

FURTHER SEALS AND SEALINGS FROM LERNA

(PLATES 125-130)

THE clay sealings¹ from the House of the Tiles at Lerna, published in 1958, form a chronologically and stylistically homogeneous group.² In the present article is published a miscellany of other sealings, seals, a stamped loomweight, and stamped fragments of pottery³ which help to fill out our knowledge of the range and chronological extent of seal cutting at Lerna. The seals, and one of the sealings, belong to Lerna IV, or the Early Helladic III period;⁴ the pottery and the remaining sealings to Lerna III, or Early Helladic II. The latter period at Lerna can be divided into four phases (a-d), the first immediately preceding the mixed fill and the last or fourth being that of the House of the Tiles, from which we catalogue here one additional sealing. Of the four phases of Lerna III, we can assign to phase c the sealings from Room DM and the sealing and loomweight from Room CA, both constructions lying southeast of the House of the Tiles and north of the fortifications.⁵ The group from the bothros in Room B of the fortifications can be assigned to a slightly earlier stage of the same phase. The stamped pottery is contemporary with the sealings or earlier. The jar with broad handles (192), although discovered out of context, is probably to be dated by analogy to phase c of the same period, Lerna III.⁶ Jar 193, from a street south of Tower V, is also assigned to phase III c, at an earlier stage than that of the DM sealings.

¹ I should like to thank Professor John L. Caskey for allowing me to study the material here published, and for many helpful suggestions. The drawings were done by Piet de Jong, the photographs by John L. Caskey, with the exception of Pl. 130, 200, and the developing and printing under the direction of Alison Frantz of the Agora Excavations. The sketch plan was done by the author. The work of investigation was assisted by a grant (Penrose Fund no. 2236) of the American Philosophical Society.

² M. C. Heath, "Early Helladic Clay Sealings from the House of the Tiles at Lerna," *Hesperia*, XXVII, 1958, pp. 81-121. Abbreviated hereafter as *Sealings* 1958.

³ Most of these are mentioned briefly in *Sealings* 1958, pp. 82-83.

⁴ For a discussion of the stratigraphical break between Lerna III and IV (E. H. II and III), and the great stylistic differences between them, see J. L. Caskey, "The Early Helladic Period in the Argolid," *Hesperia*, XXIX, 1960, pp. 285-303.

⁵ Plan in *Hesperia*, XXVII, 1958, p. 128, fig. 1.

⁶ Fabric and shape seem to agree with pottery of these later phases, although the type of handle occurs at an earlier date as well. Other strap-handled jars from Lerna include L. 540, from phases in Area J immediately succeeding and immediately preceding the mixed fill (phases a and b); L. 60 from the mixed fill in Trench A (phase a); and L. 52, found in Trench B with a group of Lerna III and II potsherds. Cf. Kurt Müller, *Tiryns*, IV, pl. XI, 1 and 2; at Corinth, *Hesperia*, XVII, 1948, p. 201, pl. LXX, A1. See note on the handles of this type of pot in J. L. and E. G. Caskey, "The Earliest Settlements at Eutresis," *Hesperia*, XXIX, 1960, p. 140 (one example, III, 8, pl. 47, from an E. H. I level).

The following catalogue begins with the single sealing from the House of the Tiles, followed by the other groups of sealings, beginning with that from Room B. Next come the stamped pottery fragments, and lastly the sealing and seals belonging to Lerna IV. The sequence of numbers continues that begun in *Sealings* 1958.

HOUSE OF THE TILES

In 1957, during the cleaning of the floor by the steps in Room III, the north Corridor, in the House of the Tiles, a small fragment of a Type B sealing was recovered.⁷ It bears a fragmentary, but clear, seal impression which can be restored with certainty as a quadripartite T design, closely resembling S29, S30, and S33, but distinct in having only one set of T's. Only the reconstruction of the center is uncertain.

S71. Pl. 125.

D. 0.0235.

Four single T's, restored as joining in the center. Between each pair of T's, a thick short

line, springing from the single line border.

Example: 144 (L7.1), Pl. 125, Type B, H. pres. 0.023.

GROUP FROM ROOM B

The sealing fragments were discovered in the course of excavating the clay-lined bothros GB-4 in the southeast corner of Room B of the fortifications.⁸ The bothros has been assigned to phase c of Lerna III. Twenty-one pieces, the largest and most representative fragments, were inventoried, of which six are here listed in a catalogue. Only seven of the inventoried group bore seal impressions, all evidently made by the same seal. This seal type, when restored symmetrically from the most nearly complete impressions, appears to have been slightly oval and very large. Most of the seal was occupied by a closely constructed S-spiral; at one side and possibly at the other as well was a single small spiral, and the intervening spaces seem to have been filled with chevrons. The cutting is not especially fine, and the seal was applied sparingly, perhaps owing to its size.

The type of sealing where recognizable (Pl. 125, 148) resembles the pithos rim sealing of the DM group. The mouth of the pithos appears to have been packed with reeds, or with a loosely woven circular reed mat. Clay was then smeared over the entire rim and the adjoining reeds, not, however, over the whole of the packing. This circle of clay would have been sufficient to secure the vulnerable rim edge of the packing against undetected pilferage; the seal impressions were added as an occasional extra precaution, but not so abundantly as on the DM sealings. The best preserved pieces from Room B bear both a section of rim impression and some reed impres-

⁷ *Sealings* 1958, pp. 90-91, pl. 19. Plan, *Hesperia*, XXV, 1956, p. 166, fig. 5.

⁸ Plan, *Hesperia*, XXVII, 1958, p. 128, fig. 1.

sions parallel to it (Pl. 125, **148**, **149**). The rim impression is wider than in the DM group and lies at the very edge of the sealing, making it clear that the clay did not overlap the neck at all.

The clay is red-brown, fairly fine, with some small impurities and is scarcely fired. The burning of the room had evidently little effect on the contents of the bothros. It is possible from the location of the fragments and their similarity in type and clay that all, including those not catalogued, belonged to one sealing. Some 222 further fragments, most of them very small, were not inventoried; of these 81 were kept and the rest discarded.

In the following catalogue the largest dimension of each fragment is given. Length is measured parallel to the rim and reeds, and width is measured across them. The top surface in the best examples shows graining and finger marks produced by smoothing.

S72. Pl. 125.

Max. D. *ca.* 0.065, min. D. *ca.* 0.055.

S-spiral, small single spiral at one side and possibly at the other, chevrons restored in the intervening spaces.

Examples: **145** (L7.2), Pl. 125, L. pres. 0.072; **146** (L7.3), Pl. 125, L. pres. 0.089;

147 (L7.6), Pl. 125, L. pres. 0.031. Others: L7.4, 5, 7, 8, L. pres. 0.028-0.046.

Unstamped fragments of the same sealing: **148** (L7.9), Pl. 125, L. pres. 0.152, five fragments; **149** (L7.10), Pl. 125, L. pres. 0.108; **150** (L7.16), Pl. 125, W. pres. 0.057. Others: L7.11-15, 17-22, largest dimension pres. 0.102-0.038.

GROUP FROM ROOM DM

The fifty-one inventoried fragments were found in a number of different places within Room DM (Fig. 1).⁹ The majority came from inside the two pithoi, and outside where they were set into the floor; the remainder were found south of the bothros GP-30, below the basin L. 606, and in the upper and lower parts of the debris (around 4.75 m. and 4.55 m. A. T. respectively). A few further fragments not recognized as such by the diggers turned up among the potsherds from the room when these were assembled for examination.

When the fragments are classed according to seal types, six main groups appear. The largest is that which bears the rosette and tripartite spiral seals found together on most of the large fragments, sometimes alone on small pieces. The fragments of this group appear to come from a pithos rim sealing somewhat like that represented by the pieces from Room B. They are nearly all characterized by a series of sharp approximately parallel impressions made by reeds which in the largest examples (**158**, **159**, **163**, **164**, Pls. 126, 127) are seen to have been laid in a wide curve with its circumference towards the thicker edge of the sealing. In addition, some pieces of the group (**152** is the best example, Pl. 126) show, next to the reed impressions, the

⁹ Plan, *Hesperia*, XXVII, 1958, p. 128, fig. 1.

impression of a section of rim. Although none of the fragments with rim impressions preserve enough of the reed impressions to show the curve, it seems likely, from the similarity of the clay and the identity of seal types, that all pieces of the group are from the same single sealing. As in the case the B group, the mouth of the pithos was first packed with reeds or with a reed mat which might have overlapped the rim.¹⁰

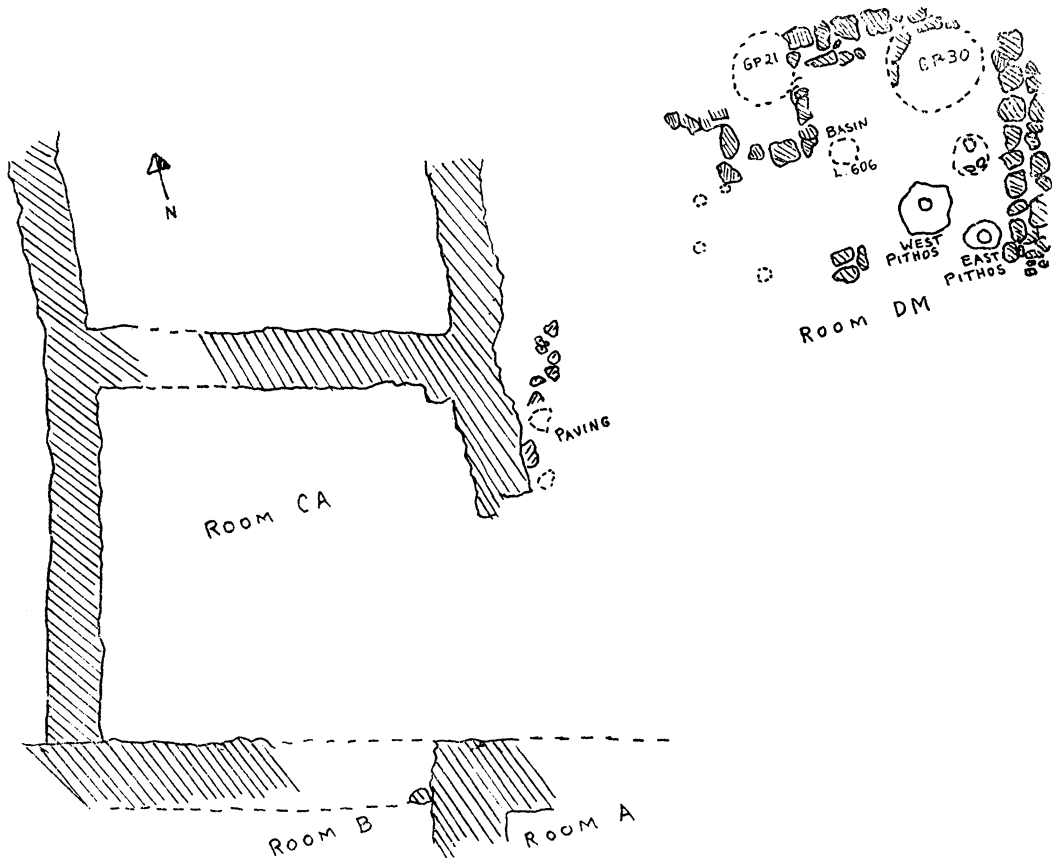


FIG. 1.

A cord (traces preserved on **152** and **161**) was passed across the reeds and the rim, presumably to keep the packing in place, and clay was smeared over the rim and the adjoining reeds, but not over the whole packing; this is indicated by the thinness of the clay towards the center of the pithos mouth. The seal impressions were made over the edge of the packing, and not towards the center of the mouth where the packing could not be opened without detection. It is possible that the same sealing overlapped the neck of the pithos; this may perhaps, despite the different quality of clay, account for **157**, a fragment which bears a partial neck impression and one

¹⁰ A possible parallel at Phaistos: D. Levi, *Annuario*, XXXV-XXXVI, 1957-1958, fig. 58.

impression of the rosette seal placed towards the rim. The reed packing of the mouth was not always level, to judge by the angle taken by the impressions on **164** and **152** (Pls. 127, 126).

In view of the places where the fragments of this group fell, it is possible that they represent the sealing of the West Pithos itself, although, since the upper part of the pithos was not found, the profiles cannot be compared. Most pieces of the sealing were found within the pithos, and of these all but one show reed impressions alone, while those pieces which would have covered the rim and therefore lay at the outer edge of the vessel were found scattered outside, some near the East Pithos, some below the basin L. 606, and one in the upper part of the debris. A few small fragments with reed impressions only were found outside the pithos. The sealing was probably not in place unbroken at the moment of the fire; the fragments were scattered widely, and show a great range of colors produced by the burning, best seen in the joined fragments of **152**. Whether the sealing could have been broken immediately before the fire, or slightly earlier, in the normal course of events, cannot now be determined.

Fragments of other sealings are far less abundant. Two single fragments were found, each representing the only example of its seal type (**170** and **171**, Pl. 127), and bearing rim and reed impressions like those of the West Pithos sealing. The first one came from the assembled potsherds and the other from the upper part of the debris. These pieces may be all that remain of earlier sealings from one or the other of the two pithoi in the room.

The fragments bearing the other identified seal type (the hatched quadrant) are not so easily explained. The quality of the clay is uniform, noticeably micaceous and burnt commonly buff and gray. Nearly all the fragments bear impressions of reeds, usually at an angle to the sealed face, sometimes on two adjoining faces of the sealing. The largest piece, **173** (Pl. 127), which appears triangular in section, is also slightly curved, in this case in two directions, suggesting that it too may come from the mouth or neck of a pithos. No pieces, however, preserve any rim profile, and it is difficult to account for the oblique packing of the reeds. The two similar fragments **175** (Pl. 127) and **176** (Pl. 128), found outside the East Pithos, bear impressions of matting, in the case of **175** either laid over a couple of cylindrical objects or woven in a series of ridges. It is impossible to say whether this matting was itself a part of a pithos sealing, perhaps that of the East Pithos. The scattered locations of the other fragments (south of bothros GP-30, outside the West Pithos, upper and lower parts of debris, assembled potsherds) do not suggest an assignment to either pithos. Possibly they were all attached to a container made of perishable material.

A few other inventoried fragments are either without seal impressions or bear impressions too faint to be described, but almost certainly of new types. A group of

fragments from the East Pithos (**182, 183, 184, 186**) may represent a series of sealings like that from the West Pithos and used on it at different times. **183** and **182** (Pl. 128), with fragments of unidentified seal types, may have belonged to one sealing; **184**, also with the edge of an unidentified seal impression, to another; and **186** (Pl. 128), partly from the lower part of the debris, to a third. The last one is large enough to give an approximate total diameter of 0.050 corresponding to the approximate diameter of the pithos rim itself. It bears no seal impressions at all.¹¹

Other stamped fragments found among the assembled potsherds include **179** (Pl. 128), of the pithos reed sealing type, and **180** (Pl. 128) and **181** from one sealing placed on fine matting. Three other fragments come from collar-type sealings (Type C)¹² used around a jar or pithos neck, probably as an adjunct to the rim sealing. Of these, **185** (Pl. 128) from the lower part of the debris is stamped, and **187** from inside the East Pithos and **188** from below basin L. 606 are not. Finally, the unstamped piece **189** (Pl. 128) from inside the West Pithos may represent part of a clay plug used in it at one time. It shows two flat surfaces at right angles to each other. Similar fragments, uninventoried, were found below basin L. 606 and in the lower floor deposit.

Numerous small fragments without seal impressions were not inventoried since these pieces repeat information already gained. One should perhaps note some 25 additional small fragments of the West Pithos sealing found inside the pithos, and 16 other shapeless lumps of clay, some probably mere earth, from the same place.

We conclude that the majority of the DM fragments come from pithos sealings, presumably from sealings used on the two pithoi in the room. The largest group of fragments (**151-169**) appears to have been used as one sealing on the West Pithos. Since these fragments are far more abundant than any others it may be assumed that this sealing was the one most nearly contemporary with the destruction of Room DM, and that the other fragments used on pithoi were earlier discards which had not been cleared away nor had had time to disintegrate before the fire. It would appear that new safeguards had had to be applied to the storage jars more than once, presumably by several persons who used different seals. The East Pithos may have been sealed at three different times by the sealings now represented by **182** and **183, 184, and 186**; either pithos may once have been sealed by **170, 171, or 179**, and have worn collar sealings represented now by the fragments **185, 187, and 188**. Evidence of containers of other types is uncertain. The group with the hatched quadrant, and **179-181**, may possibly be interpreted as coming from packages wrapped in matting or reeds.

The following catalogue gives each seal type followed by its diameter, a brief description of the design, and a list of the sealing fragments which bear the type.

¹¹ Plate 126 shows **186** in position on the rim of the East Pithos.

¹² *Sealings* 1958, pp. 95-96, pl. 19.

Only the most important pieces are catalogued; the rest are listed by inventory number. The fragments, when numerous, are given in groups according to the variety of impression on their undersides: pithos rim and reed impressions, rim, reed, or cord impressions alone, matting impressions, neck impressions (Type C), and impressions not preserved. Each fragment is also identified by its location when found. If a second seal type occurs, it is noted. Variations in color of clay are given only where significant; in most cases the clay is fairly good, burnt quite hard, reddish, and contains a few large impurities. The fragments bearing the type S77 are exceptionally micaceous, and buff to gray in color. The top surfaces of most of the DM sealings are faintly grained by smoothing along the lines of the impressions on the underside.

S73. Pl. 125.

D. 0.017.

Eight pellets, probably made with a drill, joined to each other at the center by stems. No border.

Examples:

With rim and reed impressions: **151** (L5.730), Pl. 125, in West Pithos, also stamped with Type S74, L. pres. 0.072; **152** (L5.721), Pl. 126, three fragments near East Pithos, two below basin L. 606, also stamped with type S74, L. pres. 0.114, mottled in fire, cord impression; **153** (L5.722), near East Pithos, also stamped with type S74, W. pres. 0.05; **154** (L5.737), below basin L. 606, W. pres. 0.033.

With rim impression only: **155** (L5.736), below basin L. 606, L. pres. 0.047; **156** (L5.743), with potsherds from floor deposit, W. pres. 0.043.

With neck impression: **157** (L5.734), lower part of floor debris, W. pres. 0.1005.

With reed impressions only: **158** (L5.746), Pl. 126, two large fragments found in West Pithos, one small piece found near West Pithos, also stamped with S74, L. pres. 0.099; **159** (L5.754), Pl. 126, in West Pithos, also stamped with S74, L. pres. 0.12. Other fragments in West Pithos, also stamped with S74: L5.751, L5.752 with cord impression, L5.764; L5.907 with S73 only; L. pres. 0.043-0.059. **160** (L5.725), near East Pithos, also stamped with S74, W. pres. 0.038.

With cord impression only: **161** (L5.759), in West Pithos, also stamped with S74, L. pres. 0.044.

S74. Pl. 125.

D. 0.025.

Three C-spirals placed about the circumference of the seal interlock with three C-spirals tangent to each other near the center. A small triangular space is left open in the center. No border.

Examples:

With rim and reed impressions: **151**, **152**, **153**, see S73.

With rim impression only: **162** (L5.912), upper part of debris, L. pres. 0.045.

With reed impressions only: **158**, **159**, see S73; **163** (L5.749), Pl. 126, in West Pithos, W. pres. 0.11; **164** (L5.906), Pl. 127, in West Pithos, restored with plaster, L. pres. 0.128. Other fragments in West Pithos: L5.751, L5.752, L5.764, see S73; with S74 alone, L5.755-756, L5.760-762, L. pres. 0.052-0.062. **165** (L5.748), near West Pithos, W. pres. 0.029; **166** (L5.747), near West Pithos, W. pres. 0.029; **160**, see S73; **167** (L5.732), south of bothros GP-30, L. pres. 0.035.

With cord impression only: **161**, see S73.

With no impression preserved: **168** (L5.757), in West Pithos, W. pres. 0.035.

Unstamped fragment of Type S73 or S74 (West Pithos Sealing) with reed impressions: **169** (L5.908), in West Pithos, L. pres. 0.061.

S75. Pl. 125.

D. 0.03.

Two pairs of opposed spirals spring from the center. The other axis is represented by a line ending in pellets. A small circular space is left open in the center. No border. The cutting is simple and crude, and the spirals loose.

Example: **170** (L5.739), Pl. 127, found with potsherds from floor deposit, rim and reed impressions, L. pres. 0.086.

S76. Pl. 125.

D. 0.027.

Two three-leafed elements at opposite edges. On either side, two irregular lines, each forming a loop, a spiral, and a leafed element. In the center, four pellets, irregularly placed.

Example: **171** (L5.718), Pl. 127, from upper part of floor debris, rim and reed impressions, L. pres. 0.066.

S77. Pl. 125.

Max. D. 0.023, min. D. 0.02.

Oval seal, divided by a cross into quadrants. Each quadrant filled with parallel lines, vertical in one opposing pair of quadrants, horizontal in the other.

Examples:

With reed impressions: **172** (L5.728), Pl. 127, south of Bothros GP-30, L. pres. 0.071. **173** (L5.729), Pl. 127, from lower part of debris, L. pres. 0.119. **174** (L5.745), near West Pithos, L. and W. pres. 0.042. South of Bothros GP-30: L5.727, L. pres. 0.072; L5.731, L. pres. 0.064. Found with potsherds from floor deposit: L5.744.

With mat impressions: **175** (L5.724), Pl. 127, near East Pithos, L. pres. 0.062; **176** (L5.910), Pl. 128, near East Pithos, L. pres. 0.051.

With no impressions preserved: **177** (L5.719), from upper part of floor debris, L. pres. 0.045.

Unstamped fragment, with reed impressions: **178** (L5.911), upper part of floor debris, L. pres. 0.051.

Fragmentary or indecipherable seal types:

S78.

D. *ca.* 0.03.

Several curving lines and a line border preserved.

Example: **179** (L5.741), Pl. 128, found with potsherds, impressions of reeds, L. and W. pres. 0.031.

S79.

D. 0.019.

Small shallow cut seal, close design.

Examples: **180** (L5.740), Pl. 128, with potsherds, matting impression, L. pres. 0.034; **181** (L5.742), with potsherds, matting impression, L. pres. 0.06.

S80.

D. *ca.* 0.018 (measured on **182**, uncertain on **183**).

Design includes spirals.

Examples: **182** (L5.738), Pl. 128, in East Pithos, reed impressions, W. pres. 0.041; **183** (L5.916), in East Pithos, reed and rim impressions, L. pres. 0.04. Probably from same sealing.

S81.

D. *ca.* 0.021.

Type indecipherable.

Example: **184** (L5.913), in East Pithos, rim and reed impressions, L. pres. 0.076.

S82.

D. *ca.* 0.021.

Type indecipherable.

Example: **185** (L5.733), Pl. 128, lower part of floor debris, neck impression, L. pres. 0.118.

Unstamped fragments:

With rim and reed impressions: **186** (L5.914), Pl. 128, lower part of floor debris, two fragments; in East Pithos, three fragments; dark coarse clay, restored with plaster, L. pres. 0.181, D. of pithos rim *ca.* 0.50.

With neck impression: **187** (L5.915), in East Pithos, L. pres. 0.052; **188** (L5.917), below basin L. 606, two fragments, cord impres-

sion, L. pres. 0.082.

Plug: **189** (L5.909), Pl. 128, in West Pithos, two fragments, L. pres. 0.064.

GROUP FROM ROOM CA

Two further impressed objects, one a clay sealing, the other a loomweight, were found in 1954 in Room CA,¹³ part of the same complex as Room DM. The first¹⁴ seems to be another fragment of a pithos sealing; in this case, however, the mouth of the pithos was packed with a finely woven reed mat which left its impression on the underside of the fragment next to a small section of rim impression. The seal type is a tripartite loop design, resembling the commonest type of the group from the House of the Tiles (S3-S12) but simpler than any of these. The loomweight is rectangular and was stamped with a small seal whose design, as nearly as can be made out from the very faint impressions, was tripartite and linear.

S83. Pl. 125.

D. 0.023.

Three double loops spring out of a central circle so as to resemble six interlocking loops; the line is continuous. In the center is a small circle. Line border.

Example: **190** (L4.320), Pl. 128, fairly coarse red clay, partly black, L. pres. 0.083.

S84.

D. 0.017.

Single line border. Within it, at least two parallel lines, one within the other, broken at one point so as to suggest a tripartite double loop design perhaps in the manner of S7.

Example: loomweight, **191** (L4.204), Pl. 129, rectangular, pierced twice lengthwise, good buff clay, H. 0.057.

POTTERY WITH IMPRINTS

The excavations at Lerna provide also some evidence for the use of stamp seal impressions as decoration on pottery in the Early Helladic period. A fragment of a jar, found in Area B in Lerna IV context but certainly of early Lerna III manufacture, bears on one handle the impression of a hatched quadrant seal. From a street outside Tower V,¹⁵ in an early stage of Lerna III phase c, come fragments of a large coarse jar with several indistinct impressions made by a large quadripartite seal probably resembling the double loop designs from the House of the Tiles.

S85.

D. 0.03.

Well made hatched quadrant, five chevrons in each quadrant, single line border.

Example: **192** (L.1316), Pl. 129, H. pres.

of jar 0.38; fairly fine clay, largely burnt gray and yellow, streaks of black glaze on body, inside rim, and in bands along strap handle; low incised band around body at level of top of handle.

¹³ Plan, *Hesperia*, XXVII, 1958, p. 128, fig. 1.

¹⁴ *Hesperia*, XXIV, 1955, p. 45.

¹⁵ Plan, *Hesperia*, XXVII, 1958, p. 128, fig. 1.

S86. Pl. 125.

D. 0.037.

From the decipherable fragments, a quadripartite double loop seal has been restored, of which only the central circle is conjectured. The four double loops are continuous with

each other, thus forming four additional double loops, and the first double loops are filled each with a single line. Single line border.

Example: **193** (L.1560), Pl. 129, D. mouth *ca.* 0.30, neck low and spreading, thick horizontal handle on body above greatest diameter; coarse clay, pink with gray core, unslipped.

LERNA IV SEALS

For the use of seals in the last Early Helladic period at Lerna we have as evidence one fragment of a sealing and six actual seals. The sealing, **194**, comes from a bothros and appears from the marks on its underside to have been used on matting; the single seal impression is large and indistinct. The seals are of terracotta, very crudely made, except **196** which is of stone. Four of them come from Lerna IV context; one is a surface find but can be assigned to the same group. The designs are extremely simple and include the hatched quadrant, an irregular loop pattern, and a variety of maeander. The shapes are also simple; five are varieties of the signet, and one is a ring.¹⁶

S87.

D. 0.036.

Area BE, Bothros S.

Indistinct impression.

Example: **194** (L6.326), Pl. 129, L. pres. 0.106, fairly fine micaceous clay, buff to gray.

195 (L4.67). Pl. 129.

D. 0.027.

NW part of square F7, Lerna IV, phase 3.

Line of running loops, irregular, about a circle and central pellet. Single line border. Fine tan clay, mottled to gray, polished; pinched conical signet, pierced handle.

196 (L5.378). Pl. 130.

Max. D. 0.024.

Square F7, from a street east of the House of the Tiles, Lerna IV, phase 3.

Slightly oval face, divided by lines into rough quadrants, each containing an oblique line. Soft gray stone, long flat pierced handle.

197 (L5.390). Pl. 130.

D. 0.029.

Square F6-7, over NE part of the House of the Tiles, Lerna IV, phase 5.

Irregular hatched quadrant; pinched conical signet, fine buff clay.

198 (L4.218). Pl. 129.

D. 0.031.

Bothros FF, Lerna IV, phase 5.

Two ovals each with a central tongue and encircled with lines, deeply incised. Buff clay, black glaze; rectangular face, ring handle, top missing.

199 (L7.23). Pl. 130.

Max. D. 0.028.

Surface find.

Face divided into rough quadrants, each containing an oblique line. Fairly coarse, gray to brown clay; low conical pinched signet, handle pierced.

200 (L7.318). Pl. 130.

Max. D. 0.029.

From a mixed context.

Central circle surrounded by parallel curved lines which form two loops and create a crude spiral effect. Buff clay, yellow slip; low pinched conical signet, top of pierced handle missing.

¹⁶ Cf. Matz, *Die Frühkretischen Siegel*, Berlin, 1928, types M and N, pl. XI, nos. 19, 11.

These miscellaneous impressions and seals provide clear evidence that the art of seal cutting was practised not only in the final phase of Lerna III but earlier in the period as well, and that it continued or was reintroduced in a limited way in Lerna IV. The jar **193** and the groups from Room B, Rooms DM and CA, and the House of the Tiles illustrate a sequence through the Lerna III phases c and d. The material forming this series is too little, however, to do more than suggest stylistic development. We can draw certain conclusions from the motifs used in the CA and DM groups, but the seal impressions of slightly earlier date tell us much less.

The DM seal types can be related to the more complex types from the House of the Tiles but are noticeably simpler. The most carefully cut of the DM group, the tripartite C-spiral S74 (together with S73, the latest of the group, at least in use on the West Pithos), is an example of the design from which the numerous double loop patterns were probably derived.¹⁷ The plain rosette S73 is not found among the designs from the House of the Tiles, but there are many, such as S40-S42, which suggest a rosette in their total, more complicated, effect. The facing C-spirals of S75 appear again, in a much elaborated form, in S45. The border spirals of S76 can be paralleled perhaps in S44, S46, and S49, but the total effect with its three-leafed elements and central pellets is closest to that of S43. S77, finally, shows the essentials, but not the elaboration, of S58.

The two impressions from Room CA appear to confirm the evidence of Room DM. Seal type S83 is a tripartite double loop, clearly related to S3-S11, but cut with less flair and without the addition of any filling ornaments. The type S84 appearing on the loomweight may perhaps be another of the same general design.

Taken together, the DM and CA groups offer a repertoire characterized by the same symmetry and geometry that we saw in the group from the House of the Tiles, but apparently without the same fineness of detail and repetition of one form with slight variations. None of these phase III c designs would be entirely out of place among those of phase III d, yet, taken as a group, they are distinctly plainer.

The other impressions, S72, S85, and S86, show only that some of these geometric designs go back to slightly earlier stages of Lerna III. S72 from Room B, phase III c, a variety of the spiral motif, is unlike most of the types from the House of the Tiles in its large size and brings to mind certain of the pithos bands.¹⁸ The two seal types appearing on jar fragments are also paralleled by the later types. The quadripartite double loop of S86, from phase III c in an early stage, was probably not unlike S13 or S8, although the rounded inner returns of the loops resemble the earlier type S83 from Room CA more than they do the sharply designed examples from the House of the Tiles. The hatched quadrant S85 is comparable to S58, although plainer.

¹⁷ Cf. S3-S11 especially. *Sealings* 1958, p. 114.

¹⁸ *Sealings* 1958; see S32 for size. Pithos bands L.1564, *Hesperia*, XXVIII, 1959, pl. 44, c-e, L.1570, pl. 44, f.

The seals **195-200**, datable to Lerna IV, show that seal cutting was practised, but to a much lesser extent, in the last Early Helladic period. The single sealing **194** informs us that seals were still occasionally put to this use, but we have no evidence to suggest that pottery was ever decorated with stamps. The seal designs are extremely simple and careless. The attribution of these few seals to phases within Lerna IV tells us little of any change or development within the period. **196** and **199** show us virtually the same rudimentary version of the hatched quadrant, while **197** is only slightly more elaborate. The elementary hatched quadrant is too common a design to be traced to any one source,¹⁹ but a steatite cone seal with an oval base reported to have been found in Early Helladic context at Hagia Marina may provide a parallel to **196**.²⁰

195, with its running loops, is perhaps more like S77 from Room DM than it is like any of the loop designs from the House of the Tiles, and its early date, in phase 3, may point to a connection with Lerna III. **200**, another concentric loop pattern, may also echo the loop or spiral designs. Only **198**, the ring seal, can be called unusual in shape and design, although it is as crude in manufacture as the rest. Its motif may possibly be related to the interlocking T designs; one should also mention its resemblance to certain Late Neolithic types.²¹ The whole group of predominantly terracotta stamps at Lerna is evidently part of a widespread though loosely connected tradition.

Clear evidence is wanting to establish precise relationships between these seals and sealings and those of the rest of the contemporary ancient world. Some parallel evidence has been given for the later seals. The character of the earlier Lerna types is best explained by their resemblance to the types from the House of the Tiles, and by the fact that they form, with these, a chronological sequence. They have a few parallels in the limited mainland material,²² of which the most important pieces, those

¹⁹ *Sealings* 1958, p. 119, note 39, p. 118, note 33. Cf. also the terracotta button seal from Sesklo: Tsountas, *Dimini and Sesklo*, fig. 272, col. 339, found with type A3 β pottery. Early examples also from Poliochni (L. Bernabò-Brea, *Poliochni*, Rome, 1964. I, 1, pl. CLXVIII, 9, dated to pre-Troy I ["blue" period], and pl. CLXX, 4, Troy I-II ["red"]).

²⁰ G. Soteriades, *R.E.G.*, XXV, 1912, p. 276. The seal is described, not illustrated, but the simple design appears to have been like that of **196**. Cf. also three crude terracotta seals from Asea: Holmberg, *Asea*, fig. 112, 1-3. They are called M.H., but if the phase preceding the destructive fire is in fact E.H. II, as the sauceboat found in House A of this period would indicate (p. 11), these post-destruction seals may possibly belong in E.H. III. Also comparable are terracotta seals of Troy II-V cited in Matz, *Die Frühkretischen Siegel*, pp. 255-256, fig. 112, and from other Anatolian sites such as Karataş, M. J. Mellink, *A.J.A.*, LXIX, 1965, figs. 33, 37.

²¹ *Arch. Anz.*, XLVIII, 1933, cols. 315-316, figs. 1-2 (Philia). *Ath. Mitt.*, XXXVIII, 1913, p. 29, fig. 1 (Tsangli). Delvoye, *Rev. Arch.*, I, 1949, p. 278. *Hesperia*, XXIX, 1960, pp. 135, 161, pl. 52, II. 47 (Eutresis, Group II).

²² S83 recalls an equally simple type at Zygyouries, impressed on the side of a saucer (Blegen, *Zygyouries*, p. 197, fig. 91, 1), and is distantly comparable to Frödin and Persson, *Asine*, figs. 160, 1, 172, 6. The rosette S73 has a possible parallel at Malthi (N. Valmin, *Malthi*, p. 338, pl. XXV,

from Asine and Zygouries, are clearly to be dated to the same E. H. II period.²³

There seems to be little evidence for an assumption that this body of E. H. II glyptic is to be derived directly from Crete. The double loop designs, predominating even before the time of the House of the Tiles, suggest in the earlier stages no closer Cretan relations than do the later designs of the type.²⁴ The spiral S75 and S72 may be paralleled in a general way on Crete,²⁵ the loop design S76 hardly at all,²⁶ and the

28). Seal impressions on the body of a broad-handled jar occur at Asine, House R (*Asine*, p. 239, fig. 160, 1, 2).

²³ *Hesperia*, XXIX, 1960, pp. 285-303. The strong resemblance of the Asine seal types to those from the House of the Tiles has been noted (*Sealings* 1958, p. 7). Two of these (*Asine*, fig. 172, 7, a sealing, fig. 160, 1, 2, a jar) come from House R, whose pottery (pp. 214-217) is characterized by such Lerna III types as sauceboat (160:4), beaked jug (158:5-8), basin (158:10), open jar (158:11), closed jar (159:1, 3, 4, and 160:1 with the seal impressions), hydria (159:6), saucer (158:9). The other two seal types (172:5, 6, sealings) occurred together with two seals (172:3, 4; the second is a blank) in the "vast accumulation of E.H.I. and II sherds" (p. 200) near the east side of the Polygonal Wall Terrace. Only two vessels are described from this accumulation (dipper and spoon, p. 225, fig. 164, 3, 4), but they are also clearly of types found in Lerna III. Two others (pyxis, p. 219, fig. 161, 2, and beaked jugs, p. 220), also of Lerna III types, are described as from the Polygonal Wall Terrace, but it is not stated whether they come from the accumulation.—The Zygouries saucer base (*Zygouries*, pp. 107, 214, fig. 91, 1) comes from House U, whose pottery includes, among others, a sauceboat and an askos (p. 26). The terracotta seal (p. 189, pl. XXI, 4) comes from House Y, together with sauceboats (p. 25), and an askos (p. 95). A foot amulet (pp. 47, 218, pl. XX, 3) from Tomb VII was found with pottery of Lerna III type (fig. 95).—The same date is to be given to the similar foot amulet and serpentine seal from Aghios Kosmas (Mylonas, *Aghios Kosmas*, pp. 29, 157-159, fig. 166, 13) which come from the first floor level of House E. The design on the seal, although it seems not to be a triskelion, is closer to the Asine sealing from House R than to any of the Lerna types. Cf. also a probably E.H. II stone seal from Rafina, *Πρακτικά*, 1953, fig. 15, and a terracotta button seal from E.H. II context at Keramidaki near Corinth (J. Wiseman, *Hesperia*, XXXVI, 1967, p. 26, pl. 11,d).

²⁴ S74, the C-spiral design, may also be considered here. *Sealings*, 1958, pp. 117-118, note 18, calls attention to the later C-spiral types, among which we may also include two M.M.II impressions from the harbor town of Knossos (V. E. G. Kenna, *Cretan Seals*, Oxford, 1960, pp. 144-145, pl. 16, 10S and 12S; cf. the lenticular seal, 197, pl. 8). The Platanos seal (*Sealings* 1958, p. 117, note 17; Xanthoudides, *Vaulted Tombs of Mesara*, pl. XIII, Platanos B, C1029) is still the best parallel. It is remarkable that this cylinder seal with its unusual design does not resemble the large and fairly homogeneous group of Messara ivory cylinder seals in shape (Matz, *Die Frühkretischen Siegel*, type B, pp. 6 ff.); it is pierced through one end, and consequently bears a design only on the other end. The usual ivory cylinder is pierced through the side, both ends are decorated, and its most characteristic design is that of a procession of lions (e.g. Xanthoudides, *Vaulted Tombs*, pl. XIII, Platanos zeta, C1039, Matz K49). A distant likeness to S74 may be seen in the linear design on a triangular seal from the Hagia Triadha tholos (*Annuario*, XIII-XIV, 1930-1931, fig. 111, no. 252, Matz K23).

²⁵ For S75, cf. *Annuario*, XIII-XIV, 1930-1931, fig. 67, no. 190, from Hagia Triadha; Kenna, *Cretan Seals*, pl. 5, no. 103. The best parallels for S72 are a group of seals from Marathokephalo (Δελ., IV, 1918, *Παράρ.* p. 21, fig. 7, C1206, C1203; and C1205, not illustrated: Matz K40-K45), all showing the basic S-spiral with added single spirals; in size and style of cutting, however, they are very different.

²⁶ Random spirals are fairly well known; cf. Xanthoudides, *Vaulted Tombs*, pl. XIV, 115,

hatched quadrant (S77, S85) and rosette (S73) fairly widely but without conclusive results.²⁷

Doro Levi, in his publication of the impressively abundant sealings from Phaistos,²⁸ has drawn certain conclusions about the relations between the Lerna sealings from the House of the Tiles and his own. It should be pointed out that by the stratigraphical evidence at Lerna the House of the Tiles sealings cannot possibly be contemporary with the Phaistos sealings; the former must be dated considerably earlier.²⁹ Despite the difference in date, however, the commonest type of Phaistos sealing, F, is strikingly comparable to Lerna Type B,³⁰ except that the Phaistos sealings appear to have been half rather than whole cones.³¹ Levi objects to the suggestion that the Lerna B sealings were applied to pegs projecting from wooden boxes, on the grounds that the wood grain would have become blurred after many applications of clay.³² Since the graining on many of the Phaistos sealings is repeated, so that eleven matrices, in fact, can be distinguished, Levi proposes, instead of a wooden peg, a metal matrix which could have produced a series of wax plugs to be used as stoppers for the kind of small jar especially common at Phaistos.³³ It is hard to accept this explanation for the less deeply marked graining on the Lerna sealings, found on both the Type B and the Type A examples.³⁴ The wooden peg still seems the

Platanos A, C1114, Matz K263. For the three-leaved element, see *Sealings* 1958, p. 118, note 23. Further examples of its use are to be found at Phaistos, *Annuario*, XXXV-XXXVI, 1957-1958, pp. 113-115, pl. VIII, 178-180, p. 151, pl. X, 216.

²⁷ Hatched quadrant: *Sealings* 1958, pp. 118-119; Phaistos, *Annuario*, XXXV-XXXVI, 1957-1958, no. 52, pl. III, 117, no. 53, pl. III, 118, no. 76, pl. V, 141, nos. 78-79, pl. V, 143-144. For S85, e.g. A. J. Evans, *Cretan Pictographs*, fig. 87; for S77, Hagia Triadha, *Annuario*, XIII-XIV, 1930-1931, fig. 105. Also an unpublished example on a pithos rim from Kea.—Rosette: the best examples are later (e.g. R. B. Seager, *Excavations at Mochlos*, fig. 35, pl. XV, h) and two of these resemble the crude Malthi seal (N. Valmin, *Malthi*, p. 338, pl. XXV, 28; H. B. Hawes, *Gournia*, fig. 28.5, called M. M. in style, p. 54; E. H. Hall, *Vrokastro*, fig. 65). Cf. also Phaistos, *Annuario*, XXXV-XXXVI, 1957-1958, pp. 102-104, pl. VII, 167-169. The closest example on a prism seal is illustrated by Evans, *J.H.S.*, VII, 1897, pl. X, 13.

²⁸ Doro Levi, "L'Archivio delle Cretule di Festos," *Annuario*, XXXV-XXXVI, 1957-1958, pp. 7-192; abbreviated hereafter as Levi.

²⁹ Mrs. Sakellariou-Xenaki has already pointed out the chronological difference in her article on the Lerna sealings (*Κρητικὰ Χρον.*, XV-XVI, 1961-62, p. 80). The Phaistos sealings from the Archives are placed in the last decades of the "first palatial period" of ca. 1900-1800 B.C. (Levi, p. 148, pl. 187). Kamares sherds were found scattered throughout the Archives debris (Levi, pp. 1, 136). At Lerna, pottery of M.M.I a was found in Lerna V, or M. H., levels (*Hesperia*, XXVI, 1957, p. 154, fig. 43, c; *Hesperia*, XXIX, 1960, p. 299), while the sealings are securely dated to Lerna III, or E.H.II, with which the ones from Asine and the material from Zygouries are now seen to be contemporary.

³⁰ Levi, fig. 54, a-c. *Sealings* 1958, pl. 19.

³¹ Levi, p. 50. *Sealings* 1958, pp. 90, 92, no. 43.

³² Levi, p. 51.

³³ Levi, pp. 51-52.

³⁴ *Sealings* 1958, pp. 86, 90. Levi, p. 54, suggests that the Phaistos sealings which resemble

better explanation at Lerna, whether it is a projection from the wall of the box, or a sort of latch projecting from the edge of the box through a hole in the lid.³⁵

A remarkably similar type of sealing is common in Dynasty XIII context at the fort of Uronarti in the Sudan, and in somewhat later context at the neighboring fort of Kerma. Reisner's latest explanation of these "funnel" sealings³⁶ is that the end of a storage sack was pulled through a hole in a wooden plate and tied with string; graining is visible on the flat surface of the sealing. This interpretation would not seem to fit the evidence at Lerna or at Phaistos, and yet one cannot but feel that some quite ordinary ancient system of closure lies behind all three groups of sealings.

The abundance of the sealings from Phaistos and the Sudan does shed some light on the purpose to which the Lerna sealings could have been put. It would have been possible to store containers, in the numbers suggested by the sealings, in Room XI of the House of the Tiles, but the fact that there are in the room no fragments of the jars which bore C and D sealings, and the fact, also, that the room opens only outwards suggests rather an archives room as at Pylos.³⁷ Presumably the stamped fragments provided a sort of record keeping. We can picture Room XI as an office for the reception of goods or the issuance of rations, or perhaps a market center for barter, where the sealings on the containers were officially broken, the items inspected and handed over to their new owners, and the sealing fragments shelved as a record. We may even imagine those persons who waited to do business as sitting on the yellow clay bench which ran along the south wall of the House of the Tiles; perhaps the same scene went on at Room I.

If the sealings were used only in the case of delivery, the seals would have been the property of the producers of the goods. If, on the other hand, the sealings were broken at the time the goods were exchanged, the seals may have belonged either to the original producers or to the authorities at the House of the Tiles, or to both. At Uronarti, the seal types are clearly distinguishable as either official or private. By far the largest group of sealings is stamped by one or another of the two official

Type A (fig. 57) were used on pithoi or pyxides. At Kerma, a wooden door seems to have been sealed and resealed at intervals; the mud fragments were found discarded on the spot. (George A. Reisner, *Excavations at Kerma*, Parts I-III, Harvard African Studies, V, Cambridge, 1923, p. 265).

³⁵ The latter is suggested by Levi, p. 50.

³⁶ Reisner, *Excavations at Kerma*, p. 38; *idem*, "Clay Sealings of Dynasty XIII from Uronarti Fort," *Kush* (Journal of the Sudan Antiquities Service), III, 1955, pp. 27-28.

³⁷ C. W. Blegen, *The Palace of Nestor at Pylos*, I, Princeton, 1966, p. 92. Bullae found at Bogazköy in Room I of Building D are suggested by Bittel (*Bogazköy*, I, Stuttgart, 1952, p. 63) to have been stored in the room where they were found, not fallen from a second floor. Although they were scattered somewhat outside the building, none were found in the adjoining room II. There was also no room in Room I for the storage of the goods sealed by the bullae; Bittel believes, p. 63, that the bullae were kept as evidence for the "correct entry of the goods."

seals of the fort storehouse; a few bear the stamps of other forts and must be imported; and there are a number of other official stamps.³⁸ Private seals are used on virtually as many sealings as there are official, and in addition they are very frequently used to overstamp official sealings.³⁹ Plainly, as Reisner says, the official in charge at the storehouse applied his own "private seal to the official sealing . . . to protect himself against an abuse of the office-seal by some subordinate."⁴⁰ Did some such red tape exist at Lerna and Phaistos? Double stampings occur at both sites, but there seems to be no way to identify any seal designs as specifically official. None of those most frequently used at Phaistos happens to occur with a second seal type.⁴¹ In the House of the Tiles, where double stampings are relatively more common than at Phaistos,⁴² one can see some relationships between the paired seals. All are visibly different in size, in four cases considerably. (Seals S73 and S74 from Room DM show the same difference in size). All but one of the smaller types are well below the average in diameter. In addition, four of the smaller seals, S46, S57, and S59 especially, are of extraordinarily fine workmanship. And it is also to be noted that, in the cases of the two pairs in which neither seal is of distinguishable quality, the designs themselves are related. S41 is much smaller than S32, but both are quinquepartite. S39 and S40, different in size and division, are composed similarly of leafed elements. Thus there may be some particular intention in the choice of the two seals in a double stamping, but we cannot say whether this is a distinction between official and private stamping, or between two private parties to a transaction,⁴³ or some other purpose to do with the contents of the container.

The private seals in use at Uronarti also shed some light on the Lerna seals in the matter of design. Reisner remarks on the small number of basic designs at Uronarti and their elaboration which does not, even so, exhaust all possibilities. The distinctions between seals are very small, sometimes a matter of size, or of the slightest variation of design, of orientation, of the number of elements in the design.⁴⁴ Reisner supposes that a system of official registration, such as exists in modern times,

³⁸ Reisner, *Kush*, III, 1955, pp. 36-41, 52.

³⁹ *Ibid.*, pp. 38, 52.

⁴⁰ *Ibid.*, p. 38.

⁴¹ Levi, seals nos. 26, 31, 59, 70, 82, 86, 93, 101, 106, 117, 122, 123, 131, 136, 137, 139, 140, 141, 142, 236. These occur on anywhere from 22 to 142 sealings; the other seals are far more sparsely represented as a rule. The double stampings at Phaistos are nos. 30 and 200; 55 and 132; 85 and 97; 96 and 211; 112 and 193; 114 and 203; 115 and 191; 163 and 234; 166 and 235; 218 and 246.

⁴² See the table of incidence, *Sealings* 1958, pp. 84-85. At Phaistos, the double stampings are 10 (20 seals) out of 282 seal types; at Lerna, 6 (12) out of 70.

⁴³ There is distinction of size in some cases of double stamping at Phaistos, but not all; type 235 with 166 is the most noteworthy (Levi, p. 118). At Uronarti (Reisner, *Kush*, III, 1955, p. 30), there are only four cases of stamping with two private seals. Reisner believes these are the work of persons with a joint interest in a parcel.

⁴⁴ *Ibid.*, pp. 49-50.

must have been necessary.⁴⁵ Whether or not such was in use at Lerna, the elaboration of a few basic types is obvious, even on a smaller scale, and it can also be seen at Phaistos.⁴⁶ Individual seals may show influence from elsewhere (witness, at Phaistos, certain seals with a strong Egyptian element),⁴⁷ but the family resemblance within the group is stronger. This treatment of abstract designs would seem characteristic of a geographically and chronologically limited group with a commercial purpose.

Levi, however, strongly maintains that the Lerna seal types immediately call to mind the Cretan glyptic repertory, and he lists as evidence certain elements⁴⁸ in their designs. Of these elements, only a few are genuine parallels and even these are not among the commonest types at Lerna. The enlaced design and the spiral designs have good parallels among the Phaistos designs.⁴⁹ Spiders and vases, occurring rarely and not in the Cretan manner at Lerna, are certainly among Cretan motifs,⁵⁰ as is the quatrefoil, another minor Lerna motif.⁵¹ The universality of the hatched quadrant has already been discussed. None of these parallels touches upon the characteristic Lerna types—the double loop, the interlocking T, and the symmetrical arrangement of small separate motifs. Levi quotes the maeander (interlocking T) as a Cretan parallel, but no such designs occur at Phaistos and almost nothing similar occurs elsewhere; the usual Cretan motif is a *rapport* design.⁵² The swastika is not common on Cretan seals except in the large single form of which Phaistos has produced one example (147) and Lerna none except the remote parallels S25 and S27.⁵³ The triskelion⁵⁴ shows only the most general similarities. The running loops, by which must be meant Lerna S3-S17 etc., are not at all closely related to the Phaistos types 128-138; the Phaistos designs characteristically overlap like loops of thread and are very close to the enlaced designs, Phaistos nos. 139-140. The remaining features mentioned are the cross and the star, both absent at Lerna, and the trefoil, confused with the three-leafed element.⁵⁵ The trefoil does not occur at Phaistos, nor does it seem to occur elsewhere in Crete except in one example at Gournes;⁵⁶ the three-leafed

⁴⁵ *Ibid.*, p. 50.

⁴⁶ Levi, e.g. types 21-24, 46-50, 60-68, 83-87, 113-116, 130-134, etc.

⁴⁷ Levi, type 145, p. 92; type 276, p. 134.

⁴⁸ Levi, p. 190: spirals, maeanders, swastikas, triskelia, Maltese crosses, trefoils, quatrefoils, stars, eyelets and running loops, curvilinear enlaced designs, rectilinear hatched designs, spiders and vases.

⁴⁹ S 57, unique at Lerna. Levi, nos. 130, 137, 139, 140, 150, 151.

⁵⁰ *Sealings* 1958, p. 118.

⁵¹ The quatrefoil is the major part of the design at Phaistos, nos. 109-116 (Levi, pp. 85-86).

⁵² E.g. Xanthoudides, *Vaulted Tombs*, pl. XIII, Platanos C1106.

⁵³ E.g. cf. Kenna, *Cretan Seals*, pl. 2, no. 35.

⁵⁴ *Sealings* 1958, p. 118, note 21; Levi, Phaistos nos. 161, 176. Kenna, *Cretan Seals*, pl. 2, no. 76.

⁵⁵ *Sealings* 1958, p. 83; the three-leafed element illustrated in S39, pl. 21, the trefoil in S50, pl. 22.

⁵⁶ Δελτ., IV, 1918, pl. IV, eta, Matz K88.

element, on the other hand, is indeed a Leitmotif at Phaistos, but takes usually an elongated and sharp-pointed form. Finally, we do not see among the Lerna types a characteristic fondness for the "introduction of leaves and naturalistic elements and the association and transformation of these in geometrical motifs"⁵⁷ to be paralleled only in Minoan art. On the contrary, there is very little among the Lerna types, aside from the spiders and jugs, which suggests an interest in natural forms in any way comparable to the vivid and frequent use of vegetable and animal forms obvious on the Phaistos sealings⁵⁸ and the Messara seals.

Mrs. Sakellariou-Xenaki has clearly demonstrated that the Phaistos seal types provide us with some better general parallels for the principle of symmetrical geometrical design practised at Lerna than do the earlier Cretan seal types from the Messara. She points out correctly the great difference, on the other hand, between the static composition of the Lerna designs and the motion and irregularity characteristic of the Messara types.⁵⁹ Since, then, the majority of the Phaistos seal types, according to Levi, are to be dated later than the mass of the Messara seals⁶⁰ and since the latter are certainly closer in date to the Lerna types, we may be justified in suggesting the possibility that the more static designs in Crete were derived from the mainland, or both from another source. It is not possible, though, to argue that the Lerna seal types do not find any analogy in other forms of Early Helladic art.⁶¹ Surface decoration on pottery was not unknown in the Early Helladic period even though plain ware was the more characteristic. The pithos bands impressed by carved cylinders certainly show parallels with the seal designs in their cutting and their geometric forms.⁶² The small class of painted ware shows further interest in surface design. And the very shapes of Early Helladic II pots consistently display a remarkably high level of design, especially when they are compared with those of the following period.⁶³ There existed in E. H. II a strong feeling for order and symmetry, a sense of fitness in design, which can be seen even in the plan and arrangement of the House of the Tiles itself. We know virtually nothing, of course, of the more perishable E. H. II arts. The discovery of further E. H. tombs might add more to our knowledge of seal cutting and other minor arts, if we can judge by the contents of the Messara tombs.

A search for parallels from areas outside Crete and the mainland is not directly conclusive. It should be noted, however, that, while the practice of using seal impressions as marks or decoration on pottery is not found in Crete, stamp decoration was

⁵⁷ Levi, p. 190.

⁵⁸ Levi, Phaistos nos. 167, 168, 202-270.

⁵⁹ *Κρητικά Χρον.*, XV-XVI, 1961-1962, pp. 81-86.

⁶⁰ Levi, p. 187.

⁶¹ Levi, p. 190.

⁶² *Hesperia*, XXV, 1956, pl. 44, a and b; XXVIII, 1959, pl. 42; XXIX, 1960, p. 293.

⁶³ *Ibid.*, p. 292. Painted pottery illustrated *ibid.*, pl. 69, b-c; XXIII, 1954, pl. 11, a.

common in the Early Cycladic II period on certain types of vessels: footed jars, "frying pans," less often pyxides. Most of the examples come from cist tombs excavated by Tsountas at Chalandriani on Syros, but there are others from Siphnos, Naxos, and Paros.⁶⁴ The stamps are exclusively closed spirals or concentric circles and bear no resemblance to the Lernaean or to the Cretan seal designs. Furthermore, for all the hundreds of tombs excavated in the Cyclades, almost no seals are known,⁶⁵ in contrast to Crete, and nothing has appeared which would have served to stamp the pottery. Presumably the stamps were of a perishable material. There are, of course, no sealings, a fact which may be due in part to chance and to the paucity of excavated town sites.

Fragments of this stamped pottery have been found at many mainland sites, at Lerna as well, and stamped frying pans have been found in the graves at Aghios Kosmas.⁶⁶ Mrs. Bossert, in her study of this class of ware,⁶⁷ has shown that the stamps used to decorate the mainland pieces were unlike those impressed on the Cycladic (the spirals are characteristically open rather than closed), and that the principles of composition are different. She points out, too, that the mainland shape of frying-pan is that associated in the Cyclades with *incised* decoration, not with *stamped*. Since she dates the Chalandriani pottery to Early Helladic III, following the Early Helladic III dating of the comparable Asine material, and dates the incised Kampos frying pans to Early Cycladic I-II, she concludes that the use of stamps of the Cycladic type appears at an earlier date on the mainland than on the Cyclades.⁶⁸ J. L. Caskey's more recent dating of the Asine material and Aghios Kosmas to E. H. II, and of Chalandriani to E. C. II,⁶⁹ eliminates this disparity, but the differences in style between the Cyclades and the Mainland remain evident. It appears that stamped pottery of the Cycladic type may also have been produced on the mainland, perhaps chiefly for funeral purposes as on Syros, if we may take the evidence from Aghios Kosmas as typical.

We may conclude, then, that, while the Cycladic stamped pottery may well share

⁶⁴ C. Tsountas, 'Εφ. 'Αρχ., 1899, pp. 73-134. E. Varoucha, 'Αρχ. 'Εφ., 1925-1926, pp. 98-114. Pottery from Naxos exhibited in the National Museum in Athens. Incision was also used to decorate "frying pans," notably at Naxos and Paros: Varoucha, 'Αρχ. 'Εφ., 1925-1926, fig. 9; G. A. Papathanosopoulos, Δελτ., XVII, 1961-1962, pl. 66, b; W. Zschietzschmann, Arch. Anz., L, 1960, cols. 652-668, figs. 1-14.

⁶⁵ Two seals from Melos, one a rosette (Wace and Thompson, *Prehistoric Thessaly*, figs. 112, b and c); a cylinder from Amorgos (F. Dümmler, *Ath. Mitt.*, XI, 1886, p. 20, Beil. I, D6), and a spiral seal from one of the Kouphonisia, near Amorgos (*ibid.*, p. 25, and Matz, p. 250, fig. 110). A steatite button from Kea, K3.457, with a single goat, reminds one of Cretan seal types.

⁶⁶ G. Mylonas, *Aghios Kosmas*, pl. 148, 159. A listing of mainland fragments in E. M. Bossert, *Jahrb.*, LXXV, 1960, pp. 8, 11.

⁶⁷ *Ibid.*, pp. 1-16.

⁶⁸ *Ibid.*, p. 13.

⁶⁹ *Hesperia*, XXIX, 1960, pp. 285-303; "Greece, Crete, and the Aegean Islands in the Early Bronze Age," *C.A.H.*, I, 1964, p. 28.

a common ancestry with the Lerna seals,⁷⁰ there is no question of direct derivation. Two distinct contemporary traditions exist: one, the spirals and circles stamped on a particular class of ware found on certain of the Cyclades and on the mainland; and the other, various more elaborate geometric designs used on sealings as well as on jars and other vessels and represented chiefly by the House of the Tiles sealings, and the pithos bands.⁷¹

A few stamped pottery fragments found outside the Argolid may help to relate the two traditions. From Kea come a number of fragments of pithoi or hearth rims, bearing a variety of seal impressions. Two examples of a single closed spiral design (K. 2628 and K. 2547) and one with concentric circles (K. 2004) are close to the Cycladic designs. A hatched quadrant, with a pair of leaves occupying one quadrant, resembles Lerna 192. Two other seal designs may reflect the mainland tradition: a closely woven triskelion design (K. 2466) and a delicate quadripartite C-spiral (K. 3558).⁷² The latter two bring to mind the imported sherd found in Troy II b⁷³ bearing a stamped impression with spirals. Another stamped sherd, from Poliochni on Lemnos,⁷⁴ is worth noting; the shape and size of the impression are comparable to those of the Argolid, and the design is geometric, though not symmetrical.

The stamped pyxis from the settlement at Chalandriani offers a different problem. The shape and fabric are unusual though not out of place; the small delicate stamp has been placed in the Egyptian First Intermediate Period.⁷⁵ Certainly the design is unlike both those of the Argolid and those of Crete. Possibly the vase represents an individual craftsman's variant of his tradition, using an imported seal.

This scattered evidence is inadequate for a complete account of seal use on pottery in the Early Bronze Age, but it does suggest a tradition at home in the Cyclades and on the mainland, not in Crete. For a source for this tradition of pottery decoration, we should perhaps look further east, to Anatolia, Syria, and Palestine,

⁷⁰ This suggestion is made by J. L. Caskey, *Hesperia*, XXIX, 1960, p. 293, and accepted by A. Sakellariou-Xenaki, *Κρητικά Χρον.*, XV-XVI, 1961-1962, p. 86.

⁷¹ Add also the seal-impressed jar from Asine (Frödin and Persson, *Asine*, fig. 160, 2). A cup from Chalandriani (National Museum, Athens, no. 5318) is ornamented with one single concentric circle which reminds one of the saucer from Zygyouries (*Zygyouries*, pp. 107, 214, fig. 91, 1) stamped with a variety of the same design. And at Aghios Kosmas, stamped spirals are used in a zoomorphic design on a coarse pottery fragment (Mylonas, *Aghios Kosmas*, pl. 143, no. 510), and Cycladic stamps are used together with hatching on a pyxis (pl. 141, no. 164).

⁷² Unpublished; shown to me by J. L. Caskey. Also from Kea, the impression of a small rectangular seal on a pithos rim, K. 2548, with a simple linear design.

⁷³ Blegen, *Troy*, I, p. 256, pl. 408, a-c. Schachermeyr, *Die älteste Kultur Griechenlands*, p. 175, suggests a Cycladic origin for this sherd. Kenna, *Cretan Seals*, p. 19, note 17, describes the stamp as Early Minoan.

⁷⁴ L. Bernadó-Brea, *Poliochni*, I, 1, p. 401, pl. cxxix, a. The context is very early, of the "green" period corresponding to Troy I. Note also a stamp on a sherd from Samos, identified as Early Bronze: V. Milošević, *Samos*, I, Bonn, 1961, pl. 49, 2.

⁷⁵ Tsountas, *Ἐφ. Ἀρχ.*, 1899, pl. 9, 15. E. M. Bossert, *Jahrb.*, LXXV, 1960, p. 14.

where various stamped fragments have been found.⁷⁶ The whole body of glyptic evidence from these areas is sufficiently large, however, to show that it can offer no direct explanation for the Cycladic and mainland seal types, and certainly not for the House of the Tiles seal designs.

It would seem proven, in conclusion, that the Lerna seals were not manufactured in the Cyclades, Asia Minor, or the Cretan Messara.⁷⁷ Whether they have any closer affinities with another part of Crete cannot yet be definitely said.⁷⁸ When we consider also the relative paucity of Early Helladic tombs compared to the considerable number excavated in the Messara, it appears dangerous to assume a Cretan derivation for the homogeneous Lerna seal types on the grounds that most of the known Aegean seals of approximately the same period, or somewhat later, are found in Crete. The assumption seems especially uncertain in view of the fact that the commonest and most characteristic mainland types are either absent or extremely rare in Crete. And our knowledge of the Cyclades, while still slight, does not suggest that the Lerna seal types were created in the islands. The stamped pottery tradition links the two, but as yet we do not know whether clay sealings or seals of the mainland type were in use in the Cyclades. As far as our present knowledge goes, we find nothing to exclude, and much to favor, a local origin for the Lerna seals in the region of the Argolid.

⁷⁶ *Sealings* 1958, p. 119, and notes 38 and 39. See also list in J. L. Benson, "Aegean and Near Eastern Seal Impressions from Cyprus," *The Aegean and the Near East: Studies presented to Hetty Goldman*, Locust Valley, N. Y., 1956, pp. 60-61. Anatolian examples of the hatched quadrant stamp seal are especially numerous: besides that quoted from Alishar, add S. A. Kansu, *Les Fouilles de Etiyokuşu*, Ankara, 1940, p. 78, 2, 7; Lamb, "Kusura," *Archaeologia*, LXXXVI, 1936, fig. 12, 19, fig. 20. Note, in connection with S84, a loomweight stamp from Tarsus, H. Goldman, *Tarsus*, II, p. 240, fig. 395, no. 5; and stamped terracotta crescents from Kusura, *Archaeologia*, LXXXVI, 1936, fig. 15, 2-4, fig. 17, 7. From Karahüyük, an impression on a pithos fragment, N. Özgüç, *Ausgrabungen in Karahüyük*, Ankara, 1949, pl. XLVIII, 14. J. Marquet-Krause, *Les fouilles de Ay*, Paris, 1949, p. 39, fig. 2. The double and quadripartite C-spiral designs are striking on daggers from the Dorak treasure (*I.L.N.*, Nov. 28, 1959, fig. 16, B and C, double C-spiral; fig. 17, quadripartite C-spiral). Stamped sherd from an Early Bronze burial pithos from Karataş-Semayuk, the impression circular and the design geometric, in M. J. Mellink, "Lycian Wooden Huts and Sign 24 on the Phaistos Disk," *Kadmos*, III, 1964, fig. 1.

⁷⁷ Levi, p. 191, would place the manufacture of the seals from the House of the Tiles in a Minoan workshop outside the Messara. Kenna (*Cretan Seals*, pp. 19, 23, 26, 31, 78), whose book was in press before the publication of the Lerna sealings, refers to them as Cretan.

⁷⁸ Cf. the Platanos ivory cylinder mentioned above, which seems out of place in the Messara, and the seal from Mochlos (*Sealings* 1958, p. 118, note 22). Kenna, *Cretan Seals*, p. 16, reviews the evidence dating the latter to E.M.II and concludes that it is correct. Almost none of the Cretan seals can be precisely assigned to so early a date (Kenna, pp. 13-22); to the Mochlos seal and another from the Mochlos Cemetery (Kenna, p. 15, fig. 18) may be added seals from Lebena on the southern coast (*I.L.N.*, August 6, 1960, pp. 226-227, figs. 7, 18).

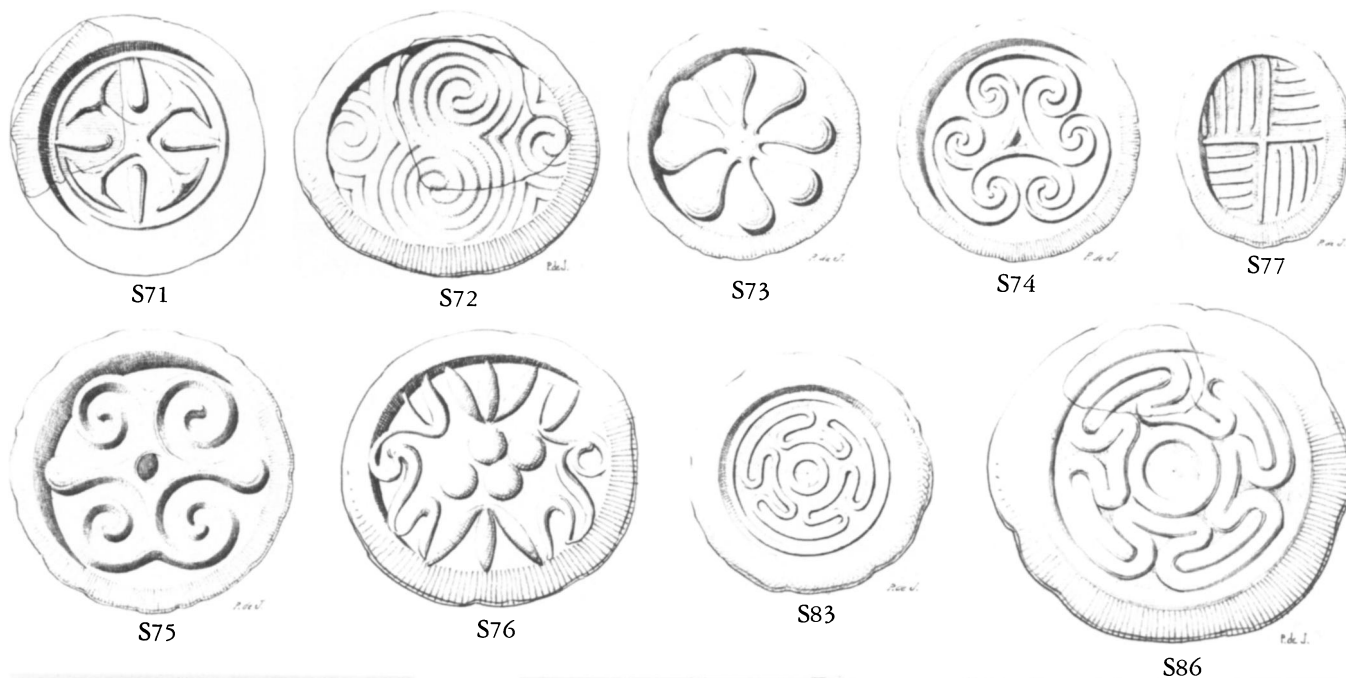
FURTHER SEALS AND SEALINGS FROM LERNA

521

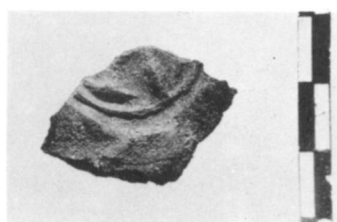
<i>Inv. Nos.</i>	<i>Cat. Nos.</i>	<i>Inv. Nos.</i>	<i>Cat. Nos.</i>	<i>Inv. Nos.</i>	<i>Cat. Nos.</i>
L.1316	192	L5.734	157	L5.909	189
L.1560	193	L5.736	155	L5.910	176
L4.67	195	L5.737	154	L5.911	178
L4.204	191	L5.738	182	L5.912	162
L4.218	198	L5.739	170	L5.913	184
L4.320	190	L5.740	180	L5.914	186
L5.378	196	L5.741	179	L5.915	187
L5.390	197	L5.742	181	L5.916	183
L5.718	171	L5.743	156	L5.917	188
L5.719	177	L5.745	174	L6.326	194
L5.721	152	L5.746	158	L7.1	144
L5.722	153	L5.747	166	L7.2	145
L5.724	175	L5.748	165	L7.3	146
L5.725	160	L5.749	163	L7.6	147
L5.728	172	L5.754	159	L7.9	148
L5.729	173	L5.757	168	L7.10	149
L5.730	151	L5.759	161	L7.16	150
L5.732	167	L5.906	164	L7.23	199
L5.733	185	L5.908	169	L7.318	200

MARTHA HEATH WIENCKE

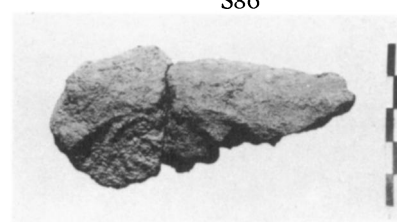
THETFORD CENTER
VERMONT



145



144



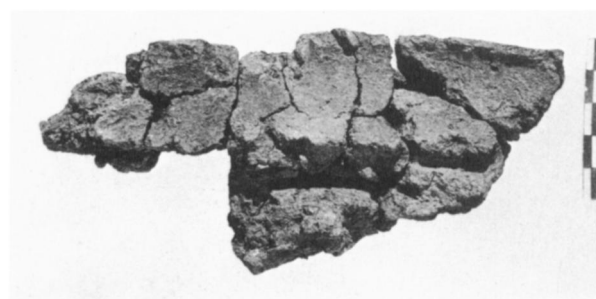
146



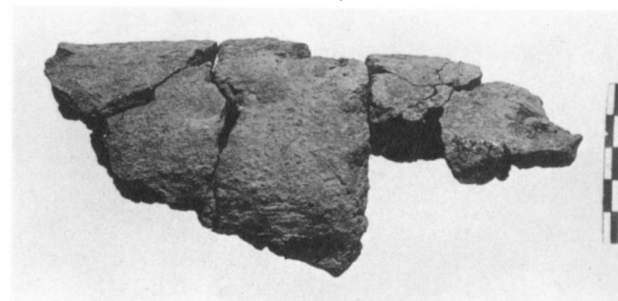
147



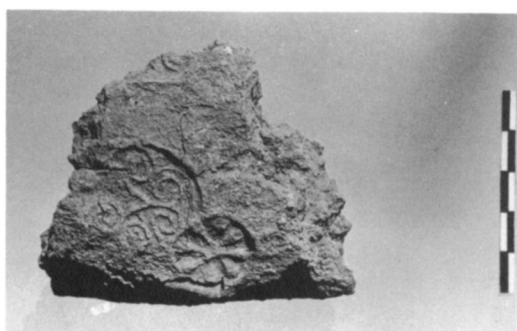
150 back



148 back



148



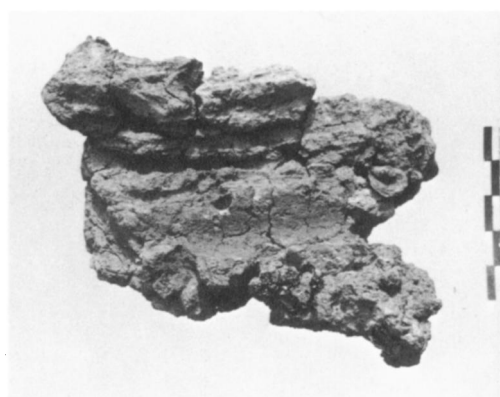
151



149



186 in Position on Rim of East Pithos



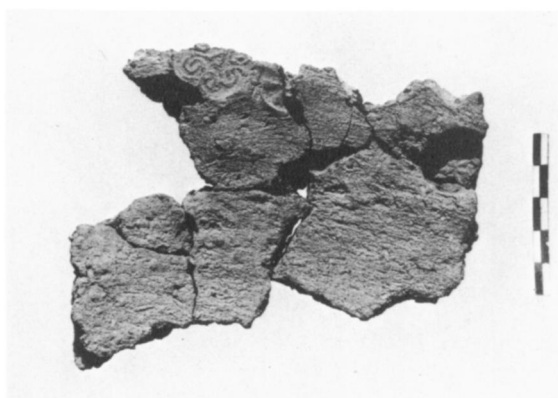
152 back



158



158 back



159



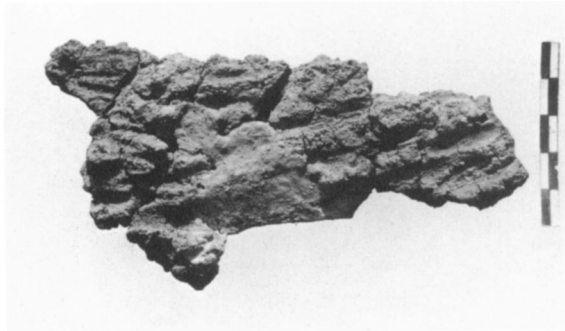
159 back



163



163 back



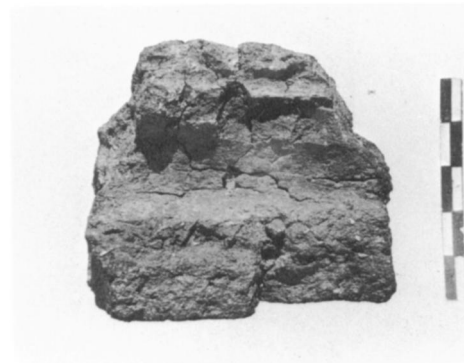
164 back



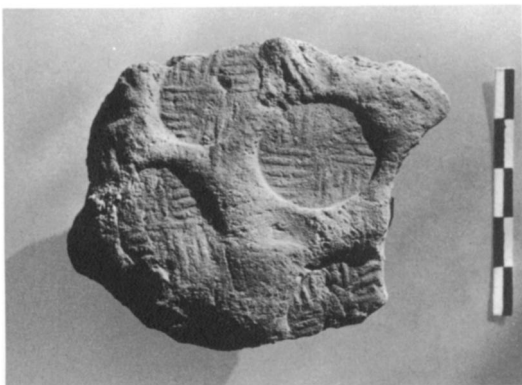
170



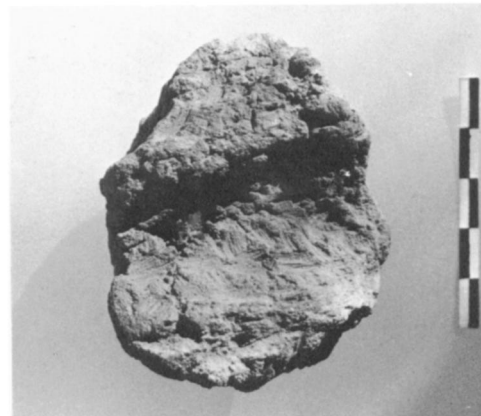
171



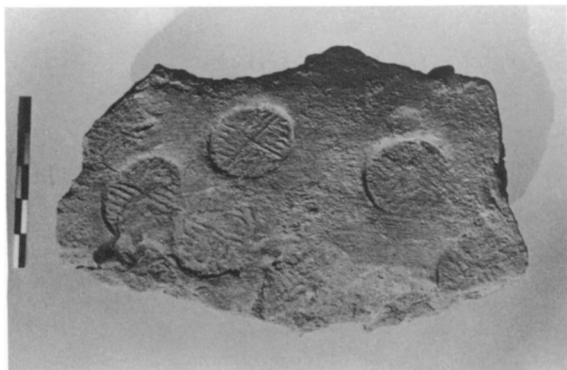
171 back



172



175 back

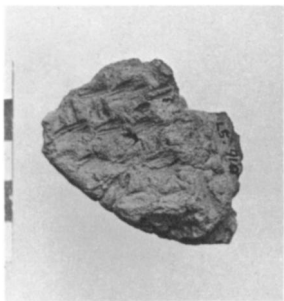


173



173 side

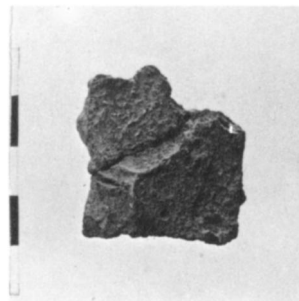
PLATE 128



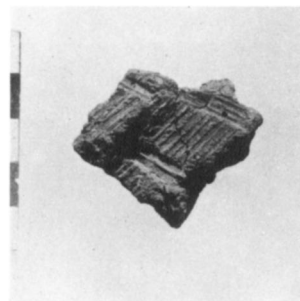
176



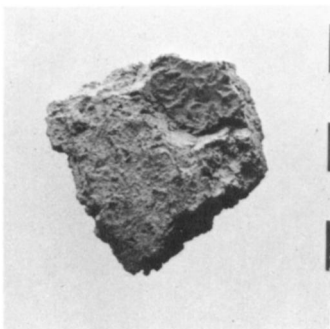
179



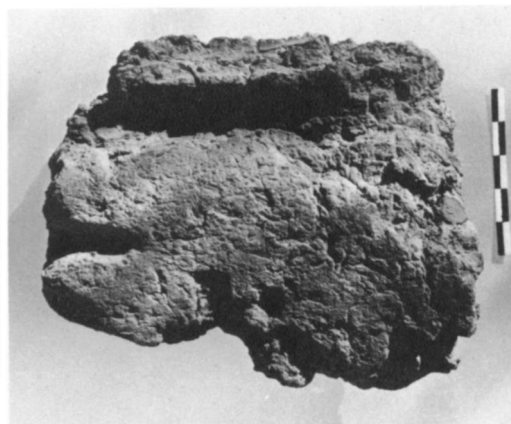
180



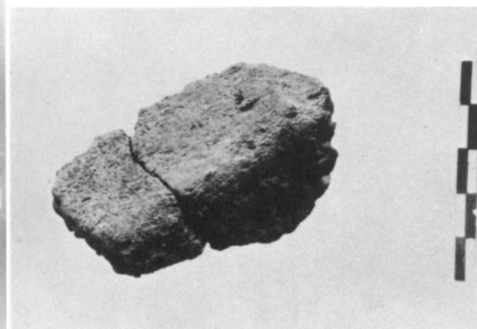
180 back



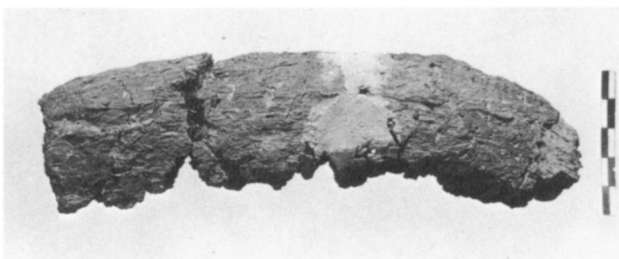
182



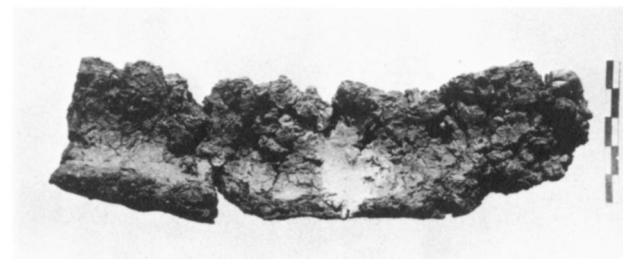
185 back



189



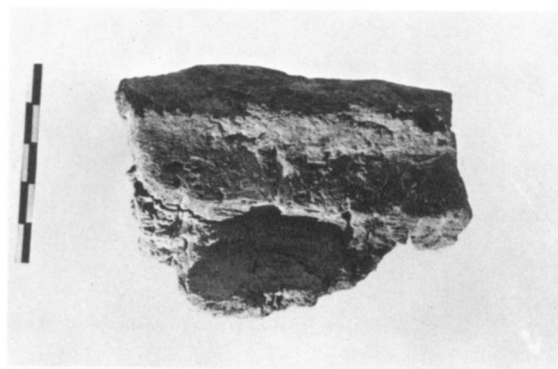
186



186 back

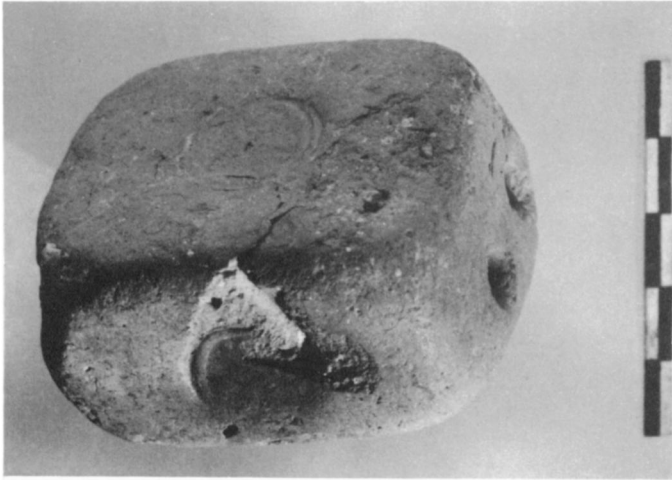


190

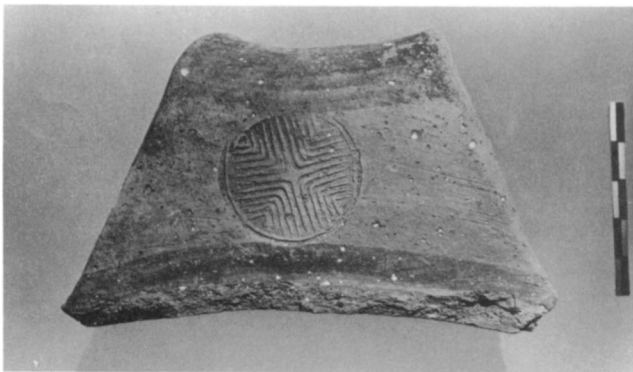


190 back

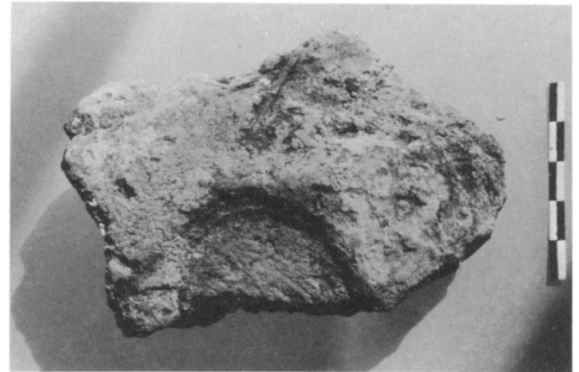
MARTHA HEATH WIENCKE: FURTHER SEALS AND SEALINGS FROM LERNA



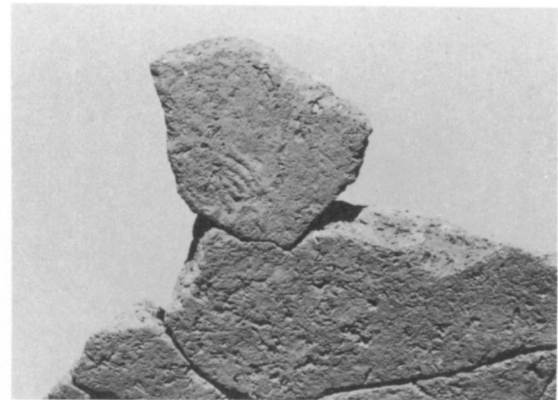
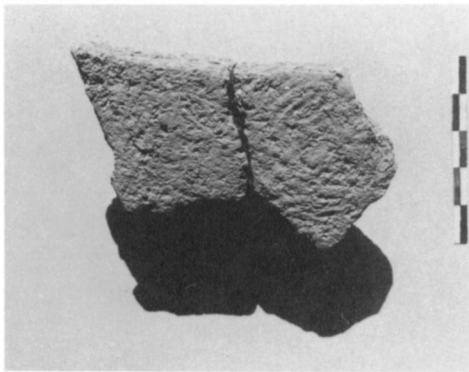
191



192



194



193



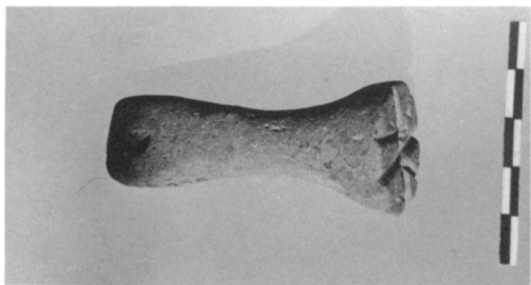
195

198



195

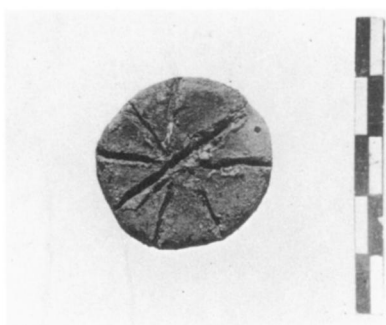
198



196



197



199



200