# Chapter 15. Other Artefacts 

J. Bayley, H.E.M. Cool, H.B. Duncan, J. Eyers, M. Maltby and P. Guest

## I. Introduction and methodology

The registered artefacts were identified and short descriptions, along with sketch scale drawings, were recorded on individual record cards in the late 1980s. The iron registered artefacts were x-rayed by Kent County Museum Service on behalf of English Heritage (late 1980s) and English Heritage Ancient Monuments Lab (2000). A listing of the bulk ironwork (nails) by context and type, was compiled in the late 1980s but the nails were not x-rayed. The leather unfortunately had become desiccated and fragmented during the period between excavation and analysis.

The paper catalogue record was subsequently entered into a digital database (Microsoft Access). The slag assemblage was identified by J. Bayley; species identification of the worked animal skeletal material was carried out by M. Maltby (Section 19). The coins were x-rayed and conserved by Phil Parkes of Cardiff University. The coins were analysed by P Guest (Section 16), the vessel glass by H.E.M. Cool (Section 17), and the remaining artefacts by H.B. Duncan. Petrological identifications were undertaken by Jill Eyers (Section 18).

Of the 434 individual items (Table 15.1), 64 derived from unphased deposits, along with 196 g of plaster and 14 g fuel ash slag. All the artefacts have been catalogued within the archive. With the exception of the more closely dated Roman objects (e.g. coins), finds from unphased deposits will not be referred to in this report.

| Material | Quantity | Wt (g) |
| :--- | ---: | :--- |
| Amber | 1 |  |
| Antler | 1 |  |
| Bone | 3 |  |
| Copper Alloy | 49 |  |
| Ferrous | 308 |  |
| Flint | 9 |  |
| Glass | 35 |  |
| Leather | 2 |  |
| Lead alloy | 4 |  |
| Stone | 21 |  |
| Tooth | 1 |  |
| Sub-total | $\mathbf{4 3 4}$ |  |
| Plaster/mortar |  |  |
| Slag - ferrous |  | 33063 |
| Slag - fuel ash |  | 396 |
| Table |  | 4038 |

Table 15.1 Other Artefacts
Instances of intrusive finds were noted in Phases 1-5. Whether these were introduced into the record via modern ploughing or during machine stripping of the area is unclear. These intrusive items are listed in the phase tables but do not form part of the phase discussion; descriptions of the intrusive items can be found within the project archives.
Residual finds were also noted in Phases 4 and 5.
A sizeable assemblage of plaster was recovered, occurring in deposits of Phases 1-5. Description of fabric types, how the material was utilised and surface treatment are considered below. Quantities and type are also referred to within the phase discussions.
*: item illustrated.

## II. Other Artefacts from Phase 1 (early 1st to early 2 nd century)

The assemblage from deposits of Phase 1 is limited in quantity and it is evident from the intrusive finds that Roundhouse gully G9 and Gully G12 were heavily truncated (Table 15.2).

| G no | Item | No. | Wt |
| :--- | :--- | :--- | :--- |
| 4 | Vessel sherds of blue-green glass | 2 |  |
| 4 | Fuel ash slag |  | 87 g |
| 29 | Fuel ash slag |  | 17 g |
| 9 | Vessel glass modern | 1 |  |
| 12 | Vessel glass modern | 1 |  |
| 12 | Copper alloy wire wound headed pin c. $1400-1700$ | 1 |  |
| 22 | Wall Plaster - no surfaces (type 2) |  | 3 g |
| 85 | Iron nail shank | 1 |  |
| 87 | Copper alloy studded ring | 1 |  |

Table 15.2 Other Artefacts from Phase 1 deposits
The two sherds of vessel glass from enclosure ditch G4, comprising a tubular pushed-in base ring and a body sherd, were both of blue-green translucent glass. Blue/green fragments such as these are only dateable by their colour, and would have been in use sometime within the 1st to 3rd centuries. Small quantities of fuel ash slag were found in enclosure ditch G4 and roundhouse gully G29. Fuel ash slag can be produced in any high-temperature fire in which alkalis and silicates come into contact, for example a house fire, and hence, on their own, are not indicative of a metallurgical process (Bayley 1985; Biek and Bayley 1979).

Two pits, G87, were situated to the north and north-west of roundhouse G29. The most westerly pit contained a cast copper alloy ring with a headed stud projecting vertically from an extension to the ring's plane (Fig. 2.6 RA60). Similar studded rings of varying diameter have been found on a number of Roman military sites and were previously described as harness fittings. Current thinking suggests that these actually served to secure the closure of a flap on a soldier's satchel (Fuentes 1991, 93-5). Fuentes identified twelve such rings from ten sites and noted that eight of the sites had 1st century military camps or forts (1991, 93). No Roman forts or camps have been identified in the vicinity of Newnham, or in fact within Bedfordshire. If these studded rings are primarily military in use, its presence at Newnham is intriguing.

The small size, and lack of surfaces, on the single fragment of plaster found in deposits associated with post-built building G22 preclude determining if it is the remains of mortar or wall covering; it is also possible that its presence is the result of bioturbation. Little can be surmised from the single nail shank from ditch G85.

## Summary of the Phase 1 assemblage

The assemblage, although limited, confirms not only domestic occupation of Newnham in the earlier Roman period, but also that the occupants had access to markets and the resources to purchase 'imported' goods. Although there are no finds amongst the stratified 'other artefact' assemblage that reflect subsistence or craft level activities, it should be noted that part of a lower quernstone in Hertfordshire puddingstone (Fig. 7.2 RA306) was found within unphased deposits (see Unphased section). Weaving, thought to be a home-based industry during the Iron Age, was evidenced by a fragment of a triangular loom weight found in post-built building G22 (Section 14). Explanation for the presence of the studded ring from a soldier's satchel is difficult; perhaps it was lost by a visiting or retired soldier.

## Catalogue: Phase 1

Vessel. Clear blue green glass. Base fragment. Tubular pushed-in base ring, base and side broken. Base diameter 70mm. Context 5c- 20.3; G4
Vessel. Clear blue green glass. Body fragment. Context $5 \mathrm{c}-60.1$; G4
*Bag ring. Copper alloy. Cast annular ring of circular cross-section with protruding knob at right angles to body. Diameter 47 mm ; width 6 mm ; thickness 6.5 mm . RA60. Context 2-31; G87 (Fig. 2.6)

## III. Other Artefacts from Phase 2 early to mid-Roman (early 2nd-early 3rd century)

Although finds assigned to Phase 2 are more numerous (Table 15.3), $67.5 \%$ of the assemblage comprises nails (27 in total). These were concentrated in deposits overlying external cobbling in the area of building G39 (G60 and 62), which could support the suggestion that the building was half-timbered. Where surviving the majority of nail heads from the cobbling conform to Manning's type 1B (flat-headed general purpose nails), with only one instance of the longer type 1A $(1985,134)$. Only one nail was recovered from the internal floor G61 of G39, which suggests the interior was kept cleared and tidy. The remaining metal objects from the cobbling G60 and G62 are fragmentary: one piece is the tip of either a cast copper alloy hair pin or needle; and the other is a robust tapering iron bar fragment possibly part of a smith's set, but too little survives to be certain. One fragment of a glass prismatic bottle and a pale greenish colourless body sherd from a second vessel were also found in G62. Fragments of prismatic bottles are relatively common finds on rural sites. The form is commonest during the later first to third centuries (Price and Cottam 1998, 194-200). In contrast the pale greenish colourless sherd is made in the typical bubbly glass of the 4th century, suggesting some intrusive activity.

| G no | Item | No | Wt (g) |
| :--- | :--- | :--- | :--- |
| 1 | Copper alloy brooch | 1 |  |
| 2 | Fuel ash slag |  | 3890 |
| 6 | Ferrous slag |  | 145 |
| 42 | Nail Manning type 1A; Nail shank | 2 |  |
| 42 | Copper alloy fragment | 1 |  |
| 20 | Colourless glass beaker | 1 |  |
| 20 | Boar's tusk (amulet?) | 1 |  |
| 20 | Nail shank | 2 |  |
| 20 | Blast furnace slag - post-medieval to modern |  | 5 |
| 61 | Manning type 1B nail | 1 |  |
| 60 | Manning type 1B nail; nail shank | 2 |  |
| 62 | Prismatic blue-green glass bottle | 2 |  |
| 62 | Body sherd pale greenish colourless glass | 1 |  |
| 62 | Copper alloy pin or needle shank | 1 |  |
| 62 | Iron bar fragment (smith's set?) | 1 |  |
| 62 | Manning type 1A nail (1); type 1B (9); nail <br> shanks (9) | 19 |  |
| 10 | Copper alloy fragment | 1 |  |
| 10 | Fuel ash slag |  | 2 |
| 21 | Wall plaster - red washed surface (type 1) |  | 134 |
| 21 | Wall plaster - no surfaces (type 4) |  | 69 |
| 21 | Blue-green glass spouted globular jug | 1 |  |
| 21 | Iron fragment | 1 |  |
| 21 | Nail shank | 1 |  |
| 54 | Iron annular ring | 1 |  |
| Table | 15 O Other Artefacts from Phase 2 | deposits |  |

Table 15.3 Other Artefacts from Phase 2 deposits
Deposits associated with a second possible building, roundhouse G21, produced a blue-green glass rim fragment having features consistent with it coming from a spouted globular jug of the second to third centuries (Price and Cottam 1998, 157-60). A small amount of plaster was also found in the drip gully fills, one piece ( 134 g ) retaining a flat red-washed surface. With no other instances of plaster occurring in Phase 2 deposits, it is uncertain whether this piece was residual, possibly deriving from post-built structure G22 in Phase 1, or intrusive, deriving from Phase 3 building G65. Pits (or possibly post-holes) G54 would have been situated within the interior of G21. An oval annular iron ring, external dimensions 64 mm by 55 mm , was found in the fill of one of the four pits. Rings such as this are extremely common and could have had many functions from harness, to chain links and tethering rings; their size is little guide to their possible use, for rings of widely varying dimensions may have had the same function (Manning 1985, 140).

The remainder of the finds from Phase 2 were found within the fills of enclosure and drove-road ditches. The fills of enclosure ditch G1 yielded a Nauheim Derivative brooch (Fig. 3.4 RA 4) with four-coil spring, internal chord and solid catch plate. The bow has a shallow triangular cross-section; the back is flat, the apex of the triangle forming a ridge down the centre of the bow front, which is accentuated by a narrow groove either side. It is generally accepted that Nauheim Derivative and related groups, although current in pre-Conquest contexts, occurred commonly during the middle of the 1st century AD and remained in use until c. AD 70 (Olivier 1988, 38). It should be noted, however, that increasing numbers of these brooches are being recorded from 2nd century contexts and the length of general currency of the group may require some slight revision (Olivier 1988, 38).

Little can be gleaned from the assemblages recovered from enclosure ditches G2, G6 and G42. The concentration of fuel ash slag in G2 does suggest an intense fire, but not metallurgical activity. The ferrous slag ( 145 g ) from G6, while dense is not diagnostic of smithing or smelting and although it does suggest that ironworking was taking place somewhere in the area, the location of this and its duration and intensity remain unknown.

Drove-road ditches G20 produced the most closely dateable item amongst the glass vessel assemblage, a wheel-cut colourless beaker with separately blown base. This is a relatively common form of the early to mid-2nd century (Price and Cottam 1998, 91-2). A boar's tusk (lower canine) showing evidence that its wear surface had been artificially expanded was also found in the fill of G20 and may have been an amulet. The use of pigs' teeth as amulets, particularly boars' tusks, can be traced back to the late Roman period (MacGregor 1985, 109). The tusk was found in association with an assemblage of pottery spanning the Late Iron Age to Roman periods, which included two sherds of fabric type R12b, dated to the 3rd to 4th centuries. It is possible that this drove-road ditch took some time to infill, or that subsequent activity in later phases (for example ditch G19 in Phase 3) introduced later finds into the fills of G20.

## Summary of the Phase 2 assemblage

The Phase 2 assemblage, whilst confirming continued occupation and access to a market, provides little insight into the economic basis of the site. Although no coins were recovered from stratified deposits, a coin of Faustina II (AD

161-188) was found in overburden deposits overlying G39 (see Unphased section). Although building G39 would appear to be fairly substantial, no evidence survives of how the building was appointed or furnished.

## Catalogue: Phase 2

Pin or needle? Copper alloy. Small fragment of a circular sectioned shank, broken both ends. Length 11.5 mm ; diameter 1.4mm. RA61. Context 4f32; G62

Set or drift? Iron. Tapering bar, broken off at head. Bar tapers in thickness on one side only, tip missing. Rectangular in cross-section. Length 83.5 mm ; width 23.7 mm ; thickness 20.7 mm . RA35. Context $4 \mathrm{f}-33$; G62

Prismatic bottle. Blue-green translucent glass. Body sherd. Also small blue-green translucent chip of glass. Context 4f-26; G62
Vessel. Pale greenish colourless glass. Body fragment, numerous small bubbles. Context 5b-93; G62
Ring. Iron. Annular ring, split (along weld line?) and distorted. Rounded square cross-section ( 7 mm by 7 mm ). Length 64 mm ; breadth 55 mm . RA17. Context 2-101; G54
*Brooch. Copper alloy. One-piece brooch with four coil spring with internal chord, shallow triangular-sectioned bow with flat back, apex of triangle, forming ridge down centre of bow front, with a narrow groove down either side of apex. Bow is a tapering elongated triangle in plan, solid trapezoidal catch plate. Pin incomplete. Length 55 mm ; bow width 7 mm . RA4. Context 1-82; G1 (Fig. 3.4)

Beaker. Clear colourless glass. Part base and side in c. 120 small strain-cracked fragments. Base formed of a separately blown paraison, edge cracked off and ground; part of base of vessel with lower body sloping up. Traces of wheel-cut lines on body fragment. Base diameter 40 mm ; wall thickness 1 mm . Context 5-62; G20

Amulet. Boar's tusk (lower canine). There is evidence that its wear surface had been artificially expanded. RA. Context 5a-12; G20

## IV. Other Artefacts from Phase 3 mid-Roman (early 3rd to late 3rd/early 4th)

Building G39 is likely to have continued in use during Phase 3. The latter half of this period witnessed the construction of a second building, G65, situated in Area 2, some 21m to the north of G39. To the south and west were a series of enclosure ditches and gullies. The latter features yielded a small ( 34 items in total), and somewhat restricted assemblage of finds, nails comprising $73.5 \%$. The ditches furthest to the west and hence furthest from the occupation focus, G3 and G7, produced only a small number of nails, in addition to intrusive modern items.

Ditches and gullies closer to the focus of occupation, G19, G43, G45, G78 and G81 also yielded nails, with a concentration (14 in total) in the fills of G43. G43 was situated closest to Phase 2 building G39, a possibly halftimbered structure. Other items associated with buildings include part of a stone shingle of bioclastic limestone from G43, a double-spiked loop from G78 and fragments of wall plaster from G19 and G45. The latter comprised a small assemblage of 84 g from G19 (12g Type 1 and 72 g Type2), only two pieces retaining a flat surface which was redwashed, and 94 g from G45 (Type 1) with one piece having a white-wash. Whether this small assemblage derived from an earlier structure or perhaps from G39 is unclear.

In addition to building materials and fittings, G43 and G81 produced items of a more domestic nature. A whetstone of fine calcareous sandstone, the stone likely sourced from Northamptonshire, and the possible remains of an iron flesh hook of Manning type $1(1985,105)$ were found in the fills of G43. The earliest instance of a quern at Newnham occurred in the fills of G81. This comprised crushed fragments of lava, petrological analysis confirming the source as the Eiffel region. The importation of lava querns commenced soon after the initial conquest of southern Britain and, although introduced by the army, soon developed as an established part of civil trade (Buckley and Major 1998, 245). By the 3rd century the lava quern trade appears to have declined (Buckley and Major 1998, 245). Although these items give more of a flavour of daily life, it is difficult to determine if these activities were associated with any particular structure. The same can be said of the assemblage from G64, occupation deposits formed prior to the construction of building G65 in Area 2.

| G no | Item | No | Wt (g) |
| :--- | :--- | :--- | :--- |
| 3 | Nail shanks | 2 |  |
| 3 | Window glass modern | 1 |  |
| 7 | Nail Manning type 1A (1); type 1B (1) | 2 |  |
| 7 | Iron gate hinge pivot modern | 1 |  |
| 19 | Nail Manning type 1A (1); type 1B (1) | 2 |  |
| 19 | Wall plaster - red wash (type 2); no surfaces <br> (Type 2) | 0 | 72 |
| 19 | Wall plaster - no surfaces (type 1) | 0 | 12 |
| 43 | Iron flesh hook? | 1 |  |
| 43 | Whetstone | 1 |  |
| 43 | Nail Manning type 1A (2); type 1B (5); nail <br> shanks (7) | 14 |  |
| 43 | Stone tile fragment | 1 |  |


| G no | Item | No | Wt (g) |
| :--- | :--- | :--- | :--- |
| 45 | Wall plaster - white wash (1); no surfaces (2) <br> (type 1) | 0 | 94 |
| 45 | Ferrous slag undiagnostic | 0 | 15 |
| 81 | Quern fragments (crushed lava) | 1 | 34 |
| 81 | Nail Manning type 1A (1); type 1B (2) | 3 |  |
| 78 | Nail Manning type 1B | 2 |  |
| 78 | Iron double-spiked loop | 1 |  |
| 78 | Glass bottle sherd modern | 1 |  |
| 78 | Spoon handle modern | 1 |  |
| 64 | Iron ward from padlock key | 1 |  |
| 64 | Iron rod fragment (stem from tool?) | 1 |  |
| 64 | Iron hammer fragment(?) | 1 |  |
| 64 | Spouted globular jug handle blue-green glass | 1 |  |
| 64 | Square blue-green glass bottle | 1 |  |
| 64 | Copper alloy knife/dagger chape | 1 |  |
| 64 | Copper alloy seal box base | 1 |  |
| 64 | Iron sheet fragment | 1 |  |
| 64 | Nail Manning type 1B (2); nail shanks (5) | 7 |  |
| 68 | Nail Manning type 1B (2); nail shank (1) | 3 |  |
| 65 | Nail Manning type 1B (1); nail shank (2) | 3 |  |
| 32 | Nail Manning type 1B (1); nail shank (1) | 2 |  |
| 67 | Quern/millstone | 1 |  |
| 67 | Whetstone | 1 |  |
| 67 | Bone hair pin | 1 |  |
| 67 | Perforated iron sheet fragment | 1 |  |
| 67 | Iron strip fragment | 1 |  |
| 67 | Nail Manning type 1A (1); type 1B (9); nail <br> shanks (8) | 18 |  |
| 51 | Leather fragment | 1 |  |
| 51 | Stone roof shingle | 1 |  |
| 51 | Iron rod fragment | 1 |  |
| $7 a b$ | l5 O Ot A |  |  |

Table 15.4 Other Artefacts from Phase 3 deposits
The assemblage from G64 was not large and the ironwork, in particular, survived in a poor and fragmentary condition. Despite this there is evidence which indicates the use of a padlock, in the form of a ward from a padlock key, and tools, a stem from a small punch or chisel(?) and possibly part of a hammer. A handle fragment from a blue-green glass spouted globular jug, a form in use in the 2 nd to 3 rd centuries, and part of a square bottle were also recovered. The terminal of a possible knife or dagger scabbard chape was also present (Fig. 4.5 RA25). This was formed by folding a copper alloy sheet into a truncated cone, the lower edge of the sheet, at the narrowed end of the chape, folded in creating an inner lip, possibly to hold in place a flat disc forming the closure of the chape. One item which suggests a high-status resident was the seal-box base (Fig. 4.5 RA6). Seal boxes were used to protect the wax impressed with intaglios which sealed important packages (Cool 1998a, 99, citing Wheeler 1930, 108). The Newnham example is of circular form and can be closely paralleled by examples from Gorhambury (Wardle 1990, 130 and fig. 126 no. 204) and Verulamium (Goodburn 1984, fig. 13 no. 99). Seal boxes have a proposed floruit of the 1st and 2 nd centuries (Cool 1998a, 99). They rarely occur on sites of the late 3rd and 4th centuries; their use possibly declined during the 3rd century as the use of intaglio finger rings fell away (Cool 1998a, 99).

The make-up layers (G68) underlying building G65, surfaces within building G65 and the possible timber annexe of G65, represented by post-holes G32, all produced small quantities of nails. Where enough of the nail survived, these conformed to Manning's type 1B, general purpose carpentry nails.

Although a few areas of internal flooring, comprising limestone paving, survived within building G65 the only associated finds comprised three nails. The absence of any finds relating to the use and occupation of G65 at this time is probably largely due to the subsequent extensive robbing (Phase 5), but occupants keeping the interior floor surface clear may also have been a contributory factor. The fill of well G51, located less than 2 m to the south of G65, contained remnants of leather (which unfortunately did not survive the years intervening between excavation and analysis), an iron bar fragment and a part of a stone shingle. The shingle is Collyweston slate, from the Weldon area of Northamptonshire. Although incomplete this example does retain one edge of a perforation and appears to be of similar shape to other examples of Collyweston slate from the Roman villa of Gadebridge, Herts (Neal 1974, 193 and fig. 83 nos. 695-6). The Newnham example has been exposed to heat, as evidenced by a pinkish colour and one lightly sooted surface. At Gadebridge Park the walls close to a hypocaust stoke-hole were faced throughout with roofing tiles (Neal 1974, 8) and it is possible that the Newnham example may have been put to a similar use.

Part of a whetstone and a large quern were presumably reused within G67, cobbling/paving situated in the northern half of Area 5. The quern fragment (calcareous sandstone) has an estimated diameter of $600-650 \mathrm{~mm}$, but only a portion of the skirt and pecked grinding surface survived (Fig. 4.6 RA310). The whetstone (Fig. 4.5 RA176) was also
of calcareous sandstone and like the example from enclosure ditch G43 is thought to have come from the Northamptonshire area. In addition to fragmentary remains of iron sheet and nails, the latter predominantly of Manning type 1B, a single bone hair pin was found within the paving (Fig. 4.5 RA187). The broad, slightly conical head and tapering stem of this hair pin conforms to Greep's type A1, thought to be a mid-Roman type (Greep 1995. 1114). It can be fairly closely paralleled by an example from Dragonby, Lincs (Greep 1996, fig. 14.1 no. 1).

## Summary of the Phase 3 assemblage

The subsequent extensive robbing of buildings G39 and G65 mean that few if any finds relating to the occupation of these structures were found within the buildings, and hence the nature of any activities carried out within them is unclear. Open areas adjacent to buildings may however provide an indication of such activities and assist in suggesting the building's function. G43 (gullies lying adjacent to building G39) contained a whetstone and a possible flesh hook, suggestive of maintenance of tools and food preparation. This area was repaved G67, perhaps at a similar time to the construction of G65. Finds of a whetstone and quern within this repaved area give a similar flavour of household chores and basic maintenance activities. The bone hair pin, although indicating that some Roman fashions were being followed, was probably made on site and does not suggest any great degree of disposable wealth.

With the exception of special or votive deposits, artefacts are generally deposited at end of their useful life and therefore the assemblage probably reflects in many instances earlier activity. This is particularly true of the assemblage recovered from occupation deposits beneath building G65. The presence of the seal box, the use of which was in decline in the 3rd century, and the spouted globular jug of 2 nd to 3rd century, suggest that G65 was constructed perhaps in the mid to later 3rd century. What building this deposit was associated with however is unknown. It is possible that this area could have been used for general rubbish disposal, and that some of the material originated from activities carried out in G39. However the sizeable quantities of ceramic building material found in G65 (see Section 14) could suggest that an earlier building occupied the site of G65. Although there are possible fragmentary remains of tools within G65, the presence of the seal box and security measures, as evidenced by the remains of a key, might indicate that someone of higher status resided in this 'lost structure'.

The recovery of glass vessels, the seal box and querns, shingle and whetstones of imported stone all indicate access to, and the resources to purchase from, a market. The source of some of the stone (for example the whetstones and Collyweston Slate) indicate either this market, or the residents of Newnham, had some links to Northamptonshire.

## Catalogue: Phase 3

Shingle roof tile. Bioclastic limestone - local Jurassic. Incomplete, remains of one possible straight edge. Length 173 mm ; width 113 mm ; thickness 16.6 mm . Context 5b-28; G43

Double-spiked loop. Iron. Rectangular sectioned strip, bent to form loop, arms out-turned. Length 78mm. RA291. Context 2a-12; G78

Whetstone. Fine calcareous sandstone - Inferior Oolite Beds/Northants. Incomplete primary whetstone of rectangular plan and cross-section. Both faces and edges worn smooth, and one edge slightly dished, through use. One end squared, opposing end broken. Length 53 mm ; width 22.8 mm ; thickness 20mm. RA181. Context 5b-28; G43

Flesh hook? Iron. Rectangular sectioned stem, expanding in width before break. Opposite end splits, one arm going off at roughly 45 degree angle, other continuing in same direction as stem. Length 94.4 mm ; stem width 11 mm ; stem thickness 8.8 mm . Context $5 \mathrm{~b}-28$; G43

Ward key from padlock? Iron. Fragment of ward from padlock key, retaining edges of two rectangular 'cut-outs', ward of rectangular shape with rounded base. Length 27.7 mm ; width 31.4 mm ; thickness 5.6 mm . RA295. Context 2-133; G64

Tool stem from ?chisel or punch? Iron. Rectangular sectioned stem, one end tapering towards chisel shaped point, opposing end broken. Length 77.4 mm ; width 5.7 mm ; thickness 5.2 mm . RA83. Context 1-48; G64

Hammer? Iron. Robust rectangular-sectioned bar, with one curving surface suggesting part of a hammer head? Length 58.4 mm ; width 22 mm ; thickness 26.7 mm . RA153. Context 2-103; G64

Jug. Clear blue-green glass. Handle fragment, side of simple lower attachment retaining small fragment of convex-curved shoulder from a spouted globular jug. Dimensions 28 by 19mm. Context 2-172; G64
*Chape, copper alloy. Possible chape formed from sheet folded round to form a truncated cone, the narrowed end having an inner lip, possibly to hold in place a flat disc forming the closure of the chape end? Damaged and flattened. Height 16.6 mm ; width (flattened) 27.4 mm ; thickness of sheet 0.5 mm . RA25. Context 2-108; G64 (Fig. 4.5)
*Seal box, copper alloy. Base of seal box with four circular perforations in a Y-shape pattern, two perforated lugs for hinge. The upper edge of the box has a U-shaped notch on either side on axis at right angles to hinge/cup line. Length 18.8 mm ; width 17m. RA6. Context 1-105; G64 (Fig. 4.5)

Bar. Iron. Rectangular-sectioned bar of iron, one end squared, opposing end broken. Length 123.7 mm ; width 18.2 mm ; thickness 8.5 mm . RA32. Context 2-166; G51

Shingle, Collyweston slate. Incomplete, two joining pieces. Appears to be sub-triangular in outline, with remains of one edge of perforation along the narrower 'top'. Possibly exposed to heat, as pinkish and one surface lightly sooted. Length $c$. 255 mm ; width 155 mm ; thickness 19 mm . Context 2-166; G51
*Whetstone. Coarse calcareous sandstone - Inferior Oolite Beds/Northants. Incomplete primary whetstone of sub-rectangular plan and crosssection. Upper and lower faces worn smooth through use. Roughly squared on one face, opposing end broken. Length 66.5 mm ; width 20 mm ; thickness 14 mm . RA176. Context 5b-18 G67 (Fig. 4.5)
*Quern. Calcareous sandstone - source unknown. Portion of a sloping skirt, flat base and flat, pecked grinding surface. No feeder or spindle hole survives and it is difficult to determine whether this is an upper or a lower stone. Thickness 123.6 mm ; estimated diameter between $600-650 \mathrm{~mm}$. RA310. Context 5b-18 G67 (Fig. 4.6)
*Hair pin. Bone - shaft of large mammal longbone. Greep type A1. Head slightly conical, tapering shank of rounded cross-section, tip missing. Length 70 mm ; diameter 7.8 mm . RA187. Context 5b-35; G67 (Fig. 4.5)

## V. Phase 4 mid to late Roman (late 3rd/4th-late 4th centuries)

The sizeable enclosure/drove-road ditch G8 yielded only a single nail. In contrast, the smaller possible trackway ditch, G44, situated closer to residential occupation, produced a greater number of finds, but once again over half the assemblage comprised nails. Subsistence activity is represented by the remains of a Niedermendig lava quern. As in the case of the example from Phase 3, this survived only as crushed fragments. Crafts are represented by the red deer antler off-cut and a possible fragment from the blade of an axe. The possible gaming piece or counter of micaeous sandstone may well have been formed from a broken whetstone (Fig. 5.4 RA52). One face of the cuboid stone has a single off-centre drilled dot and one 'end' has a rough circle of eight drilled dots encircling an off-centre dot. Quite what game the piece might have been used in is not known, but it does suggest that some leisure time was available.

| G no | Item | No | Wt (g) |
| :---: | :---: | :---: | :---: |
| 8 | Nail shank | 1 |  |
| 44 | Quern fragments (crushed lava) | 1 | 10 |
| 44 | Stone gaming piece? | 1 |  |
| 44 | Antler off-cut | 1 |  |
| 44 | Iron axe(?) fragment | 1 |  |
| 44 | Iron fragment | 1 |  |
| 44 | Nail Manning type 1B (3); nail shanks (5) | 8 |  |
| 44 | Flint flake | 1 |  |
| 57 | Yellow-brown glass bottle modern | 1 |  |
| 57 | Lead rolled sheet (fishing weight?) | 1 |  |
| 57 | Nail Manning type 1B (6); nail shanks (5) | 11 |  |
| 57 | Fuel ash slag |  | 28 |
| 57 | Wall plaster - white wash (type 4) |  | 4 |
| 57 | Wall plaster - no wash (type 1) |  | 12 |
| 70 | Wall plaster -white washed; shaped (type 6) |  | 897 |
| 70 | Perforated iron sheet fragment | 1 |  |
| 70 | Iron fragments | 2 |  |
| 70 | Nail Manning type 1B (2); type 2 (1); type 3 (1); nail shanks (3) | 7 |  |
| 70 | Ferrous slag undiagnostic |  | 103 |
| 69 | Blue-green glass prismatic bottle | 1 |  |
| 69 | Clear colourless burnt glass sherd modern | 1 |  |
| 69 | Iron padlock lift key stem | 1 |  |
| 69 | Iron annular collar | 1 |  |
| 69 | Iron annular ring | 1 |  |
| 69 | Nail Manning type 1B (1); nail shanks (3) | 4 |  |
| 72 | Plaster (type 3 - no surfaces) |  | 47 |
| 72 | Nails Manning type 1B (15); nail shanks (7) | 22 |  |
| 72 | Double-spiked loop | 2 |  |
| 72 | Padlock key | 1 |  |
| 72 | Prismatic bottle body sherd | 1 |  |
| 72 | Quern fragment | 1 |  |
| 72 | Coin Valens AE3 AD375-378 | 1 |  |
| 72 | Copper alloy bracelet | 1 |  |
| 72 | Bone pin/needle shank | 1 |  |
| 72 | Copper alloy toothpick/nail cleaner? | 2 |  |
| 72 | Iron sheet fragments | 2 |  |
| 34 | Nail Manning type 1B (3); nail shank (1) | 4 |  |
| 34 | Ferrous smelting slag |  | 46 |
| 52 | Stone roof shingle | 2 |  |
| 52 | Limestone slabs with mortar |  |  |
| 52 | Wall plaster - white wash; red wash; no surfaces (type 1) |  | 3848 |
| 52 | Wall plaster - white wash; red wash; painted (type 2) |  | 933 |
| 52 | Wall plaster - red wash (1 shaped); no surfaces (type 3) |  | 749 |
| 52 | Wall plaster - white washed; red wash; |  | 4486 |


| G no | Item | No | Wt (g) |
| :--- | :--- | :--- | :--- |
|  | shaped and painted (type 4) |  |  |
| 52 | Wall plaster - no surfaces (type 5) |  | 226 |
| 52 | Wall plaster - painted (type 6) | 1 | 3 |
| 52 | Clear colourless glass beaker | 1 |  |
| 52 | Iron knife blade fragment | 1 |  |
| 52 | Bone trimmed off-cut | 1 |  |
| 52 | Leather fragments | 1 |  |
| 52 | Copper alloy sheet fragment - flattened <br> vessel? | Nail Manning type 1A (1); type 1B (2); nail <br> shanks (2) | 5 |
| 52 | Ferrous slag undiagnostic |  | 36 |
| 52 |  |  |  |
| Table | $\mathbf{1 5 5}$ Other Artefacts from Phase 4 deposits |  |  |

Ditch G57 is located immediately adjacent, if not cutting, the south-east wall of building G39. The assemblage of finds from its fills comprises in the main nails, along with small quantities of plaster $(16 \mathrm{~g})$ and fuel ash slag ( 23 g ). These could have derived from the use and occupation of this structure. The lead sheet may have been scrap rolled ready for recycling, alternatively, it may be a net weight for fishing (Steane and Foreman 1988, 162).

Although the main focus of occupation was building G65, few finds were recovered from deposits within the building (G70) due to subsequent extensive robbing down to the foundation levels. Once again, a small assemblage of nails was found, including the first instances of Manning's Type 2 (triangular head) and Type 3 (T-shaped head) nails (Manning 1985,135 ), along with iron sheet fragments and 103 g of undiagnostic ferrous slag with mineralised fuel (wood) remains. These items convey little of the building appointments nor the activities of the occupants. The one exception to this is a piece of moulded wall plaster having two whitewashed surfaces, one convex and one slightly angled. This presumably was part of a reveal, but whether from a doorway, window or recess is unknown (see Fig. 5.8 for profile).

Occupation deposits (G69) overlying the external cobbled surface in Area 2, to the south of G65, yielded remains of four nails, the stem and looped-over head of a padlock or lift key, a prismatic bottle, a small fragment from an annular iron ring and part of a large iron cylindrical collar. The latter has an estimated diameter of 86 mm , making it is too large to have served as a collar on a hafted tool or a pivot lining, but smaller than the norm for a hub or nave lining, which vary from slightly under 100 mm to almost 140 mm (Manning 1985, 72). It is possible that it is from a smaller wheeled vehicle.

The assemblage of finds from G72 (deposits overlying the cobbled surface in the northern half of Area 5) has several of the same elements noted in G69, including a small amount of plaster, fasteners such as nails and double-spiked loops, a padlock key and a prismatic bottle fragment. There is, however, an increased repertoire including items of a more personal nature and the first instance of a coin. The coin, an AE3 of Valens, must have been deposited towards the end of this phase as it dates between AD 375-378. This not only serves to confirm activity in the later 4th century but also that the residents had access to currency and hence took part in some commerce, although the latter was already evidenced in earlier phases by the presence of imported querns. The fragment of quern recovered from G72 is the earliest instance of millstone grit, as opposed to lava, at Newnham. With a source in the Pennines, perhaps Derbyshire, this would point to either changes in site contacts or a change in supply. As noted previously (see Phase 3 discussion) by the 3rd century the lava quern trade appears to have declined (Buckley and Major 1998, 245). It was during this same period that the market for millstone grit querns widened and they first began to appear in south eastern England in quantity (Wright 1996, 371; Buckley and Major 1998, 246).

The more personal items from deposit G72 includes a small fragment of a bracelet (Fig. 5.4 RA253) with continuous vertical grooves. This is an example of a light bangle bracelet of the kind in use throughout the 4th century. The earliest occurrence of what is thought to be a toilet implement (Fig. 5.4 RA53) also occurred in G72. This comprises a pair of cast copper alloy sickle-shaped instruments with a suspension loop in the opposite plane to the sickle; both objects suspended from an 'S-shaped' link of circular-sectioned wire. Only one of the pair retains its tip and this is narrowed and turned at roughly right angles to the curve of the sickle. This does not appear to be a common implement type, but parallels have been found at Colchester (Crummy 1983, fig. 66 no. 1939) and Verulamium (Waugh and Goodburn 1972, fig. 35 no. 76). Nor is its function certain: perhaps it was a tooth pick or nail cleaner.

G34 lay to the north of building G65 and is presumed to be a rubbish pit. It contained four nails and a small amount $(46 \mathrm{~g})$ of ferrous slag. Although small quantities of ferrous slag were recovered from earlier phases none was diagnostic of smithing or smelting. This piece is a fragment of smelting tap slag, but the quantity is too small to suggest where a furnace was located.

Pit G52 situated some 3.4 m south-west of building G65 is thought to have been a water pit. While the construction and use of the water pit may have been contemporary with the use of G65, the content of its disuse fills is more suggestive
of at least partial demolition or disposal of portions of a dilapidated structure. There is a small component of the assemblage which is related to domestic life and associated craft level activities, for example a beaker sherd, a knife blade fragment, a bone off-cut and ferrous slag $(36 \mathrm{~g})$. These may be residual debris from earlier activity which became incorporated into the water pit backfill; certainly similar elements occurred in earlier phases and in fact the colourless beaker sherd is thought to date to the early to mid-2nd century (Price and Cottam 1998, 91-2). The bulk of the assemblage from G52, however, comprises building materials. If building G65, or parts of it, were falling into disrepair late in Phase 4 and the water pit was then no longer in use, it would have provided a convenient means of disposing of the material.

The building materials recovered comprise stone shingle, two small mortared limestone slabs and over 10kg of wall plaster. The stone shingles comprised two examples in Collyweston slate. The earliest appearance of Collyweston slate shingle at Newnham occurred in Phase 3, within the disuse fills of well G51, situated within 20 m of G65. That example was incomplete and presumably was discarded for that reason. One of the shingles from G52 was complete and of roughly diamond shape. Its size, shape and stone type can be paralleled by an example from the villa at Gadebridge Park, Herts (Neal 1974, fig. 83 no. 696). Although this might suggest that at least part of G65 had a stone shingle roof, it should be noted that at Gadebridge Park the walls of the bath house, which were constructed of flint and hard mortar, had a double bonding course of roofing tiles, and the walls close to the stoke-hole were faced throughout with roofing tiles (Neal 1974, 8).

The mortared slabs of bioclastic limestone were very roughly shaped, the mortar applied unevenly and the upper slab placed slightly inset from the edge of the lower slab. Whether this represents part of a simple garden wall or part of a bonding course is uncertain.

All plaster fabric types (see below for full descriptions) were represented in the $10,245 \mathrm{~g}$ assemblage from G52 (see Table 15.6); the majority was either a pink colour (Fabric types 1, 2 and 6) or white (Fabric types 4 and 5). There was a restricted range of surface treatment, most fragments having either a white or red wash, but in some cases no wash. Few pieces had painted decoration applied over a white wash or skim and of these there was a limited palette of colours, red being the most prevalent, with single instances of a very pale yellow (or off-white), grey and black. The painted decoration was in the main restricted to linear bands; only one fragment had a more complex motif (Fig. 5.8 14). The fragments possessing painted linear bands were generally too small to determine if they represented panels or borders. Three pieces were mouldings, possibly from reveals such as doors, windows or recesses. The diverse character of the fabric types present might suggest that the plaster derived from more than one room, although it is possible that the differing colours of the plaster were used to reflect changes in the vertical face of the wall or perhaps walls versus ceilings.

| Plaster fabric type | Wt (g) | $\mathbf{\%}$ | Surface treatment |
| :--- | ---: | ---: | :--- |
| Type 1 (dark pink coarse) | 3848 | 37.56 | No wash; white wash; red wash |
| Type 2 (light pink coarse) | 933 | 9.11 | No wash; white wash; red wash; painted (white wash with red band) |
| Type 3 (buff coarse) | 749 | 7.31 | Right angled moulding with thick red wash |
| Type 4 (white coarse) | 4486 | 43.79 | No wash; white wash; red wash; painted (red band; red and black band; painted motif (Fig. <br> $r .8 .8$. no.14); mouldings - Fig. 5.8 no.9 (white wash) and Fig. 5.8 no.10 (no wash) |
| Type 5 (white fine) | 226 | 2.2 | (no surfaces) |
| Type 6 (dark pink fine) | 3 | 0.03 | painted (white wash with red band) |
|  | $\mathbf{1 0 2 4 5}$ | $\mathbf{1 0 0}$ |  |

Table 15.6 Plaster from G52 by Fabric type

## Summary of Phase 4 Assemblage

Building G39 is assumed to have gone out of use by this phase, as evidenced by ditch G57 which cuts through the outer edge of the south-east foundation of G39. The finds from trackway ditches G44 situated some $5-11 \mathrm{~m}$ from G39, continue to reflect subsistence activities such as small scale crafts and grain processing and these may be residual from Phase 3 activity associated with G39.

The majority of the assemblage derives from external cobbled surfaces immediately outside of, and to the south of, building G65, and water pit G52, 3.4m south-west of G65. The finds from the external cobbled areas, in common with those of previous phases, include building fasteners, evidence of locking mechanisms and vessel glass. The latter, if not residual from earlier phases, was by this time at the end of its popularity. In addition personal items, such as a light bangle bracelet and a toiletry item were in evidence in limited numbers. A single coin (Valens AD 375-78) was also recovered, which must have been lost at the very end of Phase 4 . The quantity of finds recovered has increased from previous phases; although this could reflect an increase in prosperity, it could also indicate a lack of regard for maintaining the environs. The latter suggestion may find some support when considering the content of pit G52. This water pit had a small quantity of what could be termed household items within its fills, but the vast majority of the assemblage comprised wall plaster. This is more suggestive of partial demolition or disrepair of building G65; certainly if water pit G52 was related to the use of this structure, or at least part of the structure, its filling with over 10 kg of wall plaster, over 5 kg of pottery and 363 fragments of ceramic building material, including flue tile, imbrex
and tegula would suggest at the very least a change of use and more likely abandonment, presumably at the close of Phase 4.

The wall plaster does indicate a degree of prosperity but not on the scale of (for example) Gorhambury (Neal, Wardle and Hunn 1990) or Gadebridge Park (Neal 1974).

## Catalogue: Phase 4

Quern. Lava - Mayen-Eifel region of Germany. Tiny fragments of lava, presumably from a rotary quern. No diagnostic features apparent. RA317. Context 5b-15; G44

Off-cut. Red deer antler. Portion of a split antler, one edge knife cut and one end sawn and smoothed. Opposite end broken. Length 54mm; width 21 mm . RA267. Context 5b-15; G44

Axe? Iron. Blade fragment? Sub-rectangular in plan, triangular in cross-section. Tapering in thickness to blade edge. Length 41 mm ; width 37 mm ; thickness (max.) 11mm. RA207. Context 5b-15; G44
*Gaming piece/counter. Sandstone - slightly micaeous, source unknown. Cuboid block, retaining steep arises. Sub-rectangular in plan and crosssection. The block, possibly sawn(?) from a broken whetstone(?) has flat fairly smooth surfaces. One surface has a single drilled dot, not centred, and one 'end' has a rough circle of eight drilled dots encircling an off-centre dot. Length 39.5 mm ; width 34.7 mm ; thickness 34.2 mm . RA52. Context 5b-8; G44 (Fig. 5.4)

Fishing net weight? Lead alloy. Cylindrical rolled sheet of lead; Length 60.5 mm ; width 8.6 mm ; thickness 7.6 mm ; sheet $c$. 2 mm thick. RA36. Context 4f-23; G57

Padlock key. Iron. Rectangular-sectioned stem, end folded over to form looped head. Lower stem narrows slightly just before break. Length 99 mm ; width stem 15.6 mm ; thickness stem 4.6 mm . RA44. Context 2-168; G69

Prismatic bottle sherd. Blue-green translucent glass. Context 2-3; G69
Ring. Iron. Small portion of an annular ring, oval in cross-section. Too small to determine overall dimensions. Width 8.6 mm ; thickness 7 mm . RA90. Context 2-3; G69

Collar. Iron. Less than half of a rectangular-sectioned annular collar, estimated diameter 86 mm ; height 30.4 mm ; thickness 7.8 mm . RA89. Context 2-3; G69

Double spiked loop. Iron. Rectangular sectioned strip bent into loop with two parallel arms, tips missing. Length 68mm. RA294. Context 5b-11; G72

Spiked loop. Iron. Half of a (?)double-spiked loop comprising half a looped head, rectangular sectioned stem lower tem bent at c .45 degree angle. Length 117 mm . RA56. Context 5b-11; G72

Key. Iron. Padlock key, stem of flat rectangular cross-section with one end bent over to form a loop. The lower stem is dented and distorted but retains remains of what would have been a right angled rectangular bit with two rectangular wards, one above the other. In two pieces. Upper stem length 71 mm ; lower stem 45 mm ; width 11.6 mm ; thickness 5.4 mm . RA55. Context $5 \mathrm{~b}-11$; G72

Prismatic bottle. Clear blue-green glass. Body sherd. Context 5b-11; G72
Coin AE3 - Valens. Reverse GLORIA ROMANORVM - emperor and captive. Mint mark •/*//SMAQ; mint Aquileia. Reference CK:1043. AD375-378. RA59 Context 5b-11; G72

Quern. Millstone grit - Pennines (Derbyshire?). Small fragment of straight but angled skirt, steep worn grinding surface. The upper surface is also worn, suggesting later re-use? Too little survives to estimate diameter. Thickness (skirt 39.3mm). RA307. Context 5b-11; G72
*Bracelet. Copper alloy. Light bangle type, D-shaped in cross-section with continuous vertical grooves. Fastening does not survive. Length 28 mm ; width 4mm; thickness 1.6 mm . RA253. Context 5b-11, G72 (Fig. 5.4)
*Toothpick or nail cleaner? Copper alloy. Two cast hooks. The heads of the hooks comprise a loop which is inset from the main stem. An Sshaped link of circular sectioned wire has been threaded through both loops. The curving stems are of flat rectangular section. One hook retains its tip which is narrowed and at roughly right-angles to the curve of the hook. Length of hooks c. 72mm. RA53. Context 5b-11; G72 (Fig. 5.4)

Beaker. Clear colourless glass. Body fragments, straight side. Body diameter 60mm. Context 2-217; G52
Knife. Iron. Tip of triangular sectioned knife blade. Too little of blade survives to determine form. Length 53.6 mm ; width 13 mm ; thickness 7.4 mm . RA159. Context 2-171; G52

Offcut. Bone. Portion of a long bone, all surfaces worked as evidenced by knife cuts and trimming. Length 75.8 mm ; width 16.4 mm ; thickness 12.4 mm . RA42. Context 2-178; G52

## VI. Phase 5 (late 4th/early 5th century AD to Saxon)

The 'other artefacts' assemblage from Phase 5 is limited to features associated with the robbing of buildings G39 and G65. As might be expected, many of the artefacts recovered derived from earlier phases of activity within and around these buildings. When the robbing of the structures took place is unclear and it may have occurred over a lengthy period. The coins recovered from robber trenches of the buildings and external surfaces do however provide a
terminus post quem for this activity. Single instances of coins were found in the robber trenches associated with the hypocaust destruction G73 (Constantinopolis AD 330-340) and foundations G79 (Constantine II AD 323-324) of G65. The coin evidence from destruction layers G74 lying outside G65 is consistent in date, with an example of a Constantius II (AD 330-335). The coin evidence associated with the destruction of G39 is slightly later in date, with a coin of Magnentius (AD 350-352) from the foundation robber trench G80 and from surfaces outside the building, G77, a coin of Valens (AD 367-375).

Robbing of the walls of both G39 (G80) and G65 (G79) produced small assemblages, in the main comprising of nails, but in the case of G65 including residual vessel glass dating from the 1 st to 3 rd centuries and a small quantity $(116 \mathrm{~g})$ of red-washed wall plaster. G80 (robbing of G39) also contained what appears to be a cast copper alloy leatherworking awl (Fig. 6.4 RA30).

The largest assemblage associated with internal features of a building derived from the destruction fills of the hypocaust (G73) within building G65, with a smaller quantity of finds from G75, a layer within G65. Again much of the material resembles the composition of assemblages from earlier phases including the presence of nails, annular rings, two possible chisels, a blade fragment from a large knife or cleaver, fragments of iron strips and sheet, and sherds of blue-green vessel glass of the 1st to 3rd centuries. There is one sherd of colourless bubbly glass that may date to the 4th century and represents the only possible example of window glass. The latter, however, is unusual in being cast, not a method generally thought to be used by Roman window glass makers (Harden 1961, 44-48). There is also a possible iron ladle; the poor condition of the remains however make certain identification impossible. Personal items were limited to a single example of a three-strand cable bracelet (Fig. 6.4 RA26), one of the commonest types of bracelet in use in Roman Britain from the later 1st to the 4th centuries (Cool 1983, bracelet group 1).

| G no | Item | No | Wt (g) |
| :---: | :---: | :---: | :---: |
| 80 | Coin Magnentius. AE2. AD350-352 | 1 |  |
| 80 | Copper alloy awl? | 1 |  |
| 80 | Nail Manning type 1B (3); type 2 (1); nail (2) | 6 |  |
| 80 | Flint scraper | 1 |  |
| 76 | Blue-green glass cylindrical bottle | 1 |  |
| 76 | Copper alloy spatula | 1 |  |
| 76 | Iron double spiked loops | 2 |  |
| 76 | Iron L-shaped wall hook | 1 |  |
| 76 | Nail Manning type 1A (1); type 1B (29); nail shanks (12) | 42 |  |
| 76 | Wall plaster - white wash and red paint (type 4) |  | 170 |
| 76 | Wall plaster - grooved surface (type 5) |  | 6 |
| 76 | Cast iron pulley wheel modern | 1 |  |
| 77 | Coin Valens; AE3. AD367-375 | 1 |  |
| 77 | Blue-green glass vessel sherd modern | 1 |  |
| 77 | Brown glass vessel sherd modern | 1 |  |
| 77 | Whetstone | 1 |  |
| 77 | Iron pot hooks | 2 |  |
| 77 | Rolled lead sheet - fishing weight? | 1 |  |
| 77 | Lead sheet fragment | 1 |  |
| 77 | Flint flakes | 2 |  |
| 77 | Flint scraper | 1 |  |
| 77 | Nail Manning type 1B (12); nail shanks (6) | 18 |  |
| 79 | Coin Constantine II Caesar; AE2. AD323-324 | 1 |  |
| 79 | Blue-green glass vessel sherd | 1 |  |
| 79 | Olive green glass wine bottle modern | 1 |  |
| 79 | Iron fragment | 1 |  |
| 79 | Wall plaster - red wash (type 1) |  | 116 |
| 79 | Nail Manning type 1B (2); type 4 (1); nail shank (1) | 4 |  |
| 73 | Coin Constantinopolis. AE3. AD330-340 | 1 |  |
| 73 | Copper alloy three strand cable bracelet | 1 |  |
| 73 | Blue-green glass prismatic bottle | 1 |  |
| 73 | Blue-green glass handle sherd (melted) | 1 |  |
| 73 | Clear colourless bubbly glass body sherd | 1 |  |
| 73 | Iron knife/cleaver blade fragment(?) | 1 |  |
| 73 | Iron annular rings | 2 |  |
| 73 | Iron rod fragment (stem from punch or chisel?) | 1 |  |
| 73 | Iron fragments (strips and sheet) | 3 |  |
| 73 | Nail Manning type 1A (2); type 1B (5); type 4 (1); nail shanks (4) | 12 |  |
| 73 | Blue-green cast window glass | 1 |  |
| 73 | Opus signinum (type 1) |  | 166 |
| 73 | Wall plaster - red wash (type 1) |  | 340 |
| 73 | Wall plaster - red wash; white wash; no wash; |  | 18807 |


| G no | Item | No | Wt (g) |
| :--- | :--- | :--- | :--- |
|  | shaped (type 2) |  |  |
| 73 | Wall plaster - white wash (type 3) |  | 414 |
| 73 | Wall plaster - white wash; red wash (type 6) |  | 181 |
| 75 | Blue-green bottle sherd modern | 1 |  |
| 75 | Iron chisel | 1 |  |
| 75 | Iron ladle(?) | 1 |  |
| 75 | Iron fragments | 2 |  |
| 75 | Nail Manning type 1A (1); type 1B (9); type 4 <br> (2); nail shank (1) | 13 |  |
| 75 | Wall plaster - red wash (type 1) |  | 96 |
| 75 | Wall plaster - white wash (type 2) |  | 30 |
| 75 | Fuel ash and ferrous slag - smithing | 46 |  |
| 74 | Coin Constantius II Caesar; AE3. AD330-335 | 1 |  |
| 74 | Iron L-shaped wall hook | 1 |  |
| 74 | Copper alloy drop handle | 1 |  |
| 74 | Nail Manning type 1B (1); nail shank (1) | 2 |  |
| 74 | Wall plaster - white wash, red wash, no wash; <br> one shaped (Type 1) |  | 952 |

Table 15.7 Other Artefacts from Phase 5 deposits
The most common item within the fills of the hypocaust was wall plaster. Over 19.7 kg of wall plaster was recovered from G73, with a further 126 g from destruction layer G75. Four of the six plaster fabric types identified were present (see below for fabric descriptions). The overwhelming majority of the plaster comprised fabric Type 2, with over half ( $54.2 \%$ ) possessing a red wash, white washed pieces accounting for $27.3 \%$ of the Type 2 assemblage by weight. Four angled mouldings, one with no wash and three with red wash, and a plano-convex moulding (red wash) presumably derived from door, window or recess reveals. Only one piece had evidence of any painted decoration and this comprised a linear red band. It is unfortunately impossible to determine if this collection came from more than one room. The paucity of wall painting might suggest a plain scheme, but the possibility of selective retention of painted designs by the people who robbed the building should not be overlooked. A single piece $(166 \mathrm{~g})$ of what is thought to be opus signinum was also found within G73. This occurs in fabric Typel and has a very smoothed almost polished surface with no wash and is exceptionally hard.

| Plaster fabric type | Wt (g) | $\mathbf{\%}$ | Surface treatment |
| :--- | ---: | ---: | :--- |
| Type 1 (dark pink coarse) | 436 | 2.2 | Red wash |
| Type 2 (light pink coarse) | 18,837 | 94.8 | No wash; white wash; red wash, painted (red over white wash); angled moulding no wash (App <br> *illus. 1); red wash (App *illus 2-3); plano-convex red wash |
| Type 3 (buff coarse) | 414 | 2.1 | White wash |
| Type 6 (dark pink fine) | 181 | 0.9 | White wash; red wash |
|  | 19,868 | 100 |  |

Table 15.8 Plaster from G73 by Fabric type
The destruction levels G74 lying outside G65 produced a small assemblage of building fasteners and fittings, including two nails and a small L-shaped wall hook, the size of the later paralleled by an example from Gadebridge Park (Manning 1974, 174, fig. 74 no. 520). A moderate quantity of wall plaster ( 952 g ), all in fabric Type 1, had a mixed surface treatment. Like the wall plaster found within G73 most of this had a red wash, although some surfaces were left untreated and one angled moulding had a white wash on two exposed faces (Fig. 5.8 no. 6). Although no furniture survived, the small cast drop handle with knobbed terminals attests to the presence of a small chest or box, (Fig. 6.4 RA33) which can be paralleled by an example from later 2nd to earlier 3rd century deposits at Verulamium (Goodburn 1984, fig. 20, no. 181) and one from mid-3rd to 4th century deposits at Colchester (Crummy 1983, fig. 85 no. 2134).

G76 comprises destruction deposits situated in the immediate area of building G39. This deposit contained a sizeable quantity of nails (42 in total) the majority of Manning's type 1B. In addition, two double-spiked loops and an Lshaped wall hook were in evidence. These may all have served as building fittings within the half-timbered structure G39. One example of a possible cylindrical bottle, in use in the later 1st to early 2 nd century, was also found in G76. This is heat affected and so it is not possible to see whether there were any of the characteristic vertical scratch marks present, which would have confirmed the identification. Long-handled tools, such as the straight-sided spatula with conical top (Fig. 6.4 RA39), could be used by doctors, in surgery or application of medicines, but also by others (e.g. in the preparation and application of cosmetics: Cool 1998b, 83). Unlike small toiletry items, long-handled tools were not subject to fashion and hence cannot be dated closely. The only other item found in G76 was a small quantity of wall plaster, comprising 6 g of fabric Type 5 , with keying on the surface, and 170 g of fabric Type 4 which retains a thick white wash and traces of red paint. Deposits within or around building G39 produced little plaster during its lifetime (Phase 2 and 3) and little in the destruction phases. Hence although it is likely that the walls were covered, the material used remains uncertain.

Destruction layer G77 was situated to the south of G65 and to the north-west of G39. The deposit contained both residual finds, in the form of flints, and evidence of modern intrusion (two glass vessel fragments). With the exception of a coin of Valens (AD 367-375), which provides a terminus post quem for the deposit (see above), the assemblage is not closely datable. Over half the assemblage from this layer comprised remains of nails, where identifiable conforming to Manning's type 1B general purpose nail $(1985,134)$. Remains of a lead sheet and a rolled lead sheet possibly represent robbing activity, although the rolled sheet could also have been a fishing-net sinker (see Phase 4 discussion, G57). Two rectangular sectioned bars with hooked ends (incomplete lengths between 107 mm and 149 mm ) may have served as pot hooks; the incomplete nature of both examples precludes certainty as to identification. The primary whetstone of coarse calcareous sandstone (Fig. 6.4 RA234) is possibly of the Inferior Oolite group sandstones and if so its most likely source lies in a line from Blisworth to Northampton to Kettering. Whetstones from the same source were first encountered in Phase 3 deposits. The assemblage from G77 is small and most elements have been previously encountered in earlier phases. The items may have accumulated over time in the cobbled area or have been disturbed and redeposited during demolition activity.

## Summary of Phase 5 assemblage

The assemblage from Phase 5 deposits comprises in the main elements encountered in earlier phases. A large proportion of these may be residual, possibly disturbed and redeposited during demolition, and are likely to be more reflective of occupation in the 3 rd and earlier part of the 4 th centuries. The general picture provided is one of a fairly well-off, but not luxurious, establishment.

## Catalogue: Phase 5

Constantinopolis. Reverse, Victory on prow. AE 3. Mint mark //TR•P; mint Trier. Reference HK:66. AE3. AD 330-340. RA3. Context 1-18; G73
Constantius II Caesar. Reverse GLORI EXERCITVS - 2 standards; mint mark //[....]. AE3. AD 330-335. RA29. Context 2b-5; G79
Magnentius. Reverse VICT DD NN AVG ET CAES- VOT/V/MVLT/X; mint mark //RP; mint Rome. Reference CK: 650. AE2. AD 350-352. RA31. Context 4a-36; G80

Valens. Reverse SECVRITAS REIPVBLICAE; mint mark //SMleafRP; mint Rome; Reference CK: 725. AE3. AD 367-375. RA 50. Context 5b-5; G77

Vessel. Blue-green translucent glass. Body sherd fragment - form indeterminate. Context 2-9; G79
*Awl? Copper alloy. Leathering working awl? Lower body square in cross-section, tapering to a point. Mid-section rounded, tapering in thickness to a square-sectioned top. Bent. Length c. 101 mm ; lower shank 2 mm by 2 mm ; mid-point 3.3mm diameter.. RA30. Context 4a-25; G80 (Fig. 6.4)

Ring. Iron. Annular ring in several joining pieces in poor condition. Estimated diameter 52 mm ; width 10 mm ; thickness 9 mm . RA 5. Context 1-18; G73

Ring. Iron. Small annular ring in poor condition. Estimated diameter 37mm; width c. 4mm. RA114. Context 2-14; G73
Stem from punch or chisel? Iron. Stem of rectangular section, both ends broken. Possibly from a tool. Length 84 mm ; width 12.7 mm ; thickness 11 mm . RA101. Context 2-14;G73

Chisel? Iron. Bar of sub-rectangular cross-section tapering to a point at one end. The opposing end expands in width and tapers in thickness. Length 100 mm ; width 25 mm ; thickness 12.3 mm . RA116. Context 2-26; G75

Large knife or cleaver? Iron. Two pieces of triangular sectioned blade, both broken either end. Lengths $45 \mathrm{~mm} ; 47.5 \mathrm{~mm}$; widths $30 \mathrm{~mm} ; 24 \mathrm{~mm}$; thicknesses 4.6 mm . RA106. Context 2-14; G73

Melted glass sherd. Blue-green translucent glass. Retaining two layers, possibly from handle attachment. Context 2-14; G73
Glass body sherd fragment - form indeterminate. Clear colourless glass with numerous bubbles. Context 2-14; G73
Ladle? Iron. Rectangular sectioned stem, broken one end, opposing end retains junction of bowl and stem? Length 108.3 mm ; width 47 mm ; thickness 26 mm . RA115. Context 2-26; G75
*Bracelet. Copper alloy. Incomplete, portion of a three strand cable bracelet, fastening does not survive. The cables are made of circular sectioned wire (diameter 1.7 mm ). Length (straightened) c. 99 mm ; width 3.2 mm ; thickness 2.8 mm . RA26. Context 2a-4; G73 (Fig. 6.4)

Wall hook. Iron. Small L-shaped wall hook, rectangular in section. Length 51 mm ; height 34 mm . RA162. Context 2-210;G74
*Handle. Copper alloy. Small cast 'drop' handle, ends narrowed and folded over in same plane as body, tips in the shape of acorns. A single copper alloy link is threaded through either end. Main body of handle is lozenge-shaped in cross-section. Length 53 mm ; width 4 mm ; thickness 4 mm . RA33. Context 2-210;G74 (Fig. 6.4)

Double-spiked loop. Iron. Tips missing. Length between out-turned arms and loop head indicates it perforated a thickness of wood of c .40 mm ; Height 81.6 mm . RA40. Context 4f-9;G76

Double-spiked loop. Iron. Rectangular sectioned strip of iron bent to form a loop, ends broken but beginning to turn out. Height 53.5mm. RA43. Context 4f-28; G76

Wall hook. Iron. L-shaped wall hook, base arm tapering in thickness to wedge-shaped point. Upright arm tapering in width to wedge-shaped point. Length 56 mm ; height 31 mm ; width 12 mm ; thickness 9.3 mm . RA290. Context $4 \mathrm{f}-10 ; \mathrm{G} 76$

Cylindrical bottle sherd? Clear blue-green glass. Heat affected - possibly cylindrical bottle but it is heat affected and so it is not possible to see whether there were any of the characteristic vertical scratch marks which would confirm identification. Context 4f-28; G76
*Spatula. Copper alloy. Cast spatula with expanded 'cone-shaped' terminal, rounded stem which expands in width but thins to form a flat rectangular-sectioned spatulate end. Length 149 mm ; width spatulate end 7.5 mm ; thickness 1.2 mm ; diameter of stem 3.6 mm . RA39. Context 4f-9: G76 (Fig. 6.4)

Net weight? Lead. Cylindrical roll of sheet, one end bent and damaged. Length 82 mm ; width 12 mm ; thickness 10.2 mm . RA58. Context $5 \mathrm{a}-32$; G77
Pot hooks? Iron. Two associated objects. One rectangular sectioned rod, one end broken, other end bent into hook (Length 149mm). Second object of rectangular section, currently bent into C shape, one end hooked, opposing end broken (Length 107.5mm). RA298. Context 5a-5; G77
*Whetstone. Coarse calcareous sandstone - Inferior Oolite Beds-Northants. Incomplete primary whetstone of rectangular plan and cross-section. Both faces and edges worn smooth through use. One end squared (but damaged), opposing end broken. Length 63 mm ; width 24.7 mm ; thickness 19.5mm. RA234. Context 5b-76; G77 (Fig. 6.4)

## VII. Phase 6 Modern

Although Phase 6 deposits produced a single find, the lower portion of a circular-sectioned cast pin or needle shank (length 34 mm ; diameter 2 mm ) which could well be of Roman date, finds dating to 17 th and later centuries were recovered from topsoil deposits, unphased 'overburden' deposits and occasionally within deposits of Phases 1-5.

The most numerous category of find are the fifteen sherds of vessel glass, which include wine and probably beer bottles. These, combined with a teaspoon and a spoon handle of 'fiddle' pattern, and two cast iron pulley wheels from a clothes airer, are suggestive of some form of domestic activity. Four coins include a Charles I 'rose' farthing (16251649) and another farthing of George V (1910-1936). Interestingly, the Newnham Marina assemblage contains two exotic coins that are relatively rare finds in Britain. The first (RA 73) is a most unusual coin or token with a profile bust on the obverse and what appears to be a quatrefoil design within a legend on the reverse. Unfortunately the coin is very worn and it was not possible to provide a precise identification, but it is most similar to coins issued by the Church in the Low Countries in the 18th century. Two holes pierce the coin, both close together and towards the bottom of the obverse bust, indicating that it had been used as a decorative element on clothing or jewellery (though whether this occurred before or after its arrival in Britain is unknown). The second exotic coin (RA 21) is a large module Ottoman 40 para piece struck in Cairo for Sultan Abd al-Aziz in 1870-1. Many Ottoman coins were brought back by soldiers who fought in Turkey, Palestine and Egypt in the First and Second World Wars, though other explanations for the appearance of this coin at Newnham are also possible.

## VIII. Unphased

Eight Roman coins were found in overburden deposits and are listed below by area of excavation (Table 15.9). These unphased deposits produced the earliest coin from the investigations, a sestertius of Faustina II (AD 161-180; RA 28) from Area 4, which might perhaps be associated with the occupation of building G39. Of the remaining seven coins, five could be identified with confidence to a ruler's reign or numismatic period-of-issue and these were all struck during the fourth century, including two Constantinian issues from the 320s to 360s, two Valentinianic coins of the 360s and 370s, and a single Theodosian VICTORIA AVGGG from the very end of the 4th century.

| Area | Description | Date |
| :--- | :--- | :--- |
| 2 | Illegible obverse and reverse - AE2 (RA22) | 3rd-4th |
| 2 | Valens; reverse GLORIA ROMANORVM. AE3. Mint mark -/A//[SMAQP]; mint Aquileia. Reference CK:965. AE3 (R8) | 364-367 |
| 4 | Faustina II; Reverse [IVNONI REGINAE] SC; mint Rome. Reference RIC: 1651. Sestertius (RA28) | $161-180$ |
| 4 | as House of Constantine; reverse as Fel Temp Reparatio - falling horseman. Copy. Mint mark //[....]. AE4 copy (RA46) | $350-364$ |
| 4 | House of Valentinian; Reverse GLORIA ROMANORVM - emperor and captive. Mint mark //[.....]. AE3 (RA34) | $364-378$ |
| 5 | Constantine II Caesar; reverse GLORIA EXERCITVS - 2 standards. Mint mark //[....]. AE3 (RA174) | $330-335$ |
| 5 | House of Theodosius. Reverse VICTORIA AVGGG. Mint mark //[....]. AE4 (RA204) | $388-402$ |
| 5 | Illegible coin obverse and reverse. Broken fragment only. AE2/3 (RA173) | Mid 3rd-4th |

Table 15.9 Coins from unphased deposits by area
Items of personal adornment were sparse within the phased finds assemblage, so it is worth noting that a further two bracelets were found within unphased deposits. A second example of a cable bracelet, in this instance of two strands (Fig. 7.2 RA41), was found in Area 4. This bracelet type was in use throughout the Roman period. The second bracelet type, found in topsoil deposits in Area 1, is not represented within the phased assemblage (for illustration see Simco 1984, fig. 35a). It is a multiple unit bracelet with hook and eye closure, an aggrandised version of the light bangle bracelet type (Cool 1993, 89). Multiple unit bracelets were in use throughout the 4th century, but there are indications that the type may have developed during the late 3rd century (Cool 1993, 89). Although exact pairs of multiple bracelets are very rare, the Newnham bracelet shares a number of common elements with a bracelet from a grave deposit at Colchester dating to 320-450 (Crummy 1983, fig. 47 no. 1725)

Five quern fragments were found within unphased deposits. The lower quernstone of Hertfordshire puddingstone (Fig. 7.2 RA306) is the only instance of this stone type occurring at Newnham. Examples of puddingstone querns from other sites have been found in dated contexts ranging from the Late Iron Age to the end of the Roman period, although most are thought to pre-date AD 200 (King 1986, 71). Well stratified examples of puddingstone querns are rare but an example from Colchester was securely stratified in a deposit pre-dating AD 60/61 (Buckley and Major 1983, 76). At Dragonby, Lincs, five puddingstone querns were found, one of the most northerly occurrences of this quern type (Wright 1996, 366). Although one quern did occur in a Flavian to mid-to late Antonine context, two others were found in a deposit dated to the period between the late 1st century BC and the Roman conquest (Wright 1996, 369). It is therefore likely that the example from Newnham was associated with occupation in Phase 1. It was found in overburden deposits in Area 5 and therefore might have originated from occupation activity associated with Phase 1 post-built structure G22.

Lava querns first appear in Phase 3 at Newnham, and a further three examples were found in unphased deposits, two examples from Area 5 and one from Area 2. As noted in the discussion of Phase 3, the importation of lava querns commenced soon after the initial conquest of southern Britain and soon developed as an established part of civil trade (Buckley and Major 1998, 245). Querns only enter the archaeological record after they are broken and therefore it is probable that these imported querns were in use at Newnham in the preceding Phase 2. This could suggest that the examples from Area 5, might have been associated with the occupation of Phase 2 building G39. The final unphased quern was of millstone grit, this stone type first discarded at Newnham in Phase 4 deposits in the cobbled area outside building G39. The example from the unphased deposits was also found in the environs of G39 (Area 4). By the 3rd century the trade in lava querns had declined. This same period witnessed increasing numbers of querns of millstone grit in the south-east of England. Hence both examples of millstone grit querns may reflect grain processing, perhaps within building G39, during Phase 3 .

In addition to the three Collyweston slate shingles found within Phase 3 (Area 2 G51) and Phase 4 (Area 2 G52) deposits, a fourth example was found in overburden deposits in Area 2. Like the near complete example from Phase 4, this was roughly diamond-shaped in outline, although slightly longer ( 297 mm ) and wider ( 208 mm ). It presumably was also used on or within building G65.

There was no in situ flooring in either Phase $2 / 3$ building G39 or Phase 3 building G65 due to extensive robbing activity. In addition to a small amount $(166 \mathrm{~g})$ of possible opus signinum, from Phase 5 destruction deposits of the hypocaust G73, a single possible tessera was found in overburden from Area 2. This comprised a thin ( 5.4 mm thick) squared piece of fine calcareous sandstone, ( 15.2 mm long and 14.8 mm wide) with one surface and three edges (fourth edge broken) heavily weathered. The stone type, in common with all of the whetstones from Newnham, is thought to be one of the Inferior Oolite Group sandstones, with a source area possibly in a line from Blisworth to Northampton to Kettering.

## Catalogue: unphased

*Bracelet. Copper alloy. Small fragment of two-strand cable, made of twisted circular-sectioned wire. Length $c .15 \mathrm{~mm}$; width 3mm; thickness 3 mm ; wire diameter 1.5mm. RA41. Context 4a-17 (Fig. 7.2)

Bracelet. Copper alloy. Light bangle bracelet with multiple unit decoration comprising a central line with notching either side; a pair of ring and dot motifs; a series of small linear dots bordered by straight lines; a further pair of ring and dot, and a central groove with notches either side. One end broken, the other retaining part of eye of hook and eye closure. Length (straightened) c. 145 mm ; width 8.2 mm ; thickness 1.1 mm . RA1. Context 1-2
*Quern. Puddingstone -Herts or Chilterns. About half of a lower stone with convex worn grinding surface and half of the central spindle hole which perforates the stone. Estimated diameter 300 mm ; thickness 58 mm . RA306. Context 5b-0 (Fig. 7.2)

Quern. Lava - Mayen-Eifel region of Germany. One main piece and four probably joining fragments presumably from a rotary quern. No diagnostic features. Weight 189g. RA316. Context 5a-58

Quern. Lava - Mayen-Eifel region of Germany. Fragmented remains of a quern, numerous fragments but most joining. Part of grinding surface survives. Thickness of fragment may suggest lower stone, but no diagnostic traits. Weight 743g. RA318. Context 5b-0

Quern. Lava - Mayen-Eifel region of Germany.. Numerous fragments of lava stone, presumably from a rotary quern. No clear diagnostic features. Weight 499g. RA315. Context 2c-7

Quern. Millstone grit - Pennines (Derbyshire?). Small, worn fragment of straight but slightly angled skirt and very worn grinding surface. Too little of the quern survives to estimate diameter. Thickness 26.2mm. RA309. Context 4-0

## IX. Summation

Partial excavation in rescue circumstances means that the full range of the site at Newnham is unknown. What appears to be fairly continuous occupation of the investigated area from the 1st to at least the mid-4th centuries, combined with extensive robbing of the structures, has added to a somewhat piecemeal picture of the establishment. Poor survival of
the ironwork assemblage has also resulted in loss of information on the range of activities carried out during the occupation.

With these caveats in mind, the 'other artefact' assemblage does confirm occupation in the 1 st century and suggests that the occupants were prosperous enough to be able to afford imported glass ware. The presence of a studded bag ring, thought to act as a fastener on a soldier's satchel, is of note, especially as these rings are more normally found in military settings. The general impression gained from the Phases 2-4 assemblages overall is one of a well-off, but not affluent, working estate and not that of a luxurious town villa. Resources were available to afford imported goods, e.g. glass, stone shingles and quern stones, and plastered walls, but the paucity of coinage dating to before the 4th century suggests that funds may have been carefully managed. Building G39 may have been an ancillary structure, perhaps for workers on the estate. There is a possibility that building G65 had a predecessor, for it is the deposits below G65 which yielded a seal box, normally suggestive of the presence of someone of status, perhaps an administrator. The layout of building G65 suggests the existence of a bath house but there were no remains of bath flasks or toiletry items which might support this supposition. The two toiletry items recovered, a spatula and a pair of possible toothpicks/nail cleaners, were found in closer proximity to building G39 than G65. However, it must be said that the extensive robbing of the buildings combined with a planned abandonment by the residents, who would have removed any valuable portable goods, may have left a false impression of the over-all status of site at Newnham.

## X. The Plaster/mortar assemblage

## H.B. Duncan

## Introduction

In excess of 33 kg of plaster/mortar was recovered from the excavations. None of this was recovered in situ on standing walls. The vast majority ( $98.25 \%$ by weight) derived from Phases 4 and 5 (Table 15.10), in particular Phase 5 destruction deposits associated with building G65 and its hypocaust G73 which accounted for $63.8 \%$ (by weight) of the assemblage. Unsurprisingly much of the assemblage comprised small, heavily abraded pieces which did not retain full thickness. The fabric types present, how the material was utilised and surface treatment are considered below. The frequency of occurrence and its distribution by Phase is addressed in the Phase discussions.

| Phase | Type 1 | Type 2 | Type 3 | Type 4 | Type 5 | Type 6 | Totals |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| 1 |  | 3 |  |  |  |  | 3 |
| 2 | 134 |  |  | 69 |  |  | 203 |
| 3 | 106 | 72 |  |  |  |  | 178 |
| 4 | 3860 | 933 | 796 | 4490 | 226 | 900 | 11205 |
| 5 | 1670 | 18837 | 414 | 170 | 6 | 181 | 21278 |
| unph | 196 |  |  |  |  |  | 196 |
| Total | $\mathbf{5 9 6 6}$ | $\mathbf{1 9 8 4 5}$ | $\mathbf{1 2 1 0}$ | $\mathbf{4 7 2 9}$ | $\mathbf{2 3 2}$ | $\mathbf{1 0 8 1}$ | $\mathbf{3 3 0 6 3}$ |

Table 15.10 Plaster/mortar by Phase and fabric type

## Fabric types

Six fabric types were identified (see Table 15.10 for quantification by weight). Type 1 was a coarse dark pink fabric with frequent medium to large red (grog) and pebble inclusions. Type 2 was similar in composition to Type 1 but was light pink in colour. Type 3 was a coarse, buff coloured fabric with medium to large inclusions of rounded and angular pebbles and rare small red (grog) inclusions. Type 4 comprised a coarse white fabric with frequent small quartz and dark grey small to medium pebbles, with rare grog inclusions. Type 5 was a fine white fabric with frequent small angular to sub-rounded quartz and quartzite inclusions. Type 6 comprised a fine dark pink fabric with occasional medium and frequent small pebbles and frequent grog.

## Uses

Fabric type 1 was not only used as wall covering but also as flooring and as a 'binding agent'. The latter use is evidenced by its presence between two very roughly shaped slabs of bioclastic (local Jurassic) limestone found in pit G52 Phase 4 (2-258). One of the limestone slabs appeared complete, measuring 230 mm long, up to 130 mm wide and 25 mm thick, and had roughly squared ends. The mortar was unevenly applied to this slab and a second slab placed on top, slightly inset from the edge of the first slab.

Two pieces (171g) of possible opus signinum also occurred in Fabric Type 1. The flat obverse surface of the pieces had been smoothed and appeared to have been polished, creating a very hard surface. One fragment ( 166 g ) was from Phase 5 G73 (2a-4) and the other (5g) from an unphased deposit (5a-58).

None of the remaining plaster fragments (totalling $32,892 \mathrm{~g}$ ) retained impressions of reeding on the back of the plaster, the presence of which would indicate it derived from a ceiling. Where complete thickness appeared to survive, the
reverse surface was fairly flat. However, there are a small number of pieces which retained impressions of brick/tile or stone corners (e.g. Fig. 5.8 no.9), suggestive of deriving from walling.

The majority of pieces retained a portion of a flat exterior surface, the maximum thickness noted being 66 mm . There were, however, several pieces which were shaped, possessing angled (e.g. Fig. 5.8 nos 1-6), convex (Fig. 5.8 nos 7-9), moulded (Fig. 5.8 no.10), right-angled (Fig. 5.8 no.11) and slightly concave (illus 13) profiles. These shaped pieces occurred in all fabric types except Type 5. The angled pieces could have framed a window opening, while the semicircular profile (Fig. 5.8 no.9) and moulded piece (Fig. 5.8 no.10) may have framed a door opening. The quarter-round moulding (Fig. 5.8 no.8) could conceivably have been used at the junction of the wall and floor, as found at Bancroft (Williams and Zeepvat 1994, 94).

## Surface treatment of wall covering

Although there were some plain fragments of wall plaster, including one moulded piece (illus. 10 T2 190; Phase 4 G52), the majority of fragments ( $81.26 \%$ by weight) had treated surfaces, most retaining traces of either a white or red wash, with a smaller proportion retaining traces of painted surfaces (see table 15.11). The more commonly occurring fabric types, Types 1 and 2, were distinctly pink in colour and it is perhaps unsurprising that fragments in these fabrics more frequently bore a red wash. Types 4 and 5, the 'white fabrics', had either no wash or a white wash applied. Most of the angled pieces retained a red wash on one angled face; only one piece (Fig. 5.8 no. 6) had white wash on both angled faces.

| Fabric Type | Total quantity (g) | $\%$ of total assemblage | Red wash (g) | White wash | Painted (g) | Plain (surfaces) (g) | no surviving surfaces (g) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | 5795 | 17.62\% | 3816 | 620 | 0 | 741 | 618 |
| 2 | 19845 | 60.33\% | 10754 | 5506 | 486 | 2412 | 687 |
| 3 | 1210 | 3.68\% | 518 | 414 | 0 | 0 | 278 |
| 4 | 4729 | 14.38\% | 0 | 1911 | 1621 | 1123 | 74 |
| 5 | 232 | 0.71\% | 0 | 0 | 0 | 232 | 0 |
| 6 | 1081 | 3.29\% | 30 | 1048 | 3 | 0 | 0 |
| Totals | 32892 | 100.00\% | 15118 | 9499 | 2110 | 4508 | 1657 |
| surface treatment by \% of total weight |  |  | 45.96\% | 28.88\% | 6.41\% | 13.71\% | 5.04\% |

Table 15.11 Fabric type quantities $(\mathrm{g})$ and surface treatment
Two fragments appeared to have been combed, perhaps serving as a key. One white washed piece from G52 Phase 4 (2-178) had two sets of parallel grooves on slightly different alignment, the grooves set from 1 mm to 1.5 mm apart. One piece from Phase 5, G73 (2-14) has shallow grooves under a layer of fairly thick white wash (not illus.). A single fragment from the same deposit (2-14) had scratched lines through the pink wash; whether these scratches were accidental or were intended as guidelines for subsequent painting is unclear (Fig. 5.8 no. 12).

There were very few pieces that had a painted design, as opposed to a 'colour-washed' surface. One fragment (Fig. 5.8 no. 13) in Fabric Type 2 has a slightly concave, white-washed surface, which retains one edge each of two bands of red, separated by some $38-40 \mathrm{~mm}$. A second example (Fig. 5.8 no. 14) occurs in Fabric Type 4. This has a white washed skim ( 1 mm or less in thickness) with areas of off-white/yellowish paint surviving on the surface. A broad dark red linear band occurs down the left side of the surface and appears to overlie the off-white/yellowish paint. Adjacent to the red band are remnants of two intersecting curvilinear bands, three narrow linear bands and two further narrow curving bands of paint, all in a very pale grey. The reverse of this fragment has an impression of a corner of a brick/tile or perhaps stone. Unfortunately too few fragments retained paint to be able to suggest any decorative schemes in use.

## Catalogue of illustrated examples

(Fig. 5.8)
1 Fabric type 2. Angled piece - 45 degree angle with slight inset along length, plain flat surfaces. Phase 5 G73 (2b-6)
2 and 3 Fabric type 2. Angled pieces with two surfaces at a 45 degree angle, only one face red washed. Phase 5 G73 (2a-4)
4 and 5 Fabric type 2 Two shaped pieces 45 degree angle; red wash on one face only. Phase 5 G73 (2-14)
6 Fabric type 1 Shaped fragment with two angled faces, both white washed. Phase 5 G74 (2-210)
7 Fabric Type 6. Shaped piece retaining three faces, flat back 82.1 mm long (no wash), short flat angled face 43.6 mm long (white wash) and gently convex face (white wash), 100.3 mm long. Total length of surviving piece 246 mm . Phase 4 G70 (2-52)

8 Fabric Type 2 Convex piece with red wash over curved surface. Phase 5 G73 (2-14)
9 Fabric Type 4 shaped piece, thickness 74 mm , plano-convex in profile, possibly traces of white wash on convex face, reverse has impressions of (?)bricks (1062g). Phase 4 G52 (2-217)

10 Fabric Type 4 large piece ( 247 mm long) of shaped moulding, (window or door surround?), no wash. Phase 4 G52 (2-190)
11 Fabric Type 2 Small fragment of possible corner/intersection of two right angled planes, white wash or skin overlain with dark red paint. Phase 5 G73 (2-14)

12 Fabric type 2 One piece with flat red wash has scratched parallel lines. Phase 5 G73 (2-14)
13 Fabric type 2 Concave piece with white wash and 2 red bands of paint. Phase 5 G73 (2-14)

14 Fabric Type 4 Large flat piece ( 66 mm thick, 1078 g ), white washed skim ( 1 mm or less in thickness) with areas of off-white/yellowish paint surviving on the surface. A dark red linear band ( 39 mm wide) occupies one side of the painted surface, and appears to overlie the off-
white/yellowish paint. Adjacent to the red band are remnants of two intersecting curvilinear bands (one c .6 mm wide, the other $c .10 \mathrm{~mm}$ wide), three narrow linear bands and two further narrow curving bands of paint (c. $3-4 \mathrm{~mm}$ wide), all in a very pale grey. The reverse of this fragment has an impression of a corner of a brick/tile or perhaps stone. white wash and red band (39mm wide) painted on top. Phase 4 G53 (2-217)

