# Chapter 3:  The Finds

## THE MEDIEVAL AND POST-MEDIEVAL POTTERY (FIGS 3.1–11)
*by Cathy Keevill*

### Summary

An assemblage of 6779 sherds was recovered from stratified contexts. The majority of these (a total of 6317 or 93%) were medieval. This is the first stratified sequence from Witney and as such is highly important for the understanding of the development of 12th-century and early-13th-century pottery traditions in West Oxfordshire. The most interesting feature of the assemblage was the range of imported material from other regions, particularly south-western England. These included fabric types from Minety, Wiltshire (Fabrics 9 and 37), from Laverstock, south Wiltshire (Fabrics 5 and 25), types known in Bath and Trowbridge (fabric 23), Newbury (Fabrics 2 and 3), Winchester (Fabric 8), and a possible Nash Hill product (Fabric 33). Contacts with the Midlands are indicated by fabrics from Worcester (Fabric 16), Nuneaton (Fabric 13) and Olney Hyde (Fabric 31).

### Methodology

The pottery from the 1984 excavations, which was recorded by Maureen Mellor, was given an unique site-based numerical fabric series, which was cross-correlated with the main Oxford type series and with other regional type series. The fabrics are described in tabular form (Table 3.1) and a fabric series has been retained in the archive. Due to time and financial constraints the 1984 pottery was recorded using an abbreviated version of the Oxford recording method (see Mellor 1980, fiche 1 E06), and for reasons of compatibility and cost this abbreviated recording method was also used for the material from the 1988–91 excavations. All the records were transferred to an Access database and the tables generated in Excel. The method provides data for fabric and form analysis, but data on the minimum number of vessels, sherd size or rim size was not recorded, so no comparisons of this sort can be made with more recent analyses such as that carried out for Eynsham Abbey (Blinkhorn forthcoming).

The pottery was recorded by context. Due to the limited scale of much of the excavation, and the lack of direct stratigraphic links between trenches (or between areas within them), the stratigraphic phasing was insufficient to provide a self-sufficient chronology for the development of the site. In view of this, the appearance of reasonably well-dated fabric types (such as Brill/Boarstall ware, Fabrics 6, 17 and 27), was used together with the stratigraphic phasing to define chronological horizons, and these form the periods under which the development of the site, and its pottery, have been described.

A draft report on the pottery from the 1984 excavations was written by Maureen Mellor in the 1980s. The primary aim of the further analysis was to refine the site chronology and to understand the development of the site. This involved adding in the pottery recovered from the 1988–1991 excavations, amending the context dates derived from the associated pottery where necessary, and checking on the dating for the main types within the assemblage in order to establish a chronology that would correspond to the Oxfordshire pottery sequence. Understanding the development of the major local fabric and vessel traditions in west Oxfordshire was also a priority, especially the calcareous gravel-tempered fabric (Witney Fabric 1), which is similar to types in the Cotswolds (Mellor 1994, 72) and at Oxford (fabric OXAC).

The analysis also included a consideration of the status of the site (and of different areas within the site). Much of the pottery, however, came from dumped deposits, particularly in the area of the tower, and in these areas no direct link can be made between the types of pottery found and the original function of the buildings in which dumping took place. In addition, there is a difference in date between the excavated buildings in the two main excavation areas (north-west and south-east), making direct comparison between them difficult. A limited comparison between these two areas was nevertheless attempted for each chronological period.

### The main fabric and vessel types

The numbers of sherds of each fabric in each site period are given in Table 3.1. The main fabric type on the site was a limestone- and quartz-tempered fabric, Fabric 1. A total of 3378 sherds (49.8% of the total assemblage) was available for analysis. Fabric 1 appeared in varying quantities throughout all the phases on site, but was predominant in Periods 4b and 5a. All domestic requirements were amply catered for: there is a range of wide-mouthed cooking pots with slightly rounded profiles (Fig. 3.1, no. 3), there are jars with rounded shoulders (Fig. 3.1, nos 6 and 13, Fig. 3.2, nos 4, 6 and 7), pitchers with tubular spouts (Fig. 3.5, no. 1), jugs with pinched spouts and strap handles (Fig. 3.4, no. 8), firecovers (Fig. 3.2, no. 11), a colander fragment, and shallow dishes (Fig. 3.8, no. 8).

Although Witney Fabric 1 is very similar to Cotswold types and to the Oxford Early Medieval ware, fabric OXAC, the distinctive nature of the fabric type in thin-section and the range of vessel forms suggest, however, that the ware is unique to the area. The assemblage includes very few of the Cotswold type straight-sided cooking pots and the range of vessels also includes forms that do not fall within the known Oxford Early Medieval tradition. These additional

*Table 3.1  Pottery: Medieval fabrics, forms and styles of decoration.*

| Fabric | Comparable with | Frequency and sorting | Inclusions | Potting Techniques | Forms | Decoration | Munsell Code | Period |
|---|---|---|---|---|---|---|---|---|
| Group IA: | Shelly Limestone | | | | | | | |
| 31 | Olney Hyde; OXCG Middleton Stoney IA 1; Milton Keynes MC 3; Northampton 330 | Moderate | Fine-v coarse limestone, sparse voids | Wheel-thrown TH. 5–8 | | | Lt red (2.5YR/6/6) Core: grey (2.5YR/N6/0) | 6a |
| Group IB: | Oolitic and other Limestone | | | | | | | |
| 1 | OXAC. Ascot Doilly 'Standard'; Banbury-type 1; Middleton Stoney Type IB 1,2 3. | Abundant-moderate | Fine-coarse limestone, occ. quartz | Hand-made or -turned TH. 5–8 | Cooking pots, straight-sided and globular | Thumbing, applied thumb-pressed strips | Black (5YR/2.5/1) – reddish-yellow (5YR6/6) Core: dk grey (5YR/4/1) – V. dk Grey (5YR/3/1) | 3–10 |
| 4=30=?15 | ?Shipton under Wychwood | Moderate | Fine-coarse limestone, rounded quartz | Hand-made TH.8 | | | Reddish-yellow (5YR/6/6) Core: grey (7.5YRN5/0) | 6b, 8 |
| 9 | Minety | Abundant-Moderate | Fine to coarse ooliths, occ. red/br. mineral | Wheel-thrown TH. 5–6 | Jug/pitcher | Combing poor glaze | Core: grey (7.5YR/N5/0) | 4–10 |
| 11 | | Moderate | Fine–coarse oolitic limestone stained red-brown | ?Wheel-thrown TH.5 | | | Ext: v pale brown (10YR/7/3) Int. S & core: v dk grey (2.5YR/3/0) | 4a, 5a |
| 12 | | Abundant | Ooliths, some stained red/br., shelly limestone platelets occ. Fe ore | ?TH.8 | | Poor glaze | Int. S: reddish-yellow (7.5YR/7/6/) Core: dk grey (7.5YR/N4/0) | 5a, 6a, 8 |
| 15 | | Abundant | Ooliths, sub-rounded quartz occ. Fe ore | ?Wheel-thrown TH. ? | Jug | Poor glaze | Core: pink (7.5YR/8/4) | 5a |
| 21 | Bath-type Trowbridge C400 | Sparse | Limestone, occ. chert, quartz | ?TH.8 | | | Lt red (2.5YR/6/6) Int S: v pale brown (10YR/7/3) Core: lt grey (7.5YR/N7/0) | 6a, 7 |
| 22 | | Sparse | Fine-coarse decayed limestone, occ. red/br. mineral | TH.6 | | | Ext. S: carbon Int. S: lt grey (10YR/7/1) Core: (7.5YR/6/0) | 7 |
| 24 | | Sparse | Irreg. limestone, sub-rounded grey white and glassy quartz | Wheel-thrown TH.4 | Jug | Roulette | Ext. & Int. S: v pale brown (10YR/7/3/) Outer margins: reddish-yellow (5YR/7/6) Core: grey (10YR/7/1) | 6a |
| 28 | | Moderate | Grey and white sub-rounded quartz, limestone, chert | | | Glaze | Int. S: grey (7.5YR/N5/0) Core: (7.5YR/N6/0) | 6a |
| 37 | Minety Late Medieval | Abundant | Decayed rounded limestone occ. red Fe mineral | ?Wheel-thrown TH. 5–6 | Jug | Thumbing | Ext. & Int. S: reddish-yellow (5YR/7/6) Core: reddish-yellow (7.5YR/7/6) | 6, 6b, 7, 9 |

*Mount House, Witney*

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Group II | Flint | | | | | | | |
| 2 | OXBF<br>Cf. Ascot Doilly;<br>Middleton Stoney II3;<br>Newbury A | Moderate/<br>Abundant | Coarse-v. coarse grey & black<br>angular flint, white & glassy<br>quartz, occ. limestone & red/br.<br>mineral | Hand-made. TH.7 | | | Int. S: reddish-grey (5YR/5/2)<br>Core: (10YR/7/2) | 4–8 |
| 3 | OXAQ, cf. Ascot<br>Doilly; Middleton<br>Stoney II 5;<br>Newbury B | Moderate | Coarse- v. coarse angular<br>grey flint irreg.<br>limestone, occ. voids | Coil-made TH. 6–8 | | | Int. S: lt grey (10YR/7/2)<br>Core: grey (7.5YR/6/0/) | 4–9b |
| Group III | Quartz etc. | | | | | | | |
| 5 | Includes some<br>south-east Wiltshire | Abundant | White, rounded quartz grey<br>white sub-rounded quartz ?flint | Wheel-thrown<br>TH. 7 | Jug | | Ext. S: reddish-yellow (5YR/6/6)<br>Int. S: v pale brown (10YR/7/3)<br>Core: (7.5YR/7/0) | 4a, 5a, 7 |
| 6 | Brill/Boarstall type<br>OXAM<br>Ascot Doilly | Sparse | Grey white sub-rounded<br>quartz red/br. mineral | Wheel-thrown<br>TH. 4 | Jug | Glaze | Reddish-yellow (7.5YR/8/6) | 4–5a, 6–10 |
| 7 | OXY, cf. Ascot Doilly,<br>Brackley<br>Middleton Stoney III | Abundant<br>well sorted | Grey white sub-rounded<br>quartz occ. coarse red/br.<br>Fe ore | Wheel-thrown<br>TH. 6 | Jug/pitcher | Glaze | Outer margin: reddish-yellow<br>(7.5YR/7/8/)<br>Core: lt grey (7.5YR/7/0)<br>Int. S: lt grey (10YR/7/2) | 4–10 |
| 8 | | Moderate | Grey white sub rounded<br>quartz, black grains ?glauconite | Wheel-thrown<br>TH. 5 | Jug | Glaze | Core: white (7.5YR/N8/0) | 5a |
| 10 | Similar to Fabric 36<br>Chalgrove 70 | Abundant | Grey white sub-rounded quartz<br>occ. limestone | ?Wheel-thrown<br>TH. 6 | | | Int. S: v pale brown (10YR/8/3)<br>Core: grey (7.5YR/6/0)) | 4a |
| 13 | OXAH<br>?N. Midlands | Abundant | Grey white &<br>pink sub-rounded quartz | Wheel-thrown<br>TH. 6 | Jug | Applied red<br>strips, glaze | White (10YR/8/2) | 5a, 7 |
| 14 | ?London | Abundant | Fine-coarse grey white<br>quartz, occ. voids | Wheel-thrown<br>TH. 5 | Jug | Glaze | Int. S: reddish-yellow (5YR/7/6)<br>Core: grey (2.5YR/6/0) | 5a |
| 16=34 | Worcester | Moderate | Fine-coarse grey white<br>quartz occ. red/br. Fe ore | Wheel-thrown<br>TH. 4 | Jug | Roulette glaze | Int. S: brown (10YR/5/3)<br>Core: v dk grey (2.5YR/3/0) | 5a |
| 17 | Brill type,<br>OXAW<br>Middleton Stoney III | Abundant | Fine grey white & red<br>sub-rounded quartz<br>occ. red/br Fe. ore | Wheel-thrown<br>TH. 4 | Jug | Glaze | Int. S: lt brown (7.5YR/6/4)<br>Core: reddish-yellow (5YR/7/6) | 5b–8 |
| 18 | Ashampstead type<br>OXAG<br>Newbury C | Abundant | Rounded quartz, & flint<br>(chert < 1 mm) occ. red Fe<br>ore, micaceous clay pellets. | | | | Ext. S: reddish-yellow (5YR6/8)<br>Core: pinkish-grey (7.5YR6/2)<br>Int. S: reddish-yellow (7.5YR6/8) | 6a–8 |
| 19 | | Sparse | Grey white sub-rounded<br>quartz occ. limestone | Wheel-thrown<br>TH. 7 | | Partial glaze | Greyish-brown (10YR/5/2)<br>Core: (7.5YR/6/0) | 5a |
| 20 | Surrey type | Moderate | Colourless red/br. sub-rounded<br>quartz, occ. coarse quartz in<br>white matrix | Wheel-thrown<br>TH. 4 | | Partial glaze | Int. S: v pale brown (10YR/8/4)<br>Core: pink (7.5YR/8/6) | 5b, 7, 8 |

Table 3.1 (Continued)

| Fabric | Comparable with | Frequency and sorting | Inclusions | Potting Techniques | Forms | Decoration | Munsell Code | Period |
|---|---|---|---|---|---|---|---|---|
| 23 | ?West Wilts type Crockerton/Bath Trowbridge | Sparse | Coarse grey angular granite abundant mica and quartz | ?TH. 6–8 | Tripod pitcher | Poor glaze | Int. S. & core: dk grey (7.5YR/N4/0) | 6a, 6b, 7 |
| 25 | South-east Wilts Avebury G3 ?Old Sarum Trowbridge | Abundant | Coarse grey & white sub-rounded quartz | | | Thin glaze | Int. S: pink (7.5YR/7/4) Core: lt grey (7.5YR/7/0) | 5b, 6a |
| 26 | Surrey | Moderate | Fine pink & white grains occ. red Fe ore | Wheel-thrown TH. 4 | | Partial glaze | Pinkish-white (7.5YR/8/2) | 8 |
| 27 | ?Early Brill OXAB | Abundant | Grey, white, orange angular & sub-rounded quartz, occ. red/br. Fe mineral | Wheel-thrown TH. 5 | Jug | Glaze | Outer margins: pink (5YR/8/4) Core: white (5YR/8/1) | 6a, 9b |
| 32 | Surrey OXBN | Abundant | Fine red/br. mineral | Wheel-thrown TH. 2 | | Glaze | Core: reddish-yellow (7.5YR/8/4) | 5a, 9 |
| 33 | ?London Wilton, Wilts Dean Court, Cumnor | Abundant | Fine grey & white quartz occ. red/br. mineral, flint | Wheel-thrown TH. 4 | | Applied decoration glaze | Core: lt red (2.5YR/6/8) | 6b |
| 35 | | Moderate | Grey, white sub-rounded quartz occ. coarse-very coarse red/br. Fe ore | Wheel-thrown TH. 8 | | Roulette | Int. S: pink (5YR/7/4) Core: lt grey (10YR/7/2) | 6b |
| 36 | Trowbridge C409 | Abundant | Grey, white sub-rounded quartz, moderate limestone | Wheel-thrown TH. 5 | Cooking pot | | Int. S: & core: (7.5YR/8/0) | 6b |
| 38 | Worcester | Abundant | Fine, white and grey quartz | Wheel-thrown TH. 6 | Jug | Incised, applied red strips, glaze | Grey (7.5YR6/0) | 7 |
| 39 | ?Surrey | Moderate | Grey & white angular quartz | | Jug strap handle | Glaze | Core: white (7.5YR8/0) | 7 |
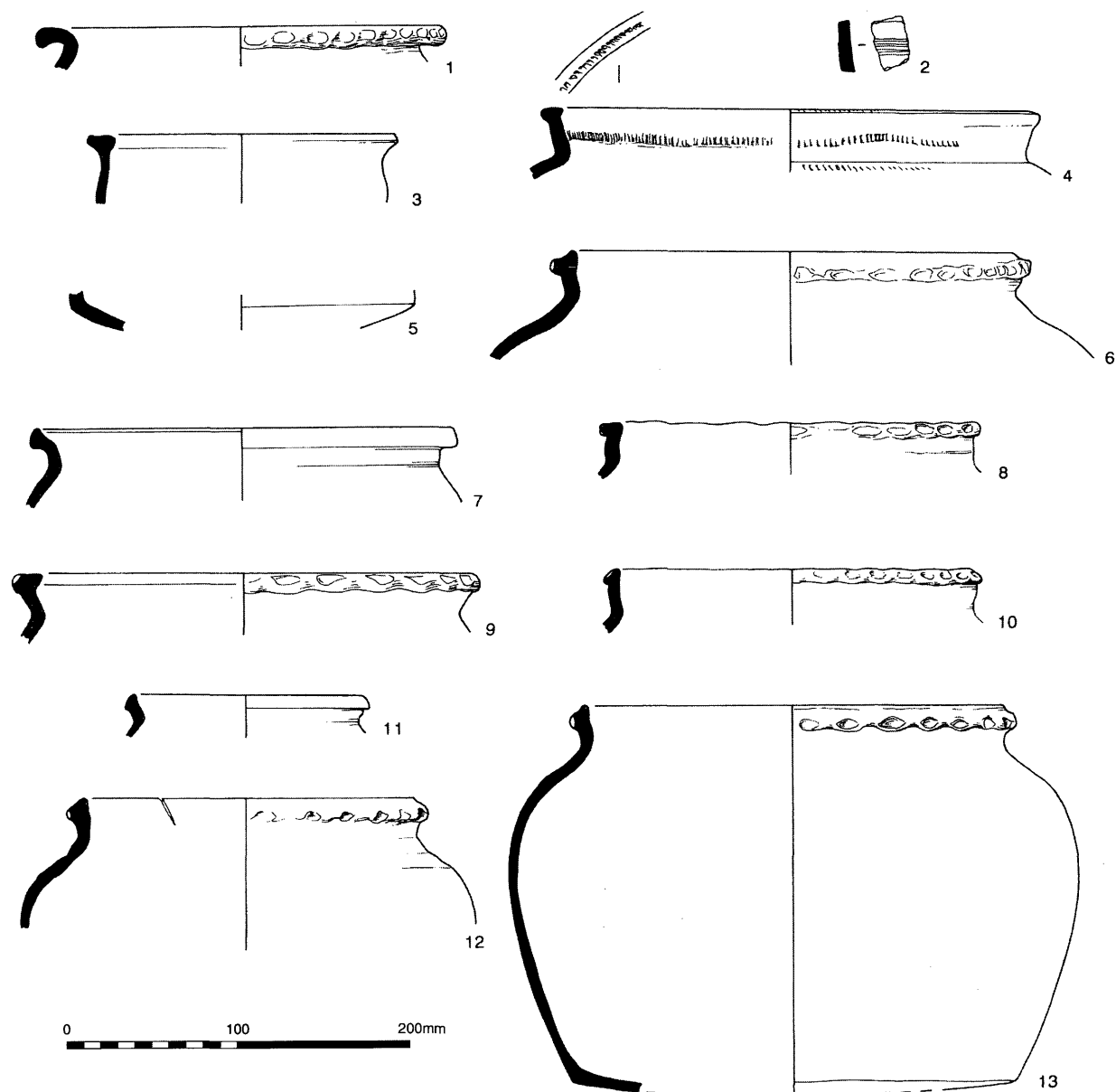
*Figure 3.1   Period 4b. All Fabric 1. Embanking west of Solar Tower: No. 1—209/0/1; East terrace clay: No. 2—84/0/1, No. 3—84/0/2, No. 4—102/0/1, No. 5—84/0/2; Latest use of Solar Tower: No. 6—50/3/1, No. 7—50/0/2, No. 8—50/1/1, No. 9—129/C/2, No. 10—129/C/1, No. 11—129/D/1. Moat: No. 12—558/14/1, No. 13—558/13/3.*

forms include the larger cooking pots/jars, the bowls with tubular spouts (Fig. 3.2, no. 10) and the jugs with pinched spouts and strap handles (Fig. 3.4, no. 8).

The other significant fabric traditions include Fabric 2, equivalent to Oxford fabric OXBF, a flint and limestone tempered fabric. Only a small amount of Fabric 2 was present: 177 sherds distributed in all periods, but concentrated in Periods 5a–6b. The vessel types are similar to the Fabric 1 products (for instance Fig. 3.4, no. 23). This fabric first appears in Oxford in the mid 11th century, and in Newbury before the late 11th century (Mellor 1994, 54), and continues in use in Oxford until the mid 13th century.

Fabric 3 is a limestone-tempered fabric with a finer consistency and with smaller amounts of flint temper

than Fabric 2. It is identical to Oxford fabric OXAQ, also known as Early to Late Medieval East Wiltshire ware, as Newbury fabric group B (Vince 1997, 51–2) and as Reading fabric type LSF (Underwood 1997, 144–5). It is more prevalent than Fabric 2, with 405 sherds (6% of the assemblage) of which the majority were present in Periods 5a–8. This fabric is dated from the late 12th century in Oxford (Jope and Threlfall 1959, 243) and continued in use until the early 15th century. Vessel types include clubbed rim cooking pots (Fig. 3.10, no. 8), thickened thumbed rim cooking pots (Fig. 3.2, no. 5 and Fig. 3.3, no. 9), bowls and occasional pitchers.

The other main fabric tradition is Brill/Boarstall ware, a fine jug and pitcher ware known in Oxford,

Reading and Abingdon. The fabric types are Fabrics 6, 17 and 27, which represent marginally different sand-tempered fabrics and developments in the products. A total of 325 sherds (4.8% of the assemblage) were recovered mainly from Periods 6b–8. Brill/Boarstall ware is dated at the kiln site to the 13th–14th century for Brill (Ivens 1982) and one kiln at Boarstall is dated to 1300–25 (Farley 1982), although in Oxford fabric OXAW (Fabric 17) predates 1231 at St John's Hospital (Mellor 1991, 49). Vessel forms at Mount House comprise only a small percentage of the wide range produced and include tall-necked jugs (Fig. 3.10, no. 1), wide-bodied pitchers (Fig. 3.10, no. 3), small jugs (Fig. 3.11, no. 1) and highly decorated jugs (Fig. 3.11, no. 3).

Another significant fabric type is Minety-type ware (Fabrics 9 and 37). Fabric 9 represents the medieval products and Fabric 37 the later medieval wares. The two fabrics together comprise only a small proportion of the total: 101 sherds (1.49%). Fabric 37 can be dated from the 14th to the 15th century at the kiln site (Musty 1973) and is present in increasing quantities at Mount House from Period 7. Vessel types in Fabric 9 include cooking pots with everted and bevelled rims, pitchers decorated with combed lines (Fig. 3.5, no. 2) and with incised and slashed lines (Fig. 3.8, no. 9). Fabric 37 vessel types comprise wide, open dishes and cooking vessels (Fig. 3.10, nos 14 and 16) and pitchers or other narrow-necked vessels (Fig. 3.10, no. 15).

## Chronological development

The numbers and percentages of the major fabrics occurring in each site period are given in Table 3.2.

### Period 3

The pottery comes from the Solar Tower, the East Range and boundary ditch 588. Only 38 sherds belong to this period and most are of Fabric 1, with a smaller number of sherds of Fabric 2 and a few intrusive modern red earthenwares (Fabric 99). The vessel forms are limited to simple cooking pots with round-topped rims and rounded bases in Fabrics 1 and 2, and these are consistent with the early-12th-century dating suggested by the architecture of the buildings.

### Period 4 (Fig. 3.1)

Seven sherds were retrieved from the soils beneath the buildings in the north-west excavation area (contexts 691 and 697). These were of Fabrics 1, 2 and 99.

A total of 499 sherds were recovered from Period 4b contexts. Most of the pottery came from the east terrace construction (Fig. 3.1, nos 3, 4 and 5), the alterations to the Solar Tower (Fig. 3.1, nos 6–10) and the chapel. The main fabric was Fabric 1, with small quantities of Fabric 2. Period 4 is defined by the appearance of other fabrics: Fabric 5 (South Wiltshire type), Fabric 7 (Medieval Oxford ware fabric OXY), Fabric 9 (Minety-type ware), Fabric 10 (Chalgrove-type fabric 70), Fabric 11 (limestone-tempered ware) and Fabric 30. There were also stray intrusive sherds

of Fabric 3 (Newbury type, Oxford fabric OXAQ), Fabric 6 (Brill/Boarstall fabric AM) and Fabric type 99 (modern red earthenware).

The range of vessel forms increased in this period, with round-topped rim cooking pots, bevelled-rim cooking pots (Fig. 3.1, nos 7 and 11), thumbed-rim cooking pots (Fig. 3.2, nos 6, 8, 9, 10, 12 and 13), and squared-rim cooking pots. All appear to be wide shouldered vessels in Fabric 1. The increase in fabrics as detailed above, and in particular the presence of Oxford Medieval ware, Fabric 7, indicates a mid- to late-12th-century date. Oxford Medieval ware is dated from the late 11th to 12th century and is most common from the mid 12th century (Mellor 1994, 71).

A jug rim sherd in Fabric 6 (Oxford fabric OXAM), which is dated 1245 at the earliest (Mellor 1994, 40), came from the surface of the chapel infill (layer 476). Two sherds of Fabric 3 (Oxford fabric OXAQ) also came from the uppermost chapel infill further west (layer 93). These layers also produced sherds of post-medieval red earthenware and other post-medieval finds, and all of the pottery is regarded as potentially intrusive. There are however sherds in Fabric 5 (a possible south Wiltshire type) from lower down in the chapel infill (context 277). This fabric may have parallels with sandy jug fabrics from Newbury, and if not intrusive, would indicate a date from the late 12th century onwards (see Period 5 below) for the chapel infilling.

### Period 5 (Figs 3.2–7)

A total of 1772 sherds came from Period 5a contexts and 524 from Period 5b. This period is defined ceramically by the appearance of two pottery traditions which have been dated in Oxford to the late 12th century: Fabric 3 (Oxford fabric OXAQ) and the appearance of tripod pitchers in Fabric 7. Fabric 3 constituted 4.23% of the pottery from Period 5a, coming in particular from the east terrace contexts. Most of the pottery in Period 5 came from the in-filling of the Solar Tower (Fig. 3.2), the accumulated deposits in the east garderobe (Fig. 3.3) and from layers within the courtyard. The courtyard contexts were particularly rich in Period 5b, together with the deposits from the North Range.

The predominant fabric, as in the previous period, continued to be Fabric 1 (92% of the assemblage total for Period 5a). The vessel forms consisted of cooking pots with a wide variety of rim profiles: splayed everted rims (such as Fig. 3.4, no. 2), bevelled everted rims (such as Fig. 3.4, no. 14) and square-rim cooking pots (e.g. Fig. 3.4, no. 11). These types are dated to the late 12th–13th century (St Aldates: Haldon and Mellor 1977, 127, Fig. 20 nos 2, 8 and 9). Some of these types were also evident in Fabric 3 (Oxford fabric OXAQ).

Fabric 3 (Oxford fabric OXAQ) is first found in the early to mid 12th century in Newbury (Vince 1997), but its earliest occurrence in Oxford is dated by association with a 'much-used' coin of Henry II
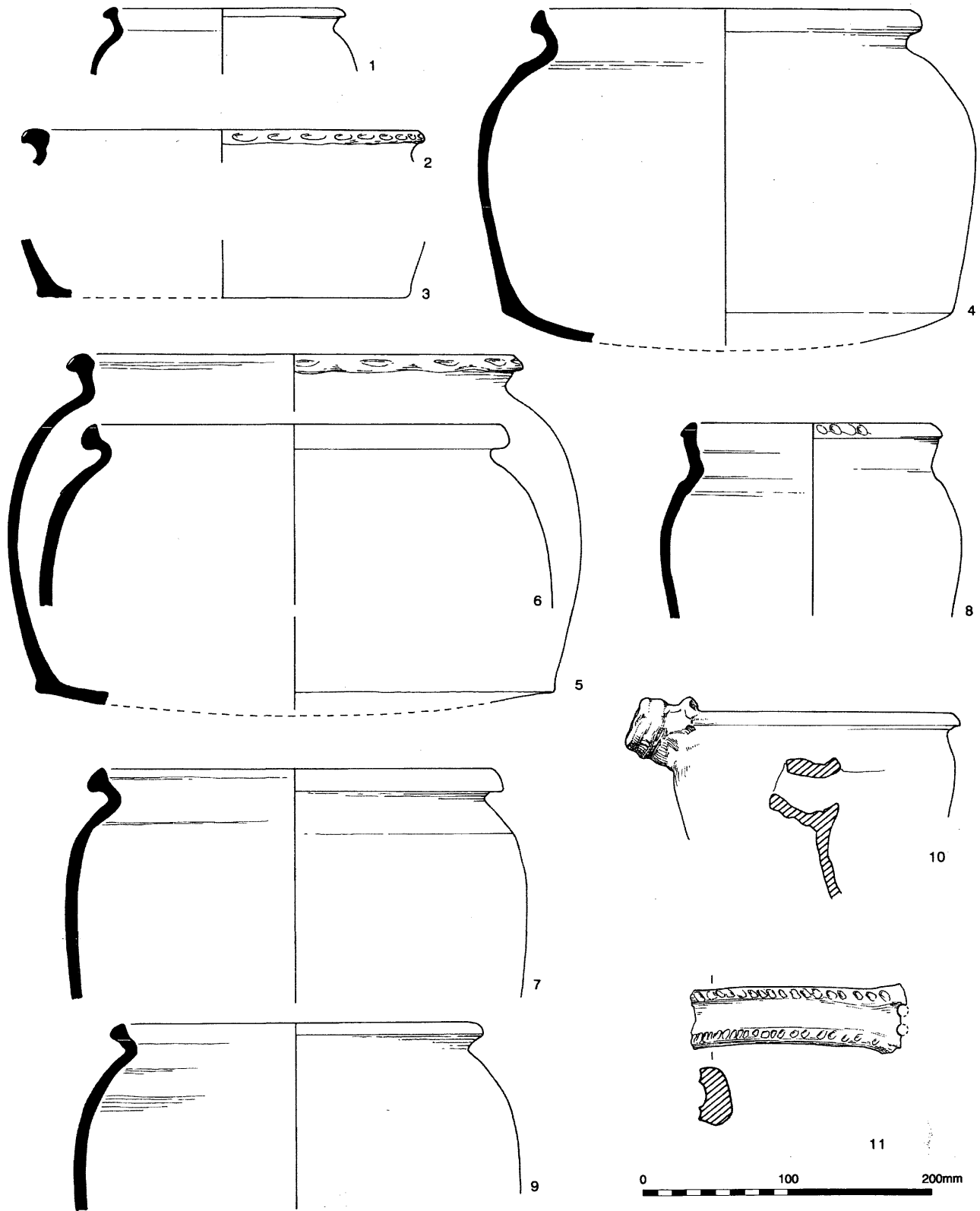
*Figure 3.2   Period 5a. Embanking south of Solar Tower: No. 1 (Fa 1)—296/2/1, No. 2 (Fa 3) 296/3/1, No. 3 (Fa 3)—296/3/2. Latest use of east garderobe: No. 4 (Fa 1)—142/1/2, No. 5 (Fa 3)—142/1/1, No. 6 (Fa 1)—213/0/1, No. 7 (Fa 1)—142/2/2, No. 8 (Fa 1)—142/2/1, No. 9 (Fa 1)—142/1/3, No. 10 (Fa 1)—142/1/1, No. 11 (Fa 1)—254/0/1.*
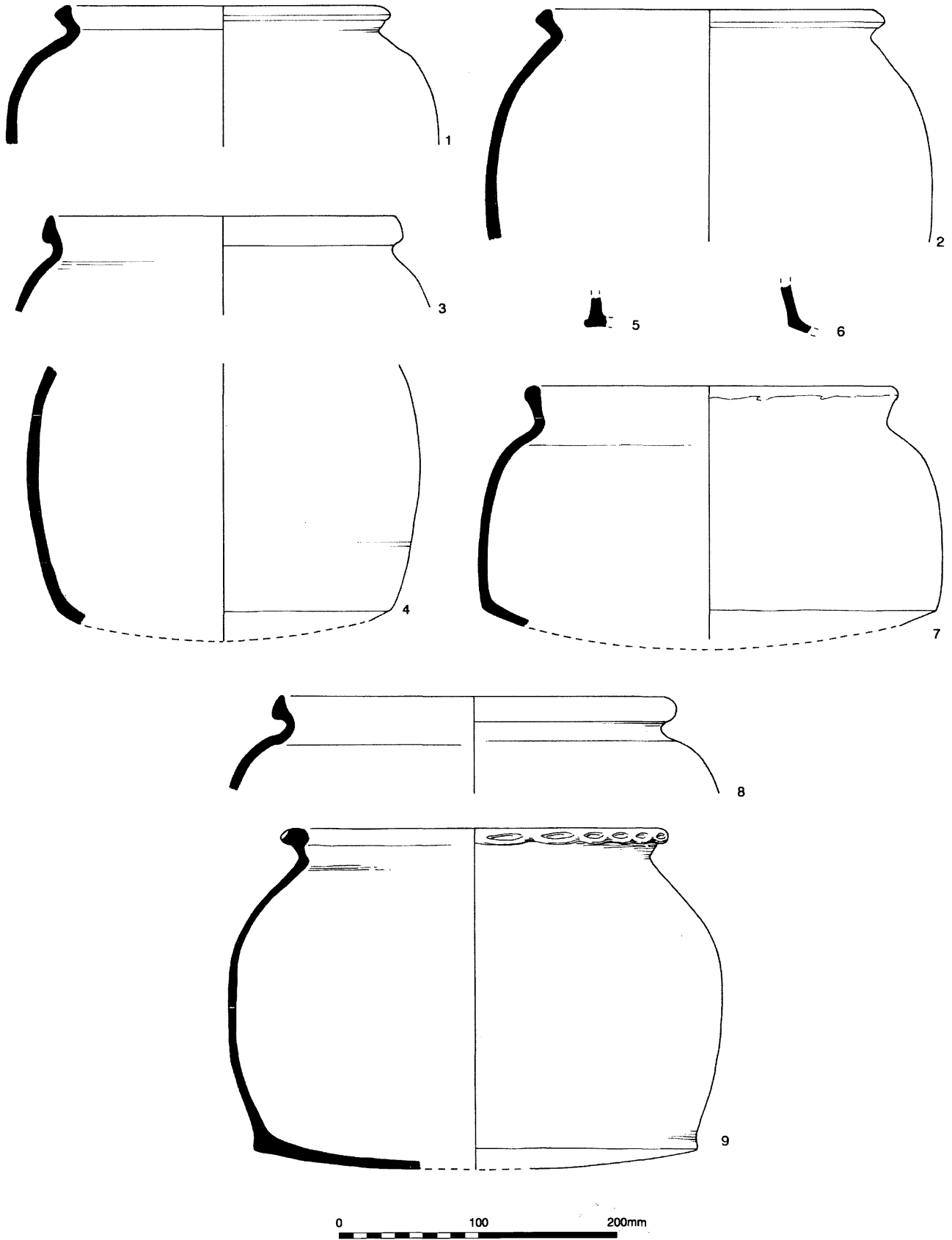
*Figure 3.3   Period 5a. Infilling of east garderobe. No. 1 (Fa 1)—111/2/1, No. 2 (Fa 1)—111/3/1, No. 3 (Fa 1)—111/2/2, No. 4 (Fa 1)—111/2/4, No. 5 (Misc)—111/0/2, No. 6 (Fa 7)—111/0/1, No. 7 (Fa 3)—81/2/1, No. 8 (Fa 1)—111/2/3, No. 9 (Fa 3)—81/2/2.*

Table 3.2   Pottery: Quantification of all fabrics by site period.

Fabric key (column headers):
- 1 = Early med West Oxon ware, OXAC
- 2 = OXBF and Newbury A
- 3 = OXAQ and Newbury B
- 4 = ?Shipton under Wychwood
- 5 = South-east Wilts
- 6 = OXAM, Brill/Boarstall
- 7 = OXY and Middleton Stoney III
- 9 = Minety
- 10 = Cf. Fabric 36, Chalgrove 70
- 13 = OXAH, ?North Midlands
- 14 = London
- 15 = =?4
- 16 = Worcester =34
- 17 = Brill type, OXAW
- 18 = Ashampstead type, OXAG
- 20 = Surrey type
- 21 = Bath type Trowbridge C400
- 23 = West Wilts type
- 25 = South-east Wilts, Avebury G3
- 26 = Surrey
- 27 = ?Early Brill OXAB
- 30 = =4
- 31 = Olney Hyde
- 32 = Surrey OXBN
- 33 = London type ware
- 34 = Worcester
- 36 = Trowbridge C409
- 37 = Minety late-medieval
- 38 = Worcester
- 39 = ?Surrey
- 99 = Post-medieval red earthenwares

| Fabric Period | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 88 | 99 | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 18 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 1 | 19 |
| 3a | 14 | 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 4 | 19 |
| 4 | 12 | | | | | | 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 13 |
| 4a | 2 | 2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 3 | 7 |
| 4b | 469 | 5 | 2 | | 3 | 2 | 3 | | 1 | 1 | 1 | | | | | | | | | | | | | | | | | | | | 1 | | | | | | | | | 12 | 499 |
| 5a | 1648 | 16 | 84 | | 5 | 3 | 9 | 1 | 3 | | 1 | 1 | 5 | 1 | 1 | 1 | | 1 | | | | | | | | | | | | | 1 | | | | | | | | | 9 | 1790 |
| 5b | 437 | 19 | 53 | | | | 2 | | | | | | | | | | 3 | | | 1 | | | | | 5 | | | | | | | | | | | | | | | 4 | 524 |
| 6 | 57 | | 2 | | | | 1 | | 2 | | | | | | | | 4 | | | | | | | | | | | | | | | | | | | 1 | | | | 6 | 73 |
| 6a | 1204 | 50 | 59 | | | 23 | 8 | | 14 | | | | | | | | 6 | 1 | | | 1 | | 11 | 2 | 56 | | | | 4 | 1 | 1 | 1 | | | | | | | | 34 | 1477 |
| 6b | 358 | 59 | 59 | 1 | | 49 | 13 | | 4 | | | | | | | | 19 | 1 | | | | | 6 | | | | | | 7 | | | 3 | 1 | 2 | 80 | 15 | | | | 38 | 715 |
| 7 | 462 | 13 | 65 | | 3 | 49 | 7 | | 3 | | | | 2 | | | | 10 | 4 | | 1 | | | 3 | 1 | 2 | | | | | | | | | | | 32 | 1 | 1 | 2 | 29 | 690 |
| 8 | 281 | 12 | 76 | 1 | | 124 | 5 | | 11 | | | | | | | | 5 | 11 | | 1 | | | | | | | 1 | | | | | | | | | | | | | 81 | 609 |
| 9 | 18 | | 3 | | | 13 | 1 | | 12 | | | | | | | | | | | | | | | | | | | | | | | 3 | | | | 2 | | | 4 | 217 | 273 |
| 9a | | | | | | 9 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 2 | 4 | 15 |
| 9b | 19 | | 2 | | | | | | | | | | | | | | | | | | | | | | | | | | 1 | | | | | | | | | | | | 22 |
| 10 | 20 | | | | | 1 | 1 | | 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 11 | 34 |
| Total | 5019 | 177 | 405 | 2 | 11 | 273 | 51 | 1 | 51 | 1 | 2 | 1 | 7 | 1 | 1 | 1 | 47 | 17 | 1 | 3 | 4 | 1 | 19 | 2 | 61 | 1 | 5 | 1 | 9 | 1 | 4 | 3 | 1 | 2 | 80 | 50 | 1 | 1 | 8 | 453 | 6779 |
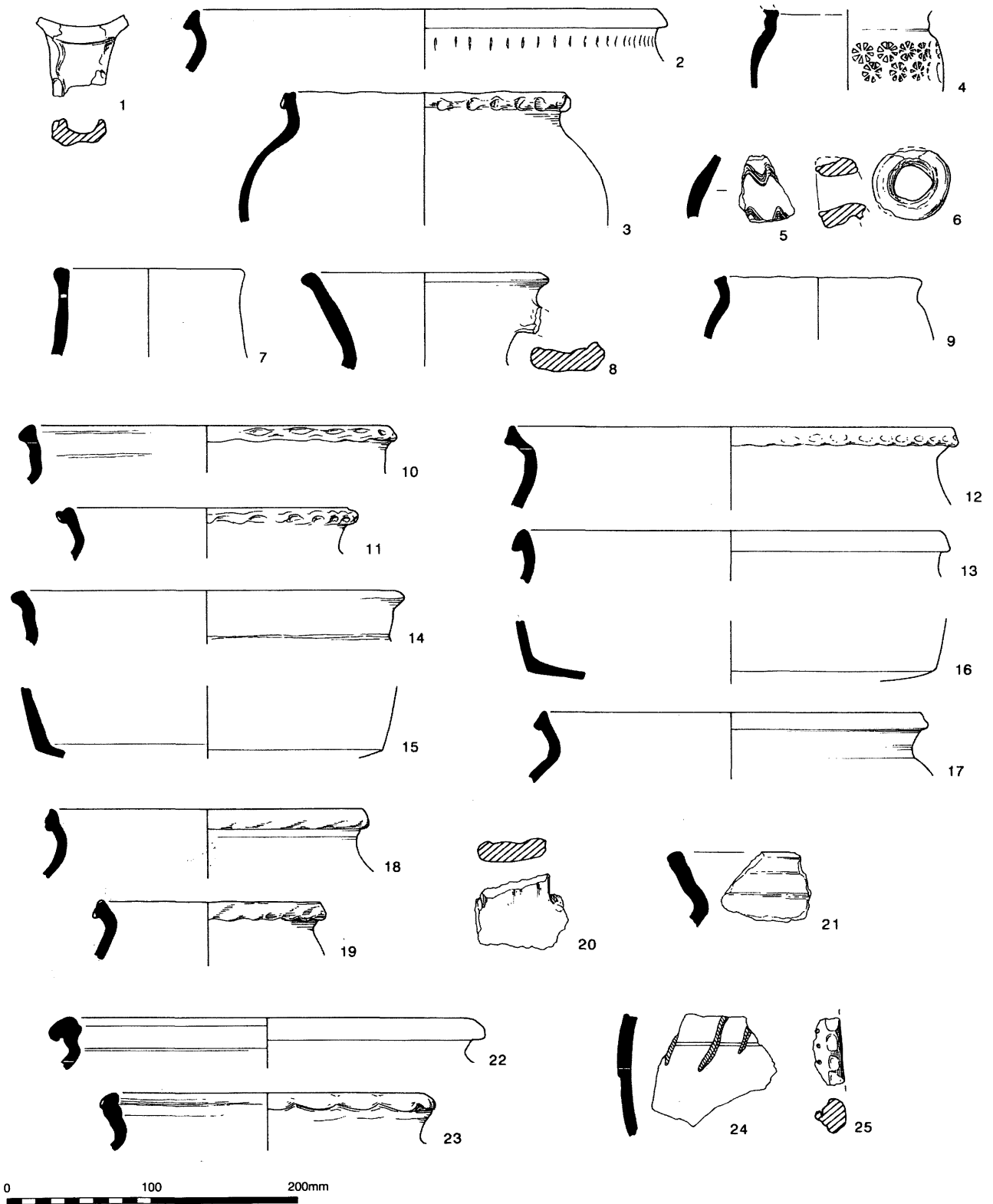
*Figure 3.4    Period 5a. Blocking of Solar Tower door: No. 1 (Fa 13)—134/1/1, Infill of Solar Tower: No. 2 (Fa 1)—211/D/ 1, No. 3 (Fa 1)—211/D/4, No. 4 (Fa 1)—211/D/3, No. 5 (Fa 9)—36/0/2, No. 6 (Fa 1)—141/D/4, No. 7 (Fa 1)—36/0/1, No. 8 (Fa 1)—141/D/5, No. 9 (Fa 1)—141/D/3, No. 10 (Fa 1)—36/A/1, No. 11 (Fa 1)—141/D/7, No. 12 (Fa 1)—141/D/ 2, No. 13 (Fa 1)—141/D/1, No. 14 (Fa 1)—139/C/1, No. 15 (Fa 1)—234/C/1, No. 16 (Fa 1)—234/C/3, No. 17 (Fa 1)— 141/D/6, No. 18 (Fa 1)—234/C/1, No. 19 (Fa 1)—234/C/2, No. 20 (Fa 1)—36/D/1, No. 21 (Fa 1)—35/0/2, No. 22 (Fa 3)—51/0/1, No. 23 (Fa 2)—128/0/1, No. 24 (Fa 13)—35/0/1, No. 25 (Fa 1)—35/0/12.*
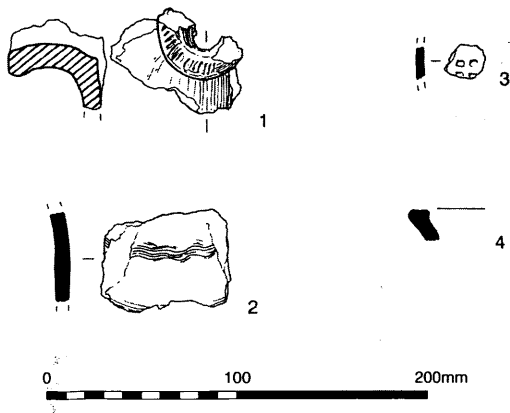
*Figure 3.5. Period 5a. West block construction: No. 1 (Fa 1)—146/0/1, East terrace clay east of garderobe: No. 2 (Fa 9)—104/0/1, No. 3 (Fa 16)—283/4/2, No. 4 (Fa 15)—283/4/1.*

(minted between 1168 and 1180) in a well at St John's College, Oxford (Jope *et al.* 1950, 46). At Mount House sherds of Fabric 3 were found in the infill of the Solar Tower, which also included one penny and two halfpennies of the reign of Stephen, minted between 1135 and 1150 (see below Mayhew, The Coins, SFs 54, 58, 68). Such coins are now known to have remained in circulation until at least 1162 in the reign of Henry II, but this association makes it possible that Fabric 3 was present in Oxfordshire earlier than previously attested.

The interpretation of this association is complicated by the fact that the dumped infill in the Solar Tower included worked stones showing signs of considerable weathering, suggesting that some of the material incorporated may have been lying around for some time. The numerous cross-joins between sherds in different backfill layers show that most of the dumping was derived from a single deposit, perhaps a midden. All of the pottery from the lower backfill layers was of Fabrics 1 and 2; the few sherds of Fabric 3 came from layer 36/1, the last of the soil

dumps, and from the bulk infill above, layers 3 = 56 and 51. It is possible, therefore, that the bulk of the pottery should be regarded as of mid-12th-century date, perhaps contemporary with the coins, but it would be unwise to place too much reliance upon this association to date the first appearance of Fabric 3 in Oxfordshire. A later 12th-century date for Fabric 3 appears to be supported by the presence of late-12th-century types such as the Fabric 7 tripod pitcher sherds and by other imported pottery types as detailed below.

In this period there is a greater incidence of regional imports including Minety-type ware (Fabric 9), three other oolitic limestone fabrics that may derived from the Cotswold region (Fabrics 11 and 12 and 15), a North Midlands type possibly from Nuneaton (Fabric 13) (Fig. 3.4, no. 1), London-type ware (Fabric 14), Worcester-type pitcher fabric (Fabric 16) and south Wiltshire/Laverstock-type (Fabric 5).

Minety-type ware appears in Gloucester from the early 12th century, but it is not common until the late 12th century; in Oxford it first appears in the early 13th century. Minety-type vessel forms comprise pitchers with thin glaze and these along with other regional types provided the table wares compared to the kitchen wares in Fabrics 1 and 3. North Midlands/ Nuneaton-type ware is dated from the 13th century at the kiln site (Mayes and Scott 1984). London-type ware appears in the mid 12th century in London, and continues to the mid 14th century. It appears to have had a wide distribution almost from the start, as 12th-century London-type ware has been found in Hereford, Gloucester, Reading and Newbury (fabric C) (Pearce *et al.* 1985). Worcester-type ware is equivalent to Worcester early sandy glazed pitcher fabric (Worcester Type fabric 59/60) and is noted for its rouletted decoration, which is evident on the example from Witney (Fig. 3.5, no. 3). Worcester-type ware is dated from the late 12th century in Worcester itself (Morris 1980, 230 and 238). South Wiltshire types including scratch-marked cooking pots and sandy tripod pit-
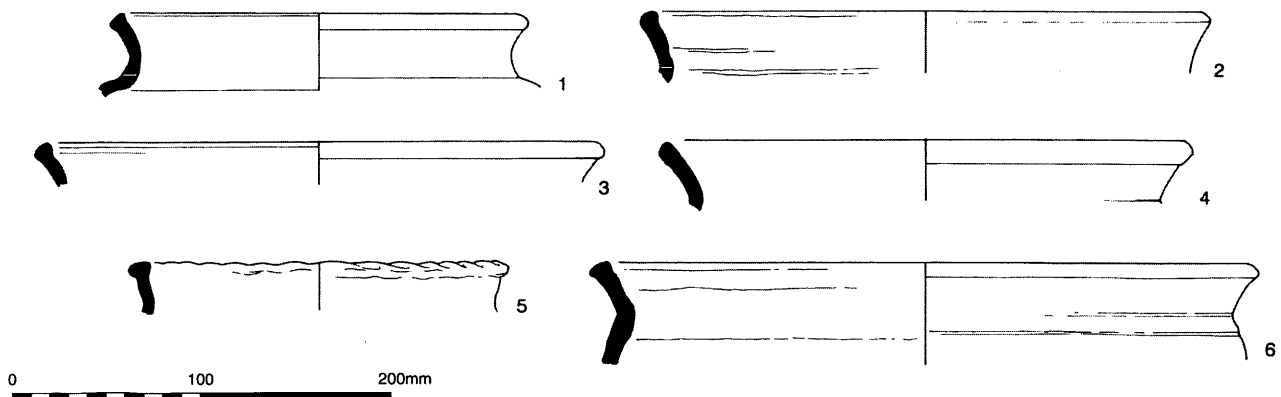


*Figure 3.6 Period 5a. All Fabric 1. North courtyard: No. 1—644/0/6, No. 2—644/0/2, No. 3—644/0/8, No. 4—538/0/1, No. 5—523/0/1, No. 6—523/0/2.*
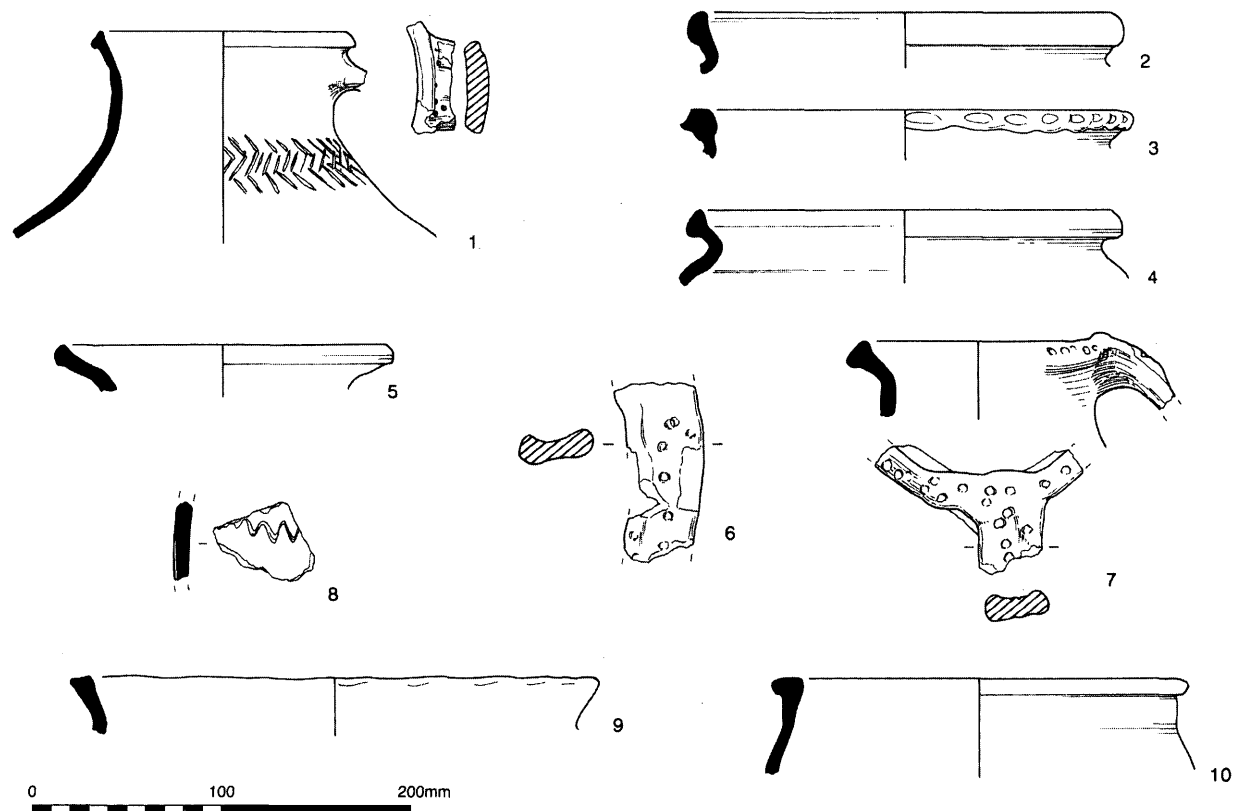
*Figure 3.7   Period 5b. Courtyard west of East Range: No. 1 (Fa 1)—148/0/1, No. 2 (Fa 1)—151/3/1, No. 3 (Fa 3)—151/3/2, No. 4 (Fa 1)—130/1/1. North Range floor: No. 5 (Fa 1)—602/2/2, No. 6 (Fa 1)—602/2/2. North courtyard: No. 7 (Fa 1) — 539/4/2, No. 8 (Fa 1)—539/4/1, No. 9 (Fa 1)—542/0/1, No. 10 (Fa 1)—633/0/1.*

chers can be paralleled at Gloucester, where they date from the early 13th century.

In Period 5b the majority of the material is from the courtyard contexts and includes early Brill/Boarstall ware (Fabric 17) and south Wiltshire type (Fabric 25). Fabric 1 still dominates the assemblage, though Fabric 3 (Oxford fabric OXAQ) is present in increasing quantity. Early Brill/Boarstall ware is dated from the early 13th century and may pre-date 1231 (Mellor 1994, 117). Fabric 25 is probably the Laverstock jug fabric dating from 1230 (Musty *et al.* 1969).

### Period 6 (Figs 3.8–9)

A total of 2265 sherds were analysed from this period, of which 1477 sherds were from Period 6a, 715 from 6b and 73 from Period 6 (unassigned to sub-group).

Throughout the period the largest amount of material appears to have been deposited in the courtyard contexts (Fig. 3.8 nos 3–18). Fabric 1 comprises the highest proportion of the assemblage (81.6% for Period 6a). There is however a wider distribution of regional imports, which include three Brill/Boarstall fabric types (Fabrics 6, 7 and 27), of which Fabric 6 (Oxford fabric AM) provides the highest number. Other types are: Fabric 18 (Oxford fabric AG) probably from Ashampstead, Berkshire (Mepham and Heaton 1995, 33), Fabric 21 (a Bath/Trowbridge type), Fabric 23 (a west Wiltshire type including Fig. 3.8, nos

13–15 and 17), Fabric 25 (a south-east Wiltshire type) and Fabric 28 (Oxford CG), Olney Hyde ware from Buckinghamshire. In Period 6b the fabrics include a Nash Hill product (Fabric 33) dated to the later 13th century at the kiln site (McCarthy 1974).

The larger amount of Brill/Boarstall ware, which includes mottled green glazed jug sherds, and which does not occur before the mid 13th century at the production centre (Farley 1982), provides the dating range for this period. Fabric 18 is dated from the mid to late 11th century onwards in Oxford and from the early 13th century at the kiln source (Mepham and Heaton 1995, 41). Olney Hyde ware (Fabric 28) is attributed typologically to the 13th century at the kiln site (Mynard 1984).

### Period 7 (Fig. 3.10)

A total of 690 sherds were from Period 7 contexts, mainly from the courtyard (Fig. 3.10, nos 8–12) and North Range areas (Fig. 3.10, nos 2–6 & 13–18). This period sees the first introduction of Surrey types (Fabric 20), Coarse Border ware (fabric 39: Fig. 3.10, no. 11) and Surrey Tudor Green type (Fabric 32) and also Minety Late Medieval ware (Fabric 37: Fig. 3.10, nos 14–16) and a Worcester decorated jug fabric (Fabric 38: Fig. 3.10, no. 5). The increase in the quantity of Brill/Boarstall jug sherds (Fabric 6: 7.1% of Period 7 assemblage and Fabric 17: 1.45%) indicates a 14th-century to 15th-
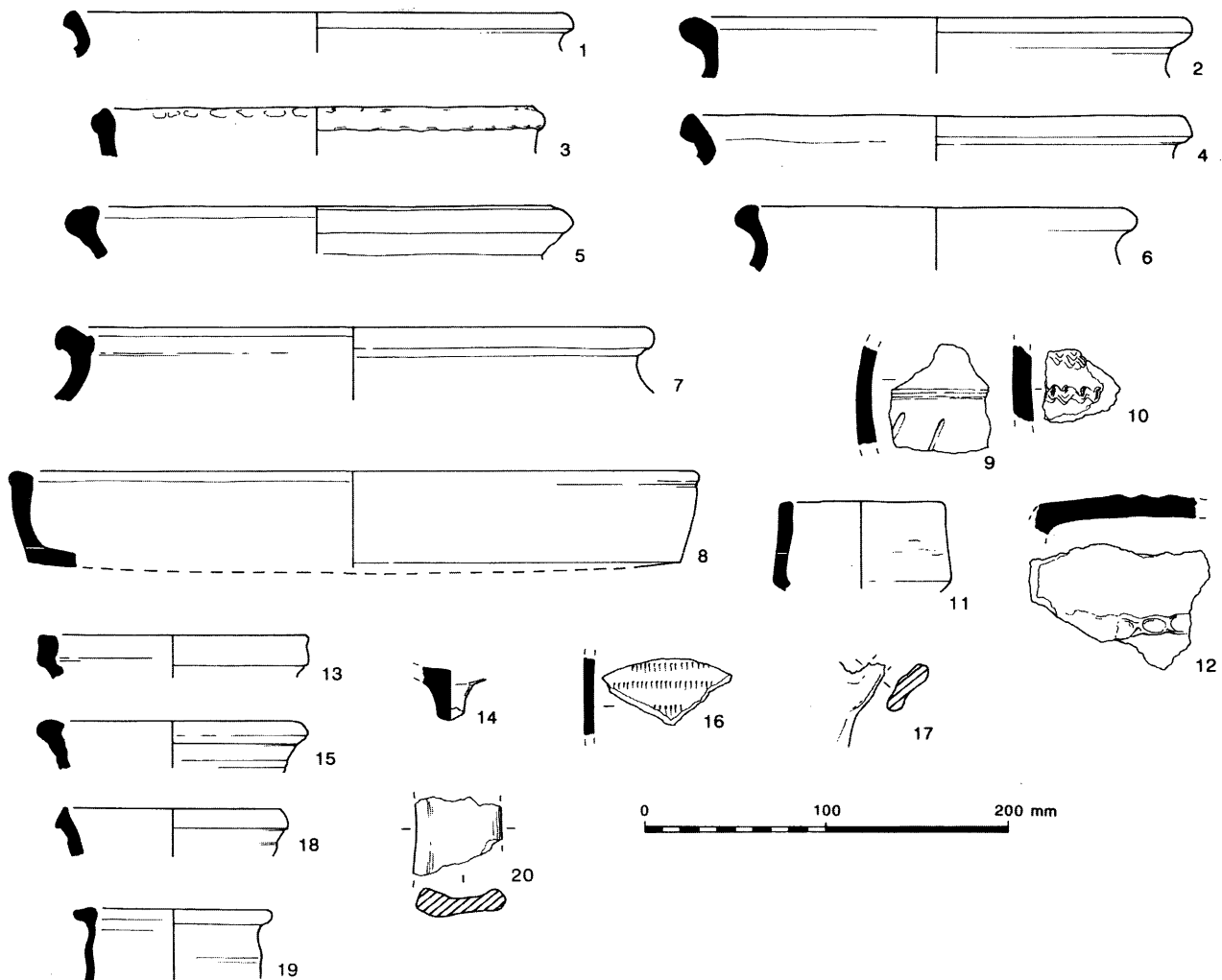
*Figure 3.8  Period 6a. North Range: No. 1 (Fa 1)—622/0/1, No. 2 (Fa 3)—663/0/1. North courtyard: No. 3 (Fa 1)—620/ 0/1, No. 4 (Fa 1)—620/0/3, No. 5 (Fa 1)—615/0/4, No. 6 (Fa 1)—615/0/1, No. 7 (Fa 1)—507/4/2, No. 8 (Fa 1)—507/4/ 2, No. 9 (Fa 9)—507/4/4, No. 10 (Fa 1)—507/4/5, No. 11 (Fa 1)—507/0/3, No. 12 (Fa 1)—507/4/3, No. 13 (Fa 23)— 507/2/1, No. 14 (Fa 23)—507/2/2, No. 15 (Fa 27)—507/0/1, No. 16 (Fa 24)—507/0/1, No. 17 (Fa 23)—615/0/5, No. 18 (Fa 2)—615/0/2. East Range: No. 19 (Fa 17)—236/0/1. Courtyard west of East Range: No. 20 (Fa 1)—29/D/2.*

century date range, which is supported by the influx of Surrey wares. Coarse Border ware is dated from the mid 14th century in London.

### Period 8 (Fig. 3.11)

The Period 8 assemblage totalled 609 sherds, of which the majority was from the courtyard contexts (Fig. 3.11, nos 1–3). There was a high level of residual pottery, including Witney Medieval ware (Fabric 1), and other medieval fabrics such as Fabrics 2, 3, Wychwood-type ware (Fabric 4) and Oxford medieval ware (Fabric 7), South Oxfordshire Medieval type (Fabric 18) and Brill/Boarstall wares. These were combined with late medieval to post-medieval red wares, particularly in the courtyard contexts, indicating a high level of redeposition and of mixing of material, which may plausibly be explained by the

interpretation of the courtyard as garden areas. The small quantities of Surrey white wares (Fabrics 20 and 26) and the larger numbers of red wares suggest a date from the 15th century to 16th century.

### Dating and longevity of the fabrics

The problem with the dating of the pottery types is that Fabrics 1 and 3 are apparently very long lived. The Fabric 1 pottery shows a progression of vessel types from simple cooking pots in Period 3 to an increasing variety of cooking pots and other types in Periods 4b and 5. This fabric continues to dominate the assemblage numerically until the end of the medieval period (Tables 3.2 and 3.3), though it is doubtful whether it genuinely remained in use quite as long as this. The proportion fluctuates in the later medieval period, dropping to only 50% in the late
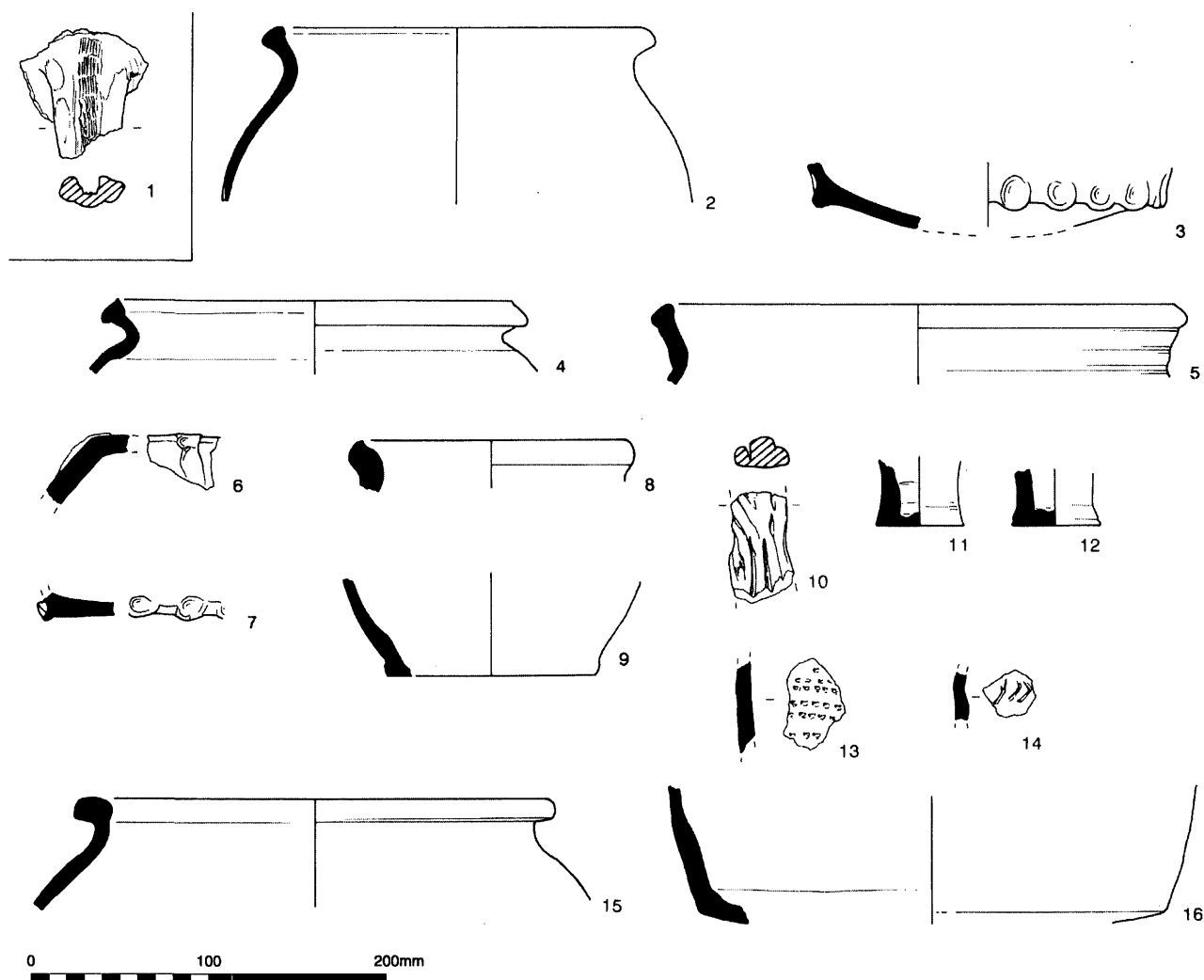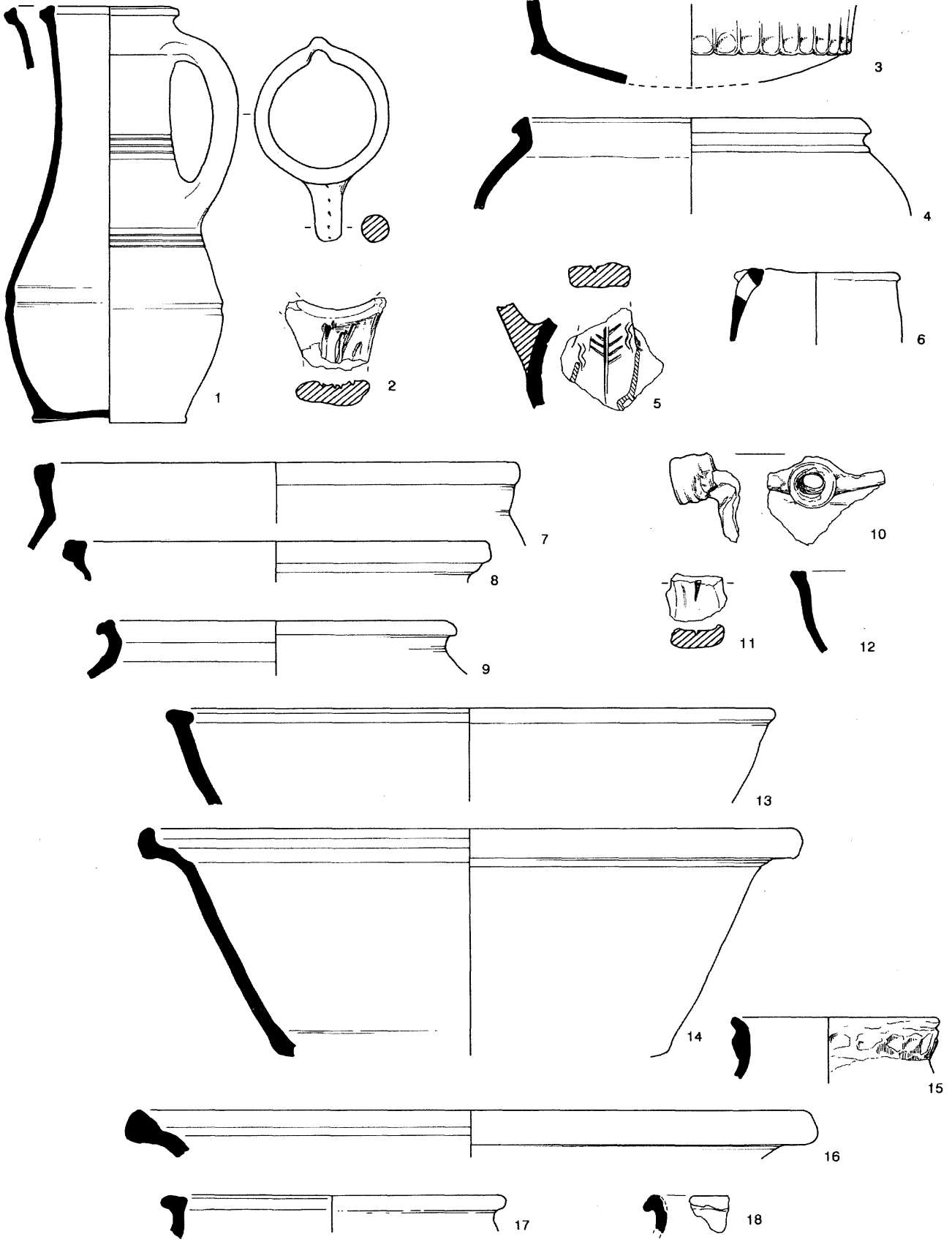
*Figure 3.9   Period 6b. Courtyard west of East Range: No. 1 (Fa 4)—23/0/1. North courtyard: No. 2 (Fa 7)—508/0/1. Dump within North Range: No. 3 (Fa 1)—596/0/5, No. 4 (Fa 1)—596/0/4, No. 5 (Fa 1)—596/2/3, No. 6 (Fa 1)—596/ 0/6, No. 7 (Fa 37)—599/0/1, No. 8 (Fa 37)—596/0/2, Porch of West Range: No. 9 (Fa 6)—554/0/1, No. 10 (Fa 37)— 626/0/1, Moat: No. 11 (Fa 6)—558/21/1, No. 12 (Fa 6)—558/21/2, No. 13 (Fa 35)—558/11/1, No. 14 (Fa 16)—558/ 11/2, No. 15 (Fa 36)—558/11/1, No. 16 (Fa 36)—558/11/2.*

13th century (Period 6b), rising again to 67% in the 14th century (Period 7), and then dropping to 46% in Period 8. So predominant is Fabric 1 in the 12th and early 13th centuries that it may be that the true *floruit* of this fabric only lasted until the late 13th century, after which it is largely residual. Table 3.4 examines the numbers of sherds in each period as a percentage of the total assemblage for that fabric. This offers some support for the suggestion that the bulk of the Fabric 1 material was in use before the mid 13th century. There does not appear to be any further development of forms after Period 5b, and although

no work on sherd size or abrasion was carried out there are certainly no largely complete vessels present in Fabric 1 after the mid 13th century.

The appearance of Fabric 3 in Period 5a, and the dating of this fabric, has already been discussed. Fabric 3 increases in quantity throughout the 13th century, and is found in combination with Brill/ Boarstall glazed jug fabrics (6, 17 and 27) in Oxford in the early 14th century (Mellor 1994). At Mount House it continues to provide a significant proportion of the pottery into the late medieval period, as elsewhere in the region (Mellor 1994, 105).

*Figure 3.10   Period 7. North-west garderobe: No. 1 (Fa 6)—678/0/1, Robbing of North Range: No. 2 (Fa 1)—578/0/1, No. 3 (Fa 17)—585/4/1, No. 4 (Fa 1)—585/0/2, No. 5 (Fa 38)—585/0/4, No. 6 (Fa 1)—585/0/1, No. 7 (Fa 1)—583/0/ 3, North courtyard: No. 8 (Fa 3)—509/0/5, No. 9 (Fa 1)—509/0/1, No. 10 (Fa 1)—505/0/1, No. 11 (Fa 39)—505/0/3, No. 12 (Fa 1)—505/0/2, Dump within North Range: No. 13 (Fa 1)—571/0/3. No. 14 (Fa 37)—571/0/1, No. 15 (Fa 37)—571/1/3, No. 16 (Fa 37)—571/0/2, No. 17 (Fa 3)—571/2/1, No. 18 (Fa 3)—571/0/5.*
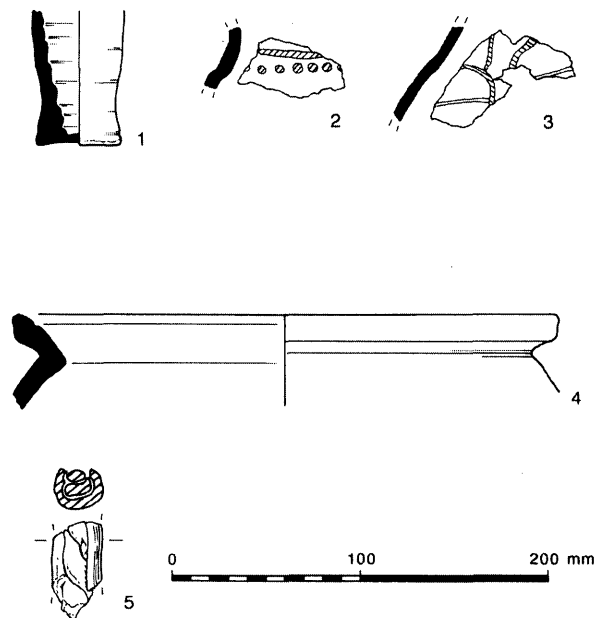
*Figure 3.11 Periods 8 and 9. Construction trench of wall 520: No. 1 (Fa 6)—553/0/1, Courtyard west of East Range: No. 2 (Fa 18)—10/0/1, East Range: No. 3 (Fa 6)—150/0/1, Moat: No. 4 (Fa 9)—558/27/1. Period 10: No. 5. (Fa 9)—33/0/2.*

The predominance of Fabric 1 throughout the medieval period also tends to mask changes in the frequency of other fabrics, making it difficult to identify other trends. Table 3.4 shows the occurrence of major fabrics other than Fabric 1 over time, but there are no very clear trends evident. As a result the pottery horizons are dated by the chronological indicators provided by known types such as Oxford Medieval ware and Brill/Boarstall ware and the appearance of regional imports which are dated by extrapolation from the production centres or other sites. The progression of the Brill/Boarstall wares and the glaze and decoration typology has been established in Oxford and in Buckinghamshire (Mellor 1994, 127, Yeoman 1983, 22–23). Type 5 is described as a South Wiltshire type and is possibly Laverstock-type ware, which is dated at Laverstock and Salisbury from the 12th century for the early scratch-marked ware through to the 14th century for the developed jugs (Musty *et al.* 1969). Type 25 may be the later developed jug fabric. Fabric 9 is described as Minety-type ware, which is also known in Gloucestershire and dated at Minety and in Gloucester to the late 12th century for the glazed tripod pitchers (Vince 1983). Fabric 2 appears to be a late Saxon type that is known from Newbury and Reading and is dated from the mid 11th century in Oxford. It only comprises a small amount of the assemblage at Mount House and elsewhere in Oxfordshire so it is difficult to know the trading mechanisms of this pottery type (Mellor 1994, 54).

All the other fabric imports, such as Worcester-type ware (Fabric 16) in Period 5a and Olney Hyde ware

(Fabric 31) in Period 6a, occur in very small quantities, but their presence can confirm a date range.

## Site distribution

Since the assemblages from the two main excavation areas are largely of different date, the south Solar Tower area dating mostly from Period 3 until Period 5 and the North Range from Periods 5–7, direct comparisons between them can only be made for Period 5 (late 12th and early 13th centuries). Although the status of the site might reasonably be assumed to be high, because it was owned by the Bishops of Winchester, the visits and even the interest of the bishops were intermittent, and this may have affected the degree of status differentiation evident in any given period.

The environmental evidence from the east garderobe in Period 5a does not correspond to the high status diet expected of the bishop and his court, perhaps suggesting that the bishop was not in residence very often in the late 12th century. The pottery from the south-east area of this period, however, indicates a wide range of vessel forms: cooking pots in a variety of forms and sizes, jars, bowls, pitchers and jugs, and it includes non-local types such as West Midlands/Nuneaton type ware (Fabric 13) and London-type ware (Fabric 14) from contexts within the east garderobe (Table 3.5). The quantities of imported pottery involved are very small, and do not suggest much use by the bishop or his immediate retinue.

The Solar Tower infill contexts for the same period do not contain such a variety of vessel types. The pottery comprises mainly cooking pots and tripod pitcher forms, with a small proportion of non-local wares such as Winchester-type ware (Fabric 8), Minety-type ware (Fabric 9) and West Midlands/Nuneaton-type ware (Fabric 13). The pottery need not have come from the Bishop's own table. As has been observed already this material was probably redeposited from a midden.

By contrast, the material from the North Range for the same period (5a and 5b) lacks the non-local pottery of the calibre found in the Solar Tower and east garderobe. The pottery comprises Witney medieval ware (Fabric 1), Fabric 2, Wiltshire type (Fabric 3) and Oxford Medieval ware (Fabric 7). The greater range of the pottery from the Solar Tower area reflects the greater status of its occupants, as one would expect. The range of vessel types in the North Range (from cooking pots to pitchers) is similar to that of the vessels from the Solar Tower infill, suggesting a similar range of domestic functions for both assemblages.

The range of vessel types expands in the 13th century (Period 6) with the increased presence of Brill/Boarstall wares (Fabrics 6 and 17) and other types such as the west Wiltshire type (Fabric 23) and includes higher proportions of glazed jugs. This is evident throughout all the deposits associated with North Range including the adjacent courtyard and moat layers. The courtyard contexts contained a

*Table 3.3  Pottery: Numbers and percentages of fabrics (excluding those occurring only once) for each period and overall.*

| Fabric/Period | Early Med West Oxon ware, OXAC | OXBF and Newbury A | OXAQ and Newbury B | ? Shipton under Wychwood | South-east Wilts | OXAM, Brill/Boarstall | OXY and Middleton Stoney III | Minety | | OXAH, ? North midlands | OXAW, Brill/Boarstall | Ashampstead, OXAG and Newbury B | Surrey | Bath, Trowbridge C400 | ?W Wilts, Trowbridge, Crockerton/ Bath | South-east Wilts, Avebury G3 | OXAB, ? Early Brill/Boarstall | | OXBN, Surrey | cf. Dean Court, Cumnor ZZ | | Trowbridge C409 | Minety Late Med ware | | Post-med red earthenwares | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 9 | 11 | 13 | 17 | 18 | 20 | 21 | 23 | 25 | 27 | 30 | 32 | 33 | 35 | 36 | 37 | 88 | 99 | Total |
| 3 Sherd Nos | 18 | | | | | | | | | | | | | | | | | | | | | | | | 1 | 19 |
| % | 95% | | | | | | | | | | | | | | | | | | | | | | | | 5% | 100.0% |
| 3a Sherd Nos | 14 | 1 | | | | | | | | | | | | | | | | | | | | | | | 4 | 19 |
| % | 74% | 5% | | | | | | | | | | | | | | | | | | | | | | | 21% | 100.0% |
| 4 Sherd Nos | 12 | | | | | | 1 | | | | | | | | | | | | | | | | | | | 13 |
| % | 92.3% | | | | | | 7.7% | | | | | | | | | | | | | | | | | | | 100.0% |
| 4a Sherd Nos | 2 | 2 | | | | | | | | | | | | | | | | | | | | | | | 3 | 7 |
| % | 28.6% | 28.6% | | | | | | | | | | | | | | | | | | | | | | | 42.9% | 100.0% |
| 4b Sherd Nos | 469 | 5 | 2 | 3 | 2 | 3 | 1 | 1 | | | | | | | | | | | 1 | | | | | | 11 | 498 |
| % | 94.2% | 1.0% | 0.4% | 0.6% | 0.4% | 0.6% | 0.2% | 0.2% | | | | | | | | | | | 0.2% | | | | | | 2.2% | 100.0% |
| 5a Sherd Nos | 1,648 | 16 | 84 | 5 | 3 | 9 | 3 | 1 | | 5 | | | | | | | | | 1 | | | | | | 9 | 1784 |
| % | 92.4% | 0.9% | 4.7% | 0.3% | 0.2% | 0.5% | 0.2% | 0.1% | | 0.3% | | | | | | | | | 0.1% | | | | | | 0.5% | 100.0% |
| 5b Sherd Nos | 437 | 19 | 53 | | | | 2 | | | | 3 | 1 | | | | | 5 | | | | | | | | 4 | 524 |
| % | 83.4% | 3.6% | 10.1% | | | | 0.4% | | | | 0.6% | 0.2% | | | | | 1.0% | | | | | | | | 0.8% | 100.0% |
| 6 Sherd Nos | 57 | | 2 | | | 1 | 2 | | | | 4 | | | | | | | | | | | | 1 | | 6 | 73 |
| % | 78.1% | | 2.7% | | | 1.4% | 2.7% | | | | 5.5% | | | | | | | | | | | | 1.4% | | 8.2% | 100.0% |
| 6a Sherd Nos | 1,204 | 50 | 59 | | | 23 | 8 | 14 | | | 6 | 1 | | 1 | 11 | 56 | 4 | 1 | | | | | | | 34 | 1472 |
| % | 81.8% | 3.4% | 4.0% | | | 1.6% | 0.5% | 1.0% | | | 0.4% | 0.1% | | 0.1% | 0.7% | 3.8% | 0.3% | 0.1% | | | | | | | 2.3% | 100.0% |
| 6b Sherd Nos | 358 | 59 | 59 | 1 | | 49 | 13 | 4 | | | 19 | 1 | | | 6 | | | 7 | | 3 | 2 | 80 | 15 | | 38 | 714 |
| % | 50.1% | 8.3% | 8.3% | 0.1% | | 6.9% | 1.8% | 0.6% | | | 2.7% | 0.1% | | | 0.8% | | | 1.0% | | 0.4% | 0.3% | 11.2% | 2.1% | | 5.3% | 100.0% |
| 7 Sherd Nos | 462 | 13 | 65 | | 3 | 49 | 7 | 3 | | 2 | 10 | 4 | 1 | 3 | 2 | | | | | | | | 32 | 2 | 29 | 687 |
| % | 67.2% | 1.9% | 9.5% | | 0.4% | 7.1% | 1.0% | 0.4% | | 0.3% | 1.5% | 0.6% | 0.1% | 0.4% | 0.3% | | | | | | | | 4.7% | 0.3% | 4.2% | 100.0% |
| 8 Sherd Nos | 281 | 12 | 76 | 1 | | 124 | 5 | 11 | | | 5 | 11 | 1 | | | | | | | | | | | | 81 | 608 |
| % | 46.2% | 2.0% | 12.5% | 0.2% | | 20.4% | 0.8% | 1.8% | | | 0.8% | 1.8% | 0.2% | | | | | | | | | | | | 13.3% | 100.0% |
| 9 Sherd Nos | 18 | | 3 | | | 13 | 1 | 12 | | | | | | | | | | | 3 | | | | 2 | 4 | 217 | 273 |
| % | 6.6% | | 1.1% | | | 4.8% | 0.4% | 4.4% | | | | | | | | | | | 1.1% | | | | 0.7% | 1.5% | 79.5% | 100.0% |
| 9a Sherd Nos | | | | | | 9 | | | | | | | | | | | | | | | | | | 2 | 4 | 15 |
| % | | | | | | 60.0% | | | | | | | | | | | | | | | | | | 13.3% | 26.7% | 100.0% |
| 9b Sherd Nos | 19 | | 2 | | | | | | | | | | | | | | 1 | | | | | | | | | 22 |
| % | 86.4% | | 9.1% | | | | | | | | | | | | | | 4.5% | | | | | | | | | 100.0% |
| 10 Sherd Nos | 20 | | | | | 1 | 1 | 1 | | | | | | | | | | | | | | | | | 11 | 34 |
| % | 59% | | | | | 3% | 3% | 3% | | | | | | | | | | | | | | | | | 32% | 100.0% |
| Total Sherd Nos | 5,019 | 177 | 405 | 2 | 11 | 273 | 51 | 51 | 2 | 7 | 47 | 17 | 3 | 4 | 19 | 61 | 5 | 9 | 4 | 3 | 2 | 80 | 50 | 8 | 452 | 6762 |
| Overall %age of assemblage | 74.2% | 2.6% | 6.0% | 0.0% | 0.2% | 4.0% | 0.8% | 0.8% | 0.0% | 0.1% | 0.7% | 0.3% | 0.0% | 0.1% | 0.3% | 0.9% | 0.1% | 0.1% | 0.1% | 0.0% | 0.0% | 1.2% | 0.7% | 0.1% | 6.7% | 100% |

Table 3.4  Pottery: Numbers and percentages of fabrics (excluding those only occurring once) over time.

| Period/Fabric | | Early Med West Oxon ware, OXAC | OXBF and Newbury A | OXAQ and Newbury B | ? Shipton under Wychwood | South-east Wilts | OXAM, Brill/Boarstall | OXY and Middleton Stoney III | Minety | | OXAH, ? North Midlands | OXAW, Brill/Boarstall | Ashampstead, OXAG and Newbury B | Surrey | Bath, Trowbridge C400 | ?W Wilts, Trowbridge, Crockerton/Bath | South-east Wilts, Avebury G3 | OXAB, ?Early Brill/Boarstall | =4 | OXBN, Surrey | cf. Dean Court, Cumnor ZZ | | Trowbridge C409 | Minety Late Med Ware | | Post-med red earthenwares | Totals |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 9 | 11 | 13 | 17 | 18 | 20 | 21 | 23 | 25 | 27 | 30 | 32 | 33 | 35 | 36 | 37 | 88 | 99 | |
| 3 | Sherd Nos | 18 | | | | | | | | | | | | | | | | | | | | | | | | 1 | 19 |
| | % | 0.4% | | | | | | | | | | | | | | | | | | | | | | | | 0.2% | 0.3% |
| 3a | Sherd Nos | 14 | 1 | | | | | | | | | | | | | | | | | | | | | | | 4 | 19 |
| | % | 0.3% | 0.6% | | | | | | | | | | | | | | | | | | | | | | | | 0.9% | 0.3% |
| 4 | Sherd Nos | 12 | | | | | | 1 | | | | | | | | | | | | | | | | | | | 13 |
| | % | 0.2% | | | | | | 2.0% | | | | | | | | | | | | | | | | | | | 0.2% |
| 4a | Sherd Nos | 2 | 2 | | | | | | | | | | | | | | | | | | | | | | | 3 | 7 |
| | % | | 1.1% | | | | | | | | | | | | | | | | | | | | | | | 0.7% | 0.1% |
| 4b | Sherd Nos | 469 | 5 | 2 | | 3 | 2 | 3 | 1 | 1 | | | | | | | | | 1 | | | | | | | 11 | 498 |
| | % | 9.3% | 2.8% | 0.5% | | 27.3% | 0.7% | 5.9% | 2.0% | 50.0% | | | | | | | | | 11.1% | | | | | | | 2.4% | 7.4% |
| 5a | Sherd Nos | 1648 | 16 | 84 | | 5 | 3 | 9 | 3 | 1 | 5 | | | | | | | | | 1 | | | | | | 9 | 1784 |
| | % | 32.8% | 9.0% | 20.7% | | 45.5% | 1.1% | 17.6% | 5.9% | 50.0% | 71.4% | | | | | | | | | 25.0% | | | | | | 2.0% | 26.4% |
| 5b | Sherd Nos | 437 | 19 | 53 | | | | 2 | | | | 3 | | 1 | | | 5 | | | | | | | | | 4 | 524 |
| | % | 8.7% | 10.7% | 13.1% | | | | 3.9% | | | | 6.4% | | 33.3% | | | 8.2% | | | | | | | | | 0.9% | 7.7% |
| 6 | Sherd Nos | 57 | | 2 | | | | 1 | 2 | | | 4 | | | | | | | | | | | | 1 | | 6 | 73 |
| | % | 1.1% | | 0.5% | | | | 2.0% | 3.9% | | | 8.5% | | | | | | | | | | | | 2.0% | | 1.3% | 1.1% |
| 6a | Sherd Nos | 1204 | 50 | 59 | | | 23 | 8 | 14 | | | 6 | 1 | | 1 | 11 | 56 | 4 | 1 | | | | | | | 34 | 1472 |
| | % | 24.0% | 28.2% | 14.6% | | | 8.4% | 15.7% | 27.5% | | | 12.8% | 5.9% | | 25.0% | 57.9% | 91.8% | 80.0% | 11.1% | | | | | | | 7.5% | 21.8% |
| 6b | Sherd Nos | 358 | 59 | 59 | 1 | | 49 | 13 | 4 | | | 19 | 1 | | | 6 | | | 7 | | 3 | 2 | 80 | 15 | | 38 | 714 |
| | % | 7.1% | 33.3% | 14.6% | 50.0% | | 17.9% | 25.5% | 7.8% | | | 40.4% | 5.9% | | | 31.6% | | | 77.8% | | 100% | 100 % | 100% | 30.0% | | 8.4% | 10.6% |
| 7 | Sherd Nos | 462 | 13 | 65 | | 3 | 49 | 7 | 3 | | 2 | 10 | 4 | 1 | 3 | 2 | | | | | | | | 32 | 2 | 29 | 687 |
| | % | 9.2% | 7.3% | 16.0% | | 27.3% | 17.9% | 13.7% | 5.9% | | 28.6% | 21.3% | 23.5% | 33.3% | 75.0% | 10.5% | | | | | | | | 64.0% | 25.0% | 6.4% | 10.2% |
| 8 | Sherd Nos | 281 | 12 | 76 | 1 | | 124 | 5 | 11 | | | 5 | 11 | 1 | | | | | | | | | | | | 81 | 608 |
| | % | 5.6% | 6.8% | 18.8% | 50.0% | | 45.4% | 9.8% | 21.6% | | | 10.6% | 64.7% | 33.3% | | | | | | | | | | | | 17.9% | 9.0% |
| 9 | Sherd Nos | 18 | | 3 | | | 13 | 1 | 12 | | | | | | | | | | | 3 | | | | 2 | 4 | 217 | 273 |
| | % | 0.4% | | 0.7% | | | 4.8% | 2.0% | 23.5% | | | | | | | | | | | 75.0% | | | | 4.0% | 50.0% | 48.0% | 4.0% |
| 9a | Sherd Nos | | | | | | 9 | | | | | | | | | | | | | | | | | | 2 | 4 | 15 |
| | % | | | | | | 3.3% | | | | | | | | | | | | | | | | | | 25.0% | 0.9% | 0.2% |
| 9b | Sherd Nos | 19 | | 2 | | | | | | | | | | | | | | 1 | | | | | | | | | 22 |
| | % | 0.4% | | 0.5% | | | | | | | | | | | | | | 20.0% | | | | | | | | | 0.3% |
| 10 | Sherd Nos | 20 | | | | | 1 | 1 | 1 | | | | | | | | | | | | | | | | | 11 | 34 |
| | % | 0.4% | | | | | 0.4% | 2.0% | 2.0% | | | | | | | | | | | | | | | | | 2.4% | 0.5% |
| Total Sherd Nos | | 5019 | 177 | 405 | 2 | 11 | 273 | 51 | 51 | 2 | 7 | 47 | 17 | 3 | 4 | 19 | 61 | 5 | 9 | 4 | 3 | 2 | 80 | 50 | 8 | 452 | 6762 |

Table 3.5 *Pottery: Comparison of occurrence of fabrics from south-east and north-west areas in Period 5.*

| Fabric/Area | Early med West Oxon ware, OXAC | OXBF and Newbury A | OXAG and Newbury B | South east Wilts | OXAM, Brill/Boarstall | OXY and Middleton Stoney III | | Minety | | | OXAH, ? North Midlands | London | | Worcester | OXAW, Brill/Boarstall | | Surrey | South east Wilts, Avebury G3 | OXBN, Surrey | Post-med red earthenwares | Totals |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 5 | 6 | 7 | 8 | 9 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 19 | 20 | 25 | 32 | 99 | |
| North-west | 602 | 22 | 41 | | 1 | 3 | | | | | | | | | 3 | | 1 | 5 | | 5 | 683 |
| South-east | 1483 | 13 | 96 | 5 | 2 | 8 | 1 | 3 | 1 | 1 | 5 | 1 | 1 | 1 | | 1 | | | 1 | 8 | 1631 |
| Total | 2085 | 35 | 137 | 5 | 3 | 11 | 1 | 3 | 1 | 1 | 5 | 1 | 1 | 1 | 3 | 1 | 1 | 5 | 1 | 13 | 2314 |

Table 3.6 *Pottery: Comparison of occurrence of fabrics from south-east and north-west areas in Period 6.*

| Fabric/Area | Early med West Oxon ware, OXAC | OXBF and Newbury A | OXAQ and Newbury B | ?Shipton under Wychwood | OXAM, Brill/Boarstall | OXY and Middleton Stoney III | Minety | Brill type, OXAW | Ashampstead, OXAG and Newbury B | Bath, Trowbridge C400 | ?W Wilts, Trowbridge Crockerton/Bath, | | South East Wilts, Avebury G3 | ? Early Brill type = OXAB | | | | OXCG and Olney Hyde type | cf. Dean Court, Cumnor ZZ | | | Trowbridge C409 | Minety Late medieval type | Post-medieval red earthenwares | Totals |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 6 | 7 | 9 | 17 | 18 | 21 | 23 | 24 | 25 | 27 | 28 | 29 | 30 | 31 | 33 | 34 | 35 | 36 | 37 | 99 | |
| North-west | 1493 | 103 | 107 | | 30 | 11 | 17 | 25 | 2 | 1 | 17 | 2 | 56 | 4 | 1 | 1 | 8 | 1 | 3 | 1 | 2 | 80 | 16 | 72 | 2053 |
| South-east | 126 | 6 | 13 | 1 | 42 | 11 | 3 | 4 | | | | | | | | | | | | | | | | 6 | 212 |
| Grand Total | 1619 | 109 | 120 | 1 | 72 | 22 | 20 | 29 | 2 | 1 | 17 | 2 | 56 | 4 | 1 | 1 | 8 | 1 | 3 | 1 | 2 | 80 | 16 | 78 | 2265 |

higher quantity of other regional imports such as the west Wiltshire type (Fabric 23) and Olney Hyde ware (Fabric 31) and the moat contexts contained a rouletted jug fabric (Fabric 35, as yet unprovenanced) and a Wiltshire type fabric (Fabric 36). This contrasts with the Period 6 contexts from the East Range, West Block and adjacent courtyard, where the fabric range is limited and the emphasis is on the dominant fabric traditions, Fabrics 1, 2 and 3 and Brill/Boarstall and Minety-type ware (see Table 3.6). This is probably explained by the fact that the Solar Tower area was now raised above the level of the surviving archaeology, and that the East Range became a basement room, possibly used as a kitchen.

Imports, including small quantities of Surrey white wares (Fabrics 32 and 39), continued to come into the site in the later medieval period. Surrey wares appear in later medieval and post-medieval contexts on several ecclesiastical sites such as Abingdon, Reading and Eynsham.

## Regional production and distribution

This assemblage is invaluable because of the lack of large assemblages from the Gloucestershire Cotswolds and the paucity of evidence from west Oxfordshire, where the only significant assemblages are those from Ascot Doilly (Jope and Threlfall 1959) and Middleton Stoney (Woodiwiss 1984). The pottery from Ascot Doilly has a standard fabric with shelly limestone temper, possibly equivalent to Witney Fabric 1, and a minor grey fabric with angular flint similar to Fabric 2. The main vessel form at Ascot Doilly is a bulbous cooking pot with out-turned rim and slight shoulder; this is also the most common type at Mount House in Period 4, with more developed rim types appearing in Period 5. Comparable assemblages are known from Cogges Manor Farm (Raven 1996) and Eynsham Abbey (Blinkhorn, forthcoming). Cogges Manor Farm has a high proportion of Oxford Early Medieval ware (Witney Fabric 1/Cogges M1), which has been dated to the 11th to 12th century. Eynsham Abbey has a late Saxon Fabric (F200) similar to Witney Fabric 1, and this continues in use in a variety of medieval forms including bowls and pitchers into the 14th century/pre-Dissolution period.

The west Oxfordshire area is dominated, therefore, by a reliance on a limited local tradition, late Saxon and early medieval west Oxfordshire Ware (Witney Fabric 1). A similar tradition is found in the Gloucestershire area with Winchcombe-type ware and Gloucester TF41b (Vince 1984, 255). It has been suggested that the wider range of vessel types and the high concentration of fabrics seen at the Mount House may mean that Witney had its own production centre in the 12th century (Mellor 1994, 50). Vince (1981, 319) has noted that in the 11th and 12th centuries pottery production reflects the reliance on local supplies except for luxury goods such as Stamford ware (known only in a few cases in Oxford) and glazed tripod pitchers (Fabric 7) and Worcester fabric (Fabric 16). There is, however, no direct evidence of the actual methods of marketing pottery for this early period. The range of regional imports evident at the Mount House is unusual for Oxfordshire, and is believed to reflect the status and connections of the Bishop of Winchester, and to result in part from the movements of goods associated with a peripatetic household.

In the early to mid 13th century there was an increase in the amount of pottery trade, as discussed for Gloucestershire by Vince (1984). The trade involves cooking and kitchen vessels travelling within a localised area and glazed tablewares being imported from elsewhere (Vince 1997; Mepham and Heaton 1995), which implies a different marketing strategy for different products. Vince has suggested that this change in distribution of products in the 12th and 13th centuries may have resulted from a chain of linked factors. An increasing specialisation of agriculture led to a reliance on non-local supplies of goods, which in turn may be reflected in the increase of market grants in the 12th and 13th centuries and the growth of local trade.

It has also been suggested that the medieval North-East Wiltshire ware, fabric AQ (Witney Fabric 3) may have fulfilled a specialised function or may be associated with social standing. This is suggested by the quantity found at the Mount House (Mellor 1994, 44). This has also been suggested as the reason for the presence of fabric OXAQ (fabric II 5, Woodiwiss, 1984, 98) at Middleton Stoney, where the concentration of the pottery type within the castle complex and the addition of the fabric originating in the Berkshire, Newbury area highlighted the castle occupants' connections with the Berkshire area. The high status of the owners of the manor at Mount House is beyond question and the range of fabric types does corroborate an image of contacts beyond the locality, which is not limited just to pottery, but indicated by the movement of other goods. It has been suggested that fabric OXAQ may be associated with the dairy industry and its concentration and origin within the Kennet Valley (Vince 1997, 65) may support this theory. Another suggestion has been the high correlation between the presence of Fabric 3 in garderobes, as at Middleton Stoney (Woodiwiss 1984, 93), Netherton Faccombe (Fairbrother 1984) and at Mount House, which may imply developments in hygiene in the late 12th and 13th centuries with the presence of 'chamber pots'.

## Conclusion

The assemblage from Witney provides an invaluable addition to current knowledge of the ceramic industries and regional contacts for a high status site in the 12th and 13th centuries. The ceramics suggest changes in supply patterns. In the 12th century the presence of Oxford fabric types such as Oxford Medieval ware suggest a shared production source with Oxford. In the 13th century the main local fabric tradition had a variety of products that are distinctive to the Mount House while the regional contacts seem more diverse.

The 13th-century pattern suggests a distinct local/ regional commercial system, which perhaps is more marked because it belonged to the estates of the bishops of Winchester. Comparison with other castle sites belonging to the bishops of Winchester, for instance Bishops Waltham in Hampshire, reveals a similar wide range of regional imports in the 11th and 12th centuries, in this case from Winchester, Michelmersh and Portchester (Barton 1985, 99–105). It is, however, not possible to discern a common pattern to the imports to the estates of the bishops of Winchester, because each manor clearly drew its ceramics from its surrounding region.

Despite the importance of this assemblage, it is difficult to draw generalisations about the Witney area as a whole. More large assemblages are needed from the town to establish whether the range of fabrics and general trends evident at the Mount House reflect general patterns or are atypical because they come from a high-status manorial site.

## THE TILE
*by Deborah Duncan and Tim Allen (Fig. 3.12)*

### Introduction

This report was first written by Deborah Duncan in 1985. Additional tiles from the later phases of excavation were recorded by Maureen Mellor in 1997, and the report was then revised by Tim Allen. The report deals with three types of material: ceramic roof-tile, ceramic floor-tile and stone roofing material. The ceramic floor-tiles were very few, and the stone roof-tiles, although numerous, do not exhibit much variety and are reported upon summarily. The bulk of the report is concerned with the ceramic roof-tile.

### Stone roof-tiles

Stone roofing material fashioned from the local oolitic limestone was recovered in great quantity. Much of the material was fragmentary, and only those tiles with intact suspension holes or three complete sides were recorded. They are roughly triangular (average length 280 mm, width 154 mm and hole diameter 9 mm) and were probably secured with either iron or wooden pegs.

### Ceramic floor-tile

Only three floor-tiles were found. One very fragmentary 17th-century white clay hearth tile with polychrome decoration was recovered from context 910/1, a recent make-up layer in the north-east area of the site. An 18th-century hearth tile with poorly preserved tin-glaze and lozenge-shaped decoration was found in the south-eastern area; its source is unknown. A dark green glazed floor-tile was found at the top of the moat sequence in the northern area of the site, in context 558/3 dating to the 17th or 18th century.

### Ceramic roof-tile

A total of 1729 fragments of ceramic roof-tile was recorded, of which 1453 were identified to a particular fabric. Of these, 108 can be positively identified as peg-tiles (average hole diameter 13 mm) and 68 as ridge tiles. One complete ridge-tile was 430 mm long and 190 mm wide, with a 30 mm diameter hole at one end and indicates the size of this roof furniture. It was either for ventilation or served as a finial attachment (Fig. 3.12, no. 1). The ceramic roof furniture has been divided into eight fabric types (see Table 3.7). Seven of these are sandy types; the eighth is Fabric 4, a calcareous type of local origin that corresponds to Fabric 1 of the pottery type series.

The proportions of tile of the various fabrics are given in Table 3.8. Fabrics 1 and 4 each constitute approximately one third of the total assemblage, with Fabric 1 being slightly more common. The proportions of tiles of different fabrics over time need to be considered with caution, as other than stray tiles broken during construction, most of the tiles will be considerably earlier than the deposits in which they appear. Furthermore, the contexts in which they are deposited may reflect periods of major rebuilding, rather than the date of manufacture or the period of use of the tiles themselves. Bearing this in mind, the first appearance of tiles of a particular fabric will at least give a *terminus ante quem* for the use of that fabric on site, and an attempt is made below to draw some conclusions about the longevity of use of specific fabric types.

The earliest tile is from the dump infilling of the east terrace and the use of the ground floor of the Solar Tower as a basement in Period 4b, dated 1170–1180. Thirteen fragments of ordinary and peg-tile were uncovered (seven of Fabric 1, three of Fabric 3, two of Fabric 5 and one of Fabric 8). These tiles were presumably in use a little earlier, and this corresponds to the earliest recorded date for ceramic tiles found at Eynsham Abbey (Mitchell forthcoming), Deddington Castle (Jope 1951, 86–7; Ivens 1983), and at Middleton Stoney (Rahtz and Rowley 1984).

Two-thirds of the tiles of Fabric 1 belong to Period 5 or earlier, that is to the later 12th or early 13th century, and more than 80% to Periods 4, 5 and 6. Thereafter a small percentage (*c* 5%) is present in all of Periods 7–9. This may indicate that tiles in this fabric were not reaching the site after the end of the 13th century, the later fragments being residual. Fabric 8 may also represent an early fabric, as although only five fragments were found, all of these were from late 12th or 13th century contexts.

Tiles of Fabric 2 and Fabric 4 first appear during the refurbishments of Period 5 (dated 1180–1220). The latter are mainly ridge-tiles, and form the majority of the ceramic roofing furniture for the North Range. Tiles of both Fabric 3 and Fabric 4 appear to be most numerous in the 14th century (Period 7), tailing off thereafter. Apart from one fragment whose attribution to this group is doubtful, Fabric 7 does not appear until Period 6 (1225–1300),
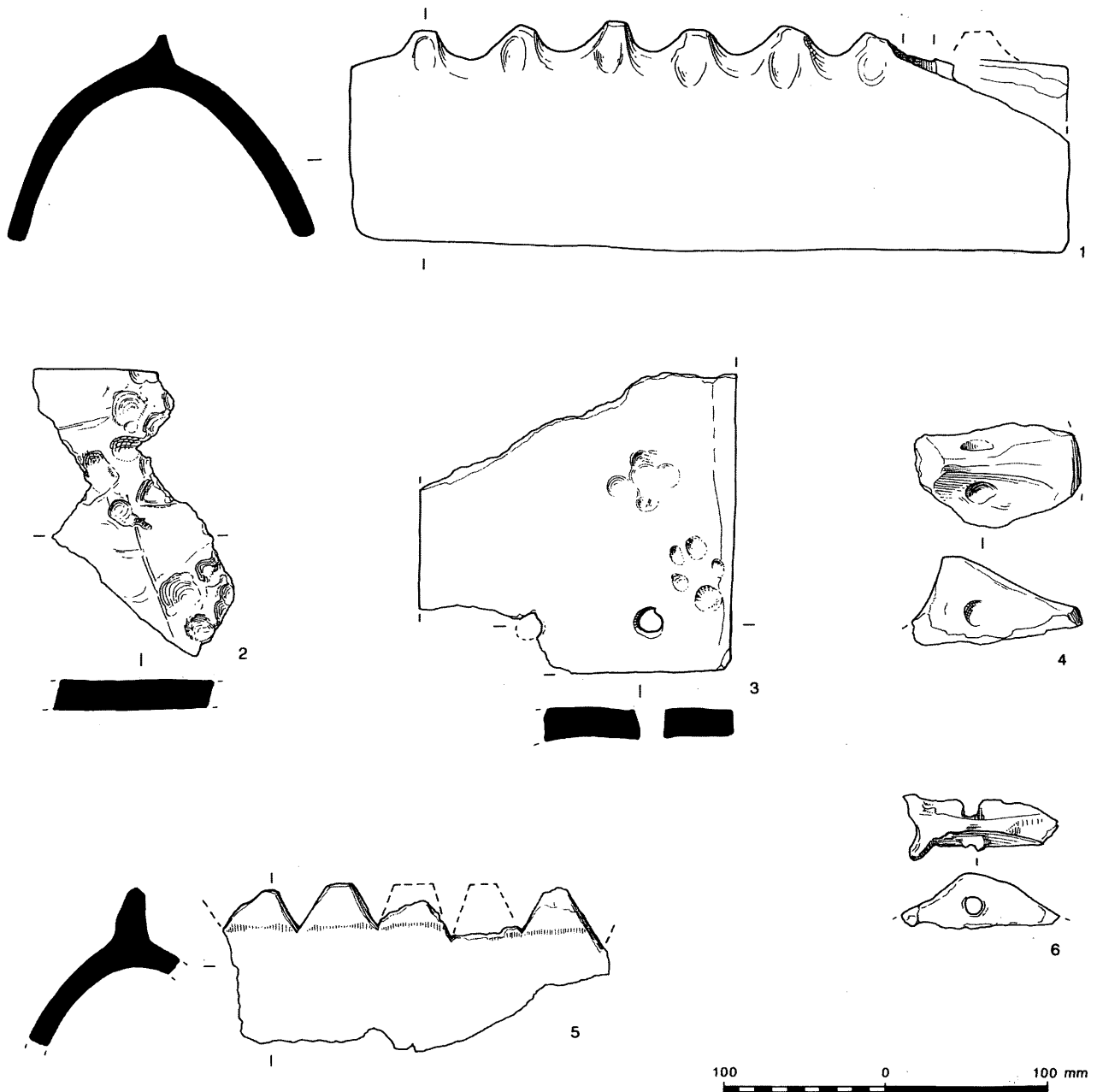
*Figure 3.12    Roof-tiles.*

roughly equal quantities of this fabric occurring in Periods 6, 7 and 8.

Not surprisingly, considering its early date, Fabric 1 makes up the bulk of the roofing material from the eastern area of the site (68%), occurring less frequently in the north (16%). However, 76% of the peg-tiles recorded from the site as a whole are of this material. The peg-tiles were cut from a block, the holes were punched and the tiles were then laid on a bed of sand before firing. They are well-fired, a small proportion having partial yellow and light green coloured glaze. Two tiles display dog paw prints (Fig. 3.12, nos 2 and 3). Mortar traces on a

number of fragments show that they were both pegged and cemented in place.

Fabric 4 forms the bulk of the ridge-tile from the site (81%) of which 87% occurs in the northern area of the site. These tiles were crafted from a complete clay sheet, the spurs either hand moulded (Fig. 3.12, no. 4) or applied as a secondary strip and then cut (Fig. 3.12, no. 5). The majority are glazed, mainly light green coloured, with a small number being brown or yellow. Fabrics 3 and 5 are white clays presumably from a local source. The former is the second most abundant tile fabric in the northern area of the site (23%), representing 34% of the peg-tiles

*Table 3.7   Tile: Fabric descriptions.*

| Fabric | Inclusions | Frequency | Sorting | Size (mm) | Rounding | Comments |
|---|---|---|---|---|---|---|
| 1 | Quartz | Moderate | Ill-sorted | Up to 0.4 | Well-rounded | Abundant grains on one surface |
|  | Chalk | Sparse | Ill-sorted | Up to 1.0 | Sub-angular | indicate laid on sand bed when |
|  | Flint | V sparse | Ill-sorted | Up to 1.0 | Sub-rounded | wet. Glazes: light green, yellow. |
| 2 | Clear quartz | Moderate | Ill-sorted | Up to 0.5 | Sub-rounded | Abundant grains on one surface |
|  | Milky quartz | V sparse | Ill-sorted | Up to 0.3 | Sub-rounded | indicate laid on sand bed when wet. |
| 3 | Clear quartz | V sparse | Ill-sorted | Up to 0.5 | Well-rounded | Abundant grains on one surface |
|  | Shell | Sparse | Ill-sorted | Up to 0.3 | Angular | indicate laid on sand bed when |
|  | Red Fe ore | Sparse | Ill-sorted | Up to 1.0 | Sub-rounded | wet. Red iron ore from parent |
|  | Black Fe ore | V sparse | Ill-sorted | Up to 2.0 | Sub-rounded | white clay. |
| 4 | Clear quartz | Moderate | Ill-sorted | Up to 0.3 | Sub-rounded | Compare with fabric of pottery |
|  | Chalk | Moderate | Ill-sorted | Up to 0.25 | Angular | type series. Glazes: light green, |
|  | Shell | Abundant | Well-sorted | Up to 0.3 | Angular | dark green, yellow, brown. |
|  | Limestone | Moderate | Ill-sorted | Up to 0.5 | Well-rounded ooliths |  |
|  | Flint | Sparse-Moderate | Ill-sorted | Up to 0.3 | Sub-rounded to angular | As above. |
|  | Fe ore | Sparse | Ill-sorted | Up to 0.2 | Sub-rounded |  |
| 5 | Quartz | Moderate | Well-sorted | Up to 0.3 | Well-rounded | Organic fragments on some |
|  | Calcareous | V sparse | Ill-sorted | Up to 0.2 | Angular | sherds suggests may have been |
|  | Red Fe ore | Moderate | Well-rounded | Up to 0.5 | Sub-rounded | laid on straw before firing. From parent white clay. |
| 6 | Pink and clear Quartz | Relatively Abundant | Ill-sorted | Up to 4.0 | Sub-angular | Occur together as lithic fragments, probably from ferruginous sand- |
|  | Red Fe ore | Sparse | Ill-sorted | Up to 0.1 |  | stone. |
|  | Milky quartz | Moderate | Ill-sorted | Up to 0.2 | Well-rounded |  |
| 7 | Clear quartz | Abundant | Well-sorted | Up to 0.2 | Sub-rounded | Glaze: mottled green. |
|  | Black Fe ore | Sparse | Ill-sorted | Up to 0.2 | Sub-rounded |  |
| 8 | Clear quartz | Moderate | Well-sorted | Up to 0.4 | Well-rounded | White clay lenses. Chalk/clay |
|  | Lithic | Moderate | Ill-sorted | Up to 1.5 | Well-rounded | composition; once termed |
|  | Iron slag | Sparse | Ill-sorted | Up to 2.5 | Sub-rounded | malmstone. |

found here. Fabric 5 is found in small quantities throughout the site. Tiles of this material tend to be poorly fired with sporadic yellow and light-green coloured glaze. Traces of organic material on the surfaces of some fragments suggest that these tiles were laid on straw before firing.

Fabric 2 is infrequent, being found only in the garderobe and in small amounts throughout the northern area of the site. Tiles of Fabric 7 have a mottled green glaze, which shows the addition of copper oxide to the lead glaze, a technique which does not appear on pottery or tile before the mid 13th century (Mellor 1994, 117). At the Mount House, tiles of this fabric are only found within the northern area of the site. Fabrics 6 and 8 are rare, the former occurs only in the northern area of the site, the latter only in the south-eastern area and adjacent to the moat.

It seems likely that until the mid 13th century the ceramic tile used at the site (both ordinary and peg-tiles) came from one local manufacturer. Although limestone tiles were also used, the proportion of ceramic to stone and other roofing materials cannot be established from the limited excavations. Another material that may have been used is thatch, with

which ceramic ridge-tiles may have been combined to provide a ceramic coping and ventilation where necessary.

The Winchester account rolls show that 2000 wooden shingles were used for roofing the hall in 1220/1, and these are mentioned again in 1465/6 and 1471/2. Stone slates were used for the kitchen in 1220/1, some 29,000 more for roofing the hall in 1245/6 and 27,300 for the barn in 1247/8. These last were dug from quarries on the bishop's land, and further quarrying for slates is mentioned in 1305/6, 1311/12, 1319/20, 1326/7 and 1339/40, though slates are often bought as well. Ceramic roof crests are mentioned in 1246/7 and 1247/8, and commonly thereafter, but references to tiles on the roof, for instance as for the passage between the Great Chamber and the chapel in 1302, are very rare. The use of thatch is not well-documented.

The documentary record suggests that stone slates were used for roofing in most cases, though in some instances it is not clear whether stone or ceramic tiles are indicated. The relatively small amounts of ordinary and peg-tiles recovered, however, support the impression gained from the documentary record, and as might be expected from the position of the

*Table 3.8   Tile: Numbers and percentages by period and fabric.*

| Period group | | Period | | | Fabric 1 | Fabric 2 | Fabric 3 | Fabric 4 | Fabric 5 | Fabric 6 | Fabric 7 | Fabric 8 | Grand Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | No of Fragments | | | | 2 | | | | | | 1 | 3 | 6 |
| | % of fabric | | | | 0.4% | | | | | | 1.2% | 60.0% | 0.4% |
| 4 | No of Fragments | | | | 7 | | 3 | | 2 | | | 1 | 13 |
| | % of fabric | | | | 1.3% | | 1.5% | | 2.2% | | | 20.0% | 0.9% |
| 5 | | 5 | No of Fragments | | 1 | | | | | | | | 1 |
| | | | % of fabric | | 0.2% | | | | | | | | 0.1% |
| | | 5a | No of Fragments | | 293 | 7 | 26 | 49 | 30 | | | 1 | 406 |
| | | | % of fabric | | 54.6% | 20.6% | 12.7% | 9.9% | 33.0% | | | 20.0% | 27.9% |
| | | 5b | No of Fragments | | 58 | 1 | 2 | 14 | | | 1 | | 76 |
| | | | % of fabric | | 10.8% | 2.9% | 1.0% | 2.8% | | | 1.2% | | 5.2% |
| 5 | No of Fragments | | | | 352 | 8 | 28 | 63 | 30 | | 1 | 1 | 483 |
| | % of fabric | | | | 65.5% | 23.5% | 13.7% | 12.8% | 33.0% | | 1.2% | 20.0% | 33.2% |
| 6 | | 6 | No of Fragments | | 2 | | | 12 | | | 13 | | 27 |
| | | | % of fabric | | 0.4% | | | 2.4% | | | 15.7% | | 1.9% |
| | | 6a | No of Fragments | | 10 | 5 | 15 | 4 | 27 | | 2 | | 63 |
| | | | % of fabric | | 1.9% | 14.7% | 7.3% | 0.8% | 29.7% | | 2.4% | | 4.3% |
| | | 6b | No of Fragments | | 74 | 1 | 43 | 58 | 1 | | 10 | | 187 |
| | | | % of fabric | | 13.8% | 2.9% | 21.0% | 11.8% | 1.1% | | 12.0% | | 12.9% |
| 6 | No of Fragments | | | | 86 | 6 | 58 | 74 | 28 | | 25 | | 277 |
| | % of fabric | | | | 16.0% | 17.6% | 28.3% | 15.0% | 30.8% | | 30.1% | | 19.1% |
| 7 | No of Fragments | | | | 30 | 7 | 83 | 208 | 5 | 4 | 27 | | 364 |
| | % of fabric | | | | 5.6% | 20.6% | 40.5% | 42.2% | 5.5% | 80.0% | 32.5% | | 25.1% |
| 8 | No of Fragments | | | | 30 | 7 | 31 | 82 | 26 | | 20 | | 196 |
| | % of fabric | | | | 5.6% | 20.6% | 15.1% | 16.6% | 28.6% | | 24.1% | | 13.5% |
| 9 | | 9 | No of Fragments | | 3 | 3 | 2 | 43 | | 1 | 6 | | 58 |
| | | | % of fabric | | 0.6% | 8.8% | 1.0% | 8.7% | | 20.0% | 7.2% | | 4.0% |
| | | 9b | No of Fragments | | 22 | | | 9 | | | | | 31 |
| | | | % of fabric | | 4.1% | | | 1.8% | | | | | 2.1% |
| 9 | No of Fragments | | | | 25 | 3 | 2 | 52 | | 1 | 6 | | 89 |
| | % of fabric | | | | 4.7% | 8.8% | 1.0% | 10.5% | | 20.0% | 7.2% | | 6.1% |
| 10 | No of Fragments | | | | 5 | 3 | | 14 | | | 3 | | 25 |
| | % of fabric | | | | 0.9% | 8.8% | | 2.8% | | | 3.6% | | 1.7% |
| Total No of Fragments | | | | | 537 | 34 | 205 | 493 | 91 | 5 | 83 | 5 | 1453 |
| Total | | | | | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% |

site close to the limestone, roofs of ceramic tile were the exception, not the rule.

## THE COINS
*by Nick Mayhew*

A total of 17 coins, jettons and tokens was recovered. Sixteen coins were found in 1984 and one (not seen) in 1991. The date range of the coins spans the medieval and post-medieval periods from the 12th to the 18th centuries (see catalogue).

### Coin Catalogue

SF 1    **Billon feudal denier** of the county of Maine. Poey d'Avant I, pp 212–3, pl xxix, 14–20. Weight: 1.14 g.
Should read 'Comes Cenomannis' with monogram of Count Herbert I, 1015–1036, and 'Signum Dei Vivi' with cross with pellets and alpha and omega. An immobilised type in use from the time of Herbert I into the 13th century.
Context 35, Solar Tower infill.

SF 58    **Silver penny** of Stephen. Irregular variety of type I (the 'Watford' type) (=Mack 1966, 75–7) type J. The moneyer is possibly Sanson, the mint Southampton or more likely Canterbury. See also *BMC Stephen* (=Brooke 1916), nos 240–243. Weight: 0.86 g.
Obverse: bust facing r. Sceptre. Legend [ ] REX:
Reverse: voided cross moline with annulets centre and at end of cross limbs. +[ ] A [N] A.
Regular type I was thought to be in circulation 1135 to 1150/2 (Seaman 1978, 66), but 'The evidence of the Awbridge find makes it certain that these coins were in circulation after Stephen's death, possibly until 1162 or later' (Mack 1966, 76)
Context 56, Solar Tower infill.

SF 578    **Silver penny** of David I of Scotland with English types and literate legends. Moneyer Erebald. Mint Edinburgh. Weight: 0.99 g.
Obverse: +[ ]VID.R[ ]
Reverse: + EREBALDON[ ]DEN
The types are those of Stephen type I (struck *c* 1135–41, circulating *c* 1135 to 1150/2 and later) with which it was probably contemporary.
Context 506, North Range.

SF 54    **Cut halfpenny** of ?Stephen. 'Watford' type I. Weight: 0.42 g. Fragile.
Obverse: no visible legend
Reverse: [] N:[]L. (or[.)
Context 140/D, Solar Tower infill.

SF 68    **Cut halfpenny** of ?Stephen. 'Watford' type I. Weight 0.48 g. No legends visible.
Context 36/2/C, Solar Tower infill.

SF 69    **Penny Edward I.** Canterbury mint. Class IXb = *c* 1300 struck. Weight: 1.35 g before cleaning. Fragile.

Circulation theoretically possible late into 15th century, but progressively less likely after 1351. Probably lost first half of the 14th century.
Context 194, East Range.

SF 510    **Early 14th-century English jetton.** Weight: 1.26 g. Sterling head obverse with roundels or large pellets in place of legends o + r. Probably type XIII, *c* 1315–18 head. Rev. Cross with rosette in each angle. Period of use: 14th century.
Context 558/1, uppermost fill of moat.

SF 2    **French type jetton.** cf. Barnard (1916, pl. VI, 45). Shield of France modern with mullet between two upper lys. Legend: Ave Maria Gratia. Reverse has letters (probably AVE) in angles in place of mullets. Crude style similar to Barnard (1916, 45). Weight: 1.47 g. Mullet was the sign of the jetton mint at Sedan believed to have been in production from the 15th century to 1640. This seems to have been struck early in that period.
Context 40, courtyard.

SF 90    **Lead token** of uncertain (though probably later medieval) date. Possibly a cooking pot on one side? Weight: 1.83 g.
Context 103, East Range.

SF 57    **1 Real of Ferdinand** (1474–1516) **and Isabella** (1474–1504) of Spain. Seville mint. Weight: 2.07 g. Worn and clipped. Perhaps a mid-16th century loss.
Context 95, robber trench fill of wall 96, stair against East Range and Solar Tower.

SF 3    **Nuremberg jetton.** garbled legends *c* 1530–1650. Weight: 0.41 g.
Context 116, courtyard.

SF 56    **James I Royal farthing,** Lennox type. 1614–25 issue, initial mark annulet, obv. only. Period of use up to 1644. Weight: 0.41 g.
Context 245, robber trench fill of wall 88, East Range.

SF 13    **Charles I 'Richmond' farthing,** round type. 1625–34 issue. Colon stops, CARO, BRI, i.m. not clear. Period of use to 1644. Weight: 0.43 g.
Context 82/2, robber trench fill of wall 83 east of Solar Tower.

SF 59    **Charles I 'Richmond' farthing,** round type. 1625–34 issue. CARO. Period of use to 1644. Weight: 0.52 g.
Context 95, robber trench fill of wall 96, stair against East Range and Solar Tower.

SF 511    **William and Mary halfpenny** 1694. Weight: 9.9 g.
Context 558/1, uppermost fill of moat.

SF 544    **George II halfpenny.** 174-. Weight: 7.9 g.
Context 562/1, robbing of curtain wall on north-west.

SF 701    Missing, not reported upon.
Context 405, infill of cellar within West Block.

The recovery of four mid-12th-century pennies and halfpennies is in itself unusual, and makes this an extremely interesting group. The complete silver penny of King Stephen (SF 58), and the two half-pennies (SFs 54, 68) were all irregular varieties of type I (the 'Watford' type); the silver penny of David I (SF 578) of Scotland was a contemporary coin to those of Stephen, and closely duplicated the contemporary English types, so its circulation in England is not surprising.

The 'Watford' type was certainly in circulation from 1135 to 1152. The three coins of Stephen may well have been minted early in this period, but recent excavations (specifically the Awbridge find: Mack 1966, 76) have suggested that coins of this mint could still be in circulation after 1162, and possibly later. The major recoinage of 1180 makes it certain that these coins could not have been in circulation after that date.

All three coins were found in bulk fill layers of the Solar Tower, the halfpennies SF68 and SF54 in layers 36/2/C and 140/D respectively, and the complete coin SF 58 in rubble layer 56 overlying this. The derivation of these deposits is discussed in Chapter 2: the infilling of the Solar Tower ground floor, and in Chapter 7: the evidence of the coins. The coin of David I was found in a later medieval courtyard layer 506 in the north-western part of the site.

The French feudal denier (SF 1, Herbert I, 1015–36, in use until the 13th century) may well reflect the international connections of the bishops of Winchester and their staffs. This coin was also found in the bulk infill of the Solar Tower, and so is associated with the 12th-century issues. Due to the long period of use of this immobilised type of coin, however, it is of little use for dating.

The absence of coins after the mid 12th century (1150–60), and before the start of the 14th century at this site is most unusual and quite out of step with what is known of the general availability of coin in England at this time. The recoinage programme of 1158 (Henry II) was on a grand scale and was followed by a further recoinage in 1180, involving the introduction of millions of new coins. The absence of coins of late-12th- and 13th-century date may reflect the small percentage of the area of the site which was excavated; a larger excavation in the courtyard area, for instance, might have produced more coins. The same reason might explain the absence of later medieval issues.

The coin of Edward I (SF 69) recovered from layer 194 in the East Range was minted in 1300, and its circulation is theoretically possible into the 15th century, but is progressively less likely after a major recoinage in 1351.

The English and French jettons require no special comment. The Spanish coin of Ferdinand and Isabella (SF 57) is, however, unusual, as Spanish coins were often re-coined in 16th-century England. The early-17th-century copper coins (SFs 56, 13, 59) are unremarkable, but all three were found within robber trenches. The explanation for a group of coins at this time may be that structures on the site were being dismantled for stone during the period of the Civil War. The latest coin find was the George II halfpenny (SF 544), found in context 562/1, and dated to 1745 onwards.

## THE OTHER SMALL FINDS
*by Leigh Allen with contributions by Cecily Cropper, Blanche Ellis, Ian Eaves, Arthur MacGregor, Martin Henig and Patrick Ottaway,*

A total of 1158 objects were recovered. The following materials were represented (with the number of objects in brackets): copper-alloy (59), iron objects (108), iron nails (971), lead (11), bone (7) and jet (2). All the objects have been catalogued by material and function. The following functional categories are represented: personal ornaments, horse-gear, armour and weaponry, locks and keys, knives, tools, structural iron-work and building iron-work. The lead and bone categories contain too few objects to be sub-divided. Within each functional group the objects discussed are in chronological order where possible. No distinction has been made between the north-western and south-eastern areas of the site.

Many of the objects have required specialist identifications and I would like to thank the following people for their valuable assistance: Alison and Ian Goodall for the initial assessment of the material from the early phases of the excavation, Blanche Ellis for her work on the spurs, Patrick Ottaway for the knife report, Ian Eaves for his comments on the body armour, Dr Arthur MacGregor for his identifications of the bone objects and Dr Martin Henig for his report on the jet objects.

### The copper-alloy objects

The total copper-alloy assemblage consisted of 59 objects, 12 of which have been illustrated. There are 38 items classified as personal ornaments, 3 objects associated with horse-gear and 18 other objects.

### Personal ornaments (Fig. 3.13)

There are six buckles or buckle pins ranging in date from the 10th century to the post-medieval period. The earliest example SF 21 (context 55/3, first phase of the south embanking, Period 4b) is a plain lipped buckle frame with the plate and frame integrally cast. The object is very similar to others recovered from excavations at St Ebbe's, Oxford (A R Goodall 1989, 223–225, Fig. 61, no. 10) and Winchester (Hinton 1990, 506–513, Fig. 129, no. 1098). The St Ebbe's example is unstratified, but the one from Winchester came from a 10th-century context. A decorated buckle SF 58 (context 286, east terrace clay, Period 5b) has a trapezoidal frame and holes for an off-centred bar. The frame has raised flanges above the holes for the bar. The off-centred bar and the flanges are devices often seen on locking buckles of the late medieval period (Ward Perkins 1940, 279. pl. LXXVII,
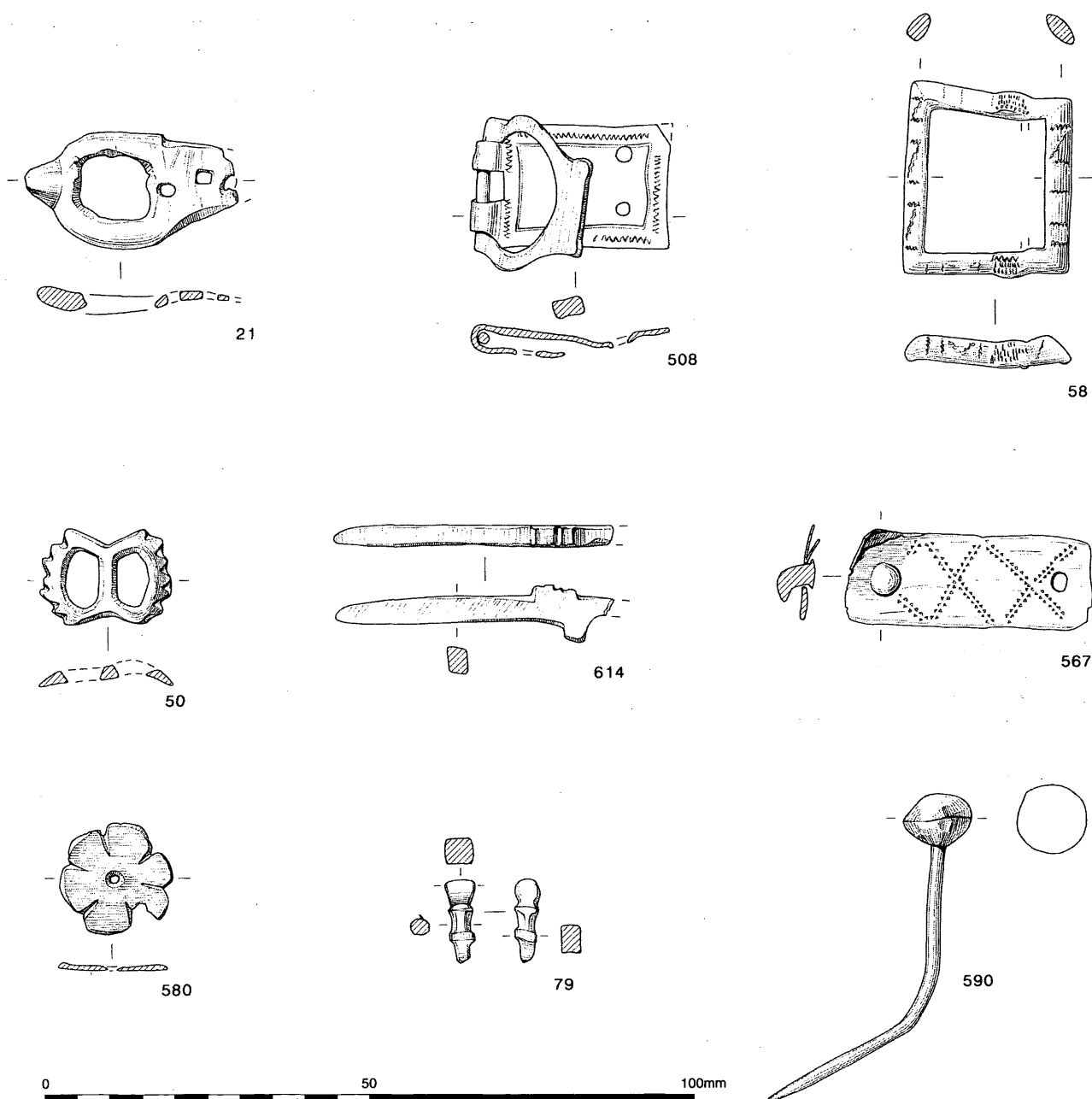
*Figure 3.13  Copper-alloy belt fittings.*

nos 11–12); an undecorated buckle frame of similar design was recovered from a 14th-/15th-century context at Billingsgate Lorry Park, London (Egan and Pritchard 1991, 97–98. Fig. 62, no. 445). An oval buckle frame SF 508 (context 505, a stone surface in the north courtyard, Period 7) has an ornate outside edge and a rectangular decorated plate. Egan and Pritchard suggest that this basic form with all its variety was in use from the late 12th to the 14th century (Egan and Pritchard 1991, 76–77, Fig. 46). A double oval buckle frame with ornate outside edges SF 50 (unstratified) is a post-medieval shoe buckle.

The remaining two objects associated with buckles are buckle pins. An incomplete pin SF 614 (context 596 soil dump over North Range floor, Period 6b) has a ridged grip or moulding at the base of the top and is similar to examples from St Ebbe's, Oxford (A R Goodall 1989, 223–225. Fig. 60, no. 5) and Billingsgate Lorry Park (Egan and Pritchard 1991, 115, Fig. 75, no. 541), both of which were recovered from 13th- to 14th-century contexts. An unstratified and very crude buckle pin SF 49 (not illustrated), consisting of a strip tapering to a point at both ends and with one end fashioned into a rough loop, is similar to

an example recovered from a 14th-century context at Norwich (Margeson 1993, 14–16, Fig. 7, no. 63).

There are two mounts in the copper-alloy assemblage. The first, a sexfoil mount SF 580 (context 571, a stony dumped layer over the North Range floor, Period 7), has a counter-sunk central perforation for a rivet (now missing), and is trimmed to the shape of the lobes. Flower-like sexfoil mounts were in common use by the middle of the 14th century and continued to be popular into the next century (Egan and Pritchard 1991, 186–187). Similar examples can be seen at The Hamel, Oxford (A R Goodall 1980, fig. 24, no. 37), and Southampton (Harvey 1975, 58–259, Fig. 241, no. 1757). The second mount SF 567 (context 562, robber trench of the curtain wall, Period 9) is rectangular with a single circular perforation at either end for attachment (one rivet is still present). The plate is decorated with crosses marked out by lines of opposed punched triangles, a type of design commonly seen on straps and buckle plates of the medieval period (see Egan and Pritchard 1991, 28–29, figs 14–15). One further object that may be associated with a belt fitting or strap-end is a small cast finial SF 79 (context 246, east terrace robbing of wall 94, Period 9) with a rounded knop and three collars below.

There are 13 pins (not illustrated), 11 of which are small drawn pins with wire wound heads and traces of white metal plating on the shanks. The majority of these were recovered from post-medieval contexts (Period 9a and 9b). Small pins for fastening clothes and head-gear are known in medieval period, but they become much more common in the 16th and 17th centuries. Pin SF 545 (context 565, rubble layer over North Range, Period 7) is of a similar design but of a much larger size. These larger examples are designed to be seen rather than hidden in the folds of clothes and head-dress, and tend to be earlier in date than the smaller examples (Margeson 1993, 11–12 Fig. 5, no. 35). A pin with a solid globular head SF 590 (context 603, a silty loam layer in the eastern room of the North Range, Period 7) has a wire-like shaft and a head formed from two hemispheres joined together and filled with a hard substance. It is of a type introduced in the late medieval period. Similar examples recovered from Winchester are dated to the 14–15th century (Biddle 1990b, 555–559, Fig. 151, no. 1458) and at Southampton to the 16th century (Harvey 1975, 260–263, Fig. 243, no. 1790).

There are ten lace tags (not illustrated), five of which have a hole in the upper end for a transverse rivet. Lace tags were in common use from the 15th century onwards, and according to Oakley (Oakley and Webster 1979, 262–3) the type with the transverse rivet dates mainly to the 15th century with some 16th-/17th-century examples. The remaining tags have edges that overlap along their length, and are later in date.

The remaining personal objects include a semi-circular fragment SF 100 (unstratified) with a D-shaped section and the beginnings of a constriction at one end. Unfortunately the object is broken at this point, but it could be a simple circular brooch (Egan

and Pritchard 1991, 248–249, Fig. 160, no. 1307). There were also four post-medieval plain, circular discoidal buttons with white metal plating on their upper faces: SF 641, SF 729, and SF 733 (all Period 8 or 9 contexts).

SF 21    **Buckle frame**, lipped with an integral bevelled plate. The plate is damaged, but it has a hole for the pin (missing), and the remains of at least two other perforations. L: 32 mm.
Context 55/3, Period 4b.

SF 508    **Buckle frame and plate**. Oval with an ornate outside edge. The buckle frame has an off-set, narrowed bar. The folded plate is rectangular, has four rivet holes and a decorative border of incised zigzag design. Medieval.
Context 505, Period 8.

SF 58    **Buckle frame**. Rectangular/trapezoidal frame with an off-centre bar (now missing). There are slight flanges on the sides next to the holes for the bar. It probably had a combined pin and bar. The upper face and sides of the frame are decorated with incised lines. Possible locking buckle.
Context 286, Period 9b.

SF 50    **Buckle**. A small double oval buckle with an ornate outside edge; possibly a shoe buckle. Post-medieval. L: 21 mm.
Unstratified.

SF 614    **Buckle pin**. Pin from a buckle or a brooch. The loop is incomplete; there is a ridged grip or moulding at the base of the loop. L: 44 mm. Context 596, Period 6b.

SF 567    **Rectangular mount**. Rectangular sheet mount with a rivet hole at either end. The mount is decorated with crossed lines of opposed punched triangles. One rivet remains *in situ*. L: 38 mm.
Context 562, Period 9.

SF 580    **Sexfoil mount**. A sheet mount with a single central countersunk perforation for a rivet (now missing). The outside edge is trimmed to the lobes. 14th-/15th-century. D: 17.5 mm.
Context 571, Period 7.

SF 79    **Fitting**. Small cast fitting consisting of a rounded knop with three collars above and a squared off end that would have been inserted into the main object, possibly a knop from a strap end. L: 12 mm. Context 246, Period 9a.

SF 590    **Pin**, with a large solid globular head. L: 60 mm.
Context 603, Period 7.

*Not illustrated:*

SF 49    Possible copper alloy **buckle pin**, consisting of a crudely fashioned strip formed into a rounded hook at one end. Unstratified.

SF 641    Plain, circular **discoidal button**, copper alloy with non-ferrous plating. Context 502, Period 9.

SFs 729 and 733    Three plain, circular, **discoidal buttons**, copper alloy and with non-ferrous plating. Context 504, Period 8.

SF 22    Complete copper alloy **lace tag**. Context 67, Period 5a.

SF 642B    Poorly preserved copper alloy **lace tag**. Context 607, Period 6b.

SF 999    Copper alloy **lace tag** with a missing tip. Context 833, Period 8.

SF 708    Copper alloy **lace tag** with no trace of a rivet hole. Context 413, Period 9b.

SF 717    Near complete copper alloy **lace tag**. Context 487, Period 9a.

SF 513    Complete copper alloy **lace tag**. Unstratified.

SF 562    Complete copper alloy **lace tag**. Unstratified.

SF 563    Complete copper alloy **lace tag**. Unstratified.

SF 545    Large copper alloy **pin** with a wire wound spherical head. Context 565, Period 7.

SF 26    Copper alloy drawn **pin** with a wire wound spherical head. Context 14, Period 9a.

SFs 15 and 34    Two copper alloy drawn **pins** with wire wound spherical heads. Context 15, Period 9a.

SFs 43 and 71    Two copper alloy drawn **pins** with wire wound spherical heads and traces of white metal coating on the shafts. Context 82, Period 9a.

SF 23    Fragments from two incomplete copper alloy drawn **pins** with wire wound spherical heads. Context 4, Period 9b.

SF 17    Two copper alloy drawn **pins** with wire wound spherical heads and traces of white metal coating on the shafts. Context 54, Period 9b.

SF 5A    Copper alloy drawn **pin** with a wire wound spherical head. Context 87, Period 9b.

SF 512    Copper alloy drawn **pin** with a wire wound spherical head. Unstratified.

SF 605    Copper alloys strip, possibly a fragment from a buckle frame. Context 605, Period 7.

SF 100    Copper alloy ring or brooch in two pieces. Unstratified.

## Horse gear (Fig. 3.14)

There are three objects in this category: a spur, a harness pendant and a pellet bell.

### The Spur
### by Blanche Ellis

The fragment from a rowel spur (SF 103, unstratified) is one of a group of such spurs from 17th-century English sites. An unstratified fragment from Bolingbrook Castle, Lincolnshire (Ellis 1976, 30–31, Fig. 15, no. 54) bears an identical pattern. Like the Witney example, its neck is broken off; many of this group of spurs are broken when found, suggesting brittleness of their cast metal. A more complete example came from a Civil War context at Sandal Castle, Yorkshire (Ellis 1983, 254–256, Fig. 11, no. 8), while the illustration of a fragment from Oxford (Ellis 1984, 222, Fig. 33, no. 127) has the added dotted outline of a complete spur from the group now in a private collection. Analysis by Justine Bayley (English Heritage Ancient Monuments Laboratory) of a detached rowel of the same type showed it to have been made of brass with silver and gold applied to its surface as an amalgam with mercury. It came from the mid-17th-century demolition layer of the hall of the Archbishop's Palace, Canterbury, Kent (Rady *et al*. 1991, 42–43, Fig. 14, no. 6).

Harness pendant SF 570 (unstratified), is triangular with a suspension loop at the apex of the triangle. The outer side of the pendant is plated with gold leaf but otherwise it is undecorated. A very similar gilded pendant was recovered from a late-14th- to early-15th-century context at Southampton with the same unusual placement of the attachment loop (Harvey 1975, 257–259, Fig. 241, no. 1749). The final object classified as horse gear is a pellet bell (SF 540, context 562, robber trench of curtain wall, Period 9) formed from two hemispheres of sheet copper-alloy soldered together at the flange. Such bells of varying sizes are common from the 14th century onwards, and could just as easily be associated with hounds, hawks or personal adornment. Similar examples have been recovered from Winchester (Biddle and Hinton 1990, 725–728, Fig. 208, nos 2272–2277), Norwich (Margeson 1993, 213–214, Fig. 162, no. 1759) and Sandal Castle (A R Goodall 1983, 232–233, Fig. 1, no. 39).

SF 570    **Horse harness pendant**. Copper alloy and gold leaf. Triangular pendant with a suspension loop at the apex of the triangle. The upper surface of the pendant is gilded. L: 53 mm. Unstratified.

SF 540    **Pellet bell**. Made from two pieces of sheet copper alloy, each with a projecting flange by which the pieces were originally joined. The bell has a loop through the top. The pellet is missing. D: 24 mm. 14th century onwards. Context 562, Period 9.

SF 103    **Rowel spur** fragment. It comprises both complete sides of a silvered and gilded copper alloy spur; its neck and rowel is missing, but it retains the broken iron plate of its buckle. The spur sides taper as they curve gently under the wearer's ankle towards figure of eight terminals, one of which has become twisted. Behind the junction of the sides a raised lozenge-shaped area formed the base from which
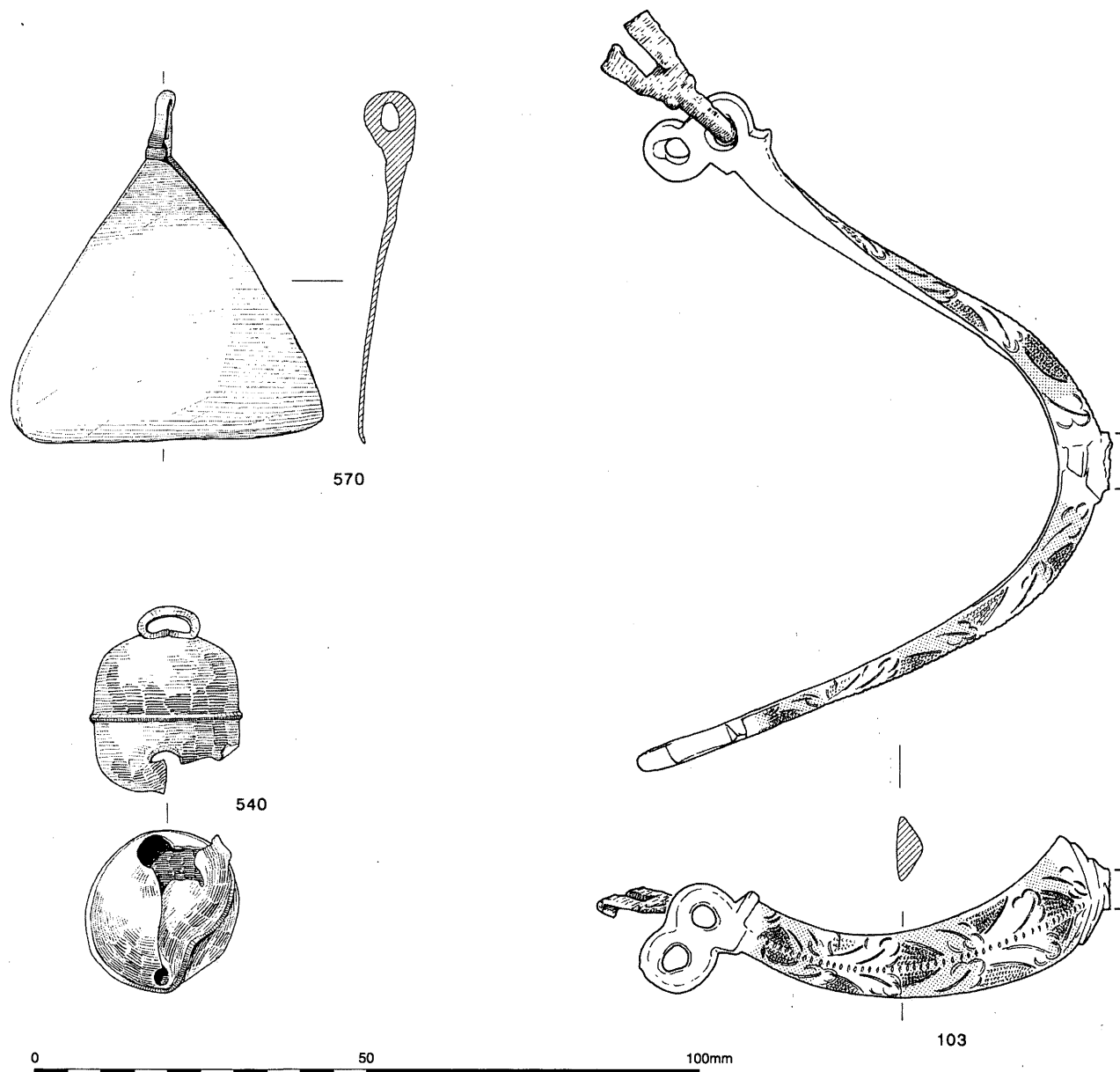
*Figure 3.14 Copper-alloy horsegear.*

the spur neck has completely broken off. The inner surfaces of the triangular-section sides are smooth with traces of gilding. Their outer surfaces are decorated with a pattern of small punched circles in trefoils, with incised double lines forming curved bands enclosing areas textured by extremely fine punching. A central horizontal line of fine file cuts defines the apex of these decorated surfaces and their entire pattern is covered by alternate sections of gilding and silvering. The base of the undecorated buckle-plate extends into a ring loop attaching it to the top ring of one terminal. It is narrow and divided by a slot

for the missing buckle pin. The top of the plate is damaged and the frame is lost. Buckles were worn to the outside of the foot and its position shows that the spur was worn on a right foot. Unstratified.

### Other copper-alloy objects (not illustrated)

There are 18 other copper-alloy objects. They include 11 fragments of sheet or strip, including a small fragment (SF 98) decorated with gold leaf, two lengths of twisted wire (SF 10 and SF 706) and an oval-headed tack (SF 500), which are listed in the catalogue and not discussed here. The remaining four objects include two small hinges SF 642A

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(context 596, a soil layer dumped over the North Range floor, Period 6b), and SF 630 (unstratified). Both hinges have traces of small iron rivets for attachment to a book or small casket and also possibly for the attachment to the hinge. There is also a length of folded sheeting SF 31 (unstratified) decorated with a row of punched triangles at one end and a length of chain with S-shaped links SF 645 (context 558/28, the rock cut moat, Period 9). Chains with wire loops or S-shaped links were used for fastening clothes in the late medieval and early post-medieval periods as well as for a variety of other household purposes (Margeson 1993, 18–19, Fig. 9, no. 76).

*Not illustrated:*

SF 98    Small fragment from a copper alloy **decorative sheet metal fitting** with a gilded upper surface. Context 139, Period 5a.

SF 638    Copper alloy **strip** with traces of white metal plating on the upper surface. Context 664, Period 6a.

SF 642A    Small copper alloy **hinge** one half with two extant rivets and the other half with four rivet holes, possibly for the attachment of a decorative fitting. Context 596, phase 6b.

SF 10    Strand of very fine copper alloy **wire** twisted around itself. Context 21, Period 7.

SF 706    Length of copper alloy **wire** wound into a loop and twisted over itself at one point. Context 461, Period 8.

SF 757    Roughly circular copper alloy **ring** with a D-shaped section and casting flashes on both faces. Context 413, Period 9b.

SF 500    Oval headed copper alloy **rivet** with a hollow shank, broken at the tip. It was constructed from a single rolled sheet, which was hammered flat to form the head. The S-shaped fold is still visible in the top. Context 910, Period 9.

SF 622    Plain circular copper alloy **disc**. Unstratified.

SF 630    Small copper alloy **hinge** with a rivet hole in each corner and three iron rivets surviving. Unstratified.

SF 1000    **Modern copper alloy object** stamped with the following: PAT & RP No. 44133. Unstratified.

SF 592    Copper alloy **strip**, possibly a pin shank. Context 527, Period 6a.

SF 615    Tapering copper alloy **strip** with a D-shaped section. Context 620, Period 6a.

SF 25    **Strip** of copper alloy broken at both ends. Context 15, Period 9a.

SF 20    **Strip** of copper alloy wire broken at both ends and with a coil of wire wrapped around one end. Context 1, Period 10.

SF 12    Plain undecorated rectangular **strip** of copper alloy. Unstratified.

SF504A    Small, roughly square, fragment of copper alloy **sheet**. Context 923, Period 9.

SF 31A    Fragment of folded copper alloy **sheet** decorated with a row of punched triangles at one end. Unstratified.

SF 645    Length of copper alloy **chain** with S-shaped links. Context 558/28, Period 9.

## Iron-work

There were 108 objects of iron, 29 of which are illustrated. There are six items classified as personal ornaments, 13 items of horse gear, eight objects of armour or weaponry, 12 knives, 12 tools, three items of lock furniture and 13 objects of building or structural ironwork. The remainder are miscellaneous fragments of iron strip or sheet and along with a list of the contexts in which nails were found they are mentioned only in the archive.

### *Personal ornaments*

The personal ornaments include a finger ring, five buckle frames and a buckle pin. The finger ring (SF 11, context 33, Period 10) is formed from two strands of wire twisted together, with two small loops wrapped around the wire for decoration or as a means of fastening the ends. A ring of similar design was recovered from Shakenoak, Oxon, (Brodribb *et al.* 1972, 92–93, Fig. 40, no. 180). There are three D-shaped frames, none of which is illustrated; one is plain (SF 575; context 558/21, the rock cut moat, Period 7) and two have expanded pin rests (SF 74, context 35/0/1, Solar Tower infill, Period 5a; SF 504, context 539, drainage gully in the north courtyard, Period 5b). The D-shaped buckle frame is the most common form in medieval contexts and they are found in many shapes and sizes indicating that they were used for many purposes (I H Goodall 1990e, 526). There are two elongated D-shaped buckles (SF 525, context 558/3, rock cut moat, Period 9; SF 82; unstratified) with central bars; SF 82 has two pins which are integral to the central bar. Both are shoe buckles of post-medieval date (Hinton 1990, 524–526. Fig. 135, no. 1258). There is also a fragment of a simple buckle pin from the Period 4 rock-cut moat (SF 593, context 558/14) (not illustrated).

*Not illustrated:*

SF 593    Iron **buckle pin** fragment. Context 558/14, Period 4.

SF 74    **D–shaped iron buckle frame** with expanded pin rest. Context 35/0/1, Period 5a.

SF 504B    **D–shaped iron buckle frame** with expanded pin rest. Context 539, Period 5b.

SF 575    **D–shaped iron buckle frame** with pin. Context 558/3, Period 9.

SF 82    Post-medieval rectangular iron **shoe buckle frame** with a central bar. Unstratified.

SF 11   Three very corroded fragments from a finger ring formed from twisted iron. Context 33, Period 10.

## Horse-gear (Fig. 3.15)

This category includes iron buckles, bridle fittings, horseshoes and a spur. There are four buckles or buckle parts. Two of these are examples of large rectangular buckles with revolving bars: SF 97 (unstratified) is complete, SF 569 (context 505, from a stone courtyard surface in the North Range, Period 7) is the revolving bar only from a large frame. This type of buckle is almost certainly for use with horse harness, as the revolving bar would have reduced the chafing of the straps. Examples are common from such sites as Winchester (I H Goodall 1990e, 526–531, Fig. 138, nos 1303-1304) and Goltho (I H Goodall 1987, 182–184, Fig. 159, nos 143–144) where they were recovered from 13th-/14th-century contexts, and buckles of this type are more generally discussed by Clarke (1995, Fig. 42, no. 29). A further two harness buckles are SF 526 and SF 514 (contexts 558/3 and /1, the rock cut moat, Periods 9 and 10) (not illustrated). They are plain rectangular buckles with a sheet-metal cylinder or roller around one arm, another device also used to reduce chafing on the straps (I H Goodall 1990e, 526–535, Fig. 140, no. 1333). Continuing with strap fittings for harness, SF 563 (context 564, destruction layer from the robbing of the curtain wall, Period 9) is a strap loop with a double riveted plate. These loops were riveted to the ends of the straps or reins, and might have attached them to bits, links or other metal fittings forming part of the bridle. Similar examples have been recovered from a 12th-/13th-century context at Winchester (I H Goodall 1990i, 1044-1046, Fig. 334, no. 2895), from Castle Acre (I H Goodall 1982, 230–234, Fig. 41, no. 122) and in a non-ferrous metal from Sandal Castle (A R Goodall 1983, 232, Fig. 1, no. 38) and dated to the 13–14th century.

There are seven horseshoes from the excavations (not illustrated); three are too fragmentary to comment on and the remaining four represent three different types. SF 564 (context 542, footing trench associated with the North Range, Period 5b) and SF 1002 (context 833, south courtyard second surface, Period 8) have wavy or lobate profiles, narrow webs, circular holes set in rectangular countersinkings, and slight calkins. They are of a type that was hardly known before the Norman Conquest, but was common thereafter. They predominated throughout the 12th century until a heavier shoe replaced them in the late 13th century (Clarke 1995, 86–96, figs 81–82 no. 126). A slightly later type is represented by SF 571 (context 504/4, a mortar and limestone courtyard surface in the North Range, Period 8); the profile of the shoe is still lobate, but the holes are rectangular and without countersinking. This is a type that was introduced in the early 13th century, predominated during the late 13th to mid 14th century, but was not known in the 15th century

(Clarke 1995, 96, Fig. 85, no. 172). The final shoe (SF 582, unstratified) has a wide web, with at least three holes in each arm, and probably more, and these holes are square. This was a type introduced in the late 13th to mid 14th century, becoming universal by the 15th century (Clarke 1995, 97, figs 86–89).

## The Prick Spur
by Blanche Ellis

The iron spur (SF 572, context 564, destruction layer from the robbing of the curtain wall, Period 9) dates to the 12th century and is similar to an example from The Hirsel, Coldstream, which had one complete and one broken small double rivet terminal. The Hirsel example was recovered from a 13th-century context. Another example from Beverley on Humberside was recovered from a context believed to have dated to c1050–1150.

SF 526   **Buckle frame**. Rectangular buckle with a sheet metal cylinder on one arm. L: 58 mm. Context 558/3, Period 9.

SF 97   **Buckle frame**. Revolving bar from a buckle frame. 11th century onwards. L: 66 mm. Unstratified.

SF 569   **Revolving bar**. From a rectangular buckle with revolving bar. 11th century onwards. L: 117 mm. Context 505, Period 8.

SF 563   **Strap loop** with a double-riveted plate. L: 116 mm. Context 564, Period 9.

SF 572   **Prick spur**. The spur sides are of rounded D-shaped section, both are broken. The remaining lengths, c 50 mm and c 30 mm long, are horizontally straight. The longest side tapers gently to become very slender at the break, which was probably close to its missing terminal. The extremely short, rounded neck supports a quadrangular section goad which tapers to a point. There are no traces of non-ferrous plating on the spur. 12th century. L: 76 mm. Context 564, Period 9.

## Not illustrated:

SF 514   Sub-rectangular **iron buckle frame** with a sheet metal cylinder on one arm. Context 558/1, Period 10.

SF 564   Complete **iron horseshoe** with a wavy or lobate profile, narrow webs, three circular holes set in rectangular countersinkings in each arm and slight calkins on the tips of the arms. Context 542, Period 5b.

SF 1001   Very corroded **iron horseshoe** fragment. Context 815, Period 6b.

SF 595   **Iron horseshoe** fragment comprising tip and calkin of a branch. Context 607, Period 6b.

SF 57   **Iron horseshoe** with a slightly lobate profile, rectangular holes without countersinkings and a slight calkin at the tip. Context 504, Period 8.
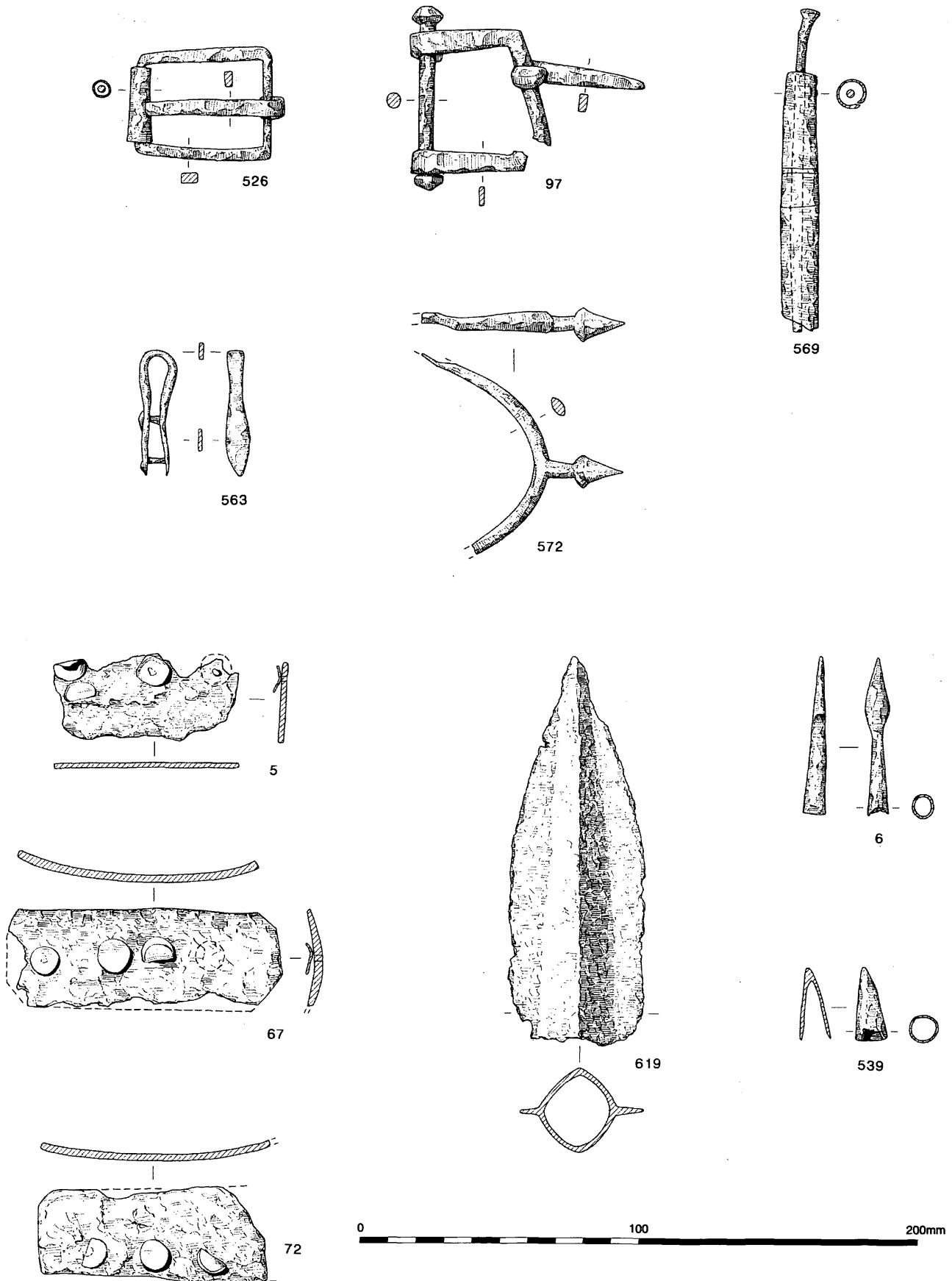
526

97

569

563

572

5

67

72

619

6

539

*Figure 3.15   Iron buckles, horsegear, weapons etc.*

0                                            100                                      200mm

SF 1002    Fragment from an **iron horseshoe** arm with lobate profile, narrow web and a heavy calkin. Context 833, Period 8.

SF 535    **Iron horseshoe**, fragment comprising tip of branch with remains of a single hole. Context 560, Period 9.

SF 582    **Iron horseshoe** fragment with wide webs and three square holes in each arm. Unstratified.

## Armour and weapons (Fig. 3.15)

This assemblage includes a javelin head, two arrowheads and plates from a brigadine.

There are two arrowheads and a bolt, or javelin-point represented in the assemblage. These include a socketed arrowhead with a triangular-shaped blade and rounded shoulders (SF 6, context 23, courtyard layer, Period 6b). Jessop classifies the form as a multi-functional arrowhead suitable for both hunting and military purposes. It was very common and has a wide date range from the 10th to16th century (Jessop 1996, 196, Fig. 1). The second arrowhead (SF 539, context 558/6, Period 9) is a bullet-shaped arrowhead with a sharp point and straight sides, used as a practice weapon; this is of post-medieval date. Similar 16th-century examples have been recovered from Baille Hill, York (Addyman and Priestley 1977, 140, Fig. 10, nos 41–49). The last object is a large complete bolt or javelin head (SF 619), which is unprovenanced. It has a broad lozenge-shaped socket that tapers to a point and is flanked on either side by narrow blades. Similar early examples dating to the 11th–12th centuries have been recovered from Goltho (I H Goodall 1987, 185-186, fig 160, nos 172–174), but later examples are also known at Wharram Percy (I H Goodall 1979, 121, fig. 63, 60) and Portchester Castle (Hinton 1977, 198, fig. 105, no. 24). A third weapon described as a 'barbed and socketed arrowhead' was found in the moat on the east side of the site (1985 Trench V, context 51/2 or /3), but is now lost. It is possible that the missing 'arrowhead', of which no details survive, and the unprovenanced javelin head are one and the same object.

### Fragments of body armour
*by Ian Eaves*

There are three fragments that are clearly from a brigandine: a garment in the shape of a doublet that was armoured with rectangular iron plates riveted to the inside. Most of the surviving examples are in the Italian tradition with domed-headed rivets, but the flat-headed rivets of the plates from the Mount House are known from an undated plate from Northward, Kent (unpublished). The size of plates was reduced after the later 15th century and the Mount House examples would fit into the period 1490–1520. A typical plate was riveted along one edge only, in most cases this

would have been the top edge. Plates from the back of the shirt towards the waistline, however, would have been riveted at the top and the bottom. The slightly saddle shape of SFs 67 and 72 with their external row of rivets could mean they were from the back of the waist line, where top riveted and bottom riveted plates would meet. The similar lengths of the Mount House plates and their matching profiles may mean that, despite being from different contexts, they originally formed a section of the waistline of one garment.

Brigandines were comparatively common, probably worn by 50% of the men fighting in the Wars of the Roses, and the occupants of the bishop's palace would have been required by statute to keep such armour for the service of the state. Such items are comparatively rare in excavations, however, presumably because the metal was used for scrap. The manufacture of brigandines generally declined after 1560; the Tower of London was still able to issue them in 1620 for use against the American Indians, but presumably by this date in Europe they were outmoded as a form of body armour. A fourth fragment of iron (SF 83, context 8, demolition layer, phase 9) (not illustrated) may be a plate from a jacket of plates. Here the square plates were sewn in between the cloth and lining of a doublet-shaped garment.

SF 5    **Brigandine plate**. Fragment from a rectangular iron plate perforated by a row of flat-headed copper alloy rivets. 1490–1520. L: 65 mm. Context 10, Period 8.

SF 67    **Brigandine plate**. Rectangular iron plate slightly saddle-shaped and perforated by a row of copper alloy flat-headed rivets. 1490–1520. L: 97 mm. Context 2, Period 3a.

SF 72    **Brigandine plate**. Rectangular iron plate slightly saddle-shaped and perforated by a row of copper alloy flat-headed rivets. 1490–1520. L: 82 mm. Context 14, Period 9a.

SF 619    **Javelin head** with a broad lozenge-shaped socket that tapers to a point and is flanked on either side by narrow blades. L: 139 mm. Unprovenanced.

SF 6    **Socketed arrowhead**, with a triangular blade and with rounded shoulders. 10th–16th century. L: 59 mm. Context 23, Period 6b.

SF 539    **Socketed arrowhead**. Bullet-shaped arrowhead. 16th-century. L: 28 mm. Context 558/6, Period 9.

*Not illustrated:*

SF 650    Possible **brigandine plate**. Rectangular strip of iron with a single copper alloy rivet through it and one other small rivet hole. Context 510, Period 9.

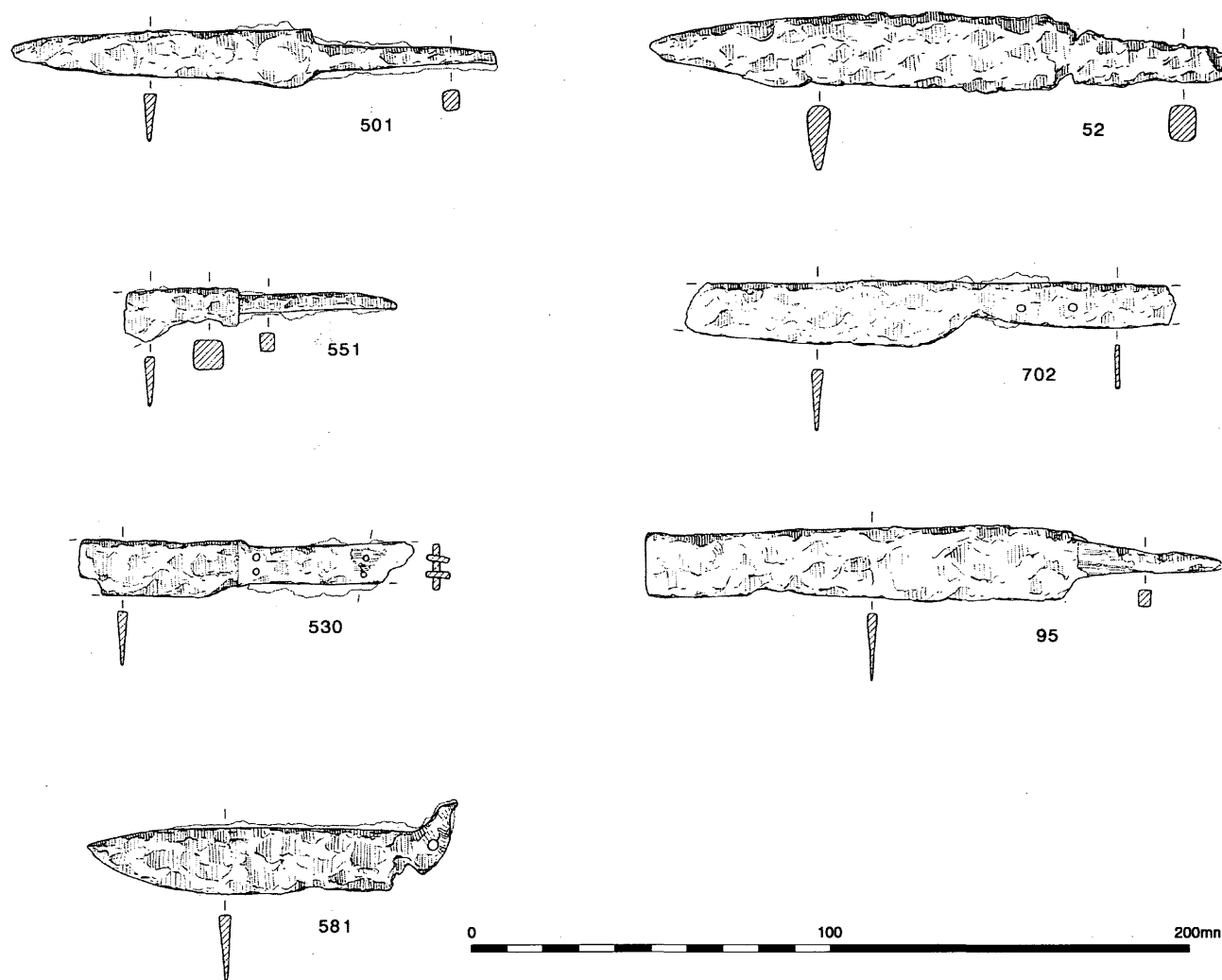SF 83    Possible iron **Jack plate**. Context 8, Period 9.

*Figure 3.16 Iron knives.*

**The Knives (Fig. 3.16)**
**by Patrick Ottaway**

Of the twelve knives excavated four have whittle tangs, two scale tangs and there are four blade fragments. In addition, there is a currier's knife and a pocket-knife.

There is a single complete knife, although in two pieces, from a medieval context (SF 52, context 129, Solar Tower charcoal layer, Period 4b). It is 160 mm long and is therefore a relatively large knife. Although it has no obvious diagnostic features, there is nothing to suggest that it should be dated other than to the medieval period. Another complete knife (SF 501) was unstratified, but is likely to be medieval in date and possibly pre-Conquest. The blade back slopes down from the shoulder before curving down to the tip and the cutting edge has a slight S-shape as a result of sharpening. This back form, classified as C3 (Ottaway 1992, 570), is common in medieval assemblages from the late 9th/10th century onwards.

It is clear from the X-radiograph that the cutting edge was butt-welded to the back; a macro-structure which appears to have been particularly favoured in knife manufacture before the 11th century (Ottaway and Weimer 1993). A knife (SF 551) from a late medieval or 16th-century context (context 505, stone courtyard surface, Period 8) has a small tapering bolster between the blade and tang, a feature characteristic of 16th- and 17th-century knives.

One whittle-tang knife (SF 576, context 558/27, Period 9), and two scale-tang knives (SF 530, context 558/3, moat Period 9; SF 702, context 246, east terrace robbing of wall 94, Period 9a) come from post-medieval contexts. The whittle-tang knife (SF 576) has no diagnostic features and cannot be dated. Scale tang knives were introduced in the 13th century and are numerous in knife assemblages from late medieval and early post-medieval contexts. SF 530 is unusual in that the scale plates are riveted on to the tang by pairs of non-ferrous rivets, and in each pair one rivet is set above the other. The blade

151

of SF 702 has a cutting edge which is markedly rounded at the rear: a characteristic feature of knives of 15th-/16th-century date. The tang widens away from the junction with the blade, a feature that is found throughout the late medieval period.

The four blade fragments: SF 33 (context 10, courtyard west of wall 9, Period 8), SF 75 (context 246, east terrace robbing of wall 94, Period 9), SF 91 (context 245, East Range robbing of east wall 88, Period 9) and one unnumbered fragment have no diagnostic features.

More specialised or distinctive blades are present. There is a fine example of a medieval currier's knife (SF 95, unstratified). It has the characteristic thin blade with a straight end and a back that is slightly S-shaped. The cutting edge is also slightly S-shaped as a result of sharpening. Analysis of an assemblage of 12 curriers knives from 16–22 Coppergate, York, suggests that the type was introduced in the 12th century and remained current throughout the medieval period. A pocket knife with its blade folded into an iron case to which bone scale plates are attached (SF 704, context 413, West Block demolition layer, Period 9) was also found. The pocket knife was a development of the post-medieval period (I H Goodall 1990f, 839) and so there is nothing untoward about the provenance of this knife. Finally, there is a blade which has a short arm at the head which curves over at 90 degrees to the back before being broken (SF 581, context 571, stony soil dump over North Range floor, Period 7). This may be a scissors blade, but in this case there should be a pivot hole at the end of the blade in an area that is now damaged.

SF 501  **Whittle tang knife.** The blade back slopes down from the shoulder before curving down to the tip. The cutting edge has a slight S-shape as the result of sharpening. Common from late 9th/10th century onwards. L: 135 mm. Unstratified.

SF 52  **Whittle tang knife.** Relatively large knife with no obvious diagnostic features. L: 153 mm. Context 129, Period 4b.

SF 551  **Whittle tang knife.** Knife with a small tapering bolster between the blade and tang. 16th–17th century. L: 77 mm. Context 505, Period 8.

SF 702  **Scale tang knife.** Cutting edge is markedly round at the rear. The tang widens away from the junction with the blade, a feature that is found throughout the late medieval period. 15th–16th century. L: 134 mm. Context 246, Period 9a.

SF 530  **Scale tang knife.** Pairs of non-ferrous rivets attach scale plates to the tang. L: 94 mm. Context 558, Period 9.

SF 95  **Currier's knife** with whittle tang and characteristic thin blade with a straight end and a back which is slightly S-shaped. 12th century onwards. L: 156 mm. Unstratified

SF 581  **Folding knife blade.** A blade with a short arm at the head which curves over at 90 degrees to the back before being broken. Possibly a scissors blade. L: 104 mm. Context 571, Period 7.

*Not illustrated:*

SF 33  Possible **iron blade** fragment. Context 10, Period 8.

SF 576  **Iron blade** fragment. Context 558/27, Period 9.

SF 75  **Iron blade** fragment. Context 246, Period 9a.

SF 91  **Iron blade** fragment. Context 245, Period 9b.

SF 704  Iron and bone **pocket knife.** Context 413, Period 9b.

SF 1003  **Iron blade** fragment. Unstratified.

### Tools (Fig. 3.17)

There are 12 iron objects classified as tools, and these are sub-divided according to the type of activity to which they are related.

#### Personal

SF 602 (context 618, soil layer in the courtyard, Period 6a) is a small pair of iron tweezers, made from a thin strip of iron folded over, leaving a loop at the top. The tweezers have an iron slide decorated with three horizontal grooves. At Winchester Biddle believes the copper alloy tweezers with slides to be medieval in date (Biddle 1990c, 690–691, Fig. 190).

SF 602  **Tweezers,** formed from thin rectangular strip looped at the top. The one remaining arm expands very slightly towards the end. The slide is a strip folded around the top (just below the loop), but its ends do not join. L: 80 mm. Context 618, Period 6a.

#### Woodworking

Two woodworking tools were found; a reamer (SF 607, context 605, pitched stone floor in east room of North Range, Period 7) and a cross-pane hammer (SF 47, context 54, Solar Tower post-medieval pit, Period 9). The reamer has a rectangular-sectioned blade and a whittle tang and was used to clean out or enlarge drilled holes (I H Goodall 1993a, 179–180, Fig. 130, no. 1404). The hammer has a burred face and a rectangular eye. Although frequently used for general work at the anvil, such hammers are also used by woodworkers. Comparable examples have been recovered from Goltho (I H Goodall 1987, 177–178, Fig. 156, no. 1) and Norwich (Margeson 1993,175–176, Fig. 125, no. 1351). In addition to these, there were a further two possible woodworking tools. There is a very corroded, but solid wedge-shaped object (SF 93, context 36/6, Solar Tower infill, Period 5a), which could be a woodworking tool (I H Goodall 1990c, 277, Fig. 60, nos 405–409) or possibly a solid
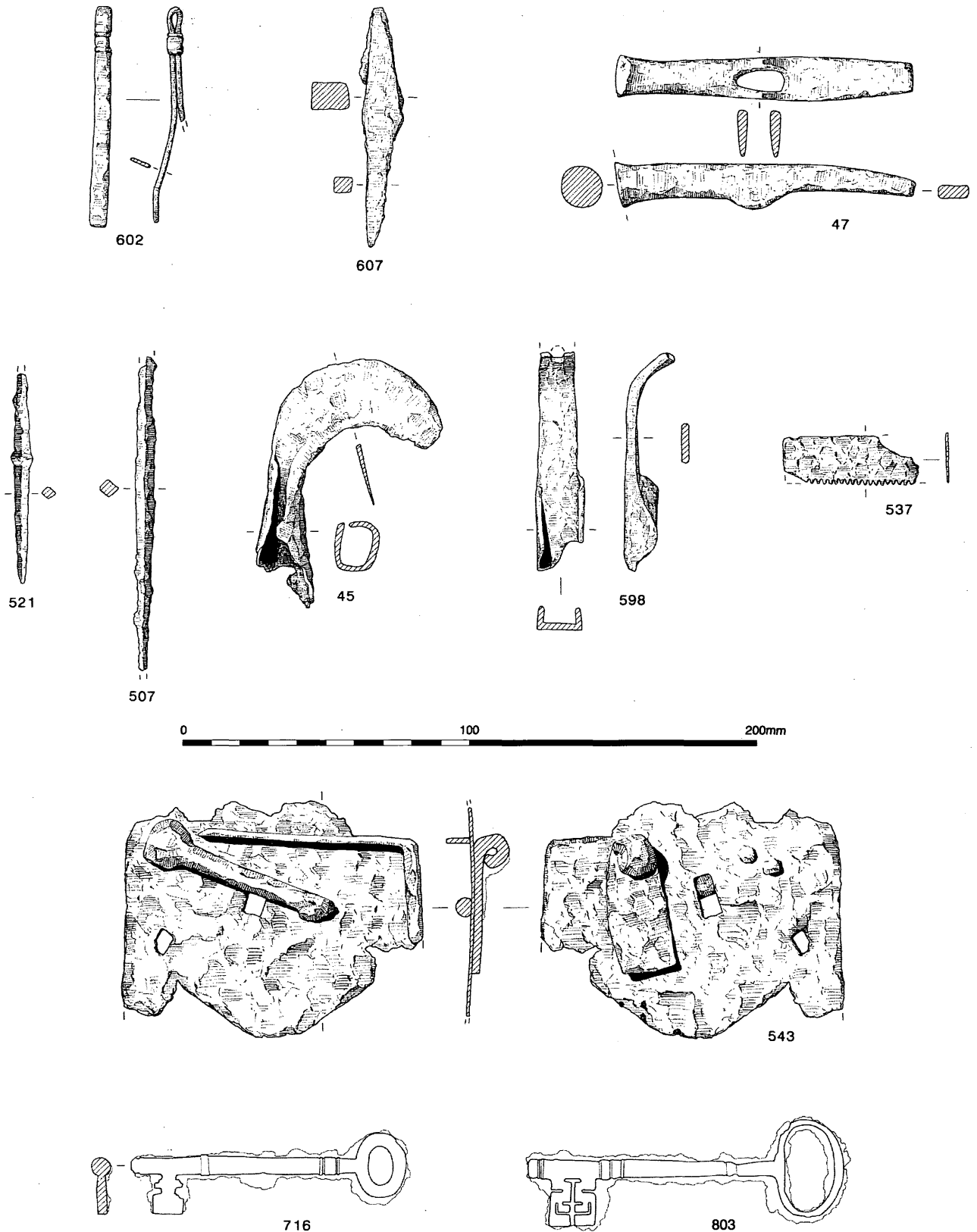
Figure 3.17   *Iron keys, locks and tools.*

chisel for metalworking (I H Goodall 1990a, 198–199, Fig. 41, nos 42–43), but it is not possible to discern burring on the upper surface. There is second wedge-shaped object from a Period 9 context (SF 801, context 910/3).

| | |
|---|---|
| SF 607 | **Reamer,** with a rectangular sectioned blade and a whittle tang. L: 83 mm. Context 605, Period 7. |
| SF 47 | **Cross pane hammerhead** with a burred face and rectangular eye. L: 108 mm. Context 54, Period 9b. |

*Not Illustrated:*

| | |
|---|---|
| SF 93 | **Wedge-shaped iron object.** Context 36, Period 5a. |
| SF 801 | **Wedge-shaped iron object** that tapers along its length to a flat wedge-shaped lower edge. Context 910/3, Period 9. |

*Leather Working*

There are three awls. Two are long and slender awls with gently tapering blades and tangs (SF 521, context 563, destruction material from the robbing of the curtain wall, Period 9; SF 27, context 23, courtyard layer below context 22, Period 6b) (not illustrated) and another awl with a square section and a more exaggerated central expansion where the tang meets the blade (SF 507, context 557, robber trench of south wall of North Range, Period 7). Awls were used to pierce holes in leather to make way for the thread; the variety in the design of the awls reflects the differences in thickness of the material and threads that were used (I H Goodall 1990b, 248–249, Fig. 536, nos 326 and 332).

| | |
|---|---|
| SF 521 | **Awl.** A straight awl with a square section and a central expansion against which the handle would have pressed. The blade and the tang taper to points. L: 73 mm. Context 563, Period 9. |
| SF 507 | **Awl.** Straight awl with central expansion and square section. The object tapers to a point at both ends. L: 110 mm. Context 557, Period 7. |

*Not illustrated:*

| | |
|---|---|
| SF 27 | **Awl,** corroded. Context 23, Period 6b. |

*Agricultural Tools*

These comprise a spade iron (SF 598, context 562, robber trench of curtain wall, Period 9) and a socketed hooked blade (SF 45, context 95, east terrace, robbing of wall 94, Period 9). Only a fragment from the reinforced side of the spade iron survives. This comprises part of the side-channel with lugs and a part of the nailed strip, which served to secure the blade or iron to the wooden spade. Similar examples from 15th- to 17th-century contexts

have been recovered from Sandal Castle (I H Goodall 1983, 242–243; Fig. 5, nos 52–53) and Basing House, Hampshire (Moorhouse and Goodall 1971, 42–43, Fig. 19, nos 54 and 55). The socketed hooked blade is possibly a pruning hook. It has a single perforation through the socket for attachment to the handle. Pruning hooks with open sockets are known from as early as the Iron Age and Roman periods and their design changes little through time.

| | |
|---|---|
| SF 598 | **Spade iron,** fragment. Side channel with in-turned lugs and a side strip with nail hole. L: 76 mm. Context 562, Period 9. |
| SF 45 | **Socketed hooked blade.** Small curved blade with a damaged socket with a nail hole. L: 88 mm. Context 95, Period 9. |

*Tools associated with textile manufacture (with a report on the saw-edged weaving comb by Patrick Ottaway)*

There are two objects. One is a possible back plate from a carding comb (SF 94, unstratified) (not illustrated). This comprises a roughly rectangular sheet of iron with three complete rows and one semi-complete row of circular perforations. It could be the back plate from an iron-toothed comb used to card wool, hemp or flax. Such combs are known from the pre-conquest period (I H Goodall 1984, 79, Fig. 119, nos 20-1) and continue in use in the medieval period; later examples from the 14th to 16th century have been recovered from Norwich (I H Goodall 1993b, 182—183, Fig. 133, nos 1416–1419).

The saw-toothed weaving comb (SF 537 (context 560, destruction material from the robbing of the curtain wall, Period 9) has serrations along one side and is plated with non-ferrous metal, probably tin. A weaving comb consisted of an iron blade set in a wooden handle and was used for beating in the weft. The plating prevented staining of the textile by iron corrosion. This object is likely to be medieval in date. For a full discussion of the use of the weaving comb in relation to a complete blade from a 12th-century context at 16–22 Coppergate, York see Walton-Rogers (1997, 1761–2).

| | |
|---|---|
| SF 537 | **Saw-edged weaving comb** blade fragment, with serrations along one side, it is plated with non-ferrous metal. L: 44 mm. Context 560, Period 9. |

*Not Illustrated:*

| | |
|---|---|
| SF 94 | Possible back plate from a **wool comb.** Roughly rectangular iron sheet fragment with three complete and one semi-complete rows of circular perforations and Unstratified. |

*Locks and Keys (Fig. 3.17)*

There are two keys and a lock plate. The two keys (SF 716, context 501, turf beneath rubble from existing Mount House, Period 10; SF 803, context 910, a courtyard layer, Period 9) both have solid

stems that project beyond the end of the bit, oval bows and mouldings on the stems. Although not of the same design, the bits have symmetrical ward cuts. The form of key was common from the 11th to the 16th century. The third object is the remains of a mounted lock plate (SF 543, context 564, destruction material from the robbing of the curtain wall, Period 9). The front of the plate has the remains of a stapled hasp still with its hooked end. The plate has a rectangular hole and on the back the only remaining piece of lock mechanism is the spring. Locks such as these are late Saxon in date (I H Goodall 1990h, 1001–1017, Fig. 317, no. 3686).

SF 543    **Mounted lock**, fragment. The front of the plate has the remains of a stapled hasp still with its hooked end. There is a rectangular hole in the plate and on the back the spring is the only remaining piece of the lock mechanism. L: 88 mm. Context 564, Period 9.

SF 716    **Key** for a mounted lock. With a solid stem that projects beyond the end of the bit. The bow is oval and there are two mouldings on the stem. The bit has symmetrical ward cuts. L: 112 mm. Context 501, Period 10.

SF 803    **Key** for a mounted lock. With a solid stem that projects beyond the end of the bit. The bow is oval and there are two sets of mouldings on the stem. The bit has symmetrical ward cuts. L: 96 mm. Context 910, Period 9.

## Building and structural iron-work

This category includes iron-work associated with internal fittings such as door furniture, general household fittings and structural ironwork such as staples. Door furniture includes a hinge pivot (SF 601, context 585 robbing of chimney North Range, Period 7) and two strap hinges (SF 40, context 67/2, Solar Tower, blocking of window 68, Period 5a; SF 46, context 142, east garderobe, last fill, Period 5a). The hinge pivot (SF 601) has a rectangular-sectioned tapering shank and a circular sectioned guide arm designed to be driven into wood (I H Goodall 1990d, 330–343, Fig. 83). One strap hinge (SF 40) has a U-shaped loop and three circular perforations. Such strap hinges, designed to be used with hinge pivots, are found in contexts from the 10th to 16th century, as at Winchester (I H Goodall 1990d, 330–347, Fig. 85, nos 660–669). The other hinge (SF 46) is incomplete and represented by bifurcated scroll decoration from its terminal (I H Goodall 1990d, 331–347, Fig. 85, nos 674–677).

General household fittings include a candle holder with an angled stem (SF 710, context 487/3, West Block garderobe infill, Period 9a) (I H Goodall 1990g, 981–983, Fig. 306, nos 3531–3534) and a wall hook designed to be driven into masonry (SF 732, context 461, part of courtyard layer 10, Period 8). The hook rises before the end of the shank. Wall hooks such as this, where the hook separates from the shank before

its end do not occur before the 13th century (I H Goodall 1990d, 328–333, Fig. 77, nos 500–507).

The remaining finds are four U-shaped staples from contexts 129 (Period 4b), 539 (Period 5b), 558/8 (Period 7) and 57 (Period 9). They would have held fittings such as chains and hasps in place or supported rings and handles on doors (I H Goodall 1990d, 328–335, Fig. 78, nos 520–522). There is also a single rectangular staple from context 562, and three iron rings with D-shaped sections from unstratified contexts.

*Not illustrated:*

SF 40    Iron **strap hinge** with a U-shaped loop and three circular perforations. Context 67, Period 5a.

SF 51    Iron **U-shaped staple** with both arms intact. Context 129, Period 4b.

SF 603A    Arm from iron **U-shaped staple**. Context 539, Period 5b.

SF 9    Iron **U-shaped staple** with only one arm intact. Context 57, Period 9b.

SF 46    Incomplete bifurcated scroll decoration from the terminal of an **iron strap hinge**. Context 142, Period 5a.

SF 732    Iron **wall hook**. Context 461, Period 8.

SF 555    Iron **staple** fragment, very corroded. Context 558/8, Period 7.

SF 601A    Iron **hinge pivot**. Context 585, Period 7.

SF 628    Rectangular iron **staple**, broken. Context 562, Period 9.

SF 710    Iron **candleholder** with an angled stem. Context 487, Period 9a.

SF 8    Iron **ring**. Context 6, Period 9b.

SF 14    Plain iron **ring**. Context 86, Period 8.

SF 96    Iron **ring**. Unstratified.

## Bone and Ivory Objects (Fig. 3.18)
*(with identifications by Arthur MacGregor)*

There are seven bone objects. The most notable is a small hipped pin (SF 626, context 339/4, East Range demolition layer, Period 9). It has a large transversely perforated spherical head and is decorated with incised ring and dot motif. Below the head is a collar, and the tip of the shank is hipped. This type of pin appeared at or soon after the time of the Norman Conquest (MacGregor 1985, 121, Fig. 64, no. 40) and there are numerous similar examples at Castle Acre (Margeson 1982, 248–252, Fig. 47). There is a needle (SF 60, context 141, Solar Tower infill layer, Period 5a) with a circular sectioned shank and an expanded, shaped head with a circular perforation; this is late Saxon or early medieval in date (see also Walton-Rogers 1997, 1783, Fig. 831, nos 6680-2).

There is also a rectangular strip or mount (SF 102, context 36, Solar Tower infill, Period 5a) decorated with a border of double incised lines and a central row of dots. One end is squared off, the other is
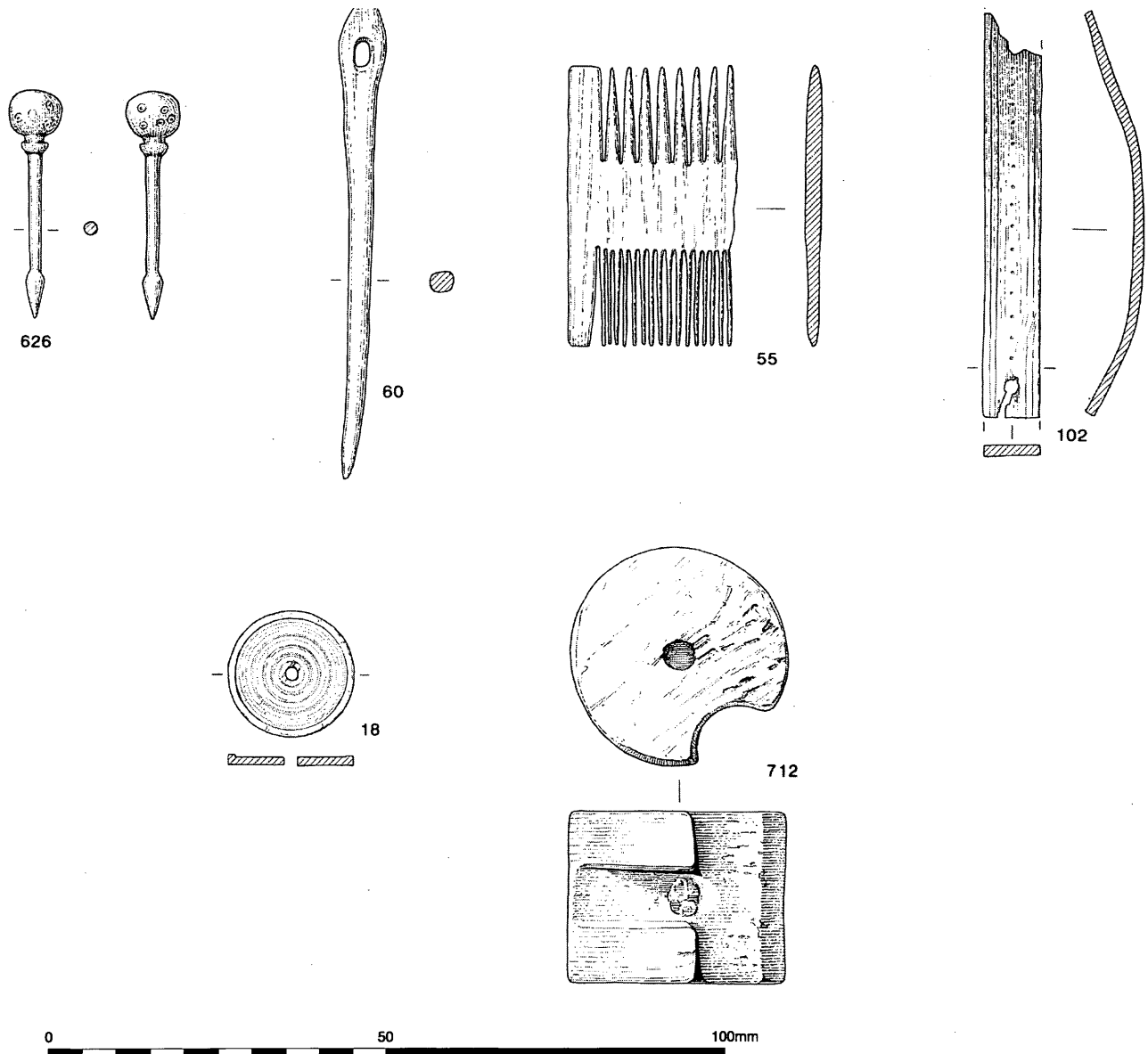
*Figure 3.18   Bone objects.*

broken and there are the remains of two rivet holes with staining. The mount is unusual in that it is curved; the curvature could have occurred accidentally, as a result of pressure on the object if it has been waterlogged, but in this case it was probably induced deliberately by softening and bending the strip to fit a curved surface.

There are two fragments from double-sided combs. One is a fragment from a small one-piece comb (SF 55 (context 155, East Range makeup layer, Period 8), which is difficult to date within the period from the 12th to 18th century. The second comb fragment (SF 42, context 103, East Range demolition layer, Period 9) is of elephant ivory and has fine teeth that give the appearance of being machine cut and is therefore not likely to date earlier than the 19th century. A small circular disc or button from an

unstratified context has a single central perforation and both faces display traces of very fine concentric grooves possibly from turning on a lathe. Similar examples were recovered from Northampton (Oakley 1979b, 317-318, Fig. 141, nos 100–101). The final bone object is a crossbow nut (SF 712, context 487/2, West Block garderobe infill, Period 9a). This is cut from a piece of antler and is neatly cylindrical in form with an axial perforation. The cylinder has been modified by the removal of a transverse piece cut with a saw and round file to form the groove for the bowstring. It is bisected at right angles by a second groove forming the arrow slot; the string would have rested against two upward projections or fingers. There is a notch that is reinforced with an iron insert. A similar feature can be seen on crossbow nuts from Cogges Manor Farm, Witney (Macgregor 1996,

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116–117, Fig. 39, no. 1) and Sandal Castle (Credland 1983, 265, Fig. 12, no. 25). The cross bow was in use as early as the Roman period, but it enjoyed increasing popularity from the time of the Norman conquest and remained in use until the 17th century; the incorporation of the iron insert in this nut probably indicates a later medieval date (MacGregor 1985, 158–161, Fig. 84).

SF 626  **Hipped pin**, small, with large spherical head transversely perforated. Below the head is a collar and the tip of the shank is hipped. There is incised ring and dot motif on the head. Context 339/4, Period 9.
SF 60  **Needle** with a circular sectioned shank and expanded head with a circular perforation through it. Context 141, Period 5a.
SF 55  **Double-sided comb** fragment, perhaps broken during manufacture. It seems to be from a small one-piece comb rather than the end plate from a composite comb. Context 155, Period 8.
SF 102  **Mount** with inscribed double borderlines and central row of dots; one end is squared, the other broken. There are the remains of two rivet holes with iron staining. No parallel is noted for this kind of decoration. The mount is unusual because it is curved. Context 36, Period 5a.
SF 18  Thin circular **disc** with a single central perforation. Both faces display traces of very fine concentric circular grooves. D: 22 mm. Unstratified.
SF 712  **Crossbow nut**. Antler and iron. The nut is cut from a piece of antler and is cylindrical in form. It has a cut groove for the bowstring, an arrow slot and a notch with an iron insert to reinforce the vertical face notch and a hole through the axis of the nut. D: 32 mm. Context 487, Period 9a.

*Not illustrated:*

SF 42  **Double-sided comb** of elephant ivory, fragment. Context 103, Period 9b.

## The Jet
*by Martin Henig*

There were two jet objects: part of a bangle (SF 554, context 558/8, rock cut moat, Period 7) and a possible chip from a spindlewhorl (SF 553, context 558/8, rock cut moat, Period 7). The bangle fragment, has an oval section. A piece of a similar bangle, more rounded in section, was recovered from excavations at St Aldates, Oxford (Durham 1977, 152, Fig. 33, no. 1). The second jet item is a fragment rounded on the outside, but squared off above; it could be a chip from a spindlewhorl (Lawson 1976, 272, Fig. 14, no. 108).

While it can not be ruled out that these are products of a medieval industry, for they both come from secure medieval contexts, it is also possible that they are Roman *objects trouvées* (compare Lawson 1976, 250, Fig. 4, no. 19). Such objects were valued in the middle ages for supposed amuletic powers: a 15th-century translation of a 14th-century lapidary (Evans and Serjeantson 1933, 32 and 90) says:

... The poudre of hym, wasshed in a litel water, clenseth a mans teth, of yef thei waggen, be a stonnde vnderneth, hit yelte his kynde. When a man brenneth hit, of when a man hath pe goute fallying, be pe odeur anon therof he resteth. The smelle of pe brennynge dryueth away serpentes, of muche is worthe to hem that haue her wombes turned, or to him pat taken crowes and hit undothe and voideth witchcrafte. Or also hit disproveth maynden-hoode, of yef a women traveile of chylde, if dryncke of the water that hit hath leyn inne thre dayes and thre nyghtes, sone she shall be delivered ....

These objects may have been found locally, as there were certainly suitable sites in the vicinity of the site (Chapter 1 and Fig. 1.2), but because of their value may have been brought to Oxford and Witney from elsewhere.

*Not illustrated:*

SF 554  **Jet bangle** fragment. Context 558/8, Period 7.
SF 553  Small **fragment of jet**, rounded on the outside but squared off above. Context 558/8, Period 7).

## The glass (Fig. 3.19)
*by Cecily Cropper*

### Vessel glass

The assemblage comprised a maximum of 67 individual vessel units, 39 units of which being from post-medieval wine bottles (late 17th to the 20th century) in a very fragmentary state (none illustrated). The remaining units were of vessels or other containers ranging in date from medieval to modern. The assemblage as a whole is representative of common vessel forms and glass types typical of their respective date ranges. The catalogue outlines the most representative vessels other than post-medieval wine bottles (in archive catalogue), or in the case of the emerald green vase (No. 10), vessels of visual interest.

The majority of glass comes from contexts in Periods 9 and 10, the distribution indicating the consequences of demolition. All the medieval fragments are from Period 9 and are thus residual, and fragments from medieval contexts are all post-medieval, and thus intrusive. Any discussion of
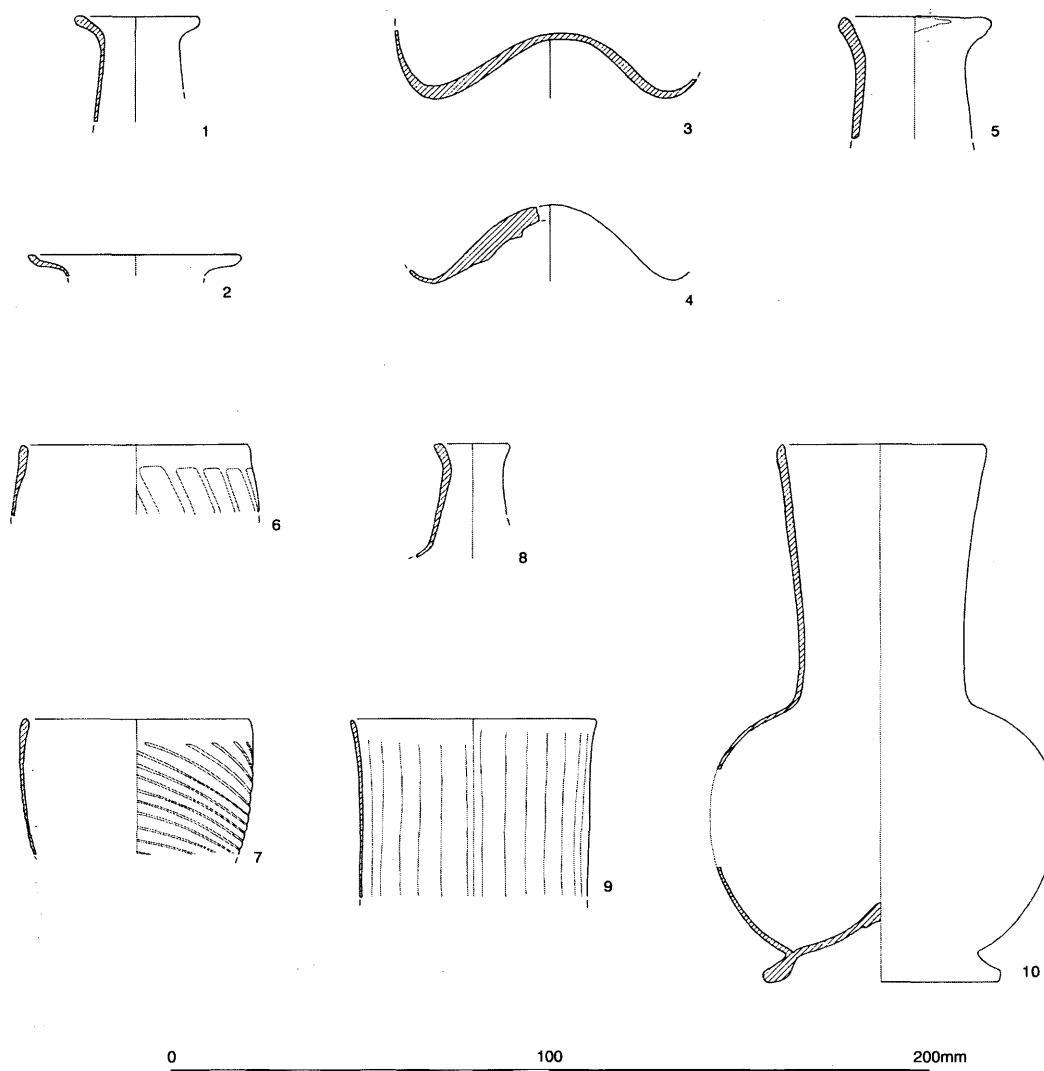
*Figure 3.19   Glass vessels.*

distribution is, therefore, restricted to areas of dumping and even then this appears to be general.

*Medieval glass*

Of note is a small group of late medieval bottles or flasks (Nos 1–4) from a Period 9a context, the infill of the garderobe in the West Block (context 487). It is possible that rim No. 1 may belong to one of the bases. Rim No. 2 is not unlike a urinal rim and if so would not belong to either base. A fourth medieval vessel (No. 5) came from another Period 9a context, a possible floor in the East Range (context 156). Bottles such as these are found on most types of medieval site; for example similar rims and bases have been found at Battle Abbey, Kent (Charleston 1985, fig. 42, no. 22) and at Eynsham Abbey, Oxon. (Cropper, forthcoming) as well as urban sites such as Southampton (Charleston 1975, fig. 221, nos 1496–7).

1   **Bottle rim and neck**, weathered opaque. Rim out-turned and nearly horizontal. Neck cylindrical and slightly flaring. Rim D: 35 mm, Bore D: 20 mm. 14th-/15th-century. SF 711; context 487/1, Period 9a.
2   **Urinal/flask rim**, weathered opaque and strain-cracked. Rim flared and upturned. D: c55 mm. ?14th-/15th-century. SF 711; context 487/1, Period 9a.
3   **Bottle base**, oxide-stained and strain-cracked, very slight green tint. Concave, shallow domed kick, rounded heel. Pontil mark smoothed. Resting Point Diameter (RPD): c 72 mm. 14th-/15th-century. SF 711; context 487/1, Period 9a.
4   **Bottle base**, oxide stained and opaque. Concave, shallow domed kick, rounded heel. Pontil mark unsmoothed. RPD: c75 mm. 14th-/15th-century. SF.711; context 487/1, Period 9a.
5   **Bottle/flask rim and upper neck**. Weathered opaque and strain-cracked. Rim slightly out-turned and fire-rounded; old chip on rim. Neck wide and

cylindrical. Rim D: 49 mm, Bore D: 31 mm, neck thickness 2.5 mm. 13th-/14th-century. Context 156, Period 9a.

*Transitional and post-medieval (16th-18th century)*

The wrythen beaker (Nos 6–7) is a very common form of vessel in the 16th and 17th centuries and as with the bottles above is recovered from the full range of site types. Similar examples can be seen from the 16th-century glass-making site at Hutton, Yorks (Charleston 1972, Fig. 64, nos 73, 75–76, 78–81, 146) and the urban sites of Northampton (Oakley 1979, fig. 131, nos. 64–5, 299) and from Exeter (Charleston 1984, Fig. 149, no.79, 270–1). The small bottle has a similar profile to an example from Southampton (Charleston 1975, Fig. 225, no. 1575, 224) that is dated to the 17th century, though the condition of the vessel from the Mount House implies a slightly earlier date. The colourless beaker (No.9) is a common form and other similar vessels can be seen at Hutton (Charleston 1972, Fig. 64, nos 71-2, 146). Finally, the vase, No. 10, is purely an attractive vessel in a rich, emerald green glass that was introduced during the 17th and 18th centuries and commonly attributed to the Bristol glass-makers where this type of glass was first produced (Newman 1977, 50).

6   ?**Beaker rim**, oxide-stained and strain-cracked, slight green tint. Rim slightly in-turned. Mould blown with widely spaced wrythen decoration. D: *c* 95 mm. ?15th-/16th-century. Context 121, Period 9b.
7   **Beaker rim**, surface loss and strain-cracking, colourless. Rim slightly inturned. Mould blown with wrythen decoration. D: *c* 90 mm. ?15th-/16th-century. Unstratified.
8   **Small bottle/phial rim and neck**, oxide-stained, green-tinted. Rim slightly out-turned and uneven finish. Neck slightly flaring to a rounded shoulder. Rim D: 25 mm, Bore D: 14 mm. ?16th-century. SF.549; context 562/2, Period 9.
9   ?**Goblet/beaker rim and upper body**, iridescent lamination, colourless. Rim slightly out-turned, body flaring. Mould blown vertical ribbing. 16th-/17th-century. Unstratified.
10  ?**Vase**, iridescent lamination, emerald green. Free blown. Rim straight, neck vertical, horizontal shoulder and rounded body. Hollow foot-rim (single paraison), kick shallow with internal point. Rim D: *c* 65 mm, Footrim D: 77 mm. 17th-/18th-century. SF.711; context 487/1, Period 9a.

*Window glass*

The excavations produced a total of 173 fragments of window glass in a very fragmented condition.

*Medieval*

Sixteen glass fragments are identified as medieval primarily because of their condition, all being severely weathered by depositional factors (see for example Newton and Davison 1989, figs 4.17 to 4.20). Some fragments from context 571, however, displayed pitting on the external surface, resulting from long-term atmospheric decay. This suggests that these fragments could have been *in situ* for a long period prior to deposition (Kerr 1985, 127). Three of the 16 fragments retained paint on the internal surface, though no overall design was decipherable. No fragments are illustrated.

Glass thickness ranged from 2.5 mm to 3.5 mm, and the colour, where the internal unweathered glass core was visible, was of a green tint. Paint colour was a medium dark red-brown, and on two pieces parallel lines were present. It is most likely that the design was a form of grisaille (geometric and stylised foliate design), indicating a general 13th-century date, though possibly slightly earlier (Kerr 1985, 127).

*Medieval glazing*

Twelve of the medieval window glass fragments came from contexts within the north-western area and five of these came from soil dumps (contexts 596 and 571) over the North Range floor, dated to Periods 6b and 7 respectively. This suggests that the glass was removed or dismantled between 1250 and 1400. The pitting present on the external surface of fragments from context 571 is interesting as it shows that this glass was placed into windows at a considerably earlier date than this, and could date to the late 12th century. Other fragments from contexts associated with the North Range included a painted fragment from the wall fireplace (576), whose construction is dated on pottery grounds to the late 12th century (Period 5a). Although it is possible that the painted glass from the dump layers was derived from elsewhere in the manor, the available evidence would be consistent with a late 12th- or early-13th-century glazing of this building.

Two other medieval glass fragments come from later 12th-century contexts in the Solar Tower area, one from the infill of the east terrace and chapel (context 93) and the other from the infill of the tower itself (context 140). There were no signs of pitting to suggest these are earlier and given the general appearance it does not seem likely that they pre-date this period.

Further fragments came from Periods 7–10. The fragment from context, 924 (Period 7) had a pocked appearance suggestive of fire distortion. One painted fragment came from a late medieval or early post-medieval Period 8 context in the northern courtyard (587). The paint and residual design was similar to that of a piece from context 476. All these fragments are residual.

The overall implication, even from such fragmentary evidence, is that there was a single, medieval glazing programme, most probably within the late 12th century. Although any overall painted design is uncertain, it may have been grisaille.

*Post-medieval and modern*

The remaining 157 fragments are of plain glass. Several fragments indicate that the window design used diamond-quarry glazing. All the post-medieval glass was of a green or green-blue tint with a thickness ranging from 1 to 2 mm. Weathering conditions included oxide-staining and early stages of strain-cracking as well as surface loss within the early post-medieval glass and iridescence and lamination on the later post-medieval glass. There appear to be two possible glazing programmes within the post-medieval period between the 16th and 18th centuries. The earlier is proposed sometime within the 16th and 17th centuries and the later within the 17th and 18th centuries.

Although there was no post-medieval window glass recovered from Period 8 contexts, the overall evidence indicates that the East Range was plain-glazed in this period: post-medieval glass was found within Period 9 contexts including layer 155, possibly the latest floor, and from the subsequent demolition or robbing contexts 121 and 245. It seems plausible to suggest a programme of plain-glazing within the East Range during the 16th century. Only small amounts of glass came from the area of the Solar Tower, certainly not enough to say with confidence that this building was also glazed. A second, more notable amount of glass came from Period 9 robbing and destruction deposits associated with the curtain wall in the north area, in the vicinity of the North Range; this may have derived from the adjacent gatehouse.

Another glazing programme during the 17th century may be indicated by a group of glass fragments in much better condition than those discussed above, though still mostly from the robbed out curtain wall in the north and (to a lesser extent) the East Range and the Solar Tower. Alternatively, it

is possible that this may be glass from a different source with a greater resistance to weathering. If this is the case then these fragments may belong to the earlier glazing programme.

Glass fragments of the 18th, 19th and 20th centuries are also present in this assemblage from Period 9 and 10 contexts. Intrusive glass of this date also appeared in the chapel infill layer 93 (Period 4b), the fill of the east garderobe 142 (Period 5a) and the early post-medieval courtyard surface 504 (Period 8).

## The Lead Objects

### The Window Cames (Fig. 3.20)
### by Cecily Cropper

Two fragments of window came (SF 81, context 236, Period 6; SF 584, context 582, Period 8) were recovered from medieval contexts and are medieval in date. The first fragment (SF 81) came from construction debris from the fireplace dated to Period 6 (1225–1300) within the west wall of the East Range, and the second (SF 584) from a deposit within the east room of the North Range, dated to the very late 14th or early 15th century.

Of particular interest is the piece of casting waste (Fig. 3.20, SF 81) which provides evidence of the casting process described by Theophilus (Hawthorne and Smith 1979, Book II, Chapters 25–26, 69–70). It is comparable to a larger piece of waste recovered from Castle Rising Castle, Norfolk (Knight 1997, 108–109, Fig. 83). Knight suggests that the presence of such waste indicates that the casting process was undertaken on the site of the castle itself (Knight 1997, 108).

The pieces of soldered came (Fig. 3.20, SF 584) show several characteristics that imply that this is a waste piece from the glazing process. The piece as a whole is not well put together, the solder is applied unevenly and has run into the heart of the came,
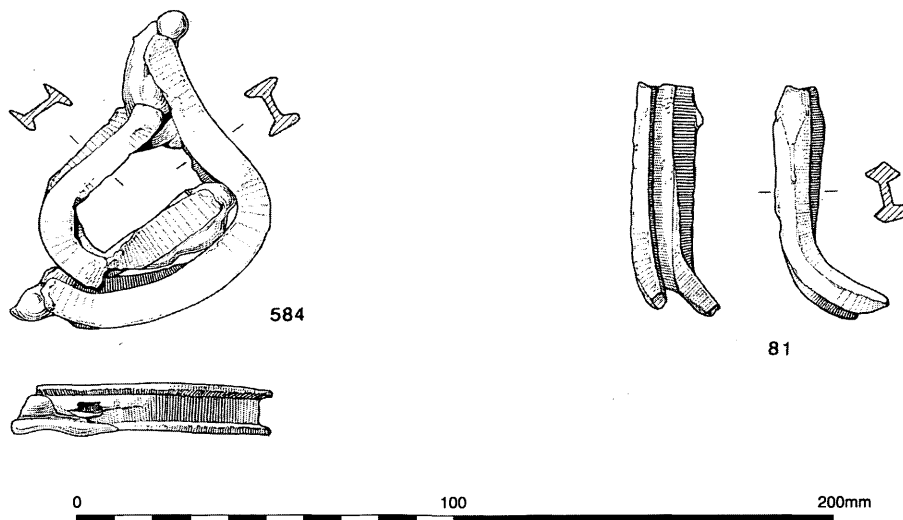


*Figure 3.20  Lead cames.*

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which would prevent the insertion of any glass. There is also a lack of solder on one side. Finally, the melted area of the flange of one came, resulting from an over hot soldering iron, suggests that this was either a piece used to test the temperature of the iron or was, perhaps, a mistake made by the glazier. All this indicates that this came was not used in a window panel. The hole in the heart of the came is likely to have been made deliberately during the leading-up process, as a result of nailing the piece of waste when used to retain glass in place on the bench.

Although the evidence from the Mount House is limited to these two fragments, both are suggestive of on-site smelting, casting and glazing. The evidence of the lead came suggests two phases of glazing. The first glazing programme during the 13th century in, or close to, the East Range, and the second in the surviving room of the North Range at the beginning of Period 8. This would have followed the demolition of the range and the window glass recovered from dump contexts of the late 13th and 14th centuries adjacent (see Window Glass above).

SF 584    **Cast came**. Two lengths joined together by solder on one side only, both lengths now curved round. Solder present at free end of each length. Signs of melting of came at one join by an over-hot soldering iron. A deliberately made small hole is present through the heart at one end. Knight's Type C (Knight 1985, 155, Fig. 48, 2c). Heart depth: 4 mm, heart width: <1 mm. Context 582, Period 8.

SF 81    **Cast came**. Cut waste from the tail end of a casting, that is from the bottom end of the mould, not the sprue end. Remains of a prominent casting flash towards cut end. Knight's Type A (Knight 1985, 155, Fig. 48, 2a). Context 236, Period 6.

*Other lead objects*

There were nine other lead objects, including six fragments or offcuts from flashing or casting waste, two perforated sheets of lead and a possible cloth-seal. There were two rectangular strips of lead (SF 86, context 199, East Range for make up for floor, Period 6; SF 81B, 236, East Range construction debris from fireplace 25, Period 6) both with rows of oval or circular perforations punched through them. A small disc with flanges on the circumference (SF 594, context 503, stone courtyard surface, Period 7) is possibly part of a cloth seal of the 16th century. There are traces of a worn image and legend on the upper surface. Cloth seals were used from the 13th century onwards as a sign that an officer of the crown had checked the quality and dimensions of the textile concerned. This cumbersome alnage system ended in 1724, but seals continued to be used as labels into the 19th century (Egan 1985).

*Not illustrated:*

SF 80    **Irregularly shaped fragment** of lead. Context 140, Period 5a.

SF 48    **Rectangular strip** of lead broken at both ends. Context 40, Period 9.

SF 86    **Rectangular strip** of lead with a row of punched circles along one edge. Context 199, Period 6.

SF 81B    Roughly **rectangular sheet** of lead with a row of punched oval or circular holes. Context 236, Period 6.

SF 621    Fragment of roughly **rectangular strip** of lead. Context 607, Period 6b.

SF 7    Lead **casting waste** fragment. Context 19, Period 8.

SF 1005    Lead **casting waste**, large fragment. Context 245, Period 9b.

SF 594    Flanged lead disc, possible **cloth seal** with slight flanges at opposing points on the circumference and traces of a worn image and legend on the upper surface. Context 503, Period 7.

SF 520    **Strip** of lead of rectangular section. Context 563, Period 9.

## THE WORKED STONE
*by John Blair*

### Architectural fragments (Figs 3.21–24)

The excavations recovered an assemblage of worked stonework which was large in quantity, but restricted in date and type and, with only a few exceptions, uninteresting. The great majority of the *ex situ* items comprised simple ashlar blocks (90), plain voussoirs (15), simple rebated blocks from door-jambs (11) and triangular wall-copings (11), mostly with precise diagonal tooling and clearly derived from the main 12th-century phases of the palace. These will not be discussed further.

Of rather greater interest are nine column-drum segments from the fill of the Solar Tower (not illustrated); six of them derive from a composite ashlar column of 1.38 m diameter, the other three from a similar column of 0.80 m diameter. These pieces are too large to come from aisle piers, and within the known buildings it is only possible to envisage one context for them: a central column in the Solar Tower, standing on the square pier in the basement. A possible explanation for the two sizes is that the column was of larger diameter on the first floor, but continued upwards at second-floor level with the smaller diameter. This is valuable evidence for the internal arrangements of the building above basement level. The following items merit individual description:

*Romanesque (Figs 3.21–3.22)*

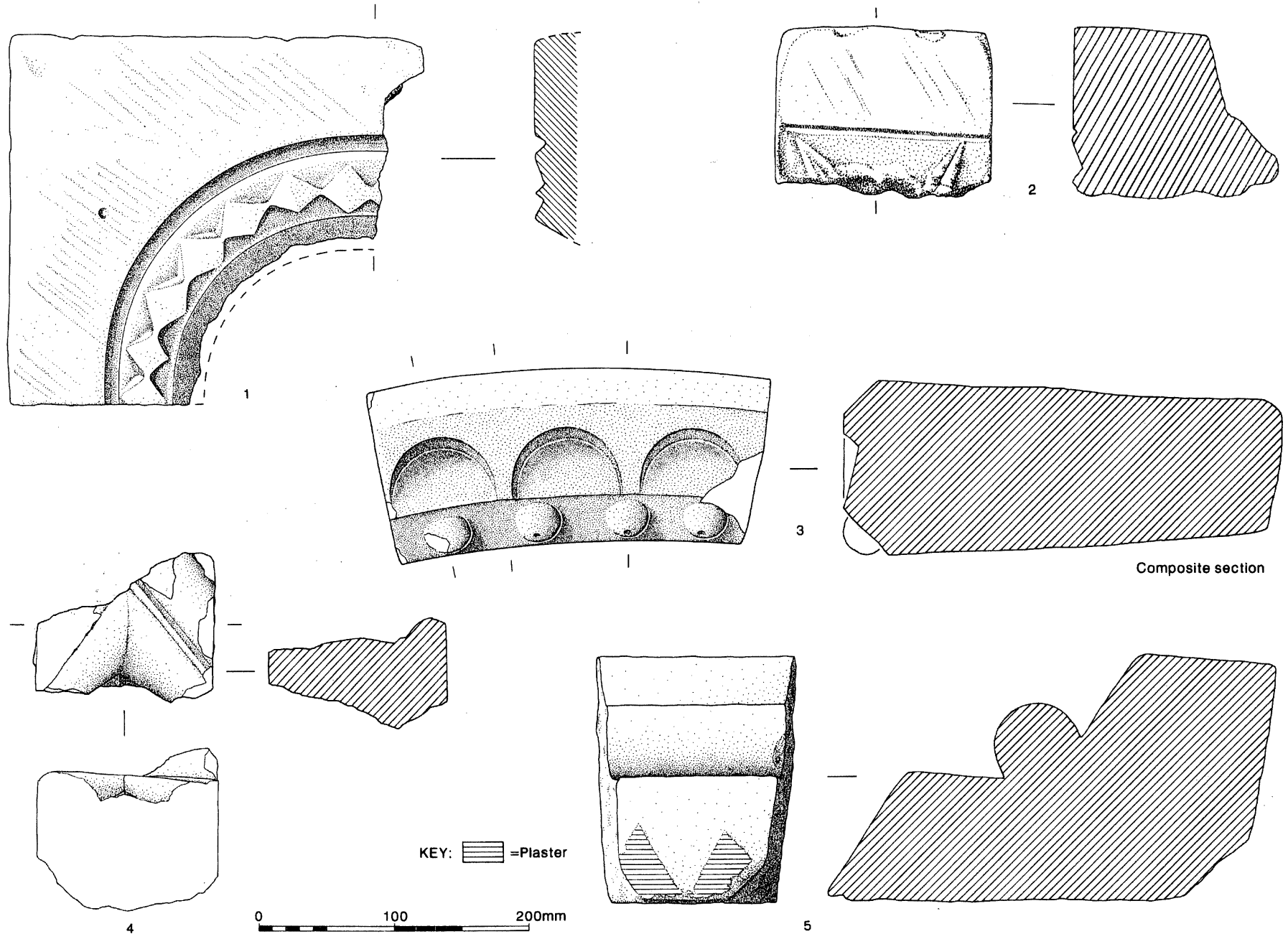1    Part of a small monolithic **window-head**, the opening framed in a band of

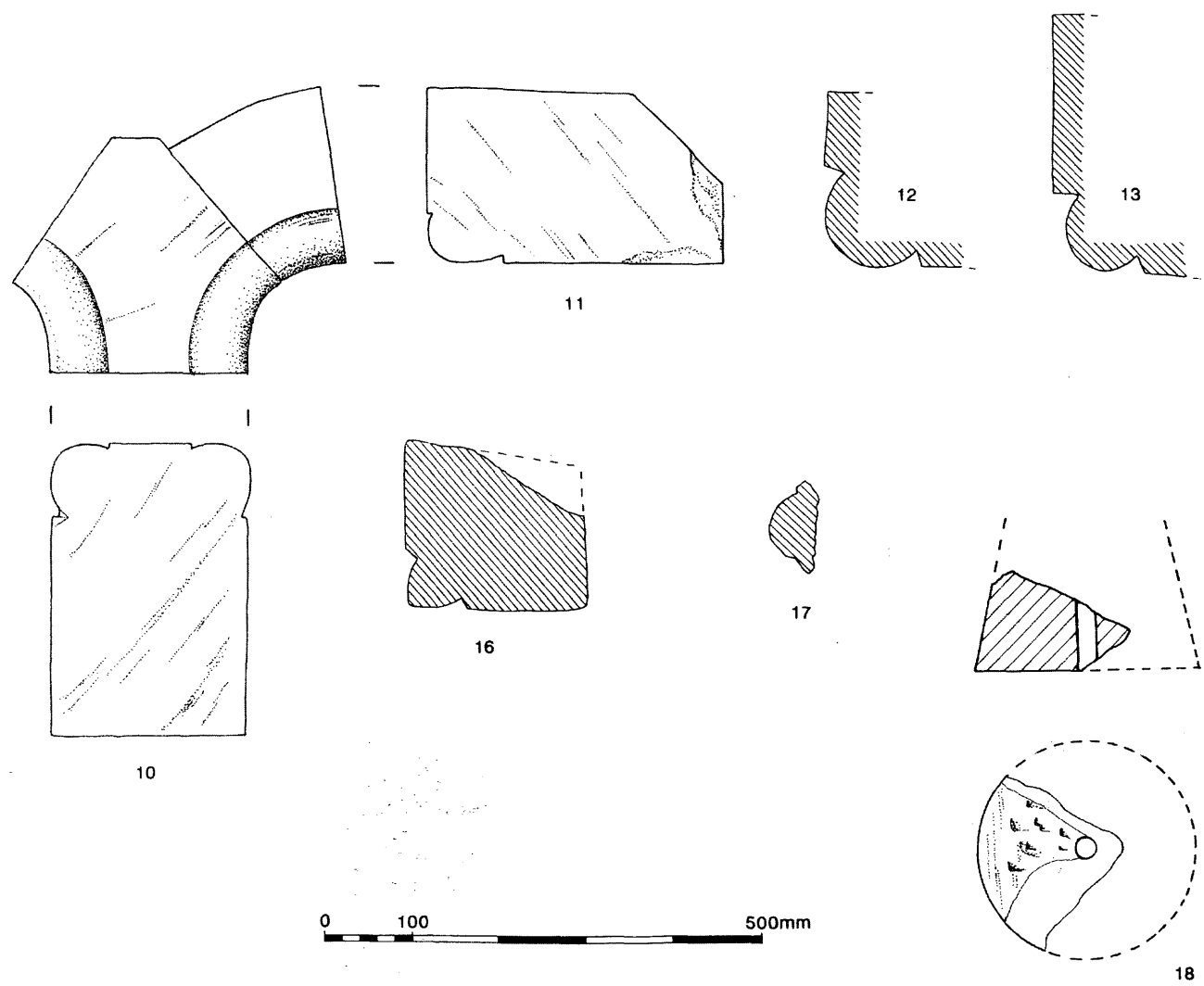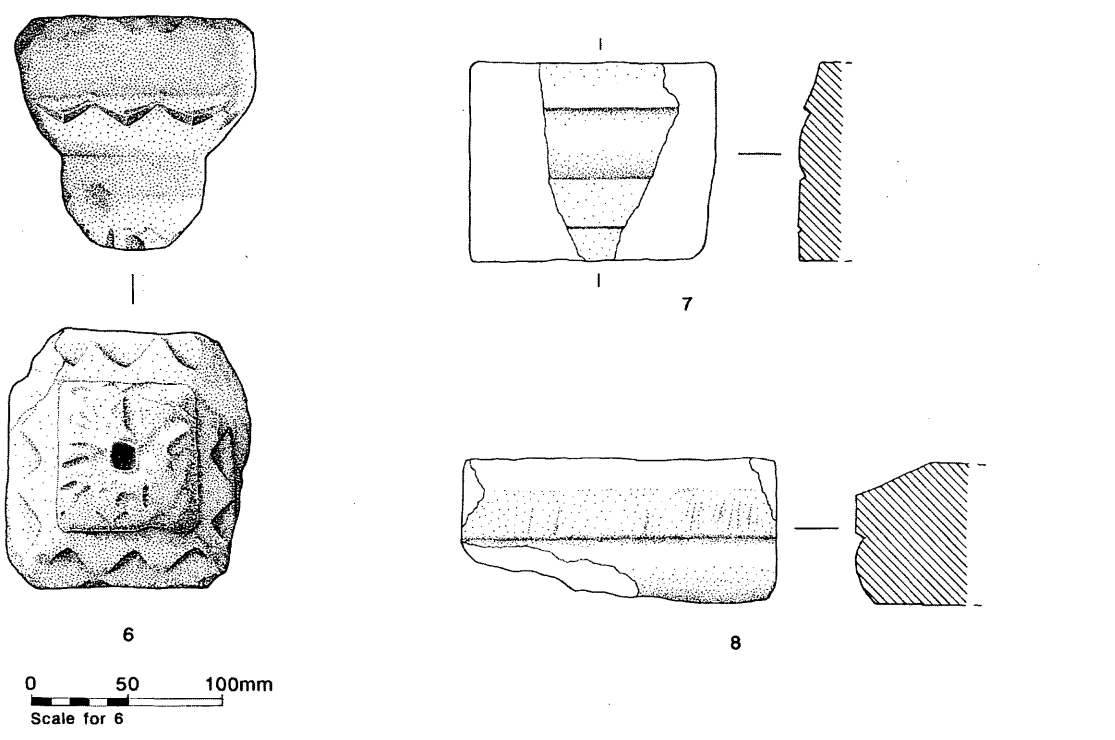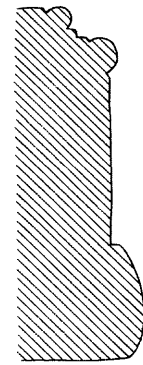*Figure 3.21    Architectural stonework Nos 1–5.*

KEY: =Plaster

Composite section

0    100    200mm
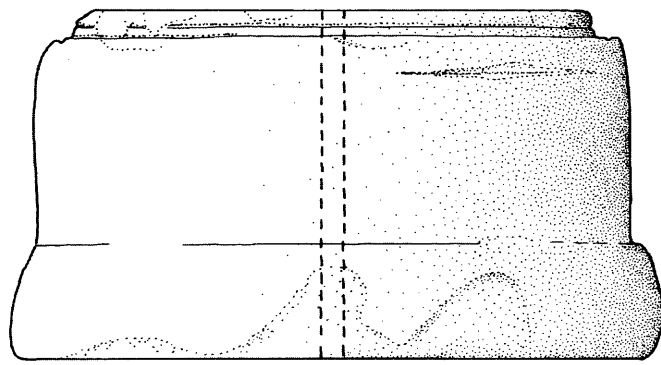
0    50    100mm
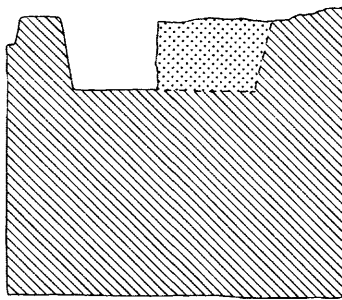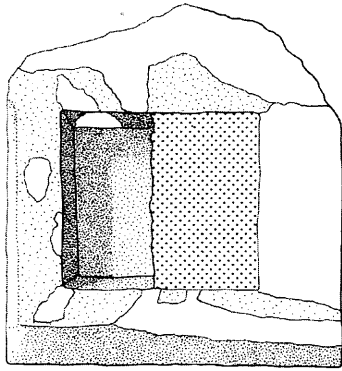Scale for 6

0    100                    500mm

*Figure 3.22   Architectural stonework Nos 6–8, 10–13, 16–18.*
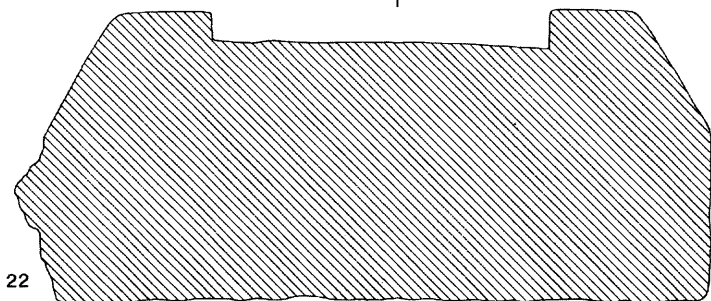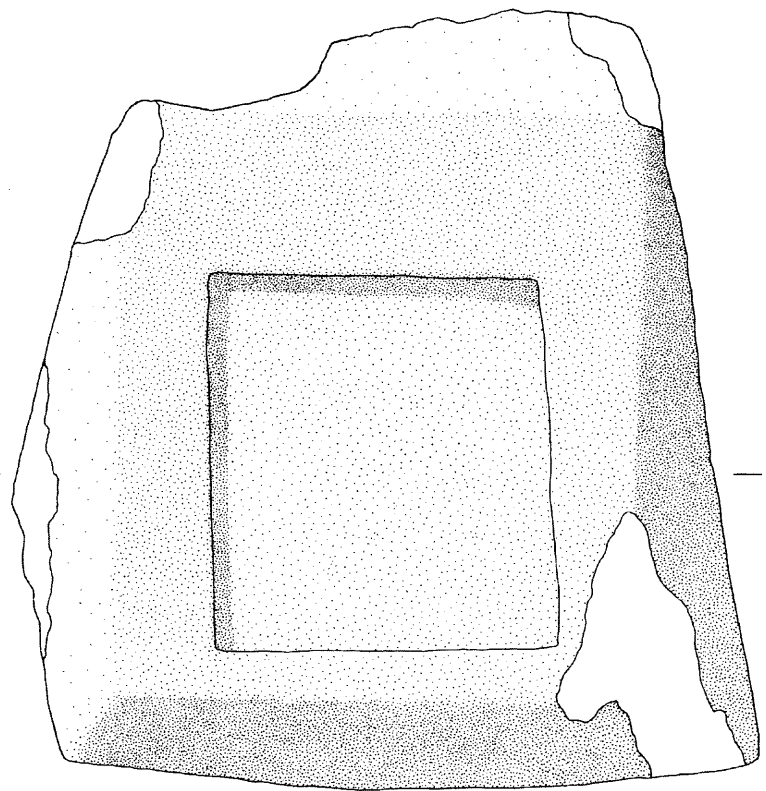
20

0    100    200mm

Scale for 20

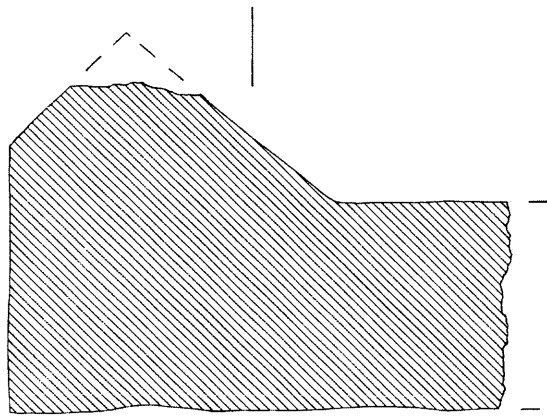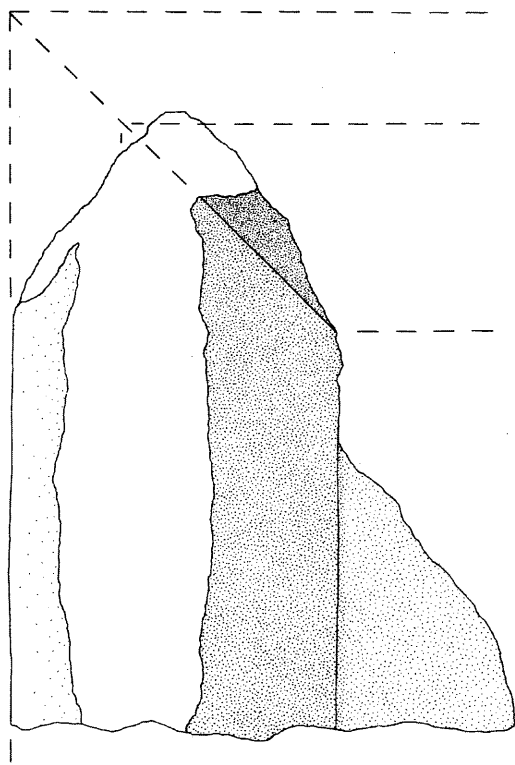Reconstruction
of unweathered
profile

KEY: [▦] = Mortar          21

0          100          200mm
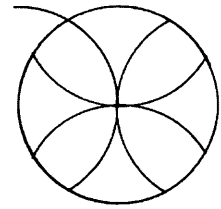
22

*Figure 3.23   Architectural stonework Nos 20–22.*
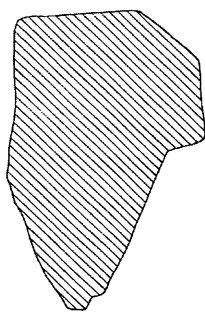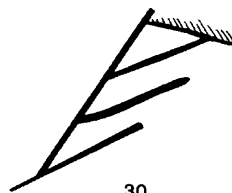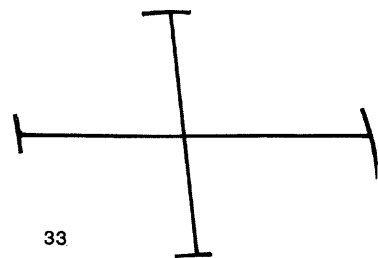
*Figure 3.24* Architectural stonework Nos 23–24; Masons' marks (Nos 27–33).

small-scale lozenge decoration. WS 356; context 97, built into chapel wall.

2    A fragment of a **block carved with a beakhead**, only the ears of which remain. The block seems to have been rectangular rather than wedge-shaped, suggesting that it comes from a jamb rather than an arch; the most likely context is a doorway with a continuous row of beakhead around arch and jambs. WS 460; Trench VIII layer 8, in post-medieval fill of East Range.

3    A **voussoir** from a large arch (projected diameter 1.5 m), decorated on the edge with indented semi-circles and large pieced pellets. WS472; context 818, re-used in 14th-century kerb around East Range.

4    A small **fragment of chevron ornament**, presumably from an arch or doorway. WS461; context 88, East Range wall, reused either in primary building or in Period 4b.

5    A **voussoir** from an arch or doorway, with a nook-roll and a splayed soffit. On the soffit, small-scale chevron is applied in plaster. WS470; context 812, a late medieval layer in the East Range.

6    A small **square capital**, with chevron around the lower arris, from the top of a square shaft. Probably the central shaft of a two-light window. WS321; context 200, unstratified.

7    A block from a **large moulded base** (max. diameter *c* 1.3 m). WS47; layer 3, infill of Solar Tower.

8    A block from a **large moulded base** (max. diameter *c* 1.3 m). WS438; context 646, late medieval layer overlying North Range.

9    *(Not illustrated)* A **springer** for two arches with angle rolls on one face; perhaps from blind arcade. WS232; re-used in fireplace 25, added to the East Range in the early 13th-century.

10    A similar **springer**. WS315; context 36/A/1, infill of Solar Tower.

11    A **voussoir** with a nook-roll, probably from the same structure as cat. nos 9 and 10. WS446; context 652, re-used in late 12th-/early 13th-century door threshold to North Range.

12    The base of the east **jamb of a fireplace**, with a nook-roll. WS243; *in situ* in context 576, late 12th-century fireplace in North Range.

13    A slightly splayed **ashlar block** with a nook-roll on one arris. WS 19; context 3, infill of Solar Tower.

14–15    *(Not illustrated)* Two **fragmentary blocks** with nook-rolls, probably from the south chapel wall buttresses. WS115; unstratified. WS429; from fill of window 70 in west wall of Solar Tower.

16    A **block with a keeled roll**. WS471; context 821, infill of robber-trench of East Range wall 88.

17    A small **fragment of attached roll**. WS466; context 110, re-used in late 12th-century steps abutting east terrace wall.

18    The base of a **small cone** or **pinnacle**. WS3; context 3, infill of Solar Tower.

19    *(Not illustrated)* A **chamfered block** of shelly limestone forming part of a fireplace. WS277; *in situ* in fireplace 25, added to the East Range in the early 13th-century.

### Later and indeterminate (Figs 3.23 and 3.24)

20    A **column-base** (max. diameter 0.72 m) with a slightly 'water-holding' edge moulding, drilled with a central hole. Probably early 13th-century. This clearly comes from a major building: an aisled hall with stone arcades is one possibility. WS 113; Re-used as an ornament in the present garden.

21–22    Two **square-socketed bases**, probably pads for structural posts in timber buildings. WS57; context 56, infill of Solar Tower; WS450; context 630, *in situ* at corner of walls 519 and 630 forming porch between North and West Ranges.

23    A fragment from the frame of a **recessed panel**, probably late medieval. WS88; Trench VIII, unstratified.

24    A **splayed door-jamb**. WS469; context 468, post-medieval robbing of West Block.

25–26    *(Not illustrated)* The bottoms of two **door-jambs**, chamfered with plain chamfered stops. WS215 & WS230; *in situ* in 14th-century doorway inserted into west wall 9 of East Range. (See Pl. 2.27).

27–28    Two **blocks** with compass-drawn graffiti. WS130; on ashlar in doorway of Solar Tower; WS141; on ashlar of central pier 49 in Solar Tower.

### Masons' marks on the standing masonry (Fig. 3.24)

Five different masons' marks were recognised on the standing ashlar masonry:

29    On a **quoin** of buttress or chimney-stack 27 against the west wall of the East Range. Smaller versions of the same mark were seen on four blocks in the south chapel wall (wall 97) and its buttresses. A version lacking one of the horizontal strokes, perhaps an incomplete example of the same mark, occurs on a probable voussoir

from the infilling of the Solar Tower (context 56). WS225; context 27. WS271, WS272, WS342, WS349; context 97. WS50; context 56.

30 On a **quoin** of buttress or chimney-stack 27. WS228; context 27.

31 On a **block** adjoining buttress or chimney-stack 27. WS229; context 27.

32 On a **block** built into the south wall of the Solar Tower. WS154; context 62.

33 On two **blocks** built into the south wall of the chapel, three **blocks** in the central pier of the Solar Tower, a **block** in the conduit arch of the east garderobe, and a **quoin** of the garderobe wall. WS140, WS142; context 97. WS177, WS347, WS350; context 49. WS389; context 227. WS451; context 27.

## Comments on the Romanesque stonework
*(Incorporating the substance of comments kindly made by Dr Jeffrey West)*

While a good deal of the material clearly derives from high-quality 12th-century structures, with fine diagonal tooling on the ashlar and roll-moulded edges, only three pieces (1-3) bear diagnostic decoration. The window-head (1) can in general terms, though not in detail, be paralleled locally by the decorated monolithic window-heads re-used in Cokethorpe and Yelford churches. This kind of small-scale lozenge decoration is very common in the Romanesque repertoire of the second and third quarters of the 12th century. The square-cut beak-head block (2) implies a doorway completely framed in beakheads, which would be consistent with the local workshop which was executing such commissions as the chapter-house entrance at St Frideswide's Oxford, or the west front at Iffley, during c1150–70 (Halsey 1988, 160-7). This parallel is reinforced by the decorated voussoir (3): the indented semicircles occur both at Iffley and on a beakhead from St Frideswide's (Halsey 1988, 163, 165).

So few pieces are not an adequate basis for assessing the architectural affinities of the site. It can only be said that they probably derive from work carried out after the Anarchy rather than before it, and that the limited evidence suggests a local workshop rather than masons from Winchester.[1] It is noteworthy that in the nearby parish church the Romanesque nave windows have small monolithic heads, not dissimilar from (1), though undecorated (Fig. 5.6), and that two beakheads are re-used in the later medieval walls.

## THE SOURCE OF THE STONEWORK
*by Philip Powell*

Of ten samples of stone, eight dressed and worked pieces and two undressed slabs, six are of a cream-coloured limestone composed of ooliths

(0.1 mm–1 mm in size) and some shell fragments set in a strong calcite cement. The original current bedding is picked out by bands of shell and larger ooliths. These comprise: WS3 and WS19 from context 3 (fill of Solar Tower), WS 461 from context 88 (east wall of East Range), WS 450 from context 630 (stair at west end of North Nange) and WS 470 and WS 471 from context 812 (infill of East Range). This is typical Taynton Stone, and the pale colour suggests a source at or near Burford.

Two other samples, WS 313 and WS 317 from context 36/A/1 (fill of Solar Tower), are lithologically similar, but are light orangey brown. Also, WS 317 contains a few blebs of pale green clay. This clay is a feature of Taynton Stone, and the browner colour of these stones suggests the possibility of Taynton itself as their source.

The last two samples were undressed slabs of a dense oolitic limestone, characteristic of some of the beds of the local Great Oolite limestones, and were clearly local to the site, possibly even from Witney itself.

## MORTAR ANALYSIS
*by G Morgan*

Samples of mortar were collected from a variety of contexts, mostly from robber trenches, rubble dump deposits and from floors. Unfortunately, no systematic sampling of standing walls was carried out, and it was not therefore possible to undertake a thorough analysis of the mortars used. Despite this 16 samples were submitted to Leicester University for analysis. These came directly from walls, from demolition rubble layers of early date and from robber trenches where the fill was thought likely to derive from the robbed walls themselves,

The work was undertaken firstly to identify the range and types of mortar used in the 12th and 13th centuries, and in the hope of distinguishing differences in the mortar used in different parts of the site, and in different periods of construction.

### Mortar analysis

The samples supplied were all lime-based mortars, plaster or renders. In all cases the aggregate was calcareous, being composed of shelly to oolitic limestone with various other fossil inclusions, making standard chemical mortar analysis very difficult. Analysis and comparison was, therefore, made using modified chemical and physical techniques together with microscopic examination.

### Descriptions

1 Context 95, robbing of wall 96, room 446—pale buff coarse calcareous mortar or render to 30 mm thick.

2 Context 246, robbing of room 446—pale buff calcareous mortar or render, 10 mm

thick, finer than the sample 1 from context 95.

3    Context 92 (infill of east terrace)—pale buff coarse calcareous mortar or render to 25 mm thick.

4    Context 429/1 (East Range window blocking)—pale buff coarse calcareous mortar or render 35 mm thick with some infilling to 45 mm. Some large pieces of oolitic limestone.

5    Context 75/1 (robbing of wall 66, east garderobe block)—pale buff coarse calcareous plaster, 15 mm thick with 1 mm of intonaco or white lime.

6    Context 79/B/1 (robbing of wall 74, east garderobe block)—pale buff coarse calcareous plaster, 20 mm thick.

7    Context 82/1 (robbing of room 449)—pale buff finer calcareous mortar or render to 20 mm thick and a shelly limestone lump.

8    Context 129/D (fill of Solar Tower)—pale buff coarse calcareous mortar or render to 30 mm thick

9–10    Context 36/A/1 (infill of Solar Tower)—two sample types:
– pale buff coarse calcareous plaster or render to 25 mm thick
– pale buff finer calcareous plaster or render 9 mm thick.

11–12    Context 134/1 (blocking of Solar Tower door)—two sample types:
– pale buff finer calcareous plaster 12 mm thick with 0.5 mm of cream limewash or intonaco
– pale buff coarse calcareous mortar or render to 25 mm thick.

13    Context 135/1 (2nd phase blocking of Solar Tower door) — fragments of coarse mortar with mud, 10 mm thick, possibly daub.

14    Context 562/2 (robbing of curtain wall 530)—pale buff coarse calcareous plaster or render 14 mm thick with 0.1 mm of limewash.

15    Context 578/1 (robbing of North Range, south wall) — pale buff finer calcareous mortar or render to 20 mm thick with 0.5 mm of limewash. Another fragment shows a rounded or moulded edge and could be from a doorway or window.

16    Context 645 (construction spillage from North Range) — this is mainly lime with some traces of aggregate and mortar. The very cracked nature of the lime suggests poor slaking, probably on site just prior to use.

*Table 3.9 Mortar: Analytical results of dissolution of samples in acid.*

| Context | Acid | Sol | Comments |
|---|---|---|---|
| 95 | HCl | 85% | Flint, quartz sand, iron stone, fossils, brown silt |
|  | Hac | 22% | Limestone fragments, gravel and sand |
| 75 | Hac | 67% | Limestone sand and gravel, quartz sand |
| 79/B/1 | HCl | 84% | Flint, ironstone, quartz sand, brown sand |
|  | Hac | 35% | Limestone sand and gravel, quartz sand |
| 645 | Hac | 33% | Limestone sand and gravel, quartz sand |

## Analytical method

In an attempt to distinguish the various types present, samples of coarse mortar and fine plaster were subject to physical and chemical disaggregation using dilute acetic acid and total acid digestion using the standard dilute hydrochloric acid method. After gentle crushing selected samples were graded through a stack of sieves and then treated with a limited amount of dilute acetic acid before being re-sieved. Separate samples were dissolved in hydrochloric acid simply to see what non-calcareous material was present (Table 3.9).

The particle size distribution graphs show that there is little difference in the gradings of the aggregate and that, generally, mechanical crushing and grading approximates to the original composition. The building waste sample, 645, is however much coarser, reflecting its heterogeneous nature.

## Discussion

The analyses show that these samples represent materials for different uses rather than different materials; constructional bonding mortar, render, fine plaster and building waste. The materials used are very similar, varying only in amount of lime and coarseness of aggregate. Finishing detail may also be of note, with most samples simply having a flat trowelled/floated surface with others being white-washed or having a fine lime intonaco layer, such fine finishing suggesting better quality work or more important rooms.

## Endnotes

1. Dr John Crook (pers. comm.) observes that although there are some superficially similar details (though confused by 19th-century re-cutting) on the Treasury in Winchester Cathedral, he does not know of 'anything in Winchester which would support the notion that the Witney fragments are Winchester-inspired'.