

EXCAVATIONS AT KISH

VOLUME I

CHALON-SUR-SAONE
IMPRIMERIE FRANÇAISE ET ORIENTALE ÉM. BERTRAND

EXCAVATIONS AT KISH

THE HERBERT WELD (for the University of Oxford)
AND FIELD MUSEUM
OF NATURAL HISTORY (Chicago)

EXPEDITION TO MESOPOTAMIA

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WITH 50 PLATES

LIBRAIRIE ORIENTALISTE

PAUL GEUTHNER

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INTRODUCTION

It is proposed to publish popular accounts of the results of THE HERBERT WELD (on behalf of Oxford University) and FIELD MUSEUM EXPEDITION TO MESOPOTAMIA from time to time, as long as we are able to keep the Expedition in the field. A scientific discussion and description of the pottery and complete plans of all excavated buildings will be given by MR. MACKAY, and published by the Field Museum of Natural History. The cuneiform inscriptions excavated or purchased by the Expedition will be included in the series, *Oxford Editions of Cuneiform Texts*. Volume I of our reports, which is herewith issued by the Expedition from the firm of PAUL GEUTHNER, should be considered only as a preliminary statement; many details and conclusions are likely to be modified or even contradicted by future discoveries. Kish has long refused to yield her secrets and we have been unsuccessful in finding inscribed monuments of her famous rulers. The imposing palace of her ancient kings has been found and innumerable works of art of the early period have been recovered there. It is impossible to make any forecast concerning the location in these vast ruins as to where the historical monuments of a Mesilim, a Kug-Bau or an Ur-Ilbaba may be hidden, but the magnificent building of early plano-convex bricks at mound A is clearly the most obvious place to look for them. The complete excavation of this mound will surely reveal one of the finest Sumerian buildings of ancient Sumer and Accad.


We succeeded in locating the mound of tablets late in the season and reached the better preserved tablets only in the last weeks of our work. This was of course by far the most important discovery for Assyriology. But the tablets have been found in lamentable condition up to the present. They lie about everywhere in the part of the mound W where we came upon them, and they are all real library tablets. About 1500 tablets and fragments were taken away, but unless they are better preserved in the deeper parts of this vast mound, the value of the discovery will be greatly diminished. Fulfilment of great hopes or disappointment may be in store for us there. The ruins of Kish conceal antiquities in nearly every mound where the excavator may chose to work, and the choice is limited only by the funds placed at his disposal. The site is large enough for several expeditions working for many years. The great mounds east of the massive temples at Inghara, the vast hills of Sudaira at the eastern end of Kish, the colossal fortresses of Khuzna, and mounds J and I, and the imposing ruins of Bandar conceal antiquities of every age from the dawn of history to the Parthian period. And it is certain that the art and literature of Sumerians and Semites, which remain concealed at Kish, will not be entirely known within the life-time of any living Assyriologist. A journey in lower Mesopotamia should teach any cuneiform scholar humility and cure his confidence, if he ever believed that he knows much as yet about the mighty civilisation which perished on the banks of the Tigris and Euphrates. Centuries of excavations and philological labour will be required before European and American scholars will know Sumer and Accad as we now know Greece and Rome. The Assyriologist who ventures upon excavation must soon learn that the lure of the desert and the silent mounds is a most dangerous distraction. Accurate control of the published texts is not compatible with the exciting life which the excavator enjoys. But there is the recompense of having promoted the subject in the only way by which the lost civilisation of these peoples can be rediscovered. We modestly

trust that even the results hastily described in this book will be in some ways a solid contribution to Assyriology.

The Expedition is grateful to those in official and unofficial positions in 'Iraq for their unfailing sympathy and assistance. A list of all their names would be a long one, but we wish to mention in particular MISS GERTRUDE BELL, *Honorary Director of Antiquities*, MAJOR J. M. WILSON, *Ministry of Public Works*, MR. R. S. COOKE, *Ministry of Awqaf*, MR. LIONEL SMITH, M.A., *Ministry of Education*, *The Photographic Department of the Air Force*, and MR. A. G. FRAZER, *Manager of the Eastern Bank*, Hillah. PROFESSOR A. H. SAYCE and FATHER ERIC BURROWS, S.J., have been good enough to read the proofs for which I am grateful.

S. LANGDON.

Oxford, October 24, 1924.



ERRATA

Page 8, for Pls. XLIV, XLV, read XLVI, XLVII.

Page 15, eight lines from bottom of text, for 15, read 13. *Ibid.*, n. 1, read Pl. XXXIV.

Page 23, l. 13 after *Uḥaimir*, punctuate (;) not (,).

Page 55, l. 8, read DE for G.

Page 73, nine lines from bottom, read Pl. XIV.

Page 77, l. 2, read No. 2. Two lines from bottom, for right, read left. N. 4, read Pl. XXI.

Page 79, seven lines from bottom, read Pl. XXI.

Page 81, l. 1, for No. 3, read c.

Page 82, l. 6, for c, read b.

Page 89, l. 7, read Pl. XXIII.

Page 105, l. 3, read *Gertrude*.

Page 110, l. 14, read south-west, for north-west.


Page 112, five lines from bottom, read B, I, etc.

Note. HENRI DE GENOUILLAC'S Tome Premier of *Premières Recherches archéologiques à Kich* was received after my book was declared ready for the press, and I had not the advantage of studying his results.

CHAPTER I

The History of Kish.

In Sumerian historical inscriptions Kish is first mentioned by Mesilim, "king of Kiš," on a mace-head dedicated to the god Ningirsu at Lagash in the time of Lugalšagengur, *patesi* or governor of Lagash¹. Here the name

is written with the ideogram , having no postfixed deter-

minative *ki*, or indication of a place-name. A vase found at Adab bears a dedicatory inscription in much more archaic linear script: "Me-silim, king of Kish, the temple Esar to its place restored; Ninkisalsigar (?) was *patesi*² of Adab³." Another text of Mesilim on a vase, inscribed in the same primitive type of script, was found at Adab⁴. The Adab inscriptions also omit the place determinative. These are all the known contemporary inscriptions of Mesilim; but he is, however, mentioned in the records of Entemena of Lagash as a king of *Kiš(ki)*, who figured largely in the earlier history of Lagash. It is clear then, that *Kiš* of the Mesilim inscriptions designates here the city *Kiš(ki)*, although the natural rendering of *lugal Kiš*, according to later Babylonian and Assyrian usage, would be *šar kiššati*, king of universal dominion. He is said to have settled the boundary between the two provinces of his dominions, Lagash and Umma⁵, and to have erected an

1. *Découvertes en Chaldée, partie épigraphique*, XXXV

2. The Sumerian ideogram *patesi* is rendered by the loan-word *iššakku* in ZA. VII 27, 11 and IV R. 36 Rev. 29; and the sign *MES*, REC. 363, in IV R. 39, 24 has the variant *iš-ša-ak-ki*, KAH. I 3, 25 and cf. *ibid.*, 5, Obv. 19, where the sign has the Assyrian classical form of *MES*, all from inscriptions of Adad-nirari I. The classical sign of *MES* occurs in the inscriptions of Ašurballit, KAH. II 27; for *pa-te-si* in the inscriptions of the same king, *ibid.*, No. 28. The Assyrian scribes probably intended to employ the sign *šangu*, priest, for *iššakku*, i. e., REC. 419. But *patešu* seems to be a possible transcription; see KAH. II 11, 5, *pa-te-šu*.

3. LUCKENBILL, AJSL. 30, 221.

4. *Ibid.*, 222.

5. SAK. 36 n) I 8-12; 24 f) I 6; *Nouvelles Fouilles de Tello*, 217.

inscribed monument to mark the border line. Eannatum, second predecessor of Entemena, claims to have possessed himself of the "kingship" of Kiš¹, and to have "smitten the head of Kiš²." In another inscription he seems to recognize a contemporary king at Kiš³. Now an historical text of the Isin period from Nippur refers to the reign of Sargon of Agade, whose date is fixed with considerable certainty at 2752-2696, in the following words: *sag-ki-gid-da* ^d*Enlil-lá-ge* *Kiš-(ki)* *gud-an-na-gim i-im-ug-ga-ta* ?(ki) *Unug-(ki)* *gud-maġ-gim saġar-ra mi-ni-ib-gaz-ta*. . . . *bi Šar-ru-kin lugal A-ga-de-(ki)-ra* [*sig-ta*?] *igi-nim-šú* ^d*Enlil-li*. . . . *nam-lugal mu-na-an-sum-ma-ta*, "After⁴ Enlil had slain Kish like the bull of heaven, . . . and had mangled Erech in the dust like a mighty bull and . . . unto Sargon king of Agade had given the kingship from the (*lower lands*) to the upper lands. . . ."

This refers clearly to Sargon's conquest of Lugalzaggisi of Erech and of Nannijaġ, last of the seven kings of the fourth dynasty of Kish⁵. The name of the city before *Unug* in the text⁶ appears to be identical with *Kā-(ki)* in the variant⁷. Here we have definite evidence that Lugalzaggisi (the third dynasty of Erech) was contemporary with at least the three kings of the fourth dynasty of Kish. Lugalzaggisi reigned 25 years as king of Erech: hence he began to reign in the time of Ashdarmuti, fifth king of the fourth dynasty of Kish. As *patesi* of Umma he conquered Urukagina *patesi* of Lagash and pillaged that city. Consequently this, the last of the early *patesis* of Lagash, who lived not more than 25 years after Entemena, must be regarded as a contemporary of Ashdarmuti, and the king of Kish who was contemporary with Eannatum must be Gimil(Puzur)-Sin or perhaps Ur-Ilbaba, the second king of the fourth dynasty of Kish. Disregarding the 25 years of Lugalzaggisi, the beginning of the reign of Gimil-Sin, son of

1. SAK. 22 VI 4.

2. *Ibid.*, 22 VI 9.

3. *Ibid.*, 28 k) III 3.

4. For *sag-ki-gid-da* = *arku*, v. AKF I 85, 22, *sag-gid* = *arku*.

5. See OECT. II 24.

6. PBS. XIII, 15, 3.

7. *Ibid.*, No. 43 Rev. 2.

the queen Kug-Bau, should be reduced to 2850 BC.¹ The early kings and patesis of Lagash, Enġegal, Ur-Ninā, and Akurgal father of Eannatum, would be contemporary with the kingdom of Akšak, 2943-2849. Note that Eannatum, who is here regarded as a contemporary of Gimil-Sin of Kish, mentions one Zuzu as king of Akšak², and although the dynastic lists³ do not mention Zuzu as one of the six kings of Akšak, this statement compels us to assume that Eannatum was a contemporary of a king of Akšak as well as of a king of Kish, both of whom he defeated. This may be explained in two ways:— (1) Eannatum commenced his reign at Lagash in the time of the last king of Akšak and continued into the time of the succeeding dynasty of Kish, or (2) the entire Akšak dynasty may be partly or entirely contemporary with the fourth dynasty of Kish. Or still another solution suggests itself; Zuzu may be a self styled king at Akšak who lived in the time of Gimil-Sin or of Ur-Ilbaba second king of the fourth Kish dynasty.

At all events the ancient king of Kish, Mesilim, clearly lived before Ur-Nina founder of the early line of rulers in Lagash, whose date is now reduced to about 2900. It is extremely probable that he was only a self-styled ruler at Kish in the period of some earlier dynasty. Nothing is known of his work at Kish, but that he dedicated objects in the temples at Lagash and Adab and settled the boundaries between Lagash and Umma warrants us in assuming that he was in reality a powerful ruler, belonging perhaps to some other northern dynasty. He may have been described as king of Kish simply because of his possession of this famous city. Judging by the epigraphy of his inscriptions he belongs to the same period as Enbi-Ashdar, king of Kish, conquered by Enšagkušanna "lord of Sumer and king of the Land⁴." This king speaks also of a "king" of Akšak whom

1. Kug-Bau represents the third dynasty of Kish in the Weld-Blundell Dynastic Prism and as mother of Gimil-Sin founder of the fourth Kish dynasty her long reign, said to have been 100 years, coincided with at least a part of the dynasty of Akšak. Reducing my figures in OECT. II 24 by 56 years, in accordance with FOTHERINGHAM'S Astronomical calculations (v. page III, *ibid.*) and accepting my calculation of 97 2/3 years for the fourth Kish dynasty, we obtain the date 2850.

2. SAK. 20 b) V 4.

3. See OECT. II 15, 43 ff.

4. See POEBEL, PBS. IV 151.

he subdued with Enbi-Ashdar. To the same period belongs Ur-zag(?)¹-ed, king of Kish, who dedicated a vase to Enlil and Ninlil at Nippur¹. Utug, who calls himself modestly only a *patesi* of Kish, claims to have *smitten* Hamazi with weapons, in memory of which he dedicated a vase to Ilbaba (god of Kish)². It is remarkable that this vase was found at Nippur, for it undoubtedly belonged originally to Kish.

Of these four early rulers of Kish, Mesilim, Utug, Enbi-Ashdar and Ur-zag(?)¹-ed, we have found no trace thus far in our excavations. A fifth king of Kish, Lugaltarsi, is represented by a lapis-lazuli tablet of unknown provenance³. The name of the city is here again written without the locative postfix *ki*. He built the "wall of the court" to Anu and Innini, which points to Erech as the site of its origin. It is extremely improbable that any of these rulers are to be placed earlier than 3500 BC. Although we have discovered the palace of the mighty kings of Kish who ruled from prehistoric times in five dynasties, at intervals, to the days of Sargon of Agade, we found only two short royal inscriptions here. On a veined marble fragment of a bowl there remain only two signs *lugal Kiš*, in which the sign for Kish resembles the form employed by Mesilim. A fragment of mother-of-pearl inlay which represents the right arm and shoulder of a figure has the signs *lugal-ud lugal*, "Lugal-ud, the king." The arm and shoulder are bare, but traces of the garment below the arm appear to indicate the upper flounce of the ancient *kaunakes* of unusually ornate pattern. From the still older(?) palace in the extensive plano-convex area in the plain marked P on the sketch map, we obtained a small statuette of a king of Kish, clad in a plain mantle hung from the left shoulder. Only the foundation walls of the buildings in this area remain, but they are extensive and built entirely in plano-convex brick. Concerning the age of the buildings in this area, as compared with the great and well preserved palace at A, it is difficult to decide; and the discussion of this problem shall be given attention later. The dress indicates a period later than Ur-Nina,

1. OBI. 93.

2. OBI. 108 + 109.

3. CT. III, 1, No. 12155.

when the *kaunakes* worn from the waist was still in use. In his left hand the figure holds a weapon having considerable resemblance to the massive boomerang wielded by Eannatum on the *Stèle des Vautours*. But the weapon is unique in Sumerian armory. See Pl. XXXV, No. 1. Beneath the left arm there are faint traces of an inscription: *la-?-?-ši-i (?) lugal Kiš(ki)*, La. . . . ši-i (?), king of Kish. The epigraphy also points to the period of the fourth dynasty of Kish, but none of the seven names of this dynasty has any resemblance to this name.

Such is the scant inscribed material now at our disposal concerning the pre-Sargonic history of this city. But the dynastic lists of the Sumerian and Semitic chronologists prove that Kish was not only the oldest capital of Sumer and Accad, but that it retained control of the entire land longer and more often than any other city before the mighty Semitic kingdom of Sargon, who finally changed the capital from Kish to Agade. It was the first capital of the country after the Flood, where its first dynasty of twenty-three kings is said to have ruled 24510 years. This is, of course, not history but legend. Several of these names are Semitic, although our excavations have proven clearly that the rulers and inhabitants of Kish in the historical period were pure Sumerian, apparently. Our dynastic lists pretend to give us definite information covering a period of over 30000 years before the real historical figures of the inscriptions mentioned above come within the purview of the Assyriologist. At Ur the excavators for the British Museum and the University of Pennsylvania found an inscription of the period of Mesannipadda first king of Ur, who is placed by the dynastic lists as early as 7649 BC. and the epigraphy of this text is much later than a pictographic inscription found by us in the palace at Kish. The form of the signs in the inscriptions of Mesilim are apparently quite as ancient as those of Mesannipadda, first king of the first dynasty of Ur, and we have seen that Mesilim and the other early rulers of Kish mentioned in actual contemporary inscriptions cannot be placed much earlier than 3200 or 3300 BC. Since the third dynasty of Erech now appears to have been contemporary with the end of the fourth dynasty of Kish and the third dynasty of Kish (Kug-Bau)¹ was

1. See OECT. II, 16 n. 2.

certainly contemporary with the kingdom of Akšak, we may assume that other early dynasties of the chronological lists were erroneously given as consecutive, whereas they were in fact contemporary. The lists also insert a second dynasty of Kish, eight kings to whom the chronologists assigned 3195 years! Between the first and second dynasties of Kish, Erech (2310 years), Ur (177 years) and Awan (356 years) are said to have successively governed the land and between the second and third Kish dynasties, Ḫamazi (360 years), Erech (420 years), Ur (108 years), Adab (90 years) and Maer (136 years) ruled for an intervening period of 1114 years. The second dynasty of Kish is then assigned to a period 7252-4057 BC. It would be absurd to reconstruct the early history of Kish on the basis of such careless and totally inaccurate material. Mesilim was obviously an important figure in the early history of Sumer and Accad, and apparently Kish never really ceased to be a recognized capital of wider or lesser dominion during the long period of the evolution of Sumerian civilisation before 2943, (the founding of the kingdom of Akšak).

At present any reconstruction of the history of Kish and of Sumer before 3000 BC. is entirely *sub judice*. A few really historical personages appear in this dimly lighted gallery, whose vista stretches back into utter darkness and mystery. Frankly, I am constrained to believe that the earliest Sumerian pottery, copper implements and inscriptions cannot be dated before 4000. The traditions concerning kings of Kish who lived 1500, 1200, 900 years, etc., as we find in the lists, must be totally disregarded by the serious historian. The only fact which we discern here on the basis of our discoveries at Kish is that these vast ruins revert to the very origins of human civilisation, and at Kish these origins are to be attributed to the Sumerians. If we assume the foundation of a reigning kingdom at Kish as early as 5000 BC., we make I believe a liberal estimation. Childish was the imagination of Sumerian chronologists of the Isin period (2301-2075), who conceived of a long series of kingdoms before 3300, reaching back to the legendary Flood, 35000 years before our era, with ever decreasing longevity from the Flood onwards. Our archaeological discoveries of the early period shall be set forth in the following pages on the basis of the conservative chronology presented above.

About 2752 Sargon, said to have been a gardener at Kish and a cup-bearer of Ur-Ilbaba second king of the last dynasty of Kish, finally put an end to the Sumerian rulership of the glorious city. He was himself a Semite and for some reason disloyal to his native city. For some unknown cause the Semitic influence upon which he depended for his military support induced him to change the capital to Agade, probably identical with the mound Tal ed-Deir 33 miles due north of Tal al-Uḥaimir and four miles N-E-N of Abu Habba the site of ancient Sippar¹. The powerful dynasty of

1. I visited Abu Habba and the adjacent ruins, April 3, 1924. The Yusifiyah Canal, a deep and rapid stream, passes close by the ruins of Ed-Deir on its southern side and it is accessible to Baghdad by a good motor route. A new canal called the Shaishubar has been dug from the Yusifiyah southward through the western end of Abu Habba. A large *tal* called Tal al-Jawen lies two miles N-E-N of Abu Habba almost in a direct line between Ed-Deir and Abu Habba. Large *tals* are visible south of Abu Habba but I had no time to explore these. Ed-Deir has certain unique features which, when taken with other evidence, lead us to believe that it is Agade. Its most striking feature is the massive city wall constructed as the two sides of a great triangle, whose eastern base was formed by a great canal: or perhaps the Euphrates itself formed the eastern defence. These walls really appear like a huge ridge of hills, and entrance to the city was obtained only by a great gate-way at the western apex of the triangle. The city was obviously built *tout de coup* and constructed primarily as a fortress. Unlike other ruins which cover ancient cities of natural and irregular growth, we have here precisely the kind of city which a powerful ruler would have planned for a new capital. Moreover Agade is known from the inscriptions to have been near Sippar; and when we find two temples of Anunit goddess of Agade both called *E-ulmaš*, one at Agade and one at Sippar-Anunit (see *AJSL*, 30, 114-116 and *ibid.*, n. 3), it is obvious that Agade must be sought for in the vicinity of Sippar. I would identify Ed-Deir with Sippar-Ḥarurum of the texts of the Hammurabi period. [Sippar-^dAruru of Asarhaddon, *BA*. III 238, 44 may be identical with Sippar-Ḥarurum; this city is also called *Dār-Sarrukīn*, "Wall of Sargon", *II R.* 50 a 59, a name which exactly corresponds to the topography of Ed-Deir and also to the historical origin of Agade.] SIR ERNEST WALLIS BUDGE conducted excavations at Ed-Deir in 1891 and in his book, *By Nile and Tigris*, he gives the Museum numbers of certain tablets found there. No. 92678 is a letter addressed to the merchants of Sippar-Ḥarurum, see *KING, LIH.*, no. 55. The British Museum Collection, 91-5-9, 1-2559, is from Ed-Deir and an examination of these tablets confirms this identification. For example 91-5-9, 326, = *CT. VIII* 27 B, a record of grain distributed to workmen in the reign of Abi-eshuh, states that the provisions came from the granary of Sippar-Ḥarurum. 91-5-9, 471, = *CT. VIII* 36 C, is a record of sesame sent from a city Luḥajātu to Sippar-Ḥarurum, in the reign of Ammiditana. 91-5-9, 747, = *CT. VIII* 2 B, is a receipt for the discharge of a commission, written in the presence of a judge and a citizen of Sippar-Ḥaruru, in the reign of Ammiditana. 91-5-9, 270, = *CT. VI* 6, is a contract for the sale of a large estate in the district of Sippar-Ḥarurum, in the reign of Ammišaduga. 91-5-9, 397, = *CT. VI* 24, is a contract for the sale of wool belonging to the temple of Shamash in Sippar, to be sold in the market at Sippar-Ḥaruru, in the reign of Ammiditana. This name occurs only in the period of the first Babylonian dynasty, and seems to have been temporarily a new name of

Agade was founded by a Semite, originally a priest in the ancient city of Kish, and Semitic names of kings appear in everyone of the four dynasties of Kish during her long period of supremacy in Sumer and Accad¹. The last dynasty of Kish, whose first two rulers Gimil (Puzur)-Sin and Ur-Ilbaba descended from the famous queen Kug-Bau a woman wine-seller, who made herself queen of Kish and re-established the power of that city after the domination of the northern state of Maer, contains five Semitic names out of seven kings, and the entire dynasty may have been Semitic. I am inclined to regard, however, Zimudar as a Semitic usurper, in view of the fact that lineal relationship ceases after Ur-d. Ilbaba in this list². The name of the son of Kug-Bau, *KkarA* + *ŠA*-*d. Sin* is possibly good Sumerian and to be read Buša³-Sin and not to be rendered by the Semitic translation *Puzur-Sin*.

The presence of Semites at Kish from a very early period is incontestable, and this racial element finally obtained complete control of the city and Semitic kings ruled the land. But there are no specifically Semitic characteristics about the archaeological discoveries which we made in either of the two Sumerian pre-Sargonic palaces so far excavated by our Expedition. We have brought back a few skulls (see Pls. XLIV, XLV). These I selected from numerous burials found in chambers of the great palace of the kings at A,

Agade, or a new epithet. Asarhaddon, however, says that he restored the gods, *Humhummu*, *Shukamuna* and *Shimalija* to Sippar-d. Arurum, whereas the goddess Anunit is known to have been the principal deity of Agade. *Šimalija* = *Šumalija* was a goddess of war and probably identical with Anunit: see *Tammuz and Ishtar*, 99 and DEIMEL, *Pantheon Babylonicum*, 257. SIR ERNEST BUDGE found numerous evidences of the work of Nebuchadnezzar at Ed-Deir and the inscriptions of that king refer to his building at Sippar and Agade. It is, therefore, probable that Agade, Sippar-Iaħruru, Sippar-d. Aruru and Dūr-Sharrukin all refer to the same city and Tal ed-Deir is the site where Agade is to be sought.

1. Note Galibum, Arpium, Baliħ (Waliħ), Tizkar, Iltasadum, in the first dynasty (pre-historic); Kalbum, in the second dynasty and the unplaced Enbi-Ashdar of the *same period* (?); Zimudar, Uši-watar, Ashdar-muti, Ishme(?)-Shamash, and Nannijaħ in the fourth dynasty, immediately preceding the rise of Sargon.

2. See OECT. II 16, 9-14.

3. For *KkarA* + *ŠA* (*burzum*) = *puzrum*, v. CT. XI 25 a 5 (ideogram without *ŠA*), and UNGNAD, *OLZ.*, 1921, 16. For the Sumerian value *buša*, note that the corrupt form of this ideogram *KšuA* + *ŠA* in Mašgan-X-(ki), IV R. 36 No. 1 II 30, is rendered by Mašgan-bu-ša-(ki) on a variant, W-B. 277 III 5.

because they represent two racial types, obviously. They were found entirely intact, but they suffered terribly in transport to Oxford. MR. BUXTON of the Department of Human Anatomy has been able to restore only the craniums and he informs me that one represents a long-headed type and one a mesocephalic type. This is what we should have expected, the long head being Semitic and the medial type Sumerian. But the figures of a king and prisoners found by us on an inlaid plaque clearly represent Sumerians (see Pl. XXXVI); and the seals, pottery and implements found in all the pre-Sargonic burials belong to purely Sumerian archaeology as known from southern sites which were unquestionably Sumerian. An early contract of the period of Mesilim now in the Nies Collection in New York City from its contents may be assigned to Kish. It affords one of the few historical evidences for a mixed population in the earlier history of the city¹.

"One mana of silver and $\frac{1}{3}$ mana² of silver for? *iku* of land; Nani and Urzuzu are the "eaters of the price of the field". $\frac{1}{3}$ mana of silver for 6(?)*iku* of land; son of Šubšub of Kish is the "eater of the price of the field." $\frac{1}{3}$ (mana) and 5 shekels of silver for 7 *iku* of land; Aš-neusan, the zu-ri-kišib-ba(?), is the *kal-il*⁴ of the field. $\frac{1}{10}$ mana and five shekels of silver for $1\frac{1}{2}$ *iku* of land; Šubšub son of Aga is the "eater of the price of the field." $\frac{1}{3}$ mana of silver for 6 *iku* of land, a supplement⁵ for Lugalennun, $\frac{1}{3}$ mana of silver to the ["eater of the price of the field"]

1. Published by DR. J. B. NIES in *Historical, Religious and Economic Texts*, No. 2.

2. One third is here written $\text{šuš} + \frac{1}{1} - \text{ša-na}$ and in line 8, $\text{šuš} + \frac{1}{1} - \frac{1}{1} - \text{ša-na} = \text{šuššana}$; $\text{šuš}-(\text{šu})$ means $\frac{1}{6}$, v. *Sumerian Grammar*, § 173, and šuššana , I take to be a dual, based upon the Semitic-Sumerian word šuššān , "one third." In later times two šuš was written $\text{šuš} + \frac{1}{1}$ and $\text{šuš} + \frac{1}{1} + \frac{1}{1}$ was falsely employed for šūnīpu , $\text{šanap} = \frac{4}{6}$.

3. $\text{šam-gan kūr} = \text{ākil šīm iklī}$, an expression for "seller." This expression corresponds to the Sumerian term galu-šam-kūr at Šuruppak, RTC. 13 III 4; 14 III 1; 15 III 3, and at Nippur, PBS. IX 3 III 1, or kūr-kug-babbar , "eater of the money," in the Obelisk of Manistusu, A IV 7; C XII 5; D VIII 10. See also DEIMEL, *Farz*, No. 31 II 3; 32 III 3.

4. Possibly "renter"?

5. *a-si* possibly for *dirig*, corresponding to the term *nig-dirig* or supplement paid for buildings on land, RTC. 13 I 4; 15 II 5; PBS. IX 3 I 5; written *SI* in later times, VS. VII 50, 11; PSBA. 1917, Pl. XII 15; cf. *ki-i pi-i DIRIG*, JA. 1917, 379 and *SI-BI*, its supplement, ZA. 30, 84, 9.

as a *gift*¹. 1/3 mana of silver for 32 *sar* of land and 4 shekels of silver² to Zuzu and Rabe-ilum sons of Iltasu(?) the *patesi*; 57 *sar* of land for the *process of the oath*³ to Ganisuma son of Urlil.”

This very primitive contract is written in Sumerian and has Sumerian legal forms throughout. Only one Semitic name occurs here, Rabe-ilum, and perhaps one Semitic word *sikin*. This is, at least, sufficient to prove the existence of a Semitic element in the population of Kish about 3300 BC.

We have found thus far at Kish scant traces of the archaeology characteristic of the dynasty of Agade. One large seal inscribed with the usual scene of Gilgamesh and the bulls was found in a chamber of the temple of Ibaba and only one specimen of the type of brick employed in the time of the Sargonids of Agade (19 inches square by 3 1/2 inches thick). So far as one can infer from the present state of our excavations, Sargon and his successors completely abandoned Kish. The city, probably because of its strong Sumerian tendencies, appears to have been hostile to him. Kish refused its most famous son and apparently never ceased to avail itself of any opportunity to break away from the empire which he had founded at Agade. The history of the sudden appearance of this military genius is still hidden in complete mystery. One of his first military movements was to conquer Kish, his own native city, against which he seems to have operated from Agade. The ingratitude of Kish to its illustrious son Sargon is all the more difficult to reconcile with the statement of Narâm-Sin, his grandson, who says that Sargon had liberated Kish from the tyranny of Erech⁴. A certain Iphur-Kish of Kish organised a great coalition against Narâm-Sin⁵, which was not successful. In his own account of the wars against the southern Sumerian city-states, by which he established his authority in

1. In case 33 read *nig-ba* (?), a present, made by the purchaser. An ancient Sumerian custom, RTC. 14 I 7; 15 II 1; PBS. IX 3 II 1; Obelisk of Manistusu, III 13, VII 8, etc.; *Déc. Ép.* XLIX.

2. This sum probably represents the *nigba*.

3. Read *si(k)-kin māmīti*?

4. RA. 16, 162, 19-21.

5. *Ibid.* 164.

Sumer and Accad, Sargon states that, after he had reduced all of these cities, he "restored Kish to its place". The ancient pre-eminence of the city is reflected in one of Sargon's titles *šar Kiš*, "king of universal dominion". Rimush³ and Manistusu employed⁴ this title *exclusively* and do not mention Agade in their inscriptions at all. For many years these rulers were in fact assigned to Kish by all Assyriologists. It is not difficult to understand the special sentiment of the sons of Sargon for this historic city which never ceased to claim the privilege of universal dominion. The title *šar Kiš* clearly refers to the position universally accorded to Kish(ki) as the city of dominion in the inscriptions of these kings of Agade.

Narām-Sin and Šargališarri, however, had no such attachment to the ancient city. The title *šar Kiš* does not appear after their names and in fact Kish joined in a great rebellion against the former. For this title we now find *šar kibratim arbaim*, "king of the four regions", employed by Narām-Sin and both adhere to their proper title "king of Agade." Inscribed records and the results of our excavations threw little light, therefore, upon the history of Kish under the kings of Agade. That Sargon, at least, retained allegiance to this ancient capital is certain, for the War-god of Kish is said to have been his god⁶.

Nothing at all is known concerning Kish in the dark period of the history of Sumer and Accad after the empire of Agade had passed away. From 2571 to the Sumerian renaissance, marked by the foundation of the empire of Ur under Ur-Nammu 2409, almost nothing is known concerning the condition of civilisation at any of the cities of Babylonia. The Sumerian and Semite seem to have subsided into complete inanity, and the invasion of the Gutean hordes accelerated the decline of an exhausted civilisation.

1. PBS. IV, 176.

2. *Ibid.*, 179; 180, 19; 183, 32. I. e. *šar kiššati*. See also the legend of Sargon, called *šar tamhari*, concerning his invasion of Asia Minor, Obv. 18.

3. PBS. IV 189; 192; 193; 194; 195; 196; 197; 199; 200; 201; 203; 204; 215; SAK. 160-163; RA. 8, 135.

4. *Ibid.*, 205; 207; SAK. 162; *Dél. en Perse*, XIV 1; X 1; Obelisk of Manistusu, B XIV 23.

5. RA. 8, 199; SAK. 164; RA. 11, 89; 16, 162.

6. Legend *šar tamhari*, Obv. 21.

Not a trace of pottery, a building, or an inscription from these two centuries has been recovered at Kish. It became the seat of a *patesi* under the provincial system of the kings of Ur¹.

Under the succeeding contemporary kingdoms of Ellasar and Isin, Kish is mentioned in the eleventh year of Sumu-ilum seventh king of Ellasar (2170-2142), "year when (Sumu-ilum) smote the army of Kish with weapons", by which the 12th and 13th years of this king were also designated². In 2169 Sumu-abu established a rival kingdom at Babylon and at this time Kish also seized the opportunity of asserting her ancient position as a capital. In the political turmoil of the period we now find Babylon, Kish, Malgû, Sippar and Kazallu all disclaiming allegiance to both of the kingdoms of Isin and Ellasar. The entire future history of Babylonia and Assyria depended upon the success of one of these candidates of the more vigorous northern cities, and Babylon finally won. A small collection of business documents from Kish proves that a local and independent kingdom maintained itself at Kish in the time of Sumu-abu (2169-2156) and Sumu-lail (2157-2122). Its position must have been hazardous and uncertain, for one of these tablets bears the formula for the tenth year of Sumu-abu, "year when he made the crown of Anu (in Kish)³." Five kings of Kish appear in the dated documents of the period⁴, Mananâ, Japium, Sumuditana, Ḫalium and Ašduni-erim. From the reign of Ašduni-erim no dated contracts exist;

1. The governors of Cutha and Kish send their offerings to the cults of Nippur as imposed by law, LEGRAIN, *Ur*, 269 † 270, last year of Dungi. In the same year the *patesis* of Kish and Adab send offerings, GÉNOUILLAC, *La Trouvaille de Dréhem*, 71. The *patesi* of Kish takes charge of offerings sent by the king (to Nippur!), GÉNOUILLAC, *Tablettes de Dréhem*, 5617, Bur-Sin, 3rd year; and *ibid.*, 5490, Uguia is named as the *patesi* of Kish and in the same connection, Bur-Sin, 4th year. Uguia sends his tribute of offerings to Nippur, RA. 9, 60; SA. 129, Bur-Sin, 4th year. Cf. *patesi Kiš(hi)*, CT. 32, 26 III 5, Bur-Sin, 7th year. Ahumbani is mentioned as *patesi* of Kish, and takes charge of offerings (sent to Nippur), *Yale Oriental Series*, IV 78, Bur-Sin, 8th year, and he is mentioned again as one of the contributors to the king's offerings (for Nippur), NIKOLSKI, *Documents of Economic Accounts*, 519, 6, Gimil-Sin, 5th year. See KEISER, *Patesis of Ur Dynasty*, 17.

2. RA. 15, 5, 56-8.

3. PSBA. 1911, 238, No. XXV, and CT. VI 10 a 8.

4. PSBA. 1911, 186-7. A few unpublished tablets from Kish are now in the Bodleian Library.

but two clay cones bearing Semitic variant inscriptions describe some events of his reign¹.

"Ašduni-arim² the valiant man, the of d. Ilbaba and d. Ishtar, king of Kish. When the four regions revolted against me, for eight years I waged war, and in the eighth year my adversary was reduced to *destruction*. My army was reduced to 300 men. When Ilbaba, my lord, the, and Ishtar my lady came to my help, food for my eating I took and I went upon a journey of one entire day, and in 40 days I subdued the hostile land. Anew I built the wall of Akšak and the canal Imgur-Ishtar I dug. *At that time (?)*³ the four regions having revolted against me, the lofty wall⁴ of Kish I built, and the "River of Eridu"⁵ in two days I dammed up."

This inscription proves that Ašduni-arim ruled over an important city state at Kish, probably some time before Sumu-abu and shews how slightly the kings of Isin and Ellasar controlled the land of Accad. Kish had temporarily included Akšak or Opis on the Tigris⁶ within her control. Of the four kings of Kish, whose dates appear on contracts at Kish, Mananā, Japium and Sumuditana often appear as contemporaries! Japium succeeded Sumuditana and since Mananā is known to have been a contemporary of Sumu-abu and Japium of Sumu-la-il the order Mananā, Sumuditana, Japium is fixed. But Mananā and Japium appear together in the oath on one tablet⁷, and each of these three kings is associated with a different god, Mananā with Nannar, Japium with Ilbaba⁸, Sumuditana with a god *bu-u-da*, and Ḫalium with Sin. Some tablets have Mananā in the oath but a year date of Sumu-abu; some have Japium in the oath but a year date of Sumu-la-il. In a chamber

1. RA. 8, 65 and CT. 36, 4.

2. Var. *erim*.

3. *ina e-bu-ri-šu-ma*.

4. Var. *dūra rabā*, "great wall."

5. That is the Euphrates. For this expression, v. *id-nun*, "River of the Prince," for the Euphrates, SAK. 40 V 10; CLAY, *Miscel.* 5 III 5; Obelisk of Manistusu, D IX 6.

6. Located by W. H. LANE, *Babylonian Problems*, at Tal Abir opposite the present mouth of the Adhaim. This passage, however, seems to favor a location below Baghdad on the Tigris; for it is not likely that the feeble kings of Kish ruled over such an extensive territory as the identification with Tal Abir implies.

7. PSBA. 1911, 192, No. VII.

8. But once with Nannar, v. PSBA. 1911, 186 n. 1.

of the temple of Ilbaba we found a small temple record of Japium, which confirms his special connection with Ilbaba. Is it possible that Kish was extensive enough to permit of rival petty kings within her own limits? The ruins measure nearly five miles from Abu Sudaira on the east to Tal Khusna and the western fortifications of Uḫaimir. Is it possible that Japium flourished in the western quarter while Mananā ruled in the greater city east of the river, now marked by the massive ruins of Inghara? Perhaps this may lead to the long sought identification of the two great temples and *ziggurats* of the eastern city. Is it possible that these huge ruins conceal the temples of Nannar and Sin'?

At best this spasmodic effort of Kish to regain her ancient supremacy was ineffective and ephemeral. In his twelfth year Sumu-la-il² devastated Kish, a memorable event, for the years 13-17 of his reign are dated from it. In his eighteenth year he destroyed "the high wall of Kish", and the city was finally absorbed into the Babylonian kingdom; never again did she aspire to royal power. Hammurabi (2067-2025) restored the temple and stage tower of Ilbaba and Ishtar in his thirty-fifth year and we found stamped bricks of this king at Uḫaimir with the following inscription. 1) Ḫa-am-mu-ra-bi 2) lugal kalag-ga 3) lugal ká-dingir-ra-(ki) 4) lugal da-ga-an kur MAR-TU 5) lugal ki-en-gi-en-(ki) Uri-ge 6) an-ub-tab-tab-ba 7) ka-ur-a siġ-gi 8) É-me-te-ur-sag 9) É-d. Ilbaba 10) Kiš-(ki)-a 11) Su-mu-la-il 12) ad-da-na-ge 13) mu-un-dū-a 14) mu-un-til-ám 15) mu-na-ni-bil. "Hammurabi, the valiant king, king of Babylon, king of all³ the land of Amurrú⁴, king of Sumer and Accad, who reduced the four regions to obe-

1. The events mentioned in the date formulae of these four kings of Kish refer to the fabrication of a throne by Mananā, of a musical instrument (*alū*, drum?) for the temple of Nannar by Mananā, for the temple of Ilbaba by Japium, and of a chariot by Japium. Ḫalium states that he dug two canals.

2. Written *šu-mu-la-il* on a Bodleian tablet.

3. *dagan*. Cf. *da-kan-me-a* = *ina puḫri-ni*, "in our assembly," RA. 11, 144, 8; *da-kan-ri* and *kullatu*, V R. 20 a 18-20 = CT. 19, 16; *da-kan-bi* = *kullat-sina*, IV Raw. 20, 15. See also KING, LIH. 100, 6, Ammiditana *lugal da-ga-an kur MAR-TU*.

4. WEIDNER, MVAG. 1921, 2, 43 and LANDSBERGER, ZA. 35, 236, believe that MAR-TU, before the 16th century, always refers to the mountainous region east of the central Tigris, the Pušt-i-Kūh.

dience, Emete-ursag the temple of Ilbaba in Kish, which Sumu-la-il his father had built, — I completed and I made it new'."

Samsu-iluna (2024-1987) successor of Hammurabi did extensive work on the temple of Ilbaba. Stamped bricks of this king were found in great numbers in the stage tower Unir-kidur-maḥ and in various parts of the temple. His inscription has the following text. 1) Sa-am-su-i-lu-na 2) lugal kalag-ga 3) lugal kā-dingir-ra-(ki) 4) lugal Kiš-(ki)-a 5) lugal an-ub-da-tab-tab-ba-ge 6) ū-nir-ki-dur-maḥ 7) ḏ-Ilbaba 8) ḏ-Innini-bi-da-ge 9) Kiš-(ki)-a 10) šu-gibil-be-in-ag 11) sag-bi an-gim 12) mi-ni-in-il. "Samsu-iluna, the valiant king, king of Babylon, king of Kish, king of the four regions, the stage tower, the far famed abode of Ilbaba and Ishtar in Kish has made a new. Its head he caused to be made high like heaven."

From the date lists of Samsu-iluna this work can be assigned to his twenty-first year; the date formula of his twenty-second year (year after the event) corresponds literally to lines 6-10 of his brick stamp. In his twenty-third year he claims to have built the wall of Kish which is on the shore of the Euphrates. The name of this wall is here given as *bad me-lam-bi kur-kur*, "Wall whose splendor (covers) the lands²." The wall of Kish is mentioned by Ašduni-arim also (p. 15). We found a great bastion wall running from a large fortress on the bank of the old river bed, north-westerly to a fortress at the edge of the western city ruins³. In 1818 BELINO, who visited Uḫaimir with KER PORTER, picked up here a small fragment of a black basalt Sumerian inscription of Hammurabi⁴. We found a number of small fragments of the same monument in various parts of the temple ruins of Emete-ursag, but no joins can be made at present. Hammurabi must have placed a very large black basalt stele in this temple, similar to his famous stele of the

1. See the text, Plate XLVII.

2. See PEISER in OLZ. 1910, 193. Cf. SAK. 30 a) Rev. l 2, and *bad-me-lam-kur-kur-ra-(ki) tūg = dūr Kiš(ki)*, II Raw. 50 a 34.

3. See on the Sketch Map, Western Area, south of the Temple of Ilbaba. The fortress on the western end of this wall was completely excavated by MR. MACRAY, and a trench was driven in to this wall immediately south of the camp. The wall and fortress appear to date from the period of the First Dynasty; perhaps we have here the wall referred to by Samsu-iluna.

4. Published in KER PORTER, *Travels*, Pl. LXXVII, h.

Law Code, but the despoilers of Kish in a subsequent period willfully shattered the monument into small bits and scattered them over the entire ruins. Future excavation on this temple site may recover a larger fragment with a connected text. Ammizaduga (1921-1901), tenth king of the First Dynasty of Babylon, placed a statue of himself in Emete-ursag in his fourteenth year.

In the long and sparsely documented period of Babylonian history which intervenes between the end of the First Dynasty (1870 BC.) and the re-establishment of Babylonia as an independent state by Nabopolassar in 625 BC., almost nothing is known of the affairs of Kish. A small onyx pommel-head of Kurigalzu the Cassite king was found at the ruins of Emete-ursag by MR. MACKAY in the first year of our excavations. The object has been deliberately broken into halves, of which the portion with the inscription has been found. The end of the second line of the Sumerian text is damaged. See the text, AJSL. 40, 228. 1) *d.Ilbaba* 2) *Ku-ri-gal-zu lugal Kiš mu-lu giš (?)*. 3) *d.Ramman d.Šamaš mu-ni ġe-gid (?)*. "To Ilbaba, Kuri-galzu king of universal dominion, lord of. May Ramman and Shamash *lengthen* his years." The Cassite kings revived the ancient title "king of Kiš," in the sense of "king of universal dominion," by which the traditional and pre-eminent position of the city is again recognized¹. We have found, up to the present, no further definite evidence of the Cassite period at Kish or Harsagkamma. But Ramman-apal-iddin, eighth king of the Isin or PAŠE dynasty, which followed the long Cassite period, repaired the temple of Ilbaba, and MR. MACKAY found a large retaining wall and platform built by him on the southern side of Emete-ursag. His bricks are not precisely square, but measure $13 \times 14 \frac{1}{2} \times 2 \frac{1}{2}$ inches³. Stamped bricks of this king were found by KER PORTER at Uĥaimir in 1818 and a copy is given in his *Travels*, Pl. LXXVII a, and in I, Raw. 5, No. 22.

1) *d.Ramman-apal-i-din-nam* 2) *lugal ka-dingir-ra-(ki)-ma* 3) *é-me-ur-sag-gā* 4) *a-pi-in-lag-ga* 5) *d.Ilbaba* 6) *ni-kalag-ra* 7) *dā-ti-ra* 8) *ū-ma-a*

1. Perhaps read, *mu-un-ba = iġiš*, he gave.

2. See also the title of Burnaburijaš, OBI. 132, 9. Workmen from Kish are mentioned in a letter of the Cassite period, RADAU, BE. XVII 109, 20.

3. Centimeters, $33 \times 37 \times 6$.

ni-tüg. "Ramman-apal-iddin king of Babylon clothed in the radiance of day Emete-ursag the brilliant *apin* for Ilbaba the valiant, the mighty." This king is said to have been an Aramaean who usurped the throne of Babylonia at the beginning of the eleventh century and reigned 22 years¹. The next mention of the city occurs in records of the reign of Tiglathpileser III (746-728) of Assyria, who invaded Babylonia and seized the cities Sippar, Nippur, Babylon, Barsippa, Kutha, Kish, Dilbat and Erech, "the incomparable cities"². He then offered sacrifices to Bêl and Zêr-bani-ti, to Nebo and Tašmit and to Nergal and Laz. A parallel account, however, gives a more detailed account in which he says that these offerings were made in Ḫarsagkamma, the great temple of Eastern Kish³. These passages prove that Ḫarsagkamma (the older Kish) still retained its importance as the most hallowed city of Accad, but unfortunately they do not include the names of the deities of Ḫarsagkamma itself. Sargon II (722-706) seems to have done some work in Eastern Kish or Ḫarsagkamma, for in the temple adjacent to the northern *ziggurat* at Inghara (marked G on the Plan). GENOUILLAC found a brick engraved with an inscription of this king⁴. The inscription refers exclusively to the construction of the two exterior walls of Babylon, Imgur-Enlil and Nimitti-Enlil, and contains no reference to Kish or Ḫarsagkamma at all. After the defeat of Merodach-baladan in 710 BC., Sargon took over the administration of Babylonia and completed extensive architectural work in Babylon. His quay-wall at the palace beside the Euphrates has been found by the German excavator Koldewey⁵, and several inscribed bricks were recovered in its outer walls and bastion⁶. This text in six long lines is a duplicate of the text found at Inghara⁷. Sargon's inscribed

1. See L. W. KING, *Chronicles*, II 58.

2. KB. II 12, 11.

3. *Ibid.*, II 6, 15-16. The list of deities here includes also Ašur and Šeru'a and Nanâ.

4. RA. 10, 83. The text published by GENOUILLAC is found on a duplicate apparently stolen from GENOUILLAC's expedition and taken to Baghdad. See *ibid.*, p. 86.

5. KOLDEWEY, *Das Wiederverstehende Babylon*, 135.

6. A translation (by DELITZSCH) and a photograph of one of these bricks will be found *ibid.*, 136. The text has not been published.

7. The text at Babylon has one insertion; after line 13 of the Kish text it reads "beside the Ishtar Gate" (*ina i-te-e abulli d. Ishtar*).

bricks at Kish bear only a duplicate text of his bricks at Babylon, but this is no reason for doubting his activity at Kish. Nebuchadnezzar did precisely the same at Kish and at many other cities. Kish is referred to several times in Senacherib's accounts of his wars against Merodachbaladan and the southern provinces. One list mentions Erech, Nippur, Kish, Harsagkamma, Kutha and Sippar, and refers to Babylon as "the city the sinful." In them had assembled the Chaldaeans together with their Aramaean allies¹. In the plain of Kish, Senacherib fought a great battle with the army which Merodachbaladan had assembled from all Babylonia, supported by Elamitic forces². The Babylonian usurper fled to Babylon eight miles to the west leaving horses, wagons, and mules on the battle field. The inhabitants of these cities with their Aramaean allies were forced to come forth and were counted as captives of Assyria. A more detailed account of this battle, recently recovered, proves that the advanced forces of Senacherib were defeated before Kish, while the king himself was engaged in the reduction of Kutha, 25 miles N-E-N of Kish. Hearing of this reverse before Kish, Senacherib hastened to reduce Kutha by assault, and advanced quickly upon Kish. Here Merodachbaladan, according to this account, feared to give battle and fled to the land Guzumman³. The same inscription describes Erech, Nippur, Kish and Harsagkamma as centres of the Babylonian revolt⁴.

Under the kings of the Neo-Babylonian Empire Kish entered into a period of renewed prosperity. The restorations of the temples in both Eastern and Western Kish in the time of Nebuchadnezzar are evident, even by superficial examination of the surface at Uḫaimir and Inghara, from the stamped bricks of this king which strew the surface. MR. MACKAY found the entire exterior walls of the *ziggurat* Unirkidurmaḫ faced with a walling of this king. The baked bricks bear invariably the usual four-line text of Nebuchadnezzar which is provokingly void of topographical information. "Nebuchadnezzar, king of Babylon, repairer of Esagila and Ezida, first-

1. KB. II 84, 37-39.

2. *Ibid.*, 82, 20.

3. SIDNEY SMITH, *The First Campaign of Sennacherib*, lines 20-26.

4. *Ibid.*, l. 52.

born son of Nabupolassar, king of Babylon." The local Babylonian pride, manifest by this consistent reference to the great temple of Marduk on the very bricks employed in the reconstruction of older and far more famous sanctuaries throughout Babylonia, is most annoying to the excavator. It tells him neither the name of the city nor the building which he is excavating, and in the case of the great eastern ruins of Ingharra and Abu-Sudaira information on both these points is most important. Occasionally a seven line stamp with the same text is found at Uḫaimir. In describing the military defences of Babylon, Nebuchadnezzar says that from the highway by the bank of the Euphrates to Kish¹ he constructed a great wall and moat, wherefore Babylon was surrounded by water. This wall was $4\frac{2}{3}$ *beru* long. Assuming that the small *biru* of 5346 meters is employed here, the inference is that the wall was 24.948 kilometers long or about 15 miles. This wall, therefore, ran from the site Uḫaimir in a north-westerly direction and reached the Euphrates about $12\frac{1}{2}$ miles north of Babylon. In fact a long chain of mounds can still be distinguished with some certainty running from the two western fortresses of Uḫaimir in that direction. Thus Kish, although larger than Babylon itself, became an eastern bulwark of the capital. The old Euphrates had long since found a new course from above Kish to the west at Babylon. The water-supply of Kish in this period was undoubtedly supplied by a canal now marked by the *Shatt en-Nil* which left the Euphrates shortly above Babylon and passed by Kish and Ḫarsagkalamma on the south. The bed of the Shatt en-Nil lies over a mile south of Uḫaimir and a half mile south of Ingharra. A large modern canal now follows the general course of the Shatt en-Nil which irrigates the fields about Ingharra. When Herodotus estimated the circumference of the walls of Babylon at 480 stadia or nearly 60 miles, Strabo at 385 stadia and Diodorus Siculus at 360 stadia, they were probably misled by the defensive military works left by Nebuchadnezzar. A large fine three-column barrel-cylinder from Kish, now in the University Museum of Philadelphia, commemorates the rebuilding of Ekišibba, chapel of the war-god

1. The text has *adi kirib Kiš(ki)*, "unto the midst of Kish." Beyond doubt the scribes of this period always understood "Kish" to mean only Western Kish and not the greater Eastern Kish or Ḫarsagkalamma.

Ilbaba, in his temple Emete-ursag¹. This chapel had been built by Nebuchadnezzar's father, Nabupolassar. Nebuchadnezzar says that he built a wall about this chapel and its rooms which are before the court, and restored it as of old. The *kisallu* or court of Emete-ursag has been completely traced to a depth of four feet, and several of these rooms have been excavated to a depth of ten feet, but the chapel itself has not been located in the vast ruins of the temple-hill at Uḫaimir. Business documents of the time of Kandalanu, probably only a Babylonian name for Ashurbanipal, were found by us in the city ruins (W on the Plan) of Ḫarsagkamma; and several others, dated in the reigns of Nebuchadnezzar and Nabonidus, from Ḫarsagkamma² and Kish³ have been published. The last historical reference to Kish in the cuneiform inscriptions is found in the Nabonidus Chronicle in the account of the last year of his reign (539 BC.). Babylonia was now in the last years of its glorious history and the great cities of the plain hourly expected the final disaster. The armies of Cyrus were already at Opis on the Tigris and the terrified cities no longer observed the national religious festival of the New Year in Nisan at Babylon at which their gods were always present. The god Ilbaba and the gods of Kish, the goddess Ninlil and the gods of Ḫarsagkamma, came not to Babylon before the end of the month Elul (sixth month), and in the eighth month Cyrus entered Babylon and treated Babylonia with unexpected mercy. The gods were permitted to return to their cities unharmed.

Kish like other cities of Babylonia undoubtedly prospered under the rule of the Persian kings, but her name now disappears even in business documents. At Abu Sudaira, the great ruins in the plain two miles east of Ḫarsagkamma, there remain abundant vestiges of a Parthian occupation and

1. This cylinder so far as it concerns the principal record of Nebuchadnezzar's work at Kish was correctly edited in my *Neubabylonische Königsinschriften*, 185, lines 70-93. But for the long introduction of this valuable inscription I was completely misled by information then at my disposal. The entire text is now published by DR. LEGRAIN in the *Museum Journal*, 1923, 270 ff. The original was inaccessible to me and the actual text now published for the first time shows that it is quite different from the text presupposed in my edition.

2. STRASSMAIER, Nbk. 359; 408; Nbn. 626; 665.

3. *Ibid.*, Nbk. 346; 423.

a ruined Parthian tower still commands the desert from that desolate mound. So far as one can judge from the present state of our excavations Western Kish was already abandoned in the Persian period. The vast city ruins of Eastern Kish or Ḫarsagkalamma marked W and H on the Plan are not covered with fragments of glazed pottery; and our excavations at W, where we found rooms full of tablets, indicate an occupation not later than Nabonidus. A place called Ḫarran-Kish or the "Road of Kish" is mentioned in the time of Darius¹. Apparently the water-supply began to fail here before this catastrophe finally turned the entire plains of Sumer and Accad into an arid waste. It is difficult to account for the later occupation at Abu Sudaira and the small *tals* which lie along the Shatt en-Nil to the east of Kish. Tal 'Izbah four miles east of Sudaira, and Abu Ḫaṭab eight miles distant both, on the Nil, shew traces of a late occupation. Abu Ḫaṭab has a fine *Imam* of the Abas-side period. At Ṭuweirij, four miles south of Abu Ḫaṭab, I found the same glazed pottery and brought in from here a beautiful glazed pot of the Persian period. The whole plain east of Sudaira along the Nil is covered with glazed pottery and dotted with low mounds, the sites of rural habitations. We found a large Greek tomb on the top of the old Sumerian palace at A, but this was the only bit of archaeology which could be definitely attributed to a period later than Nabonidus.

1. BE. VIII 113, 11 and 105, 6. See also STRASSMAIER, Nbd. 916, 13.

CHAPTER II

Ḫarsagkalamma and Its Cults.

Eastern Kish contains colossal ruins, and the mounds at E-F-G-A-D form a huge line of hills nearly a half mile long culminating in a double *ziggurat* (E-F). Obviously this part of the site conceals one of the most important temples in Sumer and Accad. Since Ḫarsagkalamma is repeatedly mentioned in the cuneiform inscriptions as a twin city of Kish, there can be little doubt but that the central range of hills at Inghara really covers the temples of Ḫarsagkalamma. It is difficult to disentangle the conflicting topographical connotations of Kish in various passages and at various periods. The eastern part of Kish is obviously the seat of the earliest Sumerian kings. We have found a few fragments of painted pottery at Uḫaimir in chambers of Emete-ursag and three fragments of black ware decorated with white incised bands, all characteristic of the early Sumerian period, at Uḫaimir, there are vestiges of plano-convex buildings here. On the other hand a large abandoned area only slightly above the plain level is strewn with plano-convex bricks about one mile east of Uḫaimir and a mile north of the central ruins of Inghara. A magnificent palace built entirely of plano-convex bricks was discovered in the low mound near the temples of Ḫarsagkalamma (at A). There is clearly no difference in the age of the buildings at the plano-convex area and of the palace near the temple. If Kish designates only the western side of the river then the palaces of the oldest and longest line of Sumerian kings must be sought there. We have done a considerable excavation in the extensive city ruins at Uḫaimir and have found nothing but buildings and tablets of the Hammurabi period. Kish designates this area in contracts of the late period, as we must infer from the cone of Nebuchadnezzar, but in all the upper strata of these ruins, which cover an area of about 300 acres to the west of the *ziggurat* at Uḫaimir,

there are no signs of the Neo-Babylonian period. It is certain, however we may explain this absence of late culture here, that in the Assyrian and Babylonian inscriptions, from the First Dynasty onward, Kish usually designates only the western area. Our excavations on the contrary demonstrate that the palaces of the old Sumerian and Semitic kings lay in the eastern area and in the great palace at A we found a fragment of marble bowl inscribed with the words "kings of Kish." "Ḫarsagkalamma" does not occur at all in religious and historical texts before the Isin period; and in the early Sumerian inscriptions "Kish" clearly includes the entire area of these enormous ruins five miles long. The first clear reference to a double city, wherein Ḫarsagkalamma appears as a special name for the older eastern city at Inghara, is made by Hammurabi. In lines 55-67 of column II of his Code of Laws he speaks of Kish and its cults as follows:—"The commander of kings, the brother of Ḫilbaba, founder of (his) dwelling in Kish, who surrounded Emete-ursag with a sheen of splendor; who prepared well the ritualistic cults of Ishtar, the guardian of Ḫarsagkalamma". Emete-ursag at Uḫaimir was the seat of the cult of the war-god Ilbaba with whom Ishtar the war-goddess was associated. This is known from the inscription of Samsu-iluna, and from the warlike figure of Ishtar in her chariot, which we found there. Unfortunately the names of the ancient temples and gods of Ḫarsagkalamma are not mentioned here.

The Nabunidus chronicle speaks of Ilbaba and the gods of Kish, Ninlil and the gods of Ḫarsagkalamma. This indicates that a temple at Inghara was dedicated to a goddess. "Ninlil" was also the title of the consort of Ašur in Assyria², and the name was often rendered by *bellu* "the queen" simply³. Definite proof that *Ḫarsagkalamma(ki)*, with or without the locative *postfix(ki)*, was only a new name for the principal part of Kish is found in a hymn to Ishtar or to the various local types of Ishtar. The text enumerates the principal temples built to this mother goddess in various

1. The section on Kish ends here. Line 68 *bit kisal nakiri*, "House of the court of the enemy" refers to Girra or Nergal, the terrible god of the dead.

2. See for example KAH. II 125, 4; KING, AKA. 62, 34.

3. C. J. GADD, *Early Dynasties*, 34.

cities. "In Kish the city of rulership is E-ḫarsagkalamma(ki) the seventh temple of thy throne room¹." A similar hymn of the Isin period has, "In Kish Ḫarsagkalamma is mine²." This settles at least three important points:— 1) Kish was the original name for the entire city; 2) Ishtar, called *beltu* (Ninlil) in the Nabunidus Chronicle, was the principal deity of the older Kish; 3) E-ḫarsagkalamma was the name of her temple here and must be identified with one of the two adjacent temples in the massive hills of Inghara. I suggest that this temple lies beneath the lofty spur marked D on the Plan and that its *ziggurat* is E. The name of this temple then gave its name to all of Eastern Kish. A somewhat similar topographical nomenclature may be cited from the dynastic lists, which state that Eanna or the temple of Anu and Ishtar at Erech was the earlier name of that city³.

Kish(ki) and Ḫarsagkalamma(ki), variant ^{ab}Ḫarsagkalamma⁴(ki), occur between Nippur and Kutha on the Senacherib Taylor Inscription, I 38. An incantation text, in which the gods of various cities are invoked⁵, has a list of the gods of *Kish(ki)* and Ḫarsagkalamma. These occur in the following order here:— *iltum rubūtum* ^{d.} *Ninlil iltum rubūtum* ^{d.} *Nin-é-an-na* ^{d.} *Ilbaba kak-ku ilāni rabūti* ^{d.} *Innini* ^{d.} *Nanā* ^{d.} *Kanisurra* ^{d.} *Sin bēl ḪI-GAR-(ki)* ^{d.} *Ramman bēl a* ^{d.} *Papsukkal a-sib bit ak-ki-il*⁶. "Goddess of mightiness, that is Ninlil⁷; goddess of mightiness, that is Nineanna⁸; Ilbaba, weapon

1. OECT. I 17, 19-20.

2. PSBA. 1918, 82, 35.

3. OECT. II 11, 46-7.

4. I. e. "City Ḫarsagkalamma."

5. CRAIG, *Religious Texts*, 58, 6-10.

6. I found two clay figurines of Papsukkal in the library at W, whereby the meaning of *akkil* from *akālu*, to write, is confirmed. Compare *ikkil šāmi-īa*, KAR. 25 IV 15.

7. Ninlil, here and above, p. 24, is clearly the principal deity at Ḫarsagkalamma, but on religious texts found in the library the god \blacktriangleleft occurs repeatedly, and this is probably a form of Enlil at Ḫarsagkalamma. For ^{d.}BAD = Enlil in Babylonian texts, v. V R. 47 b 6. But this ideogram usually stands for Ea in Babylonian texts and for Enlil in Assyrian texts. See CLAY, *AJSL*. 23, 270. It is probable that the sign *BAD*, when it means Enlil in both southern and northern texts, has the value *til-la*, CT. 24, 23, 13 and *iḫim* is the pronunciation when it stands for Ea. Note V R. 33 VIII 15-16, ^{d.} *Ē-a bēl nakbi*, and ^{d.} *BAD (nakbu) = d.Ea*, CT. 24, 14, 48. Note ^{d.} *BAD-la-tabbani*, STRASSMAIER, *Nbk*. 200, 3, probably = Enlil-tabbani, and not Ea-la-tabbani. Read *Enlil-la* and not *til-la*? But for the reading *ba-ḫd* for *BAD* = Enlil, v. RA. 17, 128, 28-9.

8. *Nineanna* had a temple in Babylon called E-kidur-garza, V Raw. 34 II 9; PSBA. 1888,

of the great gods, Ishtar, Nanâ, Kanisurra, Sin lord of *HI-GAR-(ki)*, Ramman lord of and Papsukkal who sits in the house of writing." The text continues by including Nergal of Kutha, Išum and Šubula, and the gods of the Tigris and Euphrates among the gods of Kish and Ḥarsagkalamma. In this confused list, Ilbaba and Ishtar as war deities belong to Emete-ursag in Kish. Ninlil and Nineanna we may regard as deities of Ḥarsagkalamma. Nanâ, Kanisurra', Sin, Ramman, and Papsukkal may also be assigned to Ḥarsagkalamma. Sin of *HI-GAR-(ki)* possibly gives a clue to the identification of Abu Sudaira. Beside the two principal temples of Ḥarsagkalamma, D and G on the Plan, the large mounds B and C certainly conceal two adjacent temples. Nineanna or Innini-Ishtar of the two Sumerian hymns, cited on page 25, must be the deity of one of the two great temples D or G with their adjoining *ziggurats*. To the other of these two central temples of Ḥarsagkalamma, Ninlil and Enlil may be safely assigned. The Ishtar of Ḥarsagkalamma is a type of the virgin-goddess entirely distinct from the war goddess Ishtar of Emete-ursag in Western Kish. An Enlil of Ḥarsagkalamma is proven by the list of various stars assigned to Enlil in different cities. The constellation Urbarra is here said to be the star of Enlil of Ḥarsagkalamma(ki)². He must be the ^d.BAD of the tablets found at W,

May, Pl. III 50; *East-India House Inscription*, IV 46, etc. See VAB. IV 302 under *E-kidurini*, a false reading from STRASSMAIER, *Nbk.* 247, 12, *é-ki-dur-KA-NI bit d-Nin-é-an-na ša kišad pałgi ša āli ešši ša kirib Bābili(ki)*. The hemerologies enter the 15th day as sacred to Nineanna, which day is also described as (the day) of the casting up of accounts for Sin and *dingir mağ* or *Bêlit ilāni*. Nineanna or the "queen of Eanna" is clearly a type of Ishtar, whose chief temple was Eanna in Erech, and *Bêlit-ilāni* must be identical with Nineanna here. See IV R. 32 II 23; 33* II 17. Nineanna is one of the titles of Ishtar at Erech, THUREAU-DANGIN, *Rituels*, 114, 13. She occurs on Cassite seals as mother goddess, RA. 16, 72-73, Nos. 9-11. *Šurpu* II 167-8 clearly identifies her with Ishtar of Erech.

1. *Nana* and *Ka-ni-sur-ra* are invariably mentioned together, BL. No. 56 Rev. 16-17, and ^d.Lilenna is another title of Kanisurra, a sub-type of Nanâ-Ishtar. See *ibid.*, 138. According to II R. 60 a 11/10 her local cult was at *Ekalāti(ki)*. A letter of the period of Hammurabi, probably from Erech (?), speaks of offerings to Anu, Ishtar, Nanâ and Kanisurra, UNGNAD, *Babyl. Briefe*, 181. A dedication to her by Anam, scribe and later ruler of Erech, has the interesting text, *d.Ga-ni-sur-ra nin id UD-NUN* (for Ud-kib-nun ?) *nin-a-ni-ir*. To "^d.Ganisurra mistress of the Euphrates (?) his lady." SCHEIL, RA. 12, 193, reads "mistress of the canal of Adab." According to SBH. 146, 45 she is sister (*me-rat* ?) of Nanâ. Read there *KU + SAL = aḡat*, sister.

2. PSBA. 1911, Pl. XI 3.

and consort of Ninlil here. The liturgical texts of the Isin period consistently speak of Innini-Ishtar as the principal deity of Ḫarsagkalamma¹, and she was known as the Ḫarsagkalammite². In the liturgies the name occurs regularly after the temples of Erech and followed by the temple É-tūr-kalamma³. Ḫarsagkalamma and Eturkalamma follow Ekišibba⁴ and Emete-ursag of Kish in an Enlil liturgy⁵, and a hymn to Ishtar describes her as *gašan Ḫar-sag-kalam-ma* and *gašan É-tūr-kalam-ma*⁶. The two temples are associated in the Innini liturgy, SBP. 166, 58. It is probable, then, that E-ḫarsagkalamma, or Ḫarsagkalamma, designates the great temple at mound D and Eturkalamma may be the name of the chapel of Innini in this temple. E-ḫarsagkalamma or Ḫarsagkalamma with or without postfix *ki* was also a name for the entire area of Eastern Kish.

The word means "Mountain of the world," a cosmological term for the earth, and consequently it should have some connection with the cult of the earth-god Enlil. The temple of Ninlil (his consort) and Enlil forms with Innini's temple a twin temple and twin *ziggurat* at Kish, and consequently we have to do with a type of Ninḫarsag or Nintud in the figure of Innini or Nineanna at Ḫarsagkalamma⁷. The word is written *Ḫar-sag-ga-lam-ma* in two Drehem texts which surely refer to a sacred place at Nippur⁸. Another *Ḫar-sag-galam* at Eridu is unequivocally documented by an Eridu hymn⁹, and at Ur by a hymn to Ur-Nammu¹⁰. The identification of Eturkalamma contains, however, an element of uncertainty for the liturgical texts also mention *éš é-tūr-kalam-ma* in connection with Esagila, temple of Marduk

1. BL. 78, 31; Ḫarsagkalamma is one of her cult-centres here.

2. *Ḫar-sag-kalam(ki)-i-tum*, SBP. 264, 5.

3. BL. 93, 7; 78, 31; SBP. 189, 47; SBH. 104, 16-18; 100, 36-37. BL. No. 204, 12.

4. Ilbaba's chapel in Emete-ursag.

5. PBS. X 166, 14.

6. ZIMMERN, KL. 29, 4-5.

7. See above where Nineanna is identified with Bêlit-ilāni (= Ninḫarsag, Nintud, Aruru) in the hemerologies.

8. LEGRAIN, *Ur*, 336, 6, which also mentions offerings to Enlil and Ninlil, and CT. 32, 41 I 17 in a list which undoubtedly refers to Nippur.

9. AJSL. 39, 169, 5.

10. PSBA. 1918, 46, 9.

in Babylon¹, and the Nabunidus Chronicle says that in the last days of his reign in the hour of Babylon's great calamity Nabunidus entered into E^turkalamma². But the numerous building inscriptions of Neo-Babylonian kings do not refer to this temple as we should expect them to do if it was an important temple in Babylon. Perhaps we may explain all these passages as a reference to the great temple of Innini at Ḫarsagkalamma of Kish³. A temple to the moon-gods Sin and Nannar surely existed in Eastern Kish. This is proven by the list of deities on page 26 and by the oath formula of the feeble kings of Kish, Samuditana and Halium⁴.

The tablets of the library may possibly enable us to understand the nature of the cults of the temples beneath the immense ruins of Inghara, before excavations finally give us positive information concerning one of the greatest religious centres of Sumer and Accad. It is clear that the double *ziggurat* belongs to the cults of two mother goddesses. Concerning these cults of pre-Sargonic times we have only the statement of Entemena, who says that the god of Mesilim was *KA-DI*⁵, pronounced Isir⁶. Now Isir, originally a deity of the prehistoric Dir east of the Tigris, was in fact a title of the mother-goddess Innini there⁷. A legendary hymn on the prehistoric demigods of Erech describes Dir as the original home of Innini⁸. The liturgies consistently connect Innini of Erech with Innini of Ḫarsagkalamma. We have abundant information concerning the character of the Erechian Ishtar, sister and mother of Tammuz. But her character at Ḫarsagkalamma remains a subject for conjecture. All of the evidence adduced above leads us to believe that the Ishtar of Ḫarsagkalamma will be revealed by the tablets

1. IV R. 28*, No. 4 R. 27, and SBP 238, 9. The earlier variant of SBP. 238 in PBS. X 160, 6 omits *Eturkalamma*.

2. BA. II 220 III 6.

3. In BL. 93, 7-8, both Ḫarsagkalamma and E^turkalamma are followed by *ub-imin*, the "seven regions", a clear reference to the two stage towers of Inghara. It is, therefore, possible that E^turkalamma must be regarded as the name of Ninlil and Enlil's temple here.

4. See page 13.

5. SAK. 36 n) 10.

6. See PBS. X 177, 11.

7. See *Tammuz and Ishtar*, 16 n. 1.

8. OECT. I 3.

of Kish as a mother-goddess similar to Nintud, Ninḫarsag and Aruru, of Adab, and Kēsh, a city near Erech, formerly confused with Kish by the Assyriologists.

A fragmentary list of the temples of Kish has been found at Assur and published by SCHRÖDER in *Keilschrifttexte aus Assur verschiedenen Inhalts*, No. 84. This text has the names of the temples in the following order:—

- 1) Kish-(ki).
 - 2) é ḫar-sag-kalam-ma-(ki).
 - 3) é d. Ilbaba. [I. e., Emete-ursag].
 - 4) é d. Nin-lil.
 - 5) é ša-ad-kur-kur-kur.
 - 6) é d. A-num.
 - 7) [é.] É-a.
-

The list unfortunately does not give the actual names of the temples (with the exception of Ishtar's temple E-ḫarsagkalamma(ki)), but of their deities. Line five appears to be the name of a temple and not of a deity. By comparing lines 6 and 7 the identification of Ea with d. BAD is shewn to be impossible in the nomenclature of Kish. The temple of Ninlil is not identical with the temple of Enlil (BAD). The list also proves that Kish *includes* Ḫarsagkalamma(ki)¹.

1. One of the two *ziggurats* at Harsagkalamma must be E-kur-maš, II R. 50 a 13, mentioned with E-ū-nir-ki-dur-maš, the *ziggurat* of Western Kish.

CHAPTER III

The Topography of Kish¹.

The extensive ruins of Kish lie exactly east of Babil, the red stage-tower being distinctly visible from anywhere along the eastern bank of the Euphrates. By air-line the western part of Kish, called Uḥaimir, is eight miles from Babil, and about 10 from Hillah, the nearest market; a railway station has been constructed about a mile north of Hillah and from here an indifferent motor road runs out to Uḥaimir, following the general line of the old Shatt en-Nil canal, and the north bank of a large modern canal, which is reached and crossed by a bridge about 3 miles east of Hillah Station. The road follows the bank of the canal for six miles and then by a detour northward passes the western slopes of the massive mounds of Eastern Kish and reaches Uḥaimir by a bridge over a small canal which runs only 60 rods south of the camp, pitched at the southern side of the lofty stage-tower of the war-god Ilbaba. See Plate I. This road because of its detour to the south of the ruins is at least four miles longer than the horse and foot-path across the desert direct to Hillah. The path passes by a well preserved Imam, the tomb of Ali Ibn Hassam, 3 1/2 miles west of Uḥaimir, and a salient land-mark in this area. The well preserved *ziggurat* (Unirkidurmaḥ) of the Western Kish has a remarkably reddish appearance, especially after rains, and this has given it the modern Arabic name *Uḥaimir*, diminutive of the Arabic *ahmar*, red. The traveller must be astonished to find the most impressive and massive land-mark of the whole plain described as "the little red one" by the natives. Despite the various pronunciations of this word reported by explorers from BUCKINGHAM (1816) to the present day, *Uḥaimir* is the only philologically defensible pronunciation of the name, so difficult to learn cor-

1. See Pl. XXXIII.

rectly from the natives'. The tower dominates the plain of the entire region and is more imposing than the twin *ziggurats* of Harsagkamma, a mile and a half south-east, only because of its more isolated position. Compare Plate II, No. 1 with Plate II, No. 2. The adjacent ruins of the temple Emete-ursag to the east of the *ziggurat* are low but extensive. See Plate II, No. 3, which gives a view of Emete-ursag from the east with the *ziggurat* on the western side of the temenos platform. The *ziggurat* rises about 90 feet above plain level and upon excavation of its south-eastern and south-western sides its base was found to be slightly rectangular, 190 feet on the south-western and north-eastern sides and 180 feet on the south-eastern and north-western sides. The ruins of the temple on the north-eastern side do not rise more than 30 feet above plain level at any point, but they are extensive enough to shew that Emete-ursag was one of the largest temples in Sumer and Accad. The temple mound alone covers an area of about two acres. At the top of the tower a mass of baked bricks from the period of Samsuiluna, worn into a low cap of the massive sundried brick-work below, protects the tower from rapid detrition. It shews traces of horizontal shafts left by the Babylonian builders, which are now the homes of foxes and hyenas. A wide low chain of mounds comes right up to the temenos area on the western side and extends westward in a wide sweep to the south, enclosing on that side the fine flat expanse, originally a city park, on which the Expedition's camp has been pitched. These city ruins cover an area of about 120 acres and have been the hunting ground of native diggers for many years. The surface of this area has been completely scarred with superficial burrowing, and we presume that most of the contracts from Kish (obtained in commerce) have been found here. MR. MACKAY paid considerable attention to this area during the first year of our Expedition and excavated chambers of a large building in the central part. Fragments of literary tablets were

1. BUCKINGHAM wrote the name *al-Hheimar* as RICH had done before him. KER PORTER (1818) has *al-Hymer*; MIGNAN (1827), *el-Hämîr*; BAILLIE FRASER (1835), *Ohemîr*; OPPERT, *Al-hymar* (1852); GENOUILLAC (1912), *el-'Ahymer*. My workmen invariably said *Tal el-Uhîmar*, but the Mutassarif of Hillah and his interpreter wrote and pointed the word thus, *Tal el-'Ahîmar*, which is an impossible Arabic form. OPPERT, *Expédition scientifique*, 217, correctly explained the form of this word.

found there and a few letters of the period of Hammurabi have been recovered from minor operations continued this year. Early in this season before my arrival at Kish (Dec. 23rd) our famous bone stylus was found in a chamber of the building on which desultory work has been carried on for two seasons. Pottery and copper implements of the period of the First Babylonian Dynasty constitute the only archaeological objects found in this part of the *tal*, but the existence of a large collection of literary tablets must be regarded as certain here. Thorough investigation of this area is not attractive on account of the disheveled condition of the surface, full of the pits of Arab diggers and distorted with hummocks thrown up by various adventurers.

Two isolated mounds lie just west of the city ruins of Western Kish; the larger southern mound the Arabs have named *Tal Khuzna*, which is a corruption of *hazna*, "treasure," in the local dialect. The "Hill of Treasures" and its twin hill 80 rods to the north probably constitute the western fortresses of Kish. They rise to a height of 40 feet above plain level and shew no signs of previous excavations. We have made no attempts to investigate these *tals*. From a fortress near the south-western end of the city ruins a massive wall runs south-easterly to a large low hill on the western bank of the old bed of the Euphrates. The original course of the river is perfectly visible between Western and Eastern Kish. A wide water gap passes just east of the temple ruins and runs due south and east to join the bed of the Shatt en-Nil. A deep cutting made by MR. MACKAY in this depression south of the temple revealed river-sand at a low depth; and plano-convex bricks swept down the stream from the temple area were found mingled with the sand of the dessicated stream. This is almost the only evidence of the pre-Sargonic period found thus far west of the river. The fortress at the western end of the moat wall has been completely excavated by MR. MACKAY and COL. LANE. It consists of a huge buttressed rampart with large interior chambers. Fragments of pottery of the Hammurabi period were found there.

Eastern Kish, later called *Harsagkamma* from the name of Ishtar's temple [at D-E(?)], contains many enormous mounds and is clearly the most

important and the oldest part of this great city. The huge group of central mounds [see Pl. V, No. 1] has the Arabic name *Inghara* which a literate Arab wrote for me thus, انغرى, which looks like the seventh form of the verb *gharā*, to smear with an adhesive substance, and "to be astonished," and in the third form "to stick two things together." The seventh form is apparently not used in classical Arabic, but it should mean "it is glued together," which would describe the two *ziggurats* closely joined to the massive conglomeration of ruins of Ingharā. It is, however, an impossible nominal formation in Arabic. I heard the pronunciation 'Inghara or 'Ingharra distinctly, and so also did MR. WELD and MISS GERTRUDE BELL, both trained Arabic scholars. To depend upon the transcription of my native scribe would be futile and the interpretation must be left in suspense. The word may be a corruption for *umm gharā* or *gharra*, but this also appears to be insoluble. The two *ziggurats*, closely united by a mass of debris, are joined high up on their shoulders by the ruins of their adjoining temples. See Pl. III, No. 2. The *ziggurat* E on the plan belongs apparently to the enormous ridge of ruins north of it, where I presume E-ḥarsagkamma will be found. The tower rises 75 feet above plain level, but it is smaller than the *ziggurat* at Uḥaimir. The huge spur north of it covers an area of 3 acres and is not much lower than the tower itself. The *ziggurat* at F is lower and considerably smaller, and the mound which covers its adjacent temple at G is diminutive compared with the greater temple. Just south of this temple complex lies a long wide mound, marked B on the Plan. See Pl. III, No. 1. It practically joins up with the temple-complex. Beyond doubt it conceals the ruins of another temple, perhaps that of Enlil or Sin. North of the great temple area and separated from it by a low depression lies another large mound, marked C on the Plan. It covers an area of about 2 1/2 acres and looks like one of the most promising sites in the whole area. It rises to a height of 40 feet above plain level and attracted me so much by its promising appearance that I ran trenches into it from the northern side and traced the outer walling here for several rods. Plate IV, No. 2 shews a photograph of these trenches taken from the summit of Tal al-Bandar just to the south, by MRS. MACKAY. The

camera was too near the mound to give a perspective view of its entire configuration. At the right end of this trench will be seen a fine outer gate of the building there. The walls are buttressed and well preserved; although constructed of sun-dried bricks these walls were easy to follow and our trial trenches indicated a fine building at this site. We naturally expect to find one of the temples of Eastern Kish at mound C. Beyond the crest of mound C the camera takes in the southern side of the colossal ruins of the central temple-area and shews the twin *ziggurats* clearly.

The Arabs have given the name Tal al-Bandar to the imposing mound at V just north of C. This mound covers some very great and important building in the shape of a horse-shoe. The photograph on Plate L, No. 1 is taken from the east to shew the peculiar shape of this hill. *Bandar* is a Persian loan-word in Arabic meaning "bay, harbour," and the configuration of this vast *tal* readily explains the choice of the word to describe it. Both wings and the western cross-section of this mound rise over 60 feet above plain level. From east to west the two ridges are about 280 feet long and the width of the western side is 200 feet. It is obviously not a temple; I have seen nothing like it among all the ruins of Mesopotamia. Some work was done on the eastern end of the southern ridge near the summit by OPPERT in 1852. His trenches are now sadly obliterated, but so far as I could gain any information from them the construction is a solid mass of masonry. I could not even determine the type of brick employed here, but it probably dates from the period of the First Dynasty of Babylon.

North of Bandar is a wide low expanse of ruins hardly distinguishable from the plain, and difficult to delimit from the plain itself. It is strewn with plano-convex bricks of the earliest biscuit-shape and later flat-shaped type. This area, marked P on the plan, attracted the trained eyes of COL. LANE; for walls could easily be detected by white tracks on the surface after rains. Remains of extensive buildings are easily detectable over a large area here, and no evidences of any occupation after the plano-convex period, which ends at least a century before Sargon (2752), exist. The photograph on Plate III, No. 3, gives a view of this flat area and the excavations in progress on the old Sumerian palace found there. On Plate IV, No. 1, is a

view of this part of our excavations in the initial stages shewing the surface strewn with plano-convex bricks and the lofty ruins of Bandar and Inghara a mile to the south-east. This area presents a difficult problem; for it clearly formed a very important part of Kish in the early Sumerian period and was entirely abandoned about 3000 BC. A marble statuette of a Sumerian ruler having the title "King of Kish" clearly written on it, and found in the court of the palace, proves that kings of Kish lived there. See Pl. XXXV, No. 1.

The low mound marked A on the Plan covers an area of about 3 acres and is separated from the temple-complex by only 30 rods. The depression between the temple-area and this palace-mound is slightly above plain level, and we have reason to believe that the old Sumerian palace found here was connected with the great temenos-area by at least a vast platform. Plate III No. 2 shews MR. MACKAY'S work at A in the initial stage and the relation of this mound to E-ḫarsagkalamma. See also Plate V, No. 2, the same excavations toward the end of the season. An important canal, reconstructed at many different periods, takes from the old bed of the Euphrates to the north of Eastern Kish and passes by the western side of Bandar and the entire temple-area. Vestiges of the old canal which skirts the base of the ruins of Inghara are still distinguishable. When this had fallen into disuse a new canal was dug beside it, its western bank being used for the eastern bank of the new canal. This process of reconstructing the ancient water-way seems to have proceeded westward, until the water-way reached the side of the large residential area, now mound W. The latest Abbaside canal runs close by the eastern slope of this great mound, and its banks are so high that the pedestrian must find depressions in the two great ridges in order to pass its course. Its ruins look like two low lines of sharp broken hills and it forms one of the most striking aspects of the entire topography of Kish. The explorer ROBERT MIGNAN, *Travels in Chaldaea* (1829), makes special mention of this noticeable feature of the ruins. If this canal was in use so late as Abbaside times, it is necessary to suppose that it took off from the new course of the Euphrates far to the north-west; for the old course of the river north of Kish must have been completely dessicated and abandoned already in the time of Nebuchadnezzar.

The extensive mound between this canal and the old Euphrates, marked W on the Plan, is three quarters of a mile long and in places a quarter of a mile wide. Along its central and northern ridge the elevation reaches 25 to 30 feet above plain level. Here, just below the middle of the mound, I located the *bit akkil* or "House of writing." Plate V, No. 3 has a view of our work there, taken from the south-east, shewing the *ziggurat* of Western Kish over a mile distant. Along the eastern bank of the Euphrates lies a chain of three fortresses; the two larger ones are marked J and I on the plan. The southern fortress lies exactly opposite the fortified eastern end of the moat-wall of Western Kish. Mound I is lofty and imposing, rising 45 feet above the plain and offering an impressive view from Uḫaimir. OPPERT was attracted by this mound when he visited Kish and did some work at mound I. His trenches are still visible.

A huge residential quarter joins the temple area on the east and extends eastward in the shape of a great boot with the toe to the south, resembling the city ruins of Uḫaimir in contour and size. These vast ruins rise to a height of 30 feet above plain level and cover an area of about 130 acres and the upper strata at least belong to the Neo-Babylonian period. This mound, H on the Plan, has never been touched by the spade of an excavator nor scarred by the predatory native digger. Two fortresses guard the eastern approaches of Kish, and both are marked by large mounds. Two miles east of Inghara lies an enormous *tal* crowned by a ruined Parthian tower. On this desolate hill the only living thing is a small clump of bushes called *sidratun*, the lote tree in classical Arabic, and hence the entire mound has been called *Abu Sudaira*, "Father of the little lote tree," an amusing example of "Much ado about nothing." The explorer standing upon this vast heap of ruins in the midst of the expansive desert, which spreads eastward of Inghara, has before him one of the most awful scenes of desolation, not a bit of green in the autumn and winter season within his vision, except this little lotus shrub, which gave its name to a great *tal*. The lines of Horace

1. Arabic *sidrun*, *sidratun*, is said to be the *Zizyphus Spina Christi*, "Christ-thorn", Löw, *Aramäische Pflanzennamen*, p. 283. Perhaps identical with the Assyrian *šadru*, *šaddaru*, Sumerian *šamšag-šar* = *elmeštum* and *šadaru*, RA. 16, 33.

recur inevitably to his memory; *Parturiunt montes; nascetur ridiculus mus*. COL. LANE and I are probably the first explorers of this site. Its area is approximately 250 acres and rises quite rapidly from the plain to a uniform height of 40-50 feet above the plain. The entire surface is covered with broken tiles of the Neo-Babylonian period, and stamped bricks of Nebuchadnezzar may be gathered at the elevation near the eastern end. Glazed pottery also abounds here. Abu Sudaira may not belong to the ancient city of Kish. Until excavations have been made here the identity of this important site cannot be determined. A canal has been dug about half way between Inghara and Abu Sudaira, in the spring of 1924, which supplies water to the whole area between these *tals*, and at last the difficulty of placing an expedition on this site has been overcome. Kish itself is a site much too large for one expedition, but perhaps some institution can be induced to take over Abu Sudaira which comes within the area of our concession. This site could be worked by only one excavator with the aid of our staff at Uḫaimir.

I made two incursions into the great desert east of Abu Sudaira, along the bed of the Shatt en-Nil, on horse. My first ride was made *via* Tal Izbah, to Abu Ḥaṭab nine miles due east of Sudaira and 14 miles from our camp. 'Izbah as it is written on the map of the Geographical Section, General Staff, is probably a mistake for 'azbatun, 'azba, lonely place, hamlet, farm. This *tal* consists of two mounds. On the larger western mound stands a ruined Imam, but its walls on three sides still afford protection for the traveller in a sand storm. The *tal* covers an area of about 30 acres and glazed pottery on the surface reveal a late occupation. The *tal* has a general height of about 20-25 feet, but there are no salient elevations on it and certainly no indications of a *ziggurat*. From here my guide and I struck eastward across the flat arid desert to the important ruins of *Abu Ḥaṭab*, "Father of firewood," so called I suppose from the abundance of camel thorn in that area, whose tough roots and dry prickly twigs supply the desert Arab with his sole source of fuel. Along the Shatt en-Nil we came upon many deserted canal beds and rode over low mounds strewn with sherds of glazed pottery. Abu Ḥaṭab is visible for miles in this great plain, and the ruins of a fine *imam*,

which stands on a small isolated mound 80 rods west of the large *tal*, afford a very useful land-mark in this inhospitable desert. I explored the central mound for several hours, until a terrific dust-storm blew up from the south and nearly cut me off from my guide and horses which had been left in the shelter of the *imam*. This unfortunate event together with the proximity of lawless Bedouin—for the region between Sudaira and the Tigris is one of the most desolate and unsafe in the whole of lower Mesopotamia—prevented me from making a sketch of the site. The bed of the Shatt en-Nil passes it immediately on the south. Its banks here look like lines of lofty broken ridges and are almost as high as the great mound itself. No stamped bricks could be obtained, but I carried away several good specimens of fine black and yellow glazed pottery from Abu Ḥaṭab. The mound is the largest and most attractive in the whole region east of Sudaira so far as I was able to explore. Excavations here or anywhere in this region of waterless desert are of course impossible. [This mound may, perhaps, cover the site of Kigalli *kisurra Kish(ki)*, “in the territory of Kish,” mentioned on a tablet from Umma, GENOUILLAG, *Textes économiques d’Umma*, 6041.]

On another incursion into this area, which I made on horse accompanied by Sheikh Mugheir, head of a large Arab tribe, whose camp lies 2 miles west of Uḥaimir, I endeavored to find *Tuwairij*, of which the natives repeatedly gave me promising accounts. Unfortunately the official maps placed this important group of mounds only 7 miles south-east of Sudaira, whereas I discovered from natives of a small tribe in this region that the *tal* so marked on the maps is not *Tuwairij*, but only a small mound and nameless. The real *Tuwairij* is the extensive group of mounds at Bg 85 on the official map, between 6–7 miles south-east of ‘Izba, and 3 1/2 miles beyond *Tuwairij* of the Geographical Survey. Here I came upon cultivation and a good canal. A small tribe lives very near to the *tal* which consists of at least three large mounds; the whole covers an area of about a half square mile. COL. STEVENSON, formerly of the Ordnance Department of the Mesopotamian Army, had visited *Tuwairij* immediately after the War by motor, I was told. Traces of a trench which he had dug into the large southern mound were still visible. He shewed me fragments of a case tablet of the

period of Hammurabi found here but it afforded no means for discovering the identity of the place. Several Arabs appeared from the local tribe with spades and offered to do some digging and I availed myself of the opportunity. I came upon a wall of the Neo-Babylonian period and secured one fine blue glazed pot of the Persian period but no inscribed material. Tuwairij consists of two very large mounds, separated by a living canal and of several small mounds which I could not investigate. The mound north of the canal is smaller than the southern mound (where I did some digging) but is quite elevated and undoubtedly covers a large building. The southern mound has an extent of about 25 acres and clearly conceals the ruins of an important city. There are no plano-convex bricks anywhere on the mounds of the region which I explored east of Sudaira. Tuwairij can be excavated without difficulty and cheaply; for the natives of this isolated area have not been spoiled by contact with village life and high wages. Water is obtainable here and the place could be worked, so long as there is an expedition at Kish 11 miles away; it can be reached by motor from Uḥaimir.

The whole region east of Abu Ḥaṭab and Tuwairij has never been seen by a trained archaeologist and it is full of equally important mounds. An Arab brought in to our camp four stamped bricks from *Ishan Dhaḥāk*, marked on the map between Bg 15 and Bg 24. The name means "Hill of laughter," and lies 18 miles north-east of Kish. The six line inscription reads,

- 1) *GA-NI'-ma-bi-di-e*
- 2) *mar Ma-sa-lum*
- 3) *ra-bi-an*
- 4) *ba-ab-ti-šu*
- 5) *i-na e-mu-gi-šu*
- 6) *dūram ša Mu-ta-lu-(ki)*
- 7) *i-pu-uš.*

"Gali(?)mabidē son of Masalum, supreme judge of its gate, in his skill

1. So three of the specimens; but one text has *ir* clearly and there is some doubt as to the first sign which may be *Bl*. A reading *Ga-li-ma-bi-di-e* is possible.

the wall of Mutalu built." Mutalu, however, has not been found in any other text. The inscribed bricks from Mutalu belong to the period of the First Dynasty. The title *rabiānu* proves this. The only plan of Kish hitherto accessible to scholars is the very deficient sketch made by OPPERT and FRESNEL, published in *Expédition scientifique, Cartes*, unnumbered plates. It was reproduced by RUDOLF ZEHNPFUND, *Babylonien in seinen wichtigsten Ruinenstätten*, p. 65.

CHAPTER IV

Previous Explorations and Excavations at Kish.

The first European traveller, who visited and wrote a description of the ruins of Kish, was J. S. BUCKINGHAM. In the midsummer of 1816 (July 24th) BUCKINGHAM, disguised as the Arab guide of Mr. BELLINO, Secretary to the British Residency at Baghdad, left Baghdad to visit Babylon¹. His party reached Babylon July 26th, but at this point the dates in his diary are deficient. He must have spent two or three days in his investigation of the various mounds and parts of Babylon, and then his diary passes abruptly to a new chapter which begins with the following sentence :—

“It was a quarter before nine o'clock, when we departed from hence, to extend our excursion more easterly, to which we had been tempted by the sight of the high mounds in this direction, as well as by the report of there being one of particular interest there, called Al Hheimar, and by the persuasion that vestiges of ruins must exist beyond the boundary line, (A)² which we conceived to mark only the enclosure of sixty stadia that encompassed the castellated palace and its gardens³.” It is probable that he accepted the exaggerated description of Babylon by Herodotus. This Greek historian stated unequivocally that the walls of Babylon enclosed an exact square, 120 stadia on each side, or about 60 miles in compass! Strabo gave the more modest figures 385 stadia for the compass, Diodorus Siculus

1. For BUCKINGHAM's account of this part of his travels in Mesopotamia, see his *Travels in Mesopotamia*, Vol. II (1827) 240-399. MR. CLAUDIUS JAMES RICH was at that time Resident of the East India Company at Baghdad. RICH was himself an accomplished oriental scholar and explorer, and his efforts in promoting the BUCKINGHAM expedition to Babylon are fully recognized by the latter in print.

2. This letter refers to BUCKINGHAM's sketch of Babylon, opp. p. 253.

3. Page 296.

360 and Quintus Curtius 368. These preposterous reports in classical writers misled many of the earlier explorers, including even the Assyriologist JULES OPPERT, who made a plan of Babylon to include the ruins of Kish and much beyond them, in accordance with the description by Herodotus. In the terrific heat of a Mesopotamian July day BUCKINGHAM struck eastward toward Uḥaimir eight miles distant, passing over drifting sand and meeting occasionally with pools of water. He soon came upon areas covered with fragments of bricks and pottery which he rightly explained as vestiges of buildings. He believed these to be houses within the city of Babylon. The plain between Babylon and Kish is broken by enormous parallel ridges of Abbaside canals, which in some cases BUCKINGHAM explained as streets of the eastern suburbs of Babylon. After a ride of an hour and a half the party arrived at a "walled enclosure within which were a number of date-trees." This was found to be deserted. [I have crossed the country from Kish to Hillah by approximately the same track and found no traces of this garden.] So early in the day the heat had become insupportable and their water bottles were now nearly exhausted. BELLINO complained of heat and thirst but BUCKINGHAM insisted on pressing forward. At eleven o'clock they reached the tomb of Ali Ibn Hassan², which is to this day an obvious landmark in the desolate plain. MIGNAN (1829) describes it as a "sequestered, shady and beautiful spot," and such it still is, surrounded by a well preserved brick wall, within which stand several date-trees beside the *imam*, as BUCKINGHAM found it over a century ago. Near this tomb lives the largest Arabic tribe between Babylon and Kish, whose present sheikh is named Mugheir, and who supplies our expedition with 'about two thirds of our laborers. BUCKINGHAM and subsequent explorers do not refer to the inhabitants of this area at all. From this tomb the lofty pile of the *ziggurat* of Western Kish three miles away can be clearly discerned; but BELLINO, exhausted by the heat, refused to proceed. He was left behind in the shade of the *imam* while

1. In defence of this theory he quotes Quintus Curtius, p. 297.

2. BUCKINGHAM does not mention the name of this tomb. The name occurs first in KER PORTER'S *Travels*, II 397.

BUCKINGHAM continued his journey to Uḫaimir. In passing over the last three miles he remarks on the numerous vestiges of canals and the abundant litter of pottery and bricks.

These areas covered with pottery fragments, between Kish and Babylon, be can no longer identified; for the ground over which BUCKINGHAM passed in 1816 has been irrigated and considerable portions of it are now under cultivation. BUCKINGHAM reached Kish at the two western mounds, one of which is certainly Khuzna, although he mentions no names. He now says definitely that the extensive ruins, which he passed over before reaching the *ziggurat*, constitute the eastern extremity of the city, meaning Babylon. He ascended the *ziggurat* by the western side. In his time the tenacious remnant of burnt brick, which has resisted detrition at the summit and still forms a flat cap to the huge pyramidal cone, existed as it does to day; the photograph, Plate XXXV, No. 2, compared with BUCKINGHAM's description on page 304, Vol. II of his *Travels*, affords complete evidence for the accuracy of his description. But the ruin must have been much more precipitous in his day than it is now. He repeatedly refers to the steepness and difficulty of its ascent, whereas at the present day one may reach the summit easily from all but the north-western side. He found the sides so precipitous that he believed this whole pile of solid masonry to be part of a "solid and extensive wall." At this point I shall quote the excellent description of the conditions at Kish after the arrival of the summer heat.

"The heat of the atmosphere was now intense; we were exposed to the most powerful influence of the sun in a parched and burning plain; the small quantity of water which remained in the leathern bottle, brought from the river, had been left with our companions at the sheikh's tomb; and we had a strong westerly wind, which, though the thermometer stood at 135° in the sun, instead of tempering the heat, augmented it by a suffocating and almost insufferable air, at once hot, dry and noxious to the smell; and bringing with it, at every blast, clouds of dust and sand, which rendered it difficult to look around us without having the eyes, mouth, ears and nostrils, filled with it." This is a sober description of the ordinary dust storm, which one experiences almost weekly during the period of excavations, October-

April, but these terrible sand storms, for which Kish is particularly famous, invariably blow from the south.

BUCKINGHAM remained at Uḫaimir only a few minutes. He has left a detailed description of the *ziggurat* and makes special mention of the layers of white substance in its construction. "At intervening spaces. . . . and recurring at every fifteenth or twentieth course of bricks, appeared a layer of an extremely white substance, which was seen in small filaments on the bricks, like the crossing of fine pieces of straw." This layer he found to be of "snowy whiteness and had a shining appearance, like the finest mineral salts." He describes it as like white powder, falling to pieces like ashes at a touch¹. From the *ziggurat* he casually observed "detached mounds nearly as high as the tower on which he stood, to the north and south (*sic!*)."² He was here completely deceived in his bearings. The wide expanse of ruins, which are referred to, lie directly east, and chiefly south-east of Uḫaimir.

Previous to BUCKINGHAM mention should be made of *The Itinerary of Benjamin of Tudela*, the Spanish Jew, who gives some account of Babylon and its environment in time of the Caliph Emir al Muminin al Abbasi, and returned to Spain in 1173 with an account of his travels written in Hebrew³. He states that the ruins of Babel were 30 miles in compass, and 3000 Israelites lived there, who worshipped in the Synagogue of the Pavillion of Daniel. RABBI PETACHIA of Ratisbon visited Baghdad one year after BENJAMIN OF TUDELA. He has handed down a longer description of Babylon than is to be found in Tudela's Itinerary³. There were thirty synagogues in Babylon in his day, and a great market, and "everything grows there in winter." He even mentions an academy at Babylon at that time. Although neither

1. MR. MACKAY says of this curious aspect of the *ziggurat* (Unirkidurmah) of Kish:—"The white powdery substance between the joints of the brickwork of the *ziggurat* has been examined in Baghdad by the government chemist. It is largely composed of alumina. MR. WEBSTER has no doubt that it is calcined reed or matting which has absorbed alumina, probably from the brickwork. The lines of white vary from 4 courses to 7 courses apart."

2. The literature on this remarkable Jewish traveller is too extensive for quotation here, but it is fully compiled in MARCUS N. ADLER's edition of the *Itinerary* (1907).

3. *Travels of Rabbi Petachia of Ratisbon*, edited by DR. A. BENISCH, 1861. Reference given by DR. COWLEY.

of these Jewish travellers takes any notice of the eastern environment of Babylon, it is evident that the place was still a flourishing city in the Abbaside period; and the Abbaside canals which intersect the entire plain between Babylon and Kish afford evidence that the plain east of Babylon and about Kish was then irrigated and tilled. A huge Abbaside canal which follows the course of the old Sumerian canal, flowed right through Eastern Kish beside the gigantic ruins of Ḥarsagkalamma. In the upper strata of Uḥaimir MR. MACKAY found quantities of large pots of this period, stamped with a six-pointed star, characteristic of all the Abbaside pottery of the period. We found one pottery dish at Inghara, whose inner surface is inscribed with a Hebrew incantation¹.

CLAUDIUS JAMES RICH, the British Resident at Baghdad, whose valuable advice and assistance to BUCKINGHAM have been referred to above, had visited Babylon in December 1811, and he is the first European to mention Al Hheimar, although he did not visit the place². He does not give the source of his information, but during his visit to Babylon he learned that five or six miles east of Hillah is Al Hheimar, where there is "a curious ruin bearing some resemblance to Birs Nemroud." He speaks of the noticeable capping of brick work at this tower and especially refers to the layers of white substance between the layers of bricks; specimens of bricks from the *ziggurat* taken from the layers, to which this white substance adhered, had been brought to RICH at Babylon. The low estimate of distance from Hillah to Uḥaimir was transmitted to BUCKINGHAM, who unfortunately prepared himself for so short a journey on a day of terrific heat, but found it nearly twice as afar.

Pl. XVII, No. 2 shews an earth burial found near the *ziggurat*. It clearly belongs to the Isin and Hammurabi period and well illustrates the type of water-jar and plate from burials of that time.

1. PIETRO DELLA VALLE IL PELLEGRINO visited Babylon and Hillah in 1615, and his description of the country, then under Turkish rule, shews that travel had become unsafe and the cultivation of the surrounding plain had disappeared; wandering Bedouin then possessed the fertile lands of the caliphs.

2. CLAUDIUS JAMES RICH, *Narrative of a Journey to the Site of Babylon in 1811*, London (1839), p. 80.

SIR ROBERT KER PORTER, by profession an artist and by destiny an adventurous traveller, must be regarded as the most remarkable of all the early English explorers who explored Babylon and the vicinity. He visited the ruins of Kish in November 1818, and in his account of this journey, *Travels in Georgia, Persia, Armenia, Ancient Babylon* (1822), Vol. II, 390-399, we have the first detailed account of the site. He was impressed by the great canal beds which traverse the plain between Hillah and Al Hymer. After crossing a wide dessicated canal one mile from Al Hymer, PORTER came upon soil covered with bricks, pottery and glass. As to the *ziggurat*, he says that it measured 276 yards in circumference and 60 yards in height. By 60 yards in height PORTER must mean *feet*. The tower is still about 90 feet above plain level. He also comments upon the "bright white substance which appears in some places an inch thick" at unequal distances of four, five, six, or seven bricks. The ordinary cement between the layers of bricks of Unirkidurmaḥ is in fact ordinary river clay, an exceedingly tenacious substance in this vicinity as PORTER states. In the lower levels of all our trenches we found the soil entirely composed of this bitumenous clay, which offers excellent material for making clay tablets. This white inter-layer does occur at irregular intervals in the *ziggurat*; it is like feathery powder when touched, and constitutes a unique feature in Babylonian architecture.

The base of the *ziggurat*, PORTER says, is composed of baked bricks made of fine clay and rectangular, $14 \times 12 \frac{3}{4} \times 2 \frac{1}{2}$ inches thick. But we found no bricks of this type in our excavations here. PORTER probably refers to the Ramman-apal-iddin construction found by MR. MACKAY in the south-eastern temenos-wall. But at nearly all the other mounds of Kish the unbaked rectangular brick $11 \frac{1}{2} \times 8 \times 3 \frac{3}{4}$ inches is found, and it was obviously a type employed in the reconstruction of the city during some period, which we have not yet determined. Stamped bricks of Ramman-apal-iddin must have lain abundantly on the surface in PORTER's time, as well as those bearing the six and four-line inscription of Nebuchadnezzar. From several duplicates he published the texts of these three types on Plate 77, a, b, c, and he observed that the four-line inscription occurs regularly at the (Nebu-

chadnezzar's) palace, the Kasr, in Babil. He picked up on the surface three specimens of the three-line stamp of Nebuchadnezzar, which is published on Plate 77 d. The modern Assyriologist has only praise for his accurate and beautiful copies of the cuneiform text of which not a sign was understood at that time. MR. BELLINO, of whom I have written in connection with BUCKINGHAM's visit to Kish in 1816, accompanied PORTER and he found a fragment of the black basalt inscription of which we obtained so many small inscribed fragments. The BELLINO fragment published *ibid.*, (h), fortunately preserves the name Hammurabi¹.

PORTER was the first European who visited the greater ruins of Eastern Kish. "While standing on the mount of Al Hymer, we perceived, at some little distance to the eastward, a considerable group of mounds, appearing nearly equal in height to the one we then occupied. To these we directed our horses heads, and found the distance between the one we left and those to which we were going about 1656 yards, the intermediate track being divided by a deep and highly embanked old canal, which ran south 25° east². On its first appearance it gave me so much the idea of a ruined wall, that I conceived it possible to have here found some trace of the long-sought boundary of Babylon; but on close examination³, like searching for the philosopher's stone, the pursuit ended in disappointment." PORTER ascended the highest of the two *ziggurats* at Inghara and gives a fairly accurate description of the vast temple complex. He was attracted by the prominent ruin Bandar to the north of Inghara, which he accurately describes. "In altitude nearly equal to the last described (Inghara), but of oblong shape, or rather like a compressed horse-shoe, open to the eastward. Its length was 161 yards and its breadth, equal in every part, 46 yards." PORTER viewed the flat desert east of these ruins from the top of Bandar, and says "not an

1. See above, p. 15.

2. Here PORTER clearly refers to the high broken ridges of the Abbaside canal just east of the great mound W, beyond which and across the canal depression, lie the vast ruins of Har-sagkamma. But this canal and the ruins of Inghara are a mile and a half from Uḫaimir. He does not allude to the great ruins which he must have traversed between Uḫaimir and Inghara.

3. These lofty ridges are naturally only the embankments of a canal, formed by the dredging of it at many successive periods.

object of any kind disturbing the smooth surface, except a tomb or two, six miles distant." He refers to the *imam* of the *tal* Umm al Wallād, three miles east of Abu Sudaira and strangely failed to observe the great ruins of Sudaira, which attracts attention by its Parthian tower.

Here PORTER makes an observation which we found difficult to understand. "On returning by the base of the great ramified mound (meaning the temple-complex of Ḥarsagkamma, D-E-F-G) I observed a low continued ridge, like what might once have formed a wall. It was distant from the mound 460 yards, in a direction S. 30° W. There were no remains of a ditch." Beyond the flat plain south of Inghara, which is now under cultivation, runs the bed of the Shatt en-Nil, about half a mile distant. To the south-west but at a greater distance there is a ridge of an abandoned Abbaside canal, and to this PORTER must refer. He does not mention the present Arabic names of Inghara and Bandar (the latter is mentioned by OPPERT, 1852) and it is possible that they have come into existence since his time. GENUILLAC who excavated at Inghara in 1910 does not make any reference to these names, and the existence of the word Inghara is not documented at all before the post-war maps of the Geographical Section of the British Military Survey in Iraq.

On his return to Hillah, PORTER halted at the tomb of Ali Ibn Hassan and remarks upon the vestiges of ruins on his way to Hillah. To his credit he explicitly denies that the site which he explored at Al Hymer "could ever have stood within the limits of Babylon." He then remarks: "I doubt not that Al Hymer, with its minor mounds, and all the others, great and small, east of the canal formed one place; and I venture to think not improbably one of the colleges or towns, dedicated to the astronomers and soothsayers of Babylon. In Al Hymer, we may find the pyramidal pile whence the heavens were explored; and in the larger and lesser mounds, and other vestiges of buildings, the remains of former temples, mansions, etc., belonging to the Sabian philosophers, prophets, and other sages, with their disciples attendant on the knowledge of the stars. . . . Indeed it does not appear unreasonable to suppose that the pursuits of such orders of men, would require abstraction from the noise of a great city." So was the best

explorer of that time, and a man of excellent judgement, still obsessed by the impression of the glories of Babylon, that he supposed this more ancient and greater city to have been the quiet country college of the magicians and astrologers of Babylon, who have been so movingly described in the Book of Daniel.

CAPTAIN ROBERT MIGNAN of the East India Company's Service, made an eventful trip up the Tigris from Basra to Baghdad, Oct. 22nd to Nov. 7th, 1827, and at the end of November he began a systematic examination of Babylon and its environment. The account of his visit to El Hamir will be found on pages 220-223 and 231-234 of *Travels in Chaldaea including a Journey from Bussorah to Baghdad, Hillah and Babylon*, performed on foot¹ in 1827 (London, 1829). He compares the *ziggurat* with Birs Nimroud and remarks upon its less imposing proportions. His measurements are 280 yards or 840 feet for the circumference and 75 feet for the height. For the brick capping at the summit he gives north side, 36 feet, south 37, east 47 and west 50. He also calls attention to the white layers at irregular distances between the bricks, and says it is not unlike gypsum or the sulphate of lime. He rejects the explanation of previous explorers, who supposed that these white powdery layers owe their origin to reed matting. "From the peculiarly mollified state of the bricks, I apprehend this white powder is nothing more than common earth, which has undergone this change by the influence of the air on the clay composing the bricks."

He noticed the rectangular bricks, $14 \times 12 \frac{1}{2} \times 2$, inches with the ten-line inscription of Ramman-apal-iddin, but unlike his energetic predecessor, KER PORTER, he made no copies². MIGNAN explored the larger ruins of Eastern Kish but dismisses the entire area with a casual remark on the canal which divides the ruins and the nitrous character of the soil. "But the place being so far removed from the site of the venerable city, and seeing no end to my researches if attempting to prosecute them farther eastward, which

1. MIGNAN accomplished the trip from Basra to Baghdad by boat. This author writes in the delightful style of an accomplished classical scholar and his observations are accurate for the period. There is unfortunately no account of him in the Dictionary of National Biography.

2. Our measurements for these bricks are $37 \times 33 \times 6$ centimeters or $14 \frac{8}{10}$ by $13 \frac{2}{10}$ by $2 \frac{1}{2}$ inches.

I well knew would have ended in disappointment, from the unsettled and unsafe state of the country.”

JAMES BAILLIE FRASER, gentleman and literary man (1783-1856), on his return from an official mission in Persia, visited Babylon and the neighboring ruins, Dec.-Jan., 1834-5. His account of this part of his adventures are recorded in a series of letters, *Travels in Koordistan, Mesopotamia, etc.*, London, 1840, Vol. II 1-57. On Dec. 30th, 1837, FRASER reached Al Heimer, where he found a camp of Arabs one mile west of Uḥaimir. He also describes the layers of white substance at intervals of three, four, five, six and seven courses. After some contemplation of the plain toward Birs Nimroud in order to discover a line of mounds which might mark the line of the wall of Babylon, he concluded that these ruins could not be included within the compass of ancient Babylon. Embellished with literary phrases of no interest and encumbered by inappropriate remarks, FRASER'S contribution to the subject is poor indeed. He says nothing further about the site, but gives an exciting description of the bitterly cold night which he spent with an Arab of the Zobeid tribe. The particular interest of FRASER'S exploration at Uḥaimir comes from his journey eastward from Uḥaimir to the Tigris, on horse, a journey which even at the present day is dangerous and full of hardship; for the region east of Inghara is desolate and arid beyond description. “Void of all vestiges of man and nearly so of vegetation” is his appropriate phrase. He set out eastward from Uḥaimir early in the morning and covered 32 miles that day. In all this region he records practically nothing of archaeological importance. Mound after mound he traversed, areas of glazed pottery and bricks he rode over, but there is no definite information here. He, must have passed the massive ruins of Eastern Kish and Sudaira, Tal 'Izba and Abu Ḥatab, which I visited.

JULES OPPERT, the celebrated Assyriologist, and later Professor of Assyriology at the Collège de France, conducted an official expedition to Babylon in 1852. He and his assistant, the architect FRESNEL, visited Uḥaimir in October of that year. OPPERT reproduces the name as Al Hymar, but correctly explained its original as a diminutive of a quadrilateral adjective *aḥmar*, “red.” He did some work at Tal al-Khuzna, where he found numerous

monumental inscriptions. He also speaks of the layers of white substance in the construction of the *ziggurat* of Uḫaimir and drove trenches into this edifice. OPPERT speaks of having found a great quantity of antiquities of all sorts, among them being a basalt stone with a beautifully inscribed text such as had never been seen before. Pots and figurines also rewarded the labour of the excavators at Kish. Unfortunately OPPERT has left a very unclear record of his work here and it is uncertain whether he found his antiquities at Khuzna or at Bandar. He correctly explained the origin of the name *Bandar* "the harbour," from its configuration. Although OPPERT was an Assyriologist, the explorations and discoveries of KER PORTER 34 years before his visit to this site, were apparently unknown to him. The brick of Ramman-apal-iddin published by PORTER proved clearly enough that the ruins were to be identified with Kish. OPPERT identified them with Cutha and defended the fallacious theory based on the description of Babylon by Herodotus, without making any reference to the arguments of KER PORTER, MIGNAN and BAILLIE. His account of the ruins and his work there has been recorded in his *Expédition scientifique*, 216 ff., and his conception of the plan of Babylon, which includes Kish in its compass, will be found in the volume of *Cartes* which accompany this book. To him is due the only sketch plan of Kish which has been made previous to the one published in this book. It has been reproduced by RUDOLF ZEHNPFUND, *Der Alte Orient*, XI 3-4, p. 65. A supplementary account of the *Expédition scientifique et artistique de Mésopotamie et de Médie*, 1851-1855, has been published by M. PILLET in the *Revue d'Assyriologie*, XIV 97-120; XV 87-94; 145-154; 197-207; XVI 37-46. No information, whatsoever, has been given in these additional notes concerning the subsidiary exploitation of the ruins at Uḫaimir. The antiquities discovered there, together with the entire collection from Babylon, were lost in the Tigris, when all the monuments recovered at Nineveh, Babylon and Uḫaimir were despatched by boats down that river in May 1855. Near Kurna, May 21st, the convoy was attacked by Arab tribes and only a few of the objects from Nineveh survived. M. PILLET has reprinted OPPERT's catalogue of the objects, which subsequently perished in transport to Basra, *Revue d'Assyriologie*, XVI 40-45.

This list contains only three entries from Uḫaimir.

1) A carnelian amulet in the form of a monster to which a handle was attached, p. 42, No. 32.

2) Inscribed fragment of a cylinder in black stone, p. 43, No. 1.

3) Fragment of a large inscription on black stone, written in admirably cut cuneiform signs¹.

4) OPPERT mentions a rock crystal cylinder seal from Cutha, of fine workmanship, representing the sacred tree flanked by two winged figures, p. 40, No. 1. He supposed Uḫaimir to be Cutha, and hence this seal may have been found there².

For more than half a century Kish remained untouched by explorers and almost unmentioned by scholars. The thoroughly equipped German Expedition, which excavated Babylon from 1899 annually until the out-break of the War in 1914, restricted itself severely to that city. During all this period we have no record of a single effort to visit or investigate the ruins of the greater and more ancient city, whose *ziggurats* are plainly visible from the Kasr across the canal-scarred desert. The ABBÉ H. DE GENOUILLAC excavated here in 1912 for a few months, but no published record of his work nor a statement of the character of his expedition has been made accessible. He directed his principal effort to the temple adjacent to the smaller of the two *ziggurats* at Inghara. This building, marked G on the Plan, has been almost completely exposed by him. It is obviously a temple and not a palace, as he believed. See his short note on this edifice and the inscription of Sargon recovered there, *Revue d'Assyriologie*, X 84. The shrine of this small temple stood in the end nearest the *ziggurat*, and was entered from the court by a door exactly in the centre of the cross-wall between the court and this central chapel. The outer gate of the temple stands exactly opposite the doors of the court and chapel and is flanked by imposing chambers.

1. This was undoubtedly found at the temple Emete-ursag, and belongs to the great monument of Hammurabi, of which PORTER found one fragment, and our Expedition a large number.

2. AUSTEN H. LAYARD seems to have visited Kish in 1851, when he conducted hasty excavations at Babylon. In his book *Nineveh and Babylon*, 542, brief mention is made of El Hymer. If LAYARD actually visited the site, he paid no attention to the greater eastern *tals*.

The chapel connects with a large chamber on its south-eastern side and the court is also surrounded by chambers which connect with it by narrow doors. The walls of this entire building are of unbaked brick in good state of preservation; they still stand to the height of 10 to 20 feet, an imposing monument of the activity of the French archaeologist and *savant*, who accomplished an astonishing amount of work with slender means and in a brief space of time. It is not easy, without more accurate records, to distinguish the trenches of G GÉNOUILLAC at other mounds.

So far as I have been able to obtain information concerning our predecessors, such is the story of the explorations at Kish from 1816 to 1922, when an expedition was organised for this site. MR. HERBERT WELD generously expressed a desire to excavate some ancient Babylonian site, and in the spring of 1922 he visited the principal ruins of southern Mesopotamia to consider the most suitable site for excavations. He was so impressed by the mounds of Kish that it required little persuasion to determine his decision. Erech was the site which I myself desired to excavate, but MR. WELD found this massive *tal* almost inaccessible, and totally unfeasible under present conditions. And so upon Kish we set our choice. The Trustees of the Field Museum of Natural History, through its Director MR. D. C. DAVIES, agreed to supply one half our funds with the understanding that they are to receive the greater portion of the anthropological material, in return for which Oxford University obtains the largest portion of the inscriptions. MR. ERNEST MACKAY was chosen as the Excavator and arrived at Uḫaimir in January, 1922. He worked from the beginning of February until the middle of May with the assistance of MR. HESKETH. For the season 1923-4, the staff of the Expedition was increased. COL. W. H. LANE was sent out as assistant to MR. MACKAY and arrived at Uḫaimir in October 1923. The writer joined the camp in December. We excavated from the beginning of October 1923 to March 20th, 1924, with between 80 and 300 laborers at various periods.

CHAPTER V

Racial and Linguistic Problems.

If we may place any confidence in the traditions which supplied the late chronologists of the Isin period with material for the early dynastic lists, the population or at least the rulers of the early prehistoric dynasty consisted of both Sumerians and Semites. Of the twenty-three kings who ruled after the Flood, according to the dynastic lists, all but two are now restored¹. The names of the first two are clearly Sumerian. So also are the names of the fifth and sixth; we may presume that all of the first six rulers of the earliest dynasty of Sumer and Accad were Sumerians, if any racial connection can be deduced from names alone. *Galibum* and *Kalumumu*, the seventh and eighth names, appear to be Semitic. The next three are Sumerian. The twelfth name, *Arpium*, is Semitic; *Etana* the thirteenth name is apparently Sumerian, but his son *Walih* or *Balih* is again Semitic. A Semitic son of a Sumerian father is of course impossible and we are forced to conjecture that either the tradition is erroneous, or that *Etana* is a Sumerian translation of some Semitic name, or that his Semitic parents gave him a Sumerian name. The second suggestion, that *Etana* is a translation, is excluded by the apparently phonetic writing of the name; for in the case of Semitic names written in Sumerian, the Semites invariably wrote the translation in ideograms. Enmenunna and his son Melam-Kish, fifteenth and sixteenth kings, and Barsalnunna, seventeenth king, are Sumerian. Tupzaḥ son of Barsalnunna and Tizkar son of Tupzaḥ are apparently Semitic, where we have again the same difficulty as in the case of *Etana*. *Ilkū* and *Itasadum*, twentieth and twenty-first kings, are also Semitic, but the last two (father and son) are Sumerian. The succeeding dynasty of twelve kings at Erech, which had

1. OECT. II 22. The second and third names are still missing.

certainly a pure Sumerian population in the pre-Sargonic period, is entirely Sumerian in nomenclature. This contrast is interesting in view of the fact that Semitic names in the later historical period appear at Kish previously to their identification at any other city, and the names of the rulers of Kish immediately before Sargon are almost entirely Semitic. Moreover Semitic names (*Kalbum*, *Enbi-Astar*) appear in the second dynasty of Kish, or in contemporary records of its rulers, and at Maer at least the name ending in *bi-im* may be considered Semitic. At Akšak in the 30th century the name *Ishu-il* and perhaps also *Puzur-Shahan* and *Puzur-Sin* may be regarded as Semitic. Now it is a remarkable fact that none of the southern pre-Sargonic dynasties, Erech, Ur and Adab, shew Semitic names, whereas the northern dynasties Kish, Maer and Akšak have a mixed nomenclature'. This consistent contrast in the nomenclature of the two regions from the very earliest period, until the Semite gained complete control of Kish and founded the empire of Agade, presumes the entrance of the Semite into the northern area at Kish and Maer at a very early period.

We obtained from the palace at A several skulls, two of which have already been sent to Oxford. They arrived in shattered condition but MR. L. H. D. BUXTON, M.A., Lecturer in Physical Anthropology, Oxford, has succeeded in restoring them sufficiently to determine that they belong to two types. One is distinctly dolichocephalic and undoubtedly Semitic. Cf. Plate XLVI, No. 1. The second skull is clearly brachycephalic. Cf. Plate XLVII, No. 2. I quote here from MR. BUXTON'S report.

No. 1. "As restored the skull is limited to the cranium alone, as the other fragments cannot be put into their places. The cranium is long and somewhat ill filled. It is dolichocephalic and appears to be rather low, but as it is so broken, this statement must remain uncertain. It undoubtedly belongs to the same type as that which ELLIOT SMITH has called Brown race and which Sergi has termed Mediterranean. This type is widely spread throughout the whole region and extends from the Mediterranean to India.

1. Nothing can be said of the three names of the Awan dynasty, which certainly belongs to the north, and probably lay east of the Tigris. Only one of the names is partially preserved. *Hadaniš* of Ĥamaši is apparently neither Sumerian nor Semitic.

It formed the main bulk of the ancient inhabitants of Egypt and has been called the Proto-Egyptian type.

No. 2. "This skull is of a very different type. Because of its fragmentary condition only small portions could be restored. Sufficient, however, remains to shew that it probably belonged to what is usually called the Armenoid type of man. The cranium is round and appears to have been high and flattened at the vertex. The exact degree of brachycephaly cannot be ascertained. The type of jaw which is also characteristic of these people can be seen from the photograph. Cf. Plate XLVII, No. 2."

"The crania are of very different types. They exist side by side in Mesopotamia at the present day, as they did in ancient Egypt. It is not absolutely certain, therefore, that, because we have two types of skulls, we are dealing with two races which are physically distinct; for both the brown race and the Armenoid race had a wide distribution in western and middle Asia from very early times. Both may go back to the end of the glacial epoch, although at present this is uncertain."

MR. BUXTON speaks in terms of physical anthropology here, without reference to the historical conditions which impose certain obvious conclusions about skulls found at Kish in the chalcolithic age. The inscriptions admit of but one deduction here. The dolichocephalic skull should be Semitic, and the brachycephalic skull Sumerian. Both are skulls of men, MR. BUXTON informs me.

We have found very few figures at Kish which throw light upon the racial origins of Accad. In the debris thrown outside the court-wall of the old Sumerian palace at A, MR. MACKAY found fragments of a large slate plaque, originally about three feet long, and probably part of a series of plaques, which portrayed a military expedition of a king of Kish. The monument shews that part of the expedition in which the king returns to Kish with enemy captives. The figures are inlaid in white limestone. See Plate XXXVI. The tonsure of the captives and that of the king proves that they are Sumerians. The cheeks and moustaches are shaven. In the successive stages of Sumerian tonsure, the hair of the head was the first to disappear. A fragmentary head of a statuette, found at Susa in the

stratum of the second period of painted pottery¹, represents the same style of tonsure as that on the plaque from Kish, although it is not quite certain whether the Susa figure wears a wig or still has long hair. The *Bas-Relief circulaire* form Lagash of a period *circa* 3200 BC., has two figures with the same facial tonsure, and both wear wigs; other figures have the complete tonsure². The *Figure aux plumes* of Lagash, more primitive than any of the monuments under discussion, has an exaggerated delineation of shaven cheeks and moustaches³. The captives have shaven heads on the Kish plaque. Although we have under consideration a conventional art, which may have made no attempt to delineate racial characteristics, the straight nose and receding foreheads of these figures agrees with all the portrayals of Sumerian heads known in the art of specifically Sumerian cities⁴. The captives appear to be naked, save for a band at the waist, but the clothing of the king is quite different from the dress we should expect in a period so early as that indicated by the tonsure. Surely the *kaunakes*, or falsely flounced skirt, is to be expected here, as on all the royal figures of the early period. The king wears a divided skirt, the right half being brought up around the right hip and tucked into the girdle, leaving the leg bare. The whole skirt seems to be pleated, and the wide halves of the skirt are sewed to its body, which is hung from the waist.

This style of dress is new in Sumero-Babylonian archaeology. Nothing similar exists in the representations of the Semitic dress, as known in the period of Sargon of Agade, either for gods or men⁵. The crown worn by the king, a truncated cone-shaped cap, is unparalleled in any period.

In the *débris* outside the court wall, we found several small mother-of-pearl figures which undoubtedly belong to an inlaid plaque. See Pl. VI,

1. EDMOND POTTIER, *Délégation en Perse*, XIII, Pl. XXXVI, No. 2. See also *Découvertes en Chaldée*, Pl. 47, Socle.

2. *Découvertes*, Pl. I bis, fig. 2 and 1 ter, fig. 1 a, b.

3. *Ibid.*, Pl. I bis.

4. *Ibid.*, Pl. 12; Pl. 6, fig. 3 (from Umma); Pl. 25, fig. 1. HEUZEY, *Catalogue des Antiquités chaldéennes*, No. 95.

5. See WALTER REIMPPELL, *Geschichte der Babylonischen und Assyrischen Kleidung*, pp. 4-5 and 49-53. See also p. 31 and p. 28.

No. 1. These figures when arranged in their proper order, or what I conceive to be their proper order, formed a scene similar to that of the sculptured plaques of Ur-Nina of Lagash, on which the king is represented with his sons, daughter, and attendants'. The pieces may be so arranged that the king Lugalud extends his right arm toward the figures of women, who face him on the right. Behind him stands the diminutive figure of his attendant. One of the women extends a cap and one holds two objects before her, a horn and a sickle, so placed as to form intersecting arcs. The upper part of an elaborate *kaunakes* can be seen on the figure of the king; the attendant wears the primitive single flounced *kaunakes*. The faces of the women are distinctly Sumerian, a high nose which joins the receding cranium with slight depression at the base of the forehead, oval cheeks, puckered lips and short lower jaw. The peculiar headdress cannot be paralleled.

On Plate VI are reproduced two small terra-cotta plaques with figures moulded in relief. They were brought in from sites in the vicinity of Kish, and may certainly be used as material for the archaeology of this region. One of these plaques shews two boatmen, one punting and the other steering a skiff. Nothing can be derived from the defaced features of these fellaheen, but the short skirt and cap which they wear are precisely the same as those worn by the Semitic warriors of Shargalisharri on the stele of Lagash'. The skirt consists of a rectangular piece of cloth, hung slightly diagonally from the waist, so that the back part of the garment reaches lower down the body than the front part³. The dress, at any rate, is characteristic of the age of Sargon of Accad. The second plaque is a fragment which preserves only the head, arms and shoulders of a boxer, in combat with an opponent, whose right arm only is seen here. The deep jaw, fleshy nose and fat cheeks of the boxer are features which we usually regard as indicative of the Semite in early Mesopotamian art, but the formation of the nose and forehead, the puckered lips and clean tonsure would be ordinarily regarded

1. *Découvertes*, Pl. 2 bis; Pl. 2 ter, No. 1.

2. *Découvertes*, Pl. 5 bis, and HEUZÉY, *Catalogue*, pp. 129-137. For the inscription on this monument, v. SAK. 170.

3. See REIMPEL, *ibid.*, 28.

as Sumerian. Have we here a type resulting from a mixture of the two races? Attentive study of the heads of the boatmen enables one to detect short beards on the weather-worn plaque. The plaque of the boxers cannot belong to the same Sargonic period, if the cap worn by the boxer may be regarded as a sure indication of the period. The form of this cap, however, is not sufficiently similar to the style of the headdress seen in the plaque of the boatmen to enable us to decide such an important matter as the period of the boxer plaque. Another terra-cotta plaque with figures of two boxers was found by LORRUS at Senkereh (Ellasar), and belongs to the Neo-Babylonian period¹.

In view of these convincing evidences for a mixed Sumerian and Semitic population at Kish and consequently throughout Accad, the scientific opinion of the physical anthropologist concerning the two skulls, which we obtained from the old Sumerian palace, may be regarded as final. MR. BUXTON says his impression is that the brachycephalic skull belongs to a much more civilized type. The jaw is slender and rounded, whereas the jaw of the dolichocephalic skull is square and deep. These are facts entirely consistent with my own published conclusions regarding the contrast between the Sumerian and Semite on archaeological grounds². But the anthropological evidence on the orbit of the eyes confirms the deductions which I made independently from the monuments. MR. BUXTON says that the brachycephalic head has oblique orbits, whereas the long-headed (or the Semitic) skull has straight orbits. Now the oblique orbit of the eyes of Sumerians is clearly indicated in early statuettes of this people. "A line drawn from the inner corner of the eye-socket to the outer corner slants outward and downward³." This characteristic of the Sumerian eye is clearly executed on the plaque of the scene of conquest found at Kish.

Commenting further on the two types of skulls MR. BUXTON comes to the following conclusions. "No. 1 is markedly long-headed, it was probably rather low and had a small brain capacity, but on that point I cannot speak

1. WILLIAM KENNETH LOFTUS, *Travels and Researches*, p. 257.

2. *Archaeologia*, Vol. 70, 145-154.

3. *Ibid.*, 150.

with certainty. The individual was certainly muscular and there is considerable development of the area to which the temporal muscles are attached. The top of the head is keel shaped, a condition which may be associated with the big temporal muscles. The frontal sinus is very small, but there is certain amount of massing of bone at the glabella. The glenoid fossa is deep. Usually a deep glenoid fossa is to be associated with an up and down movement of the jaw, a sidewise movement requires a more shallow fossa. The very considerable wear on the teeth suggests that hard food was eaten. *The chin was pointed and deep, that is to say the height between the bottom of the chin and the gums was relatively great.* An examination of this skull suggests to me that it is of comparatively primitive type, not unlike the skulls of the people whom ELLIOT SMITH has termed Proto-Egyptian, and Sergi has called the Mediterranean race¹. It certainly possesses certain features which I should hardly expect to find in a typical Mediterranean skull today, but this one may not be a typical specimen. Skull No. 2 is a very interesting contrast to this. I should describe it as that of a more civilized type. The muscles are less well developed. The jaw, although not well built and shewing no trace of dental disease, has signs of wear on the teeth, but not to the extent that the former jaw has. It is much more slender, a condition which naturally associates itself with the smaller muscular attachments on the cranium. The vertex of the cranium is flattened and there can be little doubt but that the skull was very round. It belongs to the Armenoid race.

Both belong to male individuals, probably senile. Both are remarkable for a depression posterior to the coronal suture. A careful examination of this depression has convinced me that it is due to some form of artificial deformation, caused either by bandaging the infant's skull in order to obtain a shape which is considered beautiful, a common practice among many peoples, or by wearing in early childhood and youth a bandage or cap-string passing over the head and ears. The condition is not so pronounced as, for instance, among some crania from the north-west of America, where a

1. The anthropologists classify the typical Semite of Arabia as of the Brown or Mediterranean race.

similar practice occurs. The condition is sufficiently marked in both crania to suspect that it is due to artificial means."

This is an entirely new aspect of early Babylonian archaeology and anthropology. The sculptured heads of Sumerians can be studied for they are cleanly shaven. They reveal no such posterior coronal depression, and no form of head-dress is known which would cause it. This discovery proves that customs and habits of the two races were at least in one respect the same. The Semite, so far as we know, refused to shave the hair and beard. That is apparently one factor in the archaeology which we may regard as distinctive. But if the cranial depression is due to a peculiar headgear, it should be a warning against accepting forms of dressing as distinctive of race.

The pre-Sargonic archaeological discoveries made by our Expedition at Kish are entirely consistent with Sumerian culture as represented by the objects found in the great Sumerian cities of the south. The Sumerian language was at least the only *written* language at Kish before Sargon. Few indeed are the Semitic words borrowed by the Sumerians, but they are found in the earliest inscriptions from Šuruppak and Lagash. Notable is the fact that the three Semitic words, found in early Sumerian, refer to war and commerce, namely *damkar*, merchant, *šam* to purchase, and *damhar*, battle. On the other hand the Semites must have borrowed a considerable part of their vocabulary from the Sumerians; but our evidence for this must necessarily begin with the earliest known Semitic inscriptions, which appear much later than the Sumerian inscriptions. The words employed for religious and official titles, cult-objects, literary forms, and in general all scientific terms are usually of Sumerian origin in the Accadian language. The Sumerian, who may be now definitely classified as an Armenoid, spoke a highly developed agglutinating language. It has been compared with Georgian, Caucasian languages, Turkish, and the Bantu languages of Africa. Outside certain general characteristics, which agglutinating languages have in common, the defenders of various theses have found little concrete similarity in any of these languages which can be said to assist the Sumeriologist in the interpretation of the texts.

CHAPTER VI

The Temple Emete-ursag¹

During the first season, February-May 1923, when MR. MACKAY was alone in the field, the temple area at Uḫaimir was the object of our principal excavations. Work was begun on the south-eastern side of the *ziggurat* and on the south side of the temenos-area. The outer temenos-wall was traced nearly half-way along the southern side, and a great bastion built against the southern platform of the temple by Ramman-apal-iddin was excavated here. Plate XLVIII, No. 1, shews a portion of the outer temenos-wall of Nebuchadnezzar, and the earlier pavement of Samsu-iluna. The entire area on the south-eastern side of the *ziggurat* and has been excavated, and MR. MACKAY has been able to determine certain architectural features of the temple of the war-god Ilbaba which are novel and most important. The entire *ziggurat* had been refaced in the time of Nebuchadnezzar. Plate XLIX, No. 1, shews the face of the bottom stage as left by Samsu-iluna, and a portion of the later retaining wall of Nebuchadnezzar. Plate XLVIII, No. 2, will explain the architectural design of the facing of the stage-tower. The peculiar T-shaped alcoves which break the flat surface of the wall is a mural design found on the outer temenos wall at Ur, JEA. IX 186. The exterior of the base of the *ziggurat* has now been sufficiently traced to warrant the reconstruction which I have made from MR. MACKAY's plans, Pl. XLIV. A corridor ran around the entire base, connecting with rooms built into the thick temenos-wall. Plate XLIX, No. 2, shews the wide temenos-wall on the south-east of the stage-tower in the early stage of the excavations there. The temenos

1. Plans and a more minute description of MR. MACKAY's work on the temple will be published by the excavator himself.

wall at Ur is 38 feet thick, and rectangular chambers, 48 by 14 feet, are let into this wall, probably in its entire compass. Our discovery is, therefore, not quite unique, but the corridor around the base of the stage-tower, and the distribution of the rooms or cells for the various orders of the priests of Emete-ursag, seem to introduce a new element into our knowledge of Babylonian architecture. The base of the *ziggurat* is slightly rectangular, 185 by 198 feet; the longer sides face N-E and S-W. We excavated several rooms on the north-eastern side of the stage tower in hope of locating the central shrine of Ilbaba at this end of the temple; for the temple lies N-E of the tower.

The walls of the temple court have been completely traced to a depth of four feet. Curiously its proportions, 142 feet S-W and N-E sides, 123 feet S-E and N-W sides, are relatively the same as those of the *ziggurat*, and its four sides are exactly in line with the corresponding sides of the tower. A deep trench has been sunk in the middle of the court to a depth of 25 feet; traces of the pre-Sargonic plano-convex walls appeared here, together with three fragments of black and white incised pottery. The fragments do not preserve enough for us to determine the shape of the jars, but agree with the black incised ware of Telloh and Sumer in two important points; the decoration consists of parallel bands and the representation of aquatic animals. See page 68, and compare HEUZÉY in *Nouvelles Fouilles de Tello*, pp. 36-39. This ware is attributed to the second period of painted ware at Susa by POTTIER, *Délégation en Perse*, XIII 88, and from its position in the plano-convex levels it must be assigned to a period before 3000 BC. The two examples of incised ware which we found in the plano-convex levels in Eastern Kish belong to two entirely different types of vases. See Pl. VII. The shape of both vases is quite unlike any type found by us at Kish. The high foot of the larger vase *b* is not indicative of a very early period; it has the band decoration characteristic of the incised pottery, but no pot of this class either in Sumer, Susa or Moussian has a similar shape. The same may be said of the less elegantly formed footless vase *a*, whose decorations are in one aspect peculiar. The lozenge-shaped decoration of the high collar, can be paralleled at Lagash, *Découvertes*, Pl. 44, No. 6. The two bands of con-

centric circles on the periphery occur on a similar vase found by BANKS at Adab¹.

We found three small fragments of painted pottery (see p. 68), Nos. 1 and 3, black on light buff surface, No. 2, black and red on light buff surface. These fragments in all three cases come from the rims of jars, and prove that the lips are not keeled or carinated. They belong to the second period of painted pottery of Susa. All three fragments have the band decoration, but I have seen no precisely similar geometrical designs on the numerous fragments found at Eridu², at El 'Obeid³, or on the painted vases from Susa. A clay model war-chariot of the goddess Ishtar of Emete-ursag, found in a chamber at Uğaimir, is shewn on Pl. VII, No. 2⁴. A *bas-relief* figure of the war-goddess is designed on the high dash-board of the chariot. In her left hand she holds the caduceus, in her right a spoon shaped weapon, and across her back is slung a quiver. On the right side of the dash-board stands a long driving-whip, attached to the frame by a socket and rings. The ordinary form of the war chariot is seen from the restored clay model on Pl. VII, No. 3. These models are extremely common at Kish.

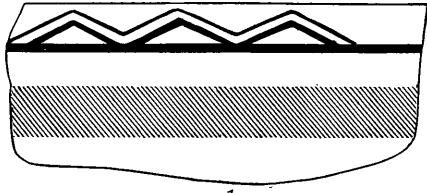
After the important discoveries made in Eastern Kish we were unable to spare many *jokhas* for the temple at Uğaimir. From the extreme eastern end of the ruins we drove a trench forty feet wide and sufficiently deep to make ourself certain of striking the pre-Sargonic levels. And from the bottom of this trench MR. MACKAY drove another behind the advance *jokhas* to virgin soil. This wide trench was driven into the vast area of the ruins of Emete-ursag exactly opposite the middle of the north-eastern side of the *ziggurat* in hopes of locating the outer temple gate. The trench was driven through about ten rods of debris fallen from the lofty temple walls of Ham-murabi and Samsu-iluna, but we have not found the eastern side of the *temenos* yet. See Pl. VIII, No. 1.

1. BANKS, *Bismya*, 347.

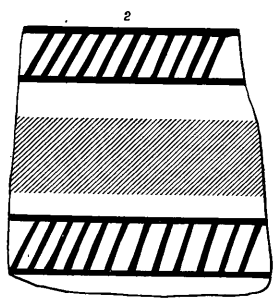
2. R. C. THOMPSON, *Archaeologia*, 70, 120-233.

3. H. R. HALL, *JEA*, VIII, Pl. XXXVIII.

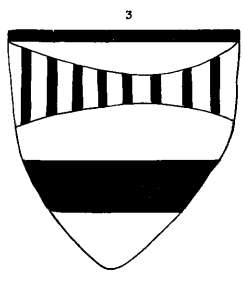
4. For similar models of war chariots, see HEUZEY, *Origines orientales*, 379 ff., and Pl. XVI. The Kish chariot has two holes in the dash-board for the driver's lines as in the Lagash model.



1



2



3

CHAPTER VII

The Palace of the Sumerian Period.

In the low mound at A which covers an area of about three acres, we made our most important architectural discovery. This mound was attacked on the south-eastern side by MR. MACKAY and COL. LANE shortly before my arrival in December, and a good many objects, notably the plaque of the return of the conquering king of Kish and the pearl inlay, were found outside the walls. Pl. V, No. 2, shews the eastern wall of the great court on the south side of the palace. East of this wall a good many chambers have been excavated to plain level and filled with earth carried back from the progressing excavations. The outer wall of the palace seen here faces a great open space enclosed on the eastern and northern sides by the outer walls. It is not a court proper, for it has no enclosing walls on the south and west. This palace is built entirely of two types of plano-convex brick, the small cushion type, $8\frac{1}{4}$ by $5\frac{3}{4}$ by $1\frac{1}{2} - 2\frac{1}{4}$ inches, and the large plano-convex thin type, $9\frac{1}{4}$ by 6 by $2\frac{1}{4} - 2\frac{1}{2}$ inches. This second type of plano-convex brick has much less convexity than the primitive cushion type. Pl. IX, No. 2, shews on the left two specimens of the fat-small type. At Kish these bricks usually have but one deep thumb mark impressed parallel to the length of the brick. The entire building had been refaced and restored with the thin plano-convex brick, of which three specimens are given on the same plate. They usually bear two shallow thumb marks, but we found many irregular markings on this type. At El 'Obeid DR. HALL excavated a small temple entirely constructed of the early cushion brick. The size at 'Obeid is 8 by 6 by $1\frac{5}{8}$ inches, being practically identical with the Kish bricks, but they have two thumb marks placed diagonally across the convex surface'. The photograph, Pl. IX, No. 1, shews how

1. JEA. VIII, 246, and Pl. XXXIV, No. 3.

the older wall has been refaced with bricks of the second type. Compare the photograph of this part of the outer wall and stairs after the secondary facing has been removed, Plate VIII, No. 1.

The walls of this palace are not panelled but the faces are relieved by shallow alcoves which produce an exceedingly fine effect. At 'Obeid I understand that the walls are panelled. The original palace of Kish dates from the earliest period of Sumerian architecture, perhaps before 4000 B.C., and fortunately it has not been built upon by later rulers. This is entirely consistent with the political history of Kish, which ceased to be the capital, when Sargon founded the purely Semitic dynasty of Agade. I infer that the latest reconstruction of the palace was carried out by the kings of the last dynasty of Kish, 2850-2752, but it is impossible to fix the approximate date for the introduction of the second type of plano-convex brick. Plate X, No. 1, gives a view of the outer wall of the palace, flanking the south side of the stairs, and Plate X, No. 2, is a view of the same wall from the south, shewing the continuation of the outer wall beyond the entrance to the stairs. The nine steps of this stair-way led up from an outer court on to a paved terrace flanked apparently with chambers whose ramifications to the east at the left side of this terrace we have not determined.

Pl. XI, No. 1, shews the fine pillared wall which faces but stands free of the south side of the palace in this area. This wall of pillars and the parallel outer wall of the palace run at right angles to the great wall of alcoves and stairs, and do not extend right up to the alcoved outer wall. A large gate-way or at any rate an open passage, leading into the principal part of the palace in the corner of the outer court, just inside the foot of the stairs, may be seen on Pl. X, No. 2. A long high wall of a later period has been built right across the court parallel to the wall of pillars, extending to within 30 feet of the stairs. This wall seems to have no relation at all to the older building. It is built of rectangular unbaked bricks, $15 \frac{1}{4}$ by $9 \frac{1}{2}$ by 3 inches. We are completely baffled by this wall and rectangular bricks, whose size does not agree with the rectangular brick of the Dungi period, $11 \frac{1}{2}$ by 8 by $2 \frac{1}{2}$ inches, found in the platform built over the old Sumerian temple at 'Obeid. A rectangular type of brick, $11 \frac{1}{4}$ by 8 by

3 ³/₄ inches, is ubiquitous at Kish, being found in nearly every building which has been tested (at B. C, W, Emete-ursag and the Western city ruins). I attributed this type of brick to the Hammurabi period, but it is undeniably identical with the Dungi bricks of El 'Obeid, and consequently our buildings at Kish may possibly belong to the period of Dungi or the subsequent Isin period. The principal public buildings of the entire city appear to have been reconstructed with this rectangular brick.

I believe, however, that the new wall built of the larger rectangular bricks in the palace may be *pre-Sargonic*. Kish had no use for a palace of kings after Sargon, and we have thus far found no other traces of any rebuilding after the plano-convex period, a fact which, in view of the magnificence and historical importance of this palace, makes our discovery quite unique in Mesopotamian archaeology.

Plate XI, No. 2, shews the western side of the palace, where we have traced the outer wall from the western end of the line of pillars northward for a considerable distance, and a good many chambers have been cleared here. All of this part of the palace together with the wall of pillars belongs to the oldest period, and the outer south wall parallel to the pillars is decorated with alcoves. Our excavations have not penetrated far enough northward into the central part of the mound to permit of any permanent description of this part of the palace, and of a decision regarding its relation to the great wall of alcoves. Pl. XII, No. 1, will give a good idea of the partially excavated area north of the pillars and the outer south wall of the palace. A curious semicircular room built entirely of the primitive type of plano-convex bricks was found among the group of chambers north of the staircase. Pl. XII, No. 2, shews this chamber, photographed from the east.

I believe that the long low wall on which stand *four* huge low round pillars in perfect state of preservation is quite unique in Sumerian architecture as at present known. DE SARZEC found a curious construction consisting of four round pillars built together into one huge pillar on a platform at Lagash¹. The inscriptions on triangular bricks from the pillars at Lagash

1. *Découvertes*, p. 424 and figure on p. 425.

prove that they were built in the time of Gudea and are much later than the pillars of Kish. According to this text Gudea built the four columned pillar in the temple of Ningirsu and it is described as *a-ga-erin* and called "the place of judgement." *a-ga erin*, or an *aga* of cedar as been rendered "hall of pillars" or "portico". This construction of bricks in four united round pillars is intended apparently to represent a cluster of cedar trees. The word *a-ga* occurs as an architectural term several times in the inscriptions of Gudea. A stele in the *a-ga* of ^d.Bau in the temple of Ningirsu, mentioned in Gudea, Cyl. A. 24, 4, is apparently identical with the *aga* of the pillars found by DE SARZEC². Two meters south-west of the composite pillar of four shafts, CAPTAIN CROS found two more pillars, and consequently *aga* may well have the meaning "hall of pillars," and the row of pillars found by us may possibly be in the Sumerian language an *aga*. In any case these pillars can hardly have connection with sun-worship, as suggested by HEUZEY. Our column of pillars ends with the large entrance to the palace at the foot of the stairs and Gudea mentions an *a-ga ku-lal* at "The Gate of Battle" in the temple of Ningirsu³. An *a-ga balag*, "Portico of the harp," in the temple of Ningirsu is mentioned by Gudea, Cyl. A. 28, 17, in connection with the *kisal*, or court; and our wall of pillars in fact forms the north side of the outer court. An *aga* in the temple of Kêsh⁴ is mentioned in a liturgy of the Isin period, where it precedes a reference to the temple gates⁵. These references seem to indicate a temple rather than a palace, if there is any connection between our pillars and those of Lagash.

In a chamber just inside the southern wall north of the pillars, MR. MACKEY and COL. LANE found a large number of beautiful inlaid figures, of which the photographs on Plates XIII, XIV and XXXVII-XLIII shew a few examples. They obviously belong to a series of plaques which represented rural and other scenes. The figures are made of pure white limestone, but the composition of the scenes cannot be reconstructed; for hardly any part of the

1. THUREAU-DANGIN, SAK. 142, Brick G. Duplicate, VS. I 23.

2. Cf. Cyl. A. 26, 12, the *aga* of ^d.Bau, "the place of counsel."

3. Cyl. A. 25, 24.

4. *Kêsh* is a southern city near Warka, and it has no connection with Kish.

5. OECT. I 56, 26.

slate frame-work of the plaques could be found. This series of plaques reveals a Sumerian art of supreme elegance, and shews that their artistic genius has been underestimated. Nearly all of the pieces represent domestic animals, but certain numbers in the series were clearly devoted to religious scenes. The figure of a woman who holds a horn and curved object, so crossed as to form intersecting arcs, is almost identical in design to one of the pearl figures found in the debris outside the wall.

Burials of the pre-Sargonic period were found in considerable number in this palace. They were in nearly all cases earth burials. No cist graves were found here. In only two of the graves were traces of matting found around the body. All traces of clothing had disappeared. These burials seem to have been made on the site *after it was abandoned*, and if this be so then the building must have become derelict before 3000 BC.; for it is clear that the pottery, copper implements, and seals found here belong to a period considerably anterior to Sargon. MR. MACKAY believes that the building with columns, where most of the burials were found, is older than the stair building, but this is extremely doubtful¹. The bodies lay invariably parallel to the walls, which determine their orientation, but there is no rule about the position of the body. In every grave of the mat burial type we found two types of pottery entirely unique in Mesopotamian ceramic. Firstly, there is the great water-jar with wide handle, high collar, keeled lip, and short foot. Plate XIII, No. 2, shews three examples of this new type of pot, and Plate XIII, Nos. 2 + 3, exhibit more clearly the incised decorations on the wide shoulders and handles. Each handle has a rude representation of the head and breasts of the mother-goddess. Now the worship of various types of the great earth mother at Kish has already been determined from the inscriptions as the principal cult at Ḫarsagkamma, which may contain the oldest and greatest temple-area in the entire site. I have already suggested that Innini or Ishtar of Ḫarsagkamma preserves the type more commonly associated with Nintud, Ninmaḫ, Aruru, and Ninḫarsag, the goddess of childbirth, as distinct from Ishtar, goddess of war, who was worshipped in

1. The eastern building to which the stairs ascend is clearly an integral part of the building north of the pillars.

Emete-ursag; a representation of her in her chariot has been discussed above. The rude figure on these jar handles beyond doubt represents the mother goddess Innini, whose temple will probably be found in the massive ruins at D of Inghara. That a head of her should be found on jars buried with the dead suggests to me one of two explanations, or both. This type of jar may have formed part of the ordinary household pottery at Kish, or at least in Eastern or Old Kish, but against this is the inconvenience introduced by adding sharp projections on the handles, which would almost prevent its being grasped firmly. Moreover the handles and their rude ornaments shew no signs of wear. My other suggestion, and the one which seems to me most probable, is that the pious believers thus hoped to invoke the mediation of the mother-goddess when the spirits of their dead entered into the presence of the terrible deities of the lower-world.

The seals of Babylonians and Sumerians from the Sargonic period onward represent the mother goddess interceding for man before the gods'. In Sumerian religion her relation to man is quite different from that of other deities, male or female. She it was who created him from clay in the theology of the Nippurian school, with which the cult of Kish was closely associated. The sorrows of man were her sorrows and his pain was her pain. A line from a liturgy clearly illustrates this belief:—

“Child-bearing mother, who knows lamentation, who abides among her people’.” She is “Ishtar of sighing”, “Ishtar of lamentation”, “Ishtar of moaning”, “Ishtar of wailing”, and *ilat tēseti*, “goddess of psalmody’.” *Ašar girrānu*. . . . *širiḫ-ki*, “Where there is wailing. . . . there is thy crying’.” Particularly interesting is the personal name *Kurupi-Ishtar*, “Ishtar is my intercessor’.” In the *Code of Hammurabi, Epilogue*, 281-290, Ninlil stands before Enlil in the place of judgement to implore for the destruction of the wicked man, who injures the stele of the king. And the

1. See the article *Gesture in Sumerian and Babylonian Prayer*, JRAS. 1919, figs. 6, 9, 11 12, 13; *The Religious Interpretation of Babylonian Seals*, RA. 16, 63-6.

2. SBP. 11, 3.

3. *Tammuz and Ishtar*, 113; RA. 12, 77, 8.

4. ZA. X 298, 42.

5. BE. VI², 48, 42.

grain goddess, a specialized form of Innini, is thus described in a Sumerian hymn :—

“She that prays earnestly for gladness of men’s hearts, queen that ensures happiness, art thou.”

The conception of a judgement on the soul before Nergal in Arallû cannot be proven for the early Sumerian religion, but texts of a later period do refer to this inquisition of those that died¹. Is it possible that the inhabitants of Kish placed this symbol of the interceding mother goddess beside those who were about to take the perilous journey to the land of no return, believing that she would plead for them before Nergal, as she had done for them before the angered gods in life? One of the most common lines of their penitential prayers before a deity is an excellent commentary upon the position she occupied in Sumero-Babylonian religion :—

“My goddess has spoken intercession unto thee, may thy soul repose².”

Secondly, in the early burials at Kish we invariably found a vessel similar to “champagne vases” found in the lower strata of Carchemish³. Pl. XIV, No. 4 illustrates three examples of this beautiful type of ceramic, and the photograph of a mat-burial on Pl. XV, No. 1 shews on the right one of these vessels, and on the left the great water-jar with anse. The bowls of these vessels are much wider and shallower than those of Carchemish. “They are made of coarse clay, generally red in colour, and made in two pieces, the base and stem being one and the dish the second part. Nearly every one has four holes at the base which are evidently ventilation holes to cool the stem, which would other-wise become very hot⁴.” I took them for braziers at first, and MR. MACKAY’s comment on them above was made on the same assumption. The stems are hollow, but I do not now believe that they are braziers. In any well prepared burial three objects are

1. See *Babylonian Wisdom*, 28-9.

2. RA. 16, 64.

3. The champagne vases of Carchemish were certainly drinking cups and are much smaller and deeper in the cup than the new type of champagne vase at Kish. DR. HOGARTH believes that there is no connection between these two types.

4. MR. MACKAY’s description of them.

necessary, a water jar, a goblet or drinking cup and a plate on which food was placed. Most burials contain many other objects, but these are essential'. If these "champagne vases" are not intended to be used as eating plates, then there is no vessel in the Kish burials for that purpose. I believe that the hollow stems were intended to contain charcoal, and in this manner the food was kept warm.

Occasionally we found a large spouted vase beside the wide handled jar (see the burial, Pl. XV, No. 1). These spouted vases have the same general shape as the wide handled jars. Pl. XVI, No. 2 shews a selection of early Sumerian funerary pottery. The small goblet is seen on the right, and a jug with handle on the left. The burial shewn on Pl. XVI, No. 1 illustrates the custom of placing the body on its side, with knees drawn up and one hand supporting the head. This disposition of the body imitates the natural position of a person in sleep. The burial shewn on Pl. XV, No. 1 has a good example of the small jar, which is occasionally found in graves of the Sumerian period, and which I take for an ointment vessel. The grave seen on Pl. XVII, No. 1 contained a large number of jars and shallow dishes; a scientific treatment of these and other types will be published by MR. MACKAY in the near future. The earth* burial seen on Pl. XV, No. 2 belongs, I believe, to a somewhat later period than any of the graves discussed above; the footless jars for liquids, the shallow drinking cup and the peculiar eating bowl or platter with hole at the centre are characteristic, I believe, of a later period; we must wait for further measurements and description of this extraordinary dish. This grave contained also a mortar and pestle. In this mound no cist burials were found as in Western Kish. The cist burials consist of a large deep urn without cover and contained a large water-jar, and a flat shallow plate. The bodies must have been bent or mutilated in these burials, but we could obtain no evidence on this point. "As a rule, the pottery was placed *outside* the burial urn, the plate being sometimes placed on top of

1. This is true of burials at Susa: see POTTIER, *Délégation en Perse*, XIII, p. 30: at Eridu: see R. C. THOMPSON, *Archaeologia*, Vol. LXX, 111.

2. I infer that all bodies were wrapped in reed-mats even where there are no traces of the matting. Of cremation we found no traces at all.

the jar." (MACKAY.) See Pl. XVII, No. 2. For an earth burial of the time of Hammurabi, found near the *ziggurat*, see Pl. XVIII, No. 1.

In most of these early pre-Sargonic burials at A we found elegant copper implements and, with bodies of women, a large number of copper and silver ornaments. Pl. XVIII, No. 3 is a selected group of three small javelin heads, two small forks, and two spear-heads. Some of the javelin or arrow-heads are triangular, others are two-edged with heavy reinforcing middle seam. Similar *bronze* arrow-heads were found at Assur¹. The sides of the triangular heads are concave, and the three cutting edges slope backward from the middle to the sheath, into which the shaft was fitted without pins. The two forks shewn in this group are respectively almost identical with two found at Lagash². In one type the place of bifurcation is long and deep, but in the other type smooth and elliptical. Both have attachment-prongs to be inserted into shafts, or handles. The nature of these objects is obscure. They may possibly be some kind of weapon, or they have served a utilitarian purpose. It is not unreasonable to suppose that they were used for eating at meat. Pl. XIX, No. 1³ shews two spear heads or dagger blades of the same double edged type as seen on Pl. XX, No. 3; and see Pl. XVIII, No. 4 for two more weapons of the same type. All are without a central reinforcing seam which is illustrated by the knife blade on Pl. XVIII, No. 2. The peculiar weapon shewn at the right of the group on Pl. XIX, No. 1 is new to me. It has the shape of a broad chopping-knife; the sharp outer curved edge is reinforced by a deep-body set by a central block into a heavy shaft, and constitutes a formidable weapon⁴.

The group on Pl. XIX, No. 4 shews four copper weapons and implements and a bent copper hairpin with lapis-lazuli knob. At the right is a specimen of a type of hatchet which seems to have been fairly common at

1. ANDRÉ, *Die Festungswerke von Assur*, p. 143.

2. HEUZÉY, *Nouvelles Fouilles de Tello*, p. 115, and *Découvertes*, Pl. 44 *ter*, No. 6.

3. The object on the right of this photograph, a short heavy cylindrical piece of copper with concave body is certainly a sacred cult object, for it is held in the hands of two deities on the early seal, DELAPORTE, *Cylindres orientaux de la Bibliothèque nationale*, No. 51.

4. See below, p. 80, and Pl. XI, No. 1, second seal. Gilamish attacks a lion with this weapon, which is attached to a short handle. The same weapon is employed by a lion-hunter, Pl. XXII, No. *b*. See p. 83.

Kish. It consists of a single heavy piece of copper. The long blade tapers gradually towards the handle-sheath, into which the handle was fitted parallel to the cutting edge. The cutting edge recedes at quite a high angle from the end of the blade toward the interior edge, which implies a short handle, so that the entire edge would come into contact with an object. There are no holes for pins in the sheath-head. The sword with hollow round handle and rivet hole, shewn at the top of this photograph is quite a new type to me. We found one straight flat sword with a rivet head on the handle, similar to those found at Lagash¹, see Pl. XIX, No. 1. The thin double curved weapon with riveted handle, shewn on Pl. XIX, No. 4, has only one cutting edge, the lower edge as photographed. It is probably a scythe. There is no means of determining the relation of the handle to the blade, but the curved scythe or sickle-blade shewn below it was undoubtedly driven into a short heavy handle in direct line with the blade. We found a good many chisels (Pl. XX, No. 3) in these graves, some of them with concave blades, others with a bevelled blade. Most of them, however, are of the ordinary type, a wide straight cutting edge with the blade tapering regularly to the handle.

Pl. XIX, Nos. 2-3 illustrate the copper hairpins and ornaments found beside female bodies, and Pl. XX, No. 1 shews a fine silver brooch of a girl, excavated in a chamber of the palace.

To complete a rapid survey of our copper and bronze weapons, I shall discuss here those found in the western city ruins. These are all from the period of the First Babylonian Dynasty, and although they have not yet been chemically analyzed they may be safely described as bronze. The curious tool shewn at the right lower side of Pl. XX, No. 5 has also been found at Lagash. HEUZEY has discussed it in *Nouvelles Fouilles de Tello*, p. 149, but he was perplexed by it. He described it as "A kind of trowel ending in a bell shape, without any trace of handle attachment; the whole ends in a projecting knob." The tool found at Kish is identical with the one from Lagash, but it has no projecting round block at the top. It is

1. HEUZEY, *Nouvelles Fouilles de Tello*, p. 112; *Une Villa royale chaldéenne*, p. 13.

difficult to see how a handle could have been attached to it for the large hole in which the blade terminates is closed at the top. The two fine split-headed axes which occupy the centre of this photograph can be paralleled by only one example, which was found at Lagash¹. The handle was inserted into the slit at the head, and fastened by two rivets. The huge pick seen at the left in this group is another new type of implement. The cutting edge is narrow and the blade long and heavy. Just below the hole for the handle are two protecting knobs apparently placed there to protect the handle; for a heavy blow with this pick on a yielding substance would cause it to sink deeply.

One of the most interesting of all the weapons found at Kish is shewn on Pl. XX, No. 4. The narrow cutting edge of this hatchet acts at right angle to the handle after the manner of a hoe. This is a very well defined Sumerian battle-axe and it is seen in the hands of some of the army of Eannatum, who march beside the spearmen on the Stela of the Vultures. There it is attached to a short shaft and seems to be a most formidable arm. A *bas-relief* of the period of Hammurabi represents a king felling his enemy by a blow with this battle-axe². A similar weapon has been found at Assur, but here the blade is much longer and narrower³.

With many of the bodies of males we found beautiful cylinder seals, invariably characteristic of the earliest Sumerian glyptic of the fourth millennium. Plate XXI, No. 1 shews four seals which are referred to here as Nos. *a*, *b*, *c*, *d*, from the top of the photograph. On No. 1 *a* the scene represents a familiar *motif* of Sumerian glyptic of the period *circa* 3000 BC., a lion attacks a stag, and in turn a huntsman attacks the lion, with a spear which he hurls with his right hand. In his left hand he holds a bow. He wears the short kilt hung from the waist, characteristic of the dress of hunters and agriculturists on early seals⁴. At the left of the scene is a highly stylized re-

1. *Découvertes*, Pl. 44 *ter*, fig. 7, and HEUZEY, *Origines orientales*, 217.

2. *Revue d'Assyriologie*, VII, Pl. V. See also HEUZEY, *Nouvelles Fouilles*, pp. 115 + 261; *Origines orientales*, 216.

3. ANDRÉ, *Festungsgerke von Assur*, 142.

4. Cf. WARD, *The Seal Cylinders of Western Asia*, No. 369; DELAPORTE, *Catalogue des Cylindres orientaux*, Nos. 17, 19, 21.

presentation of a tree, a design formed by intertwining two vines forming opposite loops and a series of lozenge shaped figures at the centre. A similar but less complicated design occurs on a seal of the Bibliothèque Nationale, DELAPORTE, No. 5. A less conventionalized design of a tree at the left of a hunting scene, is represented by a seal in the Berlin Museum, WARD, No. 155, of a much more primitive type. See also WARD, *Cylinders. . . . in the Library of J. Pierpont Morgan*, No. 25, and DELAPORTE, *ibid.*, No. 9. By rolling a seal of this design on clay or plaster a beautiful design enclosed between two trees is obtained¹. No. 1 b is an elaborate seal whose design is not clearly illustrated by the photograph, since in rolling the seal on the plaster the continuity of the composition has been broken. The first figure on the left is a bearded legendary hero, probably Gilgamesh, as is indicated by the three bands about his waist, which constitute his sole apparel², and by a pair of horns. With his left arm he seizes an attacking lion, and with his right hand he threatens to strike with a weapon. We have found a copper specimen of this peculiar semicircular halberd or axe in the old palace. See Pl. XIX, No. 1. His dog assists in attacking the lion. Another lion facing the right and drawn to intersect the figure of the first lion attacks the horned figure of Enkidu (?), who is not represented here as a fantastic being, half man and half beast. This combatant stands between two attacking lions, which he restrains with his arms on either side. The bodies of these two lions are seen in full, which proves that this part of the scene was intended for the central part of the design. Intersecting the lion on the right of the central figure is a bull who rears to attack a combatant of exactly the same delineation as that of Gilgamesh. He struggles with both hands and has no weapon. The composition is skillfully and systematically composed.

No. 1 c is good specimen of the animal file *motif*, a goat and a cow reproduced twice in a frieze-like scene. This design is characteristic of the earliest type of seal³, in Sumerian and Elamitic glyptic. [The animal file *motif*,

1. Above the tree this seal has an eight pointed star and a crescent.

2. See REIMPPEL, *Geschichte der Bab. und Assy. Kleidung*, p. 21.

3. See for example, DELAPORTE, *Catalogue du Musée Guimet*, No. 1; JEA. VII, Pl. XXII, Nos. 2-5.

goats *en passant*, occurs also on the lower register of seal No. 3, Pl. XXII, No. 4.] No. 1 *d* on this photograph is a seal in two registers. The upper register has a hunting scene. On the left is a hunter rescuing a stag attacked by a lion. On the right two lions attacking a stag, and two hunters advancing to intervene in the combat. In the field before the hunter on the left are three globes, a crescent and a rude design of a four-pointed star. The hunters wear the short kilt, hung from the waist. All three hunters carry a weapon which appears to be a short sword, represented as the continuation of the arm simply. The lower register contains two scenes. On the right a deity(?) seated on a high throne, clad in a long *kaunakes* with hands extended toward a vase, from which protrude to either side two branches of a large plant. The vase sits on a high conical stand, terminating in a cone-shaped foot. At the left of the vase and stand a human, apparently in attitude of adoration. A somewhat similar scene occurs on an early seal of the Musée Guimet⁴, two seated deities and a worshipper before a vase with two branches. The central part of this register is occupied by a scene which is difficult to understand. Two figures stand opposite each other over a stand in the form of an X³. The figure on the right has the head and arms extended backward and the head is also turned away from the tripod, looking toward the seated deity(?) and the sacred vase, as though religious timidity compelled him not to turn his head away from the holy scene. The figure on the left of the stand has precisely the same gesture as the human before the vase. At the left a third scene is taken from the rituals of incantations against the seven devils⁴. A lion-headed devil smites a human on the skull, and from behind a human (priest?) attacks the demon. The demon wears the short kilt, an unusual feature of early glyptic. Scenes of glyptic based on incantations are found only in the pre-Sargonic period.

Plate XXI, No. 2 shews three seals from burials in the palace. No. 2 on

1. Cf. DELAPORTE, *Catalogue des Cylindres... du Louvre*, S. 444.

2. DELAPORTE, *Catalogue du Musée Guimet*, No. 23.

3. This form of stand occurs as a seat, a sort of camp-stool for seated deities; cf. DELAPORTE, *Catalogue du Musée Guimet*, No. 23: and as a stand on which a tall ribbed vase is placed, *ibid.*, no. 26.

4. See RA. XVI 59-60.

this plate is so badly worn that some of the details are not discernible. It belongs to the large group of pre-Sargonic seals which represent hunters or shepherds defending domestic animals from beasts of prey. A lion attacks a bull (?), and is in turn attacked by a hunter in the left. A second hunter with weapon advances on the right. Two indefinable objects, possibly trees stand behind the bull. No. *c* on this group is an early seal in two registers, identical in design with No. *d* in the group above but not the same seal. The third seal of this group has a scene which at least borders on the ridiculous and cannot be explained from any other similar object, or from the inscriptions. A griffin with tufted serpent head, long neck, short body and long legs, bird's feet and without hands, carries a crooked sharp stick across the left shoulder, on which is spitted a large bird. In the field before him is an object, apparently a bird struck by a missile. The element of humor was so rare among Sumerians that the Assyriologist usually discounts this aspect in their art entirely. Is this a satire on some notoriously imaginative hunter? A seal with a somewhat ridiculous scene is reproduced in DELAPORTE's *Catalogue of seals of the Louvre*, S. 401, a nude figure on his haunches, with huge club, battling with a rat (?), and three cats.

Plate XXI, No. 3 has two seals of widely separated periods. The first seal belongs to the period of the Isin dynasty and was not found in the old palace whose antiquities were all pre-Sargonic. A worshipper with hands in liturgical pose, folded across the waist, stands before a seated figure of a deified king, and behind the first worshipper is a second figure, in the attitude of prayer, the so-called gesture of the kissing hand. The two humans are bearded. Two humans in similar diverse gestures may be seen on a seal of the Bibliothèque Nationale, DELAPORTE, No. 124. The seated king extends a cup in his right hand. Before him a scale-beam, and between the humans a champagne vase. The seal is dedicated to the god Shamash and his consort Aya. The second seal was found in the old palace and represents a hunting-scene framed in a door-way. The two halves of the door are swung back on either side. A lion springs upon a stag, and behind the lion a second stag *en croissant*, springs away from the contest. To the left is the defaced figure of a human, nude upper parts, with long *kaunakes*, apparently in half

seated posture. I am unable to discover the meaning of the composition.

At the top of the group of Pl. XXII, No. 1 is a seal undoubtedly pre-Sargonic; for it was found in surroundings of the early period, but its design and elegance would otherwise indicate a later age. There are two registers not divided by a line, but free-drawn. Above, two fighting cocks, twice repeated, and between the two repetitions a leaping goat. The lower register has a griffin, apparently a winged lion, open jaws and protruding tongue¹, and facing the griffin is an long-eared animal whose genus I am unable to discover². Between these animals is the sun-disk with four flaming rays, right, left, and below, certainly the precursor of the later winged sun-disk of Assyria, and Neo-Babylonian glyptic³. This scene is repeated in the lower register. Just above the animal's haunches, facing the right is a diminutive figure of a bearded man, who seems to have let slip a rope by which he had restrained the escaping goat above. The winged lion occurs in pre-Sargonic art⁴, but this design of the solar emblem is new for the early period. Seal *c* of this group has a fine design of lions reared up and fighting, and a hunter is slaying a lioness.

No. *b* of this group is a very archaic seal in two registers. In the upper register two lions have overpowered a hunter who has dropped his crescent shaped axe and spear. A rescuer attacks the lion on the right with a spear. This scene is repeated twice. In the lower register we have an extraordinary heraldic emblem, which reminds one of the lion-headed eagle with deployed wings, seizing two juxtaposed wild asses⁵ by the haunches, the so-called emblem of Lagash⁶. On the Kish seal a winged genius stands between two

1. In the combat of Assur-Marduk and the dragon, this monster represents the god *Zu*. See my *Epic of Creation*, p. 19 n. 1.

2. MR. R. I. POCKOCK, F.R.S., has kindly offered me the suggestion that this animal is a lioness, or the Mesopotamian fallow deer, but he disclaims any definite identification.

3. See for example the Neo-Babylonian seal, DELAPORTE, *Catalogue of the Louvre Cylinders*, No. 545, and cf. WARD, *Seal Cylinders of Western Asia*, p. 396.

4. See the combat of Gilgamesh and Enkidu with the winged lion, WARD, 187 a + b, and a seal of the Dungi period (an old seal, re-used with added inscription?), *ibid.*, No. 51.

5. Identified by PROFESSOR POULTON and MR. R. I. POCKOCK, F.S.A.

6. See for example, HEUZEY, *Catalogue des Antiquités chaldéennes*, No. 12; No. 7; No. 218; WARD, No. 63, from Umma, and for other archaic designs, WARD, Nos. 57-62. The common element in these emblems is the eagle with deployed wings, but the animals which it seizes

stags *adossés* which he holds by the tails. This scene is also repeated twice. Can this be the emblem of Kish ?

Pl. XXII, No. 3 shews one of the few seals of Elamitic design found thus far at Kish. It consists of two registers. In the lower register the two continuous triple lines pass across the field in waves to form triangles, each reversed to meet one above, and a globe representing a star is placed in each upper triangle. The upper register has only one triple line, but globes are placed in the triangles above and below. Seal *b* of this group has a naked bearded man between two gazelles, which stand upright, each being attacked by a lion. The hair of the man's head is rudely represented by eight lines. At the left of this scene is a huge four pointed star (?), and above it a vessel shaped like a cooking pot. No. *c* is a scene of a lion attacking a stag in a forest. The two animals are reproduced for symmetry, the lions being criscrossed.

Plate XXII, No. 2, second seal, represents a lion seizing a stag, in a forest, the trees being represented by conventionalized design. No. *a* of this group is unique. A concave ring, whose interior field has several irregular and meaningless lines; to the left a frieze designed of a wild animal, *passant* among thick underbrush. No. *c* has been photographed upside down. A man stands with upraised arm before a stationary quadruped, apparently a ferocious mythical animal, on whose back is perched with deployed wings and wide spread legs, a lion-headed eagle; below the body of the animal may be seen the spreading tail-feathers of the bird. No. *d* of this group, again photographed upside down, has the conventionalized tree surmounted by a crescent and star as on seal of Pl. XXI, No. *a*. To the right of the tree a lion seizing a wild animal by the neck, as in the similar seal referred to above. To the right two men wrestling.

Plate XII, No. 4 has a group of three seals, the first of which belongs to the period of the first dynasty and was found in Western Kish. It has the familiar figures of the god Amurrû and Ishtar, with vacant space for inscription. Nos. *b* and *c* are pre-Sargonic, found in burials in the old palace.

probably differed in the heraldry of various cities. At Lagash the lion is invariably represented on the emblem of that city.

No. *b* represents a deity clothed in long *kaunakes*, seated in a mythical boat, which he propels with an oar. The boat consists of the long sinuous body of a human headed monster, whose arms and head form the prow. He has a horned head-dress bound about the brow by a band, which falls in a long ribbon behind his head. With his arms he seizes a tall J-shaped pole whose bottom ends in two prongs like a modern punting pole. He seems to be pushing the pole to the bottom of the river, and pulling himself forward. The human-headed boat pursues a horned quadruped, above whose back is a large flask lying horizontally, and above the flask a trident. The human-headed boat with seated deity pursuing a monster has been found on very archaic seals. See WARD, *Seal Cylinders*, Nos. 106, 107, 108. WARD suggested that this may represent the voyage of Gilgamesh over the waters of death in his quest of the isle of the translated hero, Utnapishtim. But in the Epic of Gilgamesh this boat is made of 120 beams 60 cubits long, in which Sur-sunabu the boatman and Gilgamesh cross the sea. Moreover Gilgamesh is always represented naked, with only a loin band, and has no resemblance whatsoever to the deity seated in these boats. There are no mythological references in religious texts to explain this enigmatical design¹.

No. *c* has two registers, free-drawn, a file of antelopes or goats *passants*, and in the upper register a lion-headed eagle with deployed wings, between two animals, a stag and an unidentifiable quadruped. At the left apparently a man in flight. The lion-headed eagle was, therefore, one of the designs of the glyptic of Kish.

1. An elaborate seal of this class has been published by STONEY SMITH, *Babylonian Historical Texts*, Frontispiece, No. 4. SMITH regards the scene as referring to some celestial scene and suggests that it represents Shamash the sun-god paddling across the celestial ocean, or Adapa as a celestial figure. The boat he takes to represent the moon's crescent. But this seal shews the boat passing over waters full of fish. See *ibid.*, pp. 73-5.

CHAPTER VIII

The Library, *Bit Akkil*.

On the western side of the mound marked W, I began work with four *jokhas* in February of this year in hope of locating the collection of literary tablets which must exist near a great religious and administrative centre such as Harsagkalamma or the greater Kish is known to be. This great mound is about three quarters of a mile long, varying from 10 rods to 80 rods in width and attaining a height of 30-40 feet above plain level. Its massive but comparatively low proportions and its topographical relation to the great temple area just beyond the canal depression to the east and south-east seemed to point to the existence of large administrative buildings there. It appeared to be the most promising place to search for the library, and in fact a baked clay tablet, a business document of the period of Nebuchadnezzar had been found by a workman on the ridge of this mound just south of its central parts. We began to find clay coffin burials at a slight depth at once, clay figurines of the mother and child, pottery of the late period and some bronze implements. After four weeks of discouraging results, I placed some *jokhas* lower down the mound, almost at plain level, and slightly farther north, where we immediately came upon a rich deposit of literary tablets. As the excavation spread northward and toward the centre of the mound it became evident that we had entered a large building, whose rooms in nearly every instance contained tablets, but in shockingly bad condition.

Plate XXIII, No. 2 is a view of the flat top and western slope of this mound taken from the south-east and looking across the great water gap, the old bed of the Euphrates, toward Uḫaimir where the ruins of the stage tower of the temple of Ilbaba rise above the intervening mounds (J, I) in the distance, over a mile away. A few chambers in process of being excavated may be seen here. The dump-heap seen on the left of this photograph lies

upon chambers already excavated, just south of the building which contains the tablets. The labour required in extracting unbaked tablets from heavy compact clay soil is very exacting indeed, and the excavator in charge of this work must be present at every moment of the day's work. MR. MACKAY thoughtfully provided a reed hut, a *kikkišu* or *bit kané* of the Babylonian inscriptions, for me to occupy during the day, and in this the tablets were kept until four o'clock when work ceases for the day, and all antiquities are taken into the museum at the camp. See Pl. V, No. 3. Also Pl. XXXV, No. 2.

The main library, if this building by future excavations really proves itself worthy of that dignified description,—the word is employed here only provisionally,—lies below later ruins of great buildings of the Neo-Babylonian period. It belongs to the Isin and Hammurabi period and is constructed of unbaked bricks; these are rectangular, $11 \frac{3}{4}$ by 8 by $3 \frac{3}{4}$ inches, and of a type found in the western city ruins, and in nearly every mound at which we excavated, where post-Sargonic buildings were found. It is obvious that after the early Sumerian and pre-Sargonic period, the principal areas of Kish were entirely rebuilt in the Isin and Hammurabi period; this type of rectangular brick was employed by the builders of that era, but they are invariably crude. The baked brick of the same period is invariably square, $14 \frac{1}{4}$ by $14 \frac{1}{4}$ by $3 \frac{1}{8}$ inches. In excavating at this site it is necessary to remove the later constructions in the upper strata, or to disregard them entirely. They are laid over the older building without any regard to its architecture. Between the Isin and Neo-Babylonian periods the buildings of this great area fell into decay. The mound was levelled and late constructions were placed upon it. There is an average depth of about five feet between the pavements of the late and older buildings. It is not at all certain that the inhabitants of Kish in the Neo-Babylonian period housed their literary tablets in a library super-imposed upon the earlier one. A good many fragments of contracts were found in the upper strata, but it seems probable that the late occupants were not even aware of the existence of a library beneath their habitations'. They buried their dead below the

1. This statement may require modification. Most of the syllabaries have colophons and

floors and pavements, and we found coffins right among tablets of the Isin period. In one room of the late period a "strong box" of some private citizen was found. See Pl. XXIII, No. 4. This was constructed of nine baked bricks of the Nebuchadnezzar type, and evidently stood in a vault, for a long semicircular "peep hole" was found passing through a thick wall from this box into the next room. The box contained scraps of copper and bronze which were regarded as most precious¹. Pl. XXII, No. 3 will illustrate the manner of late interments in clay coffins of the bath-tub type in rooms of the older construction beneath the upper pavements. A few of these coffins are glazed, but the blue glazing is imperfect and usually in sad condition. A large number of these clay coffins were found in this building, but not one can be compared with the finely baked and elegantly glazed coffins from the late period, found at Warka and elsewhere. The coffins at Kish are merely sun-dried and their removal is almost impossible. A good many urn-burials are found in this mound, invariably at a low depth, and probably belong to the period of the first dynasty; but this is uncertain.

Pl. XXIV, No. 1 shews four strings of beads taken from burials in this mound, and of these all but the longest string of beads, shewn here, came from bath-tub burials and are certainly Neo-Babylonian. The elegant string of agate, carnelian and lapis-lazuli beads, the longest string of this group came from an urn-burial. Plate XXIV, No. 2 illustrates the type of beads obtained from the graves of the pre-Sargonic period in the old palace. The quality of the stones and their cutting are much inferior.

In the bath-tub coffins we found the only gold jewels so far recovered at Kish. On the right side of the photograph Pl. XXV, No. 1 will be seen a solid gold ear-ring, crescent shaped with thin gold wire hanger², and a slender finger ring. The beautiful ear-ring seen in the lower right side of this group is one of the finest products of ancient jewelry. The pendant represents an opening pomegranate bud secured at the base by a studded

a script which seems to indicate a period contemporary with Ašurbanipal. Apparently the tablets belong to both periods.

1. Metals were kept in a *bit asakki*, "house of darkness." See SCHEIL in RA. XII 60.

2. The same style of ear-ring was found at Babylon, see KOLDEWEY, *Das Wieder Ersehende Babylon*, p. 260.

band to which the gold wire hanger is attached. Only *one* ear-ring was found in the coffin, and if there was a pair of them, as there should have been, disappearance of the second is difficult to explain. The four objects at the left of this group, a silver brooch, and three silver rings were found in the pre-Sargonic burials at mound A. Plate XXV, No. 2, illustrates the clay lamps found in great numbers in the upper stratum of mound W.

The tablets which have been found thus far in this mound are almost entirely grammatical and philological. The number of fragments of sign lists or school texts is surprisingly large. Plate XXVI, No. 1 illustrates two of the syllabaries, and *ibid.*, No. 1 is a good specimen of a sign list with colophon¹. Pl. XXVII, No. 2 shews a room below the late building and a drain sunk from the pavement above through the debris of the library. In this room a good many tablets were found. One of our workmen is shewn holding a tablet in position for the photographer.

In those rooms, which appear to have been proper library apartments, I invariably found the tablets mixed up with fragments of large coarse jars, and whenever we came upon clusters of these thick sherds embedded in the terribly adhesive clay, it was a certain sign that tablets would be found immediately. These broken jars were arranged about the sides of the rooms, and contained the tablets. Tablets of different contents were never found inside the fragments of the same jar, and whole rooms were assigned to tablets of the same nature. We have found practically nothing but syllabaries and religious texts. Only during the last week of the season did I reach a lighter and less adhesive soil favorable to the preservation of unbaked tablets. At least 90 percent of the tablets were unbaked, and they are usually embedded in such hard adhesive clay that not one has been rescued in an undamaged condition. Plate XXVII, No. 3 shews the last large room of this library which I excavated this season. Here we had reached a deeper part of the mound, not far from the central part, and the tablets now began to be better preserved. When a large tablet was found in such desperate condition that it could not be moved, I poured a solution of celluloid over it and, having

1. Another specimen of this class is illustrated by Pl. XXVI, No. 2.

protected it from dust with a sheet of paper, left it to set. The tablet could then be moved and wrapped in paper in the usual way. This photograph illustrates the method described above. After the fragments of a tablet are carefully wrapped in paper they are left to dry for at least three days in the museum. They may then be cleaned and repaired for shipment, but nothing further can be done with them until they are baked at home.

In a room of the library I found two clay figurines of Papsukkal, messenger of the gods and three small clay models of dogs. See Pl. XXVIII, No. 1. On two of these dogs their names have been preserved. They read *mu-na-aš-šik ga-ri-šu*, "Biter of his enemy", and *a-ri-iḫ napišti-šu*, "Consumer of his life." From an incantation ritual we now know that the Babylonians buried five pairs of dogs beneath the thresholds of houses for expiatory purposes¹. Their ten names are all given in this text and among them we find the two names *munašiku garišu* on a green dog and *aruḫ napišta-šu*, "Consume his life" on a black dog. The British Museum possesses five perfect clay dogs of this kind, which still preserve their colours. These were found by LAYARD in the palace of Ashurbanipal at Nineveh and are reproduced by JASTROW in his *Bildermappe*, Pl. 22. They are all represented *en passant*, whereas the three models of Kish sit on their haunches: *munašiku gāri-šu* is 71 d in JASTROW's publication and has been coloured greenish blue². This does not exactly correspond to *arḫu*, "green," which is said to be the colour of this dog in the Berlin text, but it is possible as MR. GADD has suggested, that the Babylonians were insensible to shades of neutral colours, or that green for them is blue for us. The dog *ariḫ napišti-šu* is not one of the five in the British Museum. Faint traces of blue colouring may still be seen on *munaššik gāri-šu* which we found at Kish. These names all describe the dogs as enemies of those who plan evil against the house, probably having particular reference to the demons³. It is not without significance that two figures of Papsukkal were found with them. Clay models of this deity were

1. EBELING, *Keilschrifttexte aus Assur*, No. 298, Rev. 17-22.

2. See GADD, *Forms and Colours*, RA. XIX 158-9. When I removed these objects from the soil there were still traces of colours on them, but these faint remnants have completely disappeared with the evaporation of the moisture. They are now in the Ashmolean Museum.

3. For a comparison with the Roman *cave canem* see the note at the end of this volume.

also buried beneath thresholds. KOLDEWEY found numerous brick chests at the sides of the principal gate, and under the passage ways of the northern and southern gates of the temple of Ninurta in Babylon¹. These were made of a perishable material, possibly wood. Clay models of Papsukkal were also found in brick chests near the north-eastern gate of the temple Z in Babylon². Both figures of Papsukkal at Kish could be studied *in situ* when found, but it was impossible to remove them in their original condition. Each had a thin copper girdle and a copper band passing over the right shoulder across the back to join the girdle on the left side and across the breast to meet the other end at the left exactly like the shoulder strap of an English officer's uniform. Each held a long thin copper staff in the right hand, and a copper weapon in the left hand. The right arm was raised almost head high; the left arm was held in tense striking position at the waist. In the photographs of these objects, Pl. XLV, the attitude can be studied from our restorations, but many details have disappeared. It was impossible to preserve the copper portions of the dress.

At the foundation of the outer western wall of the Library, near a doorway we found the magnificent bronze stag seen on Pl. XXVIII. There is a clay core and the object was cast from a mould. Front and fore feet stand upon a short round pin, which proves that the object was mounted on a pedestal. Plate XXXII, Nos. 1 + 3 has photographs of two groups of Neo-Babylonian pottery. MR. MACKAY describes this pottery in the following words :—

“The pottery from W was made of a soft ware very badly baked. It is yellow and resembles modern ware, except that it is so soft. The glazed ware is good, the glaze being even and uncracked³. The jars were not placed on stilts for glazing purposes, hence their bases are rough. The glazed ware was somewhat coarse and thick for its size. There was a special ware, of which examples were comparatively rare, very thin, well baked and finished.”

In these late burials I usually found an oval water jar, with small collar

1. See KOLDEWEY, *Das Wieder Stehende Babylon*, 226.

2. *Ibid.*, 220-223.

3. See Pl. XXIX, no. 2.

and small orifice and a small goblet, but the plate or dish for food was rarely found. From the small number of pottery objects found in late burials, compared with their prolific quantity in early graves, I infer that very important modifications in Babylonian eschatology had been accepted. Women were still interred with all their jewels, but copper and bronze weapons and utensils of man were no longer placed in their graves. The custom of providing the dead with food, raiment and articles for the pursuit of their ordinary vocations in life no longer obtained. They are rather meager remains of an ancient custom, rather than signs of the old belief in the continuity of mundane life after death. The religious texts clearly reveal a more spiritual conception of the state of man in the future existence, although they still believed apparently in the dark land of the dead within the earth¹. Plate XXIX, No. 2 illustrates the glazed ware found in coffin burials and Pl. XXVIII, No. 3 is a group of late pottery. The tall thin jar which has a foot is a good example of the wine jar of the period (not found in burials). I found a few tall conical jars, of light red colour, ending in a sharp point.

1. On the earlier orthodox eschatology of the Sumero-Babylonian religion, see *Babylonia*, VI 193-215; and for the Persian period, SCHEIL, RA. XIII 168-173, and the writer's *Babylonian Wisdom*, 29-30. In the late texts published by SCHEIL, the profound modification of eschatology consists in the introduction of the theory of a judgement of the soul by the god of the lower-world. These texts make special reference to the need of food and water for the dead, after the soul has arrived in Arallu, but they do not imply that these human requirements might be taken with them on the journey to the nether world. According to these texts it is possible to infer that for the righteous man, who received a favorable judgement from Nergal, these benefits would be conferred by the gods in Arallu itself.

CHAPTER IX

The Stylus and The Art of Writing.

In the city ruins of Western Kish, where fragments of literary tablets and letters of the Hammurabi period were found in 1923 and 1924, MR. MAC-KAY discovered two polished bone objects; one is the long sought stylus of the Sumerian and Babylonian scribes, and the other is a tracer for ruling lines on tablets. Plate XXIX, No. 1 shews these two objects at the right and left of the photograph. This stylus was badly worn, but it is still in good condition and after long practice I was able to discover its rather intricate mechanism. The larger end was employed for making wedges and heads of the cuneiform script in ordinary size. The small end makes the same elements of the script, but more minutely, and was evidently used for inserting signs into the ordinary signs. The horizontal wedge ► is made by holding the stylus almost perpendicularly with the narrow back of the stylus facing the left edge of the tablet, as shewn on Pl. XXX, No. 1. A simple downward pressure of the stylus will make a wedge of ordinary length, but if a longer tail is desired it may be obtained by drawing the stylus downward to the right. This is position *one*. By turning the stylus in the fingers one position only, that is by bringing the narrow back side flat against the forefinger and the wider left side of the triangular object to face the left edge, as seen on Pl. XXX, No. 2, the perpendicular stroke † is obtained, with a simple downward pressure. This is position *two*. The so called triangular "head" of cuneiform script, with the flat side on top ▼, is made by turning the stylus one position farther to the right so that the narrow back is turned away from the left edge of the tablet. The same easy movement downward produces the shape of the "head" desired. This is position 3. To make the "head" with flat side on the right ◄, the stylus is turned one position farther so that the narrow back faces the writer as seen on Pl. XXX, No. 4.

This is position 4. By turning the stylus one place more it returns to its position seen in No. 1, for making the horizontal stroke.

On Pl. XXXI, No. 2 the four elements of cuneiform writing may be clearly seen as produced by the stylus in these four positions, and I have also written several signs with it, which involve these four elements. Excepting the slanting strokes, as for example in the Babylonian form of *NI*, or *KA*, the cuneiform signs can be made rapidly by simply turning the stylus in the fingers. The position of the hand is not changed at all. Its mechanism is much more ingenious than scholars had supposed. In fact all theories regarding the shape and use of the stylus have been completely erroneous. There can be no possible doubt concerning the nature of the triangular bone stylus of Kish, whereas none of the objects heretofore found in Mesopotamia and confidently regarded as styluses by their discoverers can be so described. MESSERSCHMIDT who has made the latest investigation of the subject, *Orientalistische Literatur-Zeitung*, 1906, 185-196; 304-312; 372-379, makes the following comment on the earlier suggestions of TAYLOR, GEORGE SMITH, RAWLINSON, OPPERT, DELITZSCH and KING :— "Up to the present no instrument has been found in excavations, which can be described with certainty as a Babylonian stylus. We know of no original object, therefore, and perhaps we shall never find one for reasons set forth below." On p. 191 of MESSERSCHMIDT'S article he reproduced the four-sided wood stylus invented by ZEHNPFFUND, and the equilateral triangular stylus with round handle designed by DE MORGAN. It will be noted that the true stylus is triangular, but two of its sides are broader than the back, and that its end is so cut that it has four faces when held properly. Neither of these two designs was even approximately correct.

The stylus which MESSERSCHMIDT designed after very careful examination of the ductus and angular variations of the wedges in all periods of cuneiform script is reproduced on page 308, *ibid.* This stylus, if I understand him rightly, has a semicircular side, the natural form of the round reed being left on one side. The side opposite is cut flat and one edge of the semicircular reed is also cut flat. The writing end is then cut at an angle of about 45 degrees with the short axis, leaving a sharp point on the small

flat side. This stylus is, I understand, designed to made the signs of the Hammurabi period. His invention is in any case even more unlike the real stylus than the others¹.

The ordinary Babylonian stylus was made of the common reed-stem of the country, as we know from the name *kan luppi*, "Reed of the tablet," and it is a Sumerian invention as we know from its older name in that language, *gi-dub-ba*². In fact traces of the reed fibre may be seen in the impressions on many tablets. But it is evident that the bone stylus found at Kish was designed for writing the script of that period, and it will make the signs of the cuneiform script in any period from Gudea to the Persian period. But it will not make the narrow headed wedges of the pre-Sargonic period, which had just emerged from the linear style on stone. See for example the Šuruppak tablets published by THUREAU-DANGIN, *Recueil de Tablettes chaldéennes*, 9-15, and by DEIMEL, *Wirtschaftstexte aus Fara*, and *Schultexte aus Fara*. In some of the more archaic texts from Fara many of the signs have curved lines as in the older monumental script, and these could not possibly be made with a straight edged stylus. The signs for the figures 1, 10, 60, 600, 3600, 216000, and the fractions $1/2$, $1/3$, $2/3$, as made on clay in the pre-Sargonic period (see THUREAU-DANGIN, *L'Écriture cunéiforme*, 81-82), presupposes a stylus capable of making a wedge with a triangular head, and also a circle. If one end were made perfectly round and cut off square, and the other cut similar to the Kish stylus but with narrower back and sharper angle between the two sides it would be possible to write most of the figures employed on pre-Sargonic clay tablets, as well as the similar numerals of the

1. In 1906 PROFESSOR CLAY, writing without knowledge of MESSERSCHMIDT's contemporaneous paper invented two styluses, one with a square end and one with a bevelled end somewhat similar to MESSERSCHMIDT's invention. He regards the square end stylus as original, and the bevelled end stylus as secondary. See *Babylonian Expedition of the University of Pennsylvania*, XIV 17-20. He observed that a large number of tablets have the tops of the wedges sloped to the right, and he consequently supposed that this was caused by the use of a bevelled edge. In fact the real stylus will produce any of the peculiarities of wedges noted by MESSERSCHMIDT and CLAY, if it be held in an untrue position. These peculiarities are really due to the styles of handwriting. See also BREASTED, *Processes of Writing in the Early Orient*, AJSL. 32, 241 ff.

2. *gi-dub-ba*, occurs first in an inscription of Gudea, Cyl. A 4, 25; 5, 22.

Sargonic tablets. The long oval cone-shaped stroke used for the figure before the measure *gur*, for example (REC. 497) may easily be made with a rounded stylus, by pressing the shaft sharply downward at an angle. In fact the small end of the Kish stylus when turned into the third or fourth position will make the half circle used for the numeral one of the Sargonic and pre-Sargonic script. I am inclined to believe, therefore, that the Kish stylus can be modified to write the cuneiform script from the very earliest period of its birth, when the linear stone script was transferred to clay tablets. For those signs which were written on clay in the old linear style a sharp tracer must have been employed. This tracer was used in making straight lines still used in a large number of signs. For example the signs *LIL*, *E*, *SIG*, *DUP* (REC. 423, 425, 464, 385) are half cuneiform and half linear as late as the Gudea period. It is difficult to understand how such signs could be made with the same stylus unless one end was used as a tracer. Our discovery proves that the Sumerian and Babylonian stylus was cut for use at both ends.

Several Assyrian *bas-reliefs* represent scribes in the act of making an inventory of the king's booty after a battle or conquest, and if we may depend upon the sculptor's design of the stylus on these monuments the Assyrian stylus certainly had only one end cut for writing signs. The clearest illustration of the scribe with tablet and stylus is reproduced in *Assyrian Sculptures*, H. KLEINMANN, Pl. 88-9. Beside the scribe with tablet is a second scribe with parchment¹ and pen (?), who is probably writing in Aramaic. The Assyrian stylus resembles a modern scalpel. The head seems to have a small knob and certainly could not be used for writing. This *bas-relief* is from the palace of Tiglathpileser III, 746-728, BC. For other illustrations see the *bas-reliefs* of Senecherib, PATTERSON, *Palace of Senecherib*, 55-56; *ibid.*, 52, and OLZ. 1906, 187.

1. Assyrian *m'aru*, KLAUBER, *Politisch-Religiöse Texte*, p. 75 and p. 164; HARPER, *Letters*, 568 Rev. 19.

CHAPTER X

The Pictographic Tablet.

In the upper stratum of the Sumerian Palace at A we found the oldest known specimen of Sumerian writing. See Pl. XXXI. It is not possible to distinguish between the obverse and reverse of this polished lime-stone tablet from its shape. Both sides are equally convex. The most perplexing aspect of the inscription is the fact that whereas the sign for *SAG*, "head" is a carefully drawn picture of the head and neck and obviously older than any known pictograph for "head", the form of the numeral for *one* is not so archaic as the club shaped design for *one* on the *Blau Monument*, or even on the lime-stone tablet from *Šurappak*, RA. VI 143. In fact the sign for *one* on this tablet is almost an equilateral triangle as found first in the time of *Eannatum*². The other signs on this tablet appear to be more archaic than several stone tablets which belong to the most archaic period of epigraphy³. The head represented here is cleanly shaven, and hence it cannot be so early as the inlaid plaque or any of the Sumerian figures which have beards. This is, therefore, an indication that the invention of writing in Sumer is not so old as has been supposed. At 'Obeid near Ur, Mr. Woolley found an inscription of the time of *Mesannipadda*, first king of the first dynasty of Ur. Now this text is certainly later than the *Kish tablet*, and later than the *Hoffman Tablet*⁴, the *Scheil Tablet*⁵, the *Jokha Tablet*⁶, the *Aleppo*

1. Previously the oldest known sign for *SAG* occurs on the *Blau Monuments*, A, Reverse, and perhaps on the *Nippur Tablet*, BARTON, PBS. IX No. 1 Rev. II 1.

2. *Stela of the Vultures*, Rev. I 33.

3. Note the carefully drawn picture of the hand, sign *ŠU*.

4. JAOS. 23, 19.

5. RT. XXII, *Notes d'Épigraphie*, No. 4.

6. SCHEIL, RA. 14, 93.

Tablet¹, the *Tablette de la Figure aux plumes*², and the Nippur Tablet³. In fact this inscription of the first dynasty of Ur does not appear to be any older than the Šuruppak tablets published by DEIMEL⁴. It is not probable that the Šuruppak texts are much older than the Ur-Nina texts of Lagash, *circa* 2900 BC. Consequently the dynastic list, which gives seven dynasties between the first dynasty of Ur and the dynasty of Akšak, of which Ur-Nina was a contemporary (and by most severe reduction of the figures of the dynastic list, Mesannipadda lived at least 4000 BC.) cannot possibly be taken seriously. It is extremely doubtful whether the earliest writing now known is earlier than 3500 BC. And this means that Mesannipadda cannot be placed before 3200 BC. Many of these numerous dynasties of the dynastic lists⁵ must have been contemporary, and the lengths of the reigns absurdly exaggerated.

The side of the tablet shew non Pl. XXXI, No. 1 is, I believe, the Obverse. The pictographs are drawn perpendicularly as on the Scheil Tablet, which I regard as the oldest inscription published hitherto. On all the other archaic tablets the signs have become either horizontal or at least oblique, that is in process of being turned to the left 90 degrees⁵. The Obverse of the Kish Tablet is divided into two columns by a double line and the Reverse by a single line. Obverse Col. I has two cases. Case 1 has "one." The fourth sign in this case may be taken for the similar sign *NITAḤ*, Blau A, Obv. IV 2 and PBS. IX, No. 1, Rev. II 1, where it also follows *SAG*, but the interior stroke is missing, and see Obv. II 1 where it also has the same form. *SAG-NITAḤ* "one slave" would make good sense, but then what can be done with third curious sign in the case? Is it *KALAG*? Note especially the form of *KALAG* in NIES, *Babylonian Inscriptions*, II, No. 2, l. 19, and CT. 10, 2, 22470, 3. We should then read 1 *sag-nitaḡ kal*, "One slave, a laborer." Case 2 has *SAG* and *URUDU*, and a

1. SAYCE, PSBA. 1914, 6.

2. *Découvertes en Chaldée*, Ép. XXXI.

3. BARTON, PBS. IX, No. 1.

4. *Wirtschaftstexte aus Fara*, and *Schullexte aus Fara*.

5. Cf. SCHEIL's remarks in RT., *Notes*, No. 4, p. 1.

defaced sign which is clearly not *NITAḤ*; it seems to have been-erased by the scribe himself. Since there is no numeral here *sag-urudu* or *sag-dá* is probably a proper name. Col. II, case 1 has one *NITAḤ-ŠU* and an unknown sign. I take this to mean "One slave is removed (?)." Col. II, case 2, has the numeral one and two signs which I cannot identify. The large sign consists of a sign with *EN* inserted into it. Compare DEIMEL, *Liste der Archaischen Keilschriftzeichen von Fara*, No. 311. The top of the second sign is obliterated but it is probably *NE, GIBIL*. See DEIMEL, *ibid.*, No. 148. Col. II, case 3, has *gub*, "is present."

Reverse Col. I has only one case 3 *sag-kalag*, "Three laborers." Col. II, case 1, has one *šu*, i. e., one of the three has been removed (?), and case 2 has two *gub*, i. e., the other two are present.

A small fragment of a baked clay tablet has been found in the Sumerian palace, a business record, in the script of the Urukagina tablets of Lagash. Only about one third of this mound has been excavated and I have hopes that a collection of this kind will be recovered in the deeper parts of mound A.

CHAPTER XI

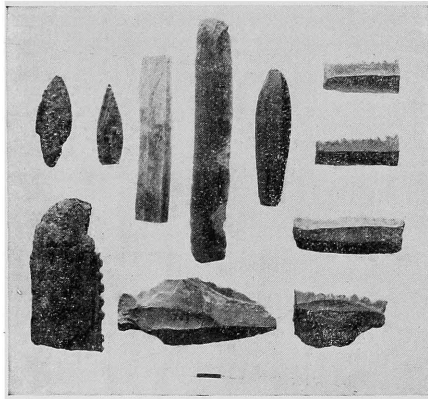
Miscellaneous Objects.

In the city ruins of Western Kish MR. MACKAY found a jar whose collar is decorated with a design in black paint. See Pl. XXXII, No. 2. This beautifully shaped oval jar has a low foot and moderately high carinated collar. It is remarkable for its thin delicate moulding of the type associated with the painted ware of Susa of the first period (3500-3000). The design consists of only a black band from which hang tassels as though the artist wished to represent a necklace, but the pattern belongs undoubtedly to the geometrical style and the shape of the vase clearly indicates the early period. The buildings of this area, however, are of the Hammurabi period and all the antiquities (tablets, implements, pottery) indicate the same date. Nevertheless, however its presence in such surroundings may be explained, the vase is an anachronism here. It must be assigned to the very earliest period of thin painted ware. Its shape alone indicates its classification. For a painted vase of this type see POTTIER, *Délégation en Perse*, Pl. XIX, No. 7 (First Period of thin ware), Pl. XX, No. 7; Pl. XXII, Nos. 8-9, and see Pl. XV, No. 2, a grave of the pre-Sargonic period, the two jars in the back ground. The types of Hammurabi pottery found by MR. MACKAY, Pl. XXXV, No. 3, do not permit us to assign this remarkable object to the first dynasty. It is nearly complete and is, I believe, the only well preserved pot of thin ware hitherto recovered in Mesopotamia. It would not be permissible to assume from this single specimen that the Sumerians manufactured the thin painted ware with painted geometrical decoration, but fragments of the thicker coarser ware of this class has been found by HALL at Tel El-'Obeid and by THOMPSON at Abu Shahrain in quantities. I have already discussed the few fragments found at Uḫaimir. See page 67. Among the fragments of painted ware from these ancient southern sites in the British Museum a

few may be most certainly classified in the first period of thin ware. The manufacture of the thin painted ware by the Sumerians in both the northern and southern areas may be regarded as proven.

Pl. XXXII, No. 4 shews a fragment from the upper edge of a black bowl, rectangular in shape and slightly convex on the sides. The rope pattern design is new to me and the fragment is hardly sufficient to determine its shape¹. Pl. L, No. 2 has three objects made of wood, decorated with a spiral groove. They have a striking resemblance to a cigar. A painted object of this class is photographed on Pl. XIX, No. 1, second object from the left. All of these objects were found in the old palace. We have been unable to suggest any name for them, nor to understand their purpose. An unidentified pictograph on the *Scheil Tablet, Recueil de Travaux, XXII, Notes, 4*, undoubtedly represents this implement. The flint saws, cores, arrow heads and implements found in various mounds at Kish are illustrated by the figure below.

1. The bowl was found at the old palace and belongs to the early period.



CHAPTER XII

Travels in the Southern Area.

On March 20th (1924) we closed our excavations for the season. The heat was already becoming oppressive for Europeans and our funds were practically exhausted. Miss GERTURDE BELL, the Honorary Director of Antiquities in Iraq, and MAJOR WILSON of the Department of Public Works represented the national Iraq Museum in the division of the antiquities. I left immediately for Diwaniyah to explore the region of Nippur in the Afaj Marshes, having in view more particularly the identification of the long sought site of Isin, for which I had already approached the Iraq Government relative to excavation. At Diwaniyah MAJOR M. G. LUBBOCK and MR. E. I. W. HARPUR, officials of the Mesopotamian Railways, received me in their house, which became my headquarters for operations in this area. The political officer of Diwaniyah gave me an introduction to Mohammad Shafiq, the Mudir of Afaj, and Dr. McLeod most kindly placed his ambulance Ford car and driver at my disposal, in which HARPUR and I travelled by a well made motor road to Afaj on the morning of March 22. Afaj is the only Arabic village of any importance in this great southern central archaeological area. It lies at the southern end of a labyrinth of great marshes on the Shatt al-Dhagarah, four miles south of the massive ruins of Nufar. A carefully made map of this entire area on a scale of one inch to two miles may be obtained by fitting together the following four sheets of the official Ordnance Map : No. 2 $\frac{D}{S.E.}$; No. 2 $\frac{H}{S.W.}$; No. 3 $\frac{A}{N.E.}$; No. 3 $\frac{E}{N.W.}$. Afaj lies E-N-E of Diwaniyah 19 miles, 23 by road. It has a good market, a sturdy but somewhat restless Arabic population of about 2000 inhabitants, a small serail and mounted native police under the Mudir of Afaj whose hospitality and efficiency are well known. With HARPUR, the Mudir and a well known

local native, who acts as agent for antiquities at Afaj, and who probably knows the region better than anyone, I at once went on to *Tal Duraihim*, commonly called *Drehem* by the Assyriologists owing to imperfect transmission of the pronunciation¹. An indifferent motor road runs east-south-east from Afaj, passing only about a quarter of a mile to the west of Duraihim. The ruins may be reached by motor over a bridge which spans a deep dry canal between the road and the mound. The natives have riddled the low city ruins of this site to the north of the high mound seen in HARPUR's photograph and innumerable temple accounts of Nippur have been found here since 1908. They are usually in fine condition and prove that the place served as a great depot for the sacrifices in the temple at Nippur under the kings of the third dynasty of Ur (2409-2301 BC.). Apparently every province in the vast empire of the first four kings of the Ur-Nammu dynasty of Ur sent animal sacrifices to Nippur as a state tax, and consequently the enormous number of records of these taxes preserved in the archives at Duraihim constitute a gazeteer and an onomasticon for the period. The place is situated three miles east-south-east of Afaj and six miles south-east-south of Nufar. It is a small well defined mound about 40 feet high in horse-shoe shape like Tal al-Bandar at Kish but not so massive. The photograph shews the western arm of the U shaped building. On the right the mound reaches its greatest elevation at the base of the curve. On the left of the photograph low lying city ruins which join the open north end of the horse-shoe shaped building may be seen. These low ruins extend about 200 rods northwards and are about 100 rods wide. The surface of this area is pitted with burrowings of the natives; for here the whole hill seems to cover the ruins of a huge complex of buildings filled with temple records. The natives dig a pit about six feet wide to a depth of 6-8 feet and then burrow under the surface in all directions, throwing up the earth like a

1. The word is probably the diminutive of *dirhamun*, palm garden. On Pl. XXVII, no. 1 will be found a photograph of the principal part of this *tal*, taken from the west by MR. HARPUR. About one half-mile to the west of this mound there is a luxuriant palm grove, but there is no sign of vegetation anywhere at the desolate ruins. The palm groves are marked on sheet No. 2 $\frac{H}{S.W.}$ just south of the motor road east of Afaj.

great colony of rabbits. As we approached the mound natives were seen working on the far eastern side but when we arrived not a trace of them could be discovered. Native digging is nominally forbidden by the Iraq Government, and the arrival of any European at a mound in Mesopotamia arouses at once the suspicion that he is an agent of the Department of Antiquities, fortified with a warrant for the arrest of illicit diggers. There is no doubt but that they nearly ruin a site for scientific excavation, and with the exception of the larger part of the mound at the north end of the ruins the place is already unattractive for such work.

The U shaped mound which forms the salient feature of the *tal* undoubtedly conceals a large and an important building. It is about 300 feet long, north to south, and 200 feet wide. The Arabs have trenched into the side of this building just at the northern end of the western arm; the photograph shews this trench. It has been dug some years ago, but good walling of sun-dried bricks of the Dungi period has been exposed here. I directed two natives to dig out some of these bricks from the rubbish heap and found a few with obliterated stamps. I also ran a trench into the eastern side of the mound in the hope of finding some evidence concerning the nature of the building, but the local labour was so untrained and unruly that I had little success in the few hours at my disposal. Only with difficulty did HARPUR and I get away from the mob which had collected, and no definite information could be obtained. It is clear that the building is *not* a temple. The Arabs assured me that a large number of tablets of the usual kind found at Duraihim were recovered in the trench on the western side. South-west of this mound beyond the derelict modern canal, about 200 rods distant, lie considerable ruins which I visited.

We returned to the house of the Mudir in Afaj about 5 in the afternoon of March 22, when HARPUR returned in the motor to Diwaniyâh. The Mudir placed a river boat, a guide and three natives at my disposal and I left at once for Nufar. Five horses were sent by a circuitous route to meet us at the point on the Afaj marshes nearest to Nufar. The ruins lie quite a long way from the nearest point attainable by water and on horse one crosses a desolate plain to the most impressive ruins of all Mesopotamia. These have been well

described by PROF. HILPRECHT¹ and by DR. J. P. PETERS². The fine house built for the *Expedition of the University of Pennsylvania*, which conducted astonishingly successful excavations there (1888-89, 1889-90, 1893-96, 1898-1900), under PETERS, HAYNES, HILPRECHT and FISHER, still stands in good state of preservation on the south-eastern side of the ruins. They are not nearly so extensive as those of Kish, but more compact and massive. I was never so impressed with any sight in my life. The grandeur of these lofty unbroken lines of mountainous ridges, whose concealed buildings lie deep beneath the plain level, cannot be described to sufficiently conjure the imagination of the reader. They do not belie the fame of Nippur in cuneiform inscriptions, and the Assyriologist cannot understand why the excavations there have been abandoned. Nufar stands in a region easily accessible to a good market and plenty of strong laborers. Clandestine digging is constantly going on here, but the place is much too difficult and vast to be affected by such feeble depredation. I had only two hours before sunset at Nufar.

In the evening, at the serail of Mudir Mohammad Shafiq in Afaj, the villagers brought in all sorts of antiquities. One of these was a stamped brick from Tal Laḥam. This pronunciation I verified in writing by the hand of the Mudir and there was no discrepancy in the pronunciation of the villagers, but some located it a short distance north-east of Afaj, and some south-east of Duraihim. The name does not appear on the large scale map at all and I suggest that the name has been distorted, and that *Tal Dulaihim*³, eleven miles south-east of Afaj, is the site from which this stamped brick came. It is exactly 13 inches square by 2 inches thick, and is impressed with the stamp of Ashurbanipal, who rebuilt the temple Ekur at Nippur. A large number of these bricks were excavated at Nippur⁴; and duplicates are constantly being found, probably at Nippur. Information obtained from Arabs is never trustworthy and the truth of their assertion concerning this brick can only be tested by more trustworthy evidence. Dulaihim is said to

1. *Explorations in Bible Lands* (1903).

2. *Nippur*, Two volumes, 1897.

3. *Dulaihim* is probably the diminutive of *dalham*, dark, gloomy.

4. Text in HILPRECHT, OBI. 82.

be an important group of mounds and the possibility that Ashurbanipal rebuilt some temple there cannot be denied without further exploration. The text refers to the building of Ekur to Enlil at Nippur, but Nebuchadnezzar used a stamp, which refers only to Babylon, everywhere in his kingdom, and it is not impossible that Ashurbanipal employed the same stamp at Nufar and Tal Laḥam (?) or Dulaihim (?).

The villagers shewed me at the same time a number of well known inscriptions from Isin and they invariably named Baḥriyāt as the site of their provenance. Several of them were certain that they could conduct me to this site and that evening the Mudir selected four mounted policemen and four guides for an expedition to this place early the next morning. This place is called *Ishān Baḥriyāt'* on the Ordnance Map, sheet No. 3 $\frac{E}{N.W.}$, latitude $31^{\circ}51'$, longitude $45^{\circ}17'$ east of Greenwich, 14 miles due south of Afaj. It is not possible to reach this place by motor at present owing to canals in the vicinity just south of Afaj. The location of Isin was first determined by COLONEL K. STEVENSON, formerly of the Ordnance Department of the Mesopotamian Army, and now stationed at York. PROFESSOR CLAY and the writer obtained this information from him and published our notes on the subject simultaneously¹. COL. STEVENSON succeeded in reaching this desolate place by motor from Diwaniyāh, but I was confidently assured by the officials in Diwaniyāh that it cannot be done now. After a ride of about two miles south from Afaj, we crossed a desolate region entirely waterless and abandoned by human inhabitants. The nearest water is 10 miles from Ishān Baḥriyāt, and we rode across a region which still shews signs of recent cultivation. We came upon a small Arab tribe in the desert six miles north of Baḥriyāt. The entire tribe manage to exist somehow by means of a well whose water supply is scant. Here we halted and were received by the

1. Ishān, written ايشان, means hill, land-mark. See MEISSNER, BA. V 112, and *nīshān*, p. 145. PROFESSOR MARGOLIOUTH informs me that *nīshān* is a familiar Persian word used in Arabic for "decoration". He regards *nīshān* as the original, and *al-nīshān* > *in-nīshān*, caused the Arabs to regard *n* as the article and then dropped it. The name seems to mean "Hill of the sailors", *Baḥriyāt* being for *Baḥriyyat*, fem. sing., used as a broken plural. This latter explanation is suggested by MR. G. R. DRIVER.

2. See CLAY, *A Hebrew Deluge Story*, p. 86, and JRAS. 1922, 430-1.

sheikh in a small reed hut. The tribe counts not more than 100 souls. They spend a good part of their time searching for antiquities, which seems to be about their only lucrative occupation. We arrived in the heat of the day and I saw not a sign of horse, cow or sheep in this miserable collection of huts. They soon brought me several inscriptions from Bahriyât all of which mention Isin. The guides from Afaj, however, now began to shew signs of uncertainty about the location of the place, and I employed an Arab from this tribe to take our party onward; he travelled of course on foot, but such is the astonishing fleetness of the desert Arab that we reached the *tal* six miles distant in one hour.

Ishân Bahriyât is a low mound covering about 200 acres and is compact. It does not consist of a series of mounds but there is another adjacent mound about a quarter of a mile to the west, which I had no time to visit. Bahriyât extends from north-east to north-west; the summit which marks the site of a large building is at the western end and here I ran a trench with ten laborers, who had been sent on ahead of us early in the morning. We could remain here only about 3 hours for there was no water for our horses and it was necessary to return to Afaj before sunset. From the trench it was possible to prove a late Neo-Babylonian occupation and a stamped brick with inscription of "Nebuchadnezzar king of Babylon, repairer of Esagila and Ezida, son of Nabupolassar king of Babylon", found here, shews that he restored buildings at Isin. The *tal* undoubtedly marks the site of Isin for we picked up several stamped bricks of kings of the Isin dynasty on the surface and brought them into Afaj.

A

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|-------------------------------|-----------------------------------|
| 1. <i>d. En-lil-ba-ni</i> | 1. Enlilbani, |
| 2. <i>sib nig-nam-šar-ra'</i> | 2. shepherd, who makes all things |
| 3. <i>Nippur-(ki)</i> | 3. of Nippur, [plentiful, |
| 4. <i>engar zi-maġ</i> | 4. far-famed faithful husbandman |

1. See also the *Inscribed Nail of Ellil-bani*, l. 2, by HOPE HOGG, *Journal of the Manchester Oriental Society*, 1911.

- | | |
|-----------------------------------|------------------------------|
| 5. <i>Uri-(ki)-ma</i> | 5. of Ur ; |
| 6. <i>me Eridug-(ki)-ga</i> | 6. the rituals of Eridu, |
| 7. <i>kug-kug-gi</i> | 7. he keeps pure, |
| 8. <i>en-še-ga</i> | 8. the beneficent lord of |
| 9. <i>Unug-(ki)-ga</i> | 9. Erech, |
| 10. <i>lugal Ī-si-in-(ki)-na</i> | 10. king of Isin, |
| 11. <i>lugal Ki-en-gi(ki) Uri</i> | 11. king of Sumer and Accad, |
| 12. <i>dam šag-gi-pad-da</i> | 12. the chosen husband |
| 13. <i>d. Innini</i> | 13. of Innini. |

The inscribed brick translated above I purchased from an Arab of the small tribe in the desert six miles from Baḥriyāt; there can be no doubt concerning its origin for it is a duplicate of one actually picked up on this mound.

B

- | | |
|---|------------------------------|
| 1. <i>d. Iš-me-^a. Da-[gan]</i> | 1. Ishme-Dagan, |
| 2. <i>[ū-a] Nippur-(ki)</i> | 2. repairer of Nippur, |
| 3. <i>[sag]-uš</i> | 3. who establishes |
| 4. <i>Uri-(ki)-ma</i> | 4. Ur, |
| 5. <i>[ud]-da-gub¹</i> | 5. who brings light |
| 6. <i>Eridug-(ki)-ga</i> | 6. unto Eridu, |
| 7. <i>en Unug-(ki)-ga</i> | 7. lord of Erech, |
| 8. <i>lugal Ī-si-in-(ki)-na</i> | 8. king of Sumer and Accad, |
| 9. <i>lugal Ki-en-gi-[ki Uri]</i> | 9. king of Isin, |
| 10. <i>dam ki-āg</i> | 10. husband beloved |
| 11. <i>d. Innini</i> | 11. of Innini ² . |

The stamped brick translated above was excavated on the mound Ishān Baḥriyāt and consequently its identification is determined.

1. The same title occurs in *ud-da-gub é-kur-ra*, OBI. 68 I 12, and for *ud-da-gub-ba*, see PBS. X 283, n. 1.

2. For a duplicate of this inscription, see CT. XXI 20, 90201 and 21, 90173. BM. 90201 has an additional line between lines 7-8.

EXCAVATIONS AT KISH

We reached Afaj at sunset, March 23, where the motor of the political officer of Diwaniyāh awaited me, and after packing all the objects obtained from Isin, Nippur and other sites, I returned that evening to Diwaniyāh. For a European unaccustomed to the heat of the country, an expedition of 30 miles on horse at this time of the year into such a barren region as that south of Afaj is most exhausting. At present excavation at Isin would be extremely difficult, unless water can be obtained by sinking a well, such as we found in the very worst part of the plain at the camp of the forlorn little tribe. Buried cities dot the plain in every direction in the vicinity of Isin. Several could be seen to the west of our route and at least two large ones to the south of Baḥriyāt. An expedition at this place must work from Afaj, and the canals can easily be bridged for a motor road, but there is apparently no labour to be obtained here. The excavator would have to house his workmen and transport all their supplies. Baḥriyāt has not been pillaged to any extent by the natives.

On March 24th and 25th MR. HARPUR and I did some work at Wannah-wa-Sadum, 13 miles north of Diwaniyāh. He and MAJOR LUBBOCK most kindly placed a small motor trolley at my disposal; for the Mesopotamian Railway passes right through the mound. A number of glazed coffins of the late period were found when the excavations for the railway were made some years ago. This has long been known as the site of ancient Marada. On Pl. XXXIII will be found a rough plan of this site. Its U shaped configuration reminds one of Nufar, but the mounds are low and incomparably less impressive. The Hillah branch of the Euphrates skirts the eastern side of the mounds. The highest part of the ruins, marked A, rises about 50 feet above plain level, and here the natives have riddled the surface with trenches. The temple is certainly located here; for unmistakable signs of a ruined *ziggurat* can be detected. In the large mound, marked B I, ran a deep trench but found only late pottery and some glazed ware. The debris of the Neo-Babylonian period which overlies the older periods is very deep at this site. The mounds extend about two miles east to west and a half mile north to south. There is plenty of labour in this vicinity and excavation here can be

conducted under more pleasant circumstances than at any site which I saw in Mesopotamia.

When I arrived at Baghdad in December 1923 on my way to Kish, several natives informed me that seals and inscriptions were being found at a site north east of Baghdad towards the Persian border. I most urgently besought them to bring me in a stamped brick from this place, when I should return from the excavations in the spring. I reached Baghdad March 29th, and left for home April 4th. During my brief rest there a dealer brought me the desired inscription, a perfectly preserved stamped brick of the period of Dungi with the following text. 1) *Ur-d-Nin-giš-zi-da* 2) *na-ra-am d-Tiš-pak* 3) *pa-te-si* 4) *Aš-nun-na-ki*, "Ur-Ningišzida, beloved of Tišpak, governor of Ašnunnak." This brick came from *Tal Asmar*, said to be 23 miles E-N-E of Baghdad beyond the Nahr Awan, and was found in January 1924¹. There are five other mounds in this vicinity, just south of Asmar, in a direct line, I am told, and their names are, in order from north to south, Tal Ajrab, Tal Abu ʿTyur, Tal Abu-Hanzir, Tal Smak and *Tal ed-Deir*. Can this last name be a survival of the ancient *Der*, capital of Ašnunnak? I can get no definite information from the official maps, but the long sought Ašnunnak has been located; for my information came from a most trustworthy source. This famous prehistoric halting place of the Sumerian immigrants east of the Tigris is Tal Asmar. Duplicates of this brick have long been known. Two are now in the Hoffman Collection of the General Theological Seminary in New York City, and were published by RADAU, *Early Babylonian History*, p. 433. POGNON published three stamped bricks of three other *patesis* of Ašnunnak as long ago as 1892, the *Muséon*, p. 253. But he never divulged his secret. Further details and accurate topographical information concerning these *tals* east of Baghdad have been most earnestly solicited from one who knows the entire country, and his report will be printed in the near future.

1. Asmar lies near the road from Baghdad to Beled Ruz and Mandali, 11 miles beyond Sifwi where this road crosses the Diala River. [Information by MR. R. S. COOKE, of the Ministry of Awqaf, Baghdad.]

CAVE CANEM

Note for page 91

When I described the discovery of the three clay dogs to PROFESSOR ROSTOVZEFF, of the University of Wisconsin, and explained to him their expiatory purpose, when they are placed beneath thresholds, he at once called my attention to the apparently similar religious custom in Roman times. In the "House of the tragic poet" at Pompēii inside the door on the floor of the vestibule (*ostium*) of the atrium a great dog was found, designed in mosaics on the floor, and beside it the inscription, *cave canem*, "Beware of the dog." See OVERBECK, *Pompeji in seinen Gebäuden, Altertümer und Kunstwerken*, 4th edition, 254-5. For the figure, see DAREMBERG ET SAGLIO, *Dictionnaire des Antiquités grecques et romaines*, p. 888. This may have, however, no religious significance, and may represent the real chained dog which was kept at the entrances of Roman houses. See J. MARQUARDT, *Das Privat Leben der Römer*, 2nd edition, by A. MAU, p. 236. Petronius refers to a dog painted on the wall of a house. See Petronius Arbiter, Ed. W. D. LOWE, § 29.

Ad sinistram enim intransibus non longe ab ostiarii cella canis ingens, cantena vinculus, in pariete erat pictus superque quadrata littera scriptum "cave canem". "For at the left of those entering, not far from the porter's lodge, there was painted on the wall a huge dog, fastened with a chain, and above was written in capital letters, 'Beware of the dog'." Lowe cites Homer, *Odyssey*, 7, 91-3, to prove a similar Greek custom.

"Golden and silver dogs were on each side,
Which Hephaistos executed with cunning understanding,
To guard the gate of the house of great hearted Alcinous."

The comparison between the Babylonian magical use of dogs, buried beneath thresholds to guard the home, and the Greek and Roman statues, paintings and mosaics of dogs, is at least most instructive.

APPENDIX

ON THE HUMAN REMAINS EXCAVATED AT KISH

BY

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The material considered in this report includes eight crania, two of which are fairly complete, five are fragmentary but capable of examination and measurement in the cranial portion, and one which was broken up into small pieces and could only be conjecturally restored.

The report has been divided into two parts; the first is a technical description of the skulls with tables of such measurements as could be made; the second contains a general discussion of a less technical nature on the general ethnological problems raised by an examination of the material. It has been written in such a way that it may be read independently of Part I by those who are not interested in the detailed description of human bones.

PART I

Description of Crania.

Skull 3¹, U.G.A. 28 (Plate XLVI), is the skull of a powerfully built individual, an adult male probably rather beyond the prime of life. The skull is relatively and absolutely extremely narrow. The forehead is rather low and retreating, the supraorbital ridges are marked. Viewed from in front the top of the vault appears to be slightly keel-shaped. The orbits are high, the external angular process extremely prominent, and there is distinct evidence of alveolar prognathism. The palate is broad and divergent but owing

1. The skulls under discussion have been numbered in accordance with the system in use in the department of Human Anatomy, Oxford "As. 105/1 H.A., 2 H.A.", etc.

to dental disease it is somewhat difficult to ascertain its original shape. The glenoid fossae are deep and the mastoid processes relatively large. The ascending ramus is low and relatively broad. The teeth are much eroded, the excessive erosion being probably due to pathological causes; I could not find any definite evidence of dental caries. The disease appeared to consist in the failure to produce secondary dentine which has appeared on the other skulls in this series, where there has been excessive wear on the teeth.

Skull 4 (Plate XLVI) belonged to an adult male in the prime of life. The general type is similar to skull 3, but there are slight individual differences. The skull is still elongated but is a little shorter and at the same time broader, although the index is still under seventy. The forehead is more upright and the superciliary ridges are not marked. The orbits are high and less straight than in the previous specimen. The alveolar prognathism is marked. The palate is large and divergent. The glenoid fossa is of medium depth and the mastoid process is small. The teeth in the upper jaw shew no traces of dental disease, but there is a slight irregularity in the position of the third molars. The mandible has a very short ascending ramus; the coronoid process is high in relation to the condyle. The teeth shew a slight degree of attrition, which can be observed even on the third molars, in spite of the irregularity of those teeth in the upper jaw.

Skull 5 is also that of an adult male. It is considerably damaged and the face is entirely missing. It is less elongated in cranial form than the two preceding specimens, but appears to be otherwise very similar to number 3. The forehead is retreating and the brow ridges are marked, the massing of the bone taking the form of two semicircles, not forming a bar across the whole forehead. Viewed from the front, the cranium appears to be slightly, but not markedly, keel-shaped. The teeth in the lower jaw are large and there is no trace of either third molar. There is no dental disease, either in the fragmentary teeth which have survived from the upper jaw, or in those of the mandible. The latter has a relatively high ascending ramus, with a small antero-posterior diameter. There is marked eversion along the posterior border, superior to the angle.

Cranium 6 (Plate XLVII) is that of an adult male. Viewed in *norma*

verticalis it appears to be of an entirely different type to those which have been described. It is somewhat rounded in form, and is both relatively and absolutely shorter and broader than the other specimens. When viewed in *norma facialis* it appears to be flattened and in *lateralis* there appears to be a slight flattening in the region of the obelion. The face is unfortunately extremely fragmentary but the orbits as far as can be judged appear to be inclined downwards and outwards. The glenoid fossa is deep with what appears to have a considerable extension of the articular surface forward over *eminentia articularis*. The jaw presents no remarkable features and does not seem to differ essentially from the other jaws examined; it is not of the type which is frequently associated with this type of skull.

Skull 7 is that of an adult male¹. It belongs to the first type. It is very elongated, with a low and receding forehead. The brow ridges are not well developed but there is a massing of bone at the glabella. The top of the cranial vault is slightly keel-shaped. The orbits appear to have been relatively high but they are badly preserved.

Skull 8 is that of an adult¹. The general smoothness of form suggests a female skull. In size this specimen is half way between the male skulls of the same type and the one undoubted female. I think that it probably belonged to a large female, possibly the archaeological evidence may be able to decide this point. The forehead is low and the brow ridges are poorly developed. The top of the cranial vault is rounded and there is a general absence of muscularity. The facial portion is too broken for any observations. The coronoid process is relatively high and the ascending ramus is narrow. The teeth shew signs of considerable erosion, possibly in this case also, pathological.

Skull 9 is that of an adult female¹. It belongs to the first type. The forehead is however rather more vertical, a feature quite consistent with the difference in sex. The vertex is flattened not keel-shaped. The face is missing. The jaw is small but for its size stout, with a relatively low coronoid process. The teeth are worn, but are in good condition.

1. Not reproduced here.

Skull 10 is of doubtful sex¹, and may have belonged to a comparatively young man. It is very fragmentary. From such parts of it as I have been able to restore, it appears to have belonged to an intermediate type. It is certainly broader than type I and narrower than type II. The forehead is upright and the brow smooth. The vertex is flattened. The third molar is absent in the lower jaw of which the ascending ramus slopes backwards. There is considerable wear on the teeth which survive.

TABLE I CRANIAL PORTION

Serial Number	Estimated cranial capacity	Glabello-occipital length	Ophryo-occipital length	Naso-occipital length	Basion-Bregma	Minimum Frontal Width	Stephanic Width	Greatest Breadth	Vertical Index	Cephalic Index
3	1409	193	190	191	137	88	101	129	70.98	66.84
4	1328	191	189	186	127	92	100	132	66.49	69.11
5	1420	193	191	189	133	—	111	134	68.91	69.43
6	1495?	173	170	171	—	93	118	142	—	82.08
7	1431	189	188	188	—	—	110	128	—	67.70
8	1402	184	182	—	—	92?	105?	135?	—	73.37?
9	1181?	178	177	—	—	90	108??	120?	—	67.42?

TABLE II FACIAL PORTION

	Basio-Alveolar Breadth	Bizygomatic Breadth	Bimalar Breadth	Bijugal Breadth	Ophryo-Alveolar	Nasio-Alveolar	Facial Index	Nasal Height	Nasal Breadth	Nasal Index	Intra-Orbital Width	Orbital Height	Orbital Width
3	97?	125?	93	95	90	62	49.60	54	24	44.44	23	44	32
4	95	137	89	94	90	62	45.20	54	24	44.44	24	38	33
	Orbital Index	Palato-Maxillary Length	Palato-Maxillary Breadth	Greatest palatal Breadth	Palato-Maxillary Index	Length Molars and Premolars							
3	72.73	52	35	36	67.31	34							
4	86.84	52	39	43?	75.00	42.							

1. Not reproduced here.

TABLE III MANDIBLES

Serial Number	Symphysial Height	Coronoid Height	Condylloid Height	Condyllo-Symphysial Length	Bigonial Breadth	Ascending Ramus Breadth	Condyllo-Coronoid Breadth	Coronoid Index
3	33	62	64	101	102	31	42	41.58
4	28	58	59	90	92	33	41	45.56
5	—	71	74	123	—	34	45	36.59
6	40	65	67	108	—	34	47	43.52
7	35	63	66	111	—	34	47	42.34
8	—	68	66	—	—	29	43	—
9	25	51	59	93	—	31	43	46.24.

PART II

General Ethnological Considerations.

The ethnological position of the Sumerians has attracted a good deal of attention and various writers have expressed very different opinions. Dr. Günther in his recent encyclopaedic work on the German people has taken up a position which appears to be self-contradictory. He says that in the fifth millenium B.C. the Sumerians with every probability seem to have been a people with a Nordic "upper stratum" and a round headed flat nosed "(inner Asiatic?) lower stratum" and "it may well be that in this upper stratum we have the earliest of the Nordic migrations." The fall (Untergang) of the Sumerian world was due to the dying out of the creative Nordic upper stratum. The Sumerian fall was ushered in by the immigration of Semitic-speaking folk of Oriental race¹ [the meaning of this term

1. This Oriental race which will be found described in BAUR-FISCHER-LENZ, *Grundriss der menschlichen Erblichkeitslehre und Rassenhygiene* (referred to hereinafter as FISCHER, *Grundriss*), is the Oriental branch of Elliot Smith's Brown race; it does not appear to have received a name from English anthropologists. As Günther points out, it is not to be confused with Deniker's Oriental race, and the term Oriental should, therefore, be avoided, especially since Morant has recently used it (*Biometrika*, 1924) far more legitimately to refer to the races

will be discussed later] who formed a further stratum over the Sumerians'.

On a later page (*op. cit.*, p. 454) he states that up to the second millennium B.C. Asia Minor, Mesopotamia, and Armenia were racially a unity, and were peopled by the 'Vorderasiatische' race, a race usually referred to in England as Armenoid. In the second millenium there was an introduction of Nordic blood mixed with the Oriental race of Fischer. Fischer¹ believes the centre of dispersion of this long-headed Brown race to have been the Arabian Peninsula. They had Nordic leaders and the Semites today are a mixture of these two races, namely Armenoid and Brown races.

If I interpret Günther's position correctly he seems to believe that the Sumerians belonged essentially to the Armenoid race. He has only stated with a query the possibility of inner Asiatic influence, without specifying exactly what he means, but his reference to the flat nosed people suggests that he means Mongoloid peoples. The crania before us have, as far as can be judged, no Mongoloid traits, although in the broken condition it would be hard to give a categorical negative. His later statement where he prefers Armenoids seems to be his final opinion. This agrees well with the evidence before us. But I can see no evidence of Nordic blood, indeed if it was confined to the leaders, at the most one in a hundred, it would hardly be visible to the anthropologist, except by chance, or in a big series.

The suggestion that the later invasion of the Semites, an invasion of long-headed peoples from Arabia, formed an upper stratum over the old Sumerian Armenoids is well in accordance with the facts as presented by the material before us, but the dates must be reconsidered.

With certain reservations then Günther's theories are confirmed by the present evidence. Another recent writer Dr. Hall² has put forward a very different theory.

He suggests that the Sumerians are of Indian origin and are akin to the

commonly called Mongolian. 'Nordic' is similarly used in a *typological* not a *geographic* sense.

1. DR. HANS GÜNTHER, *Rassenkunde der Deutschen Volkes*, p. 284.

2. FISCHER, *Grundriss*, I.

3. *Ancient History of the Near East*, p. 174.

Dravidian peoples, a position which, as will be shewn later, is hardly tenable in the light of the present evidence. Elliot Smith (*Ancient Egyptians*, p. 151 ff.), takes a very different view which is criticized by Hall (*loc. cit.*). He states that "the old Babylonian sculptures demonstrate the fact that the earliest Semites to enter Mesopotamia and Babylonia had the Armenoid type of nose and the characteristic flowing beard, at the time they intruded into the dominions of the kings of Sumer and Akkad." He continues to shew that these Armenoid peoples have left modern representatives who are commonly known as Semites, but who have no more claim to that name than the Egyptians have to the name Arab. In a subsequent chapter he suggests that, "The Egyptians, Arabs, and Sumerians may have been kinsmen of the Brown race, each diversely specialized by long residence in its own." Subsequently he maintains the Armenoids of Northern Syria were able to descend the Euphrates and vanquish the more cultured Sumerians.

His position has been attacked by Hall (*loc. cit.*) as being self-contradictory. It would seem however that he wishes to contrast two types in Mesopotamia, namely an earlier comer, Sumerian belonging to the Brown race and later Semitic Armenoid conquerors. It should be remembered that he believes that the cultured race were those people akin to the ancient Egyptians, whereas the destroyers of the culture were those belonging to his 'alien' race. Apart from other considerations it would appear that he has neglected to consider the facts of history. On philological grounds we must suppose the invaders to have come from southern Arabia. There is no reason to suggest that this area was, in early times, peopled by Armenoids. For this reason, then, the evidence seems to suggest that Elliot Smith has reversed the actual facts of history.

With these general considerations before us, it is convenient to consider the evidence which is provided by the crania under consideration. I have drawn attention in the first part of this report to the two types represented. The long-headed type, of which most specimens have survived, is remarkably consistent in form and may be conveniently compared with the Proto-Egyptians, though we shall see later that there are certain differences. The skulls are relatively extremely long and narrow, of small cubic dimen-

sions and occasionally of massive appearance with heavy brow ridges and a keel-shaped top to their heads. The area on the sides of the head for the attachment of the temporal muscles is great but the jaws are small and comparatively frail. Although to a certain extent the lack of width in the skull is made up by an increased height the cranial capacity is not great.

A search through the collection of Egyptian crania in the Anatomical Department in Oxford resulted in the finding of a number of specimens which were similar in type, but the general slenderness of the Egyptian crania and their slightly more rounded appearance seemed to suggest local variation. Skulls from the Eastern Mediterranean also shewed great similarities.

It seems probable that we are dealing with the Eastern variety of the Brown race, which Fischer has termed Oriental and which are closely akin if not similar to the Mediterranean race, called by Fischer the Western race. The extreme narrowness which the tables shew is remarkable, and suggests that possibly we are dealing with a local variety.

The general *cranial* form is similar to that of the Combe Capelle man, but this comparison must be considered chiefly as a descriptive suggestion; the form of the face in this specimen is very different from that presented by the crania before us. The jaws and face recall more closely than the cranial vault the Egyptian crania. The nose is, in the two cases in which measurement was possible, very narrow. There is a tendency in the same two skulls toward alveolar prognathism, that is to a projection forwards of that part of the face which is situated below the nose.

It is unnecessary here to discuss the distribution of this type of skull, but there is every reason to believe that they were the inhabitants of Arabia in very early times and it is probable that these skulls represent the physical type of the Semitic invaders from this area. This theory it will be noted coincides with the theory put forward by Günther.

The second type which is represented in the specimens before us is very different. Unfortunately owing to broken condition of the specimens it is not possible to be so precise as in dealing with the first type. We are certainly dealing with roundheads. These may be divided into two great classes, the Western group which includes the Alpine, the Dinaric and the

Armenoid races and the Eastern group which includes the various Mongoloid peoples. The characteristic feature of the latter is the form of the face; for as Reicher has shewn the differences in the cranial vault are not distinctive'.

The form of the nose and the fragments of the face in the only skull in which they were preserved are entirely un-Mongoloid and almost certainly indicate that the skull belonged to the Western branch of the brachycephals. — I am using 'branch' not necessarily to indicate relationship, but in the sense that these two great branches of the human race are both alike round-headed. — Such knowledge as we have of distributions makes it almost certain that we are dealing with representatives of the Armenoid race. The distribution of this people includes much of the eastern and southern Mediterranean shores, Syria, the coast of the Red Sea, and a small part of southern Arabia. They stretch from India through Central Asia to the northern shore of the Black Sea and westwards to the Balkans where they are co-terminus with the Dinaric.

Von Luschan has suggested that they were the earliest inhabitants of Asia Minor. They are not the early inhabitants of Egypt, where Elliot Smith regards them as aliens. He has shewn that they occur but rarely in the earlier dynastic tombs, but that they are much commoner in Lower Egypt in the graves from the sixth to the twelfth dynasty. They appear to have been gradually widening their sphere. They do not, for instance, occur in Malta till Bronze Age times. In most places we find that they have occupied the area which was originally the home of the Brown man. They form today what may be considered almost the dominant feature in the heterodox mixture of peoples in the Near and Middle East.

It is somewhat remarkable that at the time that they were filtering into

1. REICHER, *Zeit. f. Morph. u. Anthropol.*, XV, 1913, p. 421. See also MORANT, *Biometrika*, XVI, 1924, p. 1.

2. They form an appreciable part of the population especially in the north western area. It is possible that some of the crania excavated by Dr. Hunt in Secunderabad also belonged to this type, but they were so damaged by water that I cannot definitely express an opinion.

The presence of this type in India in modern and probably with a still wider distribution in ancient times as been insisted on because of Dr. Hall's hypothesis. These people must not however be confused with the Dravidian races, who are akin to the Brown race although some, called by Risley Scytho-Dravidians, are mixed with people who are akin to the Armenoids.

Egypt they were apparently being driven out of Mesopotamia by invading aliens from the south west. I have not been able at present to find comparative material to bridge the gap between Egypt and Mesopotamia at this time, in order to trace satisfactorily exactly how the movement of the Armenoid peoples was progressing.

If they were, as seems almost certain, the original inhabitants of the River Land, it is somewhat remarkable that the longheads should be so much commoner in our series. It is worthy of note however that we have only one certain and one probable female skull, a proportion between the sexes which shews how very illusory any judgement based on insufficient numbers may be. The proportions of the two types in our present series need not necessarily form any true guide to the actual numbers of each race which were present at this time'. It is interesting, however, to note how very distinct the two types are, and it would appear that on the whole, at the time to which these graves belong, the amount of physical mixture may not have been great.

The estimated cranial capacity of one skull from inadequate measurements is unsatisfactory. The cranial capacity of the longheads appears to have been small; that of the Armenoids is usually larger. We cannot however at present correlate intelligence with the size of the head.

Without, therefore, being able to suggest that there is anything in the physique which suggests a superior or an inferior race intellectually it would appear that in this case, at least, there are suggestions that we can identify race and culture. This cannot, however, be definitely stated until we have further evidence.

There are one or two general points not of an ethnological character which may be of interest. First, the curious depression that I suggested in my previous notes might be due to some sort of band or other artificial form of deformation, occurs in one of the skulls under review, and there are traces of what may be a similar depression in three. In three it does not occur and

1. *Circa* 3000-2800 BC. The Sumerians at this time were certainly in a minority at Kish, but very much in preponderance in the south (Sumer properly). [S. L.]

one is too broken for any opinion. The matter must, therefore, be reserved until we have a larger series.

I could find no traces of skeletal disease except in the teeth. Here there was not in the teeth I examined any evidence of caries, except possibly in one molar. There were suggestions of what may have been some form of pyorrhoea or other similar disease and some of the teeth shewed a wear on the crowns which seemed more likely to be the result of disease than of normal wear. One man had a very bad septic first molar which no doubt caused him considerable pain.

In putting forward the above suggestions I have been guided by a small number of defective skulls. The conclusions therefore cannot be considered as more than tentative. The skulls are, however, of the very greatest importance to the study of the early ethnology of the Mesopotamian region, and it is to be hoped that the excavators will be able to produce a similar or even greater number from this year's work, when it will be possible to study their finds by statistical methods.

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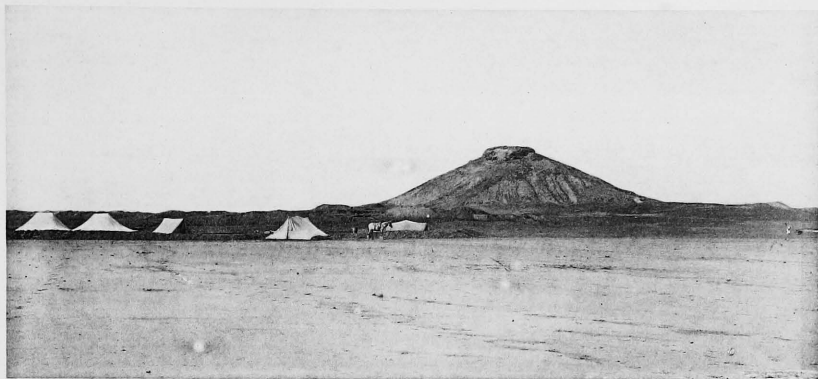
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1



2

1-2. Views of the Stage Tower of the Temple E-mete-ursag.



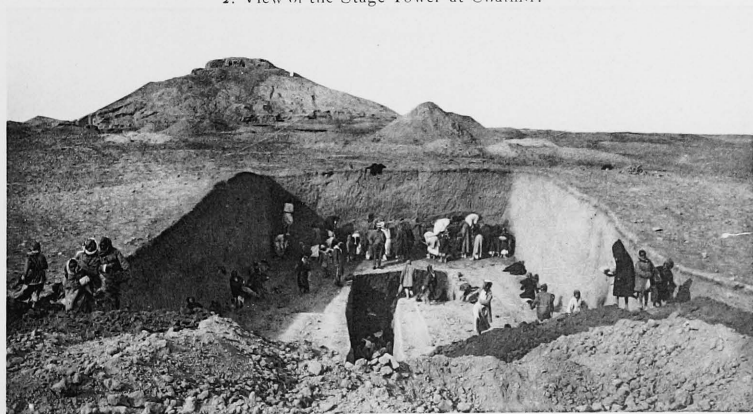
3. Sheik Mugheir.



1. Massive ruins of Harsagkalamma.



2. View of the Stage Tower at Uhaimir.



3. Temple of Ilbaba from the East.



1. Mound B just south of Harsagkamma.



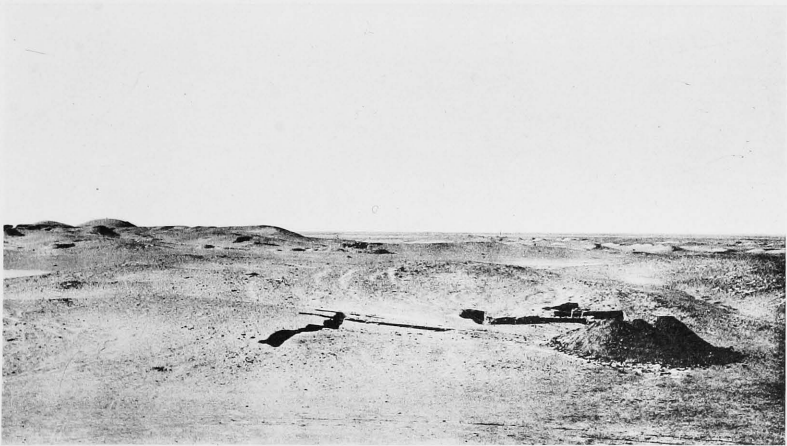
2. View of Double Ziggurat from the Palace Hill.



3. The Flat Plano-Convex Aerea, P.



1. View of Plano-Convex Area, from West. In distance Bandar and Inghara.



2. Initial stage of Work on Mound C.



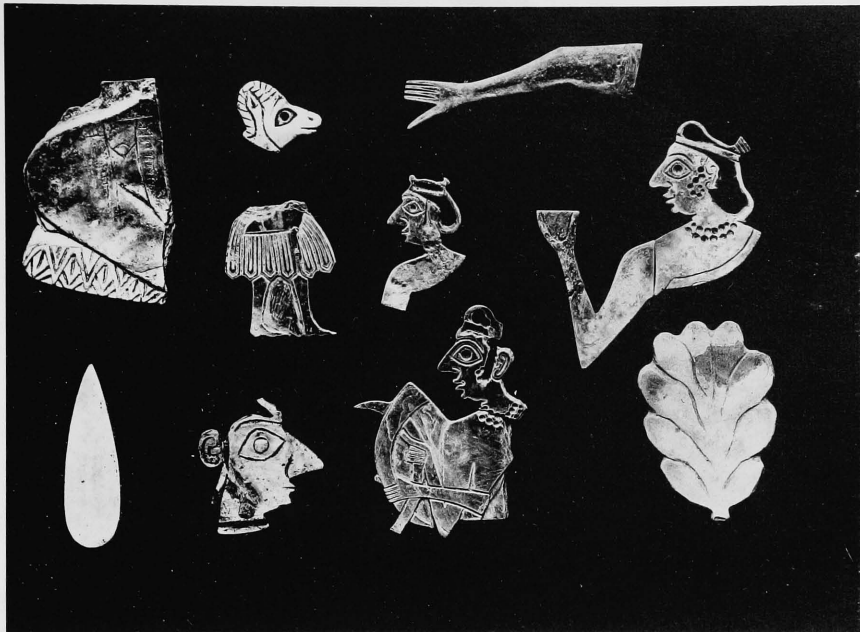
1. Beginning of Excavations in the Palace at A. Temple Mounds of Harsagkamma in Back Ground.



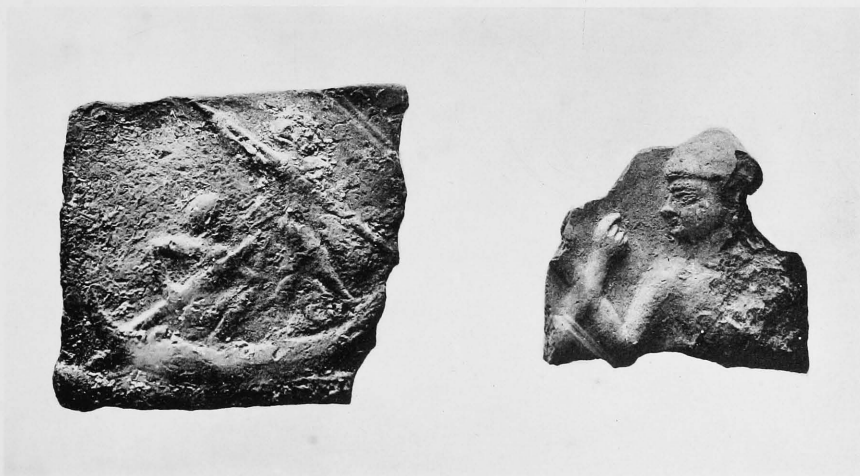
2. Excavations at the Palace later in Season.



3. View of Trenches on Western Side of Mound W, where the tablets were found.



1. Pieces of Mother of Pearl Inlay. Mound A.



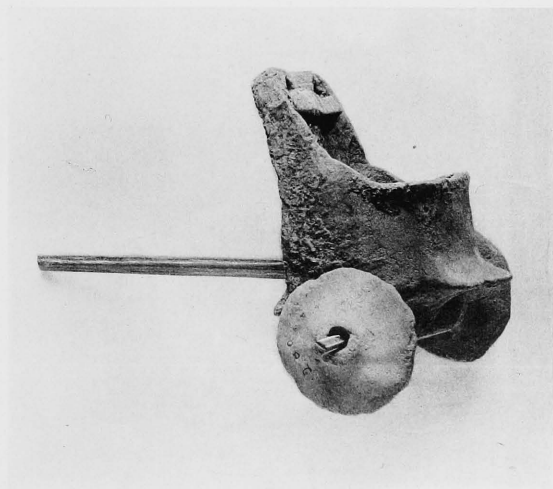
2. Two Terra Cotta Bas-Reliefs found near Kish.



1. Incised ware from Eastern Kish.



2. Chariot of Ishtar, from E-mete-ursag.



3. A reconstructed Model Chariot.



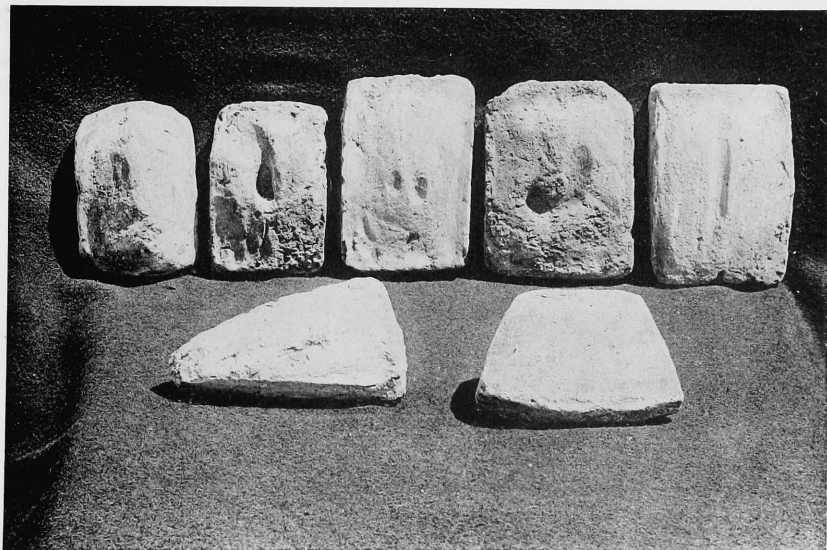
1. Wide Trench driven into Eastern Side of E-mete-ursag.



2. Western Wall of Palace Court and Stairway after Facing was removed



1. Flanking walls of Stairway, shewing facing of second period of Plano-Convex Bricks.



2. Specimens of Plano-Convex Bricks, Two on left earliest period. Also two bricks of a Column (Below)



1. Outer wall south of the Stairs of the Palace.



2. View of Court wall from South, shewing gate way at end of Column of Pillars and entrance to stairs on right.



1. View of the wall of Pillars.



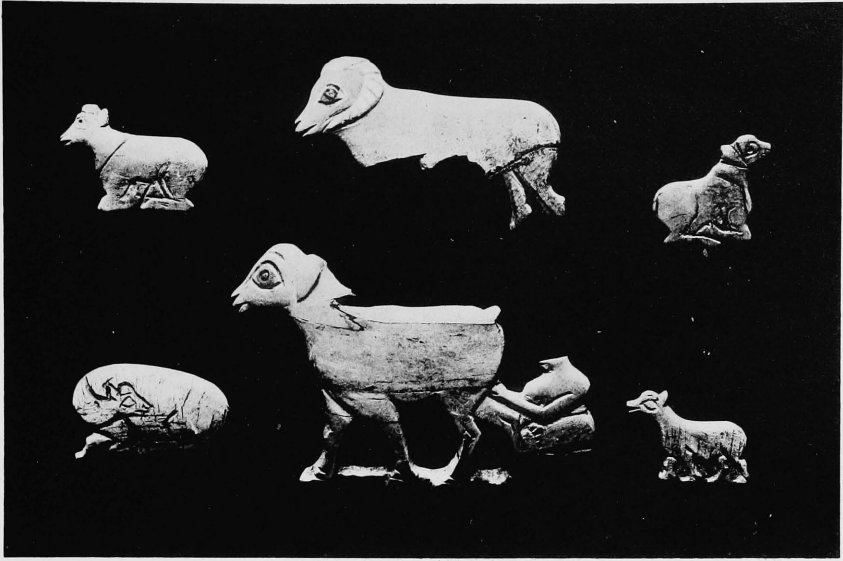
2. Western wall of the Palace.



1. Pillared wall, and South wall of Palace to left. On right the later wall of oblong Bricks.



2. The semicircular Chamber of the Palace



1. Selection from a large Number of limestone Inlay Pieces.



2. The new Type of Water Jar with Rude Face and Breasts of Mother Goddess on the Handles.



1. Pieces of limestone Inlay.



2. Top of the new Type of Water Jar.



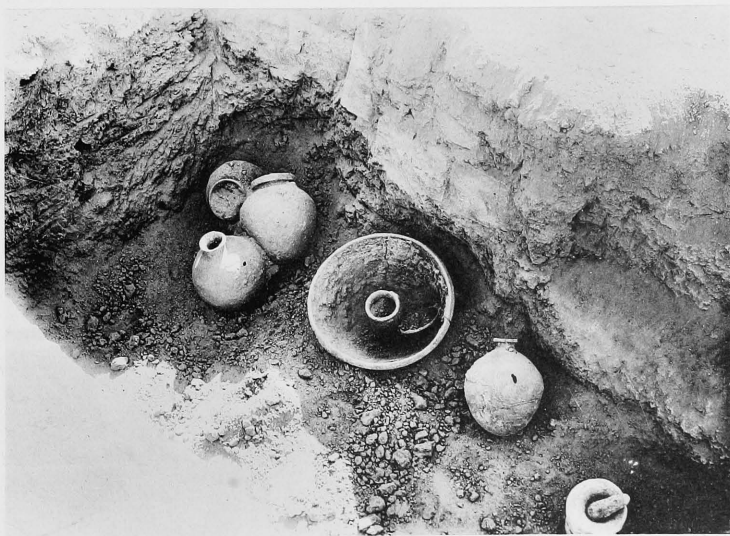
3. Top of the new Type of Water Jar.



4. Specimens of the new Type of Platter with Heater.



1. Burial of the early Sumerian Period.



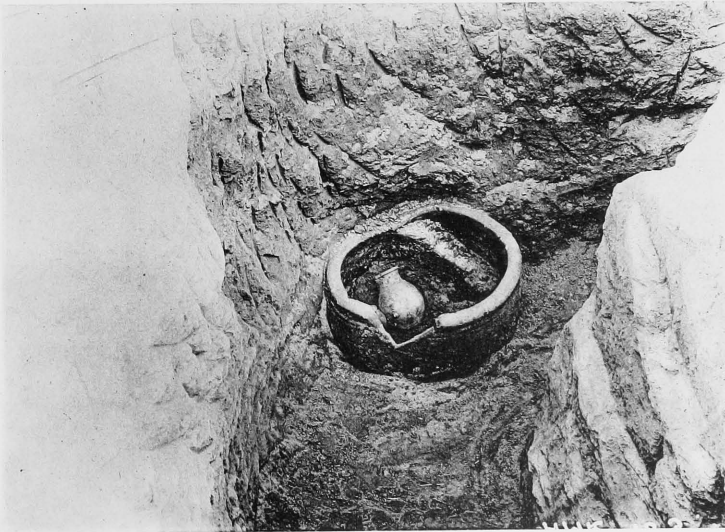
2. Burial of a some-what later but pre-Sargonic (?) period.



Burials of the early Period, See p. 76.



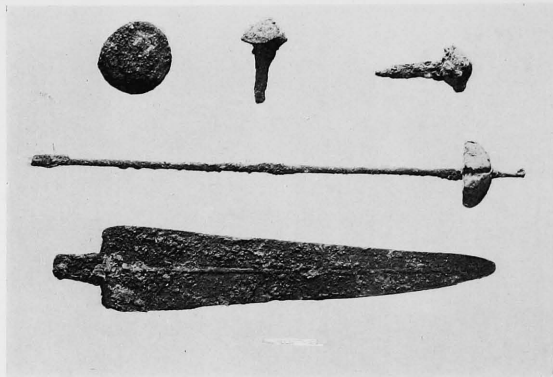
1. Burial of the early Period, See p. 76.



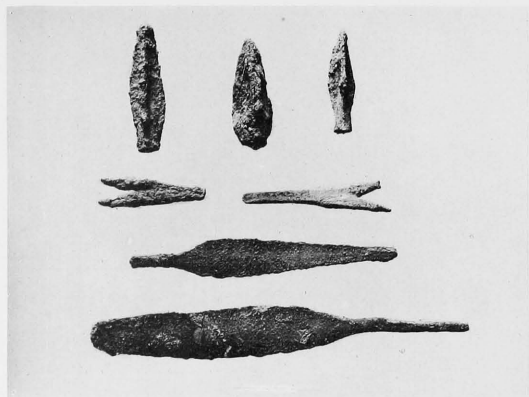
2. A cist Burial, See p. 76.



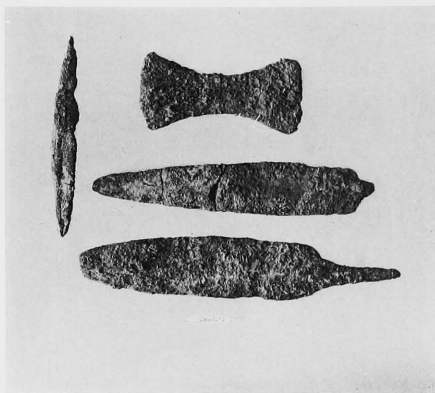
1. Earth burial of Hammurabi Period. Page 76.



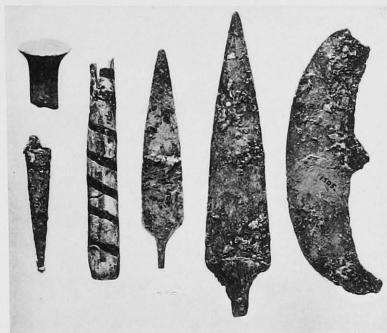
2. Dagger Blade, copper Pegs and long Pin (?). Page 77.



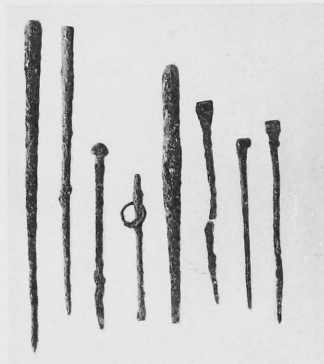
3. Copper Javelin heads, Forks and spear Heads.



4. Spear Head and concave cylinder. See page 77.



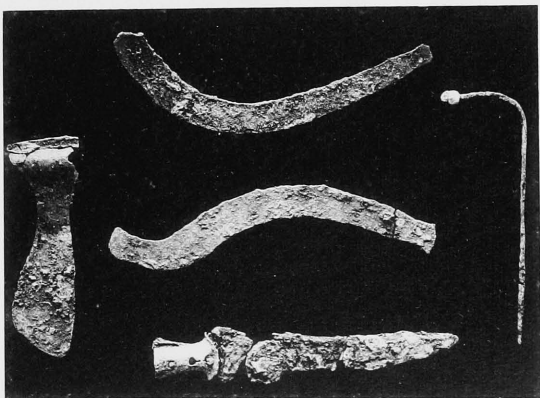
1. Two copper spear-heads and weapon See p. 77.



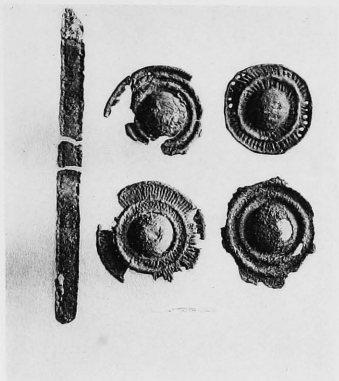
2. Copper Hair Pins, etc



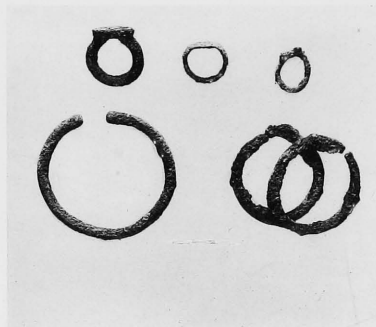
3. Copper Hair Pins



4. Copper weapons and Hair Pin. See p. 77-8



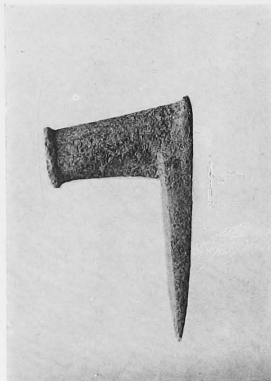
1. Silver Brooch, Sumerian Period. P. 78.



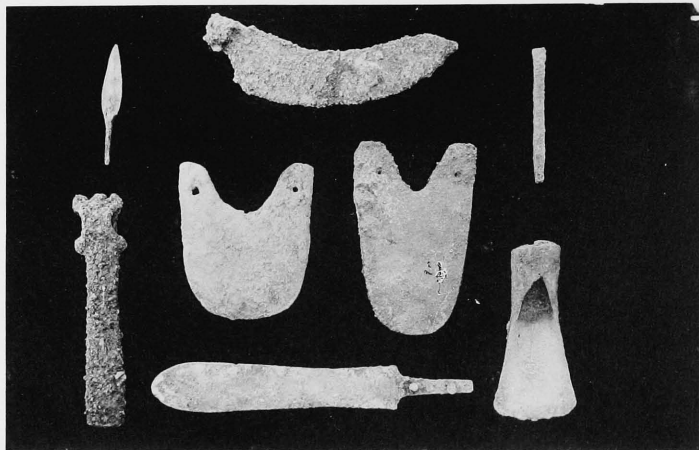
2. Copper Finger Rings and Bracelets. Early Period.



3. Copper Chisels. Early Period.



4. Bronze Hatchet. P. 78.



5. Bronze Implements of Hammurabi Period. P. 78.



1. Early Seals from Graves in the Palace. Pp. 78-81.



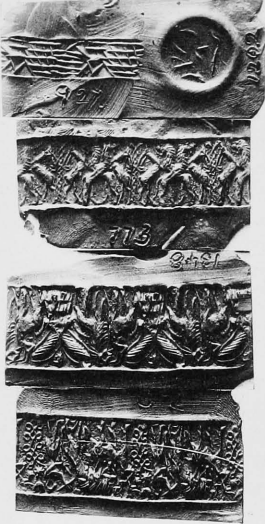
2. Early Seals from Graves in the Palace. Pp. 81-2.



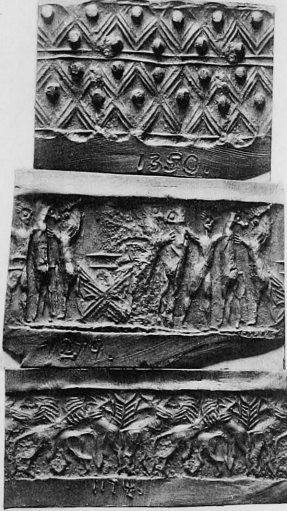
3. Two Seals of Middle and Early Periods. P. 82.



1



2

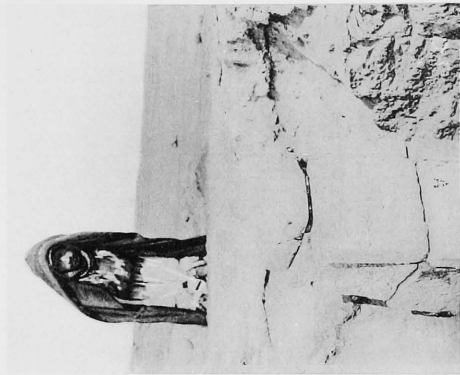


3



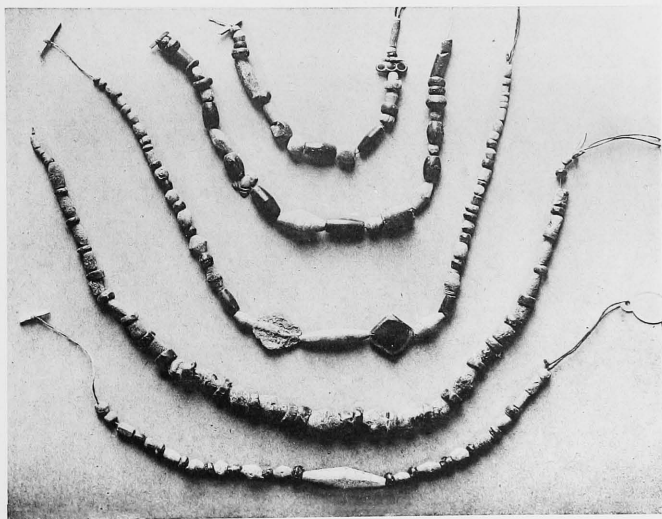
4

Seals of Early Period, with exception of n° 4 a. Pp. 83-5.

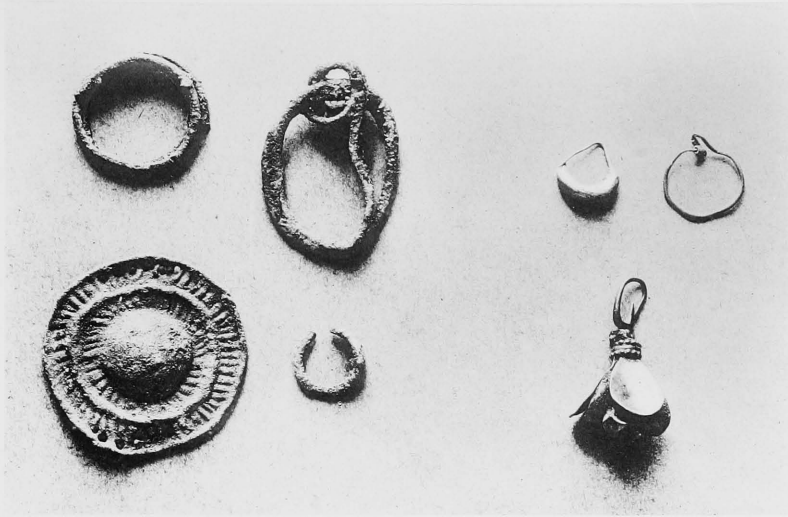




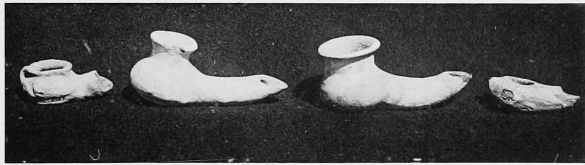
1. Strings of Beads from Neo-Babylonian Graves.



2. The same from early Sumerian Graves.



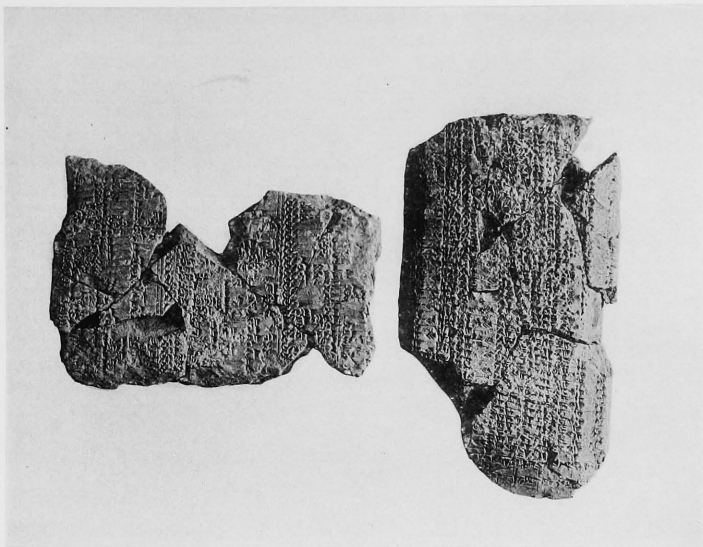
1. Silver (at left) and gold Jewelry (at right) from Sumerian and Neo-Babylonian Periods, Pp 89-90.



2. Lamps of the Neo-Babylonian Period. P. 90.



3. Strings of Beads from the Sumerian Period.



1. Two Syllabaries of the Assyrian period.



2 et 3. Two sign lists of the Isin Period.



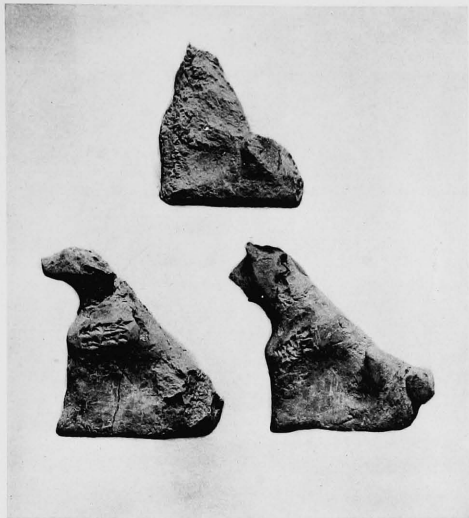
View of Duraihim from West.



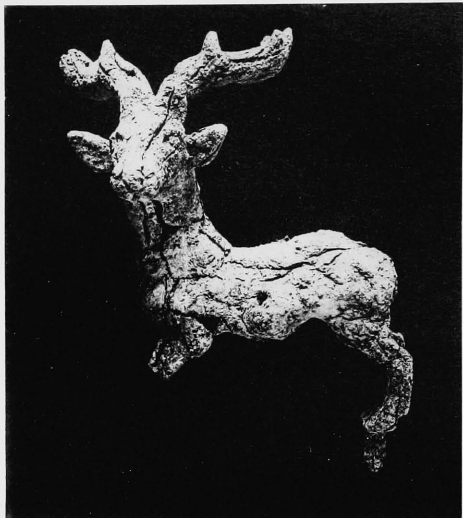
Tablets in Situ, Mound W



View of a Room of Tablets shewing Method of Hardening them before Extraction.



1. Models of Clay dogs. P. 91.



2. Bronze Stag. P. 92.



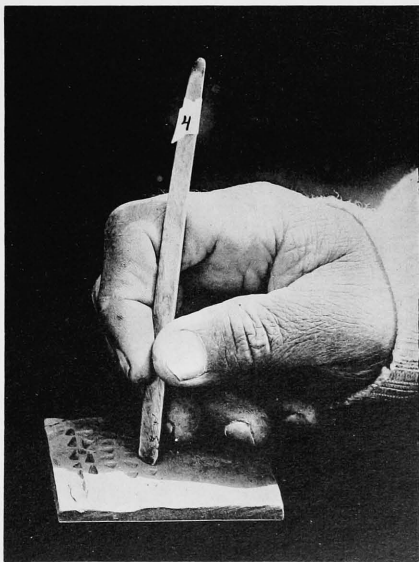
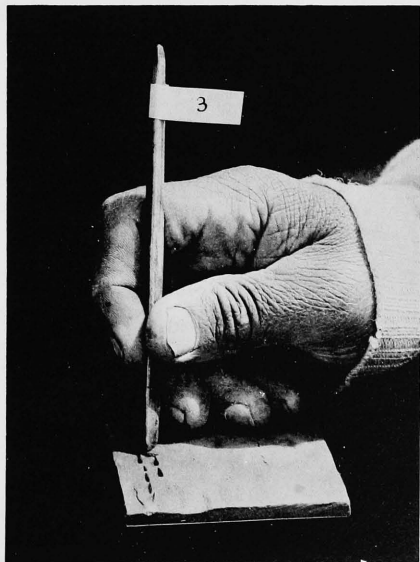
3. Group of Pottery from Graves and Wine Jars found in Rooms of the tablet Mound. Late Period.



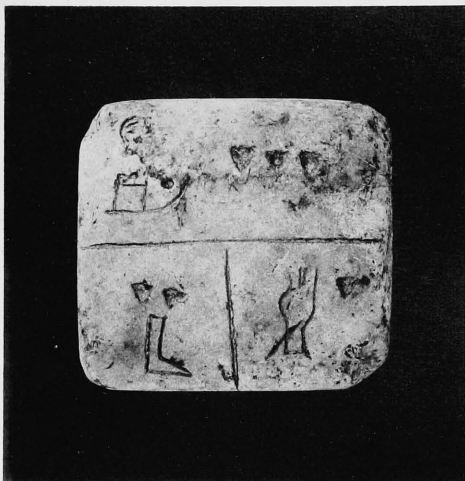
1. Bone Objects. On the Right, the Stylus, on the Left the Tracer.



2 Glazed Pottery found in Slipper Shaped Coffins at W.



The Stylus. See Pp. 95-8



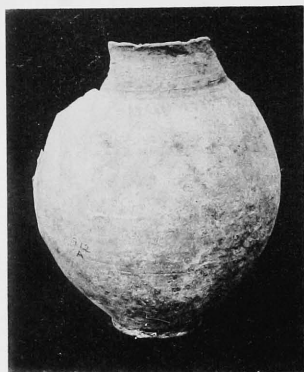
1-2. Obverse and Reverse of Pictographic Tablet See p. 99.



3. Signs and Elements of Cuneiform Writing, made with Stylus. See p. 96.



1



2. A beautiful Vase of thin ware with Collar decorated in Black design of Early Period P. 103.

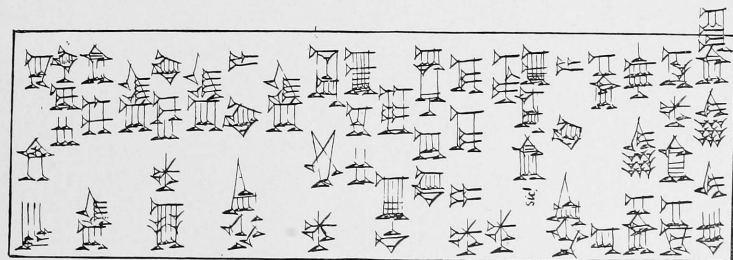


3

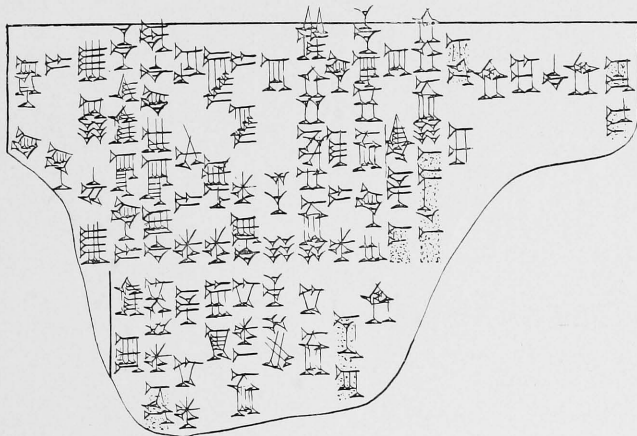
1 et 3. Specimens of Neo-Babylonian Pottery.



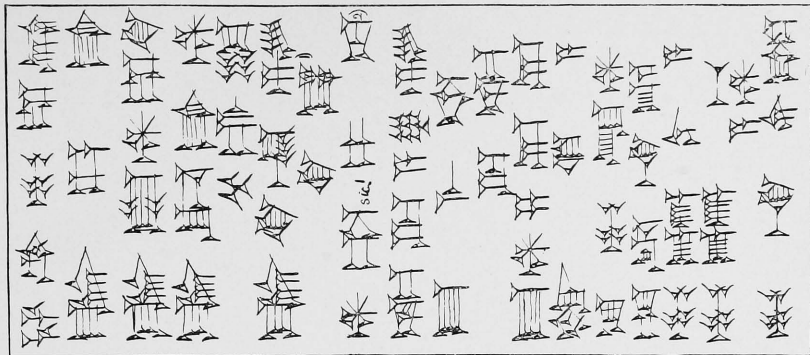
4. Black stone Bowl. See p. 104.



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2



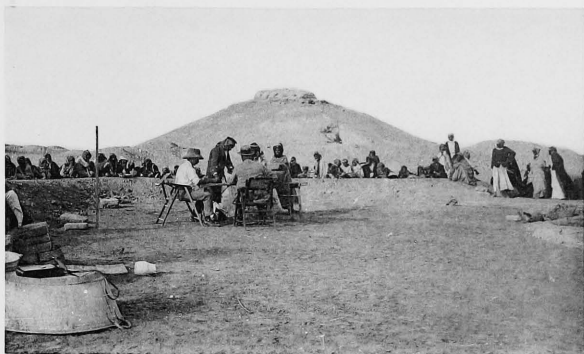
1) *Var. adds* 

2) *Var. omits this line.*

3) *Var. omits this line.*



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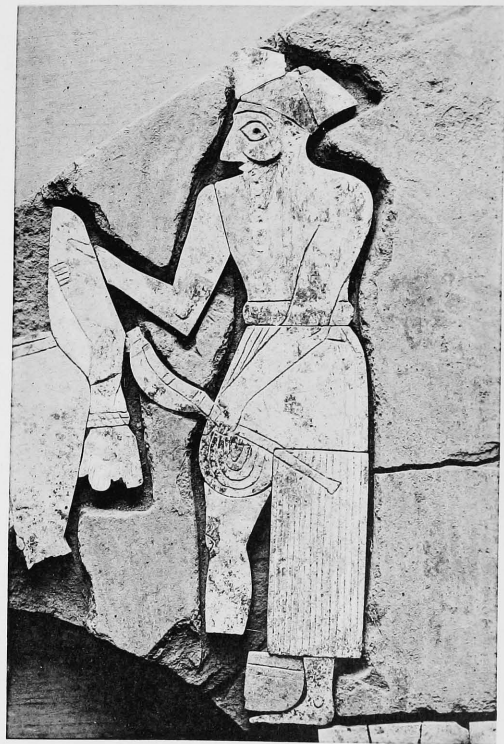
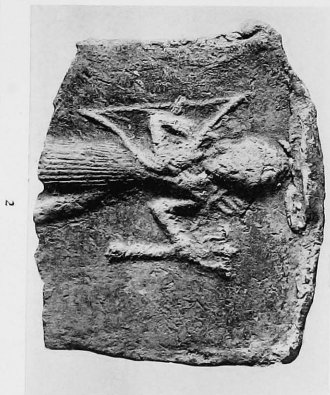
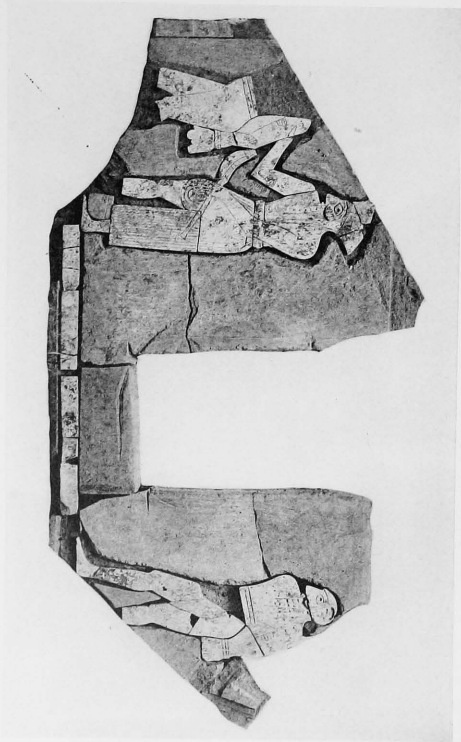


3

No. 1. Two Clay figurines of Mother goddess, late period. Seated statuette of early Sumerian King of Kish. See p. 36 and p. 5.

No. 2. Receiving antiquities at the End of the Day.

No. 3. Group of pottery of Hammurabi period. Also Ribbed Burial Urn.



No. 1. Slate plaque with Inlaid figures, See p. 59

No. 2. Clay Bas-relief of the War goddess Ishtar of the Temple Emeteursag.

No. 3 Enlarged figures of the King on this plaque.



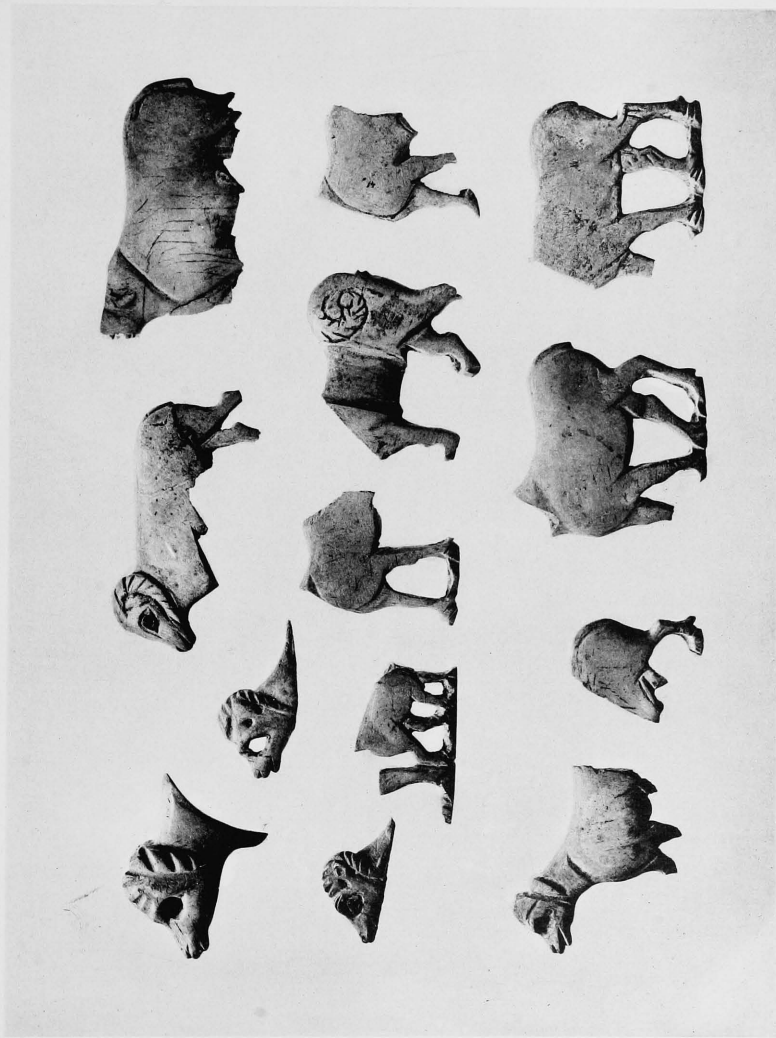
Fragments of the Inlaid Figures of a Slate Plaque. See p. 72.



Fragments of the Inlaid Figures of a Slate Plaque. See p. 72.



Fragments of an Inlaid Slate Plaque. See p. 72.



Figures from a Slate Plaque. See p 72.



Figures from a Slate Plaque. See p. 72.



Figures from a Slate Plaque. See p. 72.



Figures from a Slate Plaque. See p. 72.

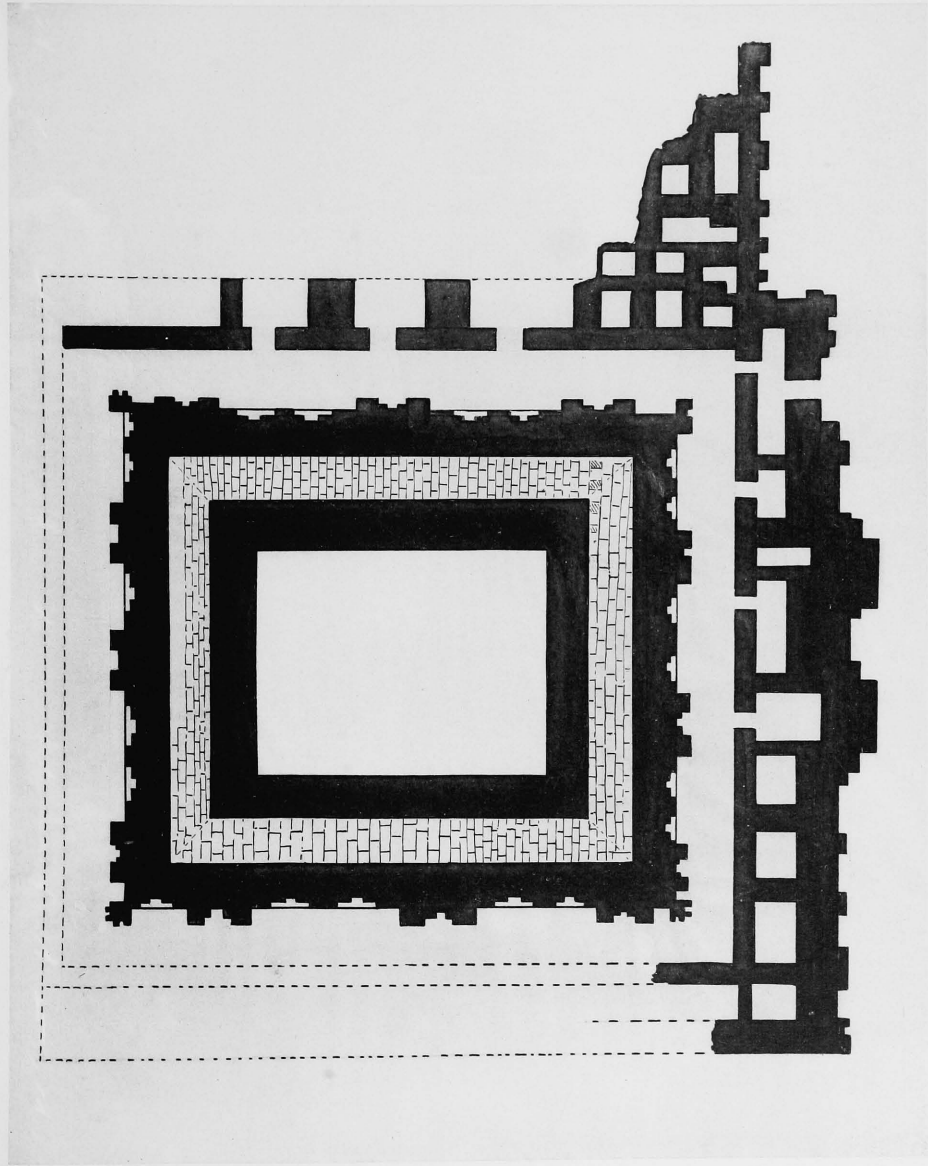
N-W

N-E

S-W

S-E

Ground Plan of the Stage Tower, Unirkidurmah. See p. 65.





Restored figure of Papsukkal, found in the Library. Originally this figure was complete, but it could not be removed from the clay soil undamaged. Papsukkal held in his right uplifted hand a bronze spear, and a bronze belt surrounded the waist. A thin bronze strap passed over the right shoulder and was attached to the girdle at the front and back.



1



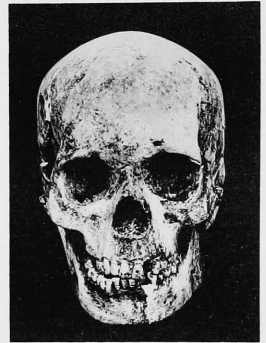
2



3



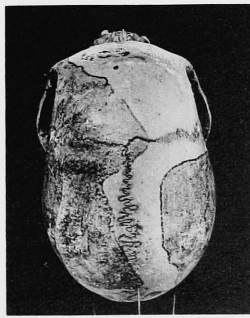
4



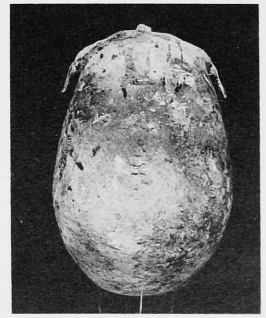
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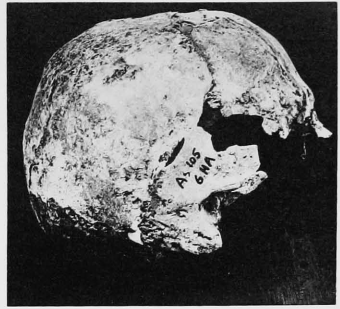


8

No 1, Skull 3, Side View, Longhead. — No. 2, Skull 4, Side View, Longhead. — No. 3, Skull 3, Front View.
 No. 4, Skull 604 of the Pitt Rivers Museum, Egyptian of 3 rd. — 4 th. Dynasties, Thebes, Longhead.
 No. 5, Skull 4. — No. 6, Skull 3, Top View. — No. 7, Top View of the Egyptian Skull, No. 4
 No. 8, Top View of Skull 4, No. 2.



1



2



3



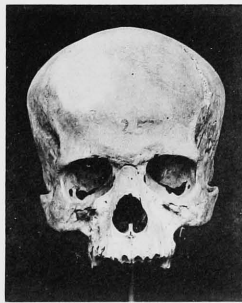
4



5



6



7



8

No. 1, Skull 5, Longhead. — No. 2, Skull 6, Roundhead (Sumerian) — No. 3, Skull 2512 of Pitt Rivers Museum, 18 th. Dynasty, Thebes, Roundhead. — No. 4, Showing Orbits of Eyes of Skull 3, $\frac{1}{2}$ Natural Size.

Straight Orbit. See Pl. 46, No. 3. — No. 5, Showing Oblique Orbits of Eyes of Egyptian Roundhead, of No. 3.

This Oblique Orbit has been determined for the Roundheaded Skulls found at Kish.

No. 6, Egyptian Roundhead, Top View. — No. 7, Egyptian Roundhead, Fullface. — No. 8, Top View of Roundhead found at Kish.



1



2

No. 1 Temenos Wall of Emeteursag and Pavement of Samsuiluna P. 65.
No. 2. Facing first Stage of the *ziggurat* of Emeteursag.

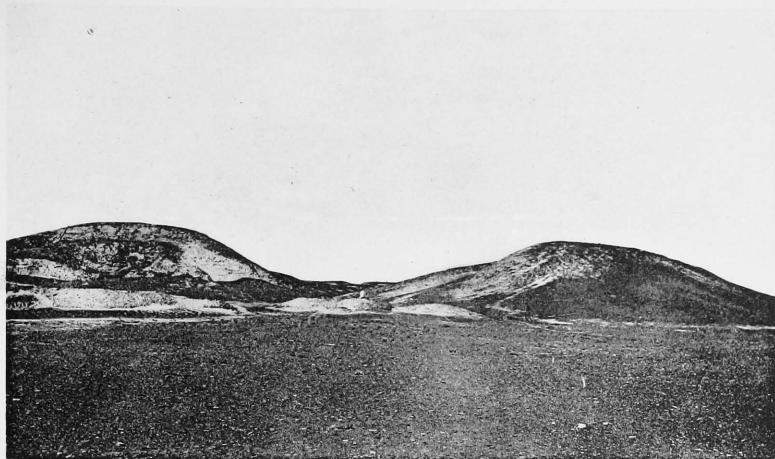


1



2

No. 1. Facing of *ziggurat*, with retaining Wall of Nebuchadnezzar. P. 65.
No. 2. Walling on S.-E. side of *ziggurat*. P. 65.



1



2

No. 1. View of Tal al-Bandar, from the East.
No. 2. Spindles of wood with spiral Grooves. P. 104.

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