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EXCAVATIONS AT NIPPUR

TWELFTH SEASON

By

McGUIRE GIBSON, JUDITH A. FRANKE, MIGUEL CIVIL,
MICHAEL L. BATES, JOACHIM BOESSNECK, KARL W. BUTZER,
and
TED A. RATHBUN and ELIZABETH FRICK MALLIN

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This volume is dedicated with gratitude
and admiration to
Professor† and Mrs. Richard C. Haines.

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LIST OF ABBREVIATIONS

Nippur I	Donald E. McCown and Richard C. Haines, *Nippur* I: *Temple of Enlil, Scribal Quarter, and Soundings*, Oriental Institute Publications LXXVIII (Chicago, 1967).
OIC 22	McGuire Gibson, *Excavations at Nippur: Eleventh Season*, Oriental Institute Communications, No. 22 (Chicago and London, 1975).

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INTRODUCTION

McGuire Gibson

The Oriental Institute's twelfth season at Nippur got under way on 20 September 1973 and lasted until 20 December. This season was a continuation of work in two areas on the West Mound begun in the eleventh campaign.[1] In WA, the area around and under Pennsylvania's Court of Columns, part of the huge dune to the southwest was removed and substantial exposures were made of the niched-and-buttressed buildings that we have suggested were temples. Area WB, toward the south end of the West Mound, was greatly expanded. Here we mapped fragments of late walls, cut by erosion and by Pennsylvania's trenches of the 1890s, and part of a large public building or palace of the Kassite period lying over Old Babylonian houses. Judith A. Franke, who was responsible for the excavation of WB this season, describes the work in Chapter 2.

The present report is different from the report of the eleventh season (OIC 22), being larger in size but produced by a less expensive method. My original intention in reviving the Oriental Institute Communications was to present all basic data from each season promptly and in an inexpensive format. I thought that the speed of publication would offset such faults as poor photographs. A quick writeup proved not enough, however, to insure fast publication. OIC 22 was delayed somewhat by experimentation with a computer-typesetting system. The present report has been delayed a much longer time due to the fact that whenever I was in the field, momentum toward publication would lag. Whenever I was unavailable for consultation, the editors would put this manuscript aside and take up one or more of the other manuscripts in their charge. Major changes in editorial personnel and a few revisions necessitated by changes in my interpretation of the data added to the delay. The basic format for these reports having now been established, future volumes should appear with fewer problems.

Just as we have made changes in the publication of the reports, we have also made several methodological changes in the field. We have altered the system used earlier for recording cuneiform tablets. The designation NT (Nippur Tablet) has been dropped and tablets are now included as part of the general object catalogue. This change has been made because at Nippur and elsewhere, recording of tablets in a separate register, although convenient for museum purposes, has served to separate the tablets from the rest of the finds.

1. See OIC 22; McGuire Gibson, "Nippur 1972-1973," *Expedition* 16/1 (fall 1973):9-14; idem, "The Twelfth Season at Nippur," *Expedition* 16/4 (summer 1974):23-32; and idem, "The Eleventh and Twelfth Seasons at Nippur," *Sumer* 31 (1975):33-39.

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Another major change is that the system for assigning findspots no longer relies as heavily on square designations as on loci. For us, a locus is any space defined by us for recording purposes. A locus may be a room, a part of a room, or an arbitrarily delimited space. We now assign locus numbers in WA and WB as new designations become necessary, usually when we open an area or room in a new level. This system works much better in the field than does the rigid baulk/square system since we are most often unable to dig in neat squares, on a relatively flat plane, but are often forced by sand dunes and by mound contours to deal with two or more levels simultaneously. Although we have retained the square designations for general orientation, the locus numbers are now our prime indicators of position. In some cases, circumstances dictated that we retain a locus designation too long, with the result that we have the same locus number for more than one level (e.g., Locus 4 in WA).

In WA, all walls have been given letter designations, such as E, CA, CF, for ease of reference. Ms. Franke preferred not to use these designations in WB and describes her walls by position in her loci or at their borders. WB was completely her operation and her loci are numbered independently of those in WA. Her burials and the burials in WA are also numbered independently.

The methods of digging in both areas were the same. Trained Sherqati and local pickmen worked under the site supervisors who recorded the loci and finds. We have adopted a system of lot numbers for all finds made. A lot may be one item or a basket of sherds from one floor in a locus. The lot number is recorded immediately on the field sheets and attached to the object or basket of sherds, and this number follows the item or sherds into the expedition house. After being drawn and analyzed, sherds and their lot numbers are usually discarded. Objects that are to be registered are given a catalogue number. Any object stored in the expedition house for a study collection retains its lot number.

The staff for the twelfth season was somewhat smaller than for the eleventh. Riadh al-Qaissy and Abdul Qadir Shaykhly represented the Iraqi Directorate General of Antiquities. I am very grateful to Mr. Shaykhly for his help in reading and cataloguing the Islamic coins. John C. Sanders did the architecture and some photography, Raymond Tindel was epigrapher, Paul Zimansky was a site supervisor and photographer, Natalie Firnhaber was registrar. For part of the season, Theresa McMahon did conservation. Miguel Civil was with us for two weeks at the end of the season and completed the identification and cataloguing of tablets.

We were fortunate to have again the services of Khalaf Jasim as foreman. Other Sherqati pickmen included Saleh Hussayn Hameda, Saleh Jasim, Ali Hussain, and Haswa Abdul Rahman. We also had several local pickmen—Abda Sadeh Abid, Hakim Muhammad, Nassir Hussayn Rabat, Ghafil Ghanim, Nadhim Makhtouf, and Yasir Bedr.

After the season ended, work began immediately on the analyses of objects, samples, etc. Results of this work appear as separate chapters.

As in the eleventh season, Miguel Civil has taken responsibility for the cuneiform tablets (Chap. 4). He has, in fact, already published some items from the twelfth season and will shortly publish another group. The bulk of

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the tablets from this season are a hoard of letters and other items found with a burial jar in WB. These difficult tablets are being studied by R. D. Biggs, who should report on them within a year or so. John A. Brinkman has examined the dozens of Kassite fragments from WA and WB and has given information to Mr. Civil for the catalogue. Most of these fragments are too small to be treated in great detail.

Chapter 5 consists of a report by Michael Bates on a hoard of Islamic coins found on the surface.

Ted Rathbun and Elizabeth Frick Mallin have contributed a section (Chap. 6) on the human bones.

Joachim Boessneck agreed to study the animal bones, mostly from WB, and his report is included as Chapter 7.

Karl Butzer's study of soil from loci in WB constitutes Chapter 8.

I want to thank the above persons for doing the analyses and preparing them for publication by late 1974. I apologize to them for the delay of the volume. Analyses on pollen and seeds will appear in subsequent preliminary reports.

Many other people gave valuable aid in the preparation of this report. Chief among them is Peter T. Daniels, who typed manuscripts, edited, gathered illustrations, did layouts, and performed many other tasks. Joseph Greene completed most of these tasks. John Sanders drew the final plans and did some of the illustrations and layouts. William H. Peterson did the burial drawings and some of the pottery and object illustrations. Paul Zimansky printed most of the photographs. Mrs. Virgil Schroeder assembled the pottery drawings for Area WB, and Mrs. Ralph Burhoe also assisted Ms. Franke in her work on Chapter 2. Julia H. Maher proofread the manuscript. Editorial work was done by Jean Eckenfels, Olga Titelbaum, and Jean Luther. The final typescript was ably prepared by Pamela Bruton, who is especially to be thanked.

A group of Oriental Institute members contributed special funds for the season. For this support we owe special thanks to Mr. and Mrs. Harvey W. Branigar, Jr.; Mr. and Mrs. Gaylord Donnelley; Mrs. G. Corson Ellis; Mr. and Mrs. Daggett Harvey; Mr. and Mrs. John J. Livingood; Mr. and Mrs. Glen A. Lloyd; Dr. and Mrs. C. Phillip Miller; Mr. and Mrs. Hermon Dunlap Smith; Mr. and Mrs. Solomon Byron Smith; Mr. and Mrs. Theodore Tieken; Mr. and Mrs. Chester D. Tripp; and Mr. and Mrs. Roderick S. Webster.

We would like to acknowledge a great debt of gratitude to Dr. Isa Salman, Director General of Antiquities, who extricated us from a bureaucratic snarl in early October, when his attention, like everyone's, was turned to far weightier matters than visa problems. We also appreciate the aid given us by other members of his directorate and by the local officials in Diwaniyah and Afak.

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1

AREA WA

McGuire Gibson

In the eleventh season, when we discovered outer walls of a series of niched-and-buttressed buildings on the western edge of WA, it was clear that our objective in the fall of 1973 should be to uncover these structures (Fig. 2:1-2). Originally we had hoped to concentrate on working east of these walls in a pit left by Pennsylvania in the 1890s, but extensive digging made it evident that in this location there had formerly been a slope to the ancient watercourse known today as the Shatt-ɜn-Nīl and that continued work there would most probably consist of moving much debris only to find badly eroded and cut surfaces with almost no buildings intact.

Exposing the series of buildings on the western edge of WA, which seemed to be temples, meant first of all removing part of a huge sand dune that lay over them. This operation should have been done with power equipment, but we could not afford to buy a tractor with a scoop, nor could we rent one, because roads were being built in the area and no equipment was available. Therefore we began by removing the sand with shovels and moving it out by railroad. In order to achieve archeological results as soon as possible we excavated both vertically and horizontally (it would have taken the entire season merely to remove the dune if we had done otherwise). As space was opened for pickmen to work, we began exposing the Neo-Babylonian level, then cut through the floors to the Kassite and older levels below. Then we moved on to newly uncovered Neo-Babylonian rooms and repeated the process. Thus we had finds from several levels although we moved only a portion of the dune and exposed only part of each level. Because we were under obligation to preserve walls for restoration, our exposures were much reduced as we went deeper. As a result, our most productive levels, the Old Babylonian and Isin-Larsa versions of the buildings, were the least excavated. The later levels are not well preserved, and we hope in the future to remove them in order to reveal the lower levels to their full extent.

In Figure 2:2 it is obvious that there are high walls of mud bricks on both sides of our exposure. These are Seleucid and Parthian buildings cut by Pennsylvania. Our railroad tracks follow the line of their enormous trench, which came in directly over the Neo-Babylonian building but touched it only on the north corner. The Pennsylvania cut intersected a deep trench made by Seleucid builders to set in the high wall (BG, Pls. 2:2, 3:1, 28). This wall seems to have been part of Pennsylvania's villa with a Court of Columns, but the floor associated with it is about two meters higher than the level of the

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court. The plan of the villa needs much rethinking and future excavation may make its layout clear. As will be seen below, the plan given by the early excavators is somewhat different from what we have found thus far.

During the eleventh season, two small pits were sunk inside the ends of two rooms of the Neo-Babylonian temple, and a series of twelve strata were noted and called floors.[1] At the bottom of these pits, in "Old Babylonian" debris, we found cylinder seals of superior quality and an inscribed stone axe fragment.[2] It was on the basis of the axe, dedicated to a deity, that we suggested these buildings were temples. Work during the twelfth season has made it certain that we were mistaken in the dating of some floors and that there were more floors than we could discriminate in the small pits dug during the eleventh season. The seals and axe found above "Floor 12" in the previous season were actually in an Isin-Larsa level not Old Babylonian. Only two seals were on floors ("10-11") associated with an Old Babylonian restoration of the building.

In this report I am keeping the locus and floor designations used in the field. This may result in some difficulty for the reader, but to renumber rooms or loci and then be obliged to correct all field records, catalogues, etc., would take far too long and would delay the report. The accompanying table (1) will make it somewhat easier to correlate the floors from the eleventh and twelfth seasons.

The table covers material in WA from Seleucid down to Ur III(?). A study of the plans for the various levels makes obvious that Locus 6 in Level III (Neo-Babylonian) is above Locus 9 of Level IV (Post-Kassite and Kassite), which is in turn above Loci 16 and 17 of Levels V and VI (Old Babylonian and Isin-Larsa). It should be noted that Locus 16 is an enlargement of the small area in the pit sunk below Room 2 of the Neo-Babylonian level touched during the eleventh season, while the more southerly end of Locus 13 was the site of the pit under Room 1 of the Neo-Babylonian building.

Scrutiny of the table makes it apparent that we went deeper in Locus 13 than in any other locus. Here we recorded a floor that has been dated tentatively to Ur III times (Level VII). This is an instance where we should have declared a new locus and started again with Floor 1.

There is also in the table an indication that in Old Babylonian loci (13, 14, 17, 19) Kassite material intrudes where pits were cut, destroying floors and walls. Figures 2 and 5 show the depth of the ash pits as known thus far. They are deeper in the loci to the north than in the south or west.

LEVEL VII, UR III(?)

Level VII has been touched only in Locus 13 (Figs. 4, 5:1). The excavation was halted when we reached an ash-strewn, tamped-earth surface, Floor 7. The latest sherds associated with this floor were judged to be Ur III.

1. OIC 22, p. 8 ff. and Figs. 9-13, 18.
2. OIC 22, Figs. 28-29.

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TABLE 1

CORRESPONDENCE OF FLOORS BETWEEN ELEVENTH AND TWELFTH SEASONS, AND AMONG TWELFTH SEASON LOCI

ELEVENTH SEASON		TWELFTH SEASON					
Pit Under Room 2	Designation	Loci 6/9/16	Loci 12/25/22	Loci 6/10/17	Loci 5/9/13	Loci 5/8/14	Loci 5/8/19
0							
1							
2							
3	Level III	1	1	1	1	1	1
		2*	2	2	2	2	2
4		3	3	3	3	3	3
5		4	4	4	4	4	4
		5*	5	5	5	5	5
6		A fill line, not a floor					
7	Level IVA	Top of mud plaster over platform, not a floor					
8		Top of platform					
9	Level IVB-C	1	1	1	1	1	1
		2	2	2	2	2	2
	Level V	1*	1*	3a	3a	3a	BQ1
		2*	2*	3b		3b	BQ2
		3*	3*	3c	3b	3c	BQ3
10		4	4	3d			BQ4
				3e		3d	BQ5
11		5	5		3c	3e	BQ6
		6*	6*	6	3d		
		7* repair	7* repair	7 repair			BQ7
12	Level VI	8		8	3e		
		9		9	1		
		10		10	2	0	1
		11		11	3	1	2
		12		12	4	2	3
					5		
					6		
	Level VII				7		

*Not recognized as an important floor during the eleventh season

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LEVEL VI, ISIN-LARSA (FIGS. 4-13)

Locus 13. About 15 cm. above Floor 7 in Locus 13 was Floor 6, on which rested Wall CB. This wall (Figs. 4, 11) was composed of mud bricks (23-24 × 16 × 6-8 cm.) laid in alternating courses of headers and stretchers. Over a footing of three courses were five preserved courses of wall. Floor 5 ran over the footing, up to the wall face, and through a doorway to Locus 14 (Figs. 4, 5:1). Sherds and other finds from this level were very few because the floors were intact in only part of the locus. Most of the area was taken up by a deliberate cutting and a fill made of fragments of mud bricks of the same size as those used in the wall. This filling seems to have been part of a process connected with reconstruction of Wall CB at Floor 4.

Floor 4 was covered with the white, powdery remains of reed matting that ran not only up to the face of Wall CB but into it for a thickness of one brick. Evidently Wall CB was crumbling, especially at the bottom (as happens with mud-brick walls), and the renovators first removed part of the old face, throwing the mud bricks into a trench dug alongside the wall. They then laid down a layer of reed mat to work on, running it up to the remaining part of the wall, and laid a new face on the edge of the matting. The new facing mud bricks (23 × 12 × 10 cm.) were of a different size from the original.

Floor 4 ran into Locus 14 over a sill that was an extension of the mud-brick filling found in the pit beside the wall.

In the doorway to Locus 14 were two pottery bowls. One, 12 N 702, was upright, while 12 N 703 was inverted (see Fig. 4 for findspots). I mention the exact placement of the bowls because similar vessels found in Old Babylonian context in WB did not seem to have been accidentally placed.

In Locus 13, a meter north of the doorway, on Floor 4, there was found a damaged sealing (12 N 438, Fig. 6:1) made with an Akkadian cylinder seal.

A large conical lump of bitumen (Fig. 5:1) in the easternmost corner of the locus seemed to be connected with the mud-brick fill below Floor 4 and may have been construction material. Some time later than Floor 4 there was a fire in the locus, and several centimeters of ashy debris accumulated. Scattered in the debris northeast of the doorway was a group of beads of various shapes and materials (12 N 441, Fig. 6:2), including gold, copper, shell, frit, and several stones.

At the southeast edge of the doorway, just below Floor 4, was a box of baked-brick fragments forming a door socket. In this door socket, beneath the charcoal remains of the doorpost, we found a cache of objects (12 N 644-647, Fig. 7:1-4), including two copper crescents, a copper bracelet, a silver ring, various beads, and two cylinder seals. One seal, of black stone, had an Akkadian-style scene of a hero with animals (12 N 646, Fig. 7:2). The other had a presentation scene with an inscription (12 N 645, Fig. 7:3); this seal, of white shell, is badly worn but is clear enough to date to the Ur III or Isin-Larsa period.

After the fire, the wall was repaired with much mud and many mud bricks at the base. (In effect, the repair at Floor 4 was itself being repaired.) Near the western end of the locus, in the repair, was an inverted pottery

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bowl (12 N 728; see Fig. 8:3 for type). Nearby, on Floor 3, were fragments of similar bowls and a very worn, white stone object that had probably been a figurine (12 N 440).

On Floor 2, near the doorway there was a fragment of a Sumerian tablet (12 N 658), probably administrative.

Also on this floor, above the Floor 4 door socket with the cache, were three upright pottery bowls, two of which were catalogued (12 N 641-642). The third disintegrated upon removal.

Floor 1 in this locus was badly cut by later pits. It was in one of these pits that during the eleventh season we found a Kassite school text.[3]

Locus 14. Locus 14 (Figs. 4, 5:2) was a room that we could expose only in part because a Kassite wall had to be left on a baulk across the locus. Right next to Wall CB several items were found on Floor 2, which is the same surface as Locus 13, Floor 4. At the south edge of the doorway there was a shell fragment, and a half meter to the west, a fragmentary stone bead (not registered). Farther along the wall to the northwest were three simple bowls in a row (12 N 705-707, Fig. 8:1-3), arranged with the outside two inverted and the middle one upright. Beyond these was an upright bowl, another inverted bowl, a pottery lid with a tab (12 N 697, 704, 698, Fig. 8:4-6*a-b*), and half a conch shell (12 N 635).

Beyond the baulk, in the rest of Locus 14 to the southwest, many objects were found, either on Floor 2 (= Locus 13, Floor 4) or above it in a layer of burned debris 5-10 cm. thick. On Floor 2, close together and partially under the baulk, were a superb Akkadian cylinder seal with a conflict scene (12 N 622, Fig. 9:1) and a fragment of a yellowish white stone jar dedicated to the god Nin-Shubur for the life of Ibbi-Sin, last king of the Ur III dynasty (12 N 621, Fig. 9:2). This fragment had faint traces of black matte paint in a band under the rim. Two pottery bowls with heavy, carinated rims were found on the floor next to Wall CA (12 N 383, 636, Fig. 8:7-8). These bowls, in conjunction with the stone fragment, may force a redating of this floor to late Ur III.

Many beads, including small shells that had been drilled vertically from the top for suspension (12 N 624, Fig. 10:1), were scattered over this locus. Materials used in these beads included gold, copper, lapis lazuli, and other stones. There was a great variety of shapes.

In the burned debris above Floor 2 were more beads (12 N 386, Fig. 10:2), including one banded agate crescent. There was also an unbaked clay tag with a cylinder seal impression showing part of a presentation scene (12 N 613, Fig. 10:4), probably of Isin date.

At the top of the burned debris, marked Floor 1, we found about 55 more beads (12 N 378) of the same variety of materials and shapes as those from lower floors. One group seemed to lie in the form of a bracelet or necklace, but most were in disorder as if strewn when they fell or were dropped at the time of the fire. With the beads there was a pottery bowl (12 N 373; see Fig. 8:2 for type) and a fragmentary object of iron (12 N 380, Fig. 9:4) that is

3. OIC 22, Appendix A, No. 18 (11 NT 26).

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roughly oval in cross section at the broken end, but shaped like a blade at the intact end. This object seems clearly to be part of an implement and, although itself small, leads one to reconstruct a sizable tool. Analyses of the metal could not be made, but the object is fairly well preserved and might prove to be an important piece of early ironwork. A fragment of a stone bowl was also found in this locus (12 N 382). Floor 0, found in only a few places, was associated with a repair of Wall CA after the fire and is equal to Floor 2 of Locus 13.

Locus 19. To the southwest of Wall CA, through a damaged doorway, was part of a room, Locus 19, that yielded interesting finds. Floor 3 of this locus was the same as Floor 2 of Locus 14 and Floor 4 of Locus 13 and, like them, was covered with the white, powdery remains of reed matting and burned debris. Cut into Floor 3 was a pit just to the southwest of Wall CA. In this pit there was evidence of (human?) excrement and many potsherds. Floor 2, which was the same as Floor 1 of Locus 14 (= Floor 3 of Locus 13), was the top of the ashy, burned debris, but it yielded only one copper bead (12 N 736). The floor above this, Floor 1 (= Floor 0 of Locus 14), however, produced several pieces of a stone vase (12 N 730, Fig. 10:3). A shallow pottery bowl with a heavy, carinated rim was found nearby and was drawn but not registered (see Fig. 8:7-8 for type). If there were any other floors above Floor 1, they were obliterated by Kassite ash pits, as was part of Wall CA.

Locus 16. In Locus 16 (Fig. 11) we exposed part of a rectangular room (Fig. 12:1), with a doorway emphasized by recessing. Details of architectural changes and comparison of elevations of wall bottoms and floors allow us to correlate this room with those previously described.

In Locus 16 we excavated to the base of Level VI Walls CK and CL. Floors 8 through 12 were subdivisions of the level. Floor 12 was the equivalent of Floor 4 in Locus 13, but there was no evidence of destruction. This floor had a hearth of mud bricks in the west corner next to the doorway. Against the northeast wall was a baked-brick construction that we could not completely expose, since a baulk was resting on part of it (Fig. 12:1). Beyond the baulk, in the east corner of the locus, was a platform made of crushed and fragmentary mica. This sort of stone occurs in cliffs that mark the beginning of the Arabian desert west of the Euphrates. The stone fractures in sheets a few centimeters to 20 cm. in thickness. At Ur and Eridu, close to the source of the stone, it is much in evidence as surface debris, but it is rare at Nippur because it is too fragile to transport efficiently. Embedded in the platform was a pottery bowl with a carinated rim (12 N 778; see Fig. 8:1, 3, 4, 5 for type).

There were two coatings of plaster on the walls, which were of mud bricks (23-24 × 16 × 6 cm.) laid in alternating courses of headers and stretchers.

There was no special doorsill at this level, nor did we find a door socket. In Locus 17, however, as will be seen, there was a baked-brick pavement that led to the doorway.

Little change was found in the room at Floor 11. The hearth next to the door was rebuilt on a slightly smaller scale, and the construction of baked bricks was raised one course, but the platform of mica was covered by debris.

Ash-marked floors kept building up until Floor 8, when a baked-brick

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sill (Fig. 12:2) was laid in the doorway. Some of these bricks were marked with stamps of Amar-Sin and Shulgi, indicating that they were originally used in the ziggurat. The base of the walls had decayed and was filled in with mud plaster and bits of baked brick. This was the last floor of Level VI.

Finds from Level VI in Locus 16 were not numerous. At the southeast end of Floor 10 there was a fragmentary star-shaped ornament of copper covered with gold foil (12 N 734, Fig. 10:5), and in the doorway was a pottery spindle whorl or wheel (12 N 751). At Floor 8, in the north corner of the locus, there was found a superb Early Dynastic cylinder seal in "Fara Style" (12 N 686, Fig. 13:1). The scene shows heroes fighting animals and has a man-animal creature typical of this style. The seal has the name of a person, A-lugal-mu. In the eleventh season, at about the same location, we found the stone axe and two cylinder seals.[4]

Locus 17. Level VI in Locus 17 was represented in a very narrow exposure (Fig. 13:2) by floors that were closely related to the floors in Locus 16. Floor 12 of Locus 16 could be followed through the doorway onto a pavement of baked bricks. This lowest pavement was exposed only at the edge of the doorway. The bricks measured 32 × 32 × 6 cm., but were sometimes cut and laid as halves. On the floor, in the niches on either side of the doorway, there were patches of bitumen, apparently intended to protect the doorway from runoff water. We are assuming that Locus 17 was an open courtyard.

Floor 11 marked the top of a second layer of paving bricks, which were exposed along the entire length of the northwest wall of Locus 17. Some of these bricks had unusual crosshatched grooving (Fig. 13:3). A few bricks of a higher course, the tops of which were at Floor 10, were found in the north corner of the locus.

Above Floor 10 there was debris associated with repeated deterioration and repair of the wall up to Floor 8.

The only object from Level VI in Locus 17 was a fragmentary baked-clay male figurine (12 N 748) from Floor 11.

Excavations in Locus 4, to the northwest of Locus 13, made it clear that the Level VI building was larger than those in the later levels. Thus far we have not found any outer walls at this level.

LEVEL V, OLD BABYLONIAN (FIGS. 14-17)

The technique of building in Level V, in all loci, was found to be less exact than that of the lower level. The walls (BQ, CF, CH, CJ) were much less straight, and the mud bricks (23-24 × 16-17 × 9 cm.) were laid differently from those in Level VI. The bricks of the four lower courses were laid flat, while above these the bricks of two more courses were laid on edge as headers.

Locus 17. In Locus 17 Floor 7 was the earliest occupation layer associated with an Old Babylonian rebuilding of the structure on the stubs of the Level VI walls. In this locus—an open courtyard—the debris built up toward the northwest, and at Floor 6 an ill-constructed wall was built to block the

4. OIC 22, p. 10 and Fig. 28.

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doorway to Locus 16. The blocking of the doorway to Locus 16 coincided with the opening of a doorway at the west end of the northwest wall. Here we found a baked brick used as a door pivot at the side of a doorway badly disturbed by later pits.

Loci 16 and 22. In Locus 16, the floors of Level V (Floors 1-7) can be correlated with those of Locus 22. In both these loci--parts of one room--we observed the rebuilding at Floor 7 already noted in Locus 17. In both Loci 16 and 22 bits of stone (e.g., 12 N 781) and baked brick were used at the base of the wall. The floors were almost all marked by heavy concentrations of ash and charcoal, especially Floors 6 and 5. The accumulation between floors was rather thin, however, leading to the conclusion that this level, although used intensively, was rather short lived. Because the doorway from Locus 17 was blocked at Floor 6, we assume there must have been another doorway into Locus 16, but this has not yet been exposed.

Floor 6 had on it, at the southeast end of Locus 16, a rectangular feature of lime plaster that has been only partially exposed (Fig. 12:3). Beyond the baulk, on Floor 5 of Locus 22, we discovered the edge of a mud-brick construction two bricks high, abutting the northeast wall. In the corner where the construction abuts the northeast wall were several fragments of stone, including mica such as was found on Floor 12 of Locus 16.

The quality and kind of objects found in these two loci were extraordinary. On Floor 6 of Locus 16 there were found a fragment of a baked-clay model chair (12 N 623) and an Early Dynastic cylinder seal of worn shell depicting a hero fighting animals (12 N 614, Fig. 15:1). On the same floor in Locus 22 was another seal, this one showing an eagle grasping horned animals that are being protected by a human figure; below is a register of men constructing a ziggurat (12 N 744, Fig. 15:2). Other items on this floor included a Jamdat Nasr stamp seal in the shape of a lamb (12 N 745, Fig. 15:3), a fragment of a baked-clay figurine of a female tambourine player (12 N 746, Fig. 15:4), a bead (12 N 747), and two pierced shells (12 N 756, 780).

Floor 5 of Locus 16 yielded a miniature pottery vessel (12 N 737, Fig. 16:1), while on the same floor of Locus 22 were four copper crescents (12 N 739-740, Fig. 16:2; 12 N 741-742), all found along the northeast wall; a copper dog figurine or pendant (12 N 749, Fig. 16:3); an unfinished black stone cylinder seal (12 N 743, Fig. 16:4); and a head from a stone statue (12 N 750, Fig. 16:5). All these items are of much earlier date than the Old Babylonian date of the building and must be seen as accumulated treasure or items collected for reuse.

Floors above 5 also yielded some objects. On Floor 4 of Locus 16 we found a badly deteriorated shell cylinder seal with a conflict scene (12 N 607, Fig. 17:1), and at the east end of Locus 22, on Floor 3, a fragment of an unbaked tablet (12 N 675) which is an account of barley delivered to the temples of Ishkur, Shulpae, Ningizzida, and other deities.

Locus 27. In a small pit just outside the southwest wall of Locus 22, a part of Level V was reached. This area, designated Locus 27, was probably part of the courtyard exposed in Locus 17. Our small pit yielded several shells that were presumably to be used as jewelry (12 N 752, 754), a fragmentary copper crescent (12 N 753), a broken bronze pin (12 N 757), and, most

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important, a fragment of a baked-clay human foot that must have been part of a life-size statue (12 N 782, Fig. 17:2).

Locus 14. In Locus 14 atop Wall CA was a bit of walling, designated BQ (Figs. 5:2, 14), that we initially thought was an oven related to the Kassite ash layers. We later recognized BQ as a wall of Level V built on Wall CA. It was partially constructed of reused Ekur bricks stamped with the name of Amar-Sin. BQ and a short bit of wall (CF) resting atop the northwest end of CB (mud bricks measuring 23 × ? × 7 cm.) were all that remained of this phase of construction in Loci 13 and 14.

Locus 4. In Locus 4 we exposed a floor of Level V and recovered a small pottery bowl (12 N 786, similar to Fig. 8:1).

SUMMARY OF LEVELS VI AND V

The evidence we have been able to gather on Levels VI and V in the two seasons tends to suggest that these buildings were sacred, but we do not have sufficient evidence as yet to declare this absolutely. The constructions in Loci 16 and 22 may have been altars. The two inscribed objects, the axe and the stone vase, were both dedicated to deities whose names begin with Nin-, but Miguel Civil says that the signs left on the axe do not allow a reading of Nin-Shubur, as is given on the vase. He leans to a reading of Nin-EZEN or Nin-Gublaga. Nin-EZEN, a late second-millennium spelling for Nin-Isina, or Gula, is the less likely alternative, since the axe is considerably older than that. Nin-Gublaga is a minor deity connected with the Moon God. Even if Loci 16 and 22, with their crescents and the axe, could be proven to have been a shrine of Nin-Gublaga, there would still be no proof that the entire building and its successors were the temples of this goddess. The Nin-Shubur inscription could be seen as an indication that Locus 14 was a shrine to yet another minor god. Both shrines would have been subsidiary to the as yet undiscovered sanctuary of some major deity.

It is conceivable that the series of buildings in WA were not actually temples but served mainly as kitchen or supply centers for one or more temples. We may even find that they were secular administrative buildings. Secular structures did on occasion have niches and buttresses. Until a door socket or foundation deposit is found in one of the levels, we cannot say for certain what these buildings were, but the evidence at present points to their having been temples.

LEVEL IVC, KASSITE ASH PITS (FIGS. 3, 5, 18, 19)

Directly overlying and in some cases cutting into the Old Babylonian and Isin-Larsa levels are pits that have produced about a hundred fragments of Kassite school exercises, pottery, and much ash. These pits were cut down into Loci 4, 13, 14, 17, and 19. Most of the tablet fragments were uninscribed or too small to be registered or even identified, so only twenty-eight have been catalogued.

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The most extensive and deepest pits were under Loci 8 and 9 of the Kassite temple (Figs. 5, 18). By far the greatest number of tablet fragments have come from below Locus 9. The ashy layers in the pits were very difficult to separate, but wherever exact layers could be distinguished they were noted in records as Floor 3b, 3c, 3d, etc.

About 20 cm. below the Kassite walls was a ground line (Floor 3a) from which the pits and the various fillings were made. Few objects or tablets were found in the upper layers of ash. Most came from 3c or 3d. It was our impression that about 80 percent of the tablet fragments found were from these layers, but the ash lines often dipped or changed color and it was easy to lose the line we were trying to follow. I have tried to discern chronological differences in the material from the lower layers as against that from upper layers, but cannot see any.

Most of the objects from these pits were broken bits that would be expected in a refuse heap. Below Locus 9, fragments of baked-clay figurines (12 N 385, 437, 788), a piece of a steatite bowl (12 N 364), and other items were found along with a pottery vessel (12 N 447, Fig. 19:1). The jar has its best parallel in Old Babylonian context and may have been dislodged from its locus when the pit was dug.

Ash levels in a pit below Locus 8 produced one interesting unbaked clay sealing with the mark of a string (12 N 353, Fig. 19:4*a-b*). The sealing had two rollings of a Nuzi-style cylinder seal showing a horned animal, a leaping animal, several animal heads, and a fish-man. There were also two pottery vessels (12 N 729, 367, Fig. 19:2-3) that would be classed Old Babylonian on the basis of shape.

An ash pit below Locus 10, cut down into the west corner of Locus 17, produced a broken clay rattle (12 N 694).

LEVEL IVB, KASSITE TEMPLE (FIGS. 18, 20, 21)

The Building. The plan of the Kassite building (Fig. 18) overlying the ash pits and constructed on a working floor (Floor 2) is very different from those of the larger Old Babylonian and Isin-Larsa structures. The room layout in the areas thus far exposed has a circular pattern. An entry on the northwest wall, near the north corner of the building, leads either around through Loci 9, 10, 8 or into a circle of larger rooms (Loci 25, 18) that gives access to other rooms. This circular pattern may be misleading, however, because the corner we have exposed is surely only a small part of the building. The northwest wall is not niched and buttressed, nor is the doorway decorated in any way. The set of smaller rooms (Loci 9, 10, 8) might be seen as a minor suite, and we must await further clearance to the south and west to work out the basic design for the whole building. Some details are instructive. There seems to have been a principle by which doorways were set in long walls toward the ends of rooms, rather than placed symmetrically. The mud bricks of the building measured 22-24 × 17 × 8 cm.

In Locus 25 there was a construction of baked brick partially set in bitumin. This installation (Fig. 20:1), which appears to have been used in con-

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junction with fire, if we judge by signs of burning and much ash, could not be entirely investigated. Future clearance of a Neo-Babylonian wall above it may make clear the function of this feature.

There were very few finds from this building, because on its single floor (Floor 1) there had been set a later platform or pavement (Figs. 3, 20:2-3) that is part of a Post-Kassite rebuilding (Level IVA). Apparently, in preparation for this rebuilding, the Kassite temple had been cleared. We did find in the doorway of the northwest wall of Locus 9 a fragmentary male human figurine (12 N 347) and an animal figurine (12 N 357). The human figurine may be out of context, however, since it was found very close to a cut for a later drain. In the doorway to Locus 25 there were a shell (12 N 473) and a group of frit beads, originally glazed (12 N 442, Fig. 21:1). These were of unusual shapes and included two birds. Just beyond the doorway, in the north corner of Locus 25, was an extraordinary Kassite cylinder seal impression (12 N 605, Fig. 21:2) on unbaked clay. This impression is in two registers: the upper one has foxes facing right with three stars, a horned animal head, and lozenges in the field. The lower register has much the same scene. At the top and bottom of the impression are the marks of triangle-decorated, probably metal, caps.

Locus 10 had a few glazed frit beads (12 N 354). The finding of glazed items in this level was to be expected since in the eleventh season we discovered fragments of green-glazed horse figurines in roughly contemporary levels outside the building.[5]

Locus 4. In Locus 4, northwest of the temple, we found floors (Fig. 3:2, Floors 13-14) that are probably Kassite in date. On Floor 14 was an unbaked clay tag with a cylinder seal impression in Nuzi style (12 N 790, Fig. 21:3). The seal shows a male figure facing left with upraised hands. In front of him is a rounded element and behind him is a spear and a star. On the same floor was a fragment of a white glazed frit mask (12 N 714), similar to examples from Tell al-Rimah.[6] A similar mask (Fig. 29:6) was found in a late context and is described below. In the west corner of the locus, Floor 14 had been cut by a pit. Here we found a few fragments of an exercise tablet (12 N 678) like the Kassite tablets from pits in Loci 8 and 9.

The floors above 13, especially 10 and 9, should date from some time after the construction of the Kassite temple (Level IVB) but before the renovation of the building (Level IVA). Floors 11 and 9 produced a bead and a fragmentary human figurine (12 N 637, 475) and Floor 8 had an animal figurine (12 N 333), but there was nothing very distinctive about these objects. On Floor 10 rested a bit of wall (BK) that had been disturbed by Seleucid pits. The relationship of this wall and these floors to the Kassite temple (Level IVB) cannot be specified as yet, because a foundation trench for the renovation (Level IVA) cut the floors.

5. E.g., 11 N 149, OIC 22, Fig. 30:1.

6. E.g., David Oates, "The Excavations at Tell al Rimah, 1965," *Iraq* 28/2 (autumn 1966): Pl. 34a.

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LEVEL IVA, POST-KASSITE (FIGS. 3, 20-22, 24)

Level IVA[7] was an unfinished building project (Figs. 3, 22; Walls K, BL, etc.) dated to some time after the Kassite period. The builders of Level IVA seem to have laid down two courses of mud brick (28-30 × 28-30 × 10 cm.) throughout the Kassite temple. Every place we have been able to expose this level we have found the platform. The courses of mud bricks were not laid in mortar but were separated by a layer of sand.

At the same time the platform was laid, the inner faces of all the Kassite walls were carved away from some unknown elevation in the wall down to the last two or three courses (see Fig. 3). This removal of the faces (Fig. 20:2-3) left just enough room to insert a new veneer of large mud bricks. We cannot say how high the veneer would have gone. The new face was never applied, although a thick layer of red mud plaster was laid over the entire platform and up into the cut-away wall. In a few places there were ashes and other evidence of fire on the top of the plaster, but it was not intensely burned. It is my conclusion that the building did not catch fire during restoration, but was simply never finished despite the interior preparations and the laying of an exterior face that followed exactly the lines of the Kassite building (Fig. 22; Walls K, BL).

The new outer face (Walls K, BL) was laid in a trench that was then filled with mud-brick fragments (Figs. 3:2, 24:1). During the previous season, while working at the northeast wall (K), we were not certain whether the trench with mud-brick fill had been cut so that Wall K could be put in place

7. In OIC 22 we called this level Middle Babylonian. We have abandoned this term for archeological purposes because it means different things to different people. Some archeologists use it to cover the time from the end of the Kassite dynasty (ca. 1100 B.C.) to the beginning of the Chaldean dynasty (ca. 626 B.C.). Philologists (including Miguel Civil in Chap. 4), however, use it with reference to written material dating from the end of the Old Babylonian period to about 700 B.C., which includes the Kassite period. To the philologists, Neo-Babylonian begins at about 700 B.C., while to the archeologists it generally begins with the Chaldeans. The span of time after the Kassites but before the Chaldean dynasty is virtually unknown archeologically, and even in documents it is poorly represented. In *Nippur* I material from this period was termed "Assyrian," but since the Assyrians did not actually claim Babylonia until about 800 B.C., and then only sporadically, to use the term Assyrian for the period before 700 B.C. would be misleading, and to use it for the period between 700 B.C. and the Chaldean dynasty would only add confusion since the philologists would be using the term Neo-Babylonian for the same period. The Second Dynasty of Isin was strong enough so that we could refer to part of the period in question under that name, but it is doubtful whether the pottery and other material from that dynasty could be separated from that of the late Kassites. The term "Period of Various Dynasties" might be applied to the time span from the end of the Kassites to the Chaldeans, but this term is a bit clumsy and has an infelicitous abbreviation. Until further work can be done on the levels and material of this time range (and we expect to do such work during the next two seasons) we are adopting the phrase Post-Kassite, and hope to make appropriate subdivisions of the material later.

It should be noted that we face a similar dilemma with the term Old Babylonian. Archeologists usually use this term to mean the period from Hammurabi to the end of the dynasty (ca. 1792-1600 B.C.), while philologists use the same term to refer to all written material from the end of Ur III to about 1600 B.C. Some archeologists, especially those who deal with glyptic, are tending to go along with the philologists, and are coming to refer to all or part of the Isin-Larsa period by the term "early Old Babylonian." We are following the older, more standard archeological usage, but one should note that when a tablet is called Old Babylonian in the tablet catalogue this does not

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or had been sunk to support retaining walls of the Neo-Babylonian period (Level III).[8] This season, a reinvestigation of section CC and evidence from Locus 4 removed our uncertainty. In Locus 4 we found, alongside the Middle Babylonian wall (BL), a trench that stopped at or just above Floor 14. The trench and its fill originated from Floor 9, which would correspond to the eleventh season's Level IV, Floor 1 on the northeast side of the building (cf. Fig. 3). The foundation trench came down upon a baked-brick feature in the northeast end of Locus 4 and destroyed part of it. Judging from photographs (Fig. 24:1), the feature appears to have been built against Wall BL, but its extension to the northwest below and beyond the trench shows that it must be associated with Floors 14-12 and the Kassite building (IVB).

A few objects were found inside the building directly on the platform or in the red plaster atop it. Some of these items may have been deliberate deposits. They consisted mainly of beads (12 N 313, 337, 342, 733), but there were also one fragmentary baked-clay statue of a man kneeling beside a lion (12 N 634), a lozenge-shaped stamp seal (12 N 732, Fig. 21:5), and a copper ring (12 N 413). These objects were recorded by the Neo-Babylonian loci under which they were found, it being thought at the time that the platform was part of a Neo-Babylonian foundation and filling operation for Level III. To locate the findspots of these objects, refer to the Neo-Babylonian plan (Fig. 23).

LEVEL III, NEO-BABYLONIAN (FIGS. 3, 21, 23, 24)

The Post-Kassite temple seems to have gone unfinished and to have crumbled, spreading mud-brick debris a meter or so from the building. In Locus 4, Floors 6 and 7 were about half a meter above the top of the rubble. These floors were cut so that the BC wall of the Neo-Babylonian level could be sunk. The trench for the Neo-Babylonian building follows exactly the outline of the niches and buttresses of the BC wall. After setting in the wall, the builders filled this trench. The Neo-Babylonian builders constructed revetments (Walls F and G) and laid in fill above the debris of the older structure, but it is difficult to distinguish between their fill and the rubble from the Level IV building. In general, the objects from the fill were broken and of various dates, leading to the conclusion that they were brought in with the fill (e.g., 12 N 332, 335).

In most of the Neo-Babylonian loci (Figs. 3, 23) we found evidence of five floors. Floor 5 was the ground on which most of the building rested. In attempting to determine the function of the WA structures, we searched carefully under doorways and walls for foundation deposits. We discovered below Floor 5 two copper crescents (12 N 304) about a meter inside Locus 5 directly in front of the doorway to Locus 7. There was no evidence, however, of any deliberate deposit.

necessarily mean that the tablet was written during or after the reign of Hammurabi. The archeological level may be Isin-Larsa in date.

8. See section shown in OIC 22, Fig. 9. Note that in that section, the cut for the laying of Wall K does not abut the wall. Further investigation this season made it clear that the cut and the fill within it do abut the wall. Mud plaster at the base of the wall at our section line originally led us to believe that the cut was away from the face.

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Some items such as beads (12 N 343, 398) were found in the plaster or walls of the building, but these could have been accidental inclusions.

The plan of the Level III building is one of rectangular rooms with a circulation leading toward the southwest. We are assuming that in that direction there lies a central courtyard. We are assuming also that the main doorway into the building lies on the northeast or southeast wall, not yet exposed.

The finding of black-painted vertical stripes around the bottoms of the walls in Loci 7 and 11 at Floor 4 (Fig. 24:2) and of a subsequent coating with white gypsum plaster at Floor 3 led us to think we might be exposing the cella and antecella of the temple. No sanctuary furnishings were found, however, and the expected entrances on the long sides (i.e., the southeast walls of the loci) did not materialize. The doorways must be on the unexcavated southwest walls of the rooms. We later found similar painting in Locus 21. Here it was possible to discover two, and in places three, layers of painted plaster.

The building was originally constructed with mud bricks measuring 31 × 31 × 10-12 cm. and faced with mud plaster. In Locus 5 there was evidence of a repair and replastering of the walls at Floor 3, then of a fire that scorched or burned the plaster red. To repair the damage, the burned plaster was covered with a new plaster at Floor 2 above the debris. Shortly thereafter a second fire took place, blackening the new plaster. To repair the walls this time, sections of new facing brick were laid against, over, and inserted into the original wall, and the earlier repairs (Fig. 3) were then replastered. At both Floors 3 and 2 we found much burned debris, including straw that was apparently used as floor covering. On this straw were charred roof beams up to two meters long, under burned mats and clay from the roof. Even with this amount of destruction debris we found few objects, despite screening. Gold foil, isolated beads, broken glass, and figurine fragments make up the inventory. In Locus 5, three Ur-Nammu stamped bricks were found stampside down on Floor 1. These had originally been used in the ziggurat (Ekur), and traces of the bitumen mortar were still adhering to them.

A glance at the plan for this level (Fig. 23) shows that Locus 20, to the east, is larger than the other rooms exposed thus far. Note also that there is a break in Wall D (Fig. 24:3). Here we found evidence of an extensive repair undertaken later than Floor 1 of Locus 12. The new wall, whose base was sunk a meter lower than that of the original wall, was on such a massive scale that the building must have been in great disrepair after Floor 1. We found traces of a doorway on the stub of the wall between Locus 12 and Locus 20 (southwest of the doorway shown between these loci on Fig. 23) and assume that this doorway marked the floor for this last restoration.

In order to investigate the repair in Locus 20, we dug a small pit to the northeast of Wall D. In this pit we found several strata that ran up to Wall D and are thus Neo-Babylonian. In one of these strata we discovered a sherd of fine reddish buff, burnished ware with a brown-painted decoration (12 N 487, Fig. 21:4). The sherd is clearly an import but its origin is not yet certain. In the same pit we found other strata that ran over Wall D and are probably Achaemenid. An ancient trench, probably Seleucid, cut through part of these strata.

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LEVELS II AND I, ACHAEMENID AND SELEUCID (FIGS. 25-29)

Information from levels above the Neo-Babylonian was fragmentary because Seleucid builders and the Pennsylvania expedition were here before us. Level II (Fig. 25), the Achaemenid, was only slightly preserved. A latrine drain (No. 2), made of large upturned jars with holes in the bottom, was sunk through Loci 5 and 8 and stopped on a Kassite wall. It contained Achaemenid pottery, and its top was covered by Seleucid Wall BF. Two other drains in the vicinity, Nos. 1 and 3, may have been contemporary, but no walls ran over them and they occurred in areas that might have been rooms of the Seleucid building. Further study of the pottery from these drains may clarify their dating.

In Locus 4 (Fig. 3:2), at the northwest edge of our working area, there was at least one floor that might be dated to the late Achaemenid era but should more probably be assigned to the early Seleucid period. This was Floor 1, on which we found a fragmentary white and black frit bead (12 N 83) and an unbaked clay plaque (12 N 82, Fig. 27:1) showing a woman facing left, holding a basket of fruit(?). Over her arm is draped a textile. Only the upper torso is well preserved. Her hair seems to be dressed in a snood. This piece, of Egyptian origin, shows Greek influence. Parallels on ivory have been found in Achaemenid Susa.[9] It should be remembered that in the eleventh season we found an Egyptian *cippus* in an Achaemenid chapel nearby.[10]

In Locus 4 we found a trash pit that cannot be dated by the stratum from which it was cut, since a Seleucid grave (Burial 8) was dug in upon it and the upper part was destroyed (Fig. 26:2). Several objects came from this pit: a baked-clay female figurine (12 N 326); part of a baked-clay model boat (12 N 498); a green-blue glazed frit lion-head pendant (12 N 618, Fig. 27:2); an unbaked clay bulla with two impressions of a lozenge-shaped stamp seal with a bird (12 N 687, Fig. 27:3); another bulla with three impressions of a round stamp seal showing three fish-men around a circle (12 N 688, Fig. 27:4); a red, white, and blue glazed frit *wedjat* eye of Egyptian origin (12 N 690, Fig. 27:5); a fragmentary baked-clay rider from a horse-and-rider figurine (12 N 692); a second and less fragmentary horse-and-rider figurine (12 N 696); and a whole copper bracelet with open ends (12 N 712). There is nothing in this group of objects that necessarily dates the pit to the Seleucid era rather than the Achaemenid. The lion-head pendant of glazed frit has not yet been traced to its origin. Ovoid sealings and *wedjat*-eyes have been found in Achaemenid levels at Susa and seals with figures in a circle are well represented in Achaemenid context.[11]

9. See Pierre Amiet, "Les Ivoires achéménides de Suse," *Syria* 49 (1972):322 and Fig. 32; and G. Maspero, ed., *Le Musée égyptien* II (Cairo, 1907), Pl. 34, central figure, from a relief of the tomb of Thanafer. Amiet identifies the textile over the arm as part of a pleated garment, but our plaque and the relief in the Thanafer tomb make it clear that this is an offering and not a piece of clothing worn by the woman.

10. 11 N 61, OIC 22, Fig. 34:3 and Appendix B.

11. Pierre Amiet, "Les Ivoires achéménides de Suse," *Syria* 49 (1972): Figs. 36-37. Related whirling motifs are common in Achaemenid glyptic. See Leon Legrain, *Culture of the Babylonians From Their Seals in the Collections of the Museum*, University of Pennsylvania, University Museum, Publications of the Babylonian Section 14 (Philadelphia, 1925), Pls. 39-40 and pp. 869-86.

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The burial cut into the pit was one of a group of graves made just under Floor 0, which was the only surface found intact within a building of Seleucid date (Walls BA, BB, BR; Fig. 25). The graves must have been dug just prior to the building of this structure or during its occupation. Thus far, all of the graves have been found under rooms, not under walls, of the building, implying that they were placed under living floors. The floor above the grave cuts would have been produced by the normal traffic in the rooms.

The building to which Walls BA, BB, and BR belong was partly uncovered during the eleventh season (Walls B1, B2, and one drain) and dated by a coin to the Seleucid period.[12]

Within the mud bricks of Walls BA and BR we found a cuneiform tablet (12 N 75) of the first millennium B.C. with part of a syllabary, and a fragmentary baked-clay dog figurine with a Sumerian inscription dedicating the figurine to a temple (12 N 656, Chap. 8). Objects of earlier periods, such as these, are often found in Seleucid and Parthian walls. During these periods, mud bricks were often formed of uncleaned clay that apparently was dug up in the closest deserted part of the city. Because of this practice, early materials, even Hajji Muhammad sherds, are to be found scattered over the entire site.

So far, the burials associated with Walls BA, BB, and BR number fourteen (Fig. 25). The similarity in method of interment, details of tombs, and grave goods would suggest that they were all made within a relatively short span of time. A detailed account of the burials is given in the next section.

Buildings and strata above the graves include, in addition to Walls BA, BB, and BR, later Seleucid structures. Chief among these are remains of what we reconstruct as part of the villa with a Court of Columns (Fig. 28) that was found by Pennsylvania. In our work, we have found that only scraps of walls and pavement remain of this building, and that these scraps do not fit well with the plan published by Fisher.[13] It seems fairly certain that Wall A1 was part of the villa, and Wall BG (the very deep foundation to the west of our area [Figs. 2:2, 3:1]) may also have been, even taking into account a difference of about a meter between floor levels at BG and the pavement of the court. The preserved top of Wall A1 was at about the level of the Court of Columns and seems to have been the edge of that court. A coin (12 N 278, Fig. 29:1) in the trench cut for this wall dates to the reign of Seleucus II (246-226 B.C.) and thus the villa cannot have been built earlier. In the same trench was a pottery bowl (12 N 78, Fig. 29:2) that may have been originally associated with WA Burial 2.

In the disturbed fill under Wall BG we found several objects that the Seleucid builders may have dug up from the Neo-Babylonian temple. These include beads (12 N 344, 372, 403, 404) and several bits of iron pins and eyelets (12 N 352, 392, 414, Fig. 29:3; see 12 N 393, a similar pin from Level III, Locus 11 in the Neo-Babylonian temple), as well as a baked-clay animal figurine (12 N 381). A badly damaged small bronze coin of Seleucid date (12

12. OIC 22, p. 14 and Fig. 36:1.

13. Clarence S. Fisher, "Mycenaean Palace at Nippur," *American Journal of Archaeology* 8 (1904): 403-32, Fig. 20; adapted as OIC 22, Fig. 5.

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N 640, Fig. 29:4) and a female figurine with accentuated hips (12 N 449, Fig. 29:5), also found in fill under the wall, show, however, that all the preceding items could be later.

Inside mud bricks of Wall BG we found a damaged yellow-glazed frit mask (12 N 308, Fig. 29:6) datable to the second millennium B.C.,[14] a tambourine-player figurine (12 N 314, Fig. 29:7), and other items.

In the fill southwest of Wall BG—that is, fill laid down at the time of Wall BG's construction—were several objects of varied dates (see catalogue).

Walls A1 and BG originally joined a set of walls left in the southeast baulk by Pennsylvania (Fig. 2:2). These walls present us with a major puzzle to unravel next season, because there are at least six building phases represented here, all dating from the Seleucid and Parthian periods. When we removed some of these remnants of buildings in order to lay railroad, we found part of a room with four floors (Fig. 28). This room was recorded as Locus 20E, meaning 20-east. The objects from the room were relatively numerous, but not very diagnostic for dating. Northeast of this locus, in the trial pit made outside Wall D of the Neo-Babylonian temple (see end of description of Level III above), there were several nude female figurines with accentuated hips (12 N 481, 496, 497; see Fig. 29:5) that we date to Seleucid times.

BURIALS IN WA (FIGS. 30-36)

The burials in Level I (Fig. 25) gave us an opportunity to compare burial practices as well as pottery in a restricted part of the Seleucid period. Three of the burials had tombs made of mud brick and/or baked brick (Fig. 30:1). In some cases we were able to find the caved-in roofing bricks. Two burials had long coffins made of baked clay with a separate pottery lid (Fig. 30:2). In Burial 8 (Fig. 31:3) the pottery coffin was protected by rows of baked bricks. Burial 14 was lying almost entirely under a wall near Burial 13, so we were unable to expose it during the season.

In some cases a minor, later burial seemed to be associated with a major one (e.g., Burials 4 and 5, 6 and 8). For these and other graves a large L-shaped pit was made in antiquity. In others (Burials 1, 2, 3), a grave shaft was dug to the desired depth, usually about a meter and a half, and the chamber then carved out toward one side. Graves, with shafts like this, dated a good deal earlier, were found in Area WB.

One burial (9) was made by cutting a large jar in two vertically, placing half of it upside down, and sealing the cut end with mud bricks. Simple pit graves (1, 2, 3) had remains of reed matting under the skeletons.

In almost all of the burials the number of items was limited, usually consisting of only a jar covered by an overturned eggshell-ware bowl.[15] The

14. See catalogue, under Level IVB, Locus 4, for part of a similar mask.

15. The drawings of pottery from the burials in both WA and WB (Figs. 33-35, 51-52, 55-56, 58:2) are not to exact scale. Months after the figures were in final form, it was realized that the photographic reductions of the pottery had been made on paper that shrank vertically. The correct sizes are given in the catalogue.

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pottery in Burial 1 was different from that in the other burials and may indicate that this grave was earlier than the others. The pottery shapes in this burial seem more Achaemenid than Seleucid. In the following description of individual burials, items are described as to location in relation to the skeleton. In two cuts of Locus 4, made for Burials 6 and 8, 9 and 10, respectively, there were objects that may have been deposited with the burials or as subsequent offerings, but that may also have been merely chance inclusions in the fill. These objects are discussed below with the relevant graves.

The skeletons in the WA burials were generally fragmentary. Most of the burials were found only a few centimeters below the bottom of trenches made by Pennsylvania, and therefore had suffered considerable weathering over the last eighty-seven years. In some cases (e.g., WA Burials 8 and 11), the bones were fairly intact. Burial 8 had not caved in; when it was opened, it gave off a distinct odor and the bones had a reddish brown coating. However, they were much more fragile than the skeletons from graves that had collapsed, allowing dirt to protect the bones. In working on the bones, we had been advised by a physical anthropologist to use a water-based rather than a polyvinyl glue, but found that it did not consolidate the bones well. Many of the bones disintegrated in transport to the expedition house, and further damage was done during shipment to Chicago. T. A. Rathbun and Elizabeth Frick worked with the bones that did survive, and their report is presented as Chapter 7. Obviously we have lost valuable information because we did not have a skeletal study specialist at the site during the season. In future, we intend either to have such a person or to store the bones at Nippur until one can join us.

Description of Individual Burials

Burial 1 (Fig. 30:3). Cut into Locus 3 and Wall BC from Level I. Pit with chamber cut to one side, disturbed by an animal burrow. Adult. Orientation impossible to determine. All bones badly damaged, discarded. Two vessels found in grave (12 N 79-80, Fig. 33:1-2).

Burial 2 (Fig. 30:4). Cut into Locus 3 from Level I. Pit, disturbed in antiquity when the foundation trench for Wall A1 was dug. Adult female(?). Flexed on left side, head to northeast. Skeleton lay under Wall BA, but shaft was to southeast of it. No objects found in grave, but a bowl (12 N 78, Fig. 29:2) found in trench may have been originally from this grave.

Burial 3 (Fig. 30:5). Cut into Locus 4 and Wall BC from Level I, northwest of Wall BA. Above and to side of Cut No. 1. Simple pit. Adult male. Flexed on left side, head to northeast. Right hand to face, left hand at knee. No objects found.

Burial 4 (Fig. 31:2). Locus 6, cut into Level III from below Wall A1 in Level I, in same cut and subsidiary to the "long tub" pottery coffin Burial 5. Simple pit. Adult. Flexed on right side, left hand in front of face(?). Skull crushed, most of bones on right side completely disintegrated. Attempt to preserve bones failed. Pottery jar (12 N 256, Fig. 33:3) found 10 cm. in front of face; eggshell-ware bowl fragment found inverted over pelvis (not registered).

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Burial 5 (Fig. 31:2). Locus 6, cut into Level III from Level I. "Long tub" pottery coffin (22.5 cm. h., 175 cm. l., 47.0 cm. w.) with separate pottery lid. Adult. Extended with head to southeast, very cramped in coffin. Arms crossed at waist. Badly disintegrated. No grave goods inside coffin, three vessels outside at head: jar, eggshell-ware bowl, and small bowl (12 N 257-259, Fig. 33:4-6).

Burial 6 (Fig. 31:3). Locus 4, Cut No. 2. Box grave of mud bricks that abutted baked bricks of Burial 8. Skull and a few upper body bones found in shaft; 20 cm. lower, tomb proper with lower half of skeleton, flexed, oriented to northwest. Adult female. Skeleton put in grave at an angle of about 45°. Jar (12 N 283, Fig. 33:7) and eggshell-ware bowl (12 N 290, Fig. 33:8) found at pelvis. Broken horse figurines (12 N 94, 266, 276), a glazed bottle with lugs (12 N 279, Fig. 33:9) found atop one of the mud bricks, and a small dish (12 N 261, Fig. 33:10) located outside grave may be accidental intrusions in fill.

Burial 7 (Fig. 31:1). Cut from Level I partly into Wall BD of Level III, west of Burial 5. Partial mud-brick box. Aged adult female. On left side, left leg sharply flexed, knee resting on a mud brick. Head oriented to southeast. Small bowl (12 N 260, Fig. 33:12) and jar (12 N 264, Fig. 33:11) found behind skull, eggshell-ware bowl (12 N 262, Fig. 33:13) in front of skull near mud brick. Iron point (12 N 265) found at foot of skeleton. Stamped Ur-Nammu brick on edge over crushed right foot. Three other Ur-Nammu bricks were found on Level III, Locus 5, Floor 1; the one in this grave must have been dislodged from that location and thrown in as fill.

Burial 8 (Fig. 31:3). Locus 4, Cut No. 2. Pottery coffin (185 cm. l., 52.0 cm. w.) with separate pottery lid. Hole in each end of lid with three grooves radiating toward outside. Double row of baked bricks (34 × 34 × 7 cm.) laid on an angle to protect head of coffin. Probably the major grave to which Burial 6 is subsidiary. Adult male(?). Extended, head oriented to northeast. Grave had not collapsed, so there was an odor from burial. Bones very delicate, stained brown. Eggshell-ware bowl (12 N 285, Fig. 33:15) and jar, broken in antiquity and mended with bitumen (12 N 289, Fig. 33:14), found at feet. One of the baked bricks (12 N 288) had a point- or knife-shaped groove carved in it some time after the brick was fired; the carving made the brick into a mold for a metal tool.

Burial 9 (Fig. 32:1). Cut No. 1 in Locus 4, beside Burial 10. Burial made of large oval jar cut in two vertically and laid rim down on bed of baked bricks to form dome. Cut end sealed with mud bricks. Adult male(?). Bones of one skeleton disarticulated. Ashes on floor of grave but bones not burned; ritual rather than cremation fire(?) Jar (12 N 263, Fig. 34:1) and eggshell-ware bowl (12 N 286, Fig. 34:2) on top of bones.

In fill just above Burial 9, part of child's grave, disturbed by foundation trench for Wall BG. Only right side of mandible preserved. Small bowl (12 N 287, Fig. 34:3) and two glazed vessels (12 N 281-282, Fig. 34:5, 4) may have been part of child's grave or of Burial 9. White bowl (12 N 282) found upright in mouth of jar (12 N 281). This jar, which has lug handles and a mouth implying a lid, has impressed rocker pattern in three registers on shoulder, a decoration common on somewhat similar Parthian jars. The Par-

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thian examples, however, usually have thicker mouths, grooved so that the lid can be set in. Higher up in the fill were two small vessels (12 N 95-96, Fig. 34:6-7) that have shapes more common in the Achaemenid than the Seleucid period. One (12 N 96) had lost a lug or handle while the other (12 N 95) had two holes drilled into the body. These items may be accidental inclusions rather than goods connected with Burials 9 and 10.

Burial 10 (Fig. 32:1). Bottom of Locus 4, Cut No. 1, north of Burial 9 and associated with it. Seems more substantial than Burial 9, probably primary. Mud-brick box. Adult. Flexed on right side, right hand to face, head to northwest. Jar (12 N 280, Fig. 34:8) with fragmentary eggshell-ware bowl (12 N 284, Fig. 34:9) inverted over it found in front of face. Fragment from bottom of white stone bottle (12 N 275, Fig. 34:10) found at right knee. Other parts of same vessel found in the fill northwest of the grave and a few centimeters above it suggest that the bottle was not part of the grave goods but a chance inclusion in the fill. Inscription on bottle reads KINNA, presumed to be in Greek because of the Seleucid date, but possibly in Latin. Robert Scranton suggests that the word may be an abbreviation of *kinnabar* ("cinnabar"), a primary coloring material in the ancient world.[16]

Burial 11 (Figs. 30:1, 32:2). Locus 6, south of Burials 4 and 5. Mud-brick and baked-brick box. Tomb walls preserved to height of four courses of mud bricks on southeast side, fragments of baked brick formed other sides. Adult. Flexed on left side, right hand to face, left hand in front of chest grasping fragmentary skeleton of small child (no skull remaining). Beneath teeth of adult, bits of metal and cloth not intact enough to identify as object. Jar (12 N 320, Fig. 35:1) covered by inverted eggshell-ware bowl (12 N 329, Fig. 35:2) found in front of skull. Bowl (12 N 321, Fig. 35:3) at knee, glazed in various colors—gray-green, gray, tan.

Burial 12 (Figs. 30:2, 32:3). Locus 20E, under Wall BT, cutting into Walls D and BX, beside Burials 13, 14. "Long tub" pottery burial, separate crushed lid. Cover originally had hole at each end, as in Burial 8, but no radiating grooves. Adult. Extended on back, arms crossed at waist. Head to southeast. Right leg disturbed in antiquity. Jar (12 N 699, Fig. 35:4) rested on skull, eggshell-ware bowl (12 N 700, Fig. 35:5) inverted over left edge of pelvis. Outside coffin, at head, an unbaked pottery flask (not registered, to be analyzed), probably not part of burial.

Burial 13 (Fig. 32:3). Locus 20E, west of Burial 12, partly under Wall BX. Simple pit, disturbed in antiquity. Only lower limbs found. Jar with eggshell-ware bowl (12 N 632-633, Fig. 35:6-7) inverted over it.

Burial 14 (Fig. 25). Almost entirely under Wall A1, so not excavated. "Long tub" pottery coffin, with separate pottery lid; mud brick laid over end for protection.

SQUARE 13, A REINVESTIGATION

In the course of the season a part of Square 13, left as a baulk above

16. See E. F. Schmidt, *Persepolis* II, Oriental Institute Publications 69 (Chicago, 1957), Pls. 51:3, 83 for similar vessels, described as cosmetic containers.

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Wall P during the previous season, was removed to resolve problems with the strata in that area and to expose Wall P (Figs. 22-23). The section published here (Fig. 3:1) should be compared for changes with the profile from the eleventh season.[17] A few figurines, including a glazed horse (12 N 20, Fig. 36:1) and horse-and-rider figures (12 N 72, 74), were found in Level III. There was also a Neo-Babylonian school tablet (12 N 44) and a casting mold (12 N 21, Fig. 36:2*a-b*). The object to be made with the mold was cruciform, perhaps a piece of jewelry such as the cruciform earrings seen on Assyrian reliefs.[18] A sign is engraved on the outside of the mold. Dennis Pardee has suggested that this sign may be the Aramaic letter *tav*, an abbreviation for *tekel* (= *shekel*). It may be that the mold was made to cast an object weighing one shekel of silver or gold and that the object was sold by weight, as jewelry most often is in modern Iraq. Weights with similar Hebrew letters are well attested in Palestine.[19] In the past we have dated Level III Neo-Babylonian and see no reason to change that dating. Level and floor designations in the catalogue relate to levels and floors published in *OIC* 22.

ADDITIONAL MATERIAL FROM WA 50*c*

In the catalogue we include a few items from WA 50*c*, a pit that was dug in the eleventh season.[20] These are small bowls (12 N 681-685, Fig. 36:3-7) that were found on the last day of the excavation and were too fragmentary to register before being repaired. They were all of a well-known type and were recorded at that time by type only. More time during the twelfth season allowed repair and registration. One of the bowls (12 N 685, Fig. 36:3) was found embedded in the face of Wall B. It contained animal bones and may have been a sort of foundation deposit.

17. OIC 22, Fig. 9.

18. E.g., B. Hrouda, *Die Kulturgeschichte des assyrischen Flachbildes*, Saarbrücker Beiträge zur Altertumskunde 2 (Bonn, 1965), Pl. 8, nos. 26, 36, 39, 40.

19. James B. Pritchard, *The Ancient Near East in Pictures*, 2d ed. with Supplement (Princeton, N.J., 1969), Figs. 776a-f and p. 373.

20. OIC 22, p. 71 ff.

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CATALOGUE OF OBJECTS BY LEVEL AND LOCUS IN AREA WA

LEVEL VI

		Field Number and Description*	Figure	
LOCUS 13	Fl. 5 in fill 1.30 m. in front of door	12 N 451. Bead, red and white stone, whole. Date-shaped, circular profile. 3.1 l., 1.0 w.	—	
	Fl. 4	12 N 438. Seal impression, unbaked clay. Contest scene of bullmen and animals. Akkadian style. Fragment: 3.7 h., 2.7 w., 2.3 th. Impression: 3.7 l., 1.5 h.	6:1	
	Fl. 4, doorway, NW edge	12 N 702. Bowl, pottery, fragmentary. Carinated rim, string-cut base. Medium fine buff ware. 5.0 h., 11.0 dm. rim, 5.9 dm. base.	—	
	Fl. 4, doorway, SE edge	12 N 703. Bowl, pottery, fragmentary. Carinated rim. Reddish buff ware. 4.0 h., 14.0 dm. rim, 5.5 dm. base.	—	
	Fl. 4, cache in door socket S of door in Wall CB	12 N 644. Metal objects: *a*) Crescent, copper, whole. Ring attached to top. 8.8 l., 1.7 w. *b*) Crescent, copper, whole. Pierced. 6.0 l., 1.4 w. *c*) 20 rings, copper. 2.0-2.3 dm. *d*) Bracelet, copper, whole. Open ends. 5.6 max. w. *e*) Ring, silver. 1.9 dm.	7:1	
	(same)	12 N 645. Cylinder seal, white shell, whole. Presentation scene. Two figures facing right, before seated deity. Crescent in field. Two lines of illegible inscription. Isin-Larsa style. 2.0 h., 1.0 dm.	7:3	†
	(same)	12 N 646. Cylinder seal, black stone, whole. Hero, horned animal, crossed lions, horned animal. Akkadian style. 3.0 h., 1.9 dm.	7:2	
	(same)	12 N 647. Stone objects: *a*) Pebble, flat, round, gray. 2.8 dm., 0.9 th. *b*) Stone, smooth, date shaped, unpierced. 3.7 l., 1.1 dm. *c*) Stone, dense, dark brown, circular, flat sides. Surface very glossy. 1.5 dm., 0.9 w. *d*) Bead, white, elliptical, translucent. 1.9 l., 1.4 w., 0.8 th.	7:4	

*Measurements are in centimeters.
†Inscribed object.

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		Field Number and Description	Figure	
		e) Bead, brown and white agate, date shaped. 1.7 l., 0.8 dm. *f*) Shell, brown and white. 1.1 l., 0.7 dm. *g*) Bead, carnelian, fragmentary. Cylindrical. 0.5 dm., 0.3 th.		
	near door in burned debris above Fl. 4	12 N 441. Piece of gold foil, copper ring, shells, 33 beads (4 black stone, 1 gold, 8 carnelian, 4 agate, 5 shell, 2 frit, 9 lapis lazuli). Various shapes and sizes.	6:2	
	Fl. 3, NW end	12 N 440. Object, white stone, badly worn. Probably a figurine. 9.4 h., 5.1 max. w., 4.1 max. th.	—	
	Fl. 3, W corner	12 N 728. Bowl, pottery, fragmentary. Carinated rim, string-cut base. Buff ware. 4.0 h., 15.6 dm. rim, 5.9 dm. base. See Fig. 8:3.	—	
	Fl. 2, in S corner of locus	12 N 641. Bowl, pottery, complete. Carinated rim, string-cut base. Medium buff ware. 5.6 h., 15.2 dm. rim, 5.7 dm. base.	—	
	(same)	12 N 642. Bowl, pottery, fragmentary. String-cut base. Medium red buff ware. Found inside 12 N 641. 6.5 h., 19.0 dm. rim, 7.7 dm. base.	—	
	Fl. 2, SE end near door	12 N 658. Tablet, economic fragment in Sumerian.	—	†
LOCUS 14	Fl. 2, near Wall CA	12 N 383. Bowl, pottery, whole. Carinated rim. Medium light buff ware, cream slip. 3.5 h., 13.6 dm. rim, 5.7 dm. base.	8:7	
	Fl. 2, near Wall CA in burned debris	12 N 613. Cylinder seal impression, clay, fragmentary. Seated deity facing left with crescent in field. Isin-Larsa style(?). Impression: 3.1 l., 1.4 w.	10:4	
	(same)	12 N 624. Ring, copper; 7 shells, whole, pierced; 21 beads (3 frit, 4 lapis lazuli, 3 agate, 1 paste, 5 carnelian, 4 gold, 1 copper). Various shapes and sizes.	10:1	
	Fl. 2, near Wall CA	12 N 619. Dagger blade, copper, almost whole. Midrib, tang broken. Rivet hole(?). 15.5 l., 3.1 max. w., 0.3 th.	9:3	
	(same)	12 N 621. Jar, veined white and tan stone, fragmentary. Dark band under rim may have been paint. Inscription dedicated for Ibbi-Sin to the god Nin-Shubur. 9.8 h., 13.0 dm. rim, 11.7 w., 1.5 th.	9:2	†

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	Field Number and Description	Figure
Fl. 2, in burned debris, partly under baulk	12 N 622. Cylinder seal, black stone, whole. Conflict scene. Naked hero to right grasps hoof and horn of rampant bull. Bullman grasps lion. Second naked hero grasps short-horned bull. Heroes and bullmen full-face with curled beards. Akkadian style. 4.0 l., 2.5 dm.	9:1
Fl. 2, against W end of Wall CB	12 N 635. Half a shell, cut. 10.3 l., 9.4 w.	—
Fl. 2, along Wall CA	12 N 636. Dish, pottery, almost whole. Carinated rim. Medium buff ware. 3.1 h., 13.7 dm. rim, 5.8 dm. base.	8:8
Fl. 2, near Wall CB	12 N 697. Dish, pottery, whole. Carinated rim. Medium fine buff ware. Found upright. 2.4 h., 12.5 dm. rim, 5.0 dm. base.	8:4
Fl. 2, near NW end of Wall CB	12 N 698. Lid, pottery, whole. Tab handle. Medium pinkish buff ware. Found tab down. 9.3 dm.	8:6*a-b*
Fl. 2, against Wall CB	12 N 704. Bowl, pottery, almost whole. Carinated rim, string-cut base. Reddish buff ware. Found inverted. 3.0 h., 12.4 dm. rim, 4.6 dm. base.	8:5
Fl. 2, near Wall CB	12 N 705. Bowl, pottery, almost whole. Carinated rim, string-cut base. Pinkish buff ware. Found inverted. 3.7 h., 12.9 dm. rim, 4.9 dm. base.	8:1
(same)	12 N 706. Bowl, pottery, almost whole. String-cut base. Red buff ware. Found upright. 4.2 h., 16.3 dm. rim, 5.8 dm. base.	8:2
(same)	12 N 707. Bowl, pottery, fragmentary. Carinated rim, string-cut base. Reddish buff ware, cream slip. Found inverted. 5.0 h., 17.5 dm. rim, 6.0 dm. base.	8:3
Fl. 2, near Wall CA	12 N 386. Various objects: *a*) Ring, copper, whole. Twisted wire. 2.5 dm. *b*) Ring, copper, whole. Twisted wire. 2.1 dm. *c*) Crescent pendant, brown and white banded agate, fragmentary. 3.1 l., 1.7 max. w., 0.4 th. *d*) Bead, carnelian, whole. Spherical. 1.0 dm. *e*) Shell, fragmentary. Brown and yellow bands. 1.0 l., 0.6 w.	10:2

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		Field Number and Description	Figure
	Fl. 1	12 N 373. Dish, pottery, whole. Slightly flattened rim, flaring sides, string-cut base. Reddish ware, reddish slip. 4.0 h., 12.4 dm. rim, 4.4 dm. base. See Fig. 8:2.	—
	(same)	12 N 376. Copper objects: *a*) Ring, broken in two places. 2.3 dm. *b*) Nail, whole, slightly bent. 2.4 l. *c*) Ring(?), fragment. Flat, ribbonlike, with two prongs. Fragment of wood between prongs. 1.8 l., 0.9 w.; prongs 1.0 l.	—
	(same)	12 N 377. 9 beads (2 agate, 4 carnelian, 3 gold). Various shapes and sizes.	—
	(same)	12 N 378. Lapis lazuli inlay; lapis lazuli and copper pin; 55 beads (19 gold, 9 lapis lazuli, 23 carnelian, 1 copper, 1 bitumen, 2 agate). Various shapes and sizes.	—
	(same)	12 N 379. Shell, grayish black, burned. Slightly chipped. Hole drilled in end, perhaps for stringing. 3.3 l., 2.3 max. w.	—
	(same)	12 N 380. Tool, iron, fragmentary. 6.6 l., 3.0 w.	9:4
	(same)	12 N 382. Bowl, stone, fragmentary. Flat base. Damaged by fire, color uncertain. 8.7 l., 6.1 max. w., 5.0 dm. base, 1.6 th.	—
	(same)	12 N 384. Bead, baked clay, whole. Elliptical. Mottled, yellowish with purple. 2.8 l., 1.0 max. w.	—
	Fl. 1, N of Wall CA	12 N 611. Beads, carnelian: *a*) Whole. Date shaped, circular section. 1.3 l., 0.7 max. w. *b*) Whole, spherical. 1.0 dm.	—
	(same)	12 N 612. Bead, white stone, whole, diamond shaped. 2.5 l., 2.4 max. w.	—
LOCUS 16	Fl. 12, E corner, embedded in stone platform	12 N 778. Bowl, pottery, fragmentary. Carinated rim, string-cut base. Reddish ware, pink cream slip. 4.1 h., 14.4 dm. See Fig. 8:1, 3, 4, 5.	—
	Fl. 10, SE end	12 N 734. Ornament, copper body with gold sheet overlay, fragmentary. Star shaped, 4 points intact. Central part is a round bulge. Interior of bulge originally filled with white material, either paste or lime mortar. 3.8 w., tip to tip; 0.6 th. in central bulge.	10:5

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		Field Number and Description	Figure	
	Fl. 10, in doorway to LOCUS 17	12 N 751. Wheel, baked clay. Perhaps a whorl, perhaps a toy. 5.0 dm., 1.2 th.	—	
	Fl. 8, N corner	12 N 686. Cylinder seal, reddish stone, whole, slightly burned. Kilted hero fights crossed lions. Hero-monster holding lions upside down by tails. Rampant lion turning back, to right, to face hero with one dagger. Second dagger in field below. Inscription: personal name A-lugal-mu. Early Dynastic II style. 3.5 h., 2.8 dm.	13:1	†
LOCUS 17	Fl. 11	12 N 748. Male figurine, baked clay, fragment. Long garment with hem on its left, fringe running from left shoulder to right hip. Low-fired, dark interior, reddish buff exterior. 8.8 h., 4.8 w., 2.4 th.	—	
LOCUS 19	Fl. 2	12 N 736. Bead, copper, round. 1.0 dm., 0.7 th.	—	
	Fl. 1	12 N 730. Jar, yellowish stone with white and some red veins, badly broken. Upper part smooth, curving in slightly. Lower part roughened, probably deliberately. Flat base. 19.1 h., 9.2 dm.	10:3	
LEVEL V				
LOCUS 4	below Fl. 14	12 N 786. Bowl, pottery, complete. Carinated rim, string-cut base. 3.2 h., 11.8 dm. See Fig. 8:1.	—	
LOCUS 16	Fl. 6, in doorway to SW along northern jamb	12 N 614. Cylinder seal, shell, badly worn. Hero holds two lions upside down. Horned animal, crossed lions, horned animal. Two dots in field. Early Dynastic III(?) style. 4.5 l., 2.8 dm.	15:1	
	Fl. 6, near SW wall S of door	12 N 623. Model chair, baked clay, fragmentary. Webbing indicated. 3.2 h., 4.8 l., 5.0 w.	—	
	Fl. 5, E corner	12 N 737. Miniature vessel, pottery. Cylindrical, with flat rim, groove under rim, splayed base. 8.8 h., 2.9 dm. rim, 3.2 dm. base.	16:1	
	Fl. 4, E corner	12 N 607. Cylinder seal, shell, badly worn. Conflict scene with hero and animals. Hero facing left, attacking rampant lion attacking deer(?). Rest unclear. Early Dynastic(?) style. 4.4 l., 2.8 dm.	17:1	

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		Field Number and Description	Figure
LOCUS 17	Fl. 7	12 N 709. Shell, whole, pierced. 3.1 l., 2.4 w.	—
	Fl. 3	12 N 755. Shell, reddish buff, pierced at top. 3.2 l., 2.2 dm.	—
LOCUS 22	Fl. 7, S end, in repair of SW wall	12 N 779. Bowl, pottery. Plain rim, string-cut base. Red ware, pinkish slip. 6.4 h., 14.4 dm.	—
	Fl. 7, in repair of SW wall	12 N 781. Door sockets, white stone, fragments: *a*) Fairly small, unworn hole, bitumen in bottom. 14.9 h., 12.7 w., 14.0 orig. dm. *b*) Much rougher, hole more worn. 17.1 h., 12.0 w.	—
	Fl. 6, S corner	12 N 744. Cylinder seal, whitish shell, slightly cracked near bottom. 2 registers, top: eagle grasping horned animal with either foot, human figure at right; bottom: 5 men build a ziggurat. Early Dynastic III style. 4.95 h., 2.4 dm.	15:2
	Fl. 6, N corner	12 N 738. Vessel, white stone, 2 fragments. Flat rim, horizontal grooves and ridges on side, flat base. Very small interior space. *a*) 7.4 h., ca. 9.2 w., 2.65 th. *b*) 3.3 h., 3.5 w.	—
	(same)	12 N 745. Stamp seal, gray green stone, pierced vertically. Sheep couchant, eyes hollow. On back, drilled design, four animals walking to right. 1.9 h., 2.5 w., 2.2 th.	15:3*a-b*
	Fl. 6, E corner	12 N 747. Bead, white paste. Flattened hemisphere, pierced. 1.6 dm., 0.8 th.	—
	Fl. 6	12 N 746. Tambourine-player female figurine, upper half. Wide, splayed hands with six fingers. Necklace. Applied hair, eyes. Hair parted in middle. Tambourine projects from body. 5.2 h., 4.6 w., 2.3 th. incl. tambourine.	15:4
	(same)	12 N 756. Shell, much worn, hole in top. 4.8 l., 3.0 dm.	—
	(same)	12 N 780. Shell, ivory with red streaks in spiral, pierced at top. 3.0 l., 2.2 dm.	—
	Fl. 5, NE edge	12 N 739. Crescent, copper, fragmentary. 13.8 l., 3.1 w., 0.3 th.	16:2*a*

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		Field Number and Description	Figure	
	Fl. 5, against NE wall	12 N 740. Crescent, copper, with loop attachment for suspension. One horn broken off. Oval in section near attachment. 8.2 h., ca. 7.9 w., 0.5-0.8 th.	16:2*b*	
	(same)	12 N 741. Crescent, copper, broken but complete. Thin. 5.8 h., 8.1 tip to tip, 1.6 w., 0.2 th. See Fig. 16:2*a*.	—	
	(same)	12 N 742. Crescent, copper, fragmentary. 7.6 h., 1.8 w., 0.2 th. See Fig. 16:2*a*.	—	
	Fl. 5, fill	12 N 743. Cylinder seal, gray stone, unfinished. Central figure an eagle, finished. A few other elements started, but a flaw in the stone seems to have forced the maker to abandon the seal. Early Dynastic or Akkadian style. 3.5 h., 2.3 dm.	16:4	
	Fl. 5, near NE wall	12 N 749. Dog figurine, copper. Seated. One ear lost. Tail curls up. 2.2 h., 2.2 l., 0.9 w.	16:3	
	Fl. 5, N end	12 N 750. Statue, stone, fragment. Head of female, eyebrows inlaid in bitumen, mother-of-pearl eyes. Hair parted in middle, ripples to back of head exposing ears. Earlobes pierced. 5.4 h., 4.3 w., 5.45 th.	16:5*a-c*	
	Fl. 3, SE end	12 N 675. Tablet fragment. Old Babylonian account.	—	†
LOCUS 27	Fl. 1	12 N 752. Shells: *a*) Unpierced. 3.9 l., 2.5 dm. *b*) Pierced longitudinally. 2.5 l., 1.9 dm. *c*) Pierced longitudinally. 2.4 l., 1.8 dm.	—	
	(same)	12 N 753. Crescent, copper, end fragment. 2.4 l., 1.1 w., 0.3 th.	—	
	(same)	12 N 754. Shell, cream colored, dashed spiral in red brown. Pierced at top. 2.7 l., 2.1 dm.	—	
	(same)	12 N 757. Point, copper, fragmentary. 7.4 l., 0.9 w., 0.3 th.	—	
	(same)	12 N 782. Foot of statue, baked clay, fragmentary. Black on inside, badly fired. Coarse reddish buff ware. 12.6 l., 10.0 w., 3.5 th.	17:2	

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		Field Number and Description	Figure	
LEVEL IVC				
LOCUS 8	below Fl. 3a in ash pit	12 N 680. Jar, pottery, almost whole. High neck, button base. Buff ware, buff slip. 17.1 h., 5.3 dm. neck, 8.0 dm. body, 4.4 dm. base.	—	
	(same)	12 N 353. Tag, clay, fragment, with two impressions of a cylinder seal. Winged animal facing left, horned animal head and two dots as fillers; upright figure with pigtail(?) and tail. Horned animal head above a creature half human and half fish, facing left. Nuzi style. 2.5 h., 2.2 w., 1.4 th.	19:4*a-b*	
	(same)	12 N 362. Bead, blue paste. Circular, convex faces. Pierced longitudinally. 1.4 dm., 0.3 th.	—	
	(same)	12 N 365. Quadruped figurine, baked clay, fragmentary. Coarse reddish buff ware. 8.0 l., 4.5 h., 3.3 w.	—	
	(same)	12 N 367. Goblet, pottery, almost whole. High neck, flat base. Medium fine reddish buff ware. 23.7 h., 8.0 dm. rim, 5.9 dm. base.	19:3	
	(same)	12 N 412. Bowl, greenish gray stone, fragmentary. Round base. 10.5 h., 13.0 w., 13.0 dm. rim.	—	
	(same)	12 N 577. Exercise tablet. Kassite.	—	†
	(same)	12 N 578. Exercise tablet fragment. Kassite.	—	†
	(same)	12 N 579. Exercise tablet fragment. Kassite.	—	†
	(same)	12 N 593. Exercise tablet. Kassite.	—	†
	(same)	12 N 595. Tablet fragment. List of names. Kassite.	—	†
	(same)	12 N 729. Bowl, pottery. Very badly warped--almost oval plan--not deliberate, but a firing accident. Carinated rim, string-cut base. Buff ware, cream slip. 8.4 h., 17.5-19.4 dm.	19:2	

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		Field Number and Description	Figure	
LOCUS 9	Fl. 3d in ash pit	12 N 385. Female figurine, clay, fragmentary. Nude. Necklace, plaited hair, pubic triangle indicated by punctations. See *Nippur* I, Pl. 122:4 for similar item. 8.8 h., 4.0 w., 1.8 th.	—	
	(same)	12 N 437. Canine figurine, baked clay, rear end. Medium pinkish buff ware with cream slip. Cf. 12 N 357 (LOCUS 9, Fl. 1, below). 3.7 h., 7.0 l., 2.5 w.	—	
	(same)	12 N 585. Exercise tablet fragment.	—	†
	(same)	12 N 588. Exercise tablet.	—	†
	(same)	12 N 788. Figurine, baked clay, fragment. Head of animal or human. Not clear. Round eyes. Bulge indicates hat, hair, or horns. Hollow. 3.2 h., 3.2 w., 3.2 th.	—	
	Fl. 3c in ash pit	12 N 359. Crescent, copper, whole. 4.3 l., 0.6 w., 0.1 th.	—	
	(same)	12 N 363. Male figurine, baked clay, top half. Nude. Pronounced pinched nose, almond-shaped eyes. Right arm probably extended to front, left to side. Coarse reddish buff ware. 5.6 h., 6.4 max. w., 2.3 th.	—	
	(same)	12 N 364. Bowl, steatite, fragment of base. Holes for inlay. 3.5 l., 3.4 w., 1.5 th.	—	
	(same)	12 N 366. Figurine, baked clay, fragment. Lower leg, perhaps in kneeling position. Medium coarse light buff ware. 6.1 h., 1.7 w.	—	
	(same)	12 N 371. Animal figurine, baked clay, fragment. Medium reddish buff ware, cream slip. 4.0 l., 1.4 w. at neck, 1.7 th.	—	
	(same)	12 N 594. Tablet fragment.	—	†
	(same)	12 N 597. Exercise tablet fragments.	—	†
	(same)	12 N 597a. Tablet fragment with a few signs.	—	†
	(same)	12 N 598-99. Exercise tablet fragments.	—	†
	(same)	12 N 651-652a. Exercise tablet fragments.	—	†
	(same)	12 N 447. Jar, pottery, almost whole. Ring base. Medium buff ware. 23.3 h., 8.0 dm. rim, 5.4 dm. base.	19:1	

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		Field Number and Description	Figure	
	(same)	12 N 655. Tablet.	—	†
	Fl. 3b in ash pit	12 N 586-87. Exercise tablet fragments.	—	†
	(same)	12 N 589-92. Exercise tablet fragments.	—	†
	below Fl. 3a in ash pit	12 N 580. Exercise tablet fragments.	—	†
	(same)	12 N 582-84. Exercise tablet fragments.	—	†
	(same)	12 N 596. Exercise tablet fragment.	—	†
	(same)	12 N 653-54. Exercise tablet fragments.	—	†
LOCUS 10	ash pit at W corner cutting into LOCUS 17	12 N 694. Rattle, baked clay, fragmentary. 8.1 l., 4.7 w., 5.0 th.	—	

LEVEL IVB

LOCUS 4	Fl. 14	12 N 714. Mask, glazed white frit, fragment of side of head. Ear with 3 holes pierced. 3.3 h., 1.5 w., 1.3 th.	—	
	(same)	12 N 790. Seal impression, unbaked clay. Male figure with spear behind head. Nuzi style. 1.8 h., 2.2 w., 1.2 th.	21:3*a-b*	
	ash pit cut into Fl. 14	12 N 678. 2 fragments of exercise tablet. Kassite.	—	†
LOCUS 8	Fl. 2	12 N 348. Female figurine plaque, baked clay, fragment. Wearing necklace. Medium fine reddish buff ware. 3.7 h., 5.0 w., 1.9 max. th.	—	
	Fl. 2, SW end	12 N 471. Male figurine, baked clay, fragment. Right arm unbroken, ends in stump. Pinkish buff ware, cream slip. 4.2 h., 6.2 w., 2.8 th.	—	
LOCUS 9	Fl. 1, in doorway of Wall BM, near later drain	12 N 347. Male figurine, baked clay, fragmentary. Nude. Legs and one arm missing. Arms folded across chest. Perhaps holding something. Medium coarse reddish buff ware. May be intrusion from drain. 8.1 h., 4.8 w., 2.5 th.	—	
	Fl. 1, in doorway of Wall BM	12 N 357. Fox(?) figurine, baked clay, fragmentary. Medium fine reddish buff ware. 2.6 h., 7.4 l., 2.6 w.	—	

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		Field Number and Description	Figure
	Fl. 1, in doorway to SE	12 N 442. 11 beads: *a*) Frit, white, whole. Abstract-shaped spacer with applied dots, ridges at one end. Two perforations. 2.7 × 0.7 × 0.6. *b*) 2 frit, white, duck shaped. Two perforations. 1.3 × 0.6 × 0.5. *c*) Frit, white, fragmentary. Spherical. 0.6 dm. *d*) Frit, white. Flat, rectangular, indentations on two sides, two round bumps on face. 1.1 × 0.9 × 0.3. *e*) Frit, white, whole. Long double conoid, grooved, circular section. 1.2 × 0.3. *f*) 2 beads, cylindrical with grooves. One white paste, one blue paste. Fragmentary. One not photographed. 1.1 × 0.3 (white); 0.3 × 0.2 (blue). *g*) Frit, white, whole. Circular section, body ribbed. 0.5 × 0.6. *h*) 2 frit, whole. Ring shaped. 0.5 × 0.3.	21:1
	above Fl. 1 in doorway to SE	12 N 473. Shell, pinkish, whole. 5.2 l., 3.3 w.	—
LOCUS 10	Fl. 1	12 N 354. 2 beads, glazed frit, whole: *a*) Blue: cylindrical with latitudinal grooves. 0.3 dm., 0.7 l. *b*) White: ring shaped. 0.6 dm., 0.25 l.	—
LOCUS 25	Fl. 2	12 N 735. Bead, ochre-brown stone. Square section, rectangular plan, all eight corners beveled. 1.1 l., 0.7 w.	—
	Fl. 1, N corner near doorway	12 N 605. Cylinder seal impression, unbaked clay. 2 registers, top: foxes with stars, horned animal head, lozenges; bottom: foxes, lozenges, animal head. Mark of triangle-decorated caps. Kassite. 4.7 l., 3.1 w.	21:2
LEVEL IVA			
LOCUS 5	Fl. 6, S corner, on platform above LOCUS 9	12 N 313. Bead, white shell. Cylinder. 1.1 dm., 0.5 th.	—
	(same)	12 N 337. Bead, blue glazed frit, broken in two. Rectangular with depressions in middle. 1.1 l., 0.5 w., 0.3 th.	—

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		Field Number and Description	Figure
	Fl. 6, on platform under Wall BH above LOCUS 9	12 N 342. Bead, green stone, whole. Elliptical profile and section. 1.1 l., 1.15 w., 0.8 th.	
LOCUS 7	Fl. 6, N corner of platform	12 N 413. Ring, copper, whole. Rounded bit of copper attached as "stone". 1.6 dm.	—
	Fl. 6, inside platform	12 N 457. Female figurine, baked clay, bottom half. Nude, seated. Medium fine pinkish buff ware. 6.3 h., 5.2 max th. feet to chair legs.	—
LOCUS 11	Fl. 6, on top of platform, above LOCUS 18	12 N 634. Figurine, baked clay, fragmentary. Kneeling man with lion? Medium coarse pink buff ware, cream slip. 10.6 l., 8.3 w., 7.2 h.	—
LOCUS 18	within platform	12 N 485. Bead, black stone, whole. Circular section, sides flat. 1.1 dm., 0.7 w.	—
LOCUS 20	Fl. 6, N corner, on red mud plaster above platform	12 N 732. Stamp seal, white stone. Lozenge shaped, with loop for suspension on back. Loop worn through. On face, drilled holes in no particular pattern. Serrated edges. Date uncertain. 3.7 l., 2.5 w., 1.2 th. with tab.	21:5
	(same)	12 N 733. Bead, glazed frit. Biconical, serrated edge. Light buff(?), glaze worn away, yellowish(?). 1.1 dm., 0.8 th.	—
LEVEL IV - sublevel not specified			
LOCUS 4	Fl. 11	12 N 637. Bead, black stone, whole. Spherical. 1.3 dm.	—
	Fl. 9	12 N 475. Female figurine, baked clay, fragmentary. Nude. 6.8 h., 5.0 w.	—
	Fl. 8	12 N 333. Animal figurine, baked clay, fragmentary. 3.5 h., 7.0 l., 3.2 th.	—
	Fl. 7	12 N 330. Human figurine, baked clay, fragmentary. Head with applied eyes, incisions for hair. 4.2 h., 3.4 w., 3.0 th.	—
	(same)	12 N 331. Animal figurine, baked clay, fragmentary. Head. 3.6 h., 3.2 w., 2.1 th.	—

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		Field Number and Description	Figure
LEVEL III			
LOCUS 4	Fl. 4	12 N 273. Ring, copper. Twisted wire. 1.6 max. dm.	—
	Fl. 3	12 N 98. Horse figurine, baked clay, fragmentary. 6.4 h., 5.4 l., 2.5 th.	—
LOCUS 5	fill below NB temple	12 N 332. Bead, black and white veined stone. Date shaped. Elliptical section. 2.3 l., 1.4 w., 0.7 th.	—
	(same)	12 N 335. Disk, baked clay, fragmentary. Reddish buff. 8.9 dm., 1.6 th. center. 0.7 th. outer edge.	—
	under Fl. 5, near doorway	12 N 304. 2 crescents, copper, one fragmentary. Pierced tang and fragment of wood adhering to one, part of tang broken off other. Probably originally joined. 4.2 w., 3.4 h.	—
	Fl. 4	12 N 322. Male figurine, baked clay, bottom half. Nude, kneeling. Reddish buff ware, light slip with much straw. 4.7 h., 3.3 w.	—
	Fl. 2	12 N 277. Bead, white frit. Cylindrical, grooved. 0.3 dm., 0.6 l.	—
	Fl. uncertain	12 N 305. Bead, green stone. Flattened cylinder. 1.25 l., 1.1 max. w.	—
LOCUS 6	Fl. 5	12 N 325. Bead, glazed frit, whitish, perhaps originally green. Damaged. Ovoid. 2.0 dm., 1.5 l.	—
	(same)	12 N 327. Gold foil, small piece. 0.8 l.	—
	(same)	12 N 328. Bead, white glazed frit. Ring shaped. 0.55 dm.	—
	(same)	12 N 389. Male(?) figurine, baked clay, fragmentary. Right arm missing, originally applied to front. Left arm raised. Applied breasts. Coarse reddish buff ware. 10.9 h., 4.4 max. w., 2.7 th.	—
	fill above Fl. 4	12 N 319. Cone, baked clay, narrow end broken. Hollow, cuplike end. Fine buff ware. Dark brown paint in bands on stem. Early Ubaid date. 3.7 dm. cup end, 1.9 dm. narrow end, 6.6 l.	—

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		Field Number and Description	Figure
	Fl. 3	12 N 307. Bowl, pottery, whole. Slightly incurved round rim, flaring sides, string-cut base. Pinkish buff ware. 5.0 h., 12.2 dm. rim, 4.7 dm. base.	—
	(same)	12 N 312. Bead, translucent agate, one corner preserved. Originally ovoid. 2.1 l., 2.7 w.	—
	(same)	12 N 408. Horse figurine, baked clay, fragmentary. Medium reddish buff ware. 7.7 h., 5.0 max. w., 3.6 th.	—
LOCUS 7	fill under NB temple	12 N 397. Bead, carnelian, whole. Etched white circles. Date shaped. Elliptical section. 2.35 l., 1.3 max. w.	—
	(same)	12 N 399. Bead, carnelian, whole. Barrel shaped. 0.9 l., 0.6 w.	—
	Fl. 4, in plaster of Wall BD	12 N 398. Bead, lapis lazuli, whole. Date shaped. Square section. 2.3 l., 0.9 max. w.	—
	Fl. 4, W corner	12 N 405. Bead, turquoise(?), whole. Double conoid. 0.7 l., 0.5 max. w.	—
	(same)	12 N 406. Bead, turquoise(?), whole. Flattened date shape, elliptical section. 0.9 l., 0.6 w.	—
	Fl. 1, in doorway to LOCUS 5	12 N 375. Bead, light green stone, whole. Elongated ellipse, circular section. 1.6 l., 0.7 max. w.	—
	Fl. 1	12 N 391. Weight, black stone, fragmentary. Lentoid. 1.9 l., 0.55 max. w., 2.1 gm.	—
	fill above Fl. 1	12 N 401. Bead, brown and white banded agate, whole. Barrel shaped. 1.0 l., 0.6 max. th.	—
	inside Wall BD	12 N 343. Bead, mottled gray stone. Circular shape. One face slightly convex, and other has a raised center. Pierced on its diameter. 2.4 dm., 0.9 th.	—
LOCUS 11	fill below NB temple	12 N 410. Camel figurine, baked clay, fragmentary. Medium coarse light buff ware. 6.8 h., 11.9 l., 5.6 th.	—
	Fl. 1	12 N 390. Animal head figurine, baked clay. Long neck, features of face deeply incised. Coarse light buff ware. 7.0 l., 2.1 w.	—

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		Field Number and Description	Figure
	fill above Fl. 1	12 N 393. Peg, iron, in two pieces. 1.6 dm., 15.1 l.	—
LOCUS 12	fill below NB temple	12 N 620. Female figurine, baked clay, mid-section. Incised pubic triangle. Ubaid date. 3.8 h., 3.1 w., 2.5 th.	—
	(same)	12 N 689. Weight, black stone, fragmentary. 3.0 l., 0.9 w., 1.8 gm.	—
	Fl. 4	12 N 395. Bead, white frit, whole. Double conoid. 1.7 l., 1.4 max. w.	—
	Fl. 1	12 N 360. Bead, carnelian, whole. Double conoid. 0.7 max. dm., 1.1 l.	—
	(same)	12 N 361. Glass fragments: *a*) Bowl rim, with thickened ridge. Greenish blue. Translucent. 3.4 l., 3.6 w. *b*) Body. Olive green. Translucent. 4.1 l., 2.4 w. *c*) Body. Aqua. Translucent. 2.5 l., 1.5 w. *d*) Tear shaped. Robin's-egg blue. Thick, opaque. 1.3 l., 1.0 w.	—
LOCUS 20	fill below NB temple	12 N 693. Female figurine, baked clay, top half. Nude. Medium fine buff ware, self slip. 5.8 h., 5.1 w., 1.6 th.	—
	Fl. 4	12 N 606. Dog(?) figurine, baked clay, almost whole. Lying down, nursing four young. Medium pinkish buff ware, self slip. 5.7 h., 11.3 l., 5.9 max. w.	—
	(same)	12 N 610. Horse head from figurine, baked clay, fragmentary. Two incisions on face may represent bridle. Medium coarse buff clay. 7.3 l., 3.1 th.	—
	fill above Fl. 3	12 N 472. Horse-and-rider figurine, baked clay, fragmentary. Medium coarse greenish buff ware. 8.7 h., 4.2 l., 3.4 w.	—
	cut made for restoration of Wall D	12 N 711. Bead, stone, whole. Rectangular. Glazed green, blue, yellow, white. 1.2 l., 1.0 w., 0.7 th.	—
LOCUS 21	fill below NB temple	12 N 456. Male figurine, baked clay, fragmentary. Left arm at side, right to head, perhaps kneeling. Medium coarse reddish buff ware, cream slip. 9.0 h., 6.3 w., 2.3 th.	—

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		Field Number and Description	Figure	
	(same)	12 N 470. Animal figurine, baked clay, rear end. Medium coarse pinkish buff ware, cream slip. 4.8 h., 10.6 l., 7.7 max. w.	—	
	(same)	12 N 482. Camel figurine, baked clay, fragmentary. Medium coarse buff ware. 7.4 h., 11.1 l., 5.5 w.	—	
	(same)	12 N 483. Figurine, baked clay, fragmentary. Nude(?), perhaps kneeling. 6.8 h., 4.2 w., 4.5 max. th.	—	
	(same)	12 N 484. Human figurine, baked clay, fragmentary. Applied arm, breasts. Coarse pinkish buff ware. 6.3 h., 4.8 w., 3.0 th.	—	
	Fl. 5	12 N 452. Bead, gold, whole. Ovoid, round section. 0.8 l., 0.8 w.	—	
	(same)	12 N 459. Bead, white frit, whole. Date shaped, circular section. 1.5 l., 0.6 w.	—	
	Fl. 4	12 N 415. Pin, iron, fragmentary. 14.0 l., 0.9 max. w.	—	
LOCUS 24	fill NE of Wall D contemporary with Wall D	12 N 480. Model boat, baked clay, bulkhead fragment. Medium fine pinkish buff ware. 7.2 l., 4.3 w., 2.0 th.	—	
	(same)	12 N 487. Sherd, pottery. Fine reddish buff ware, reddish brown paint. Not native to Mesopotamia. 7.4 l., 4.3 w., 2.0 th.	21:4	
	(same)	12 N 679. Tablet fragment, legal.	—	†
	(same)	12 N 710. Female figurine, baked clay, fragment. Nude. Hands to breasts, necklace. Buff ware. See *Nippur* I, Pl. 122:10. 5.3 h., 4.6 w., 1.3 th.	—	
LEVEL II or I				
LOCUS 3	Drain 1	12 N 97. Camel figurine, baked clay, fragment. Head and one foreleg missing. Coarse reddish buff ware, cream slip. 7.1 h., 9.6 l., 4.8 max. th.	—	
	(same)	12 N 356. Animal figurine plaque, baked clay, fragmentary. Coarse reddish buff ware. 6.1 h., 10.0 l., 3.5 th.	—	

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		Field Number and Description	Figure	
	in rubble fill outside Drain 1, near bottom	12 N 409. Model bed, baked clay, fragmentary. No legs intact. Incisions to indicate woven surface. Medium reddish buff ware. 8.5 l., 6.7 w., 0.7 th.	—	
LOCUS 4	Fl. 1	12 N 82. Plaque, unbaked clay, fragment. Woman facing left. Torso frontal. Right hand holding basket. Upper torso and most of head preserved. Egyptian origin. 5.7 h., 4.8 w., 2.3 th.	27:1	
	(same)	12 N 83. Bead, white frit with black band. Fragmentary, shape uncertain. 3.3 l., 2.6 w., 0.6 th.	—	
LOCUS 5	inside Drain 2	12 N 318. Animal figurine, baked clay, fragmentary. Probably horse-and-rider. Medium buff ware. 5.2 h., 6.9 l.,	—	
LOCUS 6	Drain 3	12 N 695. Male figurine, baked clay, fragmentary. Head missing. Hands clasped at waist. Belt. Mold made. See *Nippur* I, Pl. 130:11, 14. 7.8 h., 3.2 w., 2.0 th.	—	
LEVEL I				
LOCUS 3	inside Wall BA	12 N 75. Exercise tablet fragment.	—	†
LOCUS 4	Cut 4 (under BURIAL 8)	12 N 326. Female figurine, baked clay, fragmentary. Nude. Arms across chest, flat back. Medium buff ware. 8.3 h., 3.5 max. w.	—	
	(same)	12 N 498. Model boat, baked clay, fragmentary. Prow. Medium pinkish buff ware. 7.1 h., 5.4 max. w., 1.2 th.	—	
	(same)	12 N 618. Pendant, aqua glazed frit, whole. Lion head. 4.0 h., 3.4 w., 1.3 max. th.	27:2	
	(same)	12 N 687. Bulla, unbaked clay. 2 impressions of lozenge-shaped stamp seal with bird. 1.5 l., 0.7 w.	27:3	
	(same)	12 N 688. Bulla, unbaked clay. 3 impressions of round stamp seal. 3 fish-men around a circle. Impression: 1.8 × 1.5.	27:4*a-b*	
	(same)	12 N 690. *Wedjat* eye, red, white, and blue glazed frit, tear broken off. Egyptian origin. 1.9 h., 3.0 l., 0.5 th.	27:5	

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		Field Number and Description	Figure	
	(same)	12 N 692. Horse-and-rider figurine, baked clay, rider fragment. Medium buff ware. 6.8 h., 3.4 w., 2.0 th.	—	
	(same)	12 N 696. Horse-and-rider figurine, baked clay, fragmentary. Medium fine buff ware. 12.5 h., 10.2 l., 5.6 w.	—	
	(same)	12 N 712. Bracelet, copper, whole. Open ends. 3.9 dm.	—	
LOCUS 12	on floor against Wall BR	12 N 400. Stone, bead or inlay. Black, white, and orange. Fragmentary. Double beveled, disk in section. 1.8 l., 2.5 max. w., 0.75 th.	—	
LOCUS 20	inside mud brick of Wall BR	12 N 656. Dog figurine fragment, baked clay, inscribed. Light buff ware. 4.9 h. × 4.2 w. × 3.6 th.	—	†

LEVEL I, BURIALS

BURIAL 1	LOCUS 3, cut into Wall BC	12 N 79. Bowl, pottery, fragmentary. Flaring rim, carinated body, pointed bottom. Medium fine buff ware, self slip. Achaemenid. See *Nippur* I, Pl. 103:15, 16 for somewhat similar types. 5.3 h., 11.0 dm. rim.	33:2	
		12 N 80. Jar, pottery, almost complete. Flaring rim, grooved neck, distended body, flat base. Reddish buff ware, cream slip. 12.0 h., 5.9 dm. rim, 10.2 dm. body, 4.8 dm. base.	33:1	
BURIAL 4	LOCUS 6	12 N 256. Jar, pottery, complete. Flaring rim, groove at neck, ovoid body, modified disk base. Reddish buff ware, cream slip. Found outside coffin. 18.4 h., 8.2 dm. rim, 14.0 dm. body, 5.0 dm. base.	33:3	
		Not registered. Fragment from eggshell-ware bowl. Shallow scoring outside under rim. Round bottom. Very fine buff ware. 7.1 h., 17.0 dm. rim.	—	
BURIAL 5	LOCUS 6	12 N 257. Jar, pottery. Flaring rim, groove at neck, ovoid body, closely grooved on lower part, ring base. Reddish buff ware, pinkish cream slip. Found outside coffin. 18.7 h., 8.0 dm. rim, 14.8 dm. body, 8.2 dm. base.	33:5	

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		Field Number and Description	Figure
		12 N 258. Bowl, pottery, fragmentary. Round bottom. Very fine reddish buff eggshell ware. Found outside coffin. 8.0 h., 18.1 dm.	33:6
		12 N 259. Bowl, pottery, fragmentary, overfired, warped. Plain rim, disk base. Greenish gray ware. Found inverted outside coffin. 5.6-6.0 h., 10.3-11.0 dm. rim, 4.2 dm. base.	33:4
BURIAL 6	LOCUS 4, Cut 2	12 N 283. Jar, pottery, whole. Flaring rim, groove at neck, grooves on upper body, flat base. Light buff ware. 19.4 h., 8.9 dm. rim, 17.2 dm. body, 8.0 dm. base.	33:7
		12 N 290. Bowl, pottery, almost complete, somewhat warped. Round bottom. Fine buff eggshell ware. 6.9 h., 14.5-15.1 dm. rim.	38:8
BURIAL 6(?)	above graves in Cut 2	12 N 94. Horse-and-rider figurine, baked clay, fragment. Crude, greenish buff ware. Highly fired. 8.1 l., 2.5 max. th.	—
		12 N 261. Dish, pottery, fragmentary. Beveled rim, disk base. Pinkish buff ware, cream slip. 3.5 h., 16.0 dm. rim, 6.5 dm. base.	33:10
		12 N 266. Horse-and-rider figurine, baked clay, fragment. Coarse buff ware. 6.2 h., 9.4 l., 4.0 max. w.	—
		12 N 276. Head of horse figurine, baked clay, fragment. Applied details of mane. Pinkish buff ware. 4.9 h., 3.2 max. w.	—
		12 N 279. Bottle, pottery, fragmentary. Narrow flaring rim, one of pair of wing-lugs on shoulder, globular body. Buff ware, light green glaze gone white in places. Disk base of same material and glaze found with bottle cannot be from same vessel. 15.3 surviving h., 4.7 dm. rim, 14.0 dm. body.	33:9
BURIAL 7	LOCUS 5, cut through Neo-Babylonian floors	12 N 260. Bowl, pottery, whole. Incurved rim, flat base. Pinkish buff ware, cream slip. 4.2 h., 12.5 dm. rim, 5.3 dm. base.	33:12
		12 N 262. Bowl, pottery, fragmentary. Round bottom. Very fine buff eggshell ware. 7.5 h., 14.6 dm. rim.	33:13

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		Field Number and Description	Figure
		12 N 264. Jar, pottery, almost complete. Flaring rim, grooves at neck, distended body, flat base. Buff ware. 17.8 h., 8.2 dm. rim, 14.7 dm. body, 7.0 dm. base.	33:11
		12 N 265. Point, iron, corroded. Rectangular section. 10.7 l., 1.0 w.	—
BURIAL 8	LOCUS 4, in Cut 2	12 N 285. Bowl, pottery, almost complete. Round bottom. Very fine buff eggshell ware. 6.8 h., 17.2 dm. rim.	33:15
		12 N 288. Brick, baked, whole. Groove cut in some time after brick was made in shape of knife or hafted point. Mold(?). One of bricks covering coffin. 33.5 × 33.9 × 6.5.	—
		12 N 289. Jar pottery, cracked and repaired with bitumen in antiquity, missing one piece from rim. Flaring rim, grooves on neck and upper body, ovoid body, disk base. Reddish buff ware. 21.2 h., 8.8 dm. rim, 16.3 dm. body, 7.0 dm. base	33:14
BURIAL 9	LOCUS 4, in Cut 1	12 N 263. Jar, pottery, whole. Flaring rim, slight ridges on neck, grooves on shoulder, disk base. Buff ware. 18.6 h., 7.9 dm. rim, 14.6 dm. body, 7.3 dm. base.	34:1
		12 N 286. Bowl, pottery. Round bottom. Very fine buff eggshell ware. 6.3 h., 15.4 dm.	34:2
BURIAL 10	LOCUS 4, Cut 1	12 N 280. Jar, pottery, whole. Pinkish buff ware, self slip. 20.4 h., 8.6 dm. rim, 15.4 dm. body, 6.6 dm. base.	34:8
		12 N 284. Bowl, pottery, fragmentary. Somewhat less rounded bottom than other examples. Very fine buff eggshell ware. 5.8 h., 15.1 dm. rim.	34:9
In Cut 1, above BURIALS 9-10	LOCUS 4	12 N 84. Quadruped figurine, baked clay, one hind leg missing. 6.0 h., 5.8 l., 3.0 w.	—
		12 N 95. Vessel, pottery, almost complete. Flaring neck, groove at shoulder, flat base. Two holes drilled in body. Hole in bottom, maybe ancient and deliberate. Reddish ware, buff slip. 12.1 h., 4.8 dm. rim, 8.9 dm. body, 4.4 dm. base.	34:6

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		Field Number and Description	Figure	
		12 N 96. Pitcher, pottery, fragmentary. Flaring, beveled rim, grooves on shoulder and neck, horizontal. Handle missing. Red ware, buff slip on outside. 15.0 h., 6.0 dm. rim, 11.3 dm. body, 5.2 dm. base.	34:7	
		12 N 274. Animal figurine, baked clay, fragment. Head of sheep(?). Applied eyes. Mouth, nose incised. Reddish buff ware. 3.9 h., 2.0 w.	—	
		12 N 275. Bottle, white stone, fragmentary. Rim missing. Elongated cylinder with round bottom. Three horizontal grooves in upper half. Inscription "KINNA" above grooves. Hole partially drilled in bottom. 20.8 l., 5.0 max. w.	34:10	†
		12 N 281. Jar, pottery, fragmentary. Two wing lugs, sharply offset inner ledge rim, rocker pattern impressed on shoulder in three bands, ring base. Green glazed. Found with 12 N 282. 19.2 h., 10.5 dm. rim, 17.8 dm. body, 7.2 dm. base.	34:5	
		12 N 282. Bowl, pottery, fragmentary. Carinated rim, modified disk base. Whitish gray glaze. Found with 12 N 281. 16.4 dm. rim, 7.9 dm. base.	34:4	
		12 N 287. Bowl, pottery, fragmentary. Incurved rim, small flat base. Light buff ware. 4.7 h., 12.1 dm. rim, 5.2 dm. base.	34:3	
BURIAL 11	LOCUS 6	12 N 320. Jar, pottery, almost whole. Flaring rim, grooves at shoulder, ovoid body, flat base. Buff ware. 19.7 h., 9.4 dm. rim, 15.8 dm. body, 7.3 dm. base.	35:1	
		12 N 321. Bowl, pottery, almost whole. Carination near rim, disk base. Buff ware, gray green, gray, tan glaze. 6.8 h., 16.8 dm. rim, 7.5 dm. base.	35:3	
		12 N 329. Bowl, pottery, fragmentary. Round bottom. Very fine buff eggshell ware. 6.0 h., 15.6 dm. rim.	35:2	
BURIAL 12	LOCUS 20E, under Wall BT	12 N 699. Jar, pottery, whole. Flaring rim, groove at neck, ovoid body, disk base. 18.6 h., 8.2 dm. rim, 14.5 dm. body, 5.6 dm. base.	35:4	

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		Field Number and Description	Figure
		12 N 700. Bowl, pottery. Round bottom. Very fine buff eggshell ware. 7.5 h., 19.3 dm. rim.	35:5
BURIAL 13	LOCUS 20E	12 N 632. Jar, pottery, almost whole. Flaring rim, groove at neck, ovoid body, ridges on lower part, ring base. 19.7 h., 8.0 dm. rim, 13.8 dm. body, 6.1 dm. base.	35:6
		12 N 633. Bowl, pottery, fragmentary. Round bottom. Very fine buff eggshell ware. 8.2 h., 18.5 dm.	35:7
LEVEL I, later than BURIALS			
Debris above LOCUS 20	beside Wall BT	12 N 407. Female figurine plaque, baked clay, fragmentary. Nude. Medium light buff ware. 6.9 h., 3.3 w., 2.0 th.	—
	fill above Wall BT	12 N 445. Model chair, baked clay, fragmentary. Webbing in seat, back lost. Buff ware. 3.3 h., 6.4 l., 5.8 w.	—
	(same)	12 N 446. Figurine plaque, baked clay, lower half. Gray buff ware. 3.3 h., 2.3 w., 0.9 th.	—
LOCUS 20E	between Walls D and BT	12 N 486. Ring and bead: *a*) Ring, bone, fragmentary. 2.0 dm., 0.5 th. *b*) Bead, blue paste, whole. Circular section, lengthwise incisions. 0.7 l., 0.6 w.	—
	fill above Fl. 4	12 N 603. Spatula, bone, fragmentary. 6.6 l., 2.3 w., 0.1 th.	—
	Fl. 3	12 N 468. Spatula, bone, fragmentary. Polished. 14.5 l., 1.8 w., 0.1 th.	—
	(same)	12 N 469. Model bed, baked clay, fragmentary. Webbing indicated with raised strips of clay. Medium fine grayish buff ware. 7.8 l., 7.1 w., 0.9 th.	—
	Fl. 3, beside Wall A	12 N 479. Jar, pottery, whole. Everted rim, globular, round base. Ancient drill hole in bottom. Medium fine buff ware. (See eleventh season caches in LOCUS 2, OIC 22, Figs. 22-23*b*.) 9.0 h., 9.6 dm. rim, 12.7 dm. body.	—
	(same)	12 N 474. Rider figurine, baked clay, fragmentary. Flat hat, pinched face. Crude. Medium pinkish buff ware, cream slip. 5.3 h., 2.4 w., 1.7 th.	—

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		Field Number and Description	Figure
	fill above Fl. 3	12 N 476. Stone, black. Triangular, drill mark in center. 9.0 × 8.0 × 7.0, 2.4 th.	—
	fill above Fl. 2	12 N 455. Female figurine, baked clay, lower half. Nude. Cloth draped from left hand. Hollow, mold-made. Medium fine reddish buff ware, cream slip. 7.7 h., 4.3 w., 1.5 th.	—
	(same)	12 N 458. Glass, dark green, fragment. 2.1 l., 1.9 max. w., 0.3 th.	—
	fill above Fl. 1	12 N 454. Spatula, bone, fragmentary. 7.7 l., 1.7 max. w.	—
	(same)	12 N 460. Male figurine, baked clay, fragmentary. Probably from horse-and-rider figurine. Beard. Medium buff ware. 6.5 h., 5.9 w., 2.8 th.	—
Ancient cut NE of LOCUS 20E, outside Wall D		12 N 481. Female figurine, baked clay, fragmentary. Nude. Accentuated thighs. Medium buff ware. 6.5 h., 3.2 w., 2.4 th.	—
		12 N 496. Female figurine, baked clay, fragmentary. Nude. Accentuated hips. Medium reddish buff ware. 7.6 h., 3.7 w., 2.9 th.	—
		12 N 497. Female figurine, baked clay, fragmentary. Nude. Medium buff ware. 5.1 h., 2.7 w., 3.0 max. th.	—
LEVEL I, Court of Columns(?)			
Within Wall A1		12 N 67. Human figurine, baked clay, lower half. Nude. Winged(?). Light buff. See *Nippur* I, Pl. 134:6-8. 6.8 h., 4.8 max. w., 2.5 th.	—
		12 N 69. Spatula, polished bone, fragment. Broken at wide end. 6.0 l., 1.4 max. w.	—
		12 N 70. Tooth, polished. Canine(?). 3.7 l., 0.9 w.	—
		12 N 73. Tambourine-player female figurine, baked clay, fragment. Portion of face, hair, necklace, hands preserved. Greenish gray. 5.7 l., 4.5 w.	—
Foundation cut for Wall A1 in LOCUS 4		12 N 78. Vessel, pottery. Several pieces missing. Fine buff ware. 9.4 h., 20.7 dm. rim, 7.5 dm. base.	29:2

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		Field Number and Description	Figure	
Foundation cut for Wall A1 in LOCUS 5		12 N 77. Figurine fragment, baked clay. Bearded man with long neck. Handle(?). See *Nippur* I, Pl. 130, No. 5. 4.5 l., 2.7 max. w.	—	
		12 N 278. Coin, bronze, worn. Seleucus II (246-226/5 B.C.). Obv.: bust of king to right. Rev.: Apollo standing to left with arrows. Inscription: ΒΑΣΙ[ΛΕΩΣ].[21] 15 mm. dm., 8.8 gm.	29:1	†
Above LOCUS 7	fill below Wall BG	12 N 344. Bead, dark reddish brown stone, half. Short cylinder. 1.6 dm., 0.7 l.	—	
	(same)	12 N 352. Eyelet and pin, iron. Fragmentary. See 12 N 414 (below). Eyelet: 9.3 l., 4.0 dm.; pin: 12.9 l., 1.4 dm.	29:3	
	(same)	12 N 372. Bead, brown, black, and white banded agate. Elongated ellipse, circular section. 2.3 l., 0.9 max. w.	—	
	(same)	12 N 381. Horse figurine, baked clay, fragmentary. Damaged by fire. 6.8 h., 7.4 l., 3.6 th.	—	
	(same)	12 N 392. Iron objects, fragmentary: *a*) Cylindrical. 3.0 l., 2.5 w. *b*) 2 rods, fused together. 4.5 l., 3.9 max. w.	—	
	(same)	12 N 404. Bead, blue green glass, fragmentary. Crude. Circular section, flat faces. 1.5 dm., 0.7 w.	—	
	(same)	12 N 640. Coin, bronze, fragmentary. Obv.: male bust to right. Rev.: unclear, monogram stamped in. Seleucid. 14 mm. dm., 2.2 gm.	29:4	
Seleucid cut through Neo-Babylonian wall between LOCI 7 and 11		12 N 403. Bead, white and black stone, fragmentary. Like an eye. Beveled edge, circular shape, slightly convex section. Black portion on one face projects from white background. Pierced longitudinally. 2.2 dm., 0.7 max. th.	—	
		12 N 414. Object resembling cotter pin and fragment of a bolt, iron, fragmentary. See 12 N 352 (above). Pin: 10.9 l., 4.3 w. eye, 1.4 w. stem; bolt: 7.1 l., 1.3 dm.	—	

21. See Georges Le Rider, *Suse sous les Séleucides et les Parthes*, Mémoires de la Mission Archéologique en Iran 38 (Paris, 1965), No. 260,2.

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		Field Number and Description	Figure
Above LOCUS 21	fill below Wall BG	12 N 449. Female figurine, baked clay, bottom half. Nude. Accentuated thighs. Medium buff ware. Like 12 N 455, 481, 496, 497 (above, fill NE of LOCUS 20E). 7.2 h., 3.7 w., 3.2 th.	29:5
	inside brick of Wall BG	12 N 308. Mask, light yellow glazed frit. Left lower portion of face broken off, both ears damaged. Eyes, eyebrows, other features bored for inlay. Hollow, 3 holes at each ear. 5.0 h., 4.3 w.	29:6*a-b*
	(same)	12 N 314. Tambourine-player female figurine, baked clay, top half. Necklace. Small, delicate. 4.1 h., 4.0 w.	29:7
	(same)	12 N 316. Ring, copper, whole. 2.1 dm.	—
	(same)	12 N 317. Female figurine, baked clay, fragmentary. Nursing baby. Medium coarse light buff ware. 4.6 h., 3.8 w.	—
	(same)	12 N 334. Spatula, bone, fragment. Polished. 4.0 l., 1.4 w., 0.1 th.	—
	fill SW of Wall BG	12 N 302. Dog figurine, baked clay, fragmentary. Tail curled up. Reddish buff ware, cream slip. 9.7 l., 7.8 h.	—
	(same)	12 N 303. 2 animal figurines on flat base, baked clay, fragmentary. Fragment of possible third. Medium coarse light buff ware. Like 12 N 606 (above, LEVEL III, LOCUS 20). Animals: 1.7 h., 2.5 l.; platform: 7.1 l., 3.5 w.	—
	(same)	12 N 315. Bead, banded tan and white stone, elliptical. 1.8 l., 1.2 max. w.	—
	(same)	12 N 323. Animal figurine, baked clay, fragmentary. Reddish buff ware, cream slip. 7.2 h., 9.9 l.	—
	(same)	12 N 324. Male figurine, baked clay, fragment. Crude. Legs, arm missing. Flat, applied eyes. One arm formerly applied at front of body. Coarse reddish ware. 6.1 h., 3.4 w.	—
	(same)	12 N 336. Jar, alabaster, fragment. 4.6 l., 2.9 w., 0.4 th.	—
	(same)	12 N 345. Female figurine, baked clay, upper torso. Nude. Hands clasped, veil over hair. Medium coarse buff ware. 7.6 h., 4.5 max. w., 2.8 th.	—

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	Field Number and Description	Figure
(same)	12 N 351. Plate, baked clay, almost complete. Two concentric incisions on interior. Medium fine buff ware. 13.9 dm. rim, 8.2 dm. base.	—
WA, Pennsylvania trenches or unstratified		
Pennsylvania cut NE of Wall A1	12 N 439. Human figurine, baked clay, badly worn, fragmentary. Bitumen necklace(?). 11.5 h., 6.4 max. w., 3.0 th.	—
Pennsylvania cut SE of LOCUS 6	12 N 355. Bead, turquoiselike stone. Date shaped, elliptical section. 0.9 l., 0.7 w.	—
	12 N 358. Human figurine, baked clay. Head, portions of arms and legs missing. Medium coarse reddish buff ware. 7.6 h., 4.5 max. w., 1.6 th.	—
Pennsylvania cut above LOCUS 7	12 N 350. Inlay, white stone, fragment. Incisions on surface. 4.3 l., 2.6 w., 0.65 th.	—
WA surface debris	12 N 41. Spindle whorl, fine white stone, plain. 3.2 max. dm., 0.5 max. th.	—
Dump	12 N 499. Head of figurine, baked clay, fragmentary. Probably rider of horse-and-rider. Applied eyes, pinched nose. Medium buff ware. 4.5 h., 1.5 w., 1.8 th.	—
From Square I3, baulk above Wall P		
Below LEVEL III, Fl. 4	12 N 74. Horse-and-rider figurine, pinkish buff baked clay. Fragmentary. 8.5 h., 5.3 max. w.	—
LEVEL III, Fl. 4	12 N 28. Bead, glazed white frit. 0.8 h., 0.6 max. dm.	—
	12 N 72. Horse-and-rider figurine, baked clay. Head of rider and part of arm preserved. Light buff. 5.8 l., 2.7 w.	—
LEVEL III, Fl. 3	12 N 27. Quadruped figurine, baked clay. Head, legs, tail broken. Red buff, cream slip. 6.3 h., 8.8 l., 4.3 th.	—
LEVEL III, Fl. 3, near Wall C	12 N 46. Tablet(?). Fragmentary, with design like sign for barley (ŠE). 1.8 h., 3.5 l., 3.5 w.	—

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	Field Number and Description	Figure	
LEVEL III, Fl. 3, between Walls P and Q	12 N 68. Stone, black. Polished, pyramidal. 2.7 l., 1.3 w.	—	
LEVEL III, Fl. 2b	12 N 15. Spatula, bone, broken at one end. Polished. 6.9 l., 1.8 w., 0.15 th.	—	
	12 N 19. Quadruped figurine, baked clay. One leg and portion of hindquarters preserved. Greenish buff. 5.5 h., 3.5 l., 2.5 th.	—	
	12 N 20. Horse figurine, baked clay. Ears, 3 legs broken. Light buff, light green glaze. 6.5 l., 2.5 w., 6.0 h.	36:1	
	12 N 22. Ring, copper. Ends do not meet. 2.0 dm., 0.2 th.	—	
	12 N 23. Bead, dark orange stone. Truncated cone. 1.1 dm., 0.7 th.	—	
LEVEL III, Fl. 2b, 0.5 m. E of Wall F	12 N 44. Exercise tablet fragment. Late Babylonian.	—	†
LEVEL III, Fl. 1	12 N 16. Lamp, pottery. Broken at neck and spout, traces of burning at spout. Pinkish buff. 6.0 h., 13.1 l., 3.0 dm. rim, 1.8 dm. spout.	—	
	12 N 17. Quadruped figurine, baked clay. Legs, neck, head broken. Pinkish buff. 7.0 l., 3.0 h., 3.0 th.	—	
(same)	12 N 18. Horse figurine, baked clay, back end. May have traces of ink or paint. 5.0 h., 4.5 l., 4.0 max. w.	—	
	12 N 21. Mold(?), soft stone or frit, fragmentary. One flat surface, with cutout of Maltese cross. Upper surface has incised sign. Irregular nicks around edge. 3.5 dm., 1.3 max. th.	36:2*a-b*	
	12 N 34. Bead, greenish white glazed frit, circular. 0.6 h., 0.8 max. dm.	—	
LEVEL III, Fl. 1, fill	12 N 9. Horse figurine, baked clay, head. Buff. 4.5 h., 3.5 l., 2.0 th.	—	
	12 N 10. Horse figurine, baked clay, head and neck. Pinkish buff. 6.0 h., 3.0 l., 2.0 th.	—	
	12 N 13. Ring, copper, ends do not meet. 1.7 dm., 0.4 th.	—	

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	Field Number and Description	Figure
LEVEL II, Fl. 2b	12 N 8. Bead, black and white agate. Like an eye. Ovoid, carved so that black part of stone forms raised dot in center of white. Like 12 N 403 (above). 1.1 dm., 0.7 th.	—

WA 50c, found in eleventh season but not registered at that time

LEVEL X, inside NW face of Wall B, between oven and baulk at foundation level	12 N 685. Bowl, pottery, almost complete. String-cut base. Medium fine buff ware. Sheep bones inside. 4.0 h., 13.2 dm. rim, 4.3 dm. base.	36:3
LEVEL X, Room 1, Fl. 6	12 N 681. Bowl, pottery, fragmentary. String-cut base. Medium pinkish buff ware. 4.4 h., 15.1 dm. rim, 5.0 dm. base.	36:4
	12 N 684. Bowl, pottery, almost complete. String-cut base. Medium fine reddish buff ware, cream slip. 5.3 h., 17.0 dm. rim, 6.0 dm. base.	36:5
LEVEL X, Court, Fl. 6	12 N 682. Bowl, pottery, fragmentary. String-cut base. Medium fine pinkish buff ware. Found inverted over 12 N 683. 5.8 h., 17.0 dm. rim, 6.3 dm. base.	36:6
	12 N 683. Bowl, pottery, complete. String-cut base. Medium fine pinkish buff ware. Found upright under 12 N 682. 5.0 h., 18.2 dm. rim, 4.3 dm. base.	36:7

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2

AREA WB

Judith A. Franke

In the eleventh season of excavation at Nippur, a new area was opened in the south part of the West Mound.[1] This part of Nippur had not been excavated since the time it had been the focus of extensive work by the University of Pennsylvania at the turn of the century. In the last two years of those excavations, this part of the site (Pennsylvania's Mounds IX and X) was thoroughly honeycombed with trenches and tunnels by John Henry Haynes, who extracted from it, by his own count, 22,000 tablets.[2]

The location of our Area WB was a gully running parallel to the southwest edge of the mound. At both ends this gully joined gullies running roughly at right angles to the edge of the mound. The area excavated during the eleventh season consisted of a trench 6 m. wide by about 25 m. long. Beneath a few scraps of wall at the surface a large mud-brick wall crossed the trench. The wall had a doorway with a baked-brick sill and drain. On one side of the wall were the remains of what appeared to be a courtyard paved with baked brick. There was not enough undisturbed material here to provide pottery for dating purposes.

Directly beneath this wall were found well-preserved buildings of the Old Babylonian period that appeared to be dwellings. A number of the rooms were excavated. Among the most interesting discoveries of the excavation was a courtyard at the northwest end, with baked-brick-faced walls and many objects left in situ on the floor.[3]

In the twelfth season the WB area was enlarged, first to the southwest and then to the northeast, opening up an additional 350 square meters to make a total excavation area of more than 500 square meters. The original 6 × 10 m. excavation areas were extended by 4 m. to the northwest, creating squares of 10 m. The excavation and the processing of the finds, essentially pottery, was under my direction and supervision. The surveying and planning was done by John Sanders. From twelve to twenty workmen were employed in the area, and one railroad line was used. The workmen included from two to four pickmen. In the twelfth season work was conducted in this area from October 1 to December 12.

Since the mound on both sides of the eleventh-season trench was preserved

1. OIC 22, p. 104 ff.
2. Unpublished notes in the archives of the University of Pennsylvania Museum.
3. OIC 22, pp. 105-6, Figs. 79-82.

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to a greater height than the original mound surface in the trench area, much additional information was gained about the periods later than the Old Babylonian, and two additional level designations (G and F) have now been added above last year's Levels I-IV, reserving letters A-E for any additional upper levels that may be found in the future.

The eleventh-season method of digging in 6 × 10 m. excavation areas was essentially abandoned in the twelfth season, in part because of the fragmentary nature of the material, but mainly because the twelfth-season excavation aimed at the recovery of coherent architectural units. Areas were excavated and recorded by locus, a locus being an architecturally defined area, usually a room or part of a room. Loci were numbered in the order in which they were defined. A comparison of plans and sections in this report (Figs. 37-41) with those in *OIC* 22[4] will make clear the correspondence between old and new locus numbers.* Each of the six levels, F to IV, will be discussed in detail below, beginning with the lowest. Burials and drains are grouped with the level from which they were dug, as accurately as this could be determined. Results of the eleventh-season excavation are incorporated in the discussion wherever pertinent.

Table 2 shows the distribution of material by level.

LEVEL IV, OLD BABYLONIAN (FIGS. 37-45)

Level IV, the Old Babylonian level, consisted of one large Old Babylonian house, House A; portions of another house, B (the rooms of which were partially lined with baked brick), built against the northwest end of House A; a large open area with layers of accumulated ash outside the southwest walls of these two houses; and fragments of roughly contemporary walls built against the northeast wall of House A. The structures will be discussed in the order in which they were built. In my discussion of the Old Babylonian houses, the designations "room" and "locus" will be used interchangeably.

House A

House A is unusually large, well built, regularly planned, and well preserved. It is rectangular, with eleven rooms surrounding two courtyards (Figs. 39-41).

House A has a foundation of unplastered mud bricks 1.25 m. high. The foundation plan is identical with the house plan except for the few instances detailed below, but includes no doorways. The foundation walls are approximately a meter thick, that is, about 10 cm. thicker than the room walls built over them. In the eleventh season, before these foundations had been completely excavated, they were thought to be the walls of an earlier structure and were designated Level V, tentatively attributed to the Isin-Larsa period. The Level V designation has now been discarded. The bottom of the foundation

4. OIC 22, Figs. 77-85.

*Floor designations of the 12th season supersede those of the 11th season.

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TABLE 2

MAJOR FEATURES OF AREA WB

LEVEL	DATE	CHARACTER OF OCCUPATION	REMAINS PRESERVED	LOCI	BURIALS	DRAINS
F	Achaemenid(?) 6th-4th cent. B.C.	A large public building(?)	A few scraps of walls and floors; five deep pottery drains(?)	14, fragment above 12; 13, upper SE Wall; 6, upper SE Wall(?)		1-6(?)
G	Late Neo-Assyrian/ Neo-Babylonian(?) 8th-6th cent. B.C.	Unoccupied(?)	Several pits; three burials dug into ruined walls of previous level; two additional burials	Pits in 18/14A, 12(?)	1-4, 7	
I	Post-Kassite 11th-8th cent. B.C.	At least two building periods (these remains are not divided into two levels because the correlation between isolated parts of the excavation is still not clear)				
		(IA) A large well-planned building(?); Kassite walls used in some places as foundations	A few scraps of walls and floors	14A; 19; 3, SE Wall; 1, upper SW Wall		
		(IB) Burials dug into Phase C material	Two burials (tablet hoard associated with one burial as packing material around jar)		5, 6	
		(IC) Private houses(?) built in and around the remains of the Kassite palace walls, filling in the large open areas of the palace and in places reusing the Kassite walls	Relatively well-preserved rooms; a number of floors, some with a considerable depth of stratified material; three burials within one room	1-5, 7	8, 9, 10	
II	Late Kassite ca. 1250 B.C.	A large palace dated by tablets to the reigns of Kudur-Enlil and Shagarakti-Shuriash	Part of one side of the palace; portions of three or four rooms (one 16 m. long); part of a central paved court; large portions of preserved floors and stratified pottery			
		(IIA) The palace, highest floor, including structures within Locus 18		20, 21 (6, 11-13, 18 still in use?)		
		(IIB) The palace and its second floor level		6, 11-13, 18		
		(IIC) The palace and its original floor level		6, 11-13, 18		
III	Early Kassite 16th-14th cent. B.C.	Unoccupied(?)	Wind- and water-laid silt accumulation in abandoned Old Babylonian houses; some deliberate fill(?); pits cut into this material	Pit above Loci 25 and 16		
IV	Old Babylonian 1st half of 18th cent. B.C.	Large, well-built private houses	A large, well-preserved house with remains of other houses built against it on two sides and a large open area on a third; one burial	House A: 8, 9, 15-17, 26-30; House B: 22, 23; other: 24, 25, 10	11	

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was reached at several points within the house, but on the outside only on the southwest side. We cannot state at present whether the foundation was cut down into earlier strata, but if this was the case, the material within the cut was removed, since the foundation contains only deliberate fill. We do not at present see the necessity for this high foundation. The fill within the foundation is loose ashy material that contains little pottery and few objects. Near the top of the fill in Room 9, however, we found poorly preserved fragments of about six Old Babylonian school exercise tablets (model contracts) (12 N 566-72). The earliest floors within the rooms are in general a few centimeters above the foundation footing. The bricks throughout the Old Babylonian level measure 25 × 16 × 8 cm. and are laid in alternating courses of headers and stretchers, with occasional irregularities.

It was at the level of these earliest floors that we encountered an unusual phenomenon. Sets consisting of two crude pottery bowls were found apparently purposely placed against the walls, with one bowl inverted over the other (Fig. 41). In many cases these bowls stood on the foundation footing just beneath the lowest floor; the next most common location was on the lowest floor. The bowls seemed to be associated with doorways. Of the 39 bowls found, 33 were found in three rooms. They appeared to contain only clean silt, but the contents are being chemically analyzed and we hope to obtain more information on this point. Mention will be made of the bowls in the discussion of individual rooms, and the data on all of the bowls is given in Table 3.

Locus 8. The northeast half of Locus 8, a long, narrow corner room, was excavated in the eleventh season and designated WB 1, Room 4. About half the remainder, including the entire southwest end of the room, was destroyed by a large pit, presumably dug by Pennsylvania. The amount of room area left intact was therefore very small. The stratigraphy that remained contained a dirt floor somewhat above the level of the foundation footing. Loose, laminated dirt floors continued upward for a distance of about 35 cm., and above this point the room was filled with layered wind- and water-laid silt to the preserved tops of the walls. The room had doorways leading to Locus 23 and to the court (Locus 16). The door leading outside the house to Locus 23 was blocked at the level of Floor 1, presumably at the time that House B was built against this end of the building. The doorway to the court had not been blocked, as we thought in the eleventh season;[5] there is evidence of a succession of alternating floors and mud-brick sills that had connected the room with the court. Since the court floors accumulated more rapidly than those of the room, the sills were apparently necessary to equalize the levels of the two. All floors of Locus 8 were accessible from Locus 16 by means of these successive sills in the doorway. Above the floor level of both rooms there was a blocking in this doorway that will be discussed below. The upper walls of Locus 8 were in a very eroded state and had apparently been exposed to the elements for some time.

Locus 15. Locus 15, a long corner room like 8, originally had a doorway

5. OIC 22, p. 105.

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TABLE 3
BOWLS FOUND UNDER EARLY OLD BABYLONIAN FLOORS

Locus	Number	Provenience	Total per Room
8	1 set(?)	Fl. 1(?), left side of doorway leading out of House A	2(?)
16	2 sets	Fl. 6 (lowest), NW wall, 1 set each side of hearth	
	1 set	Below Fl. 6 on footing, right side of door to Room 15	
	2 1/2 sets	Below Fl. 6 on footing, left side of door to Room 15	11
17	1 set	Fl. 5 (lowest), center of NW wall	
	1/2 set(?)	Fl. 5, center of SE wall	
	2 sets	Fl. 5, on footing of NE wall, near door to Room 16	
	1 set	Fl. 5, NE side of doorway to Court 30	
	2 stacks, containing 3 and 4 bowls respectively, some inverted over others	Below Fl. 5, center of NW wall	16
26	1 set	Fl. 4 (of 9), NE wall near corner beside bread oven	2
27	1 set	Fl. 2(?), doorway to Court 30, NE side	
	1 set	Fls. 4-5, near S corner	
	1 set	Fl. 5, NW wall, right side of door to 30	6
30	1 set	Fl. 4 (of 7), NW wall, left side of door to 17	2
		TOTAL	39

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on the northwest leading outside the house, but this doorway seems to have been blocked soon after construction, as the blocking goes to the line of the lowest floor. The brickwork at the north corner of the house is a bit unusual in that it was only partially or roughly bonded. The upper part of the wall was unbonded and ran past the northeast wall of the house. In the area just northeast of the house we found a unique opportunity to estimate the original height of the house walls. The top part of the wall at the northeast side of Locus 15 (see Fig. 40) had fallen outward and lay with the bricks on end but still in position. The fallen wall extended to a width of 1.65 m. from the house wall, which is itself preserved to a height of 1.05 m. above the lowest floor. The original height of the wall can therefore be estimated at 2.70 m.

Within this room, 85 cm. of stratigraphy were preserved, and three floors have been distinguished in this very small area. As in Room 8, the doorway to the court (Locus 16) had been gradually blocked with mud-brick sills as the floors of the rooms rose unequally. A high blocking of the doorway, like that of Room 8, extends above the level of the highest floor. Material encountered in the eleventh season above Floor 1 in this room contained almost exclusively Akkadian pottery, indicating that there had been some deliberate filling of this room, presumably associated with the high blocking of the door. On Floor 2, in the east corner of the room, there was a door socket made of a rough box of baked-brick fragments. There were about 20 cm. of laminated wind- and water-laid silt above Floor 1, and above this there was about half a meter of what was apparently fill.

Locus 16. Locus 16 is a large rectangular courtyard of which about two-thirds was excavated in the eleventh season. In the area excavated during the twelfth season six floors were found, comprising 1.3 m. of stratigraphy. Unlike the essentially dirt floors of Loci 8, 9, and 15, this courtyard material was composed principally of thin layers of laminated ash, presumably from the many hearths found here. Mud-brick hearths and burned patches were found in a variety of locations on all floors. Near the center of Locus 16, on Floor 4, there was a hearth. Floor 6 had two hearths—one near the center of the northwest wall and another in front of the doorway to Locus 15. The hearth at the northwest wall was particularly interesting. It was composed of a line of four mud bricks placed about 15 cm. from the wall. The area around the bricks was burned. Two sets of crude bowls, each with one bowl inverted over the other, had been placed symmetrically between the wall and the bricks, one set at each end of the hearth (Fig. 43:2). Four such sets of bowls were found below the lowest floor, placed against the foundation footing: three to the left of the door to Locus 15 and one to the right. Door sockets were found corresponding with two separate floors in the east corner beside the door to Room 17.

Above Floor 1, the room was filled to the top of its walls with wind- and water-laid silt. A portion of the mud-brick wall to the southeast had fallen inward on top of this accumulated material.

Locus 9. About half of Locus 9, a long, narrow room, was excavated during the eleventh season. The room had two clay floors. Beneath the lower, in the top of the foundation fill there were fragments of about six Old Babylonian model contract tablets (12 N 566-72). On the upper floor were three

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parallel mud-brick benches, built out into the room. There were about 55 cm. of relatively clean dirt above Floor 1, and above this, 44 cm. of wind- and water-laid silt that filled the room to the top of the walls. The upper walls were very much weathered. This was the only room that was completely excavated to the bottom of the foundation walls (Fig. 43:1).

Locus 17. Locus 17, a long, narrow room, runs between the two courtyards of the house and has doorways to both. Access can also be had to Rooms 29 and 31. The latter room, excavated in the eleventh season and designated Square 2, Room 2, was a toilet with a vertical drain. The total depth of stratigraphy above the foundation fill in Locus 17 was 94 cm., excavated in five floors. The floor material consisted principally of laminated ash layers. Just below Floor 5 and on it there were a total of 16 bowls in sets (listed in Table 3). Several interesting objects were found on Floor 4: a fine Akkadian cylinder seal (12 N 625, Fig. 45:4), an almost complete clay tablet with part of its envelope (12 N 676-77, Fig. 92:3), and fragments of three plaque figurines. The clay tablet deals with the lease of a field and is dated to Rim-Sin of Larsa, Year 53 or 55 (1770 or 1768 B.C.; the date is partially broken). The figurines are all of women: one a nude woman (12 N 785), one a goddess(?) shown frontally with a harp (12 N 784, Fig. 44:2), and the third the bottom part of a goddess(?) with a flounced skirt (12 N 639, Fig. 44:1).

On Floor 3 at the northeast end, a wall only one brick in thickness crosses the room just southwest of the doorways to Locus 16 and Locus 29. The thinness of this wall suggests that it did not stand to a great height but was only a low partition.

Locus 26. The south corner room of House A, Locus 26, opens on to the court (Locus 30). All of the stratigraphy in the west corner of the room had been destroyed by a Pennsylvania cut. The preserved stratigraphy consists of 1.20 m. of debris, excavated in ten floors. All were strewn with ash.

In the period covered by the accumulation of Floors 3 through 10, there were always one or more ovens in this room (Fig. 41). They were always in one of three positions on the southeast side of the room: at one of the two corners or at the center. According to the traces that remained, there may have been from one to three ovens in use at one time. Some were apparently in use throughout the accumulation of several floors. The ovens were of two varieties: Floors 7 to 10 had a central oven or hearth characterized by a circle of mud brick; Floors 3 to 8 had round clay ovens of the standard *tannur* type still being used in Iraq.[6] There were no ovens on Floors 1 and 2, but a mud-brick platform one brick high stood against the southeast wall on Floor 2 (Fig. 40). A second course of brick was placed along the edges of this structure making a bin with a clay floor inside. Several small stones for grinding or pounding were found on this floor. Other objects of interest in this room were three clay-plaque figurine fragments: a kilted man with his foot on his kneeling foe (12 N 731, Fig. 44:3), a man on a donkey (12 N 713, Fig. 44:4), and a bowlegged dwarf (12 N 494, Fig. 44:6). The Kassite building stood just

6. The method of use is as follows: after the oven has been heated by a fire in the bottom, the flat cakes are pressed against the inside of the wall and left there until baked.

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a few centimeters above Floor 1; any Old Babylonian material above this floor level had been destroyed during Kassite building operations.

Loci 27-29. Three small rooms (27-29) at the east corner of House A will be discussed as a group, since they are closely related.

The foundation plan indicates that this unit may originally have been meant to consist of four small rooms, the area designated as 28 having been intended as two rooms joined by a doorway (Fig. 39). The jambs of this doorway, however, were not built up above foundation level. Nor was the wall separating Rooms 27 and 28 built above the foundation, so that an L-shaped room resulted, with two doorways leading to the court (Locus 30). Neither the doorway to Room 29 nor that leading out of the house to Locus 24 (see Fig. 40) existed during the earliest occupation of the house. At Floor 5 of Room 28, a doorway was cut into Locus 29. Several changes took place at Floor 4: the doorway was cut through the outside wall, and a wall was built separating Locus 27 from 28 (as had apparently been intended in the original plan). Just after this, even the doorjambs separating Rooms 28 and 29 were abandoned, and 28 and 29 became one long room. Above Floor 2, doorjambs were again built between these rooms, and finally—apparently contemporary with Floor 1 (or later)—this new door was blocked.

The total depth of stratified floor material in Room 28 is 1.37 m. Floor 1 is just below the preserved top of the walls, and the Kassite building stands directly on these walls. The floors are laminations of ash and clay. A fragment of a clay model bed and part of a clay model boat (12 N 708, 787) were found in this room.

Almost nothing remained for excavation in Locus 29, through which Pennsylvania had cut a trench. The doorway to Room 17 had been destroyed by an intrusive drain. Here again, the stratigraphy consisted of thin laminated ash layers, of many colors. There were signs of at least one hearth in this room, against the northeast wall, where the floor had been burned black to some depth.

Only about 50 cm. of stratigraphy were preserved in Locus 27. It would appear that after the wall was built dividing this room from Room 28, floors ceased to accumulate here. Above Floor 1 (which is the same as Floor 5 of Locus 28) only clean dirt (perhaps fill) was found to the top of the preserved wall. On Floor 1, however, a low mud-brick wall crossed the room at the southeast end. This could not be excavated completely because it went into the baulk line. The southeast end of Locus 28 could not be reached for the same reason.[7] The northwest end of this room is unusual in that the footing is of baked brick. Three sets of bowls (listed in Table 3) were found in this room.

Locus 30. The square courtyard, Locus 30, allows access to seven surrounding rooms. In the south corner of the court, floors were preserved to within a few centimeters of the Kassite debris above, but a large ancient pit had been cut into the center of the court, destroying much of the area. This cut separated the preserved floor area into two sections that were excavated

7. Excavation in the thirteenth season established the presence of a doorway in the southeast end of Room 28. This doorway was in use throughout the entire occupation of the house. A doorway was also discovered in the southeast wall of Room 27, but this was cut at a level even higher than that of the door in the northeast wall of Room 28.

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separately and designated "30 NW" and "30 SE." This separation resulted in slight discrepancies in the correlation of floors during excavation; the discrepancies are shown on the section (see Fig. 37:1). The preserved floors had accumulated to a total depth of 1.44 m. A long rectangular mud-brick hearth stood by the southwest wall on Floor 6. The only other constructed hearth was a smaller, square one against the southeast wall on Floor 1. The stratified material consists of thin layers of laminated ash throughout all levels, and there are traces of many fires on the floors. These were generally in the center of the room. Low constructions of mud brick that did not show signs of burning were found on Floor "6 SE" and "4 NW" (see Fig. 40). After 60 cm. of material had accumulated in the court, a wall was built that divided it into several areas. The nature of this wall is not quite clear because it was cut by the pit, but it goes out at right angles from the southwest courtyard wall and then begins to turn a corner to the southeast before it is cut off.

On Floor "2 NW" a baked-brick sill connects the courtyard with Room 29. Other doorsills, usually of mud brick, are found in the doorways to Room 28, and, at some floors, in the doorway to 26. The doorway to Room 32, excavated in the eleventh season as WB 2, Room 8, was extremely irregular—no clear doorjambs could be seen. Instead, the doorway area through its entire height was a jumble of mud brick, baked-brick fragments, and intermingled floors. The drain shown in the plan is intrusive from a now-destroyed higher level. Room 33, a small chamber excavated in the eleventh season, was badly disturbed and yielded almost no information.

Remains of several layers of plaster were found in places on the walls of the court (Locus 30), but in general the walls were very much weathered. The lower part of the southeast wall was faced with baked brick set irregularly. This is the only wall in House A that contained any baked brick. It is also the wall of the courtyard that would have been most exposed to the weather, since the prevailing winds are from the north.

House B

The remains of House B, consisting of a courtyard (Locus 22) with rooms on three sides (Loci 34-36), were completely excavated in the eleventh season. New locus designations have been given to these rooms to conform to the current system. No information about this house can be added at this time except for some results obtained from a small cut under the court. This material is presented below under the heading Locus 23.

Area Surrounding Old Babylonian Houses

Locus 23. Before House B was constructed, there was a wall northwest of House A running parallel to the House A wall and forming the northwest side of Locus 23. In this locus we were able to observe one well-preserved floor (Floor 1) that ran up against this wall and the House A footing. Oddly, this floor met the footing four courses below the bottom of the doorway into Locus 8.

The northwest wall was cut by the northeast wall of Locus 23, projecting from House A. When House B was constructed, both these walls were cut so that courtyard walls could be constructed.

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In the debris just above Floor 1 was a burial (Burial 11, Fig. 44:7) that had been placed against the wall of House A. It was the grave of a child, six to twenty-four months of age, facing west, in a flexed position with its head lying on the footing of the wall. Half of the bottom section of a large pottery jar had been placed over the body, but the head was not covered. The only object found with the burial was a copper anklet (12 N 477).

Locus 10. Locus 10 (Figs. 39-40) constitutes the open area excavated to the southwest of Houses A and B. From the top of the preserved house walls to nearly the bottom of the foundations of House A were horizontal laminations of loose ash. There were also some areas of fill material on the southwest side. Below the ashes were some broken and fallen walls that may be investigated in a later season. The area was honeycombed with Pennsylvania tunnels. A very large, deep tunnel began at the south corner of House A and ran northwest along the outer wall for its entire length, descending at about a 45° angle. This tunnel had chambers and side passages leading off to the northwest, north, and southwest. The soft material through which the tunnels were dug had fallen in in some places, making it almost impossible to reconstruct the original stratigraphy. Three bread ovens were found in situ beside House A. Since the large tunnel had been cut next to the foundations of House A, it was impossible to determine whether the upper ash layers had been cut to lay the foundations of House A. In any case, at least 2.5 m. of ash layers did appear to go against the walls. House B, on the other hand, was later than the layers of ash, since the wide foundation trench for its outer wall was clearly cut through all of the ash.

Locus 24. Five floors were excavated in Locus 24 (see Fig. 40), but it should be pointed out that all of these floors are older than the walls that define this locus on the plan. Floor 5 is a flat clay surface that adjoins the northeast wall of House A some distance below the level at which the doorway is cut. Floors 4 and 3, however, slope sharply upward to the level of the doorsill and are apparently the first floors to have accumulated after the doorway from Locus 28 was cut. Although a Pennsylvania trench cut away the stratigraphy at the doorway to Locus 28, Floors 2 and 1 would also presumably have passed through the doorway. The doorway has a succession of sills and floors. At Floor 2, in the northwest end of the area, a large deep pit faced with mud brick and then lined with a thick coating of bitumen was cut. The northeast wall of House A formed one side of this pit and was also bitumen coated. Of Floor 1 only a small portion was found.

At a later time walls were built to the northwest and northeast, cutting all of the older floors and partially destroying the bitumen-lined pit. An Old Babylonian lexical text (12 N 671-72) was found in the loose dirt within the pit.

Locus 25. Locus 25 (see Fig. 40) is a partially excavated area northwest of Locus 24. Two floors in this locus adjoin the southeast wall and the wall of House A and extend over an earlier wall to the northwest where they are then cut. The floors run into the baulk to the northeast. A drain made of superimposed pottery rings was found in the center of the area. This drain was empty (hollow) to a great depth. Beside the southeast wall a tablet (12 N 674) was found. It is Old Babylonian (Samsuiluna?) and consists of a list

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of three groups of four men's names, then a list of each of the months of the year, with one of the groups assigned to each month in a regular sequence.

Architectural Summary

The sequence of building in the Old Babylonian level appears to have been as follows:

Deep foundation walls were constructed for a large rectangular house (A). It is not known whether these cut down into earlier material. The foundations were filled with dirt. Originally there were two entrances, both of them on the northeast wall,[8] but the one at the north corner was blocked very early. There may have been another entrance to the building through Locus 33. About a meter and a half of material accumulated inside some parts of the house while several meters of ashes were laid down outside of it to the southwest. At about midpoint in this accumulation some changes occurred within the house. An outside doorway was cut leading to the northeast from Locus 28. House B was built against the northwest end of House A, cutting the ash layers and at the same time the exterior doorway from Room 8 was blocked. Some slight changes were made in interior walls and doorways. Accumulation in all rooms was not uniform, and doorsills were required to equalize the levels. There is no evidence that any of the doorways in House A were blocked during the use of the house—all blocking occurs at the highest floors or higher. Outside the house, the walls of Locus 24 cut through the floors that had accumulated to the northeast. Houses A and B appear to have been abandoned at the same time.

The highest floors in most of the rooms of House A were at the same level as the single floor in the courtyard of House B. Only the square court (Locus 30) and several of the rooms surrounding it had higher floors, although the walls of the rectangular court (Locus 16) and the other rooms at the northwest end of the house were preserved to a higher point than were the walls of the rooms to the southeast. This preservation, along with the somewhat lower floors in this area, allowed for an accumulation of wind- and water-laid silt in the upper portions of these rooms that was not encountered in the southeast end of the house.

Dating

Although few tablets were found in the houses, those found contain enough information to establish the dating with some degree of accuracy. A contract (12 N 676-77) dated to the fifty-third or the fifty-fifth year of Rim-Sin of Larsa (1770 or 1768 B.C.) was found on a low floor of House A. This would be equivalent to the twenty-second or the twenty-fourth year of the reign of Hammurabi and confirms what is known from other sources, i.e., that at this date Nippur was still under the control of the dynasty of Larsa. Hammurabi of Babylon defeated Rim-Sin and took control of Nippur in his thirty-first year. During the eleventh season, in Room 34 of House B two tablets were

8. From the thirteenth season, however, there is evidence of a third doorway. See note 7, above.

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found that date to Hammurabi's thirty-fourth and thirty-fifth years[9] and to the tenth or eleventh years of the reign of his son, Samsuiluna (1739/8 B.C.).[10] The latest dated text is from the courtyard of House B and dates to Samsuiluna's Year 13.[11] Since Samsuiluna is known to have lost Nippur before the end of his reign twenty-six years later, we can say in summary that the occupation of the house area most likely began just before Babylon's control of the city and continued throughout the entire period of that dynasty's power at Nippur. Since a thirty-two-year period is covered by the tablets, a rough estimate for the total length of occupation of the houses would be fifty years.

Analysis of Materials

The material found in the Old Babylonian level of Area WB during the eleventh and twelfth seasons consists of a number of tablets, seals, figurines, and other objects, including domestic implements such as grindstones, and about 25,000 pottery vessels and sherds. Records were made of all pottery found, and a general preliminary discussion of it is given below. In addition, 150 soil samples were taken from the occupational remains, and batches of animal bones were collected. Detailed analysis of these materials should permit us to assign functions to the various areas of the house, to note changes in function through time, and to examine quantitatively the stylistic changes in the pottery within a short and clearly delineated time period. The collecting and recording of all preserved remains from the area will make possible a more intensive study of the individual household than has previously been attempted in Mesopotamian archeology.

The animal bones have been studied by Joachim Boessneck, Director of the Institut für Palaeoanatomie, Domestikationsforschung und Geschichte der Tiermedizin der Universität München. His report appears as Chapter 7. His preliminary examination indicates that the majority of the bones are those of domesticated sheep, goats, pigs, and cattle. He has also found evidence for fish, ducks and other birds, gazelles, a small equid, a dog, and several turtles.

The pollen study is being undertaken by Peter Mehringer of the Department of Anthropology of Washington State University. In the preliminary analysis little or no pollen has been found in the house samples.

A preliminary examination of macrofloral remains is being made by Wilhelm von Zeist at Groningen, The Netherlands. In an examination of about one-third of the material, the most commonly found seeds were date and barley. Among the other seeds were cleavers, sorrel, mallow, and sedge. Charcoal of poplar, tamarisk, and date palm was also identified.

Sedimentological analysis of four soil samples was undertaken by Karl W. Butzer of the Geography and Anthropology Departments of the University of Chicago. The results of this preliminary study are contained in Chapter 8.

9. OIC 22, p. 106 and Appendix A, No. 10.
10. OIC 22, p. 106 and Appendix A, Nos. 13, 15.
11. OIC 22, p. 106 and Appendix A, No. 11.

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Special Function of Area

Of the tablets found within House B, several record the receipt of large quantities of barley and the distribution of large quantities of bread. According to one text the amount of bread involved is about 1600 liters in a two-week period. Among the people to whom the bread is distributed are canal workers, and silversmiths working for the Ninurta Temple.[12] The large deposit of ash, along with the remains of bread ovens in the area southwest of the house is archeological evidence that may have a bearing on these tablets. It should be pointed out, however, that the ash and the ovens are contemporary with House A and are of earlier date than House B, in which the tablets were found. During the eleventh season many fragments of large strainers were found in the courtyard of House B, suggesting that the brewing of beer may have been carried on in the same area. Altogether, these facts point to the need to consider whether these houses are characteristic of Mesopotamian dwellings in general or represent the habitations of individuals of special status or occupation.

LEVEL III, EARLY KASSITE (FIGS. 37-38, 48)

In the eleventh season, the designation "Level III" was used for fill material that separated the Old Babylonian level from that represented by the large wall and baked-brick pavement of Level II. The wind- and water-laid silt that filled some of the rooms of the Old Babylonian dwellings has been described above. Over the southeast end of House A the Old Babylonian stratification was preserved to such a height that the walls and floors of the Level II building stood directly upon them, leaving no intervening material to attribute to Level III. The southeasternmost room of House A, Locus 26, however, did have some intermediate material: at the northeast end of the room a pit had been dug through all of the Old Babylonian floor levels and filled with an irregular mass of mud brick measuring 29 × 29 × 10 cm. (see Fig. 40). At the southeast wall a small baked-brick construction (a box or drain?) was found above the highest Old Babylonian floor. Both of these features were below the lowest floor of the Level II building.

In the area of excavation lying outside the southwest wall of House A only a few centimeters of dirt separated the top of the ash layers associated with the house from the baked-brick pavement of the Kassite palace of Level II (Locus 6; see Fig. 46). Outside the northeast wall of House A the situation seemed somewhat different. Although this area was only partially excavated during the twelfth season, there is evidence that quite a substantial amount of fill lies above Level IV and below the floor of the Level II building. In addition, a large pit had apparently been dug into this fill in the area above Locus 25 and the northeast ends of Loci 16 and 17. This pit contained most of the pottery, including many large fragments and nearly whole vessels, that we attribute to Level III.

12. OIC 22, p. 106 and Appendix A, No. 10.

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LEVEL II, LATE KASSITE (FIGS. 37-38, 46-48)

The Palace

At Level II in the eleventh season there was found a small portion of a thick mud-brick wall that contained a wide doorway and adjoined a portion of baked-brick pavement. In the twelfth season we were able to expand the exposure at this level greatly, and although much of the area had been destroyed by previous excavations, the remains would appear to be those of a large palace of the Late Kassite period (see Fig. 46). This assumption is based on analogy with the plan of the palace at Aqarquf, in which a very large central courtyard is surrounded by three ranks of long narrow rooms.

We have been able to divide the material from this Kassite level into three phases. Phase C represents the construction of the palace and its original floors. Phase B represents the construction of the second major level of floors within the palace, roughly 30 cm. above the first. Phase A represents a period during which the palace may have stood in ruins or in partial ruins and when the small brick structures represented by Loci 20 and 21 (Fig. 49) were built inside the large room, Locus 18. The uppermost floors of Loci 18 and 11 probably date to this phase. Because of the destruction by erosion and previous excavation of the area between the upper levels of the northeast part of WB and the preserved buildings on the same level to the southwest, it is not possible to connect these areas architecturally. It is clear from the pottery, however, that structures 20 and 21 date to a Late Kassite phase while the earliest material preserved to the southwest (Loci 1-5, 7) contains pottery that is Post-Kassite. The structures built in and around the Kassite walls to the southwest have therefore been considered as belonging to Level I, and Loci 20 and 21, to Level II, Phase A.

Loci 6 and 11. In the eleventh season the center of a courtyard was excavated; Locus 6 is its southwest and Locus 11 its northeast corner. More than 30 m. of the large wall found in the eleventh season were eventually exposed on the southeast side of the court. The wall is destroyed on the northeast and runs into the baulk on the southwest. Two smaller walls were built against this wall at right angles (northeast of Locus 11 and southwest of Locus 6), and the three walls frame a courtyard edged with a pavement of four rows of baked bricks. At both the east and south corners of the courtyard a plastered mud-brick bench stood against the wall and on the baked-brick pavement (Fig. 47:1). One side of the doorway to Locus 12 is destroyed, but it appears that what was originally a wide doorway had been narrowed by the insertion of a narrow wall. A baked-brick drain that runs through this doorway is described in the eleventh-season report.

In Locus 6, only the surface that ran up to the baked-brick pavement and was contemporary with it was preserved, while in Locus 11 three floors could be traced. Floor 1 of Locus 6 is clearly associated with Floor 3 of Locus 11, since both abut the pavement. Any floors above Floor 1 in Locus 6 were destroyed by the builders of Level I.

Floor 3, with its pavement of baked bricks, sloped upward through the doorway toward Locus 12. Floor 2, which ran over the pavement, also sloped

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upward to Locus 12 and appears to have been contemporary with Floor 1 of that locus, since both contained the same ashy deposit. Floor 1 of the court may be of a later date than the main occupation of the palace, and may therefore be more properly placed within Level II, Phase A.

The only finds of importance in Locus 6 were a tablet fragment with a seal impression (12 N 295, Fig. 48:3) showing only a few signs from the seal inscription, and a seal impression (12 N 81, Fig. 48:4) with two figures flanking a Maltese cross and a horned animal.

Locus 12. Locus 12, the room just inside the doorway, had only two corners and fragments of the floor preserved (Fig. 47:2). The lowest floor—Floor 2, Phase C (Fig. 37:1)—stood on fill and on an earlier large pit (Level III) that contained much pottery. Two small pits were contemporary with the floor. The floor had a good clay surface, and there was little or no pottery or debris. This floor extended through the doorway into Locus 13.

About half a meter of clean fill separated Floor 2 from Floor 1 (Phase B), which also had a clean clay surface. A small shallow pit was cut into this floor as well. It was at the level of Floor 1 that the small wall was built across part of the doorway leading to the court. Several fragments of a Kassite seal impression (12 N 691*a-h*, Fig. 48:5) with an inscription were found in the fill below the floor, and above Locus 25.

There were large quantities of black ash and charcoal on Floor 1, both inside the room at the doorway and in the doorway itself, as well as just outside the doorway in the court on Floor 2. The heap of ash was very irregular in depth, but seemed deepest (30-40 cm.) in the room just inside the doorway, becoming shallower in the doorway itself and toward the northeast end of the room. Only a few centimeters of the burned material were present outside the doorway in the courtyard. The debris was not characteristic of the remains of cooking fires; it was a very loose mass of material that had perhaps fallen after burning and had not been consolidated by traffic. The debris in this doorway was the only area of burned debris we found in the portions of the palace that we excavated. Small palm logs 5-6 cm. in diameter could still be recognized in the material. Since it had the appearance of having fallen, the burned material might be from a burned door (there was a preserved door socket at the inside face of the small wall), but the amount of the debris and the fact that most of it was found inside the room would suggest that it might instead be the remains of the roof. If so, the fire must have been extinguished before it reached the rest of the building.

Above the burned material was wind- and water-laid silt, and perhaps some fill, into which pits from Level G were cut.

Locus 13. Locus 13, a rectangular room that adjoins 12, had all four corners and most of the floor area preserved. Preserved plaster on the walls was of a reddish color. Floor 2 (Phase C) had a clay surface, and there was no pottery or debris on the floor (Fig. 47:3). This floor corresponded to Floor 2 of Locus 12 and was separated from that floor by a doorway. Clean fill separated Floor 2 from Floor 1 (Phase B), which was paved with mud brick and was also quite clean. Above this floor several meters of debris extended to the preserved mound surface in this area. The entire area had been dug over by the old Pennsylvania expedition and backfilled either by them or by

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the elements during the seventy-five years that have elapsed since the excavation. It was not easy, therefore, to determine where the disturbed material ended and the undisturbed began. Although no clear line of demarcation could be seen in section, it was evident that about 30 cm. of material above the pavement was clean dirt that contained no large fragments of pottery such as are commonly found in the Pennsylvania backfill of this area, whereas the upper material did contain a certain amount of debris of this type. It was in these 30 cm. and usually in the material a few centimeters above the mud-brick pavement that we found several hundred very small fragments of Kassite economic tablets, mainly only corners or edges. Seventy-eight fragments were registered (12 N 234-49, 500-51, 650), one of which dated to the eighth year of Kudur-Enlil (12 N 235, 1257 B.C.), and one to the third year of Shagarakti-Shuriash (12 N 242, 1253 B.C.). Although all of the fragments were found in Locus 13, we cannot be certain that they were undisturbed by Pennsylvania.

A copper nail or pin (12 N 339) and an iron blade (12 N 338) were also found above Floor 1.

Locus 18. A small preserved fragment of plaster on the wall in the doorway between Loci 12 and 18 enabled us to establish the edge of the doorway. Locus 18, although badly cut up, could be reconstructed, since both the north and south corners were intact. The west corner was destroyed, and the east corner was not excavated. At the south corner there was a well-preserved doorway with plaster preserved on all faces. Our excavation extended just through this doorway, where a baked-brick door socket was found in place on the far side. The floor of the room had been so greatly cut by tunnels that it was preserved only in three isolated sections. Floor 3 (Phase C) had a good clay surface that in some places rested directly on Old Babylonian walls and floors. There were white powdery remains of reed mats on some portions of the floor but not much debris; above the floor there were about 25 cm. of lumpy but clean fill. An even smaller area of Floor 2 (Phase B) was preserved, but here there was a great deal of debris on the floor. Large sherds and pottery vessels that were almost complete were thickly scattered and intermingled with bones, eggshells, and layers of reed mats, as though mats had been used from time to time to make a clean surface over the debris. Objects found on the floor or in the fill above the floor included a fragment of a stone vessel (12 N 601), a fragment of a camel figurine (12 N 604, Fig. 48:7), and several tablet fragments that seem to be of a type that dates to the thirteenth century or later (12 N 664-67).

At the center and northeast end of Locus 18, about 15 cm. of dirt separated Floor 2 of the Kassite room from Floor 1, which went against the eroded face of the Kassite walls where these had been preserved. (There was no equivalent floor in Rooms 12 and 13 of the Kassite palace.) Pottery found on Floor 1 consisted of standard Kassite types. Several small tablet fragments (12 N 660-63) found on this floor were of the same type as those found on Floor 2 and also date to 1300-1100 B.C. or later. One (12 N 660) seems to be part of an administrative-economic text.

Parts of two small rooms or structures of mud brick, Loci 20 and 21 (Figs. 47:4; 49), rested on Floor 1. Each of these structures was preserved to a height of only two to four bricks. The southwest end of Locus 20 was destroyed,

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and the interior, which contained only loose dirt, had no discernible floors. The northeast end of Locus 21 extended into the baulk and therefore was not excavated. It did have a floor (Locus 21, Floor 1) a few centimeters above Floor 1 of Locus 18, and some pottery in situ. The inside faces of the Locus 21 walls were plastered.

We must conclude that these structures were built inside Locus 18 at a time when the palace walls were still standing.

The state of affairs at the south corner of Locus 18, however, further complicated the situation. A floor (Fig. 38, Floor 14A-1) in this area extended over both the southwest and southeast walls of the Kassite room. This floor was only a few centimeters higher than Locus 18, Floor 1, northeast, and may have been part of the same floor, but its relationship to that floor is uncertain since the areas are separated by a deep ancient pit that extends slightly under the preserved extent of Floor 1 at the south end of Locus 18. The reason for believing that Floor 1 of Locus 14A is of later date than Floor 1 of Locus "18 NE" is the fact that a wall of later date, between Loci 14A and 19 (see Fig. 54), rests directly on it. The wall is discussed below under the heading Level IA.

Architectural Summary

Loci 12, 13, and 18 appear to represent rooms of two of the three rows of rooms that would have surrounded a large interior court of a Kassite palace such as was found at Aqarquf. The doorway at the south corner of Room 18 apparently led to what would have been the third row of rooms. Since no corners of either the courtyard or the building have been recovered, we cannot yet say whether the courtyard represented by Loci 6 and 11 was a part of the large central court, subdivided by the addition of the two right-angle walls, or whether this court was added to the outside of the building. Two pieces of related evidence might be considered here: The doorway between the courtyard and Locus 12 was originally wide (although later made narrower), and it should be noted that at Aqarquf[13] the doors leading to the interior courts of the palace are wider than those leading to the outside of the building. The two extant door sockets on the southeast sides of the walls indicate that the doors opened inward from Court 6/11.

A certain amount of reconstruction seems justified. The scrap of wall to the south of Locus 12 has no face preserved, but the position of the preserved edge of the bricks on the northwest side does not allow for a whole brick between this edge and an extension of the line of the southeast wall from Locus 12. This may indicate the earlier existence of another doorjamb at this point. The end of this projected room is marked by the corner preserved south of Locus 6, and another door may be reconstructed at this point. The northeast end of Locus 13 is too broken to make it possible to determine whether a doorway ever existed there.

In any case, in this level we appear to be working with the remains of a

13. Taha Baqir, "Iraq Government Excavations at ʿAqar Qūf: Second Interim Report, 1943-1944," *Iraq*, Supplement (1945): Pl. 9.

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large Kassite palace or administrative building that had at least two phases of occupation. The first phase (Level IIC) is marked by Floor 2 in Loci 12 and 13 and Floor 2 in Locus 18. The second phase (Level IIB) is marked in all of these rooms by fill on which rests a second floor (Floor 1 in Loci 12 and 13, and Floor 2 in Locus 18), the mud-brick pavement of Locus 13, the narrowed doorway between Locus 12 and Court 6/11, the right-angle walls that mark the sides of Court 6/11, the baked-brick pavement, and the benches. The date of Level IIB is probably indicated by the tablets of Kudur-Enlil and Shagarakti-Shuriash found in Locus 13. Although on Floor 2 of Locus 18 there are tablet fragments that might date to 1000 B.C., these fragments may be intrusive.

Level IIA is represented by Floor 1 in the center and northeast end of Locus 18, the construction of Loci 20 and 21 on this floor, the floor in Locus 20, and possibly Floor 1 of the courtyard. During this phase the palace was probably in a partially ruined state since Floor 1 of Locus 18 goes against a very eroded face at the southeast side of the room.

Although there was little occupational debris associated with the court or with Loci 12 and 13 in any phase, Locus 18 in Phases A and B contained a great deal of such debris, consisting of pottery, bones, shells, and reed mats. The large heap of charred material in the area of the doorway between Locus 12 and Court 6/11 corresponds to late Phase B. Some of the walls of the Kassite building will be covered more fully in the discussion of Level I.

LEVEL I, POST-KASSITE/EARLY NEO-ASSYRIAN (FIGS. 37-38, 49-53)

The material in Level I includes several phases, but the fragmentary nature of our evidence makes it impossible to separate all of the material clearly at this point. The difficulty of giving a coherent account of the history of this level is due to the piecemeal character of the building operations, the absence of dated tablets, the scarcity of well-stratified objects and pottery, and the subsequent destruction of so much of the area.

Level IC

The material breaks down roughly into three phases, of which Level IC is the earliest. Assigned to it are Loci 1-5 and 7 and Burials 8-10 (Figs. 49-51).

Loci 4, 5, 7; Burials 8-10. In the western part of the excavation, material assigned to Level IC was encountered directly beneath surface debris and the Pennsylvania dump. The earliest remains of the phase are the walls of Locus 7, built while at least a part of the Kassite palace was still standing. The somewhat irregular southeast wall of this room cuts a few centimeters into the Kassite wall for part of its length. Just a fragment of the southwest wall of the locus was traced at the baulk; the west corner was entirely destroyed by a Pennsylvania trench. Below Floor 3 in this room was an ashy layer about 10 cm. thick that appeared to rest on Old Babylonian material. A rectangular burial pit (Burial 8, adult male) that had been greatly disturbed was cut from the level of Floor 3 in the west corner. All that remained were a few scattered long bones. Beneath Floor 3, in the northeast corner of the room, however, was an unusual and well-preserved burial (Burial 10, Fig. 51:4a). The

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high clay "bathtub" coffin (Figs. 51:4*b*, 74:1-2) had one round end and one rectangular end, with two lines of rope decoration. The head of the skeleton (adult male) was in the north corner, facing northeast. The body was in a flexed position. No objects were found in the coffin; traces of disintegrated wood over the bones were probably from an original wooden cover. Directly above this coffin, in the corner of the room, stood a "bench" made of tightly packed fine mud. Although destroyed at the southwest end and slightly out of line with the coffin, it certainly seemed to mark the position of the coffin in the ground below.

The third burial associated with this room was just below the floor in the east corner, where a small jar contained the remains of a child, in age, somewhere between newly born and two years old (Burial 9, Fig. 51:3, 73:22). The original position of the bones was impossible to determine because of their state of collapse and their extremely flexed position within the confines of the jar. A copper bracelet or anklet (12 N 252) and a total of 19 beads—17 of white glazed frit, bone, shell, and crystal and two of lapis lazuli (12 N 253)—were found with this burial.

Floor 2 was about 10 cm. above Floor 3 and had a burned patch. A white frit cylinder seal (12 N 76, Fig. 51:1) datable to the Neo-Assyrian period[14] was found in debris probably assignable to this floor. Floor 1 was about 30 cm. above Floor 2; in the middle of the fill was a surface marked by disintegrating reed mats that were apparently contemporary with a repair in which one row of mud bricks was added to the face of the walls.

In summary, this room showed evidence, both in the accumulation of occupational debris and in the rebuildings and replasterings of the wall faces, of quite lengthy occupation. In some places the total thickness of plaster was 18 cm.

The walls of Locus 4 were built against both the walls of Locus 7 and the Kassite courtyard wall (Figs. 49-50). The join with Locus 7 at the west corner was very awkwardly made. The southeast wall cuts the Kassite wall slightly, as does the wall of Locus 7. The northeast wall, however, was not built directly against the Kassite courtyard wall, but was separated from it by a space of about 50 cm. At the north corner, the northwest wall of the locus was carried past the northeast wall to form a buttress against the Kassite wall. There is a sill in the doorway from Locus 4 to Locus 5. All material at the northwest end of the room was destroyed by an old tunnel. Floor 3, preserved in the southeast end of the room, was the same as Floor 2 of Locus 7, extending into that locus through the doorway. A small mud-brick partition wall several bricks high and one brick thick crosses Locus 4 just southeast of the doorway to Locus 7.

In the space between the northeast wall and the Kassite wall a line of baked bricks formed a pavement or passage at about 15 cm. above the elevation of Floor 3. This pavement was apparently connected with a doorway cut into the east end of the Locus 4 wall at Floor 3. Access might thus be had from Locus 4 up to the passage, then out and over the stub of the ruined Kassite courtyard wall.

14. See *Nippur* I, Pls. 113:8, 116:1.

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The picture that emerges is one of stratigraphy going uphill from the southwest to the northeast (see Fig. 37:2). The lowest floor of Locus 7 is 30 cm. below the lowest floor of Locus 4 and slopes up to the northeast. From Locus 4 one must go up through the doorway and over the remains of the Kassite wall. The preserved pavement of the Kassite court (Level II) is approximately another 30 cm. above the lowest floor of Locus 4. Two higher floors within Locus 4 bring the level of occupation in this room up to the highest floor of Locus 7 and to the height of the Kassite courtyard pavement. In the fill below Floors 1 and 2 a female figure (12 N 62, Fig. 51:2) was found. Gradually rising sills in the cut doorway marked the accumulation of material within the room and the continued access to the area to the northeast.

Little can be said about Locus 5. It is defined on the southeast by the wall and doorway that it shares with Locus 4. This wall turns a corner to the northeast but is then cut off by a tunnel. A low floor is preserved in part of the area at approximately the elevation of Floor 3 of Locus 4, and this floor goes against the northeast wall of the locus, which is simply the reused Kassite courtyard wall. All later stratigraphy has been disturbed.

Loci 1-3. The Level IC material built over the Kassite courtyard cannot be well correlated with that just described since it does not connect with it at any point.

Locus 1 is defined by walls that were originally built against the Kassite wall to the southwest but 12 cm. above the baked-brick pavement. Only parts of the walls of Locus 1 are preserved, including some fragments of bricks that might indicate a doorway to Locus 3. Four floor levels are preserved in the south corner of the locus, the fourth being level with the bottom of the southeast wall of the locus.

Locus 2 is a space in the south corner of the Kassite courtyard that utilizes two walls of the courtyard. Although three floors have been designated in this area, Floor 3 is actually the level of the Kassite pavement (Locus 6, Floor 1), and Floor 1 seems to be contemporary with a rebuilding of the area that we consider to be Phase A of Level I. Judging from its elevation, Floor 2 is probably contemporary with Floors 3 and 4 of Locus 1.

Level IB

The evidence for Level IB is very slight. Its existence is based on two burials, 5 and 6, cut into Level IC material from above. These, in turn, are earlier than Level IA walls. Burial 6 was destroyed by one of these walls, and Burial 5 had a wall of Phase A resting on it.

Burial 5. At some point higher than Floor 2 in Locus 8, a deep cut was made for a burial jar (Burial 5, Figs. 52:1, 74:3). The top of this jar was above Floor 2, and the cut was presumably made from even higher. The jar is of an unusual type; it is decorated and has a lid. The burial in this jar was somewhat disturbed when the mouth of the jar was exposed by a Pennsylvania pit. The bones of a child eight to ten years of age were lying in a heap in the center along with fragments of the lid and the jar. A glazed bowl (12 N 58, Figs. 52:1*c*, 77:1) appeared to be upright in situ near the neck of the jar. A carnelian bead and a copper ring (12 N 59-60) were found among the bones.

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The highly unusual feature of this burial was that a great number of unbaked tablets (12 N 100-227) had been packed into the cut around the jar. On the north side were four large lexical texts that had been broken into fragments before being placed in the cut. One of the fragments, inside the jar, was found to join others found outside. The position in which this fragment was found indicated that it might have fallen into the jar when the mouth of the jar was disturbed by the Pennsylvania pit. On the southeast side of the jar 124 smaller tablets were found, of which most were letters. The tablets are undated and have no seal impressions. Although the paleography presents certain problems, the tablets have been provisionally dated to about 700 B.C. or earlier. Robert D. Biggs is studying these tablets.

Burial 6. Burial 6 (Figs. 52:2, 74:4), although much disturbed, is judged to be approximately contemporary with Burial 5, since it cuts Level IC material and is cut by a wall attributed to IA. The burial was made in a wide-mouthed jar placed in a rectangular pit that cut into the edge of the Kassite paved courtyard. Some mud bricks set on edge partitioned off the northwest end of the grave, and in the partitioned-off area there was found a complete bowl (12 N 54, Figs. 52:2*c*, 77:2) similar to the bowl of Burial 5 but unglazed. Other than this bowl, all that remained of Burial 6 were fragments of the burial jar and the mud-brick partition cut by the wall. At almost exactly the same spot, Burial 1, of a later date, was cut down from a higher level (G).

Level IA

Attributed to Level IA on the basis of the elevation of the bottoms of the walls are the walls of Loci 14A and 19 (mentioned above in the discussion of Level IIA), the southeast wall of Locus 3, the upper portion of the wall southwest of Loci 1 and 2 including a new foundation wall in part of the area, and fragments of high walls in Loci 4 and 5 (Fig. 54).

Loci 14A and 19. Locus 14A is associated with a wall of 30 × 30 × 10 cm. bricks that stands on Floor 1, which runs over a Kassite wall. The floor is disturbed by a large pit (provisionally ascribed to Level G) that undercuts the floor and by a Pennsylvania trench to the northwest. In a corner on the southwest side of the wall there are preserved a very small portion of floor and fragments of several thick layers of plaster. This area was designated Locus 19.

To the northeast of Locus 14A was another fragment of wall assignable to this phase.

Architectural Summary

Level IC consists of rooms built inside and against the large rooms and walls of the Kassite palace, presumably at a time when the palace was in ruins but had some good walls remaining. Assigned to this phase are Loci 4, 5, and 7 outside the Kassite courtyard, and Loci 1, 2, and 3 inside the court. Within this phase, Burials 8, 9, and 10 were dug in Locus 7, and several floors accumulated over them.

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Level IB consists only of burials (Burials 5 and 6) dug into Loci 1 and 3.

At this point there is evidence of a new, perhaps ambitious, building phase (Level IA), represented by the wall between Loci 14A and 19, the southeast wall of Locus 3, and the rebuilding that incorporated the Kassite courtyard wall. A certain amount of stratified material related to Level IC is preserved, but almost all stratigraphy connected with Phase IA has been destroyed.

LEVEL G, LATE NEO-ASSYRIAN/NEO-BABYLONIAN(?) (FIGS. 54-56)

Level G represents a period during which this area of the mound appears to have been unoccupied and to have been used only for trash pits and burials. Of the five burials attributed to this level, three (1, 4, 7) are pit burials cut into Level II and Level I walls and aligned with them; the remains of the walls were apparently still visible, even though the walls were no longer in use. The other two graves attributed to this level (Burials 2 and 3) are jar burials cut into the floors of Locus 2. These five burials are all within a relatively small area at about the same level and are thought to be roughly contemporary.

Pit Burials

Burial 1 (Fig. 55:1) consists of a rectangular pit with rounded corners, cut into the brickwork of the rebuilt portion of the southwest wall of Locus 1 (Level IA). The pit is aligned with the edge of the wall, but is cut several centimeters in from the northeast edge. The pit itself was empty, but at its bottom on the northeast side an irregular hole had been hollowed out to provide a place for a body. This "pit plus side chamber" is typical of Burials 1, 4, and 7. The body of an adult female, flexed and on its right side with the head to the southeast, was found slightly below the base of the pit, with half of a large baked brick lying above the body. There were no objects in the pit; the bones were in good condition and undisturbed.

Burial 4 (Fig. 55:4*a*) was dug into the walls at the north corner of Locus 1, although the northeast end of the rectangular pit extended beyond the walls and into Locus 2. Here, too, a chamber had been hollowed out at one side of the pit, in this instance on the northwest side. The skeleton, probably that of an adult female twenty-five to thirty years of age, flexed and on its right side with its head to the northeast and facing northwest, was also well preserved and undisturbed. A pottery jar (12 N 40, Fig. 55:4*b*) stood between the face and hands. In this burial a crude wall of a single thickness of baked bricks set on edge had been constructed between the pit and the burial chamber.

Burial 7 was cut into the Kassite wall just southeast of Locus 4. This pit, like that of Burial 1, was also aligned with the wall, but in this case it cut through the northwest face of the Kassite wall, leaving the wall of Locus 4 to serve as its northwest side. The burial chamber was cut into the

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brick at the southeast side of the pit. Both the pit and the chamber were filled with fine, loose dirt. A pottery bowl of fine buff ware (12 N 89, Figs. 56:2*c*, 77:7) was found high in the fill inside the chamber. The skeleton of an adult female lay flexed and on its right side with the head to the northeast and facing northwest. A long copper pin with a decorated end (12 N 92, Fig. 56:2*a*) lay in front of the face. Another copper pin, small and with a hooked end (12 N 93, Fig. 56:2*b*), lay at the chest. Two more vessels were found with the burial, a small glazed bottle (12 N 91, Figs. 56:2*d*, 77:6) and a larger buff jar (12 N 90, Figs. 56:2*e*, 77:4).

Jar Burials

The two other graves associated with this level were Burials 2 and 3, both jar burials cut into the floors of Locus 2.

Burial 2 (Fig. 55:2) was cut slightly into Floor 1 of this locus. The jar rested on its side; its surface had been broken and had collapsed onto the lower part of the burial. Broken fragments were encountered in the fill and debris above Floor 1. The bones were in a heap, disturbed by the collapse of the jar. Although not well preserved, they appeared to be those of a child two to five years of age. The original position could not be determined with accuracy. Three copper anklets (12 N 29-30) were found (identified as anklets because of their proximity to the leg bones), two apparently belonging with one leg and one with the other. A copper ring (12 N 31) and nine beads (12 N 32)—one carnelian, one glass, and seven white glazed frit—were also found.

Burial 3 (Figs. 55:3, 74:5) was on the northeast edge of Locus 2. It cut through Floors 1 and 2 and rested almost on the Kassite pavement. This jar was also found broken with the bones crushed in a heap in the center. They may have been those of a young woman thirteen to fifteen years of age. Found among the bones were three copper finger rings (12 N 38, 55, 56), a glazed pottery jar with lugs (12 N 39, Fig. 55:3*c*), and 41 beads of glazed frit, paste, glass, stone, and shell (12 N 37, 57).

Pits

The period when this part of the mound lay abandoned is represented also by one or more large pits, presumably made to obtain dirt for brick making, then filled with refuse. One pit, apparently dug from just above the level of the floor in Locus 14A and slightly undercutting this floor, destroyed the remainder of the locus, cut off the Level IIA walls of Locus 20, cut through the center of Kassite Room 18 (at the same time destroying part of the Kassite wall), and finally went down into the center of the courtyard of the Old Babylonian house (Locus 30). This pit was itself cut by a later drain from Level F and a Pennsylvania trench on the northwest. It contained a great deal of pottery.

A number of small tablet fragments (12 N 659*a-i*) from this pit are in an unusual script; they have not yet been dated.

Another large pit, possibly of the same period, is that which cuts into Kassite Locus 12, destroying part of the doorway to the courtyard (Locus 11). This pit contained no pottery. It, also, was cut by a drain from Level F.

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LEVEL F, ACHAEMENID(?) (FIGS. 57-58)

Level F contained the uppermost preserved material of which a semblance of a coherent plan could be made. It would appear to represent another major building phase, perhaps the construction of a large public building. Locus 14 (Fig. 58:1) consists of a fragment of floor upon which sit two walls that form a corner. Several other walls, although cut off from the floor of Locus 14, seem to be contemporary with it (see Fig. 57). Most of these walls were built over the remains of Kassite walls.

In the center of the "room" formed by the walls of Locus 14 is a well-built pottery collar drain, possibly contemporary with the locus. We also provisionally ascribe to this level five other drains built in the same fashion but not preserved as high as this elevation (Fig. 57). Four of these drains extend down through the Old Babylonian level, so their bottoms could not be reached. Drain 2, however, ended at the top of the Old Babylonian foundation. All of the drains had in and around them hundreds of large potsherds to serve the purposes of filtration. Fragments of several horse-and-rider figurines as well as a fine, almost complete copper bowl of Achaemenid type (12 N 370, Fig. 58:2) were mixed with this packing.

The drains are spaced so that they may have been in separate rooms of a relatively large building, of which only the area of Locus 14 remains.

A tablet fragment from between Floors 1 and 2 (12 N 561) bears an unusual and distinctive script and is perhaps an economic text. It is similar to the fragments found in the pit ascribed to Level G, that is covered by Floor 2.

SURFACE

Before excavation began in the twelfth season the surface of the mound at WB was covered with dumps and much cut by old Pennsylvania pits and trenches. The latest pottery that could be observed in any quantity on the surface appeared to be from the Achaemenid period. Some kiln wasters were found at the easternmost end of the area. The many fragments of Kassite pottery on the surface, which are principally from crude goblets, appear to have come mainly from the packing of the late drains and not from the Kassite palace. In the surface debris, including that of the areas of Pennsylvania dump, a number of small objects were found, principally fragments of figurines and plaques, (Fig. 58:3-4), a seal (12 N 294, Fig. 58:5), a seal impression (12 N 300, Fig. 58:6), and some Ur III tablets.

POTTERY FROM AREA WB

In the twelfth season, pottery was collected by units called "lots," each lot generally representing all of the pottery from one floor of one locus. All pottery from lots of this type was processed by being sorted according to thickness and color of ware. Counts were made of all sherds; all diagnostic sherds (rims, bases, or decorated pieces) were classified, drawn, and recorded in detail.

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Lots might also represent all of the material from features such as pits, ovens, or parts of rooms. Pottery from the surface, from areas badly disturbed by modern cuts, from large ancient pits, or from drain packing was not recorded in great detail. In these cases, records were usually made only of diagnostic pieces, or of the general character or quality of the material.

Almost 20,000 sherds from Area WB were counted in the twelfth season. The breakdown by level is as follows:

Level	Number of Sherds		Probable Date of Level
F		378	Achaemenid
G		94	Neo-Babylonian/Neo-Assyrian
IA	0		
IB	4		
IC	2,057		
		2,061	Post-Kassite
IIA	459		
IIB	980		
IIC	1,444		
		2,883	Late Kassite
III		307	Early Kassite
IV		13,979	Old Babylonian
	Total:	19,702	

Pottery from Level IV

By far the largest number of well-stratified sherds was recovered from Level IV, the Old Babylonian level, especially when the almost 14,000 sherds recorded from this level in the twelfth season are combined with more than 10,000 excavated in the same area during the eleventh season. The total number of sherds from House A in the two seasons is just over 15,000. Another 10,000 are from House B and from areas around House A. Of these nearly 25,000 sherds, roughly one fourth are diagnostic. The pottery can be classified into about twenty quite standard types, and it is generally easy to identify even small sherds by type.

An intensive study I have undertaken of the pottery from the WB residential area will be oriented both spatially (horizontally) and temporally (vertically) to provide evidence for an interpretation of the function of various parts of a house. This material will at the same time provide our only well-controlled body of nonselected pottery from a Mesopotamian excavation. It is hoped that the breakdown of types in existence at one time, the relative num-

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ber of specimens of each type, and the extent of variation within a time range of only fifty years will provide the basis for the development of criteria that are useful for future Mesopotamian excavations.

Since the analysis of the pottery has not been completed, only a few general preliminary remarks will be made on the pottery of Level IV in this report. Most of the vessel types from this level are shown in Figures 59 through through 61.

The assemblage of Old Babylonian pottery from WB includes vessels that might have been used for the storage of food (Fig. 61:1, 2, and 4) or the preparation of food (Figs. 59:2, 61:2-5), as well as simply made vessels from which food was presumably eaten or drunk (Figs. 59:1, 2, 4, 5; 60:1) and also better-made and sometimes decorated small vessels, also presumably used for food consumption (Figs. 59:3; 60:3, 4, 5, 8).

Painted decoration is relatively common in the fine wares, although the paint is generally confined to a simple band at the rim and is never more elaborate than in the examples illustrated.

By far the most common vessel is the small crude bowl with a string-cut base (Fig. 59:1). This bowl is either buff, reddish, or pink with buff slip and is never painted. There is some variation in size and rim profile, but this seems due principally to the crudeness of the workmanship. At various locations throughout the house bowls of this type were found in sets of two, one placed upside down over the other (see above).

Another of the most characteristic types is the shallow flat plate (Fig. 59:2). The base is either string cut or scraped, and several types of rim are common. The plates are generally buff to greenish, unpainted, and of medium coarse ware, and have some straw or chaff temper.

The small bowl (Fig. 59:3) occurs in both painted and unpainted examples. The shallow ring base is always present, but there are some differences in rim profile, 3*b* and 3*c* being the most characteristic. The bowls are always well made of clean clay; the ware ranges from buff to red; the paint is always black and generally rather carelessly applied, the lines being generally crooked with fuzzy edges. There is very little variety in the painted motifs.

Another very common type is the small unpainted cup with string-cut base (Fig. 59:4), usually rather crudely made. Of the examples shown, 4*b* is the most characteristic.

Tall goblets (Fig. 60:5), seldom found whole, are very numerous. They are usually rather well made, have a smooth surface, and often have a band of paint at the rim.

Figure 60:1 illustrates a small globular jar with string-cut base. This type of jar usually has a rather rough surface. Although often crudely made at the base, the vessel is finer and better made at the rim. The larger jar (Fig. 60:2-3) is generally finer and is sometimes painted. Ring bases larger than those of Figure 60:2 and 3 are common, but the type of vessel to which they belong has not yet been determined.

Vessels with pointed bases are not common; they occur in two distinct types. One (Fig. 60:7) is thick, very crude, and generally red, with heavy horizontal scoring on the exterior. The rim type of this vessel is not yet known. Many vessels of this type are found outside House A, especially in

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Locus 24, but almost never inside the house. The other type with a pointed base (Fig. 60:8) is a much finer vessel. It generally has a smoothed surface and often a painted black band at the rim.

The button base illustrated in Figure 60:6 is not often found. It is almost always of very fine ware, although cruder button bases do also occur occasionally.

Bag-shaped jars of the type shown in Figure 60:4 are uncommon. The only examples found are those illustrated.

Among larger vessels the most characteristic is shown in Figure 61:1, a large, ovoid jar with round bottom. This jar with its distinctive rim is one of the most common of all types. It is usually buff, has some straw temper, and has relatively thin walls for its overall size.

Figure 61:2 illustrates two typical rims of a wide-mouthed vat or jar. A number of examples of a crudely made straw-tempered bowl (Fig. 61:4) were found as well.

A number of examples of 61:3 were also identified. It is a thick, almost flat plate on a high-ring base, pierced by a hole through its center. It is straw tempered and generally very crudely made.

Several examples of Figure 61:5 were found. This cylindrical object, which is apparently open at one end and closed at the other, is always pierced by parallel holes in the sides. It may be a small drainpipe or a brazier.

Fragments of several other distinctive large crude vessel types were found: a flat plate or tray with thumb impressions along the edge, a footed circular fire-dog, and a ribbed, bitumen-coated vat.

Pottery from Levels III to F

The twelfth season pottery from the WB levels later than the Old Babylonian will be covered here in its entirety, since a total of fewer than 6,000 sherds is involved. Although many methods have been formulated in the past to record and digest pottery for publication, the archeologist generally finds that no method previously employed is exactly adaptable to his own data. This has been the case with the pottery from WB. Although the excavations at Nippur at TA and TB published in *Nippur* I cover roughly the same time range as WB, the method of presenting the data there has not been found suitable for the WB material. Another system has therefore been devised that incorporates the *Nippur* I scheme in part but is expandable so that it may include new types as they are established. In this new system all pottery is first divided into five major categories:

I. Plates and bowls
II. Jars
III. Large vessels
IV. Miniature vessels
V. Miscellaneous pieces (lids, drains, strainers, pot stands, etc.)

This rough breakdown often makes it possible to place in a pottery subdivision even small sherds that are not recognizable as belonging to a more specific

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type and are generally counted simply as "body sherds." The demarcation between "bowls" and "jars" is, of course, not always a clear one, but most pottery fragments can be assigned to one of the five groups with some degree of confidence.

Within the five categories, each distinctive type is given a letter designation. Although I have tried to confine designations of types to only those vessels whose complete shape is known, some distinctive vessel parts (e.g., rims) have also been included. Further, I have attempted to confine the designations to types of vessels that occur in some quantity and are thus representative of the pottery of the period involved. Some of the types are specific (e.g., I-E, a rim profile), while others are very general (e.g., II-C, button-base vessels). The larger categories may be subdivided in the future, as important distinctions become apparent. For the present, those features that clearly differentiate a vessel from other types have been emphasized.

Note on pottery figures.

Each pottery type is illustrated first by including the corresponding Nippur I *type when one exists, and then by presenting* by level, *beginning with the earliest, the range or special characteristics of those pieces that have been given the type designation. The roman numerals and letter designations at the top of each figure refer to types; those at the left-hand margin refer to levels. Table 4 gives the total number of examples of each type by locus or sublevel. Each recognizable diagnostic example of a type has been counted separately. Following the counts of typed vessels in the table is a breakdown of sherds by other characteristics (glazed, incised, etc.). At the end of the figures illustrating the pottery types, the untyped pottery is illustrated by level.*

Level III, Early Kassite. Very little stratigraphy was preserved from this level, and only some 300 sherds were recorded. Although a few sherds came from the material just below the lowest Kassite palace floor, which may have been fill, the most interesting examples were from a pit below Locus 12. This pit, which must originally have been very large, had been cut away on almost all sides by ancient and modern pits so that it existed as an "island" among later material and was not immediately recognizable. The pit extended down onto Old Babylonian floors where pottery was in situ. Thus, although this group cannot be considered entirely unmixed with earlier and later pottery, it comprises vessels for the most part relatively complete and of types not generally recorded previously, that form a bridge between the relatively well-known Old Babylonian pottery and the equally well-known Late Kassite.

The most distinctive type is the small button-base jar, II-C (Fig. 70:1), of rather fine ware, with a tapered lower body. Many examples of this jar were found. Variations included a more globular shape (Fig. 70:4-7) and larger examples (8-10). A good parallel to these is found in the Elamite

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Transitional period at Susa.[15] On the basis of the parallel, Level III might be assigned a date roughly from the sixteenth to the fourteenth centuries B.C.

Type I-A (Fig. 62), the crude Kassite bowl, is characterized by a thick, usually rounded rim, a string-cut base that is usually slightly splayed, and often by a slight carination. The bowls are always buff and are generally crude. The same shape occurs in a variety of sizes. The bowls have here been divided according to the diameter of the rim—small (10-16 cm.), medium (18-24 cm.), and large (32-38 cm.). All three sizes occur in some quantity in the pit in Level III.

Another relatively common type of bowl is I-C, which has a rounded, slightly incurved rim (Fig. 63:20-28).

The large goblet, Type II-A (Fig. 66), is especially interesting in this level, because although the usual Late Kassite form does occur (Fig. 66:4), other examples (e.g., Fig. 66:1-2) are clearly more representative of a transition between the rounder Old Babylonian ring-based goblet (Fig. 60:5) and the more straight-sided Late Kassite form. The base with a small ridge (Fig. 66:3) is also typical of Level III. The lid (Type V-A, Fig. 75:2-3) and the pot stand (Type V-B, Fig. 75:5-10), standard in the Late Kassite period, also occur at this level.

Level II, Late Kassite. The occupation of the Kassite palace has been divided into three phases, A-C. The pottery is tabulated by both phase and room in Table 4. The earliest phase, IIC, is represented by the greatest amount of pottery and the latest, IIA, by the smallest. About 3,000 stratified sherds in all have been recorded for the level.

The Late Kassite pottery of this area is characterized chiefly by its standardization, poor quality, and paucity of types. Eighty-eight percent of the recorded diagnostic sherds fall within five types, I-A, I-B, II-A, II-B, and II-C. Only 16 sherds could not be classified.

The crude bowl, I-A, was the most commonly found vessel, with medium and small sizes predominating. The large size was rare. The bowls were particularly numerous in Room 18.

The finer bowl with carinated rim (Fig. 63) is especially problematic. A version of this bowl in fairly shallow form is common in the Isin-Larsa period, and quite a number of similar bowls occur in the Old Babylonian levels. The bowl is very commonly found in Kassite Level IIC, but almost never in the upper phases, IIB and A; nor is it present in Level III. It became popular again in the later periods (see below), and in Achaemenid times it was one of the most common glazed forms.

A few examples were found of another fine bowl that had a more elaborate version of this rim (Type I-D, Fig. 64:1-2). Judging from the *Nippur* I parallels, this bowl probably had a flat base. Also found were some examples of a similar bowl, Type I-E (Fig. 64:5-8). The earliest stratified glazed sherd from WB is a flat base that may be from a bowl of this type (Fig. 64:8). It is from the lowest Kassite level, Level IIC, and is well made on a fast wheel. It is of dense pink buff clay and has a carefully applied thin white glaze, now iridescent.

15. Elizabeth Carter, Elam in the Second Millennium B.C.: The Archaeological Evidence (Ph.D. diss., University of Chicago, September 1971), Pls. 8-10.

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TABLE 4: WB POTTERY DISTRIBUTION BY LEVEL AND LOCUS

	Type I (Figs. 62-65) (Plates & Bowls)						Type II (Figs. 66-72) (Jars)				Type III (Figs. 73-75) (Large)	Type V (Fig. 75) (Misc.)	
	A	B	C	D	E	F	A	B	C	D	A	A	B
Level F													
Locus 14 & Drains	X*	X	X	X			X	X		X	X		
Level G													
Squares 2 & 8, Pit	X	X	X	X	X		X	X		X	X		
Burials 1-4, 7											2		
Total													
Level IB													
Burials 5 & 6							2						
Level IC													
Locus 1, Fls. 1-5	22	4	7		6	4	11	15	2	4	2		
Locus 2, above Fls. 1-3	28	18	1		3		12	10	3	7	7		
Locus 4, above Fls. 1-3	2		3	1	6		2	9			2		
Locus 5, Fl. 1	3	3		1	2		1	2	3		1		
Locus 7, Fls. 1-3	1		1		3		1	11			1		
Total	56	25	12	2	20	4	27	47	8	11	13		
Level IIA													
Locus 12, above ash	6	1					5		1	2			
Locus 18, Fl. 1	72						23	1	9		1	1	1
Locus 20	2						2				1		
Locus 21, Fl. 1 & below	14						2		1				
Total	94	1					32	1	11	2	2	1	1
Level IIB													
Locus 11, Fls. 1-2	53	3		1	1		35	4	3	1	2		5
Locus 12, ash layer to Fl. 1	17		1				5	2			1		
Locus 18, Fls. 1-2	143	1					43	4	8		3	1	1
Total	213	4	1	1	1		83	10	11	1	6	1	6
Level IIC													
Locus 11, Fls. 2-3	18	3					4	4	1				1
Locus 12, Fls. 1-2	27	3		2	1		21	15	8	8	2	12	3
Locus 13, Fls. 1-2	49	25	1	1	1		13	5	4				
Locus 18, Fls. 2-3	76	25		1	2		10	8	1		4		
Total	170	56	1	4	4		48	32	14	8	6	12	4
Level III													
Locus 11, below Fl. 3	2				1		8						
Locus 18, below Fl. 3	4		1				2		2				1
Locus 12, below Fl. 2	76						42	20	53		3	2	2
Total	82		1		1		52	20	55		3	2	3

* X = type or category present

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Pre-Old Babylonian	Old Babylonian	Red-slip	Ridged	Bitumen coated	Incised	Glazed	Eggshell	Ring base	Flat base	Strap handle	Kilnstilt	Strainer	Body sherds	Untyped (Figs. 76-79)	Total
					x	x	x			x					378
						x	x					x		x	87
														5	7
															94
						(1)†								2	4
2	23	1	2	27	(1)	2		4	11				626	18	793
3	9	2	4	8		1		2	6			1	346	11	482
	1			23	1	(4)		2	5				131	5	193
	3			18					3				178	4	222
1	15			31				1			1		297	3	367
6	51	3	6	107	(1)+1	(4)+3		9	25		1	1	1578	41	2057
	3		1					1			1		71		92
		1											211	1	321
													1		6
					1								22		40
	3	1	1		1			1			1		305	1	459
1	1			2				1		1			205	4	323
			3	2	1		1						97		130
													322	1	527
1	1		3	4	1		1	1		1			624	5	980
	3							1					99	1	135
1	2			3	2					2			307	4	423
1	2	2			4							2	282	4	396
10	1			1	2	1						2	345	1	490
12	8	2		4	8	1		1		2		4	1033	10	1444
	5							1					x‡		17
					1								51	2	64
	11			1								1	x	15	226
	16			1	1			1				1	51	17	307

† ( ) = counted in another category

‡ x = not counted

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The crude, straight-sided goblet is the second most characteristic Kassite form (Type II-A, Fig. 66). In Level IIC a smaller concave base occurs (Fig. 66:5-6), but the thick solid base is most common in this level.

The large ovoid jar (Type II-B, Figs. 67-68) continues from Level III. Although a variety of rim profiles were found, the jars were all roughly of the same size. The most common rim is that with a double ridge (Fig. 67:4-6). Surprisingly, of the more than 1,300 sherds found in Locus 18, there were only 13 examples of this rim. The relative number was much higher elsewhere, for example, in Locus 12.

Button-base jars and goblets (Type II-C) do not form a large proportion of the pottery found, and this form seems to be less standardized; it ranges from the medium globular jar (Figs. 70:11-13; 71:5, 10) to a small jar, often with a sharp carination near the base (Fig. 70:14-16). The profile of Figure 70:18 is uncommon. The button-base Type II-C forms were, as a rule, better made than those of the more numerous Type I-A and I-B bowls and goblets. They were generally of finer ware and were sometimes slipped. The Type I-A and I-B bowls and goblets, on the other hand, were often carelessly formed, were quite porous, and had some straw temper.

A cup, Type II-D, characteristic of Level I, may be already represented in Level II by two rim sherds (Fig. 72:1-2).

The lid (Type V-A, Fig. 75) and the pot stand (Type V-B) that had first appeared in Level III were occasionally found in Level II. The large perforated vessel that was usually bitumen coated on the interior and may have been a drain or a burial jar cover (Fig. 75:1) is now known from the Old Babylonian level, Level IV.

One eggshell-ware sherd is recorded from Level IIB in Locus 12, but the possibility of contamination from later material cannot be ruled out, since many pits had been cut into this room.

Level I, Post-Kassite. Quite a long period of time is apparently represented by Level I with its three phases. Our dating of these phases with any accuracy is hampered by the fact that most of the tablets were unintelligible and by the scarcity of stratified material—and therefore pottery—in the upper two phases. The best that can be done is to date Level I from Early Post-Kassite to Early Neo-Assyrian times, i.e., from the eleventh to the eighth centuries B.C. Assyriologists feel that the tablet hoard from IB may date to 700 B.C. or earlier. In view of the archeological context, I would favor an earlier date. We must hope that in future seasons more material will be available from the upper levels so that our dating can be more precise.

Even though the area had been badly cut up, more than 2,000 sherds were recovered form Level IC. The material is from the five rooms built in and around the remains of the Kassite palace—Loci 1, 2, 4, 5, and 7.

The pottery of Level I is more difficult to classify than the Kassite because a great variety of pottery was found, most of it fragmentary. It was therefore difficult to establish types.

A number of Kassite types continue to occur: the crude bowl, Type I-A, was found in some quantity, in the medium and especially the small size. The bowl with everted rim (Type I-B) was also found again. The level was characterized, however, by an increase in the finer types of bowl that began to ap-

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pear in Level II: Types I-C, I-D, and I-E became more common. They were generally well made on the fast wheel, with flat bases with very regular striations (rather than string-cut bases). The bowls had smoothed, finished surfaces and were sometimes slipped. Several glazed sherds of bowls of this type are discussed below.

A distinctive new type is I-F (Fig. 65), a bowl of fine ware with a slightly rounded base, straight sides, and sometimes horizontal grooves.

The crude so-called Kassite goblet, Type II-A, continues to be represented by quite a few examples, although some may be survivals dredged up from the level below, in which they occur in quantity. The large jar, Type II-B, continues to be about the same size as in the Kassite level, but the rim profiles are often slightly different (Fig. 67).

Button-base jars are not common, and are little different from the Level II versions (Fig. 71:17-21).

Although not many examples of Type II-D were found, this seems to be a significantly characteristic type for Level IC (Fig. 72:3-12). This rather tall cup with a straight, slightly everted, beaded rim usually has a narrow spike or stump base. A few examples (Fig. 72:9, 12) have an abbreviated rounded or flat base. In addition to the stratified examples, many more fragments of this distinctive cup were found in unstratified debris in the area of the excavation.

Type III, the very large vessel, is represented in Level IC most commonly by a sharply everted rim that is probably from a ring-based jar (Fig. 73:22) that was used for burials. Sherds found in Level II may represent examples of this type of vessel, e.g., Figure 73:6, 10, and 12; and it may even have occurred as early as Level III.

Only seven glazed examples were found in Level I. There is a rim sherd of a Type I-C bowl with white glaze (Fig. 63:23), and one of a Type I-E bowl (Fig. 65:13) with white glaze and black stripes on the rim and probably on the interior. Other glazed examples include a Type II-B jar neck (Fig. 68:22), a rather thick flat base, and two ring bases about ten cm. in diameter, one of which has a rather high, somewhat splayed base. There are also two body sherds. The ware of these sherds is relatively thick and somewhat coarse and brittle, yellow or pink buff, with straw temper. The white glaze is applied over a black surface from which it has often flaked. It has not become iridescent but has a dull, opaque blue white look. Black surface decoration, when it occurs, is somewhat vitrified and is now iridescent.

Other items represented in substantial quantity in the pottery of Level IC are ring bases and strap handles. Quite a number of sherds are bitumen coated. Many of these may be drain fragments, but others are from jars of Type II-B.

Level IB is represented by two burials, 5 and 6. Burial 5, the burial that had the hoard of tablets packed into the filling of its cut, is a jar of unusual type (Fig. 74:3). It is of buff ware and is relatively well made, containing little straw temper except in the base. Although similar in rim and base to burial jars of Level IC, it has a narrower neck and an interior ledge designed to hold a lid. The lid, found inside the jar, originally had a handle. The exterior of the jar is rather elaborately decorated with rows of

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punctate triangles and incised wavy lines. Inside the jar there was found a bowl of light buff ware with straw temper and light aqua glaze fading to white on the interior and exterior, but with yellow glaze on the rim.

The other grave in this level, Burial 6, had a more typical wide-necked burial jar (Fig. 73:4). With this burial there was a bowl very similar to that of Burial 5, but unglazed (12 N 54, Fig. 77:2). These two bowls have no parallels among the rest of the pottery of Level I.

No distinguishable pottery is associated with Level IA.

Level G, Late Neo-Assyrian/Neo-Babylonian(?). The pottery from Levels G and F will be treated somewhat differently. Because so little stratified material was preserved, sherd counts here have little significance. For this reason only the presence or absence of types has been indicated in Table 4.

The pottery from Level G can be divided into two groups, that from Burials 1-4 and 7, and that from a large pit in Squares 2 and 8.

Burials 1-4 and 7 (described in detail above) were dug into Level II. They are close together and are probably almost contemporary. The burial jar type is illustrated in Figure 74:5. It is difficult to find good parallels in the habitation levels of approximately the same time period for the vessels in these burials. Jars 12 N 40 and 12 N 90 (Fig. 77:3-4) are well-made unglazed vessels of buff or pink buff clay; the edge of the base has been shaved. Jars 12 N 39 and 12 N 91 (Fig. 77:5-6) are of a light buff ware with a light aqua white bubbly glaze. Bowl 12 N 89 (Fig. 77:7) is of a light, very fine, yellow buff ware, extremely well made and almost eggshell thin.

The pottery from the pit was not recorded in its entirety because the margins of the pit were not clear and it had been partially disturbed by Pennsylvania cuts. Only sherds that seemed useful for dating purposes were selected (Fig. 78:1-22). In addition to these sherds, there were many so-called Kassite bowls and goblets in this pit, but whether these vessels were in use at the time or had been redeposited is not known.

An interesting vessel fragment (Fig. 74:7) is part of a large plate or tray with projecting feet.

A number of glazed fragments were found. One is from a small bowl with a white, opaque glaze (Fig. 78:4). A bowl with an everted rim (Fig. 78:3) is also white glazed, as are two bases (Fig. 78:19-20). A pointed base fragment of medium red ware (Fig. 78:18) was white glazed with stripes that are now dark green and yellow. A close parallel is known from Tablet Hill.[16]

Level F, Achaemenid(?). Although almost 400 sherds were recorded from this level, their context is not good, since they are from Locus 14, a poorly defined room, and from a number of drains that can be assigned only tentatively to this level.

The most characteristic vessels from Locus 14 are bowls of Type I-B (Fig. 63:13-17) that are thinner and larger than the earlier bowls of this type and that have a blunt rim. They are almost always glazed—white over most of the vessel, with a light green or aqua glaze at the rim. Sherds from eggshell-ware bowls also occur (Fig. 78:34-35) and are sometimes grooved (Fig. 78:36). Another glazed form is the bottle, represented by the necks illustrated in

16. See *Nippur* I, Type 59, e.g., Pl. 101:15.

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Figure 78:37-38, one of them light green, the other darker aqua. Other features of the pottery from this locus are the strap handle (Fig. 79:8-9) and a sherd that is incised and stamped (Fig. 79:6).

Although very little pottery was found *inside* the drains, we did find some glazed rims of Type I-B bowls, strap handles, eggshell-ware fragments, and a stamped sherd similar to that shown in Figure 78:6. The packing outside the drains consisted almost entirely of crude Kassite pottery, usually goblet bases that seem to have been specially selected as drain packing because of their bulkiness and porousness.

Although evidence of the pottery is not strong enough to attribute this level definitely to the Achaemenid period, it is hoped that future excavations will provide additional material for the dating of these upper levels.

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CATALOGUE OF OBJECTS BY LEVEL AND LOCUS IN AREA WB

LEVEL IV

		Field Number and Description*	Figure	
LOCUS 8	above Fl. 1	12 N 291. Bowl, pottery, complete. String-cut base. Medium pinkish buff ware. Crudely made. 3.7 h., 10.0 dm. rim, 4.7 dm. base.	Like 59:1a	
LOCUS 9	Fls. 4-5	12 N 638. Spindle whorl, baked clay, whole. 1.2 th., 3.8 dm.	—	
	at level of footing below Fl. 2 at NE wall	12 N 566. Tablet fragment. Old Babylonian Sumerian text.	—	†
	(same)	12 N 567. Tablet fragment. Old Babylonian. Few signs.	—	†
	(same)	12 N 568. Tablet fragment. Old Babylonian. Exercise.	—	†
	below Fl. 2 but above footing	12 N 569. Tablet fragment. Old Babylonian. Model contract.	—	†
	(same)	12 N 569a. Tablet fragment. Old Babylonian. Legal text(?).	—	†
	(same)	12 N 570. Tablet fragment. Old Babylonian. Model contract.	—	†
	(same)	12 N 570a. Tablet fragment. Old Babylonian. Largely illegible.	—	†
	(same)	12 N 571. Tablet fragment. Old Babylonian. Exercise.	—	†
	(same)	12 N 572. Tablet fragment with a few signs.	—	†
	(same)	12 N 572a. Tablet fragment with a few signs.	—	†
	Fl. 1	12 N 292. Model or toy chariot, baked clay, fragment. Pierced for attachment of wheels and tongue. Pinkish buff ware, buff slip. Slightly broken at edges. 5.5 h., 7.0 l., 7.3 w.	—	
	(same)	12 N 296. Jar, pottery, fragmentary. Short straight neck, on outside of rim solid band of paint with pendent elongated dots, traces	60:3	

*Measurements are in centimeters.
†Inscribed object.

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		Field Number and Description	Figure	
		of a bitumen mend near rim, sharply defined shoulder, ring base. Medium fine light buff ware with black paint at rim inside and out. 18.0 h., 7.9 dm. rim, 15.3 max. dm. body, 6.3 dm. base.		
LOCUS 10	fill, low on SE end	12 N 562. Tablet fragment. Old Babylonian. Exercise.	—	†
	(same)	12 N 563. Tablet fragment. Old Babylonian. Exercise.	—	†
	(same)	12 N 564. Tablet. Old Babylonian. Exercise. Badly eroded.	—	†
	ash layers	12 N 231. Envelope fragment. Ur III. Grain loan(?).	—	†
	(same)	12 N 232. Tablet fragment. Ur III. Administrative text.	—	†
	(same)	12 N 233. Tablet fragment. Ur III. Few signs.	—	†
	(same)	12 N 554. Tablet fragment. Ur III(?).	—	†
	(same)	12 N 555. Tablet fragment. Ur III. Administrative text. Amar-Sin.	—	†
	(same)	12 N 557. Tablet fragment. Old Babylonian. Sumerian literary text.	—	†
	(same)	12 N 560. Tablet fragment. Old Babylonian. Administrative text.	—	†
	ash layers, Cut 2	12 N 609. Fragmentary baked-clay seal impression. Presentation scene. Two figures facing right before seated deity facing left. Behind, small figure. 4.6 l., 2.9 w.	—	
	lower ash layer A	12 N 310. Spindle whorl, baked clay, fragmentary. Dark gray. 3.9 l., 2.1 w.	—	
	ash layer, Square 2	12 N 311. Seal impression, unbaked clay, fragment. Conflict scene, men and animals. 4.5 h., 2.95 max. w.	—	
LOCUS 15	water-laid sandy level above Fl. 1	12 N 783. Bowl, pottery, whole. String-cut base. Reddish buff ware, pink slip. 5.3 h., 10.1 dm.	Like 59:1a	
LOCUS 16	fill below Fl. 6	12 N 444. Animal figurine, baked clay, fragmentary. Quadruped with pack frame.	44:5	

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	Field Number and Description	Figure
	Four holes in frame. Coarse buff ware. 4.7 h., 10.4 l., 4.5 th.	
(same)	12 N 450. Human figurine, baked clay, fragmentary. Crude, handmade. Medium grayish buff ware. 5.9 h., 3.1 w., 2.6 max. th.	—
below Fl. 6 on footing in NW corner	12 N 431. Bowl, pottery, complete. String-cut base. Medium pink ware, pinkish cream slip. 4.6 h., 14.3 dm. rim, 5.2 dm. base.	Like 59:1*b*
(same)	12 N 432. Bowl, pottery, complete. String-cut base. Medium fine pink ware, cream slip. 4.6 h., 13.6 dm. rim, 5.1 dm. base.	Like 59:1*a*
below Fl. 6 on footing of NW wall	12 N 464. Bowl, pottery, almost complete. String-cut base. Medium fine reddish buff ware, cream slip. Found inverted over 12 N 465. 4.7 h., 13.4 dm. rim, 5.3 dm. base.	Like 59:1*a*
(same)	12 N 465. Bowl, pottery, almost complete. String-cut base. Medium fine reddish buff ware, cream slip. 12 N 464 found inverted over it. 5.0 h., 15.6 dm. rim, 4.7 dm. base.	Like 59:1*b*
(same)	12 N 466. Bowl, pottery, whole. Carinated rim, string-cut base. Medium pinkish buff ware. 4.5 h., 13.4 dm. rim, 5.3 dm. base.	Like 59:1*b*
(same)	12 N 467. Bowl, pottery, fragmentary. String-cut base. Medium fine reddish buff ware, cream slip. Unregistered fragmentary bowl found inverted over it. 5.0 h., 16.6 dm. rim, 5.3 dm. base.	Like 59:1*a*
cut in W corner of Fl. 6	12 N 416. Weight, hematite. Flattened on one side, lentoid. Similar to 12 N 391. 2.0 l., 0.8 max. w., 2.8 gm.	—
Fl. 6, near NE wall	12 N 426. Jar, pottery, almost complete. Flaring neck, pointed base. Medium fine pinkish buff ware, cream slip. 18.4 h., 7.4 dm. rim, 8.0 max. dm. body.	Like 60:8
Fl. 6	12 N 453. Jar, pottery, almost complete. Black paint at rim. Medium buff ware, cream slip. Some straw in clay. 19.7 h., 8.3 dm. rim, 8.8 max. dm. body, 5.3 dm. base.	60:5
Fls. 5a-6, against NW wall	12 N 427. Bowl, pottery, whole. String-cut base. Medium pink ware, self slip(?). 4.2 h., 12.5 dm. rim, 5.2 dm. base.	Like 59:1*a*

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		Field Number and Description	Figure
	(same)	12 N 428. Bowl, pottery, complete. String-cut base. Medium pinkish buff ware, cream slip. 4.4 h., 12.2 dm. rim, 5.2 dm. base.	Like 59:1*b*
	(same)	12 N 429. Bowl, pottery, almost complete. String-cut base. Medium pinkish buff ware, self slip(?). 4.5 h., 11.7 dm. rim, 4.8 dm. base.	Like 59:1*b*
	(same)	12 N 430. Bowl, pottery, complete. String-cut base. Medium pinkish buff ware, pinkish cream slip. 4.6 h., 11.8 dm. rim, 5.6 dm. base.	Like 59:1*b*
	Fls. 4-5, E corner	12 N 433. Bowl, pottery, almost complete. String-cut base. Medium coarse pink ware, self slip(?). Some straw in clay. 4.6 h., 12.5 dm. rim, 5.4 dm. base.	Like 59:1*a*
	(same)	12 N 434. Bowl, pottery, almost complete. String-cut base. Medium crude pink ware with self slip(?). Some straw in clay. 3.3 h., 11.2 dm. rim, 5.1 dm. base.	Like 59:1*b*
	(same)	12 N 435. Cup, pottery, whole. String-cut base. Medium pinkish buff ware, self slip(?). Some straw in clay. 10.3 h., 6.8 dm. rim, 3.5 dm. base.	Like 59:4*b*
	(same)	12 N 436. Cup, pottery, almost complete. String-cut base. Medium buff ware, cream slip. Some straw in clay. 10.1 h., 7.1 dm. rim, 4.0 dm. base.	Like 59:4*b*
	Fls. 1-2	12 N 425. Grinding stone, red stone. 6.4 × 5.5.	—
LOCUS I7	below Fl. 5, center of NW wall	12 N 767. Bowl, pottery, almost complete. Plain rim, string-cut base. Red ware, cream slip. Found inverted over 12 N 768-69. 4.4 h., 15.9 dm.	Like 59:1*a*
	(same)	12 N 768. Bowl, pottery, fragments missing. Plain rim, string-cut base. Red ware, cream slip. Found upright under 12 N 767 and above 12 N 769. 4.7 h., 15.0 dm.	Like 59:1*a*
	(same)	12 N 769. Bowl, pottery, almost complete. Plain rim, string-cut base. Red ware, red slip. Found upright under 12 N 767-68. 5.1 h., 15.3 dm.	Like 59:1*a*
	(same)	12 N 770. Bowl, pottery, fragmentary. Plain rim, string-cut base. Reddish buff ware, cream slip. Found inverted over 12 N 771-73. 3.3 h., 13.9 dm.	Like 59:1*a*

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	Field Number and Description	Figure
(same)	12 N 771. Bowl, pottery, almost complete. Plain rim, string-cut base. Red ware, pink slip. Found inverted below 12 N 770 and over 12 N 772-73. 5.1 h., 15.4 dm.	Like 59:1*a*
(same)	12 N 772. Bowl, pottery, almost whole. Plain rim, string-cut base. Red ware, cream slip. Found inverted below 12 N 770-71 and over 12 N 773. 4.6 h., 14.6 dm.	Like 59:1*a*
(same)	12 N 773. Bowl, pottery, whole. Plain rim, string-cut base. Red ware, pink slip. Found upright under 12 N 770-72. 5.2 h., 14.9 dm.	Like 59:1*a*
Fl. 5, center of wall	12 N 716. Bowl, pottery, fragmentary. String-cut base. Medium fine buff ware, cream slip. 4.9 h., 14.6 dm. rim, 5.3 dm. base.	Like 59:1*a*
Fl. 5, center of NW wall on footing	12 N 717. Bowl, pottery, almost whole. String-cut base. Medium pink ware, some pinkish cream slip. 4.8 h., 12.6 dm. rim, 4.7 dm. base.	Like 59:1*a*
(same)	12 N 718. Bowl, pottery, almost complete. String-cut base. Medium buff ware, cream slip. Found upright under 12 N 717. 5.2 h., 13.4 dm. rim, 5.6 dm. base.	Like 59:1*a*
Fl. 5, near N corner, cut into upper footing of NE wall	12 N 719. Bowl, pottery, almost complete. Carinated rim, string-cut base. Medium pink ware, some cream slip. Found inverted over 12 N 720. 4.1 h., 12.0 dm. rim, 5.6 dm. base.	Like 59:1*a*
(same)	12 N 720. Bowl, pottery, complete. String-cut base. Medium pink ware, cream slip. Found upright under 12 N 719. 4.0 h., 11.9 dm. rim, 5.0 dm. base.	Like 59:1*a*
Fl. 5, near N corner cut into lower footing of NE wall	12 N 721. Bowl, pottery, almost whole. Medium pink ware, cream slip. Found inverted over 12 N 722. 5.2 h., 13.3 dm. rim, 15.5 dm. base.	Like 59:1*a*
(same)	12 N 722. Bowl, pottery, almost whole. String-cut base. Medium pink ware, cream slip. Found upright under 12 N 721. 5.1 h., 14.2 dm. rim, 5.3 dm. base.	Like 59:1*a*
Fl. 5	12 N 723. Cup, pottery, fragmentary. Straight sides, button base. Medium buff ware. 14.3 h., 8.2 dm. rim, 3.5 dm. base.	Like 59:5

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		Field Number and Description	Figure	
	Fl. 5, door to LOCUS 30	12 N 763. Bowl, pottery. Plain rim, string-cut base. Buff ware, cream-gone-to-red slip. Found inverted over 12 N 764. 3.6 h., 11.3 dm.	Like 59:1*a*	
	(same)	12 N 764. Bowl, pottery, fragmentary. Plain rim, string-cut base. Buff ware, cream slip. Found upright under 12 N 763. 4.8 h., 12.5 dm.	Like 59:1*a*	
	Fl. 4, 3 m. from N corner along NW wall of room	12 N 625. Cylinder seal, black stone. Water god seated facing right, confronted by two gods flanking birdman. Tree behind seated god. Crescent and star in field. Akkadian. 3.7 h., 2.5 dm.	45:4*a-c*	
	Fl. 4, N corner	12 N 639. Plaque, baked clay, fragmentary. Lower half of female in long skirt with three ridges. Medium reddish buff ware. 6.5 h., 6.2 w., 1.9 th.	44:1	
	Fl. 4	12 N 676. Tablet. Old Babylonian. Legal text. Rim-Sin 55(?).	—	†
	(same)	12 N 677. Envelope of 12 N 676. Sealed.	92:3	†
	Fl. 4, against SE wall, 2.27 m. from E corner	12 N 759. Bowl, pottery, whole. Plain rim, string-cut base. Buff ware, cream slip. 4.4 h., 11.7 dm.	Like 59:1*a*	
	Fls. 3-4	12 N 784. Plaque, baked clay, fragmentary. Woman playing stringed instrument. Mold-made. 6.7 h., 5.9 w., 2.1 th.	44:2	
	(same)	12 N 785. Plaque, baked clay, fragmentary. Nude female figurine. Mold-made. 3.7 h., 4.4 w., 1.4 th.	—	
	above Fl. 2 in N corner	12 N 626. Bowl, pottery, whole. String-cut base. Medium pinkish buff ware, cream slip. 5.9 h., 13.2 dm. rim, 5.6 dm. base.	Like 59:1*a*	
	Fl. 2, at NE wall of room	12 N 628. Jar, pottery, fragmentary. Pointed base. Medium fine buff ware, self-slip. 16.2 h., 7.6 max. dm. body.	60:8	
LOCUS 22	fill below Fl. 1, W corner	12 N 608. Weight(?), black stone. 1.5 l., 0.8 max. w., 1.95 gm.	—	
	fill NW of inset wall	12 N 461. Vessel, white stone with gray veins, fragmentary. Cylindrical, flat bottom. 9.1 h., 9.4 dm.	—	

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		Field Number and Description	Figure	
	(same)	12 N 462. Seal impression, baked clay, fragmentary. To right, goddess with hands in front of face. To left, a hand of second god(?). Inscribed. Fragment: 3.1 × 2.6 × 1.1; impression: 1.8 h., 2.5 l.	45:1	†
	(same)	12 N 615. Bowl, pottery, whole. Flaring rim, string-cut base. Medium fine pinkish buff ware, cream slip. 4.8 h., 13.8 dm. rim, 4.8 dm. base.	Like 59:1*a*	
	beside drain in fill NW of inset wall	12 N 668. Tablet fragment. Old Babylonian. Exercise.	—	†
	fill NE of inset wall	12 N 489. Bead, black stone, almost whole. Circular section, flat sides. 0.5 w., 1.1 dm.	—	
	(same)	12 N 492. Gaming piece(?), unbaked clay, almost whole. 2.3 h., 2.3 max. w.	—	
	(same)	12 N 670. Tablet. Old Babylonian. Exercise. Sumerian.	—	†
LOCUS 23	Fl. 1	12 N 701. Bowl, pottery, whole. String-cut base. Pinkish buff ware, cream slip. 2.3 h., 8.8 dm. rim, 4.3 dm. base.	Like 59:1*b*	
LOCUS 24	in bitumen-lined pit	12 N 671-72. Tablet fragments. Old Babylonian. Lexical text.	—	†
	tunnel below LOCUS 20	12 N 424. Figurine, baked clay, almost whole. Seated woman holding child. Black paint or bitumen on headdress. 8.5 h., 4.0 max. w.	58:4	
LOCUS 25	Fl. 2 at middle of SE wall	12 N 674. Tablet. Old Babylonian. Administrative text.	—	†
LOCUS 26	Fls. 8-9	12 N 731. Plaque figurine, baked clay, fragmentary. Lower half of man in kilt with kneeling victim. Reddish buff. 8.6 h., 5.7 w., 1.1 th.	44:3	
	Fl. 4, N corner	12 N 776. Bowl, pottery, almost whole. Plain rim, slightly incurved, flat string-cut base. Buff ware, cream slip. 4.8 h., 13.1 dm.	Like 59:1*a*	
	(same)	12 N 777. Wheel, baked clay, fragmentary. Gray interior, reddish exterior. Coarse, underfired. 1.4 th. at edge, 5.7 th. at hub, 15.1 dm., 2.7 dm. hole.	—	

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		Field Number and Description	Figure
	Fl. 4, above oven in S corner	12 N 760. Bowl, pottery, whole. String-cut base. Buff ware; cream slip. Found inverted over 12 N 761. 5.0 h., 13.5 dm.	Like 59:1*a*
	(same)	12 N 761. Bowl, pottery, almost complete. String-cut base. Red ware, pinkish cream slip. Found upright under 12 N 760. 4.0 h., 13.6 dm.	Like 59:1*a*
	Fl. 3	12 N 713. Plaque, baked clay, fragmentary. Man on donkey(?). Pinkish buff ware, cream slip. 6.4 h., 4.3 w., 3.5 th.	44:4
	Fl. 3, in oven in E corner	12 N 765. Bowl, pottery, complete. Plain rim, string-cut base. Buff ware, pinkish cream slip. 4.5 h., 12.8 dm.	Like 59:1*a*
	above Fl. 1	12 N 494. Figurine, baked clay, fragmentary. Lower half of bowlegged dwarf on pedestal. Pinkish buff ware. 6.0 h., 4.3 w., 3.5 th.	44:6
	(same)	12 N 495. Object, stone. Hole in one end from drill entering both sides. 7.3 l., 3.2 w., 1.5 th.	—
	(same)	12 N 627. Jar, pottery, almost whole. Ovoid, broken rim, carinated neck, wide ring base. Black paint in geometric design. Medium fine pinkish buff ware, cream slip. 11.8 h., 3.3 dm. neck, 7.7 max. dm. body, 6.0 dm. base.	60:4*b*
LOCUS 27	above Fl. 5, NE side of doorway	12 N 726. Bowl, pottery, almost complete. Reddish buff ware. Found inverted over 12 N 727. 4.2 h., 13.6 dm. rim, 5.5 dm. base.	Like 59:1*a*
	(same)	12 N 727. Bowl, pottery, complete. Buff ware. Found under 12 N 726. 4.8 h., 13.1 dm. rim, 5.1 dm. base.	Like 59:1*a*
	Fl. 4	12 N 715. Celt, stone, fragment. 2.7 l., 3.5 w., 0.9 th.	—
	above Fl. 4, S corner	12 N 724. Bowl, pottery, fragmentary. Medium reddish buff ware. Found inverted over 12 N 725. 3.5 h., 12.1 dm. rim, 5.1 dm. base.	Like 59:1*a*
	(same)	12 N 725. Bowl, pottery, complete. String-cut base. Medium buff ware. 4.0 h., 12.5 dm. rim, 5.2 dm. base.	Like 59:1*a*

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		Field Number and Description	Figure
	Fl. 3, E corner	12 N 758. Bowl, pottery. Plain rim, string-cut base. Buff ware, cream slip. 4.4 h., 9.0-10.2 dm.	Like 59:1a
LOCUS 28	Fls. 5-6	12 N 787. Model boat, baked clay, prow only. 7.9 h., 6.0 w., 3.4 intact l.	—
	Fl. 3, in oven in E corner	12 N 708. Model bed, baked clay, fragmentary. Webbing indicated. 2.2 h., 4.7 l., 3.7 w.	—
LOCUS 30	Fl. 5, N corner of room	12 N 643. Weight(?), white stone. 8.6 l., 4.4 w., 3.3 th., 210 gm.	—
	Fls. 3-4, SW end	12 N 616. Seal impression, unbaked clay, fragmentary. Presentation scene, two figures flanking seated deity. Old Babylonian style. 2.3 h., 2.5 l.	45:2
	(same)	12 N 617. Two seal impressions of same seal, unbaked clay, fragmentary. Conflict scene, hero, dragon, and animals. Old Babylonian style.[17] 2.3 h., 3.6 l.	45:3
	on Fl. 3, against center of SW wall	12 N 649. Bowl, pottery, almost complete. String-cut base. Medium reddish buff ware. Found inverted inside unregistered jar. 4.5 h., 13.1 dm. rim, 5.4 dm. base.	Like 59:1a
LEVEL III			
LOCUS 16	fill above Fl. 1	12 N 374. Female figurine, baked clay, fragmentary. Cloth over head, hands clasped, perhaps holding round object. Medium reddish buff ware, cream slip. 5.1 h., 3.1 w., 2.9 max. th.	48:1
	(same)	12 N 629. Jar, pottery, fragmentary. Straight rim, button base. Medium fine buff ware. 12.4 h., 4.6 dm. neck, 6.9 max. dm. body, 3.0 dm. base.	70:1
	(same)	12 N 630. Jar, pottery, fragmentary. Straight rim (broken off), button base. Medium fine reddish buff ware, cream slip. 11.3 h., 4.3 dm. neck, 7.2 max. dm. body.	70:2
	(same)	12 N 766. Lid, pottery, complete. 3.0 h., 8.9 dm.	Like 75 (Type V-A)

17. Briggs Buchanan, *Catalogue of Ancient Near Eastern Seals in the Ashmolean Museum* I: *Cylinder Seals* (Oxford, 1966), Pl. 36, nos. 533-36.

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		Field Number and Description	Figure
LOCUS 17	above Fl. 1	12 N 463. Jar, pottery, almost complete. Medium pinkish buff ware. 27.7 h., 8.7 dm. rim, 5.6 dm. base.	66:1
	(same)	12 N 631. Jar, pottery, fragmentary. Broken rim, straight neck, button base. Medium fine buff ware, self slip. 12.7 h., 4.5 dm. neck, 7.4 max. dm. body, 3.5 dm. base.	70:3
LOCUS 18	fill below SE wall	12 N 488. Female figurine, baked clay, fragmentary. Necklace. Medium fine pinkish buff ware. 6.0 h., 2.8 w., 1.5 th.	48:2
	fill below Fl. 3, NE	12 N 478. Figurine, baked clay, fragmentary. Long skirt, bare feet. Medium coarse grayish buff ware. 3.8 h., 3.6 w., 2.5 th.	—
LOCUS 25	above Fl. 1	12 N 691. Fragments of unbaked bullae with long inscriptions. Kassite. *a*) 2.1 × 2.5. Seated figure facing left approached by standing male figure facing right. In field, cross and lozenges. Behind standing figure is a winged lion(?) facing left. Above main scene, unclear subsidiary scene. 6-line inscription. *b*) 1.7 × 1.2. Scene shows two upright bulls(?) in conflict(?). Portions of 2-line inscription below belong to second rolling. *c*) 1.6 × 1.1. Portions of 3 lines of inscription. *d*) 3.7 × 2.5. Multiple rollings of a seal showing two standing deities. God with scimitar on left facing right, goddess on right. Between them, a lizard. Portions of a 7-line inscription. *e*) 2.4 × 1.5. Rolling from same seal as *d*. *f*) 2.3 × 1.9. Rolling with inscription only preserved. *g*) 1.9 × 1.1. Rolling with inscription only preserved. *h*) 1.9 × 1.1. Rolling with inscription only preserved.	48:5*a-h*, † 92:1-2
LEVEL II			
LOCUS 6	below Fl. 1	12 N 81. Seal impression, baked clay, fragment. Man in long garment facing woman holding ibex on leash. Cross in field. Kassite style. 2.7 l., 2.0 w.	48:4

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		Field Number and Description	Figure	
	(same)	12 N 86. Female figurine head, baked clay. Applied hair and headdress, applied eyes missing. Ur III style. 2.8 h., 2.8 w.	—	
	(same)	12 N 88. Plaque, baked clay, fragment in three pieces. Nude female. Buff. 4.7 h., 4.1 max. w., 1.4 th.	—	
	(same)	12 N 267. Bead, white frit. Cylindrical, incised crosshatching. 0.5 l., 0.5 dm.	—	
	(same)	12 N 295. Tablet fragment with seal impression. 3.3 l., 2.35 max. w., 0.2 th.	48:3	†
	above ash layer	12 N 301. Tool, bone point. 3.9 l., 0.75 max. w.	—	
	SE wall, in bricks	12 N 254. Figurine, baked clay, bottom fragment. Reddish buff. 5.2 h., 2.4 w.	—	
LOCUS 11	Fls. 1-2	12 N 396. Bowl, pottery, complete. String-cut base. Medium buff ware, cream slip. 5.8 h., 14.5 dm. rim, 5.9 dm. base.	Like 62 (Type I-A)	
LOCUS 12	Pennsylvania cut	12 N 368. Tag, unbaked clay, fragmentary, with mark of cord. Multiple impressions of same seal. God (Amurru?) facing right, wearing kilt. Goddess facing left, with something hanging from her right hand, perhaps a leash for an animal. Object in the field, between the two gods. 4.3 h., 2.4 w.	48:8	
	fill above ash layer	12 N 369. Bowl, pottery, almost complete. Medium greenish buff ware. 6.7 h., 17.4 dm. rim, 7.2 dm. base.	Like 62 (Type I-A)	
	fill from Pit 1	12 N 556. Tablet. Ur III. Administrative text.	—	†
LOCUS 13	between Fls. 1-2	12 N 648. Seal impressions, unbaked clay. Two of same seal(?). Inscription. 2.4 h., 2.8 l.	—	†
	fill above Fl. 1, Pennsylvania dump	12 N 234-49. Tablet fragments. Kassite. Mostly administrative texts.	—	†
	(same)	12 N 338. Blade fragment, corroded iron. 14.4 l., 2.1 w., 0.5 th.	—	
	(same)	12 N 339. Pin or nail, copper. Square section. 4.8 l., 0.9 max. w.	—	

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		Field Number and Description	Figure	
	(same)	12 N 500-15. Tablet fragments. Kassite. Administrative texts.	—	†
	(same)	12 N 516. Tablet fragment. Old Babylonian.	—	†
	(same)	12 N 517-51. Tablet fragments. Kassite. Administrative texts.	—	†
	(same)	12 N 650. Tablet fragment. Kassite. Administrative text.	—	†
LOCUS 18	in mud brick of SW wall	12 N 490. Horse-and-rider figurine, baked clay, fragmentary. Head of horse and hands of rider preserved. Medium reddish buff ware, cream slip. 5.0 h., 2.3 w.	48:6	
	Fl. 2, center area SW of tunnel	12 N 601. Bowl, black stone, fragmentary. Shallow, with foot broken away. Crudely made. 4.7 h. rim to base, 40.0 dm. rim, 34.0 dm. base.	—	
	Fl. 2, SW area	12 N 602. Goblet, baked clay, fragmentary. High neck, button base. Medium fine pinkish buff ware, cream slip. 19.4 h., 7.1 max. dm. body, 3.1 dm. base.	70:18	
	Fl. 2, NW area	12 N 604. Camel figurine, baked clay, fragmentary. Medium coarse buff ware. 5.3 h., 10.8 l., 4.8 max. th.	48:7	
	NE end, between Fls. 1-2	12 N 664-66. Tablet fragments. Kassite. Administrative texts.	—	†
	(same)	12 N 667. Tablet fragment, uncertain content. Middle Babylonian script.	—	†
	NE end, fill above Fl. 1	12 N 660. Tablet. Late Babylonian. Exercise.	—	†
	(same)	12 N 661-63. Tablet fragments.	—	†
	in Pennsylvania tunnel between LOCI 20-21	12 N 669. Tablet fragment. Kassite. Administrative text.	—	†
LOCUS 21	Fl. 1	12 N 762. Jar, baked clay. Button base, high neck. Buff ware, cream slip. 13.6 h., 8.7 dm., 2.9 dm. base.	71:15	
LEVEL I				
LOCUS 1	Fl. 5, under NW wall	12 N 270. Point-shaped object, baked clay, fragmentary. Incisions, applied dot. Buff ware. 4.3 l., 2.9 max. w.	—	

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		Field Number and Description	Figure
	Fl. 3, hole in floor	12 N 48. Quadruped figurine fragments, unbaked clay. *a*) Body preserved, head broken off. 4.5 l., 2.0 max. dm. body. *b*) Lower portion of body and two legs on one side preserved. 4.8 l., 2.0 max. dm. body. *c*) Two hind legs preserved. 2.5 l., 1.8 w. *d*) Two forelegs preserved. 2.8 l., 2.7 w. *e*) Partial body preserved, all extremities and head broken off. 3.2 l., 2.2 w. *f*) One bovine horn(?). 4.5 l., 1.1 w.	—
	between Fls. 2-3	12 N 49. Bead, white frit(?). Tubular. 0.9 l., 0.3 th.	—
	Fl. 1	12 N 47. Bracelet or anklet, copper. Open at ends. 0.4 max. th., 4.5 max. dm.	—
LOCUS 2	Fls. 1-3	12 N 52. Bead, carnelian. Double conoid. Nicked, worn. 0.6 th., 0.9 max. dm.	—
	(same)	12 N 61. Ring, copper. Open at ends. 0.3 th., 0.9 dm.	—
	fill above Fl. 1	12 N 268. Plaque, baked clay, fragmentary. Lower half of man walking right. Kilt. Reddish buff ware, cream slip. 6.7 h., 5.2 w., 1.6 th.	—
	(same)	12 N 269. Figurine, baked clay, fragment. Crude. Horseman(?). Buff ware, self slip. 6.0 h., 2.1 max. w.	—
LOCUS 4	bricks of SW wall	12 N 87. Bead, white glazed frit. Discoid. 0.3 th., 0.9 dm.	—
	Fls. 1-2 fill	12 N 62. Female figurine, baked clay, torso and head. Nude. Holding cup. 5.7 h., 3.5 max. w., 2.2 max. th.	51:2
	unstratified debris	12 N 65. "Incense burner," pottery, fragment. Two legs broken off. Gray slip and white paste inlay in incised decoration. Crude pinkish yellow clay. 8.8 h., 8.2 w.	—
LOCUS 5	fill below NW wall	12 N 271. Camel figurine, baked clay, fragment. Head and legs broken off. Coarse reddish buff ware, cream slip. 7.2 l., 3.6 max. w.	—
LOCUS 7	fill below Fl. 3	12 N 99. Gaming piece(?), white stone. Cylindrical. Chipped on edges. 1.6 l., 2.1 dm.	—

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		Field Number and Description	Figure	
	Fl. 2(?)	12 N 76. Cylinder seal, white glazed frit, unfinished(?). Winged human figure facing left toward animal(?). 1.9 l., 1.0 dm.	51:1	
	between Fls. 1-2	12 N 85. Grinding stone. Round. 5.5 dm.	—	
LEVEL G				
LOCUS 14	large pit below Fl. 2	12 N 417. Pin, copper. Hook on end. 6.3 l., 0.2 dm.	—	
	(same)	12 N 418. Horse-and-rider figurine, baked clay, fragmentary. Only legs of rider preserved. Medium coarse buff ware. 7.2 l., 5.2 h., 4.1 w.	—	
	(same)	12 N 659. Nine tablet fragments (from one tablet?). Syllabary.	—	†
LEVEL F				
LOCUS 11	packing outside Drain 1	12 N 370. Bowl, copper, fragmentary. Carinated, flaring rim, shallow, round base. 6.3 h., 16.7 dm. rim.	58:2	
	Drain 1	12 N 491. Horse-and-rider figurine, baked clay, fragmentary. Medium greenish buff ware. 9.5 h., 5.3 l., 4.3 w.	—	
LOCUS 14	fill below Fl. 2	12 N 573. Tablet fragment. Syllabary.	—	†
	(same)	12 N 774. Bowl, pottery, whole. Crude, handmade. Buff ware, pinkish buff slip. 4.8 h., 11.7 dm.	Like 62 (Type I-A)	
	(same)	12 N 775. Horse-and-rider figurine, baked clay, fragmentary. Buff red ware, buff slip. 8.0 h., 5.6 l., 1.9 w.	—	
	between Fls. 1-2	12 N 561. Tablet fragment. Middle Babylonian. Administrative text.	—	†
LOCUS 16	Drain 2	12 N 349. Macehead, baked clay, bitumen covered, lower half. 7.1 max. dm.	—	
	(same)	12 N 411. Horse-and-rider figurine, baked clay, fragmentary. Body of rider broken off, legs and one arm preserved. 8.0 h., 6.8 l., 3.4 th.	—	

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POST-ACHAEMENID

	Field Number and Description	Figure
Fill below Wall A	12 N 24. Shell. Pierced for stringing as a bead. Appears to have been burned. 3.0 l., 2.0 max. dm.	—
	12 N 25. Bead, blue paste. Double conical, with six nicks around edge. 0.4 th., 0.6 dm.	—
Fill around Wall A	12 N 11. Horse figurine, clay. Head and one leg broken off. Greenish. 8.0 × 6.0 × 5.0.	—
	12 N 12. Female figurine, baked clay, fragment. Broken at neck and knees. Crude. Yellowish. 4.0 × 3.0 × 2.5.	—
	12 N 26. Rubbing stone. Cylindrical, flat on one side. Black, with traces of red material at one end. 5.0 h., 4.7 w., 4.0 th.	—

BURIALS

BURIAL 2	12 N 29. Anklet, copper. Open at end and overlapping. In child burial in pot. 0.6 h., 0.2 th., 5.0 dm.	—
	12 N 30. Anklet, copper. Open at end and overlapping. In child burial in pot. 0.6 h., 0.2 th., 5.0 dm.	—
	12 N 31. Ring, copper. Open at ends and tapered. In child burial in pot. 0.3 max. th., 1.3 dm.	—
	12 N 32. About 9 beads: 1 carnelian, 1 dark reddish brown glass, 7 white glazed frit in fragments. Stone: 0.9 l., 0.6 max. dm. Glass: 0.3 l., 0.4 max. dm. Frit: ca. 1.0 l., 0.3 max. dm.	—
BURIAL 3	12 N 37. About 40 beads. White glazed frit, blue paste, shell, glass, stone. Some decorated.	—
	12 N 38. Ring, copper. Open at end. 3.0 max. th., 1.7 max. dm.	—
	12 N 39. Jar, pottery, whole. Flaring rim, narrow neck, two shoulder lugs, round body. Light buff ware, pale greenish white glaze. 7.5 h., 4.7 dm. rim, 7.0 max. dm.	55:3*c*, 77:5
	12 N 55. Ring from finger of skeleton, copper, complete, corroded. 0.3 th., 2.2 dm.	—

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		Field Number and Description	Figure	
		12 N 56. Ring from finger of skeleton, copper, complete, corroded. 0.3 th., 2.2 dm.	—	
		12 N 57. Bead, pink stone. Tubular. 0.9 l., 0.3 dm.	—	
BURIAL 4		12 N 40. Jar, pottery, whole. Flaring rim, slightly carinated, narrow neck, low center of gravity, disk base. Horizontal incisions at shoulder, lower part of body and base pared. Light pinkish buff ware, cream slip. 15.0 h., 6.5 dm. rim, 14.5 max. dm., 7.5 dm. base.	55:4*b*, 77:3	
BURIAL 5		12 N 58. Bowl, pottery, complete. Brittle buff ware, light greenish blue glaze, yellow glaze at rim. 6.0 h., 15.0 dm., 4.5 dm. base.	52:1*c*, 77:1	
		12 N 59. Bead, carnelian. Double conoid, serrated sides. 0.5 w., 0.4 dm.	—	
		12 N 60. Ring, copper. Open at ends. 0.3 th., 1.7 dm.	—	
	outside N side	12 N 100-103. Tablets. Early Neo-Babylonian.	—	†
	outside SE side	12 N 104-227. Tablets.	—	†
BURIAL 6		12 N 54. Bowl, pottery, whole. Beveled rim, slightly curving sides, small flat base. Medium pinkish buff ware with black flecks. 6.0 h., 15.5 max. dm., 5.0 dm. base.	52:2*c*, 77:2	
BURIAL 7		12 N 89. Bowl, pottery, whole. Round bottom. Buff eggshell ware. 8.0 h., 13.0 dm. rim.	56:2*c*, 77:7	
		12 N 90. Jar, pottery, whole. Ridged neck, disk base. Greenish buff ware. 15.3 h., 6.4 dm. rim, 11.7 max. dm. body, 5.2 dm. base.	56:2*e*, 77:4	
		12 N 91. Bottle, pottery, almost complete. Buff ware, light blue glaze. 8.1 h., 2.4 dm. rim, 6.9 max. dm. body, 3.9 dm. base.	56:2*d*, 77:6	
		12 N 92. Pin, copper. Four-lobed square-sectioned end. 15.9 l., 0.5 dm.	56:2*a*	
		12 N 93. Pin, copper, in two pieces. Hooked end. Hooked piece: 3.9 l., 0.33 max. dm.; unhooked piece: 2.8 l., 0.3 max. dm.	56:2*b*	

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	Field Number and Description	Figure	
BURIAL 9	12 N 252. Bracelet or anklet, copper. Separation at ends. 0.6 th., 4.1 dm.	—	
	12 N 253. 19 beads. 8 white glazed frit, discoid; 3 bone or shell, 1 rectangular, 2 cylindrical with longitudinal grooves; 1 crystallike white stone, elliptical; 2 lapis, 1 rectangular, 1 double conoid; 5 other stone, 1 double conoid, 4 elliptical.	—	
BURIAL 11	12 N 477. Bracelet, copper. 5.4 dm.	—	
WB, unstratified			
Pennsylvania dump	12 N 45. Tablet fragment. Ur III.	—	†
	12 N 228. Bilingual tablet. Middle Babylonian.	—	†
	12 N 229. Envelope fragment. Ur III. Administrative text, sealed.	—	†
	12 N 230. Envelope fragment. Ur III. Sealed.	—	†
	12 N 293. Plaque, baked clay, fragment, lower left corner. Perhaps showing leg and part of seat of chair. Pinkish buff ware, yellowish buff slip. 9.8 h., 5.3 max. w., 1.4 th.	58:3	
	12 N 294. Cylinder seal, hard black stone. Two lines of inscription. 2.2 l., 1.15 dm.	58:5	†
	12 N 300. Seal impression, baked clay. Two rampant crossed lions attacking two other rampant quadrupeds. Well modeled. Early Dynastic III style. 3.8 h., 4.15 w.	58:6	
	12 N 309. Female tambourine-player figurine, baked clay, fragment. Nude. One arm, middle torso, tambourine. 4.9 h., 6.9 w.	—	
	12 N 346. Male(?) figurine head, baked clay, broken below neck. Hollows for applied eyes. Pinched nose. Medium buff ware. 2.8 h., 3.1 max. w., 2.1 th.	—	
	12 N 552. Tablet fragment. Ur III. Administrative text.	—	†
	12 N 553. Tablet. Imitation wedges.	—	†

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	Field Number and Description	Figure	
	12 N 574-76. Tablet fragments.	—	†
Surface	12 N 7. Coin, copper, corroded. Seleucus IV (187-175 B.C.). Obv.: head of Apollo, laurel wreath.[18] 1.0 dm.	81:4a-*b*	
	12 N 35. Spindle whorl, unbaked clay. Crude. 2.1 h., 4.3 dm.	—	
	12 N 36. Spindle whorl, baked clay. Crude, with nicks around edge. 1.0 th., 2.8 max. dm.	—	
	12 N 53. Bead, gray stone. Short cylinder. 0.6 th., 1.0 dm.	—	
	12 N 63-64. Tablet fragments.	—	†
	12 N 297. Quadruped figurine, baked clay, fragmentary. Medium light buff ware. 4.6 h., 5.7 l., 2.9 w.	—	
	12 N 298. Horse head figurine, baked clay, fragment. Forelock clearly indicated with flap of clay. Medium coarse light buff ware, black paint. 4.4 h., 4.2 l., 2.0 th.	—	
	12 N 299. Female figurine, baked clay, fragment. Nude. Lower body. Splayed base. Reddish buff ware. 6.2 h., 3.3 w.	—	
	12 N 306. Plaque figurine, baked clay, fragment. Very high relief: one foot against plaque back, one separated from surface. 4.3 h., 4.5 w. at base.	—	
	12 N 388. Plaque, baked clay, fragmentary. Man with mace, walking to right, wearing kilt. Upper torso frontal, head and legs in profile. 10.9 h., 4.4 max. w., 2.7 th.	—	
	12 N 443. Female figurine, baked clay, fragmentary. Applied eyes and headdress, black paint on headdress. Necklace. 4.0 h., 2.9 max. w., 1.6 th.	—	
	12 N 448. Bead stamp, frit. Wavy lines on back. 1.5 l., 0.9 w., 0.5 th.	—	
	12 N 558-59. Tablet fragments. Middle Babylonian.	—	†

18. Georges Le Rider, *Suse sous les Séleucides et les Parthes*, Mémoires de la Mission Archéologique en Iran 38 (Paris, 1965), No. 302.

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Field Number and Description	Figure	
12 N 565. Tablet fragment. Kassite. Administrative text.	—	†
12 N 673. Tablet fragment. Neo-Babylonian. Legal.	—	†

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3

OUTSIDE THE EXCAVATIONS

McGuire Gibson

SURFACE FINDS

As usual, some finds were made by staff members or workmen on the surfaces of the mounds. Aramaic bowls numbered three (12 N 5, 387, 493; Fig. 80:1-3). These will be discussed in detail in a later report. A fragment of an Esarhaddon barrel cylinder was found on a Parthian wall of the fortress at Ekur and has been published by Miguel Civil.[1] A reddish brown stamp seal with a bird and a star (12 N 402, Fig. 81:1) came from the same area. An unusual and unusually well-preserved copper rooster (12 N 340, Fig. 81:2), found on top of the mound southwest of WA, is probably Sassanian or Islamic.

Coins found on the surface included Seleucid (12 N 6, 14; Fig. 81: 3, 5), Parthian (12 N 272, Fig. 81:6), and Islamic (12 N 33 and 50, Fig. 81: 7-8; and 12 N 51) issues. Of particular importance was a find made by Abbas Ali Dost, our cook, on his way to visit WA. About 50 m. west of the dig, at the top of the mound (see Fig. 1:2 for findspot), where we were barely able to trace the baked-brick walls of a house, he noticed a hoard of coins (76 Islamic dirhams, 12 N 789), corroded together and showing the remains of a cloth sheath that had enclosed them (Fig. 82). Michael Bates of the American Numismatic Society has studied them, and his treatment is included in this report as Chapter 5. It should be noted that none of the coins dates to later than about 780 A.D. On the basis of its pottery, I have thought for some time that Nippur did not survive much beyond the year 800, although there is mention of a Christian bishop of Nippur, then of Nippur-and-Nīl, until about 1000 A.D.[2] It would seem that the diocese continued to be called by the name Nippur long after the see was moved to Nīl, about 80 km. to the north.

It is interesting to note that there are several North African issues among the coins.

1. M. Civil, "Note sur les inscriptions d'Asarhaddon à Nippur," *Revue d'assyriologie* 68 (1974): 94.

2. See J. M. Fiey, *Assyrie Chrétienne* III, Recherches publiées sous la direction de l'Institut de Lettres orientales de Beyrouth, 3d ser.: Orient Chrétien 42 (Beirut, 1968), pp. 250-53.

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FINDS OUTSIDE NIPPUR

There are in the catalogue two items that did not come from Nippur. These are an unusual early Uruk period pitcher (12 N 2, Fig. 81:9) that is without parallel as far as I know, and a fine Jamdat Nasr period stamp seal (12 N 42, Fig. 81:10) showing addorsed horned animals. We found these items while visiting two small sites within a few miles of Nippur. We thought it important to record and publish them, and putting them in our catalogue seemed the best way to insure this.

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CATALOGUE OF SURFACE FINDS

	Field Number and Description*	Figure	
West Mound	12 N 1. Female figurine, baked clay, torso, head. Plaquelike back. Hands clasped at breast. Hair at both sides of head. Most of face broken. 6.5 h., 4.5 w., 2.0 th.	--	
	12 N 3. Bowl, pottery, fragmentary. Greenish eggshell ware. 6.5 h., 14.0 dm. rim.	--	
	12 N 4. Horse-and-rider figurine, baked clay, head. 5.0 h., 2.0 l., 2.0 w.	--	
	12 N 5. Bowl, pottery, Syriac ink inscription. "Flower" in center. 6.0 h., 17.0 dm.	80:2	†
	12 N 14. Coin, bronze. Seleucid (Seleucus IV, 187-175 B.C.). Obv.: head of Apollo facing right, laurel wreath. Rev.: Victory on left facing a trophy. Monogram (Seleucia) above. Inscription: ΒΑΣΙΛΕΩΣ ΣΕΛΕΥΚΟΥ. 15 mm. dm., 4 mm. th.	81:5*a-b*	
	12 N 50. Coin, bronze. Islamic, mint illegible. Found near 12 N 789 (below). 22 mm. dm., 3.85 gm.	81:8*a-b*	
	12 N 51. Coin, copper, badly worn. Islamic. 17 mm. dm., 0.85 gm.	--	
	12 N 66. Quadruped figurine, baked clay, head and one foreleg broken. Light buff. 5.0 h., 10.7 l., 3.8 w.	--	
	12 N 250. Model chair back, baked clay, fragmentary. Mold made. Nude bearded man facing left, holding staff. Part of temple behind him. See *Nippur* I, Pl. 143:8, 9, 12. 5.9 h., 2.8 w., 0.9 th.	--	
	12 N 251. Female figurine, baked clay, head. Mold made. High-pointed headdress. Hollow. 5.5 h., 2.9 th.	--	
	12 N 255. Model brick, baked clay, buff. 2.75 l., 2.6 w., 1.1 th.	--	

*Measurements are in centimeters.
†Inscribed object.

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	Field Number and Description	Figure	
	12 N 341. Horse-and-rider figurine, baked clay, fragment. Portion of leg of rider preserved. Buff ware. 6.6 h., 7.6 l., 3.6 w.	--	
	12 N 387. Bowl, pottery, whole. 7 lines "Jewish" script of unusual type inside bowl. 6.3 h., 16.8 dm. rim.	80:1*a-c*	†
	12 N 394. Horse-and-rider figurine, baked clay, fragment. Upper portion of rider. Applied eyes, folded hat. Medium light buff ware. 4.9 h., 3.6 w., 2.0 th.	--	
	12 N 419. Jar, pottery, fragmentary. Flaring rim, high neck, ridges on neck, flat base. Glazed inside and out, cracked, signs of burning. 7.5 h., 6.2 max. dm. body, 3.2 dm. base.	--	
	12 N 420. White stone vessel, fragment. Remains of three cases for cuneiform signs. 6.6 l., 3.6 w., 3.4 max. th.	--	†
	12 N 421. Animal head, baked clay, fragmentary. Medium fine buff ware. 4.0 h., 3.5 l., 3.3 w.	--	
	12 N 422. Horse-and-rider figurine, baked clay, rider. Medium coarse buff ware. 7.8 h., 3.2 max. w., 2.6 max. th.	--	
	12 N 423. Horse-and-rider figurine, baked clay, rider. Medium buff ware. 7.3 h., 4.4 w., 1.9 th.	--	
	12 N 600. Jar, pottery, almost complete. Flaring rim, narrow neck, concave base. Medium fine buff ware, greenish blue glaze. 8.7 h., 4.5 dm. rim, 8.3 dm. body, 3.9 dm. base.	--	
West Mound, SW of WA, between Survey Points 8 and 9	12 N 340. Rooster, copper, feet missing. Probably Islamic. 4.3 h., 3.2 w., 1.3 th.	81:2	
Near Shatt-an-Nīl, 100 m. N of WA	12 N 493. Bowl, pottery, whole. Mandaic incantation, 18 lines inside, one on rim, four around outside. Repetitive inscription for health of body, house, home, sons, daughters, donkey, ox, pig, goat, etc. of client, Gaday--"Lucky" (description by Stephen Kaufman). Medium buff ware. 12.5 h., 28.5 dm. rim, 11.5 dm. base.	80:3	†

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	Field Number and Description	Figure	
50 m. east of WA, near a Pennsylvania dump	12 N 581. Tablet fragment, legal text, mentions Sin-Šar-iškun.	--	†
S of WA	12 N 657. Tablet. Catalogue of incantations.[3]	--	†
W of WA	12 N 789. 76 coins, silver. Islamic dirhams. See Chapter 5.	82-87	
Tablet Hill	12 N 6. Coin, bronze, Seleucus II (245-226 B.C.). Obv.: male bust to right. Rev.: Apollo standing to left with arrows. Monogram (Seleucia).[4] 22 mm. dm.	81:3*a-b*	
	12 N 33. Coin, bronze, almost completely corroded. Islamic. 20 mm. max. dm.	81:7*a-b*	
In mudbrick of Parthian fortress (FI) outer enclosure wall beside NW corner of FI 65	12 N 43. Barrel cylinder, Esarhaddon. See Chapter 4.[5]	--	†
S of Ekur, on debris over part of Parthian fortress	12 N 402. Bead, light reddish brown stone, whole. Beveled edge. 6-pointed star and bird with crest. Sassanian. 1.6 l., 1.15 w., 0.7 max. th.	81:1	
(no find spot recorded)	12 N 272. Coin, bronze, Parthian. Obv.: bust of king to left. Rev.: Tyche to right with date, probably 118 A.D.[6] 16 mm. dm.	81:6	
100 m. SW of expedition house	12 N 71. Dog figurine, copper. Sitting on base. Body: 5.8 l., 3.8 h., 1.4 w.; base: 4.2 l., 1.9 w.	--	
Site 159 (as identified in Adams's Nippur Survey)	12 N 2. Vessel, pottery. Tall, slit lip spout, slightly turned out at rim, 4 small feet at base. Greenish buff ware, black painted design of cross-hatched diamonds. Early Uruk period. 17.0 h., 8.0 dm. rim, 10.0 dm. body, 6.0 dm. base.	81:9	
Small site 8 km. N of Nippur. Site 938 (as identified in Adams's Nippur Survey)	12 N 42. Stamp seal, very hard black and white stone. Deeply engraved design on one face, addorsed horned animals. Pierced vertically. 3.7-4.0 dm., 1.3 th.	81:10	

3. See M. Civil, "Selected Texts from the Twelfth Nippur Campaign," in press.

4. See Georges Le Rider, *Suse sous les Séleucides et les Parthes*, Mémoires de la Mission Archéologique en Iran 38 (Paris, 1965), No. 260.

5. See also M. Civil, "Notes sur les inscriptions d'Asarhaddon à Nippur," *Revue d'assyriologie* 68 (1974):94.

6. See Warwick Wroth, *Catalogue of the Coins of Parthia* (London, 1903), Pl. 31, Osroes.

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4

CATALOGUE OF TEXTS

Miguel Civil

Some texts of more than routine interest will be presented in a forthcoming study "Selected Texts from the Twelfth Nippur Campaign," and all lexical texts will be included in "Lexical Texts from the Eleventh-Thirteenth Nippur Campaigns," both by Miguel Civil. When a text has been assigned for publication to someone else, this fact is indicated in the catalogue. Note that the asterisk after a catalogue number indicates that only one side of the tablet is preserved. The designation "Neo-Babylonian" covers also the Post-Neo-Babylonian periods. The abbreviations used are those of *The Assyrian Dictionary of the Oriental Institute of the University of Chicago* and *Materialien zum sumerischen Lexikon*.

12 N 43. Outer enclosure wall beside NW corner of Locus FI 65, in mud brick of Parthian Fortress. 15.5 × 15.5 × 7.5 cm.
Fragment of barrel, baked. Esarhaddon: Nippur barrel B.[1]

12 N 44. WA, Level III, Fl. 2b, 0.5 m. east of Wall F. 3.7 × 1.5 × 2.1 cm.
Very small fragment of the upper right corner of a late Babylonian exercise tablet, type II; obv.: Hh. I 70 f.; rev.: Hh. IV 374-76.

12 N 45. WB, Square 5, Pennsylvania dump. 3.3 × 3.0 × 1.0 cm.
Ur III administrative text: receipt, before witnesses, of one shekel of silver, equivalent to 1 *gur* 60 $sila_3$ of grain, to be returned the third month. Amar-Sin 5.

12 N 63. WB, Square 4, surface debris. 5.0 × 4.9 × 2.0 cm.
Lower left corner of an Ur III administrative text: numerals followed by personal names.

12 N 64.* WB, Square 4, surface debris. 4.8 × 2.0 × 0.7 cm.
Small fragment from the obverse of an Old Babylonian contract: [*Ur-*^{d}*š*]*ul-pa-*⌈*è*⌉ buys a field from ^{d}*Sin-i-d*[*in-nam*] son of [. . .]-*ip-pa-al-*[*ṣa*].

1. M. Civil, "Note sur les inscriptions d'Asarhaddon à Nippur," *Revue d'assyriologie* 68 (1974):94.

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12 N 75. WA, Level I, Locus 3, inside Wall BA. 5.1 × 4.1 × 1.7 cm.
Small fragment of a late Babylonian exercise tablet: S^a 241-46 (signs only).

12 N 100-227 were found together in WB, Square 4, around Burial 5; 100-103 on its N side, the rest on the SE side. This findspot will not be repeated in the description of the tablets.

12 N 100. 21.3 × 16.0 × 2.2 cm.
Early Neo-Babylonian exercise tablet, with a few portions broken off: S^b II (signs only).

12 N 101. 15.6 × 10.9 × 3.3 cm.
Early Neo-Babylonian exercise tablet with the upper part missing: non-canonical material, nouns and verbal forms; duplicates in part 102.

12 N 102. 22.3 × 15.1 × 3.8 cm.
Early Neo-Babylonian exercise tablet with the upper part missing: contents similar to 101 and partly duplicating it.

12 N 103. 20.5 × 12.7 × 3.8 cm.
Early Neo-Babylonian roster or census list ([x].MEŠ MU.NI) that originally contained over 250 names; the surface is severely damaged and most of the names are illegible.

12 N 104-9.
Early Neo-Babylonian letters, most of them perfectly preserved. To the same genre belong also 111-28, 130, 132-47, 149-62, 164-74. A complete corpus of these letters is being prepared by R. D. Biggs.

12 N 110. 14.3 × 9.2 × 4.3 cm.
Literary: "Advice to a Prince";[2] complete, with the surface damaged in several points, especially on the upper right corner of the reverse.

12 N 111-28. See 104-9.

12 N 129. 7.7 × 4.6 × 2.3 cm.
Exercise tablet: bilingual list of professions, followed by 7 erased lines; duplicate of 148. Additional lists of professions are 131, 163, and 178.

12 N 130. See 104-9.

12 N 131. 5.9 × 3.9 × 2.3 cm.
Exercise tablet: bilingual list of professions; cf. 129.

2. The latest edition is in W. G. Lambert, *Babylonian Wisdom Literature* (Oxford, 1960), p. 110 ff., with previous literature.

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12 N 132-47. See 104-9.

12 N 148. 7.3 × 4.1 × 2.3 cm.
Exercise tablet: bilingual list of professions, duplicate of 129, followed by 10 personal names and the total on the left edge: PAP 10 $ERIN_2$.MEŠ ^{m}*Ma-a-na-a-a*.

12 N 149-55. See 104-9.

12 N 156. 9.5 × 5.5 × 2.9 cm.
List of grain amounts and personal names. Possibly an exercise tablet.

12 N 157-62. See 104-9.

12 N 163. 10.0 × 5.1 × 3.3 cm.
Exercise tablet: bilingual list of professions. Two undeciphered lines on the left edge. Cf. 129.

12 N 164-77. See 104-9.

12 N 178. 7.1 × 3.9 × 2.7 cm.
Exercise tablet: bilingual list of professions. Surface heavily damaged. Cf. 129.

12 N 179-84. See 104-9.

12 N 185. 10.7 × 7.5 × 2.7 cm.
Roster of weavers. Subscript: PAP 140 SAL.UŠ.BAR.MEŠ [*šá*] *ina* ŠU^{II} ^{md}*Nuška*-SUM, etc.

12 N 186-218. See 104-9.

12 N 219. 7.6 × 4.8 × 2.9 cm.
Exercise tablet: Akkadian words; partly duplicated by 220.

12 N 220. 5.5 × 3.6 × 2.1 cm.
Exercise tablet: Akkadian words; cf. 219.

12 N 221-22. See 104-9.

12 N 223. 8.8 × 5.4 × 3.0 cm.
List of ca. 30 personal names. Left edge: [x]-*a-nu tup-p*[*u*(?)].

12 N 224-27. See 104-9.

12 N 228.* WB, Square 8, Pennsylvania dump. 8.3 × 6.2 × 2.7 cm.
Middle Babylonian: *Udug-ḫul-a-meš* tablet D, bilingual. Duplicates BIN 2 22:64-69, 99-112, adding some new material. Lower right corner of a tablet that originally had three columns per side.

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12 N 229.* Pennsylvania dump near WB, Square 5, Locus 10. 3.6 × 2.2 × 1.1 cm.

Small fragment of envelope of an Ur III administrative text. Faint traces of seal, illegible, with presentation scene. On the fragment (reverse) one can recognize: *lugal-á-zi-d*[*a*], [. . .-D]U$_8$ *dub-sar*, and *itu zíz-a*.

12 N 230. Pennsylvania dump near WB, Square 5, Locus 10. 3.1 × 2.9 × 1.4 cm.

Very small fragment of the envelope of an Ur III loan text; obv.: *máš-bi* [. . .]; rev.: *šu* [*ba-ti*], *itu* [. . .], ⌜*mu*⌝[. . .]; edge: [*kiš*]*ib ì-lí-ša*-[. . .]. Seal: *ì-lí-ša-n*[*i*?. . .], *dumu* ^{d}E[N. . . .].

12 N 231.* WB, Level IV, Locus 10, ash layer. 3.8 × 1.9 × 0.7 cm.

Very small fragment of envelope of an Ur III administrative text. Traces of four lines (grain loan?).

12 N 232.* WB, Level IV, Locus 10, ash layer. 2.6 × 2.1 × 0.8 cm.

Very small fragment of an Ur III administrative text, bottom of obverse: numerals and gur.

12 N 233.* WB, Level IV, Locus 10, ash layer. 2.5 × 2.0 × 0.7 cm.

Very small fragment of Ur III text; only five signs preserved.

12 N 234-49, 500-551. WB, Level II, Locus 13, Pennsylvania dump above Fl. 1.

Small fragments, mostly of Kassite administrative texts, discarded by the Pennsylvania Expedition. Any data of interest that may be extracted from them will be presented by J. A. Brinkman in a forthcoming study.

Only the pieces that have their dates preserved, or the ones whose content is of a nonadministrative nature, are listed separately in this catalogue. The findspot is not repeated.

12 N 235. 4.6 × 7.6 × 2.2 cm.

Small tablet, with only the lower right corner missing; Kassite administrative text: distribution of ŠE.GIŠ.Ì. Date: MU.8.KAM $^{(d)}$*Ku-dúr-*^{d}*en-líl*.

12 N 294. WB, Pennsylvania dump. 2.2 × 1.15 cm.

Cylinder seal with two-line inscription. Perhaps a Burgul seal. See Fig. 58:5.

12 N 295. WB, Level II, Locus 6, below Fl. 1. 3.3 × 2.35 × 0.2 cm.

Tablet fragment with seal impression. A few legible signs.

12 N 420. West Mound, surface. 6.6 × 3.6 × 3.4 cm.

Vessel fragment with remains of three cases for cuneiform signs.

12 N 462. WB, Level IV, Locus 22, fill NW of inset wall. 3.1 × 2.6 × 1.1 cm.

Inscribed seal impression, fragmentary: ^{d}*Nin* x . . ..

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12 N 503. 4.6 × 2.3 × 2.3 cm.
Small fragment from the upper edge of a Kassite administrative text. Date: *Ša-ga]-rak-ṭi-šu-ri-ia-a[š*, year not preserved.

12 N 516.* 3.9 × 3.1 × 2.3 cm.
Small fragment from the obverse of an Old Babylonian Forerunner to Hh. V-VI (*MSL* 6 145 ff.).

12 N 522.* 4.3 × 3.4 × 2.3 cm.
Small fragment from the upper edge of a Kassite administrative text: distribution of ŠE.GIŠ.Ì. Date: *Ku-dur-^{d}en-líl*, year not preserved.

12 N 552.* WB, Square 7, Pennsylvania dump. 3.8 × 2.6 × 0.6 cm.
Right edge fragment of an Ur III administrative text: animals (*máš*).

12 N 553. WB, Square 7, Pennsylvania dump. 2.7 × 1.8 × 1.0 cm.
Small tablet with square edges, entirely covered with regular, imitation wedges.

12 N 554.* WB, Level IV, Locus 10, ash layers. 1.8 × 1.6 × 0.8 cm.
Small fragment with traces of three lines, probably Ur III.

12 N 555.* WB, Level IV, Locus 10, ash layers. 1.5 × 1.0 × 0.5 cm.
Small fragment from the lower left corner of the reverse of an Ur III administrative text: *ur-b[í-lum^{ki}], m[u-ḫul]* (Amar-Sin 2).

12 N 556. WB, Level II, Locus 12, fill from pit 1. 3.4 × 3.4 × 1.3 cm.
Ur III administrative tablet: 30 (*sila$_3$*) *zì-gum, igi* [. . .] ÌR, (2 or 3 lines broken), *mu*-DU. Not dated. Seal: *lugal-sa$_6$-ga, dub-sar, dumu amar-Šuba* (traces of a presentation scene).
The same seal is found on CBS 8129 and UM 29-15-934.

12 N 557. WB, Level IV, Locus 10, ash layers. 3.6 × 2.6 × 2.0 cm.
Upper right corner of a one-column tablet. Sumerian literary text, Old Babylonian period.

12 N 558. WB, Square 7, surface debris. 3.7 × 3.2 × 2.7 cm.
Upper right corner of a Middle Babylonian administrative text.

12 N 559.* WB, Square 7, surface debris. 1.2 × 1.0 × 0.3 cm.
Minute fragment with only four signs preserved. Middle Babylonian.

12 N 560. WB, Level IV, Locus 10, ash layers. 3.5 × 2.3 × 1.7 cm.
Upper left corner of an Old Babylonian administrative text; obv.: 1 *dumu a-ab-ba-tum*, 1 *dumu ^{d}sin-ra-bi*, 1 *dumu lú-^{d}nin-urta*, (rest of obverse broken); rev.: 1 (or ^{m}) *nu-m[u-. . .]* (end).

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12 N 561. WB, Level F, Locus 14, between Fls. 1 and 2. 4.2 × 2.7 × 2.6 cm.

Small fragment of a Middle Babylonian administrative text: traces of three lines.

12 N 562. WB, Level IV, Locus 10, fill low on SE end. 12.4 × 10.8 × 3.2 cm.

Lower half of a type II Old Babylonian exercise tablet; obv.: Forerunner to Hh. III ff. (*giš*), 4 lines half-erased and unidentifiable; rev.: "Silbenalphabet."

12 N 563. WB, Level IV, Locus 10, fill SE. 3.9 × 2.5 × 2.3 cm.

Upper right corner of one-column tablet, badly eroded. Possibly an Old Babylonian mathematical table.

12 N 564. WB, Level IV, Locus 10, fill SE. 6.9 × 6.4 × 2.9 cm.

Type IV Old Babylonian exercise tablet, badly eroded. Only]-*e-a* [, and]-*lá-lá* [, are readable in lines 3' f.

12 N 565. WB, Square 7, surface. 2.4 × 1.9 × 0.9 cm.

Minute fragment of a Kassite administrative text.

12 N 566.* WB, Level IV, Locus 9, at level of footing below Fl. 2, at NE wall. 6.2 × 4.6 × 3.0 cm.

Left edge fragment of a Sumerian text, Old Babylonian period. See also 567.

12 N 567.* WB, Level IV, Locus 9, at level of footing below Fl. 2, at NE wall. 3.5 × 2.3 × 2.2 cm.

Lower left edge fragment, Old Babylonian, with only *al-*⌈*gál*⌉*-*[. . .], double line, and uninscribed space (about 3 lines) to the bottom. Could be part of 566.

12 N 568.* WB, Level IV, Locus 9, at level of footing below Fl. 2, at NE wall. 6.5 × 3.8 × 2.5 cm.

Left part of a type IV Old Babylonian exercise tablet: *giš* [. . .], four times.

12 N 569.* WB, Level IV, Locus 9, below Fl. 2 but above footing. 5.4 × 4.5 × 1.5 cm.

Upper left corner of a type II/1 Old Babylonian exercise tablet: model contract.

12 N 569a. WB, Level IV, Locus 9, below Fl. 2 but above footing. 3.2 × 1.6 × 0.6 cm.

Minute fragment from the left edge. Possibly Old Babylonian legal document.

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12 N 570. WB, Level IV, Locus 9, below Fl. 2 but above footing. 5.5 × 2.4 × 1.5 cm.

Left edge fragment of Old Babylonian model contract(?); rev.: a few isolated signs scribbled at right angle with the obverse.

12 N 570a. WB, Level IV, Locus 9, below Fl. 2 but above footing. 9.8 × 4.1 × 2.8 cm.

Fragment similar to the obverse of 570, and possibly part of it; largely illegible.

12 N 571. WB, Level IV, Locus 9, below Fl. 2 but above footing. 5.5 × 4.5 × 2.5 cm.

Small fragment, apparently of a type II Old Babylonian exercise tablet; only *é*$^{?}$*-bi nu-me-a* readable on the obverse.

12 N 572.* WB, Level IV, Locus 9, below Fl. 2 but above footing. 5.6 × 4.7 × 2.9 cm.

Fragment of reverse, end of text (remains of two lines), dividing line and blank space. Contents undeterminable.

12 N 572a.* WB, Level IV, Locus 9, below Fl. 2 but above footing. 2.3 × 2.1 × 1.2 cm.

Fragment similar to 572, but hardly part of same tablet.

12 N 573.* WB, Level F, Locus 14, fill below Fl. 2. 4.2 × 3.0 × 2.0 cm.

Small fragment of an exercise tablet: Syllabary (S^{a} 18-23).

12 N 574. WB, Square 8, Pennsylvania dump N of Locus 14. 5.0 × 2.7 × 2.2 cm.

Lower part of a one-column administrative tablet, probably Middle Babylonian.

12 N 575.* WB, Square 8, Pennsylvania dump N of Locus 14. 5.2 × 3.9 × 2.3 cm.

Isolated numbers on a reverse fragment; probably part of an exercise tablet of Neo-Babylonian period.

12 N 576. WB, Square 8, Pennsylvania dump N of Locus 14. 4.0 × 2.9 × 2.7 cm.

Minute fragment of edge of one-column tablet with traces of two unidentifiable half-lines. Middle or Neo-Babylonian.

12 N 577. WA, Level IVC, Locus 8, below Fl. 3a, ash pit. 5.1 × 5.0 × 2.3 cm.

Lenticular exercise tablet, with edges somewhat damaged; obv.: Forerunner to Hh. VIII-IX (*gi*); rev.: one unidentified line. Middle Babylonian.

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12 N 578. WA, Level IVC, Locus 8, below Fl. 3a, ash pit. 6.0 × 4.4 × 2.3 cm.

Fragment of a lenticular exercise tablet with only a few signs preserved.

12 N 579. WA, Level IVC, Locus 8, below Fl. 3a, ash pit. 5.5 × 5.3 × 1.7 cm.

Lexical fragment, with some words designated as dialectal (*eme-gal, eme-galam, eme-*MÙŠ, *eme-ti-ná, eme-si-sá*).

12 N 580. WA, Level IVC, Locus 9, below Fl. 3a, ash pit. 5.5 × 3.0 × 2.1 cm.

Oblong exercise tablet with a four-line excerpt of a Sumerian literary text; rest of obverse and reverse uninscribed. Middle Babylonian.

12 N 581. 50 m. E of WA, near a Pennsylvania dump. 3.4 × 2.6 × 1.2 cm.

Very small fragment of a legal text (oath formula), mentioning Sin-šar-iškun, the king.

E]N.LÍL.⌈KI⌉[x]⌈x⌉[
]^{d}MAŠ U ^{d}NUŠKA ⌈x⌉[
]⌈^{d}⌉SIN(30).LUGAL.GAR-*un* LUGAL[
ina Ka-n]*ak* IM *š*[*u-a-ti* . . .

12 N 582. WA, Level IVC, Locus 9, below Fl. 3a, ash pit. 7.8 × 4.7 × 2.5 cm.

Oblong exercise tablet with only one poorly preserved line.

12 N 583. WA, Level IVC, Locus 9, below Fl. 3a, ash pit. Diameter: 5.9 cm.; thickness: 2.5 cm.

Lenticular exercise tablet: list of types of pigs (*šáḫ*); cf. Hh. XIV 159 ff.; the other side has a single, undeciphered line.

12 N 584. WA, Level IVC, Locus 9, below Fl. 3a, ash pit. 6.1 × 3.8 × 1.8 cm.

Lenticular exercise tablet, about one half preserved: traces of the first line, two unidentified signs on the second, and du_8-du_8 on the third; scribblings on the reverse.

12 N 585. WA, Level IVC, Locus 9, below Fl. 3d, ash pit. 4.2 × 2.5 × 1.7 cm.

Upper right corner of a small tablet, probably school exercise or lexical, only three lines preserved: [*l*]*ú*$^{?}$-*kalag-ga*(?) in the first, the rest illegible.

12 N 586. WA, Level IVC, Locus 9, Fl. 3b, ash pit.

Upper left corner of an oblong exercise tablet with traces of the beginnings of two lines.

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12 N 587. WA, Level IVC, Locus 9, Fl. 3b, ash pit. 4.8 × 4.3 × 2.2 cm.
Left half of an oblong exercise tablet; obv.: grammatical text (paradigm type); rev.: two-line excerpt of a Sumerian literary text.

12 N 588.* WA, Level IVC, Locus 9, Fl. 3b, ash pit. 6.8 × 5.2 × 3.2 cm.
Small fragment of an unidentified lexical text.

12 N 589. WA, Level IVC, Locus 9, Fl. 3b, ash pit. 4.9 × 3.4 × 2.5 cm.
Lower left corner of an oblong exercise tablet; obv.: three-line literary excerpt (unidentified); rev.: one line written upside down.

12 N 590. WA, Level IVC, Locus 9, Fl. 3b, ash pit. 4.5 × 4.6 × 2.3 cm.
Center fragment of an oblong exercise tablet; obv.: metrological(?); rev.: one-line excerpt.

12 N 591. WA, Level IVC, Locus 9, Fl. 3b, ash pit. 4.2 × 2.0 × 1.8 cm.
Small fragment of a lenticular exercise tablet; illegible traces of three lines.

12 N 592.* WA, Level IVC, Locus 9, Fl. 3b, ash pit. 3.8 × 2.4 × 1.6 cm.
Fragment of the left edge of the reverse of a tablet, with the beginnings of five lines, contents uncertain. Middle Babylonian script.

12 N 593. WA, Level IVC, Locus 8, below Fl. 3a, ash pit. 8.4 × 4.5 × 2.2 cm.
Oblong exercise tablet; obv.: lexical (*giš*?); rev.: one unidentified line.

12 N 594. WA, Level IVC, Locus 9, Fl. 3c, ash pit. 5.3 × 4.1 × 2.3 cm.
Center fragment of a large tablet: lexical.

12 N 595. WA, Level IVC, Locus 8, below Fl. 3a, ash pit. 7.8 × 4.8 × 3.4 cm.
Lower right corner of an exercise tablet: excerpt from the god list An = *anum*. Will be published by W. G. Lambert in his forthcoming edition of the series.

12 N 596. WA, Level IVC, Locus 9, below Fl. 3a, ash pit. 5.3 × 4.5 × 2.8 cm.
Right edge fragment, text of uncertain nature (not a single full line is preserved). Middle Babylonian script.

12 N 597. WA, Level IVC, Locus 9, Fl. 3c, ash pit. 3.7 × 2.6 × 2.3 cm.
Fragment of an oblong exercise tablet, with a two-line Sumerian literary quotation. Reverse uninscribed.

12 N 597a. WA, Level IVC, Locus 9, Fl. 3c, ash pit. 2.5 × 2.1 × 1.1 cm.
Very small fragment with indistinct traces of a few signs.

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12 N 598.* WA, Level IVC, Locus 9, Fl. 3c, ash pit. 3.4 × 3.4 × 1.2 cm.
Right edge fragment of exercise tablet: lexical (*en-nu-un*).

12 N 599. WA, Level IVC, Locus 9, Fl. 3c, ash pit. 8.2 × 3.8 × 2.0 cm.
Oblong exercise tablet; obv.: IGI-compounds; rev.: two-line quotation from a Sumerian literary text.

12 N 621. WA, Level VI, Locus 14, Fl. 2, in burned debris under baulk. Diameter (rim): 13 cm.; average thickness: 1.5 cm.; 9.8 × 11.7 cm.
Fragmentary inscribed stone jar. Veined white and tan stone.
Dedicatory inscription for the life of Ibbi-Sin; no donor's name preserved:

^{d}*nin-šubur*
nin-a-ni-ir
nam-ti
^{d}*i-bí-*^{d}EN.Z[U]
dingir kal[*am-ma-na-*(*šè*)]

Rest broken; the upper left corner of the sixth case is visible.

12 N 645. WA, Level VI, Locus 13, Fl. 4, cache in door socket S of door in Wall CB. 2.0 × 1.0 cm.
Cylinder seal with two lines of illegible inscription.

12 N 648. WB, Level II, Locus 13, between Fls. 1 and 2. 2.4 × 2.8 cm.
Seal impressions. Portions of 5-line inscription visible.

12 N 650. WB, Level II, Locus 13, Pennsylvania dump above Fl. 1. 2.7 × 2.3 × 1.8 cm.
Small fragment of the upper left corner of a Kassite administrative document. Dated: *i-na* MU.4.KAM [. . .] (king's name broken).

12 N 651. WB, Level IVC, Locus 9, Fl. 3c, ash pit. 5.7 × 5.5 × 2.4 cm.
Lower half of a lenticular exercise tablet, with three poorly preserved lines.

12 N 652.* WA, Level IVC, Locus 9, Fl. 3c, ash pit. 4.1 × 3.1 × 2.6 cm.
Center fragment of an exercise tablet with part of six lines of text.

12 N 652a. WA, Level IVC, Locus 9, Fl. 3c, ash pit. 2.3 × 1.4 × 1.0 cm.
Very small fragment of the upper edge, only two lines with a couple of signs are preserved. Exercise tablet(?).

12 N 653. WA, Level IVC, Locus 9, below Fl. 3a, ash pit. 5.4 × 5.0 × 2.4 cm.
About one-half of an oblong exercise tablet; obv.: unidentified (proverbs?); rev.: three lines of a Sumerian literary quotation.

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12 N 654. WA, Level IVC, Locus 9, below Fl. 3a, ash pit. 7.3 × 4.5 × 2.2 cm.

Uninscribed tablet with some crude designs.

12 N 655. WA, Level IVC, Locus 9, Fl. 3, ash pit. 7.4 × 5.1 × 2.3 cm.

Oblong school exercise; literary excerpts on both sides, the reverse apparently erased.

12 N 656. WA, Level I, Locus 20, inside mud brick of Wall BR. 4.9 × 4.2 × 3.6 cm.

Hind end of a votive dog, with the back and left side inscribed. On the back there is the dedicatory inscription, stating that the dog has been placed in the temple *é-uru$_2$-sag-gá*; on the left flank there is a praise of Ninkarrak. Second Isin dynasty, with archaizing signs(?).

12 N 657. Surface find, S of WA. 6.1 × 5.7 × 1.9 cm.

Ritual tablet of the series *Muššu'u* on the obverse. The incantation titles on the reverse are probably from some other, unidentified ritual. Late Babylonian.

Large fragment from upper left corner.

12 N 658.* WA, Level VI, Locus 13, Fl. 2, SE end near door. 3.6 × 2.4 × 1.5 cm.

Upper part of reverse of small administrative document, probably Old Babylonian, two lines: [d]*nin-t*[*u*](?), *itu ne-ne-gar*, rest broken.

12 N 659a-i. WB, Level G, Locus 14, large pit below Fl. 2.

Fragments from exercise tablets: Syllabary A (signs only).

659a. 6.1 × 4.1 × 2.0 cm. = S^a 5-8, 26-30(?).
659b. 6.3 × 3.9 × 2.6 cm. = illegible.
659c. 5.8 × 3.5 × 2.5 cm. = 21-30, 18-26.
659d. 5.9 × 3.5 × 3.0 cm. = 1-4 (twice, in adjacent columns).
659e. 4.1 × 3.1 × 1.4 cm. = 7-13, 9-13, 25-28.
659f. 2.8 × 1.9 × 1.8 cm. = unidentifiable.
659g. 5.0 × 1.9 × 1.7 cm. = 5-12, 19-22.
659h. 3.2 × 6.0 × 1.4 cm. = 31-35.
659i. 9.7 × 7.1 × 2.9 cm. = 1-4.

12 N 660. WB, Level II, Locus 18, NE end, fill above Fl. 1. 5.4 × 3.7 × 2.8 cm.

Small exercise tablet, complete, reverse uninscribed. S^b I 147-57a (no values, only signs and Akkadian translation). Late Babylonian.

12 N 661. WB, Level II, Locus 18, NE end, fill above Fl. 1. 6.8 × 3.2 × 2.2 cm.

Middle section of an administrative document; obv.: personal names followed by *ša* U$_4$ x *ša* ITU y EN U$_4$ z *ša* ITU y; rev.: a few large signs, undecipherable. Middle Babylonian.

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12 N 662. WB, Level II, Locus 18, NE end, fill above Fl. 1. 5.3 × 4.8 × 2.5 cm.
Fragment of a heavily damaged tablet, contents uncertain. Middle Babylonian.

12 N 663. WB, Level II, Locus 18, NE end, fill above Fl. 1. 5.1 × 3.6 × 2.3 cm.
Left edge fragment, very damaged. Kassite administrative(?) text.

12 N 664. WB, Level II, Locus 18, between Fls. 1 and 2. 4.2 × 6.0 × 1.9 cm.
Lower edge of a small Kassite administrative text.

12 N 665.* WB, Level II, Locus 18, NE end, between Fls. 1 and 2. 4.2 × 4.0 × 2.0 cm.
Upper part of a small Kassite administrative text.

12 N 666.* WB, Level II, Locus 18, NE end, between Fls. 1 and 2. 3.4 × 3.4 × 2.2 cm.
Small right edge fragment of a Kassite administrative text.

12 N 667.* WB, Level II, Locus 18, NE end, between Fls. 1 and 2. 2.1 × 1.4 × 0.4 cm.
Minute fragment of uncertain content. Middle Babylonian script.

12 N 668.* WB, Level IV, Locus 22, beside drain in fill NW of inset wall. 6.2 × 5.2 × 4.6 cm.
Fragment of exercise(?) tablet, with traces of personal names, mostly of the *ì-lí*-type. Old Babylonian.

12 N 669. WB, Level II, Locus 18, in Pennsylvania tunnel between Loci 20 and 21. 5.4 × 4.0 × 3.5 cm.
Small fragment of a large Kassite administrative text.

12 N 670.* WB, Level IV, Locus 22, fill NE of inset wall. 8.5 × 6.9 × 2.5 cm.
Lenticular exercise tablet, with a Sumerian literary quotation, probably from a royal hymn. Old Babylonian.

12 N 671. WB, Level IV, Locus 24, in bitumen-lined pit. 9.2 × 4.7 × 3.4 cm.
Fragment of lexical tablet: Proto-kagal 19-27, 60-66, 94-95, 189-93. Old Babylonian.

12 N 672.* WB, Level IV, Locus 24, in bitumen-lined pit. 4.1 × 3.0 × 0.9 cm.
Very small fragment of lexical tablet, possibly part of 671. Old Babylonian.

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12 N 673. WB, dump area. 5.0 × 3.9 × 2.0 cm.

Neo-Babylonian legal document dated ITU GUD U_4.1.KAM MU.11.KAM ^{md}AK.I LUGAL TIR.KI (= Nabonidus 11/2/1).

Contents undetermined: no cast or readable photo of the obverse were available when preparing this catalogue; reverse starts with list of witnesses.

12 N 674. WB, Level IV, Locus 25, Fl. 2, at middle of SE wall. 10.4 × 7.3 × 3.2 cm.

List of three groups of four people who perform some unspecified function every four months of the year, starting with the seventh month. No subscript and no date. Old Babylonian.

12 N 675. WA, Level V, Locus 22, Fl. 3, E end. 4.8 × 3.6 × 1.8 cm.

Upper left corner of the obverse of an Old Babylonian administrative document:

3 *še gur sá-dug*$_4$ ^{d}*iš*[*kur*] *ù* ^{d}*šul-pa-è*
1 *še gur kù nam-ugula-é* ^{d}*šul-pa-è*
35 *sila*$_3$ *é* ^{d}*nin-giz-zi-da*
4 *s*[*ila*$_3$ *sá*]-*dug*$_4$ *kú nam-ma*[*ḫ*]
[ ] *ì-si-in* [ ]

3 gur of grain, regular food supply of Iškur and Šulpae
1 gur of grain . . . for the office of the temple supervisor of Šulpae
35 sila for the temple of Ningizzida
4 s[ila, regular] food supply for . . . [. . .]
[. . .] Isin [. . .]

rest broken, reverse illegible.

12 N 676. WB, Level IV, Locus 17, Fl. 4. 7.0 × 4.3 × 2.5 cm.

Old Babylonian legal document: lease of a field, property of Taribum son of Nur-martu, to Ubar-ea son of Sin-iqišam. Rim-Sin 55(?). For the envelope see 677.

12 N 677. WB, Level IV, Locus 17, Fl. 4. 7.0 × 4.2 × 1.0 cm.

Envelope (reverse only) of 677. Sealed twice with one seal. Male figure with mace, facing right, female figure. See Fig. 92:1.

12 N 678a-b. WA, Level IVB, Locus 4, cut in Fl. 14 beside Wall BL, W end. a = 4.4 × 2.1 × 1.6 cm. b = 3.1 × 2.2 × 1.3 cm.

Two fragments of exercise tablets, no complete signs preserved.

12 N 679.* WA, Level III, Locus 24, fill NE of Wall D. 3.4 × 2.6 × 0.6 cm.

Small fragment, probably Neo-Babylonian legal text.

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12 N 686. WA, Level VI, Locus 16, Fl. 8, N corner. 3.5 × 2.8 cm.
Cylinder seal with inscription: personal name *A-lugal-mu*.

12 N 691a-h. WB, Level III, Locus 25, above Fl. 1.

A group of sealed clay bulla fragments sealed by at least four different Kassite seals.

691a has portions of a seven-line inscription with unusual phraseology which cannot be entirely restored. Note ^{d}*nin-líl* in line 5. Figs. 48:5, 92:1.

691d and e are fragments of one bulla. The figured scene can be entirely reconstructed. The 6-line inscription has typical Kassite phraseology. See, for instance, *ní-tuku-zu*, "the one who respects you" in line 5. Line 2 could be reconstructed [*ar*]*ad* ^{d}*Ku-dur-*[*enlil*(50)] only by assuming that the last preserved sign has been erroneously engraved: according to the preserved traces, the sign is definitely not DUR. Figs. 48:5, 92:2

691b was rolled with a third seal, only part of which is preserved.

691c, f, g, and h cannot be reconstructed, but f, g, and h are from the same seal.

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5

A HOARD OF DIRHAMS FOUND AT NIPPUR

Michael L. Bates

A coin hoard found in the 1973 season at Nippur consisted of 76 Islamic silver dirhams, struck under the Umayyads (8 coins), the ʿAbbāsids (67), and the Idrīsids of North Africa (1). The coins were struck between 85 H. (A.D. 704) and 177 H. (A.D. 793-94). About two-thirds (51) of the dirhams were struck in Iraq; most of the remaining pieces came from northern and western Iran, and five were from North Africa.

The hoard was found in the remains of a cloth bag in surface debris at the top of the mound, within the barely traceable remains of the walls of a house. The findspot is marked on the plan of the excavations. The coins were heavily corroded and formed a solid mass. The corrosion was mainly silver chloride, but at one end the mass was affected by contact with copper. Cleaning at the site made it possible to separate the coins, but every coin was damaged to some extent by corrosion and cleaning. After being photographed and weighed, the coins were turned over to the Iraq Museum. Prints for this publication were prepared by Michael Di Biase and Bernadette Willis in the laboratory of the American Numismatic Society from expedition negatives.

Thirteen mint names, representing twelve cities, were identified in the hoard. From west to east the locations of the mints were:

1) Walīla, the ancient Volubilis in Morocco, about fifty kilometers south of Tangier. The Idrīsids, an ʿAlid dynasty independent of the ʿAbbāsid caliphate, struck dirhams here intermittently from the foundation of the dynasty in 172/789 to 209/824. The place is otherwise unknown as a mint. Only one coin in the hoard, dated 174/790-91, came from this mint.

2) Ifrīqiya, the Roman province Africa, roughly equivalent to modern Tunisia. Coins bearing this name were probably struck at the provincial capital, al-Qayrawān. This mint issued dirhams almost continually from 98/716-17 until 190/806. Three dirhams in the hoard were attributed to this mint.

3) al-ʿAbbāsiyya, an administrative complex about five kilometers southeast of al-Qayrawān. The name first appears on coins in 150/767. Although dirhams seem to have been struck there in substantial quantities under the ʿAbbāsid governors and the early Aghlabids, only one dirham from al-ʿAbbāsiyya was found in the hoard.

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4) al-Baṣra, in southern Iraq. Judging by the numbers of surviving specimens, this mint produced dirhams in substantial quantities under the early ʿAbbāsids only in the years 133-48, 160-68, and 181-82; at other times its output of silver coins was either very small or nonexistent. Ten coins from this mint were in the hoard.

5) al-Kūfa, in western Iraq. This city was an important mint for dirhams from 132 to 147 (750-64), after which dirhams were struck there only occasionally. It cannot have been coincidental that the new mint, Madīnat al-Salām, began striking in 146/763. Five Kūfan dirhams were in the hoard.

6) Madīnat al-Salām (Baghdad). This city, capital of the ʿAbbāsid caliphate, was founded in 145/762, began striking dirhams in 146/763, and soon replaced al-Kūfa and al-Baṣra as the major source of dirhams for Iraq. Twenty-nine coins of Baghdad were in the hoard, amounting to 38 percent of the total.

7) Wāsiṭ. This city in south-central Iraq between Baghdad and al-Baṣra was a major dirham mint from the time of its foundation in 84/703. In the eighth century Wāsiṭ produced the bulk of the silver coinage of Iraq and the entire East until the ʿAbbāsid conquest of the city in 133/750. It then virtually ceased to emit silver coins. Seven Umayyad dirhams from Wāsiṭ were in the hoard.

8) Armīniya, the mint of the province Armenia, located at its capital Dabīl. Under the ʿAbbāsids, dirham production there was apparently only moderate and was often interrupted for several years at a time. Only one dirham (previously unpublished) of this mint was in the hoard.

9) Ṭabaristān (Pehlevi TPWRSTAN), a province known today as Mazandaran, southeast of the Caspian Sea. In the eighth century, under the Ispahbads (a last remnant of the Sāsānian dynasty) and then under ʿAbbāsid governors, this province struck substantial quantities of half-dirhams of the Sāsānian type until 178/794. Even though these coins were struck on a different weight standard from that of the ordinary post-reform dirham, one such half-dirham was included in the hoard.

10) al-Rayy, a major city of Jibāl province very near modern Teheran. Dirhams were issued in this city under the Umayyads and ʿAbbāsids only intermittently until 145/762, when the city became a major center of production. In 148/765 the mint name was changed to al-Muḥammadiyya. In the hoard there was one dirham with the mint name al-Rayy and sixteen with al-Muḥammadiyya.

11) al-Muḥammadiyya = al-Rayy.

12) Madīnat Jayy (an older name for Iṣbahān in western Iran). This city was a moderately important mint at intervals under the Umayyads and the ʿAbbāsids. It is represented in the hoard by one coin.

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13) al-Taymara, the mint of a subdivision of the district of Iṣbahān. This mint issued dirhams in significant quantity only from 90/709 to 98/716-17. A single coin of this mint was found in the hoard.

In summary, the hoard contained five dirhams from North Africa, twenty from northern and western Iran, and fifty-one from Iraq. The proportionate representation of the various mints is about what would be expected, taking into account the factors of (1) the volume of production at the different mints, (2) the distance of the mints from the findspot, and (3) the amount of time that elapsed between the periods of major production of the mints and the closure of the hoard. In the absence of die studies or comparative hoard research, the volume of production at the various mints can be inferred only in a general way from the numbers of specimens known today. Needless to say, chance also plays a large part in the representation of mints in a hoard.

The distribution of the coins of this hoard by date is remarkable in certain aspects, especially when considered along with the distribution by mints. As would be expected, the earliest dates—those from 85 to 137—are scantily represented, as is usual. Coins of the last forty years represented in the hoard make up 85.5 percent of the total. Assuming a generally steady volume of production over the years, it is usually to be expected that a sample of coins drawn from current circulation at any given moment will show a steady increase from year to year, with the last few years comprising the largest percentage of the sample. In this hoard, however, there is no such steady increase. Instead there are marked fluctuations in the number of coins from year to year, with a particularly sharp decline in the representation of coins dating to the last decade.

Especially surprising is the total absence in the hoard of any dirhams of the nearby and quite productive mint Madīnat al-Salām after 165/781-82 (one coin of this mint found in the hoard may be as late as 166). The dirhams of the last decade in the hoard come instead from the most distant mints: Ifrīqiya (170, 177 H.), Walīla (174), Armīniya (175), and al-Muḥammadiyya (168 [2], 170, 172, 173).

Two conclusions are suggested by this distribution: First, the date of closure of the hoard (i.e., the date when the last coin was added to it) and therefore the date of its burial and loss must be placed somewhat after the latest date represented in it, 177/793. Although it is not impossible that the dirham of Ifrīqiya of that year, as well as the other late coins of North Africa in the hoard, were brought to Iraq in a single lot by a traveler in the year 177, it is far more probable that these coins accumulated over a period of perhaps five to fifteen years. It is safest to conclude that the hoard was buried no earlier than the end of the eighth century (after 184 H.). Quite possibly the hoard was concealed and lost during the disturbances that wracked Iraq from 196/812 to 200/815 as a result of the dynastic war between al-Amīn and al-Ma'mūn and the revolt of Abu'l-Sarāyā in al-Kūfa.

The second conclusion is that the contents of the hoard were evidently not brought together within a short time span from the silver coinage in circulation at the time that the hoard was concealed. If that had been the case,

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Table 5
Distribution of Coins by Date

Years A.H.	Number of Coins*	Percentage of Total*
85-137	11	14
138-142	2	3
143-147	7	9
148-152	7	9
153-157	17	22
158-162	11	14
163-167	12	16
168-172	5	7
173-177	4	5
Total	76	99

*Three coins which can be dated only to a span of years overlapping the five-year periods of the table have been assigned to the period that coincides most nearly with their possible date span: Nos. 24 (141-47 H.), 57 (154-58 H.), and 19 (159-64 H.). The percentages total only 99 because of rounding.

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the hoard would certainly have contained late coins from Madīnat al-Salām and other nearby mints. Rather, its contents must have been accumulated by its owner over a period of time, whenever he found himself with a small surplus that could be put aside. Possibly the fluctuations in the representation of dates over the years reflect periods of relative prosperity and hardship.

Only one die identity exists in the hoard: The same obverse die was used for two dirhams of Madīnat al-Salām, 165 (nos. 66-67). The relative angle of the obverse and reverse die axes was recorded in all cases. The eight Umayyad dirhams are quite randomly aligned. Of the sixty-six ʿAbbāsid reformed dirhams, 37, or 56 percent, have dies aligned either vertically or at a right angle, while the remaining 29 are aligned at random. Roughly similar proportions are found at each of the mints. There is no consistency in the angle of alignment at any mint over any period of time.

A feature of about one-third of the coins in this hoard and also of many other ʿAbbāsid dirhams of the eighth century is the presence of linear indentations on one or both faces of the coin. There may be one, two, or three indentations; when there are more than one on one side, the indentations are always parallel. This phenomenon has recently interested several scholars, including the late George Miles and myself; we had thought that the indentations were cut or stamped for some unknown purpose after the coins were made. The obvious explanation was pointed out to me recently by Mr. Stephen Album: The indentations on one face of the coin are simply traces of the horizontal field inscriptions of the other side, as can be seen by rotating a coin with these indentations about its diameter. Evidently the elongated script of the inscriptions, the thinness of the flans, and the great force applied in striking often caused the metal of the flan to be deformed into the incised inscriptions of the die, even though there is no projection on the opposite die to press the metal into the incision. Such indentations occur in the hoard on dirhams of mints from Walīla in the far west to al-Muḥammadiyya in the east, dated from 134 to 177. These indentations have not been noted in the catalogue descriptions.

Although the weights of the coins have been noted in the catalogue they are of no value for metrological study because every coin has been damaged to some extent by corrosion or cleaning.

The catalogue description of the coins has been kept to a minimum: mint, date, names of caliphs or officials appearing on the coin, weight, diameter, and die axis (the arrow shows the relative angle of the die axis). Since every coin is illustrated, the plates can be consulted for other details. At least one previously published example of each issue in the hoard has been cited. For the more common issues, only one or two references to the standard catalogues of major collections (British Museum, Paris, Berlin) have been provided. There is a list of abbreviated citations at the end of the catalogue.

The coins are listed by mints, in Arabic alphabetical order, and chronologically within each mint listing. Dates or parts of dates in parentheses are tentative readings; wherever possible, these have been confirmed by other evidence. Dates and mint attributions in brackets are derived from comparison with attributed examples known to the author. The coins have been numbered in

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their catalogue order; the italicized numbers in parentheses are those assigned in the preliminary inventory at the site. These latter numbers are to be preceded in each case by the code 12 N 789, which in the inventory was assigned to the hoard as a whole.

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CATALOGUE OF THE COINS

1 (*34*). Armīniya, 175. al-Amīr ʿUbayd Allāh b. Amīr al-Mu'minīn (son of al-Mahdī and brother of the reigning caliph al-Rashīd; governor of Armenia 172-75/788-91). 2.6 g., 25 mm. ↗. Unpublished. Berlin 960, Pl. IV, of the year 174, is similar, but has in addition the name Naṣr b. al-Jahm above and below the reverse field. Also, the Nippur coin has five annulet pairs on the obverse, while the Berlin example, if correctly described (only the reverse is illustrated), has three annulet pairs alternating with three single larger annulets. Dirhams of the same mint and date as this coin have been published previously, but with the name al-Faḍl (b. Yaḥyā al-Barmakī, ʿUbayd Allāh's successor as governor); see Tiesenhausen 1197 (2 citations) and al-Qazzāz 1965, p. 176.

2 (*69*). Ifrīqiya, 16(6?). al-Khalīfa al-Mahdī; Harūn b. Amīr al-Mu'minīn. 2.3 g., 22 mm. ↖. Paris 695.

3 (*68*). [Ifrīqiya], 170. al-Khalīfa al-Hādī; Harūn Walī ʿAhd al-Muslimīn; uncertain name. 2.8 g., 23 mm. →. Berlin 914-16.

4 (*67*). Ifrīqiya, 177. Naṣr (b. Habīb; governor until Muḥarram 177). 2.5 g., 24 mm. →. Tiesenhausen 1231 (5 citations); cf. Berlin 972 (on which coin the arrangement of the description implies, perhaps erroneously, that *bakh bakh* appears above the reverse field; in any case these words are not on the Nippur coin).

5 (*42*). al-Baṣra, 13(7?). 2.6 g., 24 mm. ↗. *B.M.* IX, p. 42 no. 33a; Berlin 647. The digit of the date is somewhat dubious, but 137 is the only year in which the annulet pattern of this coin (three annulet pairs alternating with three triplets) is so far known to occur.

6 (*48*). al-Baṣra, 1(3?)7. 2.4 g., 22 mm. →. As no. 5.

7 (*43*). al-Baṣra, 142. 2.6 g., 24 mm. →. *B.M.* I, p. 42 no. 38.

8 (*44*). al-Baṣra, 146. Salam (b. Qutayba al-Bāhilī, governor 145-46). 2.1 g., 24 mm. ←. *B.M.* I, p. 43 no. 42.

9 (*47*). al-Baṣra, 146. Anonymous. 2.6 g., 25 mm. →. *B.M.* I, p. 43 no. 43.

10 (*45*). al-Baṣra, 147. 2.85 g., 24 mm. ↖. *B.M.* I, p. 43 no. 44.

11 (*70*). [al-Baṣra, 160 or 161]. al-Khalīfa al-Mahdī; Muḥammad (b. Sulaymān, governor 146-47, 160-64). 2.6 g., 24 mm. ↗. Paris 699-700. This coin's obverse annulet pattern (three double annulets alternating with three single

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annulets) and reverse configuration are found only on dirhams of this mint in these years.

12 (*49*). al-Baṣra, 165. al-Khalīfa al-Mahdī; Mūsā Walī ʿAhd al-Muslimīn (the future al-Hādī). 2.5 g., 23 mm. ↑. *B.M.* I, p. 54 no. 98.

13 (*50*). al-Baṣra, 165. As no. 11. 2.1 g., 24 mm. ↓.

14 (*51*). al-Baṣra, 167. As no. 11, but Naṣr (or Nuṣayr) below reverse field (largely effaced on this coin, but cf. the published specimens). 2.7 g., 24 mm. ↘. *Denizbacı* 292; al-Qazzāz 1964, no. 23. Naṣr, or Nuṣayr, who was probably a local official, still unidentified, appears also on a copper coin of this mint and year, Berlin 2136, Pl. VII.

15 (*65*). al-Taymara, 92 (digit *thanatayn*). 2.4 g., 24 mm. ↘. Walker, p. 130 no. Ties 10; Volubilis 28; *Denizbacı* 60; Damascus hoard 73.

16 (*66*). Madīnat Jayy, 162. al-Khalīfa al-Mahdī; Yaḥyā (unidentified official). 2.7 g., 24 mm. ↙. Paris 703-4.

17 (*64*). al-Rayy, 146. al-Mahdī Muḥammad b. Amīr al-Mu'minīn. 2.7 g., 25 mm. ↙. *N.H.R.* 48A.

18 (*75*). TPWRSTAN, 125 (Ṭabaristān Era, =160 H.). Sāsānian type, with Saʿīd (b. Daʿlaj, governor 160-63). 1.7 g., 21 mm. ↘. Walker, *Arab-Sassanian*, p. 140 no. ANS. 19.

19 (*71*). [al-ʿAbbāsiyya, 159-64]. Yazīd (b. Ḥātim, governor of Ifrīqiya 154-70). 2.1 g., 23 mm. ←. This coin's obverse marginal pattern (double pontillate circle intersected by single annulets) and reverse configuration are found only at this mint in these years; cf. Paris 706-7; *B.M.* I, pp. 55-56, nos. 104, 107; Berlin 814-15, 817; *Denizbacı* 259-60, 264.

20 (*53*). al-Kūfa, 134. Anonymous. 2.7 g., 25 mm. ↖. *B.M.* I, p. 36 no. 7.

21 (*54*). al-Kūfa, 142. 2.6 g., 25 mm. ↑. *B.M.* I, p. 46 no. 62.

22 (*55*). al-Kūfa, 144. 2.8 g., 25 mm. →. *B.M.* I, p. 47 no. 64.

23 (*56*). As no. 22. 2.4 g., 24 mm. ←.

24 (*57*). al-Kūfa, 14x [141-47]. 2.6 g., 24 mm. ↖. *B.M.* I, pp. 46-47, nos. 61-66.

25 (*28*). al-Muḥammadiyya, 148. al-Mahdī Muḥammad b. Amīr al-Mu'minīn. 2.7 g., 25 mm. ↙. *N.H.R.* 50B.

26 (*29*). al-Muḥammadiyya, 149. As no. 25, except date. 2.8 g., 25 mm. →. *N.H.R.* 51D.

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27 (*46*). al-Muḥammadiyya, 150. al-Mahdī Muḥammad b. Amīr al-Mu'minīn (different type). 2.0 g., 22 mm. ↑. *N.H.R.* 52D.

28 (*35*). al-Muḥammadiyya, 15(2). As no. 27, except date. 2.5 g., 25 mm. ↗. *N.H.R.* 54A. (The visible portion of the digit of the date permits it to be read as either *iḥdā* or *ithnatayn*, but the latter seems clearly preferable; given the decade, no other readings are possible, as this obverse annulet pattern (four annulet pairs) and reverse configuration were used until 154 only.)

29 (*30*). al-Muḥammadiyya, 153. As no. 27, except date. 2.48 g., 23 mm. ↑. *N.H.R.* 55.

30 (*32*). al-Muḥammadiyya, 155. al-Mahdī Muḥammad b. Amīr al-Mu'minīn (different type). 2.2 g., 24 mm. ↑. *N.H.R.* 57A.

31 (*33*). As no. 30. 2.8 g., 25 mm. →.

32 (*36*). al-Muḥammadiyya, 165. al-Khalīfa al-Mahdī. 2.8 g., 24 mm. ↗. *N.H.R.* 65A.

33 (*37*). al-Muḥammadiyya, 166. As no. 32, except date. 2.3 g., 24 mm. →. *N.H.R.* 66A.

34 (*38*). As no. 33. 2.8 g., 24 mm. ↗.

35 (*31*). al-Muḥammadiyya, 1[68]. al-Khalīfa al-Mahdī. 2.1 g., 22 mm. ↑. *N.H.R.* 68A. (The visible portion of the digit permits it to be read as 1, 2, 5, or 8, but this reverse type is known only in 168.)

36 (*73*). As no. 35 [168]. 2.2 g., 22 mm. →.

37 (*39*). al-Muḥammadiyya, 170. Either al-Hādī, or al-Rashīd with governor al-Mubārak (reverse too corroded to be legible). 2.2 g., 24 mm. ↑. *N.H.R.* 70A-70C.

38 (*40*). al-Muḥammadiyya, 172. al-Khalīfa al-Rashīd; Yaḥyā (b. Khālid al-Barmakī, wazīr). 2.65 g., 25 mm. ↗. Porter, *NC* 1921, p. 319 (Porter's reading of the name above the reverse field was corrected by Zambaur, *NZ* 1922, p. 6, and by Miles, *N.H.R.* 72E; but it is to be noted that the reverse field inscription of Porter's coin and of this one is like *N.H.R.* 72A and not, as Miles states, like *N.H.R.* 72B, which has the additional name Muḥammad b. Amīr al-Mu'minīn.)

39 (*41*). al-Muḥammadiyya, 173. al-Khalīfa al-Rashīd; Yaḥyā; Bahlūl(?). 2.7 g., 24 mm. ↖. *N.H.R.* 73A.

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40 (*1*). Madīnat al-Salām, 148. Anonymous. 2.7 g., 25 mm. ↗. *B.M.* I, p. 48 no. 68.

41 (*2*). M. al-Salām, 152. 2.6 g., 25 mm. ↗. *B.M.* I, p. 48 no. 72.

42 (*3*). As no. 41. 2.6 g., 24 mm. ↖.

43 (*4*). M. al-Salām, 153. 2.6 g., 24 mm. ↗. *B.M.* I, p. 48 no. 73.

44 (*5*). M. al-Salām, 154. 2.4 g., 24 mm. ↗. *B.M.* I, p. 48 no. 74.

45 (*6*). As no. 44. 2.5 g., 24 mm. ↖.

46 (*7*). As no. 44. 2.4 g., 24 mm. ↖.

47 (*8*). M. al-Salām, 155. 2.1 g., 24 mm. ↓. *B.M.* I, p. 49 no. 75.

48 (*9*). As no. 47. 2.5 g., 24 mm. ↖.

49 (*10*). As no. 47. 2.8 g., 25 mm. ↖.

50 (*11*). As no. 47. 2.55 g., 24 mm. ↘.

51 (*12*). M. al-Salām, 156. 2.55 g., 25 mm. ↑. *B.M.* I, p. 49 no. 76.

52 (*13*). As no. 51. 2.55 g., 25 mm. ↗.

53 (*14*). As no. 51. 2.3 g., 24 mm. ↓.

54 (*15*). As no. 51. 2.6 g., 24 mm. ↘.

55 (*16*). M. al-Salām, 157. 2.5 g., 25 mm. ↗. *B.M.* I, p. 49 no. 77.

56 (*17*). M. al-Salām, 158. 2.5 g., 24 mm. ↗. *B.M.* I, p. 49 no. 79.

57 (*74*). [M. al-Salām, 154-58]. As nos. 44-56. 1.3 g. (fragment, about 1/2 coin), 24 mm. ↓. *B.M.* I, pp. 48-49, nos. 74-79.

58 (*18*). M. al-Salām, 158. 2.5 g., 24 mm. ↘. *B.M.* I, p. 49 no. 80.

59 (*19*). M. al-Salām, 159. al-Khalīfa al-Mahdī. 2.7 g., 27 mm. ↗. *B.M.* I, p. 58 no. 122.

60 (*20*). M. al-Salām, 160. As no. 59, except date. 2.6 g., 24 mm. ↖. *B.M.* I; p. 59 no. 124.

61 (*21*). As no. 60. 2.5 g., 25 mm. ↑.

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62 (*23*). M. al-Salām, 161. As no. 59, except date. 2.6 g., 23 mm. ↗. *B.M.* I, p. 59 no. 125.

63 (*22*). M. al-Salām, 162. As no. 59, except date. 2.8 g., 24 mm. →. *B.M.* I, p. 59 no. 126.

64 (*27*). M. al-Salām, 16(3?). As no 59, except date. 3.0 g., 24 mm. ↓. *B.M.* I, p. 59 no. 127.

65 (*24*). M. al-Salām, 164. As no. 59, except date. 2.75 g., 23 mm. ↘. *B.M.* I, p. 60 no. 130.

66 (*25*). M. al-Salām, 165. al-Khalīfa al-Mahdī (different type). 2.85 g., 24 mm. ←. Paris 732.

67 (*26*). As no. 66 (same obverse die). 2.8 g., 23 mm. →.

68 (*72*). Madīnat [al-Salām], 16x [165-66]. As no. 66 (except date?). 2.0 g., 22 mm. →. Paris 732-33. (The four annulet pairs on the obverse and this reverse arrangement are known only for these two years.)

69 (*76*). [Wāsiṭ], 85. 1.4 g., 22 mm. ↗. Walker, p. 191 nos. 526-27. The presence of the preposition *fī* and the epigraphical style make certain the attribution to Wāsiṭ and to the latter part of the year of issue.

70 (*58*). Wāsiṭ, 96 (or 86?). 2.0 g., 22 mm. (clipped?) →. Walker, pp. 193-94 nos. 541-42. (The decade ninety seems the better reading on stylistic as well as epigraphical grounds.)

71 (*59*). Wāsiṭ, 109. 2.4 g., 26 mm. ↑. Walker, p. 196 no. 557.

72 (*60*). Wāsiṭ, 122. 2.8 g., 24 mm. ↗. Walker, p. 198 no. 573.

73 (*52*). Wāsiṭ, 124. 2.4 g., 24 mm. ↗. Walker, p. 199 no. 576.

74 (*61*). As no. 72. 2.7 g., 24 mm. ↘.

75 (*62*). Wāsiṭ, 130. 2.9 g., 25 mm. ↗. Walker, p. 200 no. 585.

76 (*63*). Walīla, 174. ʿAlī (b. Abī Ṭālib, the fourth caliph); [Idrīs b. ʿAbd Allāh] (172-77, founder of the Idrīsid dynasty; his name appears on his coins in the reverse margin, which is missing on this coin). 2.5 g., 25 mm. ←. Eustache, p. 259 no. 373, pl. XXIII (there designated "inédit," but an exactly similar coin was published by Welin, p. 108 no. 1286, Fig. 8).

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LIST OF ABBREVIATIONS

Berlin	Heinrich Nützel, *Katalog der Orientalischen Münzen* I: *Die Münzen der Östlichen Chalifen* (Königliche Museen zu Berlin) (Berlin, 1898).
B.M. I	Stanley Lane-Poole, *Catalogue of Oriental Coins in the British Museum* I: *The Coins of the Eastern Khaleefehs in the British Museum* (London, 1875).
B.M. IX	Stanley Lane-Poole, *Catalogue of Oriental Coins in the British Museum* IX: *Additions to the Oriental Collection 1876-1888, Pt. I: Additions to Vols. I.-IV.*, ed. Reginald Stuart Poole (London, 1889).
Damascus hoard	Muhammad Abu-l-Faraj al-ʿUsh, *The Silver Hoard of Damascus* . . . (Damascus, 1972).
Denizbacı	İbrahim Artuk, *Denizbacı definesi* (Ankara, 1966).
Eustache	Daniel Eustache, *Corpus des dirhams idrīsites et contemporains* (Rabat, 1970-71).
N.H.R.	George C. Miles, *The Numismatic History of Rayy*, American Numismatic Society Numismatic Studies 2 (New York, 1938).
Paris	Henri Lavoix, *Catalogue des monnaies musulmanes de la Bibliothèque Nationale, Khalifes orientaux* (Paris, 1887).
Porter, *NC* 1921	Harvey Porter, "Unpublished Coins of the Caliphate," *Numismatic Chronicle*, 5th ser. 1 (1921):317-32.
al-Qazzāz 1964	Widād al-Qazzāz, "al-Dirham al-ʿabbāsī fī zaman al-khalīfatayn al-Mahdī wa'l-Hādī," *Sumer* 20 (1964): 259-84.
al-Qazzāz 1965	Widād al-Qazzāz, "al-Dirham al-ʿabbāsī fī zaman al-khalīfa Harūn al-Rashīd," *Sumer* 21 (1965):167-227.
Tiesenhausen	V. Tiesenhausen, *Moneti vostochnavo chalifata* (St. Petersburg, 1873).
Volubilis	Daniel Eustache, "Monnaies musulmanes trouvées a volubilis," *Hespéris* 43 (1956):133-97.

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Walker — John Walker, *A Catalogue of the Muḥammadan Coins in the British Museum II: A Catalogue of the Arab-Buzantine and Post-Reform Umaiyad Coins* (London, 1956).

Walker, *Arab-Sassanian* — John Walker, *A Catalogue of the Muḥammadan Coins in the British Museum: A Catalogue of the Arab-Sassanian Coins* (London, 1941).

Welin — Ulla S. Linder Welin, "Ein grosser Fund arabischer Münzen aus Stora Velinge, Gotland," *Nordisk Numismatisk Årsskrift* 1941, pp. 74-120.

Zambaur, *NZ* 1922 — Eduard von Zambaur, "Neue Khalifenmünzen," *Numismatische Zeitschrift* 55 (1922):1-16.

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6

SKELETAL REMAINS

Ted A. Rathbun and Elizabeth Frick Mallin

Analyzing the skeletal remains from the twelfth season at Nippur was a problem because most of the skeletons were in an extremely fragmentary condition. Over time weather had had its effect, and the bones had apparently been crushed during transport. These two factors impeded reconstruction of several of the skulls.

Consequently, relatively little material could be measured. Two fairly complete skulls were reconstructed: WB4 and WB7, both female. Unfortunately, these skulls lack facial areas and cranial bases below the nuchal line. Maximum length of the long bones and adult stature were calculated by the use of Steele and McKern's formulae for estimating total length from fragmentary remains.

There were 16 individuals in this group: five males, six females, and five subadults. Several of the sex designations were made on the basis of limited material and are thus questionable. For these cases, which are indicated in the skeletal descriptions, muscularity and the size of the bone were used as sex indicators. When possible, the innominate and the skull traits were utilized in that order; unfortunately, this was possible in only a few cases. Age determinations were based on epiphyseal union, pubic symphysis changes, sutural closure, tooth wear, and degenerative changes.

WA2 AND 3—2 INDIVIDUALS: ADULT MALE (WA3), YOUNG ADULT FEMALE (WA2)

The analysis of these skeletons presented problems because the bones had been combined into one group during customs inspection. The long bones could be separated by individual, and revealed one relatively robust adult male and one relatively young female. The other remains, including the cranial fragments, are not distinguishable by sex.

The male skeleton is composed of a number of long bones. A right humerus distal end with one fourth of the proximal shaft and a fragment of the left distal end and shaft are present. A right radius proximal end with half of the shaft and the left identical portion and distal end remain; the ulna right proximal end is also present. A section of diaphysis, probably femur, is represented. The distal end of the right tibia and shaft remain. Both patellae and both clavicles are present. The left clavicle is complete; the right consists of the sternal end and half of the shaft. All of these bones are extremely large and in very good condition.

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The gracile individual is represented by both humeri, complete to the proximal end with large septal apertures. There is an almost complete left radius, but the distal epiphysis has not united, as would be expected by 20 years. A right radius proximal end and section of shaft remain. The right ulna proximal end and about three inches of shaft are present. The right femur head and greater trochanter, the left trochanters and part of the shaft, and sections of a distal end are present. The left femur head is separate. A fraction of shaft and a distal tibia end from the left side and a left proximal fibula end are also present. A shaft section of either the radius, ulna, or fibula is present. Both innominates are represented by the inferior portions of the acetabulum and ischium (the union is recent, so it is placed with the young female). The superior portion of the right acetabulum is present.

The other bones are probably a mixture of the remains of these two individuals. Calvarium remains include: a portion of a left frontal and parietal, part of the greater wing of the left sphenoid, the left zygomatic bone with part of the frontal eye orbit, portions of the interior frontal bone over the orbit, a section of the occipital, and small fragments of the parietals.

The vertebrae are fragmented. There are: one complete thoracic centrum, two fragmented cervicals, two completely fused cervicals, four portions of unidentified centra, and other small fragments. The sternum includes the complete manubrium, which is not fused, and a portion of the corpus sterni. Portions of the spine of the left scapula are present.

Wrist and hand bones include: one navicular, one pisiform, both capitates and hamates, one multangular, four metacarpals, four distal row phalanges, and six other phalanges. The ankle and foot bones include the left talus and calcaneus, seven tarsals, one navicular, one first cuneiform, five tarsal fragments, two metatarsals, and seven proximal or medial row phalanges.

Pathology. The left patella of the male skeleton exhibits osteoarthritic change. The fused cervical vertebrae are symptomatic of severe osteoarthritis. Fragments of other vertebral centra also exhibit osteophytes.

WA6—ADULT—FEMALE

This individual is represented mainly by fragments of the calvarium, maxilla, and long bones. The remains are extremely gracile, indicating a female. The clavicles and the left ulna proximal and distal ends are extremely small. The teeth are also small. The postcranial bones are in very good condition. Epiphyseal unions were apparently recent at the time of death.

The calvarium is fragmented and could not be reconstructed enough to measure. A portion of the maxilla is present in the alveolar region. No apparent tooth loss had occurred antemortem. Teeth include: all three left molars, the right canine, both right premolars, and the first two molars. The maxilla is broken at the right second molar. Wear on the teeth is very slight, with only some dentine exposure on the left first molar.

Both clavicles are present. The right includes the sternal end and the shaft to the conoid tubercle with epiphyseal union expected by 25 years. The

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left sternal end and a portion of the shaft remain. At least one vertebra is represented by fragments of the centrum and the transverse and spinous processes. Four ribs are present: three lefts (one of them a first or second), and one right. The right humerus includes a shaft fragment, a portion of the head, and the medial epicondyle. The left ulna proximal and distal ends are also represented. A fourth metacarpal completes the inventory of this skeleton.

Pathology. Slight alveolar abscessing occurs between the first and second premolars in the maxilla. Crown caries occur on both first molars. Periodontitis occurs on the maxilla. The vertebral centrum exhibits small osteophytes.

WA7—OLD ADULT—FEMALE

Very little of this individual was recovered. A few calvarium portions remain: parts of the parietals, a right frontal segment with the eye orbit and temporal muscle line, and the right mastoid portion of the temporal. A small area of the maxilla is attached to a fragmentary left zygomatic and zygomatic process of the temporal bone. What may have been an occipital fragment is also present. A right maxilla fragment contains four teeth: both incisors, a canine, and a first premolar. The teeth exhibit extreme wear, with full dentine exposure to the root. The anterior mandible is complete to the right first premolar. All teeth have been missing for a long period antemortem, as full bone resorption has occurred. The mandible is relatively small, with a pointed chin and a small condyle. Both features suggest that this is a female. The central portion and right side of the hyoid bone also remain.

The only postcranial remain is the left clavicle with the sternal articulation missing. The bone is small and badly weathered.

Pathology. The clavicle and mandibular condyle both exhibit age change, deterioration of bone, and osteoarthritis.

WA8—ADULT—MALE(?)

This individual is represented by extremely fragmentary remains in very poor condition: consequently reconstruction posed a problem. Sex determination was based on the size of the bones, the relatively large femur shaft, the musculature, and the size of the radius proximal end and right mandibular condyle. Sex diagnosis is inconclusive. The bones, especially of the calvarium, were relatively thick. Preservation of individual bones varied considerably. Parts of the skeleton had obviously weathered. The right mandibular condyle was large and in good condition, while the left had weathered substantially so that it was much smaller than the right.

Portions of the skull include: the left zygomatic, both temporal petrous portions, and both parietals near the coronal suture and at the squamosal suture. A section of the occipital squamous just below the lambdoidal suture

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could be reconstructed. The mandible was present in four portions and included the fragmented left and complete right condyles.

The postcranial skeleton includes a small portion of the end of the sternum corpus, two cervical vertebra centra and other fragments, and the dens of the second cervical. Two portions of the sacrum body and one portion of the body of one rib are present. A small portion of the right distal end of the humerus is present, and the left includes the distal shaft without the end. The proximal end of the large radius is present and is probably from the right side. A portion of the right femur diaphysis remains. The shaft is relatively large, with prominent muscle attachments. Parts of the right tibia shaft and the proximal end are also present. Many small fragments of long bone shafts are present but cannot be rejoined or identified.

Pathology. A small hole occurs in the occiput just below the lambdoidal suture, with bone regeneration in the outer table. It is a traumatic lesion that does not penetrate the inner table. Minimal disturbance to the surrounding bone occurred; there are no punctures or raised areas. The hole may be the result of a wound from a sling pellet. The medial epicondyle of the right humerus exhibits trauma in the form of bone reconstruction and remodeling. The cervical vertebrae show osteoarthritis on the centra; one also shows a possible slipped disk.

WA9—ADULT—MALE(?)

The remains of this burial and WA8 are in very poor condition and are very fragmentary. A few long bone fragments, the mandible with teeth, cranial fragments, and innominate and sacrum fragments represent this individual. The calvarium consists mainly of parietal portions, most of which do not articulate. The mandible consists of the anterior portion, which is broken at the left and right second molars. Because of breakage no tooth crowns remain, but portions of the left first molar, second premolar, canine, right canine, and right second premolar are present.

There are very few remains of long bones. The left humerus is represented by a shaft portion and part of the distal end. Portions of both tibia shafts remain, along with a fragment of femur shaft. There are many shaft fragments, most of them indistinguishable as to bone and impossible to reconstruct. The material is very crumbly and does not accept glue. A left acetabulum portion of the innominate and a sacrum fragment complete the remains of this burial.

WB1—ADULT—FEMALE

This individual is represented by both cranial and postcranial remains. Much of the cranium is present, but due to extreme fragmentation and poor condition of the bone most of it cannot be reconstructed. The frontal bone from the orbits to the coronal suture was reconstructed. Both zygomatic bones are present but unarticulated. The right temporal is represented by the mastoid,

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petrous, and external auditory meatus portions. Parts of both parietals and the occipital can be identified. The alveolar portion of the maxilla is present, but is broken on both sides posterior to the second premolar. The teeth are worn down to the roots, with extreme sloping to the lingual side indicating an overbite. Both central incisors, the right second incisor (broken at the root), the left canine, and both left and right premolars are present. There is no evidence that tooth loss occurred before death. The left portion of the mandible is broken at a point posterior to the second molar, and the ascending ramus is missing. A right mandible fragment includes the gonial angle and coronoid. The right mandibular condyle is present but not attached. The anterior mandible from the left first molar to the right third molar is present. Only the right first molar was lost before death: extensive resorption of bone had occurred. Two premolars, three complete molar crowns, and one fragment are present but separate from the bone. The wear does not seem severe; dentine exposure occurs but not to the extent seen on the anterior teeth. One of the loose teeth is probably a third maxillary molar. The left third and second molars, which alone remain in the mandible, show little wear. An animal mandible portion (probably that of a pig or sheep) was present in this burial, as well as a tibia proximal end of a sheep.

The postcranial remains are more complete. The left humerus distal end and most of the shaft remain. The distal end carries a septal aperture. The right distal end and half of the diaphysis with head fragments are also present. The left radius is complete. The right is represented by the proximal end and an unattached portion of shaft. Both ulnae are fragmented; left and right proximal ends with portions of shafts remain as do both distal ends (separate) and unattached portions of shaft. The left femur is complete except for part of the greater trochanter. The right femur proximal end with most of the shaft and the distal end with part of the shaft remain but cannot be rejoined. The left tibia is complete and exhibits a squatting facet on the distal end. The proximal end, most of the shaft, and a separate distal end of the right tibia are present. The distal ends of both fibulae and a right proximal end with part of the shaft attached are present.

The innominates are represented by the inferior portion of the acetabulum with part of the ischium from both sides. One ilium fragment with part of an acetabulum remains. Left and right fragments of the sacroiliac joint and iliac crest are present. The cervical vertebrae include a fragment of the first, the complete second, three complete others, and two centra. Six complete or almost complete thoracics and four probable thoracic centra are present. All five lumbar vertebrae are complete. Both first ribs and many fragments of ribs from both sides could be identified. Both clavicles lack only the sternal ends. Both scapulae are represented by the glenoid fossae, acromia, and spinous processes. A fragment of the body border, probably of the left, is also present. The sternum includes part of the manubrium and two portions of the corpus with rib articulations. The sacrum promontory and part of the body with a separate distal fragment are present.

Carpal bones recovered include both naviculars, both hamates, both greater multangulars, both triquetrals, and a left capitate. Metacarpals include both

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thirds, a left first, one fourth, one fifth, and the thumb. Tarsal bones include the complete left calcaneus, both tali, both naviculars (one of them fragmentary), a second cuneiform, a first cuneiform, two fragments of probable cuneiforms, and both cuboids. Foot bones include the big-toe metatarsal and distal phalange, and three distal row phalanges. No pathology is indicated.

WB2—SUBADULT—2-5 YEARS

This child is represented by the mandible and teeth and fragments of the long bones and pelvis. Most of the mandible is intact. The deciduous teeth had all erupted by the time of death. The left canine and incisors and the right incisors are missing postmortem: two left molars, the right canine, and both right molars are in situ.

Both femora are present. The left is complete except for the head epiphysis. The right diaphysis is also present. The left tibia proximal diaphysis and two fragmentary sections of the shaft remain. There are also two other long bone diaphyses, probably fibulae. The ischial portion of the innominate is unarticulated and separate. Also present is a section of the sacroiliac articulation.

WB3—SUBADULT—15 YEARS

This young individual is well represented by postcranial remains and cranial fragments. The calvarium consists of the right parietal, the right temporal with the mastoid, and both petrous portions, which are unarticulated. The right side of the occipital could be reconstructed from the lambdoidal suture down to the external occipital protuberance. The almost complete left parietal and a small left frontal portion represent the vault. One occipital condyle and both frontal orbits are present but unarticulated. The bones are in good condition and relatively thick.

The maxilla is fragmentary, with no teeth in situ. The mandible consists of the left ascending ramus, which is broken off anterior to the second molar and the right ascending ramus. There were several loose teeth, which include: the first left premolar and molar embedded in the maxillary alveolus, three first molars (apparent from the size, roots, and amount of dentine exposure), and four other molars; two are apparently unerupted third molars. All teeth are large and in excellent condition except for spots of dentine exposure on the molar crowns. One incisor and four premolars are also present. Both the Y-5 and +4 cusp patterns are exhibited on the molars.

The right humerus consists of the distal end and half of the diaphysis. The olecranon fossa carries a large septal aperture. The distal end of the left humerus is present and also carries an aperture. A portion of the right radius shaft with the tuberosity, portions of the distal end and shaft, and other shaft fragments are present. Both ulnae are present: the right is complete, with no epiphyseal union; the left consists of the proximal end and

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most of the shaft. The distal end of the diaphysis is missing. Femur shaft fragments, a left unattached distal end, and two portions of the other distal end are present. A right tibia shaft with no epiphyses and both complete fibulae diaphyses remain. Innominate fragments include portions of an iliac crest, both ischia, and some acetabulum portions. The second cervical vertebra, three other cervicals, two thoracics with immature centra, three lumbars, several other centra, and one spinous and transverse process are present. Scapula portions include both glenoid fossae and a left coracoid. Several rib fragments, mostly bodies, are present. The unarticulated manubrium represents the sternum. The left patella is complete. Portions of the sacrum are present. Foot bones included both calcanea, the right talus, one tarsal, two metatarsals, and one tarsal phalange. An adult calcaneus that obviously does not belong to this individual was also present.

Pathology. The premolars and molars exhibit slight tooth wear and crown caries.

WB4—ADULT—FEMALE(?) (25-30 YEARS)

Determining this individual's sex is a problem since the skeleton shows a mixture of male and female traits. The skull appears robust because of its heavy muscle lines, blunt eye orbits, and large external occipital with marked nuchal crest. However, the mastoids are small. The mandible exhibits a very pointed chin but an almost 90° gonial angle. The postcranial remains are small and gracile, but the tibia exhibits some strong muscle attachments. This was probably a relatively robust female.

The individual bones are relatively complete. The skull is one of the two good specimens in the group, the other being WB7. The skull is complete from the supraorbital torus and upper eye orbits to below the external occipital protuberance. Both temporal bones are present and include the left petrous, both external auditory meati, and mastoids. The greater wings portion of the left sphenoid is also present. The left maxilla is complete. The second molar was lost antemortem. A portion of the left zygomatic and sinus cavities are present also. The right maxilla is complete to the second premolar. No tooth loss had occurred antemortem, and all teeth are present. These two sections of the maxilla could be rejoined. The mandible is complete except for the right condyle and both coronoid processes. The left first molar, right first molar, and possibly the right third molar were missing antemortem. The teeth are in poor condition, with extensive dentine exposure on the first and second molar crowns especially.

The remains of the humeri include the right distal end, both lower diaphyses, and the left distal end, which exhibits a small septal aperture. A humerus head fragment is also present. A portion of the left radius proximal end and tuberosity remain. Both ulnae are represented, the right by the proximal end and a small portion of shaft, the left by the proximal end and most of the shaft. The femora are fragmented; included are three distal condyles, the right proximal end to mid-shaft with the greater trochanter broken off, a

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portion of the left femur shaft, and the head and part of the greater trochanter. Both tibia shafts and the right proximal end are present. Portions of a fibula shaft and left proximal end remain.

Of the left innominate, the left acetabulum and the connecting portion of the ischium remain. The right innominate is represented by part of the iliac crest attached to a complete acetabulum and a portion of the ischium. A separate portion of the sacroiliac joint is present. The vertebrae consist of the second cervical and fragments of centra and spinous processes; one vertebra may be thoracic as it seems to have a very small rib facet on the centrum. Two possible thoracic vertebra centra, one complete and one almost complete lumbar, one centrum, and a spinous process are present. Both clavicles remain; the left is complete except for the sternal end, while the right consists of the medial end only. The scapula remains include the right glenoid fossa, coracoid, and spinous processes which are unarticulated. Six rib fragments are present; one is a left, the others are not distinguishable as to side. Both patellae and both tali and calcanea remain. There are four metacarpals and two finger phalanges, seven metatarsals, and two pedal phalanges.

Pathology. The right innominate exhibits age changes and weight redistribution in the acetabulum. There is almost a squatting facet on the interior superior rim. The teeth exhibit heavy wear and crown caries on the molars. The left patella has a small osteophyte on the lateral articular surface. The pedal phalanges also exhibit osteoarthritic lipping at the epiphyses, and the vertebrae show lipping on the centra.

WB5—SUBADULT—8-10 YEARS

This individual is fairly well represented by cranial remains. Few postcranial bones are present. A great deal of the calvarium could be reconstructed. The vault extends from the right frontal orbit (the left orbit was unarticulated) and includes most of the frontal and the right parietal down to the temporal; the left parietal extends not quite as far, being broken off at the lambdoidal suture (the left side retains a small portion of the occipital). The left parietal portion just above the temporal, including the squamosal suture, is separate from the rest of the skull. The right mastoid portion, external auditory meatus and petrous portions, and sections of the occipital are also present. The bone is in good condition and is relatively thin and gracile. A left maxilla fragment contains the central incisor. A mandible fragment with all four incisors and the right mandibular condyle remain. There are many loose teeth, but only the right maxillary central incisor retains its root. Tooth crowns are present and include: one lower and both upper canines, one upper second and both first lower premolars, a first maxillary molar (exhibiting a Carabelli's cusp), two other first molars, two second molars (there were possibly two unerupted second molars), and two unerupted third molars.

Both femur heads and greater trochanters with no epiphyseal unions are present. A tibia distal end of the diaphysis remains. Both innominates are

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represented by fragmented ischia which include the inferior acetabula, but no union has occurred. The iliac crest portion is also immature. Three relatively whole vertebrae, one thoracic and two lumbar, are present. There are also centra fragments; all are immature. The promontory of the sacrum, separate from the body, is present. An immature right fifth metatarsal completes the postcranial remains.

WB7—ADULT—FEMALE

This individual is well represented both cranially and postcranially. The skull of WB7 and that of WB4 are the most complete in this group.

The skull is complete from the frontal eye orbits to below the external occipital protuberance of the occiput; it lacks only a left parietal portion. The mastoids, external auditory meati, parts of the zygomatic processes, and petrous portions from both sides remain. The sutures, especially the coronal and sagittal, are fairly obliterated. Two wormian bones occur in the left side of the lambdoidal suture. A fragment of a left sphenoid, both occipital condyles, and the right zygomatic bone minus the temporal process remain. A portion of the right maxilla with a sinus cavity is present. The mandible can be reconstructed, but the areas of the left first molar and right first and second molars are gone. The chin is extremely pointed and prominent; this feature, combined with the gonial angle of the mandible and the gracility of the cranium, greatly influenced the sex designation. The right lateral incisor, canine, first premolar, and the left second premolar can be repositioned. All are extremely worn, and dentine exposure occurs in patches. Only the crowns remain of one premolar and two molars (one a first or second molar and the other fragmented).

The right humerus is complete and exhibits a septal aperture. The left distal end with part of the shaft is present, with a smaller aperture. The left radius consists of the proximal end and half of the shaft; the right radial tuberosity and half of the shaft remain. Both proximal ends of the ulnae with half of the shafts attached remain. Also, one shaft fragment is present; it is that of either a radius or an ulna. The femora are fragmented. The remains include: both shafts, both heads and greater trochanters, the lateral condyle of the right distal end, and the unarticulated left distal condyles. Both proximal ends of the tibiae remain, with no shafts. The left fibula proximal end, head, and styloid process remain. All the long bones are gracile in appearance.

Both innominates are represented. The left consists of a portion of the acetabulum and ischium. The right is more complete, exhibiting a portion of the ilium with the sacroiliac joint, a wide sciatic notch, and the top part of the acetabulum. A separate portion contains parts of the acetabulum and ischium. Fragments of the iliac crest also remain.

Five cervical (one is the first), three thoracic, and four relatively complete and one fragmented lumbar vertebrae remain. There are also several unidentifiable vertebra fragments. The shaft and medial end of the left clav-

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icle and the scapular articulation of the right clavicle remain. Scapula remains include the left glenoid fossa, portions of the body and the coracoid and acromion, and the right spine and acromion with part of a border. The sacrum consists of part of the promontory and wings. A right patella is also present. There are four carpal bones: both capitates, one hamate, and one possible triquetral. The second, two fourths, and one fragmented metacarpal remain. Four proximal row, three middle, and two distal finger phalanges are present. The tarsals include the navicular, a cuboid, and a third cuneiform. A first, a fifth, and two possible fourth metatarsals are present. Five proximal-row pedal phalanges and both big toes are present.

The skeletal remains are in fair condition and are small and gracile in musculature, indicating a female. The wide sciatic notch confirms this diagnosis.

Pathology. Evidence of severe osteoarthritic changes include deterioration of the centra centers and osteophytes on the centra rims of the vertebrae, severe lipping on the patella, osteophytosis on the right lateral condyle of the proximal tibia articulation, and bony nodes on the articulations of the phalanges.

WB8—ADULT—MALE

This individual is represented solely by postcranial bones, mainly those of the femur and tibia. The right femur is the most complete bone, consisting of the shaft and proximal end (minus the head and greater trochanter). The separate femur head, left femur proximal end, and portions of the right distal end (only one condyle) are present. The femur shaft exhibits artifactual cut marks. These may have occurred during excavation. The bones are large and relatively muscular. The femur head measured 47 mm., which is well within the male range. The tibia is represented by one distal end including the medial malleolus, the left proximal end, and two shaft portions. The innominate is represented by a portion of the left ischium, including an acetabulum fragment, separate acetabulum fragments, and a portion of the iliac crest. The right patella, both tali, the distal end of a right metatarsal, and a right first cuneiform complete the remains.

WB9—SUBADULT—BIRTH-2 YEARS

This infant is represented mainly by long bones. There is artifactual weathering on most of the remains. A few skull fragments, including the left petrous portion of the temporal, are present. The ribs include three left fragments and two right fragments; side could not be determined for twelve other rib fragments. Portions of both humerus shafts are present. The right radius includes the proximal end and most of the shaft; the left distal end and a portion of shaft are present. Both ulnae include the proximal ends to the mid-shaft. No distal ends are present. The left femur lacks the greater

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trochanter and right condyle. A right femur shaft fragment was identified by the linea aspera. Both tibia shafts are present. The left innominate is represented by the ilium and part of the sacroiliac articulation.

WB10—ADULT—MALE(?)

There was some question about the contents of this burial. Since the bag labeled WB10 had broken open, some bones found at the bottom of the shipping box were tentatively placed with those of WB10. We now believe, from the size, condition, and portions of these bones, that they do belong with this individual. The tali appear to fit the calcanea. Sex identification is based on the size and musculature of the long bones. (The few skull pieces are too fragmentary to yield any information.)

Both humerus heads are present. The right humerus consists of a shaft portion and right distal end with a septal aperture. The left humerus distal end is present and also carries a septal aperture. Both radius proximal ends with small portions of the upper shafts are present. The ulnae consist of both proximal ends, with the left one retaining half of the shaft. Femora fragments include: both proximal ends with shaft sections, a probable left shaft fragment, a left distal end, and one condyle of the right distal end. Both patellae are complete. A left tibia proximal end, portions of the right proximal end, and both distal ends are present. Fibulae include the left proximal end with half of the shaft, the left distal end, and the right distal end. The acetabulum, ischium, and pubic symphysis of both innominates are present. Portions of an iliac crest and a fragment of the sacroiliac joint also remain. The scapula is represented by separate portions of an acromion, rim, body, and glenoid fossa. The sternum corpus is present. The sacrum includes body portions with attached coccyx. Both tali and both calcanea are present. Metatarsals, metacarpals, and phalanges from both the hands and feet are present.

Pathology. The left fibula shaft exhibits very reduced medullary cavities and an expanded cortex. The proximal head carries some osteophytes.

WB11—SUBADULT—6-24 MONTHS

This infant is fairly well represented by cranial and tooth portions and long bones. Some weathering had occurred. Two large portions of the calvarium could be reconstructed; one includes the left frontal bone from the orbit to the coronal suture and a portion of the left parietal to the sagittal suture; the second portion consists of the right parietal and occipital. The teeth are all deciduous. All the maxillary teeth had erupted except for the left second molar. The left first molar and both right molars were missing postmortem. In the mandible all teeth except the left first molar, right central incisor, canine, and first molar were missing postmortem. The second molars on both sides were present but were unerupted at death.

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Both femora and the left humerus are complete. The right humerus is represented by a portion of the proximal diaphysis and most of the shaft. Both radii and both ulnae are complete. A right tibia proximal end and half of the shaft remain. The right fibula shaft is almost complete.

Five vertebral centra are present, all unfused and immature. Three fragments of transverse and spinous processes also remain. Seventeen fragments of left ribs, one complete first rib, 12 fragments of right ribs, and five fragments without side landmarks are present. One metatarsal is also present.

Pathology. The left femur is extremely bent anteriorly and laterally at the mid-shaft. There is little evidence of bone remodeling, but the condition may represent a very badly healed fracture. Other possibilities include rickets, osteogenesis imperfecta, or congenital malformation.

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TABLE 6
CRANIAL DATA AND INDICES

	WA6	WA7	WA9	WB1	WB4	WB7	WB10
Maximum Length					184	183	
Maximum Breadth					129	134	
Frontal Breadth					91	95	
Nasal Breadth	20				20		
Naso-Bregma Arc					110	116	
Bregma-Lambda Arc					117	109	
Auricular Height						114	
Porion-Nasion					107	111	
Symphysis Height	26	19	27	27	24	28	26
Bigonial Diameter	85						
Bicondylar Breadth	114						
Height of Ascending Ramus	50	65			64		
Cranial Index					70.11	73.22	
Fronto-Parietal Index					70.54	70.89	

Note: Measurements are in millimeters

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TABLE 7
POSTCRANIAL MEASUREMENTS, INDICES, AND STATURE

Humerus	Maximum Length	Robusticity Index	Stature
WB4 (f)	27.77 ± 0.92 cm.	28.74	151.04 ± 4.45 cm.
WB7 (f)	31.90 cm.	18.80	165.15 ± 4.45 cm.
WA2 (f)	28.07 ± 0.92 cm.	32.22	152.29 ± 4.45 cm.
WA3 (m)	29.53 ± 0.92 cm.	—	163.44 ± 4.57 cm.
WB1 (f)	27.96 ± 0.92 cm.	30.62	151.92 ± 4.45 cm.
Femur	Maximum Length	Platymeric Index	Stature
WB4 (f)	42.72 ± 0.86 cm.	89.28	159.62 ± 3.72 cm.
WB7 (f)	40.55 ± 1.23 cm.	—	154.26 ± 3.72 cm.
WB1 (f)	43.17 cm.	93.55	160.73 ± 3.72 cm.
WB8 (m)	39.99 ± 1.31 cm.	103.12	158.31 ± 3.94 cm.
WB10 (m)	42.22 ± 1.39 cm.	81.08	163.48 ± 3.94 cm.
Tibia	Maximum Length	Platymeric Index	
WB1 (f)	37.46 ± 1.64 cm.	—	170.16 ± 3.66 cm.
WB10 (m)	—	70.35	—

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7

TIERKNOCHENFUNDE AUS NIPPUR

Joachim Boessneck

Die Studie behandelt Knochenfunde, die in den beiden Kampagnen des Jahres 1973 bei den Ausgrabungen des Oriental Institute der University of Chicago, Illinois, in Nippur, Irak, geborgen wurden. Der Leiter der Grabungen, Prof. McGuire Gibson, stellte sie zur Verfügung, Judith A. Franke sandte sie mit genauen Angaben über die Fundumstände nach München.[1] Dieser brieflichen Mitteilung entnehme ich: "The bones are from an excavation on the West Mound at Nippur which we have designated Area WB. They are, in addition almost all from the Old Babylonian level of this area. They were excavated in two seasons.

"Area WB contains one very large and well-preserved Old Babylonian house, with the remains of rooms of several other Old Babylonian buildings built against it. In the 11th Nippur Season (Winter, 1973) a trench was dug across this area. In the 12th Season the remainder of the area was excavated and, in addition, some of the 11th Season rooms were dug to a greater depth." (Zur Lage der Fundstelle s. Gibson 1974, Abb. auf S. 23.)

"In both excavations bones were kept in separate batches by room and floors of rooms, and sometimes by special features, such as drains, ovens, etc. The bone lots from the 12th Season were given the same lot numbers as pottery groups, and thus the numbers are not consecutive, since only some pottery lots also had bones. In order to avoid duplication I have given the 11th Season bone lots letter designations (A to HH). It should be emphasized that when a room was dug on both seasons, the floors do not necessarily correspond.*

"There are in addition from the 12th Season a few bone lots from an upper level of Area WB which contained the remains of a large Kassite palace."

In einer zweiten Sendung befand sich das Skelett eines Equiden mit folgenden Angaben: "Excavated Winter, 1973 - Area WA 50 C, Level: Seleucid." (Zur Lage des Fundgebiets s. Gibson 1974, Abb. auf S. 23.)

Die aus Area WB übersandte Fundmenge besteht insgesamt aus 6 Menschenknochen, 321 Säugerknochen (Tab. 8), von denen 7 unbestimmt bleiben mußten, 17 Vogelknochen, 2 Resten von Wasserschildkröten und 6 Fischknochen.

1. Für das Entgegenkommen und die Mühewaltung seien Prof. Gibson und Miss Franke herzlich bedankt. Der Deutschen Forschungsgemeinschaft dankt der Verfasser für die Finanzierung seiner Reisen in den Irak, die ihn im Herbst 1974 auch nach Nippur führten.

* Floor designations of the 12th season supersede those of the 11th season.

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MENSCHENKNOCHEN

Die 6 Menschenknochen kommen aus 3 Fundstellen:

Lot D: Scapula, Radius und proximales Ulnadrittel von einem linken Arm. Die distale Epiphysenfuge des Radius ist noch nicht, die proximale Radiusepiphyse und das Olecranon sind dagegen nahtlos verwachsen.

Lot E: Linker Calcaneus. Größte Länge 69, Größte Breite 38 mm.

Lot R: Mt I, Distalteil, und Mt III, Distalteil, links. Größte Breite distal des Mt I ca. 18 mm.

Diese Menschen waren feingliedrig und nicht groß.

Die Knochen dürften von Bestattungen sein, von denen sekundär Reste in die altbabylonische Schicht geraten sind. Sie reichen in den Räumen 1 - 1 und 1 - 6 nur in die Tiefe von Floor 1 und in Raum 2 - 2 bis in Floor 2.

SÄUGERKNOCHEN

Allgemeines

Wie Tabelle 8 zu entnehmen ist, stammt die Masse der Funde von den gewöhnlichen Wirtschaftstieren Schaf, Schwein, Rind und Ziege, die die Grundlage der Fleischversorgung des Alltags sicherstellten, sowie weitere Produkte für das tägliche Leben lieferten. Ihr Erhaltungszustand weist die Knochen gleichfalls als Speisereste aus. Inwieweit sie an ihrem primären Ablagerungsort gefunden wurden oder sekundär eingelagert sind, übersehe ich nicht. Um dem Archäologen die bestmöglichen Voraussetzungen zu schaffen, dieser Frage nachzugehen, wird im Anhang aufgeschlüsselt, welche Knochen die einzelnen "Lots" enthielten. Auf die wenigen angekohlten oder verkohlten bis kalzinierten Knochen wird dort hingewiesen. Von den 7 unbestimmbaren Knochensplittern sind 4 wahrscheinlich Rinder- und 3 wahrscheinlich Schaf- oder Ziegenknochen.

Obwohl die Probe klein ist, scheint die sich nach der Häufigkeit ergebende Reihenfolge Schaf, Schwein, Rind und Ziege durchaus den tatsächlichen Gegebenheiten zu entsprechen. In den altbabylonischen Schichten von Isin fand sich ein weitgehend ähnliches Fundbild, nur trat das Schwein weniger, das Rind stärker hervor. Aber auch diese Probe ist bisher nur klein (Boessneck 1977, Tab. 3).

Zu dem deutlichen zahlenmäßigen Vorherrschen des Schafes, das sich ergibt, wenn die nicht artbestimmten Schaf- und Ziegenknochen in gleicher Weise aufgeteilt werden, wie es die artbestimmten Knochen nahelegen, paßt ökologisch das Vorkommen von Gazellen, denn sie weisen auf steppenartigen Charakter der Landschaft hin, dort wo die Bewässerungskultur und die Marschlandschaft aufhören.

Auch wenn mehr Schafe und vielleicht auch mehr Schweine als Rinder gehalten wurden, so war das Rind infolge seiner Größe doch das wertvollste Fleischwirtschaftstier. Der Vergleich der Knochengewichte weist deutlicher auf diesen weit höheren Anteil des Rindes an der Versorgung hin als es die Fundzahlen und die Mindestzahlen an Individuen zum Ausdruck bringen (Tab. 9).

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Einem beträchtlichen Anteil des Hausschweines in der Fleischversorgung der Bevölkerung begegnen wir weithin im Vorderen Orient in der vorislamischen Zeit, auch wenn das Tier in der darstellenden Kunst ganz im Hintergrund bleibt.

Rind, Bos taurus

Die Rinderknochen stammen fast alle von adulten oder -falls nicht klar erkennbar- zumindest annähernd adulten Tieren. Eine Ausnahme machen ein distales Radiusende mit dem dazugehörigen Os carpale 2 et 3 (Lot 920), die von einem höchstens einjährigen Tier kommen. Sie erhöhen die Mindestindividuenzahl, die sich im übrigen aus den Tali errechnet, von 5 auf 6.

Aus den wenigen Maßen (Tab. 10) lassen sich keine genauen Vorstellungen über die Größe der Rinder gewinnen, jedoch steht fest, daß sie größer als die Masse der gleichzeitigen Rinder Mitteleuropas waren, gleiche Proportionen angenommen, am Widerrist etwa 1,20-1,30 m hoch. Funde, die über Schädel- und Hornform orientieren würden, liegen nicht vor.

Als Besonderheit gibt es aus Lot 905 einen abgesägten Femurkopf.

Schaf, Ovis aries, und Ziege, Capra hircus

Trotz der Fortschritte, die in der Unterscheidung von Hausschaf- und Hausziegenknochen gemacht worden sind (mehr s. Boessneck, Müller und Teichert 1964, Boessneck 1969), ist bei Küchenabfällen meist der größere Teil der Funde nicht näher bestimmbar (Tab. 8). Vor allem sind die für die Ermittlung der Altersverteilung und der Mindestindividuenzahl so wichtigen Unterkieferfunde nur mit großen Vorbehalten zu bestimmen und werden deshalb meist, und so auch hier, nicht getrennt (Tab. 11). Das Vorherrschen des Schafes lassen aber die Radien gut erkennen, die wie die Unterkiefer eine Mindestindividuenzahl von 10 ergeben. Meßbare (Tab. 12*g*) und nicht meßbare Proximal- und Mittelteile sind von 7 Schafen -3 ♂♂, 2 ♀♀, 2, ??- , einer Ziegengeiß und 2 nicht bestimmbaren Tieren. Eines der Tiere fraglicher Artzugehörigkeit war noch nicht einjährig. Für die Ziege erhöht sich die Mindestindividuenzahl bei den Fesselbeinen auf 3 (Tab. 12*p*) und insgesamt muß sie nach der Altersverteilung bei strengstem Maßstab wenigstens auf 11 hinaufgesetzt werden. Die wirkliche Individuenzahl, die die Funde vertreten, lag gewiß beträchtlich höher, ist aber leider nicht annähernd zu erfassen, weshalb es üblich ist, sich streng an die Mindestindividuenzahl zu halten.

Die in der Maßtabelle (Tab. 12) eingetragenen Geschlechtsbestimmungen drücken nur Vermutungen aus, die aufgrund der Knochengröße naheliegen. Bei den männlichen Schafen blieb unberücksichtigt, ob es sich eher um Widder- oder um Hammelknochen handelt. Die Form eines Darmbeins (Lot 920 B) spricht dafür, daß die Kastration ausgeübt wurde.

Die Schafe waren schlankwüchsig (Abb. 90:13) und mittelgroß. Eine Vorstellung von der Widerristhöhe zu gewinnen, ermöglichen zwei in ganzer Länge erhaltene Metacarpen, einer anscheinend von einem männlichen Tier, der andere von einem Mutterschaf (Abb. 90:13). Zur Methodik und zur Frage der Problematik der Berechnung verweise ich auf von den Driesch und Boessneck (1974).

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Für das Mutterschaf ergeben sich 62-63 cm, für das männliche Tier -Bock oder Hammel- 73-74 cm. Der Größenunterschied bringt den zu erwartenden Geschlechtsdimorphismus gut zum Ausdruck. Ein Vergleich der übrigen Maße an Schafknochen mit Variationsreihen in der Literatur (z.B. Boessneck u.a. 1971) macht deutlich, daß die Knochen in die gleiche Größenordnung gehören wie die Metacarpen. Eine Schätzung der Variation der Widerristhöhe der altbabylonischen Schafe von Nippur auf 60-75 cm ist sicherlich eher zu eng als zu weit (vgl. von den Driesch und Boessneck 1974, Tab. 1).

Über die Behornung der Schafe orientieren einige Kalotten- und Hornzapfenreste nur ganz unzureichend. Das noch am besten erhaltene Hornzapfenstück eines Widders (Lot Y), ein Fragment aus der distalen Zapfenhälfte, deutet eine engere Drehung an. Es ist aber nicht zu erkennen, ob es sich um ein Schaf mit korkzieherartig gedrehten Hörnern handelt, wie sie bereits seit der Frühsumerischen Zeit dargestellt werden (z.B. Strommenger 1962, Tafel 19, 22 und 23), zunächst jedoch eher als Haarschafe (vgl. Hilzheimer 1941 Fig. 13), während die Schafe der altbabylonischen Epoche sicherlich Wollschafe waren. Unter den Mutterschafen gab es hornlose (Lot 174) und wohl auch schwach behornte Tiere (Lot 990).

Ein Kalottenstück von einer weiblichen Ziege (Lot N, Abb. 89:8, Tab. 12*a*) trägt einen enggedrehten, aufgerichteten Hornzapfen. Das Tier war schraubenhörnig wie ein bekanntes Beispiel aus der Plastik, der an einem "Blütenstrauch" aufgerichtete Ziegenbock aus der Frühdynastischen Epoche von Ur (z.B. Strommenger 1962, Tafel 80 f).

Ein Talus von Schaf oder Ziege ist lateral, medial und auf der Dorsalseite abgeschliffen (Lot 905, Abb. 89:10). Man darf vermuten, daß er als Würfelknochen gedient hat.

An einer Unterkieferhälfte von Schaf oder Ziege fällt eine Auftreibung des Corpus auf der Lateralseite in Höhe von P 4 bis M 1 auf, bei gleichzeitiger Einsenkung des Alveolarrandes (Lot 904, Abb. 89:9). Oberhalb des Basalrandes ist eine stecknadelkopfgroße Öffnung zu erkennen. Derartige "Krankheitsbilder" treten bei Alveolarperiostitiden auf, die sich meist infolge von Futtereinkauung entwickeln (vgl. z.B. von den Driesch 1975).

Am Proximalende des kleineren der beiden ganz erhaltenen Schafmetacarpen finden sich feine Exostosen, wie sie bei periarticulärer "Schale" auftreten (Abb. 90:13*b*), einer Folgeerscheinung von Überanstrengung des Gelenks (vgl. wieder von den Driesch 1975).

Ähnlicher Ursache, nämlich Überlastungsfolgen des Bandapparates sind die leistartigen Wucherungen an einem Fesselbein von einem Schaf (Lot 990, Abb. 89:11).

Gazelle, Gazella (subgutturosa?)

Ein unscheinbares Mandibulafragment aus der Gegend des Kieferwinkels (Lot 1001), das distale Ende eines auffallend großen Metacarpus (Lot 1020, Abb. 90:14, Größte Breite distal 21,5 mm) und ein 5,3 cm langer Corpusabschnitt von einem gleichfalls recht großen Metatarsus (Lot T) bezeugen das Vorkommen von Gazellen in der Umgebung von Nippur in altbabylonischer Zeit. Auch in Isin (Boessneck 1977, S. 115, 124) und vom Tell Asmar (Hilzheimer 1941) sind der-

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art große Gazellen nachgewiesen. Sie bilden wichtige Indikatoren dafür, daß damals ein Trockenklima ähnlich dem heutigen herrschte.

Morphologisch kann ich die Artbestimmung nicht vornehmen. Weder reicht unser Vergleichsmaterial aus, auf Gestaltunterschiede zu achten, noch ist mir Literatur bekannt, die Artunterschiede am postkranialen Skelett beschreibt. Tiergeographisch würde jedoch alles für die Kropfgazelle, Gazella subgutturosa, sprechen, in deren Artverband heute auch Gazella marica einbezogen wird (Harrison 1968, Lange 1972). Jene allein wird für Mesopotamien selbst verzeichnet (Harrison 1968 Fig. 165; Lange 1972 Abb. 9), während die Dorcasgazelle, Gazella dorcas, nur westlich des unteren Euphrat nachgewiesen ist (ebd. Fig. 164 bzw. Abb. 6), und die Echte Gazelle, Gazella gazella, erst im Westbogen des "Fruchtbaren Halbmonds" vorkommt (ebd. Fig. 161 bzw. Abb. 8).

Die Größe der gefundenen Knochen würde auch von vornherein gegen Dorcas sprechen, die im vorderasiatisch-arabischen Raum die kleinste Form ist. Aber mit diesem Argument muß man sehr vorsichtig sein, hat doch die Kropfgazelle im Westen ihres Verbreitungsgebiets seit der frühgeschichtlichen Zeit deutlich an Größe abgenommen, wie Funde aus Westazerbaidjan ebenso erkennen ließen (Boessneck und Krauss 1973, Tafel 26, 13-16) wie die Knochen aus Nippur und aus Isin, falls sie von Kropfgazellen sind. Dafür, daß es sich um Knochen dieser Gazelle handelt, spricht schließlich der Befund Hilzheimers (1941) an Gazellenhornzapfen vom Tell Asmar. Sie sind von Gazella subgutturosa. Ein Zapfenpaar aus Isin, das ihnen gleicht, läßt sich auf diesem Weg gleichfalls morphologisch bestimmen.

Schwein, Sus domesticus

Wie gewöhnlich, weil Schweine keine Leistung zu Lebzeiten zu bringen haben wie die anderen Wirtschaftstiere, sind die meisten der Schweineknochen von Jungtieren, und zwar aller Altersstufen. Kein einziger Fall einer verwachsenen Epiphysenfuge liegt vor, wenn die Fuge erst mit 2 Jahren oder später verwächst. Auch die vermessenen Extremitätenknochen (Tab. 14) können von Tieren sein, die noch nicht zweijährig waren (vgl. Lesbre in Zietzschmann 1924, S. 404; Silver 1963, S. 252 f), obwohl nur Knochen vermessen wurden, deren erkennbare Epiphysenfugen geschlossen sind.

Nach den Unterkiefern ergibt sich eine Mindestindividuenzahl von 7 (Tab. 13). Sie erhöht sich aufgrund eines angekohlten Radius von einem neonaten oder nur wenige Tage alten Tier (Lot R) auf 8.

Die Schweine waren schlankwüchsig und klein (Tab. 14, Abb. 90:15).

Als Besonderheit fällt auf einem Schädeldach, dessen Sutura frontoparietalis noch offen war, eine Narbe auf (Abb. 89:6, Lot 153, Achämenidisch?), wie sie gehäuft bei den Funden vom Zendan-i Suleiman beobachtet wurden (Boessneck 1973 a). Wenn es stimmt, daß sich die Schweine derartige Verletzungen bei enger Stallhaltung gegenseitig beibringen, hätten wir einen Hinweis darauf, daß die Schweine derart gehalten wurden. Beruht die Verletzung dagegen auf einem Schlag, mit dem ein Hirte das Tier zurechtwies, läge -ganz im Gegenteil- Weideschweinhaltung nahe. Derartige Befunde bieten demnach zunächst keine Aufschlüsse.

Bei keinem einzigen Schweineknochen besteht der Verdacht auf die Zuge-

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hörigkeit zu einem Wildschwein. Die Wildschweine der Gegend sind groß (vgl. z.B. Harrison 1968, S. 372 ff), und daß es in alter Zeit nicht anders war, bestätigt ein Fund aus Isin (Boessneck 1977, S. 124 f.).

Esel, Equus asinus (und Hemippus, Equus hemionus hemippus)

Während die Bestimmung des Equidenskeletts aus der seleukidischen Schicht von WA als Hausesel, Equus asinus, keinerlei Schwierigkeiten macht (s.u.), ist die Zuordnung der Funde aus WB problematisch.

Ein mittelgradig abgekauter P 3 oder P 4 inferior (Lot 997) hat zwar die für Asinus typische Zeichnung (Abb. 88:3), stimmt aber darin und vor allem auch in der Größe -Länge/Breite = 25/18,5 mm- ebenso mit manchem Vergleichsmaterial von Equus hemionus überein. Die westlichste Rasse des Halbesels oder Onagers wird nach dem pferdeartigen Aussehen des Kopfes Hemippus genannt -Equus hemionus hemippus. Von diesem kleinen, in unserem Jahrhundert ausgestorbenen Wildequiden, der das Zweistromland sowie das westlich daran angrenzende semiaride Gebiet bewohnte (s. z.B. Hatt 1959, S. 54 f, Harrison 1972, S. 622) und treffend auf einem Relief im Nordpalast des Königs Assurbanipal in Ninive dargestellt ist (z.B. Strommenger 1962, Tafel 259), gibt es zu spärliches Vergleichsmaterial, um ihn in seiner Variation zu kennen. Funden aus alter Zeit (z.B. Hilzheimer 1941) haftet der Mangel an, daß ihre Bestimmung zunächst gesichert sein muß, ehe sie weiter als Vergleichsmaterial verwendet werden können. So bleibt die Zugehörigkeit des Prämolarfundes aus Nippur zu Hemippus oder Asinus ungewiß. Ebenso verhält es sich bei den Fragmenten eines Halswirbels aus kassitischem Fundzusammenhang (Lot 929).

Auch bei 4 zusammengehörigen Knochen einer rechten Hintergliedmaße ist nicht ganz ausgeschlossen, daß sie von einem Hemippus sind. Es handelt sich um das Os tarsi centrale, das Os tarsale tertium, den Metatarsus mit frisch verwachsener distaler und die Phalanx prima mit frisch angewachsener proximaler Epiphyse (Lot 921). Das Tier war demnach noch nicht zweijährig. Der außerordentlich schlanke Wuchs des Metatarsus und des Fesselbeins (Abb. 88:4*a*, 5*a*; Tab. 15*l*, *m*) sind erheblich durch dieses junge Alter des Tieres bedingt und lassen sich schwerlich als Kriterium für die Zugehörigkeit zu einem Halbesel anführen, für die lange und schlankwüchsige Metapodien charakteristisch sind (vgl. Boessneck 1976, Tab. 1). Ob ein frisch verwachsener Mittelfußknochen seine volle Länge so gut wie erreicht hat, ist bis heute nicht geklärt. Damit ist auch nicht a priori ausgeschlossen, daß der Knochen noch zu den von Hemippus bekannten Metatarsenlängen aufgeschlossen hätte. Die Mittelfußknochen der beiden ausgewachsenen Hemippusskelette der Wiener Sammlung sind 234 und 225 mm lang bei etwa gleicher relativer Breite wie der Fund aus Nippur. An den Fesselbeinen ist die Unterscheidung von vornherein viel schwieriger, weil sie bei Hemippus nicht markant länger oder schlanker sind als bei Asinus (vgl. Boessneck 1976, Tab. 1; 1973 b, Abb. 5 = von den Driesch 1972, Diagramm 27).

Aus folgendem Grunde neige ich jedoch dazu, die vorliegenden Hinterhandknochen als Reste eines Hausesels anzusehen. In der Sammlung des Instituts für Paläoanatomie befindet sich das Skelett eines ca. zweijährigen Dalmatinereels, dessen Metatarsen und Fesselbeine in Größe und Wuchs ausgezeichnet zu

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den Funden aus Nippur passen (Abb. 88:4*b*, 5*b*; Tab. 15*l*, *m*). Dieser Esel aus Dalmatien war nach dem Verwachsungsstand der Epiphysenfugen bereits älter als der Equide aus Nippur. Vielleicht ist darin der Formunterschied in den Seitenkonturen der Fesselbeine begründet (Abb. 88:5*a*, *b*). Esel mit Metapodien dieser Größe und mit diesem schlanken Wuchs sind mir noch mehrere bekannt. Sie legen nahe, auch die Funde von Nippur als Eselknochen zu bestimmen.

Bei dem Equidenskelett aus WA schließt die geringe Größe jede andere Möglichkeit als die der Zugehörigkeit zu einem Hausesel aus (Tab. 15; Abb. 88:4*c*, 5*c*). Verglichen zum Beispiel mit den Eseln aus den Hethitergräbern von Osmankayasi (Herre und Röhrs 1958) ist die geringe Größe gut abzulesen. In der Wuchsform bestand kein Unterschied und heutige Esel der Gegend sehen genauso aus. Von einem auffallend kleinen Tier heutiger Zeit liegt aus der Gegend von Isin ein Metatarsus vor (Tab. 15*l*).

Das Skelett aus WA ist streckenweise in äußerst zerbröckeltem Zustand. So ist der Schädel in kleinste Teile, der Unterkiefer weniger zerbrochen. Von den Wirbeln und den Rippen gibt es nur unscheinbare Bruchstücke. Das Becken ist in derart schlechtem Erhaltungszustand, daß die Geschlechtsbestimmung nicht mehr mit voller Sicherheit vorgenommen werden kann. Die Scapulae und die großen Röhrenknochen sind nur teilweise meßbar. Am besten erhalten sind die Metapodien und Phalangen (Tab. 15).

Der Abkauungsgrad der Incisivi (Abb. 88:1) entspricht einem Alter von etwa 5 1/2 Jahren, wenn die Kriterien der Altersbestimmung vom Pferd auf den Esel übertragen werden (vgl. dazu Cornevin und Lesbre 1894, S. 222 f). Die Epiphysenfugen an den Extremitätenknochen sind alle geschlossen, die Leisten am Becken teilverwachsen. Manche Wirbelscheiben sind angewachsen, andere nicht. Die kleinen Canini und die geringe Breite des Übergangsbereichs der Darmbeinsäule auf den Medialrand des Acetabulum sprechen dafür, daß das Skelett von einer Stute stammt.

Als zufällige Beilage befand sich bei dem Eselskelett ein Oberkieferbackzahn mit der Beschriftung WA 7 4 11 N (Abb. 88:2), bei dem wieder sehr gut sein kann, daß er von einem Hemippus stammt. Der Zahn ist verhältnismäßig groß -Länge/Breite = 27/25,5 mm- hat keine Plica caballi, dagegen ein außergewöhnlich tiefes, im Fundus schmales Innental (Abb. 88:2). In weniger extremer Ausprägung sah ich diese Eigenart an Oberkieferbackzähnen von Onagern.

Hund, Canis familiaris

Das einzige Fundstück vom Hund bilden zwei im Bereich der Zwischenwirbelgelenke und deren Umgebung verwachsene Lendenwirbel (Lot U, Abb. 89:7). Die Processus transversi sind abgebrochen. Vergleiche ergaben, daß es sich um den 1. und 2. Lendenwirbel handeln dürfte. Der vorliegende pathologisch-anatomische Befund wird als Spondylarthrosis oder Spondylosis ankylopoëtica bezeichnet. Er tritt oft -nicht aber in dem hier vorliegenden Fall- gekoppelt mit Spondylosis deformans auf, die zu Vor- und Verwachsungen an und zwischen den Ventralrändern der Wirbelkörper führt (Nieberle-Cohrs 1962, S. 892). Verwachsungen beider Art kamen früher wie heutzutage als Überlastungserscheinungen vor, und zwar vor allem bei Pferden und Hunden (z.B. von den Driesch 1975, mit weiteren Literaturhinweisen).

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In unserer Sammlung befindet sich das Skelett eines altägyptischen Hundes aus der 11. Dynastie, dessen beide ersten Lendenwirbel in der Größe denen von Nippur entsprechen (vgl. Boessneck 1975):

	Nippur	El-Târif
Größte Breite der Facies terminalis cranialis des 1. Lendenwirbels	18,5	19
Größte Breite der Facies terminalis caudalis des 1. Lendenwirbels	19	19,5
Größte Breite der Facies terminalis cranialis des 2. Lendenwirbels	18,5	18,5
Größte Breite der Facies terminalis caudalis des 2. Lendenwirbels	19,7	19,5
Größte Länge von der Facies termin. cran. des 1. zur Facies termin. caud. des 2. Lendenwirbels	45,5	45

Dabei ist bei dem altägyptischen Hund der 1. Lendenwirbel länger, der 2. kürzer als bei dem Hund aus Nippur. Gleiche Proportionen vorausgesetzt, war der Hund von Nippur von mittlerer Größe. Der Hund von El-Târif hatte eine Widerristhöhe von etwa 50 cm oder 1-2 cm mehr (Boessneck 1975).

Im Vergleich mit Wirbeln von vorderasiatischen Schakalen sind die beiden Wirbel größer.

VOGELKNOCHEN

Alle 17 gefundenen Vogelknochen gehören zu Wasservögeln.

Von einem Kormoran, der Größe nach Phalacrocorax carbo, stammt der ausgebrochene Proximalteil eines Humerus (Lot L, Abb. 91:18). Brutkolonien vom Kormoran gibt es heute in Mesopotamien nicht, er kommt nur als Wintergast vor (vgl. Hüe-Etchécopar 1970, S. 47 f), kann aber in alter Zeit durchaus hier genistet haben.

Einen bemerkenswerten Fund stellt eine Furculahälfte vom Schlangenhalsvogel, Anhinga rufa, dar (Lot R, Abb. 91:19). Der Schlangenhalsvogel, der wie ein schlanker, langhalsiger und langschwänziger Kormoran mit spitzem Schnabel aussieht, bewohnt Seen, träge fließende Ströme und Flußmündungen. Er nistet in Kolonien auf Bäumen und Büschen, ist aber heute im vorderen Orient "an den meisten Plätzen verschwunden" (Heinzel, Fitter und Parslow 1972, S. 32), nicht aber aus den Marschen des Südirak (Hüe-Etchécopar 1970, S. 53). Die Furculahälfte hat eine größte Länge vom kranialen Winkel zum Kaudalrand der Symphyse von 53 mm.[2]

2. Vergleichsmaterial zur Absicherung der Artdiagnose machten mir dankenswerterweise Prof. N.-G. Gejvall, Stockholm, und Dr. G. Bergh im Zoologischen Museum Uppsala zugänglich.

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Der Sternalteil eines Coracoids (Lot P) paßt in Größe und Form ebenso zur Graugans, Anser anser, wie zur Hausgans, Anser anser domesticus, ihrem domestizierten Nachfahren. Das südliche Mesopotamien ist heute noch Brutgebiet der Graugans (Voous 1962, S. 61; Hüe-Etchécopar 1970, S. 97; Heinzel, Fitter und Parslow 1972, S. 46); andererseits kann in altbabylonischer Zeit in Mesopotamien ebensogut wie in Altägypten schon seit dem Alten Reich (vgl. Boessneck 1960, 1962) Gänsehaltung betrieben worden sein. Die Frage, ob ein Haus- oder ein Wildgansknochen vorliegt, muß deshalb unentschieden bleiben.

An sich genauso verhält es sich bei einem Humerusmittelstück (Lot 993) von der Stockente, Anas platyrhynchos, der Vorfahrin unserer Hausente, Anas platyrhynchos domestica. Ob die Stockente im alten Mesopotamien nur Wintergast oder auch Brutvogel war, ist ungeklärt. Sie nistet heute vereinzelt in den Bergen nordöstlich des Zweistromlandes (Hüe-Etchécopar 1970, S. 110).

Zusammen mit einem Rippenbruchstück von Schaf oder Ziege wurden in Room 2 - 2, Floor 3 "inside 2nd Drain Pot" (Lot V) die Reste eines Skelett"kerns" von einer Spießente, Anas acuta, gefunden. Erhalten blieben nur Teile des Sternums, mindestens dreier Rippen, des Lumbosacrale (Abb. 91:16a), der linken Scapula sowie beide Coracoide (Abb. 91:16b). Am linken Coracoid konnten Maße genommen werden: Größte (diagonale) Länge 49,5, Mediale Länge 45, Größte Breite basal 20,6 und Größte Breite der basalen Gelenkfläche 19,2 mm (zu den Meßstrecken vgl. von den Driesch 1976). Das Vorliegen von mehreren zusammengehörigen Skeletteilen erleichterte die bei der Artenfülle an Enten, welche in Betracht kommen, schwierige Bestimmung. Hätten wir nur das meßbare Coracoid zur Verfügung gehabt, wäre der Erpel der Schnatterente, Anas strepera, nicht auszuschließen gewesen (vgl. Woelfle 1967, S. 55 f). Schnatterente und Spießente überwintern in Mesopotamien.

Ein Humerus (Lot P), von dem die distalen zwei Drittel seiner ganzen Länge vorliegen, zeigt in den Gestaltmerkmalen am Distalende (vgl. ebd., S. 79 f) volle Übereinstimmung bei der Löffelente, Anas clypeata. Seine Größte Breite distal mißt ca. 11, die Kleinste Breite des Humeruskörpers 5,2 mm. Die Reiherente, Aythya fuligula, die gleichfalls in Mesopotamien überwintert und nach den Maßen auch in Frage käme, ist morphologisch auszuschließen.

Ein in ganzer Länge erhaltener Humerus (Lot P) mit den Maßen Größte Länge 65,7, Größte Breite proximal 13,8 und Kleinste Breite des Corpus 4,4 mm (Abb. 91:20) gehört zu einem kleinen Entenvogel. Er würde der Größe nach gut zur Knäkente, Anas querquedula, passen (ebd., S. 82), der Fundus des Foramen pneumaticum ist aber nicht von Knochenspangen durchzogen, wie es u. a. für die Anasarten charakteristisch ist (ebd., S. 77), sondern glatt. Damit wäre die Zugehörigkeit zu einer Aythyaart möglich, aber auch die kleinste in Frage kommende Tauchentenart, die Moorente, Aythya nyroca, hat deutlich längere, nämlich mindestens 70 mm lange Humeri (ebd., S. 85). Nach diesem Ausschluß von Schwimm- und Tauchenten bleiben der Zwergsäger, Mergus albellus, und die Ruderente, Oxyura leucocephala, von der kein Vergleichsmaterial erreichbar war. Die Übereinstimmung ist bei Zwergsägerweibchen in Größe, Form und Muskelmarken vollkommen, so daß diese Zuordnung berechtigt sein dürfte, obwohl der Zwergsäger im südlichen Irak heutzutage nur mehr in kleiner Zahl überwintert.

Übereinstimmung in Form und Größe bei der Tafelente, Aythya ferina, fand

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sich für einen ganz erhaltenen Femur (Lot R, Abb. 91:17) mit folgenden Maßen: Größte Länge 46,3, Mediale Länge 44,5, Größte Breite proximal 10,5, Kleinste Breite des Corpus 4,1 und Größte Breite distal 10 mm. Schwimmenten und die Kolbenente, Netta rufina, waren ohne Zweifel auszuscheiden. Die Ruderente, Oxyura leucocephala, bleibt dagegen problematisch.

Vom Bläßhuhn, Fulica atra, Brutvogel und Wintergast in Mesopotamien, liegen zwei weit über halblange Distalteile von Tibiotarsen vor (Lots J und Q, Abb. 91:21): Größte Breite distal 9 und 8,8 mm, Kleinste Breite des Corpus, in gleicher Reihenfolge, 4,2 und 4,3 mm.

Inwieweit die Vogelknochen Speisereste sind, muß dahingestellt bleiben. Die Mehrzahl von ihnen kommt aus Raum 2 - 2, und zwar den Schichten 2 (Lot R) und 3 (Lots P und V).

Die nachgewiesenen Vogelarten legen nahe, außer den von vornherein zu erwartenden Wasserläufen mit stellenweise dichter Ufervegetation auch flache offene, stehende Wasserflächen mit Schilf- und Binsenrandzonen zu vermuten.

SCHILDKRÖTENKNOCHEN

Von der heute noch an den Kanälen der Umgebung von Nippur häufigen Wasserschildkröte, Clemmys caspica, liegt eine Nackenplatte (Proneurale, Nuchale) vor (Lot 1019). Verglichen mit unserem Material aus Anatolien kann das Tier nicht außergewöhnlich groß gewesen sein. 20 cm Panzerlänge hatte es nicht erreicht.

Bemerkenswerter ist ein Femur der Euphratweichschildkröte, Trionyx euphraticus (Lot 1023, Abb. 91:22), denn das Fleisch dieser großen Flußschildkröte gilt als schmackhaft, und es ist somit möglich, daß ein Speiserest vorliegt.

FISCHKNOCHEN

Die 6 Fischknochen, ein Rippenstück und ein Schwanzwirbelkörper aus Raum 2 - 2, Schicht 2 (Lot R), und 4 Funde aus Raum 2 - 3, Schicht 1 (Lot Q), kommen aus den beiden Räumen, in denen auch die große Mehrzahl der Vogelknochen geborgen wurde.

Da in München kein Vergleichsmaterial von den im Zweistromland vorkommenden Fischarten vorhanden ist, ließ sich nur so viel ermitteln, daß unter den Funden aus Lot Q Welsknochen sind (Abb. 91:23). Nach Salonen (1970, S. 102) kommt am ehesten Silurus triostegus in Betracht. Außerdem liegen Cyprinidenknochen vor.

Herr Dr. J. Lepiksaar, Göteborg, den ich um die Beurteilung der Funde bat, bestätigte meine Vermutungen.[3] Das Cleithrum aus Lot Q (Abb. 91:23) gehört zu Silurus triostegus, ebenso wahrscheinlich ein Epioticum(?) aus Lot Q und die große Vertebra caudalis aus Lot R. Von einem etwa 50 cm langen Cypriniden ist ein Schwanzwirbel aus Lot Q und auch der basale Teil einer Lepidotrichie.

3. Herrn Dr. Lepiksaar sei für seine liebenswürdige Hilfe herzlich gedankt.

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ZUSAMMENFASSUNG

Die zur Untersuchung übergebene Fundmenge ist zwar klein (S. 153 und Tab. 8), aber doch aufschlußreich. In der Masse handelt es sich um Schlacht- und Mahlzeitabfälle der Wirtschaftstiere, die im Alltag den Fleischbedarf deckten: Rind, Schaf, Schwein und Ziege. Die hier gewählte Reihenfolge wird wohl der Bedeutung der Arten in der Fleischversorgung gerecht (Tab. 9). Nach der Populationsgröße rückt sicherlich das Schaf an die erste Stelle, das Schwein an die zweite und das Rind erst an die dritte. Während die Rinder und Schafe von durchaus ansehnlicher Größe waren, fällt bei den Schweinen ihr kleiner, feingliedriger Wuchs auf. Die Gazellenknochen bedeuten schließlich einen weiteren Hinweis darauf, daß die Weidebedingungen den heutigen ähnlich waren.

Das Vorkommen des Hemippus würde zu diesem Befund passen, muß aber erst noch gesichert werden. Vorerst ergänzen nur Esel und Hund die Liste der nachgewiesenen Säuger.

Wertvolle Hinweise auf größeren Wasserreichtum bringt die kleine Menge an Vogelknochen. Genauso wie in Isin, wo als Indikator für große Wasserflächen ein Pelikan nachgewiesen ist, liegen nur Knochen von Wasservögeln vor, nicht aber solche der Wüstensteppenbewohner, die heute um die beiden Tells besonders ins Auge fallen, etwa die massenhaft vorkommenden Flughühner -Spießflughuhn, Pterocles alchata, und Tropfenflughuhn, Pterocles senegallus- oder gar der Rennvogel, Cursorius cursor. Wenn auch die Probe klein ist, scheint das doch kein reiner Zufall zu sein, zumal manche der Wasservogelarten dafür sprechen, daß ausgedehnte Wasserflächen mit Schilf- und Binsenbeständen die Steppe stärker zurückhielten als heute.

Die folgenden Vogelarten wurden nachgewiesen: Kormoran, Phalacrocorax carbo - Schlangenhalsvogel, Anhinga rufa - Graugans, Anser anser, oder Hausgans, Anser anser domesticus - Stockente, Anas platyrhynchos - Spießente, Anas acuta - Löffelente, Anas clypeata - Zwergsäger Mergus albellus - Tafelente, Aythya ferina - Bläßhuhn, Fulica atra.

In und an den Gewässern gab es so wie noch heute die Wasserschildkröte, Clemmys caspica, und, vor allem in den Flußarmen und Kanälen, die Euphrat-Weichschildkröte, Trionyx euphraticus, die sowohl aus Nippur als auch aus Isin nachgewiesen ist.

Im Gegensatz zu dem Reichtum an fischreichen Flußarmen, Kanälen und stehenden Wässern steht der geringe Anteil an Fischknochen unter den Funden.

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TABELLE 8
VERTEILUNG DER SÄUGERKNOCHEN
AUS AREA WB AUF DIE TEILE DES SKELETTS

	Rind	Schaf	Schaf/Ziege	Ziege	Schwein	Gazelle	Equiden	Hund
Hornzapfen, Geweih		2	1		—		—	—
Neurocranium	2	4	2	1	6			
Viscerocranium	3		4		2			
Dentes sup.			5					
Mandibula	5		14		10	1		
Dentes inf.			4				1	
Atlas		1	1		2			
Epistropheus		1	1					
and. Vert. cerv.			1		1		1	
Vert. cost.	3		8		6			
Vert. lumb.	2		4		2			1
Costae	7		20		8	?		
Scapula	3	4	2		4			
Humerus	4	4	1	1	7			
Radius	5	9	6	1	5			
Ulna	4	6						
Carpalia	1							
Metacarpus	2	7	1		3	1		
Pelvis		2	2	1	3			
Femur	4	1	4		7			
Tibia	2	6	6		1			
Talus	7	2	1	2	1			
Calcaneus		4	1					
Centrotarsale	1							
and. Tarsalia							2	
Metatarsus	2	7	1		2	1	1	
Phalanx 1	6	5	1	3			1	
Phalanx 2	3			1				
Phalanx 3	1			1				
Insgesamt	67	65	91	11	70	3	6	1
			167					
MIZ	6	7	1	3	8	1	2	1

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TABELLE 9

VERGLEICH DER FUNDZAHLEN (F),
MINDESTINDIVIDUENZAHLEN (MIZ) UND KNOCHENGEWICHTE (G)
ZWISCHEN DEN WIRTSCHAFTSTIEREN IM ENGEREN SINNE

	F		MIZ		G	
	absolut	%	absolut	%	absolut (g)	%
Rind	67	22	6	24	1900	43
Schaf/Ziege	167	55	11	44	1525	34
Schwein	70	23	8	32	1015	23

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TABELLE 10

MAßE AN RINDERKNOCHEN

a) Talus	E	O	O	985	1001	1012
Größte Länge der lateralen Hälfte	66,5	(73)	68	73	68,5	73
Größte Länge der medialen Hälfte	62	-	64	67	62	67,5
Tiefe der lateralen Hälfte	34	-	36	40	37	41,5
Tiefe der medialen Hälfte	-	-	36	40	-	42,5
Breite des Caput	40	-	43	48	41,5	49
Bemerkungen	ver-kohlt					

b) Centrotarsale	B
Größte Breite	50

c) Metatarsus	171
Größte Breite proximal	(50)

d) Phalanx 1	D	E	T	T	984
Vorne/hinten/innen/außen	h.i.	h.a.	v.i.	h.a.	h.i.
Größte Länge der peripheren Hälfte	62	55	60,5	63	-
Größte Breite proximal	26	23	-	27	31,5
Kleinste Breite der Diaphyse	21	20	26	22	-
Größte Breite distal	26	22,5	28,5	25	-

e) Phalanx 2	I	I
Vorne/hinten	v.	h.
Größte Länge der peripheren Hälfte	(41)	(42)
Größte Breite proximal	29	28
Kleinste Breite der Diaphyse	23	21,5
Größte Breite distal	-	23

f) Phalanx 3	L
Vorne/hinten	v.
Diagonale Länge der Sohle	71,5
Dorsale Länge	58

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TABELLE 11
ALTERSVERTEILUNG DER UNTERKIEFER
VON SCHAF ODER ZIEGE

	links	rechts	MIZ
M 1 in Reibung, M 2 fehlt noch	-	1	1
M 2 in Reibung, M 3 fehlt noch	1	1	2!
M 3 im Durchbruch	-	2	2
M 3 geringgradig abgerieben	2	1	2
M 3 mittelgradig abgerieben	1	2	2
M 3 hochgradig abgerieben	1	-	1
			10

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TABELLE 12
MAßE AN KNOCHEN VON SCHAF (S) UND ZIEGE (Z)

a) Hornzapfen, Z, ♀, schraubenhörnig (Abb. 89:8)	N
Umfang an der Basis	75
Großer Durchmesser an der Basis	27,5
Kleiner Durchmesser an der Basis	16
Erhaltene Länge am Vorderrand	63

b) Hinterhaupt, S	H
Größte Breite über die Condylen	47

c) Unterkiefer, S/Z	U	919	958
Länge der Backzahnreihe (Alveolen)	71	-	-
Länge der Molarreihe (Alveolen)	48,5	-	-
Länge der Prämolarreihe (Alveolen)	23	-	-
Länge/Breite von M 3	23/9	23,5/9	24/9,5
Höhe hinter M 3 (buccal)	38	-	-
Höhe vor M 1 (buccal)	22	-	-
Abkauungsgrad	++	++	+++

d) Atlas, S, ♂	920
Größte Breite der kranialen Gelenkfläche	50
Größte Länge von der kranialen zur kaudalen Gelenkfläche	47,5

e) Scapula, S (s. Abb. 89:12)	983	1002
Kleinste Länge am Hals	20	24,5
Größte Länge des Processus articularis	34	38,5
Größte Länge der Gelenkfläche	27	30,5
Größte Breite der Gelenkfläche	20	25,5
Geschlecht	♀	♂

f) Humerus	O	T	958
Tierart	S	Z	S
Größte Breite distal	32,5	29	-
Breite der Trochlea humeri	31	27	28

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TABELLE 12—*Continued*

g) Radius	F	J	L	T	993	1019	1023	1024	1024	1024
Tierart	Z	S	S	S	S	S	S	S	S	S
Größte Breite proximal	27,5	32	35	33,5	35,5	(34)	-	37	33	-
Breite der prox. Gelenkfläche	27	28	31,5	31	33	-	-	34	30	-
Größte Breite distal	-	-	-	-	-	-	28,5	-	-	30,5
Geschlecht	♀	♀	♂	?	♂	?	♀	♂	♀	?
Bemerkungen							ver-kohlt			im Ver-wachsen

h) Metacarpus, S (s. Abb. 90:13)	M	1002	1019
Größte Länge	151,5	128,5	-
Größte Breite proximal	25	(24)*	-
Kleinste Breite der Diaphyse	15,5	12,3	13,5
Größte Breite distal	27,5	24	26,7
Geschlecht	♂ oder ♂	♀	?

i) Acetabulum	D	D	Z
Tierart	S/Z	S	Z
Länge einschließlich Labium	33	29	26
Geschlecht	♂	♂	♀

k) Femur	G	T
Tierart	S	S/Z
Größte Breite proximal	51	-
Größte Breite distal	-	(40)
Bemerkungen	im Ver-wachsen	

l) Tibia	B	D	L	P	958	958	983
Tierart	S	S/Z	S?	S	S?	S	S?
Größte Breite proximal	43,5	(44)	-	45	-	40	-
Größte Breite distal	-	-	29	-	30	-	25
Geschlecht	?	?	♂	♂	♂	♀	♀
Bemerkungen				nicht verwachsen			

*Am proximalen Ende geringgradige "schale"-artige Exostosen (s. Abb. 90:13*b*)

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TABELLE 12—*Continued*

m) Talus	O	W	905	1020
Tierart	S	Z	S/Z	Z
Größte Länge der lateralen Hälfte	29,5	28	30	29,5
Größte Länge der medialen Hälfte	29	26	29	28,5
Tiefe der lateralen Hälfte	17	14,5	-	14,5
Breite des Caput	19,5	17	-	18,5
Bemerkungen			abgeschliffen (Abb. 89:10)	verkohlt

n) Calcaneus, S	J	1019
Größte Länge	58,5	52,5
Größte Breite	20,5	18

o) Metatarsus, S	A	L	L	160	905	958	1028
Größte Breite proximal	19	22,5	-	22,2	20,5	-	(20)
Größte Breite distal	-	-	24,5	-	-	25,3	-
Geschlecht	♀	♂	♀	♂	♀	?	♀

p) Phalanx 1	J	L	R	W	931	990	1001	1025
Tierart	Z	Z?	S	S	Z	S	S	S
Vorne/hinten	v.	h.	h.	v.	v.	v.	v.	h.
Größte Länge der periph. Hälfte	37	36	39	34,5	41	39	37	37
Größte Breite proximal	12,5	12	13	11,5	14	15	13	12,5
Kleinste Breite der Diaphyse	10,5	9	9,5	9,5	12	-†	10	9,5
Größte Breite distal	12,5	11	11,5	11	14,5	14,5	11	11
Geschlecht	♀?	♀	?	♀	♂	♂	♀	♀
Bemerkungen	angekohlt							

q) Phalanx 2, Z, hinten?	J
Größte Länge der peripheren Hälfte	23,5
Größte Breite proximal	11,5
Kleinste Breite der Diaphyse	8,5
Größte Breite distal	10

r) Phalanx 3, Z	920
Größte Länge der Sohle	33
Dorsale Länge	27,5

†Knochenleisten (Abb. 89:11)

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TABELLE 13

ALTERSVERTEILUNG DER UNTERKIEFER VOM SCHWEIN

	links	rechts	MIZ
Pd 4 beginnt zu reiben, M 1 fehlt noch	-	1	1
M 1.frisch in Reibung	-	1	1
M 2 im Durchbruch	1	-	1
M 2 in Reibung, M 3 fehlt noch	2	-	2
M 3 im Durchbruch	-	1	1
M 3 geringgradig abgerieben	1	1	1
			7

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TABELLE 14
MAßE AN SCHWEINEKNOCHEN

a) M 3 inferior	905					
Länge/Breite	33/14					
Abkauungsgrad	+					
b) Atlas	B					
Größte Breite der kranialen Gelenkfläche	50					
Größte Länge von der kranialen zur kaudalen Gelenkfläche	36					
c) Scapula	L	L	T			
Kleinste Länge am Hals	-	19,5	18,5			
Größte Länge des Proc. articularis	31,5	30	-			
Größte Länge der Gelenkfläche	28	26	(25)			
Größte Breite der Gelenkfläche	20,5	21,3	19,5			
d) Humerus	L	N	S	T	983	995*
Größte Breite distal	31	32	30	35,5	33	31,5
e) Radius	C	1002				
Größte Breite proximal	21,5	26				
f) Talus	983					
Größte Länge der lateralen Hälfte	37					
Größte Länge der medialen Hälfte	33,5					
g) Metapodien (Abb. 90:15)	A	1012				
Metacarpus/Metatarsus	Mc	Mt				
Strahl	III	IV				
Größte Länge (ohne Sporn)	61,5	71				
Größte Breite distal	14	15,5				

*proximale Epiphysenfuge offen

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TABELLE 15
MAßE AN EQUIDENKNOCHEN

a) Oberkiefer	WA links	WA rechts
Länge der Backzahnreihe (Alveolen)	-	141
Länge der Backzahnreihe (nahe Usurfläche)	-	136
Länge der Molarreihe (Alveolen)	-	66
Länge der Molarreihe (nahe Usurfläche)	-	62
Länge der Prämolarreihe (Alveolen)	-	76,5
Länge der Prämolarreihe (nahe Usurfläche)	-	76
Länge/Breite von P 2 (nahe Usurfläche)	29,5/21,5	29,5/21,7
Länge/Breite von P 3 (nahe Usurfläche)	23,7/23,3	23,5/23,2
Länge/Breite von P 4 (nahe Usurfläche)	23/23,8	24/24
Länge/Breite von M 1 (nahe Usurfläche)	21,7/24	21,5/23,7
Länge/Breite von M 2 (nahe Usurfläche)	20,5/22	20,5/22
Länge/Breite von M 3 (nahe Usurfläche)	19,5/19	19,5/19
Abkauungsgrad	+	

b) Unterkiefer	WA links	WA rechts
Länge der Backzahnreihe (Alveolen)	-	138
Länge der Backzahnreihe (nahe Usurfläche)	-	133
Länge der Molarreihe (Alveolen)	-	68
Länge der Molarreihe (nahe Usurfläche)	-	65
Länge der Prämolarreihe (Alveolen)	-	70
Länge der Prämolarreihe (nahe Usurfläche)	-	69
Länge/Breite von P 2 (nahe Usurfläche)	24,5/13,5	25/14
Länge/Breite von P 3 (nahe Usurfläche)	23/15	23/15
Länge/Breite von P 4 (nahe Usurfläche)	22/15	22,5/15
Länge/Breite von M 1 (nahe Usurfläche)	22/14,8	22/(15)
Länge/Breite von M 2 (nahe Usurfläche)	21/13	21/13
Länge/Breite von M 3 (nahe Usurfläche)	23/11,5	22,5/13
Abkauungsgrad	+	

c) Scapula	WA
Kleinste Länge am Hals	38,5
Größte Länge des Processus articularis	60
Größte Länge der Gelenkfläche	37

d) Humerus	WA
Größte Breite distal	(51)
Breite der Trochlea humeri	48
Kleinste Breite der Diaphyse	22,5

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TABELLE 15—*Continued*

e) Radius und Ulna	WA
Größte Länge von Radius und Ulna	305
Größte Länge der Ulna	303,5
Größte Länge des Radius	257
Laterale Länge des Radius	246,5
Größte Breite proximal	54
Breite der prox. Gelenkfläche	48,5
Kleinste Breite der Diaphyse	24,7
Größte Breite distal	49
Breite der distalen Gelenkfläche	41,5

f) Acetabulum	WA
Länge, auf dem Kamm gemessen	41

g) Femur	WA
Tiefe des Caput	35
Größte Breite distal	60

h) Patella	WA
Größte Länge	44
Größte Breite	43,5

i) Tibia	WA
Größte Länge	(272)
Größte Breite distal	50
Kleinste Breite der Diaphyse	28

j) Talus	WA
Größte Höhe	40,5

k) Calcaneus	WA
Größte Länge	75,3
Größte Breite	35

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TABELLE 15—*Continued*

l) Metapodien (Abb. 88:4)	WA links	WA rechts	WA links	WA rechts	WB 921	Dalmatiner Esel	Isin Esel
Metacarpus/Metatarsus	Mc	Mc	Mt	Mt	Mt	Mt	Mt
Größte Länge	162	162	196	-	(218)	219,5	189,5
Größte Länge lateral	161	160,7	193	193	215	218	186,5
Laterale Länge	156,5	157	191	191	(213)	215,5	185
Größte Breite proximal	33	33,3	34,5	-	36	36	34
Tiefe proximal	24	23,8	-	-	-	-	-
Kleinste Breite der Diaphyse	21,2	21	20,2	20,5	20,5	20	20
Größte Breite distal	30,7	30,8	30,5	30,5	(33)	33,5	31

m) Phalanx 1 (Abb. 88:5)	WA		WA		921	Dalmatiner Esel
Vorne/hinten, links/rechts	v.l.	v.r.	h.l.	h.r.	h.r.	h.r.
Größte Länge	63,5	64	61	61	66,5	65
Größte Breite proximal	31,5	32	33	32,7	34	35,5
Tiefe proximal	24	24	25	24,7	26,5	26
Kleinste Breite der Diaphyse	19,2	19,8	19	19	20,3	21
Größte Breite distal	29	28,8	28	28	30,5	28,5

n) Phalanx 2	WA		WA	
Vorne/hinten, links/rechts	v.l.	v.r.	h.l.	h.r.
Größte Länge	31	31	31,7	31,7
Größte Breite proximal	32,5	32	31,5	31
Tiefe proximal	20,5	20,5	20,7	20,7
Kleinste Breite der Diaphyse	27,5	27	25	25
Größte Breite distal	30,5	30	27	26,8

o) Phalanx 3	WA		WA	
Vorne/hinten, links/rechts	v.l.	v.r.	h.l.	h.r.
Größte Länge	(36,5)	36,8	34	34,5
Länge: Hinterrand der Gelenkfläche - Vorderrand des Hufbeins	32,5	33	32,3	32
Dorsale Länge	30	30,8	32,5	32
Größte Breite des Hufbeins	-	37,5	36	35,8
Größte Breite der Gelenkfläche	28	28	25,5	(25,5)
Größte Höhe der Gelenkfläche	16,7	(16,5)	16	16

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ANHANG

VERTEILUNG DER FUNDE AUF DIE FUNDEINHEITEN

	Lot Number and Description*
LOCUS 8	
Fill above Fl. 1	K) Rind: Femur, Proximalteil, Epiphysenfugen im Verwachsen
LOCUS 9	
Fls. 4-5	904) Schaf oder Ziege: Unterkieferhälfte mit Alveolarperiostitis (s. S. 156)
LOCUS 12	
Drain 2	153) Rind: Brustwirbel, Proc. spinalis Schaf oder Ziege: Brustwirbel, Proc. spinalis Schwein: Kalotte mit Narbe (s. S. 157); Rippen'
LOCUS 15	
Fl. 2, Hearth 2	DD) Schaf oder Ziege: 7. Halswirbel, Wirbelscheiben im Verwachsen, angekohlt
Fls. 2-3	160) Rind: 2 zusammengehörige Brustwirbel, Wirbelscheiben im Verwachsen Schaf: Metatarsus, Proximalende (Tab. 12*o*)
	BB) Schaf oder Ziege: 2 M superiores; Unterkiefer', M 3 im Durchbruch; Radius, Distalteil, Epiphysenfuge offen Schaf: Epistropheus, Wirbelscheibe lose Schwein: Hirnschädelsplitter
Fl. 3	M) Rind: Rippen' Schaf: Metacarpus (Tab. 12*h*)
LOCUS 16	
Fl. 1	D) Mensch: (s. S. 154) Rind: Scapula, Distalteil, Tuber angewachsen; Ulna'; Phalanx 1 (Tab. 10*d*) Schaf oder Ziege: Oberkiefer'; Becken' (Tab. 12*i*); Tibiakörper, Proximalteil, Epiphysenfuge offen; Tibia, Proximalende (Tab. 12*l*); Rippen'

*Ein Apostroph hinter der Knochenbezeichnung bedeutet "Bruchstück", zum Beispiel: Oberkiefer' = Oberkieferbruchstück.

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Lot Number and Description

Schaf: Scapula'; Metacarpus, Proximalteil, verkohlt; Becken' (Tab. 12*i*)
Schwein: Radius, Distalende, Epiphysenfuge offen

Fl. 2

U) Rind: Humerussplitter
Schaf oder Ziege: Unterkieferhälfte (Tab. 12*c*)
Schwein: Rippen'; Darmbein, Acetabulumfuge offen
Hund: 2 zusammengewachsene Lendenwirbel (s. S. 159)

Fl. 2, Hearth 2

W) Schaf oder Ziege: Lendenwirbel', Wirbelscheibe lose
Schaf: Phalanx 1 (Tab. 12*p*)
Ziege: Talus (Tab. 12*m*)

Fl. 2, Hearth 2

Y) Schaf: Hornzapfen', ♂, gedreht

Fls. 2-3

171) Rind: Rippen'; Metatarsus, Proximalende (Tab. 10*c*)

HH) Rind: Radius, sagittal gespaltener Distalteil, adult
Schaf oder Ziege: Rippen'

Fls. 3-4

174) Schaf: Hirnschädeldach', hornlos
Schwein: Rippen'; Femur, Distalteil, Epiphysenfuge offen

T) Rind: Radius, Proximalteil und Ulna', adult; 2 Femur'; Talus, proximale Ecke, verkohlt; Phalanx 1'; 2 Phalanges 1 (Tab. 10*d*); 2 Phalanges 2 (Tab. 10*e*)
Schaf oder Ziege: Oberkiefer', M 3 im Durchbruch, Unterkiefer', M 3 im Durchbruch, wohl zusammengehörig; Unterkiefer, etwa adult; Atlas und Epistropheus, zusammengehörig, juvenil; 2 Brustwirbel'; Lendenwirbel'; 5 Rippen'; Humerus, Distalteil, infantil; 2 Femurdistalteile, Epiphysenfuge verwachsen (Tab. 12*k*) - Mindestindividuenzahl 4 (2 adult, 1 juvenil, 1 infantil)
Schaf: Radius, Proximalende (Tab. 12*g*) und Ulna', dazugehörig
Ziege: Humerus, Distalende (Tab. 12*f*)
Gazelle: Metatarsus, Corpusabschnitt (s. S. 156)
Schwein: Hirnschädel', infantil; Unterkiefersplitter; 2 Rippen', infantil; Brustwirbel, Proc. spinalis; 2 Scapula' (Tab. 14*c*); Humerus, Distalende (Tab. 12*d*); Femur, lose distale Epiphyse

Fl. 5

O) Rind: 2 Tali (Tab. 10*a*)
Schaf oder Ziege: Metacarpussplitter; Tibia, lose proximale Epiphyse

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Lot Number and Description

Schaf: Hornzapfenspitze; Humerus, Distalende (Tab. 12*f*); Talus (Tab. 12*m*)
Schwein: Rippen'

Fls. 5a-6 905) Rind: Caput femoris, glatt abgesägt
Schaf oder Ziege: M 2, geringgradig abgerieben; abgeschliffener Talus (s. S. 156 und Tab. 12*m*)
Schaf: Metatarsus, Proximalende (Tab. 12*o*)
Schwein: Unterkieferpartie in Teilen (Tab. 14*a*)

Below Fl. 6 914) Rind: Unterkiefer'

LOCUS 17

Fls. 1-2 958) Rind: Radius' und Ulna', zusammengehörig, wohl adult
Schaf oder Ziege: M 3 (Tab. 12*c*); Rippen'; Tibiakörper'
Schaf: Humerus, Distalende (Tab. 12*f*); Tibia, Proximalende (Tab. 12*l*); Tibia, Distalende (Tab. 12*l*); Metatarsus, Distalende (Tab. 12*o*)

Fls. 2-3, NE of Small Wall 970) Rind: Rippen'
Schaf oder Ziege: Rippen'; Femur'
Schaf: Radius, Proximalende (Tab. 12*g*), und Ulna', dazugehörig
Schwein: Femurkörper', infantil-juvenil
Stockente: Humeruskörper (s. S. 161)

Fls. 2-3, SW of Small Wall 963) Rind: Tibiakörper'

Q) Rind: 3 Unterkiefer' von mindestens 2 Tieren
Schaf oder Ziege: 2 Incisivi; Rippen'
Schaf: Kalotte in Teilen, behornt, ♂(?); Metacarpus, Proximalteil
Schwein: Unterkieferhälfte, M 2 noch nicht im Durchbruch; Femur, lose distale Epiphyse
Bläßhuhn: Tibiotarsus, Distalteil (s. S. 162)
Wels: Silurus triostegus: Cleithrum, Epioticum(?) (s. S. 162)
Cyprinide: Vertebra caudalis, Lepidotrichie
Unbestimmt: Schaftstück eines Säugerknochens

Fls. 3-4 990) Schaf oder Ziege: Unterkiefer', M 1 geringgradig abgerieben, M 2 noch nicht im Durchbruch
Schaf: Hirnschädeldach', Behornung angedeutet, ♀(?);

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Lot Number and Description

Humerus, Distalende, Epikondylenfugen im Verwachsen, Ulna, wohl dazugehörig; Phalanx 1 mit "Leist" (s. S. 156 und Tab. 12*p*)

Fl. 4

B) Rind: Centrotarsale (Tab. 10*b*) und dazugehöriger Metatarsus, Proximalteil, ♀
Schaf: Tibia, Proximalende (Tab. 12*l*)
Schwein: Kalotten'; Atlas (Tab. 14*b*); Brustwirbel, Lendenwirbel, an beiden sind die Wirbelscheiben nicht angewachsen

Fls. 4-5

993) Rind: Gesichtsschädel'; Unterkiefer', Diastemaregion

L) Rind: Scapula'; Ulna'; Phalanx 3 (Tab. 10*f*)
Schaf oder Ziege: 2 Rippen'; Lendenwirbel, Wirbelscheiben lose
Schaf: Radius, Proximalende (Tab. 12*g*); Tibia, Distalende (Tab. 12*l*); Metatarsus, Proximalende (Tab. 12*o*); Metatarsus, Distalende (Tab. 12*o*)
Ziege(?): Phalanx 1 (Tab. 12*p*)
Schwein: Oberkiefer', M 2 begann zu reiben; 2 Scapulaenden (Tab. 14*c*); Humerus, Distalende (Tab. 14*d*)
Kormoran: Humerus, Proximalteil (s. S. 160)

LOCUS 18

Above Fl. 1, NE

919) Schaf oder Ziege: Unterkiefer' (Tab. 12*c*); Brustwirbel, Wirbelscheiben lose; Scapula'
Schaf: Calcaneus', wohl adult
Unbestimmt: 2 Röhrenknochensplitter

Fls. 1-2, NE

920) Rind: Humerus'; Radius, Distalteil und C 2 et 3, zusammengehörig, infantil-juvenil
Schaf oder Ziege: Hirnschädel'; 2 Rippen'; Radius'
Schaf: Atlas (Tab. 12*d*); Ulna, Proximalteil, Tuber noch nicht angewachsen; Ulna'
Ziege: Phalanx 3 (Tab. 12*r*)
Schwein: Unterkieferkörper', M 3 noch nicht im Durchbruch

920B) Schaf oder Ziege: Unterkiefer', M 2 geringgradig abgerieben, M 3 noch nicht im Durchbruch; Rippen'; Radiuskörper'; Darmbein'; Tibiakörper', proximale Epiphysenfuge offen;
Schaf: Darmbein', ♂ (?).

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Lot Number and Description

Fl. 2, center, NW of tunnel — 929) Equide: Halswirbel'

Fls. 2-3 — 931) Rind: Rippen'
Schaf oder Ziege: Radiuskörper', wohl adult
Ziege: Phalanx 1 (Tab. 12*p*)
Schwein: Tibiakörper', distale Epiphysenfuge offen

LOCUS 21

Fls. 1-2 — 921) Equide: T c, T 3, Metatarsus und Phalanx 1 (s. S. 158 und Tab. 15*l*, *m*)

LOCUS 22

Floor — I) Schaf oder Ziege: M ^{3}, mittelgradig abgerieben; Unterkiefer in Teilen, Gebiß mittelgradig abgerieben; Tibia, Distalteil, Epiphysenfuge verwachsen
Ziege: Phalanx 1, angekohlt (Tab. 12*p*); Phalanx 2 (Tab. 12*q*)
Bläßhuhn: Tibiotarsus, Distalteil (s. S. 162)

NW Quadrant — EE) Schaf oder Ziege: Phalanx 1, Epiphysenfuge offen, infantil
Schaf: Ulna, Proximalteil, adult

SW Quadrant — Z) Ziege: Becken' (Tab. 12*i*)
Schwein: Halswirbel, Wirbelscheiben lose
Unbestimmt: Verkohlter Röhrenknochensplitter

5th Quadrant — FF) Schaf oder Ziege: Brustwirbelsplitter; Rippen'
Schwein: Hirnschädel'

6th Quadrant — GG) Rind: Rippen'
Schwein: Radius, Proximalteil, verkohlt (klein, schlankwüchsig)

Hearths L-B — C) Rind: Hirnschädel'
Schwein: Humerus, Distalteil, Epiphysenfuge offen; Radius, Proximalende (Tab. 14*e*)

LOCUS 24

Fls. 3-4 — 995) Rind: Rippen'; Humerus'
Schwein: Humerus, proximale Epiphysenfuge offen, distale Epiphysenfuge geschlossen (Tab. 14*d*)

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Lot Number and Description

Fls. 4-5 1002) Rind: Radius mit Ulna, Corpus'
Schaf oder Ziege: Lendenwirbelkörper, adult; Femur'
Schaf: Scapula (Tab. 12*e*); Metacarpus (Tab. 12*h*)
Schwein: Unterkiefer', M 3 noch nicht durchgebrochen; Radius, Proximalende (Tab. 14*e*)

LOCUS 26

Fl. 4, above oven, S corner 1012) Rind: Lendenwirbel', Talus (Tab. 10*a*)
Schaf: Talus, anscheinend juvenil
Schwein: Unterkiefer', ♂, etwa subadult; Metatarsus IV (Tab. 14*g*)

Fls. 4-5 1020) Rind: Rippenkopf, kalziniert
Schaf oder Ziege: Radiuskörper, juvenil, gebrannt
Ziege: Talus, verkohlt (Tab. 12*m*)
Gazelle: Metacarpus, Distalende, gebräunt (s. S. 156)
Schwein: Femur', distale Epiphysenfuge offen, juvenil, angekohlt

Fls. 5-6 1023) Schaf: Radius, Distalende, verkohlt (Tab. 12*g*);
Weichschildkröte: Femur (s. S. 162)

Fls. 6-7 1025) Schaf: Metacarpus'; Phalanx 1 (Tab. 12*p*)

Fls. 8-9 1028) Schaf oder Ziege: Unterkieferast; Rippen'
Schaf: Metatarsus, Proximalende (Tab. 12*o*)

LOCUS 27

Fls. 3-4 1013) Schaf oder Ziege: Radiuskörper'

LOCUS 28

Fls. 3-4 985) Rind: Talus (Tab. 10*a*)

Fls. 6-7 997) Schwein: Metacarpus V, Epiphysenfuge offen
Equide: P_3 oder P_4 (s. S. 158)

Fls. 7-8 1014) Rind: Humerus, Distalteil, etwa adult

LOCUS 30

SE, Fls. 1-2 964) Schaf: Metacarpus'

SE, Fl. 3(?) X) Schaf: Calcaneus', wohl adult

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Lot Number and Description

NW, Fls. 2-3	973)	Unbestimmt: Röhrenknochensplitter (Rind?)
SE, Fls. 4-5	983)	Schaf oder Ziege: Unterkieferast Schaf: Scapula, Distalende (Tab. 12*e*); Tibia, Distalende (Tab. 12*l*) Schwein: Unterkieferhälfte, M 1 frisch in Reibung; Humerus, Distalende (Tab. 14*d*); Talus (Tab. 14*f*)
NW, Fls. 3-4	977)	Rind: Hirnschädel' Schaf oder Ziege: Unterkiefersplitter Schwein: Oberkiefer', M 1 noch nicht im Durchbruch, und Unterkieferhälfte, Pd4 begann zu reiben, M 1 noch nicht im Durchbruch, zusammengehörig; Brustwirbel', Wirbelscheiben lose; Femur, Distalteil, Epiphysenfuge offen
NW, Fls. 4-5	984)	Rind: Phalanx 1, Proximalende (Tab. 10*d*)
NW, Fl. 5	AA)	Schwein: Mt III oder IV, Distalhälfte, Epiphysenfuge offen
Entire locus, Fls. 5-6	1001)	Rind: Talus (Tab. 10*a*) Schaf oder Ziege: Rippen' Schaf: Humerus, Distalteil, etwa adult; Phalanx 1 Tab. 12*p*) Gazelle: Unterkieferast'
SE, Fls. 6-6a	1022)	Rind: Tibiasplitter; Metacarpus, Rollenstück, etwa adult Schaf oder Ziege: Hornzapfen', ♂; Metatarsussplitter
NW, Fl. 6(?)	S)	Rind: Phalanx 2, verkohlt Schwein: Atlasflügel; Humerus, Distalende (Tab. 14*d*)
NW, Fls. 6-7	1019)	Schaf oder Ziege: Unterkiefer', adult; Brustwirbel, Proc. spinalis Schaf: Radius, Proximalende (Tab. 12*g*); Metacarpus, Distalende (Tab. 12*h*); Calcaneus (Tab. 12*n*) Schwein: Brustwirbel', juvenil; Rippen' Wasserschildkröte: Nackenplatte (s. S. 162)
SE, Fls. 6a-7	1024)	Rind: Scapula, Distalteil, etwa adult Schaf: 2 Radien, Proximalenden (Tab. 12*g*); Radius, Distalende (Tab. 12*g*)

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Lot Number and Description

LOCUS 31

Fl. 1

J) Rind: Lendenwirbelsplitter
Schaf oder Ziege: Rippen'
Schaf: Radius, Proximalende (Tab. 12*g*); Calcaneus (Tab. 12*n*)
Schwein: Unterkiefer, Schnauzenpartie, jungadult, ♀; Rippen'
Unbestimmt: Dünne Knochenspange

Fl. 2

R) Mensch: (s. S. 154)
Schaf oder Ziege: Temporale'; Oberkiefer', Pd kurz vor dem Wechsel (≈ M 3 im Durchbruch)
Schaf: Phalanx 1 (Tab. 12*p*)
Schwein: Brustwirbel, Lendenwirbel, beide juvenil; Radius, neonat, angekohlt
Schlangenhalsvogel: Furculahälfte (s. S. 160)
Tafelente: Femur (s. S. 161-62)
Welsart: Vertebra caudalis (s. S. 162)
Unbestimmter Fisch: Costa (Mittelstück)

Fl. 3

H) Schaf: Hinterhaupt' (Tab. 12*b*)

P) Schaf oder Ziege: Brustwirbel
Schaf: Tibia, Proximalende (Tab. 12*l*)
Schwein: Darmbein, Acetabulumfuge offen; Becken', Acetabulumfuge geschlossen
Gans: Coracoid, Sternalteil (s. S. 161)
Löffelente: Humerus, Distalteil (s. S. 161)
Zwergsäger: Humerus (s. S. 161)

Fl. 3, Drain

V) Schaf oder Ziege: Rippe
Spießente: Teile eines "Kern"skeletts (s. S. 161)
Unbestimmt: Röhrenknochensplitter (Schaf oder Ziege?)

LOCUS 32

Fl. 2

N) Rind: Gesichtsschädel'
Ziege: Hirnschädel' (Tab. 12*a*)
Schwein: Humerus, Distalende (Tab. 14*d*)

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Lot Number and Description

LOCUS 34

Fill above floor to "Rm. 2"(?)

F) Schaf oder Ziege: Oberkiefer', M 3 geringgradig abgerieben; M ^{1}; Unterkieferkörper, M 2 begann zu reiben; Brustwirbel, Proc. spinalis; Scapula, Distalteil; Calcaneus, Tuber noch nicht angewachsen
Schaf: Scapula'
Ziege: Radius, Proximalende (Tab. 12*g*)
Schwein: Hirnschädel'; Metacarpus IV, Epiphysenfuge offen; Femur, Proximalteil, Epiphysenfugen offen

Doorway

CC) Schaf oder Ziege: M ^{2}, geringgradig abgerieben

Fl. 2

G) Rind: Rippen'; Metacarpussplitter
Schaf: Femur, Proximalende (Tab. 12*k*)
Schwein: Brustwirbel'

LOCUS 35

Fl. 1

E) Mensch: (s. S. 154)
Rind: Talus, verkohlt (Tab. 10*a*); Phalanx 1 (Tab. 10*d*)

LOCUS 36

Fill above floor

A) Rind: Oberkiefer', M 3 mittelgradig abgerieben
Schaf: Metatarsus, Proximalende (Tab. 12*o*)
Schwein: Unterkieferkörper, etwa adult; Metacarpus III (Tab. 14*g*)

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LITERATURVERZEICHNIS

Boessneck, J. 1960. Zur Gänsehaltung im alten Ägypten. *Wiener Tierärztliche Monatsschrift. Festschrift Professor Schreiber*, pp. 192-206.

_____. 1962. Die Domestikation der Graugans im alten Aegypten. *Zeitschrift für Tierzüchtung und Züchtungsbiologie* 76:356-57.

_____. 1969. Osteological differences between sheep (Ovis aries Linné) and goat (Capra hircus Linné). In *Science in Archaeology*, 2d ed., ed. D. Brothwell and E. Higgs, pp. 331-58. New York and Washington.

_____. 1973. *Die Tierknochenfunde aus dem Kabirenheiligtum bei Theben (Böotien)*. Munich.

_____. 1973a. Tierknochenfunde vom Zendan-i Suleiman (7. Jahrhundert v. Christus). *Archaeologische Mitteilungen aus Iran*, NF 6:95-111.

_____. 1973b. Was weiß man von den alluvial vorgeschichtlichen Equiden der Iberischen Halbinsel? In *Domestikationsforschung und Geschichte der Haustiere*, J. Matolcsi, pp. 277-84. Budapest.

_____. 1975. Ein altägyptisches Hundeskelett aus der 11. Dynastie. *Mitteilungen des Deutschen Archäologischen Instituts, Abteilung Kairo* 31, 1:7-13.

_____. 1976. *Tell el-Dab'a III. Die Tierknochenfunde 1966 - 1969*. Österreich. Akademie der Wissenschaften. Denkschriften der Gesamtakademie, Vol. 5. Vienna.

Boessneck, J.; von den Driesch, A.; Meyer-Lemppenau, U.; and Wechsler-von Ohlen, E. 1971. *Die Tierknochenfunde aus dem Oppidum von Manching*. Die Ausgrabungen in Manching, Vol. 6. Wiesbaden.

Boessneck, J., and Krauss, R. 1973. Die Tierwelt um Bastam/Nordwestazerbaidjan. *Archaeologische Mitteilungen aus Iran*, NF 6:113-33.

Boessneck, J.; Müller, H.-H.; and Teichert, M. 1964. Osteologische Unterscheidungsmerkmale zwischen Schaf (Ovis aries LINNÉ) und Ziege (Capra hircus LINNÉ). *Kühn-Archiv* 78:1-129.

Cornevin, Ch., and Lesbre, F.-X. 1894. *Traité de l'âge des animaux domestiques*. Paris.

von den Driesch, A. 1972. *Osteoarchäologische Untersuchungen auf der Iberischen Halbinsel*. Studien über frühe Tierknochenfunde von der Iberischen Halbinsel, Vol. 3. Munich.

oi.uchicago.edu

_____. 1975. Die Bewertung pathologisch-anatomischer Veränderungen an vor- und frühgeschichtlichen Tierknochen. In *Archaeozoological Studies*, ed. A. T. Clason, pp. 413-25. Amsterdam and Oxford.

_____. 1976. *Das Vermessen von Tierknochen aus vor- und frühgeschichtlichen Siedlungen.* Munich. (= *A Guide to the Measurement of Animal Bones from Archaeological Sites*. Harvard University. Peabody Museum of Archaeology and Ethnology. Peabody Museum Bulletin, Vol. 1).

von den Driesch, A., and Boessneck, J. 1974. Kritische Anmerkungen zur Widerristhöhenberechnung aus Längenmaßen vor- und frühgeschichtlicher Tierknochen. *Säugetierkundliche Mitteilungen* 22:325-48.

Gibson, McG. 1974. The twelfth season at Nippur. *Expedition* 16/4:23-32.

Harrison, D. L. 1968. *The mammals of Arabia* 2. London.

_____. 1972. *The mammals of Arabia* 3. London.

Hatt, R. T. 1959. *The mammals of Iraq*. Miscellaneous Publications, Museum of Zoology, University of Michigan, No. 106. Ann Arbor, Michigan.

Heinzel, H.; Fitter, R.; and Parslow, J. 1972. *Pareys Vogelbuch*. Hamburg and Berlin.

Herre, W., and Röhrs, M. 1958. Die Tierreste aus den Hethitergräbern von Osmankayası. In *Die Hethitischen Grabfunde von Osmankayası*. Wissenschaftliche Veröffentlichungen der Deutschen Orient-Gesellschaft, Vol. 71, Kurt Bittel et al., pp. 60-80. Berlin.

Hilzheimer, M. 1941. *Animal remains from Tell Asmar*. Studies in Ancient Oriental Civilization, No. 20. Chicago.

Hüe, F., and Etchécopar, R. D. 1970. *Les Oiseaux du Proche et du Moyen Orient*. Paris.

Lange, J. 1972. Studien an Gazellenschädeln. Ein Beitrag zur Systematik der kleineren Gazellen, *Gazella* (De Blainville, 1816). *Säugetierkundliche Mitteilungen* 20:193-249.

Nieberle, K., and Cohrs, P. 1962. *Lehrbuch der speziellen pathologischen Anatomie der Haustiere*. 4th ed. Stuttgart.

Salonen, A. 1970. *Die Fischerei im alten Mesopotamien*. Annales Academiae Scientiarum Fennicae, Ser. B, Vol. 166. Helsinki.

Silver, I. A. 1963. The ageing of domestic animals. In *Science in archaeology*, ed. D. Brothwell and E. Higgs, pp. 250-68. London.

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Strommenger, E. 1962. *Fünf Jahrtausende Mesopotamien*. Munich.

Voous, K. H. 1962. *Die Vogelwelt Europas und ihre Verbreitung*. Hamburg and Berlin.

Woelfle, E. 1967. *Vergleichend morphologische Untersuchungen an Einzelknochen des postcranialen Skelettes in Mitteleuropa vorkommender Enten, Halbgänse und Säger*. Munich.

Zietzschmann, O. 1924. *Lehrbuch der Entwicklungsgeschichte der Haustiere*. Berlin.

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8

COMMENTS ON THE INFILLINGS OF VARIOUS OLD BABYLONIAN AND KASSITE STRUCTURES AT NIPPUR

Karl W. Butzer

All of the samples studied from Judith A. Franke's 1973 excavations are basically similar on several counts: (a) The size-grades above 37 microns consist almost exclusively of debris derived from partial disintegration of mud brick and potsherds, although this detrital component varies from 8.8 to 39.8 percent total weight. (b) There is a small but conspicuous component of charcoal dust and diffuse organic matter in each, although the percentage of O.M. varies from 0.7 to as much as 3.2. (c) There is pink to light brown calcareous microbone in each sample, with long bones and vertebrae several mm length/diameter recognizable in the coarsest grades (2-6 mm). (d) The underlying mineral components are all derived from a fine silty sediment—i.e., flood silts of the Tigris-Euphrates system—composed initially of quartz/quartzite, feldspar, muscovite, clay minerals, and salts; the resulting "soils" are essentially the product of this original material and with the exception of sample M-17 qualify as silt loams.

There are significant differences as well. Samples M-17 (floor of large room in Kassite public building) and M-101 (unroofed Old Babylonian courtyard) are relatively compact, relatively clayey, and show moderately good, bimodal sorting in the coarse silt and clay fractions. This suggests sedimentation by moving water. Furthermore, M-17 is essentially devoid of coarse debris, with textural maxima at 12 and under 1 microns. Sedimentation was probably due to rain or flood waters washing rapidly into a covered area, but filtered by an indirect or long, circuitous trajectory, prior to ponding inside. It is almost certain that this accumulation took place before the building had collapsed or been destroyed. Sample M-101 implies strong washing in an open situation, with abundant debris and water available.

The remaining samples M-33, M-41, and M-42 are all rich in debris, poorly sorted and low in clay, but also poorly compacted. It would appear that these sediments underwent only limited water transport and sorting and represent debris primarily due to collapse and weathering in place. The presence on only these three samples of abundant salt microconcretions and efflorescences suggests a damp, shaded or enclosed microenvironment.

Organic matter and phosphorous tests were carried out through the courtesy of the University of Wisconsin Extension Division. The former component is relatively abundant in the three samples attributed to a damp, shaded or enclosed microenvironment. Phosphates are exclusively enriched in samples M-33 and M-41, suggesting an inverse correlation with calcium carbonate content.

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Although five samples are inadequate to make firm diagnoses, let alone generalizations, these results convince the writer that field macroscopic examination of excavation facies, combined with a comprehensive sedimentological program, could provide interesting information on postoccupation modification of architectural complexes built primarily of a fragile construction material such as mud brick.

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TABLE 16
LABORATORY DATA OF SELECTED SAMPLES FROM NIPPUR

Sample Number	Munsell Color	Carbonates (percent)	Organic Matter (percent)	Phosphorous	Detrital Component*	Silt (percent)	Clay (percent)
M-17	10YR 6/3	30.9	0.7	11.5 ppm	8.8	60.8	34.6
M-33	10YR 5/2	16.4	3.2	53.9 ppm	39.8	71.3	10.8
M-41	10YR 5.5/2	17.5	2.3	58.0 ppm	37.2	75.0	7.5
M-42	10YR 6/2	42.4	1.9	9.3 ppm	27.6	71.3	15.5
M-101	10YR 5/3	30.2	1.0	11.9 ppm	36.5	64.2	22.1

*Total weight of fragmented but recognizable mud brick and potsherds expressed as percentage of total weight under 2 mm diameter.

FIGURES

KEY TO PLANS & SECTIONS

LIMIT OF EXCAVATION

ANCIENT CUT

RECONSTRUCTION

6 SQUARE NUMBER

17 LOCUS NUMBER

C SECTION IDENTIFICATION

B.9 BURIAL NUMBER

BAKED BRICK

MUD BRICK

BROKEN MUD BRICK

ASH PITS

ASH LAYERS

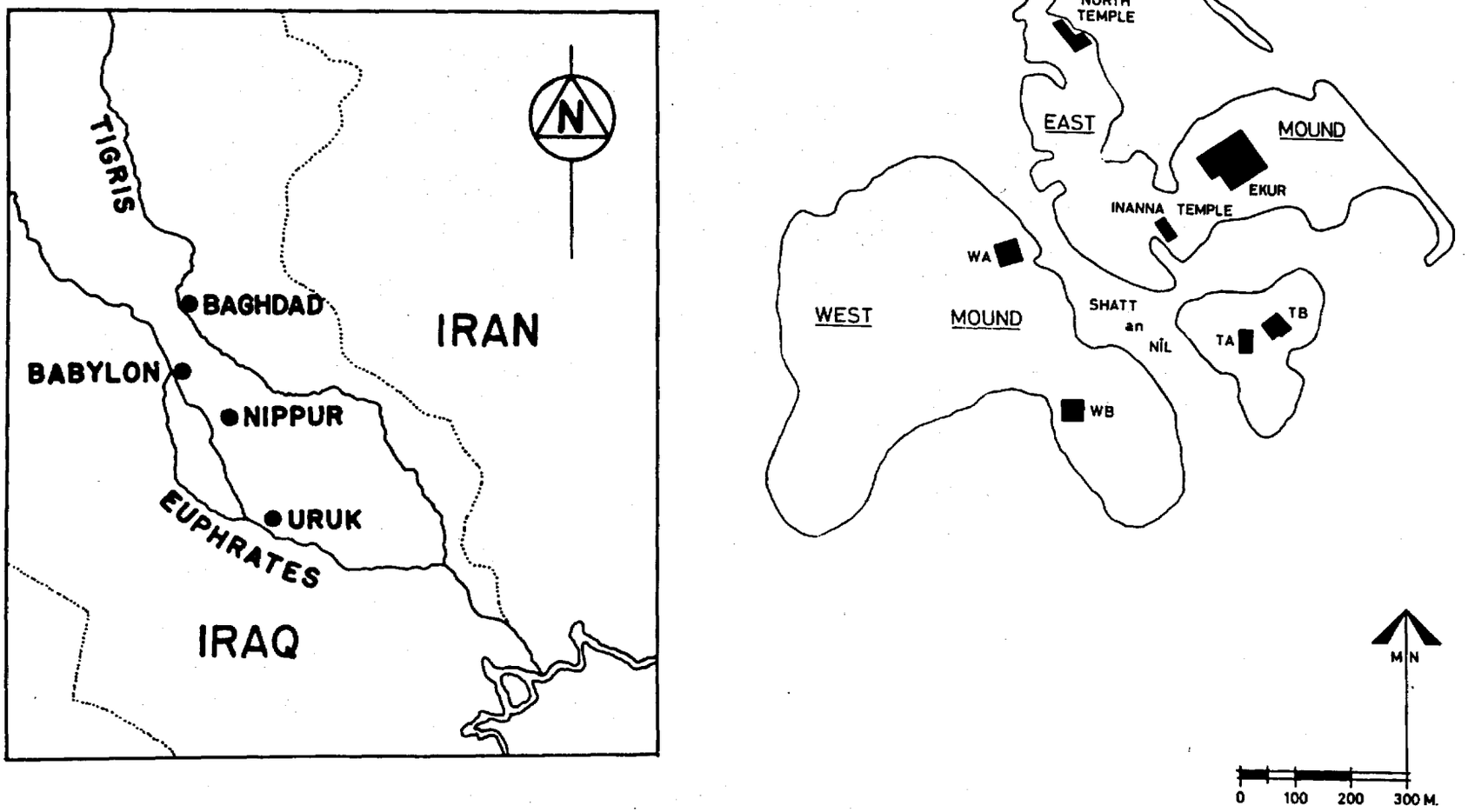
DENSE DEBRIS, MUD PLASTER

TRASH PIT

WIND & WATER LAID DEBRIS

AREA WA

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1

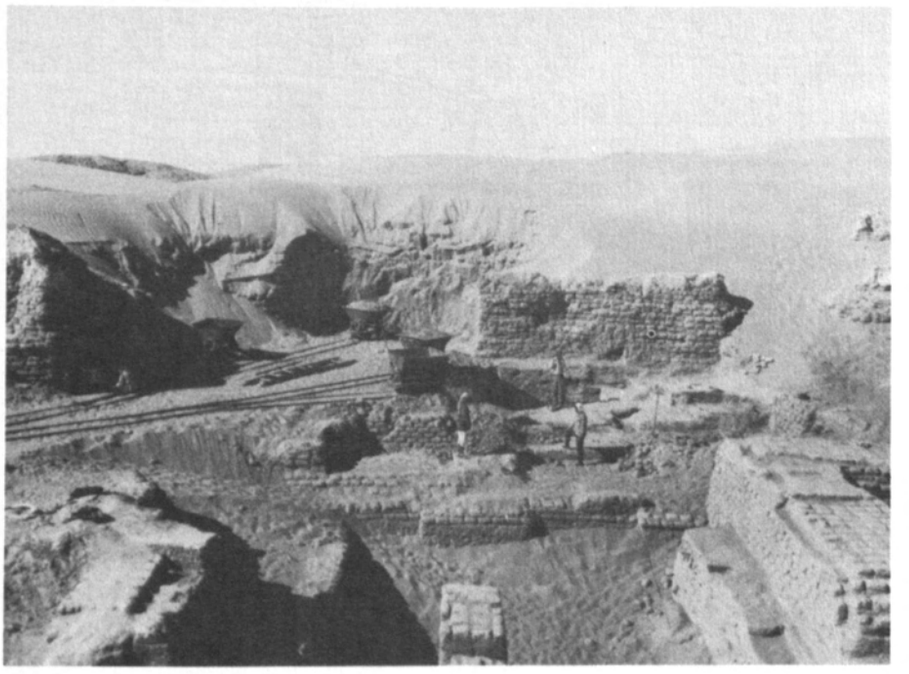
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Fig. 1.—(1) Map of Iraq. (2) Site Map.

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1



2

Fig. 2.—(1) WA at end of eleventh season, from NE. (2) WA, middle of twelfth season, from NE.

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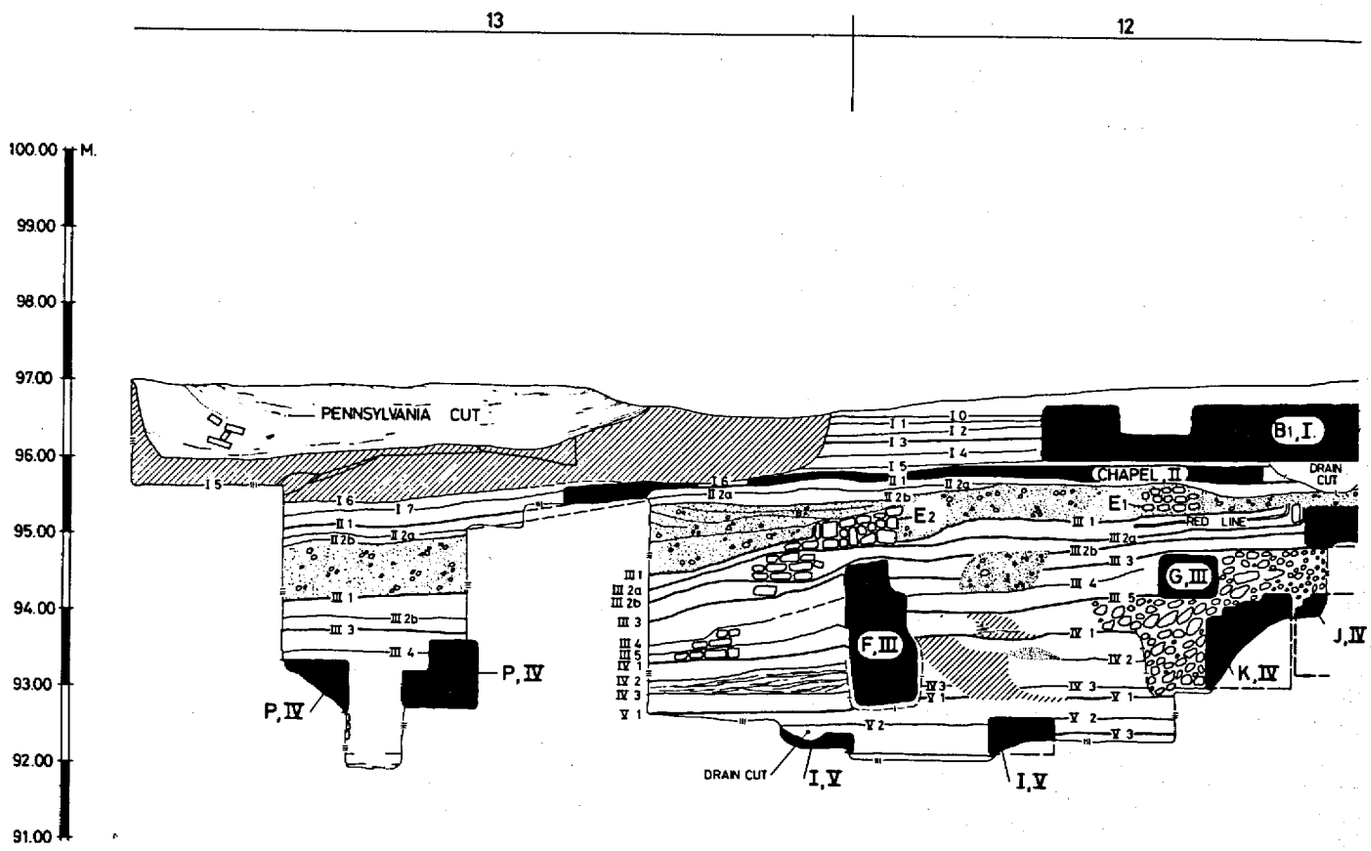
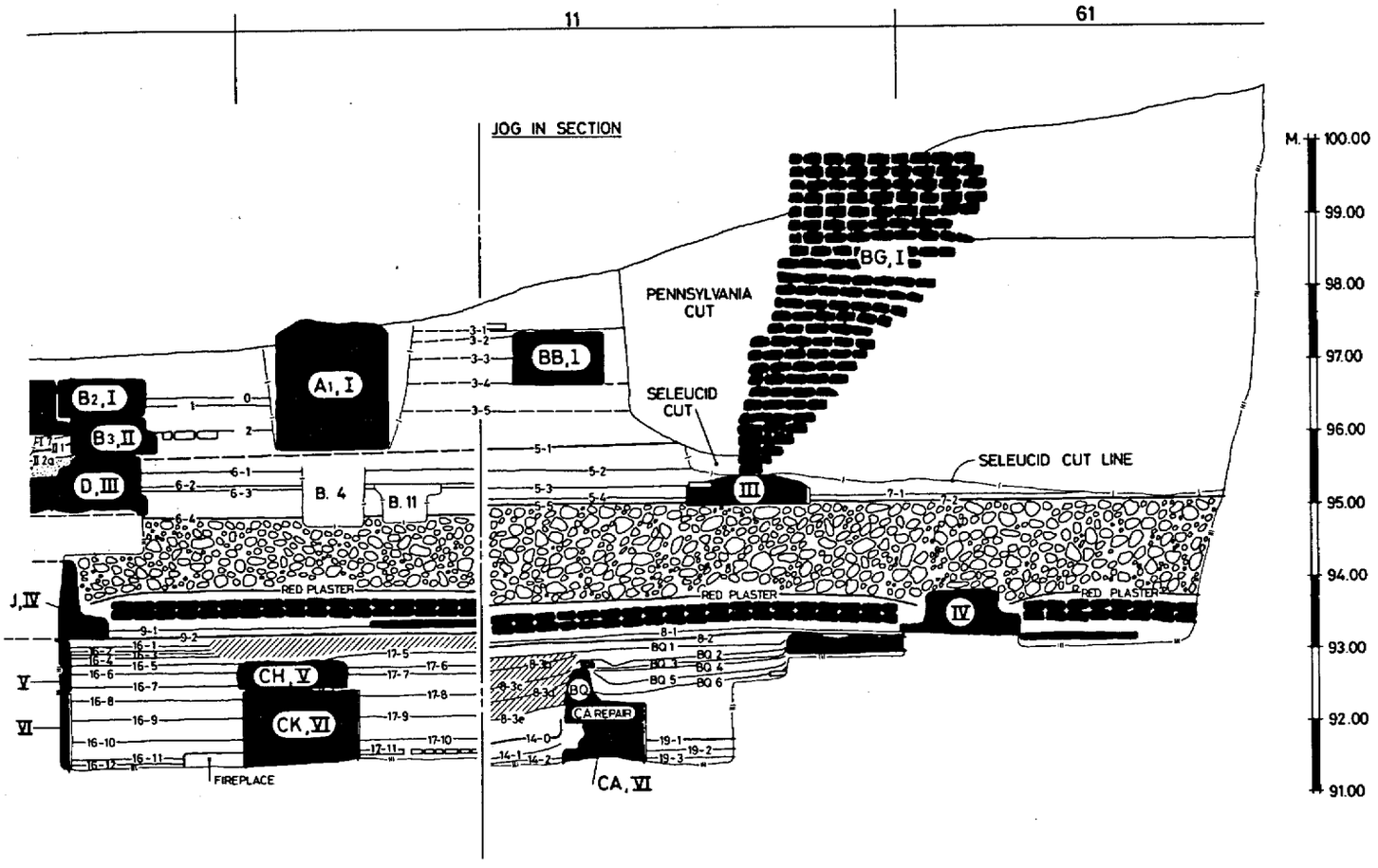


Fig. 3:1.—WA, Section CC

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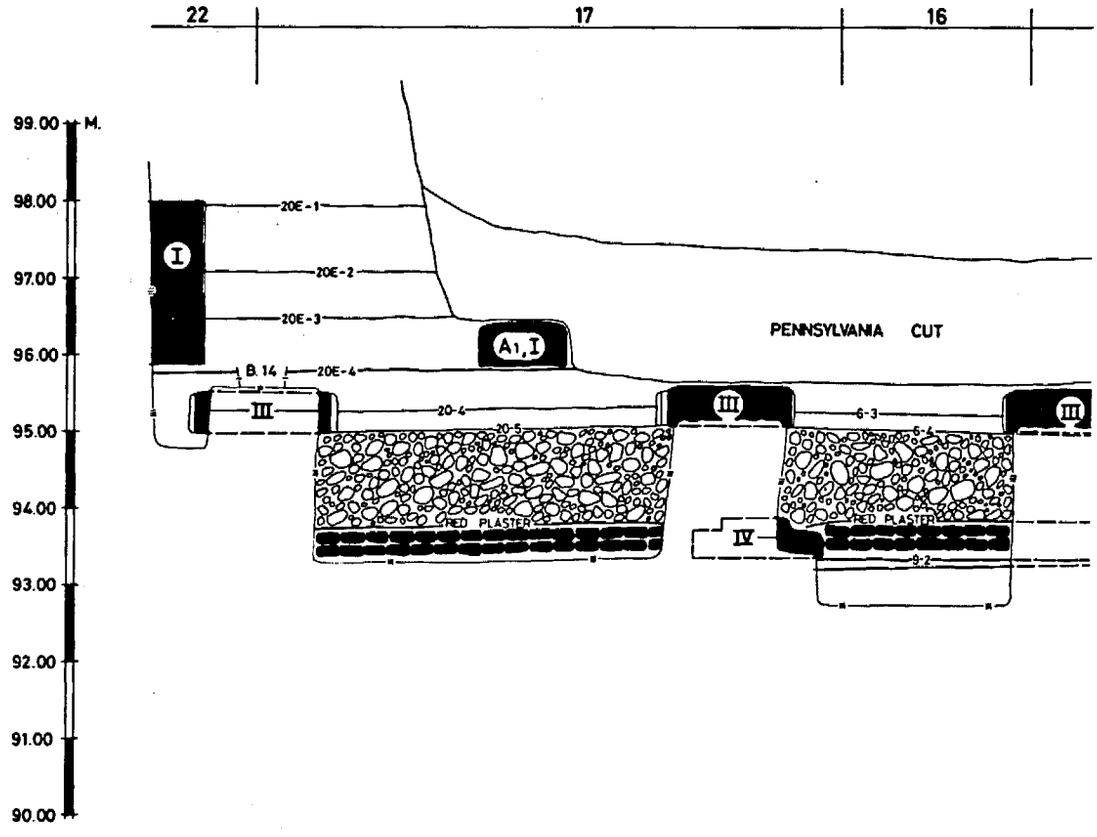
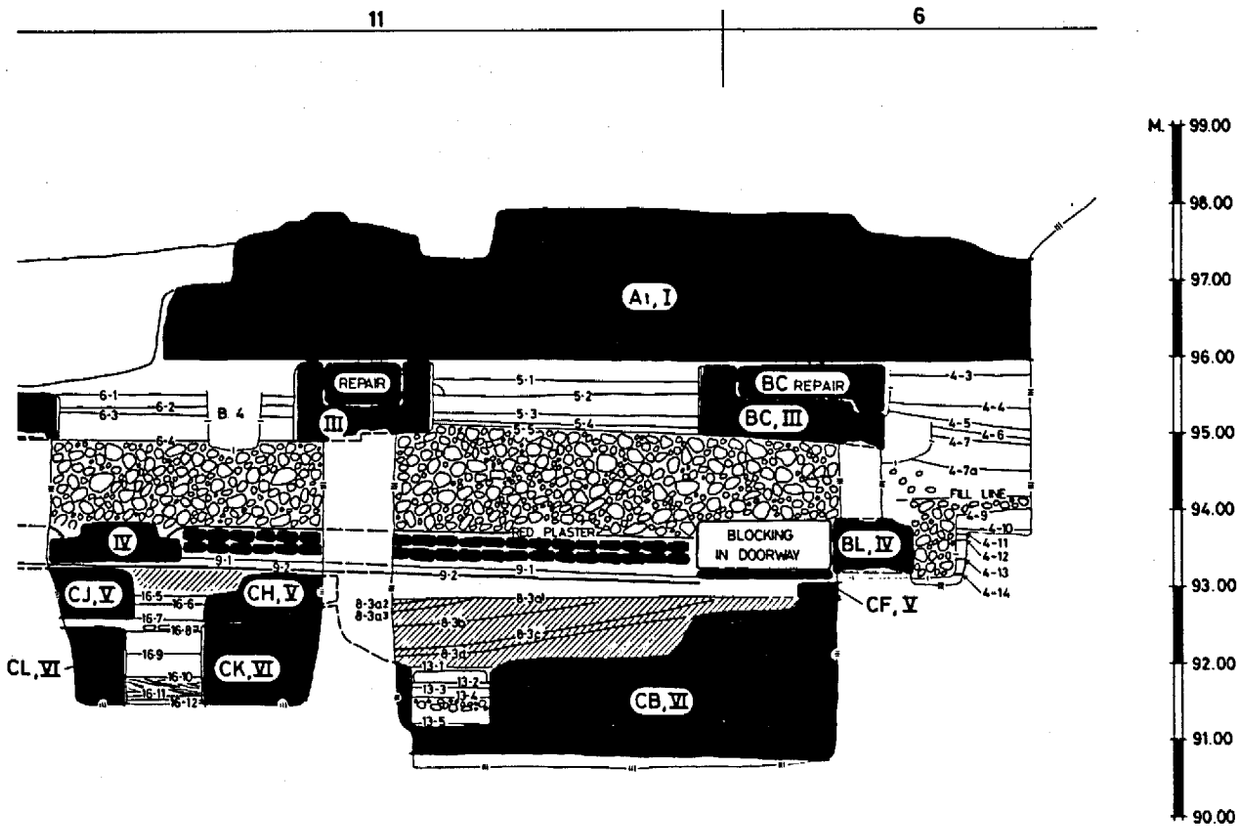


Fig. 3:2.—WA, Section FF

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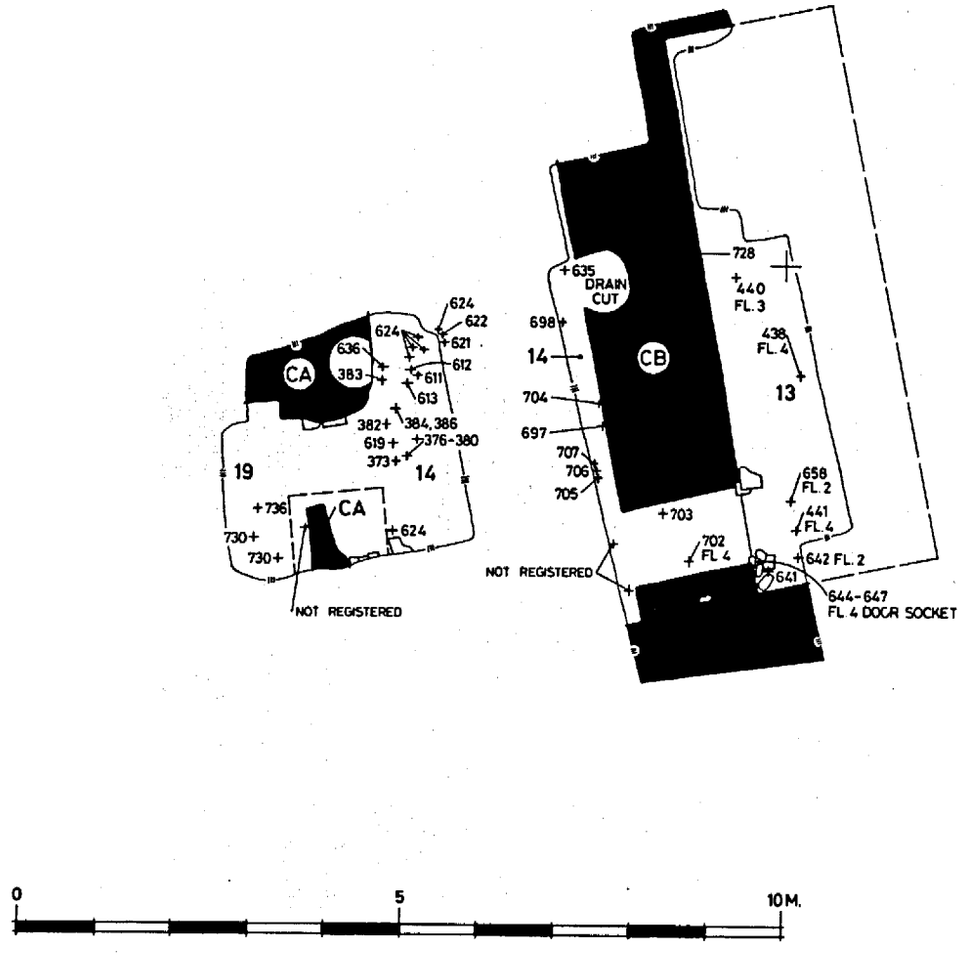
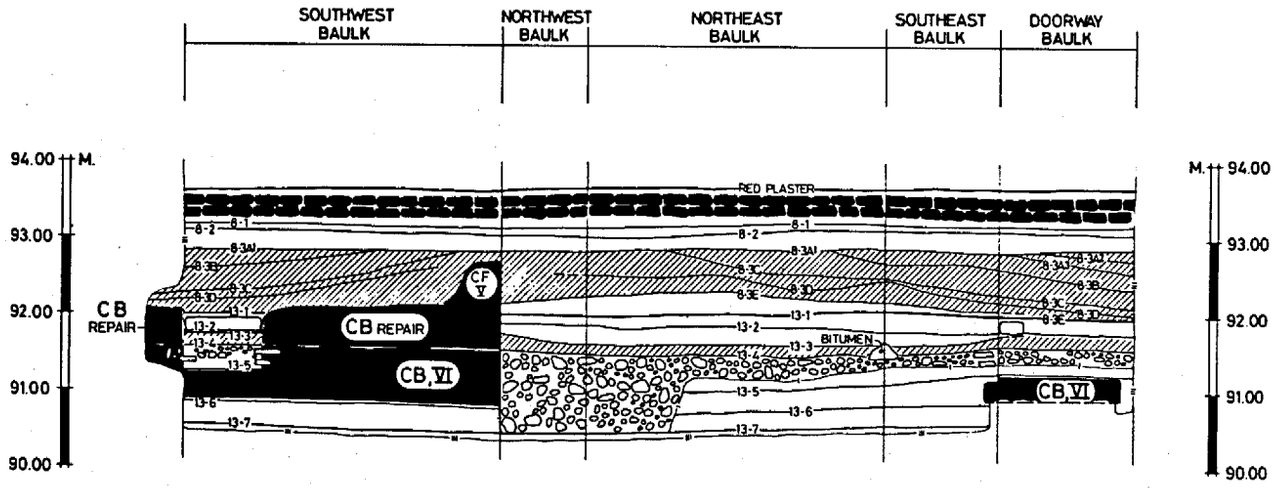
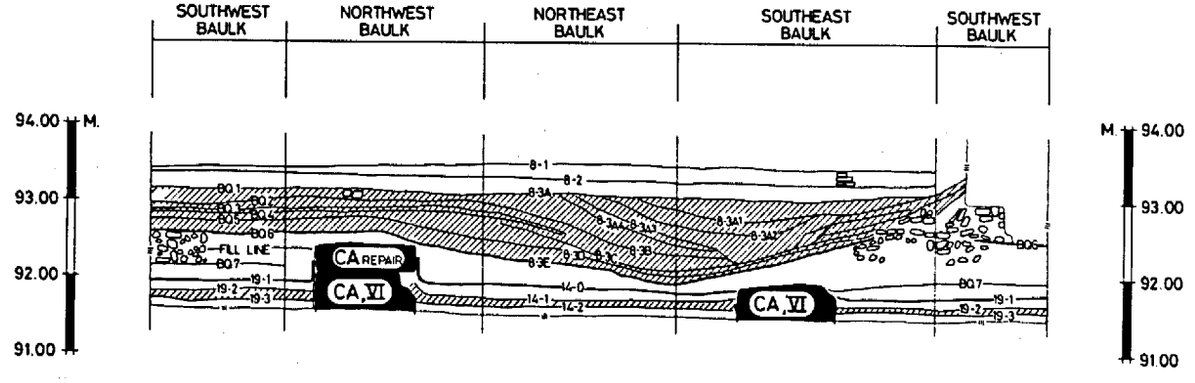


Fig. 4.—Plan of WA, Level VI, Loci 13-14, 19. Find-spots of objects marked with 12 N numbers.



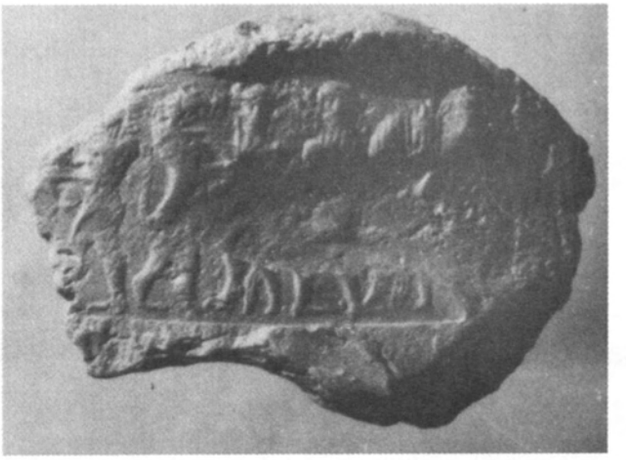
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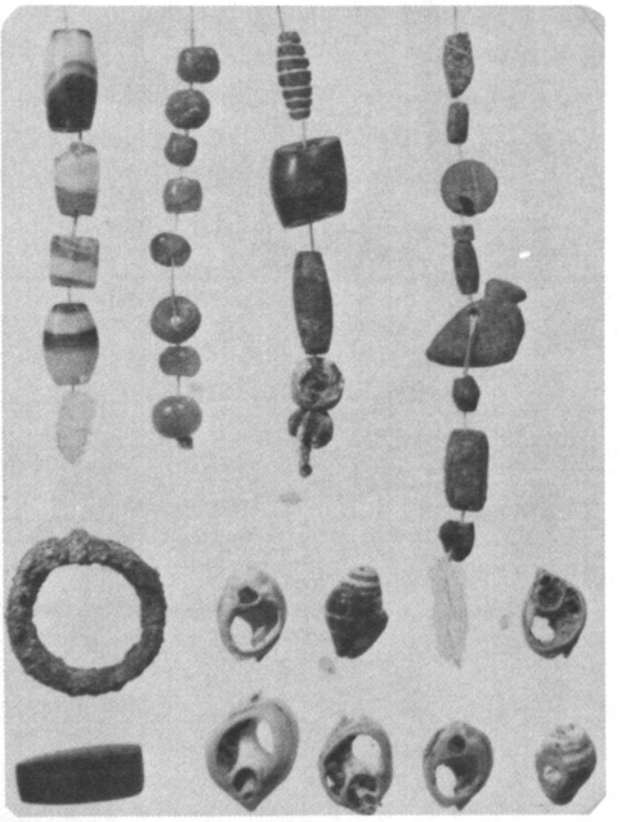
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Fig. 5.—(1) WA, Level VI, Locus 13, wraparound section. (2) WA, Level VI, Loci 14 and 19, wraparound section.

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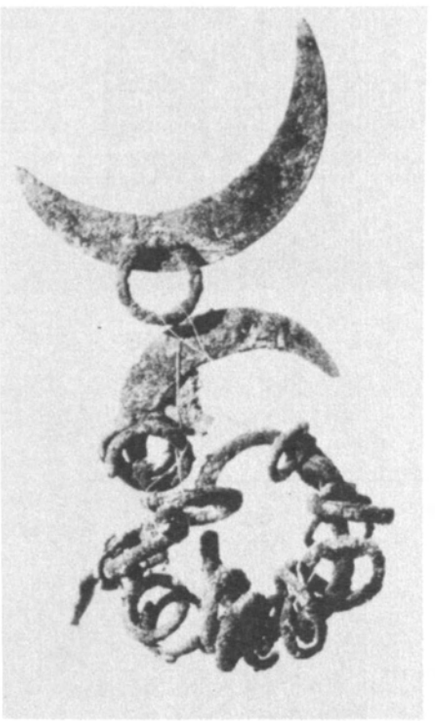
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Fig. 6.—Objects from WA, Level VI, Locus 13. (1) Bulla, 12 N 438. Scale, 2:1. (2) Ornaments, 12 N 441. Scale, 1:1.

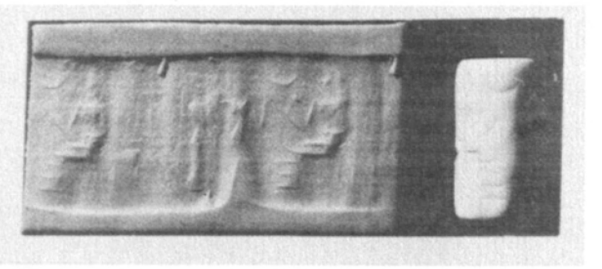
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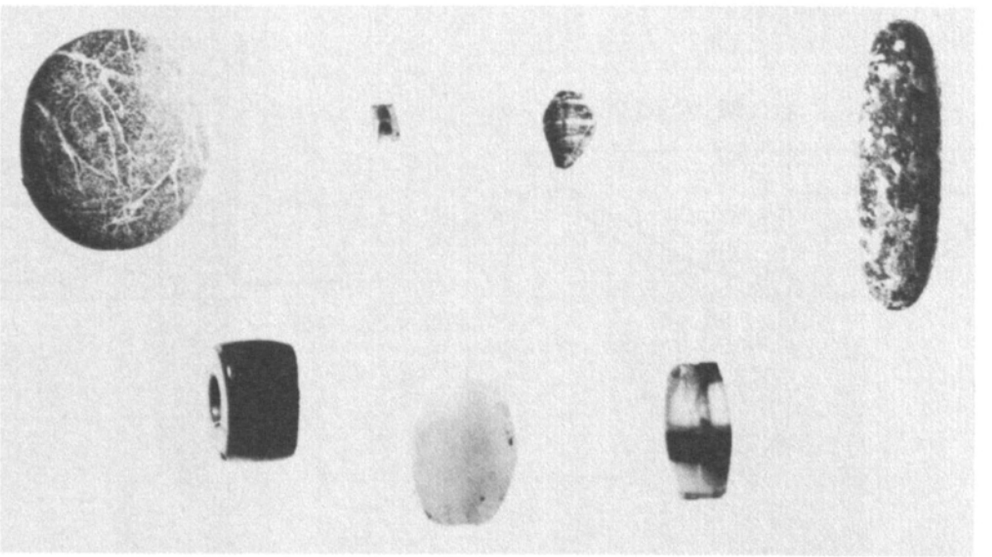
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Fig. 7.—Objects from WA, Level VI, Locus 13. **(1)** Copper ornaments, 12 N 644. Scale, 1:2. **(2)** Cylinder seal and rolling, 12 N 646. Scale, 1:1. **(3)** Cylinder seal and rolling, 12 N 645. Scale, 1:1. **(4)** Beads and other objects, 12 N 647, top: *a*, *g*, *f*, *b*; bottom: *c*, *d*, *e*. Scale, 1:1.

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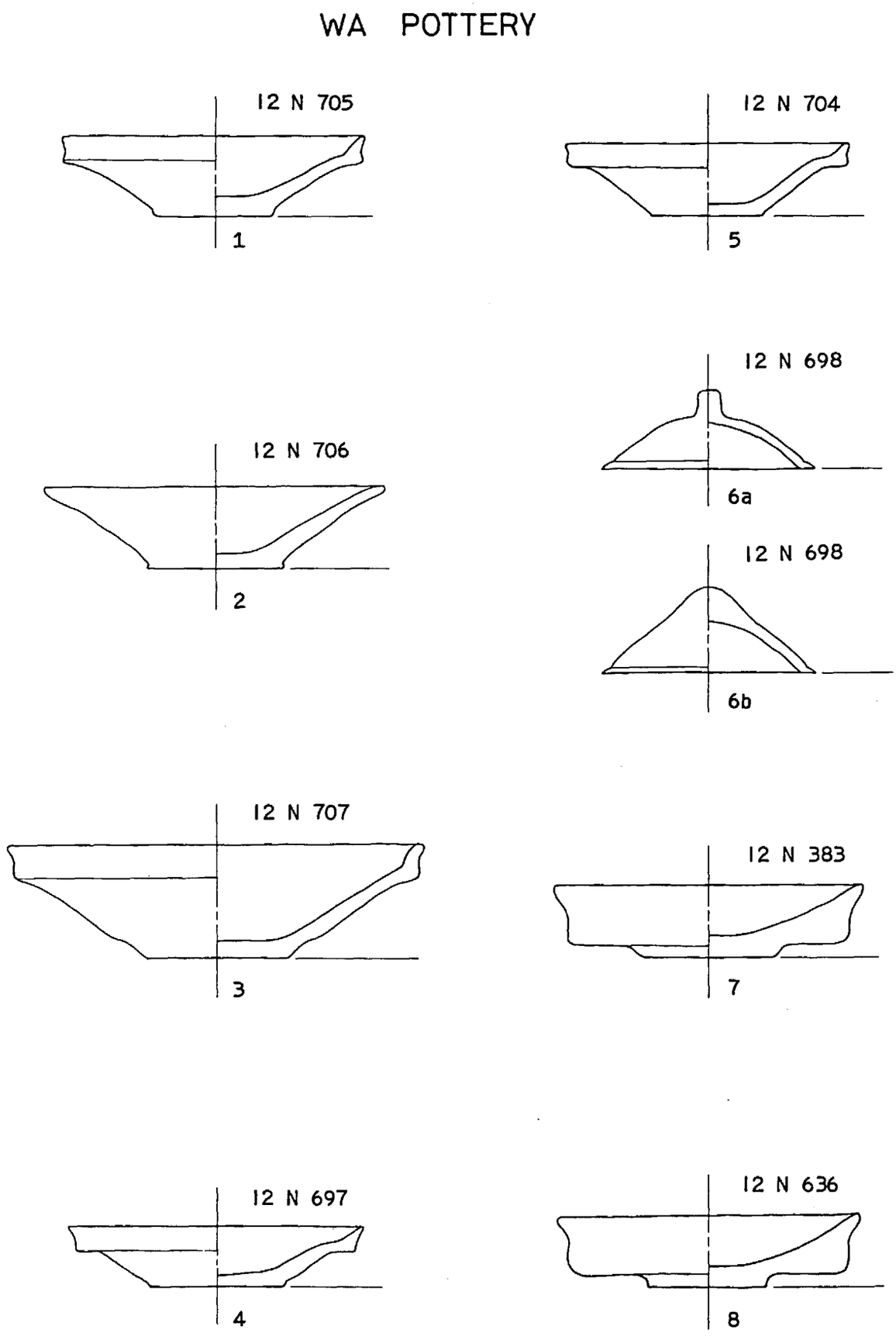
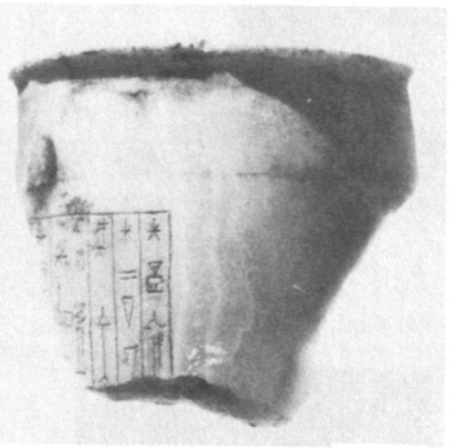


Fig. 8.—Pottery from WA, Level VI, Locus 14. Scale, 2:5. (6*a*) Side view. (6*b*) Front view.

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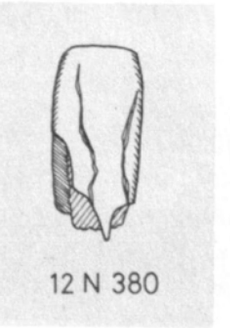
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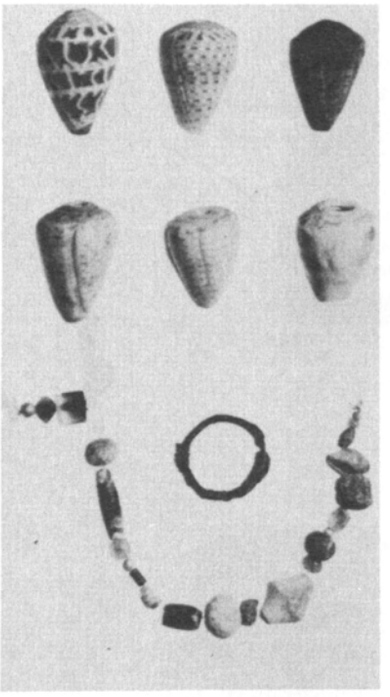
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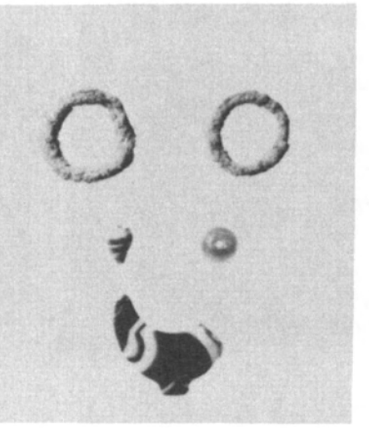
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Fig. 9.—Objects from WA, Level VI, Locus 14. **(1)** Cylinder seal and rolling, 12 N 622. Scale, 1:1. **(2)** Jar with inscription, 12 N 621. Scale, 1:2. **(3)** Dagger, 12 N 619. Scale, 1:2. **(4)** Drawing, iron object, 12 N 380. Scale, 2:5.

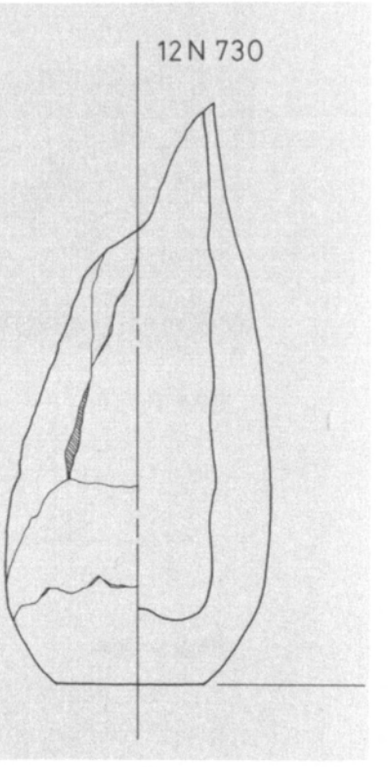
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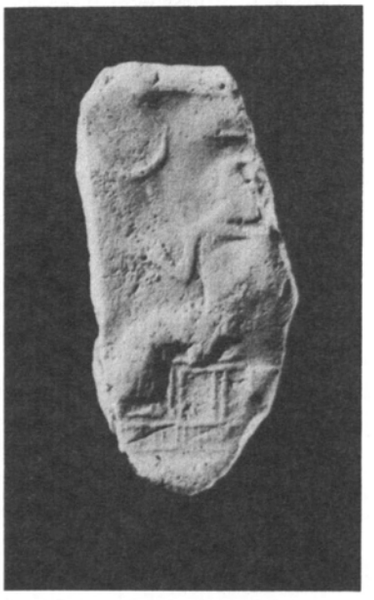
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Fig. 10.—Objects from WA, Level VI. (1-2) Ornaments, 12 N 624 and 12 N 386, from Locus 14. Scale, 1:2. (3) Drawing, stone vase, 12 N 730, from Locus 19. Scale, 2:5. (4) Seal impression, 12 N 613, from Locus 14. Scale, 2:1. (5) Star ornament, 12 N 734, from Locus 16. Scale, 1:2.

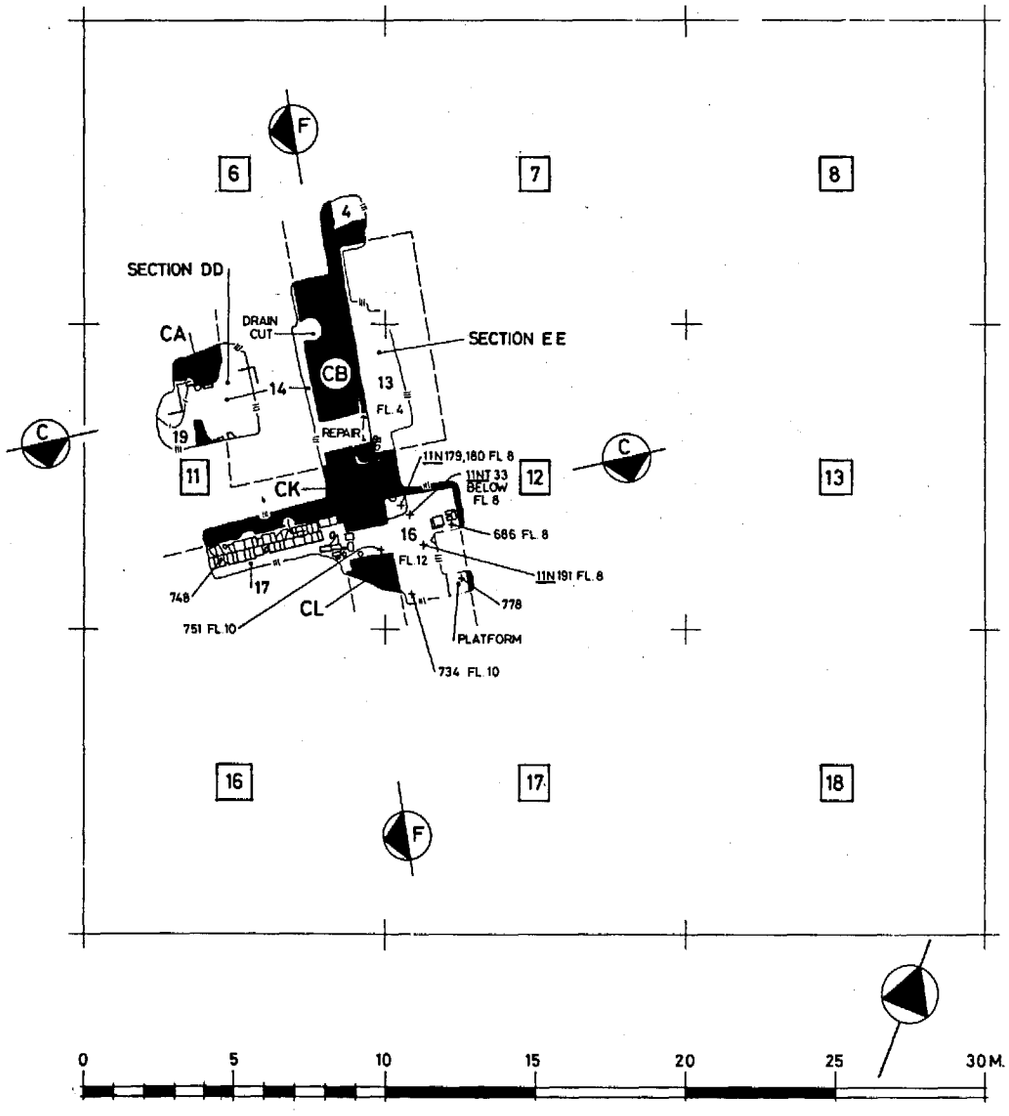
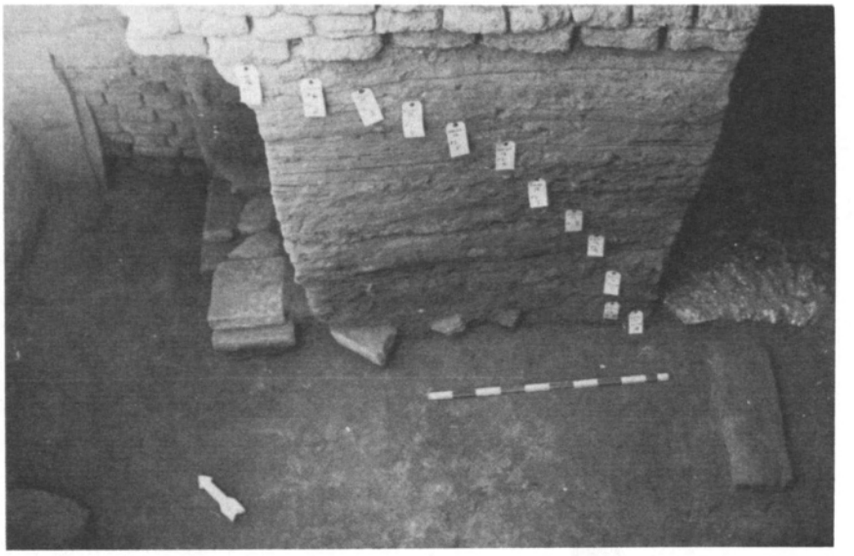
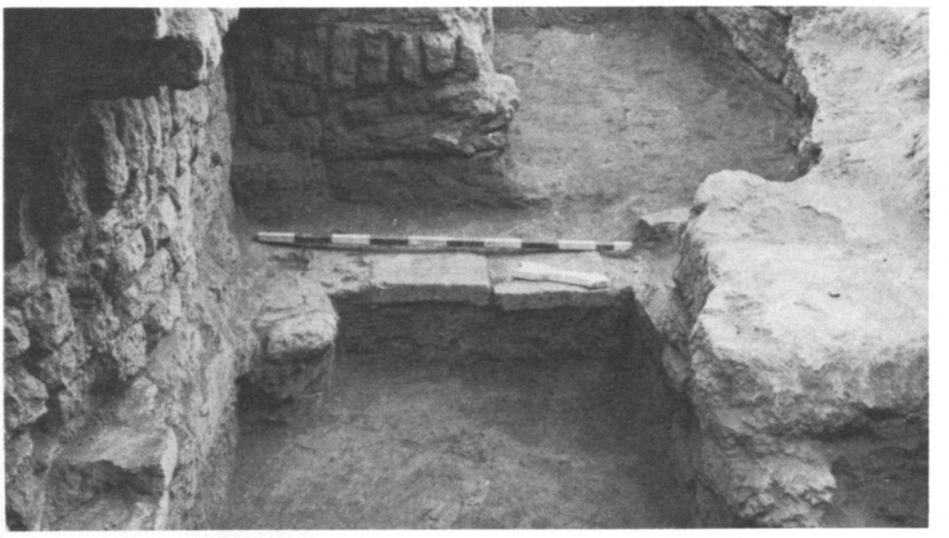


Fig. 11.—Plan of WA, Level VI, Loci 13-14, 16-17. Find-spots of objects marked with 12 N numbers.

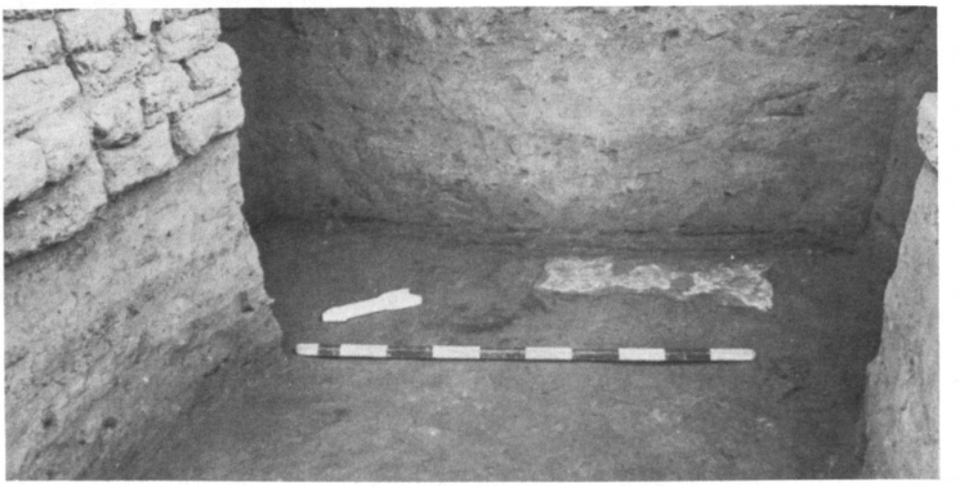
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1



2



3

Fig. 12.—WA, Level VI, Locus 16. (1) From SW. (2) Door with Amar Sin and Shulgi bricks, from NE. (3) Plaster feature on Floor 6, from NW.

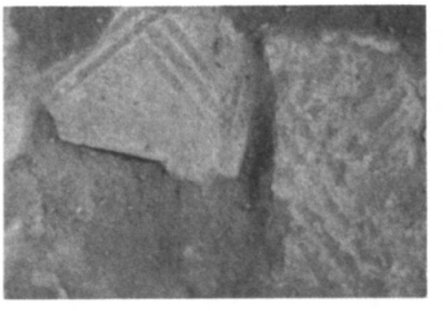
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1



2



3

Fig. 13.—(1) Cylinder seal and rolling, 12 N 686, from WA, Level VI, Locus 16. Scale, 1:1. (2) Locus 17 viewed from Locus 16. (3) Locus 17, pavement, brick detail.

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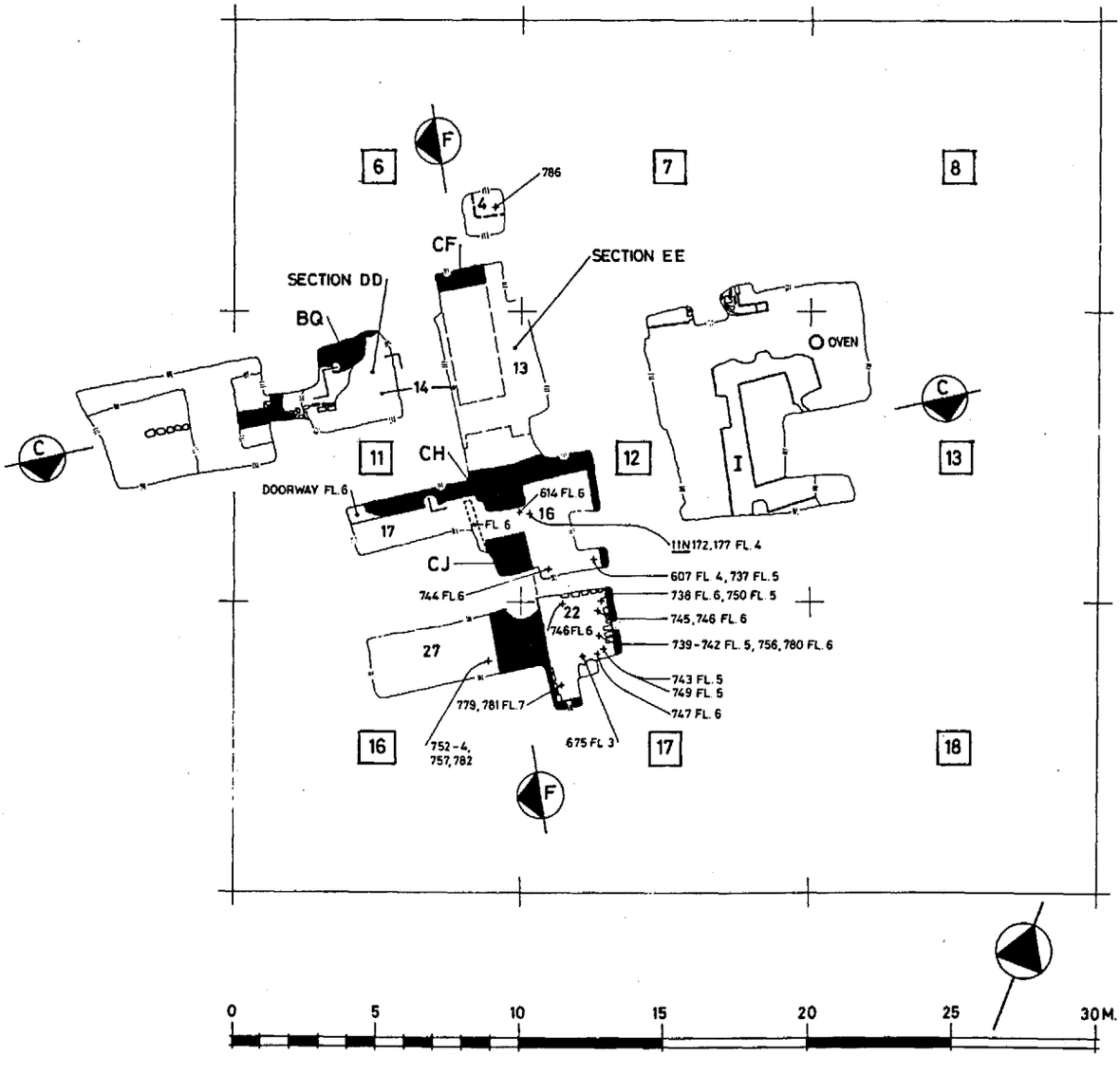
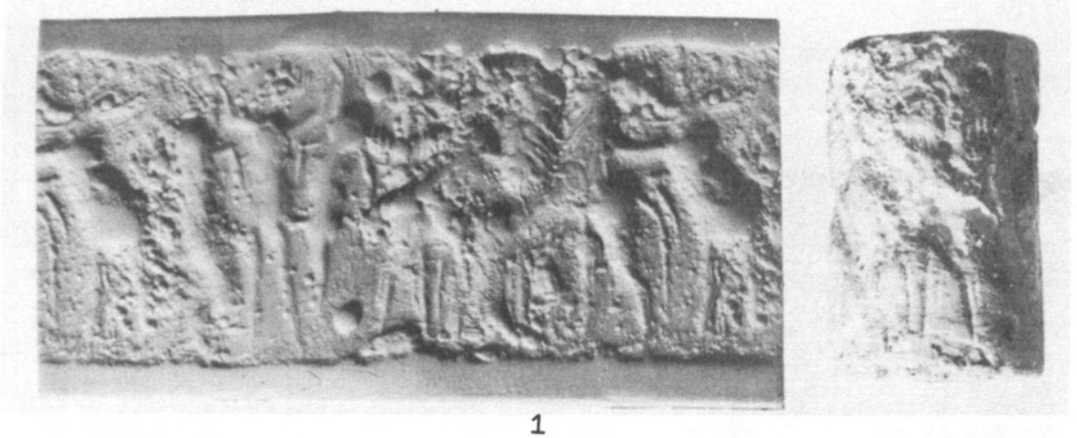
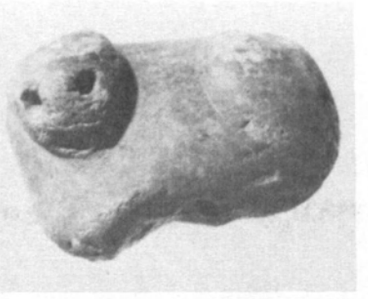


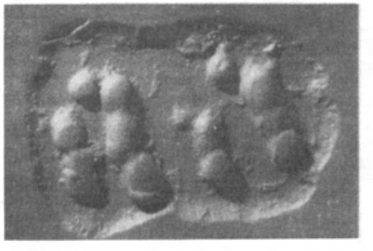
Fig. 14.—Plan of WA, Level V. Findspots of objects marked with 12 N numbers.

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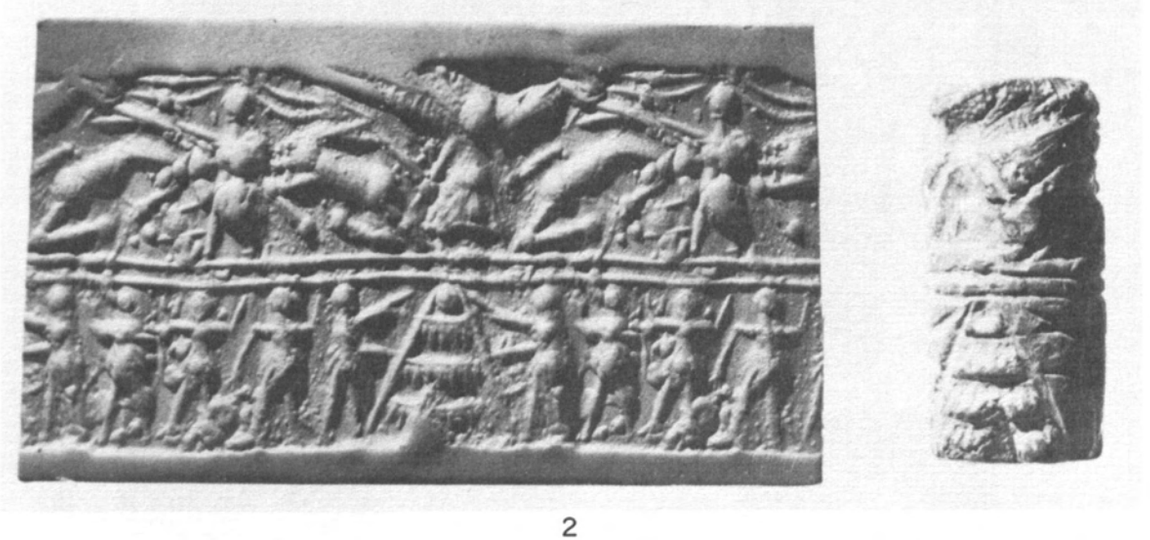


1





3



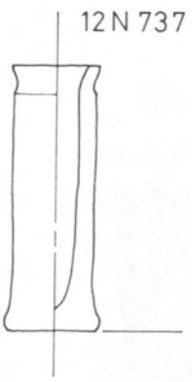
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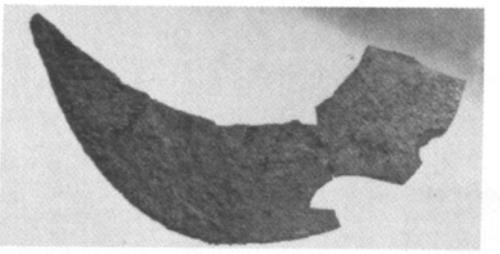
4

Fig. 15.—Objects from WA, Level V, Loci 16 and 22. Scale, 1:1. (1) Cylinder seal and rolling, 12 N 614. (2) Cylinder seal and rolling, 12 N 744. (3) Stamp seal and impression, 12 N 745. (4) Figurine, 12 N 746.

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1



2a



2b



3



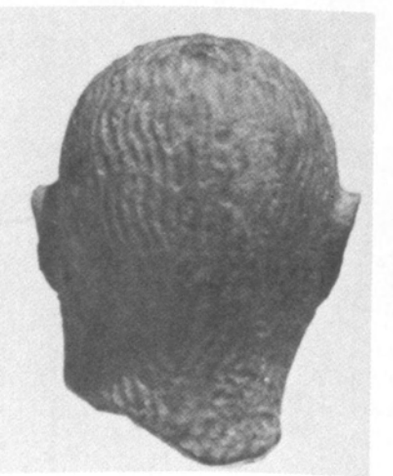
4



5a



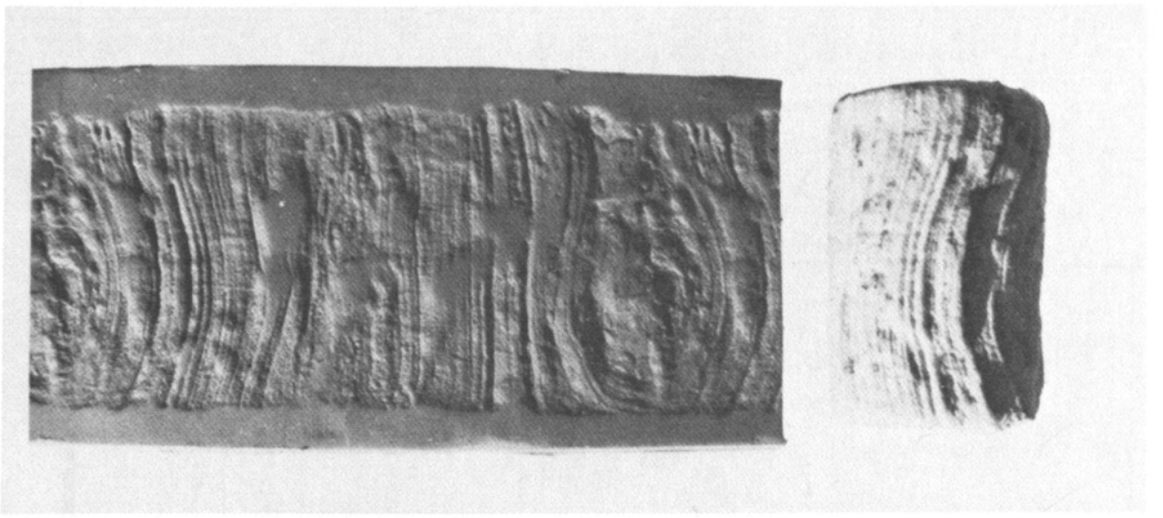
5b



5c

Fig. 16.—Objects from WA, Level V, Loci 16 and 22. **(1)** Drawing, miniature vessel, 12 N 737. Scale, 2:5. **(2*a*-*b*)** Crescents, 12 N 739, 740. Scale, 1:2. **(3)** Copper dog figurine, 12 N 749. Scale, 1:1. **(4)** Cylinder seal and rolling, 12 N 743. Scale, 1:1. **(5*a*-*c*)** Statue head, 12 N 750. Scale, 1:1.

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1



2

Fig. 17.—(1) Cylinder seal and rolling, 12 N 607, from WA, Level V, Locus 16. Scale, 1:1. (2) Figurine fragment, foot, 12 N 782, from WA, Level V, Locus 27. Scale, 1:2.

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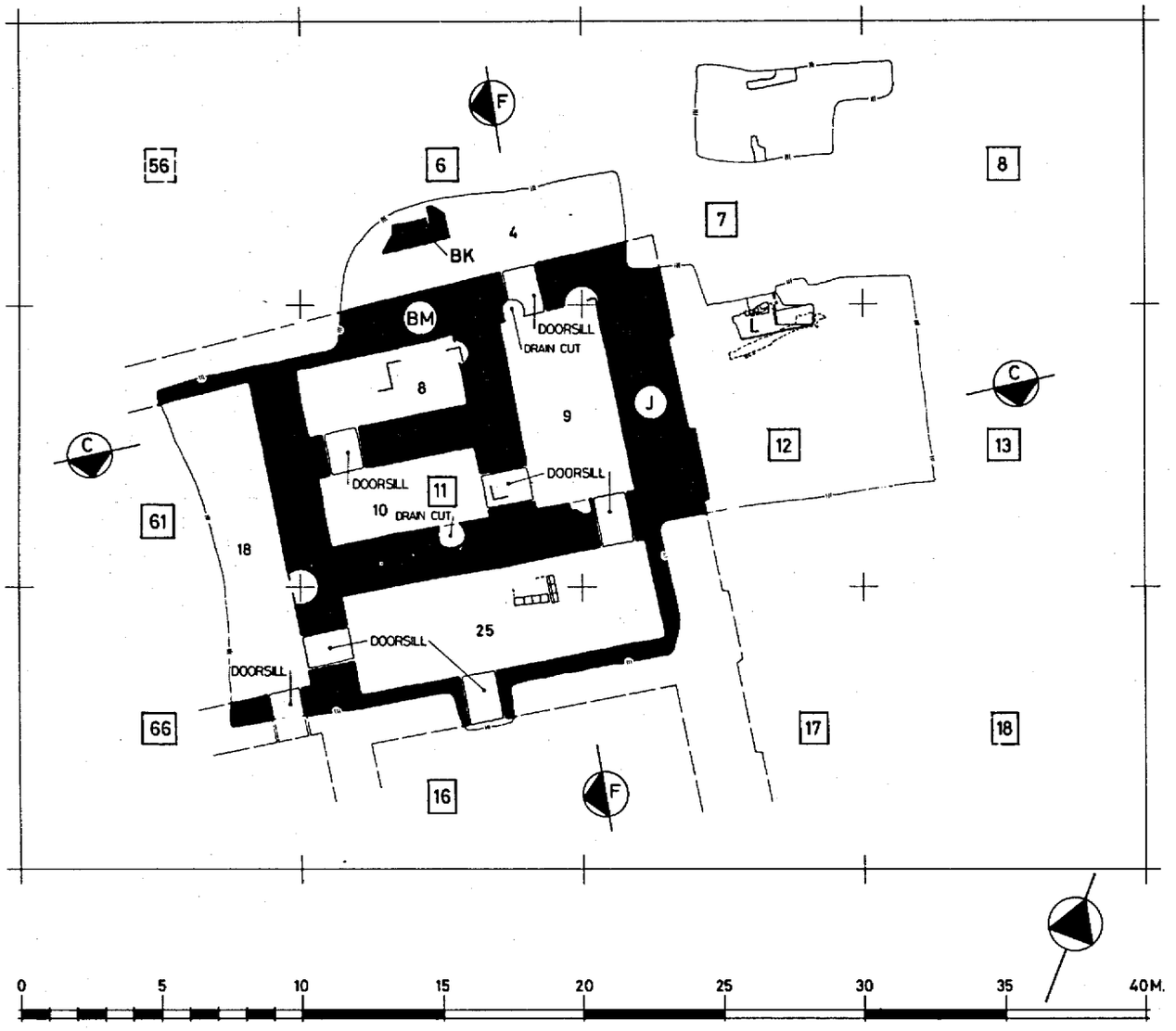
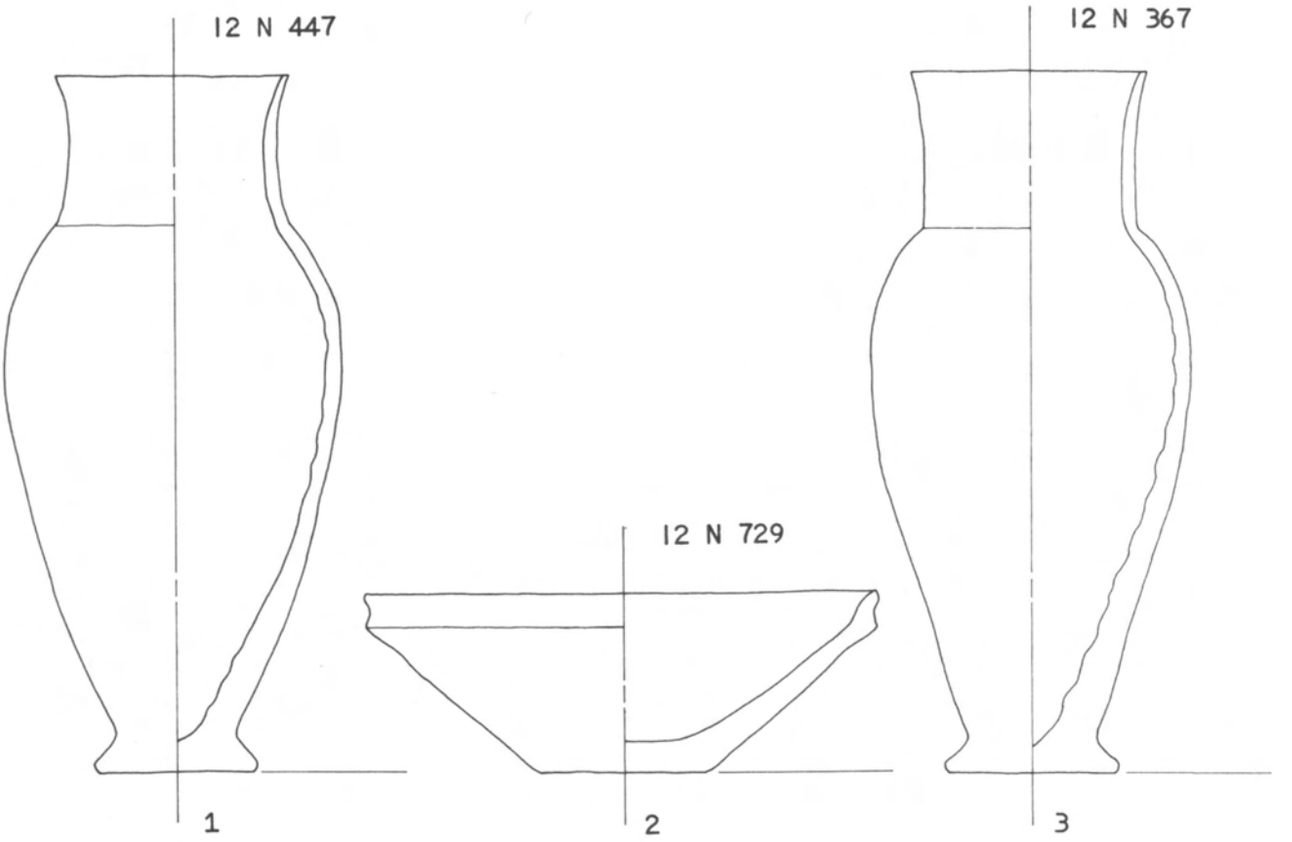
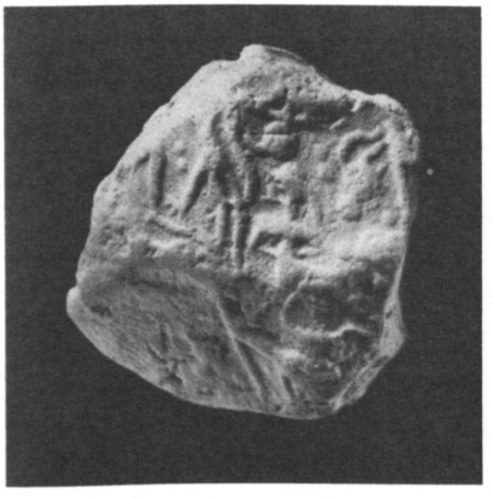


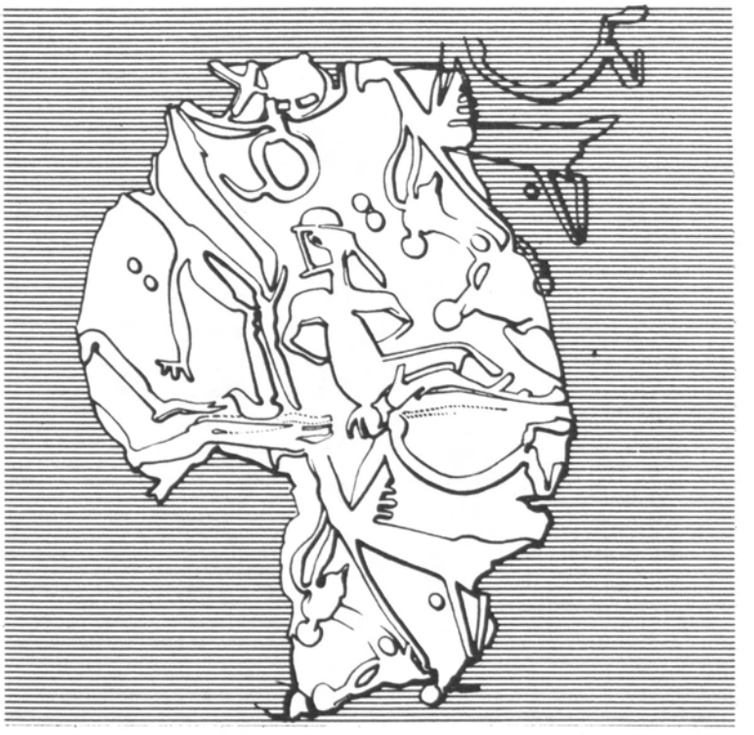
Fig. 18.—Plan of WA, Level IVB, Kassite temple

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4*a*



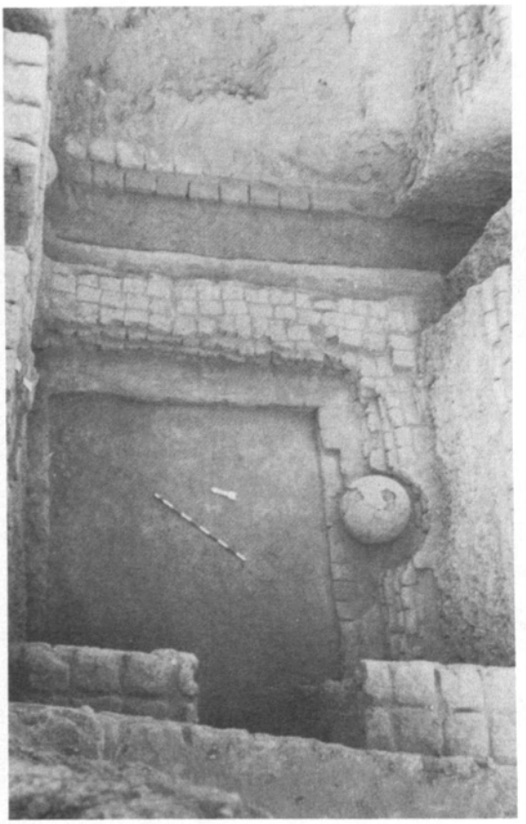
4*b*

Fig. 19.—Objects from ash pits (Level IVC) under Kassite temple. **(1-3)** Pottery, 12 N 447, 729, 367. Scale, 2:5. **(4*a-b*)** Sealing, 12 N 353. Scale: photo, 2:1; drawing, 4:1.

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1



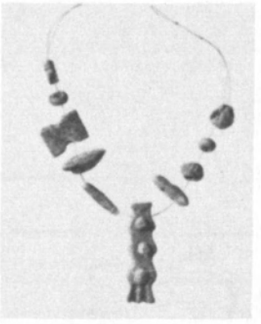
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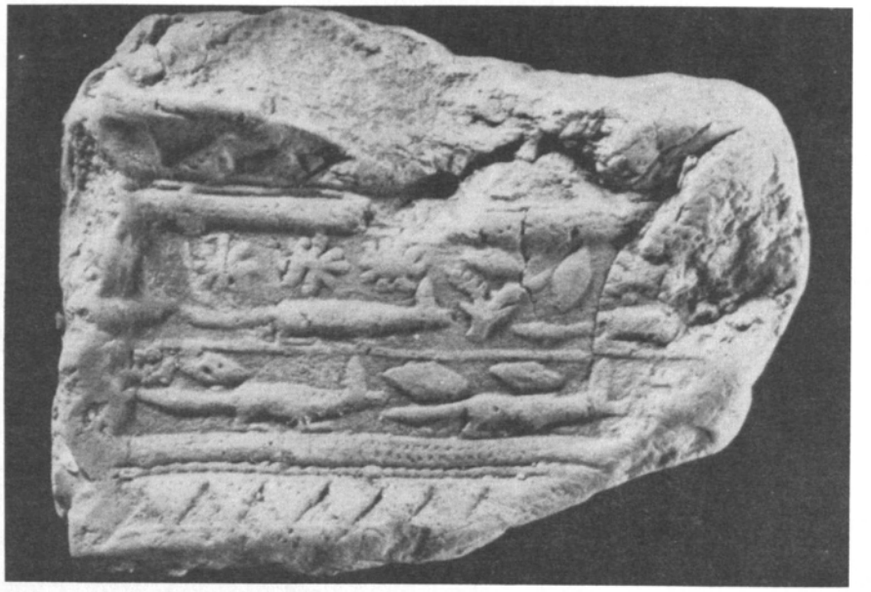
3

Fig. 20.—WA, Level IV, details. (1) Installation in Locus 25. (2) Locus 8 from west, with Level IVB walls and Floor 1 visible. Cuts made by later builders into the walls also visible. (3) Same, with platform and cuts.

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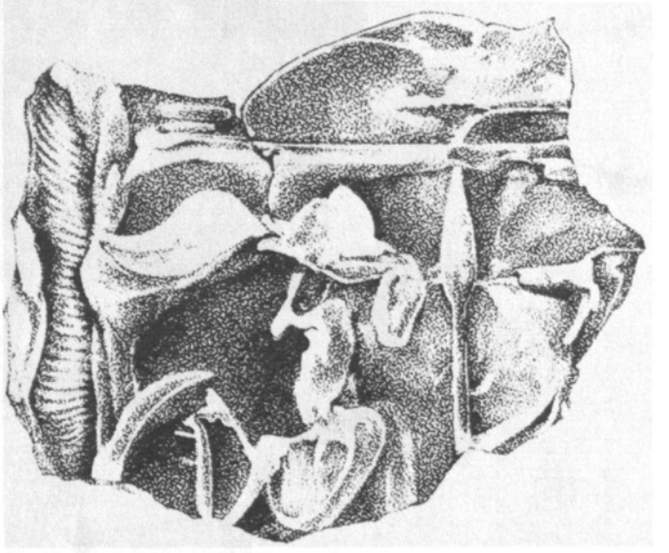
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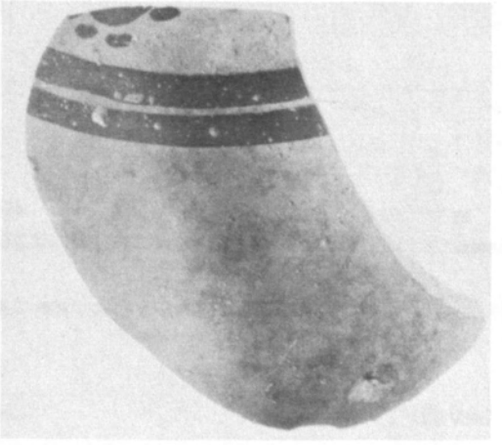
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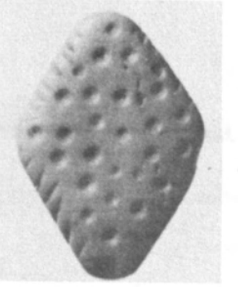
3a



3b



4



5

Fig. 21.—**(1)** Frit beads, 12 N 442, from WA, Level IVB, Locus 9. Scale, 1:1. **(2)** Sealing, 12 N 605, from WA, Level IVB, Locus 25. Scale, 2:1. **(3*a*-*b*)** Sealing, 12 N 790, from WA, Level IVB, Locus 4. Scale: photo, 2:1; drawing, 4:1. **(4)** Sherd, 12 N 487, from WA, Level III, fill NE of Wall D. Scale, 1:1. **(5)** Stamp seal, 12 N 732, from WA, Level IVA, Locus 20. Scale, 1:1.

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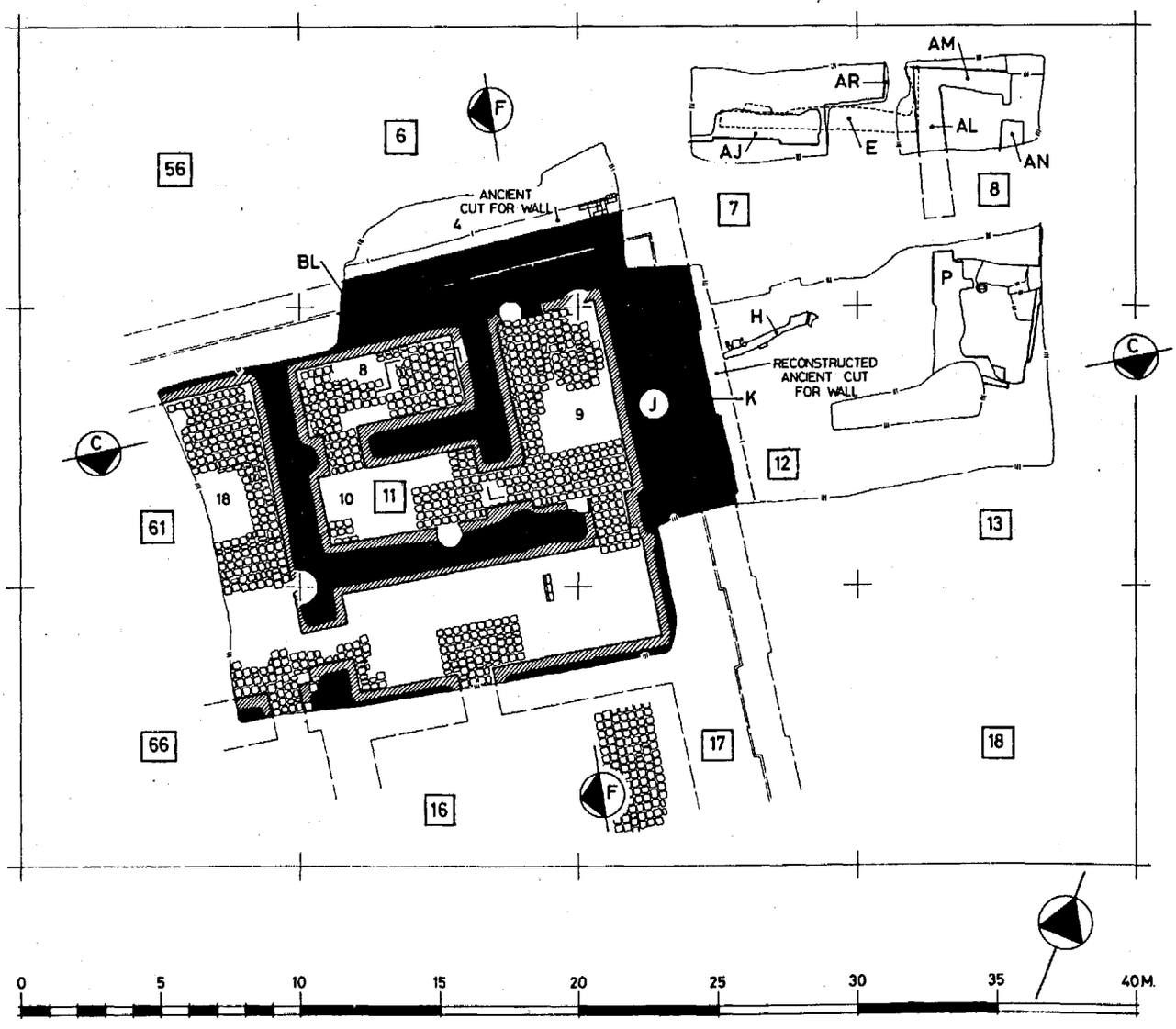


Fig. 22.—Plan of WA, Level IVA.

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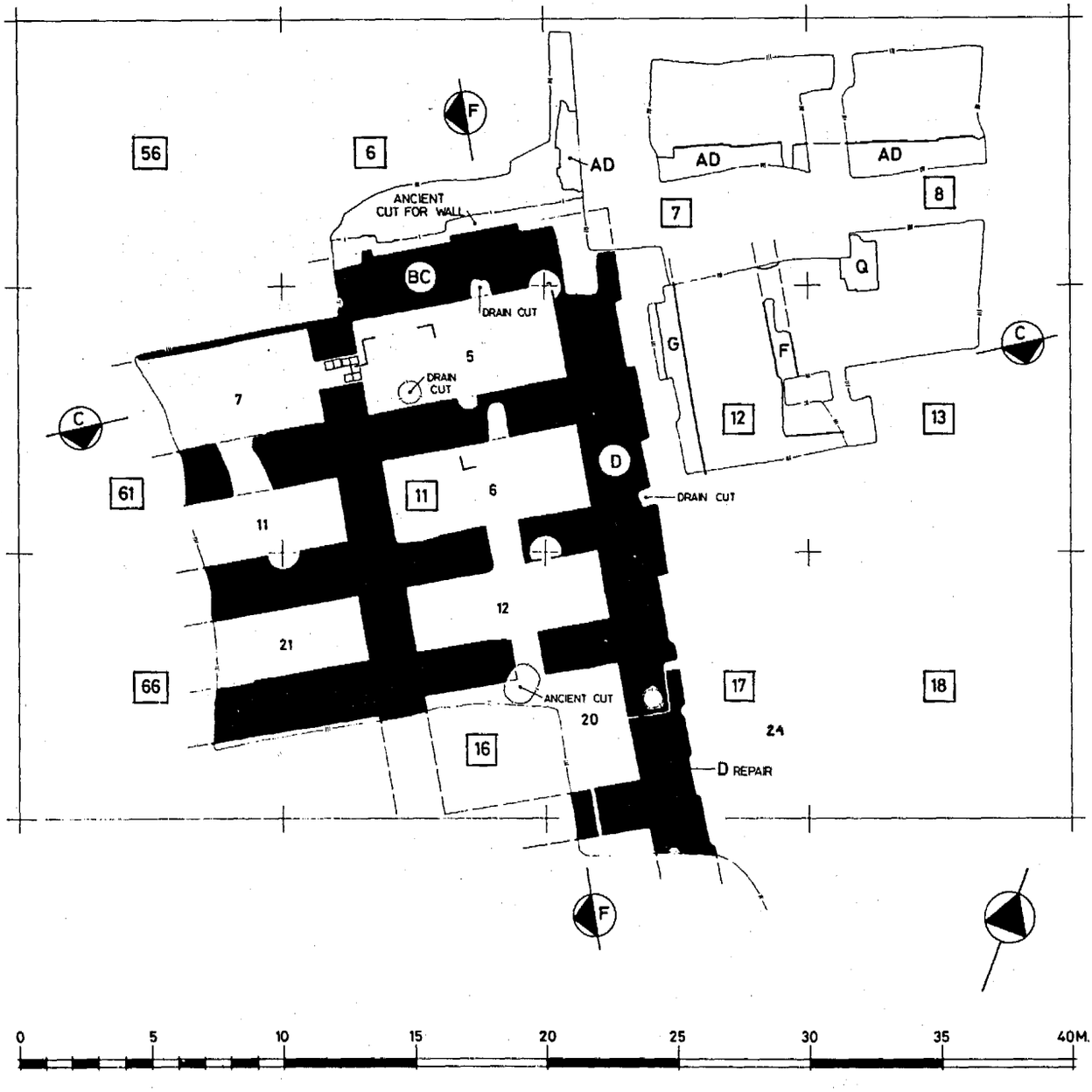
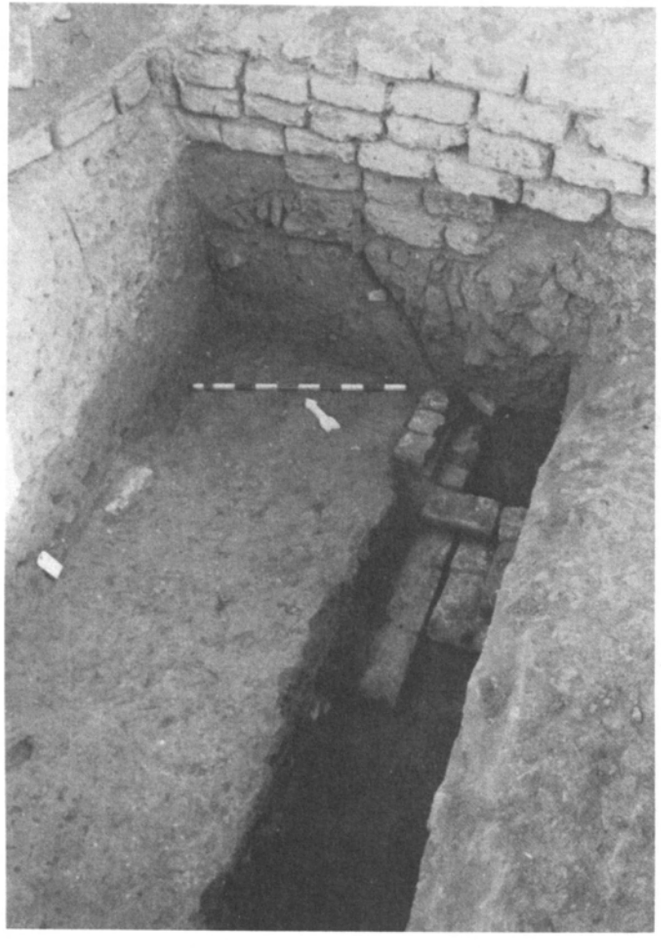
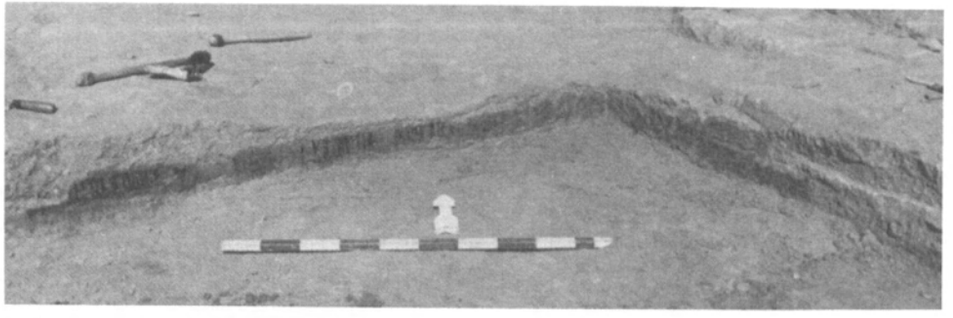


Fig. 23.—Plan of WA, Level III

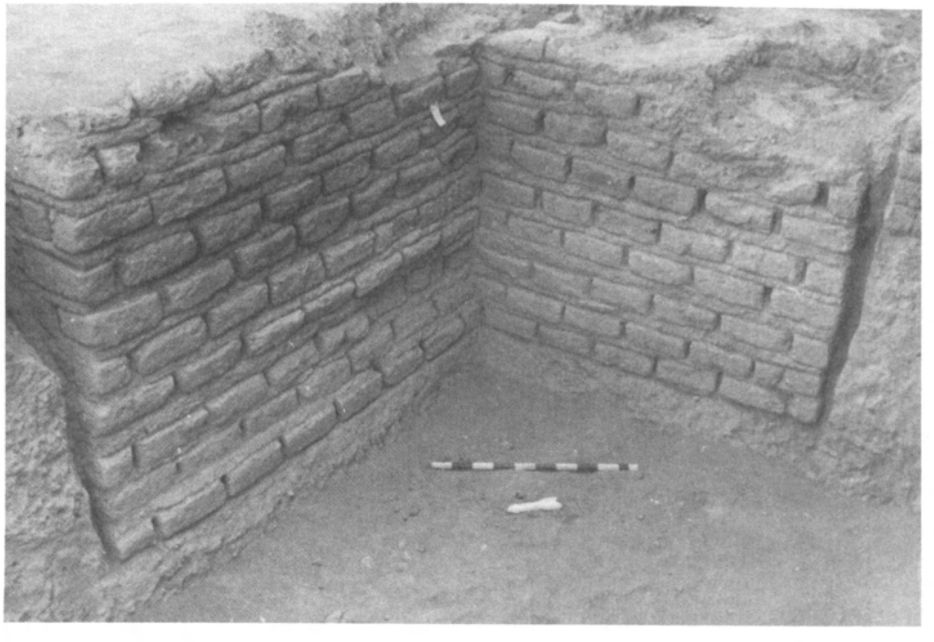
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1



2



3

Fig. 24.—(1) WA, Level IV, Locus 4, cut with rubble, from SW. (2) WA, Locus 11, from S, vertical paint on walls. (3) WA, Locus 20, cut in Wall D and later repair, from W.

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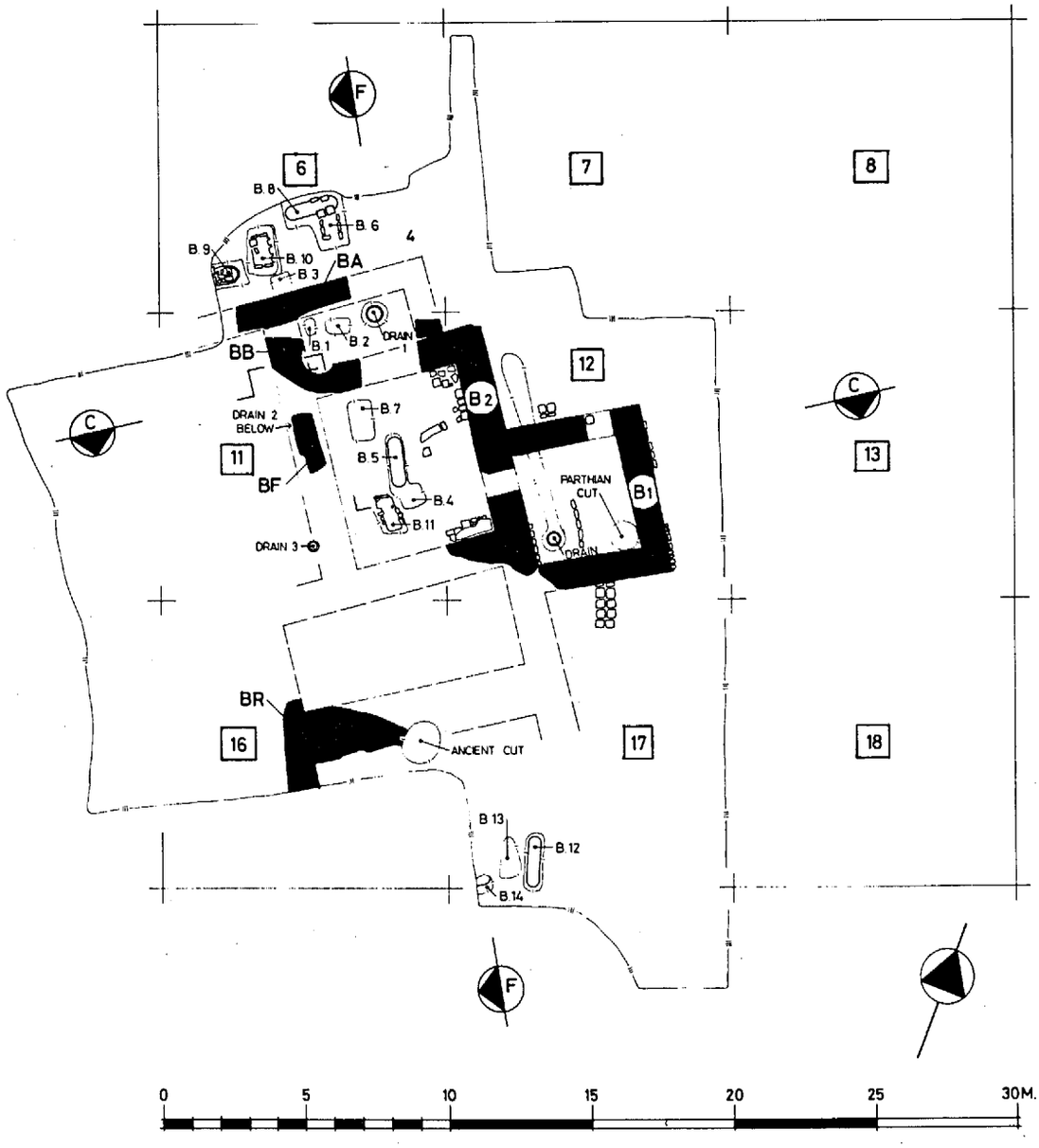
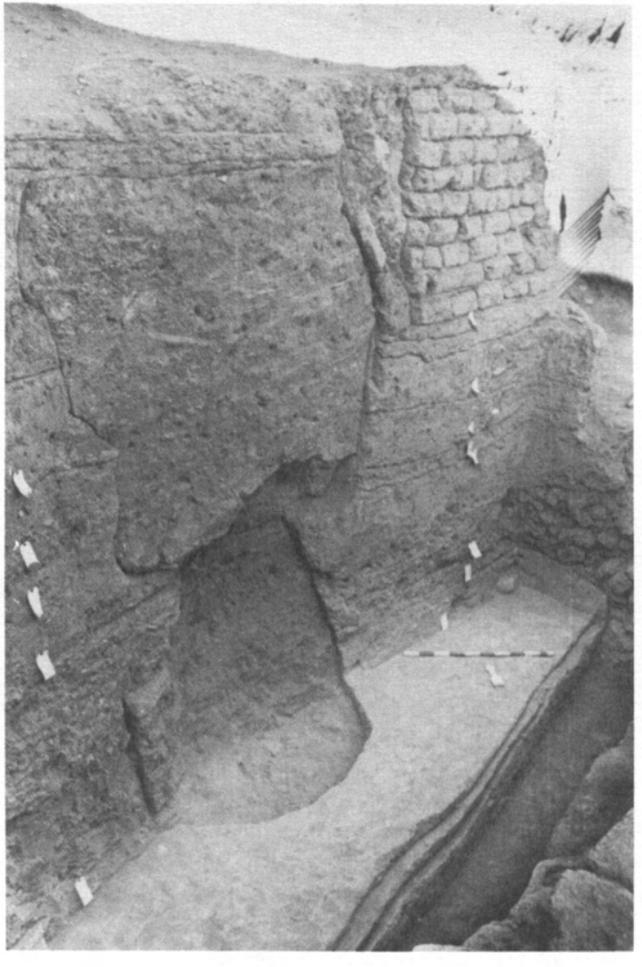


Fig. 25.— Plan of WA, Level I with burials shown. Shaft for Burials 6 and 8 originally recorded as Cut 1. Shaft for Burials 9 and 10 originally recorded as Cut 2.

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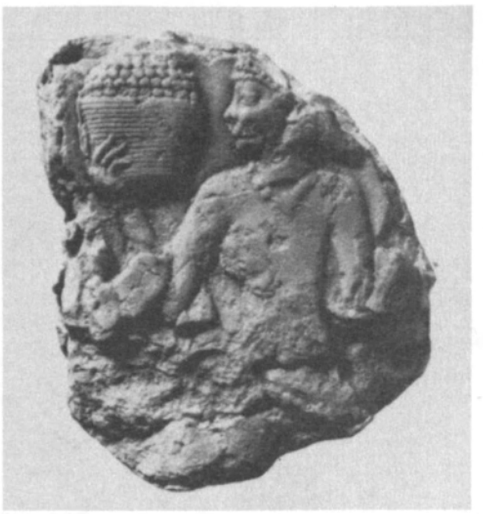
1



2

Fig. 26.—(1) Drain 3, cutting into Levels III and IV, Loci 6 and 10. Above is a Pennsylvania cut filled with striations of sand. (2) Locus 4, showing an earlier pit under Burial 8.

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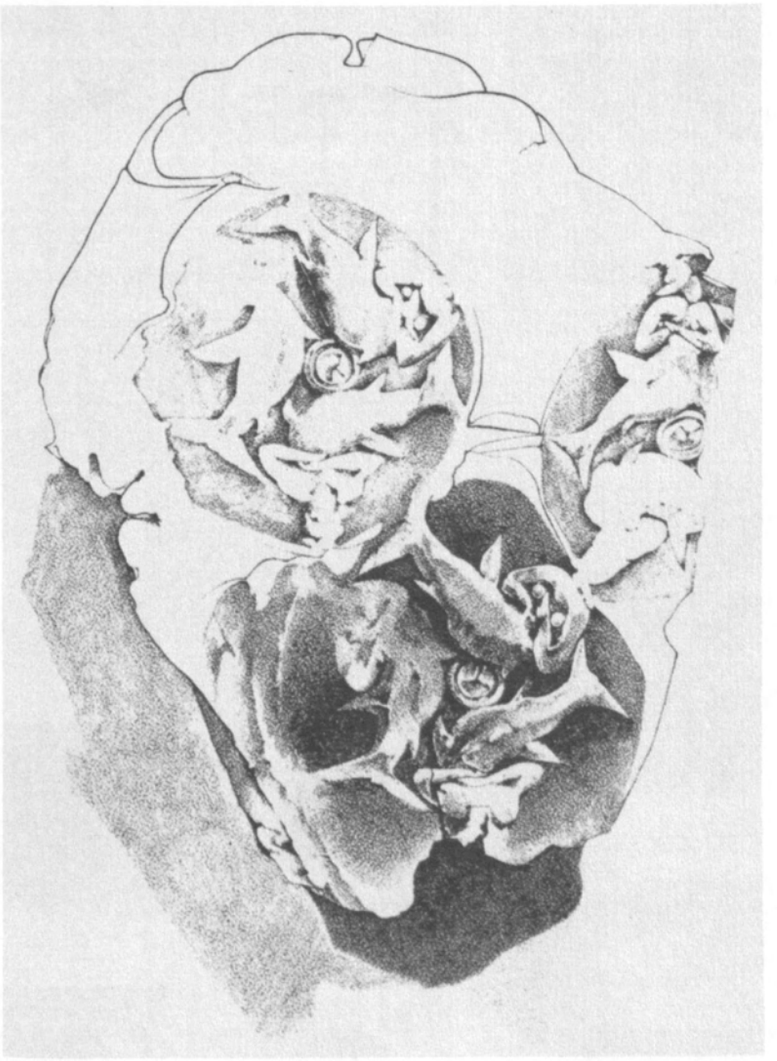
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2



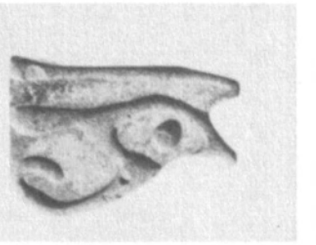
3



4*a*



4*b*



5

Fig. 27.—Objects from WA, Level II or I, Locus 4, pit below Burial 8. (1) Egyptian plaque, 12 N 82. Scale, 1:1. (2) Lion pendant, 12 N 618. Scale, 1:1. (3) Bulla with bird, 12 N 687. Scale, 1:1. (4*a*) Bulla with fish-men, 12 N 688. Scale (approx.), 5:1. (4*b*) Photograph, bulla with fish-men, 12 N 688. Scale, 1:1. (5) Wedjat eye, 12 N 690. Scale, 1:1.

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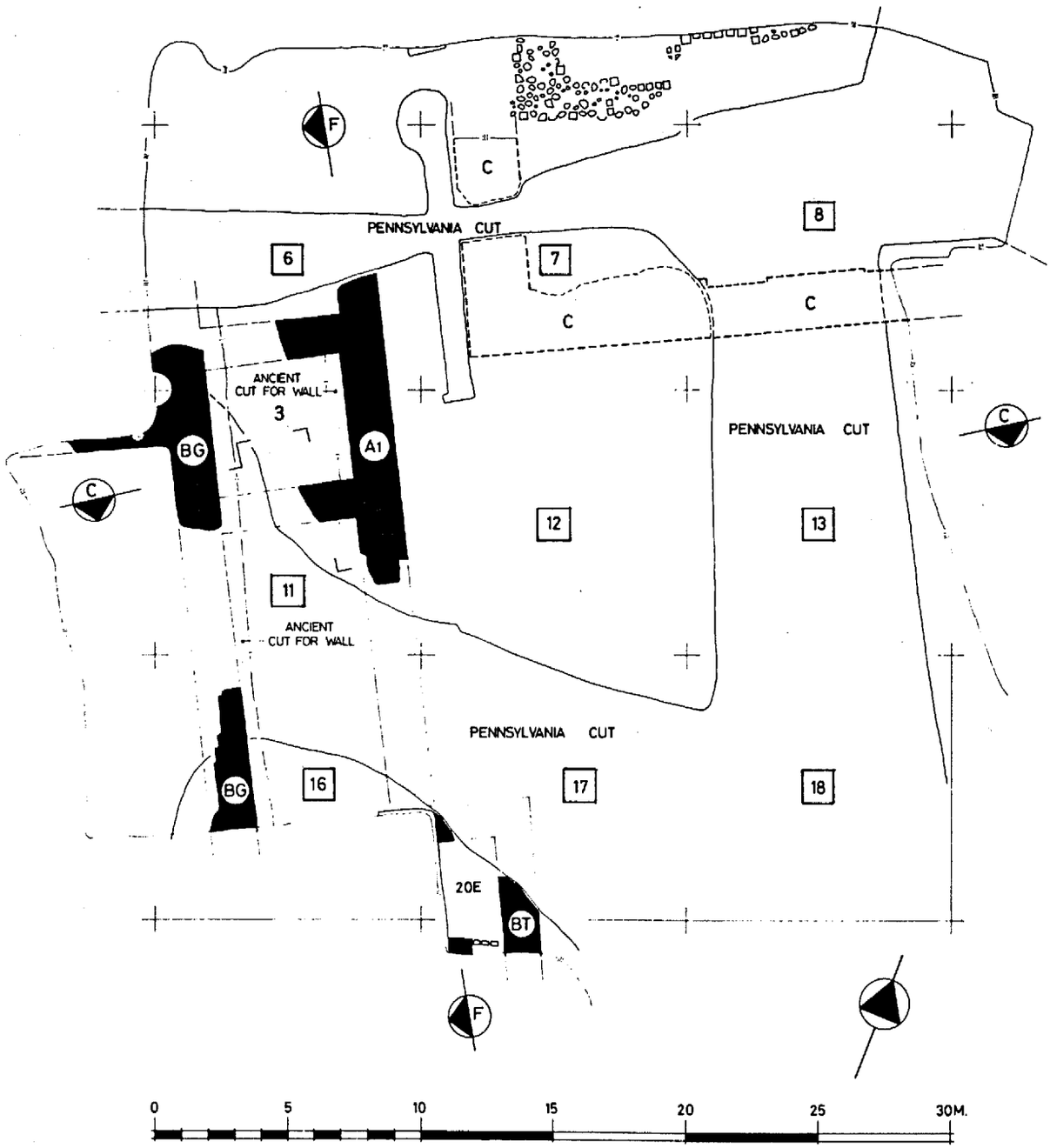
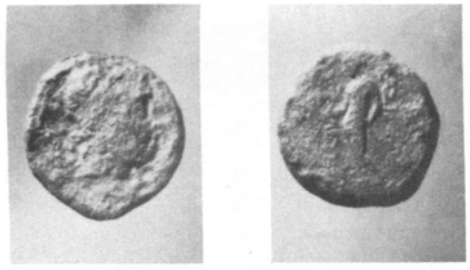


Fig. 28.—Plan of WA, Level I, later phase, "Pillared Hall"

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1a

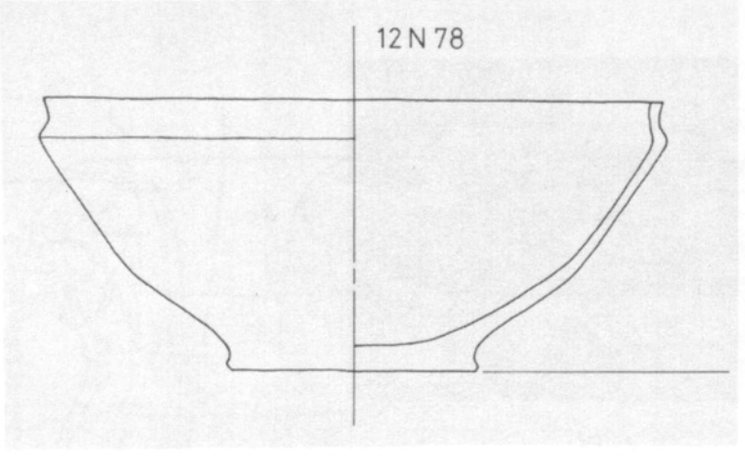
1b



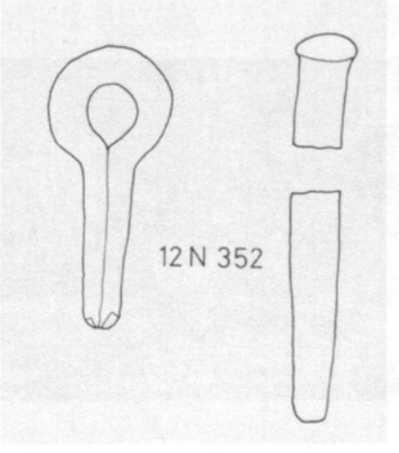
4a



4b



2



3



5



6a



6b



7

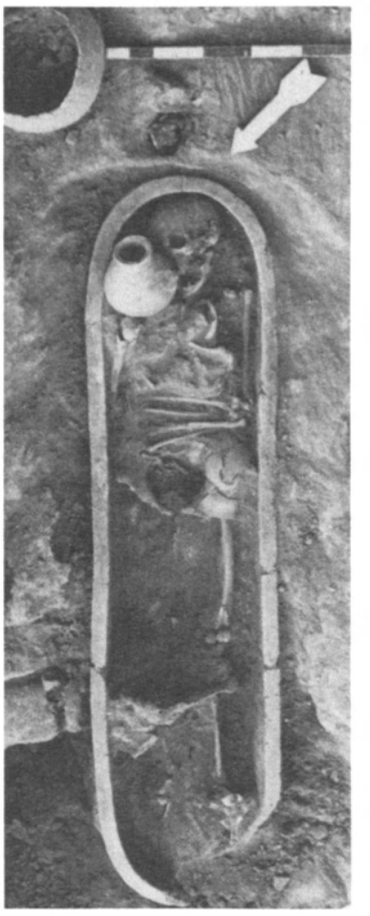
Fig. 29.—Objects from WA, Level I. (1*a-b*) Coin, obv. and rev., Seleucus II, 12 N 278. Scale, 1:1. (2) Pottery drawing, 12 N 78. Scale, 2:5. (3) Drawing, iron pin and eyelet, 12 N 352. Scale, 2:5. (4*a-b*) Coin, obv. and rev., 12 N 640. Scale, 1:1. (5) Figurine, 12 N 449. Scale, 1:1. (6*a-b*) Frit mask, back and front, 12 N 308. Scale, 1:1. (7) Figurine, 12 N 314. Scale, 1:1.

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B. 11

1



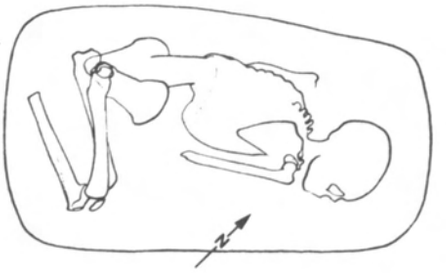
B. 12

2



B. 1

3



B. 2

4



B. 3

5

Fig. 30.—Burials, WA, Level IB. (1) Typical chamber grave, Burial 11. (2) Typical pottery coffin, Burial 12. (3) Burial 1. Scale as indicated. (4) Burial 2. Scale as indicated. (5) Burial 3. Scale as indicated.

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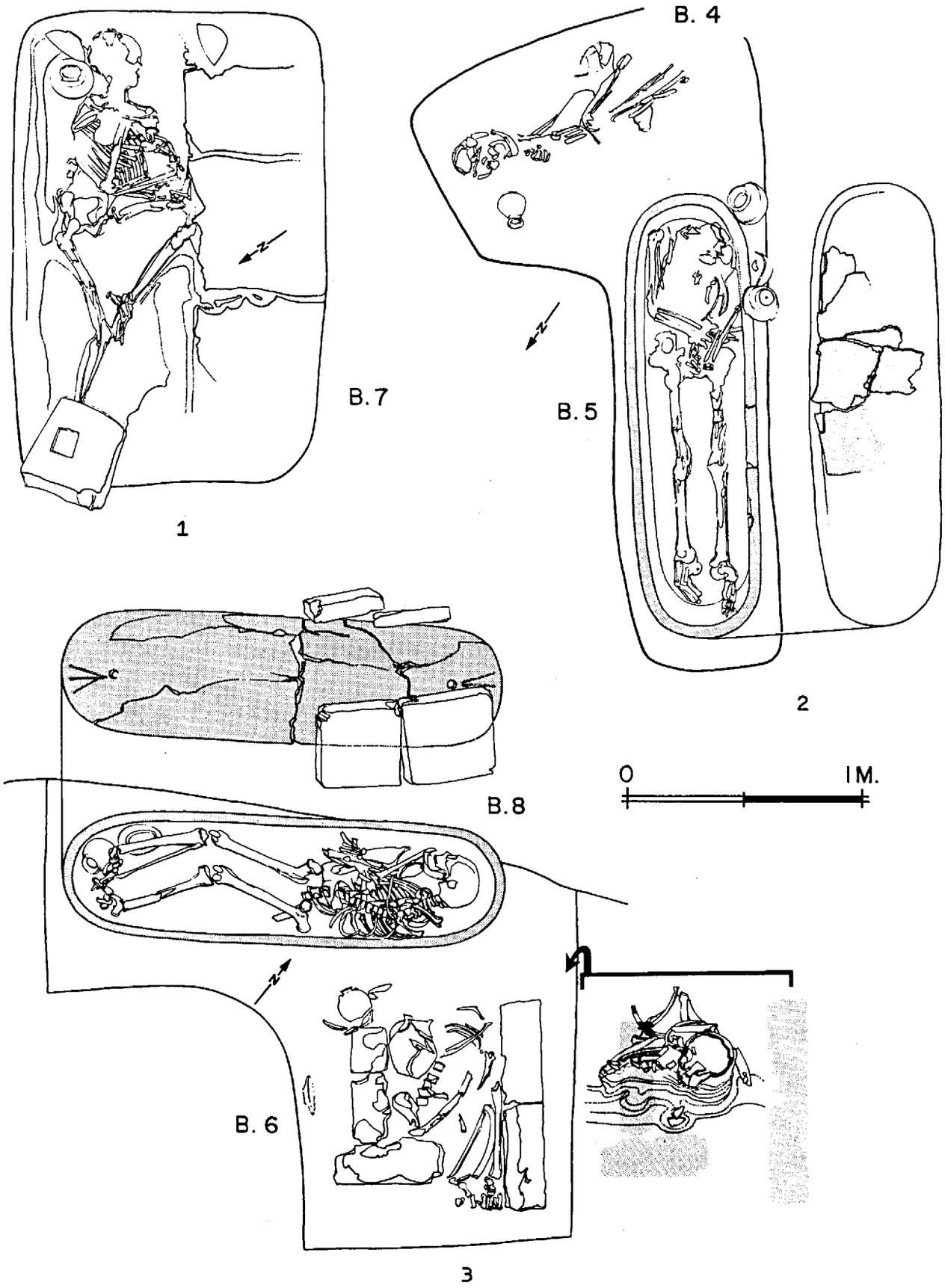


Fig. 31.—Burials, WA, Level IB. Scales as indicated. (1) Burial 7. (2) Burials 4 and 5. (3) Burials 6 and 8, with indication of covers.

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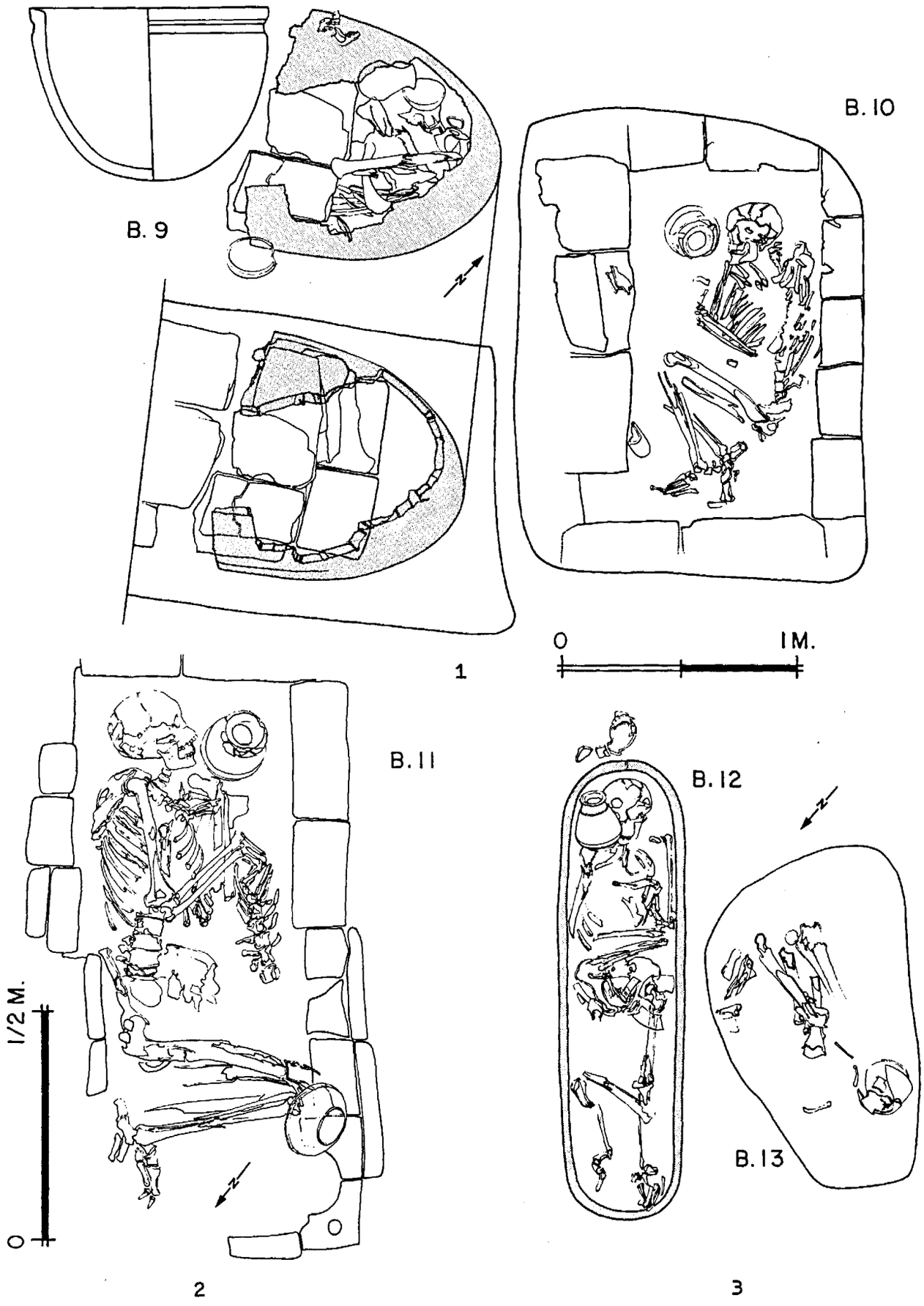


Fig. 32.—Burials, WA, Level IB. Scales as indicated. (1) Burials 9 and 10 with profile of jar used for Burial 9. (2) Burial 11. (3) Burials 12 and 13.

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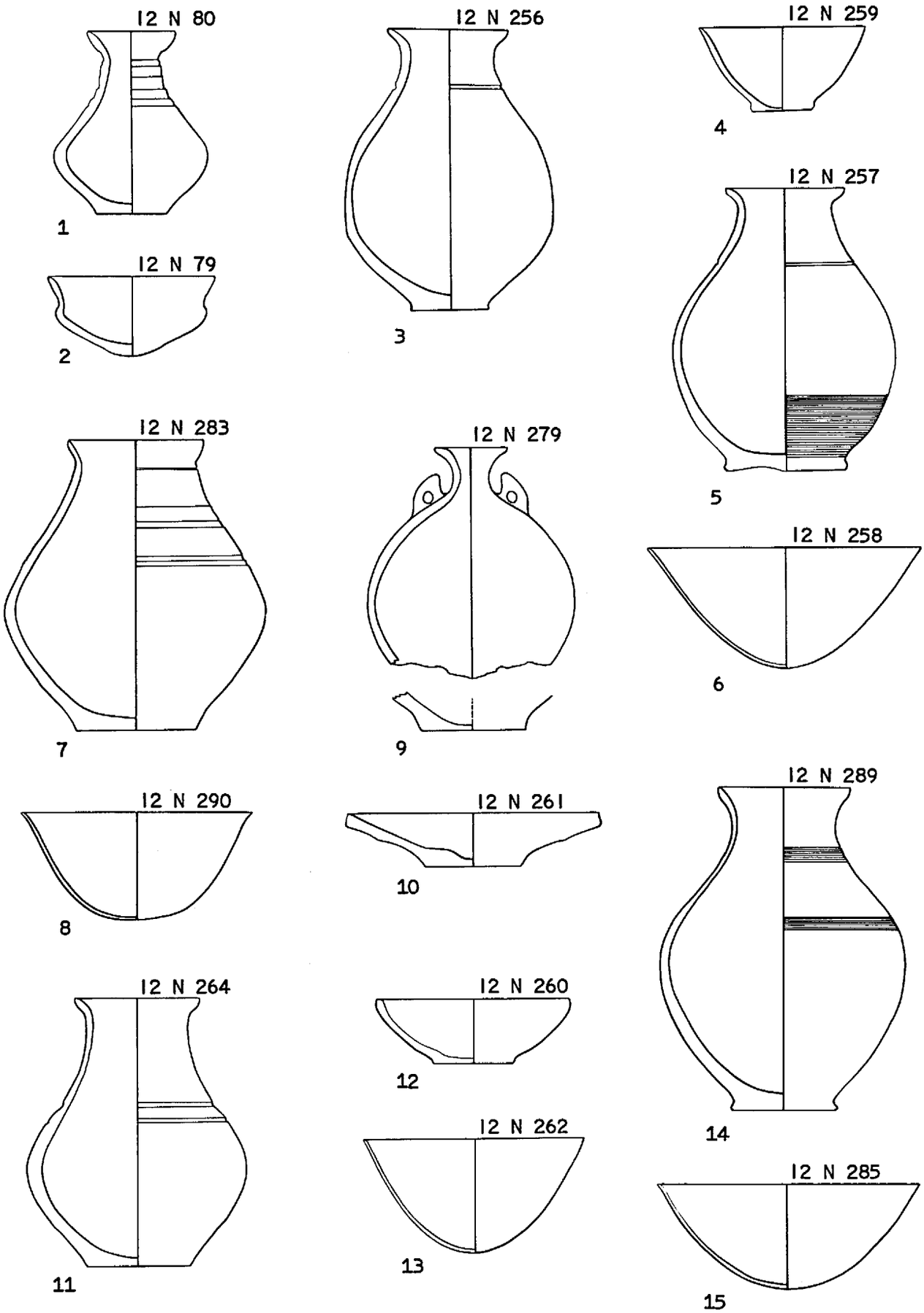


Fig. 33.—Pottery from Burials, WA, Level IB. Scale (approx.), 1:4. (1-2) From Burial 1. (3) From Burial 4. (4-6) From Burial 5. (7-10) From Burial 6. (11-13) From Burial 7. (14-15) From Burial 8.

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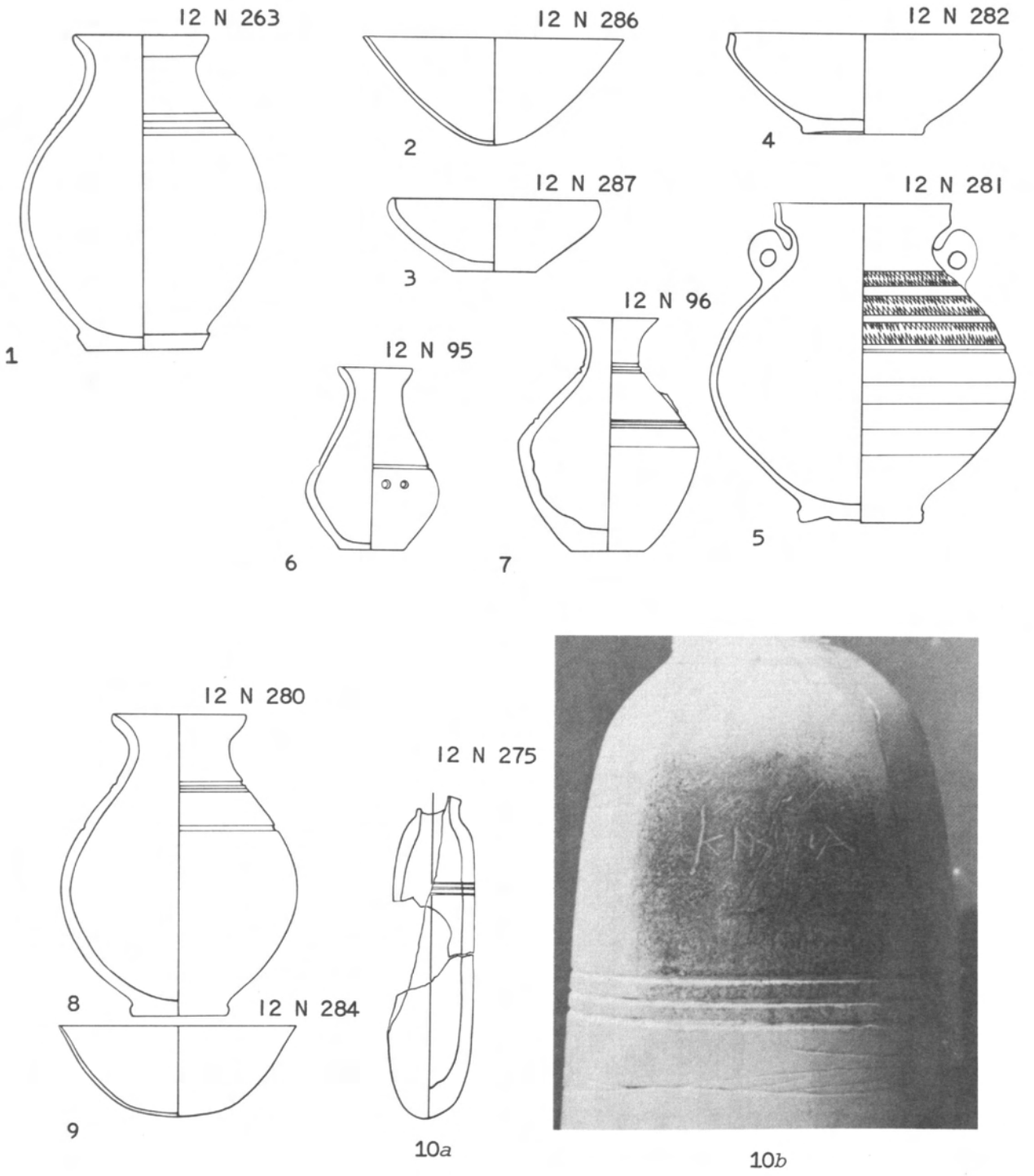


Fig. 34.—Objects associated with Burials 9 and 10. (1-7) From Burial 9. Scale (approx.), 1:4. (8-9) From Burial 10. Scale (approx.), 1:4. (10*a-b*) Stone vessel drawing and photo, 12 N 275, showing *KINNA*, from Burial 10. Scale (approx.): drawing, 1:4; photo, 1.5:1.

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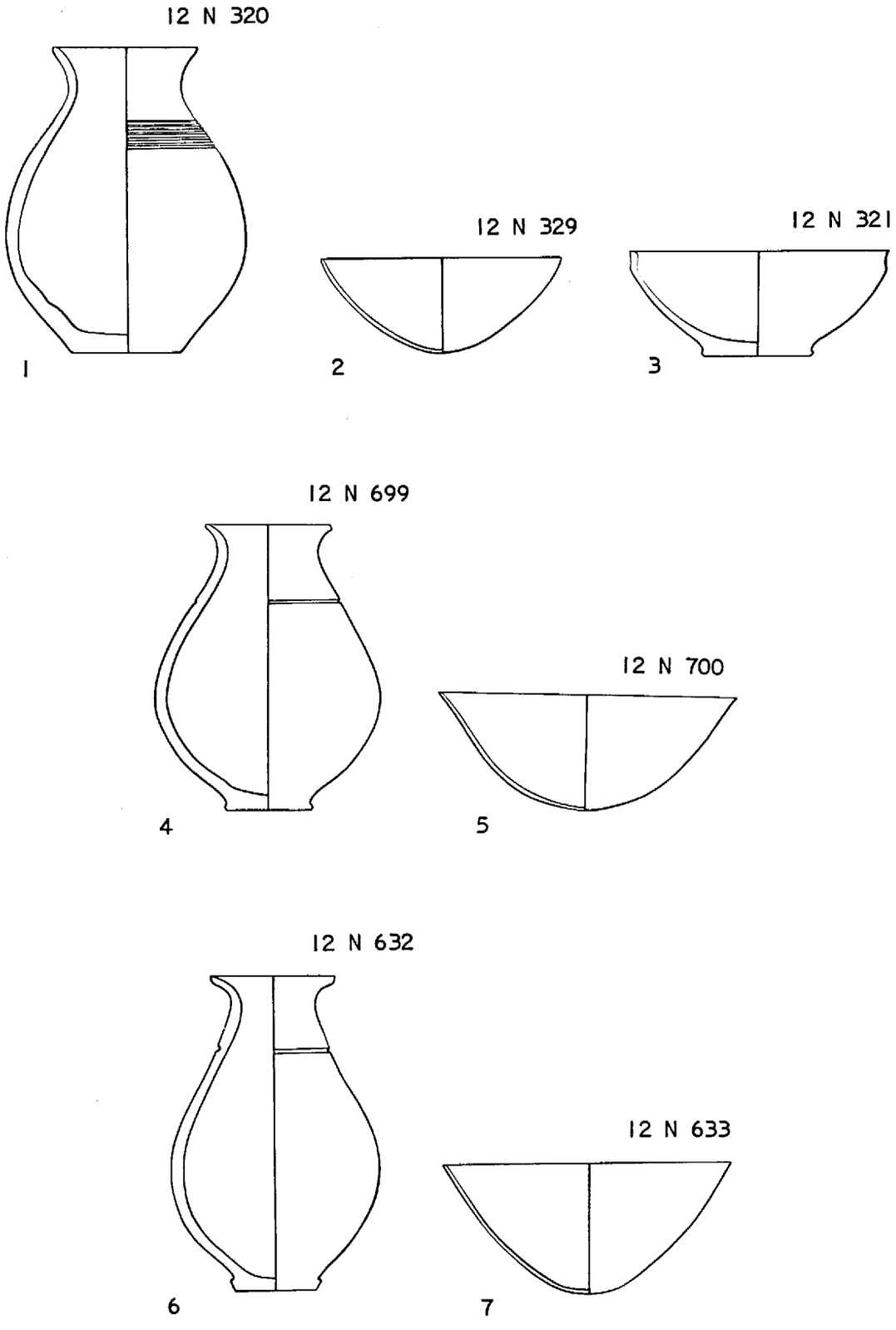
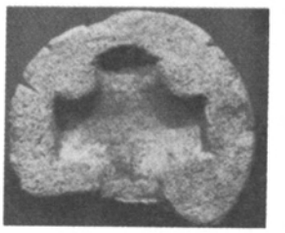


Fig. 35.—Pottery from Burials 11, 12, and 13 in Level IB. Scale (approx.), 1:4. (1-3) From Burial 11. (4-5) From Burial 12. (6-7) From Burial 13.

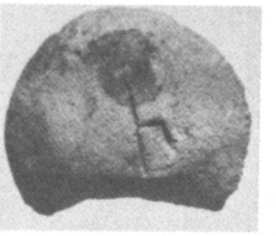
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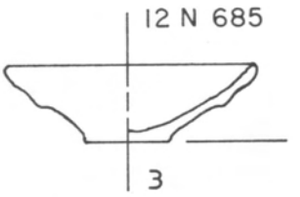
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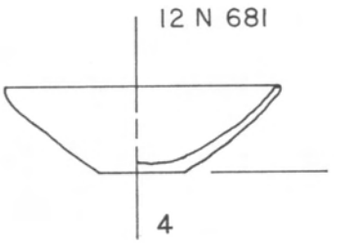
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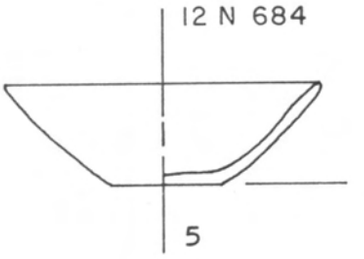
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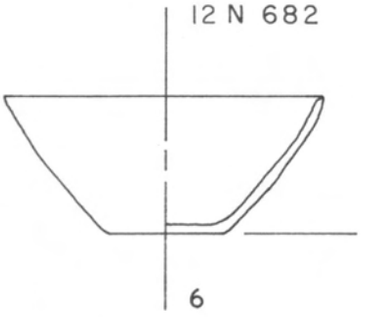
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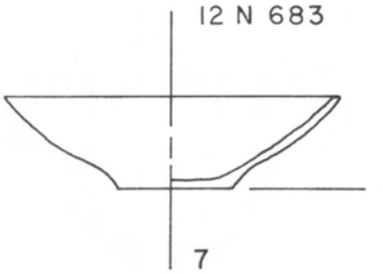
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7

Fig. 36.—**(1)** Glazed figurine, 12 N 20, from WA, Square 13, baulk above Wall P. Scale, 1:1. **(2***a-b***)** Mold, bottom and top, 12 N 21, showing inscribed character, from WA, Square 13, baulk above Wall P. Scale, 1:1. **(3)** Pottery drawing, 12 N 685, from WA 50*c*, Level X, Foundation. Scale, 2:5. **(4)** Pottery drawing, 12 N 681, from WA 50*c*, Level X, Room 1. Scale, 2:5. **(5)** Pottery drawing, 12 N 684, from WA 50*c*, Level X, Room 1. Scale, 2:5. **(6)** Pottery drawing, 12 N 682, from WA 50*c*, Level X, Court. Scale, 2:5. **(7)** Pottery drawing, 12 N 683, from WA 50*c*, Level X, Court. Scale, 2:5.

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AREA WB

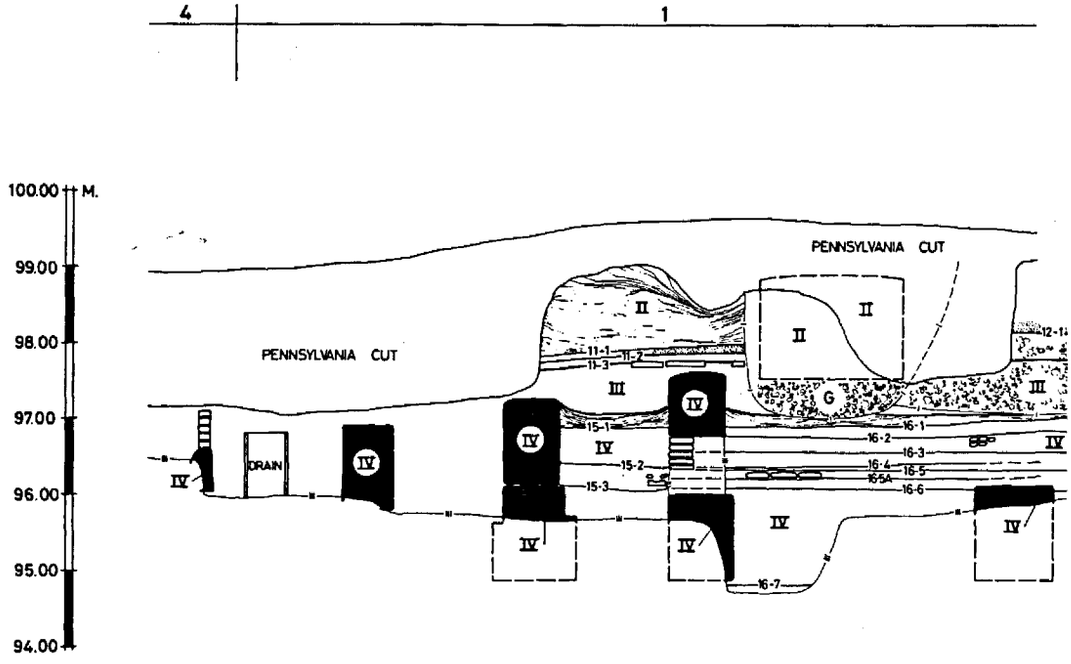


Fig. 37.—(1) WB, Section AA

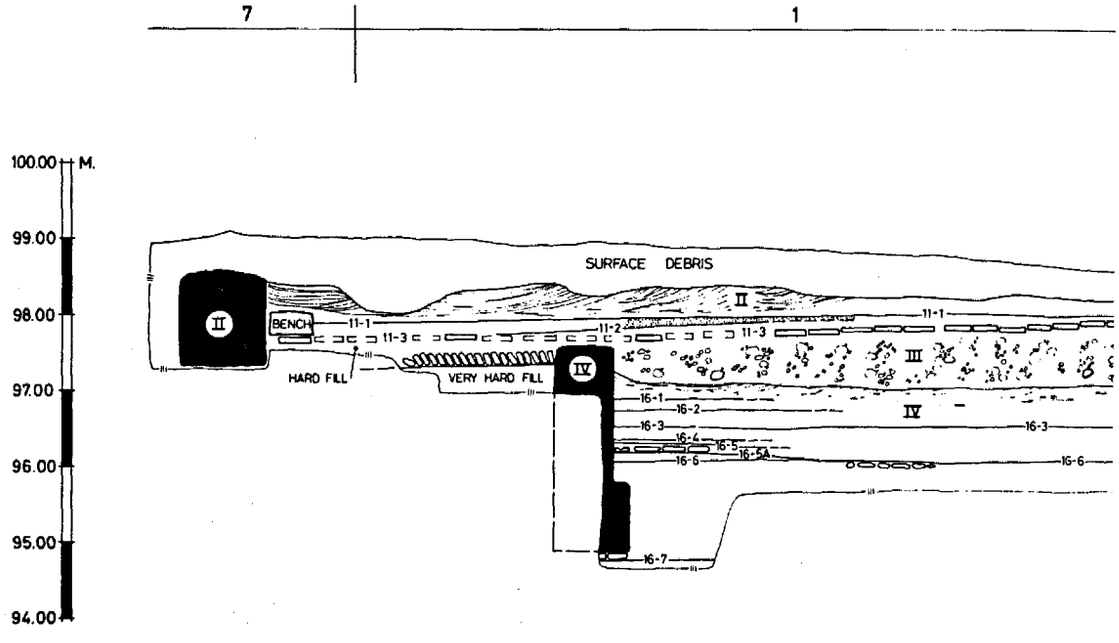
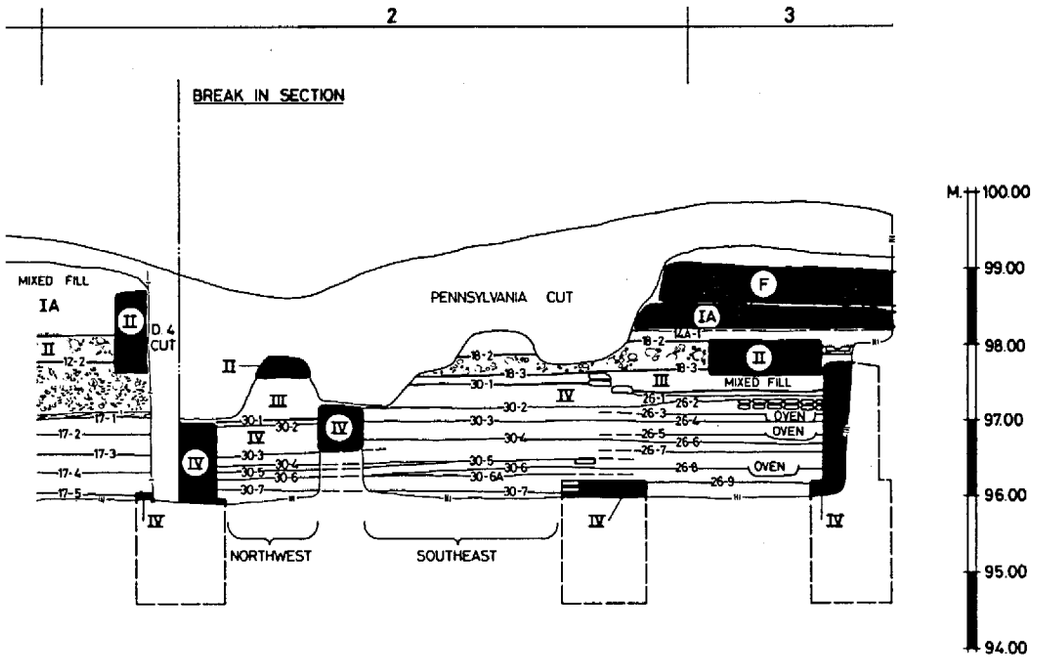
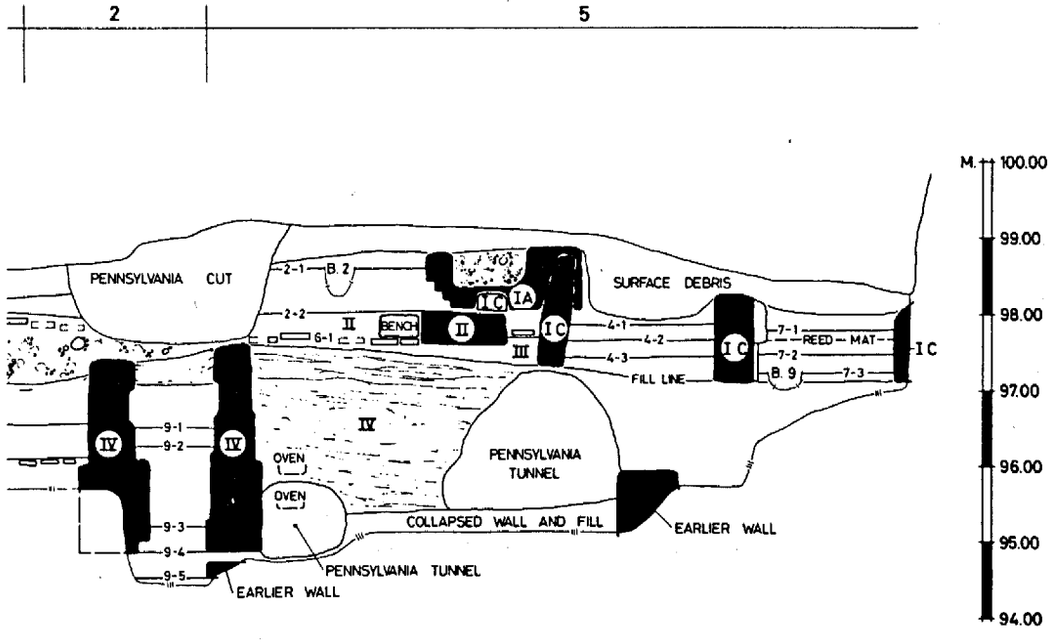


Fig. 37.—(2) WB, Section BB


2
3
BREAK IN SECTION
MIXED FILL
IA
D. 4
CUT
PENNSYLVANIA CUT
MIXED FILL
OVEN
OVEN
OVEN
NORTHWEST
SOUTHEAST
M.
100.00
99.00
98.00
97.00
96.00
95.00
94.00


2
5
PENNSYLVANIA CUT
SURFACE DEBRIS
BENCH
REED MAT
FILL LINE
OVEN
OVEN
PENNSYLVANIA TUNNEL
COLLAPSED WALL AND FILL
EARLIER WALL
PENNSYLVANIA TUNNEL
EARLIER WALL
M.
100.00
99.00
98.00
97.00
96.00
95.00
94.00

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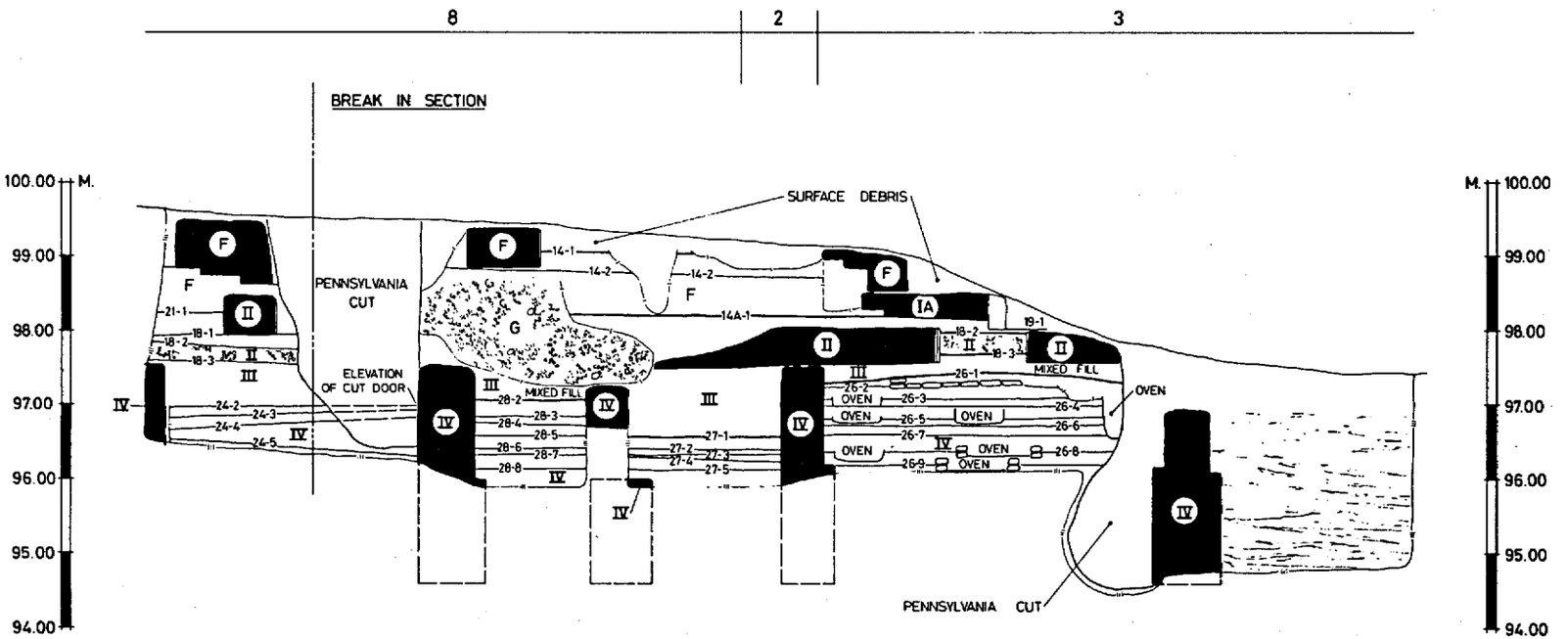


Fig. 38.— WB, Section CC

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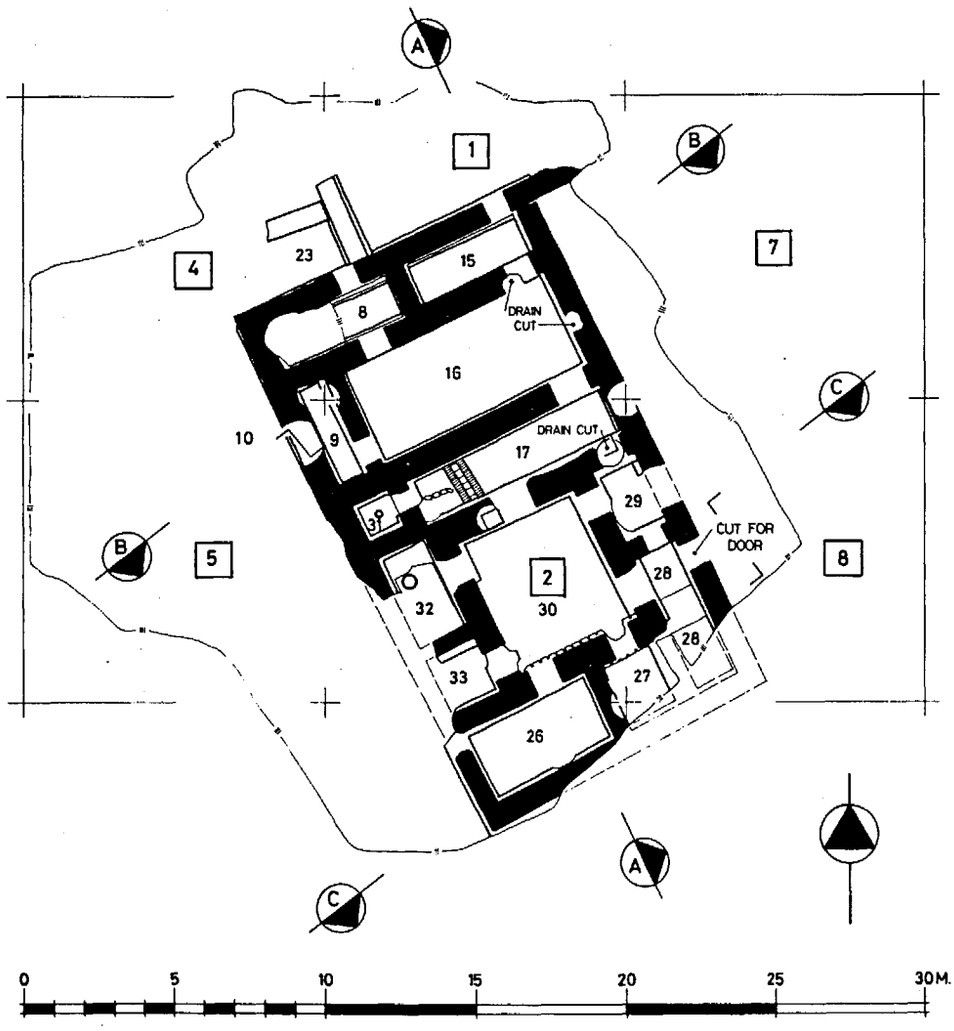


Fig. 39.—Plan of Old Babylonian house, showing foundations and walls

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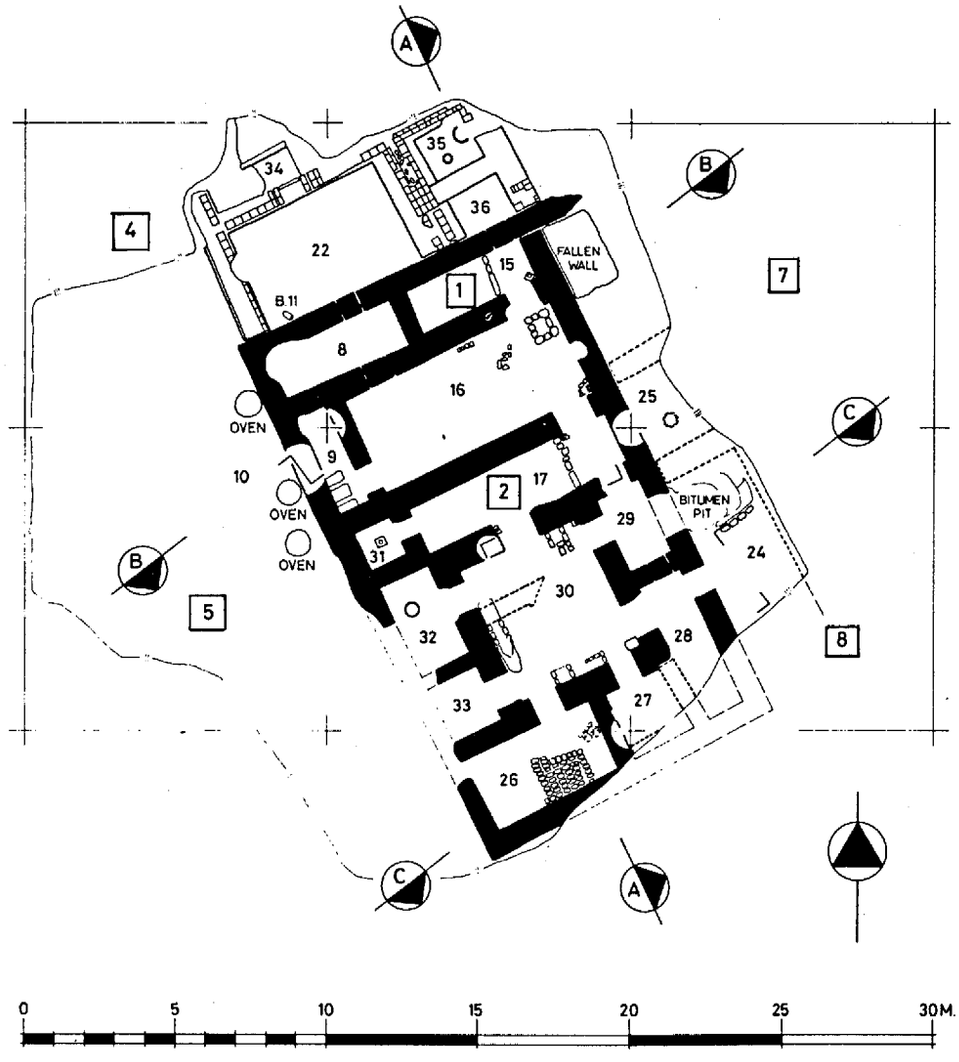


Fig. 40.—Plan of Old Babylonian house, showing features, floors, and wall changes

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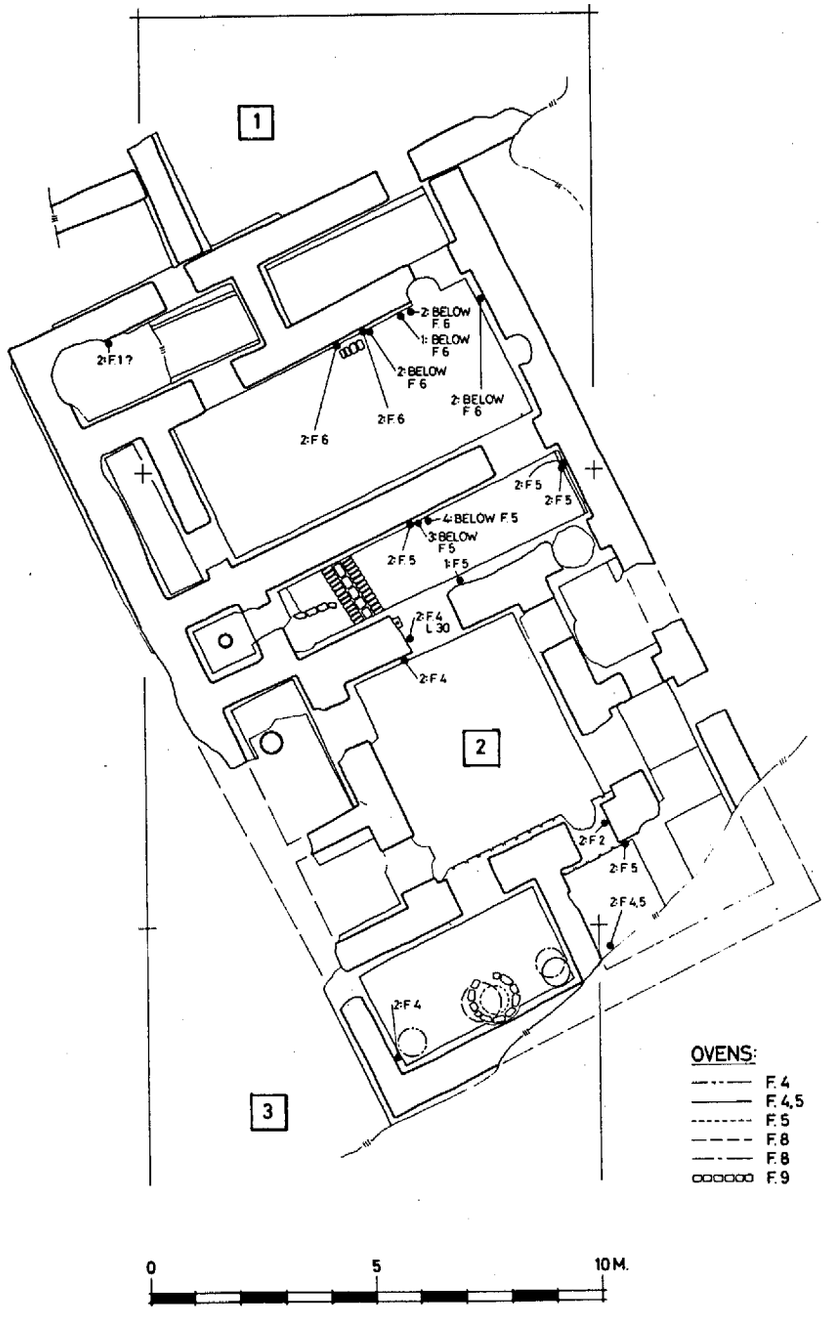
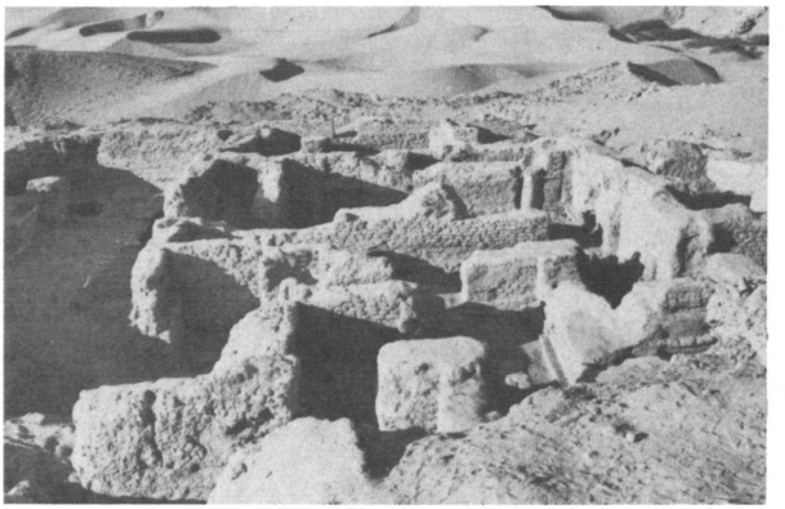


Fig. 41.—Plan of Old Babylonian house, showing special features (bowl findspots, ovens)

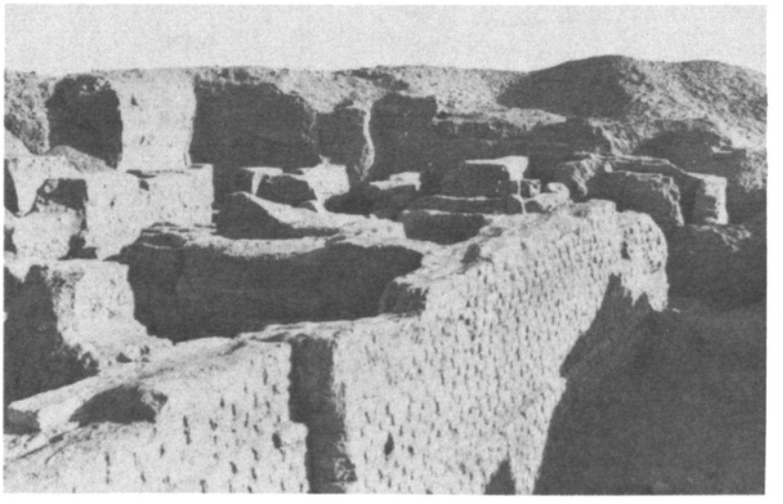
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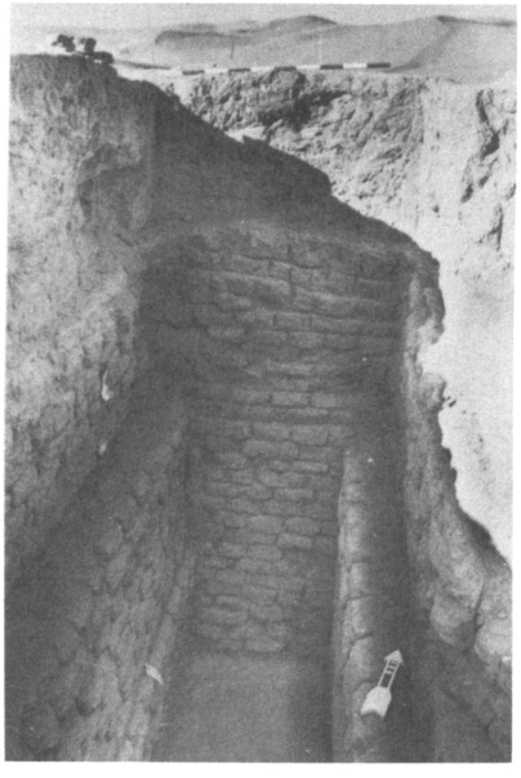
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3

Fig. 42.—Area WB at end of twelfth season. (1) From NW. (2) From SE (House A in foreground). (3) From NW (House A in foreground).

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1



2



3

Fig. 43.—Old Babylonian House A. (1) Locus 9, from SE showing walls to bottom of foundation. (2) Locus 16, two sets of bowls beside hearth. (3) Locus 16, groups of bowls at foundation footing.

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1



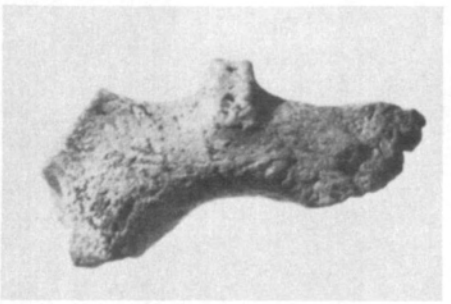
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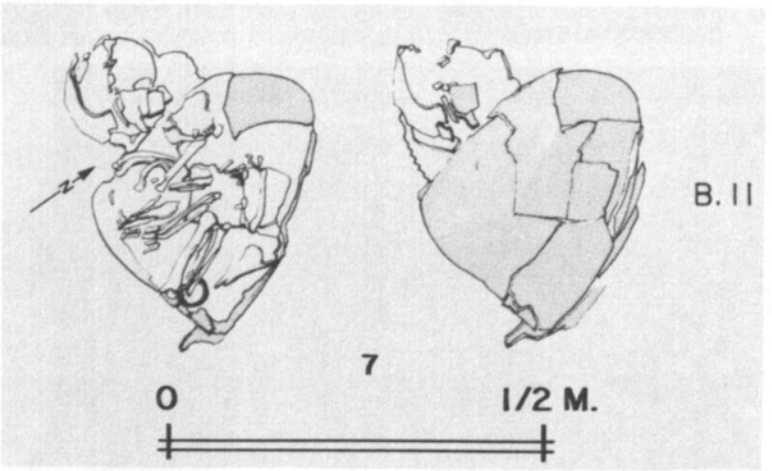
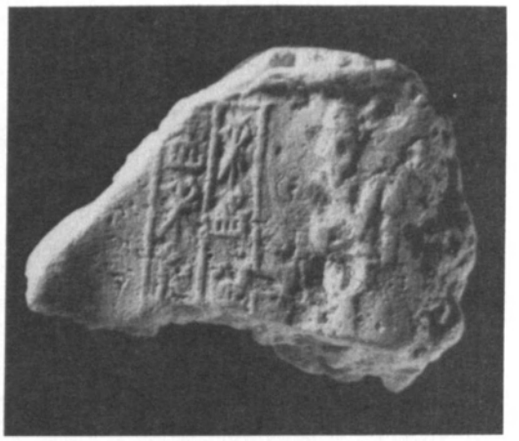


Fig. 44.—Objects from WB, Level IV. Scale, 1:2. (1) Plaque, 12 N 639, from Locus 17. (2) Plaque, 12 N 784, from Locus 17. (3) Plaque, 12 N 731, from Locus 26. (4) Plaque, 12 N 713, from Locus 26. (5) Figurine, 12 N 444, from Locus 16. (6) Figurine, 12 N 494, from Locus 26. (7) Burial 11, from WB, Level IV, Locus 23. Scale as indicated.

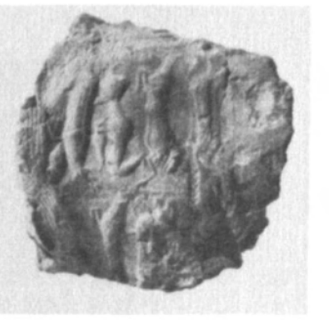
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1



2



3



4*a*



4*b*

Fig. 45.—Objects from WB, Level IV. **(1)** Seal impression, 12 N 462, from Locus 22. Scale, 2:1. **(2)** Seal impression, 12 N 616, from Locus 30. Scale, 2:1. **(3)** Seal impression, 12 N 617, from Locus 30. Scale (approx.), 4:3. **(4*a*-*b*)** Cylinder seal, rolling, and drawing, 12 N 625, from Locus 17. Scale, 1:1.

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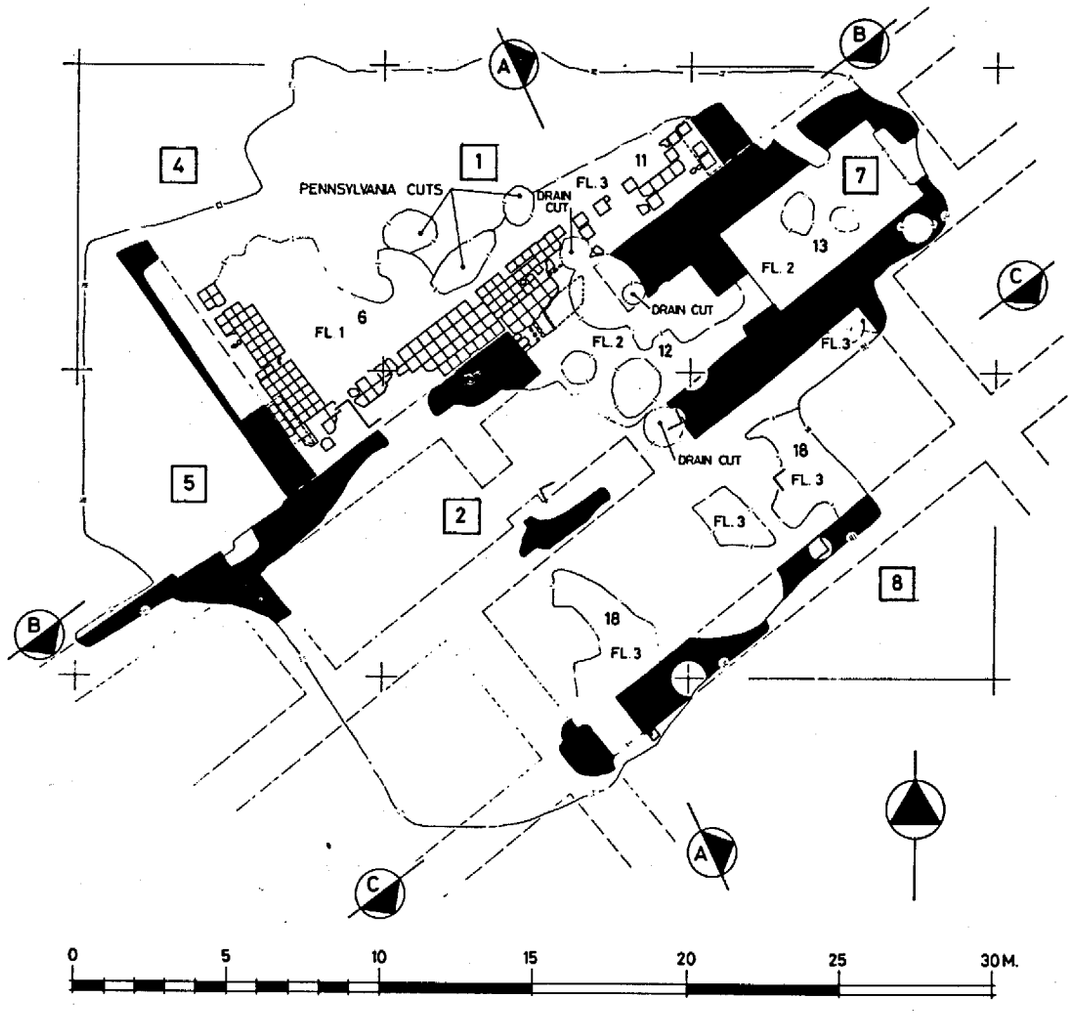


Fig. 46.—Plan of WB, Level II (Kassite)

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2



3



4

Fig. 47.—(1) South corner of Kassite courtyard with bench on pavement. (2) Kassite palace, Locus 12, Floor 2, from E. (3) Kassite palace, Locus 13, Floor 2, from SE. (4) Kassite palace, Locus 21, from SE.

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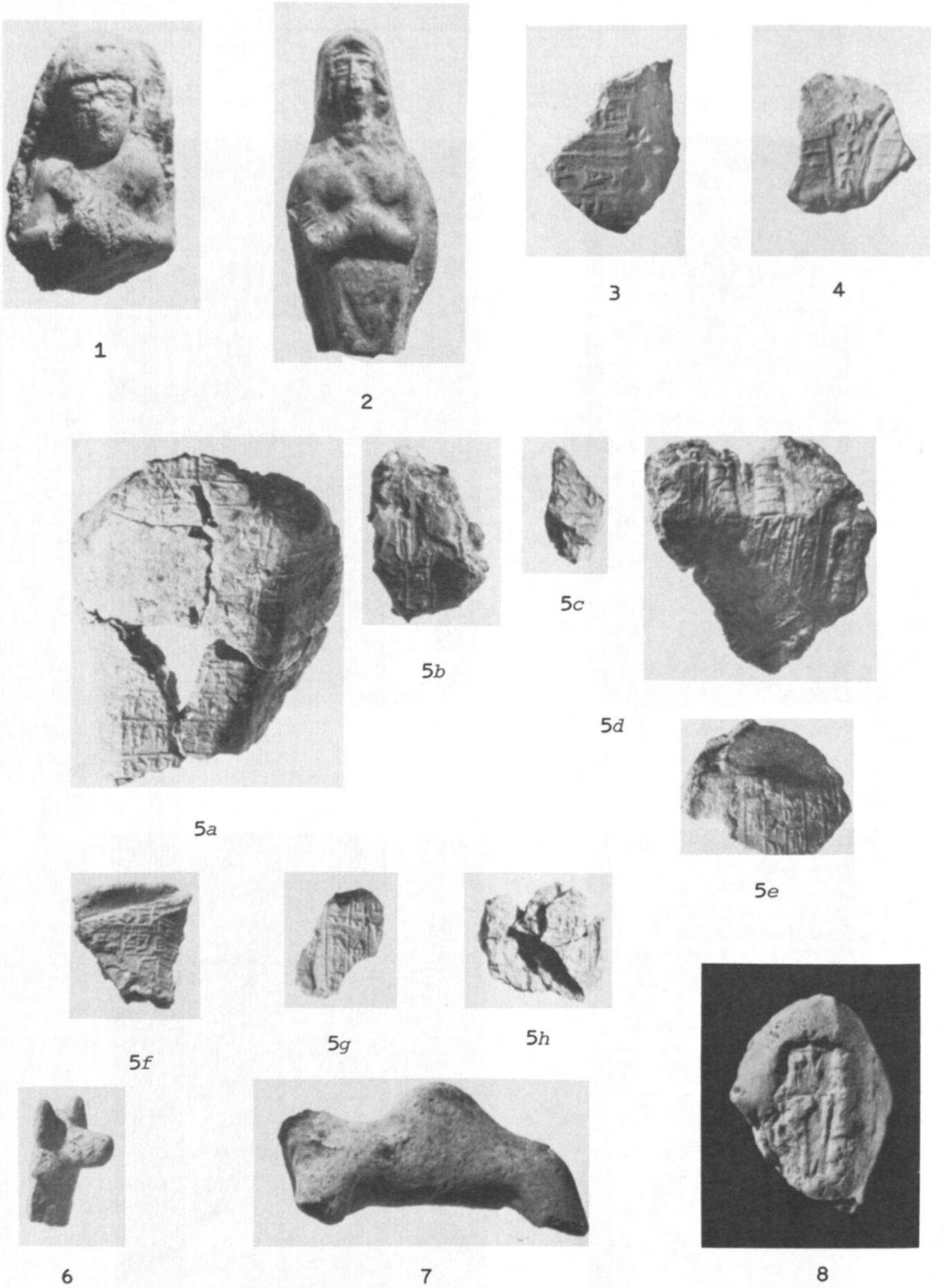


Fig. 48.—Objects from WB, Levels III (1-2) and II (3-8). (1) Figurine, 12 N 374, from Locus 16. Scale, 1:1. (2) Figurine, 12 N 488, from Locus 18. Scale, 1:1. (3) Tablet fragment, 12 N 295, from Locus 6. Scale, 1:1. (4) Seal impression, 12 N 81, from Locus 6. Scale, 1:1. (5*a-h*) Seal impressions, 12 N 691*a-h*, from Locus 25. Scale, 1:1. (6) Figurine, 12 N 490, from Locus 18. Scale, 1:2. (7) Figurine, 12 N 604, from Locus 18. Scale, 1:2. (8) Seal impression, 12 N 368, from Locus 12. Scale, 1:1.

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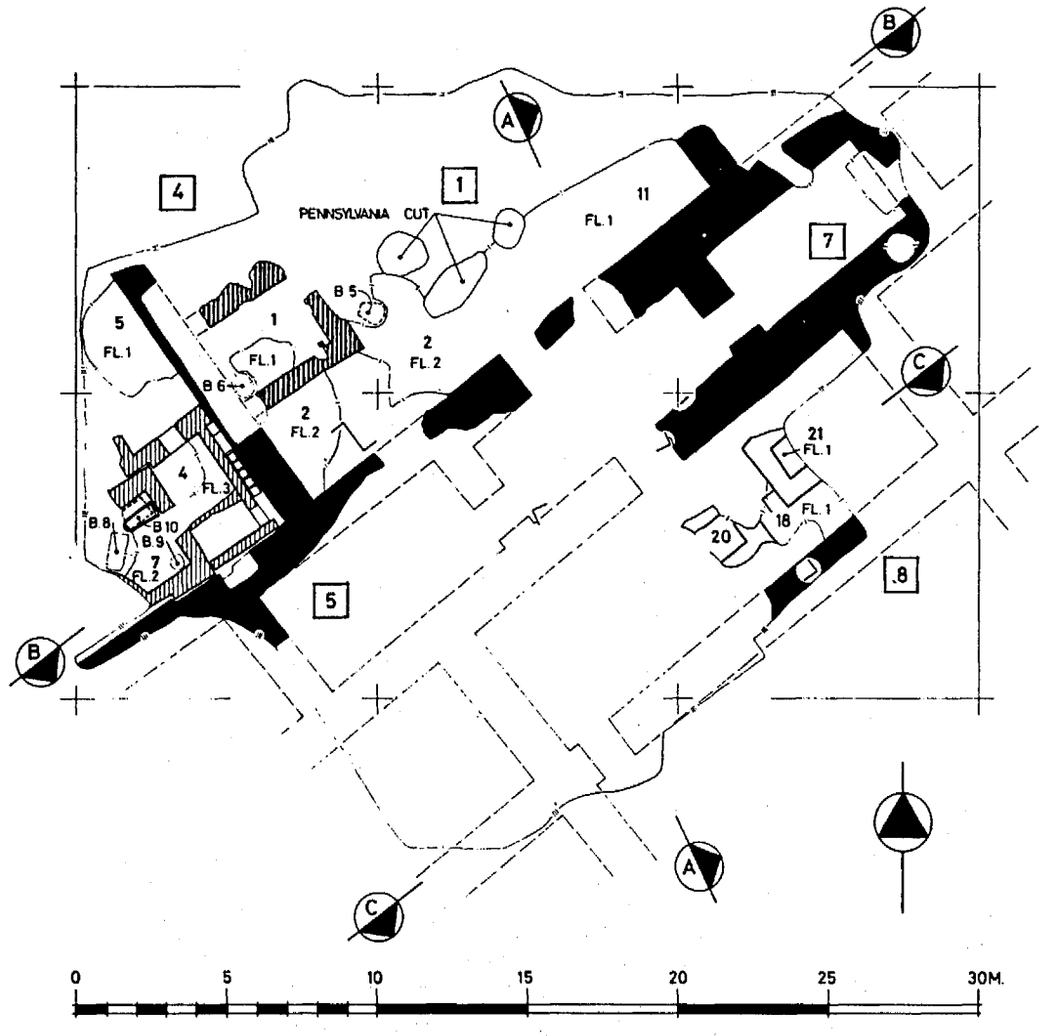
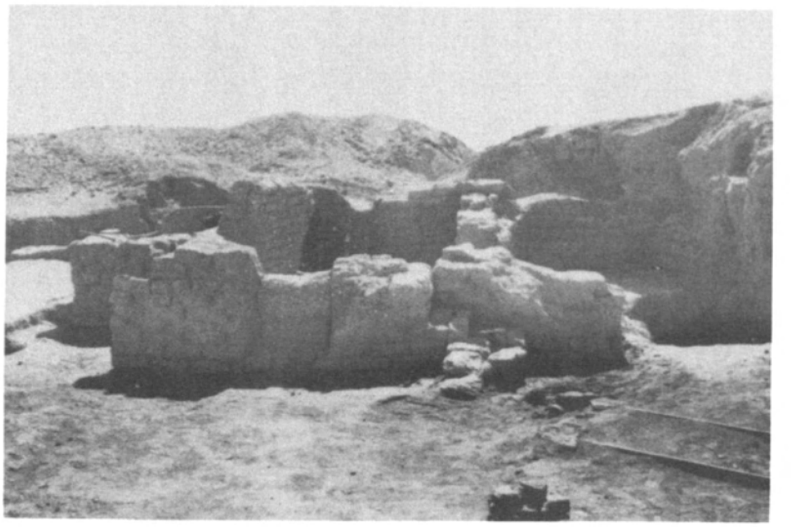
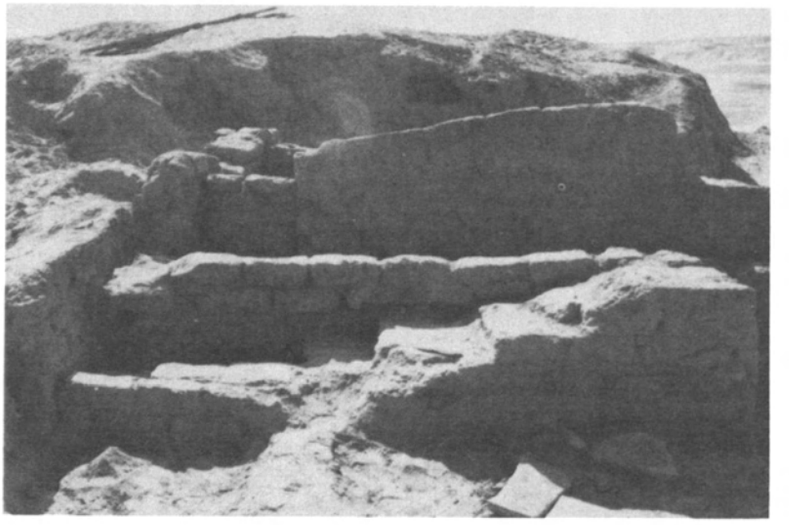


Fig. 49.--Plan of WB, Levels IB, IC, and IIA. IB, burials; IC, hatched walls; IIA, black walls and walls of Loci 20-21.

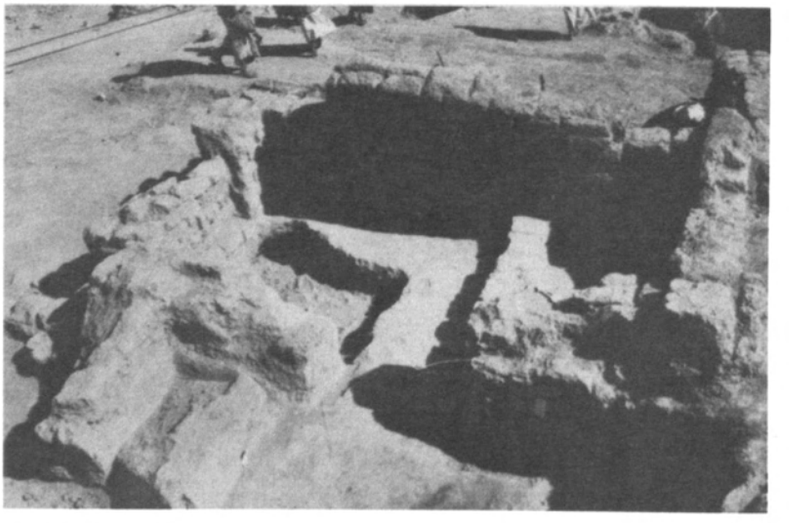
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3

Fig. 50.—Level IC. (1) Loci 4, 5, and 7, from NW. (2) Locus 4, from NE. (3) Locus 4, from SW.

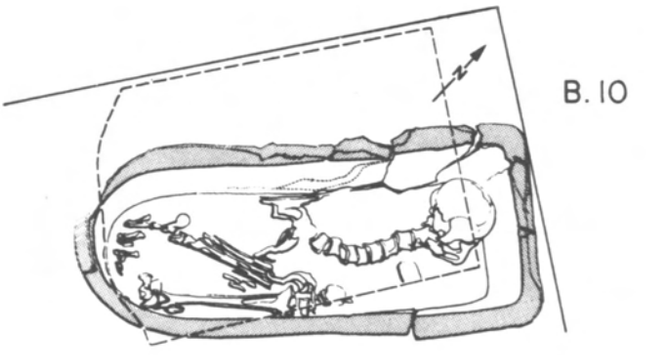
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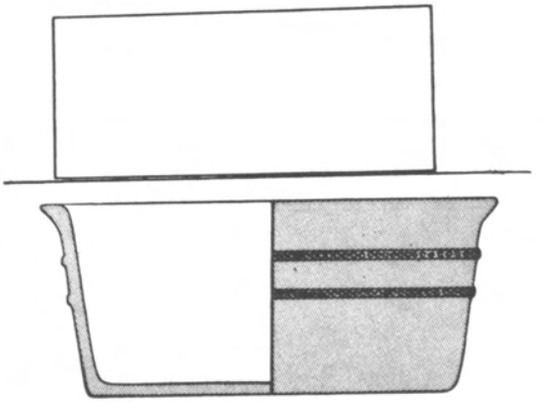
B. 10

4a

B. 9



3



4b

Fig. 51.—(1) Cylinder seal and rolling, 12 N 76, from WB, Level IC, Locus 7. Scale, 1:1. (2) Figurine, 12 N 62, from WB, Level IC, Locus 4. Scale, 1:1. (3) Drawing of burial jar of Burial 9, from WB, Level IC, Locus 7. Scale (approx.), 1:15. (4*a*) Drawing of Burial 10, from WB, Level IC, Locus 7. Scale as indicated. (4*b*) Section through Burial 10. Scale as indicated.

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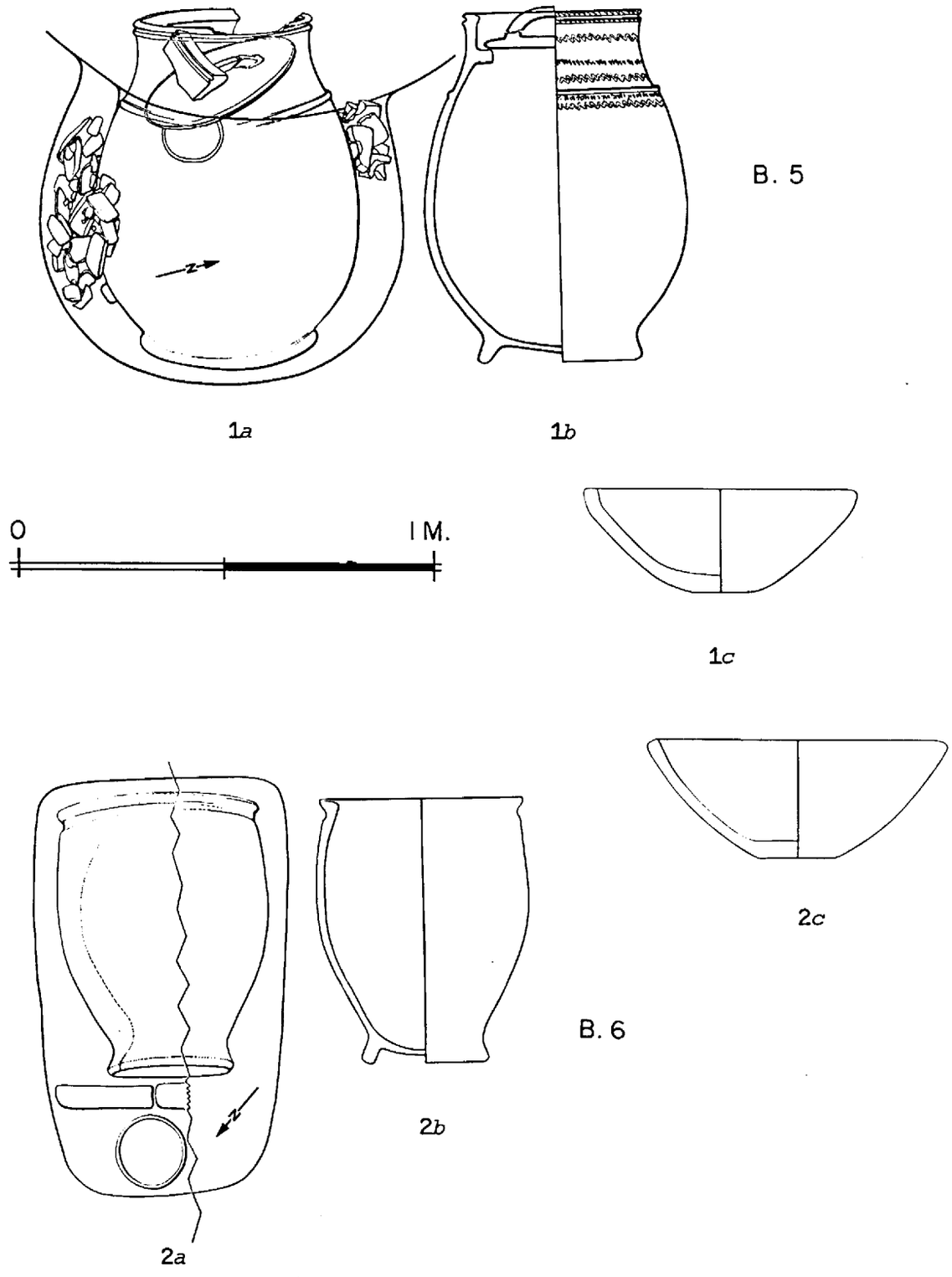
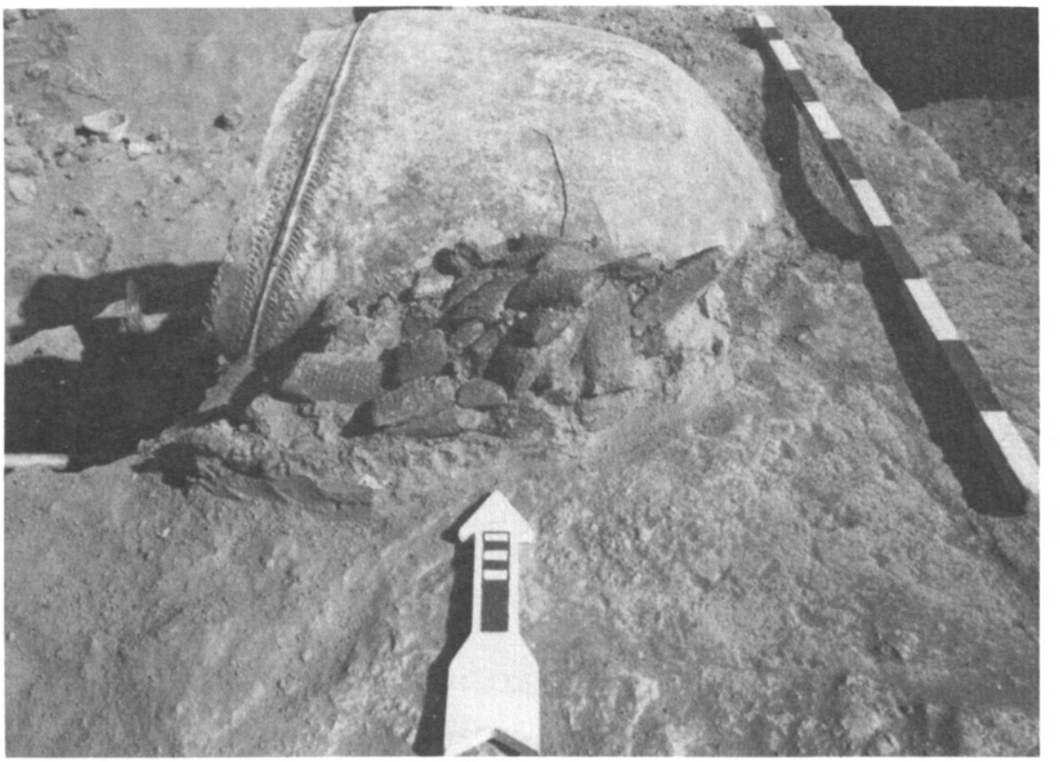


Fig. 52.—(1*a*) Drawing of Burial 5, from WB, Level IB, Locus 3. Scale as indicated. (1*b*) Drawing of burial jar of Burial 5. Scale as indicated. (1*c*) Pottery drawing, 12 N 58, from Burial 5. Scale (approx.), 1:3.5. (2*a*) Drawing of Burial 6, from WB, Level IB, Locus 1. Scale as indicated. (2*b*) Drawing of burial jar of Burial 6. Scale as indicated. (2*c*) Pottery drawing, 12 N 54, from Burial 6. Scale (approx.), 1:3.5.

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1



2

Fig. 53:1-2.—Excavation of tablets, Burial 5

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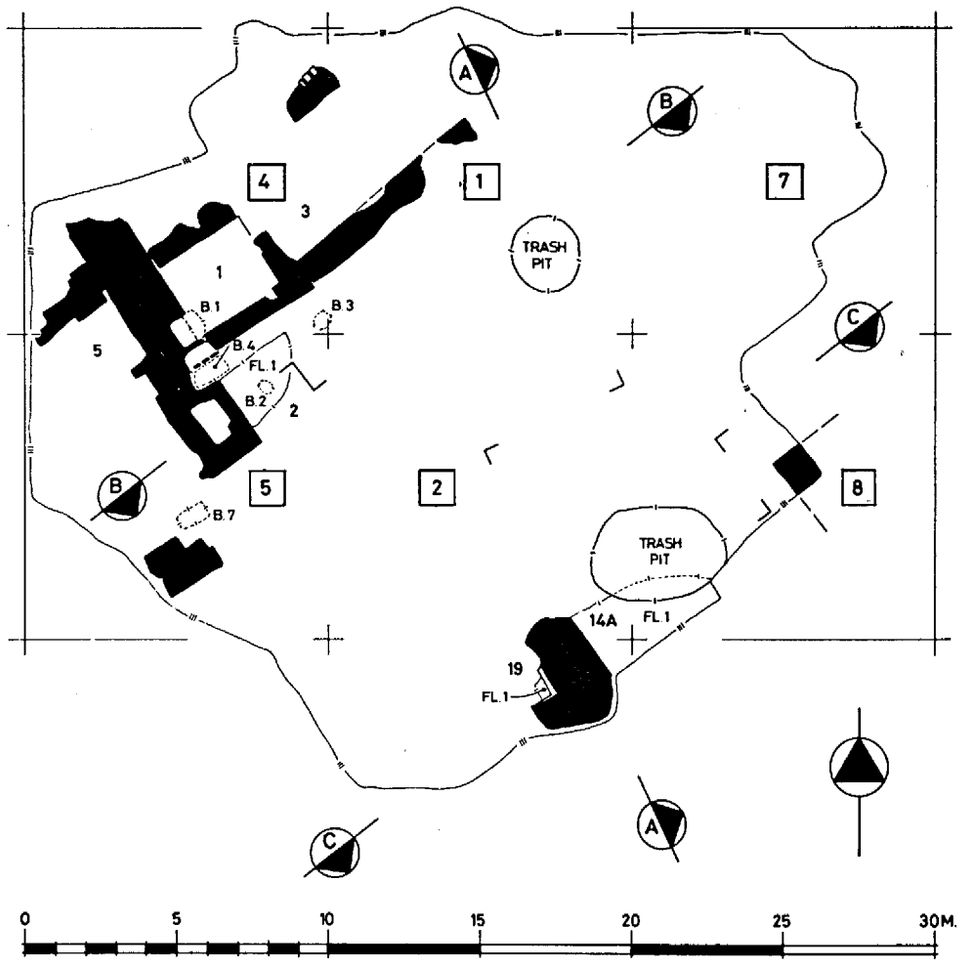


Fig. 54.—Plan of WB, Levels G and IA

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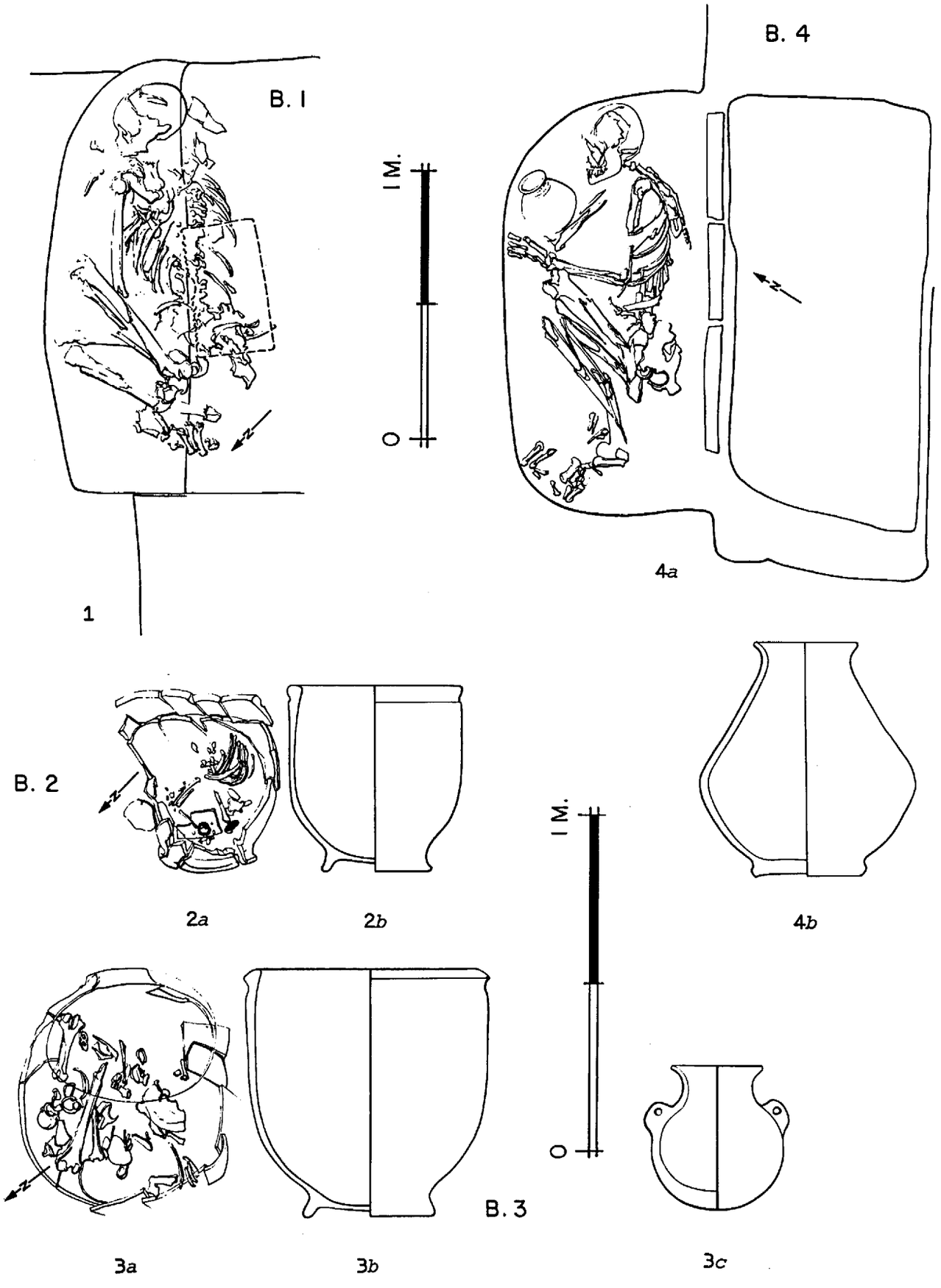


Fig. 55.—(1) Drawing of Burial 1, from WB, Level G, Locus 1. Scale as indicated. (2*a-b*) Drawing of Burial 2 and burial jar, from WB, Level G, Locus 2. Scale as indicated. (3*a-b*) Drawing of Burial 3 and burial jar, from WB, Level G, Locus 2. Scale as indicated. (3*c*) Pottery drawing, 12 N 39, from Burial 3. Scale (approx.), 1:3. (4*a*) Drawing of Burial 4, from WB, Level G, Locus 1. Scale as indicated. (4*b*) Pottery drawing, 12 N 40, from Burial 4. Scale (approx.), 1:4.

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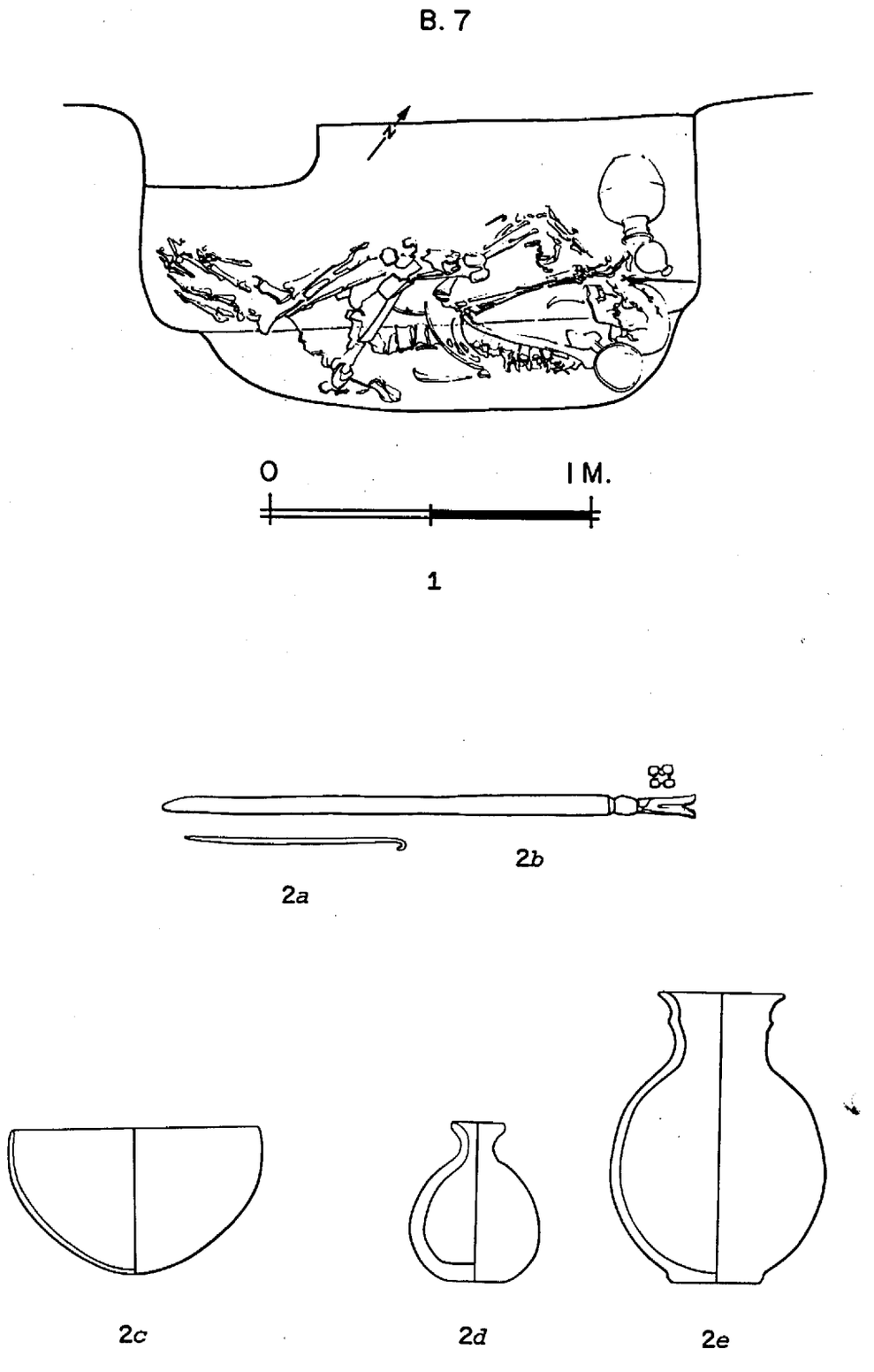


Fig. 56.—(1) Drawing of Burial 7, from WB, Level G, Locus 4. Scale as indicated. (2) Objects from Burial 7. (*a*) Drawing of copper pin, 12 N 92. Scale (approx.), 1:2. (*b*) Drawing of copper pin, 12 N 93. Scale (approx.), 1:2. (*c*) Pottery drawing, 12 N 89. Scale (approx.), 1:2.5. (*d*) Pottery drawing, 12 N 91. Scale (approx.), 1:2.5. (*e*) Pottery drawing, 12 N 90. Scale (approx.), 1:3.

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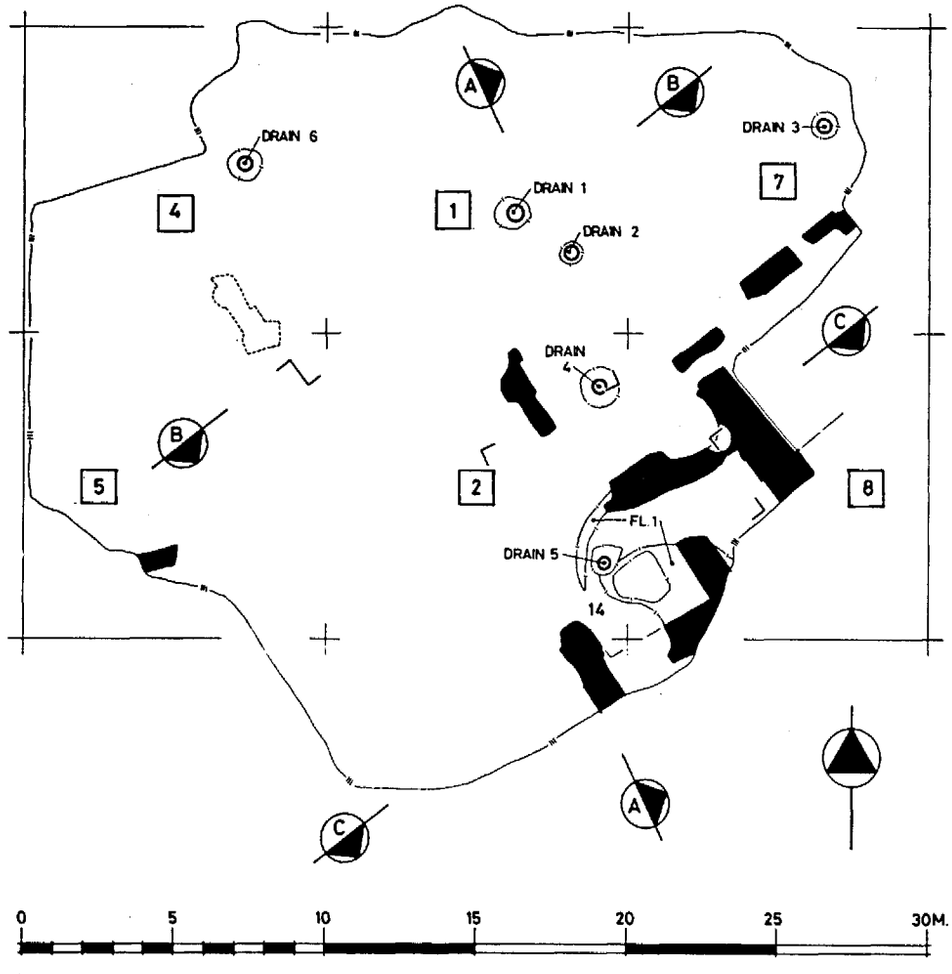
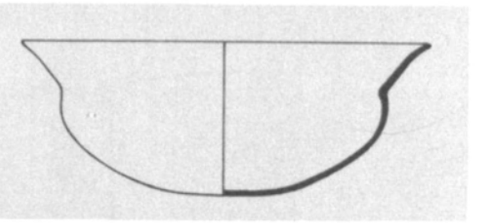


Fig. 57.—Plan of WB, Level F

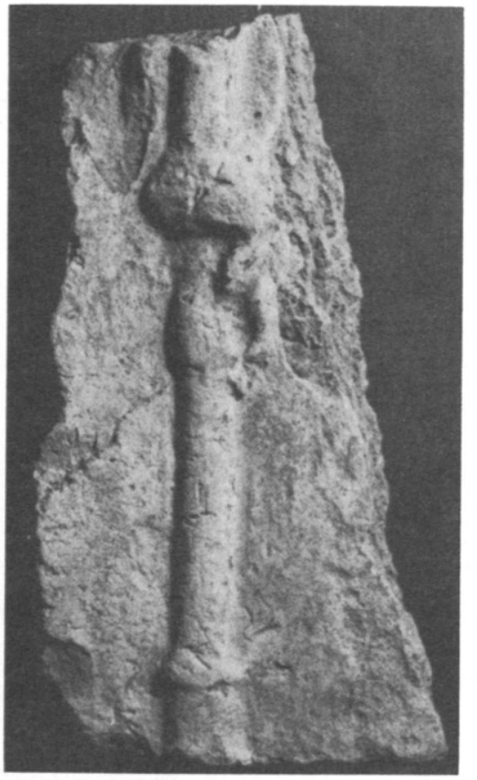
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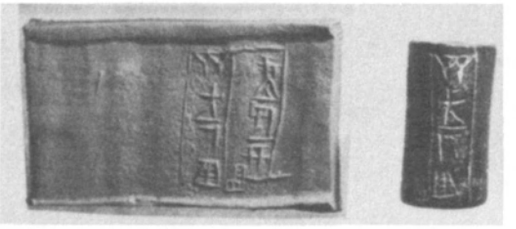
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Fig. 58.—(1) WB, Locus 14. (2) Drawing of copper bowl, 12 N 370, from WB, Level F, Locus 11. Scale (approx.), 2:5. (3) Plaque, 12 N 293, from WB, Pennsylvania dump. Scale, 1:1. (4) Figurine, 12 N 424, from WB, tunnel debris, Locus 24(?). Scale, 1:1. (5) Cylinder seal and rolling, 12 N 294, from WB, Pennsylvania dump. Scale, 1:1. (6) Seal impression, 12 N 300, from WB, Pennsylvania dump. Scale, 1:1.

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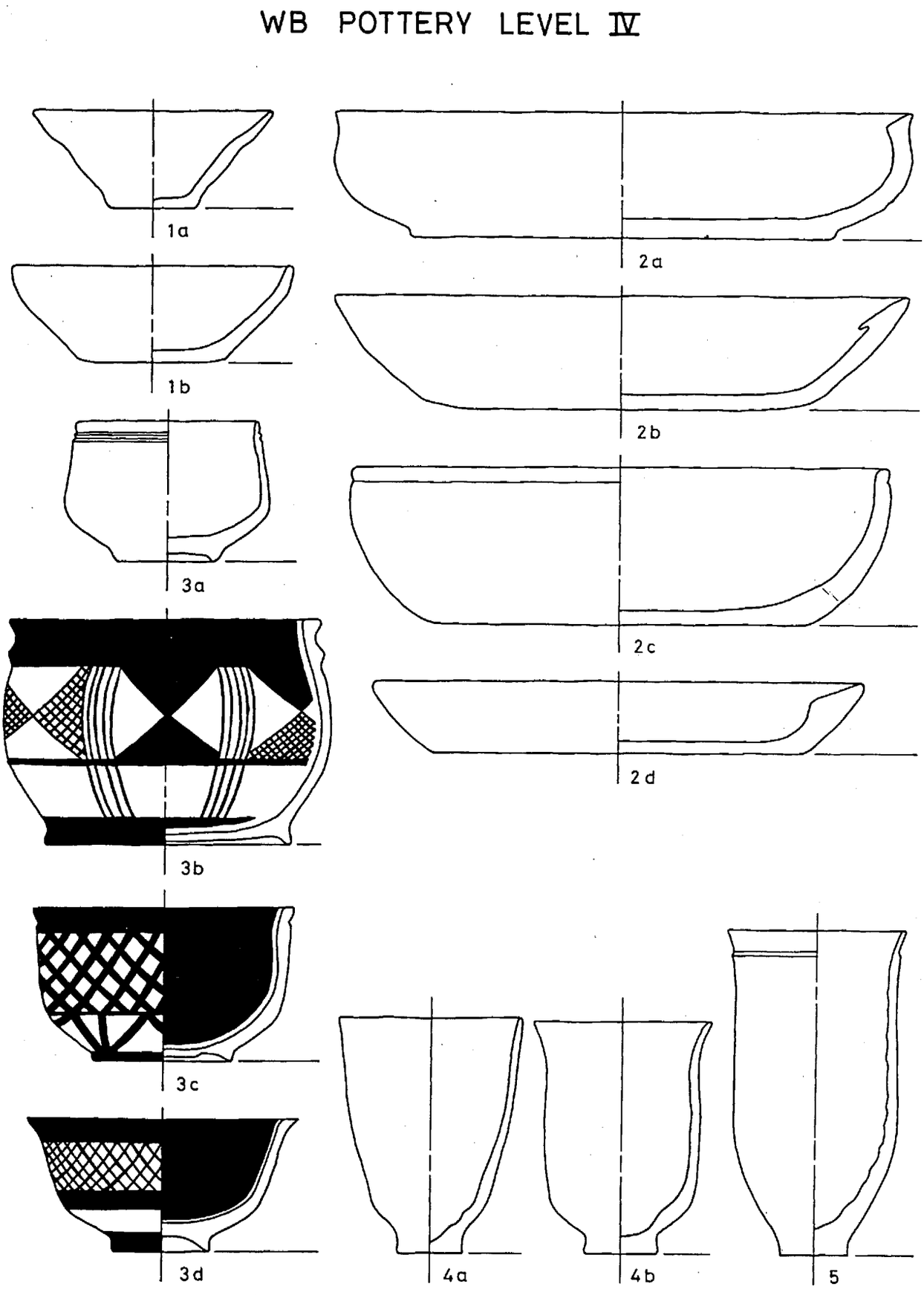


Fig. 59.—Old Babylonian pottery. Scale, 2:5.

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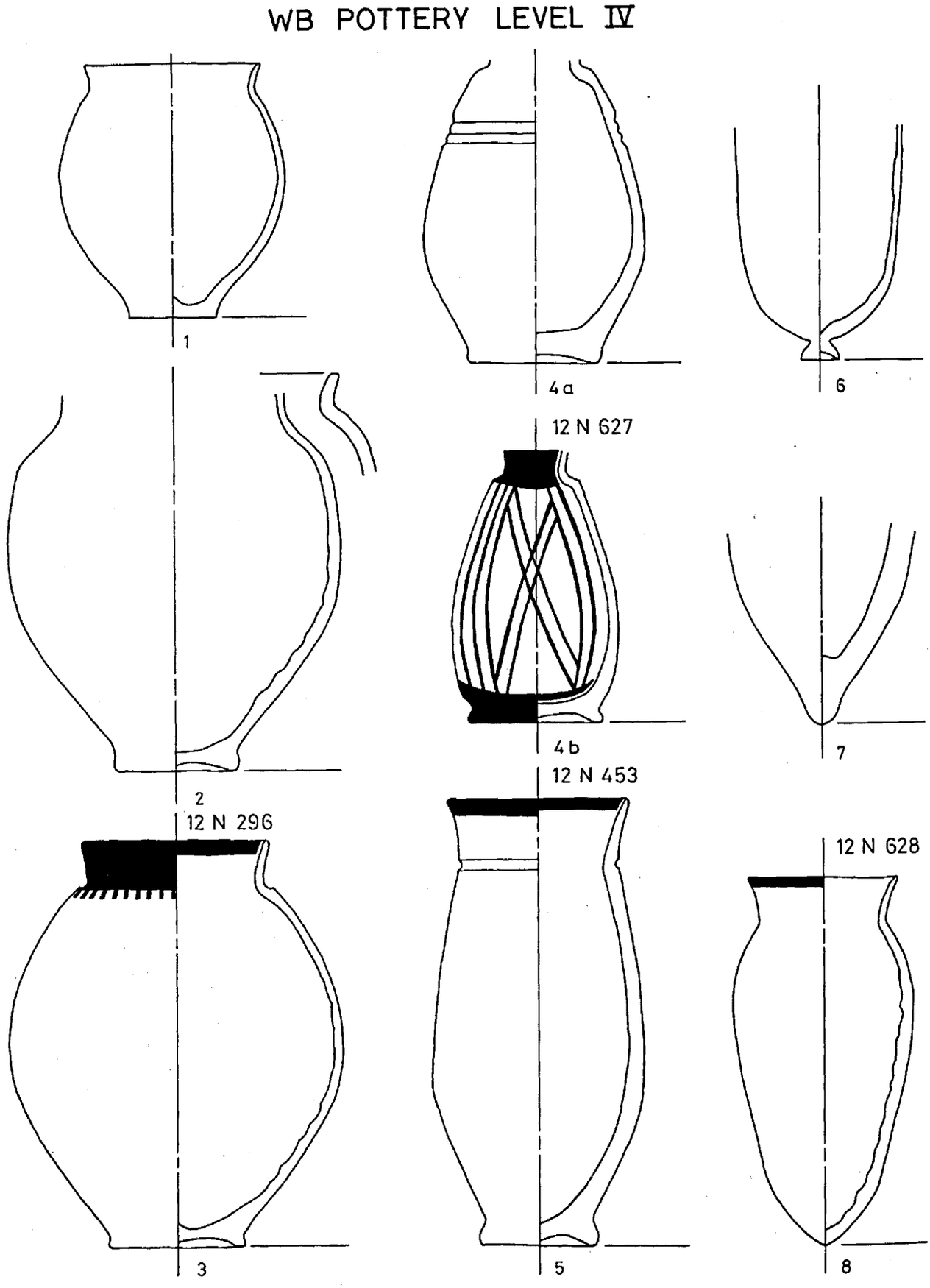


Fig. 60.—Old Babylonian pottery. Scale, 2:5.

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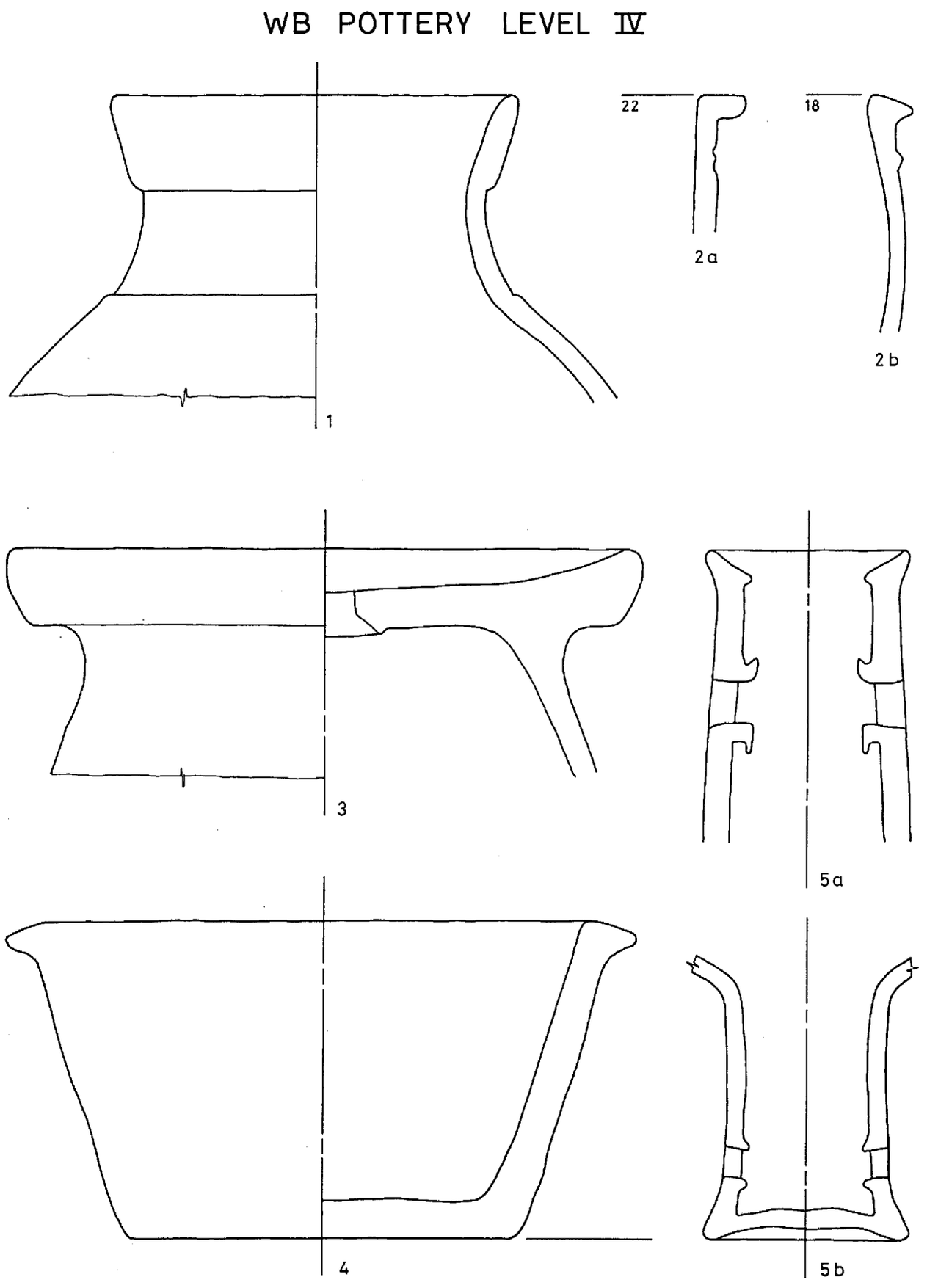


Fig. 61.—Old Babylonian pottery. Scale, 2:5.

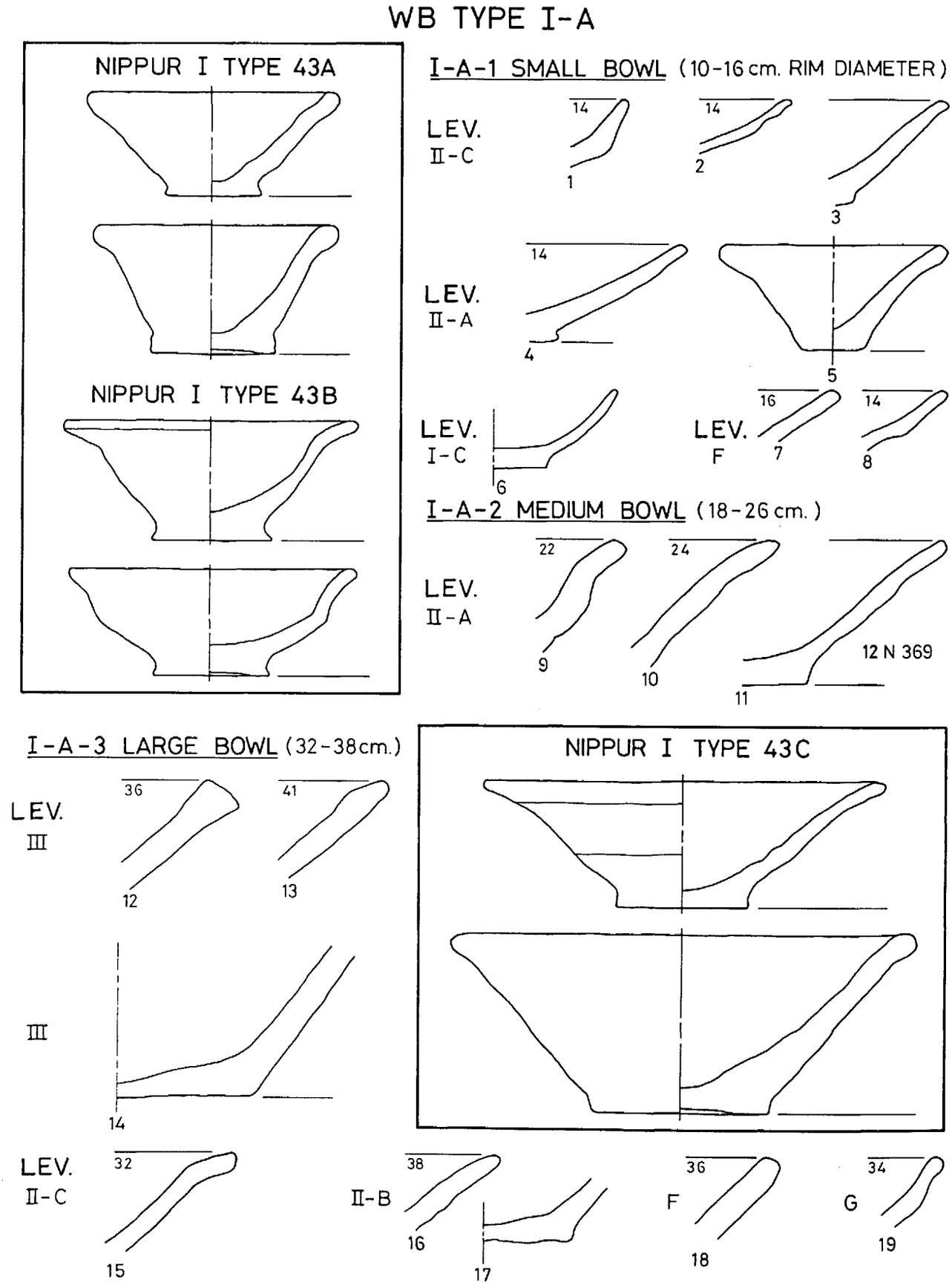
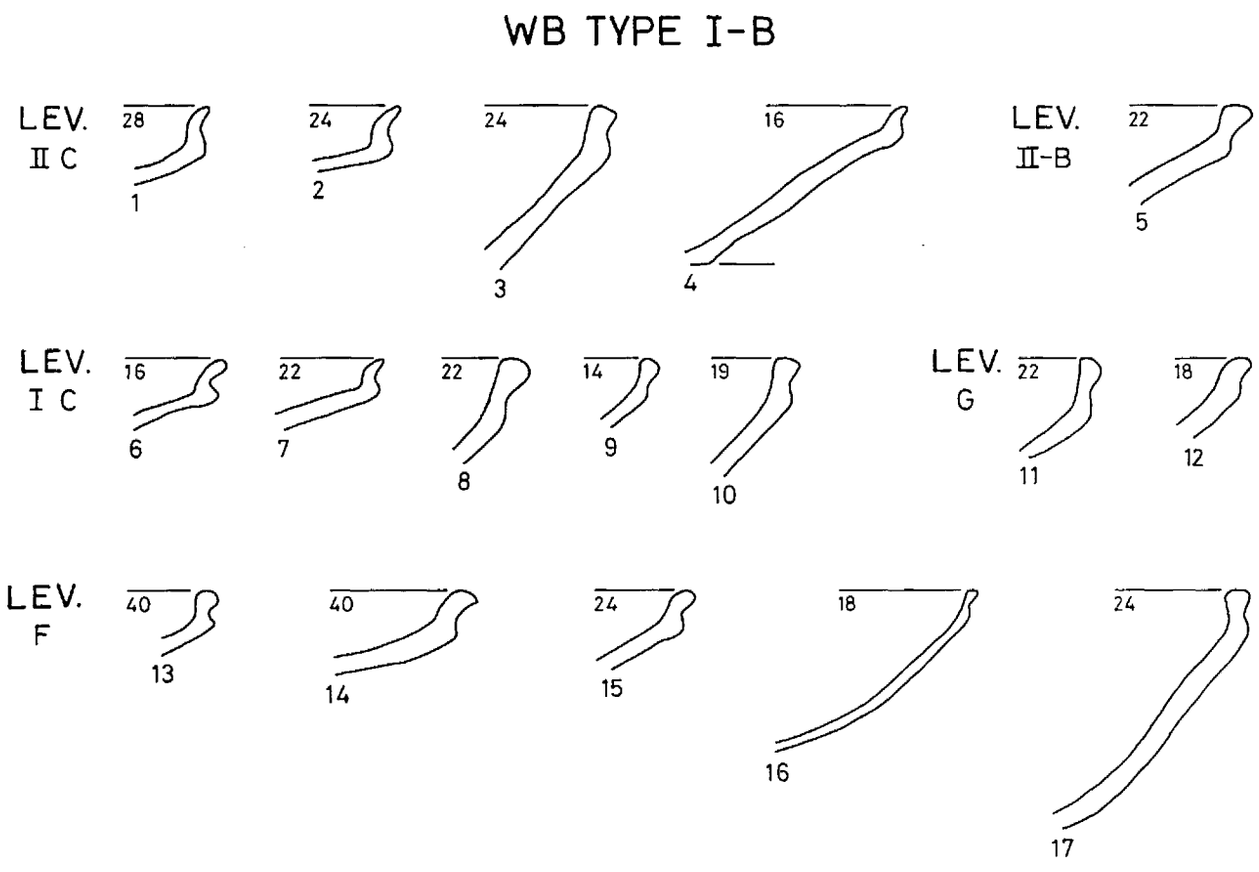


Fig. 62.—Scale, 2:5



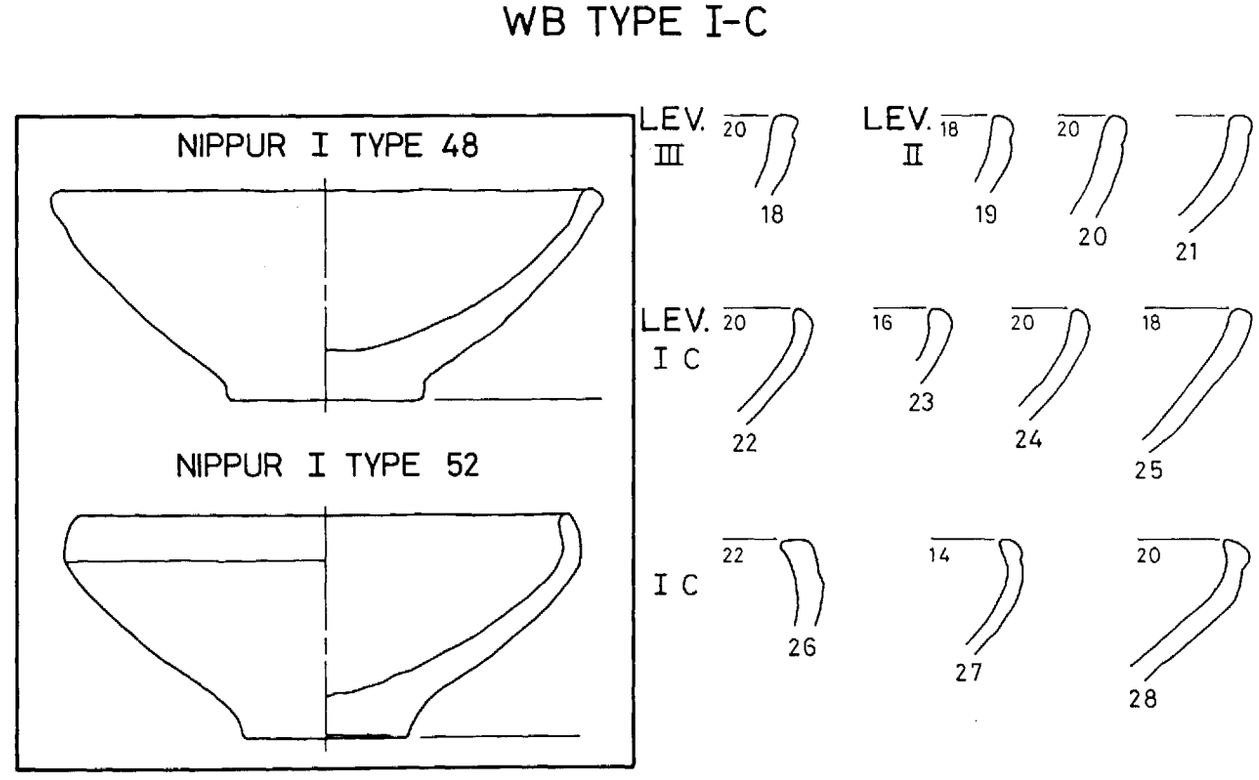
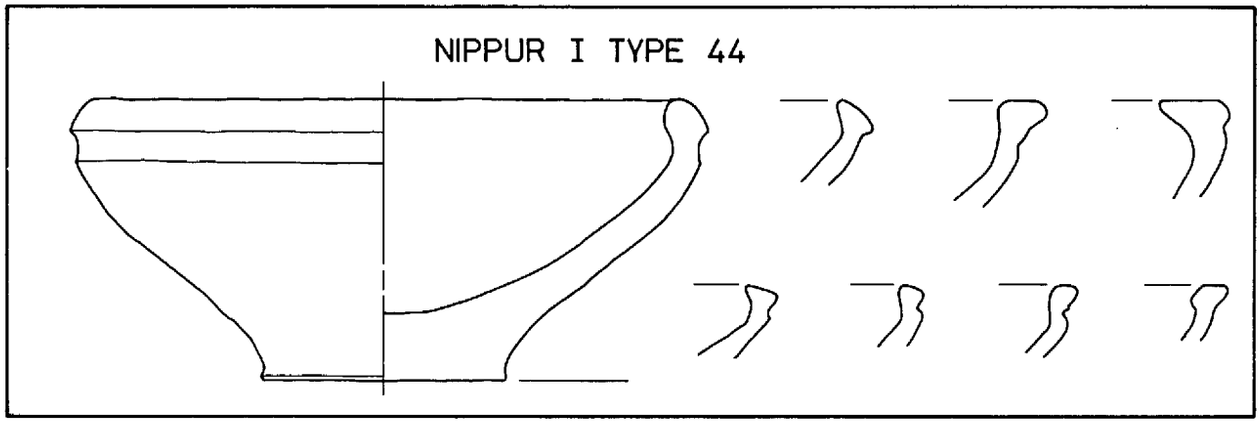
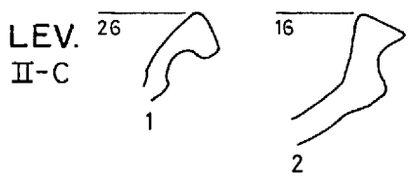


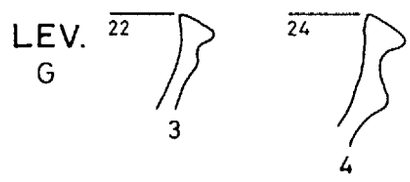
Fig. 63.—Scale, 2:5

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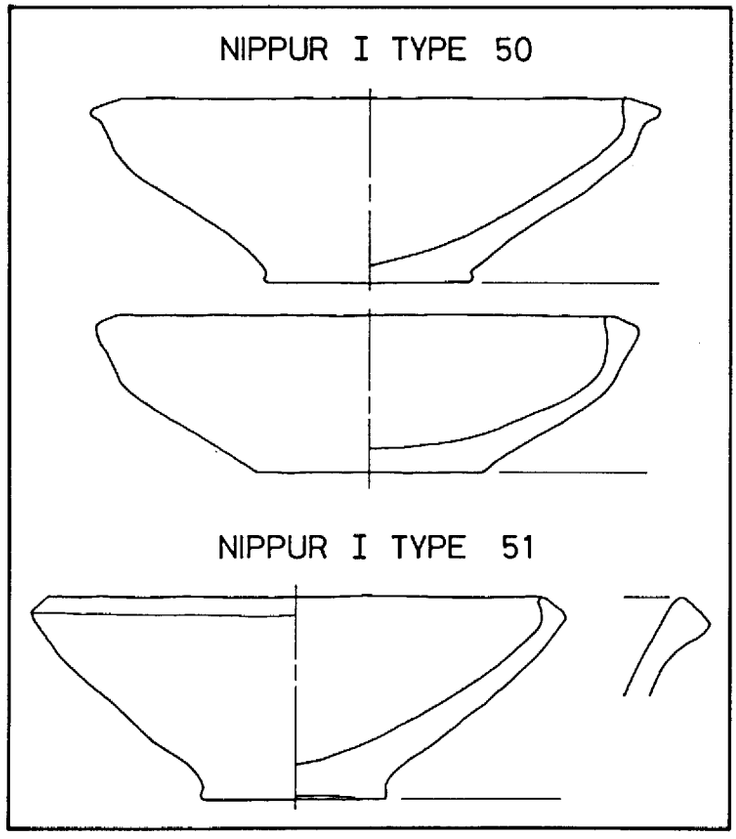
WB TYPE I-D







WB TYPE I-E



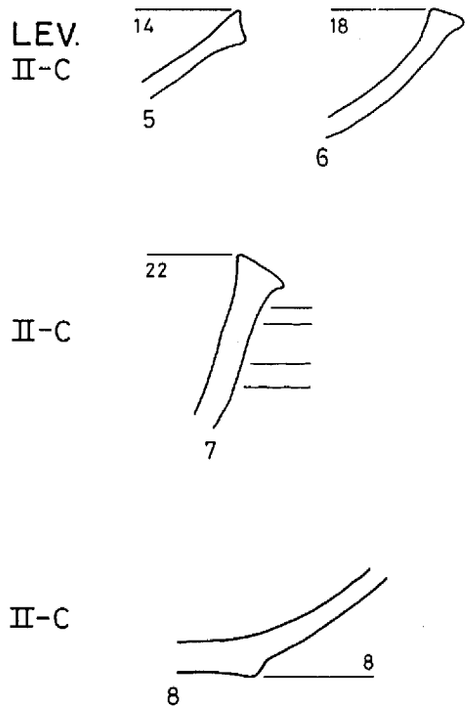


Fig. 64.—Scale, 2:5

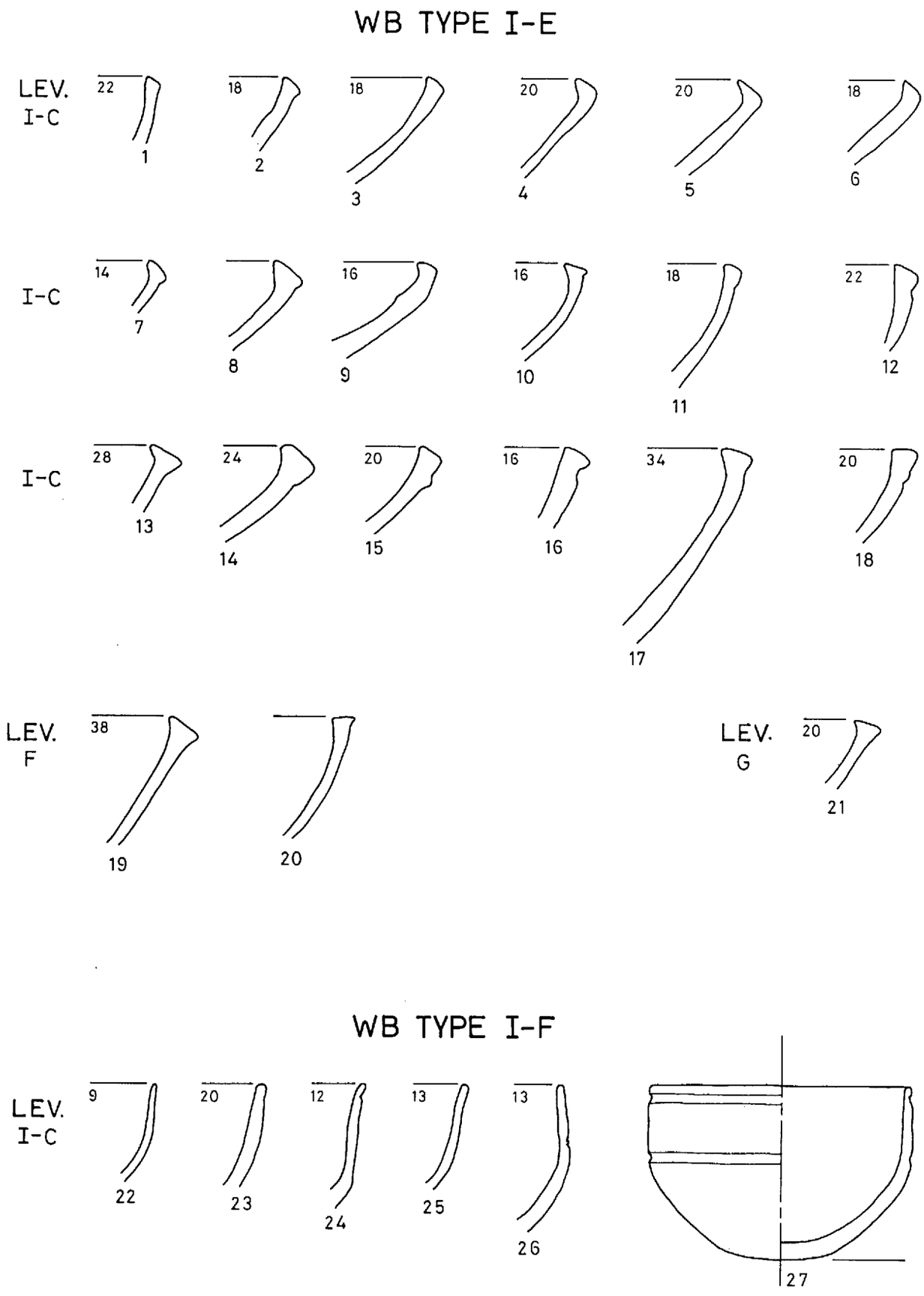


Fig. 65.—Scale, 2:5

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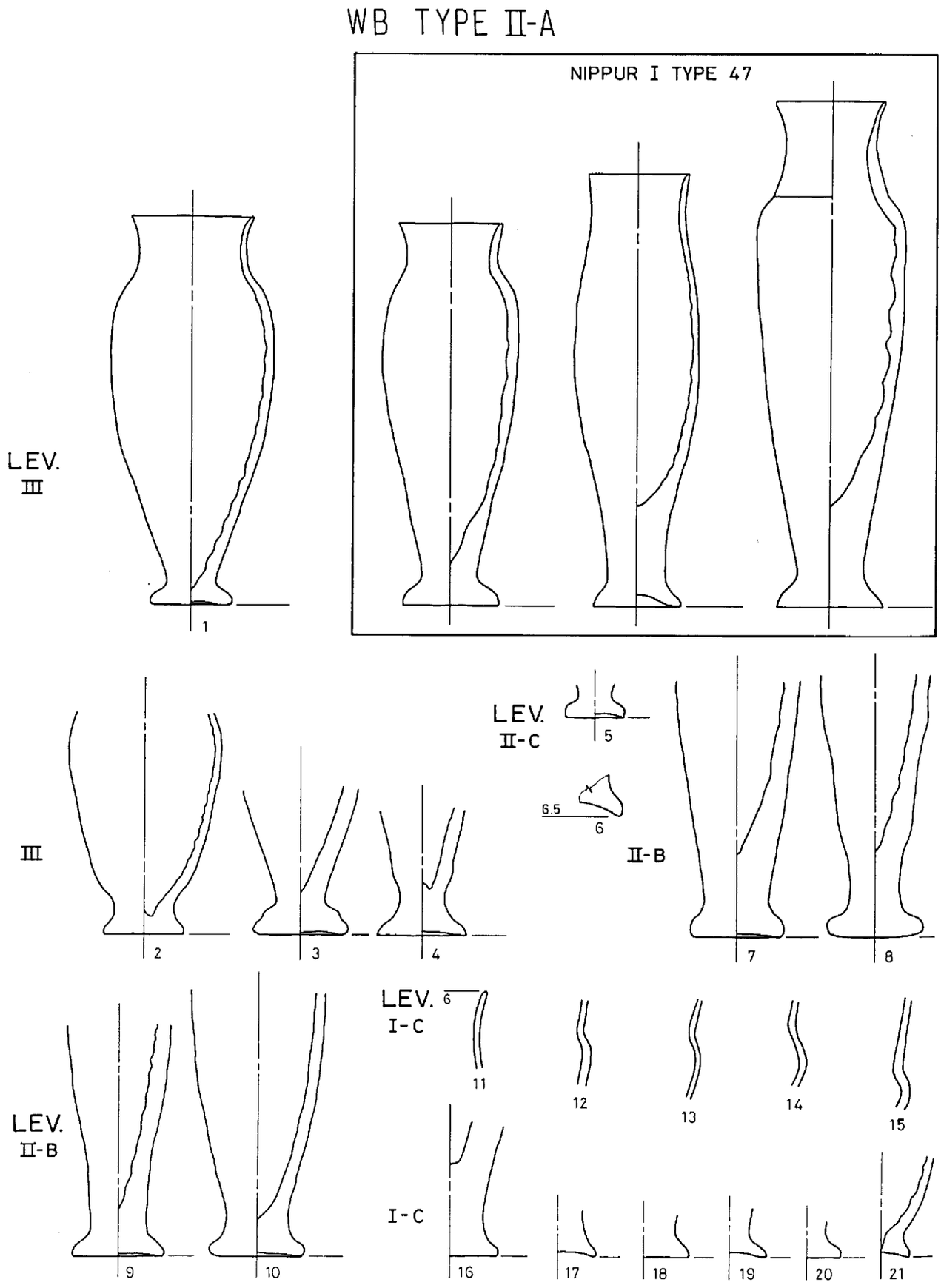


Fig. 66.—Scale, 1:4

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WB TYPE II-B

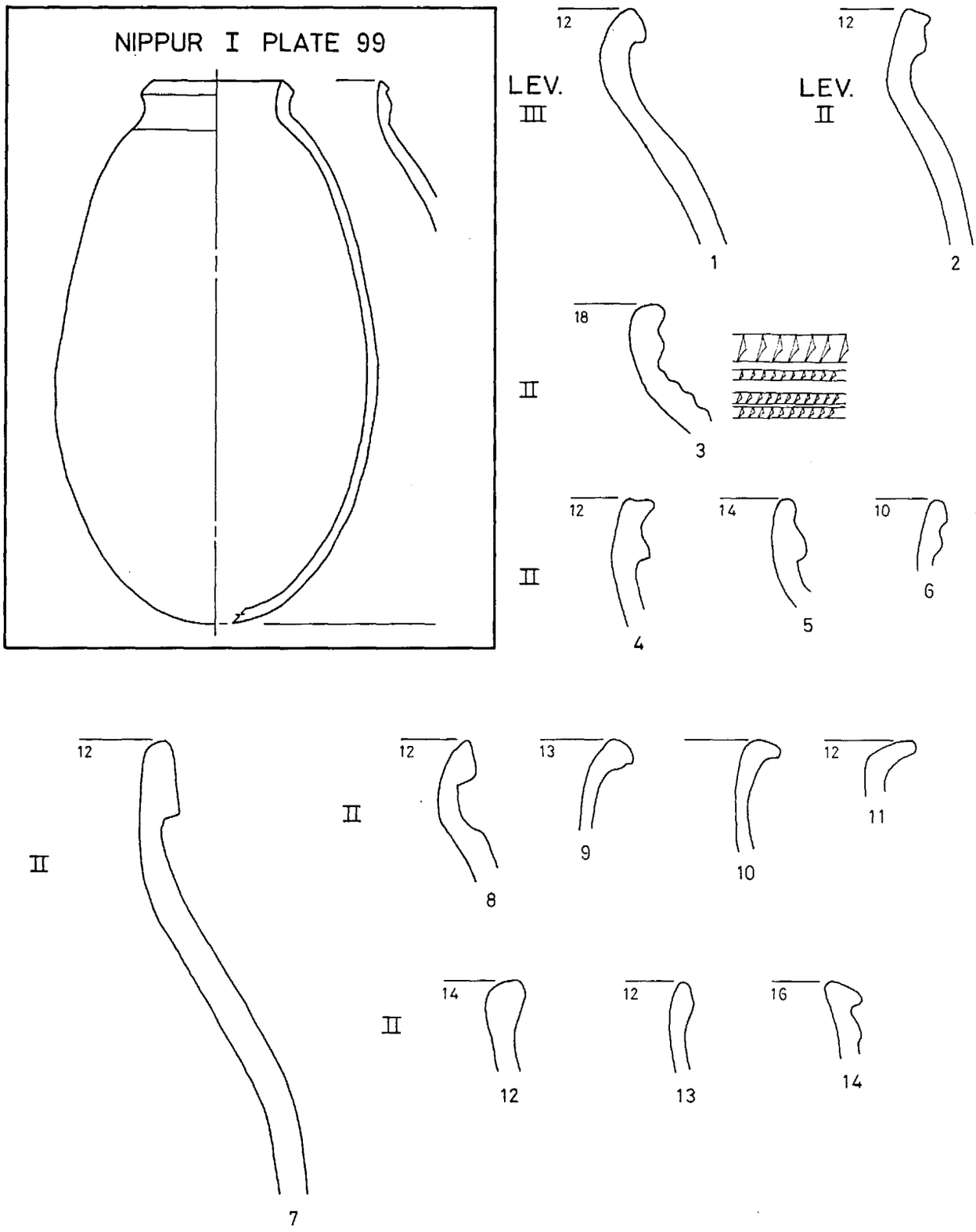


Fig. 67.—Scale, 2:5.

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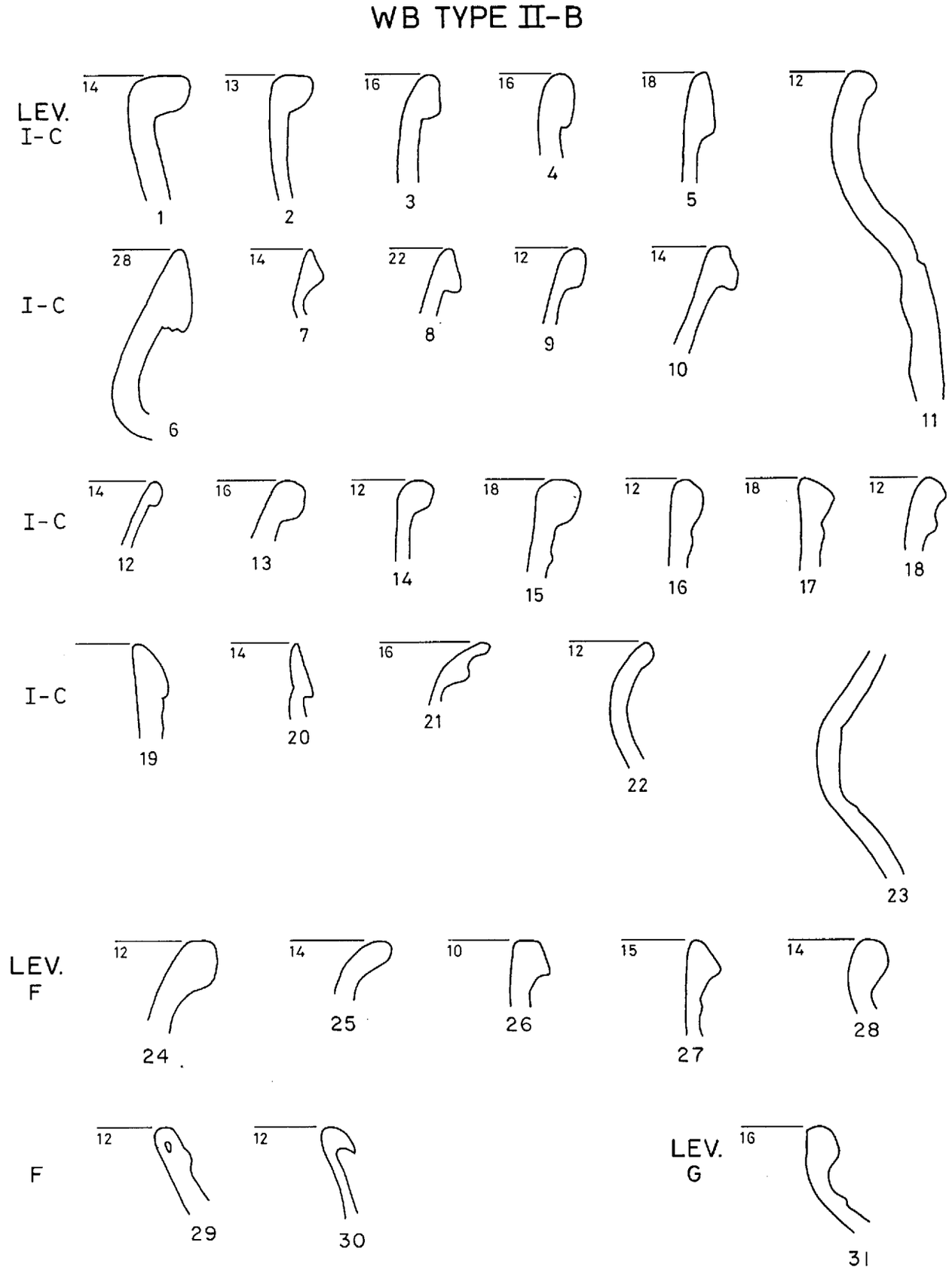


Fig. 68.—Scale, 2:5.

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WB TYPE II-C

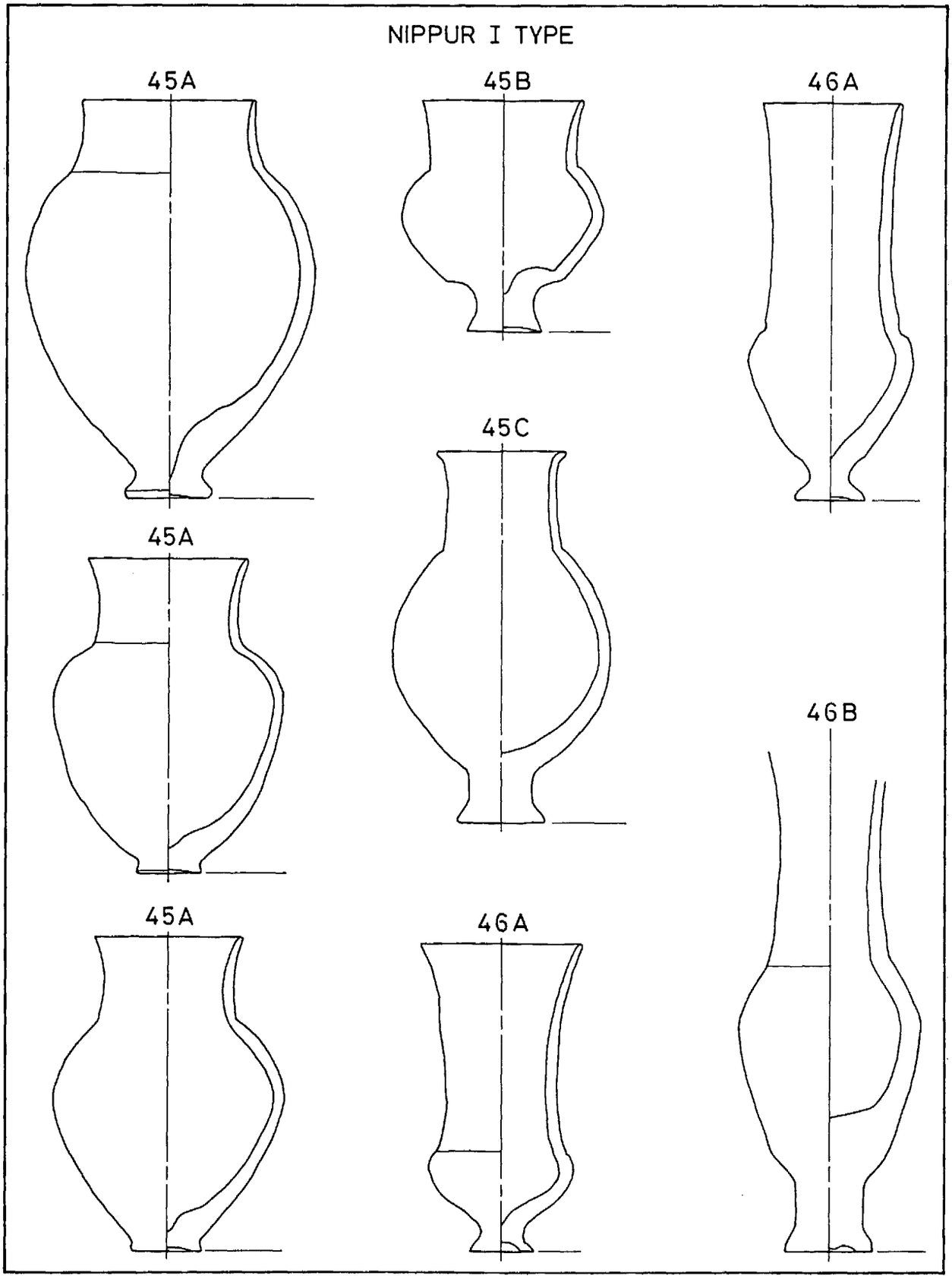


Fig. 69.—Scale, 2:5

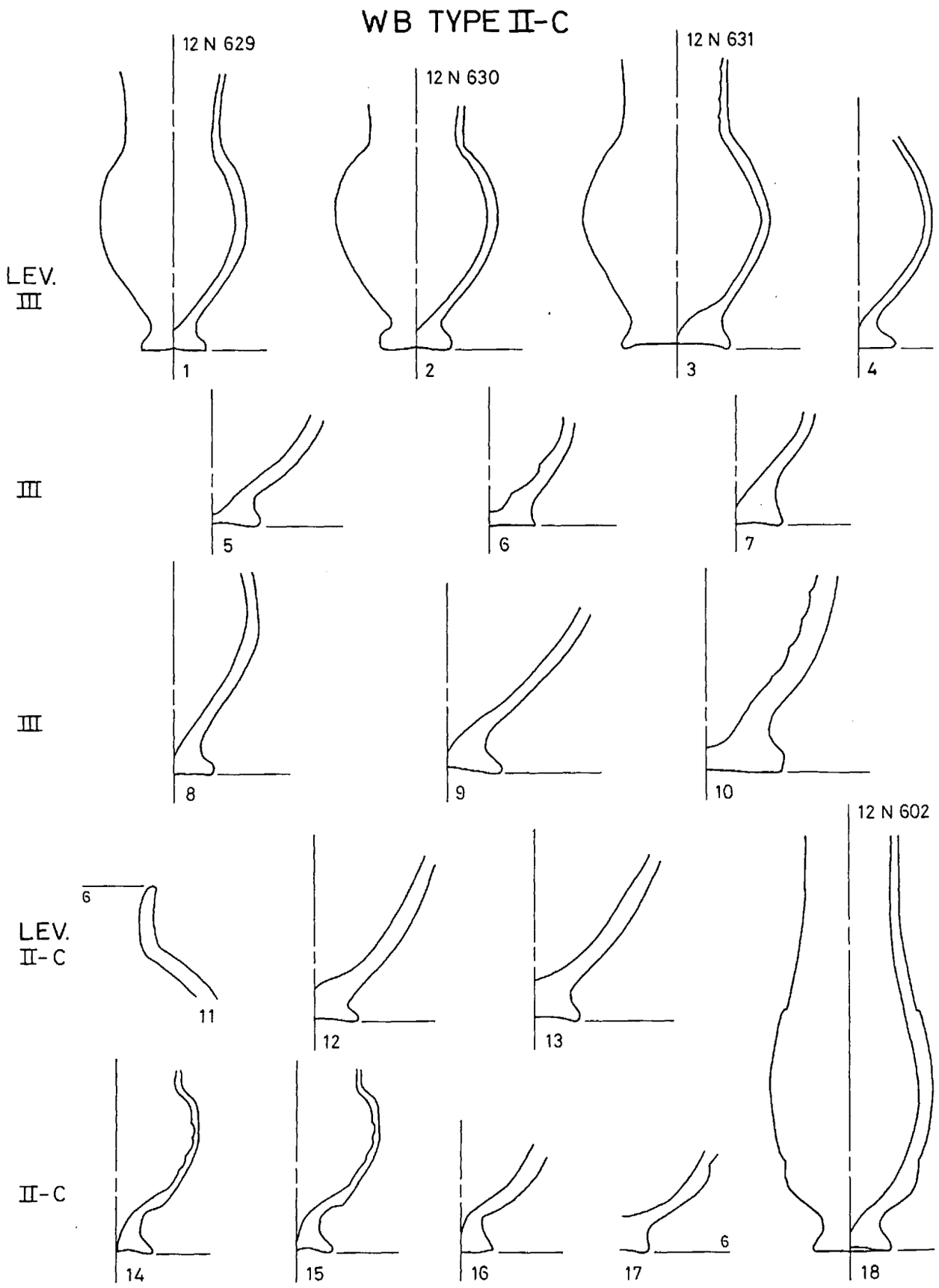


Fig. 70.—Scale, 2:5

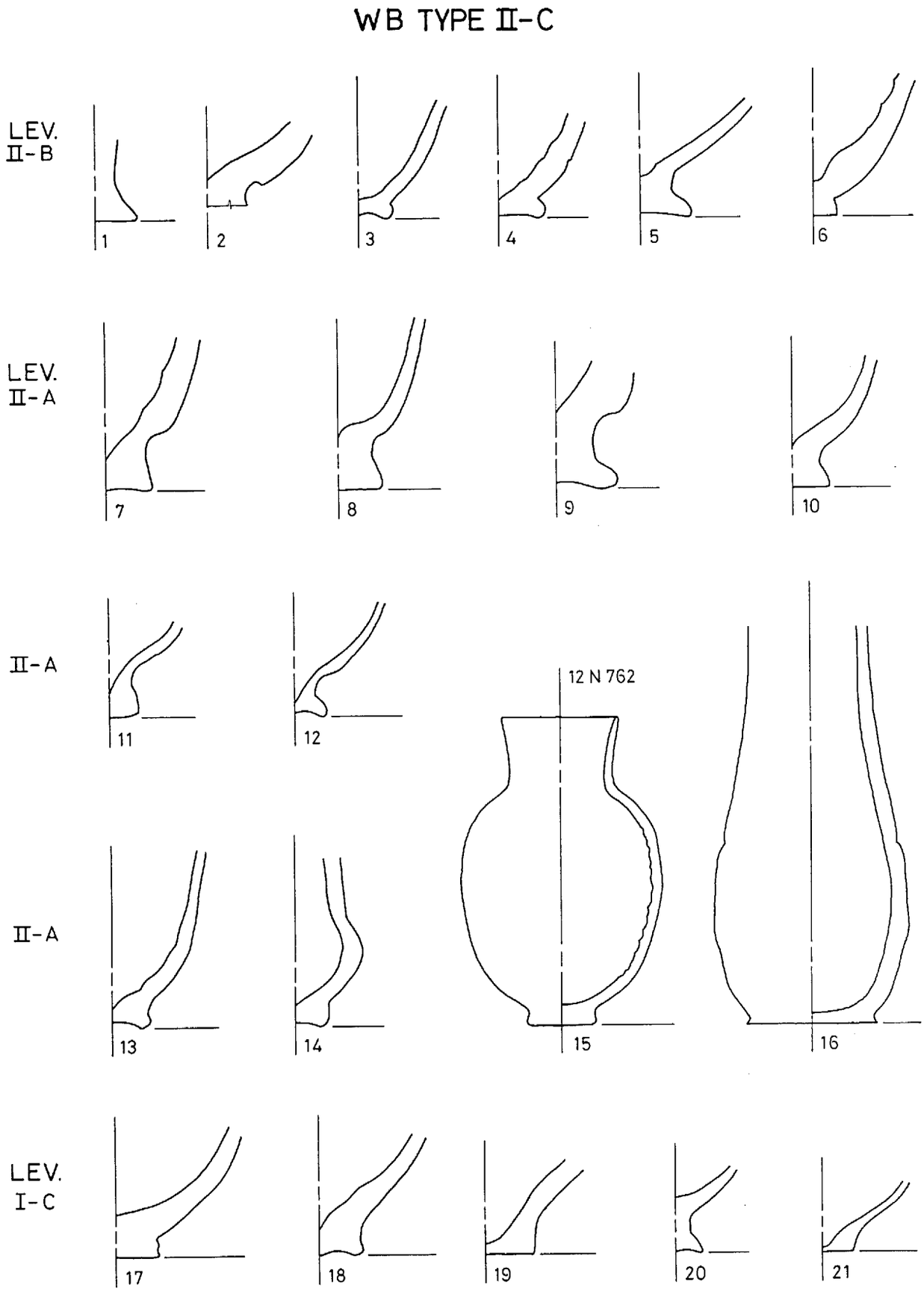
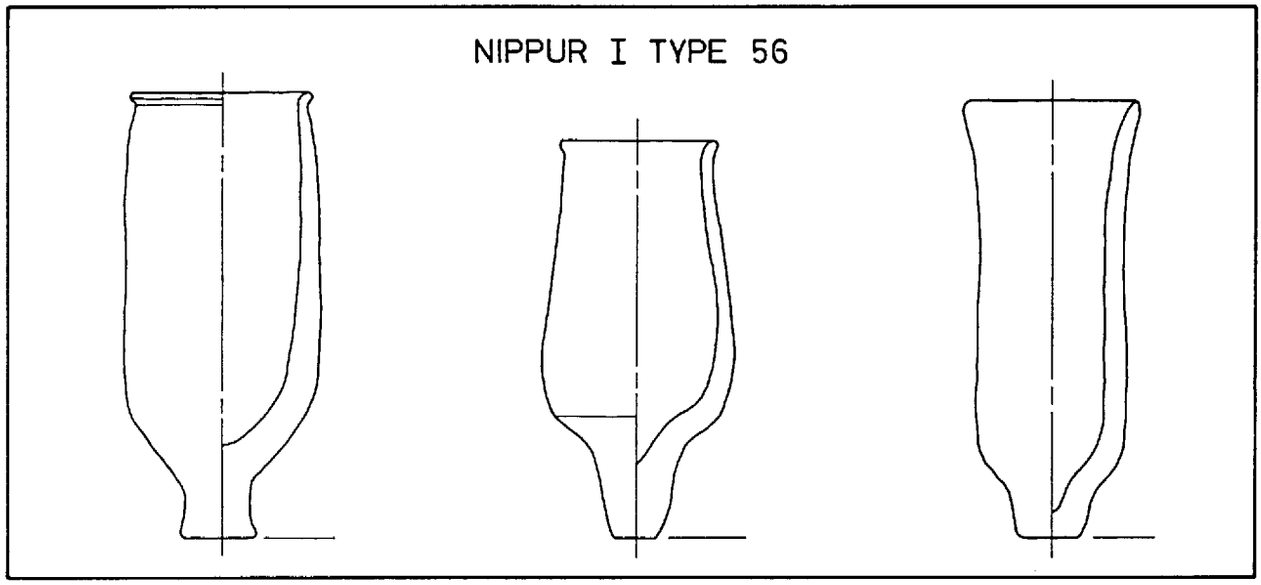


Fig. 71.—Scale, 2:5

WB TYPE II-D



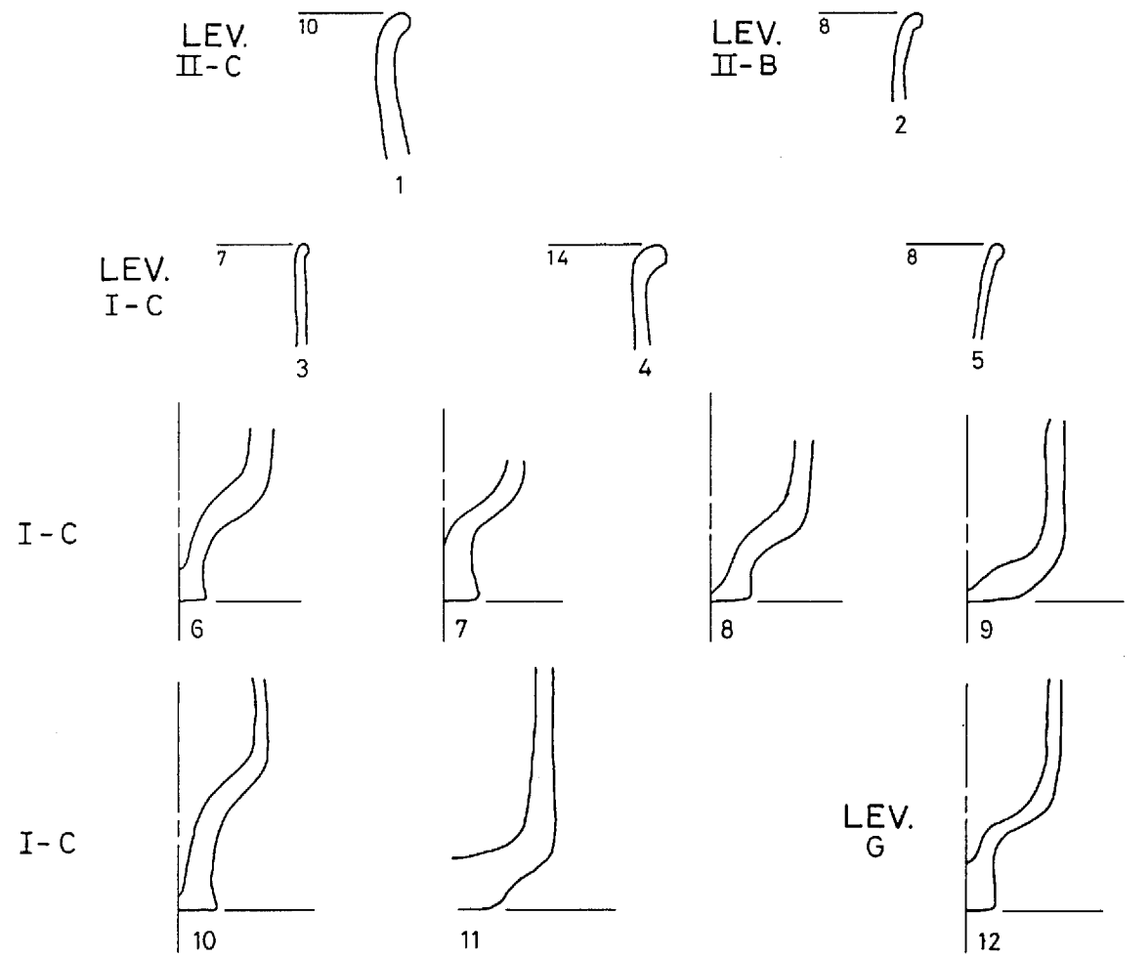


Fig. 72.—Scale, 2:5

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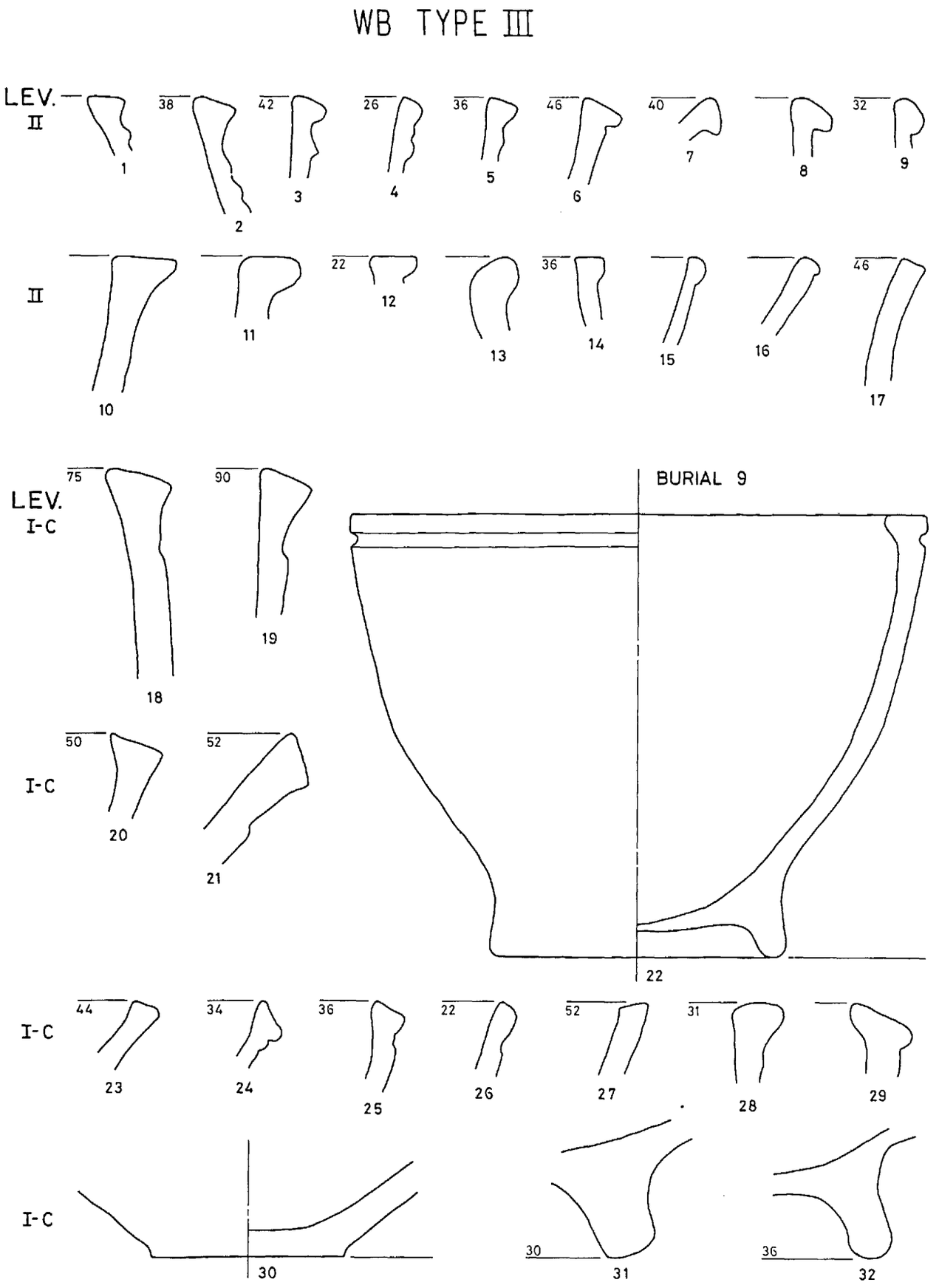


Fig. 73.—Scale, 1:4

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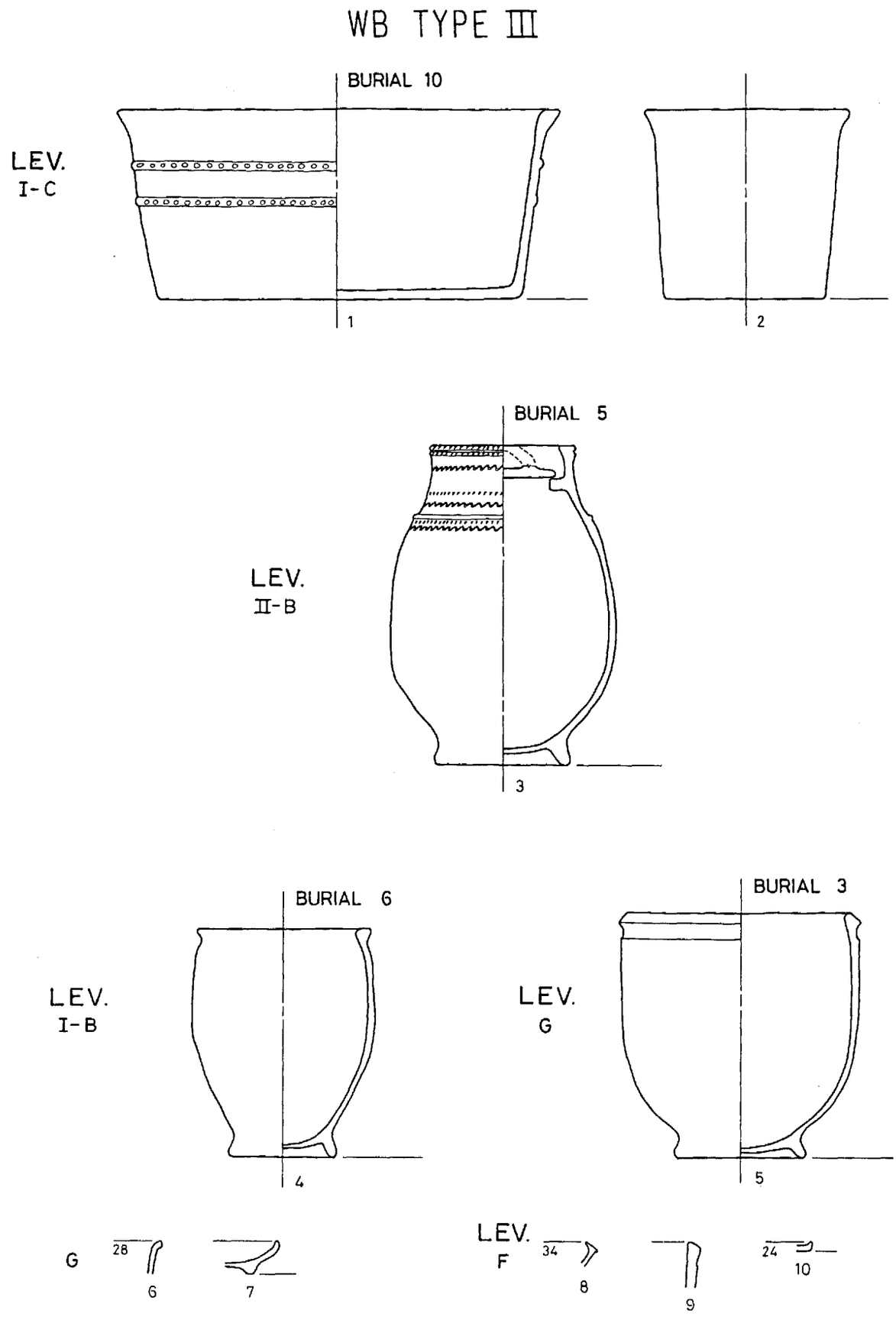


Fig. 74.—Scale, 1:15

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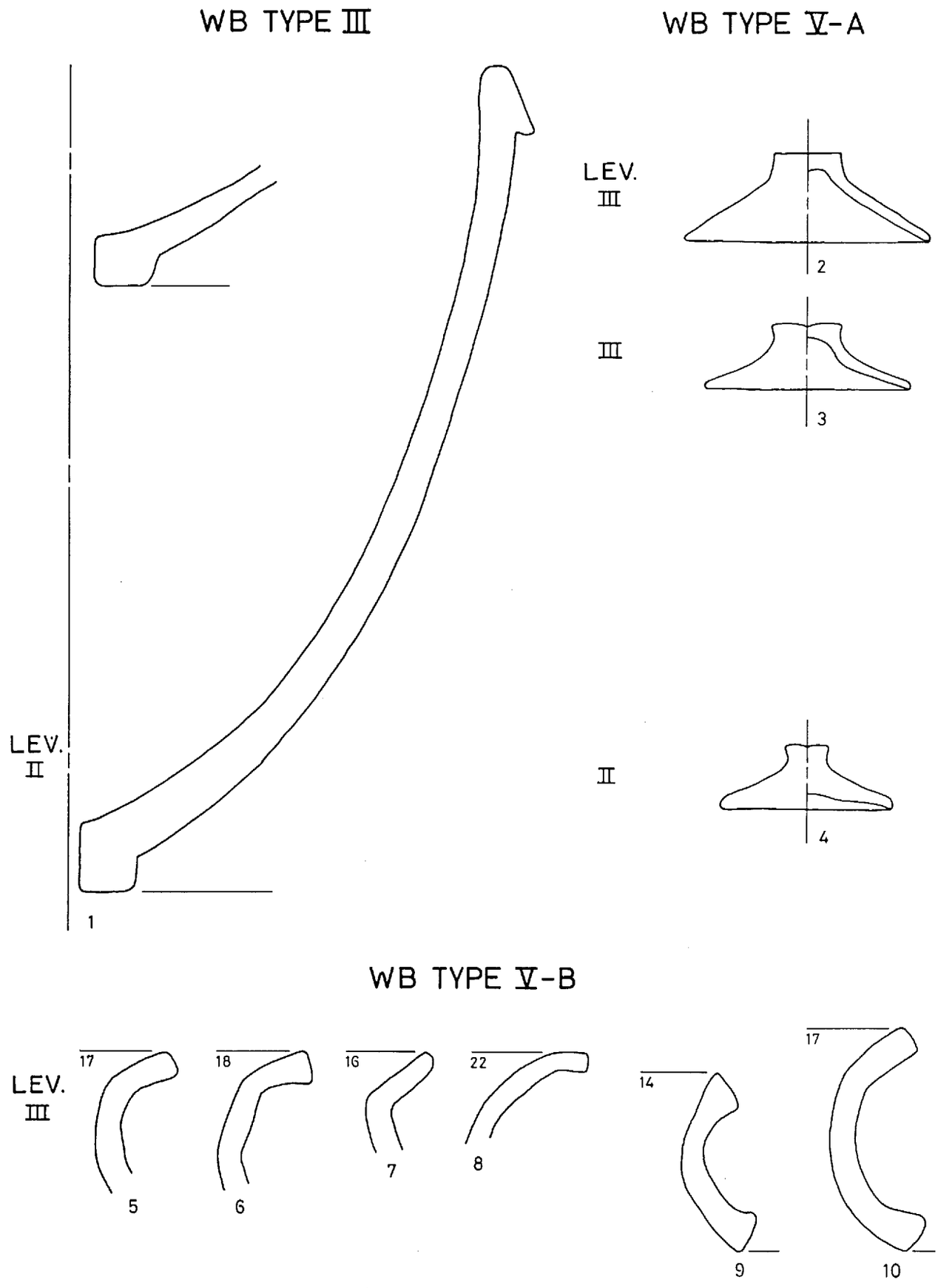


Fig. 75.—Scale, 2:5

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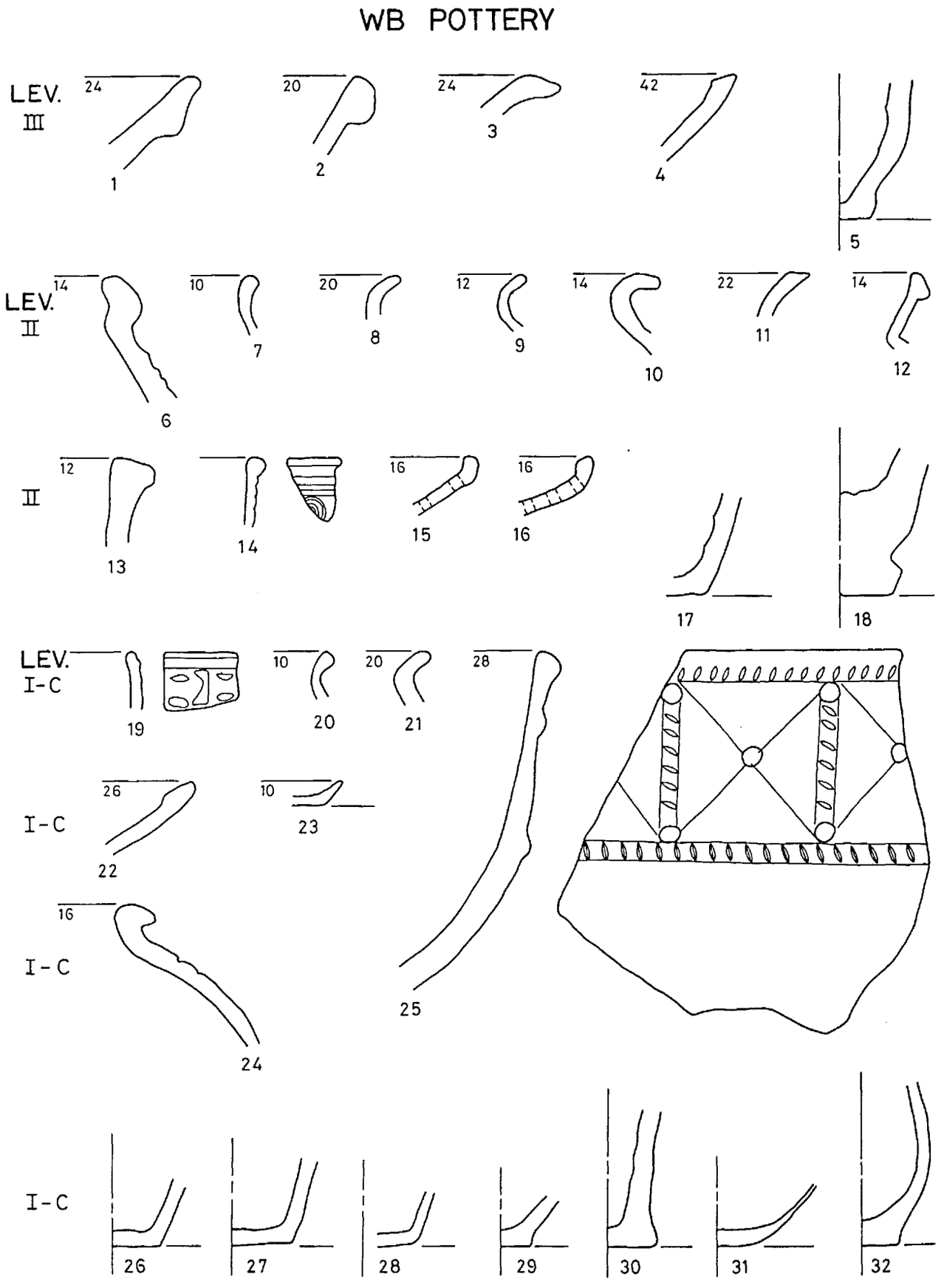


Fig. 76.—Scale, 2:5

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WB BURIALS

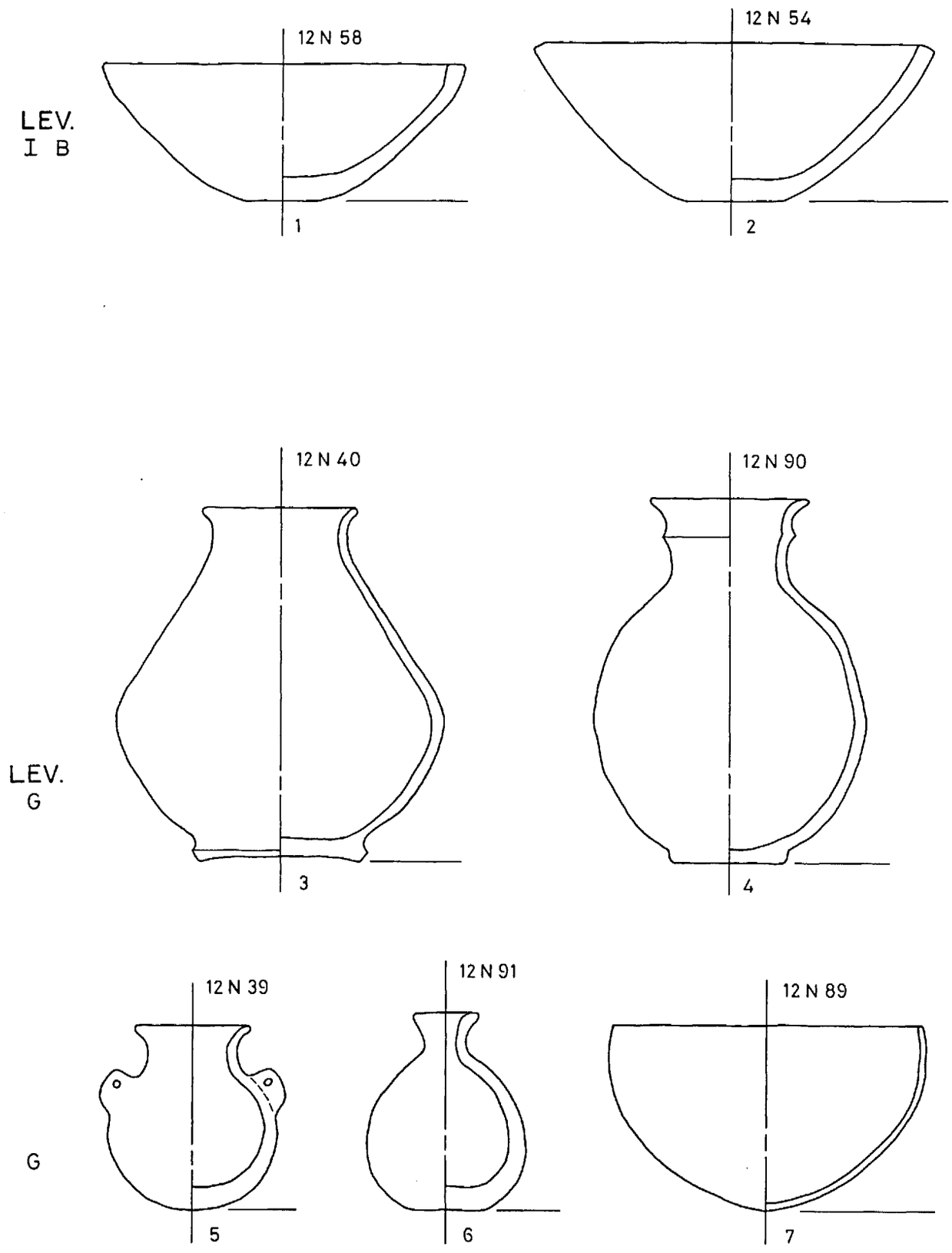


Fig. 77.—Scale, 2:5

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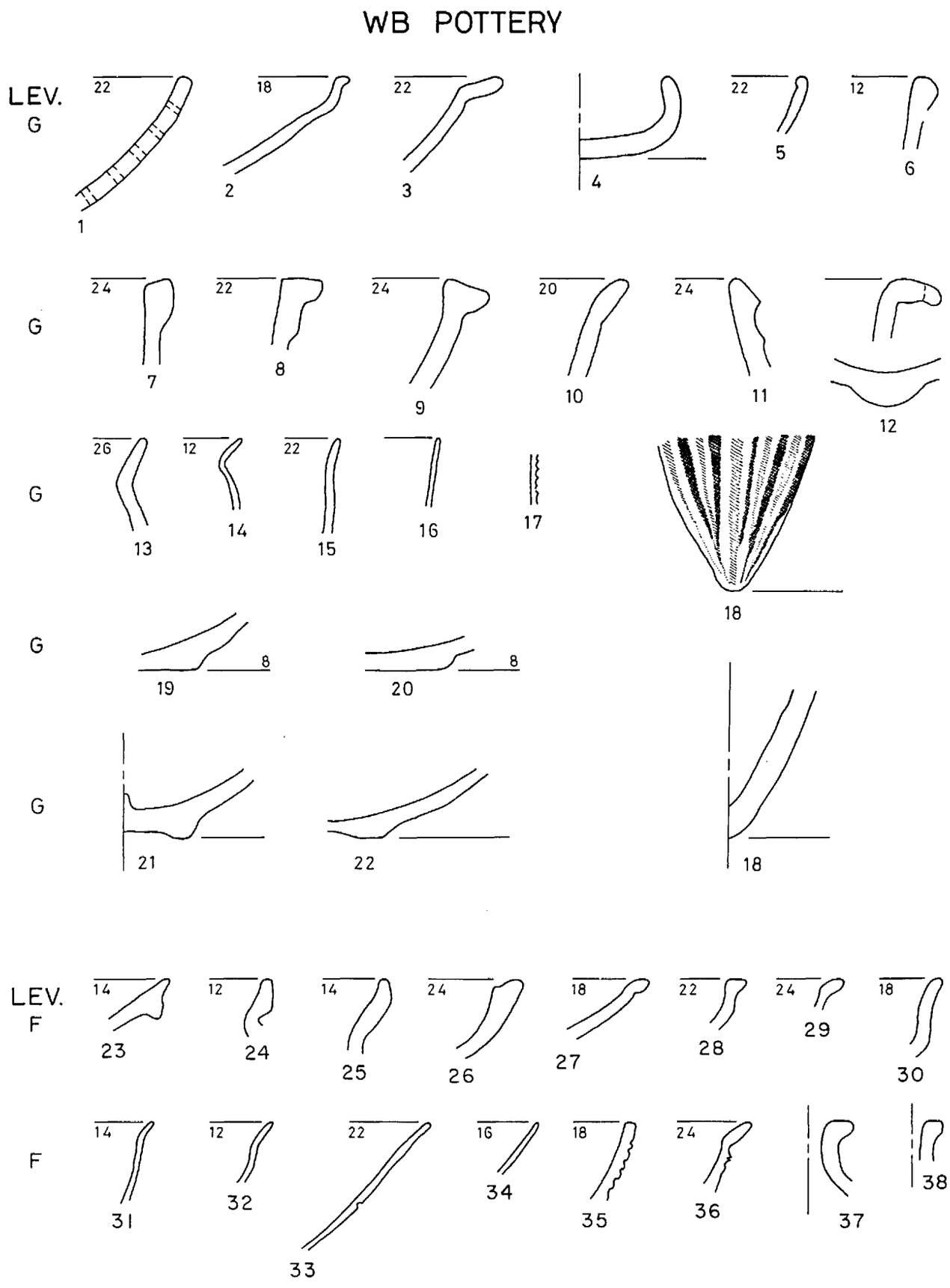


Fig. 78.—Scale, 2:5

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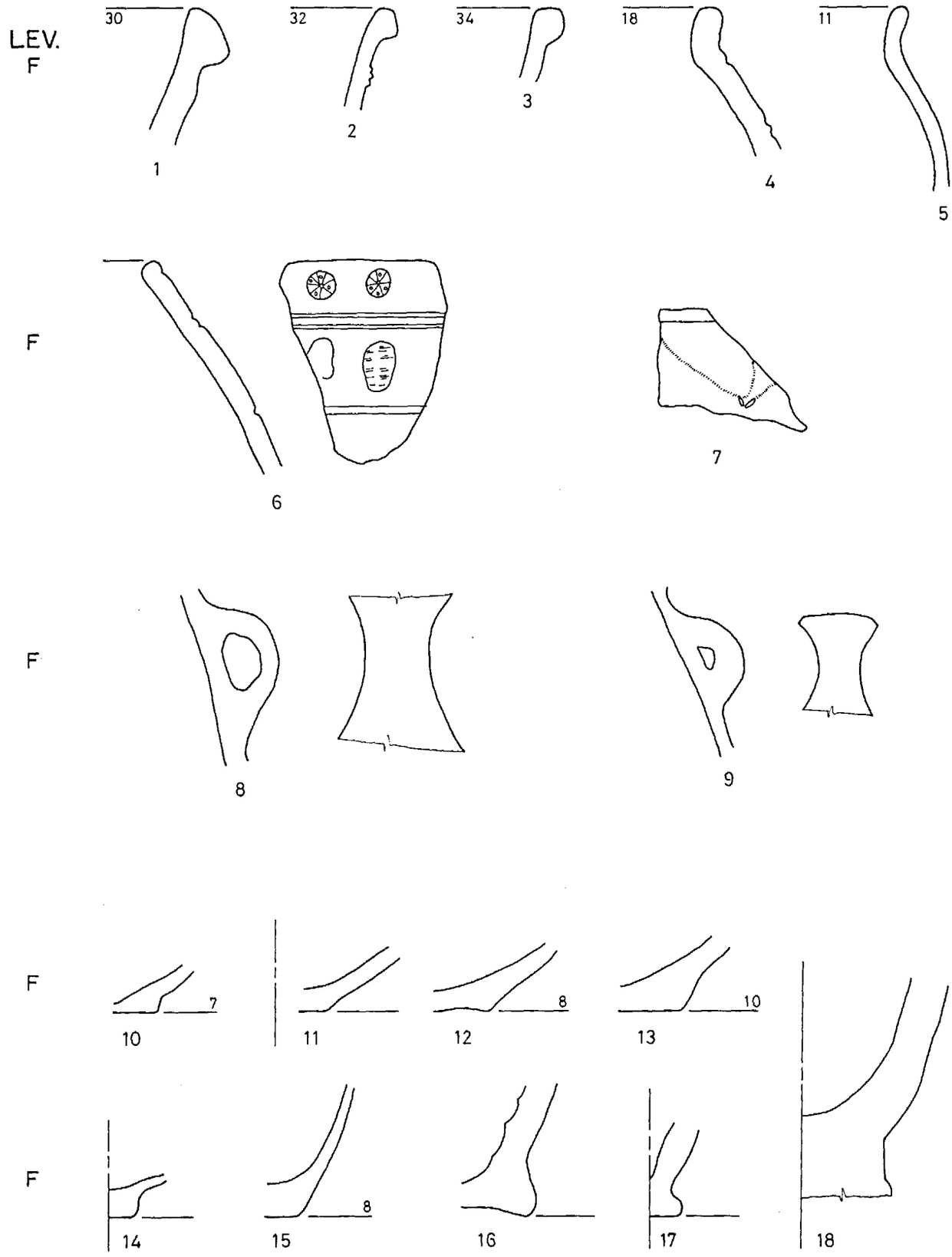
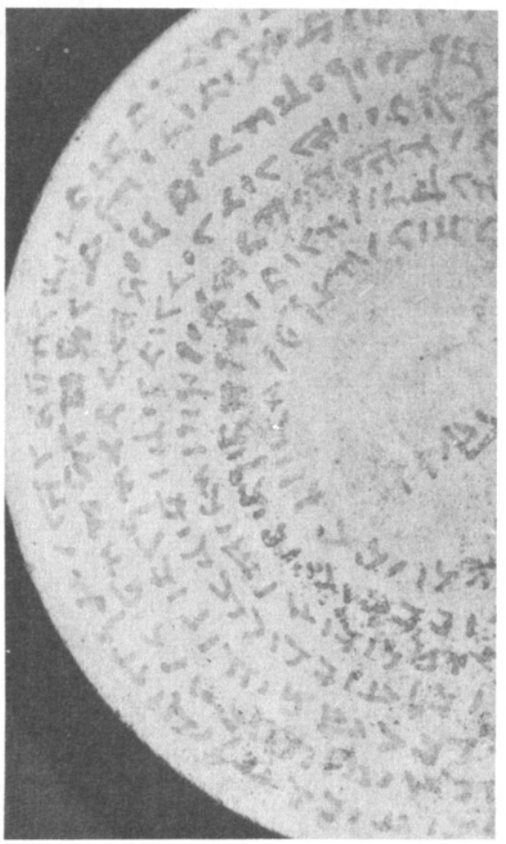
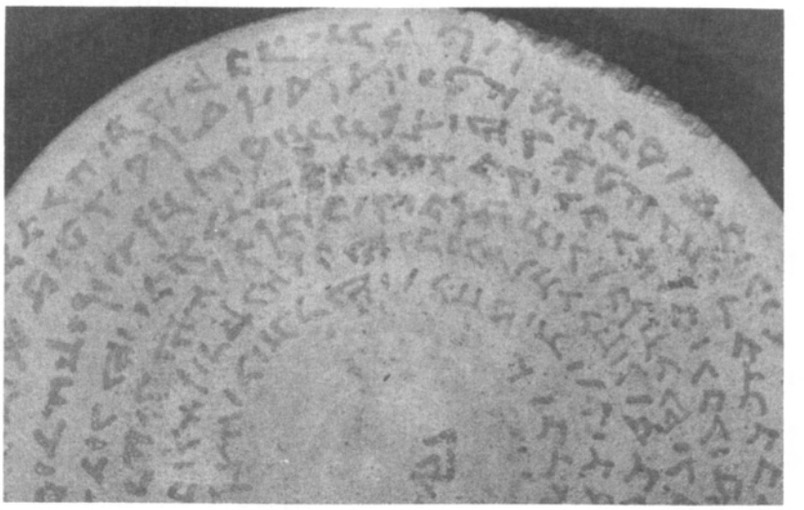


Fig. 79.—Scale, 2:5

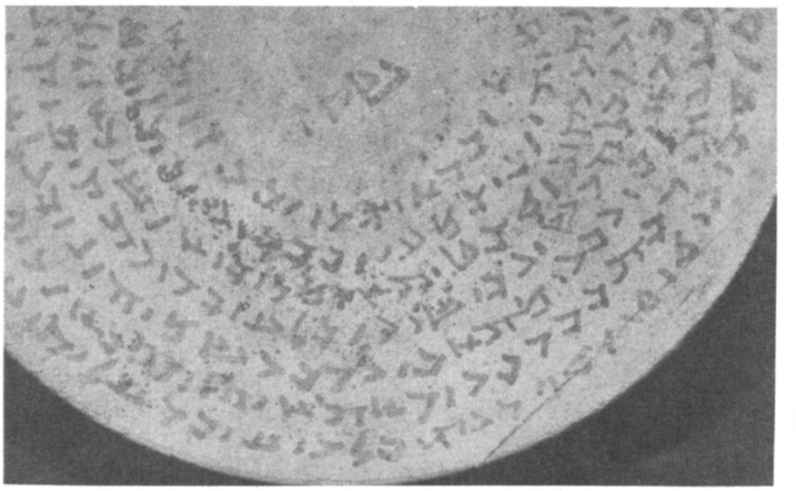
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1a



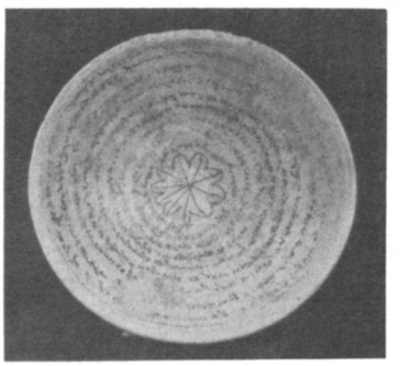
1c



1b



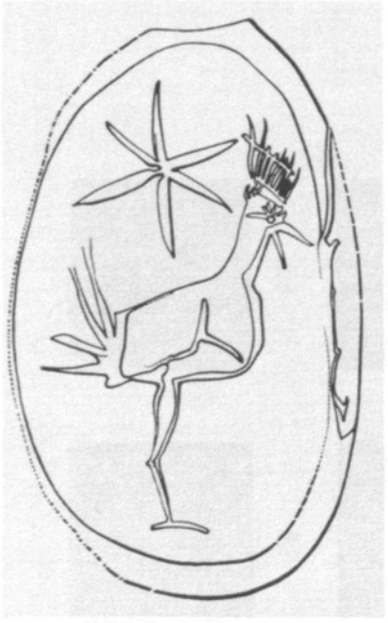
2



3

Fig. 80.—Aramaic bowls from surface, West Mound. (1*a-c*) 12 N 387. Scale (approx.), 3:4. (2) 12 N 5. Scale, 1:4. (3) 12 N 493. Scale, 1:10.

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1



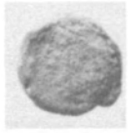
2



3a



3b



4a



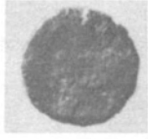
4b



5a



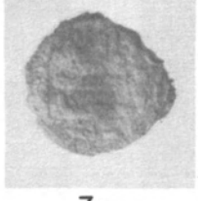
5b



6a



6b



7a



7b



8a



8b



9



10a



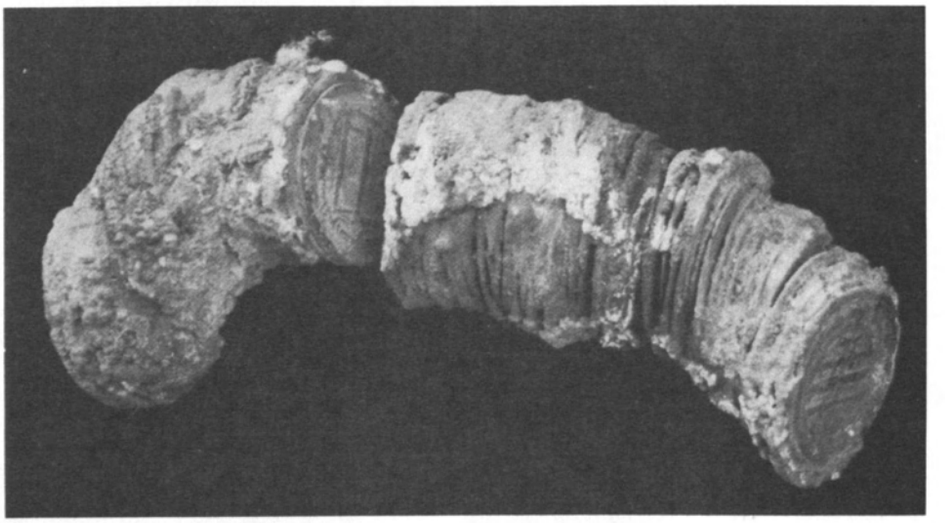
10b

Fig. 81.—(1) Drawing of seal, 12 N 402, from surface, Ekur, above Parthian fortress. Scale, 4:1. (2) Figurine, 12 N 340, from surface, West Mound. Scale, 1:1. (3*a-b*) Coin, 12 N 6, from surface, Tablet Hill. (4*a-b*) Coin, 12 N 7, from surface, WB. Scale, 1:1. (5*a-b*) Coin, 12 N 14, from surface, West Mound. Scale, 1:1. (6*a-b*) Coin, 12 N 272, from surface. Scale, 1:1. (7*a-b*) Coin, 12 N 33, from surface, Tablet Hill. Scale, 1:1. (8*a-b*) Coin, 12 N 50, from surface, West Mound. Scale, 1:1. (9) Pottery, 12 N 2, from surface, Site #159. Scale, 1:4. (10*a-b*) Stamp seal and impression, 12 N 42, from surface, Site #938. Scale, 1:1.

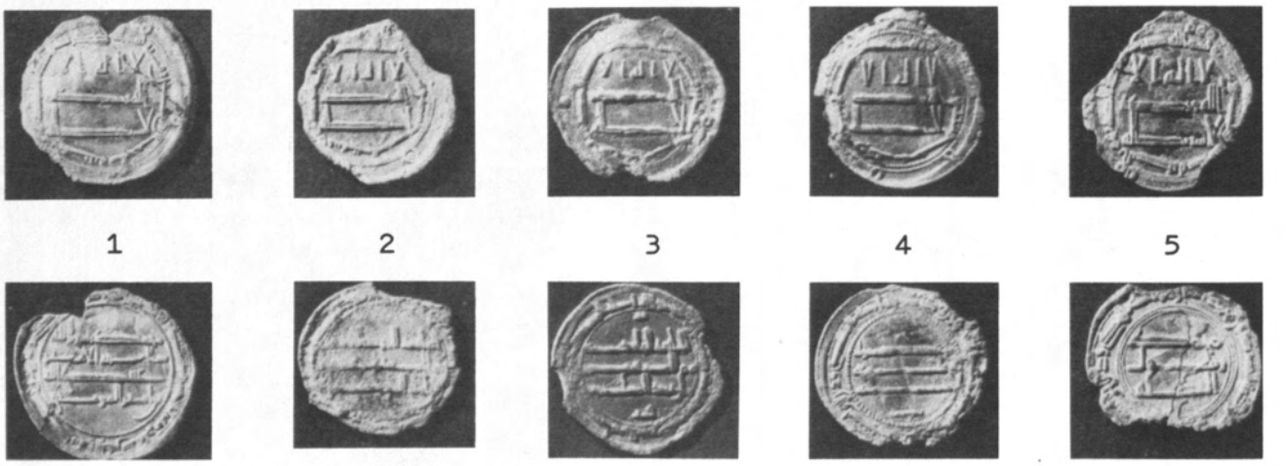
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a



b



1 2 3 4 5

Fig. 82.—(*a-b*) Islamic coins, 12 N 789, from surface, west of WA. Hoard as discovered, before cleaning. Scale (approx.), 1:1. (1-5) Islamic coins, 12 N 789. Scale, 1:1.

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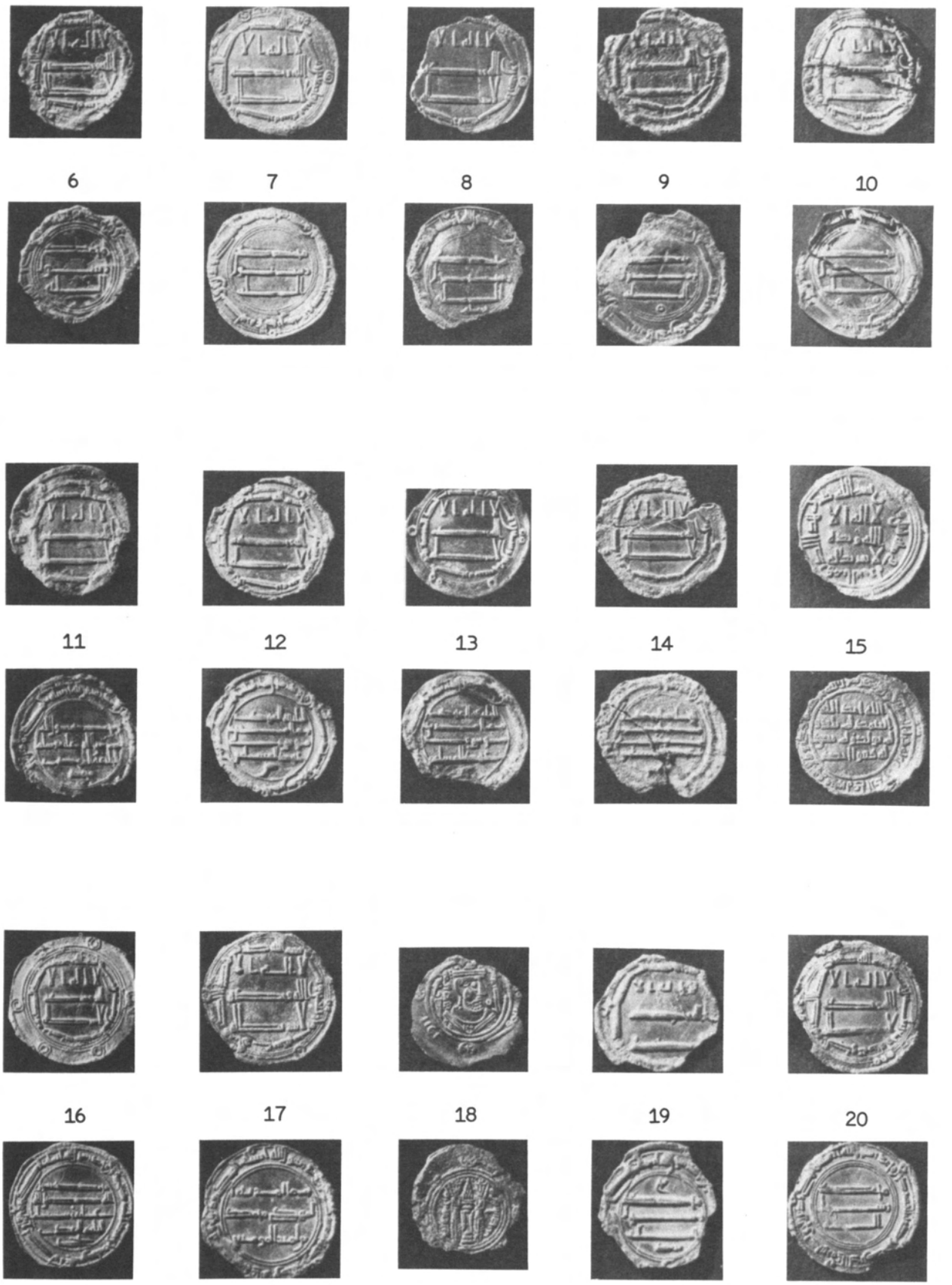


Fig. 83.— Islamic coins, 12 N 789, from surface, west of WA. Scale, 1:1.

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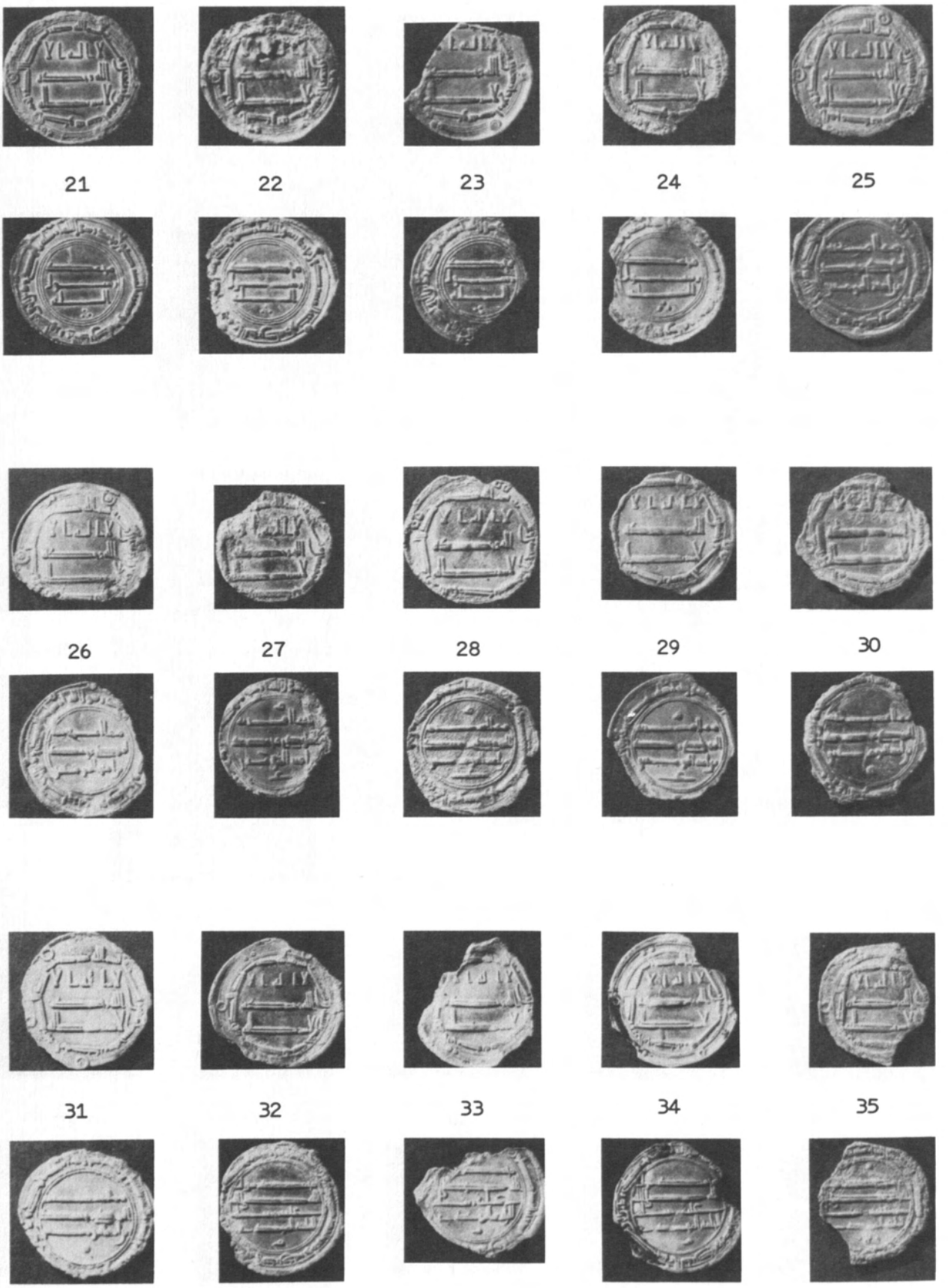


Fig. 84.— Islamic coins, 12 N 789, from surface, west of WA. Scale, 1:1.

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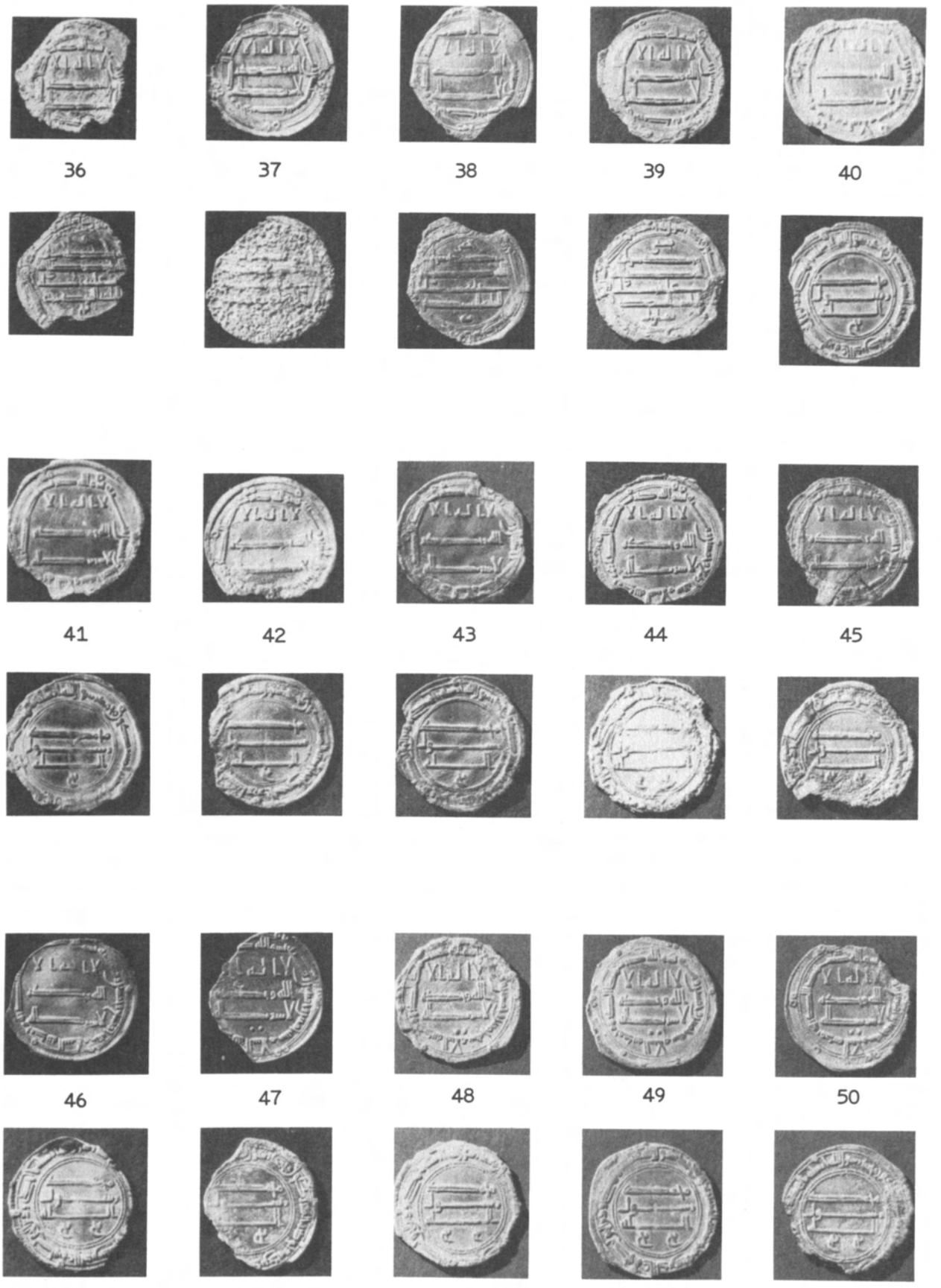


Fig. 85.—Islamic coins, 12 N 789, from surface, west of WA. Scale, 1:1.

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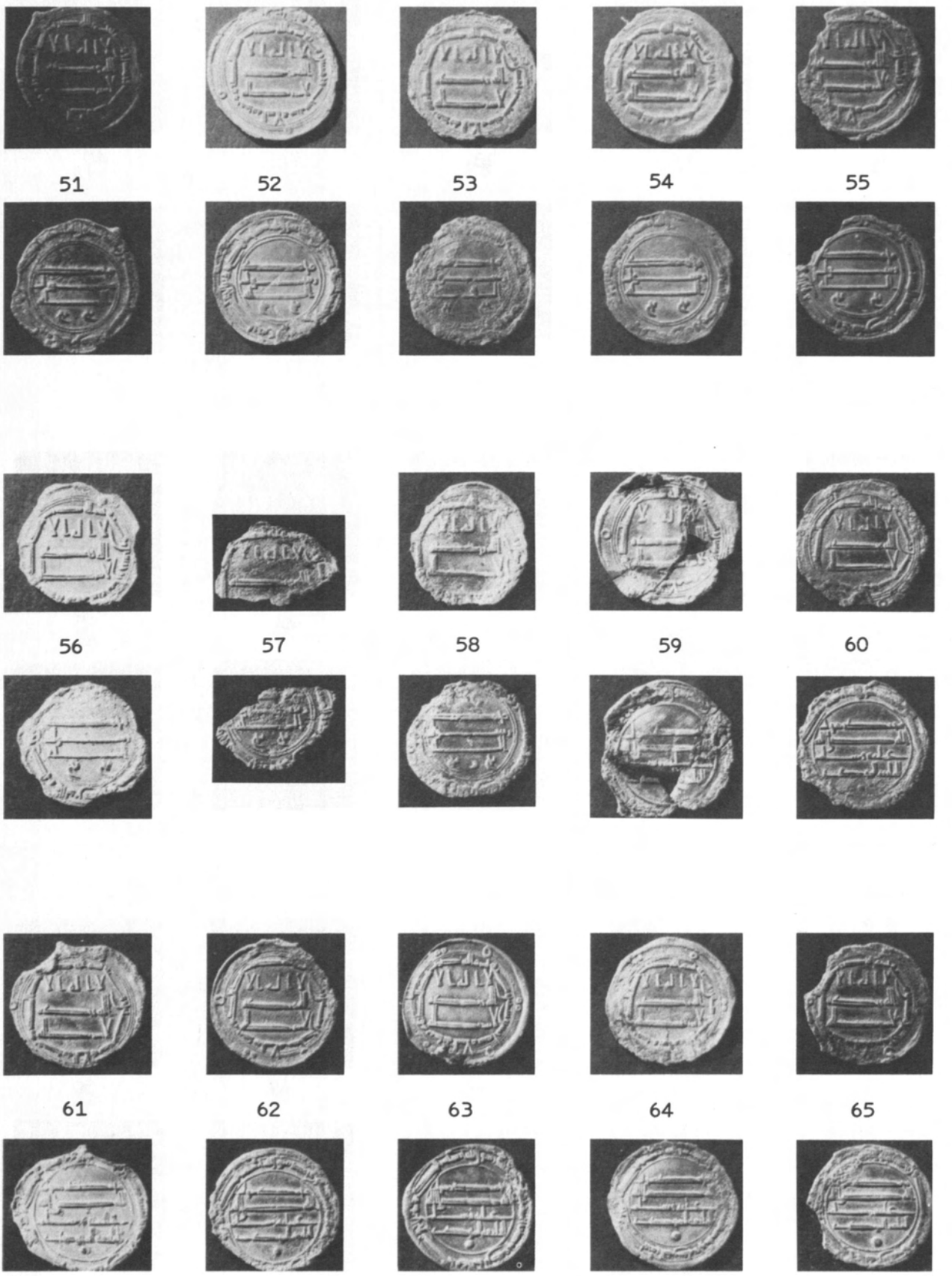


Fig. 86.—Islamic coins, 12 N 789, from surface, west of WA. Scale, 1:1.

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Fig. 87.—Islamic coins, 12 N 789, from surface, west of WA. Scale, 1:1.

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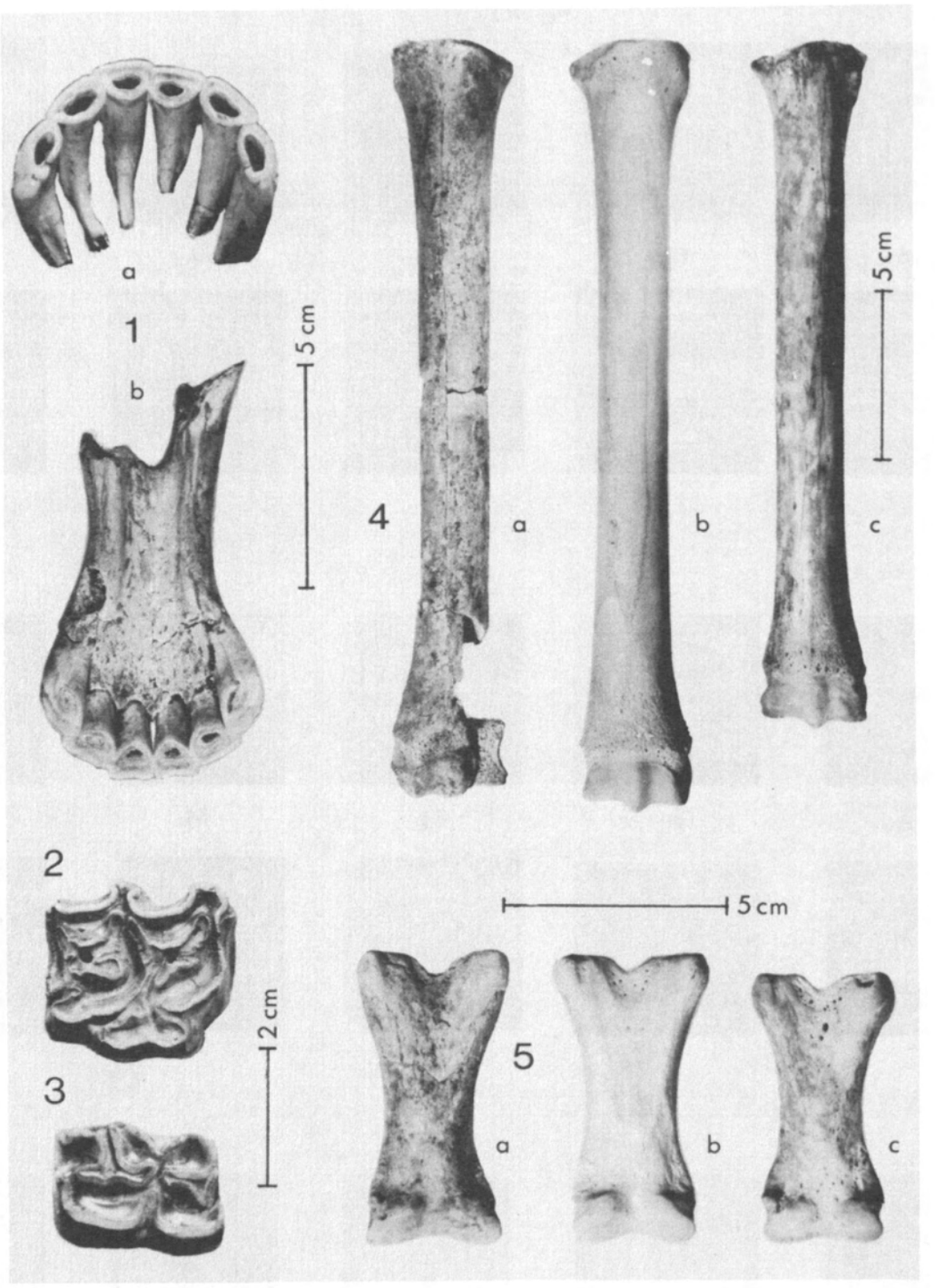


Abb. 88.—(1) Equus asinus. WA 50*c*, Level V, Seleukidisch. Schneidezahnbogen des Ober- (*a*) und des Unterkiefers (*b*). (2) Equus hemionus hemippus(?). WA, Square 7, Level I, Floor 4. 11 N. Oberkieferbackzahn. (3) Equus hemionus hemippus oder Equus asinus. Lot 997. P_3 oder P_4. (4) Equus asinus. (*a*) Lot 921, (*b*) resenter Dalmatiner Esel, (*c*) Seleukidischer Esel WA. Metatarsen. (5) Equus asinus. (*a*) bis (*c*) wie Abb. 88:4. Phalanges 1 posteriores.

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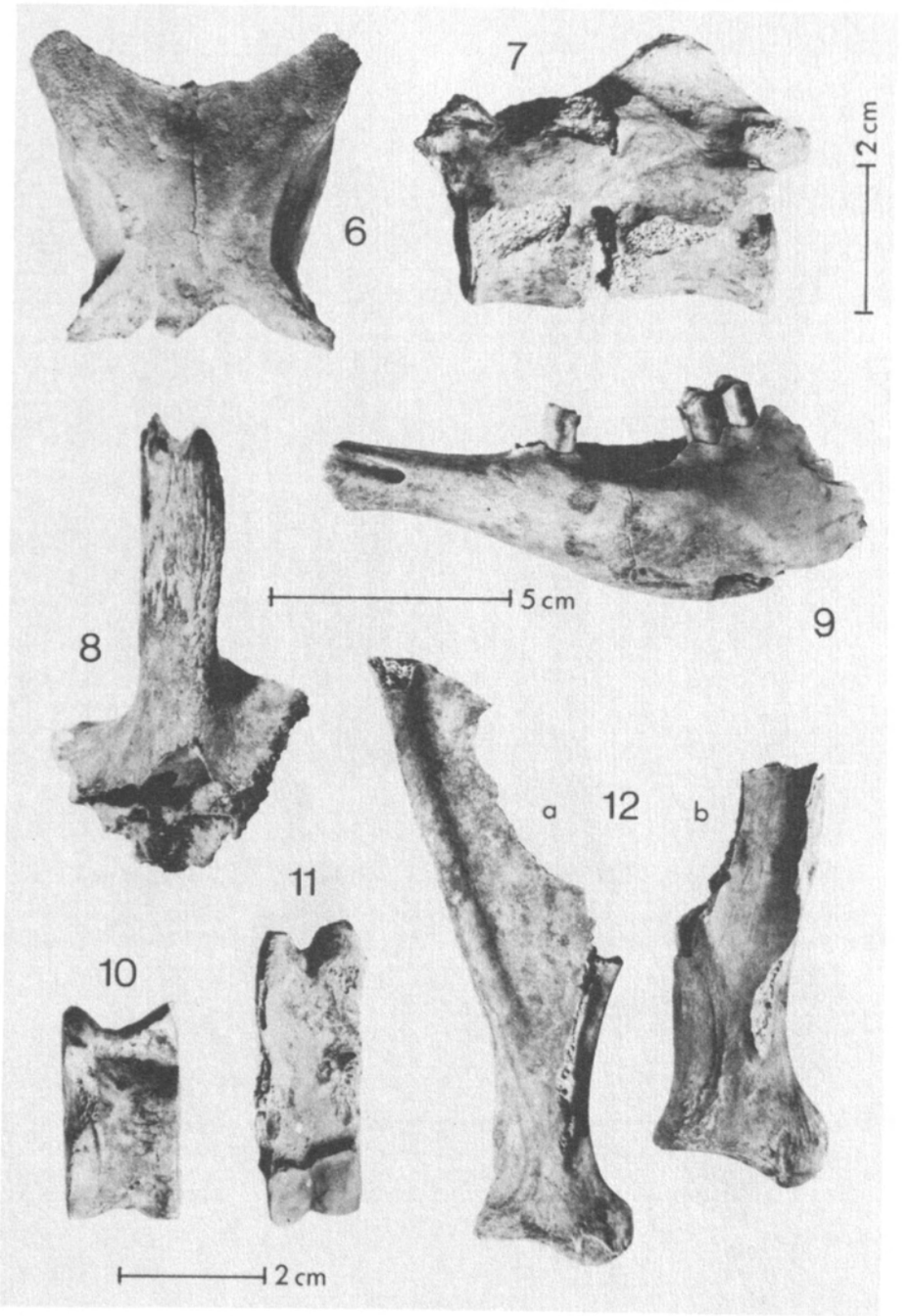


Abb. 89.—**(6)** Sus domesticus. Lot 153, Achämenidisch(?). Schädelkalotte mit Vernarbung. **(7)** Canis familiaris. Lot U. Miteinander verwachsene Lendenwirbel. **(8)** Capra hircus ♀. Lot N. Kalottenfragment mit Schraubenhornzapfen. **(9)** Ovis aries oder Capra hircus. Lot 904. Unterkieferhälfte mit Folgeerscheinungen einer Alveolarperiostitis. **(10)** Ovis aries oder Capra hircus. Lot 905. Abgeschliffener Talus. **(11)** Ovis aries. Lot 990. Phalanx 1 mit leistartigen Wucherungen. **(12)** Ovis aries. (*a*) Lot 983, (*b*) Lot 1002. Scapulae, (*a*) ♀; (*b*) ♂.

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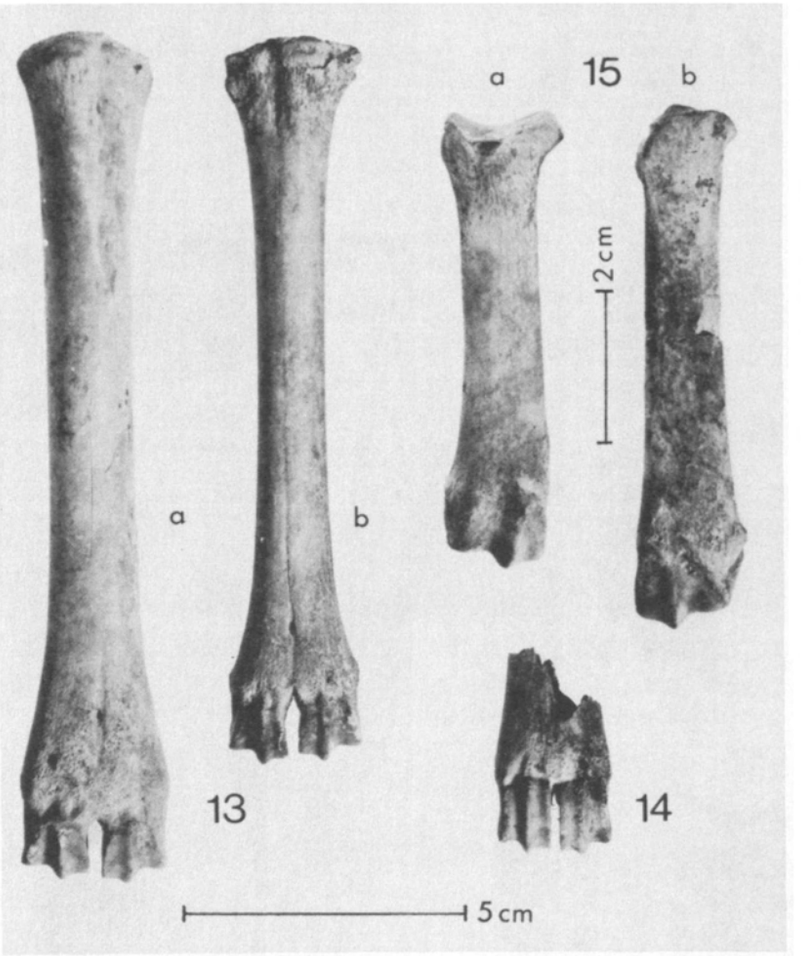


Abb. 90.—(13) Ovis aries. (*a*) Lot M, (*b*) Lot 1002. Metacarpen, (*a*) ♂ oder ♂; (*b*) ♀. **(14)** Gazella subgutterosa(?). Lot 1020. Metacarpus, Distalende. **(15)** Sus domesticus. (*a*) Lot A, (*b*) Lot 1012. (*a*) Metacarpus III, (*b*) Metatarsus IV.

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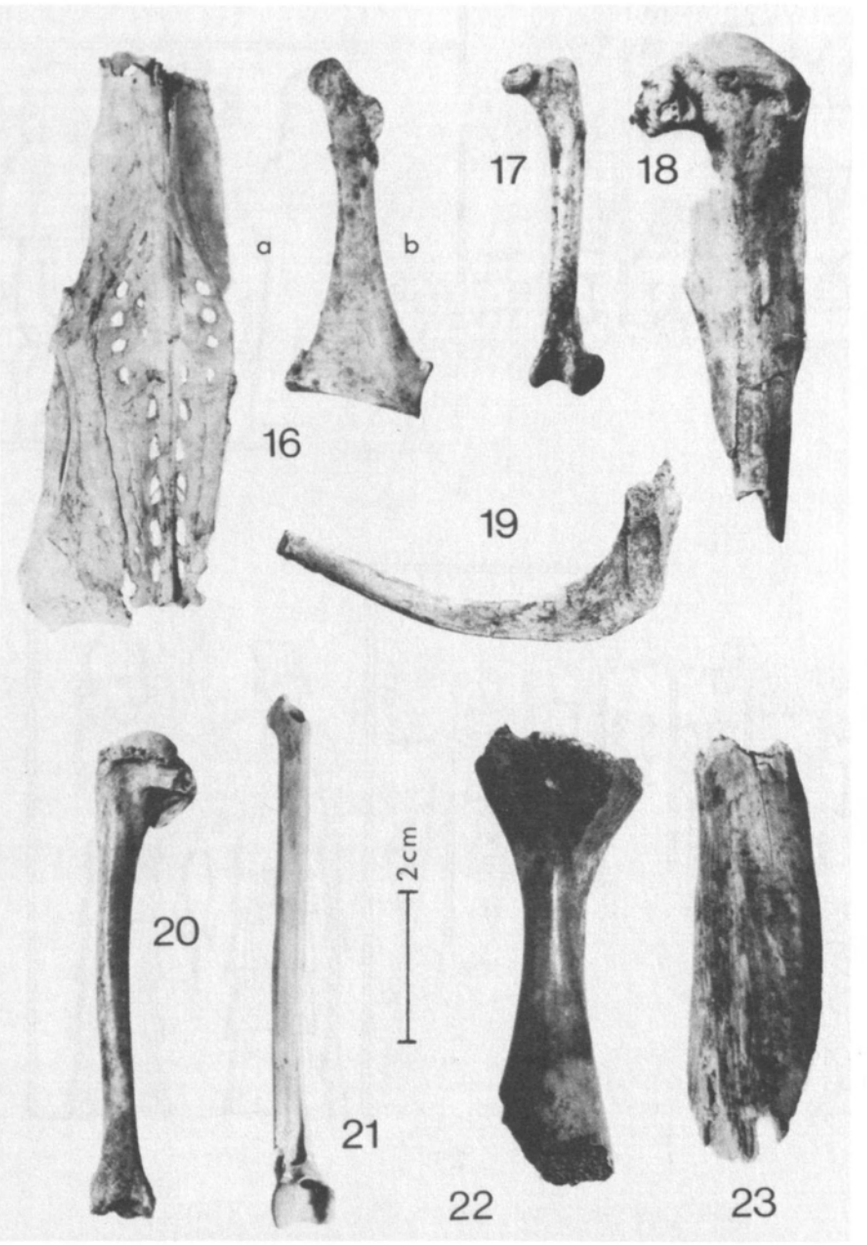
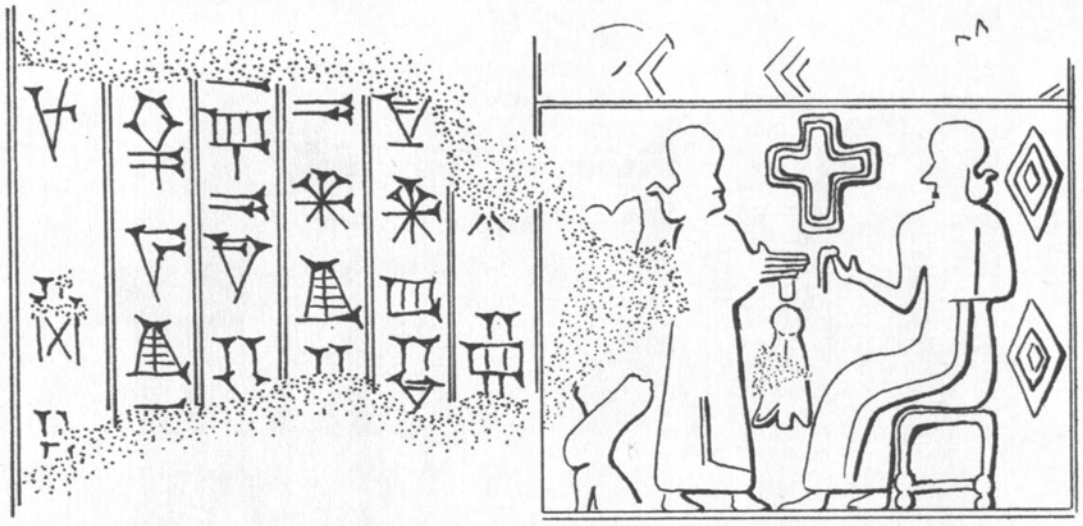
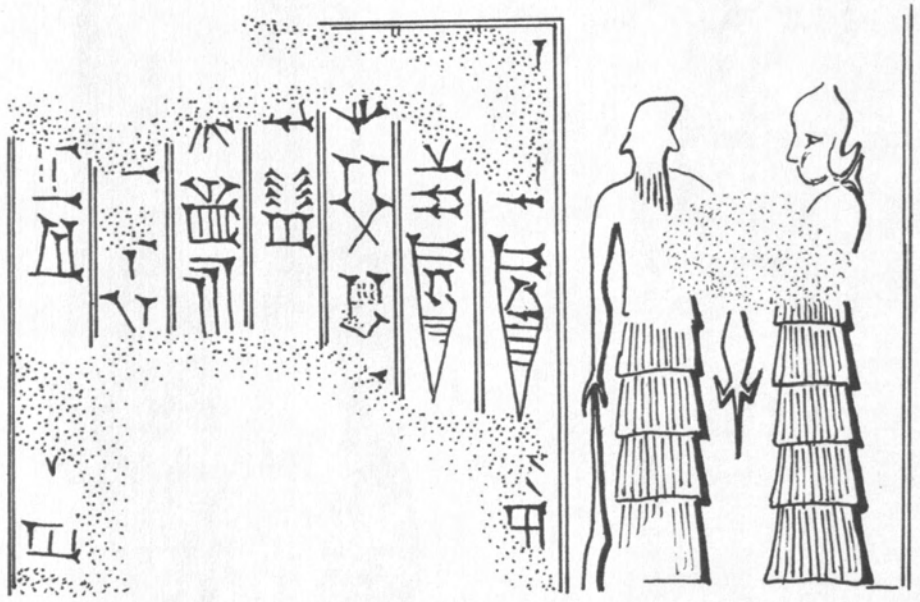


Abb. 91.—(16) Anas acuta. Lot V. (*a*) Lumbosacrale, (*b*) Coracoid. (17) Aythya ferina . Lot R. Femur. (18) Phalacrocorax carbo. Lot L. Humerus, Proximalteil. (19) Anhinga rufa. Lot R. Furculahälfte. (20) Marmaronetta angustirostris(?). Lot P. Humerus. (21) Fulica atra. Lot Q. Tibiotarsus ohne Proximalende. (22) Trionyx euphraticus. Lot 1023. Femur. (23) Siluride. Lot Q. Cleithrum.

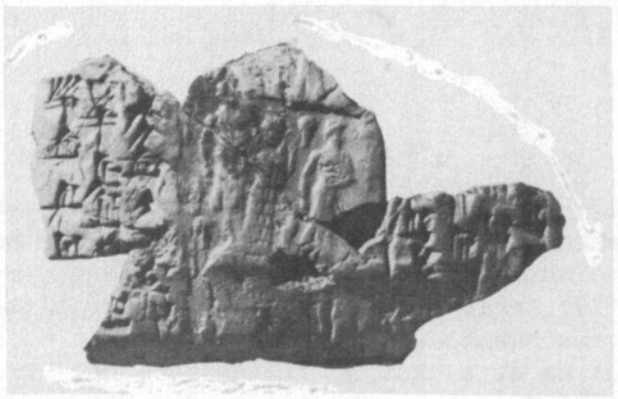
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1



2



3

Fig. 92.—(1) Reconstructed drawing of Kassite seal on 12 N 691*a* from WB, Level III, Locus 25. Scale 3:1. (2) Reconstructed drawing of Kassite seal on 12 N 691*d-e* from WB, Level III, Locus 25. Scale 3:1. (3) Photo of Old Babylonian seal on envelope 12 N 677 from WB, Level IV, Locus 17. Scale 1:1.