## SCRIPTA MINOA

ARTHUR J. EVANS



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## THE WRITTEN DOCUMENTS OF MINOAN CRETE

 WITH SPECIAL REFERENCE TO THE ARCHIVES OF KNOSSOSBY

## ARTHUR J. EVANS

## VOLUME II

## THE ARCHIVES OF KNOSSOS

CLAY TABLETS INSCRIBED IN LINEAR SCRIPT B EDITED FROM NOTES, AND SUPPLEMENTED BY (Sir)JOHN L. MYRES

## OXFORD <br> AT THE CLARENDON PRESS

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## PREFACE

The first volume of Scripta Minoa was published in 1909. It contained, as Part I, an account of the Prae-Phoenician Scripts of Crete, their Mediterranean relations and place in Minoan story (pp. 1-110). Part II described the Hieroglyphic or Conventionalized Pictographic Script, with its antecedents and affinities (pp. 111-293). Part III discussed the Phaestos Disk (pp. 294-302). An Analytical Index (pp. 294-302) was in effect a detailed table of contents; and there were twelve collotype plates.

In the preface ( $\mathrm{p} . \mathrm{ro}$ ) it was announced that
'the remaining Volumes-II and III-of this work will be devoted to detailed publication of the documents of the advanced Linear Scripts of Crete, of both classes (A and B). Volume II will contain copies of the inscriptions, complete signaries, an analysis of the script and documents, and illustrative commentaries. Volume III will consist of photographic plates of the inscribed tablets belonging to this category.'

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At his death, on II July 1941, his executors entrusted me with a preliminary examination of all his papers relating to the Cretan scripts, and on my report transferred to me all their interest in them. I in turn transferred these to the University of Oxford, reserving only the privilege of continuing, so long as I might be able, to prepare the texts for publication and Evans's own notes and drawings for preservation and reference. I reported also to the Delegates of the Clarendon Press my desire to enable them to complete Scripta Minoa, of which they had published Volume I.
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On the other hand, the great rise in the cost of printing, and the pressure of other work, have decided the Delegates of the Clarendon Press to restrict their undertaking to the publication of the peculiarly Knossian script 'Linear B', for which they had prepared, long ago, a fount of Minoan type, a large number of line blocks from Evans's transcripts, and an edition of collotype plates, numbered XIVXCVII in continuation of those published in Volume I (there is no XCII).

The present volume, therefore, represents parts of Volumes II and III of Evans's announcement in 1909, leaving the remainder, dealing with Linear Script A and other non-Knossian scripts, for publication elsewhere. For this the text and illustrations are essentially complete, apart from the unpublished tablets in a variant of Linear Script B, excavated by Dr. Carl W. Blegen near Pylos in Messenia. (AfA XLIII (1939), 557 ff.; Illustrated London News, 1939, 858.)

Chronology. Correlations with other kinds of antiquities are here made, almost without exception, in terms of the recognized Minoan periods, and the periods of culture on the Greek mainland and in Cyprus, which are securely equated with them. Absolute dates have been avoided for the further reason that the recent publications of Sidney Smith, Alalakh (1941) and Middle Minoan I-II and Babylonian Chronology (A才A XLVIII (1944), 1-24), demonstrate so great a reduction in the dates commonly assigned to periods and styles between the XII and the XVIII Dynasty of Egypt, that it would have been necessary on every occasion to state whether a date was on the old or the new system. From the XVIII Dynasty onward it is still safe to assign styles and objects within a century at most, and sometimes more precisely.

## ACKNOWLEDGEMENTS

Thanks are due to the Delegates of the Clarendon Press, for undertaking after so long an interval, and at a difficult time, this continuation of Scripta Minoa; to the Printer to the University and his skilled staff, especially in dealing with the Minoan type; and to Dr. Alice Kober, of Brooklyn College, New York, who came twice to Oxford to study the unpublished texts, revised the Vocabulary, contributed the Inventory of tablets according to their contents, read the proofs, and contributed many valuable suggestions. She was ready to go also to Crete, if the Candia Museum had been restored so as to make the original tablets accessible. After the lamented death of Dr. Kober on 16 May 1950, Dr. Emmett L. Bennett, jr., of Yale University most kindly visited the reopened museum, checked the numeration of the tablets, and rejoined some unregistered fragments. Miss Mary Potter, of the Oxford School of Geography, drew missing transcripts and redrew others. Finally Sir Arthur Evans's niece, Miss Susan Minet, contributed most generously to the cost of preparing the drawings for the press.

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| 4. | $"$ | $"$ | $"$ | $"$ |
| :--- | :--- | :--- | :--- | :--- | :--- |
| 5. | $"$ | $"$ | $"$ | $"$ |

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## LIST OF PLATES

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## THE DEVELOPMENT OF CLAY TABLET WRITING IN CRETE

On the general course of development there is little to add to $S M$ I, part ii, §§ 1, 2, 3 (1909); but the missing stages in the evolution of clay tablet writing in Babylonia are supplied by stratified deposits at Uruk (Falkenstein, A., Ausgrabung in Uruk-Warka, Band 2, Berlin, 1936). Though very much earlier than the Cretan tablets, their technique is so nearly the same, and passes through phases so closely similar, that it must be regarded as the prototype of the Cretan: the only question is, how and when this technique was transmitted.

In the light of the new evidence from Babylonia, the general course of development in Crete may now be summarized as follows:
(i) The use of linear signs, as makers' marks or owners' marks, was widespread around the Eastern Mediterranean, and there are examples of it in Early Minoan Crete.
(ii) The more special use of such linear signs, as masons' marks, is well established in the Palacebuilding period (Middle Minoan I), and presents resemblances to the 'linear' and 'alphabetiform' signs on works of Egyptian craftsmen under the XII dynasty; these, however, may have been of foreign origin.
(iii) During Middle Minoan II the earlier use of hieroglyphic seal-stones, with Egyptian resemblances, is replaced by seals of free-field pictorial design; the sealings are sometimes countermarked with linear designs related to Linear Script A, inscribed with a graver. Labels and dockets come into use, with longer groups of pictographic signs, many derived from the Cretan hieroglyphic series. From the free cursive style of these signs, it may be inferred that they were also being painted on perishable materials: none, however, have been found painted on pottery. During this period the use of masons' marks on buildings continues.
(iv) Towards the end of M.M. II the mature pictographic script on clay bars passes over, as at Mallia, into the 'Linear Script A' inscribed transversely on oblong rectangular tablets as at Mallia, Tylissos, Palaikastro, and in profusion at Hagia Triada; three tablets at Knossos come from the 'Temple Repositories'. In this new 'Linear A' script about one-third of the signs are derived from linearized hieroglyphs, and many were still used alone like ideograms for commodities, and followed by numerals in a decimal notation with fraction signs. Other signs denote the kind of transaction. Most of the sign-groups seem from their place in the formulae to be personal names. At Hagia Triada some recur twice or oftener; but the existing tablets, being unbaked, seem to have been for temporary use only, like most of those at Uruk, and to be part of a single set of vouchers, in which repetition is not to be expected.

To save space, especially as the lines of writing were transverse, and groups or even numerals often overran the line, much use was made of ligatures or monograms composed of two or more signs.

Quasi-monumental inscriptions were soon cut on libation-tables and other stone vessels (A $1-15$ ). Painted inscriptions within deep cups ( $\mathrm{A}_{16-17}$ ) were probably votive and may be continuous texts, like that on the gold ring from Mavro-spelaio (A20); all written spirally like the Phaestos disk. There are also graffition wall-plaster ( $\mathrm{A}_{25}-8$ ) and store-jars (A $\mathbf{3}_{2}-46$ ) as well as a few deliberately frescoed inscriptions (A 29, 30).

In the M.M. III period, the masons' marks are less deeply cut, and at the end of it they go out of general use. Some of them pass into signs of 'Linear A', but essentially this script is selected from the Pictographic series, with some fresh signs, a few suggested by Egyptian signs. Phonetic signs are now simplified to linear and rectilinear forms, but among the commodity signs many are still pictorial.
(v) Even at Hagia Triada there are well-marked variants of some signs; at Tylissos and Palaikastro, style and repertory vary more widely; and it was doubtless this local unconformity that provoked the drastic reform of the 'Linear B' script at Knossos, under the later 'Palace-regime' (Late Minoan II). It is not known how far the new Knossian script replaced the older local signaries in Crete; it certainly did not reach Cyprus, where the Cypro-Minoan script, with the Cypriote syllabary of classical times, is essentially derivative from 'Linear A'. On the other hand the Knossian ' $B$ ' script was adopted with local variations on the Greek mainland-where examples of 'Linear A' are very rare-and remained in use with little change at Pylos till about 1200 b.c.

The Principal Types of Inscribed Clay Documents in Crete. In the Hieroglyphic and Pictographic phases the signs are inscribed either (a) on 'labels', roughly circular disks, but pinched along one side for a string-hole : the writing follows the rest of the rim, so as to be legible when the 'label' is suspended; or ( $b$ ) on long 'bars' with four flat faces, and a string-hole at one end.

From the 'bars' are developed the foursquare tablets of 'Linear A', inscribed transversely on one or both faces, and sometimes perforated edgeways.

In 'Linear B', the foursquare tablet persists for longer documents, and is sometimes very largeto $8 \mathrm{in} . \times 6 \mathrm{in}$.-ruled and inscribed transversely. But the majority of the tablets are long and narrow, with rounded ends, unperforated, and inscribed lengthways, usually with not more than two lines separated by a rule. They were intended to be stored in small chests, of which the hinges, hasps, and parts of the woodwork or gypsum sides are preserved; and are sometimes docketed with a short title along one edge for easy reference. A clue to this long narrow shape is the statement of Pliny, NH XIII. 69, that the first Cretan writings were on palm-leaves, such as are still used in Burma and southern India.

Technique and Handwriting. The tablets were roughly fashioned by hand from a peculiar clay, coarser and sometimes gritty at Hagia Triada, very compact and plastic at Knossos. There were customary sizes and shapes, but little uniformity in detail. The signs were engraved with a pointed implement, which sometimes ploughed up the clay on one side of the furrow or both; only a single tool was used, whereas at Uruk there was a cylindrical rod for numerals and the ordinary graver had an angular end like the later cuneiform stylus.

A bronze graver, and a rectangular tablet of reddish stone ( $8 \mathrm{~cm} . \times 5 \mathrm{~cm}$.) which may have been a template for modelling tablets, bought at Palaikastro, are in the Fitzwilliam Museum, Cambridge (Bosanquet, BSA Palaikastro Supplement, fig. 9). The tablet is about the size and shape of many clay tablets from Hagia Triada.

With this excellent material and convenient technique it was easy to design a graceful and convenient script, which admitted considerable variety of personal 'handwriting', from the heavy, plunging strokes of B $\mathrm{I}_{3}$ (pl. xx), 48 (pl. xxir), 684 (pl. Lx) to the needle-pointed 'court-hand' of B 639 (pl. xliii), ${ }^{1516}$ (pl. Lxxxviil). Several such individual scribes can be recognized, and the personal sign-variants due to their ingenuity or carelessness (Tables III-V).

On the moist clay, erasures and corrections were possible (p.42), and where the stylus was allowed to graze the tablet between strokes, it has left valuable elucidations of ill-written signs or personal variants: e.g. for AB 12; AB 62; B 57; A 25; A 68, 93.

Unbaked Tablets. With very few exceptions the Cretan tablets are merely sun-dried, not baked in an oven like those of Babylonia. This was fortunately realized early by the excavators through the accidental destruction of a few by rain at Knossos (SM I. 43; PM IV. 669). The effect of conflagration on such tablets is equally disastrous, for there is little grit and much salt in the clay (SM I. 4I, fig. 18).

It may be inferred that though many of them were kept in chests of wood or gypsum ( $P M$ IV. 668), they were not intended as permanent archives, but as temporary vouchers, which could be 'pulped' when they became obsolete, and the clay used again.

This goes far to explain the circumstance that there is almost no duplication of the greater number of the sign-groups, as would have been inevitable if this kind of record accumulated even for a few years; for the names of individuals who were parties to the transactions must have recurred, though with different commodities and quantities. The clay sealings in the same deposits (p.64) were of the same sun-dried clay, intended for short-period security.

Baked Tablets. Among the tablets in Script B, however, from the Later Palace at Knossos, a few, of exceptionally crisp texture, have evidently been deliberately and thoroughly baked. They were thought by AE to be contemporary with at least the later series in Script A which show a similar fabric; but their writing is wholly in Script B, though unusually careful. Among tablets of this description, which may be regarded as coming at least before the lower limit of L.M. I, B 872 is of exceptional interest (SMI, fig. 28) : for the ox-head and the Vapheio cup depicted on it are among the most characteristic products of this period (SM I. 53 : Corolla Numismatica 352-3: cf. the Keftiu offerings in the Egyptian tomb-frescoes of Sen-mut and Rekhma-ra, and Karo, 'Minoische Rhyta', fahrb. d. k. deutschen arch. Institutes XXVI. 253).

Limits of Date. Examples of Linear Script A cover the period from M.M. III to L.M. I. The great series of tablets at Knossos inscribed in Script B are shown by the circumstances of their distribution in the later filling of ground-floor rooms in the Later Palace of Knossos (L.M. II) to have been stored in upper rooms in chests and precipitated thence when the floors collapsed at the Fall of the Palace or thereafter; i.e. about 1400 в.с. There is so little difference of style in the writing on the unbaked tablets that they may be regarded as contemporary, and representing the working archives of the last days of the Palace-regime: and probably of its last year of account (p. 40). The sealings endorsed in Linear B script offer nothing inconsistent with this.

## THE MINOAN LINEAR SIGNARY

## The Serial Order of the Linear Signs

For practical reference it was of course necessary from the first to arrange the linear signs in a conventional order. In the display-sheet of the first fount of Minoan type, printed at Oxford in July 1901 (reprinted with a supplement in June 1905 and May 1923), the signs are numbered, but in no intelligible order. In The Palace of Minos the separate lists begin with signs which resemble Greek or Phoenician alphabetical signs, but this arrangement was discarded, and no attempt was made to combine the numbering of the A and B series. In $P M$ IV. 68I-2 is outlined a classification into phonetic, ideographic, commodity signs 'relating to various properties', and administrative signs; but it was not developed in detail.

Sundwall's list for Script A and Script B (so far as published) together (Finska Vetenskaps Societatem Förhandlingen, LVI (1913-14), B. I, 5-6 (pl. I), $27^{-8}$ (pl. II)) begins with signs common to both, but in no typological order; goes on to signs peculiar to $\mathrm{B}(51-70)$ and to A ( $7 \mathrm{I}-112$ ), including signs found only on masonry ( p . I above), and ends with the compound signs ('ligatures') frequent on tablets in Script A, and rare in Script B, though Sundwall recognized that they are composed of signs already numbered in his list. His comparative table (pl. iI) of Minoan and Cypriote signs has a numeration of its own, neither that of the Minoan signs in his pl. I, nor of the phonetic order of the Cypriote syllabary. His subsequent lists (Jahrb.d.k. deutschen arch. Institutes, XXX (1915), 42 ff., not complete even for Script A, and Acta Acad. Aboensis Humaniora, I. 2 (1920), 18-25) are in different order again; and, in the latter, only nos. $1-53$ out of the total of eighty signs have any numbers at all.

Professor G. Pugliese-Carratelli of Naples has published separate tables of signs for Script A and Script B, and of the 'ligatures' in Script A, but without explanation of their order or numbering (Mon. Antichi, XL (1945), pp. 467-83, 491-4).

Professor Bédřich Hrozný of Prague has proposed phonetic equivalents for many of the signs and tabulated these in the numerical order of their alphabetic transliteration. But his list is based only on the texts already published (1947) ; even for this it is not quite complete; and it confuses several signs which are quite distinct on the tablets, and even occur together in the same texts (Archiv Orientální, xvi (1948), no. 3-4, pp. 162-84: for detailed comment, see Myres, A才A, LII, 1948, 104-6).

It is therefore perhaps not too late to offer a more systematic classification, which may be acceptable as a definitive numeration of the signs, especially as it takes account of those recorded in hithertounpublished tablets in Script B from Knossos. (Myres, $\mathcal{F H S}, \mathrm{LXVI}, 1948$, 1-4: with small revisions SM II, Table 2.)

Within the list of signs common to Script A and Script B the classification and serial order is typological: within its principal categories, therefore, it is easy to locate any unfamiliar sign.

These typological categories are as follows:
(a) Arbitrary linear signs composed of few strokes, usually straight, arranged in order from less to greater complexity ( $\mathrm{AB}_{\mathrm{I}}^{\mathrm{I}} 9$ ). It is in this category that the signs on the tablets chiefly resemble the masons' marks (SM I. II5) and the primitive linear marks on pots and seal-stones.
(b) Alphabetiform signs ( AB 10-34), resembling Greek or Phoenician letters, though without proof of historical connexion with them. Some of them recur on faience and ivory plaques from the Palaces (SM I. 115) and from Egyptian sites.
(c) Pictorial signs, resembling human, animal, or plant forms, and usually referable to more realistic prototypes in the Pictographic and Hieroglyphic Scripts described in SM I. Some of these resemblances, however, may be accidental: for example, $\uparrow(=B 35)$ may be derived not from a human figure like $\dagger(=\mathrm{B} 75)$ but from the pictographic 'plough'-sign (SM I. 163, cf. 190, no. 27) which is sometimes set thus on end in the 'hieroglyphic' tablets (SM I, P 86a, 93a, $97 a, 100 b, 116 b)$ as though its meaning had been already forgotten.
(d) Skeuomorphic signs, representing manufactured objects such as weapons, implements, vessels, and other furniture. With these are placed all other signs which appear intended to be pictorial, but are not satisfactorily identified with a known object. Some of these may be found eventually to belong to other categories; for example, $\overline{\bar{Y}}$ may be derived from the pictographic oxhead seen frontally (SMI. 196, no. $37 ; \mathrm{P} 50 b, 58 b, 91 a, 107 a, b) ; \mathbb{A}(=\mathrm{AB} 55)$ may be the gryphon reversed as on P $54 b$ (cf. SM I. 212-13, no. 63, described as a bee) and already rendered linearly on $\mathrm{P}_{\text {ro7 }} c$; and $\mathfrak{k}$ may be the 'hand-and-arm' sign ( $S M$ I. 183, no. 8) which is still pictorial on the steatite bowls A $11-12$. In the discussion of each sign A followed by a numeral refers to Evan's list for Linear A; B, to his list for Linear B; S, to Sundwall's list; PC, to Pugliese-Carratelli; Hr, to Hrozný. Variants marked $a, b, c$ refer to Tables III-V.
(e) Commodity signs ( $\mathrm{AB} 64-9$ ) not derived from the preceding categories are classified separately, because they are used as determinatives followed by numerals, and may have had ideographic, not phonetic, significance. But a few of these occur occasionally also in sign groups as 'rebus' signs, i.e. retaining the name (or first syllable) of the object represented, to express an unusual syllable.
It is satisfactory to note that Falkenstein in his list of the signs on tablets at Uruk ('Archaische Texte aus Uruk', Ausgrabung in Uruk-Warka, Band 2, Berlin, 1936) has adopted almost the same sequence-men, animals, birds, implements, signs 'not easily recognizable', though he has seen no need to separate rectilinear or alphabetiform signs.

For convenience of reference, a concordance of the numerical order now proposed, with the order adopted in The Palace of Minos, is given in Tables I-II.

The proposed arrangement of the signs has the further recommendation that it not only distinguishes, in a general way, the principal categories of signs, but corresponds with the historical order of the appearance of these categories in Crete and the Eastern Mediterranean generally : first, the primitive, purely linear signs illustrated by owners' marks and makers' marks on pottery (SMI. III), which go back far into the Early Minoan phases; then, the more complicated and formal masons' marks and craftsmen's signs on plaques of ivory and faience, which appear in Middle Minoan contexts; and only thereafter, towards the end of the Middle Minoan period, linear signs derived from pictorial symbols on seal-stones, a category which had already a long history, side by side with the 'early linear' signs, but independent of them. The fully developed linear scripts, indeed, result from the amplification of an early linear repertory of personal marks by inclusion of those pictographic signs, as on the maturer tablets at Mallia.

The Egyptian equivalents quoted from Sundwall (Acta Acad. Aboensis Humaniora I. 2. 1920) were a bold attempt to interpret the evidence available to him : but many of his readings of hieroglyphic signs, and translations of them, have been superseded by later studies in Egyptology. Only a few obvious corrections have been suggested, and other Egyptian comparisons kindly revised, by Sir Alan Gardiner.

## SIGNS COMMON TO SCRIPT A AND SCRIPT B

## Rectilinear Signs

## AB 1

In sign-groups, in all positions. In A the side-stroke is obliquely upwards. It recurs on the CyproMycenaean clay-balls C 4, 5, and on the clay ram from Amisus (PM IV. 768-9, fig. 749-50). It is identical with Cypro-Mycenaean and Cypriote $f=t a$. Sundwall (1920, no. 51) compared Eg. $m d$, , $m d d$ 'papyrus-roll' and $h t p$ 'sacrifice', but these have the side-stroke upwards _ .

It occurs also alone, followed by a numeral ( $\mathrm{B}_{257}$, 311, 432, 835-8, 1522.1 -5) ; sometimes associated with $\left\lceil\right.$ written below it with other numerals, on tablets $6{ }_{11}-13,624-5,627-8$, referring to women: occasionally also with $\ell$ ( 310 ), $\ddagger$, and a hand sign; and with ingots ( $246-9$ ) and adze-blades (495500 ): on 500 it has numeral 12 . The reversed sign $\dagger$ was associated by AE with the 'balance' and it was suggested that this is a sign of weight, like $T$ for $\tau$ ádav ${ }^{2}+\nu$ in Attic treasure-lists, and that normal $f$ may indicate a 'drachma'.

## AB 2

## $t+t$

A 19, B $25, \mathrm{~S}_{7}, \mathrm{PC} 22, \mathrm{Hr} 37$
In sign-groups, in all positions: the disconnected cross-stroke + results as in 丰 and $\mathrm{l}_{\text {from rapid }}$ writing. It occurs on Cypr.-Myc. clay-ball C I (BM Exc. Cypr. 27, no. 765) and is identical with Cypr. $+(=l o)$, and with Eg. $i m i \nmid$. Sundwall ( 1920, no. 48) compares Eg. in šbn $ص ل_{\bar{x}}=$ 'various', 'mixed', 'different'. On a chariot tablet ( 259 ) + stands alone between 'horse-head' and 'cuirass' signs: on 268, 271, \&c., with a numeral (cf. $H T$ 110 $b 1$ ); on 271, between a 'saffron flower' and numeral '. On 1055.9 in a total formula $\mathrm{t}_{\mathrm{s}}$ follows $\mp \Psi$; cf. $+\mathrm{L}_{\mathrm{s}}+$ on 1070. On 280. 5, II, I2, 13 it follows Lép and seems to qualify it.

A cross, resembling type $b$, occurs as sole countersign on seal-impressions from the 'West Temple Sanctuary' at Knossos, where a flat marble cross (PM I. 517 ; IV. 94) seems to have been a cultobject. The sign + therefore may have been in origin a religious symbol, for 'star' or 'sun' (cf. SM I. 222, no. 112).

## AB 3



In the Hieroglyphic Script $X$ (or + ) marks the beginning of a sign-group ( $S M$ I, $\mathrm{P}_{23}-\mathrm{II}$ 16). In A it only occurs in $Y$ XIII on $H T$ 17.2; 19.2; cf. 9 a. I. In B, alone at the end of an entry, replacing a commodity sign, $X$ signifies 'zero' ( 1097 -1 100); but a variant occurs before the 'live-stock' sign on 1064-67, 1070-7, 1320, I399. I, and before on 727.2.

## AB 4

In sign-groups, in all positions, and alone before numerals; also surcharged on the 'banner' sign $\mathrm{m}_{\mathrm{m}}$ (cf. 丰) on $5^{2} 3,525-7,529,533$. It is identical with Cypr. $\ddagger=p a$, and occurs on the Cypr.-Myc. clayball C 2. Early examples are on a graffito from Goulas ( $C P 9$ [278], fig. $4 \cdot 4 b$ ) and on a clay label from
the Idaean Cave（ $C P_{17}$［286］，fig．14）；and both $\ddagger$ and $\neq$ occur in Pictographic and Hieroglyphic （SM I．227，no．128；cf．SM I．217，no．97，variants）．In A（HT 34．4）PC（p．528）describes it as a＇quantity mark＇（signo metrico）．Carelessly written 非is liable to confusion with $⿻ 三 丨(2)$（ 955 ．3，1129）． The normal forms of $\ddagger$ and $\neq$ occur together（1．5，5．2，6．1，13－15．2，18．2，984．1，1432，04．O1．2， 03.2 ）as if they were distinct signs；but in $\mathrm{I}_{5} 6 \mathrm{I}$ ．I $\neq$ replaces $\ddagger$ in the same group on $60.2,344,04$ ． 7．2，78．12：compare 1332 with 1333 －4．

## AB 5

（a）米（b）末非
A 13，B $43, \mathrm{~S} 8, \mathrm{PC} 92, \mathrm{Hr}_{5} 6$
 there is an A－variant with four strokes（oblique HT 8 a 3，40．I，92．I，foursquare HT 17a． 1,98 a．3） indicating derivation from a pictorial＇branch＇（SM I．217，no．97；219，no．102）as on early cylinders in Cyprus（CP 49 ［313］，fig．58）．In B only 非 occurs，with side－strokes separate．

Sundwall（1920，no．26）compares Eg．$b d=$＇corn－ear＇［？bdt＇rye＇］．It is identical with Phoen． samekh and early forms of Gk．X ：type $b$ resembles early Gk． $\mathbf{モ}(k s i)$ and a Lycian sign $\mathbf{~}$ ，probably $\tilde{n}=n g$ ．

## AB 6



A 17，B 82，S 81
Rare in sign－groups both in A and in B（13；950．2）；but usually in formulae relating to cereals or grain measures．In 152 it stands after $Y$ and $\Psi$ denoting horses and sheep or goats；on $160.2,3$ after a bowl and a two－handled vessel ；on $757 \mathrm{ff} ., 988$ ，after 平 with which it is often associated in commodity lists；elsewhere with $X 1633 ; 834.2 ; Y_{11.2,17,19 \text { ，and the＇granary＇sign．On 8－30 it follows the }}$ ＇ear＇sign；and other＇cereal＇signs on 152,157 ．It may denote a standard amount or a payment in kind．On all these the sign stands after the numeral and is itself also followed by numerals from I to 7．When it immediately follows a sign－group，it is because the＇cereal＇sign was missing in that account；which suggests that it may be a fraction；and AE gave it the value $\frac{1}{8}$ ．But this does not accord with its use with livestock．

Sundwall（1920，no．40）compares Eg．$T=$＇boring instrument＇．


A 77，B 86，PC fig．60，LM 6， 18
With this sign may be compared a group of rare and variable signs（A 17, B 86）perhaps mis－ written；e．g．HT 12．6；16．4；В 160 （cf．155，157）．

## AB 7

## 干

B 59，S 13，PC 39
Rare in A and omitted by AE．Frequent in B；two principal types，$a b c$ with longer cross－bar above； $d e$ with cross－bars equal；$f$ is a hasty abbreviation；$g$ with base single（519）or double（cf．AB 34）， followed by numerals，may be an abbreviation of $\Psi$ or $\mp$ ：compare B 464 with four cross－strokes， associated with＇cereal＇signs $\$$ and $T$ ．

Sundwall（1920，no．I3）compared Eg．$n d=$＇hammer＇．For the＇total＇－group 干4 see p．52．62．

## AB 8

Rare and variable in A．On B ${ }_{5} 527.3$ followed by damage，it may represent $\mp$ or 同．It re－ sembles Cypr． $\mathrm{F}=$ to．

## AB 9



A 23, B $_{17}, \mathrm{~S}_{33}, 44$, PC 1о，Hr． 27
In groups，in A and rarely in B：on＇banner＇B 433．The double cross－bar HT 100．I；127a．2 and a clay label（Levi 25）recurs on B 479 a $1,612.2$ ，but is replaced by $\uparrow$ in the same group on 1173. The form $f$ occurs on 855 ．On $48.2,3$ and 955.3 个 can be confused with 用：cf．717．I．It recurs in a group at Tiryns，$P M$ IV．742，fig． 725 d．

Sundwall（1920，no．33）compares Eg．šsr $\ell \xlongequal{-}=$＇arrow＇and wr＝＇harpoon＇，and Cypr．$\uparrow=v o$ ；but the Minoan sign is more like Cypr．$\uparrow=t i$ or $\uparrow=k a$ ．

## Alphabetiform Signs

［A 38］


A $38, \mathrm{PC} 78, \mathrm{Hr} 35$
This sign is so frequent in A that it may represent the common sign $\mathbb{A}$ in B ：compare $H T$ 49．2， $98 a .2\left[\overline{\mathrm{i}} \Lambda\right.$ with $\overline{\mathrm{I}} \mathrm{M}_{3} \mathrm{BrI}$ ；so it is noted at this point．

## AB 10



A 2, B $_{2}$, PC 78
Rare in A but frequent in B in all positions．The ink－written cup A $16.2,8$（PM I．615，fig．452） supplies the cursive variant $e$ ．On B 669．I，853，it is compounded with the＇saffron＇sign B 78．It resembles Cypr．$\hat{\wedge}=t i$ and Lycian $\hat{\wedge}=e$ ．The variant $H T 29.4$ is probably meant for $\mathbb{4}$（ AB I2）．

## AB 11



A 1, B $_{1}, \mathrm{PC}_{44}$ ，Hr． 1
The form $\cap$ only occurs in A as ideogram，but some variants resemble those of $A$ in Script B （998）．The variant A occurs rarely in A．Very frequent as initial in B．Alone B 1568.

## AB 12



$$
\mathrm{A}_{3}, \mathrm{~B}_{9}, \mathrm{~S}_{35}, \mathrm{PC}_{56}, \mathrm{Hr}_{50}
$$

Frequent in A and in B．AE derived it from the＇mason＇s level＇which occurs as a pictographic sign（SM I．189，no．2：P $92 a$ ）．It may be related to Cypr．$\uparrow=s i$ ．
［ B 37］$^{3}$


B $37, \mathrm{Hr} 50$
This sign is peculiar to B，but is noted here because it has been confused by Sundwall with $\mathbb{A}$ ： see p． 27.

## AB 13

E
A $_{4}, \mathrm{~B}_{3}, \mathrm{PC} 2 \mathrm{I}, \mathrm{Hr} 9$
Frequent in A and rare in B，in all positions，but usually initial；rare as final，and not alone with numerals（but see B693．2）：in $H T 32.3$ a sign is defaced between P and 0 ．Sundwall（1920．3）de－ rives it，through the Hieroglyphic Script，from Eg．$\square=' h '=' h o u s e ', ~ a n d ~ r e l a t e s ~ i t ~ t o ~ P h o e n . ~ 9=b e t h, ~$ ＇house＇；and the Minoan variant $巳$ anticipates Gk．B．

## AB 14

Frequent in A and in B ，in all positions，with little variation，but in A some variants may be confused with P ：on $\mathrm{A}_{14}$ ，however，both signs are distinct（PM I．625，fig．462－3）．Compare the Hieroglyphic sign $S M$ I．227，no．129．Sundwall（1920．2）compares Eg．$\square$ pr＝＇house＇．Occasion－ ally in $B$ this sign occurs alone with numeral（ $6 \mathrm{I}_{3}, 6 \mathrm{~F}_{4}, 624$ ）and with the＇woman＇sign $\hbar$ ，and on $6_{10-13}, 624,627$ the sign $H^{\prime}$ is written above $\left[^{\prime}\right.$ or $\left[^{\prime \prime \prime}\right.$ ．On I23I the ligature［CLs］is probably a corrected mistake．

## AB 15 <br>  <br> A 75，B $38, \mathrm{~S}_{59}, \mathrm{PC} 21$

Very rare and irregular in A；and frequent in B．The variant $d$ may be confused with $\boldsymbol{q}$ as on 983 ． It occurs in all positions：on 867.3 it should be a commodity sign．It resembles Cypr． $\mathcal{F}=p 0$ ：in If on 895 before a horse＇s head with numeral＂a word like Gk．$\pi \dot{\omega} \lambda \omega \omega$＇pair of horses＇has been sus－ pected；but $f$ was a common terminal for men＇s names，and if recurs on 771，1171 unconnected with horses，and probably as a personal name；and also as prefix $865 \cdot 4,899.1$（see Vocab．），and suffix？ 1417 ．

The group ff （HT $122 b 6$ ；a＇grand total＇）recurs as a personal name on 1516．4，1517．I2． Cf． 983 ．$I$ ．

## AB 16

Rare both in A and in B in sign－groups（SM III A $16 . I ; H T{ }_{15} . I$ ；B 328，847，1239，1253）and alone with numerals（A $5^{1}$ a 2 ；B without bar 597，777，820）．The crescent moon is a Pictographic sign （SM I．222，no．III）and recalls Eg．$a$, ah，$i c h$, ＇moon＇or＇month＇（Sundwall，1920，no．II）with points downward．It might therefore represent＇months＇；but not as a commodity．

Pictorial variants $a$（1253），$b$（1239），$c$（777，cf．328），$d$（235，820， 847 ；cf．SM III A 16，41，67，74）； $e$（A $54 a 2$ followed by four points）are probably personal attempts at a rare sign：AE thought the complete form might still be ideographic．

## AB 17

$$
{ }_{\mathrm{A}} \gamma_{\mathrm{B}} \mathrm{~F}
$$

A in，S io，PC 89
This variable group of signs is frequent and always oblique in A．but upright and very rare in B： it may be miswritten $(822,836,839)$ ：and never occurs alone with a numeral．Similar signs are among the masons＇marks at Knossos and at Phaestos；ligatured and not easy to distinguish from the＇trident＇ sign（SM I．228，no．132）．

## AB 18－20

## H月明风月明

A 7．8，B 6．7，S ıо， PC 1．25．32，Hr 3， 60
The whole class of signs bounded by vertical strokes was liable to confusion by careless writing． Certainly the four－barred＇gate＇sign 目 which has a Pictographic original（SM I．199，no． $44 c, h$ ）is distinct from the two－barred abbreviation of the pictorial $月$ of quite different construction and origin． AE also thought that the three－barred and one－barred signs 月 H were of distinct origin（SM I．199， no．45），and that on HT 93 a 8 it had an oblique bar like a farm－gate．

AB 18 a．H occurs on the primitive whorl from Hagios Onuphrios（SM I．r18，fig．52b）；as a mason＇s mark；in A ligatured with \％，and A 16．14，where it is clearly different from $甘$ in 1．13．On B 669 ．$I$ ，ligatured，it is indistinguishable from $T$ ：and elsewhere looks like an abbreviation of $18 c$ ．

18 b．H is certainly abbreviated from $月$ ，and quite distinct from 月 with which it occurs on $H T$ ェ $a 3$ ， 88．3．4：compare A I6．13．It occurs at $H T$ in groups，and alone with numerals（ $H T_{\text {II }} b_{I}, 62.6$ ）． In $B$ it is frequent，in many variants，probably all abbreviated from B 19.

18 c ．月 has a Pictographic original（ $S M$ I．199，no． $45: \mathrm{P}_{103} a$ ）；and cf．the trial－piece A ${ }_{3} \mathrm{I}$ from Knossos（PM I．622，figs．458－9）．In A it is frequent：well established also in B and frequent as initial；but in the repeated group 股 $1219-30,1134^{-5}$ it is replaced by $H$ on 1226.2 and by $月$ on 1228．2，1230． 2 ；while 1227 has Y\＆2C，probably through carelessness．Variants resemble early Gk．日 $(=H)$ and Phoen．H（＝cheth），meaning＇fence＇：so Sundwall（1914，no．10；1920，no．39）confused this sign and its predecessor（SM I．199，no．45）with a＇trellis＇sign（SM I．200，no．46）and quoted Egyptian parallels．

## AB 19

月月日
A 6．34，B 53, S 20, PC 7． $25, \mathrm{Hr} 60$
 It has many variants，simplified into $\mathrm{AB} 18 b$ above．In B it is frequent，in similar variety：even the linear H is sometimes abridged $(740.2,3)$ till it resembles mis－written 9 ．

The unique sign B 65 in a group on 262 may be another variant．

## AB 20

目
A $8, \mathrm{~B}_{7}, \mathrm{~S}_{\mathbf{1}}, \mathrm{PC}_{32}, \mathrm{Hr}_{3}$
Frequent both in A and in B：the variants $c$ and $d$ are exceptional，and $f$ seems confused with $月$ ． The Pictographic original（ $S M$ I．199，no． 44 b：cf．$C P 38$［307］）is clearly a＇gate＇with pivot above and below；and Hieroglyphic forms connect this with A and with B．Compare HT $7 a_{2} ; 8 b_{4} ; 9 b$ ， and Phoen． $\mathrm{F}=$ he which originally may have had four bars，like Gk． $\mathrm{F}_{\mathrm{i}}$ in Boeotia．Sundwall（1920， no．25）compares Eg．$c_{3}=$＇door＇，and Cypr．$(-1=x a$ ：compare also AB $17 b$ ．This sign is frequent as terminal（Sundwall，1914，no．7）．AE thought it a feminine suffix（e．g．639．2，3，4，5，7，8，I2） （p．49）．

## AB 21

而
A $30, \mathrm{~B} 8, \mathrm{~S}_{23}, \mathrm{PC}_{75}, \mathrm{Hr}_{2}$
Frequent both in A and in B in all positions；rarely also alone with numerals（ $654.3,695,84 \mathrm{r} .6$ ）． The pictorial original（SMI．198，no．43）is the front of a barn set on posts；perhaps related to AB 66 but quite distinct from AB 22 角 which occurs next to it on $H T 27 b I, 48 b I$ ．An early example （PM I．639，fig．474）has four posts，approximating to the＇banner＇sign B 94 AB 66 圌．In the frequent group 帏 for＇boys＇or＇girls＇（see Vocabulary），there is no reason to regard either sign as any－ thing but phonetic．

The variants are not of much significance；（a）in a group on an amphora－handle from Mycenae （Tsountas，Mvк $\bar{\nu} a t$ ，214：$C P_{4}$［273］）and as mason＇s mark at Knossos；$h$ is on blocks at Knossos，
and on a pithos from Phaestos（Pernier，Scavi．rapp．prelim． 989 i）with points in four compartments is also exceptional（HT 40．I）．On a sealing（Levi ir $b$ ），it is not easy to distinguish from $T^{1}$ with long side－strokes．

## AB 22 <br> 侖而 A 35，B 62，PC 82，Hr 102

The simplified form occurs only in A．The sign usually stands alone with numeral ：but on $H T$ 14．I it is part of a name，probably as a＇rebus＇sign with phonetic value．On HT 13．2，followed by $\bullet \ddagger$ ，it may be part of the＇transaction＇formula．In B，it occurs rarely，always as ideogram，with ＇cereal＇signs and numerals（2．I，II．I，12．I，160．2．3，$I_{516}$ 6．I7）：there are several abbreviations． On 17．I，I9．I． 2 it occurs in a group with phonetic value，as on HT I4．I．

At first sight this is a＇container＇like 四；but Sundwall（1943，no．13，fig．17）compares Eg．留，irp $=$＇wine＇．In Crete，this would denote the tall krevatina vine，on its trellis，for dessert grapes and raisins；so this is not unlikely as a commodity sign，especially in association with（＇fig＇sign，＝AB 46 below derived from $S M$ I．220，no．104．）

## AB 23



A 9，B 26，S 2，PC 29，Hr 69
Frequent in A and in B ，in all positions．Though it has many variants（e．g．$\oplus$ on 1078．2＝© on 1079．2）it is quite distinct from $\mathrm{AB} 24 \%$ ，and occurs with it on $H T 6 a_{4}$ ， 1 ，II $a_{1}, 85 b 2,3$ ．It occurs also alone with numeral（HT iI．I， $85 b 3,145 . I$ ），and alone without numeral $\mathrm{B}_{130} b$ ；and ligatured with 日，$L$ ，and other signs in A．

It seems natural to regard this sign as a＇wheel＇；but Sundwall（1920，no．10）compares the Eg． $n . n u=$＇town＇．

At Knossos，AE thought type $a$ earlier than $e, f, g$（cf．Sundwall，1914，no．7）；but the range of date for Knossian B－tablets is so small，that they are probably personal variants．On HT 93 a 9 the form $\Theta$ is probably due to carelessness．A variant ona stem recurs on HT i19．4；cf．Mallia L．i．

## AB 24



A 49，B 63，S 82，PC 91，Hr 69
Frequent both in $A$ and in $B$ ，both in groups，and in $A$ also alone with numeral．The number of points varies from 2 to 4 without significance．A rare variant（ $\mathrm{B}_{1528 ; 04.55-64 \text { ）has a loop above }}$ the circle，usually before a numeral，and in connexion with goats＇horns（sign B no．99）and another commodity（B no．100）．In B the sign occurs surcharged on a cuirass（229，PM IV．788，fig． $763 \mathrm{~h}, \mathrm{k}$ ） and on 266 it stands also before in place of a horse＇s head as on 264：a wheel－sign like $\Theta$ is also coupled with the＇whip＇sign if．

AE thought that the sign denoted a tray containing grain，for fodder：cf．Eg．＇grains of corn＇and ＇corn on the threshing floor＇sp．t．（PM IV．801－2，fig． 776 g ：Sundwall，1920，no．5）；as it ends the
 thought that $\odot$ might be attached to indicate ideographically some function connected with the feeding of animals like the medieval＇constable＇（comes stabuli）．But there is no other evidence that the sign has any value except phonetic．Its occurrence surcharged on a cuirass（227－9）proves as much or as little about fodder as of surcharged on 870 about drink（PM IV．606，fig．785）

## AB 24a

This sign, only in A , is noted here for comparison with $\odot$, of which it may be a variant ( $\mathrm{HT}_{9}$ a 3 , $b_{4}, 37.5,95 a 4.5$ represented on $95 b^{b} 4.5$ by sign with two inner points: cf. HT $25 a 2$; III $a$ I). The same sign on Pictographic seal-stones (SM I. 149; cf. 221, no. 109 b) is compared by AE with $S M$ I. 154, P $23 c, 25 d ; S M$ I. ${ }_{55}$, P 27 (concentric circles, compare Hr $64 a$ ); all representing the 'day-star or sun with revolving rays' ( $S M$ I. 22I, no. 109 $c, e$ ). Compare the $\odot$ for early Gk. omicron in Crete (Gardner-Roberts, Manual of Greek Epigraphy, I. 43 (102 Lyttos; 12 Eleutherna); $S M$ I. 104, no. 2). But this centre-point results from drilling.

## AB 25

$22 z$
A 16, 54, B 60, S 16, PC 72, 94, Hr 57
Frequent in sign-groups: only the variants occur with numeral. In A there are several variants. In B the sign is more uniformly 2 but type $c$ occurs on $698.3,859,860$; and $d$ on 695.4 . Distinguish mere duplication (as on $147.1,178,347.2,453 . I$, 502, 622. $I, 654.5$ ) from the double- S sign AB 26 , which faces to left in A but to right in $\mathrm{B}(695,963)$. On 4 II an angular variant is a 'commodity' sign. Sundwall (1920, no. 24) compares Eg. 'asp' sign ( $\left.\underline{d}^{2}\right\urcorner$ ) and 'horn' sign ( $(b)$ ); and Phaestos Disk no. 26 (SM I. 345, fig. 267). The Cypr. sign $殳=p e$ is sometimes written reversed S , and may be derivative. For the sign ${ }_{e}^{2}$ see pp. 51-2; and for ${ }_{\zeta}^{\underset{\zeta}{2}}$ (B 95) p. 34 .

## AB 26

Frequent in A in sign-groups in all positions: very rare in B. Probably derived from SM I. 224, no. II 5 (facing left), on 226 , no. 124 (facing right); and may be equivalent. The linear sign also faces either right (A 50 b 3,$4 ; 66.3$ ) or left (B693.2,963, 1235) but the group Y $Y$ ).. (see Vocabulary) shows that these forms are equivalent. In the series $\mathrm{B}_{115}{ }^{1-69}$ it is quite clear that 22 ( AB 25 duplicated) is intended. Sometimes there are dots in the upper loops of $\mathbb{J}$.

AB 27
Frequent in A in sign-groups, and in the group $Y+$ before a numeral. On A 15 a more elaborate form connects with $S M$ I. 205, no. 60; cf. 217, no. 94, but this form does not occur in B; the sign $\cdot \gamma$. with two dots ( $\mathrm{B}_{4} 6$ ) is probably a variant of $\mathrm{AB} 45 Y$. This sign is identical with Cypr. $Y=s a$ and with Lycian $Y=g$ : compare also Gk. $Y=u$. Because it is sometimes duplicated, Xanthoudides (Eph. Arch., 1909, 182 ff .), thought it might be the name of a god. The sign $V$ is abbreviated from B 90 .

## AB 28

## $\phi \phi$ (1)

A ${ }_{17}, 18, \mathrm{~B}_{4} 1,57, \mathrm{PC} 67, \mathrm{Hr}_{31}$
This series of variable signs may be related to AB 58 below, which is rare in A but very frequent in B; but variant $d$ (perhaps for $\bar{T} \mathrm{AB} 59$ ) occurs with $\overline{\mathrm{j}}$ on $H T 27 b 2$; 108. 2. In B very rare (PM IV. $783-4$ ), with the centre-line prolonged above the circle $(786,1009)$ and curved. It may be a form of ( (AB 16). On B 789. I it may be mis-written for $\varnothing$; cf. 740.3 .

## AB 29-31

This group of three-pronged signs includes three main series, usually well characterized, and their associations in the Vocabulary show that they had distinct phonetic values. The more pictorial $Y$ is also distinct from $\Psi$, but its linear variant $\Psi$ is only distinguished from $\Psi$ by its projecting cross-bar: in the Vocabulary these are printed separately.

## AB 29

Rare in $\mathrm{A}(H T 63 . I$; plain branches, HT 91. I) and rare in B , thrice as initial (432.2,799 a 6, 1522.2): on $\mathrm{A}_{45}$ is a variant without stem.

In B variants include forked stem ( $\mathrm{I}_{5} 16 . I I$ ), lateral spur (479 $a$, 1173 ); single cross-bar (1057) or double $(343,473)$ : these variants cannot be of much importance. As it is identical with the treeelement in the sign B $78{ }^{8}{ }^{\circ}{ }^{*}$ (cf. PM IV. $716-18$, fig. 698-9), AE thought it might have a 'derivative' sense, as in Eng. Stock and Germ. Stamm, since it is associated with signs for women and children.

This sign is quite distinct from $\mathrm{AB} 3^{\mathrm{I}} \Psi$; it resembles local forms of Gk . chi or $p s i$, in Boeotian, Chalcidian, Laconian, and Asianic alphabets (Kirchoff, Studien, Taf. II).
AB 30
4

$$
\text { A } 64, \text { B } 45, \text { S }_{71}, 78, \text { PC } 19
$$

This sign also is variable; frequent and well marked in $A$; in $B$ the side-prongs diverge. Sundwall (1915, no. 7 I ; 1920, no. 23) compared the Eg. 'sceptre' sign $c b 3$ and the Cypr. $\langle 1\rangle=p u$.

## AB 31

$\psi$. A 22, B 47, S 14, PC $54, \mathrm{Hr} \mathrm{ri}_{14}, 52$
This sign has no cross-stroke, and the lateral prongs are usually formed by a single curved line; they do not converge at the ends as in $A B 32$. It is frequent both in $A$ and in $B$, in all positions; and occurs with $\psi$ or $\mathcal{I}$ on B 243, 384,579.2, 719, 758, 875.6. On B 892 the double crescent-line is probably a personal variant.

The angular variant $\psi$ is rare both in A and in B; it may be a linear descendant of a pictorial sign (SM I. 213, no. $92 a, b$ ), perhaps a cluster of flower-buds.

## AB 32-3

$$
{ }_{32} \varlimsup_{33} \Psi^{S} \mathrm{~A}_{31}, \mathrm{~B}_{23} a, \mathrm{~S}_{11}, 40,61, \mathrm{PC}_{35}, 61, \mathrm{Hr}_{52}
$$

AE thought these two signs were the same ( $P M$ IV. 686, fig. 668) and derived both, like the Hellenic caduceus, from the uraeus-staff of Ishtar on Late Babylonian cylinders ( $\mathcal{F} H S$, 1901, 148-52, fig. 28-9 $=$ MTAC, 50-2). But the pictorial form is not necessarily the earliest; and the simpler (AB 32) occurs in SM I. 192, no. 30, and on an early graffito from Melos (Exc. Phylakopi, fig. I55; $S M$ I. 35, fig. 16). It is probably a distinct sign, perhaps derived from callipers.

An alternative derivation of AB 33 is from the 'libation-vessel' sign (SM I. 197, no. 40) with handle and spout, cf. Eg. $k b h=$ 'libate' (verb). This takes account also of the type A 76 with S-shaped
 32.4, 117b1). This recurs at Knossos as a mason's mark, and on the Pictographic tablet SM I. 170, P100b.

In B 579.2 both AB 31 and AB 33 occur in the same sign-group, so they were different signs. On B 786 a variant has a cross-bar on the stem (cf. Sundwall 125).

In another interesting variant, on B 213 , the side-strokes descend from the top of the stem: this recurs at Pylos.

On A 71 (Tylissos) 1.7 the upper end of the stem is forked.

## AB 34

$$
\text { 毛 } 1 \text { I }
$$

$$
\mathrm{A}_{76}, \mathrm{~B}_{39}, \mathrm{PC}_{14}, 6 \mathrm{r}
$$

Rare both in A and in B : perhaps abbreviated from $\mathrm{AB} 32-3$ : cf. the tablet A 61, 62. I (Palaikastro: $B S A$ Suppl. no. I (1923), 145, fig. 127, pl. xxxili $a$ ). Sundwall (1920, no. 35) compares Eg. $-d z d z$ $(d s t t)=$ 'village' ('estate') but this - is always horizontal.

Signs derived from the Human Body, Animals, and Plants

## AB 35



A $15, \mathrm{~B}_{10}, \mathrm{~S}_{31}, \mathrm{PC} 62, \mathrm{Hr}_{31}$
Frequent both in A and in B , in groups only, in all positions. It represents a human head, like Eg. $h r$ 个 which shows eyes, nose, and mouth, as well as ears (Sundwall, 1920, no. 7) ; and is distinguished from $\rho$ by its ears, and the absence of cross-piece. The Phoen. 8 kof has lost its ears also: in B 524. 2 one ear is missing through carelessness: both, in HT 85 a 3 where it stands next to $\mathcal{F}$.

## AB 36



A 14, B 14, S 49, PC 101, Hr 74
Rare both in A and in B, in groups only. There is every stage of simplification from pictorial (SM I. 182-3, no. $5 ; H T 25 a 4$ ) to a linear sign like Phoen. $0=$ ayin 'eye'; cf. Cypr. $\Delta$ or $\mathbf{O}=y a$. The linear form $a$ retains eye-lashes, which are missing from Eg. 'eye' (Sundwall, 1920, no. 8). Even in B the oblique position on 633.2 and I 501 illustrates the Minoan tendency to set signs erect: more completely achieved in $H T$ i $a 2,25 a 4,36.2,64.1,99 b_{2}$, 101. 6; in $H T 13.4,66$.I the vertical 'eye' has a standing-base; and on $H T$ I3. 4 it looks like a double branch. A sign consisting of two eyes occurs on the Hieroglyphic tablet SM I. 179: P 121 (Pernier, Scavi, pl. xiI. 2).

## AB 37

Frequent both in A and in B, in groups, in all positions: in B rare as initial. In A there is much variation. In B the cross-barred variant is characteristic of tablets from Magazines XI-XIV: AE thought this might 'point to some difference of meaning' but it is more probably a personal peculiarity. On the Mainland at Thebes and Tiryns, this cross-bar is exaggerated and confused with the thumb-stroke. This sign is clearly derived from an open hand, like Eg. ss $s p$ (Sundwall, 1920, no. 16) which has also the meaning 'hand' $\underline{d r t}$ but also 'span' ssp.

## AB 38

Frequent in A and fairly common in B in groups, in all positions. In A the strokes vary from 3 to 5 , and occasionally the sign is reversed. It represents an open hand, but the gesture is different from AB 37. Sundwall (1920, no. 12) compares Eg. 7 in in $5 n y: s m s=$ 'hair', but that is upside down. The 3 -stroke variant is identical with Cypr. $\mu=s e$, though Sundwall prefers $\xi=k e$. In view of this, and of the Minoan habit of supporting signs on a stem or base, the name, though not the earlier form, of Phoen. $\mathrm{W}=$ shin 'teeth' suggests another derivation.

## [B 12]

This sign, peculiar to B , is noted here and in the Vocabulary because of its obvious connexion with ${ }^{?}$.

## AB 39

Rare both in A and in B. In A 9r the vertical stroke is omitted except in the variant $g$ (HT 90. 3. 4) perhaps confused with $\upharpoonleft(A \perp 8 a)$. In $B$ it is almost confined to Magazine XV, and is usually terminal or penultimate (639. 12: PM 697, fig. 682. I).

## AB 40

VVV
A 42, B $34, \mathrm{~S}_{27}, \mathrm{PC}_{76}, \mathrm{Hr}_{12}$
Frequent both in A and in B , in groups, in all positions: rare as final in B. Twice (B64I a 3.4 ) it stands alone before a 'banner' sign counter-marked $\ddagger$. Variants result from carelessness, and sometimes the two strokes are separated. In A it is ligatured with $\rangle$.

AE recognized the head of a dolphin, looking downwards (PM I. 633, fig. 471, 641, 643, fig. 477, no. 79; IV. 685). But the goat's head, frequent in Hiéroglyphic script (SM I. 207, no. 65) especially at Mallia, comes very close to the more pictorial forms, without involving so unusual an attitude: cf. the Hittite 'goat' sign which on the Tarkondemos boss has the phonetic value tar or tarku: (cf. Gk. т ра́yos: PM I. 713 ). It may be the prototype of Cypr. $F=t u$. Sundwall (1915; 1920, no. 52) independently compared the Hittite and Eg. 'goat' sign (sth 骨='noble'). A similar sign is on the engraved pendant A 19 (CP 253, pl. II. 12).

This sign, peculiar to B, is listed here and in the Vocabulary because of its bird-like form: see p. 26.

## AB 41



A 41, B 32, S $24, \mathrm{PC} 98$, Hr 54
Frequent both in A and in B , in groups in all positions-in B most frequent as initial, rare as final -and surcharged on 'banner' signs followed by numerals. Often, carelessly drawn, it resembles the swastika signs on Trojan whorls (Schliemann, Ilios, nos. 1879, 1880), which may likewise be meant
for birds. On the Phaestos Disk (SM I. 279, no. 31) a flying bird holds a snake. Sundwall (1920, II. ${ }_{17}$; II. 6) gives the sign the ideographic meaning 'booty'. In A the group yt followed by a numeral denotes 'total' (p.52). An omen-bird was the pictorial original of the Babylonian sign nihoš='augury' (Hommel, Der hierogl. Ursprung d. Keilschriftzeichen, s.v.).

## AB 42

## 

A 43, B $78, \mathrm{PC} 49, \mathrm{Hr}_{5} 5$
This sign occurs both in A and in B, in pictorial forms derived from Hieroglyphic types (SM I. ${ }^{213}$, no. 88), and also in B conventionalized or replaced by a florid naturalistic type. In A it stands in sign-groups: in B alone with numerals, or with $+(268,27 \mathrm{I})$, \% $(270,855,859,860)$, or \# $(856$, $86 \mathrm{I}=\mathrm{AB} 68$ ).

The pictorial forms show that 'saffron' is meant (PM I. 280-I ; IV. 680, 719-20): the ligatures with T.A. $\ddagger \cdot \neq$ are unusual in Linear B.
[B 51]


$$
\mathrm{B}_{5} \mathrm{I}, \mathrm{~S} 45, \mathrm{PC}, \mathrm{~B}_{45}, \mathrm{Hr}_{5}
$$

This sign peculiar to B is listed here and in the Vocabulary as a 'flower' sign: see p. 28.

## AB 43



$$
\mathrm{A}_{25}, 75, \mathrm{~B}_{19}, \mathrm{~S} 63, \mathrm{PC}_{49}, \mathrm{~B}_{54}, \mathrm{Hr}_{5} 8
$$

Rare in A but frequent in B in groups, in all positions-rare as final-but not alone with numeral: but the combination 草户 ends eight sign-groups, e.g. 1294, 1520. 5.

The sign is more elaborately drawn in A, and seems to represent a flower with radial petals, as on painted vases from L.M. III onwards. In B there are careless variants: $c, d$.

## AB 44

$\phi \varnothing$
A 44, B $28, \mathrm{~S}_{17}, \mathrm{PC} 6, \mathrm{Hr} 65$
Frequent both in A and in B in groups, in all positions. On B 629.2 it precedes the 'woman' sign $\$$ with numeral; on 1488 is a careless variant, alone with numeral ': cf. I 397.

The 'sacral leaf' of ivy had symbolic significance at Knossos (PM IV. 685, fig. 667). Sundwall, however (1920, no. 9) compares Eg. 'tree' sign: cf. $\cap$ in $n h t$ 'sycamore', ism 'palm'.

The types vary. In A the leaf is mounted on a base and is concave or flat above: but at Knossos the painted graffito A 33 (PM I. 616-17, fig. 453) YDS FA A has the convex form. In B the leaf is $^{2}$ convex, the stalk curved, and there is no base ( $735.1 ; 1422$ : variants $b$ and $h$ ).

## A 45



A 28, B $52, \mathrm{~S} 38$; PC 81, 102, Hr 66
This variable sign, or group of signs, seems to be derived from a plant or flower, with drooping leaves or petals, which do not traverse the stems as in AB 46 below: probably the iris so frequent in Minoan painting. There are two main types which may be distinct signs $(a)$ with single upright stem, only in B; (b) with two stems crossed, and sometimes connected by a ring: more elaborate centre ornaments suggest a posy. An occasional cross-bar on the stem has no special significance.

Type $b$ has many variants in A．In B it sometimes resembles ：but on B 607.3 the two signs occur together．In B it may have a vertical stroke between the stems（205）but is quite distinct from W：compare however 983.2 with 984 ．I．Another variant has a triangle between the stems，as on some


## AB 46

## A 27, B 46, S 35，PC 60,74, Hr 66

Frequent in A ；less so in B ，in groups，and alone followed by numerals．It is clearly derived from the Pictographic and Hieroglyphic＇fig－tree＇sign（SM I．220，no．104）；cf．pictorial ideogram B 862．I． A cross－bar is frequent in $\mathrm{A}\left(\mathrm{HT}_{2} 8 b_{3}\right.$ ，III $\left.a_{3}, b_{3}\right)$ ．In B the branches often cross，or rise from a ring， as in AB 45 ；but the two signs are quite distinct，and in AB 46 the cross－lines always traverse the branches．Associated with cereal signs and other commodities，and followed by numerals，this sign probably denotes＇fig－tree＇：especially noteworthy is the conjunction with 有＇vine＇on B I．II－25．

## AB 47



A 51，B 29，S 41，PC 12，Hr 75
This sign occurs in A only much abbreviated；and in the painted cup A 16.3 ill－formed（PM I． 586，fig． $43^{1}$ ；IV． $6^{1} 5$ ，fig． $45^{-1}$ ）．In B there are several variants，in groups，but not alone．It is clearly floral－probably tulip or iris（cf．SM I．213，no．87）．The cross－bar is sometimes omitted （847．I，863．I）or duplicated（II64）．It is quite distinct from $\Psi$ ．On 1289 the inner strokes are crossed and attached to the arms，explaining the ill－written sign on 18 r ．

## Signs derived from Armour，Arms，and Furniture

AB 48
（a）$\overline{X M}$（b）$\xlongequal{m}$
A 24，B 49，S 42，PC 24，102，Hr 53

Rare in $\mathrm{A},(a)$ in pictorial forms：frequent in $\mathrm{B},\{a, b)$ conventionalized，and variable，but on 955 a pictorial variant occurs thrice．In its pictorial forms it represents a helmet or tiara with side－flaps or ribbons（PM IV．688－90，figs．671－5，867，figs．853－62）well known from seal－stones．The variants at Mallia（PM 688，fig．671）led Chapouthier to derive from a bell－shaped clay figure or＇votive sheep－ bell＇（Mallia 55－6，L i a，b；Picard，Eph．Arch．1937，83－91 ；cf．Aff XLIII．482），but these objects ＇are peculiar to M．M．I a deposits＇（PM I．175；IV．689，n．2）．

Even the most conventionalized forms of $\overline{\boldsymbol{x}}$ are distinct in structure from variants of $\boldsymbol{\chi}$（ $140.2,3$ ）， and occur with them（393）．Sundwall（1920，no．47）compared Eg．wddhw＇table of offerings＇．

In B the variant＇${ }^{\mathrm{C}}$ with central line between the stems（not found in A and perhaps a district sign， because differently drawn，as at Pylos）occurs with $\frac{\mathrm{x}}{\boldsymbol{\pi}}$ on 1119 ；04．78．6．With 983.2 compare 学褮 on 984．I．Cf．the variant on the gold ring from Mavro－spelio（A 20．8：PM II．557，fig．352）．Sund－ wall regarded this as a variant of the＇man＇ $\operatorname{sign}$（ $S M$ I．181，no．1）．

## AB 49

## 부꿉

$$
\mathrm{A}_{47}, \mathrm{~B}_{21}, \mathrm{~S}_{15}, 17, \mathrm{PC}_{52}, \mathrm{Hr}_{34}
$$

Frequent both in A and in B，in groups，especially as initial．The double－bar variant in A confirms its derivation from a double axe（SM I．195，no．36；PM IV．686，fig．664），a popular Hittite cult
object．Prefixed to proper names，therefore，it might be a divine name or attribute：cf．Diodotus， Zenodotus，Jehoiada，Gottlieb．

In B the sign is much simplified：the variants $\uparrow$ and $T$ being freely interchanged（894． 1, I 541 ， 1543）；and the side－strokes may be so long as to be confused with 同 on 1053，and with $\Psi$ on 227 ． On 187 the wavy line above is a slip of the graver．Sundwall equated with Eg． $\mathrm{V}_{\mathrm{r}}-\boldsymbol{s} \times h \mathrm{ch}$＇mast－and－sail＇ ［＇stand up＇］：he also distinguished $\dagger$ from ㅂ（1914，no．10）．

The rare sign B 86 on $\mathbf{B} 160$ b 2.3 is probably miswritten $\psi$ ．

## AB 50

15
A $30,50, \mathrm{~B} 64, \mathrm{~S} 55, \mathrm{Hr} 20$
This sign does not seem to occur in A，though AE noted it in his comparative table（PM IV．677， fig． 659 ，A $50 ; 684$ ，fig． 666 ，A 30 ）．But it is frequent in B，both in groups，and alone before a numeral． On 734 it is the countermark on an ingot sign．

Though fairly uniform in groups，as a＇commodity＇sign it has many variants．It is distinct，how－ ever，from the＇cereal＇sign $\downarrow(=$ B 87）．Its origin is obscure，as it has no counterpart in A or in the Pictographic or Hieroglyphic series．It has been regarded as a＇shield＇，like either（ I ）a Hittite sign （cf．Phaestos Disk，no．I7；SM I．276），or（2）the Minoan body－shield in profile：but these objects do not explain the＇commodity＇uses in B，where it is probably a sign of some quality，like by and 多．

## AB 51


$\mathrm{A}_{45}, \mathrm{~B}_{54}, \mathrm{~S}_{3}, \mathrm{PC}_{53}, \mathrm{Hr}_{4}$
This sign，frequent in A and in B，usually faces left in A，but always right in B：compare Cypr． $\underline{L}=l i$ which also may face either right or left．It is probably simplified from the pictorial＇bent－arm＇ sign（SMI．183，no．8：cf．A 3，IO，II，7I）．It was at one time connected with $b$ and is so listed here；but it would be better placed with $\mathrm{AB} 37,38$ above．Sundwall（ 1920 ，no． 50 ），from a poor copy，compared Eg．I $n m=$＇knife＇．

Rare in A（facing left）；frequent in B，always to right，and progressively abbreviated（PM I．626， fig． 464 ；IV． 687 ，fig． $670 ; 795$ ，n．I ）．In B it is very frequent as initial；also alone before a numeral， and before $F$ and $X$ as a quality－mark（pp．62－4）like ${ }_{F}$ ：e．g．412－14．

From a throne with high back rises a crook－sceptre like that of Egypt（Sundwall，1920，no．4I）
 thought the sign an ideogram，but it occurs in all positions with phonetic value：in proper names it may have denoted a＇power＇－element like Gk．Menelaus，Menecrates．

## AB 53

Frequent in A and in B ，without significant variation．The oblique line through the handle indi－ cates the loop，as on other Minoan drawings of vessels（p．59）．Type $f$ resembles an ink－written variant（A 16.7 ；cf．$S M$ I．29，fig．12；PM I．6I4，fig．45I a）．In A the sign is rarely reversed（A 5 ；

HT 93 a 2; Phylakopi 183, fig. 155 ; PM IV. 7 I 5 , fig. $697 a$ a). On B 1435 it is duplicated; it occurs as 'quality-mark' on a banner sign, on a cuirass, and before and other 'commodity signs' (ro67. I); and alone with numerals (HT 89.5). Sundwall (1920, no. 36) thought it denoted a liquid measure for commodities, comparing Eg. 'bowl' $=k$ and Cypr. $\overline{\mathbb{N}}=k i$. But what about liquid cuirasses or he-goats?

## AB 54

Very rare in A ( $\mathrm{H} T$ 16.4: sealing noted by AE ) but frequent in B , in groups, and alone with numerals. Associated with a horse-head on the chariot tablets, it may be a sign of value or quality. On 894.2 it follows the 'wheel' sign; and on 896-7, 900 it accompanies the 'horse' sign $\mathrm{f}^{\prime}$ (PM IV.798, fig. $77 \mathrm{I} a, b, c$.

There is a Pictographic 'saw' sign (SM I. 189, no. 23; cf. $C P 27$ [296], fig. $34 d ; 38$, no. 23), depicting, like the Eg. 'saw' sign ('saw' verb $=\alpha$ lड $m d h$ 'to carpenter'), the early wooden saw set with flint teeth, modelled on the still more primitive 'jawbone of an ass' (SM I. 189, no. 21). The saw was believed in antiquity to be the invention of the Cretan giant Talos (Diod. IV. 76. 5).

In A the sign is still pictorial ( $H T$ 16.4), and occasionally also in B, with many abbreviations.

## [B 18]



B 18, S 2, 19, PC B 33, Hr 59
This sign is listed here and in the Vocabulary, but it does not occur for certain in A, and is discussed with other B signs on p. 25.

## AB 55

1 A1
A 35, B $50, \mathrm{~S}$ 19, $\mathrm{PC} 64, \mathrm{Hr}_{3} 6$
Frequent both in A and in B , with little variation, usually in groups, in all positions, and surcharged on a 'banner' sign ( $470-5$ ). In A it is ligatured with other signs and with a goblet on foot, as a 'commodity' sign. It is quite distinct from $\boldsymbol{\#}\left(\mathrm{AB}_{5} 6\right)$ and is associated with it on 479 a $2, b 3$.

The simplified form $g$ may be due to carelessness ( B 44 I ). AE noted, without reference, a variant like $f$, with head reverted, on the Cypro-Mycenaean seal (S 9).

A Cretan hieroglyphic sign ( $S M$ I. $163: \mathrm{P}_{54} b$ ) is perhaps a variant of the 'bee' sign (SMI. 212${ }^{1} 3$, no. 86); and there is another early sign resembling $\AA$ but reversed (SM I. 173: P 107 c): this Sundwall (1920, no. 12) compares with $\Psi$; but he also compares $\mathbb{\AA}$ with Eg. hrw='falcon' (1920, no. 45).

## AB 56


Frequent both in $A$ and in $B$, always in groups; passing from a pictorial representation of a tripoddifferent in A and in B-to very careless abbreviations, e.g. B 879, liable to confusion with 笠: cf. PM I. $61 \%$. These are represented in Table IV. In A, when ligatured with other signs, it often becomes confused with $\mathbb{A}$. AE regarded the A-form $\mathfrak{i n}(\mathrm{A} 66)$ as a distinct sign. Sundwall ( $1924, \mathrm{p} .78$ ) compares SMI.213, no. 86, and Eg. 'bee'='King of Lower Egypt' and regards it as an ideogram for 'priest
king' or 'sanctuary': cf. Nilsson, MMB 471. But it only occurs within groups. Carelessly written, it may be confused with the 'horse' signs $\mathrm{F}^{\prime}$ (A 68, 93).

## AB 57



$$
\mathrm{A}_{36}(\text { bis }), \mathrm{B}_{24}, \mathrm{~S}_{46}, \mathrm{PC}_{43}, \mathrm{Hr}_{3}{ }^{1}
$$

Occurs both in A and in B, usually in groups, though occasionally an ideogram or a numeral follows, as if punctuation were omitted (B616. I, 919. 2). There are many variants, but $[4+f(896)=$
 without cross-bar.

There may be more than one prototype: (a) the Eg. ankh-sign f $\subset n h=$ 'life', 'divinity': which occurs with Cypro-Mycenaean or Cypriote signs on the gold ring ( C 9 ) from Téké near Larnaca (Evans, FrAI, XXX, 1900, 216, fig. 13; SM I. 70, fig. 38; PM IV. $759 n$ ); combined with a double axe on a gold ring from Mycenae (Bossert, 399 d); on a steatite lentoid seal from Crete [AE]; and in Pictographic script (SM I. 197, no. 39). For the ankh-sign in Hittite, Mycenaean, and Carthaginian symbolism see Evans, MTPC 80, 81 (=fHS XXI, 1901 [178-9]). The sign occurs on Cypriote coins at Salamis (BM Cat. Coins, Cyprus, pl. Lxxxir). The base-line is sometimes omitted (HT $7 a_{3} a_{3} b_{3}$ ).
(b) The horned variants $h, i$ suggest the influence of an Isis symbol.
(c) The cross-barred sign $l$ which is certainly an Eg. sistrum (A $76 a I$ (Tylissos); HT $90 a 2$ ), as carried by the revellers on the Harvester Vase from Hagia Triada (Bossert, 276-9), passes into simplified forms $k$ and $j$.
[B 36, 40]

## 777出井

B $36,40, \mathrm{Hr}_{4}$ I, 11
Though peculiar to B, these implement-signs are noted here and in the Vocabulary; see p. 27.

## AB 58



A 47, B $4 \mathrm{I}, \mathrm{S} 6,56, \mathrm{PC} 26, \mathrm{~B} 63,64, \mathrm{Hr} 49$
Rare in A, but occurs in B, in groups, in all positions with many variants. The forms in A and in B are distinct, but may be equivalent. The more pictorial $a, b$, resemble the sign $\phi$ ( $\mathrm{A} 18 a$ ); but the stem always ends below the ring, which is usually omitted: on $H T 66.2 ; 90 . I-2 \bar{j}$ and $\phi$ occur together. Sundwall (1914, no. 7) identified $\bar{j}$ and $\mp$, but the more linear $v-x$ are distinguished from $\mp$ by the shortened stem: but see 911 for a very erratic handwriting. Other forms $f, g, k-o$ have the stem dotted as in $T$ and conversely sometimes $T$ has a continuous stem; but the heads of the two signs are quite distinct. The variant $u$ on the gold ring (Evans, $\mathcal{F} R A I X X X, 216$, fig. $\mathrm{I}_{3}$ ) is identical with Cypr. $\overline{\mathrm{T}}=n a$.

## AB 59



$$
\mathrm{A}_{48}, \mathrm{~B}_{42}, \mathrm{~S}_{25}, \mathrm{PC}_{5} \mathrm{I}, 67, \mathrm{Hr}_{49}
$$

Frequent in A and occurs in B , both in groups, in all positions, and alone with numeral; also surcharged on vessels. As a Hieroglyphic sign (SM I. 223, no. 113, e.g. P $70 b$ in a group) it was described by AE as 'conjecturally a rain sign', and so 'water' (cf. PM IV. 658 ); but on vessels it is less likely to denote water than other liquids. It is quite distinct from $\overline{\bar{i}}$ and from $\overline{\text {, for it has no }}$ second cross-stroke or ring. But the stem may be continuous, and the upper strokes may converge.

The closed variant $m$ may be derived from a 'grid-iron' sign, as at Thebes and at Tiryns (PM IV. 757 ; cf. p. 3I below), but this is not a Pictographic or a Hieroglyphic sign.
AB 60
F
A 46, B $55, \mathrm{~S}_{21}, \mathrm{PC}_{97}, \mathrm{~B}_{3}, \mathrm{Hr}_{48}$

Frequent both in A and in B, with little variation, in groups, and also in B surcharged on a vessel followed by numerals (774-6; cf. PM IV. 73x, fig. $714 c, d$ ) partially denoting its contents. Sundwall
 always faces left.

## [B 21]



B 31, S 30, PC (B 59), Hr 47
Though only in B, this sign is noted here and in the Vocabulary: see p. 26. The ligature associated with vessels.

## AB 61

9818
A 39, B 56, S 34, PC 49, Hr 27, 28
Rare in A in more pictorial form $c$, but frequent in B , in groups, with a few hasty variants. 'The upright loop which forms its lower member suggest comparisons with $\gamma^{\prime} \gamma^{\prime}$ [AE]. The variant with side-hooks only occurs on 04.3 1, 34, 48, 49. Sundwall (1914, no. 13; 1920, no. 22) compares SM I. 190, no. 26 and Phaestos Disk no. 23 (SM I. 176); the Eg. 'club' sign=ma='strong' in $\ddagger$ 'shm 'to lead' or 'sceptre' rb3: cf. SM I. 190, no. 26 (='white' or 'brilliant'): all this does not help much to vocalize $\rho$.

B 56a and B 56b seem to be variants of AB61: but B 56a may be a mirror, as 'rebus' sign for an unusual syllable: only in 894 . I; 04. 31. 2. B 56b occurs only in 258 . 1 referring to corselets:


A 111 only occurs (AE) on $H T$ ior. 6 alone followed by a numeral : compare B 92 with $\zeta$ for $\beta$.

## AB 62

8
A $57, \mathrm{~B} 97, \mathrm{PC} 83, \mathrm{Hr} 90 \mathrm{n}$
This variable sign is rare both in A and in B. In A it occurs in short groups followed by numerals: AE records it on a sealing, without reference; the pictorial sign on A 56 (Knossos) may be a variant: cf. PM IV. 800-r, fig. 775.

In B it occurs on 902. I-I2 in the phrase $\mathrm{Y}^{\prime} \Psi^{5}$ 2-II denoting something connected with horses, perhaps 'reins' or 'traces'. AE compared Eg. $n w h=$ 'coil of rope', and 'roo cubits' as a numeral. But it may be a 'rebus' sign and phonetic.

Rare Pictorial Signs common to $A$ and to $B$
AB 63
a $\Delta T \Delta$ в $\Delta H M$
A $64, \mathrm{PC} 85, \mathrm{Hr} 6$
'Balance' signs, more or less pictorial, and variously constructed, occur both in A and in B; but only have phonetic value in A , where the balance is always suspended, not supported on a stem as in B; cf. the sealing, SMI. 43, fig. 20 a I. Sundwall (1920, no. 6) compared the Eg. 'balance' sign.

In B the＇balance＇sign is rare，only as a＇commodity＇ $\operatorname{sign}(730-3)$ with numeral．It is upheld by a forked pedestal．For its significance as a commodity，see p． 53 ．

Sundwall mistook the＇commodity＇sign for a＇balance＇（Mélanges Glotz，827－9）relying on careless variants．

## AB 64 <br>  <br> A 83，B 67, S 69, PC 35，Hr 6

Signs representing the prow of a ship are rare both in A and in B，and are differently drawn．In A the prow is to left；the sign only stands alone，with numeral（HT $8 a_{4}, 5$ ），or followed by another sign and numeral（HT $94 b 4$ 母： $26 b 4 \mathrm{~F}^{\circ}$＇）．Compare the unique sign A 114 with similar＇mast＇and perhaps oars．

In B the prow is to right，with a foliated akroterion（PM I．118，fig．57．7；238；IV．714；cf．712， fig． 694 c）：cf．a green jasper intaglio in the Ashmolean Museum（Evans Collection）and the lost gold signet－ring from Mochlos（PM IV．952，fig．919）．It occurs in a group 䦗 4 on 1117，and followed by $\mathcal{Y}^{\prime}$ and numerals on 6I．$I$ ；but perhaps a punctuation is omitted before $\mathcal{F}^{\prime}$ ：cf．61．2， 3 ．

## AB 65

## $\mid$ III $\mid$ cf．B 48 $\left.\right|^{\text {Fin }}$

A $115, \mathrm{~B}_{48}, \mathrm{~S}_{124}$ ，PC 70
This rare sign，more pictorial in A than in B，represents the standing－loom－frame，with pendant warp－threads（ $P M$ IV．678，fig．661．7，10）．In A it occurs in sign－groups with numerical＇fraction＇ sign A 64 （HT I6．2，20．4，119．4）；and on a sealing（Levi io a）．Form $c$ in sign－groups，probably variant of AB 66 ．In B the unique form $e$ on B 63 ．I in a group may be a ligature of $\boldsymbol{P}$ and + ；and on B 490 the sign B 48 may be a variant．

## AB 66

## 四围

A 31，B 94，PC 75，Hr 2
Very rare in A，but frequent in B：described by AE as a＇banner＇sign，because sometimes sur－ charged with other signs；but more probably representing a＇granary＇or store－chest，raised on posts to repel vermin，as a standard unit of capacity，for various commodities denoted by the surcharged signs．On A 14． 5 （Troullos，PM I．625－6，fig．462）it occurs in a group，with phonetic value． Similar pictorial granaries have gable roof（SMI．198，no．43；cf．P 83 $a, 107 b ;$ PM IV． 715,697 c）； and inscribed on a pot from Thera（PM IV． $715.697 b$ ）．In B it is frequent alone with numeral， often surcharged，or supplemented with phonetic signs for contents or their quality：on 481 $a$ where it follows a frequent group $\ddagger 2 \varphi$ ，a punctuation seems to be omitted；but compare 483.1 where it may be by error for 同：cf．997．2，04．31．I，04．49． 2 and צ姵 on Thebes 2．3．4（PM IV．739－4I， fig．724）．

## AB 67

圂

## A $55, \mathrm{~B} 94 a, \mathrm{PC} 43, \mathrm{Hr} 95$

Variable representations，both in A and in B，either of an＇ingot＇with concave sides（AE）or of a chest or container：compare also the more pictorial forms of the sign $\boldsymbol{H}=\mathrm{AB}$ 19．In $A$ it forms part of a principal group（HT $19 a_{I}$ ），and should be a＇rebus＇sign with phonetic value：compare the simplified form $\boxtimes$ on $H T$ 19 $b r$ ．A similar sign followed by numeral $8 \%$ on a Minoan weight
( $220 \mathrm{gm} .=3,390 \mathrm{gr}$.) from Zakro (Candia Musum: PM IV. 663 , fig. 650 ab ) was thought by AE to indicate a sexagesimal reckoning related to the Eg. kedet of 572 gr. ( 9.025 gm .) Corolla Numismatica 346), if so, the Zakro weight would equal 24 kedet. But in Minoan notation the six points should be 60 not 6 , and would be impossible in sexagesimal notation, because represented by the next higher unit. Moreover there is very little evidence for sexagesimal reckoning in Crete (cf. p. 52).

On B 520 the sign occurs with numerals, in tabular form, associated with and numerals which are six times those with . It therefore certainly represents a commodity, and has been regarded as a metallic (ingot) equivalent for $4 \times 6$. But no other commodities are recorded thus in alternative reckonings.

On B 698 it is surcharged on a 'banner' sign at the end of the group 旰 a recurrent 'subsidiary' name group : its numeral is damaged, but it is clearly a 'commodity' sign, with punctuation omitted; and is followed in 1.2 by a surcharged $m_{m}$ and in 1.3 with $\%(=A B 25)$ :cf. B 270, 6667,860 .

## AB 68

\#
A 99, B 81
Doubtful in A , but frequent in B with saffron and other commodity signs. AE regarded it as an 'area' sign, for measurement of some crop (PM IV.668, n. 3; 719, fig. 704). Perhaps replaced by A 65 (PC ${ }_{13}$ ).

## AB 69



A 73, В 46, PC $_{36}, 38$
Variable 'sword' signs occur both in A and in B. In A the form $a$ is rare, in sign-groups, apparently with phonetic value ( $H T$ Io $b 2 ; 25 b I ; 26 a I ; 78 . r$ ): also alone with numeral ${ }^{\prime \prime \prime}(H T$ 49. 5) and surcharged HT 38.2.

In B a pictorial 'sword' sign occurs only as a 'commodity' sign followed by numeral, on a distinct series of tablets from the Arsenal-site at Knossos. $\mathrm{B}_{1540-9 ; ~ P M ~ I V .836}$ ): the type is that of a bronze dagger from Zafer Papoura (PM I. 855-9, figs. 838-4r). A similar 'dagger' sign occurs on a Pictographic seal-stone (SM I. 155=P $28 c ; 186$, no. 15). Compare the Egyptian dagger-signs (I) $\ddagger$ bakasu [bsgsve] without pommel; (2) itp with pommel.

## SIGNS PECULIAR TO LINEAR SCRIPT A

Besides the signs $A B 1-69$, there are many signs peculiar either to $A$ or to $B$ : most of these represent commodities and are described in connexion with them. Only a few are phonetic; as follows. The A signs are discussed more fully elsewhere.

Fairly frequent in groups in all positions: also alone with numeral (HT $6 b 5$ ): it can hardly be ideographic for 'cat', since the amount ' $\frac{3}{4}$ cat' is unlikely. The two forms are interchangeable (HT $3.7,85 b 5,97 a 3$ ) : compare the seal-stone (SMI. 209, no. 75), and no. 74 which AE described as a 'lion's head' (SM I. 153, 270; P 23).

Probably equivalent to the 'throne' sign $4\left(=\mathrm{AB} 5^{2}\right)$, but very variable: in sign-groups, in all positions, and ligatured with A 62: compare A81.

A 54
$\varsigma$
PC 94
Perhaps a variant of AB 35 (=A 16): only on $H T 24 b 2$.

A 56


PC 20, 44
Rare: on the Dictaean Table ( $A_{\text {I }}: P M$ I. 497, 625-30, fig. 466-7) and on $H T$ 48. 4, 5: perhaps for 0 ( $=A B_{12}$ ).

## A 58



Frequent in $\mathbf{A}$; and as $\mathbb{A}$ is rare in $\mathbf{A}$ this sign may perhaps replace it.

## A 59

Certainly a 'fraction' sign, for it only occurs after a numeral; but its value is uncertain.

A 60
2
PC 53
Certainly an early form of $\mathbb{L}_{5}$ which also occurs rarely in A.

A 61, 88


PC 68, 96
Linear variants of some pictorial sign, or perhaps a ligature; but on $H T 20.3$ it is followed by a 'fraction' sign, and may be a commodity sign.

A 70
今 S 30, PC 88, fig. 5 I. I
Occurs in groups, and alone with numerals; also reversed, and ligatured with itself (HT $97 a r$ ). It has no connexion with Western Greek and Roman R: but perhaps with Phoen. $\mathrm{r}=$ tzade.

## A 71



PC 8 I
Variable but connected signs, in groups and alone with numerals: compare Cypr. $\mathrm{X}=$ ro.

## A 72



PC 63
Only in groups ( $H T 8 a_{3}, b 2,3,85 b 5,98 a 4$ ). It may represent the Minoan woman's belt, models of which were dedicated at Knossos (PM I. 506, fig. $364 c, d$ ).

The A－variant of the＇prow＇sign AB 64 above．

The remainder of the signs peculiar to A either in sign－groups，or alone with numerals，or as ideo－ grams denoting commodities，for which no Minoan type is available，are included in Table 2.

## SIGNS PECULIAR TO LINEAR SCRIPT B

These signs are described in the numerical order of the table in $P M$ IV，fig． 666 A $, \mathrm{B}, \mathrm{c}$ ．Those which are common to $A$ and to $B$ have been described already under their $A B$ numbers．

| B 1 A see AB ir | B $5 \square$ see $\mathrm{AB}_{14}$ | B9 \＃see AB 12 |
| :---: | :---: | :---: |
| B 2 A ，AB io | B6月， 6 AB 18 | B 10 Y ，AB 35 |
| B 3 ［, $\mathrm{AB}_{13}$ | B 7 日＂，AB 20 | B 11 慗，${ }^{\text {c }}$ AB 37 |
|  | B 8 同，${ }^{\text {AB }}$ 21 |  |

## B 12

＂
S 25，Hr 21
Rare，in sign－groups only．The variants are trivial：compare the pictorial sign SM I．183，no． 7 ． On 701 $\vdash^{-K}$ is followed by ${ }^{\text {D2 }}$ and an amphora surcharged with $\uparrow$ ．

The Eg．$U k_{3}=$＇soul＇，＇spirit＇has not the arms crossed：another Egyptian sign with the hands downward is compared by Sundwall with $Y$（1920，no．25），but not with this sign．AE derived it from the crossed arms of confronted figures，eg．on a monument at Jerabis（Wright，Empire of the Hittites，pl．IX）．
B 13 F see $A B 38$
B 140 ，AB 26
B 15 see AB 53
B17合 see AB9

B 18
Frequent in groups and also alone on＇chariot＇tablets following the horse＇s head（217－19，222， 23I，24I）or replacing it（229）．A＇whip＇or＇flail＇is held by Osiris and Egyptian kings：perhaps here it denotes the charioteer．But in sign－groups it has phonetic value．

The more careless variants may be confused with $\psi$ ．Sundwall（1914，no．10）identified with the ＇broken corn－ear＇sign in Linear A，PC 50 （fig．51）which he compared with SM I．183，no． 8.

Frequent in groups in all positions, though very rare as initial; but not alone except as countermark on a two-handled cup (710. 8 b ). It represents a single-blade axe, like $S M$ I. 185, no. 12 $b, c$; but it is variable and liable to confusion with $\mathcal{H}(=\mathrm{B} 18), \boldsymbol{\gamma}(=\mathrm{B} 40),\lceil(\mathrm{B} 38)$, or $\boldsymbol{f}(=\mathrm{B} 55)$. Notable variants are on 151.3, 499, $912 a, b, 943.2,944$, 1092, IIII, 1136, 1202, 1306.

B 21 早 see AB49.

## B 22

Rare within sign-groups only, perhaps as a 'rebus' sign, and certainly phonetic. It is almost confined to the 04 . series of tablets; but cf. $461,485,518,890,1056$, and 829,891 which certainly belong to this series. It may be a front-view of the 'throne' (cf. B $27, \mathrm{AB} 5^{2}$ ) or an altar with horns (cf. $P M$, Index, s.v. 'horns'). It is sometimes followed by $\Psi$ (see Vocabulary). On 485.2 is a similar but broader sign.

| B $23 \Psi$ see AB ${ }^{2-3}$ | B 26 ¢ see AB 23 | B 28 D see AB 44 |
| :---: | :---: | :---: |
| B 24 ¢ , AB 57 | B $27{ }^{1}$ | B 29 ゙ „ ${ }^{\text {T }} 67$ |
| B $25+$, AB 2 |  |  |

B 30
l ${ }^{2}$
Hr 73
Frequent in groups in all positions, but not alone or with numerals, except ligatured with $\uparrow$ $\left(=\mathrm{B}_{3} \mathrm{I}\right)$ and associated with amphorae ( $8,9,19$ ) and cups $(19,20,23,24,703,705-7,7 \mathrm{I} 3)$ : or written in full (702, 704).

Though listed as a 'bird' sign, its origin is doubtful. The lower part resembles a M.M. type of pedestal-jug, and variants suggest a trough-spout and handle; moreover, unlike other animal-signs, it faces left: compare - Y.7.7. Sundwall (1920, no. 46) compares an Eg. 'falcon' sign.

## B 31

## 4727

Frequent in groups, and ligatured with $\boldsymbol{k}$. It seems to contain the $\operatorname{sign} \boldsymbol{\beta}$ reversed and perhaps 2 with cross-bars; but the group $\uparrow 2$ occurs only on 566.3 , and $2 f$ only as a terminal ( 83 1.5): but it is probably a distinct sign. It is variously written, but quite distinct from 9 and 5 . Sundwall (1914, no. 30) identified $\uparrow$ with $\cap$ in Linear A (=A 70), but later (1920, no. 34) with $\uparrow$, cf. $S M$ I. 189, no. 21 : and with Eg. $\sim$ 'choose' $=s t p$, and with Cypr. 5=po.

Frequent in all positions，but not alone，except a possible variant on 872.3 below a＇Vapheio＇cup． Variants are few（PM IV．709，fig．691 $a-f$ ，cf．B 6r． $3,187,912 a 2,932$ ）；but sometimes the base is closed．On 360 （pl．xxxir）a pair of these signs face inwards within a sign－group．

Though this sign resembles the＇woman＇sign 市，for which it is once substituted（PM I．709， fig．642．2），and though it has a hand－like appendage，as on the＇overseer＇sign $\| \hbar$ ，its only relation to humanity is its use in the group $8 \hat{\beta}$（ 634 and Vocabulary），which appears to mean＇children＇either male or female（p．55）．But its only precursors are the＇plough＇sign（SM I．190，no．27）set on end； and the＇lyre－and－plectrum＇sign（SM 191，no．28）frequent at Mallia：but it is not safe to equate signs which are not set the same way up：yet the＇plough＇sign is upturned on SM I．154，nos．164－ 77 （P $26 b, d, 64 d, 93 a$ ，100 $b, 105 b, 109 c, 117 a)$ ．

## B 36



S $53, \mathrm{Hr}$ II
Frequent in groups，but not alone．It has no pictorial predecessors；but an open variant on clay balls from Enkomi（C 2．5＝BM Exc．Cyprus，1899，27，nos．766，768；SM I．70，fig．37）resembles Cypr． $\mathcal{K}=$ va．AE also compares Cypr． $\operatorname{li} \mathrm{C}=e$ ；but a similar Lycian sign $=v$ ．

## B 37

$\mathbb{1} G$
Frequent and variable，like $\mathbb{A}$ ，but quite distinct，e．g．in the group $\mathbb{N} \mathbb{Z}$ A．It has no pictorial predecessor；but there is a doubtful variant at Mallia（Chapouthier，L．I a）．

$$
\text { B } 38 \text { ¢ see } \mathrm{AB}_{15} \quad \text { B } 39 \ddagger \operatorname{see} \mathrm{AB} 34
$$

## B 40

## 777

$\mathrm{Hr}_{4}$
Very frequent，especially as terminal，where it alternates with 目 and other suffixes（p．48）and is $^{\text {（ }}$ ） sometimes duplicated（II39 ff．， 1157 ff ．）．As initial it is rare．Variants with two or three connecting strokes occur together；and with four or more，at Thebes（PMIV．733－5，fig．719）．Carelessly written， it may be confused with $\varphi$ ．

| B $41{ }_{1}^{\text {¢ }}$ see AB 58 | B 44 丰 see AB 5 | B $47 \Psi$ see AB $5^{1}$ |
| :---: | :---: | :---: |
| B 42 T ，AB 59 | B 45 Y $\Psi \Psi^{\prime}$, AB 29 |  |
| B 43 半， $\mathrm{AB}_{4}$ | B 46 焱，AB 45 |  |

## B 48

## 門

Only on 490 alone with numeral，so probably a＇loom＇as commodity sign，perhaps a variant of $|m \mathrm{~m}|=\mathrm{AB} 65$ ．
B 49 笑 see AB 48
B 50 섀 see $\mathrm{AB} 55,56$

B 51

## 4 M

Frequent in all positions，and alone with numeral，up to 140 but usually not above ro．Often associated with livestock and other commodities：probably denoting some fodder－crop．AE thought it a ligature of $\Psi$ with a pair of shears，and suggested＇wool＇．But the more pictorial forms are floral． On 520 AE took for a＇weight＇sign（p．3），because associated with＇ingot＇signs．

Sundwall（1914，no．15）identified this sign with the Hieroglyphic＇ox－head＇（SM I．206，no．63） but later（Mélanges Glotz，827－9；cf．PM IV． $663 n$ ）with the balance sign（followed by Hrozný） relying on the more careless simplifications．

The variant $g$ occurs only in groups on 1520 ． 12 and $1526 a$ ，and is probably personal．

| B $52 \chi$ nee AB 45 | B 56 \％see AB 61 | B 602 see AB 25 |
| :---: | :---: | :---: |
| B 53 月，${ }^{\text {AB }} 19$ | B 57 中 ， AB 28 | B 61 ת）， AB 26 |
| B 54 Ls＂${ }^{\text {AB }}{ }_{51}$ | B 58 ト ， AB I | B 62 用， AB 22 |
| B $55 \boldsymbol{\beta}$ ， AB 60 | B 59 ¢ ， AB 7 | B 63 －，${ }^{\text {AB }} 24$ |

B 64 see AB 50 ：though noted by AE as occuring in Linear A，neither he nor PC give any example．

Pictorial Signs peculiar to Linear B，used in groups as＇rebus＇signs（＝types parlants）with phonetic value

## B 65

区
 represent a bedstead（ $P M$ IV．726，fig． $709 c$ ；$S M$ pl．xxix）．

## B 66

Only on B673 in a group．It has no counterpart，and is probably damaged of（＝AB41，B 32）： for similar signs noted by AE see $P M$ IV．721．

## B 67



S 69，PC $35, \mathrm{Hr} 6$ ：cf．A 83
The prow of a ship，in B points to right：the corresponding sign in A，to left：see AB 64.

## B 68



Only on 297.2 in the group 9 斯 followed by numeral ${ }^{\prime \prime \prime}$ ，perhaps a bird，and probably a rebus for a particular kind of bird；or a variant of B 69 but different from A 85 which faces left．

Rare，and always in a sign－group as a＇rebus＇sign（PM IV．712－13，fig．694a，c，h，l；719，fig．704f）． AE took it for the＇forepart of an ox＇（PM IV．fig．605．15）；but comparison of the legs with those of $\dot{\text { is }}^{( }$（ 74 ）shows that it represents the Minotaur seated：for slight variations see Table 4.

B 70
Only on 164． 3 with numeral：but cf．16I．2，443，539．AE made it a link between the＇horse＇sign B 93 and the pictorial horse－heads on the chariot tablets $217-45$ ．But on the photograph of 164 it looks like miswritten $\mathbb{A}$ ，and the numeral（144）is excessive for horses．

## B 71

## 

Pictorial variants of the＇swine＇sign B 92，usually as initial；see Vocabulary：cf．the simplified variant A 87.

## B 72 <br> 所

Only on $479 b$（pl．xxxix）read by AE as a＇rebus＇sign（PM IV．7I2，fig． $694 c$ ），but carelessly drawn．

## B 73

The＇scorpion＇sign detected by AE on 105 in a sign－group is more probably an accidental scratch： see photograph，pl．xxix．For the scorpion as symbol see $P M$ I．120，123，n．4；118，fig．87． 10.

Signs for Men，Women，and Overseers

## B 74

Usually alone，following a personal name－group，and followed by a numeral：on 1055 is the very high total 213．AE also included B $75 a$ in B 74；but it is a distinct sign，more related to B $74 b$ ． AE compared the Eg．＇seated man＇（SM I．181，no．2；155，P 29；PM IV．706，fig．688）：cf．p． 55.

B 74 a．This rare variant，standing full face，occurs only on $87-91$ ，101， 213,809 ．On 90 it is followed by the＇child＇group $8 \kappa^{\prime}$ ．

B 75 a

## خ

Inventory A
Frequent，with little variation．It is almost always alone following a name－group or a＇total＇group （ $597,609,1516,1518-20$ ）and followed by a numeral，usually ${ }^{\prime}$ ，but sometimes larger（ $600.2,601.2$ ，

603,604 ）．It is derived from a pictorial sign（SM I．I81，no．I ：P II a）common on the most primi－ tive prism－seals，where AE considered it a＇sign of ownership＇．In the Pictographic series and Linear A it does not occur．On 819．I it seems to be followed by the＇child＇group 旷．On 602.3 it is followed by $\prod_{1}$ ，but 602．I． 2 show that a numeral＇is omitted．Cf．PM IV．701，figs．684－5．

## B 75 b



This sign，clearly denoting a woman，only occurs on one class of tablets：it has no counterpart in the earlier scripts，or in A．It usually follows a sign－group，and is followed by a numeral，but there are often qualifying signs prefixed，sometimes with numeral：：$\left[^{\prime \prime}\right.$ on $610,614,617,620$ ；$\vdash^{\prime}\left[^{\prime \prime}\right.$ on 611,613 ， 624,627 ；［ on 612,$627 ;$ 翌 on $610 ; ~ 耳$ on 629 ，and an animal＇s head as＇rebus＇sign on 617 ：these are probably monosyllabic names（cf．PMIV．7or，figs．684－5）：and for the economic use of the sign，p． 55 ．

## B 76

㤢体
A man holds a knobbed staff（not a hoe）and extends his left hand in a gesture of command．The sign occurs（PC 96）in Script A，on HT 25 a 4：in Script B rarely in sign－groups with＇rebus＇value on $3,8.2,20,49,639.10,714,1568$ ，and also alone followed by $\backslash$ on $8.2,22,23,25.2,26$ ；and by other signs，with numeral．Occasionally the figure is a woman，in skirt（so AE：cf．2．3，8．2，II．I， 20．2）．On 649 AE copied this sign as $V$ 雨，but in the photograph（pl．xviit）it is clearly 㤢 with base－ line，as in $\$$ ．

## B 77



The human figure is replaced by an olive－tree or foliated $\boldsymbol{\Psi}(=\mathrm{AB} 29, \mathrm{~B} 45)$ ：in a variant（1516．13） this sign is replaced by $\Psi$ ．AE took it for＇superintendent of olives＇；but it occurs in sign－groups on 786，787，1403，1516．13，23．On 178，531，591．I．2，592，593．I it precedes 䒬。

## Signs for Crops and Measures for Grain

## B 78

## M，M M M

In addition to the simplified＇saffron＇sign $\mathrm{AB} 42, \mathrm{~A} 43$ ，there occur in B large naturalistic saffron－ flowers（B856－61）followed by numerals：an intermediate form B 670 is ligatured with $\uparrow$ on B 852 and perhaps on B 85 ；$\ddagger$ on $\mathrm{B} 854 ; \mathfrak{A}$ on $\mathrm{B} 802,853$ ．These probably indicate qualities or varieties of the commodity．The dots on the pictorial saffron－sign were taken by AE to be not part of the flower，but $\ddagger$ or $\neq$ ．For economic saffron see p． 60 ．

## B 79

## $\nabla \varnothing$

＇Bushel＇signs are frequent in B；a bowl with or without handle；associated with＇cereal＇signs $\uparrow$ p， 9 ； sometimes alone（42．I， $5^{1} a, b$ ）followed by a numeral：also associated with ${ }^{\text {pen }}(2 b, 4 b, 19 b, 20 b$ ， $23 b, 24 b$ ）and with amphorae；so it may be also a fluid measure．

B 80 is probably another measure of capacity: surcharged with $\mathcal{f}$ on $774-6$ bis; without handles on 775.

## B 81

## \#

Differently shaped from $\mathrm{AB} 68, \mathrm{~A} 99$. In B always alone followed by numeral ' $(426.1,427.2$, $856,86$ I $)$ usually associated with the 'saffron' sign B $78(274,286)$; and with the sign B 74 on 818 ; ${ }_{2}^{2}$ precedes on 398. AE described it as an 'acre' sign: Sundwall (1920, no. 19) compares an Egyptian sign more like an ingot sign.

## B 82

$T$
Frequent with 'cereal' signs (B89); with $\overline{\text { P }} 75$ i ; cf. $950 a$ : $T$ and $T$ seem to be variants: cf. AB 6, A 17.

## B 83

## 4D

A variable sign, frequent with 'cereal' signs, e.g. 1056-9; perhaps $\mathbb{4}$ is a different sign.

## B 84 <br> 

Perhaps a variant of $B 83$. Alone or associated with a 'cereal' sign ( $\mathrm{B}_{1}, 8,9$ ) and followed by a numeral not exceeding $\|$ : cf. AB 8.

## B 85

## 8

An obscure sign, in AE notes, without reference; perhaps miswritten for 4 , on

## B 86

$$
\Pi M M
$$

Rare and variable: once in $\mathrm{A}(H T$ 29. I) read by AE as $\Psi$. It may represent $T$ on $160 b 2,3$.

## B 87 <br> i

A variant of $B 83$, usually qualifying a 'cereal' sign (1056-9) : quite distinct from $A B 50$.

## B 88

## 4平要

The 'impaled triangle' ( $P M$ IV. 730) is usually alone, with numeral from 1 to 100 (852. 1 ): occasionally followed by $T, \geqslant, \%$.

Preceded by the 'children' signs 8 ( $75^{-2}$ ), or $8 \uparrow\left(75^{2}\right)$, it should refer to them. On 04.65 is a pictorial variant. The two principal forms seem to be interchangeable; intermediates are personal freaks $(749-52)$ like the cross-bar on $750-2,777$.

Though this sign does not occur in A, it stands on engraved lentoid gems as an accessory, sometimes to objects of religious import (MTPC 56, fig. 31 ; 61, fig. 37; Eph. Arch. 1888, pl. x. 30, and an unpublished 'minotaur' seal from the Dictaean Cave).

Signs for Cereal Crops. B 89 a, b, c
Inventory J, K
Three distinct signs are used in B, for (a) Mediterranean 'red' wheat ; (b) barley; (c) millet (PM IV. 624, fig. 610; 719-21, fig. 705).

## B 89 a $^{-}$



Rare, always alone with numeral up to !! (819), '"!, and other 'commodity' or 'quality'signs, especially millet (B89c). It represents an ear of 'red' wheat (PM IV. 625, fig. 6i2). As the numerals usually do not run beyond ${ }^{\prime \prime \prime}$, perhaps larger quantities were denoted by some other sign, of which $\boldsymbol{\rho}$ was $\frac{1}{4}$ : cf. the English 'quarter' of wheat.

## B 89 b

## 9

Quite distinct from B 89a (PM IV. 625, fig. 612): sometimes associated with T or $\downarrow$, or other signs.

## B 89 c

This 'millet' sign only occurs alone, or combined with other 'cereal' signs. It is not to be confused with the 'whip' sign ( $=\mathrm{B} 18$ ) which has three lashes, knotted. It occurs on the roof of a granary or rick (B94c). It is always followed by a numeral, up to $0 \equiv={ }^{\prime \prime}($ on 377$)$, and sometimes grouped with
个337. I, 395. I; T 1058.

Signs for Livestock. B 90-3: cf. B 70-2 Inventory E, F, G, H
These signs occur both alone with numerals, and also rarely within groups as 'rebus' signs. They consist of a characteristic animal's head on a stem, which may be either cross-barred or forked, for male or female; the former usually less numerous as in pastoral economy. Within a group the stem is either plain or looped. AE identified $\mathcal{F}$ with oxen, and $\boldsymbol{\beta}$ with sheep: cf. SM I. 307, no. 65 (goat); no. 6I (sheep). But this would leave no sign for goats which were certainly important in early Crete. However in modern Crete sheep and goats are still designated collectively as $\pi \rho o ́ \beta a \tau a$. For their economic aspect see p. 60-1.

B 90


The more pictorial variants are usually alone; the phonetic signs within groups vary and are much simplified. The latter AE compared with $S M$ I. 217, no. 94 and $S M$ I. 205, no. 60, but the transitional forms are clear: e.g. 1528. $I$ : compare 1147-53 with 1093. 1 , and 40. 2-5.

The male，female，and phonetic variants are as for B 90 ．The ligature of $\boldsymbol{\beta}$ and ${ }^{\circ}$ on $106 \mathrm{r}, \mathrm{I}$ is shown by the open group on 1060． 2 to result from overcrowding．

Another sign for a goat（B72 above）occurs only in a group on $479 b$ ．

## B 92



The similar signs for＇swine＇are peculiar to $B$ ；but the unique $\mathbb{4}$（A 87）may be an early variant or mis－written W（A 9）．More pictorial forms in B are usually＇rebus＇signs：see Vocabulary，and $P M$ IV．712．Since animal signs usually face to right，$\beta$ cannot be confused with $Y(=\mathrm{B} 20)$ ，and the ear and eye distinguish it from AB 60.

## B 93

## Fイケ

This variable sign（cf．B 70）is probably represented also by A 68， 93 always in groups．It is simplified from the pictorial horse－heads on the＇chariot－tablets＇ $130-56,217-66,347,895-902$ ．The obscure sign on 164 ，however，is probably some other sign miswritten．Compare the painted horses on＇chariot＇vases in L．M．III style from Cyprus and elsewhere（PM IV．659，fig．606）．The＇rebus＇ form occurs on 59．2．Sundwall compared Eg．ss［毗］＝＇writing－outfit＇，but the association of $\mathcal{F} X$ with other＇live－stock＇signs is conclusive（903－7）．The A forms show that its phonetic value was estab－ lished before the separation of the B script．

## Signs for Containers．B 94 a－f

Inventory L
These chests，crates，and other containers represent commodities in customary units of capacity， usually followed by a numeral，and sometimes qualified by another sign（PM IV．726，fig．709）．

## B 94

## 楽围

This sign（ $=\mathrm{AB} 66$ ），described by AE as a＇banner＇sign，is sometimes surcharged with a phonetic sign：$\ddagger, \mathcal{V}, \mathbb{A}$（frequently）；䛼 $(514-16) ; \uparrow(433) ; \boldsymbol{\zeta}(467,487)$ ：on 104 probably the numeral 10．But as it seems associated with cereals，it should be a chest on high posts：cf．SM I．198，no．43，and on a pot from Thera PM IV． 715 ，fig． $697 b$ ：also the sign A 31 ．
B 94 a，only on $520 . I-3,698$ ，also stands on posts：AE connected it with the＇ingot＇sign $A B 67$ （PM IV．664，fig． 651 ）but in B its form is distinct．
B 94 b is obviously a rick or granary（ $45^{-17}$ ， $42 \mathrm{I}, 427$（with $\#=$ B 81），677，1530－6）．
B 94 c，sometimes crowned with the＇millet＇sign $\$(\mathrm{~B} 89 c$ ），is the cylindrical wicker－structure with lifting handle，still in use among the Southern Slavs．
B 94 d，only on $674-80,840$ ，has a loop handle and distinctive cover，domed or pointed like B $94 e$ ．
B 94 e，occurs both alone $(571,573-7$ ）and associated with B 94 as its cover．
B $94 \mathbf{f}$ ，only on 96 ，is perhaps a crate or coop（PM IV． 726 ，fig． $709 d$ ）．

This sign，with its variants，is peculiar to $B$ ，and occurs isolated（B60）and on a＇banner＇sign （B94a）followed by a numeral．On 487．I the sign is preceded by ．$\mp$ and followed by ${ }_{2}^{e}$ ．Compare Cypr． ̌̌ $_{\text {Z }}=y$ e．

B 95 a．The same sign occurs also in an open container（cf． 485.2 ），perhaps a basket（862．3）：the oblique cross－strokes represent perforated handles，as on the sign（ $=\mathrm{AB} 53$ ）：cf．862．5，863．2， 864．I， 3 （PM IV． 800 ，fig．708）．Perhaps a similar container is filled by （ $=$ AB 61：variant 04． $3^{1}$ ， $34,48,49$ ）on $H T$ ioi． 6.

## B 96



Only on ir8，alone with a numeral：it may be a variant of $\Psi$ ．

## B 97



This sign is identical with AB 62 and $\mathrm{A}_{57}$ ；the latter is variable，and occurs within groups．In $B$ it only occurs on 902． $1-12$ in connexion with horses；perhaps＇reins＇or＇traces＇．

For the rare signs B 98－115 see Table $V$ ．
B 98．Only with $A$ on 04．78．7，8；with on 04．78．9，II；and with on 04．78．II．Compare the Cypro－Mycenean sign C 60 ．

B 99．The horn of a Cretan wild－goat（agrimi）for making bows，as in Iliad IV．105．On $1528 b$ it is preceded by the quality sign $\mathcal{A} \mathfrak{b}:$ if a numeral followed，it has perished．Probably this tablet has strayed from the＇Arsenal＇deposit 04．53－64．

B 100．Only alone with numeral on the tablets referring to goats＇horns：see B 99 above and $P M$ IV． 726 ，fig． 709 c．It may be some object made of goats＇hide，a quiver or bow－case．Sundwall


B 101．Only on 797 ，followed by numeral＇（pl．LiII：PM IV． 726 ，fig． 709 c ）and surcharged with $\mathbb{1}$ ． It seems to represent an animal＇s hide：compare the＇hide＇sign in profile at Mallia（Chapouthier， H 26 a 28）and B 103 below．

B 102．Only on 878 followed by numeral－III（pl．Lxxi ：PM IV． 726 ，fig． 709 g ），probably AB 25 with cross－bar，cancelled，but might be an animal＇s hide like B＇ior．

B 103
可
Only in a sign－group painted on a L．M．III cup from Knossos（SM I．54，fig．29；PM IV．738， fig．722）．On B 49．I AE read 丙 but the photograph shows 沛，see B 76 above．It represents the steering oar of Minoan and Hellenic ships（PM IV．247，figs．144， $695 a, b$ ）．Like the＇prow＇sign （AB 64，B 67）it is here a＇rebus＇sign．

B 104．Only on 876 ，probably a bag with sling（ $P M$ IV． 726 ，fig． $709 b$ ）．
B 105．Only on 95 ；probably a bin with cover，surcharged $\uparrow$（PM IV．726，fig． 709 a）．
B 106．Only on $162 a$ ，appended to a large entry of live－stock，and on 872.3 （the＇Vapheio＇cup）．AE thought it might denote＇gold＇or＇royal property＇．
B 107．Only on 440 ，followed by live－stock items：perhaps miswritten 㫙 with $甘$ below．
B 108．Only on 841．3：part of an elaborate sign，in a damaged group：another elaborate sign is on 84 I． 6.
B 109．Only on 1．2；compare X on $H T$ 94 a 2 ：perhaps miswritten $月$（AB 19）or $\mathbb{C}$（AB 14）．
B 110．Only on 1488 ，before the group $\sharp \forall f$ ；probably misdrawn $\mathbb{D}(\mathrm{AB} 44)$ ．
B 111．Only on 04．81．2，perhaps a ligature，misdrawn．
B 112．Only on 90 in a sign－group，followed by entries relating to women and children：perhaps a variant of $\mathcal{P}=\mathrm{AB} 57$.
B 113．Only on 865.2 ，damaged；certainly a＇commodity＇sign，but the numeral is lost．
B 114．Only on 736.2 with numeral；perhaps a bag．It recurs at Tylissos and Orchomenos（PM IV．684，fig．664）．
B 115．On 223 under a chariot（PM IV．788，fig． 763 a），427， $693 . I$ followed by ${ }_{2}^{21}\left(\right.$ p． $5^{1-2}$ ）， 84 I ， 863 in groups：perhaps a variant of $H=A B 18$ ．

The pictorial signs for chariots，horses，cuirasses，ingots，axe－heads，and a few other commodities are collected under B $116-23$ ．
B 116．The＇sword＇sign on the series of Arsenal－tablets $1540-1556$ ：equivalent to $A 73$（AB 60），but only used here pictorially，with numeral．
B 117．The＇chariot＇sign on the series 217－66，28I and pictorially with horse－head，saw，whip，and cuirass（p．56）．
B 118．The＇chariot body＇sign on the series $879-93$ ；04．oI－29：used pictorially with numeral．
B 119．The pictorial＇horse－head＇sign on the＇chariot＇series 217－66，and on 895 （six times）with numeral．
B 120．The＇cuirass＇sign on＇chariot＇tablets $879-93$（Inventory Nj 21－82，Nr or）．
B 121．The＇adze＇sign on the series 493－500（Inventory Oa or－09）．
B 122．The＇wheel＇sign on B 894，04．30－48（Inventory Nu or，Nr or）．
B 123．The＇tree＇sign（several variants）on 862,864 with numerals（Inventory I $a$ ）：compare the＇fig＇ sign（B 46 as ideogram）．

Besides these distinct signs, ordinary phonetic signs are often used in Script B to denote commodities or distinguish varieties or qualities. These are collected on p. 62-4.

## Comparative Tables of Linear Signs, Conventionalized. Tables III-V.

No one of the signs in these tables is exactly like any known Minoan sign; so flexible is the Minoan handwriting. All, however, resemble signs as written in various handwritings, and are intended to represent the conventional signs with which the writers were familiar, though their renderings of them varied. For well-marked variants, in Script B, see Tables III, IV, V.

In Table 1 of Linear Signs $A B$ common to Script $A$ and Script $B$ a few signs are inserted which occur only in A or in B, to complete a typological group of signs: e.g. B 37 between AB II and 12 for its resemblance to alphabetic 'A'; B 35 at the head of the signs derived from the human body; B 57 among signs derived from plants; and so forth. Such signs are repeated under their B numbers in Table 2 of Signs peculiar to Script B.

Signs common to A and to B which are used only as ideograms ('commodity' signs), in either script or in both, are marked with an asterisk *. Signs used in Script B both in groups and alone, with numerals, are recorded in detail on pp. 25 ff .

## RETROSPECT OF EARLY LINEAR SIGNS IN THE EASTERN MEDITERRANEAN

Of the general course of development in the art of writing around the Eastern Mediterranean, some account has been given in Scripta Minoa, I, part ii, §§ 1, 2, 3 (1909); but subsequent discoveries at Uruk and in Cyprus have established some further points. The primitive use of simple scratches and notches as marks of ownership and craftsmanship is widespread in Egypt and Palestine, in Cyprus at Vounous, and in Melos at Phylakopi. It is remarkable that such signs have not been recorded from the deep neolithic deposit which underlies the Minoan strata at Knossos; and in any future excavation, especially in the upper layers of that deposit, especial care should be taken to determine the phase at which such marks came into use. The lowest strata at Phylakopi are contemporary with the Early Minoan at Knossos.

Single linear signs on ingots of copper, from Cyprus, Mycenae, and Sardinia, and in Crete from Hagia Triada, are of uncertain date. Such an ingot is depicted as tribute in the Egyptian tombs of Rekhmara and Sen-mut, of the XVIII Dynasty: and those from Hagia Triada may be contemporary; from Enkomi in Cyprus, rather later. Masons' marks on blocks of stone appear in the Palaces at Knossos and Phaestos, from Middle Minoan I to Middle Minoan III. They belong to a single repertory, and some recur among the primitive linear signs of Egypt, and in the later linear scripts on the tablets. But they went out of use in Late Minoan I, when those scripts were coming in.

Between the publication of SMI in 1909 and the discovery of Linear-B tablets near Pylos in 1939, the only new material is the hoard of clay sealings, labels, bars, and tablets from the Palace at Mallia. Their 'hieroglyphic' script connects the more pictorial signary of the seal-stones and the seal-impressions from the Hieroglyphic. Deposit at Knossos with the earliest inscriptions with 'Linear A' signs, three of which were found at Mallia (Chapouthier, 1930, pl. vi; L I-3, pp. 55-6.) This deposit is dated to Late Minoan III.

## LINEAR SCRIPT B: THE PALACE ARCHIVES OF KNOSSOS B 1-1650: 04. 1-95

## DESCRIPTION AND COMMENTARY

The Numerical Order of the Tablets. In the manuscript inventory of the Candia Museum, where the tablets are preserved, they are numbered without any attempt at classification, probably in the order in which successive consignments were received from the excavator. As the tablets, though safe in the strong-room of the Museum, have been inaccessible since 1939, it has not been possible to make use of these numbers. But a concordance has now been prepared by Dr. Emmett M. Bennett (p. 90).

Evans seems to have contemplated a more systematic numeration-to which he occasionally refers as his 'Hand-list'-but he only carried it as far as No. 1567, and began a fresh series of numbers (04. 1-95) for the tablets from the 'Arsenal' building, excavated in 1904; and it is not quite clear what the order eventually adopted represents. The earlier numbers are grouped according to the place of discovery within the Palace, in the order of the course of excavation. But the tablets from the 'Area south of the Bay of the Seal-Impression' ( 1064 ff .) pass over into a list of 'live-stock' tablets in an order of the personal names which they contain, where these are preserved-'subsidiaries' where the 'principal' name is missing ( $1064^{-1} 383$ )-'principal' name where this is preserved ( $1384^{-1515) \text {. }}$ Finally (1516-32) there are a few large tablets, written transversely, and a miscellaneous group ( $1533^{-}$ 68 ) including the Sword-tablets ( $1540-60$ ). This numeration was not quite final; a few numbers being duplicated or omitted: and these omissions are now numbered after ${ }_{5} 568$. But the 04 numbering is retained.

Only when the text of the present volume was almost ready for press, was it possible to supplement this inadequate numeration by the classified Inventory prepared by Dr. Alice E. Kober, and its Index, the arrangement of which is as follows.(cf. pp. 83 ff.):

## Inventory of the Tablets, classified by their contents

## Primary Groups:

A. Inscriptions with the 'man' sign (B 75).
B. Inscriptions with the 'woman' sign (B 76).
C. Inscriptions with the 'sitting-figure' sign (B74).
D. 'Live-stock' tablets, exclusive of 'cattle' tablets.

E, F, G, H. 'Cattle' tablets (B 9I) further subdivided below.
I. 'Tree' tablets (B 123 ).
J. 'Cereal' tablets (B $89 a, b, c$ ).
K. Other 'commodity' tablets; (B 88); saffron Kd.
L. 'House', 'granary', or 'container' tablets (B $94 a-f$ ).
M. 'Vase' tablets (B 80 and pictorial vessels).
N. 'Chariot' tablets and related subjects (B $117-20,122$ ).
O. 'Adze', 'ingot', 'arrow' 'sword', and smaller groups.

P, Q. Provisionally blank.
R. 'Containers', 'banner-signs', \&cc. (B $94 e, 8$ ).
S. 'Value' signs ( ${ }_{5}{ }_{5}, 60$ ), and others.
T. Tablets with phonetic signs followed by numerals.
U. Tablets with sign-groups followed by numerals.
V. Tablets without ideograms, but sign-groups in compartments.
W. Provisionally blank.
X. Unclassifiable because fragmentary and without 'commodity'-sign.
Z. Seal-impressions and endorsements.

Most of the tablets were found in rooms and passages within the Palace; but a few (B $42-190$ ) beyond the West Wall enclosing the Magazines, whither they had been scattered as the buildings decayed. It is clear from the find-spots that they were not found where they were stored, but where they had fallen-sometimes in their store-boxes-from the upper floors of the buildings (Knossos Report, 1900, $50 \mathrm{ff} . ; 1904,56 \mathrm{ff} . ; S M$ I. $40-3 ; P M$ IV. 622). For example, the middle fragment of B 479 was found in the Seventh Magazine, but the two ends in the Eighth. Yet the general distribution was sufficiently preserved to permit the assignment of tablets $\mathrm{B} 746-8$, stolen by a workman, to their proper find-spot ( $P M$ IV, pref. p. xxi; cf. $97 ; S M$ I. 46).

Very few of the fragments have hitherto been reassembled, and it is likely that some tablets may still be reconstructed, when the originals can be handled; especially the 'cattle-tablets' $\S E$ with the 'principal names' in § $\mathbf{X}$.

At one time (SM I. 38) AE thought that 'the larger deposits of clay archives must have been naturally of gradual accumulation'; but this must refer to their accidental dispersal into the lower rooms: for apart from a few exceptionally hard-baked tablets, he assigned them all to the 'concluding age of the Remodelled Palace', i.e. to L.M. II.

Find-spots recorded in AE notes seem to be registered in accord with the progress of the excavation in 1899-1903, beginning from the neighbourhood of the earlier tumultuary trenches near the south-west angle, northward to the Throne Room and the North Entrance to the Central Court. But this sequence ends at the 'Area south of the Bay of the Seal Impression': tablets B $1064^{-1383}$ are all broken to left, $\mathrm{B}_{13} 84^{-\mathrm{I} 512}$ are all broken to right; so there has been complete regrouping here. The find-spots recorded in AE notes are printed in clarendon type at the head of the groups of tablets there found. Other find-spots given in $P M$ and other publications are:

House of the Fetishes. Knossos Report, 1905, 16; SM I. 55: tablet not identified.
Upper East-West Corridor in the Domestic Quarter. Knossos Report, 1902, 38.
East Treasury in the Domestic Quarter. PM III. 404.
Magazine by the Royal Road [?=Armoury]. PM II. 577.
Area above the Early Keep. PM IV. 733.
Room of the Archives. PM IV. 701-4.
Room of the Stone Bench. PM III. 404.

## Order of Localities (Find-spots) from AE MS. notes

Cf. the plan of the Palace, PM IV. 728, fig. 710
1-34. Clay Chest ('Bath-shaped Receptacle') 'in a small chamber near the South Propylaeum. SM I. 17-18; BSA 1899-1900, 18, pl. 1.

No. 34 is the tablet found in surface soil by Antonios Zakhyrakis; copied and photographed by AE in 1894 ;
and destroyed in 1899. Like other fragments found in earth from former diggings, it probably came from the Third Magazine. (SM I. 17-18; PM IV. 667.)

No. I was found outside the Chest; so the whole series probably fell accidentally into it as the upper floor collapsed. But $\mathbf{I}-34$ are a coherent series.
35-9. West Corner.
40. South-west Door (near).
41. " " (by, above Terrace).

42-5. Area beyond West Wall; i.e. the Western Court outside the main block of Palace buildings: these tablets had been swept outwards as the upper story collapsed.
191-337. Chamber of Chariot Tablets, north of Upper Propylaeum. There were three main deposits of Chariot Tablets (p. 56). PM. IV. 529; 668-786; 810: BSA 1899-1900, $29,86$.
(a) South-west Border of Central Court. PM IV. 728, fig. 710.
(b) North Entrance Passage, near upper West Corner of Central Court. Knossos Report, 1904, 56 ff.
(c) Central section of Paved Way from the Palace to the Little Palace cf. Armoury Deposit. PM IV 173; 668-9; 795; 832.
338. Court of the Altar.

339-93. Room of the Column-Bases: North-east Corner: = Corridor of the House Tablets.
394-410. Near Entrance to Room of the Column-Bases (PM IV. 728, fig. 710) = Wall of Colonnades ('re-occupation deposit' (PM IV. 738, fig. 333 : 'under the late floor' PM IX. 734-5).
411-14. Bull Area: Minor fragments.
415-18. Corridor of the House-Tablets and near entrance to East Pillar Room.
419. bis. North of the Room of the Column-Bases.

419-31. Corridor of the House-Tablets [ = Corridor from Magazines to 'Pillar Room' (Room of Column-Bases)].
PM IV. 622-3.
432-3. East Pillar Room.
434-8. Room of the Niche, north of End Pillar Room (cf. 711-13). PM IV. 728, fig. 710.
439-45. II Magazine $=$ ('West Gallery').
446-50. III Magazine: also a hieroglyphic label. SM I. 169, P 97 a, b. Cf. PM IV. 622, 'the small corridor leading to the Pillar Room'; cf. $608 a$.
451-75. IV Magazine (formerly numbered V).
$476-7$. V
478. VI

479-92. VII
493-516. VIII
517-23. IX ",
524. X

PM IV. 669-71 : South-east corner, adze-tablets 670-71, fig. 655-6.

525-60. XI
561-3. XII
564-5. XIII
566-70. XIV
57r-670. XV " $" \quad P M$ IV. 706-8. [= Lower Long Corridor]. PM IV. 728, fig. 710.
671-73. Long Gallery: South End. = 'Long Corridor of Magazines'. PM II. 624.
674-80. " ", near VIII Magazine.
681-99. ", North End.
700-13. PM II. 533; IV. 728, fig. 710.
700. West Area (Western Court), near South-west Entrance.
701. Long Gallery, near VIII Magazine. Cf. 674-80.

702-10. Gallery of the Jewel Fresco: loculus, but some scattered as far as VIII Magazine.
71 1-13. Room of the Niche. [ = 'Basement Magazine of the Vase-Tablets'.] PM IV. 728, fig. 710; 733-6.

714-26. Gallery of the Jewel Fresco (cont.).
727-9. $\quad, \quad$ [Small Room bordering on . . .] 'perhaps part of the same deposit as 714-26'.
730-34. Ante-chamber to the Throne Room, and adjacent Area E.
735-40. Bath Room.
741-5. , and Gallery of the Stone Basin.
746-8. Under blocked door of Room behind Throne.
749-73. Room of the Flower-Gatherer Fresco.
[750 central threshing-floor: tablets in this deposit much perished.]
774-6. Region of the Threshing-Floor.
777-97. Room of the Spiral Cornice [ = Deposit of the Great Seal].
[785-97. Deposit b.]
798-1034. Area of the Bull-Relief: 'the greatest deposit yet found'.
[894-1304. North Entrance Deposit. PM III. 190; IV. 698-9, 795, fig. 768. No. 894 belongs to the Armoury Deposit. 04. or-99.]
1034-54. West Palace Quarter: Miscellaneous.
1055-63. Room of the Clay Signet.
1064-1 539. Area South of the Bay of the Seal Impression.
(Tablets classified by personal names)
${ }^{1}$ 540-60. Corridor near South-east Angle of the Palace [Sword Tablets]. PM II. 331; IV. $854-7$ (above mature $L M$ I $a$ : below $L M$ III $b$ ).
04.01-95. 'Armoury Deposit' = 'Arsenal' SM I. 44; PM IV. 668-9.

## LINEAR SCRIPT B

This script is peculiar to Knossos, and to the last phase of the 'Later Palace' (L.M. II). It was introduced, however, with local variations into the Greek Mainland, and persists at Pylos, with only slight modifications, until far on into L.M. (Helladic) III, long after the destruction of the Palace régime. At Knossos it is stratigraphically later than Script A (SM I. 29-30), and the majority of the tablets found among the debris within rooms and corridors of the 'Later Palace' had been precipitated into them when the upper floors collapsed, in the chests which held them. They belong therefore to the very latest days of the Palace occupation, and as will be seen, probably represent little more than the last year's vouchers before the catastrophe. So, too, at Pylos, the tablets were found strewn on the floor of the room in which they were in use when disaster came.
'Linear Script B' is essentially a system of about seventy phonetic signs, selected from the same older repertory as 'Script A', but remodelled in a more curvilinear and flowing style, and supplemented (a) by ten new phonetic signs; (b) by six or seven pictorial 'rebus' signs for rare syllables within sign-groups; and $(c)$ by other pictorial signs denoting commodities, but without phonetic use in sign-groups. In Tables II, V many of the rare signs B ro2-16 noted by AE seem to be miswritten or misread. Commodities are no longer spelt out phonetically, as often in Script A.

All vestiges of an older right-to-left writing have now disappeared. The B tablets, being usually long and narrow, and inscribed lengthways, there is little occasion for ligatures (p. 4I); but occasionally a subsidiary group is written, sign by sign, between the stems of the larger 'principal' signs (e.g. B 60) to save space or remedy omissions.

The larger number of signs in Script B does not indicate a different language, but rather a more refined distinction between sounds: it is the converse of the reduction of the later Cypriote script from Minoan writing, by elimination of similar signs for labials, gutturals, and so forth. The total
number of phonetic signs in Script B is not so large as is required for the syllabic equivalent of five vowels and the usual consonants，$b, p, f, v ; k, g, c h ; d, t, t h ; l, m, n, r ; s, z, s h(5 \times 17=85)$ ，and this may account for the rare＇rebus＇signs already noted．There can be little doubt，from the size of the sign－groups，that the Knossian signs，like their predecessors，were essentially syllabic．

Script B has also well－marked peculiarities and style；it has been deliberately adapted to special uses and conditions．The signs in Script A are in general nearly as wide as they are high；they are written across short broad tablets；the sign－groups therefore often run from one line into the next； and ligatures are freely employed to save space．In Script B，except a few long lists，the tablets are long and narrow，the writing is usually in the direction of their greater dimension，and their statistical content makes it desirable that the essential facts of each item should be presented within the compass of one line．The signs have therefore been made tall and narrow，dispensing almost entirely with ligatures．The contrast may be compared with that between the Roman type developed among Italian printers and the Gothic type of Germany．To this end，many of the signs are mounted on a high vertical stem，and on this stem minor differences，of uncertain purport，are indicated by cross－bars or lateral signals，as in 等舍。Other signs，on a forked support，are modified by a central stroke，as in $\bar{\pi}$ 䈁，or a triangle $\AA$ ：a device which may be compared with the Greek use of＇breathings＇and ＇accents＇，the Hebrew and Arabic＇vowel－points＇，and the German＇umlaut＇（ $u, u \boldsymbol{u}$ ）．That these refine－ ments are not quite accurately or consistently employed（pp．8，17），like our omission to＇cross the $t$＇， does not detract from their significance．The forked support is further used in conjunction with cross－bars to differentiate sex－varieties in some of the＇commodity＇signs，e．g．$\$$ seems to be used for ＇he－goats＇，and $\mathbb{X}$ for＇females＇；while $\delta$ and $\%$ are only used with phonetic value within a sign－group，


Ligatures in Script B．Ligatured signs，so frequent in Script A，where the lines are transverse and the signs crowded，became unnecessary in B．A few exceptions illustrate this，when the ligatured signs stand also side by side：cf．PM IV． 683.
1．$\ddagger$ В ${ }^{1451}$
5．V』 1403 perhaps 怰
9．Al $8,10,19 b, 20 b, 23 b$
2． $\mathrm{C} k{ }^{1231}$
6．㐌 1060
7． $7{ }^{-1} 85 \mathrm{I}-3$
8．7A 852.2 ；M $\ddagger 854$
10． 忾 849.2
11．存？ 777.4
12．阬 63

These ligatures are almost confined to＇commodity＇－signs．
Punctuation．At Uruk，in the earliest pictorial phase，the signs which formed a phonetic group were first confined between parallel lines；later these zones were subdivided transversely into com－ partments．On the Phaestos Disk the signs are arrayed along the zone，not transversely within a compartment．In Script A the lines between zones are usually omitted，and the transverse partition is reduced to a short stroke，easily confused with unit numerals．In Script B，with its longer lines， the rules are retained，but the punctuation marks are short strokes，usually on the lower rule，but sometimes on the upper（ $62,96 \mathrm{I}$ and thus easily confused with numeral 1 ），or both（ $432.2,103 \mathrm{I}, 1547$ ）． But on 137 （pl．xcvii：PM IV．695，fig．181）they are much higher than the signs，and form com－ partments as on the Phaestos Disk：less definitely on $58,62,137,138$ ，between rules，and on 43 I .2
without them．Punctuation is often careless or omitted：especially before a＇commodity＇－sign；on II9 a punctuation mark is cancelled and transferred，to make room for a terminal sign．

Scribes＇Errors and Corrections．The Knossian tablets are very carefully written，but a few errors may be suspected where the same sign－group is repeated with a single sign changed．The signs thus confused are all similar，and consequently give no clue to phonetic resemblances．［N．B．These ex－ amples are taken from AE transcripts．Some are not confirmed by his own photographs，and all will require to be verified by the originals when these shall be again accessible：see Critical Notes．］


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AKEFP IOOI.I; AKEF9 1008. I.
A\PsiAAB 705.I; A\Psi^AR 714,7I5,7I6.
```



```
N'for $ 620.I.
Cf. }\ddagger\mathrm{ 二゙ 1550-4; ҒӨ二 I553.
% for XIIO2.I, I248.I.
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TYYM 600 and frag.; TVYM 1036. I.

04. 04. 2.
$*$ and $\rangle$ confused, 48.I.
$\bigodot$ for $\because$ with loop 04. 53 ; cf. 04. 54-64.
అ干• 438, 1059. 2 ; అ干F 686. . .
而 for 11 I9. $I$.

Replacements are rare．Most of them seem to result from carelessness，but a few are deliberate alterations．On 246，247，an ingot replaces a cuirass，doubtless its metal－value（PM IV．805，fig． $783 a$ ， b）．On 1540 a＇subsidiary＇name is partly erased；single signs on 800．3，821，866．On 882． 2 目 is replaced by $\%$ ，on 693.3 by $\hat{\beta}$ ，on both，this remedies an omission and the follows in its proper place；on $873 . I$ a sign is begun，and cancelled．On $843.4, \mathcal{F}$ is either replaced by $\mathbb{A}$ or ligatured with it；and on 84 I .2 平 is ligatured with $\mathcal{Y}$ or $\downarrow$ ．On 221 the broken ${ }^{\boldsymbol{y}} \boldsymbol{\rho}$ seems to be a slip of the graver．

Obverse and Reverse．Tablets in Script B are only rarely inscribed on both faces；still more rarely there is an endorsement on one edge．When both faces are inscribed，the first line of one side is contiguous with the last line of the other．The tablet，that is，was revolved on its long axis，like $H T$ 92 in Script A．Examples are $152,423$.

## FORMULAE AND PURPOSE OF THE TABLETS IN SCRIPT B

The tablets from the archives of Knossos are of two principal kinds：（a）Lists of names of persons－ men，women，and children，concerned in various transactions，probably some form of slave－trade； （b）Records of commodity－transactions between individuals，some of whose names occur also in the ＇Lists of Persons＇concerned with various amounts and qualities of goods，indicated by ideographic signs followed by numerals．More detailed classification is offered on pp． 83 ff ．

As might be expected，such inventories or vouchers are almost devoid of syntax，because the verbs expressing the transaction were presumed to be familiar，and only the persons，commodities，and quantities or values had to be stated on each occasion．There are，however，a few documents in Script B，as in Script A，which do not record numerals or＇commodity＇－signs，but consist solely of
sign-groups separated by punctuation marks, not easily distinguished from numeral I. These may be mere lists of names, and some of these sign-groups recur as names elsewhere: see Vocabulary. These documents offer the best prospect of evidence as to the grammatical structure of the language. In Script A the inscriptions on the libation tables A I-9 and other votive objects show traces of punctuation and include recurrent groups; but these do not happen to recur on the A tablets; and no tablet contains any certainly grammatical text. In Script B, the same stems recur with alternative suffixes, but in the same position within the tabular formula, and these may have been alternative case-endings as suggested by Dr. Kober in $A \mathcal{F} A \mathrm{~L}$ (1946), 268-76. But earlier generalizations about 'feminine' and other suffixes are not confirmed by further analysis; and the variety of structure is little-if at all-greater than in Greek or in English personal names.

But before it is practicable to detect grammatical syntax in these texts, some acquaintance is necessary with the structure and variations of the sign-groups themselves, and with their functions in the documents, and especially in relation to the 'commodity'-signs with their appended numerals.

## LISTS OF NAMES OF PERSONS IN SCRIPT B

This class of tablet appears to contain only personal names (B 53, 54, 55, \&c.), separated by punctuation marks, but usually without numerals or 'commodity'-signs. They are, however, followed directly by numerals on $\mathrm{B}_{145}, 684,960$. Some of them, where the personal names are followed by a 'man' sign (p.45), $\lambda, \hbar$, or $\sum_{i /}$ and the numeral ', are clearly lists of individuals; a few include the record of totals which can sometimes be shown to agree with the items. It is from the recurrence of name-groups from these lists, as principal or subsidiary names on the 'commodity' tablets, that the latter are identified as representing individuals who were parties to these transactions.

The Composition of the Sign-groups. The small number of signs in a group-discounting a few much longer groups where punctuation can be shown to have been omitted-suggests that the phonetic value of each sign was syllabic, as in Cuneiform, in Egyptian, and in the Hittite and Cypriote scripts. The total number of the signs found in sign-groups-i.e. excluding 'commodity'-signs only found followed by numerals-is in accord with this. From their position in the formulae of the 'commodity' tablets (p.50), these sign-groups must denote the parties to the transactions represented by the numerals; and they are so numerous, and yet recur (with a few exceptions) so rarely, that they must be the names either of persons or of places.

It will seem to many students of the Minoan scripts premature to speak of sign-groups as 'names' before phonetic values can be assigned to the signs, or any progress has been made with the determination of the grammatical structure of the Minoan language. In defence of the procedure here adopted, it is submitted:

1. That it was adopted long ago by Sir Arthur Evans in the first volume of Scripta Minoa, elaborated in The Palace of Minos, IV, and developed in unpublished drafts, which do not seem to be obsolete. It has only been challenged by Hrozný, who prefers the hypothesis of placenames. Such place-names there may be, but their existence needs to be proved.
2. That it is in accord with the procedure of the pioneers in the decipherment of hieroglyphic and cuneiform scripts: without the assumption that the sign-groups enclosed in a 'cartouche' were personal names, Champollion could not have made a beginning, even with the help of a

Greek version; and the royal names were the keystone of the decipherment of the Persian cuneiform.
3. That both classes of tablets-name-lists and commodity transactions-presume personal agents. Sign-groups followed by the 'man' sign, or 'woman' sign, must refer to individuals or communities; sign-groups so varied as the 'principal'groups on 'commodity'tablets are too numerous for village-names, even in Crete 'of the hundred cities'.
Other considerations are submitted in examining the contents of the tablets, tending to support the same hypothesis. It does not preclude the recognition of linguistic structure within the signgroups, and of prefixes and suffixes attached to verbal stems. Only by the probability that namesor any other kinds of word-in the same position within the formula of a transaction must have the same grammatical function, as agent, recipient, or the like, does it apply a test to all theories of grammatical 'cases'. For this test, the material is collected below in the Inventory, § E, among the 'principal' and 'subsidiary' word-groups of the numerous 'cattle' tablets.

The proof that many sign-groups are personal names is as follows:

1. As no other kind of proper name-villages, farms, or topographical units-is so copious as the many hundreds of names in these tablets would require, they must be names of individuals. Further, the recurrence of the same name as 'principal' on one tablet and as 'subsidiary' on others precludes such topographical meaning; only individuals could stand in these varied relations with each other, as giver and receiver, principal and agent or witness, and the like.
2. Sign-groups followed by the 'man' sign in the long lists of persons numbered individually and authenticated by a total-figure with the same 'man' sign, recur on 'commodity' tablets, both as 'principal' sign-group, and sometimes as 'subsidiary' groups, which have been described as 'official' because they recur on a whole series of tablets. This makes it certain that some at least of the 'principal' and 'subsidiary' sign-groups are personal names; and the uniform drafting of the large classes of tablets within which these personal names recur makes it certain also that these whole classes deal with personal transactions, and contain personal names in the corresponding places in their formulae.
3. This proof is supported by the recurrence of elements from compound personal names in the 'man'-sign lists, as prefixes or suffixes within other sign-groups on 'commodity' tablets, which may
 Greek, or feho-, Adoni- names in Hebrew, or Amen-, Ptah-, and -hotep names in Egyptian. This proof is strongest when the identical element is the greater part of the group; but it is valid when any two initial signs or more are the same. The argument from terminals is qualified by the consideration that grammatical suffixes may occur (p. 49 below); but this is unlikely in a list of proper names, which should all have the same grammatical form in the same context. Only in the short lists 749 , $833,875$ do all the sign-groups happen to end in $\rceil$.
4. They include words compounded with signs representing animals and occasionally other objects, which give the impression of a rebus or type-parlant such as is common among personal names of all
 539.
5. Several groups are Lallnamen, repeating one syllable twice or thrice, in jest or endearment.

Such names are frequent in Asia Minor later（P．Kretschmer，Einleitung in die Gesch．der gr．Sprache， 334 ff ．；PM IV． $75^{2} n$ ．and p．48）．

6．Whereas most sign－groups do not occur more than twice or thrice，a few stand in the＇sub－ sidiary＇positions as many as fifteen or twenty times．This would result，if the tablets were a series of vouchers for single transactions between a large number of private persons and a quite small number of officials，some of whom moreover appear also in their private capacity as＇principals＇． Once the same name occurs in both capacities（915）．Occasionally such＇subsidiary＇names alternate， as would happen within a staff of officials．

7．Sign－groups from Script B occasionally occur in documents of Script A（355，1519．4；cf．HT $12 a$ I）and in inscriptions outside Crete（13．I，cf．Eleusis；PM IV，Suppl．pl．Lxix）；but so rarely that they cannot be regarded as verbs or common nouns，or even place－names．Elements composed of two，and occasionally three，signs recur as initials in Script A and Script B rather more commonly， as though the language were the same．

8．The only name under which the activities of the same personage can be collected supports this hypothesis of personal names：

The sign－group 阶明。
1516． 20 阶 4 stands at the head of the third section of a list of names each followed by $\not \subset$ ：it is followed by E笑YE．
40． 6 in a list of names，it is itself followed by $\hbar^{\prime}$ and preceded by $\mathrm{CK}^{\prime} \Psi$ ：if this is another personal name，we seem to have a pedigree of three generations－A son of $B ; B$ son of $A$ ．
654． 3 in a list of names，with a small 闹 appended．
525 as principal in a＇commodity＇tablet，with 国篤。
660 as principal in a＇commodity＇tablet（damaged）：the first subsidiary group begins with $\Theta$ ．
$438 . .74$ 間 as principal in a＇live－stock＇tablet with subsidiary $\bigoplus \mp f$ ，perhaps the same as in 660 ．
686． 1 as first subsidiary in a＇live－stock＇tablet，with $\bigoplus \mp f(686.2$ 印 $\dagger$ ）as second subsidiary：
1054． 1 cf． $43^{8}$（damaged）and 660 ．
971． $2 \ldots$ ．$\mp 4 \mathrm{l}$ as second subsidiary in a＇live－stock＇tablet：followed by $1 \ddagger \ddagger$ ．
It may be inferred that these documents are sidelights on the standing and activities of a single individual，as official，proprietor，and tributary．It is not easy to adjust them to the hypothesis of place－names．

The Longer Lists of Names．B 1516，1517，1520．A few large tablets，inscribed transversely like the tablets in Script A，contain lists of sign－groups each followed by the＇man＇sign $\chi$ and numeral＇， and therefore probably personal names．At the end of each paragraph is a＇total＇sign－group，于 $9 \AA$
 for some damage）with the preceding items．Each paragraph seems to have begun with a short pre－ amble including one or more personal names，probably of individuals responsible for the delivery of the members of the lists．

Other lists，of similar construction，but less complete，are $40,60,147,154,280,466,479,482$ ， $488,492,503,509,510,600,601,603,604,609,653-5,694,832,959,961-2,983-4,1518,1519$ ，
 $9,798-8 \mathrm{I} 8,822$ ）；on 599－602， 605 the＇human＇signs are associated with other＇commodity＇－signs．It seems clear therefore that the human chattels are being transferred like other commodities，and in variable numbers from each source of supply（p．55）．

In none of these lists is there any clear indication of grammatical structure－prepositions，verbs， $\& c$ ．－at most，the group $\mathcal{A} \Psi \mathbb{G}$ 目 which occurs six times on $875 \cdot 1-6$ preceded by different name－ groups；but in the preamble or rubric on 1516.12 ［YA］ $\mathbb{K} \mathbb{K}^{\circ}$ is followed by $\AA^{\prime}$ 。

It seems to result（I）that they are all lists of personal names，like the great majority of the B tablets； （2）that though these names or parts of them recur in compounds or with one or more suffix signs， these do not correspond with any position of the sign－group in the list，nor with any relation between this and any other sign－group，such as would suggest a patronymic or a surname．

The Sign－groups on the Chariot Tablets and Wheel Tablets．The series of tablets 04．30－49 is con－ cerned with chariot－wheels．Each tablet has a principal，followed by two or more subsidiaries． Some names occur as principal on one or more tablets，and as subsidiary on others：as though there was rotation of headship within a small team．Eleven others only occur once each．

Al $\oplus$ principal $30,34,36,41$ ，subsidiary $38,39,40,47$ ；cf． 894

$\ddagger$ 忶 principal 31 ，subsidiary $34,37-9,4{ }^{1}-4,45,48 ;$ cf． 894.2 ： 8 printed for B 22.

On $30,32,34,39,46 * \bigoplus$ ，and on $31 \oplus$ ，is written after the numeral；and on 35 there are two lines of subsidiaries in this position：（1）GY ．（perhaps for UYFil as on 29，37）；（2）A ．（？for Al $\oplus$ as on 30 and elsewhere，v．above）．

The spelling of sign－groups on the chariot tablets is less accurate than usual，and the hand－writing is more careless．［N．B．In this section AE transcripts are not always confirmed by his photographs．］ For example：

$$
\begin{aligned}
& \text { HLst=1t? } \\
& \text { 解憐… 04-14.2. }
\end{aligned}
$$

$$
\begin{aligned}
& \text { 形行邦 (04.03.2. } \\
& \text { TLsf=19..04.01.2. } \\
& \text { 玌骎伊平干 04.05.2. } \\
& \text { 凹ษ闰 } 04.3 \text { 1, } 37,40,45,48,49 \text {; cf. 879, 891, 892, } 893 \text {. } \\
& \text { 〔乡用04.37. }
\end{aligned}
$$

> ब小り $04.05 . I$.
> बね个\} 04.06.I.
> ©lざT04.17.1, 28.

> 忓 $04.23,25$.
> 忓仠 04.71.
> 叶准平 (04.22.2.

Composition of Personal Names．The composition of these numerous＇name＇groups is further proof that they represent personal names．Their brevity－most having three or four signs and very few as many as six－is strong presumption that the signs are syllabic rather than alphabetic；the Greek names of Cypriote kings require 4，5，or 6 syllabic signs，rather than 2，3，or 4，mainly because they contain so many double－consonants：－$k r, p r, s t-$ ；and almost as many would be required for Carian or Lycian names：Rondinasis，Lygdamis，Panyasis，Pixodaros，Maüssolos，Zrppodaïna（the Lycian form of Sarpedon）．It is possible，however－though unlikely－that some Cretan signs may have had a more complex value than the Cypriote，e．g．double consonants，or consonant both before and after a vowel．

But the comparative brevity of these＇name＇groups may result from the form of the names them－ selves，if they originated with the old Cretan folk，not with intrusive Greeks or Phoenicians．Ancient Cretan place－names，many of which are indigenous，are usually short－Gortys，Knosssos，Lappa， Lyttos，Phaestos，Praisos，Rethymnos，Tylissos－though there are a few longer names with Asianic suffixes，e．g．Phalasarna，Hierapytna，Eleutherna．Compare the personal names Minos，Talos，Tauros； and Dictynna，Rhadamanthys．

Many sign－groups，as in Script A，include elements consisting of two or more signs which recur． Those which are prefixes are easily recognized in the Vocabulary：no less than 95 of them are common to Script A and Script B，a strong presumption of common language．Others are imbedded in the sign－group，and less certain；others again are terminal，and may be grammatical forms（p．49）．There were therefore certainly compound names，such as are common among Greek personal names：Demos－ thenes，Demokritos，Kritoboulos；in Hebrew：Yehoiakim，Yehoshaphat；and in other languages．As in Greek and in Hebrew，a substantival element may stand either first or last－Damasippus，Hippokrates －so too in Script B，but rarely．Examples of such compounds are：

| TVYY行 I．7，698，705．I， 1036. <br> 性乡药． 289. <br>  <br>  |
| :---: |
|  |  |
|  |  |




TVYY広 T 601.2 。


Prefixes．Several signs，however，occur as initials so much more often than the others，that they may be regarded as prefixes．The extreme instance is $\varphi$ ，which is the initial of more than 250 groups in Script B，and more than 40 in Script A．This seems only partly due to radicles of two signs such as $\ddagger \neq$
押 $(\times 8)$ ；but partly also to the use of $\dagger$ as a prefix to radicles which occur elsewhere without it：e．g．

旷吁（04．02．I）。
宇汽（645．2）but YГ（879）．
門 5 目 04.05 .2 but㥵 432.7 ．

时价晛 1568 edge but $\ddagger$ А $1281,1516.17$.时世A588．I；忆¥AT 641．I；but $\ddagger \Psi$ A 526，\＆c．


Other signs have similar frequency as initials：
 $A f(\mathrm{II})$ ．



Such initials might denote＇divinity＇or＇power＇like Zeno－，Hero－，Dio－，Mene－in Greek names， but there is no reason to regard them as determinatives，merely because $\uparrow$ represents a double－axe， or $\lfloor$ a throne；for $\dagger \hat{L}$ occurs also prefixed to several＇commodity＇－signs（p． 63 ）as an indication of quality．Nor is 早 the＇name or title of a royal officer＇（PM IV． 856 ，fig． $838 f\left(=\mathrm{B}_{1355}\right), g\left({ }^{2} 558\right)$ ）， nor did $\oint$ mean that＇the persons listed were as a rule not of a servile condition＇（1．c．706）：they are more likely，if symbolic at all，to have had some meaning like reich－or recht in Teutonic names． Similar treatment would make＇divine＇prefixes of the more frequent initials in the Telephone Direc－ tory：for both P and T resemble axes，single or double．

Suffixes in Script B are commoner than in Script A．With $\uparrow \oplus$ ro78－83， 1087 compare $\uparrow \oplus \psi\rangle$ $62,153 a 2$ ，1084．$I, 1085$ ；$\uparrow \bigoplus\rceil$ 1086，1331．$I:$ as these occur in the same grammatical position， in their respective contexts，they cannot be inflexions，but must be compound－names with the same initial－element $\uparrow \oplus$ ：cf． $60.5,69,745 . I$ ；$\uparrow \bigoplus \Psi \mathcal{T} 416$ ，and others（see Vocabulary）．Similarly Greek and Hebrew names＇ring the changes＇on a favourite theme within a family．Examples of prefixes and suffixes in combination are：

TVY䏹 654．2，777．2；cf．585．
TVY出 7601.3.
秋蚛 $513 b$ 。
भФЧҮ 62， 153 a 3，1085，1089．I．
НӨБ「 1086，133і．т．
НФ Ү阝 416.
$A$ fltbl $^{-3} 57,199$ a 5.
$A^{\prime 2} \mathrm{~T}^{-1}$－ 166.2.
$A^{f} \oplus$ ．．802． 2.

个缃•743，1526．I．䏹 suffix 15 times．䀠 prefix 8 times．
$\uparrow \oplus$ alone 1078－83． ，Io other compounds． Af부‥ 1390 ．
Aftol．． 127.
Af 8 other compounds．
 with 等抹 $\mp 1523.4$（punctuation perhaps defective）and with the frequent suffixes $\Gamma 799$ a 8 ，and个04．37．2．

Many suffixes are of only one sign：e．g．the radicle 朋 is compounded with H 91 II .12 ；with $\mp$



Single－sign Groups are not common： $\boldsymbol{P}$ 921， 923 （a＇subsidiary＇name）；$\ddagger 908 ; \sharp 653.4$ ；$\oplus 04$ 46．I；


Reduplicated Signs．There are a few Lallnamen repeating the same syllable in jest or endearment as in＇papa＇，＇mama＇．For these Lallnamen see Kretschmer，P．，Einleitung in die Geschichte der griechischen Sprache， 334 ff ．；PM IV．75i－2．They are frequent in the Asianic languages of Asia Minor．Ex－ amples are：

A $A$ 6 6 ．I．
Ad Thebes，PM IV．752，n．I， fig． $734 g$［I3II］．
$555^{13} a, 492.2$［perhaps ter－ minal］，524． $1,689,697.2$ ［fig．682．2］，985． 2.
$\bigoplus \bigoplus$ 04．8I bis． 2.
湖 697． 1 。
22347.2.

Once a sign is thrice repeated：पСए $152 b$ ．
More frequently，reduplicated signs occur within a longer group：examples are－

H HT 笭 1.3 （cf．32）， 723 ．
执．．206．扎 207.
TAA ${ }^{\text {TH2T }} 867.4$.
 648 （perhaps the same name misspelt，as Li＠occurs sepa－ rately 692. I， 983 ．I，04． 8 r． $I$ ，a clear instance of a com－ pound name）．

$\mathbb{\triangle A} \boldsymbol{A}_{\overline{1}} \mathrm{r} 3$ ． ．
．．${ }^{\text {阴睈 04．08．2．}}$
A YÂ̌．．．606．I．

．．$y^{4} y+801$. I．
YYT 1290 （cf．639．3，since $\}$ may be a suffix）．
 tion uncertain）．
© P4～$^{4}$ E 839．？punctuation． ．． Tl $_{2} 22$ ．． 323.

$22+147.1$ ．
22井午178，870．
22出 654.5 ，1151．I．（Vocab．）
22出个7622．I，1152－69．

A few groups containing two or three signs may be common nouns，adjectives，or verbs；but
（I）they occur rarely，and in positions where a proper name may be expected；whereas in texts of this kind any grammatical formula might be expected to recur often；
（2）they recur as components of groups which are certainly personal names，and therefore must have meanings consistent with this other use；
（3）occasionally they are found with the suffixes $\}$ or 目，which are frequent with personal names， as though they could be used substantivally：as in English we have＇good＇along with Goode， Goodman，Goodwood，Toogood，Habgood．This further limits the range of their independent significance，and increases the probability that they are personal names when uncombined． A clear instance is the group $\mp \uparrow$ which recurs both as a＇total＇sign in lists of names，as a＇prin－ cipal＇or a＇subsidiary＇name on commodity tablets（see Vocabulary），and as a radicle in a compound name $\mp \uparrow$ A．． 742 ：compare the English surname＇Tootal＇with＇total＇．

Grammatical Terminations．Not easily distinguished from suffixes，which are an integral part of a sign－group，are the terminal signs（and a few examples of two－sign terminations like $\Psi 2$ on 98 r ，and 1517．1I）of which two or more are found attached to the same sign－group．The most frequent are
 or other of these two signs occur in the same place on tablets of similar import，they cannot be＇case－ endings＇like those in Greek，unless there were two such＇case－endings＇with similar meanings，like the English dative－forms＇to＇and＇for＇．It was suggested by AE that－- might denote feminine gender；but it seldom marks all the names in a list，and it occurs in names followed by the＇man＇sign； ${ }^{1516.7,20(t w i c e), ~ a s ~ w e l l ~ a s ~ t w i c e ~ i n ~ t h e ~ p r e a m b l e ~ 1516.2: c f . ~ 694.3 ; ~ 819 . ~} I ; 1519.4$ ．On the other hand，though terminal－ －occurs 10 times in the list of women 639 ，there are 42 names in all．Other signs，moreover，are almost as frequent．
 （40．6）suggests that may be a patronymic or adjectival termination，its recurrence is significant．

But it is not very frequent，and few examples are supported by the recurrence of the stem with another suffix．

AtAB 116.2
Aft 127
A ARHE 129
（－）低 348．2，513a2，693．I
性袕解 128
．．$\Psi \Psi \Psi^{\circ} 758$ ． I
 980 （？punctuation）

32
甬AGB822．2
制行 411

．．敫 488.2


Tt十旁化 4

Tht 1226 ；cf．解 1466

筑 $941,982,1164$
©TY＇ $04.28 .1,04.8$ I． 1 ，
04． 83.2


A similar suffix－- 丰 occurs in $\lceil\ddagger$ А


Case－endings．In Aff L（1946），268－76，Dr．Alice Kober claims，as＇case－endings＇，some of the more frequent suffixes：examples are，beside ．．目 and ．．7 which are common，．．A目 639 （PM IV． 707 ，fig．689），．AT，$\mp$ ，and $\boldsymbol{\mathcal { Y }}$ ．These and other suffixes occasionally occur with the same radicle or stem：e．g． $\mathrm{H} A \mathrm{~A}, ~$ Y A $7, ~ H Y \mp$ ．But this does not preclude the alternative that they are not case－ endings，but suffix－stems within a compound name；and such a suffix may well have been appropriate to women＇s names，for example，like Eg．nefer．And it does not explain the collocation of names ending in－ lath $^{\text {with names ending otherwise，in a single formula，as in } \mathrm{B}} 6_{39}$ ；unless there were distinct paradigms for different kinds of nouns as Dr．Kober suggests．

In AFA XLIX（1945），143－51，Dr．Kober also discusses＇Evidence of Inflection on the＂Chariot＂ Tablets from Knossos＇（ $=04$ ．or -29 ）．She has no difficulty in collecting recurrent terminal signs and longer suffixes；but this does not demonstrate that they are grammatical inflexions，rather than final components of a compound stem：compare such a series as Whitaker，Whitebarn，Whitchurch， Whitehouse，Whiteway，Whitworth，in English surnames and place－names；and the terminations－son， －kins，－ling，－ton，－ley，－ham，－by，－bury．

## COMMODITY TABLETS IN SCRIPT B

By far the most numerous tablets in Script B present a quite simple formula，though some have more complicated varieties of it．It is the record of an assessment or transaction in a commodity or commodities represented by initials or pictorial signs，followed by numerals．The parties to the transaction are represented by（a）a principal group，written usually in large signs at the left－hand end，and（b）one or more subsidiary groups in smaller signs，at the beginning of each．Of these entries there may be one，two，or rarely more．The＇principal＇groups recur so seldom（and are therefore so numerous）that they must be presumed（as above）to be personal names．Subsidiary names occur as often as a dozen or fifteen times，in smaller writing immediately before the＇commodity＇signs． Their greater frequency suggest that they are names of officials or agents－each dealing either as witnesses，or registrars，with a number of private persons．It is not so clear why there are usually （though not always）two entries dealing with the same or varying commodities，with different subsidiary
name groups ( p .53 ). Occasionally there are two or more subsidiary name groups in one entry; in the 'sword' tablets (B 1540 ff .) and in the 'chariot' tablet ( $04.0 \mathrm{I}-20$ ) as many as four or five (p.57). A principal name sometimes appear also as a subsidiary on another tablet.

Numerals in Linear Script B. The decimal system of numerals, developed from the Hieroglyphic series (SM I. 258, fig. I 15) into Linear Script A is simplified in Linear Script B and supplemented with a new sign $\theta$ for 10,000 (B $162 a, 852$. 1 , 1088 : PM I. 646, fig. 479; IV. 691, fig. 676). The

'pellet' or 'dot' for Io-so easily confused with the punctuation sign in Script A-is normally replaced in Script B by a horizontal stroke, as in some examples of Script A, but occasionally this horizontal stroke is broad, and was impressed rather than incised ( 67 I ), a survival of the older custom.

Though a sexagesimal relation was suspected by AE on B 520 between the numerals for values or commodities, this seems to be unique; and Sundwall's interpretation of this as a ratio between metal units rests on his confusion of $y$ with the 'balance' sign (Mélanges Glotz, 828) and on his assumption that in these texts the same commodity is recorded in two reckonings.

Occasionally a numeral is mis-stated, probably by subsequent inclusion of an item: on B 427 the units exceed 10 ; on B 162 both units, tens, and hundreds, are in excess, and the excessive hundreds are written above the tens, after an attempt (erased) to insert them below the first nine hundreds. This mis-statement affects the higher numerals also.

Fractions: the sign ${ }_{2}^{2}$. In Script B there are no certain examples of fraction signs. The $\operatorname{sign}{ }_{2}^{2}$ which was regarded by AE as a fraction sign (PM IV. 661-2, fig. 649 a) always occurs before (not after) a numeral, which is not usually above 9 ; but it also rises to 47 (B833.7) and 60 (B 180.2). On B $666 b$ it is associated with 2, but the formula is crowded, and should probably be read as ${ }_{2}^{2}|z| 11$ representing two different quantities: cf. B $666 c$ and $667 a, I, 2$. Moreover, though ${ }_{2}^{2}$ usually follows the numeral of some other 'commodity'-sign, it can also stand by itself, even at the head of a list (834) and can constitute the whole of an account (833) with six items and the total 47. It also can follow not only commodities divisible into fractions: frequently; $\odot$ (with loop) on $456.1,1528 a 2$, $04.53-64$, but also human beings who are not (818); and it can directly follow a 'commodity'-sign without numeral (B426. I, I528a2). The sign ${ }_{2}^{2}$ is therefore certainly a 'commodity'-sign; so also the single 2 as on B 58. If, as will be suggested (p. 53), the 'ingot' and 'balance' signify 'copper' and 'gold' respectively,
the sign ${ }_{2}^{2}$ with numeral, which follows them on 730 may well be another metal, or valuable object. To facilitate further study of this sign, its occurrences are tabulated here.
${ }_{2}^{2} 1398,425,427.2,463.1,2$ (with \#), 487. I,

| 2lll ${ }_{2}^{2} 11424,833.3$. |
| :---: |
| ${ }_{\text {2III }}^{\text {2III }}$ 8, 833. $2 ;{ }_{2}^{2111111418 .}$ |
| ${ }^{2} 11111111427$ (overruns the decade). |
|  |
| ${ }_{2}^{2}-11398.2$. |
| $2^{\circ}$ 三 180.1 . |
| ${ }_{2}^{2}=11834$. |
| ${ }_{2}{ }^{2}$ IIII 111833.7 (total). |
| ${ }_{2}^{2} \equiv \equiv$ 180. 2. |

${ }_{2}^{2}$ follows on 504, 939. I, 2, 944. I, 1064. I, 2, 1065. I, 2, 1067. I, 1071. 2, 1072. I, 2, 1073. I, 2 [489a], 1575. 1 , 2. It follows $\boldsymbol{T}$ (perhaps for $H$ ) on 693. 1,2 , and $(:$ (with loop) on 456. 1 , 1528. 2.
'Total' signs. Whereas in Script A the 'total'sign is $1+$ (SM. III) in Script B the regular sign-group for 'total' is $\mp \varphi$. As it occurs also alone in formulae (see Vocabulary) as principal name, and in compounds, it certainly had phonetic value as a word; it is also perhaps occasionally mis-spelt $\ddagger \boldsymbol{\dagger}$ ( $\mathrm{I}_{57.1}$ );
 a total number of men $\hbar$.

Other 'total' signs are perhaps $E \chi$ with numeral of on $86_{3}$. 2; and $\chi \Psi \ldots$ on $156_{3}$, and $2 \chi 2$ on 862.5 and 865 . 2. But these may be a scribe's personal phrases. Similarly on $598 a$. $x-3$ the sign ${ }_{\pi}$ is followed by numerals ', " ${ }^{\prime} \AA^{\prime \prime \prime \prime \prime}$, but on the edge ( $b$ ) the total ${ }_{m} \equiv$ is preceded by $\mp Y$. From all this it results that $X^{X}$ is a variant of the more frequent $Y$, and also that $\mp \varphi, \mp Y$, and $\mp \uparrow X$ have the same meaning of 'total'.

Abnormal Numerals. On B 59, dealing with horses, if the last numeral 40 is the total, it can only be made to agree with the items by reckoning as io a horizontal stroke between two rows of units $\frac{111}{}$ II in 1. 2. The displacement of these units shows that this stroke is not an addition, but part of the original numeral; its purpose, however, is obscure; and it is not certain that the numeral 40 is meant as a total.

On B 1098. I the same numeral $\frac{111}{}$ though erased, probably signified 16.
On B $456 b$ the numerals $\overline{\overline{1}}$ 开 $\prod^{\pi}$ are to be interpreted in the same way, as there is no doubt that the horizontal strokes are on the upper side of the groups.

On B 7 II $b$ the numeral $\equiv \equiv \equiv$ overruns the century, and probably results from inadvertence, since the numeral 220 is correctly written $\circ=$ on the other face of the same tablet.

On B 627.2, dealing with children, a horizontal stroke is added between units $\frac{\mathrm{III}}{\mathrm{III}}$, but it is not certain whether this is deliberate addition, or the substitution of io for 9: compare, however, III in 1. 3 . Both numbers ( 19 and 13 ) are unusually large for groups of children. There are other instances.

Occasionally numerals occur without 'commodity'-sign; immediately after principal and subsidiary names (e.g. B684). Where the numeral is 1 it is difficult to distinguish from the punctuation sign, but the former is always written high in the line, the latter low (p. 4I). When such an isolated numeral is larger than units the question arises, what multiple commodity or service is intended.

## 'Percentage' Tablets (PM IV. 691. 2)

On many of the tablets recording lists of commodities, and especially the twofold lists of livestock, the units add up to 100 : more rarely to 50,200 , and 300 ( 1151 ). This occurs too often to be accidental ; but it is difficult to understand what the reckoning is, in which commodities of very different valuee.g. different kinds of cattle-are equivalent fractions of 100 . There are traces of 'percentage' reckoning in the Hieroglyphic Script (SM I. 258 and 173 : P 105 and 107); but none in Script A. Though the fact can only be established on a complete tablet, it is probable that 'percentage' records were more frequent even than appears. It is the more remarkable, as so many of the 'percentage' totals are the sum of two different accounts in the same commodities, under distinct subsidiary names. Occasionally ( $1097-1100$ ) the whole hundred is supplied by one such account, and the other is completed by the 'zero' sign ( $X$ see AB 3, p. 6) making the purpose of the reckoning still more difficult to explain, though it is clearly deliberate. Only on 464 are the two subsidiaries the same. If the records are of some kind of offering or tribute, it is possible that it was the custom to offer 100 objects of some kind, according to the circumstances of the contributor: compare the minimum offering of 'a pair of turtle-doves or two young pigeons' in Jewish ritual: and this custom may be perpetuated in the Greek term 'hecatomb' for a sacrifice, in the highest grade, of a hundred victims, of whatever kind.

It is possible that the first entry is a payment on account, and the second the balance of an annual contribution; but if so, it is remarkable that so many contributions were of exactly 100 units.

## Weights and Measures of Value

Signs derived from the balance and the ingot occur both in Script A and in Script B. But their uses must be distinguished.

Balances. For Minoan balances generally, see p. 2I above, and PM IV. 659-66. In Script A the balance sign A 4 I -always suspended, not supported on a pedestal-is usually followed by a numeral, and sometimes preceded by a sign-group without punctuation (HT12.4, 13.5, $24 a I, 99 a I$ ): so the sign has had phonetic value. It is not associated with any ingot sign; but on $H T 44 a$ I it may be a 'transaction' sign.

In Script B a more pictorial balance, supported on a forked pedestal, on 730, 731, 732, 733 (and probably after the 'ingot' sign on 734) stands alone, and is followed by numerals up to 52. But though associated with the 'ingot' sign (p. 54) there is no evidence of any regular ratio between 'balance' value and 'ingot' value: $60: 52$ on $730,10: 6$ on 733 . On 730 the 'balance' is followed by ${ }_{2 l}^{2 l}$ for which see p. 54 ; on 732 it is preceded by..$\Psi$, probably part of a name. An abbreviated variant occurs surcharged on sealings found with B 439 in the 'Room of the Niche' (SM I. 43, fig. $20 a 2$ ). Sundwall equated the 'balance'sign with miswritten $=\mathrm{B}_{51}$, which is frequent as a 'commodity'-sign (Mélanges Glotz, 828-9: see PM IV. 663 n . and p. 28 above).

From its association with the 'ingot' sign in Script B, the 'balance' may denote some metal, other than copper-probably gold: as in Greek tádaעтov ( $=$ 'balance'), a pre-Hellenic word, denoted the
largest metallic unit. But what AE did not think it necessary to prove (PM IV. 649-52) is that in these tablets successive items are equivalent modes of stating the same value. This may be so when an 'ingot' sign replaces an erased 'cuirass' sign (B 246, 247) or is surcharged on it (cf. $\odot$ on B 229) ; but it would lead to absurd results with the livestock tablets, or the tablet B 862 recording different kinds of trees, and the ratio varies on the tablets B $730(60: 52)$, 733 ( $10: 6$ ). The alternative is to regard the 'ingot' and 'balance' items as concurrent items, not as equivalents, and the surcharged $\boldsymbol{T}$ and as describing the quality or the origin of the ingots: the sign $\$$ is frequent in this sense with other 'commodity'-signs (see AB 50, p. 18).

Ingots. Signs for metallic ingots occur in the Pictographic Script (SM I. 203, no. 56). In Script A and Script B there are several variants (Signary AB 67, A 55, B 94 a) ; and in Script B there is also a more pictorial 'commodity' sign, associated with 'balance' and 'cuirass' signs (Inventory § Oh). This pictorial sign, either foursquare (B437) or with characteristic concave outline and swollen angles (B 246-9, 730, 733, 734: PM IV.652, fig. 637. 1, 805-8, fig. 784b) and followed by numerals, represents a metallic 'commodity' unit, probably copper, like the actual ingots from Hagia Triada and elsewhere. On B 733 the 'ingot' sign is surcharged with $\boldsymbol{T}$; on 734 with $\boldsymbol{1}$; on $734 a$ with 2. On the 'chariot' tablets B 246,247 this sign cancels the 'cuirass' sign (p. 5); whence AE inferred that a copper 'talent' was regarded as equivalent in value to a cuirass. This pictorial 'ingot' never occurs in a sign-group, and may have been merely ideographic, like the balance, cuirass, and other 'commodity'-signs.

For the variable 'ingot' signs AB 67 -so described by AE - which occur also in Script A in signgroups with phonetic value, see Signary, p. 22.

The 'value' tablets already published in PM IV are reviewed by B. Hrozný in Arch. Orientální XV, 1946, pp. 280-94. He equates the 'ingot' sign on the tablets $730,734,753$ with the copper ingots of about 29 kg . found at Hagia Triada which he calls 'talents'; and the 'balance' sign on 730, 731, 733 with a 'mina' ( $\frac{1}{60}$ talent): on 730 he finds $53 \frac{1}{2}$ 'minae' following 60 'talents'. The sign ${ }_{2}^{2}$ he regards as 'one-third', but he does not know the other occurrences of ${ }_{e}^{z}$ with larger numerals (p. 52) : the sign cannot be simply a fraction, though the commodity which it represents may have been $\frac{1}{3}$ of or $\Delta \Delta \Delta$ in value. The sign Hrozný regards as another kind of 'talent' (as in 520): but it needs to be proved that the combination $y$-1111 $\underbrace{\prime \prime \prime \prime}$ is a double statement of one amount, not (as usual in these accounts) a list of collateral items. The same applies to the collocations of the 'ingot' and the 'balance' items on 730 and of items with livestock, e.g. 944.

## Men, Women, and Children as Commodities. Inventory § $\mathrm{A}, \mathrm{B}, \mathrm{C}$

The signs B 74, B $74 a, \mathrm{~B} 75$, and B 76 for 'men' and 'women' only occur as ideographic 'commodity' signs, followed by a numeral, usually appended to a sign-group which is therefore probably a personal name, either of the individual enumerated, or of the person giving or receiving 'one man' or 'one woman' in a commodity transaction. The latter alternative accounts for the occurrence of higher numerals than 'one'. The 'total' entries with higher numerals, which can sometimes be shown to be the sum of the preceding items, confirm this interpretation. That the sign-groups followed by $\hbar^{\prime}$ are personal names is confirmed by the recurrence of some of them as 'principal' or 'subsidiary' names in other 'commodity' tablets (see Vocabulary).

For the origin and uses of this group of signs (B74-6) see p. 29-30 above.

## 新竞

A preliminary difficulty is caused by this sign（ $4 \mathrm{I}, 6 \mathrm{I}-39,77^{8-9}, 798-807,818$ ，in group 427.1 ） which denotes a class of human beings，but it is not obviously either male or female，though its full－ face－standing variant B $74 a$ 商 may be clothed in a skirt（87－91，101，213，427．1，798－807，809，822－3）． Both forms occur once in a sign－group（seated 799．2，standing 427．I），and therefore had phonetic value，though only as a＇rebus＇sign（p．5）．On 818 the seated sign is associated with the commodity
 it has the very high＇total＇number 213；on 807 it has 237.

Though this sign never occurs associated with $\grave{\chi}$ or $\bar{\hbar}$ it must denote some class of human chattel； perhaps eunuchs，who were traded in Greek times（Hdt．III．48，VIII．605－7）．Comparing the figure on A 21 in Script A，Dr．Alice Kober suggests that it may represent a dancer．

## B 75a

## خ

The occurrences of this sign are of importance，because they are the clue to the meaning of the lists of sign－groups each followed by $\boldsymbol{\hbar}^{\prime}$ ．It may be assumed that this sign，followed by numeral I or by larger numerals after the＇total＇group $\mp \varphi$ ，signifies＇one man＇；and that when the numeral is larger，it signifies＇so many＇men in relation to the preceding sign－group．

## B 75b

## 夫

The sign $\dagger(8 \mathrm{r}, 87,88,338,610-38,739,780-2)$ clearly denotes＇woman＇，though the breasts are sometimes omitted．It has no counterpart in the earlier scripts，except the skirted variant of the winged figure $\stackrel{y}{d}$ in Script A（ $=$ A 90 ），which Sundwall identified with $\hbar$ ．It never occurs associated with $\hbar$ ，but is similarly used after sign－groups，in lists with＇total＇items．In other transactions，$末$ is followed by other signs and sign－groups，with numerals：$T$ above $\Psi(629) ; \Psi T(624,630) ; T P(616.1)$ ；
 627 by $\complement$ with $\mu^{\prime}$ above it；on 617 by an animal＇s head；on 610 by $\frac{\mathrm{M}}{\mathrm{x}}$ ；and on 629,2 by $\emptyset$ which may be monosyllabic proper names．On 321， 620 this sign is replaced by $\chi$ ，on $819 a$ by $\hbar$ ，probably by mistake．

Women and Children．On 63，338，610－40，738－55，769，780－7，824－30（PM IV．708，fig．690），the ＇woman＇sign $\grave{\pi}$ is followed by the groups $9 \uparrow$ and $8 \AA$ with qualifications and usually with numerals so small（except in totals on $6{ }_{15}, 617,824$ ）that it is certain that they denote＇boys＇and＇girls＇；but there is no indication，which is which；except that on 819 $a$ ，the group 旷 is preceded by $\hbar$ ．But this may be a mistake for $\bar{\lambda}$ ．

 （ $611,612,614$ ）．AE noted that in Hellenic Crete different words were used to denote boys below and above seven years of age，and suggested that these were similar terms：in Sparta the age－classification was even more elaborate．

 classification may have been extended.

As the general form of the documents in which women and children are mentioned is that of the 'commodity' tablets, with a principal name, and one or more subsidiaries, it would seem that they deal with tribute, or sales, of women with their offspring; that is, with some form of slave-trade. The same conclusion must be drawn from the association of men, and of children, with 'banner' signs denoting other commodities (602-5). This should help to explain the qualifications, especially of the women, as indications of value, like those of other commodities: age, appearance, accomplishments. The full formula is preserved on 612, in three lines of items:
(1) Principal name.



## 

and can be restored, except the numerals, from others of the series. Sometimes there are two groups of women: on $616-17$ there are two principals, or a patronymic.

For the 'overseer' sign 懦 B 76,77 see p. 30 .
It was naturally assumed by AE that the sign-groups in $\mathrm{I}_{5} 16,{ }_{15} 17$, and similar texts were not only the names of persons, but of those persons who made up the totals in 11. II, 19. But on 597, 600, 601, 603 and elsewhere the numeral is ' 1 , 1 ', or 'II', and even larger numbers ( 9 on $601 ; 25$ on 600 ), and 237 (with $\mathbb{j}_{j}$ ) on 807 . These numerals must refer to persons other than the bearer of the preceding namegroup. Cowley (Essays on Aegean Archaeology (ed. Casson), 1927, pp. 5-7) suggested that these were persons to whom slaves or prisoners were allotted, 'or of persons who provided slaves to carry out public works. . . . The slaves did not require to be named, any more than if it were "I horse", "r ox".' Similarly, on 217-66, pictorial representations of a horse, a chariot, a cuirass, and other objects are preceded by 'name'-groups which cannot be individual names for such objects. This view is supported by the lists of women above which include both male and female children. All such assignments or assessments must obviously fall on named individuals; and the two kinds of lists(1) nominal rolls and (2) masters of squads under a head-man-must be considered separately.

## Chariots, Chariot-bodies, Wheels, and Tires. Inventory § N

Tablets dealing with chariots and their parts occurred in several deposits:
(a) In the 'Chamber of Chariot Tablets': B 217-66 (with fragments 269-309, 3 10-25, and 1562): The chariots are complete with wheels and yoke, and accompanied by a horse-head, a 'saw' sign, a whip (sometimes), and a cuirass, sometimes cancelled $(246,247)$ or replaced $(248,249)$ by an 'ingot' sign or () (266). PM IV. 786-7; SM I. 40-3.
(b) In the 'Area of the Bull-Relief' where the North Entrance Passage reaches the Central Court: B 879-902: The chariots have no wheels or yoke (879-93); wheels occur alone (894); horses alone (895-902); and horses with other livestock (903-7).
(c) In the 'Arsenal' building, north-west of the Palace: 04. or-52: the chariots (04. OI-29) and their wheels (04. 30-52) are as in Series (b) (PM IV. 786-7). The 'chariot' tablets are larger than the average, and usually contain two lines of writing, though only one entry. There is one principal group, and several subsidiaries, selected from a small panel of names, and set in variable order.

They seem to be members of an association of craftsmen, employed on a particular commission. Some of the names occur elsewhere: see Vocabulary.
The chariots on these tablets have no wheels, and are of two different types. On 04.01-30, 12-13, $15-16,22$, the pole is latticed, with yoke and collars, and the back of the car is prominent and convex; on 04. 18-21, $23-8$, the pole is single, and the body a square box. The construction is discussed in $P M$ IV. $789-97,809-25$.

The large supply of wheels illustrates the difficulties of transport in so rugged a country, and over tracks so rough as the known Minoan roads.

The annular objects on 04. $5^{\text {I-2 }}$ seem to be tires, of the same padded leather type as on the Egyptian chariot of Tut-ankh-amen (Cairo Museum: $c$. 1350 B.C.).

The chariot tablets are figured in PM IV. 788-82I as follows:

| 217 | PM IV, fig. $763 d$ | 230 | $P M$ IV, fig. $763 a$ | 259 | $P M$ IV, fig. $763 l$ |
| :--- | :--- | :--- | ---: | :--- | ---: |
| 220 | $763 a$ | $S M$ I, fig. 19 | 260 | $763 n$ |  |
| 222 | $763 i$ |  | Hall, CGBA 86, fig. 97 | 261 | $709 e$ |
| 223 | $763 c$ | 238 | $P M$ IV, fig. $763 b$ | 261 | $763 k$ |
| $225 a, b$ | $784 a, b$ | 244 | $763 f$ | 262 | 772 |
| 226 | $800 b$ | 245 | $763 e$ | 266 | $763 h$ |
| 229 | $763 k$ | 246 | $784 a$ | See also Inventory, § N |  |

Cuirasses on Corselets. Inventory, $\S \mathrm{Nj}-1$
The 'cuirass', 'corselet', or 'breastplate'sign, associated with the 'chariot'sign on B217-66, is derived from a form of body-armour consisting of horizontal plates, presumably on a flexible garment of leather or linen, but sliding freely over one another like the rings of a lobster, and suspended from shoulder pieces of similar fashion. It is worn by the Shardana mercenaries of Rameses II (Rosellini, Mon. storichi., pl. CIV ; PM IV. 804, fig. 780-1), and by the warrior on an ivory mirror handle of about the same period from Enkomi (PM IV. 804, fig. 782; BM Exc. Cyprus, pl. 2.872; Bossert, 491). The Cypriote cuirass of Agamemnon (Iliad X, 19ff.) had bands (oipo८: 'tracks') of gold, tin, and kyanos enamel, 21 in all, but these may have been inlaid in a solid breastplate, a reminiscence, perhaps, of the Shardana cuirass (Helbig, Hom. Epos, 1889, 38ı-2; Myres, $\mathcal{H} H S$ LXI. 20).

On some tablets, details are omitted (PM IV. $803 a, b, c$ ). On 28I the cuirass is surcharged with $l$; on $593-4-5,870$, with $\gamma$; on 229,266 with $\odot$. On $246-7$ the cuirass is erased and replaced by the 'ingot' sign (p. 54), probably its metallic value.

## Swords: B 69

A series of tablets ( ${ }^{5} 540-60$ ) dealing with swords was found, all together, with clay sealings and fragments of chests, in the south-west corner of the 'Domestic Quarter' (PM IV. 853). Their relative date is fixed, between L.M. I $a$ pottery below the floor, and L.M. III pottery above them, separated by 25 cm . of earth. The sword-types are discussed, $S M$ I. 55, fig. 30; PM IV. 854-7, figs. 837-41: AE thought them late; but the writing of the 'sword' tablets is of standard Script B: this lasted, however, on the Mainland till 1200 b.c. at least, and their stratigraphical position is certain. Stores of bronze swords in this part of the Palace are indicated by fragments of sword-hilts at about the same level, on the borders of the corridor where they lay.

An earlier type of sword occurs in Hieroglyphic Script (SM I. 186, no. 15) and is compared by AE with Eg. hieroglyphic 色 bss 'jar' and ! tpy in bgsw 'dagger'. It occurs as a phonetic sign in Script A
(HT io a. 2; $26 a . I-2$ ) followed by numerals; and alone with numeral (HT 49. 4). But it does not occur in groups in Script B, unless it be as the prototype of $\hat{\mathbf{f}}$.

The formula on these 'sword' tablets is unusual. The principal name, which varies as usual, is

 and chariot-makers of Knossos, compare the travelling companies of potters from Thrapsanos in modern Crete, described by Xanthoudides, Essays in Aegean Archaeology, ed. Casson, 1927, p. 127, in which seven men have distinct tasks and names. There are travelling companies of blacksmiths in some parts of Spain.

Adzes. Inventory, § $\mathrm{O} a$
A series of tablets (494-500: xxxvini) dealing with adzes was found in the south-east corner of the Eighth Magazine lying in order as they had fallen in (or from) a box (PM IV. 670, figs. 655-6; SM pl. xxxvini). Dr. Alicé Kober ( $A \mathcal{F} A$ XLVIII, 1944, $62-75$ ) has reconstituted the original order of these tablets as they lay in their box. They are of the simple flat type, tapering slightly to the butt, with the cutting edge clearly marked; but not expanded laterally.

The adze-blade does not occur as a linear sign, but the frequent sign $Y=B 20$ seems to represent such a blade with its haft (see p. 20).

Favelins. Inventory, § $\mathrm{O} b$
On a tablet (04. 81 bis) is a pictorial javelin with leaf-shaped head, followed by numeral $\equiv$ ' (PM IV. 840, fig. 819). It was found in the 'Armoury Deposit' with the 'arrow' tablets.

## Arrows. Inventory, § Od

On a tablet (04.82) from the 'Armoury Deposit', are two lines of entries relating to arrows, with high numerals $(6,100$ and 2,630$)$ preceded by a pictorial arrow with barbed head and triple feathers (PM IV. 837, fig. 817). Actual arrow-heads, of bronze plate, deeply barbed, were found in the same deposit (PM IV. 836, fig. 8ı6 $a, b$ ).

The arrow does not occur as a linear sign, unless it be the prototype of the wholly conventional sign $\uparrow$ common to A and to B .

## Vessels of Metallic Types. Inventory, § M

On tablets of Script B, as on those of Script A, are several records of vessels which seem to be metallic, with numerals and occasionally with phonetic signs. They are not simply containers, but table furniture of intrinsic value. The most notable, B 872, is a list including ( I ) bulls' heads like the silver bull's-head rhyton from the IV Shaft Grave at Mycenae, (2) one-handled cups of the 'Vapheio' pattern with a linear sign, B ro6, which recurs on $162 a$, and was thought by AE to signify 'gold' or 'royal property' (SM I. 52, fig. 28).

On 93 are groups of vessels-bowl, cup, and oenochoë-evidently table-sets (PM II. 633, fig. 397; IV 730, fig. 712; SM III, pl. xxiv).

On 434 are another handled cup (damaged), a wine ladle, and a narrow-necked flask (PM IV. 730, fig. 713 ; SM III, pl. xxxv).

On 436 is a deep bowl, surmounted by a saffron-flower (damaged) ( $S M \mathrm{pl}$. xxxv).
On 439 is an inverted flask: perhaps a punning reference to a personal name, as it stands in the 'principal' place on the tablet ( $\mathrm{pl} . \mathrm{xxxv}$ ).

## Vessels of Ceramic Types

Other vessels, of less metallic types, and usually surcharged with phonetic signs, presumably denoting their contents, are described among other containers below (p. 6 I ).
Vessels of Typical Pottery-forms, and therefore distinct from the metalliform-types (p. 58).
They are containers of no intrinsic value, and are usually accompanied or surcharged with a phonetic sign denoting their contents.
Script B
Amphorae: $8 b$, 10. 1,2 , preceded by ${ }^{2}$, surcharged 9 ( $P M$ IV. 731, fig. 714);
419 bis, 701-13, surcharged $\uparrow$ ( $P M$ IV. 731, fig. 714);
701, surcharged $\uparrow$ (PM IV. 731, fig. 714 g );
707 , surcharged
709, surcharged $\overline{\mathrm{T}}$ with ornate handles of Minoan type (PM IV. 73I, fig. $716 a, b$ ); 710 , with 9 above;
740. 2, surcharged ${ }^{\text {m }}$ (read by AE as M: $P M$ IV. 731, fig. 715 ).

Goblets and Cups: 774, 775, 776,877 , surcharged $\boldsymbol{\rho}$ ( $P M$ IV. 73 1, fig. $714 d, f$ ): AE described 877 , which is damaged, as a 'spade'.
Deep Bowl: 873, $1-3$, surcharged $\psi$ : cf. 875. 6.
Stirrup-handled vase: 700. I, 2 (PM IV. 733, fig. 719 ); 746 (fig. 718 ); 778 (SM II, pls. Li, Liil): compare the vessels with graffiti at Tiryns (PM IV. 743, fig. 721).
Three-handled vase: 874 , surcharged $\uparrow$ (pl. Lxvi: $P M$ IV. 73I, fig. $714 f$ ).
Tripod vase: 740 (obscure: $P M_{731}$, fig. 715 : pl. LI).
Vessel with high handles (? damaged): 1516 . 15 (pl. Lxxxviil): in a sign-group, but unique and probably a 'rebus' sign (p. 5).
Agricultural Produce. B 76-89: Inventory, § J, K
Many tablets in Script B are concerned with agricultural produce, represented by measures of capacity and area, and pictorial ideograms for a large variety of products, including cereals, saffron, and fruit-trees, with other signs for qualities or varieties of these: see Inventory, § I, J, K. Some of thens occur also rarely in sign-groups, probably as 'rebus' signs with phonetic values; and several signs, usually phonetic, are used to denote commodities: e.g. ${ }^{\mathbf{*}}(=\mathrm{AB} 46)$ which is certainly derived from the pictorial 'fig-tree' sign (SM I. 220, no. 104). Their meaning may eventually be a clue to their phonetic value as initials of Minoan words. Other examples are (=B51), some kind of flowering plant, perhaps 'saffron', concurrently with the pictorial signs AB 42, B 78 .

The 'granary' tablets were found in two main deposits: $(a)$ in the corridor named from them in the Western Wing of the Palace ; (b) above the parapet of the East Bath-room with the Spiral Dado, in the south-east quarter. Both were evidently derived from upper chambers. The tablets from (b) refer to considerably larger amounts than those from (a), but are much more damaged.

Cereal Crops. Three distinct signs, B $89 a, b, c$, are used in Script B to represent (a) Mediterranean 'red' wheat, (b) barley, (c) millet. They are sometimes associated with signs of quality or variety (B 82-8), and with signs for various 'containers' (PM IV. 624-5, figs. 610-12). The sowing of mixed crops-
 economy, but was prohibited to the immigrant Hebrews (Deuteronomy, xxii. 9; 'thou shalt not sow thy vineyard with divers seeds'). Millet ( $\mathrm{Gk} . \mu \in \lambda i \nu \eta$ ) was grown early throughout the Near East, and
occurs in the Swiss lake-dwellings (Keller, Lake dwellings of Switzerland, ET 1878 ${ }^{2}$, 519; Pfahlbauten VI Bericht, p. 311 ). Beer was made from it by the Paeonians (Hecataeus, p. 123 Müller, $\pi a p a \beta i \eta$, and by the Ethiopians and Egyptians, Strabo xvii. 2). This may explain the association of the 'millet'sign with a bowl on $2 a 1,3.2,12.2,17.1$, 19. 2, 24. 2, 25. 2, $35 a$.

Saffron. 851 -61; cf. 267, 669-70.I ; cf. AB 42 (A 43, B 78). Inventory, §K $d, e, f$. The plant Crocus sativus was cultivated from Minoan to modern times in the Near East, as a dye. It is not known wild, but C. Cartwrightianus, a closely allied species, is indigenous in Crete (Mobius, fahrb. Arch. Inst., 1933, 7-9, fig. 4; Dawkins, Man, 1939, 90). Saffron-coloured garments are represented in Minoan frescoes (PM I. 265 ; IV. 718 -19). Early saffron signs are noted in SM I. 213, no. 88, and the pictorial 'saffron' is unmistakable.

In Script A simplified 'saffron' signs occur with numerals (HT i4. 2, 21. 4, 50. 4, 58. 3, 94. 3) and also in groups ( $H T$ 33.4, 21. 4, 91. 3).

In Script B large pictorial saffron signs occur with numerals (PM IV. 718-19, fig. 703-4 a (857), $b(856), c(858), d(860), e(854), f(870), g(861)$; the only corresponding sign in groups-unless the frequent sign (B51) denotes 'saffron' (p. 28)-is in the obscure sign-group $87{ }^{M}$ ' on 1568.2 . The ligatures with $\left\{\neq \uparrow^{\prime}\right.$ or $H$ may distinguish varieties or qualities of the commodities.
 occurs only preceded by ..[if and followed by numeral on 864.2: compare the variant of $\Gamma^{*}$ on 156.2, pl. xcrv, followed by numeral ${ }^{11}$.

Fruit-trees and vines: Inventory, § I. On 862 is an inventory of fruit-trees pictorially shown, followed by large numerals ( $P M$ IV. 717 , fig. 700). In 1 . I the tree is an elaborated variant of the frequent ${ }_{\psi} \mathrm{k} \operatorname{sign}$ ( AB 46 , A 27 , B 46), the pictographic predecessor of which is certainly a fig-leaf (SM I. 220, nos. 103, 104).

In Script A this sign is frequently associated with 用identified (AB 22, A 35, B 62) with the vine.
In Script B it occurs with numerals, and the quality sign $\ddagger$ : see p. 31: so its meaning in 862 is certain. This large number ( 1,780 ) of trees, planted 20 feet apart, would occupy a little over 16 acres.

In 862. 2, a pictorial tree resembles the pictographic 'olive' $\operatorname{sign}(S M$ I. 229, nos. 101, 102; cf. 200, no. 48) which is embodied in the 'overseer'sign B 77 , in variants of AB 29, especially B 45 , and in A 86. The 405 olives, planted 20 feet apart, would occupy about 4,400 sq. yards or rather more than an acre.

In 862. 3, the first tree is evidently represented as pruned; the second resembles an almond without its foliage. Compare sign B 77 'overseer of olives'.

The sign用 (AB 22, A 35, B62), in view of its Egyptian counterpart (1) probably denotes a vine, when it stands with numerals. But like it occurs also in sign-groups ( $2,17,19,21-5,160,162$; and simplified on 19. I, 2 : see Inventory, § J $i$ ).

## Livestock

By far the largest series of tablets from Knossos is that which deals with livestock, represented by signs ( $\mathrm{B} 90-3$ ) consisting of an animal's head or horns, on a stem, followed by numerals which are sometimes very large ( 20,464 on B $162,18,000$ on B 1088). These signs had also phonetic value and occur in sign-groups (pp. 32-3). When used as 'commodity'-signs, the stem either has two crossbars, for mule animals, or is forked, like the 'woman' sign, for females (PM IV. 712 , fig. 694; 662, fig. 706). Very often $\mp$, more rarely $\mathbb{R}$, stands first among the items followed by a $y$-item.

On the tablets $903-7$, account is rendered of fully stocked properties, illustrating the relative numbers of each kind of livestock (PM IV. 724, fig. $707 a, b, c$ ). A few tablets deal with horses only. The majority deal with sheep and goats $\mathcal{F} \mathbb{R}$, sometimes in very large numbers. As usual, in such flocks, the females are much more numerous than the males.

The frequent association of 'livestock' items with (e.g. 933 ff ., ro60 ff.) suggests that denotes some commodity such as a fodder-crop, which admitted differences of grade or quality, represented, e.g., by $\mathfrak{G}($ see p.63). Other differences of quality among 'livestock' items are similarly denoted by prefixed $\ddagger$ frequently; frequently; U $\Psi$ 1240. $I ;$ \# $913 . I$; frequently; frequently; 919.2 ,
 and combinations of these. These were considered by AE to refer to 'livestock' perquisites of cults or officials, or other destinations of the flock.

Lists of animals with numerals occur on Proto-Elamite tablets: Scheil, Mem. Dél. Perse, VI. 59 ff.; quoted by Chapouthier, Les Écritures minoennes, 9, fig. 6.

## Other 'Commodity'-Signs. Inventory, §§ L and R

The most frequent are containers of various shapes, representing commodities in their customary units of capacity, such as granaries, bins, baskets, and store jars. They stand usually alone followed by a numeral, but are sometimes qualified by a phonetic sign, prefixed, or surcharged (PM IV. 726, fig. 709). The most frequent (AB 70, B 94) was described by AE as a 'banner' sign; but it is certainly a store-chest on high feet: compare the gable-roofed chest in the Hieroglyphic Series (SM I. 198, no. 43) and inscribed on a pot from Thera (PM IV. 715 , fig. 697 b). Similar signs are AB 70 , A 81, 113. Some signs may be fractions of other measures.

B 94 b has gable-roof and handle: it is often followed by $T$ with a numeral (AB 6). It seems to follow that the 'granary' sign represents a larger unit, of which $T$ was $\frac{1}{8}$ th, since its numerals do not exceed 7. If so, $T$ with a 'cereal' sign should denote one 'load' of grain, of which eight filled a 'bin'.

B 94 c , crowned with the 'millet' sign (B89c).
B 95 occurs both alone and within a 'banner' sign, followed by a numeral; also within an open container, perhaps a basket, such as occurs alone on $485: \mathrm{cf}$. HT IOI. 6 in Script A.

Other containers are B 98, 104, 105.
B 97, only on 902. I-I2, in connexion with horses, perhaps denotes 'reins' or 'harness' (PM IV. 801, fig. 708); cf. AB 62, A 57 (HT 89 a 3, b 3, 94 b 4).

B 98 seems identical with the Cypro-Mycenaean sign VI. 24 (510) in Daniel, AJf XLV (1941), 468-70.

B 99 clearly represents the horn of the Cretan wild goat (agrimi) for making bows as in Il. IV. Io5; Od. XXI. 391: only on 04. 54-9 from the Arsenal site, and on the stray tablet B 1528 b.

B 100 only occurs alone, followed by a numeral, on the same tablets as the goat's horns (04. 53-64: $P M$ IV. 726, fig. 709 c ) : probably a goat's hide or some object made therefrom, e.g. a quiver or bow ease.

B 101 only occurs once, at the end of a fragmentary group, surcharged with $\mathbb{4}$ and followed by numeral '. It seems to represent an animal's hide, but has no counterpart in the Pictographic series, or in Script A. See, however, the 'hide' sign in the Hieroglyphic script at Mallia (H5, $26 a, b$ ), which may be the same object as B ior but folded lengthways.

B 102 only occurs once，followed by numeral－ 11111 in 878 ．I，pl．Lxxi（PM IV．726，fig． 709 g ）． It may represent an animal＇s hide or fur－pelt；but it has no counterpart elsewhere．

B 107 may be another kind of skin or hide．

Signs with Phonetic Value，used to denote commodities，and followed by numerals．In addition to the pictorial＇commodity＇signs，many commodities are denoted by phonetic signs，followed by numerals． Some of these may retain their original pictorial meanings，but more probably they are initials，like the short groups of two signs．In some of the latter，however，the second sign $(T, \uparrow)$ may be a measure or value．Only the rarer signs are completely recorded here：for others see Vocabulary．
f 79，311， 625 a 2－4；tabulated 432． 1 －3；1522．$I$－5．
H $^{\prime} \boldsymbol{H}^{\prime} 625$ a 1 ．$H^{\prime} \neq 1835-9$ ．朴 58．I．

ト over＇adze＇sign 495－7，499－500．
$\dagger$ after name－group；tabulated $280.5, I I, I 4,625 a 2-4$ ．
 after 1600；very rare in groups（p．7）．
IT frequent with＇cereals＇：in group 950． 2.
耳 $159.2,3,337 b 3$（followed by G．．）；perhaps for $T 850$ ；cf． 842 ．
耳Y as＇total＇group 1517.10 ；perhaps for $\mp Y$ ．
FY as＇total＇group 639．6．Read by AE for $\mp 4$ as on $535,598 b$ ，1047．I，2，but the text is clear，and as the group is the＇principal＇on 535,1540 it should be a personal name：so also on 918 a 3， 1047．I， 2 interposed between lists．On 639.6 ，however，and $598 b$ followed by $\prod_{m} \equiv$ it is probably a＇total＇（PM IV．693，fig．679）and may be miswritten for 干9．
于4 as＇total＇group 837．7，849．2，1055．9，1519．12，1520．7；followed by X才 15 16．11，19．Mis－ written $\mp \Psi^{1517.10, ~} \ddagger^{\dagger}$ 157．I．Elsewhere a personal name（see Vocabulary），followed by $A \ddagger$（q．v．）and two subsidiaries $600 . I$ ，cf． $601 . I$ where it precedes the＇principal＇name．See Kober，$A \mathcal{F} A$ ，1944，66－7．
$\ddagger 432$ ，941．2：cf．frequent as＇transaction＇sign and＇commodity＇sign in Script A；not an ideogram but a phonetic initial．Prefixed to a group 625 a 2，3，4：frequent on＇banner＇sign．
 clear．This element recurs as prefix in six name－groups（see Vocabulary），and with the suffix最；so it may be an epithet of ${ }_{3}$ persons．

$\ddagger \ddagger$ with numeral ${ }_{57}$ ．I probably for $\mp \uparrow$ above．
 617．3，627． 2 qualify the＇child＇sign 用（p．55）．
$\ddagger \neq$ frequent on＇livestock＇tablets，e．g． 1102.
$\hat{f}$ on＇banner＇signs 433；a variant of $\hat{f}$ ．
A $695 \cdot 4$ ．
A followed by sign B 98，04．78．7， 8.
$A \ddagger 1568$ repeatedly；with $\mp \uparrow 600.1$ ；cf．601．I．
A5 283.

A8 with chariot 226.
（597， $777 a, 820.1,2,4$ ；with 本 and T 847．2． C． $610-14,617,620,624,927,628$.
$\left\{283,867.2\right.$ associated with ${ }_{\xi}{ }^{k}$ ．
가 $\mathbf{1 5 2 4}^{2}, 3,4$ followed by＇but perhaps a group．
（1）487．2．
（）with loop；with ${ }_{2}^{2}$ and numeral $1528 a 2$ ； $04 \cdot 53-64$ ；in sign－groups written $\odot$ ，but the loop variant only occurs with numerals．
258，273， $667 b, 696.2,855,872.7$ alone，896，916．$I$ ．
$Z$ probably $=2 ; 489,667 b, 665,666 a, b, 667 a, c, 693-4,695 \cdot 4$ ；on ingot $734 b$ ．
ใ probably $=2 ; 270$（after＇saffron＇sign）， 274 ．
2 probably $=2 ; 411($ after $\mathbb{R}):$ cf．$H T 24 b 2$ ．
 before 699 ；（sign B 97）902．I－12；with $T$ after＇boys＇and＇girls＇ $624.2,629.1,630.2,63$ I．I．
$\uparrow 457,46 \mathrm{I} .2,518.2,818$ ．$I$ ：but the sign may be part of the preceding group．
$V$ before 团 surcharged $\ddagger$ frequently 1568 （ $P M$ IV，697，fig．682）．
4 very frequent，especially on＇livestock＇tablets and followed by ${ }_{e}^{2}$ and numeral between 485 and $696 ; 683.1,696.2$ at beginning of line 1062，with 乌̧ frequently；with $\begin{aligned} & \text { T } \\ & 47,47 \text { bis，} 50,52 .\end{aligned}$ Sundwall（Mélanges Glotz，1932，828－9）regarded this sign as a＇balance＇，denoting a metallic weight value，and as the equivalent of the＇commodity＇items associated with it，usually $\widetilde{\neq}$ and $\mathbb{R}$ ．But（1）the resemblance to a＇balance＇results from careless writing；（2）on＇percentage＇ tablets the items are not equivalents，but items in the total ；（3）items occur without other commodities，therefore had independent value as commodities；（4）there is no intelligible ratio between the amounts．See also p． 28 and $P M$ IV． 663.
$\$$ with $\dagger 629,640 . I$ ；probably in $637.2-641$ it is the initial of a group．
Yo4．79．2；with 394 b． 3.
Y 161．2，841．5，866，867．2，3；cf．pictorial variants 862．$I$ ；with $>395$ b．

褮 1－4，8．I，12．I，17．I，19．I，22．I， 23 a I，25．I．
$T^{T}$ a careless variant 49 ．
党 after $\mathrm{P}{ }^{*} 620.3,625$ a 4；after amphoza $7 \mathrm{II} b$ ．
\＄1562， 740.5 （PM IV．797－8，fig．770）；with horse and chariot，frequently 717 ff ．

## 

4 alone above a jar 710.
before 周（ $\mathbf{1 5 6 8 )}$ ）repeatedly；before $\bigcap_{\text {With }} \boldsymbol{\AA} 869$ ；on ingot 734 ，cf． ；punct．uncertain 462.2 ；before T926．I， 927 ．I；with numeral 1063 before $1101.2,1107.2$ ；and frequently，between 1101 and $\mathrm{I}_{3} 60$ ．
$\forall$ alone 145 ；before $\$$ or $\mathscr{R} 672.2,79$ r．I，and frequently，especially between 923 and 1383 ．
$\mathfrak{l} \ddagger$ alone 821 ． 1 ；on 823.2 it is the end of a subsidiary name；on 1184.2 it may be a third sub－ sidiary；before 䒬 and numeral 695．I．
Ley with numeral 463．2， 67 1．2；before＇banner＇sign with $\AA$ and numeral 869 ，and frequently between 933 and 1077 ； 1598 ．

Li）with numeral 813.2 ；at end of list，after total，800． 6 ．
\＆with numeral 457 ；perhaps for 7 as in $45^{6-64}$ ．
 1060．$I$ ．

$\forall$ before $478 b$ ；and nine times between 916 and 1287 ．
$\forall \times$ before 7 1066．I．


$\bar{i}$ with jar 709.
624．3，after $8{ }^{1}$＇child＇sign；on vase 874.
T without numeral，in tabulated formula $875 \cdot x-5$ ．
$\rho[\mathrm{C}$ at end of entry；numeral damaged 13.3 ．
Tendorsed on＇ingot＇sign 733；with numeral 810．
Ple with numeral damaged？1023． 2 ．
if $955.2,3$［pl．LXII，1631．I，2，1633．2］．
令 punctuation uncertain 462.2 ；see 1 ．
8 $\mathbb{Z} 2$ ro49．$I$ ；apparently a＇commodity＇written in full．


## CLAY SEALINGS WITH SURCHARGED SIGNS

Many clay sealings from packages have been found at Knossos，as on other Minoan palace－sites， sometimes showing traces of the cords which they secured．Some are merely finger－marked，others bear impressions of engraved seal－stones；others，again，both plain and seal impressed，are counter－ signed with one or more signs in Linear Script B． $\mathrm{Z}=$ Kober inventory numbers．
$1701 \mathrm{Z}_{3}{ }^{1}$（a）inscribed across a seal impression－bull charging to right，below the feet of an acrobat，one sign，perhaps a balance：SMI 43，fig． $20 a$ ；PM IV．607，fig． $604 a$ ；（b）on the back，the ligature $\mathbb{N}^{\| \prime}$ and the sign－group $\mathbb{A} \mathbb{N}^{1}$ ：the ligatured signs recur on B 301，and in a compound name on the sealing B 435 bis．Room of the Niche．SM I．43，fig． 20 a；PM IV． 607 ，fig． $604 b$.
1702 Z two goats back to back：on back a balance（？）as on 1701．Room of the Niche．SM I．43， fig． 20 b ．
1703 Z a ir inscribed across a seal impression－bull to left with head turned to shake off an acro－ bat：（a）countersigned 2 （sign B 60 var．）；（b）on the back：two lines－［干斗：〔月简．From the Fifth Magazine．SM I．43，fig． 20 b．1．
1704 Z a 02 inscribed across a seal impression－lion：$(a)$ the sign $\uparrow$ ；$(b)$ on the back，in three lines：扙时•犻： 2 pellets：SMI．46，fig．22，left；PM IV．606，fig．603，left．
1705 Z a 2 I inscribed across a seal impression：lion：扑．$S M$ I．46，fig．22，right：PM IV．606， fig．603，right．
1706 on back of clay sealing：$\uparrow \frac{7}{7} . P M$ IV．756，fig． 721.
1707 large gable－shaped sealing，inscribed on each face in two lines：


in $(b)(2)$ the second sign may be $\uparrow$ ．
1708 inscribed across a concave impression，the sign B 74；pl．Lxxxviil（ $=$ B 1636）．
1709 ＇countermarked and countersigned＇on bull attacked by two hounds：found with B639．BSA VII．43；PM IV． 706.

1710 over a large impression of two bulls．PM IV． 706.
1711 fragment representing the＇Lion Gate＇scheme．PM IV． 706.
1712 reference to sealings found near $\mathrm{B}_{5}$ 16．$P M$ IV． 597 ：not identified．
1713 inscribed over three Minoan shields：$\Psi$ from＇Archive Deposit no．5＇．PM IV，fig． 602.
1714 Clay sealings：three examples with the same endorsement，＇commodity＇sign，and numeral 30：
（i）．． $\mathrm{T}^{2} \mathrm{Y}$
（2）$|\zeta| \equiv$ ．A duplicate of（2）is $\mathbf{1 6 5 3}$（Ashm．Mus．141．180），see p． 106.

## Miscellaneous Late Examples of Linear Script B

1715 Painted Inscription on a vase of L．M．III style from the Palace of Knossos，in a different pig－ ment from the decoration，but applied before firing：octopus pattern ：three signs 顺们 probably the owner＇s name．The second sign（ $\mathrm{B}_{103}$ ）is unique，as that read by AE on the tablet B 49 is more probably $\mathbb{W} \ddagger$ ．The first sign may be G．SM I．54，fig．29；PM IV．728，fig． 732.
1716 Female Votive Figurine from Knossos：on the face，painted before firing，the separate signs and $月$ ，perhaps tattoo－marks，or the name of the votary：sub－Minoan．PM IV．757， fig． 738.
1717 Clay Disc incised with three linear signs：the second may be $\chi$（B52）．From a sub－Minoan tholos－tomb at Erganos near Lyttos．Halbherr，$A \mathcal{F} A$ V，190x，27x ff．；SM I．ior，fig． $45 \cdot$
1718 Pendant of Fasper incised with $H$ and ligatured $\{\not \ddagger$ ：seen at Kourtes，west of Knossos，in

1719 Seal－stone of Steatite engraved K．Kourtes．Halbherr，$A \mathcal{F} A$ V，1901，289，fig． 16.
1720 Bead－seal，almond shaped．Hagios Ilias，Pediada．Halbherr，$A \mathcal{Y} A$ V，1901，395，fig． 5.
1721 Bead－seal of black stone．Hagios Ilias，Pediada．Halbherr，$A \not \subset A$ V，1901，395，fig． 8.
1722 On the lower part of a cuneiform tablet from Boǧaz Köy（no． 2429 c），of the New Hittite Empire：above are four and three lines of cuneiform writing．The linear signs appear to be as follows：（1）$\|^{\prime \prime \prime}$（2）．．［ figure，Bossert，Alt－anatolien，1942，p．163，no． 725.

## GRAFFITI

In the Palace buildings and on objects of the period，to which the inscribed tablets belong，there are very few casual graffiti：as if the use of sign－writing was not widespread，but the privilege of a literary class．Examples are，however，given of such graffiti in SMI．51，fig．27；PM I．636，n．2，616， figs． $603-4$ ；and AE refers to another（PM I．617）which has not been identified．

At Phaestos a graffito beneath the rim of a pithos in one of the＇later Magazines＇is published by Pernier，Mon．Ant．，1902，p．98，fig． 32 （PM I．617）．

The signs in these graffiti do not conform exactly to Linear A or Linear B；but some of them face to left as in A，and stratigraphically they belong to the Middle Minoan phase of reconstruction，about 1700－1600 B．C．They are，therefore，registered and discussed，with other inscriptions in Linear A，in SM III．

## TABLET INSCRIBED WITH SEAL-ENGRAVER'S DESIGNS

One complete tablet from Knossos is of entirely different character from the rest, though its fabric and technique are the same. It is 4 inches long, by $\mathrm{I}_{16} \frac{3}{16}$ inch wide, with the usual rounded ends, and bears three independent drawings, vigorously but carelessly incised.

1. To the left is what at first sight is the script-sign $\gamma$ written upside down in relation to (2) and (3); but faint traces to left of it show that it is the lateral petal of a large design, probably a sketch for an engraved seal-stone.
2. A heraldic design, as if for an engraved seal-stone, consisting of a floral or palm-leaf centre between facing animals, on their hind legs, with heads bending inwards. Between these heads is a combat group of three men; on the left a spear-man attacks the central figure, who retreats covered by a large shield of Minoan type, but turns to face him; on the right is a spectator standing with outstretched hand. These little figures are only $\frac{1}{4}$ inch high, but vigorously sketched.
3. A lean and sinuous quadruped with long tail advancing to left; it seems to have hoofs; the head looks backward, and a long wavy line in front of the body looks like a bull's horn; but the eyes and other features are obscure. This also seems to be a sketch for an engraved seal-stone, with one of the common bull-types.
The importance of this tablet is that it illustrates the use of clay as a draughtsman's material, as well as for script.

## SCRIPT AND SPEECH

Discussion of the early language or languages of Crete must begin from the Homeric description (Odyssey XIX. 173-7):
where it is disputed whether ${ }^{\alpha} \lambda \lambda \lambda \eta \delta^{\prime}{ }^{\prime}{ }^{\prime} \lambda \lambda \omega \nu \gamma \lambda \hat{\omega} \sigma \sigma a \mu \epsilon \mu \gamma \gamma \mu \epsilon$ ' $\nu \eta$ means 'each language distinct from other, in confusion' or 'a mixed language of different elements', like a lingua franca: the former presumes less expert linguistics in the poet. All interpretations must recognize that the passage is neither folk-lore nor fiction. Odysseus is speaking to be believed, and what he says must have been common knowledge to the original audience of the Odyssey, whatever its date. This description of Crete therefore is saga, reminiscence of a historic situation, not very remote, and the inclusion of Achaeans and Dorians prescribes limits of date.

Of the five component peoples, the Kydones may be accepted as the people of Kydonia and its neighbourhood, in the remote west ; the Eteokretes survived in historic times in the eastern peninsula, preserving a non-Hellenic language in the inscriptions of Praesos, until the sixth or fifth century в.с.

The Achaeans, Dorians, and Pelasgians are all immigrants, but at different periods. The Pelasgians in other Homeric passages are in the neighbourhood of the Hellespont (Il.II.840-3, cf. X. 429)-probably
between the strait and the mainland Thracians and Cicones-and as memories or survivals in Thessalian Argos (Il.II. 681-5) and at Dodona (Il. XVI. 233); they should therefore belong to one of the European intruders into the Aegean, like the Thracians of Attica and Naxos. The Dorians, in Homeric context, should be precursors of the 'Dorian Conquest' of the twelfth and eleventh centuries b.c., like the Heracleids of Rhodes (Il. II. 653); but they may in this passage be an anachronism of a post-conquest poet. They alone can be connected with any historic language, the Doric dialects of Greek which were predominant in the island in Hellenic times. The Achaeans were the tribes-or more precisely speaking, the dynastic leaders of the tribes-which are represented as dominant in the island-world and in peninsular Greece, from Thessaly and Leucas to Rhodes and the Calydnian islands off the Carian mainland, with a wide range of roving enterprise, into Pontus and the Levant, and settlements in Cyprus. Probably they have left their speech in the Greek dialects of Cyprus and Pamphylia, which are related to those of historic Arcadia. Xanthudides (Eph.Arch., 1920, 80) detects an Achaean element in Cretan Doric (cf. Thumb-Kieckers, Hdbk. d. Gr. Dial. I ${ }^{2}$ (1932), 146f.).

If the Eteo-cretes, like the Eteo-carpathii of Carpathos, represent a pre-Hellenic population, the archaeological evidence of the earliest Minoan settlements would appear to connect them with the early bronze age culture of Western Anatolia, which spread also widely into the islands and peninsular Greece, and along the north shore of the Aegean. But this was nowhere the earliest culture of the region, and cannot be assumed to have superseded that culture's language by Anatolian forms of speech. Many geographical names, however, both of natural features and of settlements, exhibit the phonetic elements $-m n-$, $-n d-$, or $-n t-$, and $-s s-$, which are frequent in Anatolian words, and in Greek names for animals,

 K $\nu \bar{\omega} \sigma \sigma о \varsigma, \Pi \rho \iota a \nu \sigma o ́ s, \kappa v \pi a \rho \iota \sigma \sigma o ́ s, \nu a \rho \kappa \iota \sigma \sigma o ́ s$. They are occasionally appended to Indo-European stems (Debrunner, Griechen, §40). These suffixes prove little about the stems to which they are attached that is not equally applicable to non-Hellenic stems with Hellenic suffixes. Many names, also, in Greek mythology, are not of Greek origin, and others have only been Graecized imperfectly-'A $\chi \sim \lambda(\lambda)$ eús,
 seem to have been transmitted from a pre-Hellenic repertory of popular tradition (saga), if not of 'palace' literature (Evans, $\mathcal{F H S}$ XXXII, 1912, 277-97).

It seems certain, therefore, that Greek speech-and probably two or more dialects of Greek-were introduced ready-made into Crete; that the latest arrivals, the Doric dialects, did not arrive much before the eleventh century, and are probably to be connected with the spread of mature Geometric style of decoration, and the copious use of iron and slashing swords; and that the Achaean dynasties, established, as their genealogies show, only two generations before the 'Trojan War'-i.e. about 1250 B.C.-and about five before the coming of the Dorians, were an important incident in a period of immigration which may have begun, on the mainland at all events, as early as the Fall of Knossosi.e. about 1400 b.c., the generation of the first Minos, of Cadmus' arrival in Boeotia, and of the establishment of 'Hellen and his sons' in South Thessaly; the great Aeolid families-not necessarily of 'Aeolic' speech-spreading through mainland Greece as far as Corinth and Pylos, in the generations before 1300 or 1250 B.C.

Though the use of Script B in Crete cannot be demonstrated later than the Fall of Knossos, and though the examples of similar script at Tiryns and Thebes are on vessels not appreciably later than that event, and probably earlier, the preservation of fully formed B script at Pylos until about 1200 b.c.
with sign-groups recurrent from Knossos, indicates that the same language survived here also. As there is also some recurrence of sign-groups between the B script at Knossos, the mainland varieties of it, the A script at Hagia Triada, and even the Pictographic and Hieroglyphic scripts, it is probable that there was also continuity of language as far back as the script-evidence goes. But as the Hittite languages show-and the experience of medieval Europe with international Latin-this is compatible with the existence of an official or dynastic language side by side with a literate language of general intercourse. The two names Xanthus and Scamander, for the Troad river, like the two names Asland and Douglas for a tributary of the Ribble, are a glimpse of such a bilingual phase, and it is notable that as the Lancashire names are Norse and Celtic, so the Troad names are respectively a Greek word and an Anatolian -nd-word.

It would seem, therefore, unlikely that the language of the Cretan scripts was any kind of Greek, and probable that it was related to the early language or languages of Western Anatolia-associated, that is, with the archaeological 'cultures' of Alaja Hüyük I ('proto-hattic') and of Hissarlik II and Yortan ('Luvian'). This is in accord with the grammatical structure, so far as it can be recognized on the tablets (p. 49). Though many of the sign-groups are compounded from distinct elements, usually of two syllables each, there is little trace of an organized system of grammatical suffixes, as in Greek. At most, a few signs are notably frequent as terminals; they seem to replace each other in the same grammatical position, and are, therefore, suffixes adhering to the stem, like the substantival-especially agentendings of the nominative in Greek $-\eta \rho,-\omega \rho,-i \sigma \tau \eta \rho,-i \omega \nu$, and personal endings like $-\kappa \lambda \hat{\eta} s$; and they give no clue to syntax. The rarity, however, of continuous texts, even in the copious B series, makes all conclusions about grammatical structure precarious (pp. 49-50).

The conditions for decipherment of any script are concisely stated by Bossert, H. (‘Santaš und Kupapa', Mitt. d. altor. Gesellschaft, VI. iii, 1932). No script can be deciphered without some bilingual aid, though something may be discovered by analysis of undeciphered texts as to the grammatical structure, word formation, and (with the help of numerals and ideograms) the transactions which the documents record. In earlier sections of this book, some contribution has been made on these lines. Bilingual aids include, besides texts repeated in an unknown and a known language, the foreign words in a known language which can be shown to be derived from a people of unknown speech. These include personal names, place-names, names of commodities, and other 'loan-words' resulting from intercourse.

Only rarely is a whole sentence in an unknown language transcribed verbatim. Examples are the magical formulae in 'Keftiu' speech, in Egyptian medical papyri (p. 70), and the list of 'Keftiu' names in an Egyptian schoolboy's exercise (p.70). But here it is a previous question whether 'Keftiu' denotes 'Cretan' at all.

There have been several attempts to assign phonetic values to the Minoan signs, and thereby to 'read' the scripts. The earliest attempt, by Kluge, H. (Die Schrift der Mykenier, Cöthen, I897), dealt only with Evans's collection of engraved seal-stones, Schliemann's 'inscribed' spindlewhorls from Hissarlik, and some Cypriote inscriptions. He assumed that the language was Greek; stressed superficial resemblances with Greek and Phoenician letters (pl.4); made much use of ideograms; and derived phonetic values from the initial sounds of the Greek names for objects represented. His transcripts are often unintelligible. But Kluge admitted the possibility (p.95) that the language may not be Greek, and that phonetic changes may have occurred in it since early Minoan times, as well as in the forms of the signs.

The Phaestos Disk had several interpreters: Melian Stawell, F., Burlington Magazine, XIX, 1911 (into Greek); Hempl, G., Harper's Magazine, 191 I (into Greek); Cuny, A., Rév. Ett. Anciennes, XIII, 1911, XIV, 1912 (Egyptian values); Thomopoulos, I., Пє $\lambda a \sigma \gamma \iota \kappa \alpha ́$, Athens, 1912 (Albanian); Rowe, A., Trans. R. Soc. Australia, XLIII, 1919, 142; AЭ7 A XXV, 1921, 176 (Cypriote); Macalister, R. A. S., $\operatorname{PEF}(Q S)$, 1921, 141 (Libyan); Reid, F. W., $P E F(Q S)$, 1921, 19 (a piece of music); Ipsen, Indogerm. Forsch., XLVII, 1929, I (Indo-Germanic). There is a complete bibliography of the Phaestos Disk in Pernier, L., Il Palazzo di Festos, I, 1935, I49ff. Other transliterations of the Pictorial Script are by Hempl, G., Stanford Univ. Publications, V, 19II, I-II; 1930, III; 1931, Iv; Stawell, F. M., Aff XXVIII, 1924, 120 (into Greek), A Clue to the Cretan Script, 1934; Burrage, C., Harvard Studies, XXXII, 1921, 177 (into Semitic); Gordon, F. G., Through Basque to Minoan, Oxford, 193 I.

Transcriptions of the Linear Scripts have been offered, into Albanian by Thomopoulos, I (Pelasgica, Athens, 1912) and by Sundwall, J. (Deutsche Litt. Z., 1930, 1748); into Sanskrit by Spann-Rheinsch, E. (Anthropos, XXV, 1930, 100-3); into Hittite by Cuny, A. (Rév. Ett. Anc. XL, 1938); into Sumerian by Newberry, J. A. (Harvard Studies, XLV, 1934); into Hebrew by Blaufuss (Festchr. Gymn. Nürnberg, 1928; Kaphtor, 1928); into Slavonic by Butevand (L'Énigme crétoise, Paris, 1937); into Etruscan by Ventris, M. (AyA XLIV, 1940, 494-500); into Greek by Persson, A. W. (Corolla Arch. Gustavo Adolpho dedicata, II, Rome, 1932; 'Schrift u. Sprache in Alt-Kreta'. Uppsala Univ. Årsskrift, 1930, progr. 3 (Asine graffito); Symbola philologica, 272); also by Daniel, J. F. ('Prolegomena to the CyproMinoan Script', Aff XLV, 1941, 249).

Aegean place-names, collected by Ktistopoulos, C. D., A Contribution to the Problem of the Minoan
 mary), 1946, include many non-Hellenic-and presumably pre-Hellenic-words, and several prefixes and suffixes. But Ktistopoulos has not explained how he obtains phonetic values for the Minoan signs, nor how he distinguishes place-names from the names of persons and deities in his lists.

It must be remembered that all attempts hitherto have been based on the small selection of tablets published in The Palace of Minos; and that most of those in Linear Script B are in Vol. IV, which appeared only in 1935. Sundwall, alone, has made use of photographs and transcripts of the tablets in Script A from Hagia Triada, and a few transcripts of his own, of Script B.
J. Sundwall's studies, mainly on Script A, are contained in numerous short articles. He has been inclined to assume large use of ideograms, to emphasize similarities between Minoan and Egyptian signs, and (like Evans) to discover ritual and mythical significance in 'commodity'-signs. But he was the first to recognize formulae and to attempt the analysis of sign-groups into radicals, prefixes, and suffixes.

Minoan and Anatolian. B. Hrozný (Archivum Orientale Pragense, XIV, 1943, 1-117; XV, 1946, ${ }^{158-302}$; signary XVI, 1948, 162-84) begins with the short inscription from Eleusis (PM IV, Suppl., pl. xLiI), and the Theban vase-endorsements, and deals with all B texts published in The Palace of Minos. He assumes connexions between Minoan scripts, Hittite hieroglyphics, and the proto-Indian script of Mohenjodaro-which he derives from North Syria or East Anatolia-and slighter contacts with the Phoenician alphabet, 17 signs in which he derives from Minoan signs, as was believed long ago by Diodorus (V.74). He further assumes that a large part of the early population of Crete was of Anatolian origin, though mixed with other strains, and dominated by an Indo-European element.

Accepting the Cypriote equations $f=t a, \mp=n a$, and giving, on the Eleusis inscription, a 'Hittite
or proto－Lydian＇value $j a$ to $\hat{F}$ ，he translates this group as＇dedication＇，showing＇very strong Babylon－ ian influence＇in Crete．But $\bar{F}$ is the regular ideogram for＇oxen＇and the same group recurs on B I3I as a proper name，frequent also at Knossos is the abbreviated form FVI（see Vocabulary）．Hrozný also identifies 旰 on $\mathrm{B}_{137}$（PM IV．695，fig．653）though 8 is a quite distinct sign．In Eleusis 1．2，Hrozný uses Hittite and Egyptian analogies to reach the transcription ta－ha－ba－pa which he recognizes as ＇Thebes＇，an＇Anatolian＇word．The last sign ח $\Pi$ he confuses with the Egyptian＇house＇sign；but it is a frequent phonetic sign（AB66）in Script B．Hrozný does not explain why a vessel inscribed＇dedica－ tion－Thebes－palace＇should have been found at Eleusis．

His signary confuses distinct Minoan signs；equates $\bigoplus$ with $\vdash, \overline{\}}$ ，and $\mp$（on Thebes 1 ）；identifies $\mathbb{1}$ with $\mathbb{4}$ and the Hittite sign for a＇king＇；takes $\uparrow$＇for a＇temple－name＇；confuses $\bar{i}$ with $T$ ，and makes the sign－group 晘커 $\bar{i}$ into the＇Babylonian loan－word Naggâru＇denoting＇a town in which there was a double－axe sanctuary＇：it was also a＇royal capital＇\＆A ．By similar ingenuity，the group $\uparrow \mid s+1$ 丰 （on 04．02．2－06．2：PM IV．790，fig． 764 b）becomes＇double－axe town＇Ba－lu－o－ga－s－ra－n，identified with Palaiokastro in Eastern Crete：but this place－name is medieval Greek＝＇old fort＇．

He regards most of the sign－groups as place－names，some Babylonian：＇Es is the creator＇，＇thy friend is Ana＇，＇the place of Isis＇，＇Baal is strong＇（comparing Turkish Bali－kasri and Greek Palaiokastro）： a recurrent place－name＇Misrun＇is indifferently＇Egypt＇，＇Knossos itself＇，and a Babylonian word mişrun＇boundary＇．

Enough has been quoted to illustrate Hrozny＇s method and its results．His general reconstruction of prehistoric Crete will be found in his Histoire de l＇Asie Antérieure，de l＇Inde，et de la Crète，Paris， 1947.

Minoan and＇Keftiu＇．Short texts in＇Keftiu＇speech，quoted in Egyptian medical papyri，have been thought to contain Minoan words：

1．An＇incantation against the disease tntkm＇in the language of the Keftiu＇．British Museum，no． 10059：Wreszinski，W．，Der Londoner Medizin：Papyrus，1912，no．32， 151 （text）， 192 （translation）； Friedrich，J．，Kleinasiatische Sprachdenkmäler，1932，XIV A， 145 （bibliography）；Wainwright， G．A．，Journ．Eg．Arch．XVII， 1931 ；Sayce，A．H．， $7 H S$ LI，1931，286；Collinder，B．，Uppsala Univ．Arsskrift，1933，B 3，5．The text is as follows：
sentē kepe wej＇ejmentere kekere
in the opening syllables of which Bossert，H．（＇Šantaš und Kupapa＇，Mitt．d．altor．Ges．VI．iii， 1932），detects the names of the Anatolian deities Sandon and Kybebe（Kybele）：v．below．
2．An＇incantation against the disease $s m k$＇：Wreszinski，Hearst Papyrus，no．170；Demel，H．，in Brandenstein，Sprachschichten，33．The text is as follows：
ebeksetesebesejze hmkt repej pewer＇smk．
Here the only Egyptian word is $h m k t$ ．But even here，if the formulae are really of Keftiu origin， the references to the＇Asiatic＇disease，and perhaps to two Asiatic deities，do not support a con－ nexion with Crete．
3．An Egyptian schoolboy＇s exercise＇on writing Keftiu names＇，on a wooden tablet（British Museum，no．5647；Max Müller，W．，Mitth．vorderas．Ges．，1900，6－9，pl．I，II；Peet，T．E．， Essays in Aegaean Archaeology（ed．Casson），1927，90，pl．xv，xvi），of the early XVIII dynasty， in hieratic script and＇syllabic＇writing，in which vowels are suppressed and a＇weak＇consonant， $y$ or $w$ ，is attached to each＇strong＇consonant，does not give the phonetic value of any Minoan sign，and consequently cannot be compared with any Minoan name－group．Of eleven names，
eight are followed by the determinative for 'man', as well as for 'foreign', and Peet regards the other three also as personal names. Two names, San-nefer and Sent nefert, are common Egyptian names, and another begins with Sen; another reads smdt 'dependents'. The name 'kš resembles the Philistine 'Achish' ( 1 Sam. XXI. Io); Bndbr may be $b n$ Dbr 'son of D.' though Peet doubts a Semitic name. The other names, 'šhr, Nsy, Purt, Rs, have not been identified.

For the connexion between the Keftiu and Crete, which is of old standing, see Hall, H. R., in Essays in Aegean Archaeology, 1927; Wainwright, G. A., Journ. Eg. Arch. XVII, 1931, 26; ЭHS LI. 1, 1931, LII, 1932, 1 ; Sayce, A. H., $7 H S$ LI. 286; Bossert OLZ, 1931, 303; Mitt. d. altor. Ges. VI. 3 (1932), the 'Keftiu' incantation (above); Brandenstein, W., PW. RE, suppl. VI, 1935, 165 ff ., 200 ff ., 'Die Sprachschichten im Bereich der Aegäis' in 'Germanen u. Indogermanen' (Hist. Festschrift, II, 1936, 29-44).

Minoan and Hittite. In the essay already quoted, Bossert, H., Mitt. d. altor. Ges. VI. iii, 1932 (cf. Sayce, A. H., $\mathcal{F} H S$ LI, 193I, 286), is primarily concerned with the identification of the names Šantaš (Gk. Sandon) and Kupapa (Gk. Kybebe). The former he detects in the Hieroglyphic Script, in the group consisting of a 'double branch' and a 'silphium' $\operatorname{sign}(S M \mathrm{I}, \mathrm{P} 24 c$, 101 $a, 102 a, 104 a, b)$ and in the first of these signs written separately (SMI, P ıor $c, d$; Mallia, H $12 a, b$; Gournia, PM I. 621, fig. 457 a) ; equating the 'double-branch' sign with Cypriote $V=s a$ and the 'silphium' sign with $\uparrow=t i$, and explaining phonetically the omission of the nasal between them. The occurrence of a 'double-axe' sign on SM I, P $24 c$ does not prove more than on P $102 a$, where it is separated from the sa-ti element by another sign and probably has phonetic value as part of the name-group. The equation with ti might go back to $\uparrow$ in Minoan script $(=A B 9)$; and sa to $Y(=A B 27)$; but the group $\uparrow Y$ does not occur either in Script A or in Script B.

He compares the Hittite sign (ए), a 'divine symbol' (p. II, fig. 3) with Minoan palmette panels which he regards as symbolic, and with the linear sign $\Omega=\mathrm{AB} 67, \mathrm{~A} 55, \mathrm{~B} 94 a$; but the latter has no sacral significance ( p .22 ) and probably no use as a syllabic sign.

Bossert compares 6 ( $=$ A 62) on the one hand with the Hieroglyphic sign with vessels slung or a pole (SM I, no. 132. P $70 b$; Phaestos Disk no. 14. SM I. 276, pl. xil-xiri) depicted on the Hagia Triada Sarcophagus (Bossert, Art of Ancient Crete ${ }^{3}$, fig. 74); on the other hand, with the Hittite sign for kar or karka, which certainly depicts the same object, and is the leading sign in the name of Carchemish.

The 'double-palmette' ornament, common in Minoan decoration, and identified by Bossert (1932, 11-12) with the Hittite ideogram for 'god', may be connected with the sign in Script A and B ( $=\mathrm{AB} 67$ ), but it only occurs in Script A within sign-groups ( $H T$ iga $I, b I$ ) with phonetic valuethough perhaps as a 'rebus' sign; and in B 520 it is a commodity sign followed by a numeral, and associated with another 'commodity'-sign : on a Minoan weight from Zakro it is also followed by numerals, and certainly denotes some unit-weight (Evans, Corolla Numismatica, 346). Evans regarded it as denoting a metallic ingot. On B 698. $I$ it is inscribed in a 'banner' sign following a personal name, and denotes a commodity, like other signs so inscribed (p.33). It is not, therefore, of much use as a clue to divine names.

The 'sacred knot' which is a common symbolic ornament in Minoan art, is equated by Bossert (1923, 12-13, figs. 5-7) with variants of the ankh-sign common to Egypt and Syro-Hittite symbolism.

But his nearest Minoan counterpart is a diagrammatic loop-sign (only on Mallia H. 17 a) : to which may be added the unique sign B 112 which is probably a variant of of and occurs in a sign-group with phonetic value. This adds nothing to Bossert's comparison.

The 'bucket and pole sign' (Bossert, 1923, 14, fig. 8), well represented on hieroglyphic seal-stones (SM I, fig. 69, 70 b $77 H S$ XIV. 338, fig. 57 b), may be the same as the 'manacle' sign or 'yoke' sign (Phaestos Disk no. 14; SM I. 276; =A 62); and may also be related to the Hittite symbols figured by Bossert. But in Script A the 'yoke' sign is an ordinary phonetic sign, always set upright, whereas the Hittite symbol is always horizontal.

Bossert compares a Hittite 'branch' sign, used before cult-titles of chiefs, with the pictographic 'branch' sign and the $\rangle$ sign frequent in ligatures in Script A (SM III : cf. Chapouthier, 36). The 'sacral' meaning of $\geqslant$ has been emphasized by Sundwall (1943); but the sign in Script A has become merely conventional, and occurs within sign-groups with phonetic value (p. 9). The Hittite 'step-throne' sign (Bossert, 1923, 19, fig. 12) may be connected with $母$ ( $=$ A 53 ) superseded in Script B by §. The 'singlebranch' pictographic sign ( $S M \mathrm{I} .140, \mathrm{P}_{4} b ; 132$, fig. $70 b ; 130$, fig. $67 c ; 132$, fig. $70 c$ ) is not a regular Hittite sign, and has nothing to do with the linear sign $\rangle=\mathrm{AB}_{17}$, $\mathrm{A}_{11}$.

These are very slight grounds for connecting the Minoan with the Hittite signary; and Bossert admits this (1923, p. 15); and as the closer resemblances are with the earliest Minoan signs, there is an interval of at least several hundred years between extant examples.

Other resemblances between Minoan and Hittite signs. There are, however, Hittite signs, not noted by Bossert, though included in his Hittite texts, which have at least formal resemblance with signs in Script B: the following are examples:



Compare also the 'commodity'-sign B 95 with Bossert, p. 42, fig. $25 a$, where it supports the 'divine'-
 novelties in Script B, and that none of them is represented in the Pictographic or Hieroglyphic Scripts. They may, therefore, have been introduced from the Hittite culture-area.

Minoan Linear Script and Cypriote Syllabary. The Syllabic Script of classical Cyprus is used both for Greek-a dialect related to Arcadian-and for a language which is neither Greek nor Phoenician. But the essay of Bork, F. ('Die Sprache von Alasyia', Mitt.d. altas. Ges. VI. I, Leipzig, 1930), on a bilingual Cypriote Greek inscription from a site near Amathus, shows that the Greek and the Cypriote text do not exactly correspond, even in the proper names, and that the correspondence between vowels also is only approximate ; 'A $\mu a \theta o v \sigma i ́ \omega \nu: U-m i-e-[t u]-s a-i$;'A $\rho \iota \sigma \tau \dot{\omega} \nu a \kappa \tau o s: A-r a-t o-v a-n a-k a-s$ šo-ko-o-še ; cf. Kretschner, P., Glotta, V. 260 ('Ovararópas: Onasa).

Other texts examined by Bork were already published: I, II by Meister, R., Sitzb. Preuss. Acad. d. Wiss., 1911, 166-9 (Ashmolean, from near Amathus); III, IV, Vendryes, J., Mém. Soc. Linguist., Paris,

XVIII, 1913, 271-320 (Louvre, from Amathus); Dussaud, R., Civ. Helléniques², 1914, pl. ix; V, Schmidt, M., Samml. Kypr. Inschr., pl. ix. i ; Sittig, E., Eph. Arch., 1914, 1-2; Hoffmann, O., Gr. Dialekte, I. 123, p. 63; VII-VIII, Sittig, E., Z. f. vergl. Sprachforsch. LII, 1924, 124-202 (with V, VI). They offer few indications of grammatical structure, and the proper names are Greek. They are not earlier than the fourth century в.с.

Even later, probably third or second century b.c., is a series of dedications by a potter on his wares, from a site near Athiénou (Pennsylvania Museum: Dohan Kent, Aff $A$ XXX. 249-58, 1926). Some are in cursive Greek script, some in cursive Cypriote; their content is the same, and they are all in Greek language. Evidently the Cypriote Syllabary was in continuous use, alongside the Greek alphabet, on perishable materials; compare the inscribed tablet (evidently wooden) held by a votive limestone statue in the Cyprus Museum (Voni no. 5009: Cyprus Museum Catalogue, 1899) of the sixth or fifth century в.c.

This Cypro-Minoan or Cypro-Mycenaean syllabary has been shown by Daniel, J. F. (AyA XLII, 1939, 102-3) to be more closely connected with Linear Script A than with Script B. Its origin is therefore reserved for discussion with Script A. But the resemblances between Minoan and Cypriote signs are so many and some of them so close that they seem to offer at least the foundation for a phonetic system. The more obvious of them are set out in Table $\mathrm{V} b$. Some of them have been already accepted as probable by Evans and Daniel.

## SUMMARY

The long development of linear scripts in the Aegean world may therefore be summarized as follows. Primitive marks of ownership, best illustrated in Cyprus, were supplemented, as representative art emerges, by arrow signs, snake signs, and rudimentary human figures. As in Egypt, where perishable materials are preserved, such signs were put upon wood, gourds, leather, and livestock. On amulets they begin to bear some relation to the wearer, and develop into seal-stones.

From Egypt, during the Middle Kingdom, the M.M. culture of Crete adopted many hieroglyphic signs, transformed them into Minoan style, and added indigenous objects; grouping them to express polysyllabic names or short phrases, and indicating their initial component. It is in this M.M. period, also, that linear signs were employed on masonry to denote the source or destination of the blocks.

When Egyptian intercourse waned, after the Middle Kingdom, and communication was established through North Syrian ports with Mesopotamia, the art of writing on clay gave a fresh direction to Cretan development, before linear pictography was superseded by cuneiform technique; and the latter never affected Minoan writing, except perhaps in the derivative Cypro-Minoan script. It was this adherence to linear draughtsmanship that permitted the peculiar facility of the Minoan linear scripts, and especially of the ' $B$ ' script of Knossos.

The Phaestos Disk, which is probably from south-western Asia Minor, shows a remarkable combination of ( I ) impressions from monosyllabic seals, (2) Mesopotamian punctuation by panel-divisions, (3) spiral prolongation of the row of punctuated panels, which recurs in the Cretan A script on the gold ring from Mavro-spelaio, and on the painted cups from Knossos.

These painted inscriptions, and painted graffiti on plaster, illustrate the flexibility of the Cretan linear scripts, and limit the significance of the technical peculiarities of the clay-writing, which has provided most of the evidence hitherto. The only monumental texts in Script A are one from Mallia, a few fresco signs from Knossos (A 22-4 in SM III), and the painted larnax from Trypeti (A 29).

The use of numeral signs, derived from Egypt, but modified for clarity, and supplemented by fractions and perhaps other measure-signs, begins in the Hieroglyphic phase and remains constant throughout.

In the Linear A script most of the signs are directly derived from the pictographic, but some are little more than abstract linear marks. There are many signs which are not known to occur within vocalized groups but only with numerals; and these may be ideographic, e.g. the 'poppy' sign. Those which occur in groups and also alone with numerals may be phonetic throughout, representing a commodity by its initial sound. Inscriptions in Linear A script include several kinds of transactions in commodities between a principal person and one or more subsidiaries. A few continuous texts on votive objects may be grammatical (SM III, A $1-7$ ).

The Linear B script was peculiar to Knossos originally, during the Later Palace period (L.M. II), but was introduced widely on the mainland during that period, and was still in use, almost unaltered, as late as the destruction of the Palace of Pylos (Ano Angelianos) about 1200 b.c. It combines many signs of Linear A origin with others derived from the Pictographic or even the Hieroglyphic series, and others again which are new, but of pictorial character. Almost all the texts are transactions in commodities, including human chattels-men, women, and children-but the formulae are different from those of script A, and simpler. Grammatical texts, devoid of numerals, are very rare, and doubtful. Though the tablets are more numerous, the B formulae are few. Though preserved in chests and boxes, they are almost all unbaked, and their contents do not seem to represent more than a single year's transactions, probably the last before the Fall of the Palace.

At Pylos also the formulae are few, and probably cover only a brief period of account. Other inscriptions from the mainland illustrate the free variation permitted by brush-work and rapid writing. A few groups, common to the mainland and Knossos, seem to be personal names.

In Cyprus primitive marks of makers or owners are separated by a long period from the fully developed variety of linear script derived from the Cretan, and more closely related to script A than to script B. The rare and brief texts are contemporary with many makers' marks on L.M. fabrics of pottery, some of which resemble those of the Greek mainland (L.M. III or L.H. III); but some are certainly of local make, and are found also on North Syrian and Palestinian sites. Some of the same marks are incised on North Syrian pottery, imported into Cyprus and Egypt.

A few short owner's marks on objects of Early Iron Age fabric connect this Cypro-Mycenaean script with the syllabic Cypriote writing of classical times, the simple linear forms of which seem to result from a phase of wood-carving before work was resumed on stone in the seventh or sixth century.

Finally, on one small series of dedicated clay vessels, from a sanctuary near Athiénou, the classical syllabary is incised in a curvilinear style resembling the 3 rd-2nd Greek letters on other vessels of the same dedication.

With this belated survival the long history of Minoan writing ends.

## INVENTORY

## OF THE TABLETS CLASSIFIED BY THEIR CONTENTS WITH CRITICAL AND EXPLANATORY NOTES

The tablets were numbered by Sir Arthur Evans (a) in general accordance with their find-spots ( $1-1063$ ); ${ }^{1}$ (b) thereafter classified under subsidiary sign-groups ( $1060-1383$ ); ( $c$ ) under principal groups in B-signary order ( $\mathrm{I}_{3} 84^{-1} 5^{12}$ ) ; (d) without apparent order ( $\mathrm{I}_{5} 13-68$ ). Supplementary lists have been appended ( $1569-1640: \mathrm{M} \mathrm{I}^{1} \mathbf{2 8}$; 126-38) of tablets omitted from Evans's numeration, but otherwise recorded: and of seal-impressions ( $1701-10$ ). These numbers are retained for the transcripts and on the collotype plates.

For easier reference, however, this Inventory has been supplied by Dr. Alice Kober, classified according to the matter with which each tablet deals, as indicated by its leading ideogram or 'commodity'sign, in the following main categories:

## Primary Groups

A. Inscriptions with the 'man' $\operatorname{sign}(\mathrm{B} 75)$.
B. " " "'woman' sign (B 76).
C. " ". "'sitting figure' $\operatorname{sign}$ (B 74).
D. 'Livestock' tablets exclusive of 'cattle' tablets (E, F, G, H).

E, F, G, H. 'Cattle' tablets (B 91 : further subdivided below).
I. 'Tree' tablets.
J. 'Cereal' tablets (B $89 a, b, c$ ).
K. Other 'commodity' tablets (B 88); 'Saffron' K d.
L. 'House' (or 'granary' or 'container' tablets) (B $94 a-f$ ).
M. 'Vase' tablets (B 80 and pictorial vessels).
N. 'Chariot' tablets and related subjects (B $117-20,122$ : and pictorial signs).
O. 'Adzes', ingots, arrows, swords, and smaller groups.

P, Q. Provisionally blank.
R. 'Containers', 'banner signs', \&cc. (B 94, 94e).
S. 'Value' signs ( $\mathbf{B}_{5} \mathrm{I}, 60$ ) and others.
T. Tablets with phonetic signs followed by numerals.
U. Tablets with sign-groups followed by numerals.
V. Tablets without ideograms, but sign-groups in compartments.
W. Provisionally blank.
X. Unclassifiable.
Z. Seal-impressions and endorsements.

## Subdivisions

In Group E and other groups where the tablets are very numerous, and many small distinctions must be recorded, the arrangement of the sign-groups (hereinafter 'words') and of ideograms on each tablet is indicated as follows.

[^0]Arrangement of Words: The word in large signs on the left (beginning) of an entry is called the 'principal': words following it in small signs are 'subsidiaries'. Where there are two registers ('lines') these are separated in this inventory by an oblique line. The description of subsidiary words as 'type III' or 'type V' refers to the 'cases' in Dr. Kober's article 'Inflexion in Linear Class B: 1. Declension', $A \mathcal{F} A \mathrm{~L}, 1946,268-76$. Hundreds are used to indicate the presence of one or more words.

0-100 all words are missing.
101-200 principal: no subsidiaries.
201-300 principal: subsidiary (type III).
301-400 principal: subsid. (type V)/subsid. (type III).
401-500 principal: subsid. (type III)/subsid. (type V).
$501-600$ principal: subsid. (type III)/subsid. (type V), word.
60I-700 principal: subsid. (type V): word/subsid. (type III).
$701-800$ principal : subsid. (type V : not III as in 301-400).
801-900 principal: subsid. (type III)/subsid. (type V), i.e. reverse of 301-400.
901-1000 principal: subsid. (type V)/no word.
Arrangement of ideograms preceded by words as above
With no register, or with changes in the upper register:
$a$ no register: (i.e. only one line) only $\widetilde{F}$ (B 9I male) with numeral.
$b$ two registers: upper $\widetilde{F}$ with numeral/lower blank. Probably not different from $a$.
$c$ no register: $\mathcal{F}$ and $\mathbb{R}$ with numerals.
$d$ two registers: $\mathscr{F}$ and $\mathbb{K}$ with numerals/blank. Probably not different from $c$.
$e$ as in $a-d$ plus $b^{\circ}$ with numerals.
o-IO. too dubious for further classification.
11-20. $\frac{T}{f}$ with numeral preceding as in $\mathrm{E} a$ and $\mathrm{E} b$.
2I-40. $\mathcal{F}$ and $\mathscr{T}$ with numerals preceding as in $\mathrm{E} c$ and $\mathrm{E} d$; for further subdivisions see $\mathrm{E} j$ below.
$f$ as in $a-d$ plus $\ddagger \underset{F}{\mp}$ (only found in later categories: nos. $5 \mathrm{I}-80$ below).
$g$ as in $a-d$ plus $\ddagger \frac{7}{7}$ and another sign (nos. 61-70).
$h$ as in $a-d$ plus (nos. $7 \mathrm{I}-80$ ).
$i$ as in $a-d$ plus $y$.
With similar changes in the lower register

$o$ as in $a-d$ plus 18 . $18 \mathrm{x}-90)$.
$p$ ", , , , X
$x$ unclassifiable, but of type E, usually fragments containing only words.

This classification of about 350 tablets in Group E immediately reveals the formula of each inscription, so that a drawing is only necessary for specific words or numerals; e.g. the tablet 1084 is:
(E) a 'cattle' tablet: (e) ends in $\mathscr{G}^{\top} T$; (22) contains both $\mathcal{F}$ and $\mathbb{X}$; (300) contains principal; subsidiary (type V) in upper register; subsidiary (type III) in lower: therefore inventoried as E e 322 , being (2) the second item in that subdivision.
N.B. In other principal groups the subdivisions $a, b, c \ldots$ refer to quite different arrangements of the appropriate ideograms.

## INVENTORY

In this Inventory the classification is followed by the Evans number ( $1-1710$ ) and the number of the collotype plate XIX-XCVII. Tablets marked * are inscribed on both faces. Dr. Kober is responsible only for the classification, not for descriptive details; and reserved freedom to vary it in later publications.

## A. Lists of Persons, Male

The lists A a or-03 with principals and subsidiaries, and A h, $\mathbf{i}$ where the 'man' sign is associated with other ideograms, show that these persons. were treated as commodities and subjects of transactions like the cattle in § E-H. It seems to follow that the 'man' signs in $\mathbf{A} \mathbf{b}$ or- $\mathbf{A} \mathbf{g}$ or refer to similar chattels; that the words which precede them denote one party to the transaction; and that the 'preambles' in A b or. 12, 20 A c or. 11 represent the principals in $\mathbf{A} \mathbf{a}$ or-03. There is no reason to identify the 'man' signs with the words which precede them.

## A a. Lists of principals and subsidiaries, tabulated, followed by $\chi^{\prime}$

A a or 40 XXII: transverse:
11. 2-5 same subsidiary: for 1.6 cf. A b or. 1. 20.
11. 7 -10 blank.

A a 1 I 604 XLIII: lengthways: subsidiaries written in.
A a 12606 XLIV: lengthways: subsidiaries written in.

## $A$ b. Lists of single evords, each followed <br> by $\hbar^{\prime}$

Abor ${ }_{1516}$ LXXXVII: transverse: 24 lines: in three paragraphs:
11. 1-2 preamble.

1. II 'total' 3 I.
2. 12 two words preamble.
3. 19 'total' 23.
4. 20 first two words cf. A a or. 6.
5. 24 traces of 'total'.

Aboz 1519 LXXXIX: transverse:
11. 1-8 more than one line lost: tabulated.
11. 9-10 blank.

1. II two names.
2. I2 'total without numeral'.
3. 13-14 blank. The record seems unfinished.

AbiI 603 XLIII Abi2 607 XLIII.
AbI3* $608 a, b$ AbI4 609 XLIII. No totals.

## A c. Tabulated lists of single voords with $\dagger^{\prime}$ : 'palm-leaf' form

Acor 1517 LXXXVIII: transverse: two items in a line:

1. ro 'total' 17.
2. II preamble.
3. 13 one word without numeral, perhaps signature.

Acoz $1_{520}$ LXXXIX: transverse:

1. 7 'total' 10 , therefore only preamble missing above.
2. 8 blank.
3. 9-13 fresh paragraph without preamble.

## A d: miscellaneous lists, written lengthways: larger numerals Cf. Ax

Ador 1518 LXXXIX: numerals $5,2,3,5$. 1.42 before $\lambda$.

A e lists, woord followed by $\bar{\chi}$ : with larger numerals

A e or 755 LII: $\boldsymbol{r}$ line; princ.; $\backslash$ - $\|$. Ae 02 M. 9 : fragment. Aex 826 LIX: 2 lines; princ.; subsid.; (1) | $\boldsymbol{\lambda}$ | ; (2) $\boldsymbol{\lambda} 111$. |
| :---: | :---: | A for 82 LIX 3 lines: list of princ. and subsid., with $\AA^{1}$.

## Ag. 'Total' followed by words: large numerals: lengthroays

Agoi 600 XLV.
Ago2 601 XCIV: same words as on 600 .

> A h, i,j. Entries with $\dagger$ associated with 'children', 'cereals', 'containers', छc.:cf. §R

Ah or 602 XCIV: 'granary' signs.
Ah 026055 lines: 'granary' (I signs.
A i or 597: $才$ preceded by (I (B 16).
Aj or 819: 'children' word: 'cereal' below.

> A $x$ fragments: perhaps like A for but with more lines

Axor 04 93. 3 lines; list of words: $\dagger$ in 1.3.
B. Tablets with 'Women' signs

The 'women' tablets have more complicated formula than the 'men' tablets in § A: (r) The 'women' sign is sometimes preceded or followed by phonetic signs which may be quality-marks, though some of them have numerals (e.g. Bn 05). (2) They are accompanied by the groups 8 同 and $8 \AA^{k}$ with small numerals (probably 'children' of either sex, with subdivisions by age). But the long list Bdor with 'totals' for women and children, and the smaller entries $\mathbf{B} \mathbf{c} \mathbf{0}, \mathbf{B} \mathbf{1}, \mathbf{m}, \mathbf{n}$, show that the transactions were as on the 'men' tablets.

## B a. Single line: word: 'rooman' sign

Ba or 632. Baoz 753: fragments.
Ba II 827: upper line: name followed by $\boldsymbol{\hbar}^{\prime}$.

$$
\text { Bb. Two lines: word and } \bar{\AA} \text { with numerals }
$$

Bbox 623 XLV: transverse.
Bbo2 618: lengthways.

## B c．Word followed by＇woman＇sign＇

Bcar 694：lengthways； 4 lines．
BC II 769：lengthways； 2 lines．
Bd．Word：woman：numeral：＇boy＇and＇girl＇ B dor 639 XLIII：transverse； 14 lines； 1.6 total．

Be．Women，children，and＇seated figure＇it（B74a）
Beor 87 ．
Beo3 9I XXIV．
Beoz 88 ．
Beo4 89 XXIV．

Bf．Like Be but fragmentary，so no＇rvoman＇ B f or 90：＇standing figure（B74a）克 and children．

## Bg，h．Women，children，and various ideograms

Bgo6 754．Bgo8 194.
Bgax $33^{8}$ XXXI： 2 lines；（1）princ．；（2）word and children．
Bhor 63 XXIV： 2 lines；（ 1 ）princ．；（ 2 ）women and children．
Bj or 739： 2 lines；（1）princ．；subsid．；women I／children I．I．
Bjo2 738： 2 lines；（1）subsid．；（2）［children］．
Bj II 638 XLV： 2 lines；differently arranged．
Bk or 640 XCIV：transverse； 4 lines； 1.3 children ｜ $\mid 11$｜${ }^{\prime}$ ．
B1ox 629 XLVIII：lengthways； 2 lines；women，children； other signs．

B $m, n$ ．Words：women，children，with qualification
Bmor 824 LVIII：lengthways；princ．；subsid．；（1）women and children；（2）children．PM IV． 718 ，fig． 690.
Bnor 612．XLIV： 3 lines；（ 1 ）princ．効！；$(2,3$ ）children．
Bno3 634：lengthways； 2 lines；（1）princ．；［children］；（2） children．
Bno4 6ro：lengthways； 3 lines；（ 1 ）$\ddagger$ ；（2）（3） 8 用． $8 \uparrow$ ．
Bno5 6r4：＂ 3 ＂
Bno6 780 LIII（3 lines）．

Bno8 624 XLVI： 3 lines；（ 1 ）princ．；（2）（3）明． $8 \uparrow$ ．


Bnix 616 LII： 3 lines．Bni6 627 LII： 3 lines．
Bni2 617 XL： 3 lines．Bn2x 6ri XLIV： 3 lines．
Bni3 619： 3 lines．
Bn 14 626： 3 lines．
Bn 22 631： 3 lines．
Bn 15 635：3 lines．Bn 24 636： 3 lines．
Bn $3^{1}$ princ．；women／children．
B n 32 501 bis： 2 lines；children［no $\mathbb{E}$ drawing：$\xi$ is doubtful］．
Bn 4 M 126： 2 lines，lower blank．

## 

B o or 828； 3 lines：（ x ）names；（2）（3）8用． 8 N ．
Booz 784 LIII： 3 lines；（1）names；（2）（3） $9 \Pi$ ． $8 \AA^{\kappa}$ and names．
Boo3 781 LIII： 3 lines；（ 1 ）name 一III；（2）（3）明． $8 \hat{\text { 人 }}$ ． Bo 04 783： 3 lines；names／children／defaced．

[^1]Bpoz 190.
B q or 829：fragments．
Btoi 825.

Btix 832.
Bt 21637 XLIV： 3 lines．
Bu ox 633 XLV： 3 lines．
Bvor 84 bis：1．I princ． 1.200 ［large numeral］．
Bxor 213 ： 1 line；unusual sign $\frac{1}{\dagger}(\mathrm{~B} 74 a$ ），cf．Bf．
B×02 321：cf．K c 21.
B×03 115：2 principals： 9 用． $8 \AA$ ．

## C．Tablets with＇sitting figure＇sign（B 74）$\frac{\mathrm{k}}{3}$ ： cf．Beor，B for，all transverse

For the＇sitting figure＇see Signary B 74．The long lists C a or－ C b or－03 are in the same form as those in § A and § B，and the entries with principal and subsidiary presume the same traffic： on $\mathbf{C d o x}, \mathbf{C f o r}, \mathbf{C} \mathbf{i o x}, \mathbf{C} \mathbf{j}$ or other commodities are included．

Ca．The＇sitting figure＇has no numeral
C a or＊ 799 （a）LV： 9 lines；a list of words，each with in $_{4}^{\prime}$ punctuation irregular；1．I preamble；1． 9 broken； PM IV．705，fig． 687 b，Suppl．Pl．Wxii．
799 （b）LVI： 5 lines； 6 blank；same list continued （11．9－13）；I． 13 damaged；no trace of total；1． 14 blank．
C a 02800 LV ：broken above： 6 lines；Il．1－5 list of words followed by＇sitting figure＇，some with numeral；in 1.5 the numeral 32 may be a total； 1.6 two words without figure or numeral；same handwriting on $\mathbf{C a}$ ox but not the same tablet．
C a 03 801 LV：lower part； 4 lines；no total．
C a 04803 LV ：lower part； 3 lines；1． 3 defaced．
C a 05804 LVII： 5 lines；1． 5 defaced．
C a $06805 \mathrm{LV}: 4$ lines．The upper margins of $\mathbf{C}$ a 05－06 show that there were at least two other tablets in this series：cf． the large＇total＇ 237 on C b o3．
C a 07＊ $806 a$ LV： 6 lines；1．I defaced． $806 b$ upper part； 2 lines； 1 ．I defaced．
C a II 802：4 lines；same hand as C a or－07．
Ca21 1626 LXXXVIII（ $=$ B 1707）：seal impression；这．

## C b．The＇sitting figure＇has numerals

C b or 798 LIV：tabulated；words with $\frac{5}{3}$ and numerals from 1 to 6；1． 10 Evans，Sundwall，and AEK read for fl．
Cbo2 1055 XCVII：in two parts； 9 lines；1．1 may be pre－ amble；in 1． 9 ＇total＇sign，word，and $\frac{i \pi}{4,}$ with numeral 213.
C b o3 807： 4 lines；（3）（4）blank；1．I defaced；1． 2 word；发 with numeral 237 ．
$C b-C i$ similar，all inscribed lengthways
Cbir ror XXIV： 2 lines；（1）words with $\frac{1 \pi}{3 /}$ and numeral 8； I． 2 blank．
$C c, d, e, f, g$ ．Principal，subsidiary：$\sum_{1 / 1}$ with numeral
Ccor 808 XCVII．
Cdo3 ${ }^{15} 5$ LXIV．
Cco2 814 LXXI．Cdo4 1634.
Cdor 817 LX．Cd058ir．
Cdix 8 r 6.

Cfor 823．Cfoz 810．Cgor 812．

## Ch．Troo lines，as in C c－g

Chox 809．Choz 779．Cho3 41 XXII．

## $C i, j$ ．Numeral combinations of commotif signs

Cior 819：word；$\vec{k}_{3}=\| \| H^{\prime}$.
C j or 778：LIII：transverse； 6 lines；list of names with com－ modities；（1）spout vase 180 ；（2）word only；（3）vacant； （3）（4）${ }_{31}^{1}$ ；（4）word only．

## D．Livestock Tablets：Oxen，Swine，Horses

For the＇livestock＇and＇cattle＇signs see Signary B 71．80－93， and for other signs used as ideograms to qualify them，pp．62－4． For the numerals and the＇percentage＇tablets，see pp．5r－3．
D a．Full lists of domestic animals，male and female，lengthways
Da or 903 LXVIII：complete； 2 lines；（r）princ．；subsid．； small cattle，（2）oxen，swine，horse，male and female，with numerals．PM IV．724，fig． 707 c ．
Da 02906 LXVIII：complete； 2 lines；princ．；subsid．；small cattle，oxen，swine，with numerals．PM IV． 724 ，fig． 707 b．
D a 03904 LXIX： 2 lines；princ．；subsid．；small cattle，oxen， swine．．．．
D a II 907： 2 lines；princ．；subsid．（in different type）；small cattle，oxen，swine，horses．PM IV．724，fig． 707 a．
D a 21909 LXIX：only swine and numeral：fragment；subsid． incomplete．
D a 22 910 LXIX：fragment；oxen；cf．D a 21.

## D b．Lists of swine

D b ox＊ 162 a XXVII；wide tablet；complete；inscribed length－ ways irregularly with very large numbers of small cattle（a） and swine（b）；perhaps a provisional reckoning，as the numerals overrun．
D b II 16I XXVI： 2 lines；［small cattle］，（ 1 ）swine／（2）swine， figs，vines（ p .60 ）．
Db2I 113 XXIV．Db 22 905．Db 23767 LII：fragments．
Dcor＊ $152 a$ XXV；$b$ XXVI：？transverse； 3 lines；words， horses，oxen，and small cattle．

## D d．Cattle only，both sexes

D d or 50 a XXII：lengthways； 2 lines；princ．；subsid．inter－ polated；（2）subsid．；$b$ XXIII ：similar $\mathfrak{K}$ ．$c$（on edge）name and＇horse＇sign．
De．Tabulated principals，subsidiaries，and oxen．Transverse
De or 911 LXX： 16 lines（ $14-16$ blank）；princ．and one or more subsid．；livestock signs with numerals；11． $1-2 \mathbb{R}$ ；
 perhaps two princ．；AEK．reads $\mid \neq \psi$ for $+T$ ．
De．Tabulated，principals，subsidiaries，and small cattle
De 02 9r2 $a$ LXII；$b$ LVI：transverse；（ $a$ ）ir lines；（ 1 ）single word；2－11 princ．；subsid．； $\boldsymbol{F}$ items；（b）1．I blank；（2） princ．；subsid．； $\boldsymbol{\%} \uparrow$ ；（3）＇total＇o $900 ;(4-9)$ blank． The＇total＇on（b）is less than the items（damaged）on（a）．

## Df．Only females

D for 915 LXIX：lengthways； 2 princ．；（1） $\mathbb{K}-$ ；（2） 2 subsid． $\lambda$－；first princ．repeated in 1.2.
D fir 1632 LXII：fragment； 3 lines；（1） $\mathbb{K}^{\prime}$ word；（2）word $\uparrow ;(3) \uparrow \ldots \bar{\Pi}$.
D f $2 \mathbf{X}$ 908： 1 line；princ．； 2 subsid．； $\boldsymbol{X}^{\prime}$ ．

Dg．Principals and subsidiaries with oxen and small cattle： only males，lengthroays
Dg or 914 LXVII：princ．； 2 lines；（1）subsid．；ơ $50+$ ； （2）subsid．； $\mathbb{F}$ 三ニ perhaps $\uparrow$ as on D for（915）．
D g II x63：last 4 lines（ 3,4 blank）；（1）of 70；（2）f 42 ； unusual order of signs．
Dh or 913 LXXVI： 2 lines；（1） 2 words $\mathcal{f}^{\prime} \ldots ;(2) 2$ words； first repeated from 1．1；$\AA^{1}$［word］．
D j．Commodities connected with cattle and other animals， lengthrvays
Djor 04－55： 2 lines；（1）princ．； 2 ideograms（B 100，？B 90）；
（2）ideograms（B $63 \bigodot$ with loop，B 99）．
Dj 02 04－63：［princ．］； 2 lines；（1）subsid．；B 100；（2）B $63 \because$ loop；2ll
Dj 03 04． 60 ：［princ．］；（1）subsid．；B $100 \ldots$（2）B $63 \because$ loop； $\begin{gathered}2 \\ 2\end{gathered}$
Dj 04 04． 56 ：princ．；（1）B 100；$\hat{f} \ldots$ ．．．；（2）B $63 \because$ loop； ${ }_{2}^{2} ;$ B 99.
Dj 05 04．53： 2 lines；（1）B roo；$\lambda ;$（2）B $63 \bigodot$ loop，${ }_{2}^{2} ;$ B 99.
Dj o6 04．64： 2 lines；（（ ）B roo；（2）B $63 \bigodot$ loop；${ }_{2}^{2}$ ．
D 1 II 04． 58 ：princ．；（1）subsid．；B 100；（2）B $63 \bigodot$ loop；${ }_{2}^{2}$ ．
D 12 04．54：fragment；？end of 04． 58.
Dj 13 04．59： 2 lines；（ 1 ）［subsid．］；B roo；$X$ ；（2）subsid．； B $63 \bigodot$ loop；${ }_{2}^{2}$ B 99.
Dj 14＊ 1528 LXXXIX：$(a) 2$ lines［B 100］；$\uparrow$ ；（2）B 63 $\because$ loop；${ }_{2}^{2} ;($ b）乌 B 99.
Dj 15 04．62： 2 lines；（1）B roo；（2）B；B $63 \because$ loop；${ }_{2}^{2}$ ．
D ${ }_{17}$ SM I，fig． 18 ．
Dj 21 04． $61: 2$ lines；（1）B 100；（2）subsid．；B $63 \because$ loop； on back 0 三三．
Dj 22 1564：princ．［2 lines］．
Di31 04． $5^{8}$ ：fragment；B $63 \bigodot$ loop．

## $D$ k．All with $X$ female，but various types

Dk or $33: 4$ lines（1． 4 blank）；11．1－3 cattle signs； 1.4 blank．
Dk II 954 LVII：list of words followed by $\AA^{\prime}$ ．
D k 21＊919：（a）list of words followed by $X ;(b)$ words； 1.2 only one sign．
Dk $3^{1}$ 156x：fragment；（ 1 ）word；（2） $\mathbb{X} \ldots$

## Dl：with Mof group

D1 ox＊394：transverse； 4 lines；（a）XXXIV；words； 1.4 horse head；（b）XXXIII：11．1－3［words］；11．2－3 \％；1． 4 blank．

D m．Horses＇heads with numerals and words
D mor 895 LXVI：lengthways； 2 lines；in each 3 horse－heads with numerals．
D n．Horse（ideogram）and saw，as on $D o$ ，but differently arranged D n or 144：fragment； 2 lines；words；1．I

Do．Lengthways，with horse and saw
D o or 900 LXXI：i line；subsid．
D o 02899 LXIX．D o Ix 897.
D o 21896 LXVII．
Doo3 1029．Do 12 1015．Do 22979.
D 0.04898 LIX．

## $D p, q$. List of woords and horses

Dp or 59 XXIII: lengthways; 3 lines; in each, 2 horse-items as in D 0 12, 21, 22, but without $E$.
Dqor 6r XXIII: transverse; 4 lines; list of words with horse ' ; in I. I the 'ship' sign $\triangle$ (B 67) in group.
D q II 156: ? transverse; 2 lines; name and horse; in 1.2 an odd variant.
Dr,s,t,u,v,x.Tabulated: principals and subsidiaries with horses and related commodities
Drox 902 LXIII: transverse; 12 lines; in each line princ.; subsid. (none in 1.8 ); horse ${ }^{1}$; signs $\mathbb{I}$; $\mathbf{6}$; numeral ${ }^{\mathbf{I}}=$ in 1. 3 two such entries.
D s or 49 XXII: lengthways; i line; princ.; subsid; ; $\boldsymbol{Y}^{\prime}$.
De II 901 : princ. (?); horse (fem.) = [word].
D 821 1570: fragment; princ. [horse].
D v or 1582: fragment; 2 lines; (1) subsid. ; horse; (2) subsid.
Dxor (347): = J d or; lengthways, complete; 2 lines; (1) princ.; subsid.; cereals; horse ${ }_{\| I}$ II; (2) princ.; subsid.; millet; $\bar{\beta}$; subsid.; $\bar{p}$.

## E. Tablets dealing with small cattle $\mathbb{F} \mathbb{X}$ (B 9r)

E a. No register (i.e. one line): only of (B gI male) with numeral
All words missing:
E a or 1379 .
Ea 03 1614.
E a 021609.
E a 04 1089.

## Ea 051088 <br> LXXXIV.

Principal: no subsidiaries:
Eaior 1355 (type III). E a 102 135I.
Principal: subsidiary (type III):

| E a 2011377. | Ea 207 M 22. | E a 2121078. |
| :---: | :---: | :---: |
| E a 2021196. | Ea 2081338. | Ea 2131081. |
| Ea 2031187. | E a 2091202. | E a 2141079. |
| E a 2041273. | E a 2101147. | Ea 2151195. |
| E a 2051363. | Ea211 1401. | E a 216 1091. |

Ea 2061299.
Principal (sometimes missing): subsidiary (III): subsidiary (V):
Ea 301 1194. E a $3061650 . \quad$ Ea 311 II43.
E a 302 1197. E a $3071137 . \quad$ E a 3121127.
Ea 303 rir6. E a 308 II34. E a 313 I382.
E a 304 1378. E a $3091132 . \quad$ E a 3141162.
Ea 305 1314. E a 310438 . E a 315 134r.
E b. Two registers: upper with numeral: lower blank Probably not different from E a
All words missing:
Eboi 1 597. Ebo2 ${ }^{2}$ 343. Ebo3 M15.
Principal: no subsidiaries: E b $101 \mathbf{1 4 4 5}$.
Principal: subsidiary (III):

| Eb 201 M 7. | E b 2101087. | Eb 219 |
| :---: | :---: | :---: |
| E b 2021227. | E b 2111288. | E b 2201108. |
| E b 2031251. | E b 2121289. | E b 2211224. |
| E b 2041114. | E b 2131170. | Eb 2221221. |
| E b 205 (=Ed 217). | E b 2141339. | E b 223 1080. |
| E b 2061514. | E b 2151191. | E b 2241082. |
| E b 2071275. | E b 2161313. | E b 2251083. |
| E b 2081238. | E b 2171315. | E b 2261350. |
| E b 2091268. | Eb 218 |  |

Principal: subsidiary (V) / subsidiary (III):
Eb301 1135. Eb $3021167 . \quad$ Eb 3031352.
Principal: subsidiary III / subsidiary (V): E b 4011172.
Principal: (1) subsidiary / (2) subsidiary:
Eb501 $1163 . \quad$ Eb502 1365. Eb 5031321.
Principal: (1) subsidiary / (2) subsidiary: E b 80 I 1333.
Ec. Principal: no register: both $\mathcal{F}$ (male) and $\mathbb{X}$ (female) with numerals
All words missing:
Ecor 1610.
Ec 031375.
Ec 051344.
Ec 02 1606. Ec 041345.
Principal: no subsidiaries: E c 1011373.
Principal: subsidiaries (III):

| E c 201925. | Ec 2061220. | Ec 2131204. |
| :---: | :---: | :---: |
| E c 2021225. | E c 2071205. | Ec 2141185. |
| E c 2031199. | E c 2081126. | EC 2151115. |
| E c 2041186. | Ec 2111282. | Ec 216 IIIO. |
| E c 2051198. | Ec 2121247. | E c 2171190. |

Principal: subsidiary V / subsidiary III:
Ec301 $1133 . \quad$ E c 3021145.
Ed. Principal: two registers: upper both $\%$ and $\mathbb{X}$ with
numerals / lover blank Probably not different from E c
All words missing:
Edor 1612. Ed 02 1372. Ed 03 1043. Ed 04 r6ir. Principal: no subsid.:

Ed IOI 1419.
Ed 1021492.
Principal: subsidiary (III):
Ed201 1239. Ed 215 1207. E d 2371208.
Ed 202 1426. E d 218 1388. E d 2381236.
Ed 203 1206. Ed 219 1213. Ed 2391324.
Ed $204{ }^{1515}$. E d 220 1296. E d 240 1261.
Ed 205 1188. E d 221 1267. E d 24 I $^{*}$ 1304 $a, b$.
Ed 206 1222. E d 222 1215. Ed 242 1305.
E d 2071255.
Ed 2081466.
E d 2091237.
Ed 2101124.
Ed 2111471.
E d 2121214.
E d $2133^{132}{ }^{\circ}$
Ed 2141262.
Principal: subsidiary (V) / subsidiary (III):
Ed 03 1643. Ed 302 1166. Ed 3041243.
Ed301 1192. Ed 303 1160. Ed 3051159.
Principal: subsidiary (III) / subsidiary (V):
Ed 401 1330. E d 403 1086. Ed 4051140.
Ed 402 1232. E d 4041141.

E E 11369 (no X). $\quad$ E e 121587.
Principal: subsidiary (V) / subsidiary (III):
Ee 321 1084. Ee 3221085.

E h．Principal：both $\mathcal{F}$ and $\mathbb{X}$ as in $E$ a－E d： 1 numerals（7I－80）
Eh 211602.
Eh 2 II 1148.
Eh III 1359.
Eh $\mathrm{H}^{\mathrm{E}} \mathrm{II} 1298$.
E i．Principal：both $\frac{\mathcal{F}}{}$ and as in $E a-E d$ ， Einf 671.
Eif2 1613.
Eix 1951. Ei 212937.

Ej．Principal：both $\%$ and $\mathbb{F}$ ：in lower line $\dagger 9$
Ej $2 \mathbf{1} 1358$.
Ej 221617.
Ej 231585.
Ej 24672.
Ej 25 1571．
Ej 26 1615．
Ej 27 138r．
Ej 2111268.
Ej 2121303.
Ej 2131270.
Ej 2211234.
Ej 2221217.
Ej 2231369.
Ej 2241254.
Ej 225 III2．
Ej $226 \times 362$.
Ej 2271287.
Ej 228 1260：
Ej 2511318.
Ej 3 II 1118.
Ej 3121272.
Ej $3 \times 3$ I 337.
Ej 3141154.
Ej 324 r 301.
Ej 325 rrog．
Ej 326 115
Ej 421 123r．
Ej 80 r 440.
Ej gor 47 bis $b$ ．
Ej 902447.
Ej 9 II 449.
Ej 315 Ej $921{ }^{1371}$ 127．
Ej 922 136r

Ej 322 1152．
Ej 323 п138．
E k．Principal：subsidiary：$\mp$ and $\mathbb{X}$ as in $E$ a－Ed： $1 \ddagger$ with numeral

Ekor 1593.
Ek 211600 ．
Ek 22 I603．
Ek 23 1592．
Ek $24 \times 1579$.
Ek 251366.
Ek 261356 ．
Ek 271380 ．
Ek 2211149 ．
Ek 2221604.

Ek 2231306.
Ek 2241244 ．
Ek 2251218.
Ek 2261300 ．
Ek 2271284.
Ek 228128 r．
Ek $229 \times 286$.
Ek 230 1291．
Ek 2311252.
Ek 232 1171．

Ek 233 rizor．
Ek $234{ }^{1150}$ ． Ek 235 1283． Ek 236 1374． Ek $237{ }^{1} 376$ ． Ek 238 IIO6． Ek $\mathrm{B}_{21} 1342$. Ek 3221157. Ek421 11 Th4．

E l．Principal：subsidiary： $\mathcal{F}$ and $\mathcal{R}$ as in $E a-E d: \mp$ and
E1 3211158.
Em．Principal：subsidiary： $\mathcal{F}$ and $\mathcal{T}$ as in $E$ a－Ed： $\ddagger$ 䓍 and 䬫 numerals

| Em211 1107． | Em 222 | 1280. |
| :--- | :--- | :--- | :--- |
| Em221 1316． | Em 223 | 1278. |

E n．Principal：subsidiary：$\widetilde{F}$ and $\mathbb{X}$ as in $E$ a－E d：

Enix 1589.
En 121584.
En 2 II 1228.
En 2211299.
En 2221230 ．

旱numerals
En 2231223.
En 3111122. En 224 1233．En 3121117. En 225 1360．En 3211120. En 226 1290．En 322 1119． En 227 1285．En 323 1121．

E o．Principal：subsidiary：$\frac{T}{F}$ and $\mathbb{X}$ as in $E a-E d$ ：

$$
1 \text { and }
$$

Eo 221 1235．EO 222 1101．

Ep．Principal：subsidiary： $\mathcal{F}$ and $\mathbb{X}$ as in $E$ a－E d， lower line $X$（zero）

| Epor 1100. | EP 2211097. |
| :---: | :---: |
| Ep $2 \times 1$ reg8． | Ep 22221099. |

$E x$ ．Unclassifiable fragments of $E$－tablets
Ex or 1598.
Exil
Exiox 1317．Ex23 M27，Ex $3_{10} 1415$.
Exio2 76．Exe25 1173 AB Ex $\mathbf{3 n}^{12} 1113$ ．
Exili 1414．（word on edge）．Ex 3131429.
Exxi3 1473．Exa26 1193．Ex 3141607.
Ex 115 1449．Ex227 M 5．Ex ${ }^{155}$ 1161．
Ex201 1404．Ex231 1276 ．Ex $316 \quad 1155$.

Ex202a 1440．Ex233 M io．Ex ${ }^{18} 81165$.
Ex 203 1271．Ex 234 1104．Ex 321686.
Ex 204 1326．Ex235 1422．Ex 322 1054．
Ex 205 1292．Ex236 1266．Ex 323920.
Ex 206 1469．Ex 237 1308．Ex 3241139.
Ex 207 1312．Ex $23^{8}$ 1417．Ex 325 931．

Ex2091212．Ex2401211．Ex 3311142.
$\begin{array}{llllll}\text { Ex } 210 & 1125 . \quad E x 241 & 1588 . \quad \text { Ex } 3321307 .\end{array}$
$\begin{array}{llllll}\text { Ex211 1490．Ex } 242 & \text { 1216．Ex } 3331309 . ~\end{array}$
Ex212 1123．Ex243 M 23．Ex 3341156.
Ex 2131226.
Ex 214 1199．
Ex 215 1203．
Ex 2161183.
Ex 217 1310．
E x 2181436.
Ex 219 1475．
Ex $2201277^{\circ}$ ．
Ex ${ }^{301} 45$ ．
Ex 302 1323．Ex $33^{6}$ 1131．
Ex 303 46．Ex401 1317.
Ex $3044^{2}$ ．Ex 8011253 ．
Ex 305 1405．Ex 802439.
Ex 306 1331．Ex 803441 ． $\begin{array}{llll}\text { Ex } & 307 & \text { r136．Ex } 8041332 .\end{array}$ Ex 3081168.

Ey．Fragmentary：names broken

Eyor 188.
Ey 021184.
EyII 1370.
E y 121128 ．
Ey 13 iro2．
E у 141248.
Ey 171357.

E y 18 i210．
Ey 21926.
Ey 241294.
Ey 25 M 24 ．
Ey $\mathbf{3 I}^{1} 1367$.
Ey $3^{2} 941$ r．
Ey 331146 ．

Ey 411169.
Ey 42 1636．
Ey 51 159r．
Ey $6 \mathbf{1} 1364$.
Ey 621648.
Ey 7143.
Ey 72 1061．

## F．＇Cattle＇－tablets： $\mathcal{F}$ or $\mathcal{X}$

F a－F l．Male with prefixes，followed by numerals

Faor 727 XLIII．
Fa $02{ }_{1} 1068$.
Fao3 $S M$ fig． 18.
Fan M130．
Fbor 1071.
Fb 021043 ．
Fbo3 ${ }^{1476}$
LXXVII．
Fb 041064
LXXXIII．

Fbo5ro6．
Fbo6 1072 LXXIV．
Fbo7 1075.
Fbo8 1074.
Fbo9 1369.
Fcoi 1077.
Fcoz 1326.
Fe $03 \quad 1076$ LXXVII．
Fc 041399.

Fdor 1066 LXXVII．
Fdoz 1068.
Feor 1067.
Fgor 1396.
Fhor 1346.
Fior 1243.
Fjoi 1646.
Fkoi $124^{\circ}$
LXXX．
Flor 1243.

Fo-Fs. Female $\mathbb{R}$ followed by two lines of entries

| Foor 924. | Fp 201922. | Fror 919 |
| :---: | :---: | :---: |
| Foxil 923. | Fpjor 747. | Fsor |
| Fozer 921 LXXI. | Fqoi 929. | Fto |

G. 'Cattle' Tablets: principal : two subsidiaries: $\mathcal{F}$ and $\mathcal{X}$ with $\frac{y}{6}$ followed by numerals: subdivided as in $\S \mathbf{E}$
Gaor 952. Ga302 930 LX. Ga 304950.
Gayor 943. Ga303946 LXIV.
G b. Like G a but no word in upper line: lower line,

Gbor 478. Gber 916.
Gc. Like $G$ b, but $\} \mathbb{X}$ follows $X$ in upper line

Geior 791.
Ge 102790.
Ge 103792.
Gc $\mathbf{3}^{3} 928$.
Gd. Like Ge but is followed by Hes
Gdor 923.
Gdo2 935.
Gd 03414.
Gd 302948.
Gd $\mathbf{3 0 3} 949$.

 Gf 301917 LXV. Gf 303938.
Gg 201 463 LXVI : unique formula.
Gh. Words before the ideograms
Ghor 932. Gh 1547.
$G x-y$. Variant formulae
GXII 1567.
Gx $3^{01}$ 1619.
Gy 201934.
$\begin{array}{llllllll}\mathbf{G} \times 12 & 1525 . & G \times 302 & 968 . & G \mathbf{y} 2 \times 1 & 1060 .\end{array}$

G× 14939.
Gy or M 2 I.

## H. Cattle-tablets: various formulae

Ha. Principal subsidiaries always the same (Type III)

Ha or $117 \%$.
Hag2 1176 LXXVI.
HaO3 ir8r.
Hal 041174 LXXVI.
Ha $05{ }^{1175 .}$
Hb. Subsidiaries (Type III): large numbers of male cattle
Hbor 1092.
Ha o6 1180 LXXXVI.
Ha of 1179 .
Ha 081178.

Ha 1 о 1386 .
large numbers of male cattle
Hbo2 ro93 LXXXIV.
Hb2I 1095 LXXVI.
Hbil 1200.
$\begin{array}{lll}\mathrm{H} & \mathrm{b} & 12 \\ 1209 .\end{array}$
Hbil 1311.
Hbill ${ }^{2} 33^{6}$.
Heor 1239 LXXXVI.

## I. 'Tree' tablets

Ia or 862 LXV: very broad, but written lengthways; 6 lines (11. 4, 6 blank); a spaced list of pictorial fruit-trees, \&c., with numerals: 1. I fig-tree (cf. ${ }^{\mathrm{Kx}}, \mathrm{AB} 46, \mathrm{~A} 27$, and pictographic $S M$ I. 220, no. 104) with numeral $1780 ; 1.2$ olive tree (cf. $\Psi$ AB 29, B 48); with 403; 1. 3 two other trees,
pruned, and B 95 (cf. $485,863.2 ; 864.1$ ); 1. 5, B 95 with 225. BSA VI, pl. I: PM IV 717, fig. 700.

I a 11 864: probably ruled like $863 ; 3$ lines; 11. I, 3 sign B 95; 1. 2 fig-tree ( AB 46 ) with same subsid. Cf as 862 . x.

Ia 21863 LXVII: lengthways; 2 lines; 1 . 1 words; 1.2 sign B 95 (402) and fig. (102) with same subsid. Ef as 862. 1. NB. The 'fig' sign $\%$ ( AB 46 ) recurs with numeral on K i 21 (866), X m 46 (865) and frequently in J i.

## J. 'Cereal' tablets with signs B 89 a, b, c 9 个') and qualifying signs

7a. 'Millet' signs, $\rangle$ with numerals preceded by one word Jaor 344 XXXI. J a 03350 XXXII. J a ir 998.
Ja al 356 XXXV. Ja 04346 XXXI. J a 12378 .
$\begin{array}{ll}\text { JaI } & 382 .\end{array}$
fa 5I-3. 'Millet' $>$ ' and 'Wheat' $\mathcal{Y}$ together
J a $5 \mathbf{I}{ }_{352}$ XXXII. J a 52 I057 XLVII. J a 53 M 14. fa $6 \mathbf{r}-3$. 'Millet' ${ }^{\text {p }}$ w with qualifying sign $\downarrow$ J a 6I 345.

J a 62 351.
Ja 631056 XLVII.
fb. 'Millet' " and other cereal signs preceded by troo zoords
Ob or-20. Principal: subsidiary ${ }^{\dagger}$ with numeral and other signs

| J b or 38 r . | Jb 05371. | J b 17375. |
| :---: | :---: | :---: |
| J b oz 366. | Jbir 339 XXXI. | J b 18358. |
| J b oz bis 04. 84. | Jbiz 349 XXXII. | J b 19355. |
| Jbo3 369 XXXII. | J b 15376. | J b 20380. |

J b 04372 . Jb $\mathbf{1 6} 391$.
$\mathcal{f} b 21-2$. Millet and wheat

Jb 22340 XXXI. Jb 5x 353 XXXII ${ }^{\text {PD }}$ D.

fc. Several entries
J C II 343.
J c 12 36I XXXII.
$\mathfrak{f d}$. Troo lines: various combinations of cereal signs
J d or 347 XXXI: 2 lines; ( 1 ) princ.; subsid.; cereals; horse ${ }_{\| I}$;
(2) subsid.; cereals.

Jdo3 348 XXXI. J d 07365 XXXII. J dir 362 XXXIII.
Jd 05357 XXXII. J d II 364 XXXII.

## fe. Miscellaneous

Jeor 342 XXXII. Jein 198. Je 15354 XXXIII.
Je 21 363: transverse; 4 lines ( 4 blank); ll. $\mathrm{x}-3$ separate entries.

## ff. Tablets beginning with ${ }^{4}$ Wls after principal

J f or I XIX: transverse; 13 lines (ll. II, 13 vacant); tabular list of words and cereals (B $95 b, c$ ); no word in 1. 12.
Jfir 13 XX: lengthways; 3 lines; list of cereal entries; in 1. 3 the same word recurs with different cereals.

Jf $124^{8}$ XXII: lengthways; 3 lines; 11. 1, 2 list of words with cereals; 1.3 princ.; subsid.; cereals.
Jf 135 XX: lengthways; 3 lines (1. 3 blank); princ.; 2 subsid.; cereals.
Jf 21 I4 XX: lengthways; 2 lines; names and cereals.
Jf 227 XIX: lengthways; 2 lines.

Jf 2315 XX： 2 lines．Jf 2416 XXI： 2 lines．
Jf $3^{1}$ 1645： 2 lines；names； 1.2 （B64．51）．
Jf 416 XIX： 2 lines；l．I princ．as in Jf 2344 ．
Jf 4227 XXI： 2 lines．Jf $43 \mathrm{M} / 8: 2$ lines；fragment．
Jf 4418 XXI：fragment．
Jf 45 32：fragment：？part of J f 44 ．
Jf 5x 390 ：fragment．Jf $\mathbf{5}^{2} 723$ ：fragment．
fi．Principal：two lines：various＇cereal＇combinations
Ji or＊8：（a）XIX；（b）XX；B 40 amphora．
Ji o2＊ 2 XIX：（a）cereals： 1.2 ＇vine＇（ AB 22 ）；（b）B 40 ；bowl．
Jio3 22 XXI：cereals and＇vine＇as in Jio2．
Ji 0425 XXI：（ 1 ）cereals；＇vine＇用（B62）；（2）＇overseer＇ （B76）体．
Ji in ${ }^{*}$ I9 XXI：（a）subsid．；cereals；用；［兩；（b）B40；bowl
Ji 12＊ 23 XXI：（ $a$ ）（1）cereals；用；（2）$\sqrt{\ddagger}$ ；（b）bowl 0 ．
Jix3 26：fragment；（1）word；（2）伂．
Jix 21 XXI： 2 lines；（ I ）subsid．；cereals；（2）$\sqrt{\hbar}$ ．
Ji $2 \mathbf{I}^{*} 4$ XIX：princ．； 2 lines；subsid．and cereals．
Ji 22＊20：fragment：（a）${ }^{\boldsymbol{W}}$ ；；（B51）；（b）bowl
Ji 233 XIX：princ．； 2 lines；subsid．；cereals；1． 2 板．
Ji 24 If XX：princ．； 2 lines；（1）cereals；甬；（2）subsid．； cereals．
Ji 3 I 12 XX：fragment； 2 lines；（1）fig．${ }^{\text {kx }}$ ；用；（2）cereals．
Ji $3_{2} 17$ XXI： 2 lines；（ 1 ）cereals；（ 2 ）板屚。
Ji 33＊ 24 XXI：（a） 2 lines；（1）cereals；$\hat{\gamma} \mid$ 板；（2）cereals 用； （b）bowl $\bigcirc$ ．
Jj oi＊${ }^{51}$ ：（a）XXII：cereals；（b）XXI： 2 lines；cereals；$\bigcirc ; T$ ．
Jj 1x＊ 160 ：transverse； 4 lines；（a）XXVII 1．I blank；11．2－4 tabulated names and cereals；（b）XXII 11．1－4 tabulated cereals；names missing；$\square \top$ ．

## fk．Wheat－sign $\{$

Jk or 74 II LII：transverse； 4 lines；same word．
J 1 or 760 ：fragment； 2 lines．

## f $m$－ $\mathfrak{y}$ r．＇Vine＇－sign角

J m or 840：transverse； 5 lines；tabulated．
Jnor 462 XXXVI： 2 lines；words；1． 2 （AB 50）with numeral．
Jp or 1058 XLVII： x line；princ．；subsid．；cereal（B 95 a）＊＊． J P II＊456：fragment；（a）cereals；（b）（B 95 a）＊＊unusual numerals．
Jq or 452 XXXV：transverse； 3 lines；words with cereals p
Jror 464 XXXVI：lengthways； 2 lines；princ．；subsid．； cereals；rare sign；AB 34 ．
J r 1 II 5 I9 XL：transverse； 3 lines；words；cereals；BA 34 ．

## 75．＇Cereal＇zoord 9 T zoith 数

Js or 1633：fragment； 3 lines（1． 3 vacant）；（B 51）；$\%$ ．
Js oz 34： 2 lines．
J 8 II 955 LX：transverse； 3 lines．
J 812 513：transverse； 3 lines．

## K．＇Cereal＇tablets with＇impaled triangle＇sign（B 88）本 transverse lists

K a or 749：ir lines（8－1I blank）；tabulated words（type II） with $\overline{4}$ and numerals．
K $\mathbf{a} 02$ 04．66： 3 lines．
K a II 843 LVII： 5 lines．
Ka2I 165 XXVI： 3 lines．
K a 3 I 508 bis： 2 lines；paragraphed；cf．§ R．
Ka a 4i－3．Only one entry
K a 4 I $35:$ ：line；word and 本．
K a 42 551：x line；same word as K a 4r．
K a 43 71： 1 line；word．
K a 5 I 132：unusually large numeral；cf．K a 21.
K b or＊777：（a）LIII：lengthways； 3 lines；tabulated words （type I）；（I平；（b）I line；word．

## Kc．Ideogram 平，T with numerals

K cor 842 LXIII： 3 lines；preamble and words；平 and $T$（AB6）．
KexI 668 XLVIII：lengthways； 2 lines；words；平，$T$ ．


K c 41845 ．
K c 4204.65.
Kc 61847.
Kc 62848 ．
$K d-K g$ reserved
Ki ox 157： 2 lines；（ 1 ）word，＇total＇本；（2）cereals．
Kj．Tablets voith 平 and＇saffron＇signs ligatured MMMMy
Kj or $852: 2$ lines．K $\quad \mathbf{j} 02853$ ．
K j 03＊ $85 \mathrm{I}: 2$ lines；（a）transverse；（b）numerals．
K j $\mathbf{I I} 854$ LVI： 4 lines（1． 3 vacant）．
K $\mathrm{j}_{21} 669$ XLVIII：lengthways； 2 lines；words 本举畄M；cf． Bx or．
Kj 22670 XLVIII：lengthways； 2 lines；as in K c 4 ．
$K k$ ．Saffron tablets with pictorial sign

Kk or 267.
Kk 02269 XXX．
Kk 03272.
Kk 04276.
Kk 05278.
Kk 06279.
Kko7 M138．
Kkir 857 LXIV．
Kk 12858 LXIV．
Kk21 277：pictorial saffron； p1．
Kk 3x $\quad$ Kk 6x 859 LXIV：saffron；2． $3^{1}-268$ XXX：pictorial saffron；$\dagger$ ．
Kk $322^{271}$ ：pictorial saf－Kk8x 860：saffron； $\mathfrak{b}$ ； fron；${ }^{\top}$ ．
$K l, m, n, o, p, s, t$ ．Lists of names with sundry commodities
 1． 6 saffron．
K m or 1630：transverse； 4 lines（ 1.4 blank）；$T$ ．
K m II 685 XLIX：princ．；subsid．；$T$ ．

K m $124^{21}$ XXXIV：princ．；subsid．；$T$ ．
K m 2I 465 XXXVI： 2 lines；princ．；subsid．；$T$ ．
K m 3 ${ }^{*}{ }^{*}{ }_{153}$ ：transverse； 3 lines；（a）words；（b）$T$ ．
K o or 867 LXIII：transverse； 8 lines（11． 7,8 blank）；tabulated names with 11．2， 3 fig． $\mathcal{Y} ; 11.2,3$ 本．
K o II 866：fragment；［words］${ }_{2}^{2 l}$ ．

K s ox＊457：（a）word；（b）cereal；${ }^{\mathbf{p}}$ ．
Ktoi 46 I XXXVI： 2 lines；subsid．；cereal？

## L．＇House＇tablets，with granary or container signs

B 94 b，c，d（p．6r）
L a．Container B 94 b


## L b．Container B 94 d

Lbor 679．Lbir 678 LII．Lbi2 679．Lbi3 675 LI． L c．Container B $94 b$ woith $T$
Lcor 415 XXXIV．Le 02416 XXXIV．

## $L$ d．Principal：two subsidiaries with container B 94 d

Ldoi 674 XCVII．Ldin 676 ．Lden 673 XXII．
Le．Principal：two subsidiaries：container B $94{ }^{b}$
Leor 9r7．Leir 418 XXXIV．Lei2 $423 a, b$ ． Lf．Container B 94 c with ${ }^{\text {p }}$ p on cover
Lfor ${ }_{519}$ XL．Lfoz $57^{8}$ ．
$L g, h, i, j$ ．Unusual formulae woith containers
Lgor 680．Lior 419 ．
Lj $02{ }^{1} 532$.
Lhoi ${ }^{1536}$ ． $\mathbf{L} \mathbf{j}$ or 153 I XC ：transverse．
M．＇Vase＇tablets；with pictorial vessels（Table Va）
Ma or ${ }^{113} \mathrm{~L}$ ：ine；word；ligature ${ }^{7}$ ；amphora．
M a 02＊707：fragment；（a）amphora；（b）numeral．
Ma03 706 XXXVII：princ．；subsid．；amphora；${ }^{\text {o }}$ above．
Ma04 703 L：${ }^{7}$ ；amphora．
Ma05710 XXXVII： 7 over amphora．
Mani 701 XXXIX：［princ．］；subsid．；amphora．
Mb or $7_{14} \mathrm{~L}: 2$ lines；（ I ）subsid．；（ 2 ）${ }^{2}$ ，separately；amphora．
Mbo2 726 XCIII： 2 lines；subsid．；（2）${ }^{2}$ ；amphora．
Mbo3 717： 2 lines；（ 1 ）princ．；subsid．；（2）subsid．；${ }^{72}$ ； ［amphora］．
M b II 702： 2 lines；（ 1 ）（2）princ．；subsid．； 4 ；amphora．
Mc or io XX： 3 lines（ 1.3 vacant）；（1）（2）amphora．
M d or 705：3 lines；（1）princ．；（ $\mathrm{x}-3$ ）subsid．；${ }^{7}$ ；amphora．

M f or 776 bis：fragments；（a）amphora；（b） $\boldsymbol{f}$（ AB 60 ）over cup．
$\mathbf{M g o r} 774$ ：word； $\boldsymbol{f}$ over cup． $\mathbf{M g o 3} 775$ ：word； $\boldsymbol{f}^{\boldsymbol{f}}$ over cup．
Mgo2 776：［word］； $\boldsymbol{f}$＂，$\quad$ Mgo4 877：word； $\boldsymbol{f}^{4}, \quad$ ，
Mhor＊71I：（a）amphora surcharged $H^{\prime}$（b）numeral；颈 numeral．
M h 02＊708：fragments；（a）amphora $\mathrm{H}^{\prime}$ ；（b）numeral．
Mi or 700： 2 lines；（ I ）（2）amphora；large numerals．
M j or 873 LXI！lines（ $\mathbf{1}-3$ ） 2 ；amphora．

Mkor 974：fragment；amphora．
M 1 or 436 XXXV ：fragment［vessel］．
M111 746 L：fragment；stirrup vase．
Mmor 704 L：fragment；amphora．
Mnor 875 LXV tranverse； 6 lines；tabular；11． $1-5$ same formula after diff．words； 1.6 words；vessel．
Moor 872 LXI：transverse； 3 lines；words；11．1， 2 bull＇s head；1． 3 ＇Vapheio＇cup．
M p or 712 XXXVII： 1 line；amphora；bowl．
M q or 93 XXIV：r line；pile of metallic vessels．
Mror 434 XXXV： 2 lines；words；metallic vessels．
M s or 740 LI：transverse； 6 lines（1． 6 defaced）；words with various vessels．

N．＇Chariot＇tablets and accessories：cuirass：ingot $N$ a．With same long formula

Na or 04．or．
N a 0204.03.
Na 03 04． 04.
N a 0404.05.
Na 05 04． 06 （3 lines）．

N a 0604.68.
Na 0704.07. N a 08 04． 08. N a 09 04．13． Nalo 04． 14. NaII 04． 17.

Na 12 04．81．
N a $130_{4} \mathrm{~N}_{3}$ （3 lines）．
Na 14 04．II．
Na 15 04． 29.
N a $16 \quad 04.69$.

## $N$ b．Formula $\mathrm{H}^{4} \oplus, \varepsilon^{\circ} c$ ．

N b or 04．16： 2 lines；another inscription．
N b 02 04．50： 2 lines；another inscription．
N b o3 04．02： 2 lines；inscription．
N b 04 04．12：fragment；inscription；chariot．
N b 05 04．22： 2 lines；long inscription．

## N d．Formula varies

N d or 879 LXVI： 2 lines；long inscription；chariot．
N d 02882 LXVI：I line；word；chariot．
N d 03884 LXVI：I line；word；chariot．
Ne．Chariot body only：principal；subsidiaries

Neor 04． 18.
Ne 0204.26.
Ne 03 04． $3^{6 .}$
Ne $04{ }^{04}{ }^{20}$
（4 subsid．）．
Ne 0504.21.

Ne 0604.27
（long inscr．）．
Neo7 04．71． Ne 08 04． 19.
Ne 0904.23.
N e 10 04． 25.

NeiI 124.
Ne 12885 LXVI．
Ne 13886 LXVI．
Ne 14887.
Ne 15889 LXVI．
Nfor 888 LXVI．

Ng or 890 LXV：transverse； 3 lines；（1）（2）chariot body； （3）word．

Nj－k．Various＇chariot＇formulae

N j or 285 ．
Njo2 $24^{\circ}$ XXVIII．
Njix 1651．
Nj 12262 XXIX．
Nj 21226 XXVIl．
Nj 31217 XXVII．
N j $\mathbf{3}^{2} 230$.
Nj 33243 XXIX．
Nj $3423^{8}$ XXVIII．
Nj 35239 XXVIII．
N j $3^{6}{ }^{263}$ ．
Nj $37{ }^{261}$ XXIX．
Nj $3^{8}{ }_{260}$ XXIX．
N j 39＊ 256.
Nj 40＊ 255 XXIX．

Nj 41235.
Nj $42{ }_{23}{ }^{2} 6$ XXVIII．
N j 43＊${ }^{237}$ ．
N j $44{ }^{253}$ ．
Nj 45233 XXVIII．
N j $46{ }^{2} 54$.
$\mathbf{N} \mathbf{j} 47^{*}$ 252：（a）XXVIII；（b） XXIX．
N $\mathbf{j} 4^{8}{ }^{251}$ ．
N j $49{ }^{250}$ 。
Nj 50234 XXVIII．
Nj $5 \mathbf{1}{ }^{1644}$ ．
N j 6I 245 XXVIII．
Nj7I 244 XXVIII．

N $j$ 85．Cuirass cancelled by ingot
Nj 8x 247：cuirass cancelled by ingot．
Nj 82246 XXIX．
Nj85．Chariot and ingot
Nj 85249 XXIX．Nj 86248 XXXI．
Nk．Chariot－horse and savw
Nk02 264 XXX．Nko7＊218：（a）XXVII；
Nk 03＊ 242 ：（a）XXVIII．
Nk 0423 2 XXVIII．
Nk 05232 XXVIII．
Nk 06224 XXVIII．

## $N l$ ．Cuirass inscribed $\because(\mathrm{AB} 24)$

Nior 238 XXVIII．N1ix 266 XXX：AB 24.
N121227 XXVII：whip＊（（B 18）．
N 13 229：word；cuirass；whip．
$N m$ ．Horse，vohip，no cuirass
Nm or＊225：（a）XXVII：chariot horse whip；（b）ingot．
Nmo2 230 XXVIII．
N m $04{ }^{241}$ ．
$\mathrm{Nm}_{\mathrm{ol}}{ }^{221}$ ．
$\mathrm{Nm} 05{ }^{1628}$.
$N q, r$
N q or 257 XXIX： 3 lines；（ 1 ）word；chariot；（2）word； $\mid$ numeral；（3）blank．
Nror 258 XXIX： 2 lines；（1）word；粕（B 56）；cuirass；（2） words．

Nu or 04．49：足．Nuo8 04．34．NuI7 04． 42 ：

Nuoz 04．15：f．Nu0904． 47 ．
Nuo3 04.40 ．
Nu 04 04．37：邑．
Nuo5 04．39：母．
Nuo6 04．48： $\boldsymbol{f}$
NuI8 04．41．
Nuo7 04．31：\＆f．Nux6 04． $3^{6}$ ．
N v 6r 894：the large wheel－tablet；transverse； 4 lines；princi－ pals and subsidiaries followed by wheel and saw．
Nx or 04．91：fragment；word．
N X 1 I 04．09：fragment；chariot．
N x 12 04．10：fragment；chariot．
N x 13 04．15：fragment；chariot．
$N x 2 I-3$ ．Fragments with $\Upsilon \Psi$ 同；$c f . N u$ or


## $N \times 3 r-42$ ．Chariot fragments

Nx $3^{1} 883$ LXVI．
N×4x 223 XXVII．
N x $3_{2} 886$ LXVI．
Nx $4^{2} 219$ XXVII．
Nx 33 88ı LXVI．
O．Adzes，ingots，arrows，swords，and metal objects Oa．Adzes
All found together in remains of a box：restored by A．E． Kober，AYA XLVIII（1944），64－74．
O a or 493 XXXVIII：princ．；subsid．；adze with $\mathcal{f}$（ AB r）．
Oa oz 494 XXXVIII：］princ．；subsid．［

O a 03495 XXXVIII：princ．；subsid．；adze．
Oa 04496 XXXVIII：princ．；subsid．；adze．
O a o6 497 XXXVIII：princ．；［damaged］；adze．
Oa of 498 XXXVIII： 2 lines；princ．；subsid．；adze．
O a 09499 XXXVIII：＇total＇；adzes（215）．
Oa II 437 XXXV：word；ingot with numeral．

$$
O c, d, f, h . \text { Various objects }
$$

Oc or 95 XXIV：casket？（B 105）．
Od or 04． $82: 2$ lines；arrows．
Of or 04．81 bis：javelin．
$\mathbf{O h}$ or＊ 734 LI ：（a）（b）ingots，cancelled by signs．
Oh II 520： 3 lines；word；；ingot or container（B 94 c ）．

## Oj．Balances

0 jor $73^{\circ} \mathrm{LI}$ ： I line and ingot；balance；${ }_{2}^{2}$ ．
Oj Ix 733 XXXIII： x line；ingot（cancelled）；balance．
Oj2I 732 LI ：i line；word；balance．
$\mathrm{Oj}_{3} \mathrm{I}^{\mathrm{I}} \mathrm{m}^{\mathrm{I}} \mathrm{LI}$ ：fragment；balance．

## Ok．Swords．Ok or－19

Three＇sword＇tablets were all found together in the SW． corner of the＇Domestic Quarter＇，above the plaster floor of a small passage having fallen，in chests with clay－sealings，from a store－room opening on the upper landing of the Entrance Staircase．Their relative date is fixed by pottery（a）of mature LM I $a$ class below the plaster floor，（b）of mature LM III $a$ of the Reoccupation Period，above the tablets，and separated from them by 25 cm ．of earth．The sword－types are discussed on p．57：cf．PM IV．854－7．

These tablets form a single series，with a longer formula than usual，following the principal word which is preserved only in B 1540,1547 ，and 1548 ；cf． $653,1238,1393$ ．The order of the five subsidiary words varies，and they are not always all present． Compare the subsidiary words on the Chariot tablets，§ N．The

Ok or 1540 XC：princ．；subsid．；sword；numeral．
Ok 02 1548： 5 words；sword．

Oke4 1566 ．Okix 1556 ．Oki8 1542 XC．
Ok 05 1547．Ok 12 1557．Ok 19 1544 XC．


Oko8 1559 ．Ok $15{ }^{1550}$ ．
Ok 09 154 XC．Okl 161545 ．
O m．Goat＇s horns：cf．Dj 05－13
Omor 04．51．$\quad$ O m O2 04.52.

> O n-O q. Bags, loom, cage

On or $736 \mathrm{LI}: 2$ lines；words； 1.2 i bag（B 114）．
O o or 876 LXI：words；satchel．
Op or 490：fragment；？loom（B 48）．
Oq or 96：fragment；cage（B 94 f）．
R．Containers，＇banner－signs＇，\＆c．，且（AB66，B 94），\＆c． $R$ a．＇Banner signs＇$\prod_{1}$

Raor 764.
Raoz ${ }^{761}$ ．
RaII 491．

Ra12 M12．
Ra2 ${ }^{565}$ ．
Ra 3 ${ }^{\text {T }}$ 513：（a）XXXIX．

Ra4 588 XLIV：lengthways； 3 lines．
Ra 51 1638：lengthways； 3 lines．
Ra 61 654：transverse； 5 lines；words，with numerals．
Ra71＊1649：（a）b－s，words；（b）word， $\mathrm{b}-\mathrm{s} ;(c)$ word．

## Rb．Pointed covers

Rbor ${ }_{571}$ XLII．
Rboa 572：duplicates；princ．； 4 subsid．；sign；＇pointed cover＇ （B 94e）．

Rbo3 ${ }^{871}$
LXVII．
Rbo4 583 XLII．
Rbo5 579 XLII．
Rbo6 1009．
Rc－h．＇House＇sign or container
Reor 596 XLV．
Reoz 589.
Rce3 ${ }^{587}$ ．XLVIII．
Rc 04＊598：（a）XLV（SM
I．47，fig．23，edge）．
Rdor 599 XLV．
Rbo7 649 XLV．Rbi2 576 XLV．
Rbo8 573 XLII．Rbl3 577 XLV．
Rbog 585 XLII．Rbi4 580
Rbio 574 XLII．Rb2x 578 ．
RbII 575 XLV．
$R i, j$ ．＇Banner sign＇or container B 94，sometimes surcharged
Riox 536： 3 lines；（1）（2）围；（3）周 surcharged；words．
Rj or 642 XLVI：transverse； 4 lines；words； 1.2 周．
Rj 0264 X XLIV：lengthways； 5 lines；（1）words；（ $2-4$ ）words with 国； 1.5 vacant．
Rj 03＊ 1568 ：（a）lengthways； 6 lines（5 partly blank； 6 damaged）； an unusual list with three sizes of signs；many entries with围 surcharged，and signs prefixed（see p．22）；PM IV． 697，fig．682a，$b ;$（ $b$ ）endorsement on edge．
$R k$ ．Troo lines：various formulae with 围
Rkox 541 ．
$\begin{array}{ll}\text { Rko3 } & 533 .\end{array}$
Rk2x ${ }_{561}$ XLI．
Rkoz 543.
Rkin 529.
R l．Similar formulae with
R 1 or 592 XCIV：princ．；subsid．；${ }^{+}$（B77）．
R11I 540 XLI．R123 530 XLI．R151521：国。
R112560．R124525 XL．R152．526 XL．


$R \mathrm{~m}$ ．Similar formulae with（B5）
Rmor＊49r．
R m 04＊${ }^{*} 507$ ．
Rmo2＊ 501 XXXIX．$\quad$ Rm 05＊ 493 XXXVII．
Rmo3＊${ }^{58 \mathrm{I}}$ ．$\quad$ Rmin ${ }_{516}$ XXXIX．
Roor 556 ．
R o．Similar formulae with 围
Roo2 557．Roo4 553．Roo6 554.
$R_{p} \square_{\mathrm{m}}$ and cuirass surcharged ；for cuirass see $N_{31} f f$

Rpoi 870 LXI．
Rpix 594 XLV．
$\mathbf{R}_{\mathbf{p}} 2 \mathbf{1}$ 593：（3 lines）．
Rp3x 595 XLVI（2 lines）．
Rq．Same sign $\prod_{\pi}$ surcharged $\AA$
Rq ox＊ 759.
RqII 475 XXXIV．Rq13 868 ．
Rq $\mathbf{0 2} 1599$.
Rq12 472 XCVII．Rq14 201.

Rq21 474
Rq 33470
Rq6 6 473

XLVIII．
Rq31 $75^{8}$ LII．
Rq32 469 XXXVI．

XCIII．
R q 3447 ．
Rq41 1616.
Rq51735．

XCVII．
Rq． 6286.
Rq71 1647.
Rq81 ${ }^{1595}$ ．
$R \mathrm{r}$ ．$\square_{\mathrm{m}}$ surcharged with 其 $(A B 4 I)$
Rror 514 XXXIX．
Rr12 516 XXXIX．
Rrin 515 XXXIX．
$R s$ ．素 with＇olive－voord＇sign $\gamma$（ $\boldsymbol{H}_{77}$ ）



## $R t, u, x$ ．Various fragments

Rtor 1530：transverse； 4 lines．
Rto2 698 XLVI：transverse； 3 lines；（3） 2 （B 80）．
Rvor 538 ．$\quad$ Rvo2 646 ．
Rwor 104 XXIV．Rwir 433 XXXI．Rw 2 T 28ı XXX．
R w 3I 757 LI：$\square_{\text {In }}$ surcharged $\sum$ ；cf．S s or．
$\begin{array}{llllll}R \times 01 & 548 . & R \times 21 & 544 & \text { XLI．} R \times 4 \mathbf{1} 535 .\end{array}$
$\mathbf{R \times 0 2}$ 545．$\quad \mathbf{R} \times 3^{1}$ 550．$\quad \mathbf{R} \times 5 \mathbf{5} 656$.
$\mathbf{R x o 3} 546$ ． $\mathbf{R x} 3^{2} 547 . \quad \mathbf{R} \times 6 \mathbf{6}$ 61．
$\begin{array}{lllll}R \times 11 & 542 \text { XL。 } R \times 33549 . & R \times 7 \times 1621 .\end{array}$

## S．＇Value＇signs，（B5I）；and variants <br> $S a-f$ ．With other combinations

Sa or 714 L ．Scoi 687 XCVI．Sce5 486.
SaII 715 XCIII．S c 02689 XLI．S d or 690.
Sal2 716 L ．Sco3 502 Sdo2691 XCVI． Sa2I 682．XXXVII．SdiI M 4
Sbor 699．Sc 04688 XLVI．
Se or 562 XLI： 3 lines；（ $\mathrm{I}-3$ ）princ．；subsid．；B ${ }_{5}$ r；three distinct entries．
Sfor 563 XLI： 2 lines．

$$
S g-S r . \text { Tablets with }{\underset{Z}{2}}_{2}
$$

Sg or 696 XLVI： 3 lines．Sior 559 ．
Shor 683 XCVI： 2 lines．Siin 487.
Sj oI＊ 666 XLVII：（a） 2 lines；（I）subsid．；B 5 I ；（2）princ．； subsid．；／（b）princ．；B $5^{\mathrm{x}} \stackrel{2}{2} ; 2$ cross bar；／（c）（edge） princ．； 2.
Sj 02 1605：fragment；幽．Sj 03 M 129.
S k or＊ 667 ：（a） 2 lines；B $51 ;{ }_{2}^{e}$ B 60 var．；（2）${ }_{2}^{2} 2$ cross band； （b）word； 2
S 1 or 730 LI： 2 lines；（ $\mathbf{x}$ ）princ．； 2 cross band；（2）princ．；${ }_{2}^{2}$ ．

Sl 22 396．S14r 425．XXXIV．
S m or 833 LVII：transverse； 7 lines；（ $\mathrm{I}-6$ ）name；${ }_{2}^{2} ; 1.7$ ＇total＇ 36 （complete）．
S m 3x 426 XXXV：（1）$\underset{2}{2} \#$（B 81）；（2）subsid．
S p or 427：2 lines；（1）${\underset{2}{2} H \text { ；（2）}{ }_{2}^{2} H \text { ．}}_{2}$
Sp 02398 XXXIV：（1）$\#$ ；（2）$\underset{2}{2} H$ ．
S $p$ Ix 693： 2 lines；（（1）princ．；subsid．；${ }_{2}^{2} ;(2)$ subsid．；${ }_{e}^{\gtrless}:$ （3）subsid．；${ }_{2}^{2}$

S q or 1527：lengthways； 4 lines（1． 4 blank）；（1）${ }_{己}^{\gtrless}$ ；（2）subsid．； $\stackrel{\gtrless}{2}$ ；（3）subsid．；${ }_{2}^{2}$.
S r or 04． 67 ：lengthways； 3 lines；（ 1 ）words；（2）subsid．；${ }_{2}^{2}(2)$ ； （3）subsid．${ }_{2}^{2}(2)$ ．

## Ss．Tablets with $\}$

S s or 467 XXXV：I line［ ${ }^{\text {J }}$ ］；cf．R w 3 ．
S s 02720 S 11 724：［己］．
S 821729 XCIII： 2 lines；（1）B 51 ；（2）subsid．
Ss 31719 L： 2 lines；words；1． 2 B 51.
St or 878 LXXI： 2 lines；（1） 2 cross band；（2）name；numeral．

T．Tablets with phonetic signs followed by numerals； cf． S t or
T a or 820 LVIII：lengthways； 4 lines；（I） 5 words；（（B4）； （2） 2 words；（；（3） 5 words；（4）（belongs to 1.3 ？）．
Tcor 145 XXV：transverse； 5 lines；（1）damaged；（2－5） princ．；subsid．；AB 52 （B 27）．
Te or 797 LIII：five－sided sign B ror，surcharged B 37 ．
Ti or 1640：fragment；龂；Apo8．
T j or 79：fragment；subsid．；$(\mathrm{B} 58$ ）．
Tk or 1522 LXXXVIII：transverse； 5 lines；tabulated name with 1 ．
T 1 or＊625：（a）transverse； 5 lines；tabulated list $f ; 1.5$ ？ 2 ； （b）word．
Tm ox 472 XCVII：transverse； 8 lines（1． 5 blank）；tabulated names with $f$ ．
Tn or 836：princ．；subsid．；$f^{\prime} \ddagger^{\prime}\left(\mathrm{B}_{1}, 4\right)$ ．
Tno2 839 LXVII：princ．； 5 subsidiaries；$f^{\prime} \not \ddagger^{\prime}$.
Tn 03 837： $\boldsymbol{f}^{\prime} \not \boldsymbol{f}^{\prime}$ ．Tn 07983 LXXI．Tn 14991.
Tn 04835 LXIV：Tn 08 970．Tn 15987.
ト＇キ＇．Tnir 838：ト．Tni6980．
Tn 05 1022．Tni298r．Tni7 950.
Tno6 103r LXXI．Tni3 1011．Tn 18 1032．
Tq or 118.
Tror 04．78：transverse； 21 lines；tabulated list of words； I． 5 a second word；11．7，8，9，11， 12 sign B $98 ; 1.28$ preceded by $\hat{A}$（B I1）；ll．11， 12 by B $51 ; 1.14$ B 51 above．

## U．Tablets with sign groups followed directly by numerals

Ua or 129 XXV．
U a 02＊317：（a）；（b）个（AB 49）．
U a 0373.
One sign－group：numeral I

U a 04199.
Ua 05175.
Ua 06185.
Ua 07215.
U a o8 184．
Ua 0968 ．
Ua 10150 ．

| U a 11 | $205^{\circ}$ | U a 18198. |
| :--- | :--- | :--- |
| U a 12 | 316. | U a 19 |
| U | $55 \quad$ XXIII． |  |
| U a 13 | $65^{\circ}$ | U a 20 |
| U |  |  |

Ub or 283：numeral 三三；traces of another numeral．
UbII 1062：：UbI3 1063：：\％
U c．Lists of words each followed by numeral＇；transverse

Ucor 147： 5 lines．
Uc 02832 LXI： 5 lines．
Uc 03 1631： 4 lines．
Uc 04 1529： 4 lines．
Ue II 466 XXXVI： 3 lines．
U e 13＊ 479 XXXVII：$(a)(b)$ 3 lines．
U c 14 60 XXII： 7 lines．
Ue 15 655： 5 lines．
Uci6 83I XCV： 8 lines．
Ue $12503 \mathrm{LI}: 4$ lines．
Ud oi－U fo8．Lengthways：two lines
U d or 488.
Ueor 789 LII：Ufo4 492.
Ud 02509.
U d $03{ }^{1583 .}$
Ud 0477.
Ud 0552.
1． 2 numeral II．Ufo5 62 ．
Ufor 80 XXIV．Ufo6 961 LVII．
Ufoz 57 XXII．Ufo7 1526 ．
Ufo3 657 XLVI．Ufo8 151 XXVI．

Uf 09－13．Transverse
Uf09 482 XXXVII： 5 lines．
Uf io 653： 4 lines．
UfII 1524 LXXXIX： 5 lines．
U f 121523 LXXXIX： 9 lines．
Ufi3 280 XXX： 16 lines（ $2-4,6-9,16$ blank）；tabulated；
11． $5,11 \mathrm{I}-14$ same second word $\uparrow ; 1.15$ two words．

## U g．Lists of words，with larger numerals

Ug or＊ 337 XXX：transverse；（a） 4 lines；（b） 3 lines．
Ug 02 164：transverse； 4 lines（ 1.4 blank）．
Ugo3 159 XXVI：transverse； 5 lines．
Uh or 56 XXIII：lengthways； 3 lines； 1 ．x numeral III III．
Uh 02 505：lengthways； 2 lines；one numeral．
Uh II 684 XLIX：lengthways； 2 lines；（ 1 ）（ 2 ）？princ．；subsid．

## V．Tablet with sign－groups in compartments，without ideograms

V a or 137 XXV，XCVII：complete．
Vaix 138.
V a 21 62：fragments．

## X．Unclassifiable by content，because fragmentary <br> $X$ a．Single voords：initials，in Evans＇s B－order

Xaor Mr．
X a 02 bis M6．
Xaix 1391．
X a 12297.
$\begin{array}{llll}\mathrm{X} & \text { a } 13 & 04 . & 74 .\end{array}$
X a 14327.
Xa 15302.
X a 16 212．
X a 171390.
X a 17 bis 1389 ．
$X$ a 18 313．
X a 19993.
X a 201578.
X a 21428 ．
X a 221385 ．

| X a 23294 | X a 3694. |
| :---: | :---: |
| X a 23 bis 1384． | X a 37333. |
| X a 241406. | X a $3^{8}$－4．73． |
| X a 24 bis 1410. | X a 391487. |
| X a 25298. | X a 401431. |
| X a 26 201． | X a 41484. |
| X a 271424. | X a 42169. |
| X a 28177. | X a 43385. |
| X a 29 1491． | X a 44307. |
| X a $3^{\circ} 135$. | X a 451470. |
| X a 311398. | X a 46569. |
| X a 32 04．72． | X a 47 324． |
| X a 331435. | X a 48315. |
| X a 3498. | X a 49173. |
| X a 351436. | X a 501577. |

Xasi ${ }^{1}$ 。
X a 521052.
Xa 531467.
Xa 54112 XXIV.

X a $55{ }^{110}$ XXIV.

X a 56299 XXX.
X a 571560 .
X a $5^{8} 1462$.
X a 59 o4. 80 .
Xa60 1468.
$\begin{array}{ll}\mathrm{X} & 6 \mathrm{6x} 189 .\end{array}$
Xa 62182.
Xa63 394
XXXIV.

X a 64460.
X a 651465.
Xa 661464.
X a $67{ }^{1463}$
LXXXIII.

X a 681472.
Xa 6933 1.
Xa70300.
Xa71 37.
X a 72314.
Xa 73474
XLVIII.

X a $74144^{2}$
LXXII.

X a $75{ }^{1438 .}$
X a $7^{6} 1509$.
X a 771512.
Xa78 ${ }^{1511}$
LXXVII.

X a 791508
LXXXVI.

X a 801510.
X a 81 126.
X a 8285.
X a 8386.
X a 841452.
X a 85477.
X a 861452.
X a 87386.
X a 88989.
X a 89186.
X a 90388.
Xa91 373
XXXIII.

X a $92{ }_{476}$.
X a 931495 LXXXVI.

X a 941911.
X a $95{ }^{291}$.
X a 961434.
X a 971394 LXXXIII.

X a 97 bis ${ }_{1395}$.
X a 98
383
$\begin{array}{ll}\mathrm{X} & \mathrm{a} 99 \\ 1396 .\end{array}$
$\mathbf{X}$ a 99 bis 1393.
X a $1006 \%$.
X a 101197.
X a 102290.
X a 1031433.
$X$ a roz bis 04. 92.
X a 104 512.
X a 104 bis 1400 LXXII.
$X$ a 1051402.
X a 1061403 LXXXIII.

X a 107308.
X a 10874.
X a 109978.
X a 110 1416.
Xaini 1418 LXXXIII.

X a 112 1501 LXXVII.

X a 1131506.
X a 1141505.
X a 11575.
X a 11697.
$X$ a 1171504.
X a 118 511.
X a 119319.
$\begin{array}{llll}\mathrm{X} & 120 & 1448 .\end{array}$
X a 121193.
X a 122292.
X a 1231476 .
X a 124206 XXXIII.

X a 125207.
X a 1261474.
X a 1271496.
X a 1281486 LXXXV.

X a 12938.

X a 130 roor.
X а 13 x 1484.
X а 1321483 .
X a 133285.
X a 133 bis 39 .
X a 134 04. 70.
X a 135967.
X a 136141 .
X a 137142.
X a 138796.
X a 139204.
X a 1401446.
X a 1411443 LXXVII.

X a 1421444 LXXVI.

X a 143209.
X a 144301.
X a 145 1461
LXXII.

X a 146994.
X a 147663.
X a 1481456 .
X a 149288.
X a 1501459.
X a 151330.
X a 152392.
X a 1531477.
X a 154665.
$X$ a $155^{-60}$ : cancelled.
X a 1611487 LXXII.

X a 162186.
X a 1631420 .
X a 1641421.
$X$ a 16530.
X a 166 31.
X a 167 1481.
X a 168742.
X a 1691479 LXXXIV.

Xa 170325 XL.
X a 171296.
X a 17266.
X a 173 183.
X a 174972 LVI, LXII.
X a 1751500.
X а 1761499 .
$X$ b. Single voords, complete, but preceded by break
$X b$ or
127.
Xboz 312.
Xb 031642.
Xbo4 1141.
$\mathbf{X b} 051048$.
Xb o6 106.
Xboy Miza.

Xbos 323.
Xb 09718 XCIII.
XbiI 1451 LXXXVI.

X b 121620.
$\begin{array}{ll}\mathrm{X} & \mathrm{b} \\ 13 \\ 1488 .\end{array}$
X b 14 04. 86.

XbI5 111 XXIV.

Xb 161525 LXXXVIII.

Xb 17444.
Xb 1854 XXII.
$\mathbf{X} \mathbf{b} \mathbf{1 9} 96$.

| Xb 201502 LXXXVI. <br> $\begin{array}{ll}\mathrm{X} & \mathrm{b} 21 \\ \mathbf{X} \\ 1608 .\end{array}$ <br> Xb 22664 | Xb 231033. <br> X b 24203. <br> X b 25 IO13. <br> X b 26 ioio. | $\mathbf{X b} 27174$. <br> X b 28195. <br> Xb 29336. |
| :---: | :---: | :---: |
| $X$ c Word perhaps incomplete |  |  |
| X cor ${ }^{\text {ar }} 318$. | X c 311453 | X c 63996. |
| X c 02304. | LXXVII. | X c 64395. |
| X ceoz 102. | X c $3^{2} 82$. | X c 65179. |
| X c 04 04.89. | X c 3372. | X c 66329. |
| Xce5 1605. | X c 341449. | X c 67384. |
| X cos 1409 | X c 3570. | Xc 681494 |
| LXXVII. | X c 36130. | LXXVI. |
| X c o7: cancelled. | X c 37303. | Xc 691493 |
| $\mathrm{X} \mathrm{co881053}$. | Xc $3^{81612 .}$ | LXXVII. |
| X co9 122. | X c 391413. | X c 7029. |
| Xcio 15 | X c 40 04.75. | Xc7 143. |
| LXVI. | X c $42{ }^{78}$ | X c 72172. |
| X cix 136. | X c 43 -4.88. | Xc 73 |
| X c 12191. | X c 441319. | X c 74310. |
|  | Xe 45322. | X c 75200. |
| X c 14389. | Xc 46 M 17. | X с $7628 \%$ |
| X c 15: cancelled. | Xc 47170. | Xc 771034. |
| Xc 161454. | X c 481000. | X c 79476 a. |
| Xc 16 bis 1455. | X c 49 09.90. | Xe80 393. |
| X c $17{ }^{\mathbf{3}} \mathbf{2 6 .}$ | X c 5099. | Xe 8 x 1563. |
| X c 181498. | X C5192. | Xe82 M2. |
| X c $19 \times 167$. | X c 52 M 16. | X c 831458. |
| X c 20: cancelled. | X c 53 M 20. | Xc84 1457 |
| X c 21: cancelled. | X c 54 04. 55. | LXX |
| X c 22459. | Xe $55{ }^{216}$. | Xe 85305. |
| X c 2384. | X c 56 ro38. | X c 861478. |
| X c 24320. | Xc 57387. | X c 88125. |
| X c 251437. | X c 57 bis M ${ }_{3} 2$. | X c 891480. |
| Xce26 1441. | Xc $5^{8} 328$. | Xe90 171. |
| Xce27 108 XXIV. | Xc5921. | Xc91 123. |
| X c 281428. | X c 60 04.95. | X c 92430. |
| X c 29: cancelled. | Xe 6i 662. | X c 93443. |
| X c $3^{\circ} 83$. | X c 62133. |  |

$X d$. Two words: signs of same size
X d or 299.
Xd oz 966.
Xdo3 658.
Xd 04648.
X d 05368.
X d o6 446.
Xdo7793.
X d 0828.
$X d \boldsymbol{0 9}=\mathrm{Za} \mathbf{3}^{\mathbf{r}}$.
Xdio 131.
Xdix 9.
Xd 12105 XXIV.
Xdiz 119.
Xdi4 121 XXV. X d 26971.
Xd 15187.
Xdi6 202.
$X d 17{ }^{214}$.
X d 18306.
X d 19309.
Xd $203^{1 r}$.
Xd 21539.
Xd 22367
XXXIII.

Xd 23450.
Xd 24458.
Xd 25766.
$X$ d 271014.
X d 281045 XXXVI.

X d 29 1053.
X d 301539.

| $X d$ | 1618. |
| :--- | :--- |

$\begin{array}{lllll}X{ }^{2} & \text { o4. } 84 \text {. }\end{array}$
$=\mathbf{J} \mathbf{b} \mathbf{0 2}$ bis

Xd 5I* $114 a, b$ xXIV.

X b 27174.
X b 28195.
Xb 29336.

X c 63996.
X c 64395.
X c 65179.
Xc 66329.
Xc 67384.
LXXVI
Xc 691493
Xc 7029.
Xc 7143.
$\times$ c 72172.
Xc 73721 .
X c $743^{10}$.
X с $7^{6} \quad 28$.
Xc $77{ }^{1034 .}$
Xe80 393.
Xe81 1563.
Xe 831458.
Xe 841457
Xe 85305.
X c 861478.
Xc 88125.
Xe90 171.
X c 91123.
Xc 92430.
Xc 93443 .
$\begin{array}{lll}\text { Xe or } & 985 . \\ \text { Xe II } & 1030 . \\ \text { Xe I2 } & 564 .\end{array}$
XeI2 ${ }_{56}{ }^{4}$.
$X$ e. Principal and subsidiary

Xe 13454
XxXV.

X e $14{ }_{5} 2$.

Xe 21109
XXIV.

Xe22 795.

| Xe 231035. | Xe 37196. | Xe $49{ }^{1513}$. |
| :---: | :---: | :---: |
| X e 241447. | Xe $3^{8}$ roso. | X e 50192. |
| Xe25 1016. | X e 39999. | Xe5x 659. |
| Xe26 737. | Xe 40334. | Xe 52744 LII. |
| Xe27 52 r . | Xe41995. | Xe53 |
| Xe28 160 r. | Xe 4292. | X e 54 cancelled. |
| $\mathrm{Xe} 3^{\mathrm{r}} 04.76$. | Xe 431020. | Xe55 |
| Xe 321408 | Xe 44 1021. | X e 56100 XXIV |
| LXXXVI. | Xe 45770. | Xe 57103 XXIV |
| X e 33989. | Xe 46335. | X e 58 roig. |
| Xe 341537. | Xe 471432 | X e 59128. |
| Xe $35{ }^{284}$ | LXXXIV. |  |
| Xe36 $3^{2}$ 2. | Xe $4^{8}$ ror8. |  |

$X f$. More than two zoords, different size or different levels

| $\mathbf{X f o r}$ | 762. | $X f 21$ | 480. | $X$ |
| :--- | :--- | :--- | :--- | :--- | $\mathbf{f}_{\mathbf{4}} 973$.

Xfir $5^{8}$.
Xf $\mathbf{3}^{1} 722$.
X g. Troo lines, preceded by principal (broken)

| X g or | 756. | Xg $43 \mathrm{M}_{15}$. | Xg83 1036 LXIV. |
| :---: | :---: | :---: | :---: |
| Xg II | 420. | Xg 441460. | X g 841043 . |
| Xg 21 | 04.77. | Xg 451427. | X g 851533. |
| $\mathrm{Xg}_{3}{ }^{\text {r }}$ | 1002. | Xg 46448. | X g 86692. |
| X g 32 | 1003. | $\begin{array}{ll}\mathrm{X} & 51 \\ 51039 .\end{array}$ | X g $87 \times 153$. |
| X g 33 | 1005. | Xg 61120 XXV . | X g 881594. |
| X g 34 | 1004. | Xg 71408 | $\mathrm{Xg89} 1641$. |
| Xg ${ }^{1}$ | 158. | XXXVI. | X g 90 M 26. |
| X ${ }^{\text {d }} 4$ | 743. | X g 82982. | Xg9x 976. |

$X$ h. Principal followed by two lines

| Xhor ${ }^{1027}$. | X h 22506. | X h 251503. |
| :---: | :---: | :---: |
| XhiI 568. | Xh23 1439. | X h 26508. |
| Xh2x 660 | X h 24359 | X h 3r 44. |
| XCIV. | XXXIII. | X h $3^{22} 107$. |

$X$ i. Principal and two lines: fragmentary

| Xior | 977. | Xio5 1028. | Xio9 1392. |
| :---: | :---: | :---: | :---: |
| Xioz | 134 XXV. | X i 06 1040. | Xi 10370 |
| Xio3 | 763. | X io7 988. | XXXII. |
| Xi 04 | 974. | X i 08969. | Xiif 1023. |

$X j$. Principal and subsidiaries: more complicated
$\mathbf{X j}$ or ${ }_{963}$ LXXI. $\quad \mathbf{X} \mathbf{j} 2 \mathbf{1} 1006 \mathrm{LX} . \quad \mathbf{X}_{\mathbf{j}} \mathbf{4 I} 997$.
Xjir 68 XCVI. Xj3 $\mathbf{3}^{\mathbf{3}} \mathbf{3 0}$ XXXII.

| $\mathrm{k} \mathrm{X}_{1} 155$. | Xk29 65 r. | Xk 42 r |
| :---: | :---: | :---: |
| Xk 12 1017. | Xk $30 \quad 725$. | X k 43 1042. |
| Xki3 M i33. |  | X k 441044. |
| Xk 2136 bis. | Xk $3^{2} 765$. | Xk 4510 |
| Xk 2269. | Xk 33773. | X k 46 |
| Xk 23 Ir6 XXIV. | Xk 34794 LIII. | Xk 47 |
| Xk24 117 XXIV. | Xk 35784 LIII. | X k 481538. |
| Xk 25409 | Xk ${ }^{6} 1007$. | Xk $49{ }^{1576 .}$ |
| XXXVI. | $\mathrm{X} \mathbf{k} 371008$. | Xk $50{ }_{158 \mathrm{r}}$. |
| Xk26 $44^{2}$ | Xk $\mathbf{3}^{8}$ 1012. | XkE5104. |
| XXXV. | Xk 391024. | Xk53 |

Xk 27453. Xk 40 1025.
Xk 28647 XLVI. Xk 411026.
X 1 . Troo distinct lines complete at beginning

| 68 XXVII. | X $1 \times 41596$. | X 141897 XLVI |
| :---: | :---: | :---: |
| X111524. | X 11525. | X $15_{57} 768$. |
| X112567. | X 1211047. | X1 $5^{2} 451$. |
| X $1 \times 3570 \mathrm{XL}$. | X131410. | X16r ${ }^{771}$ |

$X \mathrm{~m}$. Transverse: more than two lines
Xmox 435. Xm33510. Xm 43 04. 94.
Xmir 468 LII. X m 34 566. Xm 44166






$\begin{array}{llll}\text { X m 3I } & 429 & \text { X m 4I 959. } \\ \text { OVII. }\end{array}$
Xm32 43 $^{1} \quad$ Xm42 960.
X m $5^{0}$ 1521 LXXXVIII: transverse; 4 lines; tabulated; 11. 1-3 same word.
$X n-q$. Miscellaneous
Xnor 154.
$\mathbf{X q}$ or M 19: fragment. $\quad \mathbf{X q} \mathbf{0 3}^{134}$.
Xq $02 \mathrm{M}_{135}$.
X qiI M iI: numeral only.

## Z. Seal-impressions, surcharged with words

Zaor 1704. Za21 1705. Za ${ }^{21}$ 1707.
$\begin{array}{lllll}Z a 02 & 1704 . & Z a 3 x & 1701 . & \text { Za6x } 1708 .\end{array}$


## CONCORDANCE OF NUMERATIONS OF TABLETS

Discussed by B. Hrozný, Archiv Orientálni Pragense, XIV (1943), 1-117; XV (1946), 158-302, where they are quoted under their page and figure number in the Palace of Minos IV or in Sundwall, Minoische Rechnungsurkunden (1932, Soc. Sci. Fenn. Comm. Hum. Litt. IV.4); Altkretische Urkundenstudien (1936, Acta Acad. Abo. Hum. X. 2); with some inaccuracies. Nos. 1-40 are tablets from the Greek mainland. In the table, $\mathrm{R}=$ Rechnungsurkunden $; \mathrm{U}=$ Urkundenstudien.

| Hrozmy | PM IV | B | Hr. | PM IV | ${ }^{B}$ | Hr. | PM IV | B | Hr. | PM IV | B |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 41 | 686 | 1516 | 77 | $767 a$ | 04. 40 | 112 | 712 | 93 | 149 | 678 a | 1097 |
| 42 | $B S A . \mathrm{VI}, \mathrm{pl}$. | 875 | 78 | , b | 04.48 | 113 | 713 | 434 | 150 | $\mathrm{U}_{34 \cdot}{ }^{\text {b }}$ | 1316 |
| 43 | 687 | 799 | 79 | $c$ | 04. 39 | 114 | $714 a$ | 8 a | 151 | U 34.2 b | 1099 |
| 44 | 689 | 639 | 80 | d | 04. 36 | 115 | $b$ | 704 | 152 | 677 | 1248 |
| 45 | 690 | 824 | $8{ }^{1}$ | , e | 04.47 | 116 | „ $c$ | 706 | 153 | U $34 \cdot 5{ }^{\text {b }}$ | 1169 |
| 46 | 692 | 63 | 82 | , $f$ | 04.46 | 117 | , $f$ | 874 | 154 | R 9, D 10 | 1110 |
| 47 | 708 g | 673 | 83 | 768 | 894 | 118 | " $g$ | 701 | 155 | R 9, D 12 | 923 |
| 48 | U. p. 37, fig. 42 | 40 | 84 | 771 a | 940 | 119 | , d | 774 | 156 | 694 | 1435 |
| 49 | 68 I | 137 | 85 | , b | 897 | 120 | ,e | 775 | 157 | R 8, D 4, | 1101 |
| 50 | 680 | 1522 | 86 | " $c$ | 896 | 121 | 715 | 740 |  | U $34.7 a$ |  |
| 51 | 775 | 902 | 87-8 | 603 | 1704 | 122 | 719 | 700 | 158 | R 9, D 9 | 1108 |
| 52 | 763 a | 230 | 89 | 817 | 04.82 | 123 | $707 a$ | 907 | 159 | R 8.3 | 1201 |
| 53 | " $b$ | 228 | 90 | $783 a$ | 247 | 124 | , b | 906 | 160 | R 87 | 412 |
| 54 | " | 200 | 91 | $783 b$ | 246 | 125 | " ${ }^{\text {c }}$ | 903 | 161 | 636 | Ingot |
| 55 | ", $f$ | 244 | 91 a | $784 a, b$ | 225 | 126 | $\mathrm{U}_{33}$. 1 a | 1353 | 162 | PM II. 391 | , |
| 56 | " $g$ | 226 | 92 | 819 | 04. 81 bis | 127 | R 9, D 11 | 1147 | 163 | 637 | Not a |
| 57 | " | 222 | 93 | $838 a$ | 1540 | 128 | $\mathrm{U}^{3} 3 \mathrm{f}$., $a$ | 1117 |  |  | tablet |
| 58 | $k$ | 239 | 94 | , e | 1541 | 129 | U33. 10 a | 1118 | 164 | 649 b | 739 |
| 59 | , $l$ | 459 | 95 | " ${ }^{\text {c }}$ | 1548 | 130 | R 8, D 6 | 1152 | 165 | , $a$ | 730 |
| 60 | $m$ | 879 | 95 a | $604 b$ | 1703 | 131 | 694 e | 1117 | 166 | c | 733 |
| 61 | 773 | 895 | 96 | $838 b$ | 1526 | 132 | $694 a$ | 1116 | 167 | ${ }^{1}$ d | $73 \times$ |
| 62 | 763 c | 223 | 97 | , $d$ | 1556 | 133 | 677 b | 1112 | 168 | 651 | 520 |
| 63 | , | 245 | 98 | , $f$ | 1555 | 134 | U $34 \cdot 3 a$ | 1112 | 169 | R2, A I | 1065 |
| 64 | $n$ | 260 | 99 | " $g$ | 1558 | 135 | $677 a$ | 1289 | 170 | , 2 | 1071 |
| 65 | $h$ | 266 | 100 | $656 a$ | 494 | 136 | $\mathrm{U}_{37.1} \mathrm{l}$ | 1282 | ${ }^{171}$ | " 3 | 1073 |
| $65 a$ | 772 | 262 | 101 | $b$ | 498 | 137 | U. $33.4 a$ | 1128-9 | 172 | " | 1064 |
| 66 | $764 b$ | 04.06 | 102 | , ${ }^{\text {c }}$ | 499 | 138 | U 33. 10 b | 1285 | 173 | " | 1076 |
| 67 |  | 04.03 | 103 | 679 | Not a | 139 | U $34.5 a$ | 1218 | 174 | R2, B I | 943 |
| 68 | , $f$ | 04. or |  |  | tablet | 140 | R 8, D 2.1 | 1240 | 175 |  | 935 |
| 69 | f | 04.07 | 104 | 6513 | 698 | 141 | U 34.76 | 1232 | 176 | " ${ }^{3}$ | 944 |
| 70 | " $c$ | 880 | 105 | $709 a$ | 95 | 142 | R 8, D I | 1233 | 177 | $\mathrm{R}_{3}, \mathrm{C}$ I | 938 |
| 71 | d | 04.12 | 106 | " ${ }^{\text {b }}$ | 876 | 143 | U33. 6 a | 1298 | ${ }^{178}$ | , ${ }^{2}$ | 947 |
| 72 | $766 a$ | 04.22 | 107 | " | 797 | 144 | U 34. I b | 1158 | 179 | BSA. VI, | 918 |
| 73 | b | 04.27 | 108 | , d | 96 | 145 | R 8, D 5 | 1171 |  | pl. 2, B $~ 1$ |  |
| 74 | d | 04.21 | 109 | " $e$ | 261 | 146 | $\mathrm{U}_{34} \mathrm{I}$ a | 1084 | 179 a | 682 | 1568 |
| 75 | , $c$ | 04. 28 | 110 | " $f$ | 577 | 147 | U $33.2 a$ | 1132 |  |  |  |
| 76 | $e$ | 04.20 | 111 | 711 | 872 | 148 | 678 b | 1097 |  |  |  |

Numerical Index of Tablets figured in Palace of Minos IV, by page and figure number.

| $B$ | page | fig. | B | page | fig. | B | page | fig. | B | page | fig. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $2 a$ | 623 | 609 d I | 13 | 675 | 658 | 49 | II. 247 | 144 | 57 | 807 | $786 a$ |
| $b$ | " | , $d_{2}$ | " | 807 | 786 | " | 681 | n. 4 | 59 | 801 | n. 5, 6 |
| $8 b$ | 731 | $714 a$ | 24 | 623 | $609 c$ | 50 | 801 | n. 5,6 | 6r | 712 | $694 f$ |
| 11 | 807 | 786 | 25 | " | , b | 54 |  | ก. 5 | 62 | . 709 | 692 |
| 13 | 674 | 657 c | 49 | 714 | $695 a$ | 55 | 807 | 786 d | 93 | 730 | 712 |


| $B$ | page | fig. | B | page | fig. | B | page | fig. | $B$ | page | fig. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 95 | 726 | $709 a$ | 598 b | SM. 47 | 23 | 872 | 729 | 711 | 1548 | 855 | $838 c$ |
| 96 | " | " $d$ | 639 | IV. 707 b | 689 | 874 | $73^{1}$ | $714 a$ | 1555 | " | "f |
| 137 | 695 | 681 | $666 a$ | 712 | 694 b | 876 | 726 | $709 f$ | ${ }^{1} 556$ | " | " d |
| 198 | $73^{8}$ | 762 bis, a | 669 | 719 | $704 h$ | 877 | " | " b | 1558 | " | \% $g$ |
| 200 | 788 | 763 d | 670 | " | $709 f$ | 878 |  | "g | 1568 | 697 | 682 |
| 222 | " | " $i$ | 698 | 664 | 651 | 879 | 788 | 763 m | 04. 01 | 790 | $764 f$ |
| 223 | " | " c | 700 | 734 | 719 | 880 | 790 | $764 c$ | 04.03 | " | , e |
| 226 | , | , g | 701 | 731 | 714 g | 894 | 795 | 768 | 04.06 | " | , b |
| " | 821 | 8006 | 704 | " | " b | 896 | 798 | 771 | 04.07 | " | ", $a$ |
| 229 | 788 | $763 k$ | 706 | " | " $c$ | 897 | " | \% $b$ | 04. 12 | " | , d |
| 230 | " | " $a$ | 709 | " | $716 a$ | 900 |  | $a$ | 04. 20 | 792 | 766 e |
| 238 | " | $b$ | 730 | 661 | 649 a | 902 | 800 | 775 | 04. 21 | " | , d |
| 241 | 821 | $800 a$ | 731 | " | ", d | 903 | 724 | 770 c | 04. 22 | " | " $a$ |
| 244 | 788 | $763 f$ | 733 | " | " c | 906 | " | "b | 04. 27 | " | , b |
| 245 | " | \% $e$ | 734 | " | " b | 907 | " | " ${ }^{\text {a }}$ | 04. 28 | " | " $c$ |
| 246 | 805 | $783 b$ | 740 | 731 | 715 | 972 | 711 | ก. 6 | 04. $3^{6}$ | 794 | $767 d$ |
| 259 | 788 | $763 l$ | 746 | 733 | 718 | 975 | 712 | $694 c$ | 04. 39 | " | , $c$ |
| 260 | " | "n | 774 | 731 | $714 d$ | 976 | " | , $i(a)$ | 04.40 | " | , a |
| 261 | 726 | 709 e | 775 | " | " $e$ | 1097 | 692 | 678 b | 04.45 | 795 | Text |
| 262 | 799 | 772 | 789 | 783 | 762 bis, $b$ | 1099 | " | " ${ }^{\text {a }}$ | 04. 46 | 794 | $767 f$ |
| 266 | 788 | $763 h$ | 797 | 726 | 709 c | 1112 | " | 677 b | 04.47 | " | "e |
| 256 | 719 | 704 | 799 | 705 | $687 a, b$ | 1116 | 712 | $694 a$ | 04. 48 | , | \# b |
| 416 | 623 | 609 a | 824 | 708 | 690 | 1117 | " | " | 04.53 | 833 | 813 ${ }^{\text {a }}$ |
| 434 | 730 | 713 | 831 | 699 | 683 | 1248 | 692 | $677 c$ | 04.54 | " | " $c$ |
| 479 b | 712 | 694 g | 854 | 719 | $704 e$ | 1289 | " | 677 a | 04.55 | " | , ${ }^{\text {d }}$ |
| 493 ff. | 670 | 655 | 856 | " | $b$ | 1419 | 712 | $694 a$ | " | 802 | 776 g |
| 494 | 671 | $656 a$ | 857 | " | " $a$ | 1425 | " | , $h$ | 04. $5^{8}$ | 833 | 8136 |
| 495-7 | 670 | 655 | 858 | " | " $c$ | ${ }_{5} 16$ | 703 | 686 | 04.81 | 840 | 819 |
| 498 | 671 | $656 b$ | 860 | " | , d | 1522 | 695 | 680 | 04.82 | 837 | 817 |
| 499 |  | " $c$ | 861 | " | "g | 1540 | 855 | 838 a |  |  |  |
| 520 | 663 | 651 | 862 | 717 | 700 | 1541 | " | " e |  |  |  |
| 598 a | 693 | 679 | 870 | 806 | 785 | 1546 | " | , b |  |  |  |

Tablets illustrated in Palace of Minos IV, with their B-numbers.

| PM IV | fig. | $B$ | PM IV | fig. | B | PM IV | fig. | B | PM IV | fig. | B |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 623 | $609 a$ | 416 | 692 | 677 b | 1112 | 719 | $704 a$ | 857 | 731 | 7146 | 704 |
| " | , b | 25 | " | $c$ | 1248 | " | $b$ | 856 | " | " | 706 |
| " | " c | 24 | " | $678 a$ | 1099 | " | $c$ | 858 | " | " $d$ | 774 |
| " | , di | 2 | " | , $b$ | 1097 | " | , $d$ | 860 | " | " | 775 |
| " | , $d_{2}$ | $2 b$ | " | 679 | 598 | " | \% $e$ | 854 | " | " $f$ | 874 |
| " | "e | $5^{1} b$ | 695 | 680 | 1522 | " | , $f$ | 670 | " | "g | 701 |
| 625 | $612 a-f$ | $5 \times b$ | " | 681 | 137 | " | \% $g$ | 861 | " | 715 | 790 |
|  | " $b, c$ | $51 a$ | 697 | 682 | 1568 | " | "h | 669 | " | 716 | 709 |
| 661 | $649 a$ | 730 | 699 | 683 | 831 | 724 | $707 a$ | 907 | 733 | 718 | 746 |
| " | " b | 734 | 703 | 686 | 1516 | „ | , b | 906 | 734 | 719 | 700 |
| " | " $c$ | 733 | 705 | 687 | 799 | " | " $c$ | 903 | 783 | 762 bis | 198 |
|  | , ${ }^{\text {d }}$ | 731 | 707 | 689 | 639 | 726 | $709 a$ | 95 | 788 | $763 a$ | 230 |
| 663 | 651 | 520 | 708 | 690 | 824 | " | , $b$ | 876 | " | " b | 238 |
| 664 | $651 b$ | 698 | 709 | 692 | 63 | " | " c | 797 | " | " | 223 |
| 670 | 655 | $493-9$ | 712 | $694 i(a)$ | 1419 | " | " $d$ | 96 | " | , ${ }^{\text {d }}$ | 200 |
| 671 | $656 a$ | 494 | , | "b | 666 a | " | "e | 261 | " | " $e$ | 245 |
| " | " b | 498 | " | " c | 975 | " | " $f$ | 877 | " | " $f$ | 244 |
|  |  | 499 | " | " $d$ | 673 | " | " $g$ | 878 | " | "g | 226 |
| 674 | 657 | 13 | " | " $e$ | 1117 | 729 | 711 | 872 | " | " $h$ | 266 |
| 675 | 658 | 13 | " | " $f$ | 6 x | 730 | 712 | 93 | " |  | 222 |
| 681 | n. 4 | 49 | " | " $g$ | 479 b | " | 713 | 434 | " | $k$ | 229 |
| 692 | $677 a$ | 1289 | " | , $h$ | 1425 | 731 | 714 a | $8 b$ | " | , l | 459 |


| PM IV | fig. | $B$ | PM IV | fig. | $B$ | PM IV | fig. | H | PM IV | fig. | H |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 788 | 763 m | 879 | 794 | $767 a$ | 04.40 | 805 | $783 a$ | 247 | 837 | 817 | 04.82 |
| " | $n$ | 260 | " | , b | 04. $4^{8}$ | " | $b$ | 246 | 840 | 819 | 04.81 bis |
| 790 | $764 a$ | 04.07 | " | " | 04. 39 | " | $784 a$ | $225 a$ | 855 | 838 a | 1540 |
| " | \%b | 04. 06 | " | , ${ }^{\text {d }}$ | 04.36 | " | " $b$ | 225 b | " | " $b$ | 1546 |
| " | " $c$ | 880 | " | " | 04.47 | 806 | 785 | 870 | " | " c | 1548 |
| " | , d | 04. 12 | " | , $f$ | 04.46 | 807 | 786 | 11. 13 | " | " ${ }^{\text {d }}$ | 1556 |
| " | " | 04.03 | 795 | 768 | 894 | " | " $a$ | 57.55 | " | " | 1541 |
| " | $\cdots f$ | 04. 01 | 798 | 771 a | 900 | 821 | $800 a, b$ | 241 | " | " $f$ | 1555 |
| 792 | $766 a$ | 04. 22 | " | , b | 897 |  |  | 226 | " | " $g$ | 1558 |
| " | " b | 04.27 | ", | "c | 896 | 833 | $813 a$ | 04. 53 | Suppl. P | LXII | $799 a, b$ |
| " | " c | 04. 28 | 799 | 772 | 262 | " | " $b$ | 04. 56 | " | " | Eleusis |
| " | "d | 04. 21 | " | 773 | 895 | " | " $c$ | 04. 54 |  |  |  |
| " | " $e^{1}$ | 04. 20 | 800 | 775 | 902 | " | , $d$ | 04. 55 |  |  |  |

Tablets published in Annual of the British School at Athens VI, pl. I, without numbers.

| $8 b$ | 22 | $918 a$ | 872 |  |
| :---: | :---: | :---: | :---: | :---: |
|  | 5 |  | 890 | 875 |
|  | 11 |  | $89 x$ |  |
|  | 13 |  |  |  |
| 14 |  | 15 |  | 947 |

Hall, H. R., The Civilization of Greece in the Bronze Age, 179, fig. r30.
Tablets in the British Museum: the larger (1910, 4. 23. x ) is $\mathrm{B}_{13}$; the smaller ( $\mathrm{I} 910,4.23 .2$ ) is $\mathrm{B}_{13}$.
Maranghiannis, G., Antiquités Crétoises, III. 1915.
The tablets inscribed in Script A, and reproduced in Plate XXXVII, are as follows: all are from the hieroglyphic Deposit at Knossos, published in Scripta Minoa, I, plates v-x.

| XXXVII |  |  |  | Pro4a | P 107 a <br> Prooc |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | P $85 a$ | P 896 | P 120 |  |  | $\begin{aligned} & \text { Proi } a \\ & P_{\text {ro2 } a} \end{aligned}$ |
|  | P $96 a$ | P 8ic | P 108 b |  |  |  |
|  | P $80 b$ | P $92 b$ | Proga |  |  | $\mathrm{P}_{\text {III }} \mathrm{b}$ |
|  | P 93 | P 97 | P 117 | P 103 d | P 1056 | Piroa |
|  |  |  |  |  |  |  |

Tablets inscribed in Script B, of which collotype reproductions are given on Plates xxxviII, Xxxix are as follows: note that some are printed upside down.

| XXXVIII | 896 <br> 683 <br> 1240 <br> 690 <br> 1097 <br> 1110 <br> 865 |  | $\begin{aligned} & \stackrel{\rightharpoonup}{\mathrm{O}} \\ & \hline \end{aligned}$ | 907 <br> 903 <br> 48 <br> 520 <br> 1065 | XXXIX | PM IV <br> fig. 682 <br> 831 | $64$ | $1516$ $\square$ <br> 833 ${ }^{-1}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |

## CONCORDANCE OF NUMBERS OF TABLETS IN THIS VOLUME AND IN THE REGISTER OF THE MUSEUM AT HERAKLEION (CANDIA)

The Tablets from the Archives of Knossos are, with a few exceptions, preserved in the Museum at Herakleion (Candia) in Crete, and registered in its Inventory, apparently in the order in which they were received there. Most of them bear the register-numbers, and some bear also numbers written in red or blue, which refer to provisional numberings of Sir Arthur Evans. They do not however bear his definitive numbers as published in this volume.

It had been the intention of Dr. Alice Kober, of Brooklyn College, New York, to go to Herakleion as soon as the Museum was reopened after the War, and check these numbers, and Sir Arthur Evans's transcripts, with the originals.

After her lamented death, Dr. Emmett L. Bennett, jun., of Yale University, most kindly undertook this work, and completed it in August 1950. He found the tablets for the most part in good order, but a considerable number are missing, besides those already known to be in the British Museum ( 13 and 1171 ) and in the Ashmolean Museum at Oxford (p. 108) and in the collection of Dr. Giamalakis in Herakleion (p. 109). He was informed that one large tablet and fifteen fragments are in the National Museum at Athens, but that they were not yet accessible.

| S.M. | Mus. Reg. | S.M. | Mus. Reg. | S.M. | Mus. Reg. | S.M. | Mus. Reg. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| I | 97 | 27 ( +14 ) |  | 49 | 202 | 74 | 743 |
| $z$ | 200 | 28 (+14) |  | 50 | 206 | 75 | 777 |
| 3 | 204 | 29 | ** | 51 | 183 | 76 | 777 |
| 4 | 181 | 30 | 922 | 52 | 887 | 77 | 760 |
| 5 | 179 | $3{ }^{1}$ | + | 52 bis | ** | 78 | 763 |
| 6 | 185 | 32 | $\dagger$ | 53 | 213 | 79 | 747 |
| 7 | 886 | 33 | $9 ¢ 2$ | 54 | 214 | 80 | 752 |
| 8 | 894 | 342 | H | 55 | 209 | 8 x | 745 |
| 9 | 900 | 35 |  | 56 | 898 | 82 | 922 |
| 10 | 906 | $3^{6}$ | 473 | 57 | 211 | 83 | 922 |
| 11 | 182 | 36 bis |  | 58 | 915 | 84 | 922 |
| 12 | 896 | 37 bis) | 922 | 58 bis | 9 O | 84 bis | 922 |
| 13 | Brit. Mus. 1910, | 37 | 1169 | 59 | Ashm. 212 | 85 | 777 |
|  | 4.23.2 | 37 bis ( +36 bis) |  | 60 | 207 | 86 | 922 |
| $14+27+28$ | $889+890+922$ | $3^{8}$ | 1169 | 61 | 908 | 87 | 794 |
| 15 | 203 | 39 | 1169 | 62 | 909 | 88 | 789 |
| 16 | 205 | 40 | 95 | 63 | 208 | 89 | 912 |
| 17 | 884 | 4 I | 891 | 64 | 911 | 90 | 786 |
| 18 | $903+922$ | 4 I bis | 922 | 65 | 921 | 9 I | 793 |
| 19 | 201 | 42 | 857 | 66 | 918 | 92 | 922 |
| 20 | 922 | 43 | 860 | 67 | 919 | 93 | 212 |
| 21 | 897 | 44 | 872 | 68 | 920 | 94 | 761 |
| 22 | 191 | 45 | 861 | $69(=745)$ | 518 | 95 | 1345 |
| 23 | 180 | 46 | 865 | 70 | 922 | 96 | 766 |
| 24 | 885 | 47 | Ashm. 709 | 71 | 917 | $97(+284)$ | 809 (+1246) |
| 25 | 888 | 47 bis | 904 | 72 | 916 | 98 | 922 |
| 26 | 922 | 48 | 110 | 73 | 828 | 99 | 842 |


| S.M. | Mus. Reg. | S.M. | Mus. Reg. | S.M. | Mus. Reg. | S.M. | Mus. Reg. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 100 | 748 | 154 | 237 | 208 | 1227 | 262 | 1206 |
| 101 | 830 | 155 | 841 | 209 | 1246 | 263 | 1239 |
| 102 | 913 | 156 | 833 | 270 | 1246 | 264 | 1202 |
| 103 | 770 | 157 | 839 | 211 | 1225 | 265 | 1216 |
| 104 | 777 | 158 | 841 | 212 | 1219 | 266 N | 427 |
| 105 | 750 | 159 | 236 | 213 | 1246 | 267 | 409 |
| 106 | 759 | 160 | 834 | 214 | 1246 | 268 | 414 |
| 107 | 758 | $16 x$ | 235 | 215 | 1246 | 269 | 252 |
| 108 | 818 | 162 | 234 | 216 | 1230 | 270 | 219 |
| 109 | 785 | 163 | 831 | 217 | 223 | 271 | 1236 |
| 110 | 797 | 164 | 841 | $218(=1644)$ | Ashm. $4^{89}$ | 272 | 1235 |
| III | 771 | 165 | 858 | 219 | 1201 | 273 | 1240 |
| 112 | 776 | 166 | 239 | 220 | 1205 | 274 | † |
| 113 | 1345 | 167 | 842 | 221 | 1210 | 275 | 1242 |
| 114 | 1345 | 168 | 1222 | 222 | 228 | 276 | 1246 |
| 115 | 215 | 169 | 842 | 223 | 229 | 277 | 1238 |
| 116 | 751 | 170 | 827 | 224 (+228) | $1212(+1224)$ | 278 | ** |
| 117 | 754 | 171 | 826 | 225 | 231 | 279 | 241 |
| 118 | 744 | 172 | 825 | 226 | - 220 | 280 | 98 |
| 119 | 749 | 173 | 810 | 227 | 732 | 281 | 1226 |
| 120 | 742 | 174 | 781 | $228(+224)$ |  | 282 | 1218 |
| 121 | 822 | 175 | 813 | 229 | 1246 | 283 | 1241 |
| 122 | 814 | 176 | 792 | 230 | 221 | 284 (+197) |  |
| 123 | 815 | 177 | 783 | 231 | 227 | 285 | 1244 |
| 124 | 784 | 178 | 782 | 232 | 222 | 286 | 1246 |
| 125 | 790 | 179 | 795 | 233 | 764 | 287 | 1229 |
| 126 | 787 | 180 | 829 | 234 | 1214 | 288 G | 1528 |
| 127 | 812 | 181 | 816 | 235 | 226 | 289 G | 1519 |
| 128 | 763 | 182 | 803 | 236 | 225 | 290 G | 1530 |
| 129 | 808 | 183 | 799 | 237 | 718 | 291 G | 1524 |
| 130 | 777 | 184 | 791 | 238 | Ashm. 704 | 292 | † |
| 131 | 820 | 185 | 788 | 239 | 1237 | 293 G | 1518 |
| 132 | 777 | 186 | 804 | 240 | 1197 | 294 G | 1522 |
| 133 | 757 | 187 | 811 | 241 | 739 | 295 | + |
| 134 | 756 | 188 | 824 | 242 | 1200 | 296 | $\dagger$ |
| 135 | 775 | 189 | 805 | 243 | 224 | 297 G | 1527 |
| 136 | 841 | 190 | 798 | 244 | 1204 | 298 G | 1525 |
| 137 | 155 | 191 | 819 | 245 | 1203 | 299 | $\dagger$ |
| 138 | 841 | 192 | 817 | 246 | 260 | 300 | + |
| 139 | 768 | 193 | 802 | 247 | 270 | 301 | $\dagger$ |
| 140 | 837 | 194 | 823 | 248 | 762 | 302 | H |
| 141 | 773 | 195 | 806 | 249 | 217 | 303 G | 1523 |
| 142 | 755 | 196 | 842 | 250 | 765 | 304 | $\dagger$ |
| 143 | 777 | 197 | 800 | 251 | 720 | 305 | + |
| 144 | 769 | 198 | 796 | 252 | 1221 | 306 | 1196 |
| 145 | 99 | 199 | 807 | 253 | 1198 | 307 | $\dagger$ |
| 146 | 841 | 200 | 1246 | 254 | 1223 | 308 | $\dagger$ |
| 147 | 1339 | 201 | 801 | 255 | 715 | 309 | H |
| 148 | 840 | 202 | 1246 | 256 | 210 | 310 N | t |
| 149 | 841 | 203 | 1246 | 257 | 230 | 311 | + |
| 150 | 821 | 204 | 1246 | 258 | 1231 | 312 G | 1529 |
| 151 | 240 | 205 | 1246 | 259 | 1213 | 313 | $\dagger$ |
| 152 | 835 | 206 | 1215 | 260 | 1246 | 314 | H |
| 153 | 836 | 207 | 1246 | 261 | 1217 | 315 | H |

+ The fragments do not quite fit, but seem to be parts of the same tablet.
N Evans noted 'minor fragments of tablets 269-309 and 310-25' duplicate numbers.
G Tablets now in the Giamalakis Collection (p. 109).

| $S . M$ | Mus. Reg. |  | Mus. Reg. | S.M. | Mus. Reg. | S.M. | Mus. Reg. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 316 | $\dagger$ | 370 | 421 | 433 | 427 | 488 | 1047 |
| 317 | † | 371 | 418 | 434 | 168 | 489 | 1039 |
| 318 | H | 372 | 1220 | 435 | H | 490 | $\dagger$ |
| 319 | $\dagger$ | 373 | 1145 | 436 | 1083 | 491 | 1034 |
| 320 | † | 374 | † | 437 | 1051 | 492 | 1027 |
| 321 | H | 375 G | 1526 | $43^{8}$ | 1066 | $493(+500)$ | $300(+1111)$ |
| 322 | H | 376 | $\dagger$ | 439 | 1062 | 494 | 300 |
| 323 | H | 377 G | 1521 | 440 | 1064 | 495 | 300 |
| 324 | $\dagger$ | 378 | $\dagger$ | 441 | 1080 | 496 | 300 |
| 325 | $\dagger$ | 379 | $\dagger \dagger$ | $44^{2}$ | 1083 | 497 | 300 |
| 326 | H | 380 G | 1520 | 443 | 1083 | 498 | 300 |
| 327 | + | $3^{81}$ | $\dagger$ | 444 | 1083 | $499$ | 300 |
| 328 | H | 382 | † | 445 |  | $500(+493)$ |  |
| 329 | H | 383 | $\dagger \dagger$ | 446 | 192 | 501 | 1076 |
| 330 | H | 384 | + | 447 | $893(+922)$ | 502 | 1065 |
| 331 | † | 385 | † | $44^{8}$ | 895 | 503 | 282 |
| 332 | † | 386 G | 1532 | 449 | 901 | 504 | 1077 |
| 333 | + | 387 | † | 450 | 902 | 505 | + |
| 334 | $\dagger$ | 388 | $\dagger$ | 451 | 1083 | 506 | H |
| 335 | t | 389 | + | 452 | 1053 | 507 | + |
| 336 | + | $39^{\circ}$ | + | 453 | 1063 | 508 | + |
| 337 | 425 | 391 | ** | 454 | 1069 | 508 bis | + |
| 338 | 396 | 392 | $\dagger$ | 455 | 1083 | 509 | H |
| 339 | 246 | 393 G | ${ }^{1} 531$ | 456 | 1083 | 509 bis | † |
| 340 | 247 | 394 | 426 | 457 | † | 510 | + |
| 341 | 243 | 395 | † | $45^{8}$ | 1083 | 511 | 1019 |
| 342 | 245 | 396 | $\dagger$ | 459 | 1083 | 512 | 1070 |
| 343 | 244 | 397 | $\dagger$ | 460 | 1083 | 513 | 1049 |
| 344 | 249 | 398 | $\dagger$ | 461 | 1083 | 514 | 1072 |
| 345 | 251 |  |  | 462 | 1060 | 515 | 1075 |
| 346 | 216 | 408 | 559 | 463 | 253 | 516 | 1083 |
| 347 | 238 | 409 | 1024 | 464 | 255 | 517 | 138 |
| 348 | 242 | 410 | 905 | 465 | 399 | 518 | 1138 |
| 349 | 404 | 411 | 844 | 466 | 1056 | 519 | 1133 |
| 350 | 405 | 412 | 159 | 467 | 1078 | 520 | 1338 |
| $35^{1}$ | 400 | 413 | 677 | 468 | 1020 | 521 | 1145 |
| 352 | 248 | 414 | 1176 | 469 | 254 | 522 | 1145 |
| 353 | 410 | 415 | 258 | 470 | 474 | 523 | 1145 |
| 354 | 401 | 416 | 257 | 471 | $\dagger$ | 524 | 1145 |
| 355 | 408 | 417 | 398 | 472 | 156 | 525 | 145 |
| 356 | 406 | 418 | 256 | 473 | 162 | 526 | 843 |
| 357 | 419 | 419 | 412 | 474 | 158 | 527 | 1117 |
| 357 bis | † | 420 | 402 | 475 | 1052 | 528 | 1121 |
| 358 | 413 | 421 | 397 | 476 | 427 | $529(+545)$ | 1132 |
| 359 | 415 | 422 | 1157 | 477 | $\dagger \dagger$ | 530 | 1116 |
| 360 | 250 | 423 | 411 | 478 | † $\dagger$ | 531 | 1118 |
| 361 | 407 | 424 | 259 | 479 | Ashm. 219 | 532 | 1115 |
| 362 | 403 | 425 | 1048 | 480 | 1044 | 533 | 1123 |
| 363 | 423 | 426 | 1061 | 48 I | 1029 | 534 | 1119 |
| 364 | 1234 | 427 | 1050 | 482 | 263 | $535\left(+53^{8}\right)$ | II4 1 ( +1145 ) |
| 365 | 427 | 428 | 427 | 483 | 1097 | $53^{6}$ | 1120 |
| 366 | 427 | 429 | 422 | 484 | 1038 | 537 | 1145 |
| 367 | 416 | 430 | 427 | 485 | 1047 | $53^{8}(+535)$ |  |
| 368 | H | $43{ }^{1}$ | 417 | 486 | 1047 | 539 | 1143 |
| 369 | 420 | $43^{2}$ | 424 | 487 | 1036 | 540 | 846 |

$t \dagger$ Tablet not seen by E. L. B.

* Tablet not numbered.

G Tablets now in the Giamalakis Collection (p. ro9).

+ The fragments do not quite fit, but seem to be parts of the same tablet.

| S.M. | Mus. Reg. | S.M. | Mus. Reg. | S.M. | Mus. Reg. | S.M. | Mus. Reg. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 541 | 1144 | 594 | 480 | 648 | 950 | 702 | 167 |
| 542 | 1126 | 595 | 942 | 649 | 1137 | 703 | 198 |
| 543 | 1122 | $596\left(+5^{87}\right)$ |  | 650 | 935 | 704 | 169 |
| 544 | 1124 | 597 | 493 | 651 | 939 | 705 | 150 |
| $545(+529)$ |  | 598 | 466 | 652 | 937 | 706 | t |
| 546 | 1145 | 599 | 1142 | 653 | 934 | 707 | ** |
| 547 | H | 600 | 475 | 654 | 950 | 708 | 1046 |
| 548 | 1131 | 601 | † | 655 | 932 | 709 | 199 |
| 549 | 1145 | 602 | + | 656 | 950 | 710 | 1047 |
| 550 | 1145 | 603 | 1155 | 657 | 945 | 711 | 1081 |
| 551 | 1130 | 604 | 1153 | 658 | 372 | 712 | 170 |
| 552 | 1128 | 605 | 1166 | 659 | ** | 713 N | 866 |
| 553 | 1145 | 606 | 1165 | 660 | H | 714 | 940 |
| 554 | 1145 | 607 | 1156 | 66 r | † | 715 | 1149 |
| 555 | 1129 | 608 | 1169 | 662 | 1169 | 716 | 943 |
| 556 | † | 609 | 1154 | 663 | 950 | 717 | 990 |
| 557 | 1135 | 610 | 468 | 664 | 1162 | 718 | 1169 |
| $55^{8}$ | 1112 | 611 | 467 | 665 | 950 | 719 | 1261 |
| 559 | 1145 | 612 | 116 | 666 | 1260 | 720 | $1159(+1169)$ |
| 560 | 1145 | 613 | 52 I | 667 | 1164 | 721 | 1169 |
| 561 | 136 | 614 | H | 668 | 115 | 722 | $47^{8}$ |
| 562 | 135 | 615 | 1059 | 669 | 1147 | 723 | 484 |
| 563 | 140 | 616 | 500 | 670 | 1148 | 724 | 488 |
| 564 | 479 | 617 | 1114 | 67 I | 892 | 725 | 494 |
| 565 | 1134 | 618 ( +623 ) | 1115 (+1169) | 672 | $\dagger \dagger$ | 726 | 1160 |
| 566 | 1140 | 619 | 930 | 673 | 907 | 727 | 1152 |
| 567 | 1136 | 620 | 928 | 674 | 164 | 728 | 489 |
| 568 | 494 | 621 | 1057 | 675 | 141 | 729 | 485 |
| 569 | 1125 | 622 | 1058 | 676 | † | 730 | 572 |
| 570 | 1127 | 623 ( +618 ) |  | 677 | 1021 | 731 | 1073 |
| 571 | 133 | 624 | 925 | 678 | 1044 | 732 | 1083 |
| 572 | 131 | 625 | 929 | 679 | 871 | 733 | 417 |
| 573 | 132 | 626 | 936 | 680 | 863 | 734 | 950 |
| 574 | 471 | 627 | $262(+272)$ | 681 | 149 | 734 bis | 950 |
| 575 | 476 | 628 | 926 | 682 | 847 | 735 | 1071 |
| 576 | 483 | 629 | 137 | 683 | 118 | 736 | 261 |
| 577 | 477 | 630 | 950 | 684 | 143 | 737 | 1083 |
| 578 | 1017 | 631 | H | 685 | 142 | $73^{8}$ | 1068 |
| 579 | 470 | 632 | + | 686 | 856 | 739 | 275 |
| 580 | + | 633 | 1145 | 687 | 845 | 740 | 287 |
| 58 I | 268 | 634 | 1168 | 688 | 144 | 741 | 1026 |
| 582 | ** | 635 | +1 | 689 | 147 | 742 | 1033 |
| 583 | 486 | 636 | 1040 | 690 | 120 | 743 | 513 |
| 584 | 1113 | 637 | 1167 | 691 | 876 | 744 | 510 |
| 585 | 469 | 638 | 491 | 692 | 848 | 745 | 518 |
| 586 | J074 | 639 | Ashm. 218 | 693 | 941 | 746 | 196 |
| $587(+589$ | 457 (+1139 | 640 | $\dagger$ | 694 | 927 | 747 | 947 |
| +596) | +1150) | 641 | 102 | 695 | 933 | 748 | $\dagger$ |
| 588 | 146 | 642 | 924 | 696 | 946 | 749 | 264 |
| $5^{89}\left(+5^{8} 7\right)$ |  | 643 | $\dagger$ | 697 | 944 | 750 | 1037 |
| 590 | 1163 | 644 | 938 | 698 | 931 | 751 | 1042 |
| 59. | 492 | 645 | 950 | 699 | 494 | $752(+753)$ | $1022\left({ }^{1}+1.41\right)$ |
| 592 | H | 646 | 950 | 700 | 293 | 753 (+752) |  |
| 593 | 1161 | 647 | 949 | 701 | 139 | 754 | 496 |

+ The fragments do not quite fit, but seem to be parts of the same tablet.
$\dagger \dagger$ Tablet not seen by E. L. B.
** Tablet not numbered.
N Evans notes after 713 'fragments A and B'; after 792-3 'may be parts of the same tablet'; after 878 'minor fragments from Bull Area'.

CONCORDANCE OF NUMBERS OF TABLETS

| S.M. | Mus. Reg. | S.M. | Mus. Reg. | S.M. | Mus. Reg. | S.M. | Mus. Reg. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 755 | 503 | 807 | 542 | 861 | 1107 | 913 | 659 |
| 756 | 499 | 808 | 874 | 862 | 104 | 914 | 117 |
| 757 | 518 | 809 | 532 | 863 | 292 | 915 | 1084 |
| 758 | 298 | 810 | 543 | 864 | 851 | 916 | 153 |
| 759 | 1083 | 8 II | 1196 | 865 | 284 | 917 | 1196 |
| 760 | 518 | 812 | 1196 | 866 | 1096 | 918 | 283 |
| 76 x | 1016 | 813 | 694 | $867(+84 \mathrm{I})$ | 663 (+100) | 919 (+92x) | 679 (+1190) |
| 762 | 1045 | 814 | 882 | 868 | 682 | 920 | 662 |
| 763 | † | 815 | 534 | 869 | 495 | 921 (+919) | $1140(+679)$ |
| 764 | 1079 | 816 | 535 | 870 | 276 | 922 | 68I |
| 765 | 1047 | 817 | 527 | 871 | 295 | 923 | 190 |
| 766 | ** | 818 | 531 | 872 | $\dagger$ | 924 | 690 |
| 767 | ** | 819 | 175 | 873 | 290 | 925 | ** |
| 768 | 518 | 820 | Ashm. 215 | 874 | 1047 | 926 | ** |
| 769 | 1146 | 821 | 174 | 875 | 103 | 927 | 1175 |
| 770 | 482 | 822 | 172 | 876 | 1018 | 928 | 1185 |
| 771 | H | 823 | 1170 | 877 | 543 | 929 | 529 |
| 772 | 1169 | 824 | 112 | 878 N | 1085 | 930 | 165 |
| 773 | 974 | 825 | 1100 | 879 | 274 | 931 | 1196 |
| 774 | 879 (+880) | 826 | 187 | 880 | 277 | 932 | 1111 |
| 775 | 878 | 827 | 671 | 88I | 279 | 933 | 1088 |
| 776 | 859 | 828 | 502 | 882 | 271 | 934 | 1171 |
| 776 bis | 88 I | 829 | 508 | 883 | Ashm. 705 | 935 | 128 |
| 776 bis | Ashm. 855 | 830 | 514 | 884 | 269 | 936 | 160 |
| 777 | Ashm. 214 | 831 | 89 | 885 | 281 | 937 | 540 |
| 778 | 105 | 832 | 286 | 886 | Ashm. ${ }_{5}{ }^{1}$ | 938 | 177 |
| 779 | 518 | 833 | 96 | 887 | 281 | 939 | 674 |
| 780 | 1182 | 834 | 528 | 888 | 1035 | 940 | 1172 |
| 781 | 517 | 835 | 1092 | 889 | 1047 | 941 | 1093 |
| 782 | 1181 | 836 | 119 | 889 bis | ** | 942 | 538 |
| 783 | 518 | 837 | 1097 | 890 | 1047 | 943 | 111 |
| 784 | 515 | $83^{8}$ | † | 890 bis | 1415 | 944 | 173 |
| 785 | 265 | 839 | 171 | 891 | 1047 | 945 | 189 |
| 786 | 507 | 840 | 94 | 892 | 1196 | 946 | 113 |
| 787 | 862 | 841 ( +867 ) | 100 ( $千^{6} 663$ ) | 893 | 1102 | 947 | 273 |
| 788 | 518 | 842 | 148 | 894 | Ashm. 211 | 948 | 184 |
| 789 | 504 | 843 | 666 | 895 | 278 | 949 | 525 |
| 790 | 266 | 844 | 1098 | 896 | 176 | 950 | 524 |
| 791 | 497 | 845 | 543 | 897 | 296 | 951 | 1179 |
| 792 N | 498 | 846 | 849 | 898 | 1090 | 952 | 1086 |
| 793. N | 511 | 847 | 1109 | 899 | 297 | 953 | 501 |
| 794 | 518 | 848 | IIII | 900 | 675 | 954 | 195 |
| 795 | 512 | 849 | 1180 | 901 | ** | 955 | 193 |
| 796 | 509 | 850 | 151 | 902 | 90 | 956 ( +643 ) | $957(+644)$ |
| 797 | 299 | 851 | 1187 | 903 | 108 | 958 | 1196 |
| 798 | 93 | 852 | 106 | 904 | 114 | 959 | 883 |
| 799 | $\dagger$ | 853 | ** | 905 | 518 | 960 | 853 |
| 800 | 285 ( + 1196 ) | 854 | 197 | 906 | 109 | 96 r | 1195 |
| 801 | 291 ( +1047 ) | 855 | IIII | 907 | 107 | 962 | 667 |
| 802 | 516. | 856 | 152 | 908 | 188 | 963 | 1091 |
| 803 | 289 | 857 | 541 | 909 | 850 | 964 | ** |
| 804 | 665 | 858 | 1105 | 910 | 267 | 965 | 1108 |
| 805 | 664 | 859 | 1106 | 911 | 88 | 966 | 519 |
| 806 | 288 | 860 | 194 | 912 | 92 | 967 | 1196 |

$\dagger \dagger$ Tablet not seen by E. L. B.
** Tablet not numbered.

+ The fragments do not quite fit, but seem to be parts of the same tablet.
N Evans notes after 713 'fragments $\mathbf{A}$ and B'; after $792-3$ 'may be parts of the same tablet'; after 878 'minor fragments from Bull Area'.

| S.M. | Mus. Reg. | S.M. | Mus. Reg. | S.M. | Mus. Reg. | S.M. | Mus. Reg. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 968 | 1188 | 1023 | 692 | 1077 | 957 | 1132 | 326 |
| 969 | 668 | 1024 | ** | 1078 | 553 | 1133 | 592 |
| 970 | 1193 | 1025 | IIII | 1079 | 445 | 1134 | 561 |
| 971 | 1186 | 1026 | IIII | 1080 | 552 | 1135 | 585 |
| 972 | 1099 | 1027 | † | 1081 | 345 | 1136 | $\dagger \dagger$ |
| 973 | 163 | 1028 | 518 | 1082 | 438 | 1137 | 385 |
| 974 | ** | 1029 | 537 | 1083 | 157 | 1138 | 364 |
| 975 | 218 | 1030 | 1089 | 1084 | 314 | 1139 | 1007 |
| 976 | 669 | 103I | 660 | 1085 | 328 | 1140 | 991 |
| 977 | 683 | 1032 | 543 | 1086 | 965 | 1141 | 997 |
| 978 | 686 | 1033 | † | 1087 | 958 | 1142 | 629 |
| 979 | 672 | 1034 | 691 | 1088 | 969 | 1143 | 657 |
| 980 | 678 | 1035 | 670 | 1089 | 395 | 1144 | 658 |
| 981 | 1177 | 1036 | 523 | 1090 | 388 | 1145 | 953 |
| 982 | 1184 | 1037 | 533 | 1091 | ** | 1146 | 963 |
| 983 | 161 | 1038 | 1196 | 1092 | 597 | 1147 | 186 |
| 984 | 506 | 1039 | 536 | 1093 | 352 | 1148 | 578 |
| 985 | 673 | 1040 | 1104 | 1094 (+1311) | $457(+609)$ | 1149 | 547 |
| 986 | 687 | 1041 | 689 | 1095 | 968 | 1150 | 318 |
| 987 | 661 | 1042 | 676 | $1096(+1336)$ | 166 | 1151 | 316 |
| 988 | 1101 | 1043 | 1087 | 1097 | 129 | 1152 | 311 |
| 989 | 1032 | 1044 | 1110 | 1098 | 302 | 1153 | 323 |
| 990 | 1173 | 1045 | 543 | 1099 | 303 | 1154 | 315 |
| 991 | 543 | 1046 | 543 | 1100 | ${ }^{*}$ | 1155 | 233 |
| 992 | $53^{\circ}$ | 1047 | 1183 | rioy | 122 | 1156 | 442 |
| 993 | 873 | 1048 | 543 | 1102 | 1262 | 1157 | 545 |
| 994 | 875 | 1049 | 543 | 1103 | 974 | 1158 | 354 |
| 995 | 870 | 1050 | 543 | 1104 | 463 | 1559 | 342 |
| 996 | 1196 | 1051 | 688 | 1105 | 371 | 1160 | 600 |
| 997 | 1194 | 1052 | 680 | 1106 | ** | 1161 | 658 |
| 998 | 877 | 1053 | 694 | 1107 | 603 | 1162 | 357 |
| 999 | 1103 | 1053 bis | 694 | 1108 | 130 | 1163 | 621 |
| 1000 | ** | 1054 | 505 | 1109 | 971 | 1164 | 1000 |
| 1001 | 1023 | 1055 | 923 | 1110 | 128 | 1165 | 1011 |
| 1002 | 1095 | 1056 | 1342 | 1111 | 444 | 1166 | 350 |
| 1003 | ** | 1057 | 1344 | 1112 | 134 | 1167 | 625 |
| 1004 | 294 | 1058 | 1340 | 1113 | 455 | 1168 | 637 |
| 1005 | 1094 | 1059 | 1343 | 1114 | 38 I | 1169 | 339 |
| 1006 | 526 | 1060 | 1151 | 1115 | 601 | 1170 | 612 |
| 1007 | 520 | 1061 | 472 | 1116 | 308 | 1178 | Brit. Mus. 1910, |
| 1008 | 1192 | 1062 | 1169 | 1117 | $44^{1}$ |  |  |
| 1009 | 1191 | 1063 | 1158 | 1118 | $43^{\circ}$ | 1172 | 587 |
| 1010 | ${ }^{6}$ | 1064 | 154 | 1119 | 341 | 1173 | 329 |
| 1017 | ** | 1065 | 126 | 1120 | 366 | 1174 | 446 |
| 1012 | 684 | 1066 | 955 | 1121 | 307 | 1175 | 449 |
| 1013 | 694 | 1067 | 556 | 1122 | 320 | 1176 | 465 |
| 1014 | 694 | 1068 | 121 | 1123 | 565 | 1177 | 368 |
| 1015 | 1174 | 1069 | 954 | 1124 | 1014 | 1178 | 460 |
| 1016 | 1111 | 1070 | 951 | 1125 | 1010 | 1179 | 977 |
| 1017 | 1189 | 1071 | 125 | 1126 | 1002 | 1180 | 557 |
| 1018 | 522 | 1072 | 306 | 1127 | 360 | 1181 | 635 |
| 1019 | ** | 1073 | 305 | 1128 | 987 | 1182 | 359 |
| 1020 | 1178 | 1074 | 304 | 1129 | 355 | 1183 | 961 |
| r021 | 543 | 1075 | 534 | 1130 | 575 | 1184 | 623 |
| 1022 | 693 | 1076 | 310 | 1131 | $\dagger \dagger$ | 1185 | 1263 |

** Tablet not numbered. $+\dagger$ Tablet not seen by E. L. B.

+ The fragments do not quite fit, but seem to be parts of the same tablet.

| S.M. | Mus. Reg. | S.M. | Mus. Reg. | S.M. | Mus. Reg. | S.M. | Mus. Reg. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1186 | 451 | 1241 | 363 | 1299 | 443 | 1357 | 378 |
| 1187 | 1003 | 1242 | 124 | 1300 | $43^{1}$ | $1358(=1354)$ | 315 |
| 1188 | 972 | 1243 | 579 | 1301 | Ashm. 708 | 1359 | 975 |
| 1189 | 464 | 1244 | 992 | 1302 | 437 | 1360 | 978 |
| 1190 | 461 | 1245 | 58ı | $\mathrm{r}_{3} 3$ | 546 | 1361 | 658 |
| 1191 | 453 | 1246 | 319 | 1304 | 436 | 1362 | 983 |
| 1192 | 964 | 1247 | 321 | 1305 | 433 | 1363 | 980 |
| 1193 | 392 | 1248 | 429 | 1306 | 582 | 1364 | 989 |
| 1194 | ${ }^{1} 341$ | 1249 | 367 | 1307 | 340 | 1365 | 658 |
| 1195 | 1264 | 1250 | * | 1308 | 1013 | 1366 | 986 |
| 1196 | 962 | 125x | $\dagger \dagger$ | 1309 | 459 | 1367 | 985 |
| 1197 | 1266 | 1252 | 604 | 1310 | 648 | 1368 | H |
| 1198 | 589 | 1253 | 568 | 13II ( +1094 ) | $609(+1157)$ | 1369 | ** |
| 1199 | 599 | 1254 | 550 | 1312 | 602 | 1370 | 658 |
| 1200 | 609 | 1255 | 584 | 1313 | 1004 | 1371 | 984 |
| 1201 | 123 |  |  | 1314 | 439 | 1372 | 981 |
| 1202 | 347 | 1260 | 340 | 1315 | 456 | $\times 373$ | 630 |
| 1203 | 1009 | 1261 | $33^{8}$ | 1316 | 435 | 1374 | 379 |
| 1204 | 452 | 1262 | 327 | 1317 | 383 | 1375 | 598 |
| 1205 | 462 | 1263 | 586 | 1318 | 976 | 1376 | 634 |
| 1206 | 389 | 1264 | 559 | 1319 | ** | 1377 | 1005 |
| 1207 | 447 | 1265 | 622 | 1320 | 465 | 1378 | 982 |
| 1208 | 370 | 1266 | 335 | 1321 | 974 | 1379 ( $=1609$ ) |  |
| 1209 | 650 | 1267 | 995 | 1322 | 959 | 1380 | 373 |
| 1210 | 614 | 1268 | 990 | 1323 | 960 | $138{ }^{81}$ | 642 |
| 1211 | 395 | 1269 | 386 | 1324 | 576 | 1382 | 658 |
| 1212 | 966 | 1270 | 343 | 1325 | 974 | 1383 | 979 |
| 1213 | 458 | 1271 | 393 | 1326 | t | 1384 | 1014 |
| 1214 | 376 | 1272 | 322 | 1327 | 1006 | ${ }_{1385}$ | 658 |
| 1215 | 674 | 1273 | 609 | 1328 | 639 | 1386 | 658 |
| 1216 | 564 | 1274 | 588 | 1329 | 632 | 1387 | 1014 |
| 1217 | 970 | 1275 | 394 | $133{ }^{\circ}$ | 974 | 1388 | 956 |
| 1218 | 353 | 1276 | 595 | 1331 | 605 | 1389 | 619 |
| 1219 | 428 | 1277 | 1008 | ${ }_{133}$ | 615 | 1390 | 609 |
| 1220 | 358 | 1278 | 3 ¢ | 1333 | 974 | 1391 | 658 |
| 1221 | 324 | 1279 | 313 | 1334 | 974 | 1392 | 1012 |
| 1222 | 593 | 1280 | 549 | ${ }^{3} 335$ | 974 | 1393 | 619 |
| 1223 | 454 | 1281 | 434 | 1336 (+1096) | 166 | 1394 | 658 |
| 1224 | †t | 1282 | $44^{\circ}$ | 1337 | 620 | 1395 | 1345 |
| 1225 | 377 | 1283 | $35^{1}$ | ${ }^{1338}$ | 631 | 1396 | 649 |
| 1226 | 628 | 1284 | 336 | 1339 | $3^{82}$ | 1397 | 607 |
| 1227 | 580 | 1285 | 432 | 1340 | ** | 1398 | 1014 |
| 1228 | $6{ }^{1}$ | 1286 | 1356 | $134{ }^{1}$ | 641 | 1399 | 619 |
| 1229 | 627 | 1287 | 365 | 1342 | 624 | 1400 | 609 |
| 1230 | 988 | 1288 | 361 | ${ }^{3} 34$ | 658 | 1401 | 610 |
| 1231 | 1265 | 1289 | 337 | 1344 |  | 1402 | ** |
| 1232 | 356 | 1290 | 344 | 1345 | ** | 1403 | 567 |
| 1233 | 309 | 1291 | 346 |  |  | 1404 | 524 |
| 1234 | 611 | 1292 | 362 | ${ }_{350}$ | 387 | 1405 | 647 |
| 1235 | 312 | 1293 | 317 | ${ }^{135}$ | 658 | 1406 | \# |
| 1236 | 551 | 1294 | 563 | 1352 | 993 | 1407 | H |
| 1237 | 555 | 1295 | 325 | 1353 | 998 | 1408 | 574 |
| 1238 | 633 | 1296 | 594 | 1354 | 395 | 1409 |  |
| 1239 | $55^{8}$ | 1297 | ${ }^{369}$ | 1355 | 636 | 1410 | 609 658 |
| 1240 | 127 | 1298 | Ashm. 216 | 1356 | 384 | 1411 | 658 |

$\dagger \dagger$ Tablet not seen by E. L. B.

* Tablet not numbered.
+ The fragments do not quite fit, but seem to be parts of the same tablet.


## CONCORDANCE OF NUMBERS OF TABLETS

| S.M. | Mus. Reg. | S.M. | Mus. Reg. | S.M. | Mus. Reg. | S.M. | Mus. Reg. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1412 | 1014 | 1467 | 1014 | 1522 | 695 | 1574 | 609 |
| 1413 | 609 | 1468 | 465 | 1523 | 699 |  |  |
| 1414 | 1014 | 1469 | 658 | 1524 | 702 | 1575 | $\dagger$ |
| 1415 | 616 | 1470 | 619 | 1525 | 708 | 1576 | 1196 |
| 1416 | + | 1471 | 340 | 1526 | 708 | 1577 | H |
| 1417 | 999 | 1472 | ** | 1527 | 574 | ${ }^{1} 578$ | H |
| 1418 | 1345 | 1473 | 334 | $1528(=1508$ : | 571 ( +706 ) | 1579 | ** |
| 1419 | $44^{8}$ | 1474 | 708 | +1564) |  | ${ }^{580}$ | E4 |
| 1420 | ** | 1475 | 380 | 1529 | 698 | 1581 | 518 |
| 1421 | 1014 | 1476 | 658 | 1530 ( +1531 ) | 573 (+700) | 1582 | 685 |
| 1422 | 465 | 1477 | 1014 | 1531 ( +1530 ) |  | 1583 | 694 |
| 1423 | 577 | 1478 | 658 | 1532 | 704 | ${ }^{1} 884$ | 994 |
| 1424 | ** | 1479 | 1014 | 1533 | 566 | 1584 bis | $\dagger$ |
| 1425 | 332 | 1480 | 1014 | 1534 | † | 1585 | 640 |
| 1426 | 562 | 1481 | 1014 | 1535 | 708 | 1585 bis | \# |
| 1427 | 974 | 1482 | 655 | ${ }^{1536}$ | 707 | ${ }^{5} 586$ | 658 |
| 1428 | Ti\% | 1483 | H | 1537 | 708 | 1586 bis | H |
| 1429 | 609 | 1484 | 1014 | ${ }^{1} 538$ | 708 | 1587 | † |
| 1430 | 619 | 1485 | 658 | 1539 | $\dagger$ | 1587 bis | $\dagger$ |
| $143{ }^{1}$ | ** | 1486 | + | 1540 | Ashm. 706 | 1588 | 658 |
| 1432 | 391 | 1487 | ** | 1541 | 560 | 1588 bis | H |
| 1433 | $\dagger$ | 1488 | 658 | 1542 | 574 | 1589 | 653 |
| 1434 | 658 | 1489 | 974 | 1543 | ** | 1590 | 658 |
| 1435 | 1014 | 1490 | 606 | 1544 | ** | 1591 | † |
| 1436 | 1014 | 1491 | 974 | 1545 | ** | 1592 | 608 |
| 1437 | 609 | 1492 | 591 | 1546 | ** | 1593 | 609 |
| 1438 | ** | 1493 | * | 1547 | * | 1594 | + |
| 1439 | 643 | 1494 | 974 | 1547 bis | ** | 1595 | † |
| 1440 | 1014 | 1495 | * ${ }^{\text {e }}$ | 1548 | 544 | 1596 | † |
| 1441 | † | 1496 | 1265 | 1549 | ** | 1597 | † |
| 1442 | 465 | 1497 | 658 | 1550 | 572 | 1598 | † |
| 1443 | 1345 | 1498 | 658 | ${ }^{551}$ | 570 | 1599 | H |
| 1444 | ** | 1499 | 658 | 1552 | ** | 1600 | H |
| 1445 | 583 | 1500 | 658 | 1553 | ** | 1601 | $\pm$ |
| 1446 | ** | 1501 | ** | 1554 | * | 1602 | $=1$ |
| 1447 | 658 | 1502 | 465 | 1555 | ** | 1603 | 609 |
| 1448 | 1014 | 1503 | 652 | ${ }^{1556}$ | ${ }^{18}$ | 1604 | ** |
| 1449 | 974 | 1504 | 395 | 1557 | ** | 1605 | $\dagger \dagger$ |
| 1450 | 1014 | 1505 | 658 | 1558 | ** | 1605 bis | + |
| 1451 | 569 | 1506 | 658 | 1559 | ** | 1606 | 654 |
| 1452 | 1014 | ${ }^{507}$ | 548 | 1560 | * | 1607 | †t |
| 1453 | 1345 | $1508(=1528 b)$ | $706(+57 \mathrm{I})$ | 1561 | ** | 1608 | H |
| 1454 | 1014 | 1509 | 1014 | 1562 | 40 | 1609 | 658 |
| 1455 | ** | 1510 | 1014 | 1563 | ** | 1610 | 658 |
| 1456 | 1014 | 1511 | ** | $1564(+1528)$ | $706(+571)$ | 1611 | 658 |
| 1457 | 974 | 1512 | † | 1565 | ** | 1612 | $\dagger \dagger$ |
| 1458 | ** | 1513 | 1014 | 1566 | *4 | 1613 | 656 |
| 1459 | 619 | 1514 | 375 | 1566 bis | † | 1614 | + |
| 1460 | 973 | 1515 | 658 | 1567 | * | 1615 | 1025 |
| 1461 | 450 | 1516 | 87 | 1568 | 101 | 1616 | 1067 |
| 1462 | ** | 1517 | 91 | 1569 | Ashm. 710 | 1617 | 646 |
| 1463 | 331 | 1518 | 701 |  |  | 1618 | 618 |
| 1464 | 1014 | 1519 | 696 | 1571 | 899 | 1619 | † |
| 1465 | 974 | 1520 | 697 | 1572 | + | 1620 | † |
| 1466 | 330 | 1521 | 703 | 1573 | † | 162x | 1014 |

$\dagger$ Tablet not seen by E. L. B.
** Tablet not numbered.

+ The fragments do not quite fit, but seem to be parts of the same tablet.

| CONCORDANCE OF NUMBERS OF TABLETS |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| S.M. | Mus. Reg. | S.M. Mus. Reg. | S.M. | Mus. Reg. | S.M. | Mus. Reg. |
| 1628 | $\dagger$ | 04-91) | 04-36 | 1433 | 04-68 | 1452 |
| 1629 | $\dagger \dagger$ | 04-06 1412 | 04-37 | 1435 | 04-69 ( $+04-17)$ |  |
| 1630 | † | 04-07( $+04-14) 1414(+1426)$ | 04-38 | 1430 | -4-70 | ** |
| 1631 | + | 04-08(+04-11) $1428(+1440)$ | 04-39 | 1352 | 04-71 | 1460 |
| 1632 | † | 04-09( $+04-8 \mathrm{I}$ ) $1411(+1413$ ) | 04-40 | 1432 | 04-72 | ** |
| 1633 | H | 04-10(+04-05) | 04-4 ${ }^{\text {I }}$ | 1434 | 04-73 | 1465 |
| 1634 | + | 04-11 ( $+04-08)$ | 04-42 | 1429 | 04-74 | 1458 |
| 1635 | H | 04-12 1423 | 04-43 | 1448 | 04-75 | ** |
| 1636 | H | 04-13 1408 | 04-44(+04-33) |  | 04-76 | 1459 |
| 1637 | H | 04-14( $+04-07$ ) | 04-45 | 1457 | 04-77 | 1463 |
| 1638 | H | 04-15 t $\dagger$ | 04-46 | 1453 | 04-78 | 1454 |
| 1639 | H | 04-16 1409 | 04-47 | 1357 | 04-79 | 1451 |
| 1640 | H | 04-17(+04-69) 1449 ( +1461 ) | 04-48 | 1442 | 04-80 | 1467 |
| 1641 | † | 04-18 1468 | 04-49 | 1431 | 04-8x ( $+04-09$ ) |  |
| 1642 | H | 04-19 1436 | 04-50 | † | 04-81 bis | 1455 |
| 1643 | † | 04-20 1420 | 04-5 | 1450 | 04-82 | 1419 |
| 1644 (=218) | Ashm. 489 | 04-21 1351 | 04-52 | 1444 | 04-83 | $\dagger$ |
| 1645 | Ashm. 711 | 04-22 Ashm. 213 | 04-53 | 1354 | 04-84 | 1471 |
| 1646 | Ashm. 712 | 04-23 1414 | 04-54 | $\dagger$ | 04-85 | + |
| 1647 | Ashm. 848 | 04-24 1416 | 04-55 | Ashm. 217 | 04.86 | H |
| 1648 | Ashm. 850 | 04-25 1407 | 04-56 | 1438 | 04-87 | t |
| 1649 | Ashm. 852 | 04-26 1418 | 04-57 | $\dagger$ | 04-88 | H |
| 1650 | Ashm. 854 | $04-271410$ | 04-58 | 1437 | 04-89 | $\dagger$ |
| 1651 | Ashm. 859 | 04-28 1349 | 04-59 | 1439 | 04-90 | H |
|  |  | 04-29 1417 | 04-60 | 1466 | 04-9r ( $+04-05$ ) |  |
|  |  | 04-30 1350 | 04-6x | 1469 | 04-92 | † |
| 04-0x | 1406 | 04-31 1443 | 04-62 | 1462 | $04-93$ | $\dagger$ |
| 04-02 | 1353 | 04-32 1425 | 04-63 | 1441 | 04-94 | H |
| 04-03 | $\dagger$ | 04-32 bis 1477 | 04-64 | 1447 | 04-95 | † |
| 04-04 | 1421 | 04-33(+04-44) $1437(+1466)$ | 04-65 | 1456 |  |  |
| 04-05 | 1422 | 04-34 ** | 04-66 | 1464 | M 1 -1 38 | M 1 - $\mathbf{r}_{3} 8$ |
| $(+04-10+$ |  | 04-35 1445 | 04-67 | + | but M 25. 126-9 | 176-7 H |

Dr. Bennett has also noted the following junctions of fragments, and additions:

| $14+27+28$ | $1528+1564$ | junctions with |  | reverses | edges |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 36 bis +37 bis | $1530+1531$ | unn | bered | noted | noted |
| $97+284$ | $1613+S M$ I fig. 18 | fragments |  | 11 | 417 |
| $224+228$ | lower left | 139 | 04. 02 | 17 | 564 |
| $493+500$ | 04. $05+10+91$ | 245 | 04.03 | 26 | 680 |
| $535+538$ | 04. $07+04.14$ | 800 | 04. 12 | 180 | 1098 |
| $587+589+596$ | 04. $08+04.11$ | 801 | 04.26 | 512 |  |
| $618+623$ | +2 unnumbered | 1092 | 04. 41 | 517 |  |
| $752+753$ | 04. $09+04.8 \mathrm{r}$ | 1186 | 04. $78+$ | 646 |  |
| $841+867$ | +r unnumbered | 1328 | several | 658 |  |
| $919+921$ | 04. 17+04. 69 | 1519 | unnumbered | - (218) |  |
| $1094+1311$ | +2 unnumbered | 1520 |  | 217 (218) |  |
| $1096+1336$ | $\begin{aligned} & 04 \cdot 33+04.44 \\ & 04.59+04.60 \end{aligned}$ | 1593 |  | 1248 ( 1304 ) |  |

## CRITICAL NOTES ON THE LINEAR TEXTS IN SCRIPT B

Only rarely is there occasion to question the accuracy of the transcripts made by AE from the originals．But fuller acquaintance with the signary and the vocabulary makes probable a few emendations；and perhaps there are others to be made．

1．Damaged and difficult to read．1．2： $\bar{\square}$ may be $\neq$
1．8：$|2|$ may be $\mu$ ．
1．9：only the fifth sign is legible：AE read for the first；
$f$ for the second．
1．10：the numeral may be ${ }^{\prime}$＇．
1．II：numeral｜for ${ }^{1}$ for lack of space？
16．1．2：the fourth sign is variant of $\overline{7}$
17．1．I ：first sign $\mathcal{Y}$ ；1．2：first sign $\sqrt{\text { fin }}$ ．
18．1．I：first sign $\hat{\mathcal{Y}}$ or $\boldsymbol{\{}$ ； 1.2 ：first sign $\boldsymbol{\}}$ ：numeral lost； final sign of second word $\mathbf{Y}$ ．
19a．1．I：third sign 局．
20 a．I．1：first sign T；cf． 3 for this word．
21．1．I：punctuation mark after first word．
22．first word may be restored from 2.
25．first word，last sign is $\frac{M}{\bar{X}}$ ；in PM IV，fig． $600 b$ ，the numeral at end of 1．I should be 1 ．
27．1．I ：first sign may be $A$ but cf．AN $799 a, b$ 。
1．2：restore the first word from $5,6,13$ ．
28．1．I：second sign perhaps
3I．second sign $H$ or 4 ．
33．1．I：first stroke may be $X$ ；cf． 9 Ir．
34．1．I：second sign is $\overline{\hat{i}}$ ．
36．probably complete to left；first sign of second word is $\ddagger$ ．
40．1． 3 ：first word，second sign $Y$ ．
4 I bis．copied by AE but cancelled．
42．1．I：first three signs as in 46 ；at end $\square$ should be $\frac{\gamma}{T}$ or $R$ ．
43．first sign ं；cf． 1035 ．
45．1．I：first word，second sign illegible．
47．1．2：signs after second word may be ALE．
 quoted PM IV，fig．695，does not exist．First word， second sign is 信，not Y風。
50．combined from two pieces：（a）the fourth small sign may be the sixth $f$ ；b second small sign $(\not \ddagger \mathrm{AE})$ is not clear．1．I：antepenultimate sign is not 9 （as AE）；cf． 8 in 1．2．The first sign may be $H$ ；cf．face $a$ in same position．The last numeral in I．I and after ideogram in 1.2 is unusual．On $c$ the numeral may be III or $111 /$ ； cf． 59.
5I b．last sign before（ may be 7 ．
52．last three signs are from a detached fragment．
56．the unusual numeral may be 16 ．
58．the sign 2 may be part of $\$$ ．

59．1．2：AE read final sign as 5 but it may be $\mp$（Sundwall）．
60．1．I：first sign is $\hat{\chi}$ ，the last $\left[\right.$ or $I_{s}$ perhaps even $\theta$ ．
6x．1．1：the＇ship＇sign（ $\Longleftrightarrow$ AE）recurs on $1 \times 17$ ．
63．almost illegible；in 1 ．I the first word may be tured；the second word was followed by ？ x ．
1．2：first sign probably $\$$ ；numeral ${ }^{1}$ after $\theta$ 开．
68．third sign may be $\psi$ or 览s．
69．seems to be identical with AE 745；1．2：last sign restored．
71．second sign probably $\not \ddagger$ ．
78．final sign perhaps $\Psi$ ．
79．numeral damaged；more than 4 ；the sign $F$ is frequent as ideogram．
80．first sign may be $\mathcal{P}$ ；third perhaps $\bar{T}$ or $\uparrow$ ．
82．first sign $\Theta$ ；last probably ${ }^{\Psi}$ ．
84．first sign $\uparrow$ ；last 非．
85，86．fragments with $\bigoplus$ ．
87．first sign 用（AE）but perhaps 日．
89．the rare＇standing figure＇（B74a）is not separated from the preceding group，but seems to be an ideogram like药（B74）．
101．third sign may be $f$ ；the first sign after the central break is obscure：驾 or
105．first sign may be
114．may have been turned along short axis（see p．42）．
115．second word，second sign 悀 or $斤$ ．
116．1． ：last sign perhaps $\hat{A} ; 1.2$ ：first and third signs may be $\Lambda$ ．
120．in the superscript word $f^{\prime}$ may be $f$ ．
121．initial G is the end of a＇principal＇word．
125．also numbered $\mathbf{1 6 2 6}$ ．
128．only certain signs are $\mathcal{G}$ and $\mathcal{T}$ ．
131．1．I：second sign $\uparrow$ ．
133．first sign $\psi$ ，last $\boldsymbol{\xi}$ ．
137．second word；last sign 日闹 or C．PM IV，fig．68ı．
144．1．1：fourth sign perhaps $\mp ; 1.2$ ：third and fourth $\mathbb{C}$ ！ cf．902， 909.
145．1．5：fourth sign $\mathcal{F}$ ；illegible signs after $\mp$ ；；1．6： probably 1 ．
148．1． 2 ：last sign＊
149．1．I：first sign $D ; 1.2$ ：first sign $\boldsymbol{\}}$ ．
150．first sign probably $\uparrow$ ．
153．turned on vertical axis．a l． 3 first sign $T^{\prime}$ cf． 323.
154．1．I：last sign A；1．2：last sign $\%$ ．
166． 1 ．I：sign after $H$ may be 8 ．

172．last sign may be 1 ．
182．last sign perhaps $\frac{M}{X}$ ．
187．first sign probably $\boldsymbol{f}$ ；last sign illegible．
196．last sign perhaps $\mathbb{A}$ ．
202．first sign $\theta$ ．
2II．penultimate restored．
213．first sign unusual：गा｜（B 96）．
216．last sign $\Psi$ ．
217．first sign $\zeta$ ；remainder ideograms．
242 b．last sign yy．
244．first sign 典5．
246．first sign（PM IV，fig． $783 b$ ）not $\bigoplus$ but $\because$ ．
268．first sign may be $\bar{\mp}$ or $\overline{\bar{i}}$ ；sign $f$ may be -1 ．
269．the sign 8 obliterated．
270．first sign $\mathrm{B}_{\mathrm{g}}$ may be 用．
281．first sign may be 䒬；word perhaps 452 ．
283．delete－after 5 ．
288．first $L_{S}$ doubtful，perhaps $Y$ ．
292．last signs V庶 or 柆。
3ro．last sign $Y$ or $F$ ．
312．third sign $\begin{gathered}\text { 有 not } \bar{\chi} \text { ．}\end{gathered}$
321．first sign $\AA^{\alpha}(\mathrm{AE})$ ，but should be $8 \pi^{\prime}$ or $\hbar$ ．
324．last sign 9 ．
329．first sign $\Psi$ ．

341．fifth and sixth signs damaged．
342．broken between $\boldsymbol{\gamma}$ and $\Psi$ ．
343．last word damaged．
344．$\Psi$ doubtful．

352．fourth sign $\dagger$ probably $\mp$ ．
354．both lines damaged．
359．1．2：last sign 开．
36x．first sign ${ }^{\text {Y }}$ ，but damaged．
364．1．I at end；perhaps $\Psi$ or $\Psi$ ．
365．1．I ：first sign is $\hat{\AA}$ ．
367．fourth sign（AE）may be C ．
368．last sign perhaps $\Psi$ ．
370．1．2：last sign $Y$ ．
371．second word；restore 4 自克
372．last sign 刪s．
374．last sign 登（AE）or 丰．
380．Xenaki photo；〕非个Hp．

386． 2 restored by AE．
388．last sign probably 4 ．
389．last sign 2 or 4 ．
394 a．1．4：Evans $\mp$ should be $\neq$ ．
b．1． 3 ：insert $\%$ before ．

397．first sign may be $\mathcal{F}$ ．

4II．the last sign is unique．
415．delete $I$ before $T$ ．
423．broken and damaged after 8 ？
427．1．1，end：restore $\#$ ．
432．1． 2 ：first two signs damaged．
437．first sign perhaps 9 ．
439．the inverted bottle is quite clear．
440．1．I：first sign ？A；1．2： 5 or $\mathrm{H}^{\prime}$
442．1．I：$\{$ or 4 ．
452．1．2：first sign $P$ or 8 ．
457．$P$ as final or ideogram is unusual．
458．supply punctuation after $\ddagger$ ．
477．drawn but cancelled by AE．
478 a．drawn but cancelled by AE．
478 b．from AE notes．
483．1．2：perhaps ${ }^{4}$ ．
510．1．I ：second sign \％．
$513 b$ ．probably TYY \＆A Lini！．
519．restore H 10 出。
535．1．2：first sign perhaps C ．
538．1．2：restore $\bar{\nabla}$ ．
540．first sign \＃\＃．
542．first sign $T$ ．
558．first sign $\varnothing$ ．
559．1．2：first sign $\mathbb{A}$ for
562．1．I ：last sign perhaps $\Psi$ as in 11．2，3．
1． $2: 5 \mathrm{ft}$ should be $5 \mathrm{f7}$ ．
568．probably $\mp$ 个
570．space between and \％．
571－2．exactly same contents．
580．1．2：$\ddagger$ 处 4 日．
583．1．r：first sign $\}$ ．
584．1．I：first sign
590．I．I ：first sign \％．
59x．1．2：fourth sign $\mathcal{M}$ may be $\Psi$ ；cf． $5^{8} 4,695$ ．
592．first sign $Y$ ．
593． 1.1 and end of 1.2 damaged．
608．1．2：$f$ is larger than preceding signs．
6Ir．1．1：非 not clear．
612．1．2：last signs erased．
614．1．3：H个A as in 1． 2.
616．1．3：numeral $-{ }^{111}$ not $=11$ ．
626．1．I ：upper word 8栶 ${ }^{4}$ ．
627．1．I：numeral ${ }_{\text {il }}^{1} \mathrm{H}$ restored．
11．2，3：numeral $\|_{\|!}^{\prime}$ erased and replaced by－（10）．
629．1．I：the damaged word ${ }^{\boldsymbol{\lambda}}$ 了类s．

635．1．2：last sign is $\%$ ．

638．upper line A $\Psi$
64I．1．1：last word $\mathcal{Y}(\mathrm{AE})$ doubtful．

656．1．2：Y $4 \hat{7}$ restored．
659．traces of rule to right．
66x．may be complete to left．
664．last sign probably $\overline{\overline{1}}$ ．
666 c．second sign $\Psi$ or $Y$ ．
673．PM IV．694 d；damaged；perhaps $\sqrt[4]{4} A$ ．
677．numeral ${ }^{11}$ not ${ }_{\|| |} 1 \mid$（AE）．
678．word illegible．
681．the＇principal＇is on a separate fragment．
684．words are followed directly by numerals．
686．diminutive is interpolated；cf． 1248.
688．restored from four fragments which may not belong．
690．1．I ：sixth sign uncertain．
693．1．2：sign after $殳$ may be ${ }_{2}^{2}$ ；in the group to left $\hat{Y}$ is written over erased ．
696．1．I：small signs damaged．
699．sign to left is
702．numerals restored from photo．
705．1． 3 restored．
708，710，711．traces of sign on amphora．
717．1．2：restored ${ }^{72}$ ．
719．1．1：note the punctuation．
726．restore＂${ }^{2}$


755．doubtful whether $\$$ or $亠$ 市．
758． 4 （AE）may be 5 ．
778．1．I begins $\oplus$ L．
781．1．I：$\AA^{x}$ may be $\hbar$ ．
786．sign to left is unusual variant $ग \mathbb{T}$（ B 96 ）．
798．1．10：second sign Af or $\mathbb{N}$ ．
820．1．1：sign after if may be 全．
1． 3 ：third word $\left\{A^{\forall x}\right.$ last word third sign $\mathcal{F}$ ．

830．1．I：last sign probably 5 ．
832．probably broken to left，but inscription seems complete．
833．1．3：Evans reads $\pi$［ but $\AA$ 厷 occurs 744.7.
836．1．2：seems to have been rewritten．
839．1． 2 ：numeral erased．
842．1．1：last sign probably N ．
850．last sign should be $T$ ．
859．last sign perhaps
860．Evans $\Psi$ should be $\|^{\circ}$
863．1．＇ 1 ：first word is $8 L_{r}$ ；punctuation mark doubtful．
864．1．2：third sign a variant of $\%$ for＇fig＇．
871．note variant 4.
873． 1.3 ：sign to left is 2 ；sign on jars is $Y$ or 4 ．

875．1．3：first sign $\AA$ ；perhaps for N ．
1． 4 ：first sign $\Psi$ ．
1．5：first two signs not clear．
1．6：the jar to right is quite clear．
878．the unusual sign（ $\mathrm{BrO2}$ ）is probably 2 cross－cancelled．

882．目 erased before 都．
884．fourth sign is 5 not 4 ．
892．second sign is $\Psi$ as in 893 ．
893．first sign is 2 ．
902．1． 2 ：penultimate sign is $\mathbb{K}$ ．
904．1．2：the second numeral is 0 ミニ1．
907．the group is ALst．
911．1．г：restore $\bar{f}$ for Evans＇s $\overline{\bar{i}}$ ．
1．2：first sign（HEvans）may be 目 or $\square$ ．
1． 5 ：second sign $\#$ ．
1．7： $\boldsymbol{\neq}$ over erased $\lambda$ ．
1．9：first word ends in $\overline{7}$ or 9 ；second word perhaps is or 5 ；numeral should be $\equiv$ 三．
1．10：first word indistinct；perhaps $\not \subset$ ；for $\zeta$ read $日$ ； upper small word is $K \lambda T\rangle$ as in 1．8；lower word 5\％and obscure sign；numeral is 0 三三．
1．II：祭 restored by Evans．
1．12：second sign is $日$ ；fourth obscure；second word begins $\Theta$ ；third word begins $\gamma$ ；in numeral column， traces of $A$ ．
1． 13 ：damaged．
915．1．2：last word is 受什。
$918 a$ ．second word is $\mp M ; 1.3$ ：last word is $\ddagger$ ．
92I．third and fourth signs smaller，subsidiary；fifth sign smaller still．
926．1． 2 ：restore 9 Y．
929．numeral omitted before $\mathbb{Y}$ ．
930．upper word ends $\overline{\}}$ not ㅎ． ．
932．less space after $\ddagger$ ．
934．numeral－$\|\|$ is abnormal；？-1111 ．
943．last numeral is 1111 ．
944．last sign is G ．
950．1．2：for Tर restore $\mathcal{H}$ ．
953．1．I：word ends $\boldsymbol{T}$ ；cf．I．I．
962．1．I：last sign probably 䒬 not $\mathbb{A}$ ．
1． 3 ：lower word is $\oplus\left[{ }^{\circ}\right.$
968．upper word second sign usually $\mathbb{A}$ ．
972．unusual variant of Mm ．
972．upper line，perhaps ${ }^{\circ}$ for $\mathcal{M}(\mathrm{AE})$ ．
984．1．1：second word begins 笑，but cf． 983 策。
987．second word，punctuation，cf．991．
997．upper word begins $\lceil$ for $\$$ ．
999．second word may be $\ \iint$ ．

1004．punctuation needed before
1006．1．2：second word begins $\frac{m}{\bar{x}}$ or $\frac{\mathrm{m}}{\mathrm{M}}$ ．
1007．1．2：space after 丰．
1009．second sign perhaps $\phi$ ．
ror4．？punctuation．
1015．upper word begins $\mp$ ；cf． 898.
1017． 4 is probably 7 ．
1020． 4 is probably 5 ．
1029．second word begins 5 ．
1053．punctuation after $H$ by mistake．
1055．two separate fragments．1． 7 begins $\Lambda$ or $\bar{A}$ ．
1066．principal damaged；restored by AE．
1068．first sign unusual variant of $\mathbb{M}$ ．
1069．damaged numeral probably 0.
1085．upper word $\uparrow \bigoplus \Psi$（；cf． 1084.
1092．first word is APY．
1098．upper numeral erased．
1102．upper line；second $\mathcal{F}$ should be $\mathbb{K}$ ；cf． 1128 ．
1116．PM IV，fig． $694 a$ ；word is $17 \%$ 个
1121．principal is 7 \％．
1128．second $\%$ should be $\mathbb{X}$ ；cf． 1102.
1138．1．2：restore G $^{\text {\％}}$ ．
1139．1．2：supply $卜$ before 行
1161．lower word is $\ddagger \Psi \mp$ as on $\mathbf{I 1 6 0}$ ．
1188．1．2：restore ${ }_{L} \mp$ as on 1167 ．
1210．first word probably $\boldsymbol{y}^{4}$ ．
1212．restore $\overline{7}$ for $\mp$
1221．first sign probably ․
1222．lower word；first sign $H$ ；cf．1226，1230；but 月 on 1223 ，$^{\text {12 }}$ ， 4，5．
1232．last word ends $\neq \bar{\eta}$ not $\dagger \overline{7}$ ．
1233．first sign $\pi$ ．
1235．principal ends in $\overline{\}}$ ．
1239．third sign may be $P$ or
1241．the sign $\square$ is written small．
1262．second sign perhaps $\}$ ．
1292．lower line，perhaps $\boldsymbol{\omega}$ ．
1297．1．2：AE gives ${ }^{4}$ but cf．1278－96．
1316．lower line；AE gives $\ddagger$ but Sundwall and photo $\uparrow$ ．
1385．last sign $日$ ．
1426．lower word perhaps 需目。
1422．first sign is 月．$^{\text {1 }}$
1432．read．．．成了で丰も。
1451．restore $\bigoplus$ 非 $\boldsymbol{7}$ 。
1475．second word is $F$ 任干．
1508．compare 1528 b．
1516．compare PM IV，fig． 686.
1517． 1.5 ：second word is $\mathbb{I N}$ ．
1． 6 ：second word is $f \mathbb{K}$ ？
1．8：first legible sign is $\ddagger$ for $\mp$（AE）．

1． $9: \overline{7}$ rewritten．
1520．1．7：total $\dagger$－but should be more．
1523．1．1：perhaps ${ }_{K} \mathrm{M}_{\boldsymbol{T}}$
1． 4 ：first sign larger；sixth sign $\overline{\overline{7}}$ ．
1．6：A（AE）or perhaps $\mathbb{4}$ ．
1．8：first word 笑筧。
1524．1．4：first word may be 解＇。
1526．1． 3 ：third sign $Y$ ．
1527．1．4：$\ddagger$（AE）perhaps $\mp$ ．
1528．may be the same as 1508 ．
1531．1．3：first legible sign is $Y$ ．
1541．PM IV，fig． $838 c$ is more accurate than $S M$ I，fig． 30.
1549．first signs are 需，$\Delta$ t．
1559．first sign $\Psi$ ．
1568．A very wide tablet，complete，ruled lengthways in six lines，with an elaborate statement of＇container＇－entries塐 written in four sizes of signs irregularly，and perhaps including subsequent endorsements．Words under－ lined are in the largest signs．In tabular form，the entries would be as follows：


1．5：space for two entries，blank，then－


1．6： $1 \uparrow \quad \mp Y \neq$ perhaps a total枇㽬III
1． $7:$ on the edge of the tablet．


In 1．2，item 3，the second sign is the＇saffron＇－sign；in item 4 note the＇overseer＇－sign with phonetic value within a group．The endorsement on the edge（1．7） contains no numerals，and may be a continuous text．
On edge，the sign $\%$（thrice）is a variant of $\bar{\pi}$ with central stroke omitted．Perhaps a punctuation after $\bigsqcup 4$ （twice）．

Since the three principal groups begin with $\mathcal{Y}$ ，this sign may be a grammatical prefix．The group A 4 recurs on 961． 2 ；the other groups do not recur；but two end in $日$ ；the radicle $G 4 h f$ occurs on 682,683 ． 1 ；$T \ddagger$ A．
 on 687.2 ；and $H \neq$ is frequent；so they are probably all personal names［PM IV．697，fig． $682 a, b$ ］．
1569．1．I：first sign yr．
1．2：last sign $\bar{\gamma}$ ．
1575．same as 314：quoted by AE．
1576．1．2：\％\％
1577．same as 996.

1598．second of should be $\mathbb{R}$ ．
1607．principal should be ．．At．
164r．second sign is 7 ．
1643．1．2：first sign is $\hat{A}$ ．
5017 is identical with 771．

04．or．l．2：read＇tst＇…
04．03．$P M$ IV，fig． $764 \ell$ ；first word is $A \Psi \ddagger ⿰ ⿰ 三 丨 ⿰ 丨 三 一$ B．

04．14．1．I：first sign is 2 ．
04．23．first sign is 7 ．
04．30．1．I：first word 9 者卜＇。
1．2：third sign；like B；only in this series；perhaps yt．
04．32．two fragments combined．

04．50．1．I ：last word is 5閒．
1．2：first sign 9 ．
04．60．1．1：the word is M开角．
04．66．1． 3 ：the word is $\hat{\jmath}$ ．
04．68． 1 ．I：third sign may be $\Psi$ ．
04．7r．last sign is $\mp$ ．
04．78．1．1：the word is $\left.\AA^{\gamma x x}\right\}$ ．
04．8x．damaged：1．2 probably 5 年日 as on 04.02 and 04.28.
04．90．the word is probably A $^{\mathbf{4}}$ ？
04．93．1．2：last word is $8 \%$ ．

TABLETS REGISTERED IN HERAKLEION MUSEUM，BUT NOT DRAWN OR NUMBERED BY EVANS

| 395 （one of five tablets） | 723 | 84 r （one of eight） | 1966 （six of seventeen） |
| :---: | :---: | :---: | :---: |
| 465 （one of seven tablets） | 724 | 854 | 1199 |
| 518 （one of twelve tablets） | 725 | 855 | 1207 |
| 543 （one of twelve tablets） | 726 （not seen） | 858 | 1208 |
| 596 | 727 | 859 | 1209 |
| 604 | 727 bis | 864 | 1211 |
| 609 （four of fifteen tablets） | 728 | 867 | 1217 （seven of eight） |
| 617 | 729 | 868 | 1228 |
| 619 （three of nine tablets） | 730 | 869 | 1232 |
| 626 | 731 | 883 （one of two） | 1245 |
| 638 | 733 | 883 （two） | 1246 （five of twenty－one） |
| 644 | 734 | 914 | 1247 |
| 645 | 735 | 922 （three of nineteen） | 1345 （three of ten） |
| 651 | 736 | 952 | ［1349 begins 04．］ |
| 658 （two of fifteen tablets） | 737 | 974 （three of eighteen） | 1470 |
| 708 （five of twelve tablets） | 738 | 996 | 1473 |
| 709 | 740 | 1001 | 1475 |
| 710 | 741 | 1014 （seven of thirty－three） | 1476 |
| 711 | 746 | 1015 | 1478 |
| 712 | 757 （not seen） | 1028 （noted as lost） | 1479 |
| 713 | 767 （not seen） | 1031 | 1481 |
| 714 | 772 | 1047 （seven of eighteen） | 1482 |
| 716 | 774 | 1050 （one of two） | 1483 |
| 717 | 777 （two of seven） | 1082 | 1484 |
| 719 | 778 | 1083 （three of eighteen） |  |
| 721 （not seen） | $779(+780)$ | 1145 （three of six） |  |
| 722 | 832 | 1169 （one of ten） |  |

## TABLETS IN LINEAR SCRIPT B FROM KNOSSOS

NOT INCLUDED IN THE DEFINITIVE NUMERATION B 1 －1574
Tablets for which there are transcripts（under provisional numbers）in Evans＇s manuscript notes NB．A few have been identified with tablets definitively numbered

1575．世多 $\mathbb{A}=314$ ． 1576．$\frac{\text { G论 } 5}{4 \hat{i}}$
1577．．U7У4．．$=996$ ．
1578．．A $A^{\text {俊．．}}$
1579．$\frac{\ldots 11 \text { 三三111 }}{\ddagger \text { क11 }}$



1583．$\frac{\text { 丰个性 } \% \text { ．．}}{\text { blank }}$
$1584 \cdot \frac{. \% \text { 夆 }=R^{111}}{\ldots \%-111}$

1585．$\frac{\text { To } \frac{X^{111}}{\text { ¢ }} 1111}{1111}$





1591.
$\frac{1 \text { 羊三ミX－1111 }}{\text { blank }}$
1592．$\frac{\text { ．} X \equiv=11}{\neq \$ 11}$
1593．$\frac{\cdots \text { K三III }}{\neq \text { FII }}$

1596．$\frac{\cdots \text { G分．．}}{\cdots 7 \text { ．．．}}$
1597．$\frac{\text { ．} \% \text { o．．}}{\text { blank }}$

1599．．$\square_{1 \pi}$ surcharged $\AA$
1600．$\frac{\text { क1111 } \neq}{\neq \frac{111}{7}-}$
1601． $2 \pi \overbrace{1}: \frac{1}{9 \ldots}$


1603．$\frac{1111 X \equiv 11}{\ddagger \frac{\%}{7}-}$
1604．$\frac{\cdots==X \ldots}{P^{*}+\frac{1}{7} 11}$
1605．．．C゚ Hill ．．．

160\％．$A \pm \frac{2}{\ddagger}$
1608．掃．
1609．$\cdots \frac{1}{4} \equiv$
1610．．．$=1111 \chi \equiv 111$ ．
1611．．．．。
1612．．．\％ $0-$ ㅈ…

1614．．．\％ 00 ．
$1615 \cdot \frac{\cdots \% \text { \％}}{4 \%}$

CONCORDANCE OF FRAGMENTS NOT NOTED BY SIR ARTHUR EVANS，BUT TRANSCRIBED BY DR．EMMETT L．BENNETT IN 1950，WITH THEIR MUSEUM NUMBERS

| $S M$ | Mus．Reg． | SM | Mus．Reg． | SM | Mus．Reg． | SM | Mus．Reg． |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 5003 | 867 | 5028 | 1047 | 5108 | 1471 | 6053 | IO47（4） |
| 5009 | 859 | 5050 | 1014 | 5132 | $1196(2)$ | 6060 | 974 |
| 5017 | 952 | 5079 | 1249 | 5134 | 593 |  |  |
| 5027 | 1047 | 5103 | 1470 | 5185 | 1345 |  |  |

TABLETS REPRESENTED BY AE PENCIL NOTES，WITHOUT PROVISIONAL NUMBERS

1616．．．用 surcharged $\AA$（2）blank．16x8．．Cif干 A．．

1699．$\frac{\cdots \text { 〒 } \cdot .}{\text { F］妆 }}$

1620．G $\Psi \Phi \mathcal{Y}$［quoted $P M$ IV，p．783］． 1621．$A \frac{\text { 禹 }}{A}$

## TABLETS PHOTOGRAPHED IN THE COLLOTYPE PLATES，BUT NOT NUMBERED

1628 XXVII：horse－head 41.
cf． 220 and 241 but different type．
1629 L：fragmentary and indecipherable，perhaps on ingot sur－ charged 2
1630 LVII： 4 lines；（1）＝III：（2）三＇TII\｜；（3）．．\｜TII； （4）blank．
 （4）．${ }^{\prime}$ 三．．
1632 LXII：


1634 LXIV：．． $\boldsymbol{\Gamma}^{\prime}$ ．．

i牧三［cf．932］．
1636 LXXXVIII ：＝sealing 1708 ；concave impression；counter－ signed ${ }^{\text {i／}}$（B74）．
1637 a LXXVIII：A 5 a；SM III 54 （Knossos：Linear Script A）．

1638 XCIII：．．$M \neq \mathbb{Y} \mathbb{A} \underset{\sim}{4}$
1639 XCIV：（no number）；（x）$\square_{11}^{1}$ ；（2）．． $\boldsymbol{I}^{1}{ }^{1} ;(3) \ldots-11$
1640 XC：A 6； 4 lines；defaced；probably Linear Script A．

TABLETS FOUND 1946 IN THE VILLA ARIADNE，AND TRANSFERRED TO THE CANDIA MUSEUM

b． 2 lines；illegible．

1643．from outside SE．angle of the＇Little Palace＇；excavated 1931．§ PI 17 in Pendlebury，Guide to the Stratigraphical Museum．
（1）．．一三ミ．．
（2）．APY－

TABLETS IN ．THE ASHMOLEAN MUSEUM，OXFORD：PRESENTED BY THE GREEK GOVERNMENT TO SIR ARTHUR EVANS：REGISTER NUMBERS

1644．cuirass：fragment（1910．489）．

（1938．7II）．
1646．．．干＇ABY＇夺夆二 （1938．712）．

1647．．． ensill $_{1111}^{11}$ surcharged 多
． 1111 surcharged $\AA$ ．
（1938．848）．

| SM |  | Ashm． | SM |  | Ashm． | SM |  | Ashm． | SM |  | Ashm． | SM |  | Ashm． |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 13 | 1910 | 221 | 479 | 1910 | 219 | 799 | 1938 | 707 | 1298 | 1910 | 216 | fragm | 1938 | 858 |
| 47 | 1938 | 709 | 520 | 1910 | 222 | 820 | 1910 | 215 | 1301 | 1938 | 708 | ＂ | 1941 | 180 |
| 59 | 1910 | 212 | 639 | 1910 | 218 | 872 | 1938 | 713 | 1540 | 1938 | 706 | 1714 | 1941 | 179 |
| 218 | 1910 | 489 | 676 | 1910 | 223 | 883 | 1938 | 705 | 1569 | 1938 | 710 |  |  |  |
| 236 | 1938 | 860 | 776 bis | 1938 | 855 | 889 | 1938 | 851 | fragment | 1938 | 856 | 04.22 | 1910 | 213 |
| 238 | 1938 | 704 | 777 | 1910 | 214 | 1171 | 1910 | 221 | ＂ | 1938 | 857 | 04． 55 | 1910 | 217 |

TABLETS IN THE BRITISH MUSEUM：Hall，Civ．Greece in the Bronze Age，r79，fig． 230

$$
13 \quad 1910 \quad 4.23 .1 \mid \mathbf{1 1 7 1} \quad 1910 \quad 4.23 .2
$$

TABLETS IN THE METROPOLITAN MUSEUM OF ART，NEW YORK．All are facsimiles
Mus．Nos．13．30． $4-18$.
$4=$ B 639．
$5=$ B 894．
$6=$ B 13．

$$
7=B_{59}
$$

$$
I I=04.55
$$

$$
8=\mathrm{B} 820 \quad, \quad 12=B 1298
$$

$$
14=\mathbf{B} 117 \mathbf{x}
$$

$15=\mathrm{B} 676$.
$17 S M$ I，P 116.
18 SM I，P 83.

$$
12=\mathrm{B} 1298 . \quad 16 S M \mathrm{I}, \mathrm{P} 104
$$

$$
\mathrm{I}_{3}=\mathbf{B} 777 a
$$

## TABLETS IN THE GIAMALAKIS COLLECTION, CANDIA

Sixteen tablets in Linear Script B acquired together as having been found at Phaestos: published by Miss Hagne Xenaki, Xpoviкג̀ K $\upharpoonright \eta \tau \kappa \kappa \alpha ́$. (Candia) 391-2, pl. xiII, xiv.
They resemble in every way the tablets in Linear Script B excavated in the Palace of Knossos, in a fabric and script unknown hitherto from any other site. Nos. $1-15$ are of the long narrow form, inscribed lengthways; No. 16 is defective on all four sides. As their contents are identical with texts recorded in Evans's numeration, it seems certain that they have been derived from the Candia Museum after Evans's list was made.

The tablets are recorded here in the order of the plates xiII, xiv in Miss Xenaki's publication, with Giamalakis register numbers, and Evans numbers ( $£$ ).



TABLETS 04. oI-95 FOUND DURING EXCAVATIONS AT KNOSSOS IN 1904, COLLOTYPE PLATES XIII-XVIII
A. THE 'Chariot tablets' (04. 01-29) From the 'armoury' or 'arsenal'
'These hoards themselves stand in a certain administrative relation to the building, on the northern border of the paved "Via Sacra" leading from the "Reception Area" to the "Little Palace", just off its central section, where the road slightly dips. The other two deposits connected with them were found ( I ) near the point where the Northern Entrance Passage reaches the Central Court, (2) on the south-east border of the court itself. The last mentioned-known par excellence as the "Deposit of Chariot Tablets"though largely found in a fragmentary state, and including many remains of documents referring to other classes of possessions, is the only one in which the Minoan war-chariots were depicted in their complete form, together with objects closely associated with them, such as the horse's head and the cuirass, or in some cases, the ingot. But there were also found here-as to a much greater extent in the "Armoury Deposit"-tablets relating to separate parts of the chariots such as the chassis or wheels.' PM IV. 786-7.

The chariots on these tablets have no wheels, and are of two different types. On 04. or-10; 12-13; 15-16;22, the pole is a lattice-girder, with yoke and collars, and the hinder part is prominent and curved, as in the wheeled chariots (B217 ff.). On 04. 18-21 ; ${ }_{2} 3^{-8}$ the pole is single, and the body a square box. On some tablets the chariot is omitted, but the formula is similar.

## TABLETS IN LINEAR SCRIPT B FROM KNOSSOS

These tablets bear a longer formula than usual. There is apparently a 'principal' word-group, followed by as many as eight or nine words, in variable order selected from a small repertory. If, as seems likely, these are personal names, they may represent those members of an association of craftsmen who were actually engaged in producing this or that chariot. Some of these words recur on other tablets: see Vocabulary. References are given to the publication of these tablets in PM IV. 790 ff .

04, 01. 1. 2: first word, restore $\Psi$ 우 ; $P M$, fig. 764 b.
04. 02. 1. I: fifth word damaged.
04.03. 1. I: first word is $A \Psi \neq \neq \sum^{\prime} ; P M$, fig. $764 e$ e

04. 05. 1. 2: first sign damaged; fourth word HLFG.

04, 06. 1. 2: second word in smaller signs. $P M$, fig. $764 b$.
04. 07. two fragments; perhaps connected with 04.68. PM, fig. $7^{6} 4 a$.
04. 08. 1. i: traces of $A^{\prime}$ CAUTEA] as on 04.05.
04. 09. fragmentary.
04. 12. $P M$, fig. $764 d$.
04. 13. 1. 2: last sign is $\%$
04. 14. 1. 2: first sign is $\mu$.
04. 15. 1. 2: restore 4 .

04. 17. 1. 2: last sign is $Y$.
04. 18. second word in smatler signs.
04. 19. third sign $P$ or $\Psi$.
04. 20. $P M$, fig. 766.0 : note the large number of chariots (110) written in tens.
04. 21. $P M$, fig. $766 d$.
04. 22. $P M$, fig. $766 a$.
04. 23. first sign $\overline{3}$.
04. 24. second word in smaller signs.
04. 25. fragmentary.
04. 26. cf. 04. 24.
04. 27. $P M$, fig. 766 b.
04. 28. $P M$, fig. $766 c$.
04. 29. principal written large.
04.30.1. I : the first word is $8 \%$. The third $\operatorname{sign} ~\left(\begin{array}{l}\text { in } 1.2\end{array}\right.$ is peculiar to this series. The numeral is $=$

## B. TABLETS WITH CHARIOT WHEELS. 04. 30-52: cf. B 894

These were found with the 'Chariot Tablets'. Each complete tablet has a 'principal' word, followed by two or more subsidiaries, as on 'commodity tablets'. As some words occur as principal on one or more tablets, and as subsidiary on others, it looks as though these persons formed a team, within which sometimes one, sometimes another was leader. Some subsidiaries, however, do not appear as principal. On 04. $3^{2}$ the principal $\dddot{X l}$ has no subsidiaries. On some a word is written also after the numeral: -10 on $04 \cdot 30$, $3^{2,34}, 39,46 ; \theta$ on 3 ; and on 35 there are two lines of subsidiaries in this position, perhaps abbreviated: 4 .. for 64 用 as on $04.29,37 ; \hat{A} \ldots$ for $\hat{A}{ }_{l} \oplus$ as on $04.29,37$.

As the number of wheels are as large as $462,73,64$, and 41 , their manufacture employed much labour. The totals, however, stand in no direct relation to the numbers of persons involved.
04. 3r. PM IV, fig. 770 .
04. 36. the sixth sign is probably as on $04.35,40,4 \mathrm{I}$, or for Y/ written over erased 2. $P M$, fig. 767 d .
04.39. the group $\because \bigoplus$ is here written with the pictorial 'wheel' sign. $P M$, fig. 767 c .
04. 40. note the rare sign $\bigcup$ in group as on 45, 48. $P M$, fig. $767 a$.
04.4 r .1 .2 : third sign from end is 4 .
04. 42. note the rare sign $\chi$ ( $\mathrm{B}_{12}$ ).
04. 46. two entries. PM, fig. 767 b.
04. 47. PM, fig. $767 e$.
04. 48. $P M$, fig. 767 b.
04. 49. the last sign is probably $\mathrm{T}_{\text {. }}$
04. 50. 1. I: last word is $\mathcal{J}$.

1. 2 : first sign is of

## TABLETS WITH TIRES FOR WHEELS. 04. 51,52

The annular commodity signs seem to be leathern tires, like those of Tut-ankh-amen's chariot in the Cairo Museum.
04. 51-2. fragments. 04. 53. fragment.

TABLETS WITH IBEX-HORNS (B 99) AND OTHER COMMODITIES 04. 53-64
The use of horns of the Cretan ibex for making composite bows is familiar from the description of the bow of Pandarus (Iliad IV. 105 ff .). The other objects on these tablets are uncertain: the rectangular sign ( B 100 ) may be a hide: the circular object like the phonetic sign $\because(\mathrm{AB} 24)$ but furnished with a handle or loop was described by AE as a 'sieve full of corn'; but its association with ट्ट is unexplained.
04. 53. $P M$, fig. $813 a$.
04. 54. $P M$, fig. $813 c$.
04. 55. $P M$, fig. $81_{3} d$.
04. 56. $P M$, fig. 8 r $_{3} b ; B S A$ X. 58 , fig. $21 b, c$.
04. 59. 1. 2 : third sign doubtful.
04. 60. upper line: third sign 4 .

## MISCELLANEOUS TABLETS FROM EXCAVATIONS OF THE YEAR I 904

04．65．fragment of a＇cereal＇tablet with an elaborate variant of the $\overline{\text { F }}$ sign（B 88）；cf．751．2，821，911，\＆c．
04．66．fragment with normal 本 sign．
04．67． 3 lines；words followed by ${ }_{2}^{2}$ ．
04．68．fragment of a chariot tablet；in 1.2 first word is［4］ 0 日．
04．69．fragment of a chariot tablet； 1.2 first sign $T$ ．
04．70．note the unusually heavy hand．
04．71．fragment of a chariot tablet；last sign $\mp$ ．
04．72．last sign $\mp$ 。
04．73．first sign $\hat{\uparrow}$ ．
04．74．last sign $Y$ ．
04．75，76．fragments．
04．77．note the fully formed $\uparrow$ ；the first sign is $f$ ．
04．78．restored from several fragments inscribed transversely in 2I lines；a tabulated list of names，followed by com－ modity signs，of which B 98 does not occur elsewhere； note the earlier variants of $\bigoplus, L_{s}, \mathrm{H}$ ，and E ．None of the sign groups recur．
04．79．fragment with $\stackrel{\stackrel{\rightharpoonup}{2}}{2}$ ．

04．8o．fragment；third sign is $\theta$ ．
04．81．a＇chariot＇tablet like 04．or ff．
04．8I bis．PM，fig．819；a reckoning in javelins；from the same ＇Armoury＇deposit as 04． 82.
04．82．$P M$ ，fig． 817 ；a reckoning in large numbers of arrows，of which many were found in the＇Armoury＇．PM IV， 836 ，fig． 816.
04．83．part of a＇chariot＇tablet like 04．or．

04．84．compare B 366 ；note the＇total＇signs $\mp 4$ as principal； cf． 366 ．
04．85－86．fragments．
04．87．damaged；1．I At ．
1．2：perhaps $\overline{\hat{T}} \uparrow$ ．
04．88－91．fragments．
04．92．part of a＇chariot＇tablet．
04．93．1．1 ：second word $A \because[$.

04．94，95．found in the Villa Ariadne in 1947 （ $=$ 1641－2 above）．

## tablets m 1 －27：126－38 mislaid，like 1641－3（04．94－5），in the villa ariadne，and

 TRANSFERRED TO THE CANDIA MUSEUM IN 1949M．I．large sign $\Psi$ and traces．
2．two lines：（1）开隹（2）凡．
3．two lines：（1）．．YY ．．（2）．．丰P．．
$4 . .7{ }^{4}$ ．
5．blackened by fire：H $\bigoplus$
6．．ATT！！
7．．．${ }^{5}$
（1）$\%$ 프․
（2） Cl －．

8．two lines：（x）damaged．（2）$\ldots \neq \frac{\mathrm{X}}{\mathrm{X}} \boldsymbol{Y}^{1}$
9．finger－marks：． $\boldsymbol{\chi}^{1} \ldots$
10．string－hole：T $\oplus$ ¢ $\dagger$
（1）$\%$（2） P …
11．．．！ミ．．

13．．．旪栄笑．


M．22．string－hole：．．个尖s \％

24．$\quad, \quad(1) \ldots 111 \nless K=11$（2） q $_{1}$
25．Libation Table of grey marble：－$\because ; B S A$ XXVIII ［SM III．A 8］，1926－7，297；cf．BSA VI，pl．xi．2； PM I，497，fig． 355 ．
26．string－hole：two lines；（1）${ }^{1} 9$
（2）blank．
27．＂＂two lines：illegible．
28．Conical Seal of steatite：three linear signs．SM III．A bo．

127．two lines：（ x ）\＆$\Pi_{\mathrm{A}}$ surcharged？（2）．$\Pi_{\text {I }}$ sur－ charged $\AA$
128．inscribed both sides：（a） 140 （b） 24.

130．two lines：（I）．．\％o（2）blank．
131．．．早．．
132．two lines：（ 1 ）．三困日（2）．．夆．．．
133．two lines：（1）．．．III．．．．．（2）（III
134．．．－r．end of tablet．
135．．｜l｜
136．illegible．
137．sketch of silphium－plant．
138．saffron－plant．

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## VOCABULARY

In compiling this vocabulary the following principles have been observed. The original tablets in the Museum at Heraklion being (1949) inaccessible, the evidence is (a) from the photographs made for the collotype plates, (b) from Sir Arthur Evans's drawings.

1. When there is a photograph, its reading is given, if necessary, in preference to AE drawing.
2. When there is no photograph, AE drawing is given; and AE restorations of partly legible or illegible signs, unless there is evidence to the contrary. Sometimes doubt of a reading is indicated by a dot . under the dubious sign.
3. Dubious readings may be listed under the various possibilities. Where sign-groups are written together without dividing signs, the second is listed as dubious.
4. Restored readings are listed twice; (a) the actual reading, (b) as restored [in brackets]. Cross-references are not given, because each restoration must be redetermined by the reader.
5. Normalized signs are generally used; but the reader is advised to check with photograph or drawing. But ( $a$ ) animal variants are given as they appear; (b) certain variants seem to occur more frequently as initials. In general the most frequent variant is used as 'normal' sign; or the simplest, if variants are of about equal frequency.
6. A dot before or after a sign-group indicates that it is incomplete.
7. Two dots . . mark a break before or after a sign-group. Where a sign is uncertain or restored a dot is placed below it.
8. A few words beginning with two uncertain signs have been omitted.
9. In numeral-lists, (? -) indicates that the signs in this instance are uncertain.
10. The word 'ideogram' under a sign indicates that this phonetic sign is also used alone with a numeral or on commodity signs such as containers.

|  | ． 1 ＊K ${ }^{1043.1}$ ト半訂う 70.2 <br> 十苚k 479a3 ト栕 ${ }^{1317}$ ト $\Psi$ ．．． 69.2 14門432．7 $H^{k} \kappa_{\substack{59.1 \\ 27212}}^{\substack{512}}$ 621.2 928.2 1138.2 1145.2 1146.2 1154.2 1155.2 1310.2 1310.2 1311.2 1312.2 1312.2 1313.2 1314.2 $[1315.2]$ $[1368.2$ $[1368.2$ 1515.2 1538.2 1568.6 <br> 1568.6 1650.2 <br>  ドメ゙上゙X卜算 976卜筫睷 670.1卜筫㒀 363.2 ト第 1419 <br>  FY．．${ }^{5503}$ HF | トリ干 ${ }_{1552}^{1152}$ 1153.2 1475.2 $04-77$ Also on Eleusis jar <br>  <br> トリMラ ${ }^{6692}$ <br> HEs． 1000.2 <br> H．4．Y． <br>  447.1 1076.2 1077.2 1116.1 1117.1 1118.1 IIIg．I 1120.1 1121. 1121.1 1122.1 1320.2 <br>  <br>  <br> ト9 846 <br> ．1－9 $94-79$ <br> Hbst 53.3 <br> H6T：＋ 1220 <br>  <br> 1169.2 <br> 1430.2 1586.2 <br> ． 1 HEL 125 <br> H－94 77,2 <br> 卜年 9 91． 6 <br> 1－7 ${ }_{94-93,2}^{45}$ <br> 1788．642．3 <br> 1－n⿹ㅓ… 40.1 <br>  <br> Fi ${ }^{1536}$ <br>  <br> ritt $165_{3} \cdot 4$ <br> ト行 ${ }^{1334}$ | 18971530.6 <br> $+$ <br> $t$ idegram <br>  <br> 十キ <br> 十甲 ${ }^{866 .}$ <br> $+\mp 9^{39}$ <br> $+H_{9} 7_{5,1}$ <br> 十籸 ${ }^{36}$ <br> $+4 \begin{aligned} & \text { s．oas，} b_{2} \\ & \text { ins }\end{aligned}$ <br> $+4{ }^{1234}$ <br> $+93_{36}$ <br> ＋4，800．5 <br> tM80．．1os 1.1 <br>  <br> $+\uparrow{ }^{\text {n }}$ <br> ．$+15+10 \% 0$ <br> 十年等要 <br>  <br>  | 抿 $\begin{aligned} & 115 \\ & (? 793) \\ & 871 \\ & 913.1,2 \\ & 914.2 \\ & 915.1,2 \\ & (? 945.2) \\ & \hline 10.6 \end{aligned}$ <br> $\neq 79^{55}$ キ十本158．． 993 キ才†．． 206 <br> キキ十bs， 207排 984.1 $\neq \mp 十 \vdash$ 198 <br> $\neq \mathrm{FA}_{15}^{12816.17}$ <br>  <br> $\neq$ C $^{9}{ }^{328}$ <br> 末［．，gr8a 3 <br> 汇 $A \bar{j}{ }^{9 r 14}$ <br> \＃目 ${ }^{1704}$ <br> $\neq\left[\begin{array}{\|c} \\ \hline\end{array}{ }^{58}\right.$ <br> $\neq\left[\begin{array}{l}\text { F } F \bar{Y} \\ 625[2], 3\end{array}\right.$ <br>  <br> 末勖 ${ }^{5159}$ ． 6 <br> 相十 16496 <br> 末畋 639.2 <br> 相苞 354 －2 <br> 相保 344 <br> 井用 ${ }^{254}$ <br> 析聞（288．1） <br> ${ }^{\text {キ．．．}}{ }^{1549}$ <br> $\neq \oplus \overline{\mathrm{T}}(\overline{\mathrm{F}}){ }^{15540}$ ${ }_{\substack{[544 \\[1545]}}^{154}$ $154^{8}$ 1549 <br> 1550 1551 <br> 155 $\left[155^{2}\right]$ <br> $155^{2}$ 1553 <br> 1554 <br> $\neq 2 . .5$ |  |
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| 扎厂 ${ }^{1475}$ |  |  |  |  | － 1523.4 |
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| 非 ${ }^{114}$ | ． | ． ¢ $_{\text {¢ }}$ | 于防5 5 ．${ }^{\text {r }}$ | ．79 ${ }_{\text {¢ }}{ }^{366}$ | Flse．．．${ }^{58,2}$ |
| ． | ．$\ddagger$ 于 1100 |  |  |  | 缶¢855） |
| 拒＠${ }_{\text {¢ }}{ }^{140.2}$ |  | 非諥884，1 | 于戈相 61.1 | 13） | （1） |
| ．$\ddagger$ Ki．．${ }^{\text {o4－95 }}$ | 非景．．962， |  |  | ¢9．．${ }^{30}$ | A． 748 |
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| ATM ${ }^{1517.3}$ <br> Arik．． 539 <br>  <br> Ab．． 34.1 <br> A以P 1076 <br> At．．．506．． <br>  <br> A） $\begin{aligned} \text { Ft．．．} \\ \text { 220 }\end{aligned}$ <br>  <br> 用只干而来。987 <br> ก굿．．． $4^{28}$ <br>  <br>  <br>  <br> A欩京。 ${ }^{138_{4}}$ <br>  $\begin{aligned} & 294 \\ & {[303]} \\ & {[1384]} \end{aligned}$ <br> f）$M{ }_{3}^{317 a}$ <br> Als．．． 68.2 <br> （1）弟碞 1578 ．．A）${ }^{3}$ ist． 2 | A <br> A ideogram <br> A．． <br> A．${ }^{64+3}$ <br> At．．． 958.2 <br> At 822.1 <br> A十三篗目 595 <br> A十末必for－99．2 <br> $A+A=24$ <br> $A+A B=\cdots$ <br> Atfi 1162 <br>  <br> A非而．． 359 <br>  <br> A非雨系．．9120 5 <br>  <br> A干 ${ }^{1243}$ <br>  <br> A干N゙̊ 462．2 <br> AARH 19 A 1 <br> AA間 6998 AA明間 68.2 <br>  | A时 28．15 <br> A사 $\xi_{5}^{129}$ <br> A领十相696． <br> A0．f［ $9 \% 2$ <br> ．． 月昛 ${ }^{318}$ <br>  <br>  <br>  <br>  <br> A明转 8 <br> A $\mathbb{A}[\ldots . . .805 .2$ <br> A臣高 ${ }^{102}$ <br>  <br>  <br> A［．f． $608 a_{1}$ <br> 月5 ${ }^{283}$ <br> A5． 28.1 <br> A배팩ㄱ 52．2 <br> ．A目神 76.2 <br> A昂．．${ }^{1391}$ <br> AR $8+{ }^{1005.1}$ <br>  <br> $A_{\oplus} \neq \psi \Gamma$ г <br> A $\oplus$ b．．．${ }^{1176.2}$ <br> $A \oplus \operatorname{ls} A 2 \sum_{\substack{1174.2 \\ 1175 \cdot 2}}^{12}$ <br>  <br> 1177.2 1178.2 <br> 1179.2 1180.2 <br> 118 I .2 <br> 1182 1183 <br> 1183 1184.1 <br>  <br> AOLA ${ }^{2} 82.1$ | $A \odot T^{4} \mathrm{H}^{56,2}$ <br>  $\underset{\substack{[88,3] \\ 872.2]}}{57.2 .}$ <br> A2用．．${ }^{57} 3$ <br> ．A2 Aff．．${ }^{3122}$ <br> （．A己 3r2：Evans A己畕4236 <br> Aて艺C．． 993 <br> 月䏹井 ${ }^{804.3}$ <br> A＊FA目 705.1 <br>  <br>  <br> А評邦官 1007.2 <br>  <br> A $\%$ 排 $\overline{\text { F }}{ }^{1042,2}$ <br> $A \psi \neq \mp \underset{684,1}{[14,1]}$ <br> $\AA \psi \neq \Psi \dagger$ ．． 2 2 2 <br> AY［＇902．11 <br>  <br> AWFt．． $04-93$ <br>  <br>  <br> А 4 A겨… ${ }^{297}$ <br> $A \Psi\left[L \log { }_{[54]}^{573}\right.$ <br> 585 649 785 <br>  <br> A $45+690.4$ <br>  line 1？） <br>  |  | AM－5 1522.5 <br> A AN世 7996 А州＂本 27.1 <br>  <br>  <br> A明干 $\begin{gathered}{\left[\begin{array}{c}{[19.1} \\ 60.1\end{array}\right]}\end{gathered}$ 601.1 <br> Als 440.1 498.1 498.1 $(? 687.1)$ 726.1 <br> 944.2 ［1060．2］ 1298.2 ［1323．2］ ［1330．2］ $[1331.2]$ $\left[\begin{array}{l}\text {［1333．1］}\end{array}\right.$ <br> Als ${ }^{7}$ 722 940.2 （2958．2） $\underset{\substack{1037.1 \\ 1364,2}}{\substack{102}}$ <br> Als．． $\begin{gathered}15897 \\ 1649 \\ 189\end{gathered}$ <br> Abs． 7 得 $04-72.12$ <br> Als目 ${ }_{5}^{(427.7}$ 562 $5_{39.5}^{528}$ $5_{2}$ <br> Als日 ${ }^{\text {ro24．2 }}$ Abs… ${ }^{867.6}$ <br> Alb ${ }^{24} 900.5$ <br> 獬 $\mathrm{N}^{20039.1}$ <br> ALs ${ }^{4}$ 357．2 <br> Alsخ 1059 <br> Als $\overline{43 r}$ <br> A ${ }^{6}{ }^{6881,2}$ <br>  <br> Aワ㚢 ${ }^{527}[533]$ <br>  <br> A非 563.2 <br> 月菊齐 1080 <br> A두⿻丅．．．${ }^{302}$ |
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|  | H7\％，${ }^{\text {nem }}$ | \％ | ${ }^{\text {H3 }}$ | тห\％） |  |
| THARf | F4\％．．s． |  | 4397 |  |  |
|  |  | TY4． | TY | Truth |  |
|  | HYLF 4 ma |  |  | TMut | Hunt \％ |
| T¢月8 | TYLC\％ 48 |  | rex | ．rimed | Thity ${ }^{\text {ato }}$ |
|  | T4\％wis | TVYE | Htam | TMEf |  |
|  |  | TH |  | Thti | d |
|  |  |  | H6＊＊Lat wer |  | Nomo |
|  |  | TVY9\％${ }^{\text {a }}$ |  | Tilit | Hecs |
| Tr99 | ヶч\％和 | \％ |  | Tell | Trypr iof |





| ．${ }^{\text {c }}$ |  | 䃧 ${ }^{263}$ |  | ．$\overline{12} 25162$ | $F P_{4} P_{4} b_{i s i}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | ．．AHF？aras |  | 勈亏 ${ }^{\text {cos．}}$ | ． $7.29^{151.3}$ | 803．1，（ 22$)$ |
| ${ }_{8}^{806}$ |  | 蚝 1580.5 | ．．$\overline{\text { F }}$ 彦 ${ }^{420}$ | TiN ${ }^{1509}$ | F．． 606.4 |
|  | H［t ${ }^{\text {c }}$ | 兆广 821.2 |  |  | ft ${ }^{196}$ |
| ${ }_{\text {cosem }}^{\text {959．3 }}$ |  |  |  | 10．． |  |
|  | H149 ${ }^{\text {639．11 }}$ | ． 1555 | ＝$n 30400$ |  | f非龷364．2 |
| 106 | 相．．．${ }_{\text {a }}^{1437}$ |  |  | TATML | F［ ${ }_{13}$ |
| ciock |  | ．．118 ${ }^{\text {Wer }} 1557$ | Y $87{ }^{489.1}$ |  | FL．．． 19.9 .1 |
|  |  |  | ＂ | ． 1 TV44．．04－85 |  |
| 7．7 | ${ }_{654}^{639.14}$ | $\overline{\bar{q}}, \overline{\bar{Y}}$ same mign？ |  |  | ［496］ |
|  | 为間．．${ }^{137}$ | 产 ${ }^{709}$ | $\overline{\bar{i}}{ }^{\text {ideogram }}$ |  | （1213， |
| （ | 相\％ 0 －-92 | （094－48） | Ti．${ }^{722}$ |  |  |
| cose | 相．．． |  | Ti］ 820.1 |  | ［1217．2］ |
|  | 相奸 5156.11 | ＋ 1516.23 | Witow 88.15 |  | FC＇F⿴囗 $77.1,2$ |
| 禄 ${ }_{3}{ }^{\text {M } 23}$ |  |  | ¢T（ | TiTy 930 |  |
| ．．7神 380 | 相め．． 45.1 | ．．${ }^{\text {P }}$ | 8．2，3］ | 1 | ［959．2］ |
| 万丰 $\psi \ddagger . .14$ |  | 羚 ${ }^{\text {r }}$ 6．1 |  | 1x．． 7994 |  |
| 㮫2 |  | 动最 156883 |  | T发†．．${ }^{1504}$ | ${ }_{1290.1}$ |
|  | （1） |  | It |  | ， 1131.1 |
| 7月 616.2 | ${ }_{969.2}$ | 14＊ | Tif ${ }^{875} \times 1-5$ |  | ${ }_{1133.1}$ |
|  | 相． $8^{882.1}$ | 钿 ${ }^{286}$ | Tif 47909 |  | ${ }_{\text {l }}^{1135.1}$ |
|  |  | ．$\overline{\text { ¢ }}$ ¢ ${ }^{1507}$ | 1523．4 | 14t5075 | ， 1137.1 |
| 7Y0 ${ }^{698}$ | HYF 1517．2 | ．．1祀．． 7996 75 | T10䀦 ${ }^{284}$ |  |  |
| ［B | A | 产． 1534 | 何閶 ${ }^{293}$ |  | F［7．．${ }_{\text {c }}$ |
| $. .7 \times Y^{688.4}$ |  |  | Tif\％ 97 | 10 | 1415 |
|  | MTA |  |  | TM¢¢［ 4993$]$ | FLうう |
| ．． 7 T\％．． 5 596．2 | ．．1林目己． 646.1 | $\overline{\mathrm{F}} \Psi^{1304}$ | 1477 | 们間 ${ }^{\text {cos }}$ | ${ }_{1}^{142.2 .1}$ |
|  | 杖 ${ }^{\text {2280 }}$ |  |  |  | lite． 11.4 .1 |
| ${ }_{\text {M }}$ | HY7 ${ }^{1254}$ |  |  |  |  |
| ．． 78 （142 | 本朗 902.1 | 妇矿 | Ti ．． |  |  |
|  | H1st 902．4 |  | ${ }_{1581.2}^{250.2}$ |  | FFFtG 42.1 |
| 戌，肚 |  |  |  | f | F52 |
| H．．a4 |  | 缺 |  | $f{ }_{\text {ideogram }}$ |  |
| －．．${ }^{\text {4－77．}}$ |  |  | 1 ¢Lt M 10 | F ${ }^{6}$ | F月 1120 |
|  | 兆餫．． 96.1 | ，解 ${ }^{1277}$ |  |  | F9TC ${ }^{1286}$ |


|  | $\uparrow . . \overline{7}{ }^{6} 637.2$ |  | 8 | $87 \pi_{620}^{6}$ | ． $8 \mathrm{~N}^{750}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $F_{\oplus} \oplus 4^{8 r b}$ | $\boldsymbol{\Gamma} \mp \Psi_{04-67.2}$ | $\begin{aligned} & 704.1 \\ & 724 \\ & 809.1 \end{aligned}$ | 8．${ }^{560.1}$ | $\begin{aligned} & 621 \\ & 622 \\ & 6220 \\ & 622 \end{aligned}$ | P介゙2日 ${ }^{866}$ |
| ．．F2t ${ }^{666.3}$ | $\overbrace{}^{\text {釈 }} \begin{gathered}612.2 .2,3 \\ 614.3\end{gathered}$ | 872.2 999 | $73^{8.2}$ $953.2$ | 623 624 634 | 8皿 ${ }_{\text {c }}^{955.2}$ |
| A 392 | ${ }_{[636.1]}^{4.4}$ | M 133 | （？ 1439.2 ） | 635 636 | 8以 370 |
| F40．039 | Pf．．${ }_{\text {cog bis }}^{504 a}$ |  | 8856 | ${ }_{698}^{639}$ $639.5,6,13$ | 8 K .0548 |
|  | $\begin{aligned} & 50 y \\ & 6 \mathrm{r}_{5.2} \\ & 635 \end{aligned}$ |  | ．－1 ${ }_{1637.2}$ |  | ．．84．${ }^{15464}$ |
| $\text { Fǐ^2 goz. } 6$ | ${ }_{636.1}$ | ¢．． 79963 | ．． $8 . .1516 .1$ | 737.2 739.2 | 1551 |
|  |  | 「突同 ${ }^{1255}$ | 8 L $\ddagger$ 泩 8066 | 752 754 | 8461064 434．2 |
| Fîol ${ }^{459.2}$ | 614.2 <br> ［615．2］ |  |  | 780.2 781.2 883 | 8469 ${ }^{(370)}$ |
| FOT方 04－58 | $617 \cdot 2,[3]$ |  | 8．． ¢f ${ }^{821.2}$ | 828．2， 3 $830.2,3$ | $\bigcirc{ }^{549} 6$ |
| ．．flle 639．1 | 622 |  | 8t ${ }^{1152}$ | 82日 697.1 | ${ }_{\substack{643 \\[1313]}}$ |
|  | $[677,2,3]$ | $\text { pey } 801.4$ |  | ．． $82 \overline{7}{ }_{925}^{45.1}$ | 84以展．．${ }^{665}$ |
| Fis 873．1 | $\begin{aligned} & 784 .[2], 3 \\ & 824.1 \\ & 828.2,3 \\ & 0 \end{aligned}$ | ．． $1 \times{ }_{805.3}$「2゙半う800．2 | $8 t \quad \mathrm{r}, 1$ | $8 \psi ⿻ 三 丨$ |  |
| $\text { . } \mathrm{FY}{ }_{946}$ | $T_{\Delta} / \bar{j}^{8_{30.2,3} 61.2}$ | Tr TX．．${ }^{842.1}$ | $8+$ 日广 $3^{82}$ $8+2$－ | $8 \Psi^{\prime} \hat{\Lambda}^{\text {¢ }}$ 1568a 2 |  |
| f15 ${ }^{799 a}$ |  | P闍．1055．7 | $8+$ 14． 53 |  |  |
|  |  | $\uparrow^{2}=839.1$ | 8t［［485］ | ．． $847{ }^{13}$ | $\begin{aligned} & 831.8 \\ & 1055.1 \end{aligned}$ |
| ．Fibj ${ }^{1329}$ | $\begin{aligned} & 782.2 \\ & { }^{783,2} \\ & 824,1,2 \end{aligned}$ |  | 596.2 ［597］ 598 a 2 | 842 472 |  |
| Fis $\overline{.}$ ．${ }^{1477}$ | 829．2， 3 | ワ | 599.2 | $8{ }^{8} \times{ }^{87} 90$ | 83 1240 |
| $F \mathscr{G}$ |  | $\eta \overline{\bar{T}} 3.2$ | 8F．． 1022.1 OF 137 | $\begin{aligned} & 194 \\ & 3^{22} \\ & 33^{8} \end{aligned}$ | $83^{5}+803.1$ |
| Fīt．．${ }^{10.3}$ |  | T产 $8_{42,2}$ |  |  |  |
| FFī⿳亠二口欠彡 639.10 |  | $\chi^{\bar{Y}} \bar{Y}^{717.1}$ | 8非 ${ }^{1054}$ | $\begin{aligned} & 612 \\ & 613 \\ & 613 \end{aligned}$ | $\begin{aligned} & 418.2 \\ & 418,2 \\ & {[419.2]} \end{aligned}$ |
| Fī̄．．${ }^{1478}$ |  |  | 8 （1084 | 614 615 | ${ }_{4}^{421} 4$ |
|  | ．．PLols． 79964 | Tff．． $\begin{aligned} & 614.15 \\ & 6.5\end{aligned}$ | －1 ${ }^{3}$ | 617 619 | 退 $\begin{aligned} & 42302 \\ & {[673.2]}\end{aligned}$ |
| $F \bar{Y})^{1408}$ | $T^{2} \mid A_{1}{ }_{238}^{60.3}$ | $\text { PFF }{ }_{6}^{610.3}$ | 80． 639.1 | ${ }_{6}^{620}$ | 674.2 676.1 |
| ．．FBh ${ }_{\text {¢ }}{ }^{590}$ | P时干 o4－86 | 612.2 616.3 617．2， 3 | 8昭只．． 806.2 | $\begin{aligned} & 622 \\ & 622 \\ & 624 \\ & 627 \\ & 627 \end{aligned}$ | 8Y．．${ }^{\text {988．2 }}$ |
| $\uparrow$ ¢，¢ etc． |  |  | $84 \oplus{ }_{587.1}$ | $\begin{aligned} & 629 \\ & 631 \\ & 635 \\ & 636 \end{aligned}$ | 8M2F ${ }_{\text {chen }}^{\substack{931.1 \\ 127.1}}$ |
| \％${ }^{\text {a }}$ ideogram | P2pfe 79962 | $\text { TFFīA } \begin{gathered} 509 \text { bis } 2 \\ 63.3 \\ 6.5 \end{gathered}$ | 아 63 | $\begin{aligned} & 366 \\ & 6_{3} 8 \\ & 6_{39} \end{aligned}$ |  |
| T． 360.2 <br> ． 780.3 | P义＊． 740.5 | 616.3 631.2 |  | 639 640 739 | 8M15．．${ }^{186}$ |
|  | T1 IIIL 1.1 | $\begin{aligned} & {[6344.2]} \\ & 636.2 \end{aligned}$ | （194 $\begin{aligned} & 198 \\ & 338\end{aligned}$ | 759 754 754 | 83 839 |
| $p_{1210}^{21210}$ |  | RO［ 469．1 | ${ }_{610}{ }_{609}{ }^{\text {bis }}$ | 780 781 |  |
| ．．f ${ }^{\text {P }}$（1517．4） | ${ }_{13.1}$ | 18L［470］ | 6611 | 824 |  |
|  | 1.1 .1 15.1 15.1 |  | 612 6613 614 | 828 830 | BYMF 685 |
|  | 16.1 <br> 48.1 <br> ${ }_{1645 .}$ |  | 614 615 617 | $8{ }^{1 \%}$. | 81．． $04-93.1$ |


|  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |

## TABLES I-V

LINEAR SIGNS A COMMON TO SCRIPT A AND SCRIPT BO
AND THEIR RESPECTIVE EQUIVALENTS (A AND B) WITH EVANS' NUMERATION


- A few siǵns peculiar to A or to B are added for comparison. Signs marked* are only used as ideo ograms.

* Evans' numeration down to A90 and B97.
${ }^{2} \vdash^{6} ト^{6} \vdash^{2} \vdash^{0}+^{6} \vdash^{\circ}+^{8}$



${ }^{8} \mathrm{~F}^{c} \mathrm{~F}^{d} \mathrm{~F}^{c} \mathrm{~F}^{d} \mathrm{~F}^{*} \mathrm{~F}^{f}$
${ }^{9} \hat{f}^{0} \hat{f}^{c} \hat{\mathrm{~T}}^{c} \hat{\mathrm{f}}^{d} \hat{\mathrm{f}}^{c} \hat{x}^{f} \mathrm{~T}^{b} \mathrm{~T}^{b}$


$A^{\circ} A^{\circ}$ 萳 $A^{d} A^{\circ} A^{f} \theta^{\circ} A^{\circ}$


 ${ }^{15} 5^{\circ} 1^{\circ} \pi^{\circ}$ ${ }^{16} \mathfrak{F}^{\circ} 6^{\circ} C^{c} C^{d}$ ${ }^{17} \exists^{\circ} \cdot 习^{d} \exists^{c} F^{d} F^{c} N^{s} F^{s} E^{a} E^{b} F^{c}$




 ${ }^{23} \otimes^{\circ} \oplus^{b} \oplus^{\circ} \oplus^{\alpha} \oplus^{\alpha} \oplus^{+} \oplus^{f} \Theta^{\delta} \odot^{b}$
$\left.\left.{ }^{2}\right)^{6}\right)^{\circ} \odot^{d} \Theta^{\prime} \Theta^{s}$


${ }^{27} \gamma^{c} \gamma^{b} Y^{c} \gamma^{d}{ }^{28}{ }^{28} \phi^{d} \phi^{b} \phi^{d}$
 ${ }^{3} \Psi^{0} \Psi^{6} \Psi^{c} \Psi^{\alpha} \Psi^{*}{ }^{3}{ }^{22} \psi^{0} \psi^{0}$

 ${ }^{35} \varphi^{30} p^{0.6} p^{6} \eta^{4} p^{p} \rho^{5} Q^{3}$



 $\left.\left.407 \zeta^{a} 7 \delta^{b}\right\rceil 夕^{c} 7 \delta^{d} 7 c \cdot\right)^{e} \downarrow \int^{f}$

$42 \overbrace{1}^{m} \frac{M}{T_{2}}$









48 以－


IV


 ${ }^{51} 21^{a} 2 j^{b} 2 J^{c} J^{d} 2^{c}$







 $\pi^{\prime \prime} \pi^{\prime \prime} \pi^{\prime} \pi^{\prime \prime} \pi^{\prime} \pi^{\prime \prime}$



 $59 \pi^{a} \quad \pi^{b} \quad \pi^{c} \quad \pi^{d} \quad \pi^{d} \quad \pi^{e} \quad \pi 1^{8} \quad \pi^{h}$





Signs peculiar to Linear Script B (Evans numbering)






$\left.{ }^{836} H^{0}\right)+C^{b} H^{c}$ 生 ${ }^{d} \|^{c}$
${ }^{837} \mathbb{A}^{a} \mathbb{A}^{b} \mathbb{A}^{c} \mathbb{A}^{d} \mathbb{N}^{e} \mathbb{1}^{f}$




 90ヶิ

92
$a_{3}^{a}$



CYPRIOTE SYLLABARY COMPARED WITH MINOAN SIGNS


## CLAY TABLETS <br> INSCRIBED IN SCRIPT B FROM THE PALACE OF KNOSSOS

The Tablets numbered $1-1569$ were found during the excavations of $1900-$ 1903: the find-spots are recorded in italic type in the right-hand margin: see pp. 38-40. The mode of transcription is described by Sir Arthur Evans, SM I, p. vii, n. 2:

The copies of the clay documents have been traced by me with the aid of photographs on bleaching-out paper, the tracings in each case being subsequently corrected by comparison with the original.
A few amendments by Dr. Alice Kober and others result from further study of photographs only, the originals having been inaccessible until this volume was nearly completed. Dr. E. L. Bennett, who examined the originals in the summer of 1950 , reports that some of the fragments may be fitted together, but that much further study of them is required.

The numbering is that assigned by A E in his Handlist, preserved at Oxford. But some references to a Handlist in PM iv are to an earlier classification, and in the definitive Handlist there are sometimes as many as three or four provisional numerations.

To bring together tablets with similar contents, use must be made of the Inventory compiled by Dr. Kober (pp. 75-89). The concordance-number of each tablet is printed after its Handlist number.


3 J i 23 (xix)

$8 b$ J i 01 ( xx )
$5 b$ J f 13


7 J f 22 (xix)


6 ff 41 ( xix )



15 J f 23 ( xx )

18 J f 44 (xxı)


20a Ji 22 (xxl)


20 bji 22 (xxu)

$17 \mathrm{~J}_{1} 32$ (xxı)

19a J i 11 (xxi)


19b J i 11



22 J i 03 ( xxI )


25 Ji 04 (xax)


27 J f 42 ( xxI )



29 x c 70

$30 \times=165$





34 J = 02
$35 \mathrm{~K}_{\mathrm{a}} 41$

bis $\dagger$ 36 xk 21

bis $+37 \times k 5$
r... Al

$37 \times$ a 71

$38 \times$ - 129


39 Xa a $133 b$




53 U a 23 (xxiI)
$50 a \mathrm{Dd} 01$ (xau)


50 b D d 01 (xxiII)
(2(2) $)_{1}^{\text {F. }} 1111$


50 c D d 01


56 Uh 01 (xxiir)


57 Uf 02 (xxur)


52 Ud 05

$58 \times \mathrm{f} 11$ (xxiI)


59 D p 01 (xouli)


62 V a 21

$$
61 \text { D q } 01 \text { (xXIII) }
$$



71 K a 43


68 U. 09

$69 \times k 22$


$75 \times 115$


79 Tj 01

$82 \times$ c 32


76 E $\times 102$


80 Uf 01 (xxiv)

$83 \times$ c 30


77 U d 04


81 x a 51



66 X a 172

$70 \times$ c 35

$74 \times$ - 108

$78 \times 42$

bis 84 Br 01
85-6. Fragments from left end of tablets: no drawings. Sign AB 23


87 Be01 (xxiv)


90 вf01 (xxiv)


88 Be 02 (xuav)


89 Be04 (xxiv)


91 Be03 (xaciv)


$92 \times \mathrm{c} 51$

$97 \times 116$

$94 \times$ a 36


950 c 01 (xxiv)

$99 \times$ c 50


100 Xe 56 (xxav)


101 cb 11 (xarv)


108 X c 27 (xxwv)
109 xe 21 (xxiv)

$114 b \times \mathrm{X} 51$

115-44


$127 \times$ b 01

$131 \times \mathrm{X} 10$ (yorv) (xzvir)



128 x e 59 (xxv)



129 U a 01 (xav)


137 V a 01 (xxv) (xcvii)



148 J e 11


$146 \times \mathrm{m} 25$ (xxv)


149 X m 26


147 Uc 01


150 U a 10


$152 b$ D c 01 (xrvi)


153a K m 31

$153 b \mathrm{~K}$ m 31


154 X п 01 ( xxvi )

$155 \times \mathrm{k} 11$

$158 \times \mathrm{g} 41$





230 N j 32 (xxviII)


231 Nk 04 (x̌rim)


232 Nk 05 (xxviil)


234 N j 50 (xxvin)


235 Nj 41 (x大viii)
$236 \mathrm{Nj}^{2} 2$ (dximi)



262 N j 12 (xxxix)


261 Nj 37


264 N k 02 ( x 0 x )


265 Nj 01


266 N 111 ( (cax)


280 Uf 13 ( xxx )

281-311


281 R w 21 (xxx)


284 X e 35


291 Xa95

$294 \mathrm{X}=23$


297 X a 12

$300 \times$ a 70


304 x c 02


308 X a 107



286 K f 41


283 U b 01


287 X c 76


293 U. 16


302×a 15

$307 \times 244$


311 Xd 20

312-40


317 U a 02

$325 \times 170$

$329 \times$ c 66



341 J b 25 ( xcxx )

342 J e 01 (xxxu)


345 J a 61 ( x 0 x x )


343 Jc 11 (xxxiri)


349 J b 12 (xxxil)


354 J e 15 (xcxuir)


353 J b 51 (xxxiI)


355 j b 19



382 J a 13



381 J b 01 (xXxII)



385 x a 43


386 X a 87


387 X c 57

$388 \times$ a 90

$383 \times$ a 98


391 J b 16

392 X a 152


389 x c 14


390 J f 21



394a D 101 (xxerv)

Nact
411 F: 01


409 Xk 25 (xaxvi)

$410 \times 131$




$453 \times \mathrm{k} 27$



455 x m 21



457a K \& 01


456 J J p 11


459 x c 22


460 X a 64


461 Kt 01 (xxav)


458 X d 24


462 J ת 01 (xxxvi)



464 J s 01 (xaxvi)


465 K m 21 (xxxvi)


466 U c 11 (xaxvi)


470 R q 33 (xCHi)

## 468 x m 11 (Lin)



469 R q 32 (xoxvi)


471 R q 34 (xciv)


## 472 R q 12 (xcviı)



473 R q 61 (xcvir)


481a R m 01 (xxxviI)


475 R q 11 (x.cix)

480 X f 21 (xxxviI)

$481 b$ R m 01
482. See next page.


483 R m 05 (xxxviI)
$479 b$ U c 13 (xxxix)

488 U d 01




## 503 © c 12 ( L )



502 s c 03 (xaxvii)


504a R m 02


505 U h 02


506 X h 22


508-25



531 R131 (xLL)


534 R 121


538 R v 01



529 R k 11


527 R151

530 R 123 ( xLL )



533 Rk 03


540 RI11 (xLI)


541 R k 01
(o) $\sqrt{-1 \div}$

543 R k 02



546 R $=03$

$547 \mathrm{R} \times 32$


551 K a 42


555 R o 05


558 R161


561 Rk 21 (xLI)

$548 \mathrm{R} \times 01$

$549 \mathrm{R} \times 33$

$550 \mathrm{R} \times 31$


553 R171


557 R ○ 02


560 R 112


562 Se 01 (x+1)


563 s fol (xLI)

$564 \times$ e 12


569 X 46
$7 \%$
$566 \times$ m 34


$570 \times 113$ (xL)

587-604



620-37



640 B $\times 01$ (xcrv)


$643 \times$ m 37


647 Xk 28 (xLvi)

$644 \times \mathrm{X}$ m 38



645 X m 39


649 R b 07 (x.v)



651-71



685-99





756-bis 776


777-92

$777 a \mathrm{~Kb} 01$ (LIII)


791 G c 101


792 G c 103

793-803



798 c b 01 (Liv)


$794 \times$ k 34 ( $\mathbf{L I I I}$ )

## (

795 X e 22


798-1035
Area of he
Bull Relief





## 831-50



835 Tn 04 (Lxiv)



840 J m 01


836 Tn 01 (LxviI)

## P: 

841-2. See next page.


839 Tn 02 (Lev it)

844 K j 51


845 K j 41



846 K j 71


849 K j 72


847 K j 61


842 Kj 01 (LxvII)
843-4-5-6. On previous page.


848 к ј 62
-

851-61
Saffron



853 K j 02



852 Kj 01 (Liv)


854 K j 11 (Lvi)

858 Kk 12 (Lxiv) $\quad 861 \mathrm{Kk} 45$ (Lxiv)


862 I a 01 (Lxv)



879-93
Chariot-
bodles


882 Nd 02 (Lxvi)

879 N d 01 (Lxvi)

883-97



$904 \mathrm{D}: 03$ (Lxix)


906 Da 02 (LxVII)

$$
\begin{aligned}
& 907 \mathrm{D} \text { a } 11 \text { (Lxvir) }
\end{aligned}
$$

$\left\{\begin{array}{l}\text { F, M } \\ \pi\end{array}\right.$
908 D f 21


$909 \mathrm{D}=21$ (Lxix)


$12 a \mathrm{D}$ e 02 (Lxxis)




$$
\begin{aligned}
& A \oplus \rightarrow+\sqrt{2-4}
\end{aligned}
$$

$$
\begin{aligned}
& 2
\end{aligned}
$$

948-65

| Livestock |
| :---: |
| 913-1059 |
| Principal |
| Names, de. |$|<|$

949 G d 303


952 Ga 01


955 J s 11 ( Lx )


959 X m 41

$960 \times \mathrm{m} 42$


963 X 01 (Lexis)

$964 \mathrm{E} \times 232$

†964 cf. 1104

$965 \times$ b 19





1021 Xe 4

$1025 \times 140$


1022 Tn 05

$1026 \times k 4$


1023 x h 33



$1038 \times 56$


1039 Xg 51


1044 X 上4


1045 X d 28


1046 Gf 304

$1048 \times$ b 05



1062-3. On previous page.







1071 Fb 01 (Luxuii)


1073 F b 02 (Lxarv)


$1079 \mathrm{E}: 214$ (Lxxav)


1080 Eb 223

1081-bis 1095
$1060-1383$
Livestock,


1086 E d 403

1082 E b 224 (Lxoxv)


1088 E a 05 (uxoxiv) (uxxvi)


1083 е b 225 (2x011)


1089 E a 04


1084 E e 321 (Luxx)

bis 1095 H b 21



1116 E a 303 (Lucox)



1121 En 323 （Lxxiili）


1123 Ex 212 （Lxxavi）


1122 En 311 （Lxaiv）


1127 E a 312

1129 E j 315 （Larvin）




1124 E d 210


1125 E× 210
$\left.0 \rightarrow\right|_{-1} ^{-1}+\quad+\quad=$
1126 E c 208


1128 E y 12

1132 Ea 309 （LxoviI）

$1131 \mathrm{E} \times 336$


1134 E a 308 （Lxoxvi）


1133 Ex 301


1136 E $\times 307$



1137 E a 307



1139 Ex 324

## 1138 Ej 323



1145 E x 302



1152 Ej 322 (Luodv)


1157 E k 322


1158 E1321 (LxaviII)



1159 E d 305 (Luxu)

$1161 \mathrm{E} \times 315$


1163 Eb 501


1166 E d 302 (horviil)

$1168 \mathrm{E} \times 308$


1170 Eb 213


1171 E \& 232 ( xcl )


1174 H a 04 (Lxxvi)


1160 E d 303


1162 E a 314 (Lxarvir)

$1164 \mathrm{E} \times 335$

$1165 \mathrm{E} \times 218$


1167в в 302


1172 E b 401

$1173 a \mathrm{E} \times 225$ (LxXXIII)

$1173 b \mathrm{E} \times 225$


1175-93

1175 Ha 05


1180 Ha 06 (Ludavi)
1184E y 02


1182 E y 01 (Lxarvin)
1181 Ha 03


1185 E c 214
1183 E x 216 (LㅈIII)


1186 E c 204

$1189 \mathrm{E} \times 214$


1190 E c 217


1188 E d 205
1187 E a 203


1191-2. See next page.


1191 Eb 215 (Luav)


1194Ea 301



1210 E y 18

$1212 \mathrm{E} \times 209$ (Lxxis)


1218 Ek 225 (Laxiui)


1219 En 221 ( xcl )


1221 E b 222 (LxaviI)

$$
\begin{aligned}
& \frac{7 \equiv!!11}{9} 9 \equiv \\
& \mid=192 \\
& \hline F-11
\end{aligned}
$$

1223 En 223


1222 Ed 206

$1211 \mathrm{E} \times 240$ (Lxoxiv)


1214 Ed 212


1216 Ex 242 (Lxxavi)


1215 Ed 222


1224 еb 221 (Lxoxy)



1228 En 211
1231 Ej 421

1232 E d 462 (LxxaiII)

## 1233 E n 224 (Lxocx)



## 1235 Eo 221 (LxxxiII)



1246 E d 248 ( $1 \times 0 \times$ )


1247 E c 212 (Laxv)


1248 E y 14 (Locux)

1249 Ed 235



$1250 \mathrm{E} \times 239$


1251 Eb 203


1252 E k 231


1253 Ex 801 (Luoxiv)



1262 Ed 214 (Lxevil)


1264 Ej 211 (Lxxavi)


1263 E d 304

$1271 \mathrm{E} \times 203$
4


1273 E: 204
1270 Ej 213 (Luxax)


1272 Ej 312 (Lxavii)


1276 E y 231


1277 E 220


1278 Em 223 ( $2 \times 0 \mathrm{cox}$ )


1279 E d 245 (Lxoxiti)


1281 Ek 228 (L.5xix)


1283 Ek 235


1284 Ek 227 (LooxiI)


1286 Ek 229 (xcl)

## 1287 Ej 227



1288 E b 211

1289 е b 212 (Lxoxxi)

1291 Ek 230 (Lxxxil)



1294 E y 24 (Lxaxvi)


1295 E d 236 (Laxivi)


1301 Ej 324



1303 Ej 212

##  <br> 1304a Ed 241 (Lxאm)



1304 b E d 241


1305 E d 242 (LXXIX)


$1308 \mathrm{E} \times 237$


1311 Hb 13


1312 E 207



1310 E $\times 217$


1313 E b 216

## $1 N / \sim=1=1 \leq 7 / 1 \overline{7}=$

1314 E 305 (Laxix)


1315 Eb 217


1316 Em 221 (LLooxi) (L난)


## 1318 E j 251


$1317 \mathrm{E} \times 401$ (Lxoxiv)
$1319 \times$ c 44

1321 Eb 503



1322 E j 923


1323 Ex 302



1325 Ed 213


$1327 \mathrm{E} \times 221$


$1328 \mathrm{E} \times 223$


1329 E $\times 309$


1331 E $\times 306$

1060-1383
Livestock,
\&c.

1332 E $\times 804$


1336 Hb 14


1333 db 801


1340 Ed 218


1345 Ec 04
1346-49. These numbers were left blank by AE.


1353 е b 218


1354 Er 21


1355 Ea 101



1382 Ea 313


1380 E\& 27


1381 E j 27


1383 Ej 924


1387 Ha 09


1388 Ed 216

$1390 \times 217$

$1389 \times$ \& 156


1394 X a 158


bis $1395 \times$ a 97 (Lxariil)


1399 F c 04

$1400 \times \mathrm{X} 159$ (Lxoxiv)


1401 Ea211

$1403 \times$ a 106 (Lxxxvi)

$1402 \times$ a 105


[^2]1405-31


1406 X a 24


1407 E x 202


1408 x e 32 (Looxvi)

$1409 \times \operatorname{co6}$ (Lxaxvi)


## $1412 \times$ c 38


$1416 \times 110$
$1413 \times$ c 39


1414 Ex 111


1418 X a 111 (LDocuil)


1421 X a 164


1424 X 27

$1427 \times \mathrm{g} 45$



$1443 \times 141$ (Laxiv)


1444 X : 142 (Lxavi)


1445 e b 101


$1454 \times$ c 16

1456 X a 138




1458 X c 83


1459 X a 150


1460 Xg 44 (LxxiI)


1461 X : 145 (LXXH)


$$
\because=1=\frac{1}{-}=1
$$


$1463 \times$ a 67 (Lxocilit)


1466 E d 208 (Luoxiii)

$$
1468 \times \text { a } 60
$$


$1467 \times 25$

$1472 \times 28$

$$
=\sqrt{3}+\sqrt{1}
$$

1471 E d 211

$1474 \mathrm{X}=126$


1481 X a 167


1486 X a 128 (Loorv)
$1478 \times 86$


1475 E $\leq 219$


1482 E× 311

$1487 \times$ a 161 (L재II)


1479 X a 169
$1488 \mathrm{X}_{\mathrm{b}} 13$

$1476 \times 123$
$1473 \mathrm{E}=111$ (LLOOMII)

$1485 \mathrm{E} \times 208$


1480 X c 89




1489 E x 115


$$
1505 \times \text { a } 114
$$


$1508 \times$ ․ 79 (Lxxavi)


1510 X a 80

1511 X a 78 (Lxxvit)


1514 Eb 206

$1512 \times$ a 77


1513 Xe 49


1515 E d 204



1519 Ab 02 (Lscoxx)

1520-25





1568 R j 03

## 

1568b R j 03


1569 K c 53


1572 R : 02


$1573 \times \mathrm{g} 87$


1574 K c 55

TABLETS FROM VILLA ARIADNE 1640-1643 TABLETS IN ASHMOLEAN MUSEUM 1644-1651


FRAGMENTARY TABLETS MISLAID IN THE VILLA ARIADNE AND TRANSFERRED TO THE CANDIA MUSEUM IN 1949



M 128aRq 54


M 133, 136 illegible


TABLETS FROM THE EXCAVATIONS OF 1904 AT KNOSSOS (04.01-95)







04-32-38




$$
\begin{aligned}
& 41 \text { In }\left.\right|_{4} ^{-1}
\end{aligned}
$$


$04-44$ N u 19




04-54 D j 12

04-55 D j 01




04-64 D j 06


$04-66$ K c 02

$04-69$ N a 16


$04-70 \times 2134$



04-71 Ne 07

04-72-81


$04-83$ Na. 13


$04-88 \times 43$

$04-89$ x c 04

$04-90 \times$ с 49?

$04-91 \mathrm{~N} \times 01$

bis 04-92 Xa 103

$04-95$ x c 60


04-94 X m 43

SEAL-IMPRESSIONS, \&c., FROM KNOSSOS (B1701-1716) ERGANOS (1717), BOGAZKIOI (1722)



Clay Tablet with Gem-Engraver's Sketch: Knossos.


Clay Tablets from Uruk.


Graver and Template


1714


Painted L M III Sherd: Knossos.


Modern Tallies.

## JUNCTIONS WITH FRAGMENTS ALREADY NUMBERED



$5\rangle+101 \oplus$ 届 $=\because \because \Psi \mathrm{YF}$



 second 非 ever perused．


$\times 248 \quad 1 / 1 \% 181 / /$

－rev．$/ / \AA$ i！ $1 / /$

## JUNCTIONS WITH UN－NUMBERED FRAGMENTS；AND REVERSES



| кıя | ＇｜／1／1／1， |
| :---: | :---: |
|  |  |
|  | \＄的 |
| －s | cifalic |
|  | ¢ \％${ }_{\text {\％}}$ |
|  | \％ |
|  | $\begin{aligned} & 1 / x^{2} 4_{4} \\ & 77 \end{aligned}$ |



$1 / / /$ ，延（竹非
 トロッ，小品
下ヶ


／／／／／／／／，饮月挔


## reverses added

| ${ }_{5} 26$ |  |
| :---: | :---: |
| －rev． | 哭 『1／／1， |
| $\underline{417}$ |  |
| －edge |  |
| к 012 | 山上㫜1／／－rev． 7 （f／／／ |

## JUNCTIONS WITH UN-NUMBERED FRAGMENTS; AND REVERSES







K 17
 -rev. $1 / / 101$





-rev. $\quad 1 / / 1,15 \times 911$
Al is the beginning of the sign 隹never completed




FRAGMENTS OF TABLETS IN THE HERAKLEION MUSEUM NOT RECORDED BY SIR ARTHUR EVANS，BUT TRANSCRIBED IN 1950 BY DR．EMMETT L．BENNETT




5027 TMIIIIIIIIIIIIIII，


 I／I，咅 III，
s006 Lidyll／ls
son9 $\oplus d d / / / / 1$ $\bar{\top} \oplus \neq 1=1 / / /$

－rev．$/ /\|/\|_{1} \equiv$㸪举高…

5103 © AB Y／I，







$5183!/ / / 1 / \mp, 7+\mp 1 /!/$ I／／／В В
5192 हला／／I／1，
sı9 $\ddagger \oplus$／／l／l，

5200 片岛－1／｜／1，
5217 A．4｜／／／／，
5218 bst A $\xi^{\prime} / / / 1 /$
5224 ／／／T＇キ $\times \times / / / /$,
5232 I／／埇败 U／／，


5298市 $\Psi^{\prime} / / / / 1$,


5312 新 $\ddagger / / / 1$,

529 而与





|  |  |
| :---: | :---: |
|  |  |
| 5479 |  |
| 5496 |  |
| 5198 |  |
|  |  |
|  |  |
|  |  |
| 5536 |  |
|  | 涬1／1／ |

569 Fị！u｜l！









5524／／／＋¢ ¢

sss3 T成签｜／｜／｜／1／，

5538 吅京 $1 / 1 /$
$\oplus y^{\prime \prime} / 1 /$

5557 I／I／I，ई 1 I／I，



5589 8A／／l／，

5618 3）当少｜／1，
5632 I／1／ $1201 / / 1$




5659 邓
5691 V／／，
5704 良 $\ddagger$ T／／／，


5718 U／1／$x^{\prime}+\oplus^{2}+1 / / / 1$,
5721 I／，,$~ \varphi 4 \times y / / / /$
5723 戊等可三／／／／，

FRAGMENTS OF TABLETS IN THE HERAKLEION MUSEUM NOT RECORDED BY SIR ARTHUR EVANS，BUT TRANSCRIBED IN 1950 BY DR．EMMETT L．BENNETT







5777 I／II口＂＂$/ 1 / 1 /$／，

s781 目4．IV／I，

s795 $\ddagger$ I／III，
TTA！｜！！！，

5821 7ヶ7
1
5823 YMF＂rybly
5824 7YY bachoty



$5864 / / / 1 / 1 / 1 / 1 /$





## 5869 ©zざF 

 $\|_{1 / 1}$－$\ddagger=1 / \|_{1}$

s871 III／，АБス＇

5877 IIII FAt IIII I／I／，fat I／／I，
sses IIII vacar 1／／1．Tatat
s999 T睤 $1 / / / 1 /$,
ร90 $/ / / / / / / / 15+1 / / / / /$ ， W／A． $\mathrm{A} \cdot \mathrm{A}$（ $/ / / /$,

5902 ｜／I／间由迫干年／／／
5904 十岩！／！！
 ｜／／／／＂：At／I／I，

5920 I／／／／AK © ．． $1 / / / / /$, T／／／T T T／irill／，


 $/ / / 1 /$ 周• $1 / / /$

5924 ／／／，$\cdot A \times \odot \Theta^{\prime} / / / 1$,
s931 I／II $\odot+$ IIII， I／I／1，

5935 ｜／／1．＂
I／／li Tiqk＇／／l，
s938 $/ 1 / 1, T+\alpha / 1 / 1 /$.

5953 III，卜－〒ғV／／，

$5959+\mathrm{a}^{2} / / 1 /$
s961 I／／／tol／／／，

$59761 / 1 / /$ ，H15 $/ 1 / 1 / 1 /$

s998 9ikk A＂：
6040 I／I它rafl／l／／
$6045 \pi \int_{1 / / / 1}$


｜l／／ $\boldsymbol{\Psi} \oplus \mathrm{L}$ ．$/ \mid / / / / / /$,
I／／／斿目十，务／／／／／
6059 $4 \times 4+$ ．A8 $/ / / / 1$,




## SCRIPTA MINOA: VOL. II: COLLOTYPE PLATES

These Plates are numbered XIV to XCVII in succession to Plates I-XIII in Vol. I. They contain only a selection of the tablets inscribed in Script B, for the Palace of Knossos, numbered in accord with the line-drawings I-1651 in Vol. II, but not set here in precise numerical order. A few are duplicated, especially in Plates XCIII-XCVII. There is no Plate XCII.

## ERRATA

XXII. ${ }_{51} b$ should be ${ }_{51} a$.
XXIII. $50 a$ should be $50 b$; cf. XXII for $50 a$. 57 (right hand) should be 56 .
XXIV. Tablet above 103 should be 100.
XXVII. 218 should be $218 a$. 261 should be 229 ( 261 is in XXIX).
Tablet above 261 resembles 241 .
XXX. 337 should be 337 a.
XXXIII. 732 should be 733 .
XXXIV. 418 should be 417.
XXXVII. 700 should be 708.
XL. 512 should be 570 .
XLVIII. Tablet below 669 should be 474 .
L. Tablet next to 7or should be 1629 ; next to 714 should be 746 .
LVII. Tablet next to 962 should be 954 . Tablet below 833 should be 1630 .
LIX. 899 should be 898 .
LXII. Tablet next to 841 should be 1631 . Tablet below 84 I should be 1632 .
Tablet next to 912 a should be 1633 .
LXIV. Tablet next to 815 should be 1634 . 825 should be 835 .
LXV. Tablet below 918 a should be 890 .

893 should be 891; 899 is on LXXI.
LXVI. Tablet next to 88 r should be 886.
LXVII. Tablet next to 863 should be 1635 .
LXXII. III7 should be 1487 .
LXXIV. rog 8 should be 1099.
LXXVI. 1173 should be $1174 ; 1173$ is on LXXXIII.
LXXVII. 1383 should be 1511 .
LXXVIII. ir6i should be 1129.
LXXXVIII. Sealing should be 1636 ( $=1701$ ). A $5 b$ should be $1637 b$ Linear Script A.
LXXXIX. A $5 a$ should be $1637 a$ : SM III A 54 (Knossos).
XC. $153^{1}$ should be 155 ; 1544 (left hand) should be 1546.

A 6 should be 1640: defaced; prob. Linear Script A.
XCIII. 1095 should be ro6r ; cf. LXXXVI.
XCIV. Tablet next to 610 should be 1639 .

Tablet next to 580 should be 640 .



TABLETS FROM THE ARSENAL-SITE AT KNOSSOS
SERIES 04.01-04.82
Slightly reduced scale


TABLETS FROM THE ARSENAL-SITE AT KNOSSOS



TABLETS FROM THE ARSENAL-SITE AT KNOSSOS
SERIES 04.01-04.82
Slightly reduced scale


2



10




19



22


INSCRIBED TABLETS FROM THE PALACE OF KNOSSOS.




INSCRIBED TABLETS FROM THE PALACE OF KNOSSOS
Linear Class B


137






243


252 b


249


246



247


248


261


256 a


262


257


258


264


266


273


270


269


268


274


281





347 (


341












512


542



571



574





INSCRIBED TABLETS FROM THE PALACE OF KNOSSOS
Linear Class b.


INSCRIBED TABLETS FROM THE PALACE OF KNOSSOS



INSCRIBED TABLETS FROM THE PALACE OF KNOS'O)'

Plate XLVII

$10 ; 9$


INSCRIBED TABLETS FROM THE PALACE OF KNOSSOS
Linear Class B.



Plate L


710

INSCRIBED TABLETS FROM THE PALACE OF KNOSSOS
Linear Class 8 .

$13 j$


615



615





INSCRIBED TABLETS FROM THE PALACE OF KNOSSOS







350






INSCRIBED TABLETS FROM THE PALACE OF KNOSSOS


875



879


880


883



884




ans



896






983



977


972


963

## 



893




1320


1117


1109


1111


1113

1094


1461

Plate LxXili


INSCRIBED TABLETS FROM THE PALACE OF KNOSSOS
linear Class b.

PLATE LXXIV



INSCRIBED TABLETS FROM THE PALACE OF KNOSSOS
Linear Class B.



117


1414


INSCRIBED TABLETS FROM THE PALACE OF KNOSSOS

PLate LXXVII


INSCRIBED TABLETS FROM THE PALACE OF KNOSSOS



INSCRIBED TABLETS FROM THE PALACE OF KNOSSOS
Linear Class b.


INSCRIBED TABLETS FROM THE PALACE OF KNOSSOS
Linear Class b


1201


INSCRIBED TABLETS FROM THE PALACE OF KNOSSOS
LINEAR Class B.


INSCRIBED TABLETS FROM THE PALACE OF KNOSSOS



1432


1088



1043


1400


1429


1211

INSCRIBED TABLETS FROM THE PALACE OF KNOSSOS
linear Class b.




$x+$


INSCRIBED TABLETS FROM THE PALACE OF KNOSSOS



INSCRIBED TABLETS FROM THE PALACE OF KNOSSOS



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869

INSCRIBED TABLETS FROM THE PALACE OF KNOSSOS


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[^0]:    It is not certain at what point that collection ends, to which the rubric 'Area south of the Bay of Seal-impressions' applies: it may refer to most or all of the remainder (106c-1568).

[^1]:    $B p, q, r, s, t$ ．Like $B n$ but with ideograms replacing qualifying words
    

[^2]:    $1404 \mathrm{E} \times 201$ (Lxxxvi)

