



A MORTARIUM KILN
AT ELLINGHAM,
NORFOLK

EAST ANGLIAN ARCHAEOLOGY

A mortarium kiln at Ellingham, Norfolk

**by Kay Hartley
and David Gurney**

with contributions by
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Tony Gregory

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and photographs by
Tony Gregory and David Wicks

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Cover illustration

The excavated kiln, looking north-west, showing the mortaria built into the kiln floor. Ref. ZQ11.

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of Mr John Pope is gratefully acknowledged as well as that of Nick Adams, who moved most of the soil and who also drew the plans and sections. A grant towards post-excavation analysis of the mortaria was provided by English Heritage. The illustrations of the pottery are by Hoste Spalding. Plate III was taken by David Wicks.

Summary

The mortarium kiln at Ellingham, excavated in 1976, contained an exceptional number of mortaria (837 sherds, mostly rims), including between thirty-seven and forty-nine individual mortaria stamped by Regalis, a potter known to have worked at Colchester; these factors indicate a production site of special interest. Large numbers of stamped and unstamped mortaria were incorporated into the structure of the kiln. The circumstances indicate that these came from an earlier kiln on the same site or nearby, and that mortaria were also fired in the later kiln. The mortaria are stamped by Regalis, by Lunaucis, with a herringbone stamp or with a trademark stamp. The potter Regalis appears to have moved from Colchester to work at Ellingham in the period AD 170–190,

and the mortaria with stamps of Lunaucis and those with herringbone stamps also show strong links with the Colchester tradition. The potter using the herringbone die was either Regalis himself or another potter active in the same workshop. The potter using the trademark die belonged to quite a different tradition from the other three. Further work is needed to clarify the issue, but it is possible that this tradition came from West Stow in Suffolk, where a stamp of this rarely-recorded potter was found. There was a considerable pottery industry in that area including mortarium production, and the other seven stamped mortaria recorded from West Stow can be attributed to local production. The trademark mortarium could have been a local product too.

Chapter 1. Introduction

The Site

(Figs 1–2, cf Fig. 14)

The site of the mortarium kiln at Dairy Farm, Ellingham (TM 37 91) is on gravel soils at around 3m OD on level ground close to the valley edge and only 425m from the River Waveney (Figs 1, 14). In the Norfolk Sites and Monuments Record the kiln is Site 11843, and the finds and archive have been deposited with the Norfolk Museums Service at Norwich Castle Museum (Acc. No. 190.990).

The kiln was discovered in November 1976 and was excavated under the direction of Andrew Rogerson in the same month. It was located in a farmyard and came to light during the mechanical excavation of a stancheon pit (Fig. 2). Parts of the collapsed kiln superstructure, oven floor and flue arch, as well as probably three pilasters were thus removed prior to the excavation, leaving only the lowest part of the kiln wall (39) and the firing chamber intact on the south side (Pl. I). The stancheon pit had been partly backfilled with loose soil and kiln fragments before the excavation commenced.

Other stancheon pits and recently disturbed soil were carefully searched, but no features were recorded and no other finds were made. There is as yet no other surface, excavation or cropmark evidence of a Romano-British settlement in the vicinity. A geophysical survey by the Ancient Monuments Laboratory in May 1977 to locate any other kilns was also unsuccessful. It proved impossible to survey the area immediately around the kiln due to the presence of abandoned metal articles within the farmyard topsoil, but a magnetometer scan to the south of the kiln and in the field to the west, up to 100m from the farm buildings, located no significant anomalies (Griffiths 1977). However, the amount of mortaria used in the structure of the kiln and their condition indicate that there *must* have been an earlier kiln not far away, from where these vessels were obtained. One possibility is that the earlier kiln was on the same site as the later one, and that it was totally demolished before the second kiln was built. The evidence of the stamped and unstamped mortaria suggests that Regalis and the herringbone potter may have been primarily involved with the earlier kiln, and the trademark potter and Lunaucis with the surviving kiln, but none of the four potters used *only* the later kiln.

Background

There are only two other Romano-British finds recorded in the area around the kiln, and both are Dolphin brooches of the first century AD. One is from Site 28990 some 450m to the west-north-west, and the other is from Site 17336 some 800m to the north-west. Both appear to be isolated finds.

The nearest Roman road to Ellingham runs from Woodton in Norfolk to Halesworth in Suffolk (Fig. 14), and is known as Stone Street, in parts the modern A144.

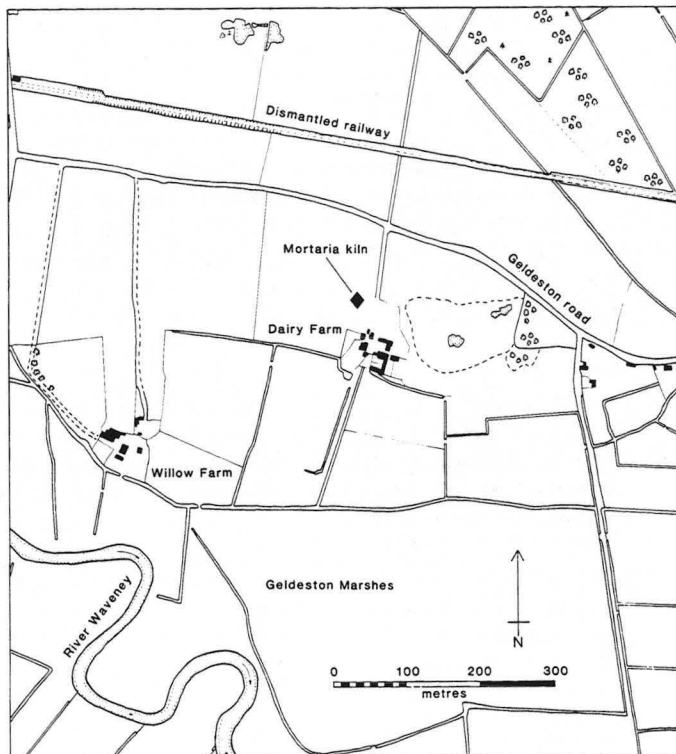


Figure 1 Location plan. Scale 1:10,000

It crosses the River Waveney on the Broome-Ditchingham parish boundary at Wainford (see Fig. 14), 3km to the west along the valley from the kiln site, where surface and metal-detector finds suggest the presence of a substantial settlement around the river crossing, including evidence of pottery manufacture with finds of firebars, kiln wall fragments and wasters (Site 18529; Norwich Castle Museum Acc. No. 378.982(3)). This settlement is possibly the market that the Ellingham potters were aiming at, and any kilns there were perhaps even in some way part of the same pottery industry. Beyond Woodton, the road is likely to continue northwards, passing east of but with a branch road to *Venta Icenorum* at Caistor St Edmund (some 19km by Roman road from Wainford), and the line can be projected southwards to substantial settlements at Wenhaston or Knodishall in Suffolk. The A140 Pye Road from Colchester to *Venta Icenorum* passes through Long Stratton (Fig. 14) c. 16km due west of Wainford, but there is at present no evidence of an east-to-west road linking these two sites.

As far as a clay source is concerned, there are pits shown on Ordnance Survey maps north of the dismantled railway (see Fig. 1), from which clay has certainly been extracted in recent times (inf. Mr Chapman). It is possible that the Ellingham kiln was sited to exploit a white-firing clay source.

Chapter 2. The Excavation

Description of the kiln

by David Gurney and Andrew Rogerson
(Figs 2–3; Pls I–II)

The ploughsoil c. 0.25m thick lay directly on top of natural gravel, the kiln and the stoke pit. This was shovelled off to reveal the full extent of both features. The stoke pit (38) was then totally emptied and, because of the large amount of pottery (almost exclusively mortaria) built into the kiln structure, the kiln itself was completely dismantled except for a strip 0.25m wide from the top to the bottom of the kiln wall close to the western end of the section (Fig. 2).

The kiln was built within a circular pit which was the same size as the outer wall of the kiln itself (external diameter at the top c. 1.80m), except to the east where the pit broadened out to form the stoke pit 38. The circular wall 34 was 0.15m thick at the top, fired to its full width, and this broadened to 0.35m at the base, where there was up to 0.20m of unburnt clay behind the burnt inner surface (Fig. 3). The kiln wall had a sloping inner face, although this slope was less pronounced on the north side than is visible on the west side in the Section W-E (Fig. 3). The clay of which the kiln lining 34 was constructed contained tile and mortarium fragments, and changed from unburnt yellow on the outside through burnt red in the middle to hard-fired grey on the inner surface. The upper parts were so thoroughly burnt that the adjacent natural gravel had also turned red.

The firing chamber floor 26 was of very hard grey clay some 30mm thick with a flat upper surface. Under the flue arch to the east it stopped in a straight line against a flat tile (Fig. 3). The firing chamber was almost entirely empty on discovery. Parts of the floor 26 were overlain by a patchy and thin layer 27 of white ash (not on section). In the north-west between the pilasters there was a localised pile of red and white ashy soil 35 (not on section), which may have arrived in this position by falling through a vent-hole in the oven floor.

Seven pilasters 25 sprang from the wall 34 (Fig. 3C; Pl. II), being constructed of tiles (including broken *tegulae*) set roughly one above another and bonded together with clay. They also incorporated a few mortarium sherds. Their original number probably totalled ten, assuming five on each side. The central tongue 32 (through which the main section (Fig. 3) is drawn) consisted of less-carefully laid tile and mortarium fragments set in clay. Also incorporated within it were one base and two body sherds of pottery (total weight 35g) in Fabric C (see *The Other Pottery*) and, below the junction with the flue arch, a solid cylinder of clay (Fig. 3), almost certainly a kiln support. The flue arch 36 was also of clay and incorporated large quantities of broken tiles set more-or-less horizontally as well as fragments of mortaria. The eastern end had partly collapsed so that only the 'jamb's' 28 and 33 were upstanding. 28 and 33 contained four sherds (30g) and three sherds (20g) respectively in pottery Fabric C. Burnt clay from the collapsed arch 24 lay within the flue hole.

The solid oven floor 12 (Pl. I) was made of fired clay, broken tiles and mortarium rims (Pl. II) covered by a skim

of clay. It also contained one pottery sherd (5g) in Fabric C. It was cut by numerous vent-holes 16, of which twenty-five were extant; the six larger outer ones (Pl. I) with parts of their sides following the slope of the inner edge of the wall. The floor 12 was covered by a deposit of soft red burnt clay with lenses of dark grey soil, some fragments of hard burnt grey clay and numerous sherds of mortaria. This layer (10 and 11), probably the collapsed upper wall of the oven chamber, was overlain by a localised patch of burnt clay mixed with soil (17; not on section).

It is important to note that all the structural elements of the kiln seem to have been of one build, and that there was no evidence of reconstruction, repair or patching.

The primary fill of the stoke pit 38 was a layer 8 of very dark grey silty ashy soil with gravel. This did not extend as far west as the flue arch and was covered in the central area by a spread of gravel (Fig. 3, W to E section, unnumbered layer between 7 and 8) which had clearly derived from the collapse of the eastern edge. Further collapses of the natural gravel seem to have occurred on the north and south sides (Fig. 3, S to N section). These falls were followed by the formation of a very dark grey-brown soil 7. A spread of ash and charcoal 23 overlay the top of 7 and tailed out over the top of the furnace floor 26. The next layer of filling 6 had partly accumulated before the partial collapse of the flue arch 24.

Thereafter the stoke pit and the space above the flue arch were filled with a series of soil layers (6, 4, 3) containing occasional stones, charcoal, fragments of burnt and vitrified clay, tile fragments and pottery.

The kiln is of Type F6 in Swan's (1984) classification, being a circular sunken or semi-sunken kiln with a single flue and permanent clay lining to the kiln chamber. There were permanent integral supports, comprising a long narrow rectangular tongue or bar, the top of which joined the flue arch, and ten blunt wedge-shaped integral pilasters all made of clay, tile and sherds, with a permanent raised solid vent-holed oven floor, also of clay, sherds and tile spanning all or most of the furnace chamber. There was a short clay-lined flue with clay cheeks.

Discussion of the kiln

Swan (1984, 121) sees this kiln as possibly belonging to a group of Icenian kilns of second and early third-century date, circular in shape with integral pilaster-supports and solid vent-holed floors. In Norfolk, these include kilns at Brampton (at least seven; kilns H, F4, F, A5, A6, A9 and A7) (Knowles 1977) and, unpublished, in the Nar Valley (Pentney C, Shouldham I), at Witton (phase 2) and at Hevingham I, II and III. There are, however, no links in the stamps between any of these kilns and Ellingham.

None of these Norfolk kilns have both the integral pilasters and long narrow rectangular tongue of the Ellingham kiln; eight have the former, five the latter. The major pottery at Brampton has kilns with one or the other, where, between the late first and the early third century, grey bowls, BB1-type cooking pots, jars, colanders and buff flagons were produced. Mortaria were apparently

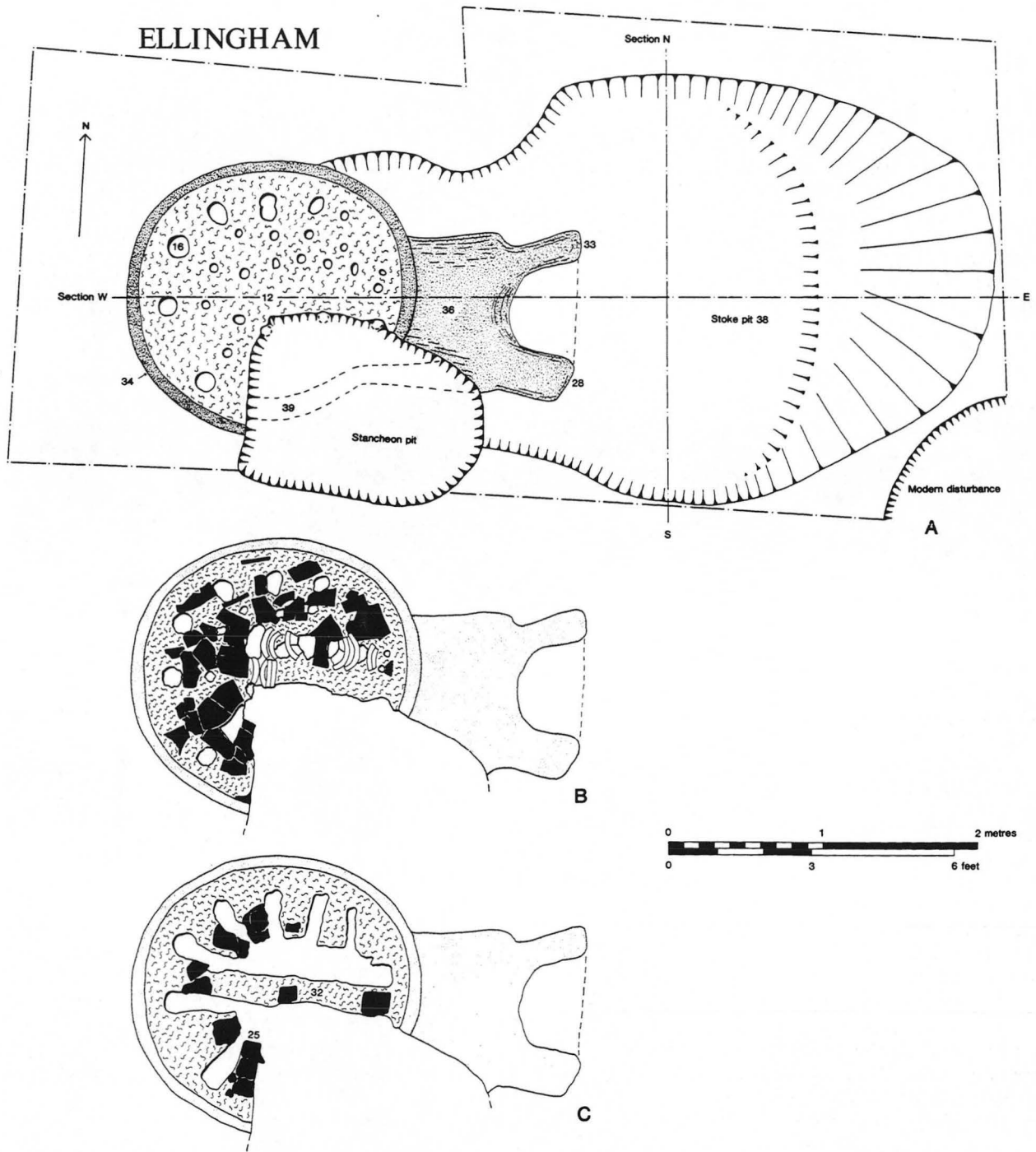


Figure 2 Plan of kiln and stokepit (A)(*cf* Pl. I), detail of oven floor (B)(*cf* Pl. II) and tongue and pedestals (C) (*cf* Pl. III). For key see Fig. 3. Scale 1:40

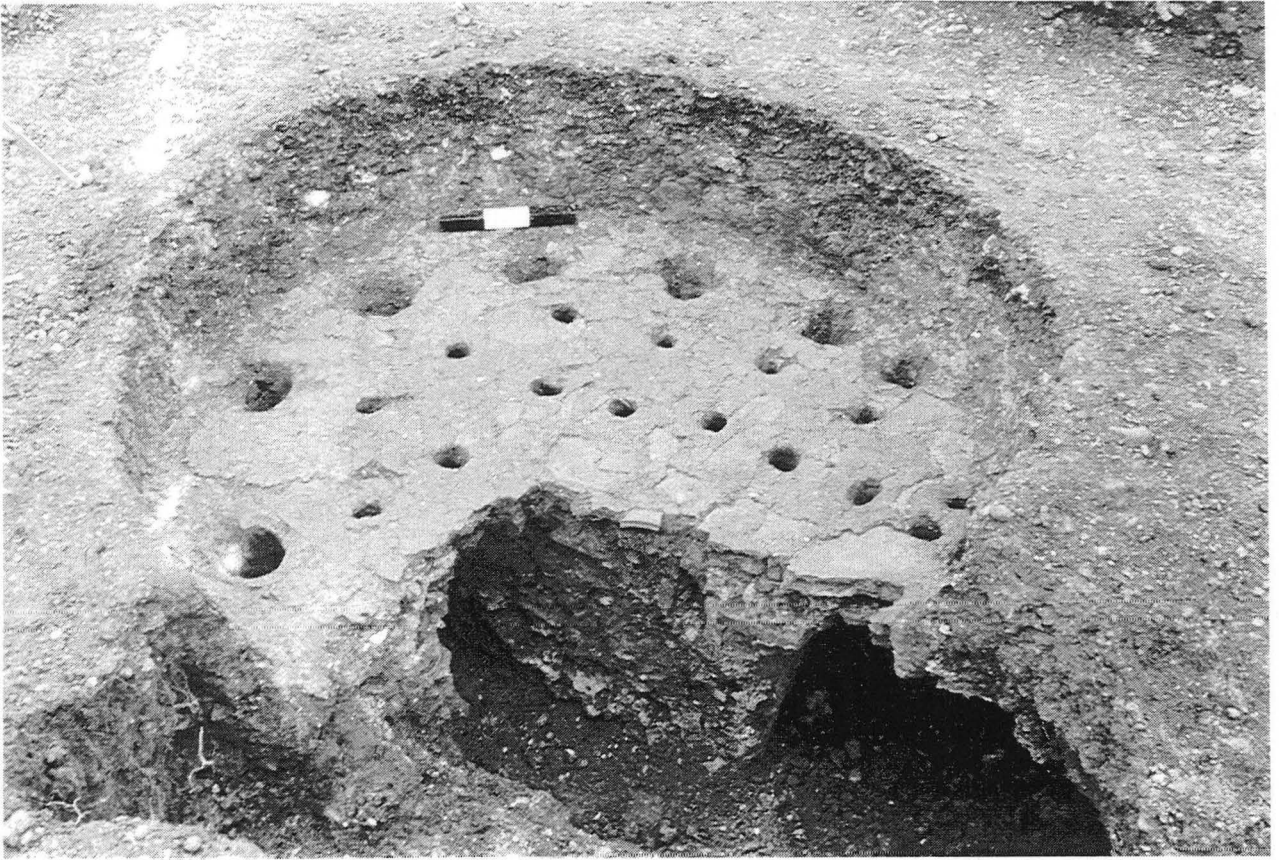


Plate I The excavated kiln, looking north-west, showing the kiln floor. Ref. ZQ1



Plate II The excavated kiln, looking north-west, showing the tongue and pilasters. Ref. ZQ21

ELLINGHAM

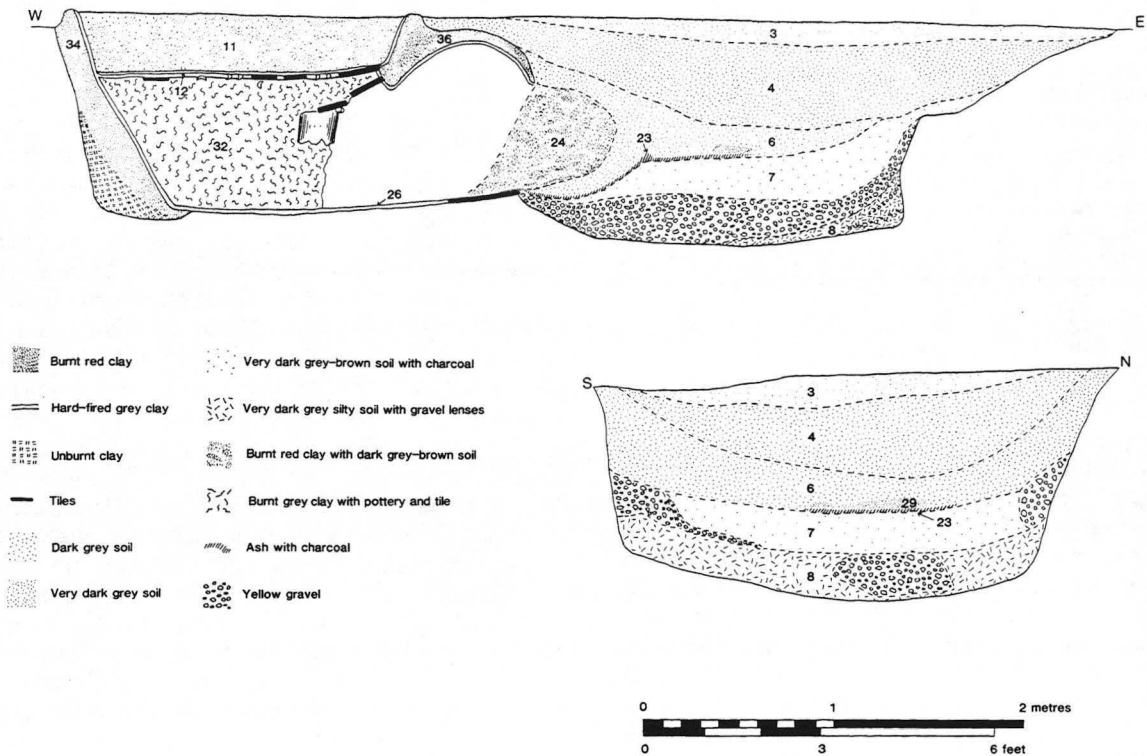


Figure 3 Sections. Note that 32 is the central tongue of the kiln in cross-section. Scale 1:40

fired in large square or rectangular kilns with vent-hole floors supported on side pillars.

The kilns with integral pilasters at Pentney, Shouldham and Witton all produced grey or reduced coarse wares for local markets between the late second and the fourth century. The Hevingham kilns of later first to mid-second century produced grey ware jars, flagons and buff mortaria stamped ESAMI and INGENV (unpublished; Norfolk Sites and Monuments Record Site 7498). The latter appear to be associated (with, of course, other pottery) with kilns II and V respectively, and to belong to the period c. AD 100–140. Kiln II was circular and Kiln V sub-square,

and both had the long narrow rectangular tongue, but instead of pilasters both had an integral ledge to support the floor.

The Ellingham kiln seems therefore to belong to this distinctive group of kilns in the territory of the Iceni, and to owe little to external influence, to West Stow (West 1990, 29–40) or, in particular, to the Colchester potteries where Regalis had worked. There (see Hull 1963; Swan 1984, 92–95), the basic kiln-type is lined with sun-dried blocks, with a tongue support, a baffle at the flue-mouth and vaulting under the clay vent-holed floor (see Swan 1984, fig. X).

Chapter 3. The Artefacts

The Small Finds

(not illustrated)

1. **Bone pin.** Circular-section shaft with a plain flat end tapering to a broken point. Highly polished. 18.
2. **Iron fragment.** 13.
3. **Iron fragment.** 18.
4. **Iron nail.** 23.
5. **Curved iron rod fragment,** perhaps part of a handle. 23.

The Mortaria

by Kay Hartley

Introduction

The excavator was certain that the kiln showed no indication of refurbishment of any kind. Quantities of stamped and some unstamped mortaria, together with other coarseware sherds, had been used in its construction, and the numbers incorporated into the structure can only indicate that they are waste material from another kiln, whose use pre-dated the present structure. The fresh, unweathered state of this pottery could indicate that the building of the excavated kiln followed swiftly upon the initial firing of the pottery used in its construction. It is most unlikely that waste material would have been carried far just to be used in this way.

There is no suggestion of long-term, intensive occupation of the site at Ellingham and, although every effort was made to locate any other kilns, none were found in the vicinity of the surviving structure. One possibility is that both kilns were in the same place, the earlier one being entirely demolished before the second was built. Any comparison of the surviving stokehole with those of other kilns highlights its unusually vertical nature. It is not impossible that the earlier kiln was in the area which became the stokehole of the later kiln. It has often been suggested that potters would, at a given site, make all their kilns face the same direction to take advantage of prevailing winds, but evidence from excavated kiln-sites does not support this.

Contexts

'Period 1' consists of all contexts which formed part of the surviving structure of the kiln and therefore covers all of the pottery found in its construction: Contexts 12, 25, 28, 32, 33, 34 and 36. 'Period 1?' in Table 2 consists of context 24, a fallen portion of the flue arch which was clearly structural, and contexts 10 and 11, the collapsed upper wall of the oven chamber, which ought also to belong to the construction period.

'Period 2' contexts post-date the building of the kiln, but the structure was damaged before excavation, so many of the mortaria in 'Period 2' will originally have been built into the structure. This is corroborated by the number of fragments from those contexts which have clay accretion still adhering (see below). Where sherds from contexts in different periods join, the mortarium is counted into the chronologically earlier one, *i.e.* 'Period 1', the construction, since it was clearly not fired in the surviving kiln.

Accretion

Context 1 (forty sherds) includes nine with heavy accretion and one other vitrified (two stamps of Regalis and one of Lunaucis), and surface or slight accretion on eight sherds (one Regalis, one herringbone). The only other contexts with more than the odd one or two such sherds were 3, 4 (three herringbone and one Lunaucis) and 5. Context 6 had two sherds with accretion and Contexts 9 (one herringbone), 13, 18, 19, 20, 21 and 23 each had one such sherd. Many of these sherds could well have been part of the structure of the kiln before mechanical excavation for the stancheon pit damaged it.

Quantification

The vast amount of baked clay adhering to the numerous vessels used in the structure made it useless to contemplate weighing the sherds. The main quantification has been of the numbers of mortaria of individual potters, and the numbers of mortaria which were never stamped, assessed according to rim-type and Period (see Tables 1 and 2).

Discrepancies of minor importance may be encountered, firstly because some rim sherds are so tiny that on different occasions they may have been excluded or included in the quantification, secondly because the data was not computerised, and thirdly due to shortage of time.

Method of assessment

The following criteria were used for assessing individual mortaria to obtain minimum numbers:-

- i) a piece large enough for some part of the stamp impressed on each side of the spout to have survived *i.e.* the mortarium has the full complement of stamps
- ii) joining sherds fulfilling the same requirement
- iii) the use of two stamps impressed close together (which is unusual)
- iv) where possible, a record was made of which side of the vessel a stamp was from. This, combined with the rim-type series, was used to check when two stamps could be from the same vessel and when they are certainly from different vessels.
- v) where it was not possible to check which side the stamp came from, it has been assessed according to rim-type and with any other stamps surviving on the same rim-type. If it cannot be cancelled out in this way, *i.e.* two stamps on the same rim-type estimated as one mortarium, then it is assessed as an extra vessel. This is a rough method, and physical comparison of the sherds would probably increase the total.
- vi) spouts and rim-types were used to assess mortaria which were never stamped.

This method gives the minimum possible number for both stamped and unstamped mortaria. The resulting numbers will be lower than the true number of vessels, except for those with Regalis stamps from the same die as Fig. 4, No. 2, where the total of five stamps is the correct number of vessels. The assessment also allows for a

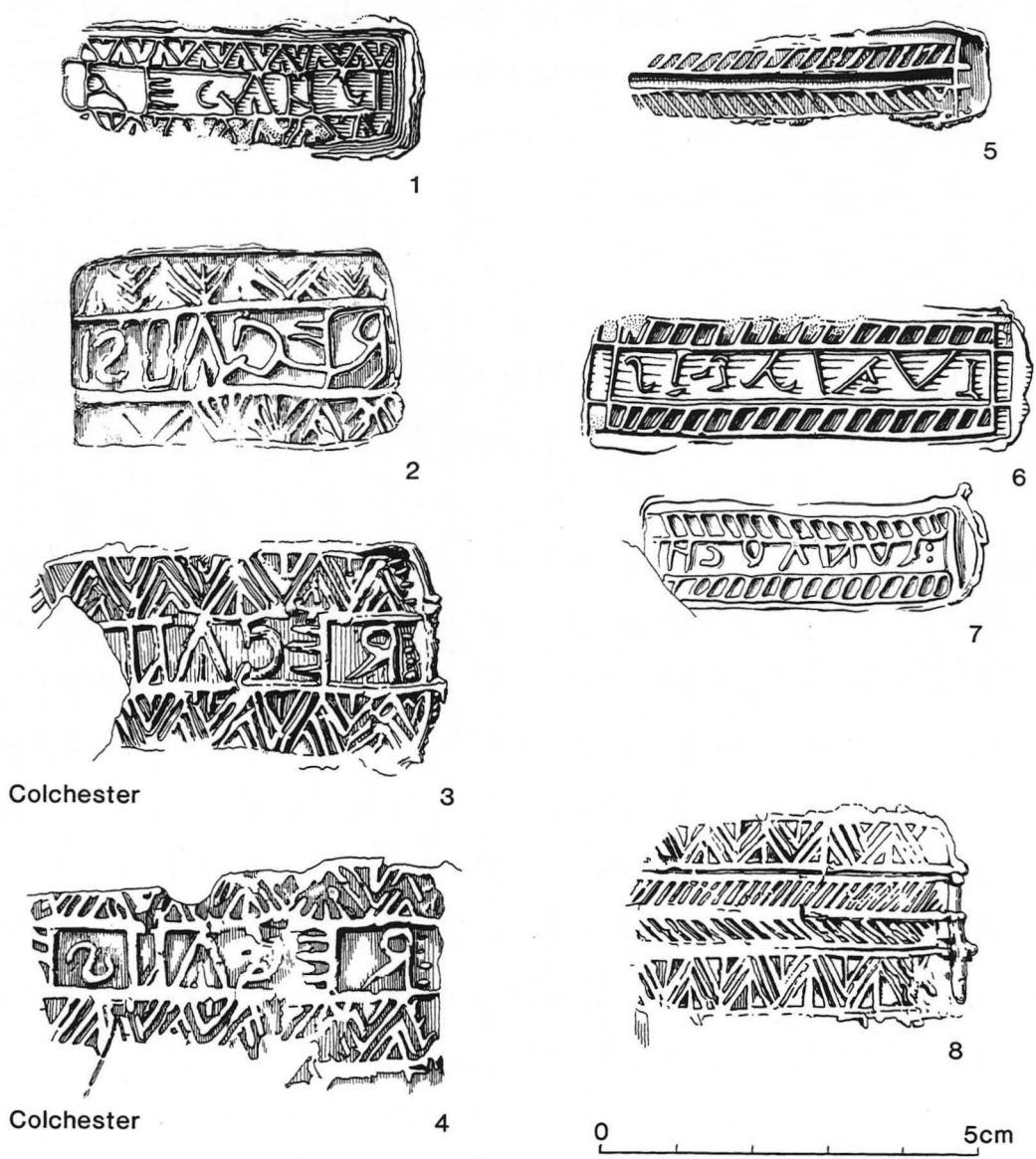


Figure 4 Mortarium stamps. Scale 1:1

maximum possible number of stamped mortaria. The numbers for mortaria which were never stamped are minimum numbers and may be an underestimate, partly due to lack of time but also because, in the late second century, potters were abandoning the practice of stamping in East Anglia. Unless an adequate amount of the rim survives, it is often impossible to be certain that an individual vessel was unstamped. Some stamps are too fragmentary to record the rim-type but, again due to shortage of time, there were also a few other omissions in recording rim-types and the positions of stamps. Little time was spent searching for joins, and it can be assumed that many more exist. There are few bodysherds, but this is probably due to the mortaria being in large chunks and overfired; also, the sherds used in the construction would have been selected, and rim-sherds were probably more likely to be chosen. Six stamps from Period 2 contexts are too fragmentary for identification and are not included in the Tables or in any figures taken solely from the Tables; they are on Types 2D, 4A, 6D, 13A, and 13B, with one fragment too small to type. If more time had been available

they could probably have been identified, either by joining fragments or by more work on the stamps.

Numbers of mortaria
(Tables 1-3)

A total of 837 sherds (mostly rims) were examined. Joining sherds from the same context were counted as one.

A total of forty-two mortaria with a full complement of stamps (many of these stamps are, of course, incomplete), and 135 single stamps were recorded from all contexts (Periods 1 and 2), giving a minimum of 130 stamped mortaria up to a possible but unlikely maximum of 177 stamped mortaria. These include thirty-seven to forty-nine mortaria of Regalis (sixty-two individual stamps), twenty-seven to forty-four mortaria with herringbone stamps (forty-seven stamps, two of which are on the mortarium also stamped by Regalis), nineteen to twenty-six mortaria of Lunaucis (thirty-three stamps), and forty-seven to fifty-eight mortaria stamped with trademark, Fig. 4, No. 8 (seventy-seven stamps).

Type	Regalis		Herringbone		Lunaucis		Trademark		Never stamped		Stamps rare		Totals Min (Max)
	Mort	Other mort min (max)	Mort	Other mort min (max)	Mort	Other mort min (max)	Mort	Other mort min (max)	Sure	Probable	Sure	Probable	
1 A-G	2	2 (3)	1	1 (2)	1	-	-	-	1	2	-	-	10 (12)
1 H-L	-	-	-	-	-	-	-	1	1	1	-	-	3 (3)
2 A-D	-	1	-	12 (23)	-	-	-	2	1	-	-	-	15 (26)
2 E	-	1 (R*)	1 (R*)	-	-	-	-	-	-	-	-	-	1 (1)
2 F-G	-	1	-	4 (6)	-	-	-	1	-	-	-	-	6 (8)
2 z	-	-	-	2 (4)	-	-	-	-	-	-	-	-	2 (4)
3 A-D	-	1	-	3 (5)	-	-	-	1 (2)	-	-	2	1	8 (11)
3 E-I	5	6 (12)	-	-	2	5 (8)	-	-	-	-	2 (1L*)	1 (1L*)	19 (28)
4 A-B	5	5 (9)	-	-	-	1	-	-	1	-	-	-	12 (16)
4 C-D	-	1	-	-	4	4 (6)	-	-	-	-	-	-	9 (11)
5 A	-	-	-	-	-	-	-	1	-	-	-	-	1 (1)
5 B	-	1	-	-	-	-	-	1	1 (2)	1	1	-	5 (6)
6 A	-	-	-	-	-	-	-	1	2 (4)	-	-	-	3 (5)
6 B	-	2 (2)	-	-	-	-	-	-	1	-	-	-	3 (3)
6 C	-	-	-	-	-	-	-	2	2 (3)	-	-	2	6 (7)
6 D-H	-	-	-	-	-	-	-	1	-	-	1	-	2 (2)
7 A	-	-	-	-	-	-	-	-	-	-	-	-	- (-)
7 B	-	-	-	-	-	-	-	-	-	1	-	-	1 (1)
7 C	-	-	-	-	-	-	-	-	-	1	-	-	1 (1)
7 D-F	-	-	-	-	-	-	2	2 (2)	1	-	8 (2T*+1N*)	-	10 (10)
8 A-B	-	-	-	-	-	-	2	1	1	-	-	-	4 (4)
8 C	-	-	-	-	-	-	-	-	-	1	-	1	2 (2)
8 D	-	-	-	-	-	-	-	1	-	-	-	1 (1T*)	1 (1)
8 E	-	-	-	-	-	-	-	-	1	-	1 (1N*)	-	1 (1)
9 A-B	-	1	-	1	-	-	-	-	-	-	-	-	2 (2)
11 A-B	-	-	-	-	-	-	-	2	-	-	-	-	2 (2)
11 C	-	-	-	-	-	-	-	1	-	-	-	-	1 (1)
12 A-C	-	-	1	-	-	-	1	-	1	1	-	-	4 (4)
13 A-B	-	-	-	-	-	-	2	-	-	-	2	-	4 (4)
13 C	-	-	-	-	-	-	-	-	-	-	-	-	- (-)
14 A	-	1	-	-	-	-	-	-	-	-	-	-	1 (1)
15 A	-	-	-	-	-	-	-	1	-	-	1	3 (1T*)	4 (4)
17 A	-	-	-	-	-	-	-	-	1	-	-	-	1 (1)
18 A	-	-	-	-	-	-	-	-	-	-	-	-	- (-)
19 A	-	-	-	-	-	-	-	-	-	-	-	-	- (-)
19 B-C	-	-	-	-	-	-	1	1 (2)	-	-	5 (2T*)	-	5 (6)
20 A-B	-	-	-	-	-	-	1	2 (4)	-	1	22 (2T*)	4 (2T*)	26 (28)
21 A-B	-	-	-	-	-	-	3	-	-	-	4 (2T*)	-	5 (5)
22 A-B	-	-	-	-	-	-	-	2	-	-	7 (1T*)	-	8 (8)
Indet	1	1 (2)	-	-	-	2 (4)	1	4 (7)	-	-	-	-	9 (15)
Totals	13	24 (36)	3 (R*)	24 (41)	7	12 (19)	19	28 (39)	10	10	56	11	
min (max)		37 (49)		27 (44)		19 (26)		47 (58)		20		67	

Notes

Mort: Mortaria with the full complement of right- and left-facing stamps surviving, so that the fragments can be counted as mortaria instead of single stamps.

Other Mort Min (Max): The first number is the minimum number of mortaria represented by the single stamps and the following number in brackets is the actual number of stamps.

R*/H*: The single mortarium (Pl. III) which carries a stamp of Regalis (Fig. 4, No. 2) on the surviving rim and herringbone stamps (Fig. 4, No. 5) on the raised borders of the spout.

L*/T*/N*: Miniature rims which have already been counted in another column because the mortaria were stamped (L = Lunauc(is), T = Trademark) or they are in the 'Never stamped' category (N).

2z: Mortaria of Type 2 which are too fragmentary to be more closely typed.

Table 1 Minimum numbers of stamped, never stamped and miniature mortaria, and numbers of stamps by type

The relative maximum numbers of stamped mortaria attributable on available evidence to Periods 1 and 2 are as follows (for H* and R* see Table 1 notes): Regalis 30(H*):19; herringbone potter 17(R*):27; Lunaucis 3:23; trademark potter 13:45. Table 2 shows mortaria with a full complement of stamps and, separately, the numbers of other, single stamps for each of these potters. Table 2 also shows the numbers of mortaria which were recognised as

never having been stamped, 7:13, and, also, a category of mortaria described for convenience as 'miniatures', which have unusually small rims, the whole pots too, being sometimes small, 7:60. These were counted separately from the 'never-stamped' category, but most of them were probably also unstamped. The possible maximum of seven mortaria recorded as 'miniatures' include two mortaria with trademark stamps and one unstamped mortarium

	<i>Regalis</i>		<i>Herringbone</i>		<i>Lunaucis</i>		<i>Trademark</i>		<i>Never stamped</i>		<i>Miniature</i>	
	Mort	Single stamps	Mort	Single stamps	Mort	Single stamps	Mort	Single stamps	Sure	Probable	Sure	Probable
Period 1	10	14	1+1(R*)	13	0	0	3	2	3	0	2 (1N*,1T*)	0
Period 1?	2	4	0	2	1	2	5	3	3	1	1	4 (1T*)
Period 1 total	12	18	1+1(R*)	15	1	2	8	5	6	1	3	4
Other contexts	1	18	1	26	6	17	11	34	4	9	53 (1L*,8T*,2N*)	7 (1L*,3T*)
Absolute totals	13	36	3	41	7	19	19	39	10	10	56	11

Notes

Period 1 = construction contexts (contexts 12, 25, 28, 32, 33, 34, 36)

Period 1? = contexts 10, 11, 24

For other abbreviations, see Table 1

Table 2 Numbers of stamped, never stamped and miniature mortaria by period

Potter	Total number of stamps	Total number of stamps	
		Period 1 and 1?	Other contexts
Trademark	77	21	56
Lunaucis	33	4	29
Herringbone	47 R*	19	28
Regalis	62	42	20
'miniature' rims	67	7	60

For abbreviations, see Table 1

Table 3 Numbers of individual stamps

(both are recorded under both categories on the tables); the possible maximum of sixty 'miniature' mortaria includes two mortaria of Lunaucis, eight mortaria of the trademark potter plus three single stamps, and two mortaria which were never stamped. There are obvious difficulties in assessing numbers for the 'never-stamped' and 'miniature' categories and they may be under-estimated. They could post-date all of the stamped mortaria, but this is unlikely because the different potters concerned may not have ceased stamping simultaneously, and a small number were present in Period 1.

Stamps of all four stamping potters were found in the construction of the surviving kiln *i.e.* in Period 1. The numbers for Regalis (twelve mortaria plus eighteen single stamps) and the herringbone potter (two mortaria plus fifteen stamps), which are attributable to structural contexts, outnumber those for Lunaucis (one mortarium plus two stamps) and the trademark potter (eight mortaria plus five stamps). This could be significant, considering the numbers of their stamps found on the site and the relatively small number of small-rimmed mortaria in Period 1 contexts. Only ten stamps are recorded on the small-rim mortaria from all contexts, and all are of Lunaucis (one) and the trademark potter (nine).

There is, in fact, an obvious correlation between the rim-types favoured by the trademark potter and the small-rim mortaria. Whilst trademarks do occur on other types, they are commonest on Types 5–8, 11, and 19–22: these are precisely the types which predominate among the small-rimmed mortaria. The presumption is that most of these will be products of the trademark potter.

If all stamps are assessed as individual stamps as shown in Table 3 (*i.e.* one mortarium in Tables 1 and 2 equals two stamps), then the very high number of Regalis stamps built into the structure is evident. The vast majority of trademark stamps and unusually small-rimmed mortaria in later contexts are equally clear.

Thus although none of the potters was using only the surviving kiln, it is very possible that most of the trademark potter's products (even perhaps most of Lunaucis' work) were being fired in it. It is also possible that it was used solely by the trademark potter or the trademark potter and Lunaucis and that *all* the mortaria with stamps of Regalis and the herringbone were fired in the preceding kiln. The numbers of mortaria of Regalis and the herringbone potter which were *not* in the structure are high if this was the case, but an unknown number of these were certainly from parts of the structure which were damaged before excavation.

There is, however, no doubt that stamps of Lunaucis and the trademark potter were about on the site when the present kiln was constructed, and their rarity on occupation sites makes it clear that these could not be chance finds. They were actively making pottery at Ellingham and were presumably firing it in the same (earlier) kiln as Regalis and the herringbone potter.

With one single exception, it is very probable that all the mortarium fragments found are waste from firing kilns on this site. The exception is the very large mortarium with a diameter of *c.* 560mm, which is probably an import from the Rhineland (Type 10A, Fig. 10). It may have had some part in the production process.

The Fabrics

The mortaria manufactured at pottery-making centres of any size normally show some variation in the fabrics produced. Some differences, of course, are due to varying firing techniques or accidents during firing but some are due to differences in the inclusions or to having clays which vary in their chemistry, to mixing clays or even to poor mixing of the clay.

At Ellingham there are mortaria which almost certainly were fired in only two different kilns over a very short period. Many of those fired in the first kiln were

rejected as wasters and were used in the construction of the second kiln; as a result, these were refired. It is reasonable to assume that, with the exception of one import, under Type 10A, the rest of the mortaria are all wasters, made at Ellingham.

Although the presence of a fifth potter who did not stamp mortaria is possible, we are almost certainly dealing with just four potters, two of whom, Regalis and the herringbone potter, worked in the same workshop; it is even possible that the herringbone die belonged to Regalis (see below). The time-span and the number of potters involved are very limited.

There were difficulties in assessing fabrics due to much of the pottery being refired after being built into the kiln and to the considerable clay accretion adhering to many of the sherds; this or a self-coloured slip frequently covers the trituration grit. It is, however, clear that two quite distinct fabrics were produced; each shows some variation in its range and each appears to have trituration grit specific to that fabric.

Fabric A

Self-coloured, hard, very slightly micaceous and fine-textured fabric, slightly powdery to the touch; light brown in colour (Munsell 7.5YR 7.5/6), with paler but still distinctly brownish surface; sometimes with pink core. At x20 magnification, few, sometimes slightly more, ill-sorted, sporadic quartz and red-brown inclusions are visible. The trituration grit consists of abundant and uniformly small, transparent, milky, pinkish, grey and black quartz; flint; soft orange ?sandstone; red-brown and black/red-brown haematite iron compound and opaque black material. The general effect is distinctly more colourful than the trituration grit associated with Fabric B.

Fabric B

Hard, cream fabric, varying in colour from brownish-cream (Munsell 10YR 7/3) sometimes with pink core, to cream (Munsell 2.5YR 7.5/2), and to a distinctly greenish-cream (Munsell 5YR 7/3). Although the ill-sorted, quartz and black and red-brown iron-slag? inclusions are very moderate in quantity, the fabric is coarser in texture than Fabric A. The trituration grit consists of abundant and uniformly small-sized, transparent, white, grey and black quartz with some flint, rare black, iron-slag? and rarer red-brown material. (See Discussion, below, for comparison with fabrics produced at Colchester).

Fabric B was the fabric commonly produced, Fabric A being very much of a rarity. Regalis produced both, though most of his mortaria are in Fabric B; both fabrics were used in mortaria in Period 1. The other three potters rarely produced Fabric A. Fabric B is very similar to the fabric commonly produced at Colchester c. AD 140–170.

The trituration grit used with both fabrics is unusually deeply-embedded and is often covered with a thin skin of clay, perhaps a self-coloured slip. On occasion, two layers of trituration grit are apparent, a feature not noticed elsewhere.

Whilst the mass of this huge assemblage of waste mortarium fragments clearly belongs to the two categories Fabric A and Fabric B, there are a few sherds, probably less than ten, where Fabric A is associated with the trituration grit normal with Fabric B. A very few sherds may also have been a true orange-brown rather than being discoloured; these tend to have the trituration associated with Fabric A, and one in this category has a trademark stamp (Type 11B).

The presence of vitrification and accretion is common on pieces built into the structure; it is also recorded on the many pieces in other contexts, which probably derived from the structure. The radial cracking usual in mortaria is common; extreme distortion does occur, but only rarely.

Probably because of the thickness of the fabric, mortaria are rarely badly distorted when overfired.

Type Series

A limited amount of time was available for making the rim-type series, and as a progression of related types it could certainly be improved, but it does faithfully reflect the types made. To facilitate the production of Table 1, the more similar forms have been grouped together.

With some mortarium wasters the horizons have been difficult to determine with accuracy, and the vessels as illustrated may contain inaccuracies in this respect (e.g. 1I, 3D2, 5A, 6A, 7A, 9A, 9B and 21B). Equally, some diameters may not be correct (e.g. 5A).

A fairly common feature of Types 6D, 6F, 7A, 8A, 8D and 13A is a series of sharp little ridges and grooves at the top of the body on the outside, underneath the flange, at the point where the flange begins.

Type 1

(Fig. 5)

- A. Lunaucis, die as Fig. 4 (No. 7).
- B. Regalis, die as Fig. 4 (No. 1).
- C. Herringbone stamp, Fig. 4 (No. 5).
- D. Regalis, Fig. 4 (No. 1).
- E. Never stamped; perhaps never gritted.
- F. Probably never stamped.
- G–J1. Unstamped fragments.
- J2. Trademark (Fig. 5, No. 8).
- K. Never stamped.
- L. Probably never stamped; no trituration.

Type 1 can be loosely described as collared, although 1B to 1F are normally described as wall-sided. C–F are roughly the equivalents of Hull 1963, 118, type 501. Hull would probably have included A–B under types 498–499 (1963, 118, fig. 107), but the collars of these Ellingham mortaria are basically the same as C–E, they merely lack the grooves. Apart from A–B, J and L, Type 1 is distinguished by having one or two grooves at the top and bottom of the collar; the bead is often also grooved. A–G are all similar in having a deep, slightly convex collar, and a tendency for the distal end of the collar to turn marginally inwards or to be straight. F and G are variants on this theme. H–L have shorter, thinner and often more curved, wider collars, but all have some kind of grooving on the collar or the bead, which links them in a loose way with Hull 501. L is unusual in having a tapering flange. The spouts used are varied; the very large one (C), is probably always associated with stamped mortaria while the other, smaller spouts (A–B) probably began to be made later and continued in production after the practice of stamping ceased; the very small one on E is very unlikely to have been used on a stamped mortarium.

A–G are clearly Colchester forms and, as might be expected, appear primarily on mortaria stamped by Regalis (2–5) and the herringbone potter (1–3), who have undoubted links with Colchester. A is recorded once in association with Lunaucis but no trademark stamps were recorded on A–G. Only one stamp, a trademark on J2, is associated with H–OL. Some of A–G, particularly E–F, are unstamped as at Colchester; almost certainly H–L are mostly unstamped but the more delicate rims are more fractured and much more work on the pottery would be necessary to check this out in detail. H–L can occur at Colchester, but they are almost certainly late second- to early third-century, usually unstamped, variants derived from Hull 501 (A–G). There is likely to have been an overlap in the production of stamped and unstamped mortaria of these types at Colchester and also in the production of A–G and H–L, but no H–L appear in any Period 1 context at Ellingham. It is also worth noting the absence so far of completely vertical-sided (*i.e.* true wall-sided) mortaria like those sometimes made at Colchester (Hull 1963, fig. 64, no. 3 *bis*, at the top of the second column, and fig. 65, no. 12); Regalis did occasionally produce this form at Colchester. All of the Ellingham mortaria of Types 1 and 2 have an element of convexity in the 'flange' and are described here as 'collared', though some of Type 1 would often be described as 'wall-sided'. Nor were any examples of typical third-century unstamped variants of the wall-sided type (Hull 1963, fig. 5, no. 10 and fig. 94, no. 50) found at Ellingham.

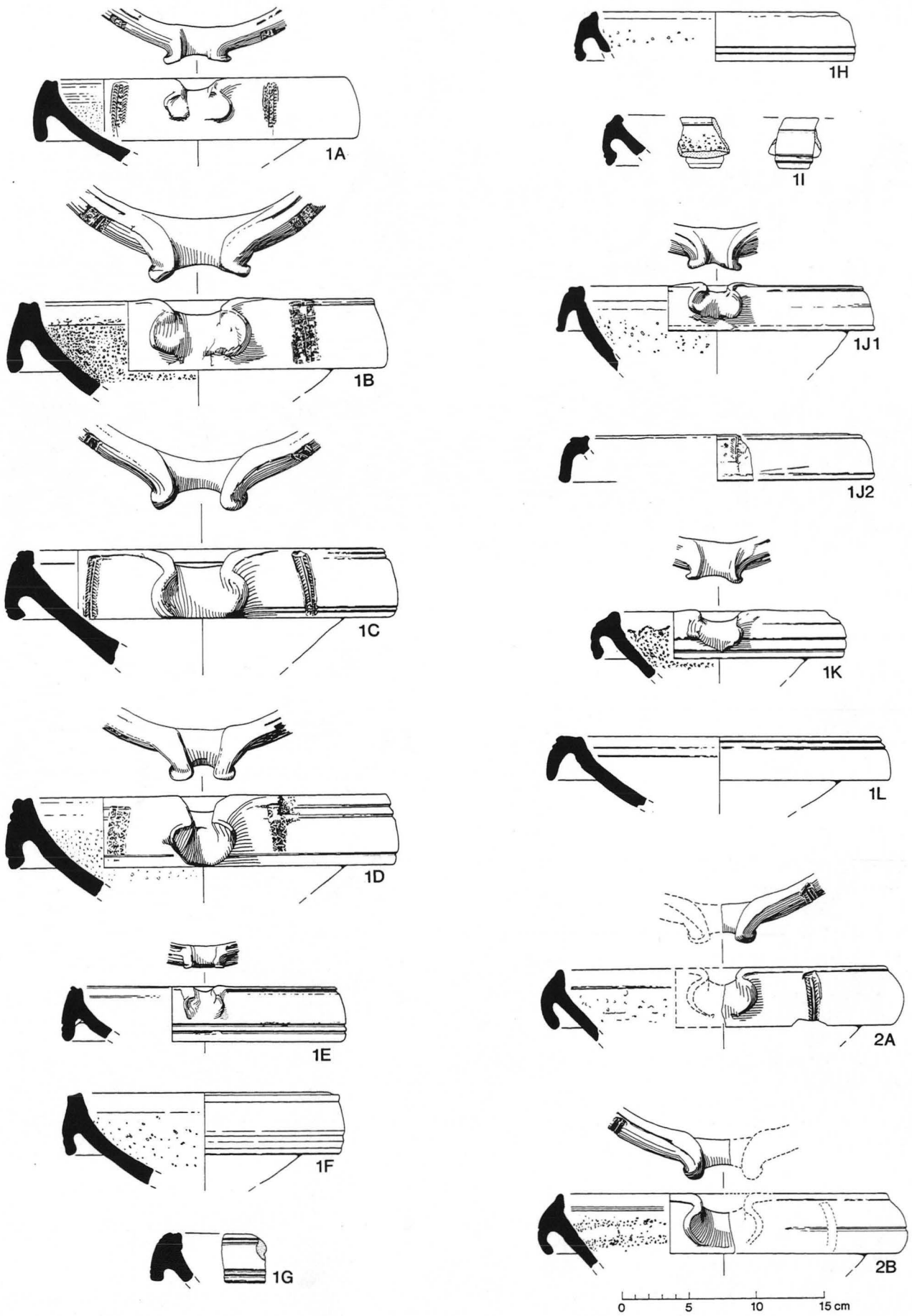


Figure 5 Mortarium Forms 1 to 2B. Scale 1:4

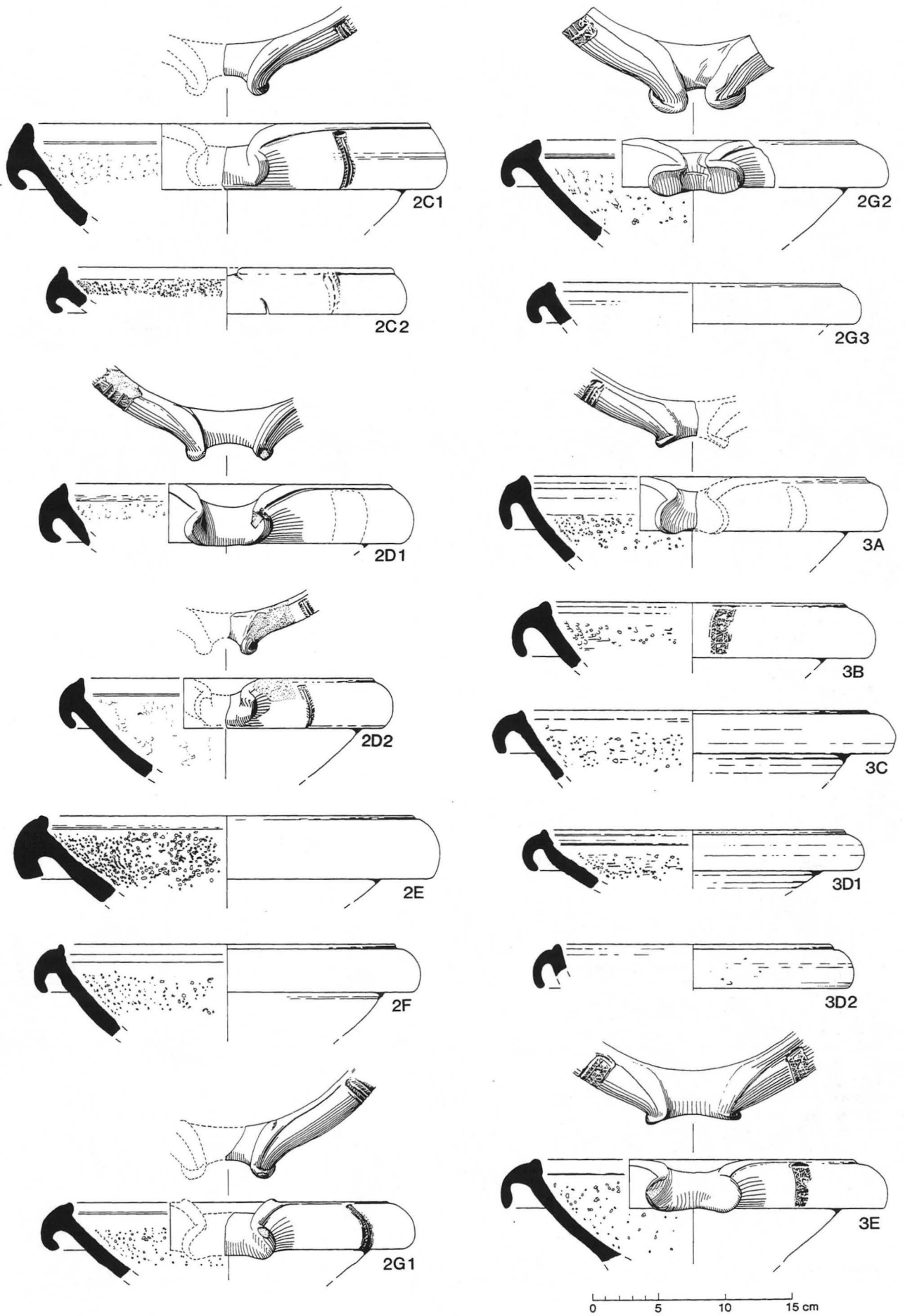


Figure 6 Mortarium Forms 2C to 3E. Scale 1:4



Plate III Mortarium, Type 2E, with Regalis stamp and herringbone stamps impressed on the raised borders of the spout. Ref. FXD4

Summary of Type 1

<i>Max. numbers</i>	<i>Period 1</i>	<i>Period 1?</i>	<i>Other Contexts</i>
mortaria	6	2	18
mortaria Regalis	4	1	0
mortaria herringbone	1	1	1
mortaria Lunaucis	0	0	1
mortaria trademark	0	0	1
never stamped (minimum)	0	0	4+
'miniature rim'	0	0	0

Type 2
(Figs 5-6)

- A-C2. Herringbone stamp (Fig. 4, No. 5).
- D1. Trademark (Fig. 4, No. 8).
- D2. Herringbone stamp (Fig. 4, No. 5).
- E. Unstamped fragment.
- F. Perhaps never stamped.
- G1. Herringbone stamp (Fig. 4, No. 5).
- G2. Regalis (Fig. 4, No. 2).
- G3. Unstamped fragment.

A-E have deep, very convex collars which are always distinctly recurved at the distal end. Hull would have placed A-E under his type 499 (1963, fig. 107) but most, if not all, of the Ellingham mortaria are more convex and more recurved than Hull 499. All of Type 2 have a high bead. E is a very thick variant, notable because of a mortarium of this type stamped by Regalis, with herringbone stamps (Pl. III) impressed on the raised borders of the spout. The two normal types of spouts used are illustrated in D1, A and D2; the large spout was probably always associated with stamped mortaria and the smaller one began to be made later and continued later, probably after stamping ceased. The spout of G2 is different, and is more like the spouts sometimes associated with Type 3 to which this mortarium is very close.

F has an upright bead not dissimilar to Type 3 D2 but is thick in section beneath the bead like all the Type 2 forms; it could well be an unstamped type. G1-3 have some features of A-E and some of Type 3; the rim is much wider than 2A-E and more rounded, the flange is less deep in proportion but the distal end is heavily recurved.

Summary of Type 2
(for H* and R* see Table 1 notes)

<i>Max. numbers</i>	<i>Period 1</i>	<i>Period 1?</i>	<i>Other Contexts</i>
mortaria	32	8	84
mortaria Regalis	1H*	1	1

<i>Max. numbers</i>	<i>Period 1</i>	<i>Period 1?</i>	<i>Other Contexts</i>
mortaria herringbone	11R*	0	19
mortaria Lunaucis	0	0	0
mortaria trademark	1	0	2
never stamped (minimum)	1	0	0
'miniature rim'	0	0	0

Type 3
(Figs 6-7)

- A. Herringbone stamp (Fig. 4, No. 5).
- B. Regalis (Fig. 4, No. 1).
- C-D2. Unstamped fragment, rim small for size of vessel.
- E. Regalis (Fig. 4, No. 1).
- F. Unstamped fragment.
- G. Unstamped fragment, perhaps never stamped.
- H1. Regalis (Fig. 4, No. 1).
- H2. Unstamped fragment.
- H3. Lunaucis (Fig. 4, No. 7). Rim small for vessel size.
- H4. Unstamped fragment.
- I. Lunaucis (Fig. 5, No. 6).

Type 3 all have a high bead, a wide, sometimes very wide, very rounded flange, with the lower part more-or-less parallel to the body. The flange is shorter and less markedly curved than in Type 2; the side is also less thick at the junction with the bead. 3A is close to Type 2 except that the flange is not recurved at the distal end. F to H have a flattish zone next to the bead, are very wide and somewhat square in section; the raised bead is often flat-topped with no groove behind it (Type 9 could be a related form). G has a wide flat channel behind the bead.

Summary of Type 3

<i>Max. numbers</i>	<i>Period 1</i>	<i>Period 1?</i>	<i>Other Contexts</i>
mortaria	20	4	48
mortaria Regalis	9	2	8
mortaria herringbone	1	1	3
mortaria Lunaucis	0	0	10
mortaria trademark	0	0	1
never stamped (minimum)	0	0	0
'miniature rim'	0	1	5

Type 4
(Figs 7-8)

- A1. Regalis (Fig. 4, No. 1).
- A2. Lunaucis (Fig. 4, No. 7).
- A3. Never stamped.
- A4-5. Regalis (Fig. 4, No. 1). (Type B equated with Type A).

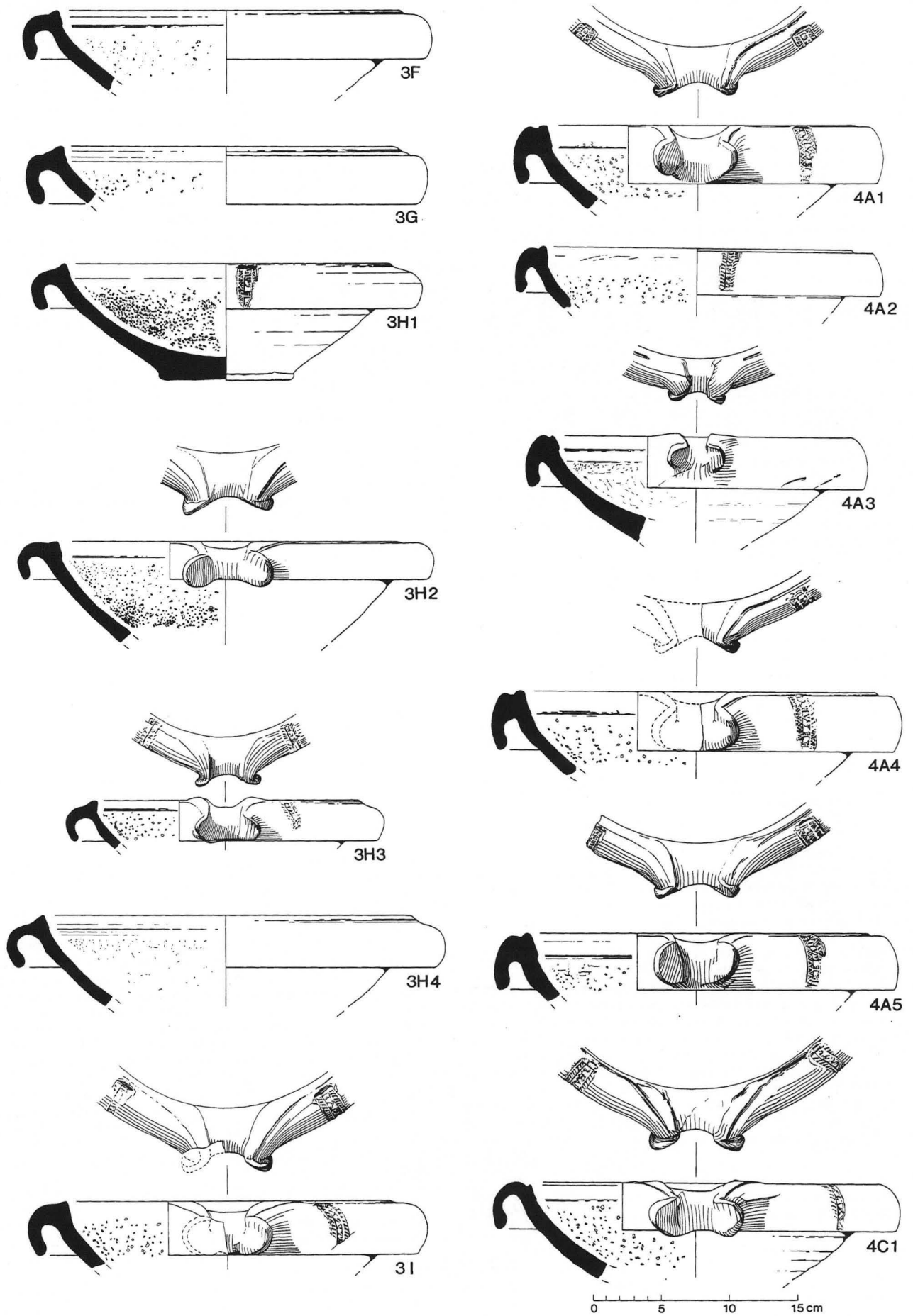


Figure 7 Mortarium Forms 3F to 4C1. Scale 1:4

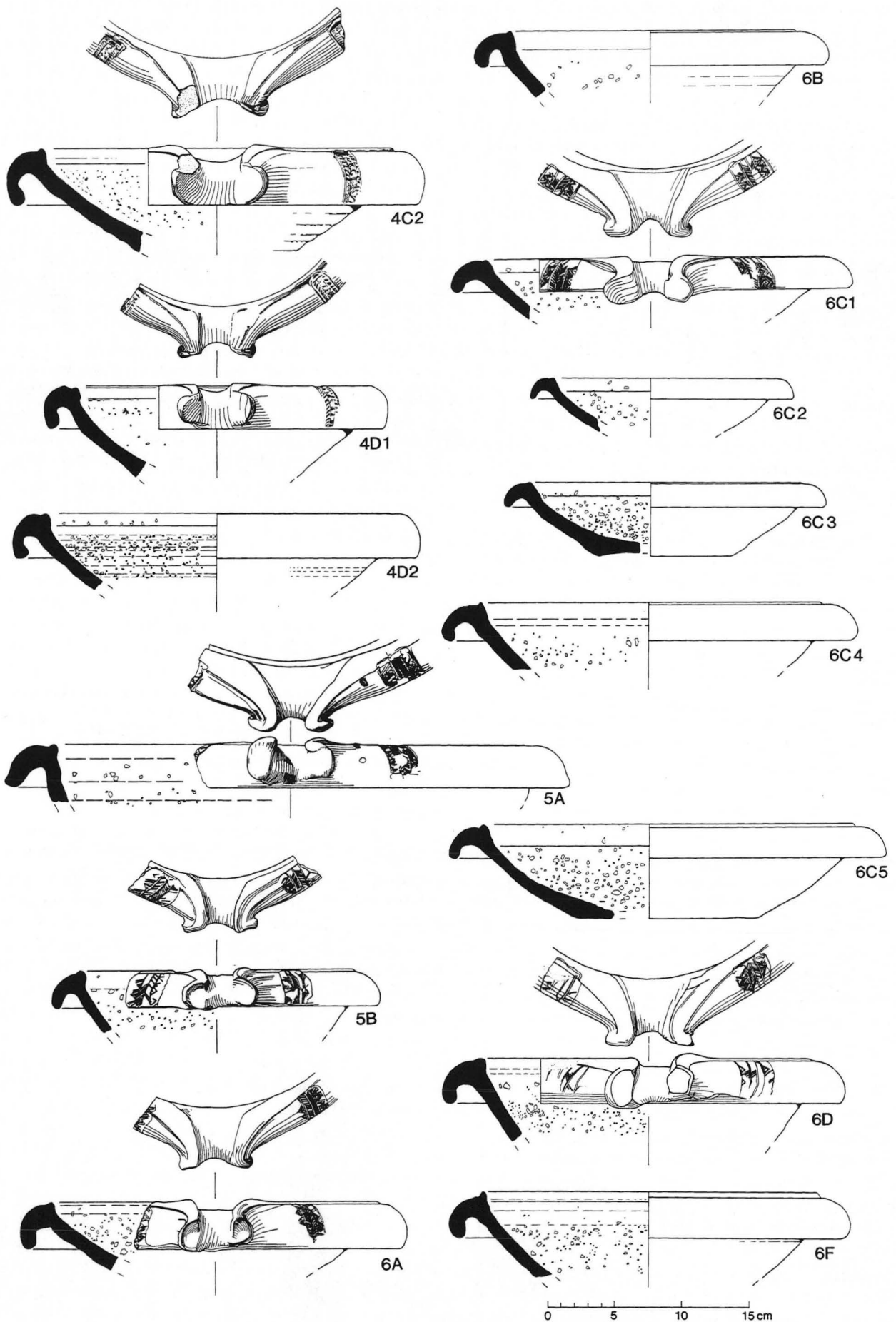


Figure 8 Mortarium Forms 4C2 to 6F. Scale 1:4

C1-2. Lunaucis (Fig. 4, No. 6).

D1. Lunaucis (Fig. 4, No. 7).

D2. Unstamped fragment. The example drawn has partial concentric grooving on the inside which is most unusual at this period. This example was probably never stamped.

The bead can be above or below the flange, which is deeper than Type 3; the distal end is marginally intumed. In A the flange is very deep, and is thick at the top; the lower half may be of even thickness or may thicken slightly at the distal end. The large and small spouts are both used (as Type 1, C and B). C1 has a bead below a very rounded but deep flange swelling slightly at the distal end; the spout is similar to that used with Type 2 G2, Type 3 H2 and 3I. C2 to D2 have more rounded, wider and shorter flanges than 4A; the distal end is always thickened.

Summary of Type 4

Max. numbers	Period 1	Period 1?	Other Contexts
mortaria	17	9	48
mortaria Regalis	7	3	6
mortaria herringbone	0	0	0
mortaria Lunaucis	0	3	8
mortaria trademark	0	0	0
never stamped	0	0	1
'miniature rim'	0	0	0

Type 5

(Fig. 8)

A-B. Trademark (Fig. 4, No. 8). A has some intermittent grooving on the inside.

A has a bead above or level with the flange. The flange is relatively wide, shallow, rounded and thick, going outward and, after a slight concavity, tapering slightly to an angle on the upper side at the distal end.

B is essentially a different type, which itself contains some variants. Bead above small, curved, thickish flange, which tapers slightly towards the distal end.

Summary of Type 5

Max. numbers	Period 1	Period 1?	Other Contexts
mortaria	10	2	10
mortaria Regalis	1	0	0
mortaria herringbone	0	0	0
mortaria Lunaucis	0	0	0
mortaria trademark	2	0	2
never stamped	0	1	1
'miniature rim'	0	0	0

Type 6

(Figs 8-9)

Type 6 covers a range of variations and the individual letters could well be used as individual types. All, however, have the bead above a fairly thick flange.

A. Trademark (Fig. 4, No. 8).

B. Unstamped fragment.

C1. Trademark (Fig. 4, No. 8).

C2. Small mortarium with 'miniature' rim.

C3. Rim small for size of vessel.

C4. Unstamped fragment.

C5. Unstamped fragment; unusual calcareous inclusions.

D-E. Trademark (Fig. 4, No. 8).

F-G. Perhaps never stamped.

H. Possibly never stamped.

A has a wider, more rounded flange than Type 5B, the upper half of the flange is thicker, the lower half thinner, but is blunt-ended rather than tapering.

B is thick-walled with a shallower rim, the flange may thicken towards the distal end (associated only with Regalis (1-2)).

C has a wider, shallower, well-curved flange tapering slightly towards the distal end, and tending outwards except for C4, where the distal end is sharply intumed.

D-E conflated: a thick, well-curved flange, thicker in the upper half of the flange.

F has a very high bead; thick, relatively narrow flange.

G-H are shallow, very stubby variants. H has a distal groove, which does not show on the illustration. F-H do not appear in Period 1; they are not associated with any of the stamps and could be unstamped types.

Summary of Type 6

Max. numbers	Period 1	Period 1?	Other Contexts
mortaria	3	3	47
mortaria Regalis	0	0	2
mortaria herringbone	0	0	0
mortaria Lunaucis	0	0	0
mortaria trademark	0	2	10
never stamped	0	0	2
'miniature rim'	0	0	2

Type 7

(Fig. 9)

A. Unstamped fragment.

B-C. Probably never stamped.

D. Trademark (Fig. 4, No. 8).

E1. Never stamped.

E2. Trademark (Fig. 4, No. 8).

F1. Rim small for size of vessel; this example ?never stamped.

F2. Probably never stamped.

A-F have a very high bead and a small, sharply down-turned flange, sometimes stubby. Apart from these common factors, the individual letters really represent individual types. They are unlikely to be stamped and only the trademark potter is associated with any of them.

Summary of Type 7

Max. numbers	Period 1	Period 1?	Other Contexts
mortaria	2	3	13
mortaria Regalis	0	0	0
mortaria herringbone	0	0	0
mortaria Lunaucis	0	0	0
mortaria trademark	0	0	4
never stamped	2	1	1
'miniature rim'	1	0	6

Type 8

(Fig. 9)

A. Trademark (Fig. 4, No. 8).

B. Never stamped.

C1. Unstamped fragment.

C2. Probably never stamped.

D. Trademark (Fig. 4, No. 8), rim small-sized.

E. Rim small for size of vessel. Probably never stamped.

A, B and E have a very high bead and narrow, deep flange. C1-2 are stubby with a shorter flange than A, B and E. D should be a different type; the small, fairly narrow flange goes downwards and outwards and then turns sharply down giving a slight concavity and tapers at the distal end (related to 5A, 7F1 and 19B1). Only A and D are recorded with any stamps (all of the trademark potter) and these types were probably mostly unstamped.

Summary of Type 8

Max. numbers	Period 1	Period 1?	Other Contexts
mortaria	0	10	3
mortaria Regalis	0	0	0
mortaria herringbone	0	0	0
mortaria Lunaucis	0	0	0
mortaria trademark	0	3	1
never stamped	0	2	1
'miniature rim'	0	2	1

Type 9

(Fig. 10)

A. Herringbone stamp (Fig. 4, No. 5).

B. Regalis (Fig. 4, No. 1).

A and B are variants of Type 3, F to I; the flange sweeps out from the bead without any intervening groove and there is a raised 'saddle' on the upper part of the flange which does not show on the illustrations; perhaps related to Type 3.

Summary of Type 9

Max. numbers	Period 1	Period 1?	Other Contexts
mortaria	0	0	3
mortaria Regalis	0	0	1
mortaria herringbone	0	0	1
mortaria Lunaucis	0	0	0
mortaria trademark	0	0	0
never stamped	0	0	0
'miniature rim'	0	0	0

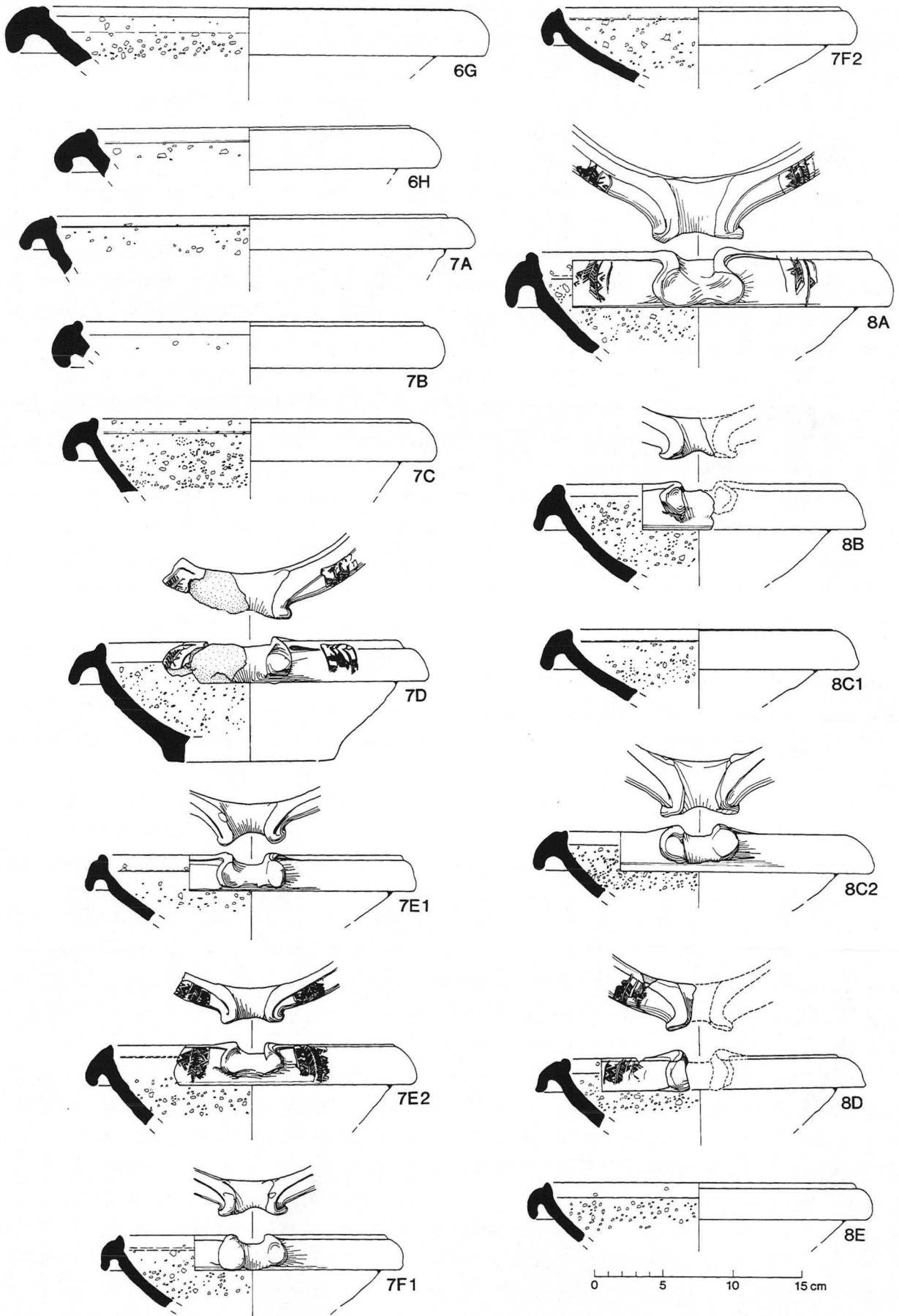


Figure 9 Mortarium Forms 6G to 8. Scale 1:4

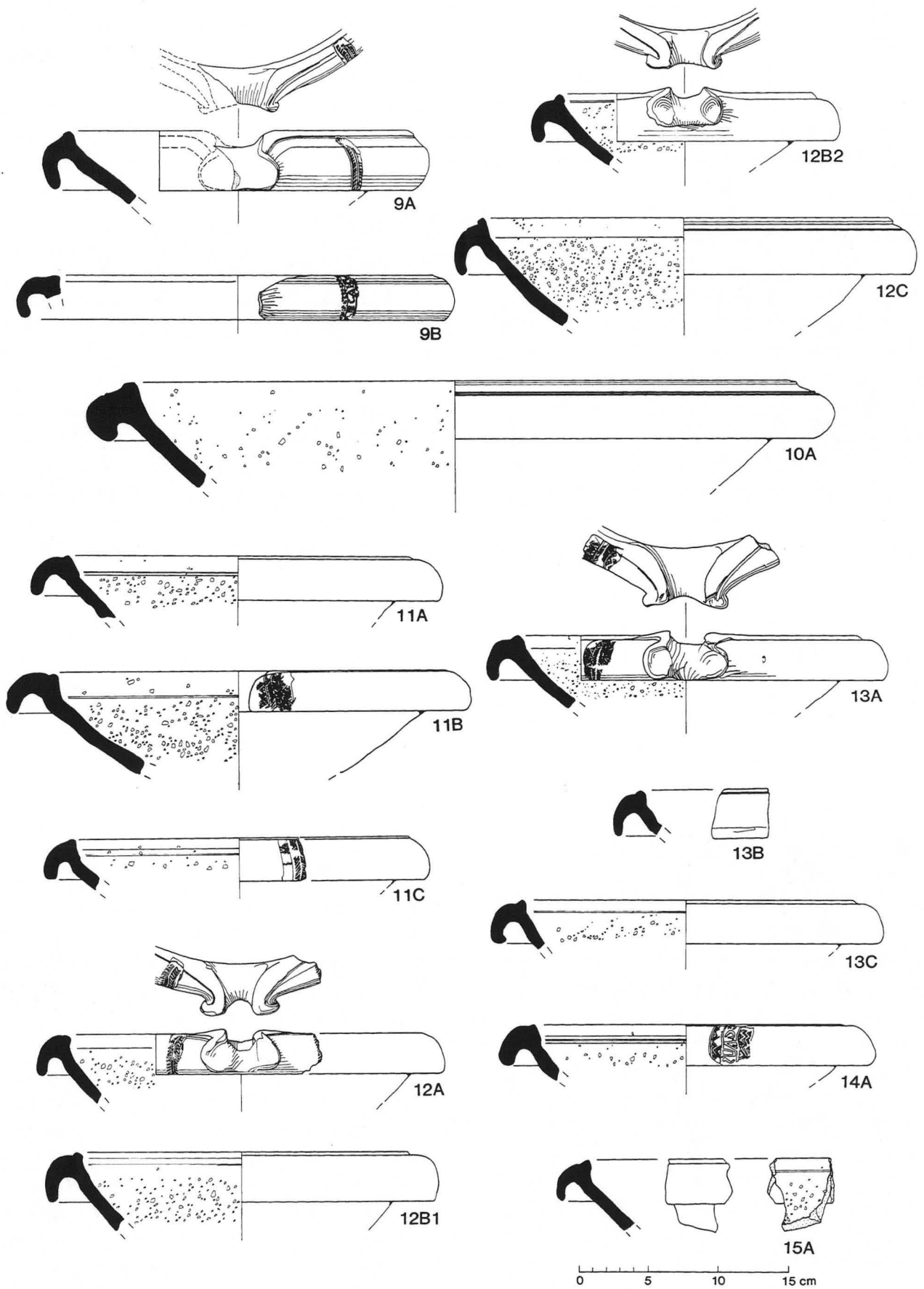


Figure 10 Mortarium Forms 9 to 15. Scale 1:4

No. 10A

(Fig. 10)

10A. Never stamped. This very large mortarium (diam. nearly 560 mm) is not part of the Type Series. It is an import, probably from the Rhineland. In very dense, hard, fine-textured, drab cream fabric with pink core; inclusions mostly quartz with some black material. The finely-fragmented trituration grit consists mainly of quartz with some dark grey material and perhaps some feldspar. All parts of it were found in Period 2 contexts.

Type 11

(Fig. 10)

- A. Unstamped fragment.
 B. Trademark (Fig. 4, No. 8). Fabric unusual among mortaria made at Ellingham, in being distinctly red-brown.
 C. Trademark (Fig. 4, No. 8).

A and B have thick, well-rounded, fairly wide rims; C is deeper and narrower.

Summary of Type 11

Max. numbers	Period 1	Period 1?	Other Contexts
mortaria	0	4	9
mortaria Regalis	0	0	0
mortaria herringbone	0	0	0
mortaria Lunaucis	0	0	0
mortaria trademark	0	1	2
never stamped	0	0	0
'miniature rim'	0	0	0

Type 12

(Fig. 10)

- A. Herringbone stamp (Fig. 4, No. 5).
 B1. Unstamped fragment.
 B2. Never stamped.
 C. Probably never stamped.

A to C have the bead above or level with the fairly deep, well-rounded flange, which usually tapers towards the distal end. Many of A to C were probably never stamped.

Summary of Type 12

Max. numbers	Period 1	Period 1?	Other Contexts
mortaria	3	3	7
mortaria Regalis	0	0	0
mortaria herringbone	0	0	1
mortaria Lunaucis	0	0	0
mortaria trademark	0	0	1
never stamped	0	1	1
'miniature rim'	0	0	0

Type 13

(Fig. 10)

- A. Trademark (Fig. 4, No. 8)
 B-C. Unstamped fragments.

A to C have a bead above the flange, which begins almost horizontally, then turns very sharply downwards; the flange tapers towards the distal end, which is marginally recurved in A to B; in C the distal end is tipped sharply inwards.

Summary of Type 13

Max. numbers	Period 1	Period 1?	Other Contexts
mortaria	3	1	15
mortaria Regalis	0	0	0
mortaria herringbone	0	0	0
mortaria Lunaucis	0	0	0
mortaria trademark	1	0	1
never stamped	0	0	0
'miniature rim'	0	0	2

Type 14

(Fig. 10)

- A. Regalis (Fig. 4, No. 2).

A stubby rim in two planes like Type 13, but remaining thick and tending outwards at the distal end.

Summary of Type 14

Max. numbers	Period 1	Period 1?	Other Contexts
mortaria	2	0	0
mortaria Regalis	0	0	1
mortaria herringbone	0	0	0
mortaria Lunaucis	0	0	0
mortaria trademark	0	0	0
never stamped	0	0	0
'miniature rim'	0	0	0

Type 15

(Fig. 10)

- A. Unstamped fragment. High bead, flange curving out and down and then turned sharply down, distal end tapering.

Summary of Type 15

Max. numbers	Period 1	Period 1?	Other Contexts
mortaria	0	0	9
mortaria Regalis	0	0	0
mortaria herringbone	0	0	0
mortaria Lunaucis	0	0	0
mortaria trademark	0	0	1
never stamped	0	0	0
'miniature rim'	0	0	3

Type 16

(not illustrated)

Similar to Type 12A (with which it has been amalgamated) but with a very much higher bead.

Type 17

(Fig. 11)

- A. Never stamped.

Bead with flange in two planes, the upper part heavily cordoned and beaded, distal end of flange tapering and recurved. This form is an exaggerated variant related to Type 1J-L and Type 9. It is most unlikely ever to have been stamped.

Summary of Type 17

Max. numbers	Period 1	Period 1?	Other Contexts
mortaria	0	0	1
mortaria Regalis	0	0	0
mortaria herringbone	0	0	0
mortaria Lunaucis	0	0	0
mortaria trademark	0	0	0
never stamped	0	0	1
'miniature rim'	0	0	0

Type 18

(Fig. 11)

- A. Unstamped fragment.

Fairly heavy rim and thick body; bead slightly above wide flange, which goes out almost horizontally, then severely tapers as it curls sharply under; wide and fairly shallow.

Summary of Type 18

Max. numbers	Period 1	Period 1?	Other Contexts
mortaria	0	0	1
mortaria Regalis	0	0	0
mortaria herringbone	0	0	0
mortaria Lunaucis	0	0	0
mortaria trademark	0	0	0
never stamped	0	0	0
'miniature rim'	0	0	0

Type 19

(Fig. 11)

- A. Unstamped fragment.
 B1. Trademark (Fig. 4, No. 8); rim small for size of vessel.
 B2. Unstamped fragment.
 C. Trademark (Fig. 4, No. 8).

Bead above, humped flange, tapering towards distal end. A and B1 are similar to Type 7 F1 but are slightly wider and shallower. B2 and C are

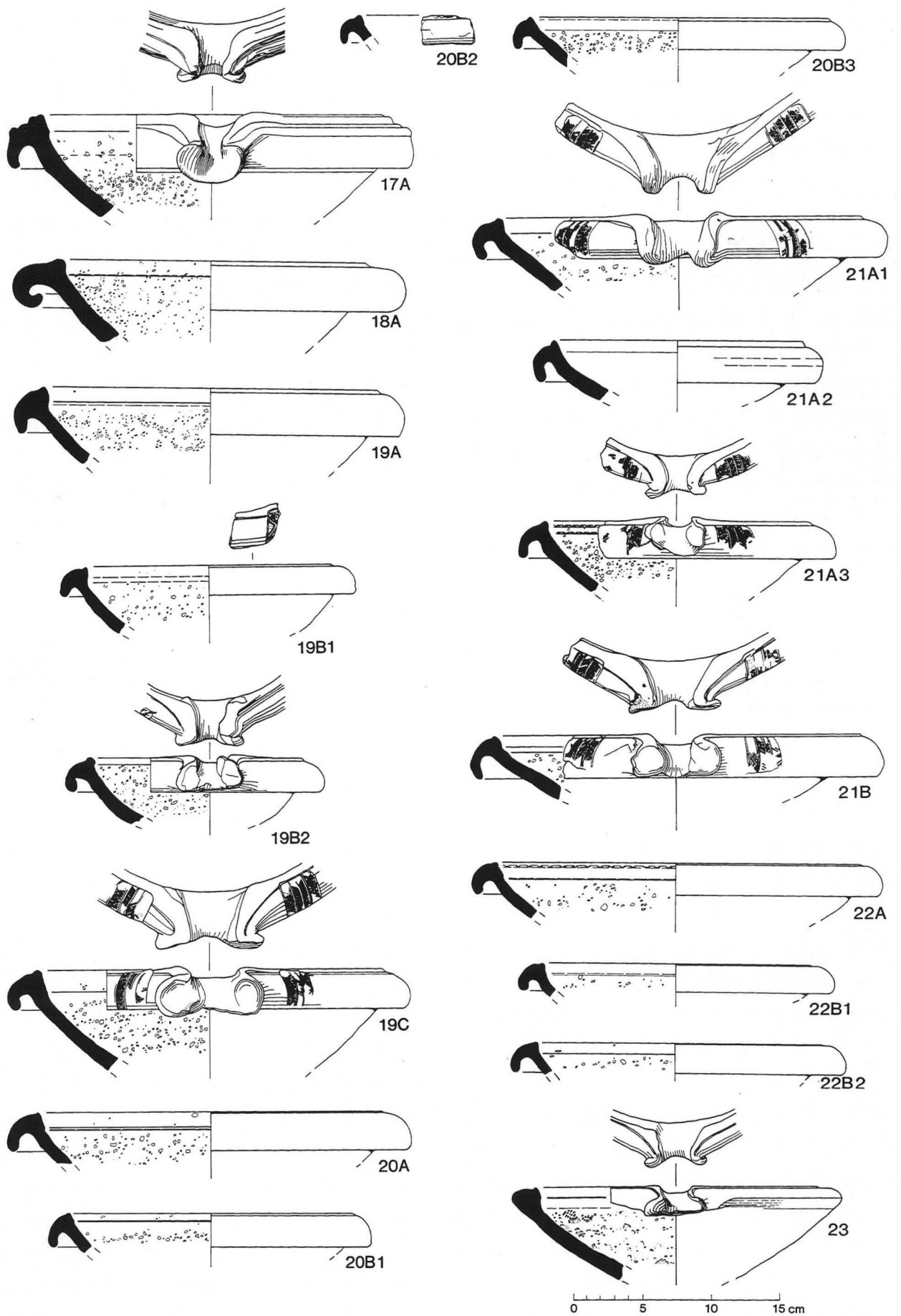


Figure 11 Mortarium Forms 17 to 23. Scale 1:4

wider, stubby rims in two planes, much thicker in the upper part of the flange but blunt-ended or swelling at the distal end.

Summary of Type 19

Max. numbers	Period 1	Period 1?	Other Contexts
mortaria	2	2	10
mortaria Regalis	0	0	0
mortaria herringbone	0	0	0
mortaria Lunaucis	0	0	0
mortaria trademark	0	1	2
never stamped	0	0	0
'miniature rim'	0	0	4

Type 20

(Fig. 11)

- A. Unstamped fragment.
 B1-2. Rim small for size of vessel.
 B3. Rim small for size of vessel; probably never stamped.

Form 20 has a high bead and a well-rounded flange tapering marginally towards the distal end; the rim is relatively deep. A includes the larger rims, B all the tiny rims.

Summary of Type 20

Max. numbers	Period 1	Period 1?	Other Contexts
mortaria	0	1	33
mortaria Regalis	0	0	0
mortaria herringbone	0	0	0
mortaria Lunaucis	0	0	0
mortaria trademark	0	0	5
never stamped	0	0	1
'miniature rim'	0	1	26

Type 21

(Fig. 11)

- A1. Trademark (Fig. 4, No. 8). Spout unusual.
 A2. Rim small for size of vessel.
 A3-B. Trademark (Fig. 4, No. 8).

A has a high bead, smallish, angled flange, quite thick and rounded at the distal end. B is sharply angled and tapered at the distal end.

Summary of Type 21

Max. numbers	Period 1	Period 1?	Other Contexts
mortaria	1	1	5
mortaria Regalis	0	0	0
mortaria herringbone	0	0	0
mortaria Lunaucis	0	0	0
mortaria trademark	1	0	2
never stamped	0	0	0
'miniature rim'	1	1	2

Type 22

(Fig. 11)

- A-B1. Rim small for size of vessel.
 B2. Trademark (Fig. 4, No. 8); rim small for size of vessel.

Type 22 is close to Type 20, but with a lower bead, though never below the small, thickish, well-rounded flange. All have small rims for the size of the vessel, but 22A are the larger rims, 22B the tiniest rims.

Summary of Type 22

Max. numbers	Period 1	Period 1?	Other Contexts
mortaria	0	0	10
mortaria Regalis	0	0	0
mortaria herringbone	0	0	0
mortaria Lunaucis	0	0	0
mortaria trademark	0	0	2
never stamped	0	0	0
'miniature rim'	0	0	7

No. 23

(Fig. 11)

23. This is not part of the Type Series. This example was never stamped nor is it possible to suggest a type for it. The flange had been broken off with a knife or wire before firing, and the break smoothed over. Almost all of the mortarium survives; it shows no sign of use.

The Other Pottery

by Tony Gregory

(Figs 12-13)

Fabrics

With only two exceptions (one sherd of a cornice-rim beaker in Nene Valley Colour-Coated Ware and one sherd of a Spanish globular amphora), the other pottery from the Ellingham kiln can be divided into five discrete fabric groups which are distinct from the mortaria fabrics described above. During processing, these were lettered A to E (and so they appear throughout the archive), but to avoid confusion here with the mortarium fabrics A and B, they have been re-lettered C to G. The total weight of the Other Pottery is 46.06kg, and the total number of sherds is 2692. The percentages by weight and count of each fabric are given below, based on these figures.

Fabric C

Smooth, slightly sandy very fine fabric with extremely sparse small sub-rounded quartzite inclusions. Occasionally contains a little mica, but never as much as Fabric G below. Hard, ranging in colour from white (Munsell 2.5Y 8/2) to very pale brown (10YR 8/3). Flagons in this fabric tend to be harder and finer in texture than other forms in the same fabric. Used for flagons, jars, bowls, dishes and the ring-vase.

Forms 24-37, 42, 44, 46, 49-51 and 53-55.

87.2% by weight; 90% by sherd count (all statistics exclude mortaria).

Fabric D

As Fabric C, with mica-gilding. One example only, Form 44. <0.1% by weight; <0.1% by sherd count.

Fabric E

Smooth, slightly sandy fabric, with coarser texture and more quartzite inclusions than Fabric C, but otherwise very similar. Colour ranges from red (10YR 5/8) to grey-brown (10YR 5/1). Fabrics C and E are, in reality, the two ends of a range of variation in fineness and density of inclusions. However, the range of forms in Fabric E suggests that some distinction was made by the potters. The only flagon forms for which Fabric E is used are Forms 30, 33 and 34, and these forms are represented by a mere eleven sherds. Otherwise, this fabric is restricted to jars, bowls and dishes.

Forms 36, 38, 40, 42-47 and beaker 51.

8.7% by weight; 6.4% by sherd count.

Fabric F

As Fabric E with a micaceous slip on both internal and external surfaces. Much softer than Fabric E. Used for dishes.

Forms 44 and 48.

0.7% by weight 0.4% by sherd count.

Fabric G

Hard, smooth fabric with profuse mica and sparse sub-rounded quartzite. Core and surfaces dark grey (2.5YR N4/0). This fabric is quite clearly distinct from Fabrics C-F and should be regarded as Ellingham reduced ware. Used for jars, bowls and dishes.

Forms 37, 39-45 and ?beaker 52.

3.3% by weight; 3.2% by sherd count.

The Forms

(Figs 12-13)

Despite the large sample excavated, a relatively small number of rims occurred. By characterising vessels by form, fabric, rim diameter and percentage of total rim surviving, a vessel equivalence figure of ninety-three was reached; therefore forms had to be defined in fairly wide terms to allow any sort of valid analysis. Percentages for forms where the rim form is known are given in terms of the vessel equivalence total. Where forms are defined simply in terms of body shape, the number of sherds is cited in order to give at least a rough idea of the importance or otherwise of any form.

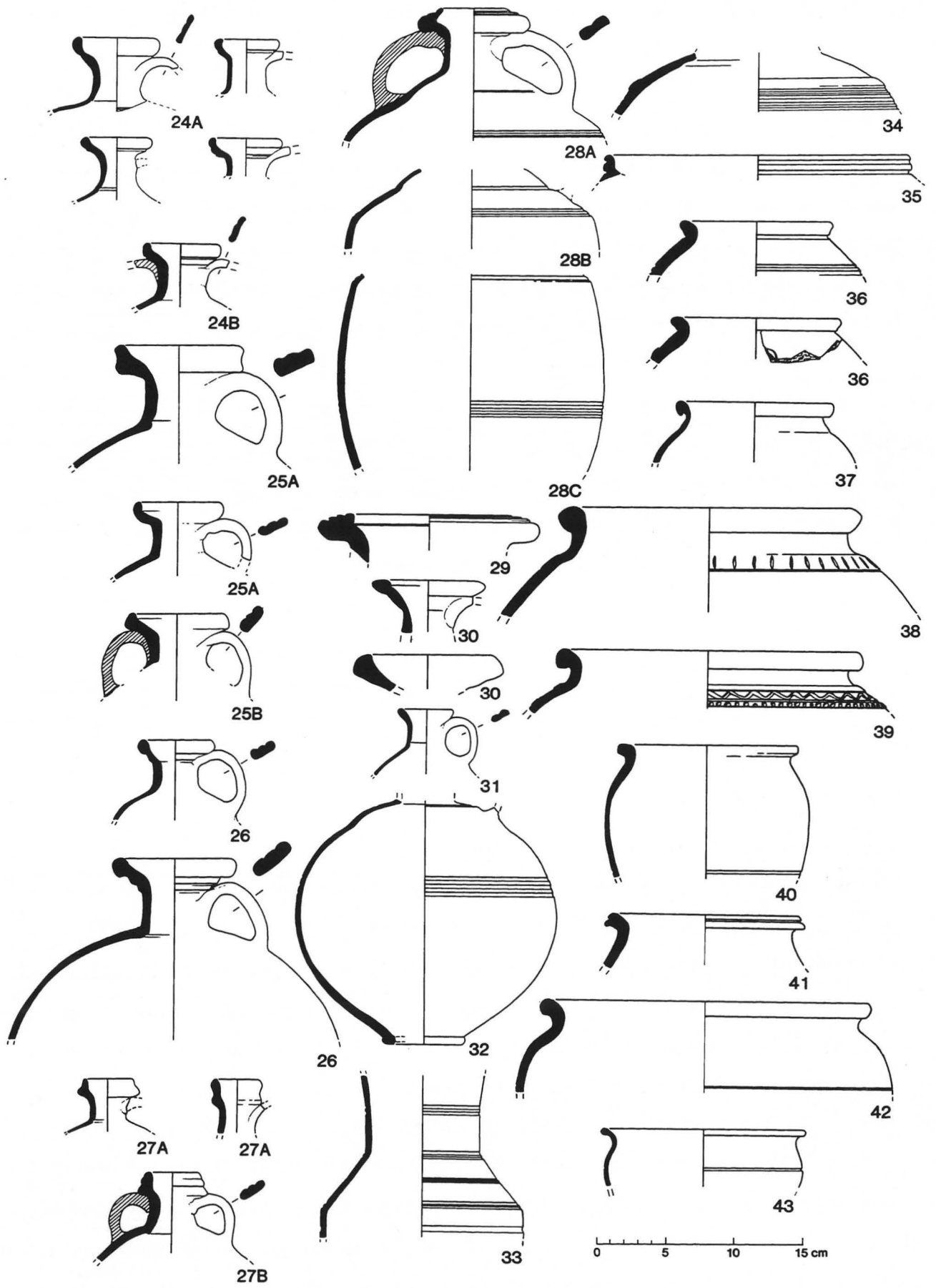


Figure 12 The Other Pottery, Forms 24A to 43. Scale 1:4

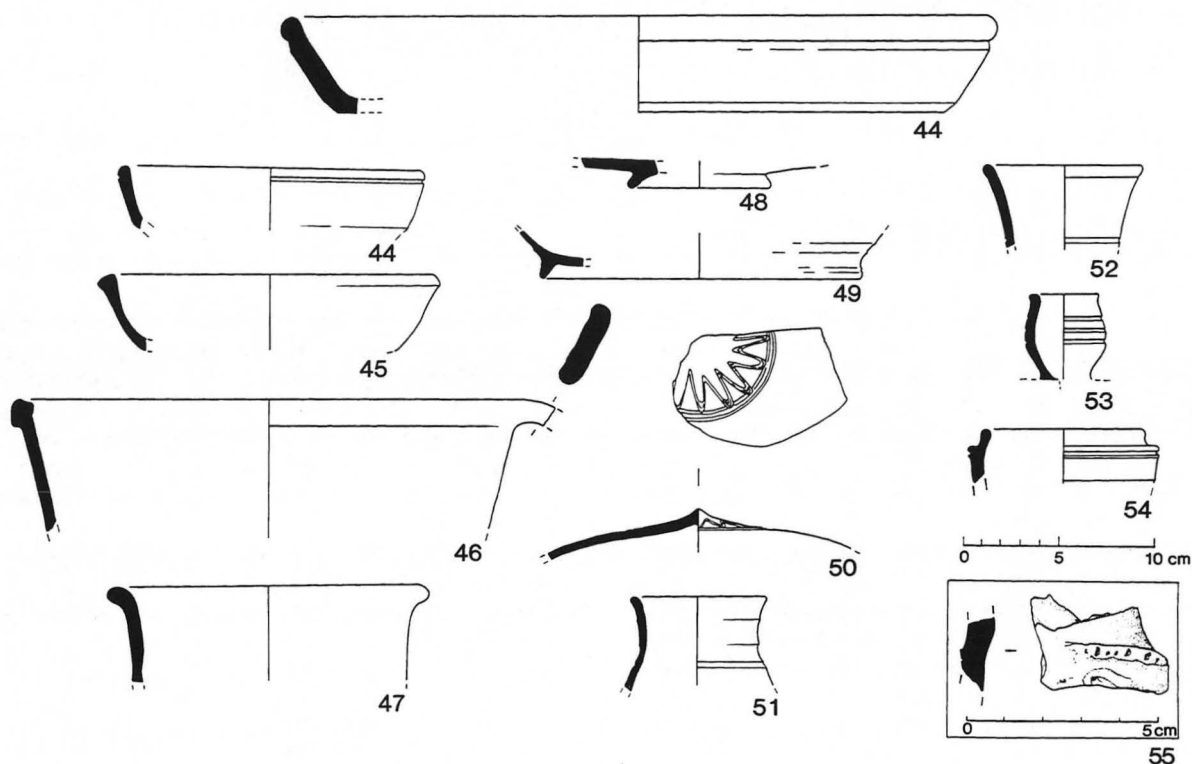


Figure 13 The Other Pottery, Forms 44 to 54. Scale 1:4 except inset (No. 55) Scale 1:2

24. Flagons with the mouth expanded into a cup, which internally is markedly concave, and often bears one or more grooves externally. The junction between the neck and the mouth is not always clearly defined. All examples are in Fabric C. Form 24A (one-handed) accounts for 16.1%, Form 24B (two-handed) 2% and Form 24 (handles uncertain) 2.2%.
25. Flagons with expanded mouths, much less cupped than Form 24 and with a better-defined rim. Fabric C. Form 25A (one-handed) 4.3%, Form 25B (two-handed) 1.1%.
26. Ring-necked flagons with two or three mouldings, of which the upper ring is exaggerated. Fabric C. No evidence for more than one handle. 10.8%.
27. Flagons with plain rounded rim above a moulding which varies from a slight projection to an incipient flange. Fabric C. Form 27A (one-handed) 4.3%, Form 27B (two-handed) 1.1%, Form 27 (handles uncertain) 3.2%.
28. Flagons with inturned rims and two handles. Fabric C. 3.2%.
29. Flagon with everted reeded rim. One example only, in Fabric C. 1.1%.
30. Flagon with everted thickened rim. Fabrics C and E. 2.2%.
31. Flagon with simple everted rim. Fabric C. 2.2%.
32. Globular flagon, sometimes plain, sometimes grooved. Body sherds not quantified. Mainly Fabric C.
33. Flagon with straight shoulder, sharply carinated above a cylindrical to barrel-shaped body. Body and shoulder bear multiple grooves. Perhaps a more angular version of Form 28. Fabric C nineteen sherds, Fabric E three sherds.
34. ?Flagon, with rounded shoulder and cordon above multiple grooves. One example bears a handle scar on top of the cordon. Fabric C three sherds, Fabric E seven sherds.
35. ?Large lid-seated jar with upstanding grooved rim. Fabric C. 2.2%.
36. Jar with everted tapering rim, slightly undercut; one example (illustrated) has the remains of applied or moulded decoration. Fabrics C and E. 2.2%.
37. Jar with everted and markedly undercut rim. Rim/shoulder junction not always as clearly defined as the illustrated example. Fabric C two sherds (one vessel), Fabric G six sherds (three vessels). 4.3%.
38. Necked jar with stubby everted rim, and slashed decoration on the shoulder. Fabric E 2.2%.
39. Necked jar with rolled rim, and stabbed and incised decoration on the shoulder. Fabric G. 4.3%.
40. Jar with poorly-defined neck and everted squared rim; body profile slack. Fabric E five sherds (three vessels), Fabric G one sherd. 4.3%.
41. As Form 40, but with a deeply-grooved rim. Fabric G one sherd. 1.1%.
42. Wide-mouthed jar/bowl with simple everted rim. One example has a highly-burnished exterior. Fabrics C (one sherd), E (one sherd) and G (five sherds). 4.3%.
43. Wide-mouthed bowl with simple everted rim, and remains of horizontal burnishing strokes on exterior. Fabrics E and G. 2.2%.
44. Straight-sided dish with one, two or three grooves below the rim, chamfered base angle. One example has a single burnished horizontal line around the exterior. The two illustrated examples show the variety of wall pitch. Fabrics C, D, E, F and G. 6.5%.
45. Dish with triangular rim and rounded body; interior and exterior burnished. Fabrics E and G. 3.2%.
46. Straight-sided vessel with externally-thickened and squared rim which is markedly concave on top. One sherd has the stump of a vertical handle. This could be a dish, or perhaps a very large jug or flagon as at West Stow (West 1990, 84, Type 8, fig. 59, nos 263-4)(cf Hull 1963, fig. 106, no. 379). Fabric C one sherd, Fabric E three sherds. 4.3%.
47. Bowl with simple everted rim. Fabric E one sherd. 1.1%.
48. Dish or plate with foot-ring. Fabric F. One sherd.
49. Base sherd. Fabric C.
50. Bossed sherds, possibly from costrels. All are grooved but not all are decorated. If this form is a costrel, then some of the Form 33 body sherds may belong to the same vessels. Fabrics C and E.
51. Beaker, or possibly a cup from a ring-vase. Fabrics C and E. 2.2%.
52. Beaker or cup. Fabric G. 1.1%.
53. Cup from ring-vase. Fabric C. 1.1%.
54. Vessel with external ledge. Fabric C. 1.1%.
55. Small body sherd with fragment of curved, notched cordon, possibly part of a face-urn. Fabric C.

The proportions of each group of forms, as percentages of the vessel equivalent total, are as follows:-

Flagons	54.0%
Jars	21.6%
Dishes	9.7%
Bowls	7.6%

Chapter 4. Discussion

by Kay Hartley

Comparison with fabrics produced at Colchester and elsewhere

(Fig. 14)

Since there is good evidence that Regalis worked at Colchester during part of his career and it is virtually certain that the herringbone potter did also, the question of similarity to Colchester fabric is particularly important. Fabrics A and B are both close to fabrics produced at Colchester and it is unlikely that fabrics produced at the two sites could always be distinguished with confidence. Fabric similar to Fabric A was used at least as rarely at Colchester with stamped mortaria as it was at Ellingham; it may only have come into use *c.* AD 170/180 with such potters as Acceptus, and it was probably more commonly used in the first half of the third century for mortaria which were never stamped (wall-sided, see Type 1 above). Contemporary potters working in Kent, probably at Canterbury, also produced similar mortaria in basically similar fabric, but it was a small-scale production. It is doubtful if the trituration grit used at Colchester and Canterbury was ever identical with that in Fabric A, so if the usage at Ellingham was consistently followed, Fabric A should be distinguishable from similar fabrics made elsewhere. Fabric B and its trituration grit are, however, basically similar to those commonly produced at Colchester in the second half of the second century. It would be impossible to claim that the fabric alone could always be distinguishable from fabrics produced at Colchester at any time from AD 43–350.

Ellingham Fabric B certainly appears to be harder than the equivalent Colchester one but many of these examples are overfired. All relevant details would need to be considered in attempting to assign a mortarium to Ellingham or Colchester:

- i) comparison side-by-side with attested fabrics from both sites.
- ii) the small size of the trituration grit and the sometimes double layer of gritting may only occur at Ellingham.
- iii) certain rim-forms were, at least, more commonly produced at Ellingham; such differences can be subtle and difficult to judge but they do occur, *i.e.* in Type 2, the distal end of the collar curves back much more towards the body than Colchester types 498–499; mortaria of Regalis from Scole (Rogerson 1977, fig. 83, no. 230), and Caistor St Edmund (Norwich Castle Museum Acc. No. 77.939 and Site 9791, context 168, both unpublished) would be difficult to parallel closely at Colchester *etc.*
- iv) the provenance of finds can often make one source very much more probable than the other. If there is a potter's stamp then the distribution of the other stamps from the same die should be considered. If the piece is large enough and in pristine condition, or several factors are in agreement, the source might be regarded as certain. But it should also be remembered that any contemporary potters working at Caistor St. Edmund would also use similar fabric.

The stamped mortaria from other sites, which are listed below, have not been re-examined with the possibility of an Ellingham source in mind. When the possibility of two sources with fairly similar clay is known, this factor would obviously be taken into consideration before attributing a fragment. Where only one source is known, any deviation in fabric which is as slight as these would not be considered sufficient to indicate a second source. Re-examination may help, but the distribution patterns for different dies of Regalis provide important complementary information (see below).

The four potters' distributions of stamps

(Fig. 14)

Regalis

i) Stamps from the same die as Fig. 4, No.1.

Ellingham: stamps from a total of thirty-two to forty-four mortaria are recorded from the excavation. Twelve mortaria, *i.e.* with stamps surviving on both sides, and fourteen single stamps are recorded from Period 1 and Period 1? contexts; one mortarium and seventeen single stamps from other contexts.

Nine mortaria stamped with the same or a closely related die have been recorded from the following sites: Brundall, Norfolk (Site 10227); Caistor St Edmund (three; one is Site 9791/c168); Colchester (unpublished); Fordham, Cambs; Scole, Norfolk (two: Site 1007; Rogerson 1977, fig. 83, nos 230–1); Campen Collection, ?Stebbing, Essex. The Colchester stamp is slightly shorter than others which are complete enough for detailed checking; it could perhaps be from a sister die made from the same matrix; the Fordham stamp and two of those from Caistor St. Edmund are too fragmentary for this detail to be checked.

ii) Retrograde stamps from the same die as Fig. 4, No.2.

Ellingham: stamps from five mortaria, recorded from the excavation; four found in Period 1 and Period 1?, one of these with herringbone stamp, Fig. 4, No. 5, impressed on top of the bead as it borders the spout, on both sides of the spout (Pl.III); the fifth mortarium is from the stokehole filling.

There are three mortaria from other sites with stamps from the same die: Grimstone End, Pakenham, Suffolk; South Shields. A stamp from Saham Toney (Norfolk) (Site 4697) differs fractionally but should clearly be assessed with this die.

iii) Retrograde stamps from the same die as Fig. 4, Nos 3–4.

No stamps from this die were found at Ellingham. Four mortaria from other sites: Colchester (two); Pakenham, Suffolk; Scole, Norfolk.

iv) Retrograde stamp (not illustrated).

No stamps from this die have been recorded from either Colchester or Ellingham. Caistor St Edmund (two mortaria; Atkinson 1936, facing p. 230, R24–25).

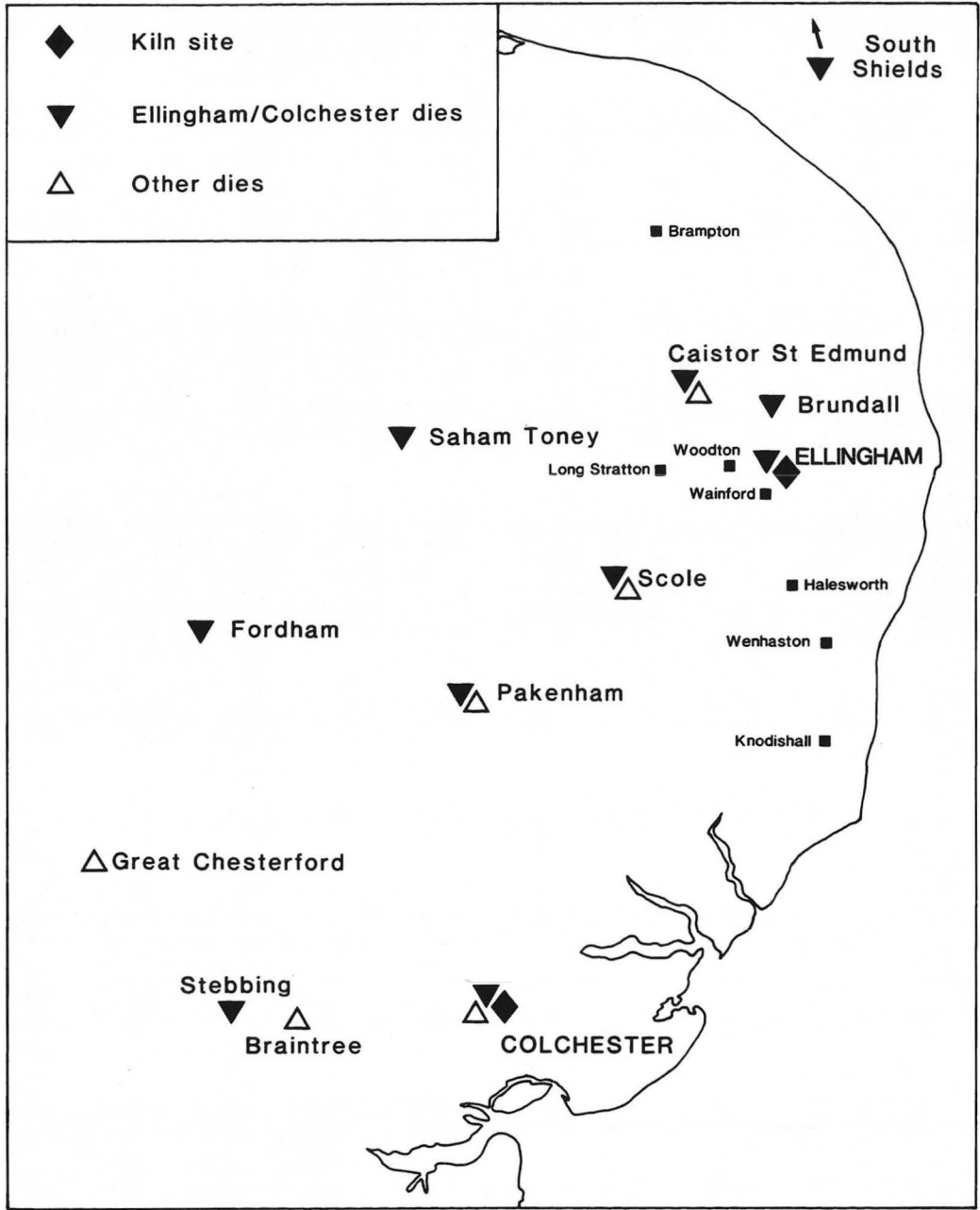
v) Retrograde stamp (not illustrated).

Colchester (2–4; Hull 1963, fig. 60, no. 21); Great Chesterford, Essex. None at Ellingham.

vi) Not illustrated.

Colchester (3; Hull 1963, fig. 60, no. 22); Braintree, Essex; Pakenham, Suffolk. None at Ellingham.

The stamps on Fig. 4, Nos 3–4 are illustrated because the design of the stamps is identical with that of stamps from Ellingham (Fig. 4, No. 2). The S in these stamps is, however, so different that there is no question of the Ellingham die being a *surmoulage*.



North of this area the only site where Regalis' mortaria are known is South Shields. Colchester is shown as a kiln site as there is no reason to doubt that these dies would have been used there too. The map also shows the distribution of mortaria stamped with the four other dies *not* represented at Ellingham. The two from Caistor St Edmund are from an otherwise unknown die, and the fact that they have only been recorded there suggests that the die was used at Ellingham.

Figure 14 Map of East Anglia showing the distribution of mortaria by Regalis, stamped with the two dies known to have been used at Ellingham. Also other sites referred to in the text.

Between three and five Regalis mortaria have been recovered from the kiln area at Colchester, enough in the circumstances to establish production but none of his kilns were located. Only one stamp (Fig. 4, No. 1) from either of the two dies used at Ellingham has been found at Colchester.

The range of rim-forms produced at Colchester and Ellingham do not differ sufficiently to show any difference in date. His mortaria and the characteristics of many of his stamps are typical for a Colchester potter and are closely comparable to the work of Acceptus and Martinus of Colchester. For these reasons, his migration is almost

certain to have been from Colchester to Ellingham, not the other way round. His recorded work is hardly large enough to support the idea of simultaneous production on both sites and the distributions of stamps from the same dies as Fig. 4, Nos 1 and 2 are also against this idea (see Fig. 14).

The fact that only two dies are represented in the waste pottery from Ellingham does not, of course, prove that he used no other dies there. Of his ten mortaria from Norfolk, all but three are stamped by the two dies known to have been used at Ellingham. Two of the three have the only recorded stamps from die iv) above, and both are from Caistor St Edmund; the third, a recent find from Scole (Site

30815), has a stamp from the same die as Fig. 4, No. 3. All three of the mortaria could well fit with production at Ellingham, but further work would be necessary to establish this with certainty.

Excluding the sites at Ellingham and Brampton, approximately 143 stamped mortaria have been recorded in Norfolk. Of these, only fifteen are stamped by potters who had worked at Colchester in the second half of the second century; of these, ten are stamped by Regalis, three by Messor, one by Dubitatus and one with a herringbone stamp attributable to Colchester. Clearly, ten is an abnormally high number for a Colchester potter in this area, and it can reasonably be assumed that the majority were in fact from Regalis' Ellingham workshop.

The Cambridgeshire distribution also fits origin from Ellingham better than Colchester. South Shields, however, is in the normal distribution pattern for Colchester, but Colchester name-stamps are relatively uncommon in north-eastern England, and this is the only example of the later named potters, Acceptus, Cunopectus and Regalis, who seem to have largely post-dated Messor, Dubitatus, Martinus *etc.* Kilns in Norfolk also sold mortaria in the north-east of England and in Scotland but in very small, even minute, quantities compared to Colchester. Re-examination of the South Shields mortarium suggests, on the whole, a Colchester source, but again that cannot be regarded as completely certain.

Pending further examination, it is therefore reasonable to assume that most, possibly all, of Regalis' stamps in Norfolk, and even more likely any in Cambridgeshire, came from Ellingham. The distribution of stamps from the two dies used at Ellingham does suggest that Ellingham could have been at least as important as his production at Colchester (Fig. 14).

The likelihood of Norfolk potters selling mortaria at Colchester or in that area is nil because of the vast output of the Colchester potteries. Norfolk production, on the other hand, was comparatively limited but it was probably fairly continuous from the Flavian period until the end of the second century. In the absence of a local industry, Norfolk would have been a natural outlet for Colchester. Suffolk, with some local production and approximately fifty-eight stamped mortaria recorded, has at least fourteen second-century mortaria (including three Regalis) which can be attributed to Colchester.

So many of Regalis' mortaria are of Hull types f.499 and f.501, that they probably indicate that he began working after AD 160; he used some rims which could easily have been unstamped and produced in the latest years of the second century or the early third century; such rims are present at Colchester as well as Ellingham. A date within the period AD 160–200 is certain but his production of stamped mortaria would almost certainly have ended by AD 190. The optimum date for his activity at Ellingham is within the period AD 170–190.

Herringbone Potter (Fig. 4, No.5)

Ellingham: stamps from a total of twenty-seven to forty-four mortaria are recorded from the excavation; two mortaria and fifteen single stamps are recorded from Period 1 and Period 1? contexts; one mortarium and twenty-six single stamps from all other contexts. These figures include the Regalis mortarium from Period 1 which has stamps from this herringbone die along the spout (Pl. III).

Herringbone stamps, especially when fragmentary, can be very difficult to identify with total certainty, but this is a fairly distinctive stamp and no others are known which are liable to be confused with it. It is, therefore, virtually certain that four mortaria from the following sites are stamped with the same die: Baylham House (Suffolk); Cambridge; Colchester (Essex) (two; Symonds and Wade forthcoming, 206, TZS 151). This herringbone was not published by Hull, but there is no reason to doubt that it was used at Colchester.

The fact that one of Regalis' mortaria from Ellingham has this stamp impressed along the beads bordering the spout establishes a link between Regalis and the user of the herringbone die (Pl. III). It means that the dies were in use at the same time and presumably in the same workshop. Although it cannot be proved, this die could actually have belonged to Regalis. It was used on rim-types which are contemporary with Regalis and which, typologically, are marginally later than the mortaria with herringbone stamps which occur in Scotland.

The distribution would again fit with production at both Colchester and Ellingham. A large number of the herringbone potter's mortaria at Ellingham are of Type 2, but apart from that the types correspond closely enough with those favoured by Regalis. The types most favoured by the trademark potter are not used. There is every reason to accept the herringbone potter as a contemporary of Regalis, if not Regalis himself.

Lunaucis

There is no reason to doubt that the two dies used to produce retrograde stamps Nos 6 and 7 (Fig. 4) belonged to the same potter, but they can be read differently. Indeed, it would be difficult to read them in the same way. The late Richard P. Wright read No. 6 as 'Lunaris' with cursive AR. This name is recorded in R.I.B. (Collingwood and Wright 1965) 786, 1521 and the *Corpus Inscriptionum Latinarum* xiii, 4333. Unfortunately Wright did not see No. 7, which has a clear C and appears to read LVNAV.C.F. There are precedents for mortarium potters varying the spelling of their name either by accident or design *e.g.* Dubitatus or Dubetaus at Colchester (Hull 1963, 110).

a) Stamp as Fig. 4, No.6

Ellingham: stamps from a total of eleven to sixteen mortaria are recorded from the excavation; one mortarium and two single stamps are recorded from Period 1 and Period 1? contexts; three mortaria and ten single stamps from other contexts. No stamps from the same die are known from elsewhere.

b) Stamp as Fig. 4, No.7

Ellingham: stamps from a total of eight to ten mortaria are recorded from the excavation; no stamps are recorded from Period 1 contexts, but there are three mortaria and seven single stamps from Period 2.

Mortaria from other sites: Caistor St Edmund (two; one from Site 9791). The Norfolk Sites and Monuments Record also has another from Gayton Thorpe (Site 3743) in sufficient detail to be reasonably certain that the stamp is from this die, but it has not been possible to locate and re-examine the sherd.

Lunaucis used mainly Types 1, 3 and 4; they have more in common with those used by Regalis and the herringbone potter than with the trademark potter, though Type 4C1 is almost certainly a Norfolk rather than a Colchester type. There is no evidence to suggest that he ever had a workshop at Colchester but there is at least one other potter (unpublished) who worked in Norfolk, probably at Caistor St Edmund, whose work could indicate some kind of link

with Colchester. There is no way of knowing exactly what such links would be but one possibility could be that they learnt their trade there.

Trademark Potter (Fig. 4, No. 8)

Ellingham: stamps from a total of forty-seven to fifty-eight mortaria are recorded from the excavation; eight mortaria and five single stamps are recorded from Period 1 and Period 1? contexts; eleven mortaria and thirty-four single stamps from other contexts.

Stamps from the same die have been recorded from Caistor St Edmund and West Stow, Suffolk (West 1990, fig. 59, no. 268).

The Caistor mortarium will certainly be from Ellingham, but there is nothing like the same certainty for the West Stow mortarium. The latter is not in either Fabric A or B but in a definite orange-brown fabric (Munsell 2.5YR 6/8), with sporadic transparent and whitish quartz and rare, tiny black inclusions. The few trituration grits surviving consist of pinkish and milky quartz with rare red chert and rare fragments of a softer orange-brown material of which only the stain remains. Fabrics like this, perhaps used primarily for other wares, were almost certainly made at West Stow and many other sites in East Anglia, and it can be matched reasonably well with that of a stamped mortarium certainly made at West Stow, Suffolk. This fabric has nothing in common with the typical fabrics represented in the Ellingham assemblage but could, perhaps, be compared to the very few sherds which appear to be orange-brown (see fabrics, above, and Type 11B in the Type Series).

In all, eight mortarium stamps from seven different dies have been recorded from West Stow; this trademark is the only one of the stamps recorded at West Stow which has ever been recorded on any other site. Very small numbers of stamps are a normal feature of excavations of smalltime local workshops in East Anglia. It could be that they made very few mortaria or that they did not stamp all that they made. The number of mortaria present at Ellingham is totally exceptional for an East Anglian workshop outside Colchester; and it certainly suggests some emphasis on production.

There was a very active pottery workshop at West Stow throughout the second century and mortaria were clearly made there. With the possible exception of this trademark, there is no reason to doubt that all the stamped mortaria and many of the unstamped mortaria found at West Stow were made there. The origin of the trademark mortarium is only in question because of the discovery at Ellingham; its fabric would sort well enough for production at West Stow but it might not be impossible for Ellingham. It would be unlikely for West Stow to have obtained mortaria from Ellingham, but the possibility has to be allowed for. Until further evidence is available, it can only be regarded as made either at West Stow or at Ellingham.

Given the large numbers of this trademark found at Ellingham, the recorded distribution is incredibly tiny,

though it should be remembered that the potter probably made unstamped mortaria as well. The rarity of the stamps and those of Lunaucis as site-finds is, however, absolutely typical of small locally-based East Anglian potters who stamped mortaria. Even the most important of the potters working at the regionally important pottery at Brampton have limited distributions. The large numbers of mortaria evidently being made at Ellingham, combined with the tiny distributions, even for Regalis, is perhaps an indicator of how few of the stamped mortaria made are actually found.

It is, however, necessary to remember that the rim-types of the small-rimmed, often also small mortaria, are predominantly those preferred by the trademark potter, who is the most likely of these four potters to have produced them. The trademark potter is, therefore, also the only one likely to have been producing unstamped mortaria on a more than minimal scale. Regalis himself was among the latest of the potters at Colchester who were stamping their mortaria. If the trademark potter's work does partly post-date that of Regalis, which is a possible interpretation of the facts, this could fit well with a relatively large production of unstamped mortaria in the period when the surviving kiln was in use *i.e.* Period 2, because the practice of stamping was certainly dying out around this time. The use of both the earlier kiln and the later one can presumably be dated within the period AD 170–190/200. It is also worth noting that the kiln had not been in use long enough for any repairs to have become necessary.

The four potters who used the Ellingham kiln appear to represent two different traditions. Despite some small deviations, Types 1–4 (excluding 4C1), and Type 9 are very clear Colchester derivatives. Many other types might be matched at Colchester but are not typical. Types such as 5A, 6B–6H, 7E–7F, 8D–8E, 18, 19B, 20 and 22 are alien to the Colchester tradition in mortaria. The mortaria stamped by Regalis, the herringbone potter and Lunaucis are, almost without exception, types which are clearly linked to the Colchester tradition. In the equally large sample of the trademark potter's products, such forms are the exception (approximately six mortaria), while forms alien to Colchester are used (approximately twenty-one mortaria).

The die used by the trademark potter is, however, made up of elements which are clearly linked into the Colchester tradition, although trademark dies were, in fact, very rarely used at Colchester except in the form of pure herringbone stamps. It is probable that the Colchester potters had considerable influence on potting traditions in East Anglia in the first and second centuries. This is evident among potters working in other parts of Essex, and with at least one herringbone potter (unpublished; see above) apparently working at Caistor St Edmund. Brampton, on the other hand, seems to have been too far away to be affected.

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