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## CUNEIFORM TABLETS

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## CUNEIFORM TABLETS

OR

# DOCUMENTS FROM THE TEMPLE ARCHIVES OF TELLOH 

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PART II


HAVERFORD COLLEGE

## PREFACE.

Although it was foreseen in 1905 when Part I was issued that some time would elapse before another part could be published, exacting professional duties and the preparation of the volume on Ecclesiastes for the International Critical Commentary have delayed the appearance of this part longer than was then anticipated. In copying the texts published in Part I the writer began with the view that an editor should reproduce exactly what he saw as nearly as he could, thus passing on all the peculiarities of individual scribes, who often wrote carelessly. This justly laid some of the work in Part I open to criticism. The writer is convinced that an editor should reproduce the characteristic palaeography of the period, but should not copy scribal idiosyncrasies to such an extent as to make texts misleading. This may easily happen, for peculiarities reproduced upon paper make a different impression than when observed on clay. These facts have been borne in mind in copying the texts which follow, although to a limited extent scribal variations have been permitted to appear.

George A. Barton.
Bryn Mawr, Pa.,
July, rgog.

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## INTRODUCTION.

The ninety-four texts included in the present volume are of the same general character as those published in Part I, and in other publications that are devoted to the archives of the temple of Telloh.

## TWO UNIQUE TABLETS.

There are, however, two which are, so far as I know, unique. They are Nos. 78 and 79 of the Haverford Collection and are reproduced in autograph on plates 79 and 80 below. These objects are made of clay and are, as one looks either at the obverse or reverse, of the general shape of a bag that is but partially filled and is tied at the top. Each of them is $\frac{3}{8}$ of an inch thick. One of them is $I$ and $\frac{5}{8}$ and the other $I$ and $\frac{3}{4}$ inches in length. At the widest part they are respectively $I$ and $\frac{1}{4}$ and $I$ and $\frac{3}{8}$ inches. Each is perforated through its longest dimension with two holes, so that a cord could be inserted by which the objects could be hung up. Each bears a short inscription, over which a seal has been rolled making it a veritable palimpsest.

No. 78 reads: (Ob.), IV GUR LXXXI QA ZID-ŠE MA UR- ${ }^{\text {d }} \mathrm{KAL}$; (Rev.), DUB MA-NA-TI UD VIII ${ }^{\text {kam }}$ ITU ZIb-kU, i.e., " 4 Gur 8i qa of wheat flour, boat of Ur-Kal, account of Manati. 6th Day, month Zibku," (i. e., the 6th month). The seal is not all legible, but we learn that it was simply the seal of the scribe who wrote the document.

No. 79 is not so elaborate. It reads simply: II GUR X QA ZID-ŠE UD XXVI ${ }^{\text {kam }}$, i. e., " 2 Gur io qa of wheat flour: day 26 th." In this case, however, we can read the whole seal. It is:
 What was the purpose of these objects? One is at first tempted to think that they were meant to hang up in the temple, to serve a purpose similar to the discs of lapis lazuli (cf. BE, I, Nos. 58-62), which were cut from the larger blocks of that precious stone, to be preserved in the temple and to keep alive the memory of the generous donor, while the bulk of the precious stone was sold to fill the coffers of the treasury. This view is, however, hardly probable. One might give grain to a temple-indeed such gifts for sacrifices must have been frequent-but it is hardly probable that the memory of such gifts was preserved in this way. Had this been the purpose of these objects, it would have been implied in the inscriptions placed upon them, as in the case of the lapis lazuli objects mentioned.

Again, they can hardly be ordinary receipts for grain, for in that case their curious shape and perforation could not be accounted for. We have hundreds of such receipts, but none of them yet published are in this form.

My own belief is that in these objects we have two Old Babylonian bills of lading. It is well known that the account tablets from Telloh often mention that such and such an amount of grain came "by boat" of such and such a man (cf. below, p1. 85, I, I3, and pl. 86, No. 88, passim, and Lau, Old Babylonian Temple Records, N. Y., 1906, p. 35). One of these objects
(No. 78 ) mentions that the grain is "by boat of Ur-Kal"; and I am inclined to think that these are bills of lading given to the boatman. The Code of Hammurabi, Col. XXXVI, 38-55, provides that, if a boatman sunk a cargo through carelessness, he should replace whatever portion of it was lost. So business-like were the Babylonians in all respects, that it is altogether probable that the boatman always had a bill of lading to show the extent of his responsibility. Such boatmen, in the hot climate of Babylonia, probably wore little clothing in the summer months (the one of these which is dated was written in summer), and these bills of lading were, I believe, perforated in order that the boatman might hang them about his neck and not lose them.

If this view is true, of course the shipper, whether temple or private individual, would also have a duplicate of the bill, so as to be able to defend himself against attempted fratd. Indeed, so thorough were the Babylonian business methods, that nearly all important business documents were duplicated. The duplicate bills of lading made for a temple, in case it were the consigner of a cargo, would be made in the ordinary tablet form, to be stored in the archives with the other tablets. Such a duplicate we have, I believe, in No. ir6, published below on pl. 96. It is of the ordinary form, and is by the rolling of the seal made a palimpsest, like Nos. 78 and 79. It reads: LX QA SE LUGAL MA A-KAL-LA DUP GAL-me-Ne, i. e., "60 Qa of grain, royal quality, by the boat of Akalla, account of Galmene." It bears the seal: "Galmene, scribe, son of Galnun."

If the view here advanced is correct, the reason why so few of these bag-shaped, perforated tablets have been found is that the duplicates made for the temple were not of this form. Probably it is due to some ancient train of circumstances which we cannot now trace, that the two here published found their way into the temple archives.

## MESSENGER TABLETS.

An interesting class of tablets, of which a number are contained in this volume, I would call "messenger tablets," though perhaps a more correct designation would be: "provision lists of traveling officers connected with the public service." The tablets of this nature here published are Nos. 85, 101, 105, 106, 108, 109, 111, II5, 122, 124, 125, $127,131,132,135,136,138$ and 403. These are not, however, the first of this class of texts to be published. Reisner published more than thirty of them in his Tempel Urkunden aus Telloh, Berlin, igor (No. 192 ff.); Thureau Dangin published a number in 1902 in the Revue d'Assyriologie et d'Archéologie orientale, which were republished with others in his Recueil de tablettes chaldéennes, Paris, 1903 (No. 326 ff .). In this last mentioned work some sixty texts of this class were published, though most of them were very short. Lau published six in his Old Babylonian Temple Records, New York, igo6 (viz: Nos. 22, 73, 110, 114, 126 and 127), while four were published in Part I of the present. work (viz: Nos. 2I7, 288, 297 and 345). Those included in the present volume bring the number up to about one hundred and twenty. The nature of the contents of these tablets may be seen from the three examples of them translated below, pp. 20-22.

So far as I know, however, the historical importance of these texts has never been set forth. They give us important information as to the governmental methods of the empire of the second dynasty of Ur, showing us how messengers, soldiers, and tax collectors were constantly moving about; they reveal to us incidentally governmental methods, and something of the extent of the empire. Most interesting is the fact that a regular system of posts (or rather an interurban
messenger system) seems to have existed, the cost of which was shared by different cities. ${ }^{\text {. }}$ The temple at Shirpurla (Telloh), which was apparently an office of the king's government as well as a religious establishment, furnished messengers and other government officers with provisions (certain quantities being given for their days of rest in the city, and larger quantities for the road), and portions of the provisions were charged to the cities to which the messenger belonged.

The proof that this messenger-system existed, and the reason why I prefer to call these " messenger tablets," is that, out of 363 statements of the occupations to which the men belonged to whom these grants of provisions were made, 204 were sukkal or messengers, and 70 were Gal-RIM, messenger's assistants, or inferior messengers. Approximately $\frac{13}{18}$ ths of all the professions noted here are messengers of one class or the other. That they were real messengers (some doubt as to the real function of a sukkal has existed), is shown by the fact that it is over and over again stated in these texts that they came from such a city or went to such a city, and by the fact that they were on the road more than the members of any other profession to whom the temple furnished supplies.

Most of these tablets are dated simply as to the month, but a few of them record also the year in which they were written. These years range from the 22 d of the reign of Dungi to the 8th year of Bur-Sin. These tablets, accordingly, give us a glimpse of thirty years of the control of the second dynasty of Ur at its most prosperous era, and show us that a system of messengers, probably occupied with public business, was in existence at this period, apparently not unlike the system which Darius I organized at a later time for the Persian empire. Unfortunately the tablets do not record the errands on which the messengers were sent. They confine themselves strictly to noting the profession of the man, the nature of his provisions, his destination (or point of departure), and the government which is to share the expense. These men, it is noted, not only went as messengers to cities, but the tablets also record the names of several individuals to whom they were sent. In some cases these individuals were the Patesi of other cities, in some cases it is mentioned that the men to whom they are sent are at temples. Probably in all cases the individuals were officers of importance.

From the statements of the destination of messengers, and the charges for their provisions we incidentally learn something of the political organization of the empire. It appears that Nippur (RTC, 350), Susa (RTC, 326), Adamdun (RTC, 328) and Sabu (below, No. 136) were ruled by Patesi. The rulers of seventeen other cities, including Anshan, afterward famous as the fatherland of Cyrus the Great, occur, but most of them are mere names to us. Their rulers are called nim-mi, i. e., Šaqāni, or Governors. Whether they were all appointees of the king, or whether he sometimes left the government in the hands of local elders we do not know. Four of the cities which are thus mentioned had a single ruler, a nim, or Governor. These single rulers may have been Patesi, for one text (Reisner, Urkunden, No. 195) refers to the Patesi of Sabu as Nim, but of their cities little is yet known.
${ }^{1}$ See, e. g., Reisner, Urkunden, 194, where the NIM (=Šaqu, governor), of Šussanli, is said to have received 30 qa of food, royal quality; ibid. No. 197, where the governor of Šimaš, receives the same amount; ibid. No. 215, where the governor of Zaul receives 40 qa of drink, 30 qa of food of split grain, royal quality, and ro qa of wood oil. Usually the messenger receipted for it in the name of the rulers of his city. Thus in HLC, I27, the provisions of the messenger, Susasu are charged to the nim. . . mi (Šaqāni, rulers), of Gisa, and Susasu receipts for them as their "Gir." In HLC, I36, the provisions of the messenger Zanati are similarly charged to the Patesi of Sabu, the messenger acting as his "Gir."

Messengers were not, however, the only officers to whom provisions were furnished. Of the 363 charges for provisions noted above 50 were made to TU-UŠ-GAL officers. TU-UŠ officers appear in many texts. Some of them were subject to Patesi. TU-UŠ-GAL indicates a high TU-UŠ officer-one that was over others. Two of these apparently held a still higher office, for they are called tu-uš-gal-gal (cf. RTC, Nos. 359 and 373). One held a still higher office; he is called the king's TU-UŠ-GAL (RTC, 337). These tU-UŠ-GAL who are next in number to the messengers mentioned in this class of tablets, were probably concerned with the collection of taxes. Taxes were collected in kind, as in the East to this day. The sign TU is the sign for shekel and probably these men were the public revenue officers.

Next in number to these officers was a kind of soldier, called "a man with a long spear" (GAL GIŠ-KU-GU-LA). There are 3 I charges against these. They were probably connected in some way with the king's army. I have noted two charges of provisions to scribes, and a number ${ }^{1}$ to DUMU-NU-banda. The Nu-Banda was an officer higher than a shepherd. Perhaps dumu-nu-banda may mean "member of the Nu-Banda guild" or profession. Possibly, like the TU-US-GAL, their traveling was connected with tax-gathering.

For the most part, it is probable that these men traveled on animals. The usual supply of provisions was 5 qa of drink and 5 qa of flour and 3 qa of oil. As the qa was more than a gallon (see below, p. i8) a man could not have carried all these. In five instances, however, they are said to have traveled by boat. ${ }^{2}$

A study of the statistics of this class of texts affords one other interesting fact, which seems to me to have a historical significance. There are in these tablets 128 references to cities as the destinations of messengers or other officers, or the places from which officers have come. Of these 128 references, 46 , or more than one-third, are to the city of Susa. Next to Susa, but a long way behind it, comes Anshan with 16. Sabu has 1.; Nippur, 9; Adamdun, 8; Simash, 5; Kimash, 4. Two cities are mentioned three times, two twice, while nineteen others are each mentioned but once. Ur is mentioned but three times. As the dynasty took its rise at Ur and the kings called themselves kings of Ur, we are led to expect that Ur would hold a more important place in this inter-urban system of messengers than it seems to have done. Why, on the other hand, should Susa have been the destination of so many of the officers? Susa, we know, was not independent at this time as its local ruler was only a Patesi, called Galzagal. ${ }^{3}$ The only sufficient explanation of the fact that Susa was, apparently, the center whence this messengersystem radiates, seems to me to be the supposition that Dungi and Bur-Sin had made it their residence. The climate of Susa in the elevated lands of Elam was more salubrious than that of Ur in the marshes of southern Babylonia, and such a change of residence on the part of the monarch is not in itself improbable. Moreover, the temple at Susa was one of those which Dungi rebuilt. (See his inscription, Délégation en Perse, VI, 20.) If Susa was the center of government, the frequency of the passage of messengers to and from it is satisfactorily accounted for.

At all events some important reason must lie behind the fact that so many messengers went to and from Susa.

[^0]
## SOME HITHERTO UNEXPLAINED NOTATIONS OF NUMERALS.

In pl. 16 of Part I of this work the combination $\mathbf{Q V}^{\boldsymbol{E}}$ occurs as a numeral three times: col. iii, $15 ; \mathrm{v}, \mathrm{ro}$, and vi, 2 . In each case it occurs before the well-known notation for 36,000 . When the volume was published in 1905 I recognized that this was a numeral larger than 36,000 , but partly because the first lines of the tablet were illegible and partly because a number of abbreviations were used in the tablet-abbreviations which $I$ did not then understand-I
 strate that it denotes the number 216,000 .

The tablet records first the collection and then the distribution of ma-NU wood, igr-RU-ma-nu (some small objects connected in some way with the ma-Nu wood), and binding-reeds. The wood is measured in talents and manas, but the other objects are counted. As the bindingreeds were the most numerous it is in the totals of these that the number 216,000 occurs. ${ }^{1}$

Up to col. iii, 15 of the tablet the account deals with the collection of the reeds, etc., and as col. i, 2 evidently contained a large number of these reeds, but is now in part broken away, we turn to the last half of the tablet, where the reeds are distributed, for our demonstration. Except in the totals the numbers are expressed by means of well-known signs. They are as follows:

$$
\begin{aligned}
& \text { Col. iii, } \mathrm{I} 8,54,492 \\
& \text { " iv, } 5, \mathrm{I} 99,539^{\frac{1}{2}} \\
& \text { " iv, ri, } \frac{4,140}{258, \mathrm{I} 7 \mathrm{I} \frac{1}{2}}
\end{aligned}
$$

This total is written in col. v, io as follows:

$$
\begin{aligned}
& \text { D百 }=216,000 \\
& \text { (1) }=36,000 \\
& \boldsymbol{\delta}=3,600 \\
& \text { FKKKK }=2,400
\end{aligned}
$$

$$
\begin{aligned}
& 258,17 \mathrm{I}^{\frac{1}{2}}
\end{aligned}
$$


Following this we have the following numbers written in the well-known notation:

| Col. v, 12 , | I, I20 |
| :---: | :---: |
| v, $\mathrm{I}_{3}$, | 640 |
| v, 17, | 3,075 |
| Total, | $\begin{gathered} 4,835 \\ 258, \mathrm{I} 7 \mathrm{I} \frac{1}{2} \end{gathered}$ |
|  | 263,006 ${ }^{1}$ |

gives as a grand total,
263,006 $\frac{1}{2}$
${ }^{1}$ In Thureau Dangin's Recueil de tablettes chaldeennes, Nos. 305 and 306 record similar collections of reeds for binding but the numbers are not so large as in the HLC text.

In col．vi， 2 we gave the grand total written as follows：

which just balances the total obtained in the other way again proves $=216,000$ ． All these reeds are present or have been taken away for some purpose．In col．vi a statement of the reeds that are lacking follows，thus：Col．vi，6， $4 \mathrm{r}, 250 \frac{1}{3}$ reeds are lacking．
Add this to the previous total，
263，006 $\frac{1}{2}$
$304,256 \frac{5}{6}$ ，which is the total of the reeds and we obtain as another grand total， received as stated in col．iii， 15 in the following notation：

$$
\begin{aligned}
& \text { 路 }=216,000 \\
& \text { 人 } x^{2}=72,000 \\
& Q ゆ D Q=14,400 \\
& \text { KTATA }=1,800
\end{aligned}
$$

which gives the same total， 304，2565
and affords a third proof that $\mathbf{V}^{\boldsymbol{E}}=216,000$ ．
Having demonstrated thus indubitably that the sign in question is a notation for 216,000 ， some interesting results may be obtained by applying the fact to the interpretation of some other texts．In Hilprecht＇s Babylomian Expedition，Series A，Vol．XX，No．29，obverse，col．iv， 8 our sign occurs．The first column of this text is broken away．The second column is taken up with ways of expressing numbers of $Q a s$－first，from to to 20 ，then the numbers increase by tens to 60 ， then，by sixties to 300 ，which makes a Gur．This Gur stands in the last remaining line of col． ii．As col．iii begins with 18 Gur we learn that sixteen lines are broken away from col．ii．The enumeration of Gurs is carried in the sixteen lines of col．iii to 300 Gur．The first line of col．iv begins with to col．iii．In four of these the increase advanced by sixties to $600=\boldsymbol{k}$ ；in five others it advanced by six hundred at a time to $3,600=\downarrow$ ；and in six others by thirty－six hundred at a time to in one of these columns without being written in part one under the other，these fifteen lines occupy exactly the space of the seventeen lines which we should expect to find here on
account of the way the tablet is broken，and on account of the sixteen lines which we proved had been lost from col．ii1．

Now the first eight lines of col．iv are as follows：


It is clear at a glance that line $\mathrm{I}=28,800 \mathrm{Gur} ; 1.2=32,400$ Gur； $1.3=36,000$ Gur． If now we apply to the interpretation of the following lines the principle obtained by a study of the preceding columns，the notation should now increase by thirty－six thousand at a time． We accordingly interpret the following lines thus：
1.4 处 42,000 Gur；

1．5 众 $=108,000$ Gur；
1.6 运 144,000 Gur；
1.7 途 平＝180，000 Gur；
1.8 §正 $=216,000$ Gur．
${ }^{1}$ The facts concerning the missing parts of cols．ii and iii of the obverse of $\mathrm{BE}, \mathrm{XX}$, No． 29 may be mathematically demonstrated to the eye as follows：


This was provable by inference from Hilprecht＇s tablet alone，as we have shown．It might，however，have been regarded as speculative and uncertain，but for the confirmation of the Haverford tablet，which proves independently that $=216,000$ ．This demonstrates that the factors which intervene between 36,000 and 216,000 have been correctly interpreted above，and gives us four additional new notations，viz：㐱 $=72,000$ ；液 $=108,000$ ；煺 $=144,000$ ；and $=180,000$ ．I call these new notations，for，so far as I know，but one of them has been mentioned before．Reisner in the Sitzungsberichte of the Berlin Akademie， r896，p．420，suggests the possibility that may have been used in land measure with a value corresponding to that proved for it above．In the corresponding table of his Tempel Urkunden aus Telloh， 1 gоi，however，he gives instead the notation，$\& \leqslant$ for the number，and this latter notation is really the one employed in the Telloh tablets which have hitherto been published．

The ideograms to which we have thus given meanings occur in a broken，Neo－ Babylonian syllabary published in CT，XII，24，where their Sumerian names are given， though the meanings are broken away．Thus

$$
\begin{aligned}
& 4 \text { b, read: ŠAR-NIMIN, } 14 \text { 这 }=\text { [40 šars] . . . . . . . . . . . . . . . . . . . . (i. e., i44,000). } \\
& \text { 5b, read: ŠAR-Nin } \hat{U} \text {, 迦 }=\text { [50 šars] ........................... (i. e., I80,000). }
\end{aligned}
$$

This table thus demonstrates that the number 216,000 might be written $\mathbf{v}$ as well as words for the various numerals，and are proof that our interpretation is correct．

Indeed，if we refer again to the text of BE，XX，No．29，it appears that the number 216，000（ ${ }^{2}$ ），when used in the notations of land measure to designate a number of Bur （i．e．， 3,600 Bur）is written（see rev．iv，7）．This last number follows the numbers，抮，and just as 2 回多 does in obv．iv，8，thus proving that the two had the same numerical value．

In the Pennsylvania tablet there is but one other notation higher than that for 216,000 ．
 This is nothing else than Šar－Gal su－nu－sum＂，i．e．，＂the great šar；its double，＂i．e．，432，000． The principle of increase followed in the earlier part of the text confirms this，showing that in the one case we have the notation for 432,000 ，and in the other，of the corresponding number of $\operatorname{Bur}$（i．e．，7，200 Bur）．

It appears from this tablet that the common and unambiguous notation known to the scribal school from which this tablet comes did not extend beyond 432，000．${ }^{2}$

In the Neo－Babylonian syllabary in CT， 24 already referred to，two other signs appear

[^1]in the series after the sign sar－dis（

> 1. 7 , ŠAR-GAL-DIS, 验,
> 1. 8, šar-GAL-MIN, 道.

If we had this syllabary only in its present broken condition，we might infer that these two signs completed the sexigesimal series，and that the notation was as follows：
 lead us into error．The syllabary is not，like the tablet published by Hilprecht，giving us a regularly ascending series，which increases according to regular increments，although it is true that the first six numbers in the column were arranged according to the tens，from ten to sixty．A study of the rest of the column shows，however，that the compiler of the syllabary was collecting rather all the compounds of SAR which were known to him，and that this regular numerical order extends no further．The scribe was following no such system as appears in the Pennsylvania tablet．When two signs occur which have the same value they are written suc－ cessively，the more complex of the two being written last．This can be clearly shown by a com－ parison with BE，XX，No．29．Thus is but a more compact writing of which has already been proven to denote 216,000 ．Similarly if but a more compact writing
 written within the 2 ，as is the figure 2 （ TV ）by which the word form of the numeral（su－nu－ sum ）is replaced．The Neo－Babylonian list of CT，XII， 24 is，accordingly，a later transcript of the earlier list published by Hilprecht．

It should be noted in connection with these signs that still another notation for the number 216,000 is employed by Gudea．It is ${ }^{1}$（Stat．B，iii，io），and is simply another device to indicate that the šar is multiplied by 60 ．

To recapitulate：Our discussion has shown that the texts designated afford the following hitherto unrecognized numerical notations：

$$
\begin{aligned}
& \text { 原 }=72,000 . \\
& \text { 除 }=108,000 \text {. } \\
& \text { 松 }=144,000 \text {. } \\
& \text { 除 }=180,000 \text {. } \\
& \text { 《気 }=216,000 \text {. } \\
& \text { (1) }=216,000 \text {. } \\
& \text { (1)目 }=216,000 \text {. } \\
& \text { 㧱 }=216,000 . \\
& \text { 又気自女白 }=432,000 \text { 。 }
\end{aligned}
$$

$$
\begin{aligned}
& \text { 城 }=43^{2,000} \text {. }
\end{aligned}
$$

${ }^{1}$ See Thureau－Dangin，L＇Écriture Cuneiforme，No．49r，and Sumerischen und Akkadischen Königinschriften，pp．68， 69.

Of these is the only one yet found in the business documents from the temple archives of Telloh hitherto published. All of them with three exceptions were known to the scribes of Nippur about 2000 B. C. Three of them ( $\downarrow$, 通, 遅) -natural developments from the earlier forms-have as yet been found only in the Neo-Babylonian Syllabary published in CT, XII, $24 .{ }^{1}$

## THE PRICE OF WHEAT IN ANCIENT BABYLONIA.

The tablet of Dr. Gould (below, pl. Ioo, translated on p. 22 ff .) gives some interesting quotations of the prices of Babylonian wheat. Fortunately there are two inscribed objects, one from the reign of Dungi and one from the reign of Gimil-Sin, on each of which the ancient weight is stated, and the actual weight of which is known. (Cf. Weissbach, ZDMG, LXI, 395, and the original publications of them, Révue d'Assyriologie, V, 57 ff . and Collection de Clerq, Catalogue, II, 83 ff . and pl. viii, No. 3.) Averaging the value of the unit of weight which results from these two objects, we learn that, if Babylonian silver had the same degree of purity as American coinage, the value of the silver she was .OoI 664 cts. We reach the result thus: Dungi's diorite (?) pyramid is inscribed as $\frac{1}{2}$ Mana and weighs 248 grammes $\therefore 30$ shekels $=248$ grammes $\therefore$ I shekel $=8.0206+$ grammes.$\therefore$ I she $=\frac{1}{180}$ of a shekel $=.0445589$ grammes. GimilSin's diorite object is inscribed as 5 manas and weighs 2510,975 grammes, which makes the she $=.0464423$ grammes. Averaging these we obtain .0455 grammes as the average she of the period. A gramme $=15.432+$ troy grains $\therefore$ I she $=.686714$ troy grains. The American dollar $=412.5$ grains $\therefore$ I she $=\frac{.6867 .14}{412.5}$ of $\$ \mathrm{x} .00$ or $\$ .001664$.

Taking the measures of capacity as determined by Thureau Dangin (fournal Asiatique, 1909, p. IOI), a shekel of capacity equaled .583 gills. We reach the result thus: i $q a=40.4$ decilitres, I decilitre $=.845$ U.S. gills $\therefore$ I $q a=34 . \mathrm{I} 38$ gills $=4.267$ qts., I shekel $=\frac{1}{60}$ of a $q a . \therefore$ I shekel=.0701ı16 qts.

The tablet of Dr. Gould, translated below (p. 22 ff .), gives three prices at three different times during the year. The first price was I5 shekels of wheat for i2 she of money; the second 7 shekels of wheat for 7 she of money; and the third, 3 shekels of wheat for 5 she of money. These prices represent the value of wheat at three different periods of the year, as the harvest became more and more remote. These three prices were, when translated into American terms by means of the above equations, respectively $.596 \mathrm{cts}$..745 cts . and $\$ 1.23$ per bushel. This was for wheat of the finest quality in a country in which there were several grades of wheat.

If Babylonian silver was unalloyed, which I regard as improbable, the price of wheat was slightly higher. The American dollar contains $37 \pm \frac{1}{4}$ grains of pure silver, so that, if the she was pure silver, it was worth $\frac{6866714}{371 \cdot \frac{14}{25}}$ of a dollar, or $.001847+$ cts. This would make the three prices quoted in this tablet respectively $.665 \mathrm{cts} ., 83 \mathrm{cts}$., and $\$$ r. 38 per bushel. ${ }^{2}$

[^2]When, however, we compare these values with values which are known to have prevailed in the East in more recent times, it is probable that the silver was alloyed and that the first list of prices is nearer the truth.

Tablet No. 39 ( $\mathrm{pl}, 70$ ), below, contains an interesting statement, though it cannot represent the price of wheat. It reads dXX GUR CXI bar QA.SE LUGAL. I. 520 Gur , ill and $\frac{1}{2}$ qa of grain royal quality.
2. SA-BI-TA.
2. Of it.
3. $x$ lal $\frac{7}{6}$ gin azag-ud ccxl qa-ta.

9 and $\frac{5}{6}$ shekels of money at the rate of 240 qa;
4. SE-bi vil gur ccle qa. its grain was 7 gur 260 qa;
5. GAR-RA MU ك. Sh-AS-RU $^{k i}$. designated by the name of Shashru.
6. A-kA SIS-KAL-LA ba-A-Gar.
. A partial payment Sîs-kal-la made.
Rev. i. mu-gub. Rev. I. It is present.
2. LAL-NI. DXII. GUR. CLI bar. QA
2. There are lacking 5 r2 gur, $15 \frac{1}{2}$ qa.
3. GIR. GA-SAG-GA.
3. Gir-officer, Gasagga.
4. DUB-NU-TUG 4. The tablet is unsealed.
5. GAR-RA GIR.
5. Deputy-Gir.
6. GAL ${ }^{d}$ NIN-GIR-SU DUMU UR ${ }^{d}{ }^{a}$ ba-U
6. Gal-Ningirsu, son of Ur-Bau.
7. MU-US-SA. E-BA-ŠA-IS ${ }^{\text {d }}$ DA-GAN BA-RU
7. The year after the E-BA-SA-ĬS of Dagon was built.

It follows from this statement that the grain was reckoned at the rate of 240 qa of grain for a shekel of money, which would be at the rate of a little less than i cent per bushel if the silver was alloyed, and a slight fraction over a cent per bushel if the silver were unalloyed. The money was a small percentage of the value of the wheat. Why it was allowed is not clear. There are various possibilities, but we do not know which to choose.

## TRANSLATIONS OF SELECTED TEXTS.

## Fragmentary Record of the Employment of Men on Public Work.

 P1. 92 , No. 96.Transliteration.
Obv. ı. XLI KAL
2. NU-BANDA UR- ${ }^{\mathrm{a}}$ NIN-GIR-SU
3. XXXIV PA GAL- ${ }^{\text {a }}$ DUMU-ZI
4. XXX LAL I PA NA-BA-S̆AG
5. ŠU-NIGIN CIV KAL
6. ŠA-BI-TA
7. XV GI-IL E-S̆E-BAG-GA
8. XX-BI LUGAL-RA NITAH-SA ${ }^{2}$
9. V TIG-PES-ZIKUM ${ }^{3}$
ro. V E-GUD ŠAM E-BA-ŠA-IŠ DA-GA-AN
ii. . . . . ŠAM EN-LIL ${ }^{\text {ki }}$
12. . . . . GUB-BA

Rev. I. . . . . URU
. ŠU-NIGIN LXXVIII KAL
ZIG-GA
XX LAL II URU-TA NU UD-DU
LAL-NI IV PA GAL- ${ }^{\text {d }}$ DUMU-ZI
6. LAL-NI IV PA NA-BA-ŠAG
. UD VI ${ }^{\text {kam }}$
ITU GUD-DU-NE-ŠAR-ŠAR

## Translation.

Obv. r. Forty-one men,
. Nu-banda officer, Ur-Ningirsu;
. thirty-four (men), Pa-officer, Gal-Dumuzi;
twenty-nine (men), Pa-officer, Nabashag.
Total, 104 men.
Of these
ry are reed-carriers ${ }^{1}$ (at) Eshebagga;
20 of them are binders ${ }^{2}$ for the king;
5 are catchers-of-fish ${ }^{3}$ (?);
o. 5 are hired at the ox-stable of the E-BA-ŠA-IŠ of Dagan;
. . . . . are hired at Nippur;
12. . . . . present (?)

Rev. I. . . . . . city.
Total, 78 men
were employed.
Eighteen, did not go out of the city.
There remained four of Pa-officer GalDumuzi's;
6. there remained four of Pa-officer Nabashag's.
. Day sixth,
8. month Guddunesharshar, (3rd mo.)

List of Supplies Furnished to Messengers.

$$
\text { P1. } 95, \text { No. II5. }
$$

Obv. 1. V QA GAŠ V QA GAR
2. I NI-GIŠ À-GAM

NE-NE SUKKAL
V QA GAŠ V QA GAR
I NI-GIŠ À-GAM
. A-GU-A SUKKAL
. III QA GAŠ II QA GAR

Obv. I. Five qa of drink, 5 qa of food,
. i flask of wood-oil,
. Nene, messenger;
. 5 qa of drink, 5 qa of food,
5. I flask of oil,
6. Agua, messenger;
. 3 qa of drink, 2 qa of food,
${ }^{1}$ HLC, No. 24 (Pl. 16), as well as RTC, Nos. 305 and 306, show that in the absence of binding-twine reeds in large quantities were gathered for use in binding. Apparently these men were employed in carrying such reeds to those who were using them.
${ }^{2}$ This is not to be read here US-SA ( $=$ "after" or "following") as in that case it would precede lugal. It stands where it does to show that these men were binding something (perhaps grain) for the king. They were using the reeds which those mentioned in the previous line brought to them. This month is the same as the month Siman of later times, in which, according to Neo-Babylonian contracts, the harvest occurred.
${ }^{3}$ This is a difficult phrase and the rendering is uncertain. That suggested is based on the fact that in Meissner's Ideogramme No. 2049 gives tig-ZIKUM-A =liq $t=$ "take," "catch," and the sign pes originally pictured a fish. (See Barton, Semitic Studies in Memory of William Rainey Harper, II, 235 and ${ }^{253 .}$ )
8. UR- ${ }^{\text {d }}$ BABBAR SUKKAL
9. III QA GAŠ II QA GAR

Rev. i. NER-DA-NI SUKKAL
III QA GAŠ II QA GAR
ŠU-GAL-SUD GAL-GIN
III QA GAS̆ II QA GAR
UMUN-BAR GAL-GIN
AN-S̆A-AN ${ }^{n-T A}$ Š GIN-NA
7. ITU DIR-ŠE-KIN-KUD
8. Ur-Babbar, messenger;
9. 3 qa of drink, 2 ka of food,

Rev. 1. Nerdani, messenger;
2. 3 qa of drink, 2 qa of food,
3. Gimil-Galsud, inferior messenger;
4. 3 qa of drink, 2 qa of food,
5. Umunbar, inferior messenger.
6. From Anshan and Nippur they came.
7. Month Dirshekinkud, (intercalary month).

A Similar List.

$$
\text { Pl. 94, No. } 106 .
$$

Obv. I. V QA GAŠ V QA ZID I À-GAM
2. ${ }^{\text {a }} \mathrm{EN}-Z U-I B-S ̌ U$ ŠUKKAL
3. ${ }^{\text {dNANNINERIN }}{ }^{\mathrm{ki}-K U ~ G I N-N I ~}$
4. V QA GAŠ V QA ZID I À-GAM
5. NE-LA GAL-GIŠ-KU-GU-LA
6. SA-BU-UM ${ }^{k i}-K U$ GIN-NA

V QA GAŠ V QA ZID I A-GAM
A-NI-NI-ŠU GAL-GIS̆-KU-GU-LA
${ }^{\text {a }}$ NINNI-ERIN ${ }^{\text {ai-TA }}$ GIN-NI
10. V QA GAŠ V QA ZID I À-GAM
ii. A-UHU-DINGIR TU-UŠ-GAL
12. ${ }^{a}$ NINNI-ERIN ${ }^{\text {id }}-T \dot{A}$ GIN-NI
13. V QA GAŠ V QA ZID I À-GAM
14. SU̇-ŠA-GA-GA GAL-GIŠ-KU-GU-LA

Rev. I. ${ }^{\text {d }}$ NINNI-ERIN*i-KU GIN-NI
V QA GAŠ V QA ZID I À-GAM
ŠA-AL-MA-UM GAL-GIŠ-KU-GU-LA
${ }^{\text {a }}$ NINNI-ERIN ${ }^{\mathrm{xL}}-\mathrm{TA}$ GIN-NI
X QA GAŠ X QA ZID II À-GAM
GAL_- NANNAR SUKKAL
ŠA IGI-ŠAG-ŠAG TU-US̆-GAL
${ }^{\text {a }}$ NINNI-ERIN ${ }^{\text {wi }}-T A{ }^{\circ}$ GIN-NI
V QA GAŠ V QA ZID I À-GAM
ŠU-S̆A-ŠU ŠEŠ-ŠAL-MI
${ }^{\text {a }}$ NINNI-ERIN ${ }^{\text {xi}-T A ~ G I N-N I ~}$
V QA GAŠ V QA ZID I À-GAM
UR-NIGIN-GAR DUMU-NU-BANDA
${ }^{\mathrm{a}}$ NINNI-ERIN ${ }^{\text {ui}}-$ TA GIN-NI
ITU EZEN- ${ }^{\text {d }} \mathrm{NE}$-ŠU

Obv. 1. Five qa of drink, 5 qa of flour I flask (of oil)
2. Sin-ukin, messenger;
3. to Susa he went.
4. Five qa of drink, 5 qa of flour I flask (of oil),
5. Nela, a long-spear man,
6. to Sabum he went.

Five qua drink, 5 qa flour, I flask (of oil),
Aninishu, a long-spear man,
from Susa he came.
10. Five qa of drink, 5 qa of flour, r flask (of oil),
II. Aukhu-dingir, revenue (?) officer
12. from Susa he came.
13. Five qa of drink, 5 qa of flour, r flask (of oil),
14. Sushagaga, a long-spear man,

Rev. I. to Susa he went.
2. Five qa of drink, 5 qa flour, I flask (of oil),

Shalmaum, a long-spear man,
4. from Susa he came.
5. Ten qa of drink, ro qa of flour, 2 flasks (of oil),
6. Gal-Nannar, a messenger
7. and Igishagshag, a head revenue (?) officer,
8. from Susa they came.
9. Five qa of drink, 5 qa of flour, I flask (of oil),
io. Sushashu, an eunuch(?), ${ }^{1}$
ir. from Susa he came.
12. Five qa of drink, 5 qa of flour, I flask (of oil),
13. Urnigingar, a member of a Nu-banda guild,
14. from Susa he came.
15. Month of the feast of Neshu, (4th mo).

Another Similar List.
Pl. 99, No. 136.
Obv. 1. III À-GAM NI-GIS̆ Obv. I. Three flasks of wood-oil,
2. UD $1 I^{\mathrm{kam}}$
2. three days,
3. A-DA-A SUKKAL
3. Ada, a messenger,
${ }^{1}$ Literally, " Brother of women." "Eunuch" is an uncertain rendering, but the phrase designates an official.

${ }^{1}$ This tablet belongs to Dr. George M. Gould, of Ithaca, N. Y., who kindly permitted me to publish it with the Haverford Collection.
4. X GUR DUB UR- ${ }^{\mathrm{d}}$ EN-LILLAL
5. ŠU-NIGIN CVII GUR LX QA
6. ŠU-NIGIN XV GIN ŠAM XII SE AZAG
7. ZIG-GA
8. LAL-NI III (GUR) LX QA NI-DUB ŠA GIR-SU ${ }^{\text {ki }}$
9. ŠA BAR-RA
ro. NIN-ŠID-AG LAL-NI-UD-DU-A
Ir. GAR-ŠAM-AŠ-DU-GABA
r2. MU ${ }^{a} B U R-{ }^{d} E N-Z U$ LUGAL-E UR-BILLUM ${ }^{\mathrm{ki}}$ MU-HUL-A
4. то Gur, account of Ur-Enlil.
5. Total, 107 gur, 60 qa.
6. Total, $I_{5}$ shekels, at the price of $\pm 2$ she of money
7. is taken away.
8. There remains 3 gur, 60 qa stored in Girsu.
9. and left.
10. Business transaction of Lalniuddu,
11. the $A$ sh-plant-food $D u g a b a^{1}$ officer.
12. The year Bur-Sin, the king, subjugated Urbillum.

Account Tablet.

Part I, Pl. 9, No. $18 .{ }^{2}$
I. 1 . CLXXX QA ŠE GUR
2. SI-NI-IB
3. ŠA-BI-TA
4. CLXXX QA DUB GAL-BI-MU
5. MU-GUB
6. UR-IM-NUN
7. VI GUR CLVIII KINGUSILA QA
8. ŠE-KUL-TA GUR-RA
9. CLXXX QA ŠE AMAR BA-EDIM
io. S̆U-NIGIN VII GUR XLVIII KINGUSILA QA
ir. ŠA-BI-TA II. Of it
12. V DUB BA-NI
13. I GUR XXV QA
14. DUB-BI II A-AN
15. DUB UR- ${ }^{a}$ NINA DUMU NA-BA-ŠAG
16. MU-GUB
17. LAL-NI I GUR XXIII KINGUSILA QA
18. UR- ${ }^{\mathrm{a}} \mathrm{BA}-\mathrm{U}$
19. VI GUR XC QA
20. LAL-NI ŠE-KUL
21. ŠA-BI-TA
22. VI GUR XC QA
II. i. DUB UR- ${ }^{a}$ NINA DUMU NA-BA-ŠAG
2. MU-GUB
. URU-KI
4. E- ${ }^{\mathrm{a}}$ NIN-DAR-A
5. XXXIX GUR LX QA
6. ŠE-KUR-RA ERIM BA-EDIM
I. I. 180 Qq of grain royal quality
2. remain from last year.
3. Of it
4. 180 qa receipted for by Galbimu
5. are present.
6. Urimnun:
7. 6 Gur 158 and $\frac{5}{6}$ qa
8. for seed-grain are set apart.
9. r80 Qq of Amar-grain is set apart.
10. Total 7 gur 48 and $\frac{5}{6}$ qa.
12. 5 (gur), account of Bani,
13. I gur 25 qa
14. (his two accounts)
15. receipted for by Ur-Nina son of Nabashag
r6. are present.
I7. There is lacking I gur 23 and $\frac{5}{6}$ qa.
18. Ur-Bau:
19. 6 Gur 90 qa
20. is on hand as seed grain.

2I. Of it
22. 6 gur 90 qa
II. I. receipted for by Ur-Nina son of Nabashag
2. are present
3. in the city.
4. Temple of Nindara:
5. 39 Gur 60 qa
6. food for slaves is set apart.
${ }^{1}$ The Dugaba officer was, in the time of Hammurabi, an officer of varied duties; see King, Letters and Inscriptions of Hammurabi, Vol. III, p. 8 n. I.
${ }^{2}$ In Part I, pp. 15-18 this tablet was translated, but as the division between the notation of GUR and QA was drawn there according to an erroneous theory, a corrected translation is given here.
7. S̆A-BI-TA
8. XXXIX GUR LX QA
9. DUB GAL-BI-MU

го. MU-GUB
ir. GAL-NA-AŠ-E-LA-KI DUMU BA-A
12. XVI GUR CLXXX QA
13. LAL-NI ŠE-KUL
14. XIV GUR LXXXVI ŠUŠŠANA QA
15. ŠE-KUL-TA GUR-RA
16. ŠU-NIGIN XXX GUR CCLXVE ŠUŠŠANA

QA
17. ŠA-BI-TA
18. V GUR CCXXV QA
19. DUB UR- ${ }^{\text {d }}$ NINA DUMU NA-BA-ŠAG
III. ェ. XVI GUR LXXV QA
2. DUB BA-LI DUMU KI-RAM-MU
3. MU-GUB
4. LAL-NI VIII GUR CCLXVI ŠUŠŠANA QA
5. UR-DUMU
6. XIV GUR CLX QA
7. LAL-NI ŠE-KUL
8. XXXI GUR XLII BAR QA
9. ŠE-KUL-TA GUR
10. XC QA ŠE AMAR BA-EDIM
ir. II (GUR) CXX QA KI LUGAL-URU-DA-TA
12. ŠU-NIGIN XLVIII GUR CXII BAR QA
13. ŠA-BI-TA
14. XLVIII GUR CXII BAR QA
15. DUB UR- ${ }^{\text {a }}$ NINA DUMU NA-BA-ŠAG
16. MU-GUB
17. UR-SAG-GA
18. E-d ${ }^{\text {d }}$ UMU-ZI
19. VII GUR
20. ŠE-KUR-RA ERIM BA-EDIM
IV. .
2. V GUR LX QA (DUB). . . .
3. I (GUR) CCXL QA ŠID-NU-TUG
4. DUB GAL-BI-MU
5. MU-GUB
6. UR- ${ }^{\mathrm{B}} \mathrm{BA}-\mathrm{U}$ DUMU PA-AL-E
7. IV (GUR) CCXL QA ŠE GAR-GAL-LA
. ŠA-BI-TA
9. IV (GUR) CCXL QA ŠID-NU-TUG
10. A-KA GAL-BI-MU BA-A-GAR
if. MU-GUB
12. UR- ${ }^{\mathrm{a}} \mathrm{KAL}$ DUMU HU-MU
13. CXCII GUR LXVIǏ QA TUG(?)
14. CCXXVI (GUR) XXX QA ZID-KA
7. Of it
8. 39 talents 60 qa
9. receipted for by Galbimu,
10. are present.
11. Galnashelaki, son of Bâ:
12. 16 Gur 180 qa
13. remain as seed-grain.
14. 14 Gur 86 and $\frac{1}{3}$ qa
${ }^{1} 5$. for seed-grain is sealed.
I6. Total 30 gur 266 and $\frac{1}{3}$ qa;
17. of it
18. 5 gur 225 qa
19. receipted for by Ur-Nina son of Nabashag,
III. т. 16 gur 75 qa
2. receipted for by Bali, son of Kirammu
3. are present.
4. There are lacking 8 gur 266 and $\frac{1}{3}$ qa.
5. Urdumu:
6. 14 Gur 160 qa
7. remain as seed-grain;
8. $3^{\mathrm{r}}$ Gur 42 and $\frac{1}{2} \mathrm{qa}$
9. for seed-grain are sealed.
10. 90 QA of Amar-grain is set apart.

1I. 2 Gur 120 qa (are) from Lugaluruda.
12. Total 48 gur, II2 and $\frac{1}{2}$ qa:
13. of it
14. 48 gur 112 and $\frac{1}{2} q a$
15. receipted for by Ur-Nina, son of Nabashag
16. are present.
17. Ursagga,
18. Temple of Tammuz:
19. 7 gur
20. food for slaves is set apart.
IV. i. Of it
2. 5 gur 60 qa on the account of. : . . .
3. I gur 240 qa on an unsealed tablet
4. receipted for by Galbimu
5. is present.
6. Ur-Bau son of the Paal of the temple:
7. 4 Gur 240 qa grain prepared as food.
8. Of it
9. 4 gur 240 qa , on an unsealed tablet,
10. a partial payment made to Galbimu,
ir. are present.
12. Ur-Kal, son of Khumu:
13. 192 Gur 67 qa, sealed(?),
14. 226 gur 30 qa , flour for food,
15. IM-SI BA-TA
16. S̆U-NIGIN CCCCXVIII GUR XCVII QA
17. ŠA-BI-TA
18. LXV GUR
19. GAL-BI-MU ŠU-BA-TI
20. CCXLIV GUR XXVII QA

2I. UR- ${ }^{\text {d }}$ NINA DUMU NA-BA-ŠAG
22. ŠU-BA-TI
23. ŠU-NIGIN CCCIX GUR XXVII QA
24. MU-GUB
25. LAL-NI CIX GUR LXX QA
26. TUL-TA
27. XVI GUR LXVIII BAR QA
28. LAL-NI ŠE-KUL
V. r. (VI) GUR (CLXXXII BAR) QA SE-KUL-TA GAR-RA
2. ŠU-NIGIN XXII GUR CCLI QA
3. ŠA-BI-TA
4. LAL-NI XXII GUR CCLI BAR QA
5. UR- ${ }^{\mathrm{d}} \mathrm{BA}-\mathrm{U}$ DUMU KALAM-IL
6. XV GUR CCLXXIV QA
7. LAL-NI ŠE-KUL
8. VII GUR LXXII BAR QA
. SE-KUL-TA GUR-RA
10. ŠU-NIGIN XXIII GUR XLVI BAR QA
ir. ŠA-BI-TA
12. VIIII (GUR) BA-RU ŠU-BA-TI
13. VIII (GUR) DUB GAL-BI-MU
14. ŠU-NIGIN XVI GUR
15. MU-GUB
16. LAL-NI VI GUR LVI BAR QA $^{2}$
17. UR-NIGIN-GAR
18. E- ${ }^{\mathrm{a}}$ MAL-TUM-DUG
19. XVI (GUR) CXC (QA) LAL-NI ŠE-KUL
20. XI GUR CC QA
21. ŠE-KUL-TA GUR-RA
22. II GUR CXX QA S̆E AMAR BA-BAD
23. SUU-NIGIN XXX GUR CC ${ }^{3}$ QA
24. ŠA-BI-TA
25. XIV (GUR) XX (QA) GAL-BI-MU S̆U-BA-TI
15. remained from last year for rations.
16. Total 4 r 8 gur 97 qa ;
17. of it
18. 65 gur
19. Galbimu received.
20. 244 Gur 27 qa

2r. Ur-Nina, son of Nabashag
22. received.
23. A total of 309 gur 27 qa
24. is present.
25. There are lacking 109 gur 70 qa.
26. Tulta:
27. 16 Gur 68 and $\frac{1}{2}$ qa
28. is on hand for seed-grain.
V. 1. (6) gur ( 182 and $\frac{1}{2}$ ) qa for seed-grain are set apart-
2. total 22 gur 25 Iqa .
3. Of it
4. there remain 22 gur 25 rand $\frac{1}{2}$ qa.
5. Ur-Bau son of the porter:
6. 15 gur 274 qa
7. remain as seed-grain.
8. 7 Gur $7^{2}$ and $\frac{1}{2}$ qa
9. for seed-grain is set apart:

1o. total 23 gur 46 and $\frac{1}{2}$ qa.
r. Of it
12. 8 gur Baru received;
13. 8 gur was receipted for by Galbimu;
14. total, 16 gur
15. are present.
16. There are lacking 6 gur 56 and $\frac{1}{2} \mathrm{qa}^{2}$
17. Urnigingar,
18. Temple of Maltumdug:
19. i6 Gur 190 qa remain for seed-grain;
20. II gur 200 qa
21. for seed-grain are set apart.
22. 2 Gur 120 qa of Amar-grain are set apart.
23. Total 30 gur 200 qa.
24. Of it
25. I4 gur 20 qa Galbimu received;
${ }^{1}$ The word su-ba-tr, literally "he received," is, as this context suggests, a synonym of dub, so that dub may in such connections be rendered "was receipted for by." This is proved beyond a doubt by HLC, No. 77 (see Pl. 6), where the case reads: KI UR- ${ }^{d}$ NINA-TA DUB UR- ${ }^{\text {a }}$ KAL DUMU NAM-MAH, which the tablet in its version of the same thing expresses: KI UR- ${ }^{\text {d NINA-TA }}$ UR- ${ }^{\text {d KAL }}$ dumu NAM-MAH SU-ba-ti. In the first case then we must render "from Ur-Nina, receipted for by Ur-Ka' son of Nammakh," and in the second: "from Ur-Nina Ur-Kal son of Nammakh received." As the seal of HLC, No. 77, shows that Ur-Kal son Nammakh was the scribe who wrote the tablet, it is clear that these expressions dub and su-ba-TI refer to the recording officers who receipted for the grain and entered it upon the books of the receiving office. See also Lau, Old Babylonian Temple Records, p. 6.
${ }^{2}$ Scribal error for 7 gur 46 and $\frac{1}{2}$ qa.
${ }^{3}$ Scribal error for CCX.
26. MU-GUB
27. LAL-NI XVI GUR CXC QA
28. UR-E-ŠE
29. XVI GUR CLXXXII ŠANABI QA
VI. i. ŠE-KUL-TA. . . . . . . .
2. I (GUR) CL (QA).
3. V GUR XXVII QA
4. LAL-NI ŠE-KUL
5. ŠU-NIGIN XXIII GUR LIX ŠANABI

QA
6. ŠA-BI-TA

XVIII GUR XXXI ŠANABI QA
. GAL-BI-MU ŠU-BA-TI
MU-GUB
ro. LAL-NI V GUR XXVII QA
ir. NIN-ŠAM-AS̆
12. E- ${ }^{\mathrm{d}}$ NINA
13. CCX QA ŠE-BA IB-BA
14. CVI GUR CCLXXX QA ZID-KA
15. SUU-NIGIN CVII GUR CCL ${ }^{\text { }}$ QA
16. ŠA-BITA
17. LXXXIV GUR XXX QA
18. A-KA LUGAL-SIG-GID BA-GUR
19. MU-GUB

20 LAL-NI XXIII GUR CXC QA
21. GIR UR-ŠAG-GA MU-DUMU MA-LI

GAR-ŠAM-AŠ DUMU-KI-KU-GAL
NIN-ŠID-AK SI-NI-IB
GAL-HAL-NE
ŠA KI-NU-NIR ${ }^{k i}$ NINA $^{k i}$
26. MU SI-MU-UR-RU-UM ${ }^{\mathrm{ki}}$ LU-LU-BU ${ }^{\mathrm{ki}}$ A-DU (X) LAL $I^{\text {kam }}$ BA-HUL
${ }^{1}$ The number of qa in this account are inaccurately enumerated.
26. it is present.
27. There are lacking 16 gur 290 qa
28. Ureshe:
29. 16 Gur 182 and $\frac{2}{3}$ qa
VI. I. for seed-grain. . . . .
2. I Gur $\mathrm{I}_{50}$ qa. . . . .
3. 5 gur 27 qa
4. remain as seed-grain.
5. Total 23 gur 59 and $\frac{2}{3}$ qa.
6. Of it
7. I8 gur 32 and $\frac{2}{3}$ qa
8. Galbimu received;
9. it is present.
10. There are lacking 5 gur 27 qa.
xi. Ninshamash,
12. Temple of Nina:
13. 2 Io Qa as wages were paid.
14. 106 Gur 280 qa , flour for food:
15. A total of 107 gur 250 qa ;
16. of it
17. 84 gur 30 qa ,
r8. a partial payment made by Lugalsiggid,
19. is present.
20. There are lacking 23 gur 190 qa.
21. Gir: Urshagga, oldest son of Mali,
22. Ash-plant-food Dumu-ki-ku-gal officer.
23. The business transaction performed
24. Galkhalne
25. in Kinunir (and) Ninâ,
26. the year Simurru and Lulubi were subjugated for the ninth time (i. e., Dungi's 42 nd year).

## CORRECTIONS TO PART I.

P. 7 erase the last sentence of the second paragraph, beginning: "A comparison," etc.
P. 9, 1. 7, read "for business" instead of "of food-making (or food-makers)".
P. 9. 1. 15 , read "for messengers to" instead of "deposited at."
P. 9, 1. 34, read "BA-AN-TUR" instead of "BA-AN-LIL."
P. ro, No. 220, rev., 4, read "Lugalmagurus, messenger" instead of "Lugalmagurussukkal". Also strike out dash before SUKKAL.
P. io, No. 144, rev. 3, begin the line of translation with capital T.
P. 1о, No. 329, 1. r, read "LVII CXX QA" instead of "CLXXVII," and translate " 57 Gur 120 qa" instead of " 177 talents."
P. io, No. r88, 1. r, read "XV" instead of "XXV."

Ibid., read "gur" instead of "talents" in the translation of lines 1-4.

Ibid., 1. 5, read "XXX X" instead of "UŠU-U" and translate " 39 " instead of "of Ushu."
P. II, No. 288, rev., 1. 3, read "GIN-NA" instead of "GUB-NA" and translate "to Susa they went" instead of "at Susa they presented."
P. ri, No. 47, 1. r, read "CCC" instead of "V" and translate " 300 "Gur" instead of " 5 talents.'"
P. ir, No. 193, in obv.1. i and rev. lines 1 and 5 read "SAG" instead of "DAMAK."

Ibid., rev., 1. 7, read "to" instead of " of."
P. 12, No. if3, 1. 2, read "NIN-ŠID-AG" instead of "GAR-RA-AG" and translate "for the transaction of business" instead of "of "food-making."
P. 12, No. 185, 1. i, read "III CXX QA" instead "CXXIII" and translate " 3 Gur 120 qa" instead of " 123 Talents."
P. i3, No. 324, 1. i, read "BAR" instead of "MISLA."
P. 13, No. 334, 1. 4, read "BA-AN-TUR" instead of "BA-AN-LIL."

For corrections to pp. 15-18, see above pp. 23-26.
P. 19, No. 12 ; in the date insert the word "after" after the word "year."
P. 26, No. 379; in the date insert "high priest of" after the word "year," read "ninth year of Bur-Sin" instead of "reign of Dungi(?)".

## CORRECTIONS TO PLATES OF PART I．

Pe．9．i．1．read 矨 instecol of


Pl．10．No．309．neve 3，3nad
rinstrad of

 ＂for 枅佔
Pl． $11, N_{0} 15^{-2}$ ，ners 2，head a－st for M－
Pl．13．No．184，1，rend for


Pl．16．i，1，sead $\mathrm{T}^{2} Y^{A}$ for $\mathrm{H} T \mathrm{~T}$
＂ 1 ＂13．．
．$\because i i, 2$ ．．TT ．T TITI
＂＂ii， 8 the sign mead ti is
a scribal serasuse

PR．16．ii．12，nead TIT iustead of $\times$ TIF


Pl．17，No．100，revel，read for


## REGISTER OF TABLETS.

| Tablet No. in Haverford College Collection. <br> I. | Plate. 5 I | Description of Tablet. <br> Account tablet, 6 and $\frac{1}{8}$ in. long, 3 and $\frac{1}{2}$ in. wide, 9-16 in. thick. ${ }^{1}$ Record of quantities of wool paid to men and people of the "house of weavers." | Date. <br> Month of the feast of Tammuz (7th mo.), the year the king was installed high priest of Anu and Nannar,4 th year of Bur-Sin. |
| :---: | :---: | :---: | :---: |
| 2. | 52. | Account tablet. 5 and $\frac{1}{4}$ in. long, 4 and $\frac{1}{4} \mathrm{in}$. wide, r in. thick. List of kids offered in sacrifice. | Month . . . . . <br> Accession year of Bur-Sin. |
| 4. | 53. | Case tablet, unopened. Receipt for grain to be used as rations for the women weavers. Length, I and $\frac{5}{8}$ in.; width, I and $\frac{1}{2} \mathrm{in}$.; thickness, I in. | Month Sheilla (ist mo.), the year Shashru was subdued. |
| 6. | 53. | Receipt for grain. Length, I and $\frac{1}{4} \mathrm{in}$; width, I and $\frac{1}{8}$ in.; thickness, $\frac{3}{8}$ in. | Month of the feast of <br> Dungi (8th mo.). <br> Year not given. |
| 7. | 54. | Account tablet. Length 5 and $\frac{3}{4}$ in.; width, 4 and $\frac{1}{4} \mathrm{in}$; thickness, I in. Badly broken on left edge. Account of receipt and distribution of wool. | Undated. |
| 8. | 55, 56. | Account tablet-record of quantities of grain, meal and oil. Length, 6 and $\frac{1}{4} \mathrm{in}$.; width, 4 and $\frac{7}{8} \mathrm{in}$., thickness, I and $\frac{1}{4} \mathrm{in}$. | The year the king repaired the house. |
| 9. | 57. | Account tablet of grain. Length, 5 and $\frac{5}{8}$ in.; width, 4 and $\frac{3}{8} \mathrm{in}$.; thickness I in. Tablet rapidly crumbling. | Date broken away. |
| Iо. | 53. | Account of foods. Length 4 and $\frac{7}{8}$ in.; width, 3 in.; thickness, $\frac{7}{8}$ in. | Two years after the E-BA-ŠA-IS ${ }^{2}$ of Da gon was built,-39th year of Dungi. |
| 14. | 58. | Account of food. Tablet is crumbling rapidly. Length, 4 in.; width, 2 and $\frac{1}{4} \mathrm{in}$.; thickness, $\frac{1}{4}$ in. | Date broken away. |
| 19. | 59. | Account of quantities of grain paid to HI-KU and KU-IL workers. Length, 5 and $\frac{1}{2}$ in.; width, 3 and $\frac{1}{8}$ in.; thickness, $\frac{3}{4}$ in. | Month, Mushul (roth mo.); the year the king was appointed high priest of Nan-nar-KAR-ZI-DA, 9th year of Bur-Sin. |


| Tablet No. in Haverford College Collection. 22. | Plate. | Description of Tablet. <br> Account of quantities of grain paid to various men and women. Length, 3 and $\frac{3}{8} \mathrm{in}$.; width, 2 and $\frac{1}{4}$ in.; thickness, $\frac{7}{8}$ in. | Date. <br> Undated. |
| :---: | :---: | :---: | :---: |
| 23. | 62. | Account of quantities of wheat, flour, drink, and oil given to different classes of officials. Length, 5 and $\frac{3}{8}$ in.; width, 4 and $\frac{3}{8}$ in.; thickness, $x$ in. | Date broken away. |
| 25. | 63. | Record of quantities of land on different plantations worked by various men. Length, 4 and $\frac{3}{8}$ in.; width, 3 in.; thickness, $\frac{7}{8}$ in. | Date broken away. |
| 27. | $64,65$. | Record of quantities of land appropriated by the king and entrusted to various officers. Length, 6 and $\frac{1}{2} \mathrm{in}$.; width, 5 and $\frac{1}{2} \mathrm{in}$.; thickness, $x$ and $\frac{1}{8}$ in. | No date. |
| 28. | 66. | Record of quantities of grain paid to three classes of temple servants. Length, 4 and $\frac{3}{4} \mathrm{in}$.; width, 4 in.; thickness, $\frac{7}{8}$ in. | Date broken away. |
| 3 I . | 63. | Case tablet, unopened. Record of grain assigned as rations to two men. Length, I and $\frac{5}{8} \mathrm{in}$.; width, I and $\frac{1}{2}$ in.; thickness, $\frac{7}{8}$ in. | The year the land was devastated a second time. |
| 32. | 67. | Account of quantities of grain for flour. Length, 3 and $\frac{3}{4} \mathrm{in}$.; width, 2 and $\frac{1}{2} \mathrm{in}$.; thickness, $\frac{7}{8} \mathrm{in}$. | The year Bur-Sin became king. |
| 33. | 68. | Rations for various classes of officials and workmen. Length, 4 and $\frac{3}{8}$ in.; width, 2 and $\frac{7}{8}$ in.; thickness, $\frac{7}{8}$ in. | Month of the feast of Baut (9th mo.), 7 th day, the second year after the subjugation of Kimash,--the 46 th year of Dungi. |
| 34. | 69. | Record of the "round-up" of a flock. Length, 4 and $\frac{5}{8} \mathrm{in}$.; width, 2 and $\frac{5}{8} \mathrm{in}$.; thickness, $\frac{3}{4} \mathrm{in}$. | The year Kimash ${ }^{1}$ and Humurti were sub-dued,--reign of Dungi? |
| 39. | 70. | Account of grain. Length, 2 and $\frac{1}{8}$ in.; width, 1 and $\frac{1}{2}$ in.; thickness, $\frac{5}{8}$ in. | The year after the E -BA-ŠA-IŠ of Dagon was built,- 38 th year of Dungi. |
| 46. | 70. | Record of rations for some workers in gardens. Length, I and $\frac{5}{8}$ in.; width, I and $\frac{3}{4} \mathrm{in}$.; thickness, $\frac{3}{4} \mathrm{in}$. | Month of the feast of Dungi (8th mo.), irth day, the year Kimash was sub-jugated,-44th year of Dungi. |
| 48. | 70. | Case tablet, unopened. Receipt for two kids from two shepherds. Length, 1 and $\frac{5}{8}$ in.; width, I and $\frac{1}{2}$ in.; thickness, I in. | Month of the feast of Tammuz (7th mo.), the year after Urbillum was subjugated, -44th year of Dungi? or 3 rd year of BurSin? |

[^3]\begin{tabular}{|c|c|c|c|}
\hline Tablet No. in Haverford College Collection.
\[
49 .
\] \& Plate.
70. \& \begin{tabular}{l}
Description of Tablet. \\
Case tablet. Receipt for grain. Tablet I and \(\frac{1}{4} \mathrm{in}\). long, I and \(\frac{1}{8} \mathrm{in}\). wide, and \(\frac{5}{8} \mathrm{in}\). thick. Case, I and \(\frac{1}{2} \mathrm{in}\). long, I and \(\frac{1}{2} \mathrm{in}\). wide, and \(\frac{7}{8} \mathrm{in}\). thick.
\end{tabular} \& \begin{tabular}{l}
Date. \\
Same month and year as the preceding.
\end{tabular} \\
\hline 50. \& 67. \& Receipt for . . . . Length, I and \(\frac{5}{8} \mathrm{in}\).; width, I and \(\frac{3}{8} \mathrm{in}\).; thickness, \(\frac{5}{8}\) in. \& Month, Shukul (5th mo.). Year not given. \\
\hline 5 I. \& 7 I. \& Account of grain payments to various workmen. Length, 4 and \(\frac{1}{2} \mathrm{in}\).; width, 3 and \(\frac{1}{4} \mathrm{in}\); thickness, \(\frac{5}{8} \mathrm{in}\). \& Month, Mushul (roth mo.), the year the king was installed high priest of Nan-nar-KAR-ZI-DA,9th year of Bur-Sin. \\
\hline 53. \& 72. \& Account of quantities of grain and flour. Length, 3 and \(\frac{3}{4}\) in.; width, 2 and \(\frac{3}{8}\) in.; thickness, \(\frac{7}{8}\) in. \& Months of Guddunesarsar and Feast of Neshu (3rd and 4th mos.), the year that Bur-Sin became king. \\
\hline 55. \& 73. \& Record of the wages paid for working certain fields for 55 days in the months Shekinkud and Sheilla, ( i 2 th and ist months). Length, 4 and \(\frac{1}{8}\) in.; width, 2 and \(\frac{1}{2}\) in.; thickness, I in. \& The year after Bur-Sin became king. \\
\hline 56. \& 74. \& List of various classes of temple officials and of grain paid to different men. Length, 5 and \(\frac{1}{4}\) in.; width, 3 and \(\frac{7}{16}\) in.; thickness \(x\) in. \& Undated. \\
\hline 57. \& 75. \& List of sheep, kids and oxen, apparently for sacrifice, on certain days in the months Zibku, Feast of Dungi, and Mushul (6th, 8 th and roth months). Length, 5 and \(\frac{3}{4}\) in.; width, 4 and \(\frac{1}{4}\) in.; thickness, 1 in. \& Undated. \\
\hline 62. \& 76 \& Record of the wages of women and men employed from the 5 th to the 9 th months. Length, 4 and \(\frac{3}{4}\) in.; width, 3 and \(\frac{1}{8}\) in.; thickness, \(\frac{5}{8} \mathrm{in}\). \& Undated. \\
\hline 67. \& 77, 78. \& Record of the dimensions of some fields the produce of which was to go to certain shepherds. The tablet is circular; its diameter is 4 and \(\frac{1}{4} \mathrm{in}\). ; its thickness at the center, \(I\) and \(\frac{1}{8}\) in. \& The year the great High Priest made Bur-Sin, whom he loved, high priest of Eridu,-8th year of Bur-Sin. \\
\hline 69. \& 79. \& Account of quantities of butter, cheese, oil, and goat's hair. Length, 4 and \(\frac{3}{4}\) in.; width, 3 in.; thickness, \(\frac{7}{8} \mathrm{in}\). \& The year Bur-Sin destroyed Urbillum, i. e. his and year. \\
\hline 70. \& 80. \& Account of wages paid in grain to various classes of temple servants. Length, 3 and \(\frac{5}{8} \mathrm{in}\).; width, 2 and \(\frac{5}{8}\) in.; thickness, \(\frac{3}{4} \mathrm{in}\). \& The year (the king) was made high priest of Nannar-KAR-ZI-D A -9th year of BurSin. \\
\hline 71.

-8. \& 82. \& Case tablet. Receipt for I GUR, 270 QA of grain as wages for 19 men. Length of tablet, $x$ and $\frac{3}{4}$ in.; width, I and $\frac{1}{2}$ in.; thickness, $\frac{1}{2}$ in. Case, 2 and $\frac{1}{4} \mathrm{in}$. long; other dimensions unobtainable. \& Month Sheilla (rst mo.), the year Gimil-Sin became king. <br>
\hline
\end{tabular}

| Tablet No. in Haverford College Collection. 72. | Plate. $8 \mathrm{r} .$ | Description of Tablet. <br> Tablet about half broken away. Fragmentary record of artisans, laborers and women employed during five months. Length, 2 and $\frac{3}{4} \mathrm{in}$.; width, 3 and $\frac{1}{2}$ in.; thickness, $I$ in. | Date. <br> The second year after Kimash was destroyed, -46 th year of Dungi. |
| :---: | :---: | :---: | :---: |
| 73. | 83. | Case tablet. Account of cows and calves and the grain provided for them. Length of tablet, 2 and $\frac{3}{8}$ in.; width, I and $\frac{3}{4} \mathrm{in}$.; thickness, $\frac{5}{8}$ in. Case, 3 in. long, 2 in. wide, $x$ in. thick. | The year Bur-Sin became king. |
| 77. | 86. | Case tablet. Receipt for storage of grain to be paid in wages. Length of tablet, $I$ and $\frac{1}{2}$ in.; width, I and $\frac{1}{8}$ in.; thickness, $\frac{1}{2}$ in. Length of case, I and $\frac{7}{8}$ in.; width, I and $\frac{3}{8}$ in.; thickness, I in. | Month, Mushul (Ioth mo.), the year Harshi and Humurti were subjugated, -46 th year of Dungi. |
| 78. | 80. | A clay object of irregular shape, but of the general form of a bag, I and $\frac{3}{4} \mathrm{in}$. long, r and $\frac{1}{4} \mathrm{in}$. wide in the widest part, $\frac{3}{8}$ in. thick. Perforated through its longest dimension with two holes through which a string could be inserted for hanging up the object. The seal was rolled over it so as to form a palimpsest. Records the shipping of 4 GUR, 8r QA of wheat flour. | Month Ziblku (6th mo.), year not given. |
| 79. | 79. | An object in every respect similar to the preceding. $x$ and $\frac{5}{8}$ in. long, $x$ and $\frac{3}{8} \mathrm{in}$. wide at the widest part, $\frac{3}{8} \mathrm{in}$. thick. Bearing in addition to the seal the words " ${ }_{2}$ GUR, 10 QA of wheat flour." | 26th day, month and year not given. |
| 82. | 82. | Account of quantities of wool produced by a flock for making garments. Length, 4 and $\frac{1}{4} \mathrm{in}$.; width, 2 and $\frac{1}{2}$ in.; thickness, $\frac{7}{8}$ in. | The year . . . egir-(?) ru was subjugated. |
| 83. | 84. | Pay roll of women employees. Length, 4 and $\frac{1}{8}$ in.; width, 2 and $\frac{3}{4}$ in.; thickness, I in. | Undated. |
| 85. | $5^{8}$. | Account of provisions of two spearmen who went to different cities. Length, I and $\frac{3}{4}$ in.; width, I and $\frac{1}{8}$ in.; thickness, $\frac{1}{2} \mathrm{in}$. | Month Shekin-kud ( I 2 th mo.), 8th day, year not given. |
| 86. | 8 I. | Receipt for butter and cheese. Length, $I$ and $\frac{1}{8}$ in.; width, I and $\frac{1}{4} \mathrm{in}$.; thickness, $\frac{1}{2} \mathrm{in}$. | Month of the feast of the god Nishu, the year the TEMEN of Eridu (was erected?) reign of Dungi? |
| 87. | 85. | Pay-roll of men, women and boys. Length, 4 and $\frac{3}{4}$ in.; width, 3 and $\frac{1}{4}$ in.; thickness, $\frac{5}{8}$ in. | Date broken away. |
| 88. | 86. | Account of the receipt and distribution in wages of quantities of wheat flour. Length, 3 and $\frac{1}{2} \mathrm{in}$.; width, 2 in.; thickness, $\frac{3}{4}$ in. | Month of the feast of the god Neshu (4th mo.), year not given. |
| 89. | 87. | Account of a pay-roll. Tablet nearly half broken away. Length, 3 and $\frac{1}{4} \mathrm{in}$.; width, 3 and $\frac{1}{8}$ in.; thickness, I in. | Month Mushul (roth mo.), irth day, two years after Kimash was subjugated, 46th year of Dungi. |

Tablet No. in Haverford College Collection. 92.

Plate. 88, 89. 93

3 and $\frac{1}{8}$ in.; thickness, $\frac{5}{8}$ in. Account of numbers of working-women. Length, 2 and $\frac{1}{2}$ in.; width, r and $\frac{3}{4}$ in.; thickness, $\frac{3}{4}$ in.
92. Account of men employed on public work. Length
2 and $\frac{1}{2} \mathrm{in}$.; width, I and $\frac{7}{8}$ in.; thickness, $\frac{7}{8}$ in.

Date.
Date broken away.
Account of grain-payments to different men from different men. Originally very large, but more than half is now broken away, including more than half the length of the tablet and a part of the left side. At least one column of writing is thus lost at the beginning and the end. Length, 3 and $\frac{1}{2}$ in.; width, 7 and $\frac{3}{8}$ in.; thickness, 1 and $\frac{1}{8}$ in. ccount of wool from different flocks. Tablet broken at left side so that lines are incomplete at the beginning. Length, 4 in.; width, 2 in.; thickness, $\frac{7}{8}$ in.
(The year Simu)-ru was subjugated,--23rd year of Dungi. (Perhaps to be read (Shash)ru, in which case the date is the 6 th year of Bur-Sin.)
Date broken away.

Undated.

Sixth day of the month Guddunesharshar (3rd mo.). Year not given, but the E-BA-ŠA-ǏS of Dagon is mentioned, which connects it with Dungi's 37 th year.
Ninth day of the month Sukul (5th mo.). Year not given.
Month of the feast of Tammuz ( $\mathrm{I}^{\text {th }}$ mo.), the year Simurru and Lulubi were subjugated the 9 th time,42nd year of Dungi.
93. Fragmentary pay-roll of men and women. Length, Undated. 2 and $\frac{1}{4} \mathrm{in}$.; width, 2 and $\frac{1}{8}$ in.; thickness, I in.
93. Account of flour, drink and oil furnished to messengers and others. Length, 3 in.; width, $x$ and $\frac{3}{8}$ Month Mushul (ioth mo.), year not given. in.; thickness, 9-16 in.
93. Account of grain necessary to pay the wages of laborers working at different rates for I2 months. Length, $I$ and $\frac{7}{8} \mathrm{in}$.; width, I and $\frac{3}{8}$ in.; thickness, $\frac{3}{8}$ in.
94. Pay-roll of 17 men for digging. Length, 2 and $\frac{3}{4}$ in.; width, 1 and $\frac{11}{16} \mathrm{in.;} \mathrm{thickness}, \frac{5}{8} \mathrm{in}$.

The year Nannar-KAR-ZI-DA entered the temple,-5th year of Dungi.
Year when the high priest of Eridu. . . 26th year of Dungi.

| Tablet No. in Haverford College Collection. 105. | Plate. 94. | Description of Tablet. <br> Account of flour, drink, and oil furnished to messengers and others. Length, 2 and $\frac{3}{4} \mathrm{in}$.; width, I and $\frac{1}{4}$ in.; thickness, $\frac{5}{8}$ in. | Date. <br> Month Zibku (6th mo.), year not given. |
| :---: | :---: | :---: | :---: |
| 106. | 94. | Account of drink, flour and oil furnished messengers and others who came from and went to Susa. Length, 2 and $\frac{5}{16}$ in.; width, $I$ and $\frac{7}{16}$ in.; thickness, $\frac{3}{8} \mathrm{in}$. | Month of the feast of Neshu (4th mo.), year not given. |
| 108. | 95. | Account of oil furnished to messengers. Length, r and $\frac{3}{8} \mathrm{in}$.; width, I and $\frac{8}{16}$ in.; thickness, $\frac{9}{16}$ in. | Month Zibku (6th mo.), year not given. |
| 109. | 87. | Account of drink, food, and oil furnished to messengers and others. Length, I and $\frac{1}{4}$ in.; width, r in.; thickness, $\frac{1}{2}$ in. | Twenty-fourth day of the month Amarāsi, (ith mo.), year not given. |
| 110. | 95. | Unbaked tablet; half broken away. A list of fields and amounts of grain. Length, $I$ and $\frac{7}{8}$ in.; width, r and $\frac{7}{8}$ in.; thickness, $\frac{3}{4}$ in. | Undated. |
| III. | 95. | List of quantities of drink, flour and oil furnished to messengers. Length, 2 and $\frac{1}{4}$ in.; width, I and $\frac{8}{8}$ in.; thickness, $\frac{3}{8}$ in. | Month of the feast of Bau (9th mo.), year not given. |
| 112. | 95. | Pay-roll of five men. Length, 1 and $\frac{15}{16} \mathrm{in}$.; width, I and $\frac{1}{2}$ in.; thickness, $\frac{3}{4}$ in. | Undated. |
| II4. | 96. | A receipt. Length, 1 and $\frac{5}{8}$ in.; width, I and $\frac{1}{2}$ in.; thickness, $\frac{1}{2} \mathrm{in}$. | Month Mushul (ioth mo.), the year Ini-Sin became king. |
| I 15. | 95. | List of amounts of drink, food and oil furnished messengers from Anshan and Nippur. Length, r and $\frac{9}{16}$ in.; width, x in.; thickness, $\frac{1}{2} \mathrm{in}$. | Month Dirshekinkud (intercalary month), year not given. |
| 116. | 96. | Bill of lading for 60 QA of grain. Seal so rolled over it as to make the obverse a palimpsest. Length, 1 and $\frac{5}{8}$ in.; width, $I$ and $\frac{7}{16}$ in.; thickness, $\frac{3}{8}$ in. | Undated. |
| 117. | 96. | Pay-roll of shepherds. Partially defaced. Length, I and $\frac{5}{8}$ in.; width, $I$ and $\frac{3}{8}$ in.; thickness, $\frac{1}{2}$ in. | The year the great high priest of Anu was made high priest of Innini,--Bur-Sin's $4^{\text {th }}$ year. |
| II 8. | 96. | Record of the establishment of a copartnership. Length, 1 and $\frac{3}{4}$ in.; width, $I$ and $\frac{1}{2}$ in.; thickness, $\frac{3}{4} \mathrm{in}$. | The year the throne of Enlil was erected,3 rd year of Bur-Sin. |
| 119. | 97. | Record of the storage of quantities of grain. Obverse badly defaced. Length, 2 and $\frac{1}{8}$ in.; width, I and $\frac{1}{3}$ in.; thickness, $\frac{3}{8}$ in. | Undated. |
| 120. | 96. | Case tablet. Receipt for grain paid to the Patesi as taxes. Length, r and $\frac{13}{3} \frac{\mathrm{in} . ;}{}$ width, I and $\frac{1}{2}$ in.; thickness, $\frac{1}{2}$ in. | Month, Ganmash (2nd mo.), the year after the great high priest of Anu was estab-lished,-5th year of Bur-Sin. |


| Tablet No. in Haverford College Collection. I 2 I . | Plate. 96. | Description of Tablet. <br> Case tablet. Record of the storage of grain. Length, I and $\frac{7}{8} \mathrm{in}$.; width, I and $\frac{3}{8}$ in.; thickness, $\frac{1}{2}$ in. | Date. <br> The year Ini-Sin became king. |
| :---: | :---: | :---: | :---: |
| 122. | 97. | Record of quantities of flour furnished to messengers and others. Length, 2 and $\frac{1}{16}$ in.; width, I and $\frac{5}{16}$ in.; thickness, $\frac{3}{8}$ in. | Month Sheilla (ist mo.), year not given. |
| 123. | 97. | List of quantities of different kinds of food. Length, I and $\frac{1}{2} \mathrm{in}$.; width, I and $\frac{1}{4} \mathrm{in}$.; thickness, $\frac{1}{2} \mathrm{in}$. | Month, Guddu(ne) <br> sharshar (3rd mo.) 26th day, the year the high priest of Ininni was designated by omens. |
| 124. | 97. | List of quantities of drink, food and oil furnished to messengers. Length, 2 and $\frac{3}{16}$ in.; width, $I$ and $\frac{3}{8}$ in.; thickness, $\frac{3}{8} \mathrm{in}$. | Month of the feast of Bau (9th mo.), year not given. |
| 125. | 97. | List of quantities of oil furnished to messengers and others. Length, I and $\frac{1}{3} \mathrm{in}$.; width, I and $\frac{1}{8} \mathrm{in}$.; thickness, $\frac{1}{2}$ in. | Month Zibku (6th mo.), year not given. |
| 126. | 97. | Record of the receipt of quantities of flour from different boats. Length, I and $\frac{3}{4} \mathrm{in}$; width, I and $\frac{3}{8}$ in.; thickness, $\frac{1}{2} \mathrm{in}$. | Month Mushul (Ioth mo.), the year Shashru was subjugated,6th year of Bur-Sin. |
| 127. | 98. | Record of quantities of drink furnished to messengers. Length, I and im-i6 in.; width, I and $\frac{1}{4}$ in.; thickness, $\frac{5}{8} \mathrm{in}$. | Month Shukul ( 5 th - mo.), year not given, |
| 128. | 98. | Receipt. Obverse so defaced that the subject is unknown. Length, 2 and $\frac{1}{4} \mathrm{in}$.; width, 1 and $\frac{7}{8}$ in.; thickness, $\frac{3}{8} \mathrm{in}$. | Month of the feast of Bau and month Mushul ( 9 th and Ioth months), the year that Gimil-Sin the king subdued the land of Zabshali,-7th year of Gimil-Sin. |
| 129. | 98. | Receipt for wool. Length, I and $\frac{5}{8} \mathrm{in}$; width, I and $\frac{1}{2}$ in.; thickness, $\frac{3}{8} \mathrm{in}$. | The year the great throne of Enlil was erected.-3rd year of Bur-Sin. |
| 13. | 98. | Receipt for goats and sheep. Length, I and $\frac{3}{4} \mathrm{in}$; width, I and $\frac{3}{8} \mathrm{in}$.; thickness, $\frac{3}{8} \mathrm{in}$. | Month of the feast of <br> Tammuz (7th mo.), 8th day, the year the high priest of Eridu was appointed,-26th year of Dungi. |
| 131. | 99. | Record of quantities of drink, flour and oil furnished to messengers and revenue (?) officers. Length; 2 in.; width, I and $\frac{3}{8}$ in.; thickness, $\frac{1}{2}$ in. | Month Ganmash (and mo.), year not given. |
| 132. | 99. | Record of quantities of oil furnished to messengers and revenue (?) officers. Length, 2 and $\frac{1}{4}$ in.; width, I and $\frac{3}{8} \mathrm{in}$. ; thickness, $\frac{5}{8} \mathrm{in}$. | (Month of the feast of) Neshu (4th mo.), year not given. |


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| Tablet No. in Haverford College Collection. | Plate. | Description of Tablet. | Date. |
| I 33. | 98. | Case tablet. Receipt for wheat. Length, I and $\frac{1}{2}$ in.; width, I and $\frac{1}{2} \mathrm{in}$.; thickness, $\frac{3}{8} \mathrm{in}$. | The year the high priest of Ininni of Erech was designated by omens. |
| 134. | 98. | Record of the purchase of quantities of grain. Length, I and $\frac{5}{8}$ in.; width, I and $\frac{1}{2}$ in.; thickness, $\frac{1}{2}$ in. | Undated. |
| I 35. | 99. | Record of quantities of drink, flour and oil furnished to messengers and revenue (?) officers. Length, 2 in.; width, $x$ and $\frac{1}{4}$ in.; thickness, $\frac{1}{2}$ in. | (Month Zib)ku (6th mo.), year not given. |
| ${ }^{1} 36$. | 99. | Record of quantities of oil furnished to messengers and others. Length, I and 9-16 in.; width, I and $\frac{1}{4}$ in.; thickness, $\frac{1}{2}$ in. | Month Mushul (Ioth mo.), year not given. |
| ${ }^{1} 37$. | 99. | Receipt for grain. Length, $\mathbf{I}$ and $\frac{3}{8} \mathrm{in}$; width, I and $\frac{1}{4}$ in.; thickness, $\frac{3}{8} \mathrm{in}$. | Undated. |
| ${ }^{1} 38$. | 99. | Record of quantities of food, drink, and oil furnished to messengers. Length, 2 and $3-16$ in.; width, 1 and $\frac{3}{8}$ in.; thickness, $9-16$ in. | Month Mushul (Ioth mo.), year not given. |
| 401. | 8I. | Receipt for grain on account. Length, I and $\frac{7}{8}$ in.; width, I and $\frac{3}{8}$ in.; thickness, $\frac{5}{8} \mathrm{in}$. | The second year after it! (Perhaps after Kimash was subjugated, which would be the 46 th year of Dungi.) |
| 402. | 100. | Record of quantities of wheat flour for different months. Length, I and $\frac{1}{2} \mathrm{in}$.; width, I and $\frac{3}{8} \mathrm{in}$.; thickness, $\frac{5}{8} \mathrm{in}$. | The year of Urbillum and the year after Urbillum are men-tioned,-i.e. the and and 3 rd years of BurSin. |
| 403. | 100. | Record of quantities of drink, food and oil furnished to messengers. Length, $I$ and $\frac{3}{4}$ in.; width, $I$ and 3-16 in.; thickness, $\frac{1}{2}$ in. | Month of the feast of Neshu (4th mo.), year not given. |
| Tablet of Dr. Gould. | 100. | Record of the storage and distribution of grain. Length, 4 and $\frac{3}{4}$ in.; width, 2 and $\frac{1}{8}$ in.; thickness $\frac{3}{4} \mathrm{in}$. | The year Bur-Sin the king subdued Urbil-lum,-2nd year of Bur-Sin. |

## HALF-TONE PHOTOGRAPHS.

No. 1, Pl. I, Obverse of HLC. No. 27. Text published on Pl. 64.
No. 2, Pl. II, Obverse of HLC. No. 53. Text published on Pl. 72.
No. 3, Pl. II, Reverse of HLC. No. 53. Text published on Pl. 72.




HLe. 6.


HLG. 10.



HLl. 8


- Enased, affarentty by accident, before the tablet mas baked.

HLb. 8

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HLl. 22.


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HLe. 23

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## HLb 27



HLB. 27.






H46. 39


HLb. 46.


HLC. 48.


496


HL.b.58a.

PL. 71.


HL． 6.53.
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HLb. 67.


## HLb. 67.




HLe. 72.


HLe. 86.
Obverace




HL.l. 83
I
II


## HL.l. 87



- Scribal Erasure.


## HLE. 88.

obveric.


HLb 77.
obresse.
Tallet.


HLl. 6.77.
bave
obverse


Reverse.


HL\&. 89.
I
II


HLC. 109

HL6.92.

HL6: 92

HLb. 93.


HLG. $95^{5}$



HLE. 96.


HLE. 97.


HLC. 98.


HLZ. 99.


HL6. 101.
Obverse.


HL.b. 103.
otuerse.



HLb. 104
obverse.


HLB. 105
obverse.


Reverse.


HLE. 108.


Reverse.
HLle. 115


HLE. 110.
obverse.


HL. 6.111.


Reverse.


HLE. 112.
obucese.


Reverse.






Tablet of str. Gould.


HLb402.


HLe. 403.



HLC. No. 27. Face
Cf. Pl. 64.


HLC. No. 53 . Reverse.

Cf. P1. 72.


HLC. No. 53 . Face.


[^0]:    ${ }^{1}$ I have not collected full statistics of references to these officers. Six were included in the 363 officers mentioned above and I remember having seen three or four other references to them.
    ${ }^{2}$ These are Reisner, Urkunden, 195, 223 ; Thureau Dangin, RTC, 342, and HLC (below), roi and 138 .
    ${ }^{3}$ See RTC, No. 326 . Spelled also Gazaurgal, ibid., No. 325 .

[^1]:    ${ }^{1}$ i．e．，su－nu is for sunnû．The multiples in Assyrian are expressed by the form fu＇ul（see Ungnad，Babylonisch－Assyrische Grammatik，$\S_{29} \mathrm{~g}$ ），while in Arabic the form fu＇ul expresses a fraction（see Wright＇s Arabic Grammar，${ }_{3} \mathrm{~d}$ ed．，§ $3^{6} 3$ ）．
    ${ }^{2}$ That they had an ambiguous notation extending to $12,960,000$ ，Hilprecht has shown in his introduction to BE，XX，p． 26 ．

[^2]:    ${ }^{1}$ Cf. Meissner's Seltene assyrische Ideogramme, Nos. 6548, 6549 and 6557.
    ${ }^{2}$ These arithmetical calculations Mr. L. H. Rittenhouse, Instructor in Engineering in Haverford College, has kindly verified.

    For details as to Babylonian weights and measures see the article of Reisner in the Sitzungsberichte of the Berlin Academy, 1906, referred to above; the article of Weissbach in ZDMG, LXI (r907), pp. 379-402; and that of Thureau Dangin, Journal
    

[^3]:    ${ }^{1}$ Probably a scribal error for Harshi and Humurti, the 46 th year of Dungi.

