

10 The Finds

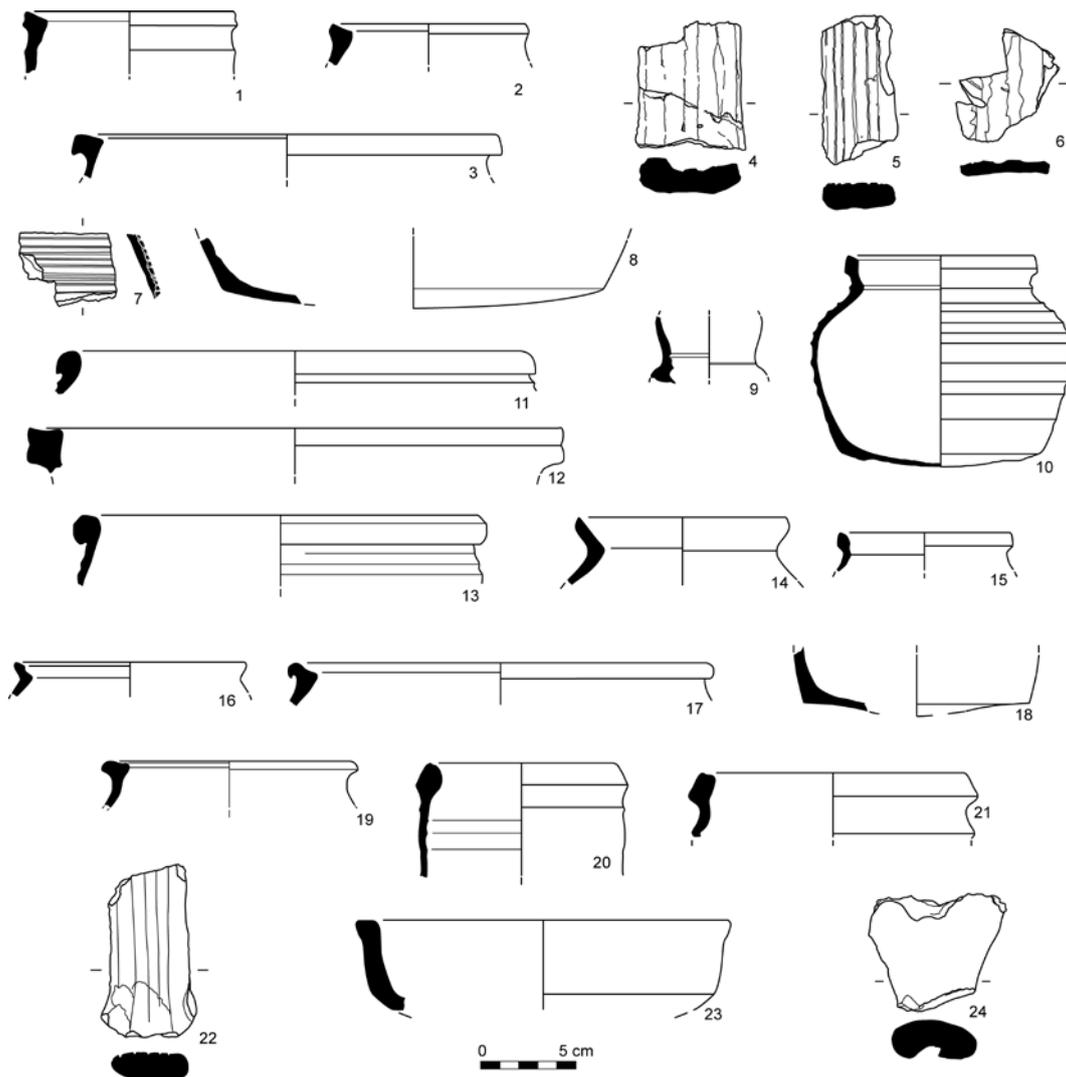
10.1 The pottery by Derek Hall & George Haggarty

This report considers the medieval and later pottery from the sites excavated at the east end of the Cathedral and in the Choir Vestry in 1981, as well as medieval material recovered from the 1977 geotechnical trial pit excavations.

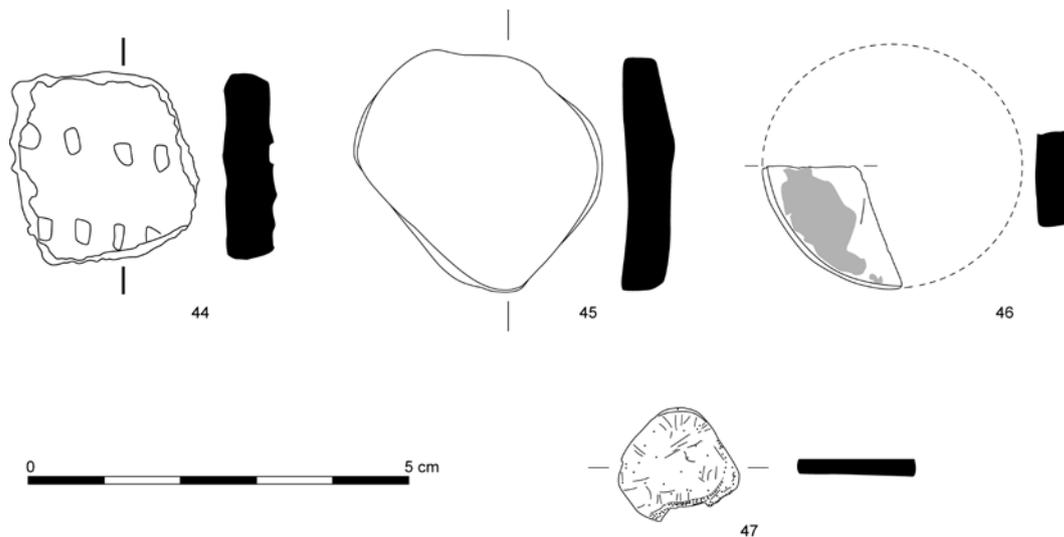
The medieval assemblage consists, in the main, of material of Scottish manufacture. In total, 866 sherds from both sites are represented. All the sherds were examined by microscope at a $\times 20$ magnification in an attempt to define separate fabric types. In the fabric descriptions an attempt has been made to convey the hardness of the fabric and the frequency and size of the inclusions present. No petrological analysis was carried out.

10.1.1 South Choir Aisle, 1981

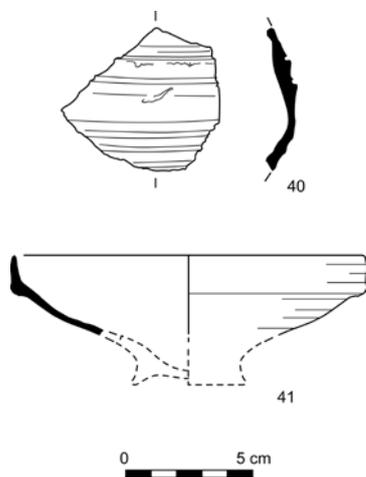
Scottish White Gritty Ware (SWGW) Ninety-four per cent of the medieval pottery from the South Choir Aisle excavations consists of variations of this ceramic type (illus 33). Recent work would seem to indicate that the three main production centres for this pottery were the Lothians, Borders and Fife, and these may show both regional characteristics and trade (Haggarty 1984; Hall 1997). The results of the recent pilot ICP-MS chemical sourcing project have for the first time suggested that the SWGW industry is more complicated and widespread than previously assumed (Chenery *et al.* 2004). This ceramic type has now been recovered from a number of east coast Scottish burghs such as Leith in association with 12th-century imported pottery



Illus 33 Pottery: East Coast White Gritty Ware; South Choir Aisle, 1981



Illus 34 Pottery and cannel coal counters



Illus 35 Pottery: stoneware

including Developed Stamford Ware (John Lawson, pers comm).

The White Gritty Wares from the excavations exhibit variations in colour, probably indicating different firing conditions within the kiln or usage. The most common variation in this pottery is reduced grey in colour, containing abundant quartz grits and occasional red sandstone fragments. Some sherds possess an external pink slip and are smoke-blackened, while another common group is pink in colour with a white core (P2a).

Jugs are the most common vessel type in this assemblage and outnumber cooking pots by at least three to one. There are two sherds from a dripping pan from C246 in P3, a local copy of a Low Countries Redware vessel type (Verhaege 1983). A bodysherd from C84 (P2b) has been reused as a counter (see *illus 34*, 45).

East Coast Redwares More than 20 years of archaeological excavations along the Scottish east coast, in

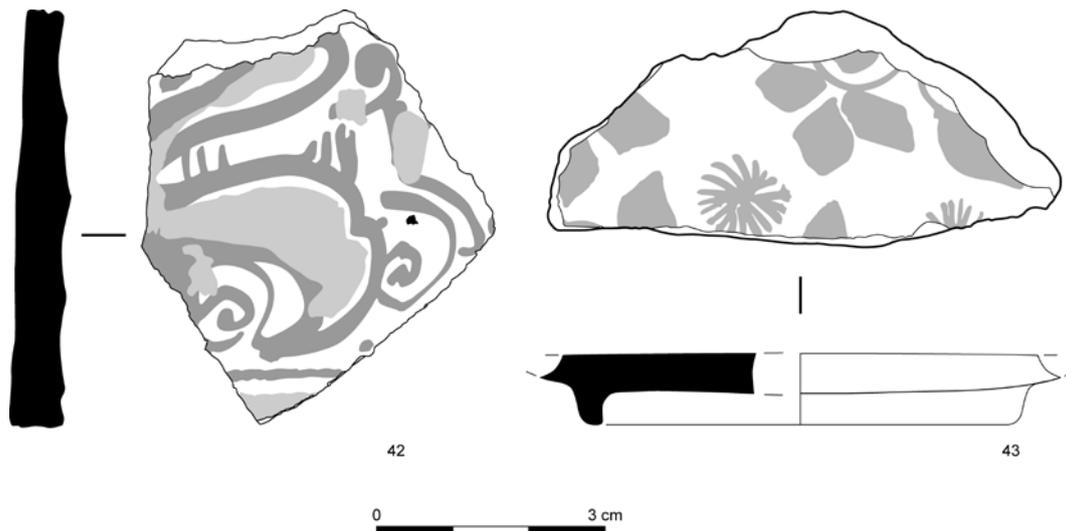
particular Perth and burghs north of the River Tay, have identified this widespread industry as forming a tradition of native pottery production, apparently dating from the 13th to the 15th centuries (Hall 1996, 126). Archaeological evidence also suggests that in the Lothian area, where white firing pottery (SWGW) was the norm during this period (Brooks 1981), material was liable to be imported in only very limited quantities from the Redware production sites to the north of the Tay (Hall 1998, 170). There are eight Redware sherds present in the assemblage from the 1981 South Choir Aisle excavations in St Giles', from Periods 3 and 4.

English Imported Wares

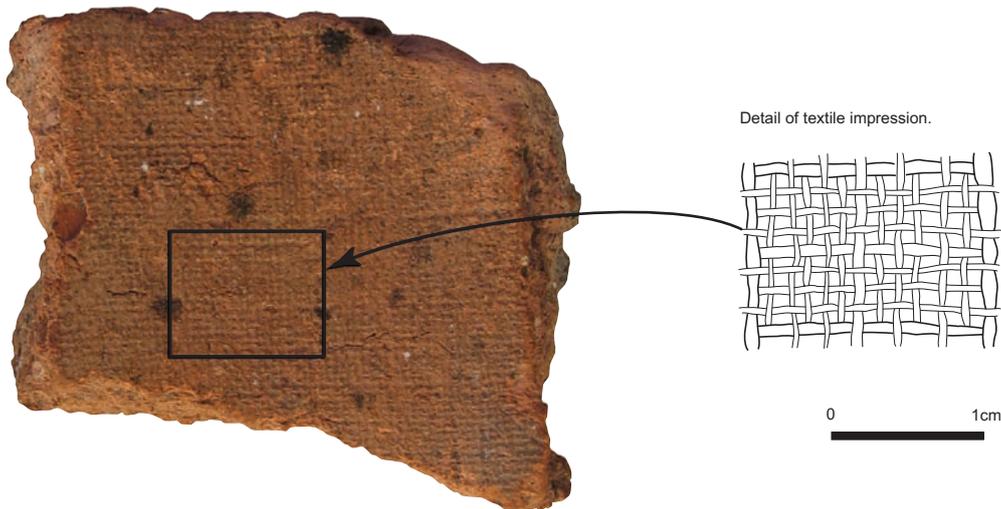
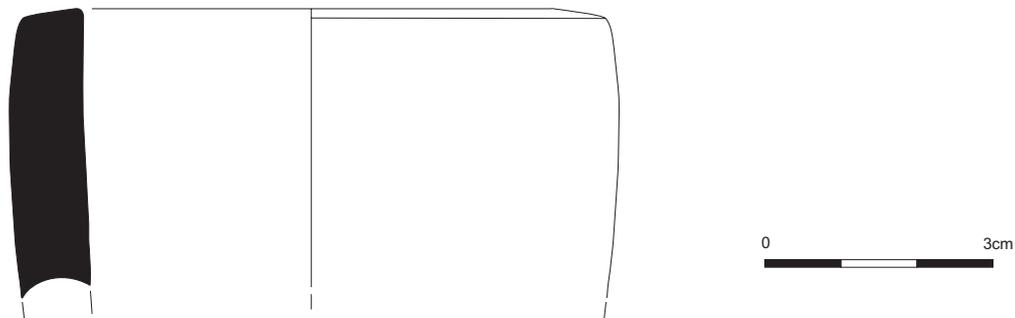
Yorkshire-type wares Vessels in these often distinctively glazed fabrics are generally the most common imports in the Scottish east coast burghs in the 13th and 14th centuries (McCarthy & Brooks 1988, 227–52). There are six sherds from a minimum of three jugs from C84 (P2b).

Continental Imported Wares

Beauvais or Siegburg stonewares A small unglazed bodysherd (C9, P4) and a rim sherd from a drinking bowl in a beige/mushroom colour fabric (C25, P4; *illus 35*, 41) could either be from Siegburg in the Rhineland or Beauvais in France. These vessels are generally believed to have been produced in the 15th and early 16th centuries at both Siegburg in the Rhineland (Beckmann 1974, 161–4; Gaimster 1997, 168–9) and in France in the area of Beauvais (Hurst *et al.* 1986, 105). As the fabrics are visually similar, without analysis it is impossible to be sure of the source for the numerous Scottish finds. However, in many instances, unlike this example from St Giles', the Scottish examples have been recovered in asso-



Illus 36 Pottery: Anglo-Dutch wares

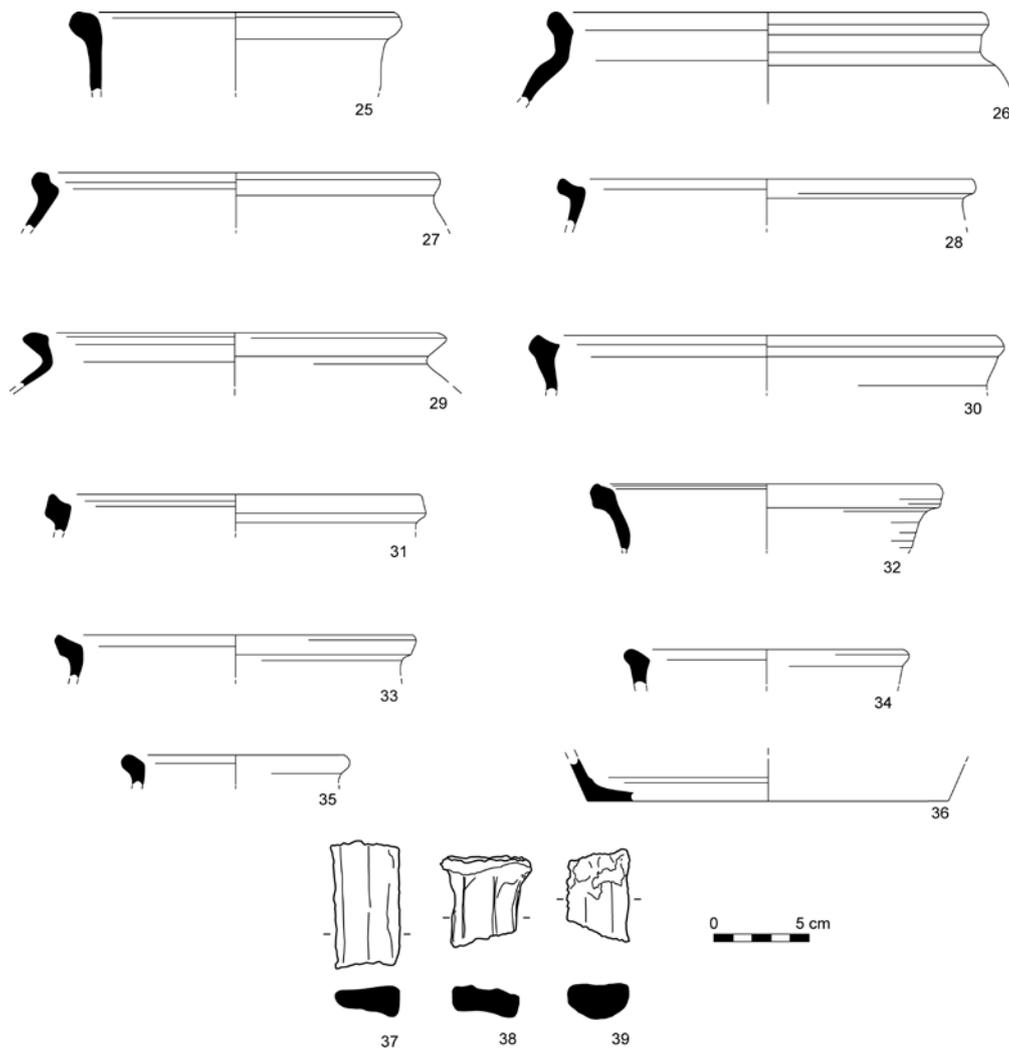


Illus 37 Pottery: 14th/15th-century crucible sherd with cloth impression on interior surface

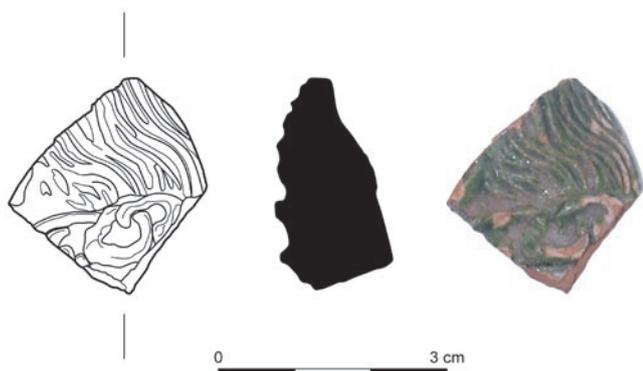
ciation with Beauvais earthenware, which suggests that most of the examples recovered in Scotland may be French ([Haggarty, forthcoming b](#)).

Raeren stoneware There are six sherds of Raeren stoneware, probably all from the ubiquitous 16th-

century drinking mugs, from contexts 84 (P2b, where it is probably intrusive) 22, 53 and 151 (all P3). There is also a further bodysherd (C53, P3; [illus 34](#), 46) which has been reused as a counter; this sherd also shows signs of wear and survives only as a quarter of the original circumference.



Illus 38 Pottery: East Coast White Gritty Ware; Choir Vestry, 1981



Illus 39 Ceramic building material: stove tile 15th–17th century; C25

Unprovenanced stoneware There is one heavily rilled bodysherd from C25 (P4; *illus 35, 40*). This is from the shoulder and belly of a small globular stoneware jug covered on the exterior with a thick coating of glossy light grey glaze which is in turn covered with spots of dark brown. The sherd is also

decorated with a pair of prominent incised lines, which have formed horizontal cordons. These can be paralleled on some Raeren vessels (*Hurst et al. 1986, 197*). The fabric, however, for this vessel is sandy in texture, reddish in colour with small black inclusions, and its provenance is unknown.

Tin-glazed earthenwares Three sherds of tin-glazed earthenware were recovered from all the excavations. Two bodysherds from albarellos (drug jars) were found in C11 (P4). The bodysherd illustrated is from an albarello in a buff fabric, decorated in a brown and blue abstract design (*illus 36, 42*). The third sherd (from C25, P4; *illus 36, 43*) is a flat basesherd with a small foot-rim from either a small plate or shallow dish. All three sherds probably date to the 17th or 18th centuries.

French wares Three small bodysherds were recovered which are likely to be French in origin, possibly Saintonge, though this is far from certain as they are difficult to identify accurately given their size. The sherd from C87 (P3) is unglazed, thin and well-potted in a buff/pink fabric, and may be early

Saintonge. Two sherds from C6 (P3) and C101 (P2b) were also unglazed but thicker, and may possibly be Saintonge but dating to the 15th century.

Low Countries highly decorated ware There is one sherd, apparently from a green-glazed jug (Verhaege 1983), in this fabric from C84 (P2).

Other ceramics Two ceramic pieces from contexts C84 (P2b) and C81 (P3b) were identified, apparently in the same red earthenware fabric as the floor tiles, but with a reduced grey core. Much thinner than the floor tiles, these would seem more likely to have come from some sort of vessel. The piece from C84 is glazed yellow-green and is slightly curved.

A single piece of fired clay from a crucible or mould with internal textile impressions was found, dating to the late 14th to mid-15th century (C22, P3; *illus 37*). It is difficult to assign a function to this object; bell moulds normally have traces of textile impressions on the outside surface not the inside (Cox 1997, 92–4).

10.1.2 Choir Vestry excavation (1981) and geotechnical trial pits (1977)

The 1981 Choir Vestry excavation produced an interesting group of jars in SWGW apparently used for cooking and as jugs (*illus 38*). These include a straight-sided vessel from context ECV C118 (Cat 34), probably of 12th-century date, and a mixture of rim forms from context ECV C114 that resemble vessels from excavations in Edinburgh, Leith and Coulston dating to the late 12th to early 14th centuries. The jug forms include three green-glazed strap handles from context ECV C114 (*illus 38*, 37–9) which have a flat edge, indicating that they had been cut off the wheel rather than pulled.

Twenty-seven sherds of pottery were found in a trial pit excavated in 1977. Nineteen of these join to form an almost complete jar in SWGW (*illus 33*, 10). The remaining eight sherds are all bodysherds from jugs.

10.1.3 Conclusions

Using native Scottish fabrics to date archaeological deposits is fraught with difficulties given the absence of reliable chronologies (Hall 1996). At St Giles' it may be reasonable to suggest that the earliest phases (P2a) are later 12th century in date. Sherds of Yorkshire-type wares do not occur until Period 2b, whilst the appearance of Rhenish stonewares in P2b would date this activity to the mid-14th century.

Illustration catalogue

White Gritty Ware (*illus 33*)

- 1 Rimsherd from jug glazed green brown. C196, P2a
- 2 Rimsherd from jug glazed green. C196, P2a

- 3 Rimsherd from jug glazed yellow. C30, P3
- 4 Strap handle with applied vertical strip glazed brown on green background. C84, P2b
- 5 Strap handle fragment glazed green with vertical incised lines. C22, P3
- 6 Bodysherds from jug glazed yellow with applied vertical brown-glazed strips. C84, P2b
- 7 Bodysherds decorated with horizontal incised lines glazed green-brown. C130, P3b
- 8 Basesherds from unglazed jug. C175, P2a
- 9 Pedestal basesherd from small vessel glazed green. C77, P2a
- 10 Virtually complete globular storage jar or drinking vessel. 1977 geotechnical trial pit
- 11 Rimsherd from unglazed storage vessel. C175, P2a
- 12 Rimsherd from unglazed storage vessel. C175, P2a
- 13 Rimsherd from storage vessel. C130, P3b
- 14 Rimsherd from jar internally glazed green-brown. C20, P4
- 15 Rimsherd from heavily reduced cooking pot. C223, P2a
- 16 Rimsherd from cooking pot. C197, P2
- 17 Rimsherd from cooking pot with slight traces of external smoke blackening. C134, P3
- 18 Basesherd from heavily reduced cooking pot. C175, P2a
- 19 Rimsherd from?straight-sided cooking pot. C185, P2b East Coast Redware (*illus 33*)
- 20 Rimsherd from jug glazed green-brown. C84, P2b
- 21 Rimsherd from jug with splashes of green glaze. C84, P2b
- 22 Strap handle decorated with vertical incised lines glazed green. C130, P3b
- 23 Rim and base profile from small open vessel with spout glazed green internally with traces of external purple wash. C9, P3
- 24 Fragment of unglazed skillet handle with traces of external smoke blackening. C22, P4 Scottish White Gritty Ware, Choir Vestry excavation, 1981 (*illus 38*)
- 25 Rimsherd from straight-sided cooking jar. C118
- 26 Rimsherd from cooking jar. C114
- 27 Rimsherd from cooking jar. C114
- 28 Rimsherd from cooking jar. C114
- 29 Rimsherd from cooking jar. C114
- 30 Rimsherd from cooking jar. C114
- 31 Rimsherd from cooking jar. C114
- 32 Rimsherd from cooking jar. C114
- 33 Rimsherd from cooking jar. C114
- 34 Rimsherd from cooking jar. C114
- 35 Rimsherd from cooking jar. C114
- 36 Basesherd from cooking pot. C114/118
- 37 Green-glazed strap handle. C114
- 38 Green-glazed strap handle. C114
- 39 Green-glazed strap handle. C114 Imported stonewares (*illus 35*)
- 40 Heavily rilled sherd from the shoulder and belly of a small globular stoneware jug. C25, P4
- 41 Rimsherd from a well-potted, typical smooth stoneware drinking bowl of Beauvais or Siegburg stoneware. C25, P4

Tin-glazed earthenwares (*illus 36*)

- 42 Albarello bodysherd, decorated in a brown and blue abstract design. C11, P4
- 43 Basesherd from a small plate or shallow dish. Probably Dutch, late 17th or early 18th century. C25, P4 Pottery and Shale counters (*illus 34*)
- 44 Scottish White Gritty Ware counter. ECV C114
- 45 Scottish White Gritty Ware counter. C84, P2b

- 46 Raeren stoneware, quarter fragment. C53, P3
47 Cannel-coal counter. C84, P2b

10.2 The ceramic building material

by Derek Hall

Forty-nine fragments of ceramic building material were recovered from the 1981 excavation in the South Choir Aisle, 44 of which are of medieval date.

10.2.1 Floor tile

Forty fragments of floor tile were recovered, all of which were manufactured in a red-brown earthenware fabric. The majority of the tile fragments were recovered from Period 3 contexts, although three were found in Period 2a (C182, C196 and C229). Other fragments also occurred in other Period 2 (C55, C84, C101, C175). Very few of these pieces have any surviving traces of glaze but the presence of spots of yellow and green colour on some fragments suggest that that was the colour of these tiles. There are also traces of a white slip below the glaze on some of the tiles. The closest parallel for these tiles would seem to be those recovered from the excavations of the Trinitarian Friary in Dunbar (Eames 1983, 485). At Dunbar, the tiles were dated to the 15th or early 16th centuries and given a Low Countries provenance. There is nothing present in the St Giles' assemblage to suggest the presence of highly decorated floor tiles such as those that have been recovered from Newbattle and Melrose Abbeys or the Cistercian nunnery at North Berwick (Richardson 1929, 284–97). Recent chemical sourcing of Scottish redware tiles from several abbeys and castles is suggesting that many of these were locally produced rather than imported (Chenery *et al.* 2005). With this in mind, it is intriguing that the presence of a waster at St Giles' from context 022/040 (P3) may suggest that tiles were being made in the vicinity.

10.2.2 Stove tile

Of most interest in this assemblage is the glazed decorative fragment from a ceramic stove tile from C25 (P4; *illus* 39). The fragment has the remains of the depiction of the hair and clothing of a human figure. St Giles' is only the fourth site in Scotland to produce a piece from one of these ornately decorated medieval central heating systems which are dated to the 15th to 17th centuries (Gaimster 1990, 4). The other pieces were found in excavations at St Nicholas Leper Hospital, St Andrews (Haggarty 1995), Calton Road, Edinburgh by AOC Archaeology Ltd (Haggarty, *forthcoming a*) and excavations in advance of the construction of the new Scottish Parliament building at Holyrood, Edinburgh (Hall, *forthcoming*). The fabric of the piece from St Giles' is very dark red, and appears to be North German in

style. It has been dated to the late 15th century and may belong to one of the well-known North German pre-Reformation devotional niche-tiles types (D Gaimster, *pers comm*). The hair may belong to a bearded saint (Gaimster 2001, 51–66, fig 14). This is an important find, being the first in Scotland.

10.3 Coins and jetons by Nicholas Holmes

The 15 numismatic finds comprise ten Scottish base metal coins from the reigns of the first four Jameses (1424–1513), one 17th-century French copper piece and four brass jetons made in Nuremberg between about 1480 and 1560.

The earliest coin, a very worn billon penny of James I or II (1424–1460) (Cat No 1) was found in the backfill of the robber trench (C9, P3) of the original east wall of the late medieval church and it is unfortunate that it has not been possible to date this item more accurately.

The billon and copper coins from the reigns of James II–IV (1460–1513) all belong to Period 3, during which the burials were inserted beneath the floor of the South Choir Aisle, and indeed five of them were recovered from the fill of graves. Only one jeton came from an undisturbed context (Cat No 13, P3).

Only the French double tournois of Louis XIII (Cat No 11) dates demonstrably later than the final phase of burials. Its recovery from the fill of a pit (C13, P4) confirms that the latter must have been associated with some fairly late (P4, mid-17th century or later) construction or repair to the church. The presence of this coin also demonstrates that the two other coins (Cat Nos 3 & 9) and possibly also the jeton (Cat No 15), which were also found in the same context, must have been redeposited in the backfill of the pit.

Catalogue

Scotland

- 1 James I or II billon penny, otherwise unidentified (1424–1460), very worn and mostly illegible. C9, P3b, SF231: from fill of robber trench of original east wall of church
- 2 James II–III copper 'Crux Pellit' issue, type IIIb (c 1451–1482?); diameter 21mm, weight 1.82g; die axis 1.0; uneven striking; slight surface accretion; moderate wear. Obv.: + [IACOB] VS * DEI * GRA * REX *; closed Old English Es; star stops; orb tilted upwards and to right, with rosette on centre. Rev.: + CRVX: PELLIT: OIE: CRIM; closed Old English Cs and Es; double annulet stops; pellets on cusps; nothing in spandels. C15, P4, SF14; redeposited in construction trench for modern heating duct
- 3 James III billon penny, class Cv (a or b) (c 1475–1482); diameter 13.0 × 12.5mm; weight 0.40g; die axis 6.0; slight bent; worn. C13, P4, SF16; from fill of pit
- 4 James III copper farthing, first issue (c 1465/6): diameter 12.5mm; weight 0.25g; die axis uncertain; much edge damage; very worn and corroded. C65, P3b, BP5, SF121: from fill of grave containing SK18
- 5 James III copper farthing, second issue (c 1466); diameter 14.0 × 14.5mm; weight 0.67g; die axis 9.0;

uneven striking; obverse slightly off-centre; fairly worn. Obv.: [+I] ACOB [] DEI []; closed Old English C and E; saltire stops. Rev.: +IACOBVS DEI GR []; closed Old English C and E; saltire stops. C22, P3, SF94: from soil deposit cut by latest burials

6 James III copper farthing, 'ecclesiastical' type 1 (c 1465–82); diameter 15 × 14mm; weight 0.61g; die axis uncertain; irregular angular flan; uneven striking; moderate wear. C78, P3, BP4, SF152: from fill of grave containing SK22

7 James III copper farthing, 'ecclesiastical' type 1 (c 1465–82); diameter 12 × 11.5mm; weight 0.28g; die axis uncertain; irregular angular flan; uneven striking; moderate wear. C78, P3, BP4, SF153: from fill of grave containing SK22

8 James IV billon penny, second issue, type IVa (c 1500–1510); diameter 15 × 14.5mm; weight 0.46g; die axis 2.0; some edge damage and surface corrosion; fairly worn. Obv.: [] BVS DE [] REX SCO []; closed Old English C and E; pellet stops. Rev.: +VIL / [] DE / ED [] / BVR; closed Old English E; lis in first and third angles of cross. C41, P3, BP4, SF68: from fill of grave containing SK8

9 James IV billon penny, second issue, type III or IV (c 1500–1510); diameter 16 × 14mm; weight 0.47g; die axis 6.0; broken and repaired; much flattening and surface corrosion on obverse and some on reverse; moderate wear. Obv.: [] COTO []; closed Old English C. Rev.: +VILL / [] / EDIn / BVRG; closed Old English E; lis in first and third angles of cross. C13, P4, SF35: from fill of pit

10 James III, IV or V billon plack (fragmented) (1467–1526); weight 0.48g; c one third of coin; bent; much flattening and surface corrosion. C67, P3b, BP5, SF123: from fill of grave containing SK19

France

11 Louis XIII copper double tournois (1639?), probably Duplessey (1989) type 1372; Diameter 19mm; weight 2g; die axis 6.0; obverse very worn; reverse fairly worn with some flattening. C13, P4, SF7; from fill of pit.

Nuremberg Jetons

12 Anonymous 'Dauphine'-type (c 1480–1500?), cf Mitchener (1988) 1043–1044a; diameter 32mm; weight 3.35g; die axis 9.0; some edge corrosion; gouge-mark through middle; mostly worn. Obv.: crown VIVAnV: EnV [] VnmOIDEVnE: unbarred A; closed Old English Es; quartered field, with dolphins in first and third angles, three lis in second and fourth. Rev.: crown AVBOnEmn EnVOLABOn []; unbarred A; closed Old English Es; field of France. C25, P4, SF42: from redeposited material in upper layers

13 Anonymous 'ship penny' type (c 1490–1550?); diameter 27.5mm; weight 2.24g; die axis 11.5; chipped at 9.5–11.5 on obverse; pierced and peck marked; moderate wear. Obv.: crown AVREON: VIANVRVEO; V [] R; Ns reversed; first A barred, second unbarred; ship sailing to left. Rev.: crown AV[] VIRVNV: ERIGVR: VOEVN'.; Ns reversed; four lis within a lozenge; ornament by each side of lozenge. C22, P3, SF83: from soil deposit cut by latest burials

14 Rose/orb type, almost certainly by Iorg Schultes (master 1515–1559) although unsigned; diameter 24.5mm; weight 1.28g; die axis 8.0; some surface corrosion and accretion; moderate wear. Obv.: crown IESVS trefoil KRISTVS; three crowns and three lis arranged alternatively around a six-petalled rosette. Rev.: crown IESV [] RISTVS G trefoil; imperial orb surmounted by cross pattee, within tressure of three simple arches; trefoils in

spandrels. The crown initial mark, three curved tressure and trefoil ornaments all indicate Iorg Schultes as the manufacturer (Mitchener 1989, 394–5). The jeton probably dates from before 1550. Context AA, P4; SF275 from 19th-century rubble cleared from contractor's excavations

15 Rose/orb type of Iorg Schultes (master 1515–1559) ISOV group, Mitchener (1988) 1315–1316b (probably 1550s); diameter 25mm; weight 1.16g; die axis 11.0; slight edge buckling; some flattening; moderate wear. Obv.: [] ISOVB TG []; three crowns and three lis arranged alternatively around a six-petalled rosette. Rev.: crown IOVBAGnDI [] BAGn small crown; unbarred As; D reversed; imperial orb surmounted by cross pattee, within simple three-arc tressure: trefoil between two pellets in each spandrel. C13, P4, SF24: from fill of pit

10.4 Other finds by Julie Franklin and Mark Collard

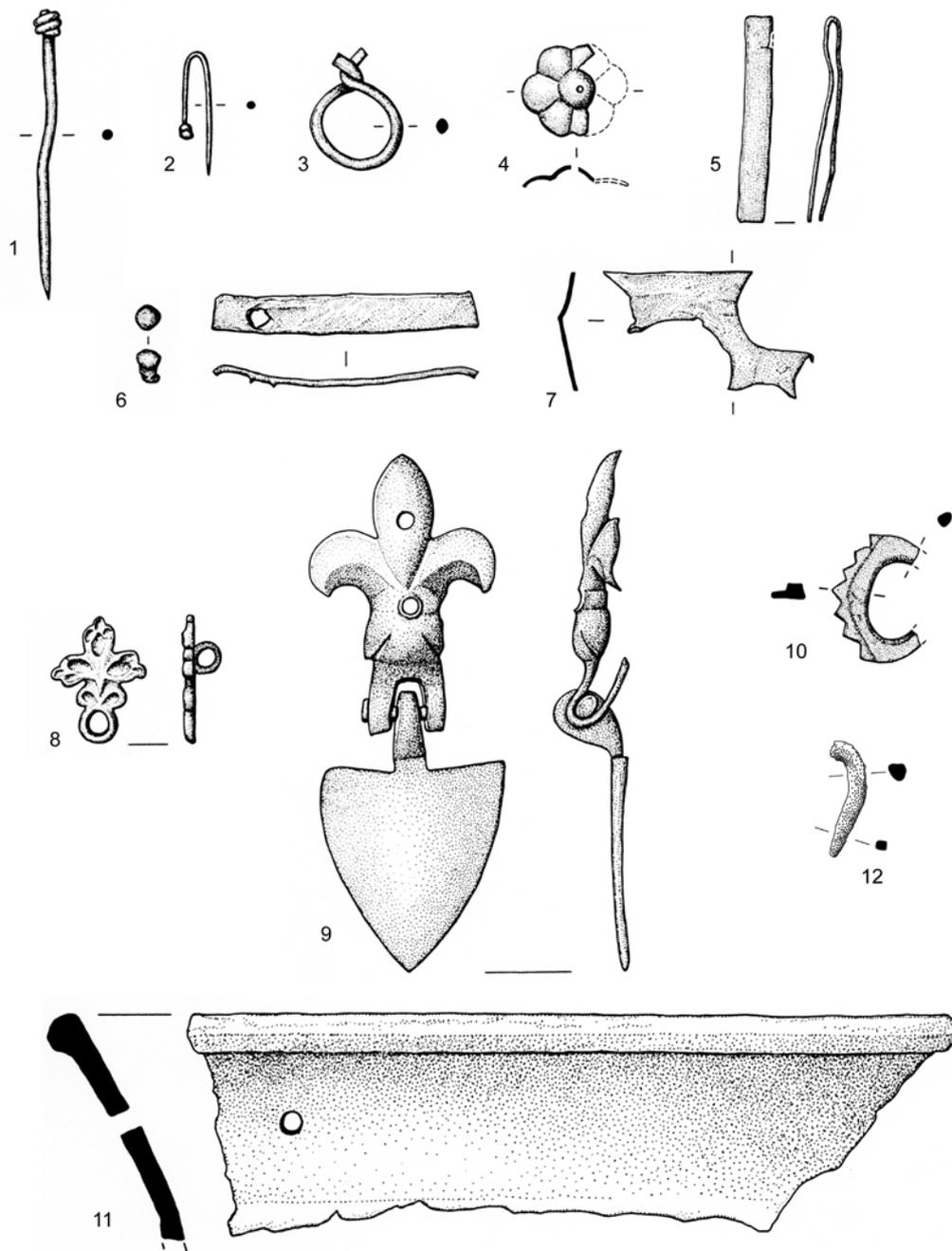
Most of the finds from the excavations in the South Choir Aisle were recovered either in direct association with the excavated burials or from the soil matrix around the burials. Consequently, the assemblage of finds is dominated by coffin nails and shroud fastenings such as pins and lace tags. It was clear from the excavation that almost all the accumulated deposits investigated had been introduced from elsewhere in the medieval burgh, with a range of midden material included within them. It is most likely therefore that most of the objects not directly related to the practice of burial had derived originally from outwith the site. The nature of the objects recovered reflects that environment of redeposition, with many of the pieces, particularly the metal finds, being fragmentary or unidentifiable. Their value lies, therefore, with the information they provide about the context of medieval life in the wider burgh beyond the kirk and its cemetery.

A small group of material, including the window glass, architectural fragments and some of the ceramic building materials, was deposited during periods of construction and demolition within the church. Although small in absolute quantity, they can provide glimpses of elements of the structural history and medieval decoration of the medieval and post-medieval kirk of St Giles'.

Catalogue entries are provided only for the illustrated pieces and include the context, period, site small find number and illustration number and, where appropriate, the burial with which it was associated and where in relation to the body it was found. A full catalogue of all finds is deposited with the archive.

10.4.1 Copper alloy

Lace tags, used to neaten the end of laces made of leather or fibre, are a common find on sites of late medieval and early post-medieval age. The 53 examples found at St Giles' have been divided into three types based on the typology devised for Linlithgow Priory (Lindsay 1989, fiche 12:F14). Most



Illus 40 Metalwork: Copper alloy and silver

were of very simple construction, a small piece of sheet metal rolled into a cylinder, with both ends left open (Type 1, 41 tags), ranging in size from 13mm to 25mm, with most in the range 15–22mm. Eight tags narrowed towards a finished free end (Type 2, 18–27mm long) and four had evidence they were fixed with rivets (Type 3, 21–27mm). None were decorated. Two contained remains of the original laces, but no further analysis was undertaken on these. There is no chronological pattern to the use of the different types and all seem to have been in use together. At St Giles', although a single example was found in a Period 2a (BP2) context and seven from Period 2b (BP3), the majority (85% of the total) are

from Period 3 (BP4 and later). At Linlithgow Friary the tags came mostly from 15th- and 16th-century domestic areas, but there was a concentration associated with graveyard soils and grave fills (Stones 1989a). Excavations at Whithorn produced 144 tags, mostly associated with the later medieval burials up to the early 16th century (Nicholson 1997, 375). At St Giles', 20 of the examples are directly associated with burials.

The 77 **wire pins** fall into three head types, based on Caple's classification (Caple 1983, 273). The most numerous are made of small coils of wire soldered onto the top of the shaft, either a double coil, with the wire wound twice round the shaft (Type A, 22

pins; **illus 40**, 1–2) or a single coiled ring (Type B, 19 pins). There are also a few pin heads, made of coiled wire, but fixed to the shaft by stamping, giving them a characteristic spherical shape (Type C, 9 pins).

Shaft lengths varied according to the different head types. Type B pins were the longest and most uniform in length, between 27 and 38mm, averaging 31mm. Types A and C varied by 20mm or more but Type A pins averaged 30mm long, and Type C 24mm. The width of the wire was approximately the same (0.9mm) for all the pins. Type C were generally more finely made, with a higher proportion showing evidence of tinning.

The majority (86% of the total) of the pins of all types, as with the lace tags, are from Period 3 (BP4) or later. None came from Period 2a (BP1/2) burials or deposits.

Four **wire loops** were recovered, all from contexts dating to the 15th century or later, and all formed by simply twisting together the ends of a length of wire, varying in diameter between 0.8mm and 1.6mm. The illustrated example was typical, with a loop diameter of 12mm, made of wire 1.6mm thick. C95, P3b, SF97; **illus 40**, 3.

Similar items are a common find in medieval and early post-medieval contexts. At Coventry Free Grammar School, they were associated with the fastening of clothing (**Woodfield 1981**, 98). The excavations of the Carmelite Friary at Linlithgow produced 27 examples, mostly from graveyard soils and, on the evidence of fragments of leather and wood preserved with them, they appear to have been used as eyes to fasten leather shrouds, with thongs or wooden toggles (**Stones 1989a**). At Whithorn, 17 such rings were found, also from 15th- and 16th-century deposits, from graveyard and midden deposits, and were probably used for both clothing and shrouds (**Nicholson 1997**, 384).

A number of small items of personal accessories were recovered. A small leaf-shaped **pendant** with a loop at the top and another projecting at the back was similar in form to examples found in London, including an almost complete necklace with seven surviving leaves and two rumbler bells spaced on loops around the chain. The pendants from datable contexts in London were both from the first half of the 15th century (**Egan & Pritchard 1991**, 321). Two leaf pendants or mounts came from Threave Castle in Galloway, one of silver gilt and one of copper alloy; these were of comparable date, being from the Douglas era of the castle, between 1370 and 1455 (**Good & Tabraham 1981**, 106–8). Length 18mm, width 13mm. C67, SK19 (by right side), P3b, BP5, SF104; **illus 40**, 8.

Only four **buckles** or parts of buckles were found, and only one was substantially complete, part of a single D-framed buckle, cast with a decorative saw-toothed front edge. The bar and pin are missing. Length 11mm, width 17mm. C22, P3, SF238; **illus 40**, 10. An identical buckle was found during excavations at Linlithgow Carmelite Friary, complete with bar and pin (**Stones 1989a**, 158) though this was unfortunately unstratified.

The other three partial buckles included a small oval or D-framed buckle (C084, P2, SF258) and a double oval-framed buckle (C95, P3b, SF96). A **strap end** made of a strip of metal was recovered from the earliest burial phase, broken across one end, with a rivet hole with loose rivet associated. Length 37mm, width 5mm. C175, P2a, SF257; **illus 40**, 6.

A strip of metal bent double across middle may be pair of **tweezers** or a further strap end (though no rivet hole was present), and came from an early burial phase context. Length 29mm, width 3mm. C175, P2a, SF256; **illus 40**, 5.

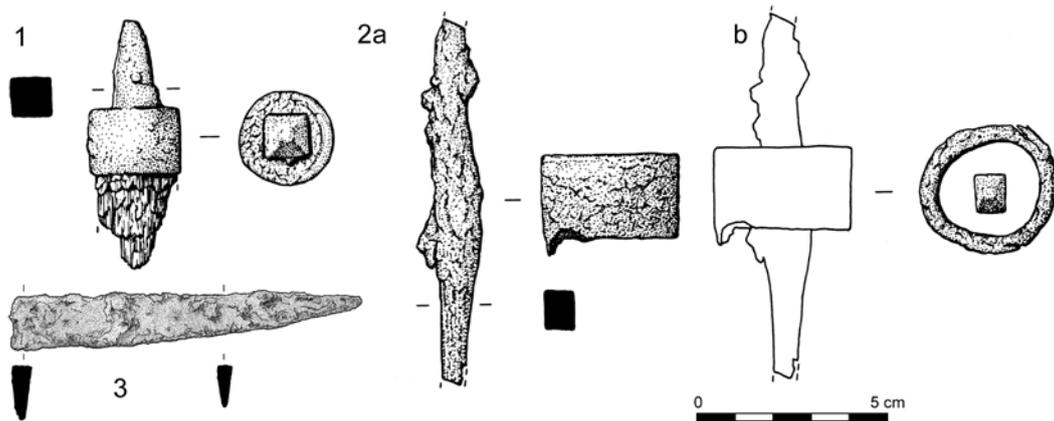
A number of **decorative mounts** were recovered, including a two-piece mount, the size of which suggests it was meant to decorate a relatively large object, possibly a box or door. The fleur-de-lis-shaped upper part has two large rivet holes for fixing. The lower part is shield-shaped and attached by a hinge and was presumably meant to be free-hanging. Length 72mm, width 26mm. C013, P4, SF010; **illus 40**, 9.

In the post-Reformation, Period 4, rubble deposits were three **studs**, with round-domed heads, 10mm in diameter, set on square shafts 15mm long (not illustrated). They match exactly examples recorded on fragments of wooden furniture (or coffins?) found in the excavations in the Choir Vestry (ECV C81, context 103), where they were hammered closely together in tight rows for decoration.

Other **mounts** found are more ambiguous in their original use. Flower-shaped and bar mounts were sometimes used on belts and straps (**Egan & Pritchard 1991**). However, it was suggested that the several similar objects found in the excavations of the Carmelite Friary in Aberdeen had been used to decorate books (**Stones 1989b**, 155). A sexfoil, flower-shaped mount with central rivet hole was of this type. Diameter 13mm. C22, P3/4, SF219; **illus 40**, 4. In addition to the illustrated example, also found were a decorated sheet with part of a stamped design of a cross with club-ended arms within a circle, and a bar mount formed of a small rectangular piece of sheet metal with a central rivet hole (both from C22, P3, SF226 and SF175).

Other miscellaneous objects included: a small fragment of the everted rim of a **skillet**, with a small hole drilled 16mm down from rim, for hanging or attachment of handle (rim diameter 195mm, hole diameter 2.5mm. C9, P3b, SF271; **illus 40**, 11); a **ferrule** in the form of a cone made of sheet metal with a rounded tip with possible vertical millings and a hole in the side for attaching it (length 25mm, width 12mm, diameter 9mm. C173, SK68, around pelvis?, P2b, SF250, not illus); and part of a **needle** shaft, broken at both ends but with some of the eye still visible (length 15mm, width 2.4mm. C025, P4, SF604, not illus).

A total of 36 small pieces of **offcut copper alloy sheet** were found, the majority (two-thirds) from Period 3, particularly the deep levelling deposit (C22). Two offcuts had a number of circular holes cut or punched through. The illustrated example



Illus 41 Metalwork: Iron

(C6, P3b, SF161; [illus 40](#), 7) had a range of hole sizes from 10mm to 20mm, while the other example (C98, P3b, SF244, not [illus](#)) was fragmentary but had evidence for the removal of circles of metal all c 15mm in diameter. These are presumed to be for the removal of blanks for the manufacture of decorative mounts or studs. Similar pieces were found at 80–86 High Street, Perth in 13th/14th-century contexts ([Cox 1997](#), 745).

10.4.2 Iron

The two most interesting items were found in association with two of the Period 2b, BP3 skeletons, and appear to have been deliberately placed in the coffins at the time of interment ([illus 14](#) & [illus 15](#), depicted as ‘batons’). Both objects were of identical form, though different dimensions. That from SK31 consisted of a short, tapering square-sectioned iron shaft, 12mm square by 64mm long, set into a surviving round-sectioned piece of wood, bounded by a circular iron collar 24mm in diameter externally, 18mm internally. The wood protruded from one side of the collar around the shaft; on the other side, the shaft projected with no wood visible. The iron shaft tapered at both ends. C101, SK31, in hand, P2b, BP3, SF203; [illus 14](#) & [illus 41](#), 1.

The object from SK43 had no wood surviving within it but was larger. The length of the shaft was 94mm, the section of the shaft was again 12mm and the external diameter of the collar was 36mm, the internal 26mm. C121, on feet, P2b, BP3, SF218; [illus 15](#) & [illus 41](#), 2a & b.

Despite the differences in scale, the identical form and the proximity of the burials to each other point to them being objects of the same original type. However, despite seeking parallels for the objects, none has so far been found. The closest association so far identified is from the excavation of the Augustinian Friary in Hull by Humber Archaeology Unit, in which 12 burials had wooden rods of various types. Of these, two had two rods; five burials were in coffins, of which four were male, one female and

one was a juvenile burial. The rods themselves seem to be of two different ‘types’ – that is short and long – but no apparent fixtures or fittings, apart from a small amount of iron staining on a couple of them. Thus far, suggestions have been plentiful as to role, function, meaning, from pilgrim staffs to self-flagellation sticks or badges of office, but no clear use has been identified. They are dated to around 1343–1353 by dendrochronology of the associated coffins (John Buglass, pers comm).

A possible identification for the objects may be as the ferrules from the base of staffs commonly carried by pilgrims, which often had an iron hook for carrying bundles of possessions over the shoulder, with an iron tip on the end to prevent wear. The arrangement of the surviving wood in the example from SK31 would fit with this explanation as the wood does not project beyond the collar on one side.

Almost all the other iron finds were with a few unidentifiable pieces of structural ironwork or pieces of blade. The majority of **nails** (663 in total) seem to be mostly coffin nails and were recovered from Period 2b and later contexts. They varied in length between 43 and 58mm. All had small, flat, round heads, between c 10 mm and 17mm in diameter. Wood was often found adhering to the shafts of these nails (see [Section 7 – The coffin wood](#) above).

Four **knife blades** were excavated from medieval contexts in Periods 2 and 3, of variable blade lengths of 93mm, 104mm (2) and 115mm. Two had scale tang handles. One is illustrated (C58, SK15, above pelvis, P3, BP4, SF102; [illus 41](#), 3). A further 13 iron objects were recovered; the only objects identifiable to function were from P4 contexts and included part of a strap hinge and a T-bracket.

10.4.3 Stone (see [Section 10.4.7](#) below for architectural stone)

Only three small stone objects were recovered. These were a barrel-shaped **bead** of quartzite, diameter 10mm, length 9mm (C14, P4, SF18; [illus 42](#), 5), a **counter** made of cannel coal,

diameter 16mm, thickness 2mm (C84, P2, SF242; [illus 34](#), 47) and a small possible **whetstone** of west Highland-type slate (C13, P4; not *illus*).

10.4.4 Bone objects (with bone identifications by David Henderson)

All three items made using animal bone were found in Period 2 contexts and included a barrel-shaped **bead** of polished bone, length 7mm, diameter 7mm (C28, SK6, between knees, P2b, BP3, SF52; [illus 42](#), 4).

An **implement handle** of square-sectioned handle, broken at one end and hollow in the middle, sanded and polished into a square section. Decorated with a row of drilled dots, it was made from an *Ovis* metatarsal. Handles made from ovid metatarsal are relatively common on medieval sites. Two examples were found during excavations at Burgess Street in Leith ([Henderson in prep](#), LBS94 SF2790 & SF3691), one of which was also decorated with dots, though in a random pattern. From Perth there is an example decorated with rows of drilled dots along two of its faces ([Ford 1987](#), 151). The Perth example is from a 14th-century context, the two from Leith are possibly a century or two earlier. Length 62mm, width 11mm, breadth 9mm. C201, SK88, on pelvis, P2a, BP2, SF468; [illus 42](#), 2.

A single **pin**, broken at its top end, had possibly been manufactured from a *Bos* long bone? Length 82mm, width 6mm. C115, SK115, above right shoulder, P2a, BP1, SF469; [illus 42](#), 1.

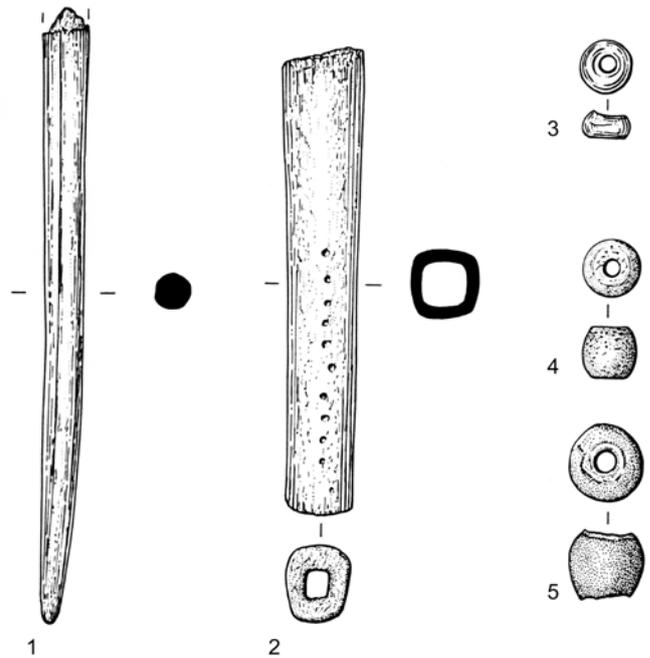
10.4.5 Vessel glass by Robin Murdoch

A very small assemblage of vessel glass and a single glass bead were recovered from the excavations in 1981 of the South Choir Aisle. A small number of wine and beer bottle sherds were also recovered from the 19th-century rubble and debris (C13, P4).

Catalogue

1 A small sherd in clear, thin-blown, colourless glass with heavy patchy silver-coloured denaturing, originally in one piece, 27mm x 17mm x 0.8mm thick, which came from a pruned beaker. Two of the prunts survive, each 6.5mm in diameter and projecting 5.2 and 3.2mm, respectively, from the vessel's surface. The prunts are drawn up and finished with a swirl imparting a profile similar to a small snail shell. The surviving curvature indicates an approximate vessel diameter of 60–70mm and the sherd almost certainly comes from a pruned beaker, a relatively common vessel form around Europe from the 13th to 16th centuries ([Tyson 2000](#), 76). They were made in both potash and soda glass in southern France, Germany, Italy and Corinth ([Tyson 2000](#), 87).

The lack of any rim or base detail makes dating slightly more difficult but the small size of the prunts is commensurate with a late 13th- to mid-14th-century date, as prunts become considerably bigger on later examples. Parallels



Illus 42 Bone objects (1 & 2) and beads (3–5: bone, glass and stone)

have been found in Britain, mainly in southern England, but Tyson remarks that they are not as common here as might have been expected ([Tyson 2000](#), 76). This appears to be the first early example recovered in Scotland. Among half a dozen sherds of a similar item (*noppenbecker*) from Holland, two carry prunts finished in a similar swirling fashion to the St Giles' example and this Dutch example are dated to around 1300 ([Henkes 1994](#), 28, fig 3.3).

Late 13th to mid-4th century. C073, P2b, SF124; [illus 43](#). **2** Two small sherds in heavily denatured glass with dark brown corrosion products indicating potash glass; the original colour was not discernible. One is 27mm x 19mm x 1.6–2mm thick and appears to be either from a small, flattish dish or is possibly part of the rim from a wide-mouthed vessel, possibly a flask or urinal. The second sherd is 18mm x 11mm, with thickness varying between 2 and 3mm. Localized thickening may result from optic blowing to create a surface decorative feature, perhaps of small lozenges. If these two sherds are from the same vessel then it is not a urinal, as this type of vessel was not decorated.

Dating difficult but unlikely to be later than c 1500. C22, P3, SF306; not illustrated.

3 Small bead in very dark glass, some abrasion, rounded oval section, diameter 6.5–6.6mm, width 3.4mm, aperture 2.6mm diameter. Marks from moulding are visible either side of the entry to the aperture. C101, P2b, SF276; [illus 42](#), 2.

4 Part base in clear, colourless glass with patches of moderate buff-coloured denaturing, with a rather small diameter of 31mm, with a pontil scar in the indented base. The apparent base of the bowl is only 8mm above the base ring of the vessel, therefore either the item has not had a stem or the stem had at least one hollow knop (not enough left to ascertain which). The piece seems rather small for a drinking vessel base (although but this cannot be entirely ruled out) and other possible forms include a candlestick holder or small flask.

Colour and condition of glass would suggest no earlier than late 17th century. From contractor's excavations, P4, SF304; not illustrated.

10.4.6 Window glass and lead

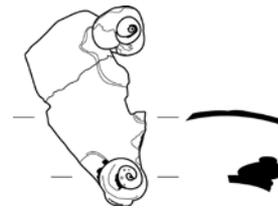
by Pamela Graves

Background and documentary evidence

Graves wrote a review of known documentary evidence relating to the production of window glass in medieval and Renaissance Scotland, the painting of window glass and its installation (Graves 1994, 124–6). The majority of the information relating either to Edinburgh or the immediate environs of the capital occurs in the later Middle Ages, and the most detailed accounts occur in the early 16th century. The only direct reference to glass in St Giles' was a note pointing out heraldic work in the eastern chapel of the western aisle of the North Transept: an elephant, 'very well executed', and a crown and hammers, within a wreath, which were probably the armorial bearings of the Incorporation of Hammermen (Wilson 1891, II, 228). The chapel had been dedicated to St Eloi, the patron saint of metalsmiths and goldsmiths. This was the only coloured glass that had survived into the 1820s, and must have disappeared sometime between the 1820s and 1848 (Wilson 1848, II, 180; Gray 1891–2, 37–8; Wilson 1891, II, 235; McRoberts unpublished). The reference to a painted wreath containing the Hammermen's arms suggests an early 16th century date, akin to the compositional formula of surviving armorial roundels in the Magdalen Chapel in the Cowgate.

The *Exchequer Rolls of Scotland* imply that glass was imported from the Continent through the ports of Blackness, Leith and Dundee from the 14th century onwards (*Exchequer Rolls III*, 222; *Exchequer Rolls IV*, 533 and 619). Customs were raised on glass in Edinburgh in the 1520s and 1530s (*Exchequer Rolls XV*, 515; *Exchequer Rolls XVI*, 35, 65, 229, 360, 374).

In 1504, a particular glasswright, Thomas Peebles, was granted lands to serve as the source of an annual pension for maintaining the windows in the royal palaces at Falkland and Linlithgow, the palace and abbey at Holyrood, and the castle at Stirling, and in 1506 he was paid for 60 feet of 'payntit glas in divers places' (*Treasurer's Accounts III*, 297; Apted & Hannabuss 1978, 136–7). The relative quantities of white (colourless) glass and 'payntit roundis with chaipplitis' ordered for the Queen's oratory at Holyrood in 1512 (100ft and seven roundels, respectively) suggest that, here at least, the fashion was for minimum painted decoration, probably heraldic roundels similar to those of the mid-16th century surviving in the Magdalen Chapel, Cowgate, Edinburgh (*Treasurer's Accounts IV*, 375; cf Seton 1886–7). The 'kingis armis' are specified for other chambers in Holyrood between 1531 and 1532 (*Works Accounts I*, 93–5). However, 'ymagis . . . of paynttit werk' are prescribed for the chapel of Linlithgow Palace in 1534–5 (*Works Accounts I*, 128). In 1535–6, 'Flanderis roundis and squair antik peces' together with 'paintit glas in bordouris and antik



Illus 43 Vessel glass

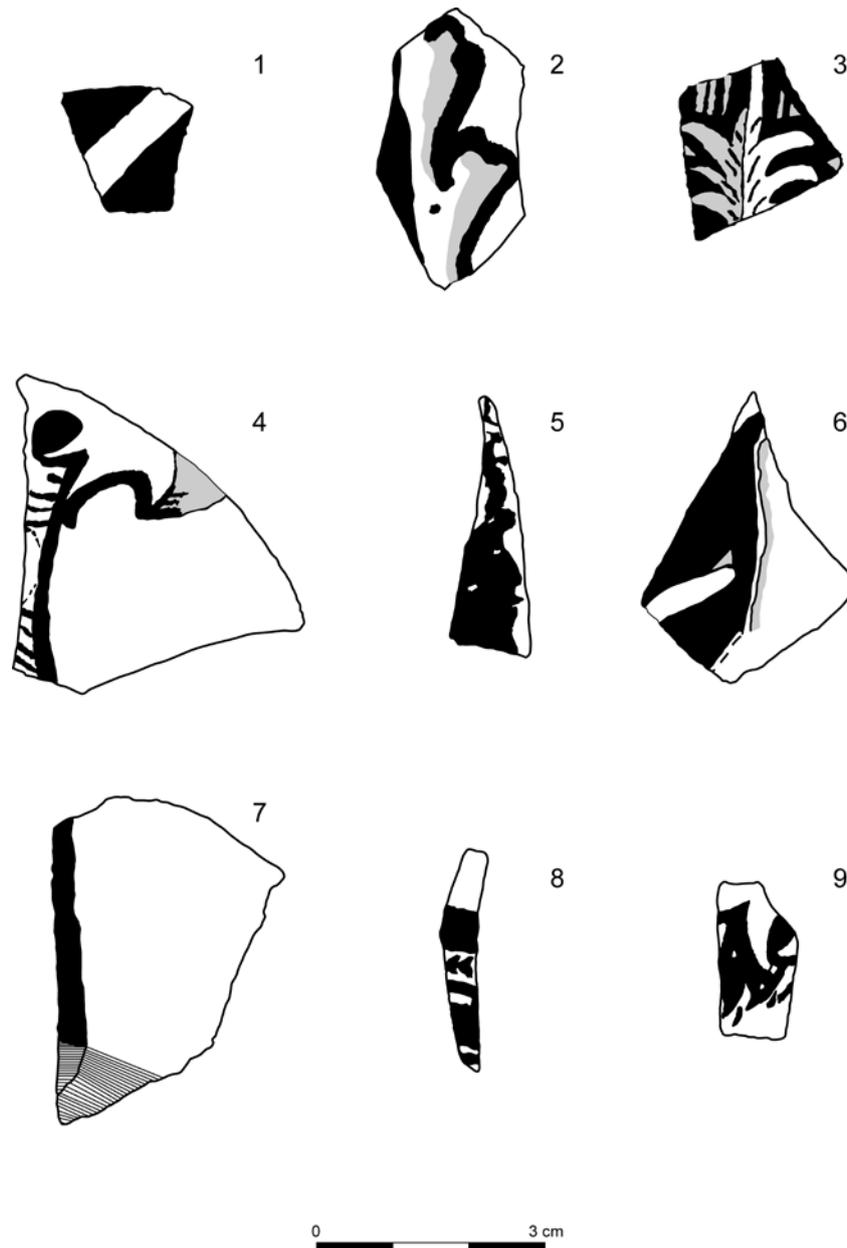
faces' were placed in the 'new chapell' and elsewhere at Holyrood Palace (*Works Accounts I*, 190). 'Antik faces' may refer to Renaissance grotesques and masques.

The most complete remains of pre-modern painted glass relating to Edinburgh are all heraldic. These are the four roundels, referred to above, in the Magdalen Chapel in the Cowgate, dating to the mid-16th century; and a roundel from Woodhouselee, near Penicuik, outside Edinburgh, dating to 1600 (now housed in the Royal Scottish Museum, Chambers Street) (Seton 1886–7; Gray 1891–2). Glass of older date was found at Holyrood Abbey in 1909 (Eeles 1914–15), and represents the greatest range of painted motifs known from any site in Scotland, albeit that the date range is restricted to the 13th/14th centuries (Graves 1994, 132–3). The Holyrood assemblage has been supplemented by a small amount of material excavated in 1995 (Bain & Clark 1998). All other comparative material from Scotland may be found in various excavation reports (Graves 1985; Stones 1989b; Graves 1995; Graves 1996; Graves 2000a; Graves 2002).

There are three general categories of glass within the material recovered from the excavations (a full descriptive catalogue of all the window glass recovered has been deposited with the site archive). The first is undoubtedly medieval, with corrosion patterns characteristic of potash (ie wood ash-derived alkali) glass (c 440sq cm). The second group is a finer, more durable glass, with opalescent surface corrosion, and characteristically less than 2mm thick (c 325sq cm). This is likely to be late medieval/early modern glass, possibly of the 16th/17th centuries. The third category is modern glass, and will not be discussed here.

Medieval glass

By far the majority of the medieval potash window glass is uncoloured with no painted decoration. There are four examples (13sq cm) of fire-rounded edges from the cylinder method of manufacture, used throughout the medieval period. Whilst great quantities of fire-rounded edges in a single deposit may indicate the debris from installation of glass at a particular time (being effectively 'off-cuts' from the main sheets), there is no doubt that fire-rounded edges with a comparatively slight thickening at the edge could be, and were, used as quarries. The small number of such edges at St Giles' is consistent with



Illus 44 Medieval glass

them having been leaded into windows in the normal way. Only fragments from the earlier geotechnical trial pit (1977) showed any sign of distinctive batch characteristics in that 7sq cm have a noticeable blue tint to the metal.

Only one fragment appeared to be a pot-metal colour (4sq cm of yellow, C123, P3b, SF358). There was only one fragment of flashed ruby (red) glass (C43, P3b, SF112E), which could date from any time between the 14th and 16th centuries.

Only *c* 33sq cm (7.5%) out of a total of *c* 440sq cm of medieval glass showed signs of painted decoration. Every one of the designs was so fragmented, abraded and corroded that no indisputable identifications of motif and date could be made: this is a very unusual situation within excavated assemblages. A single piece of white potash glass came

from C6 (P3b), with two areas of paint leaving a strip in reserve (SF341, *illus 44*, 1).

Two fragments may have been from 13th-century grisaille: a rounded terminus (5sq cm, C22, P3, SF336) of the sort usually found in 13th-century trefoils, and two concentric lines (*c* 4sq cm, C26, P3, SF340) which would be common in the curling stems of both 13th- and 14th-century grisailles. Grisailles were designs of mainly geometric and vegetal motifs, with most of the painting in monochrome, and limited colour use. Thirteenth-century grisailles, like those still extant in Salisbury Cathedral and York Minster, featured stylized trefoils in outline on cross-hatched grounds; from the end of the 13th century and into the mid-14th century, more naturalistic, recognizable leaf patterns were featured in outline on plain grounds. One fragment from

C25 (P4) may have part of an oak leaf painted in outline with slight shading following the line, and highlighted in yellow stain (c 4sq cm, SF342; *illus 44*, 2). Because yellow staining in the British Isles dates to c 1310 onwards, but was more common from the 1320s and 1330s (*French & O'Connor 1987*, 13), the St Giles' fragment would be consistent with mid-late 14th-century grisaille or simply an oak leaf motif used in some other compositional context. The enigmatic fragments from C43 (P3b, SF112A; *illus 44*, 4–6) have closely-spaced lines at one edge which resemble cross-hatching. Similarly, the rounded and curling terminals of paintwork may be consistent with trefoil grisaille, particularly that with tight heads found, eg at Jedburgh and dating to the early to mid-13th century (*Graves 1995*). However, the paintwork in other places on these fragments is more akin to the fine washes and stickwork which characterize early 14th-century rinceaux and diapers (cf *French & O'Connor 1987*, plate 19). The condition of the surface has deteriorated too far to be able to be more precise, but the thickness of the glass and its general condition suggest a date in the 14th century onwards rather than earlier.

C25 (P4) also contained a possible piece of black letter script (SF339). This form of inscription tended to replace Lombardic script from the mid-14th century onwards. The design on a piece from C43 (P3b, SF165B; *illus 44*, 9) is by no means certain, but could be the jagged edges of fur, as seen on heraldic animals, particularly their limbs, from the 13th century onwards. Again, the glass itself suggests a date in the 14th/15th century. Fragments C and D (*illus 44*, 7 and 8) from the same context are equally likely to date to the 14th–15th centuries, although their paintwork is not diagnostic. A tiny leaf (3.5sq cm) in reserve from C25 (P4, SF47; *illus 44*, 3) is the most complete design from the whole assemblage, and the use of dilute wash compares with that of the oak leaf (above) from the same context. Small leaves like this were common in background diapers of the 14th and early 15th centuries in particular.

A possible 13th-century date for the fragment from C22 (P3, SF336) is plausible; it is clear from extant glass windows and from excavated assemblages that older glass would be kept and reused often. Contexts 73 (P2b, SF350) and 89 (P2, SF302) contained glass without diagnostic paintwork but it was medieval potash glass, consistent with a late 13th- to mid-14th century date, and 12th- to mid-14th century date, respectively.

Post-medieval/early modern glass

The first patent granted for the production of glass in Scotland dates to 1610, and Scotland was thought to be self-sufficient in the supply of glass by 1622 (*Turnbull 2001*, 1). Glass works were located at Leith, three locations to the immediate east of

Edinburgh, and at Kirkcaldy and Wemyss in Fife, and broad window glass seems to have been manufactured from the first (*Turnbull 2001, passim*). Venetian expertise was brought in between 1622 and c 1646, but a skilled workforce from England was also employed (*Turnbull 2001*, 28, 87–8).

The assemblage of more durably transparent glass, with weathering mainly visible as an opalescent sheen on the surface, was almost consistently of 2mm thickness or less. There were c 33sq cm of fire-rounded edges indicating cylinder or broad glass, the most common form of glass found in Britain in the 17th century (*Turnbull 2001*, 22). It is thought that traditional cylinder glass manufacture (as opposed to improved or drawn cylinder methods) became almost obsolete by 1700 (*Burgoyne & Scoble 1989*, 4). Such thin glass was not unknown in the 14th century, at least in York (cf *Graves 2000b*; and with reference to York Minster, David O'Connor, pers comm). Thin glass of the early modern period (16th–17th centuries) has also been observed from other excavations in the north of England. In this respect it is perhaps significant that, in the 1620s:

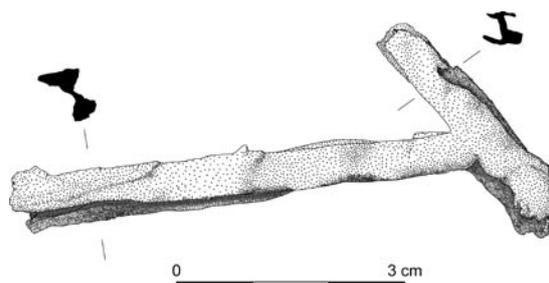
There was controversy about the thickness, and therefore strength, of glass, especially that from Scotland, and the frequent repairs listed in accounts bear witness to its fragility (*Godfrey 1975*, 206; *Turnbull 2001*, 54).

As the only example of lead came can be dated to the 16th–17th centuries by the marks left by the characteristic, close spacing of the teeth of the hand mill through which it was turned (see *Section 2.2* below), it seems most likely that the comes, similarly marked lead strips, and this assemblage of thin glass, all relate to the same episode of glazing sometime between the late 16th and late 17th centuries at St Giles'.

The window lead

Fifteen lead window comes, with a characteristic H-shaped profile and seven flat lead strips were also recovered, all from contexts dated to P3 and P4.

There was only one wholly recognizable piece of lead came (C1, P4, SF196, *illus 45*). This had the regular dimensions and ridges consistent with



Illus 45 Metalwork: Lead came



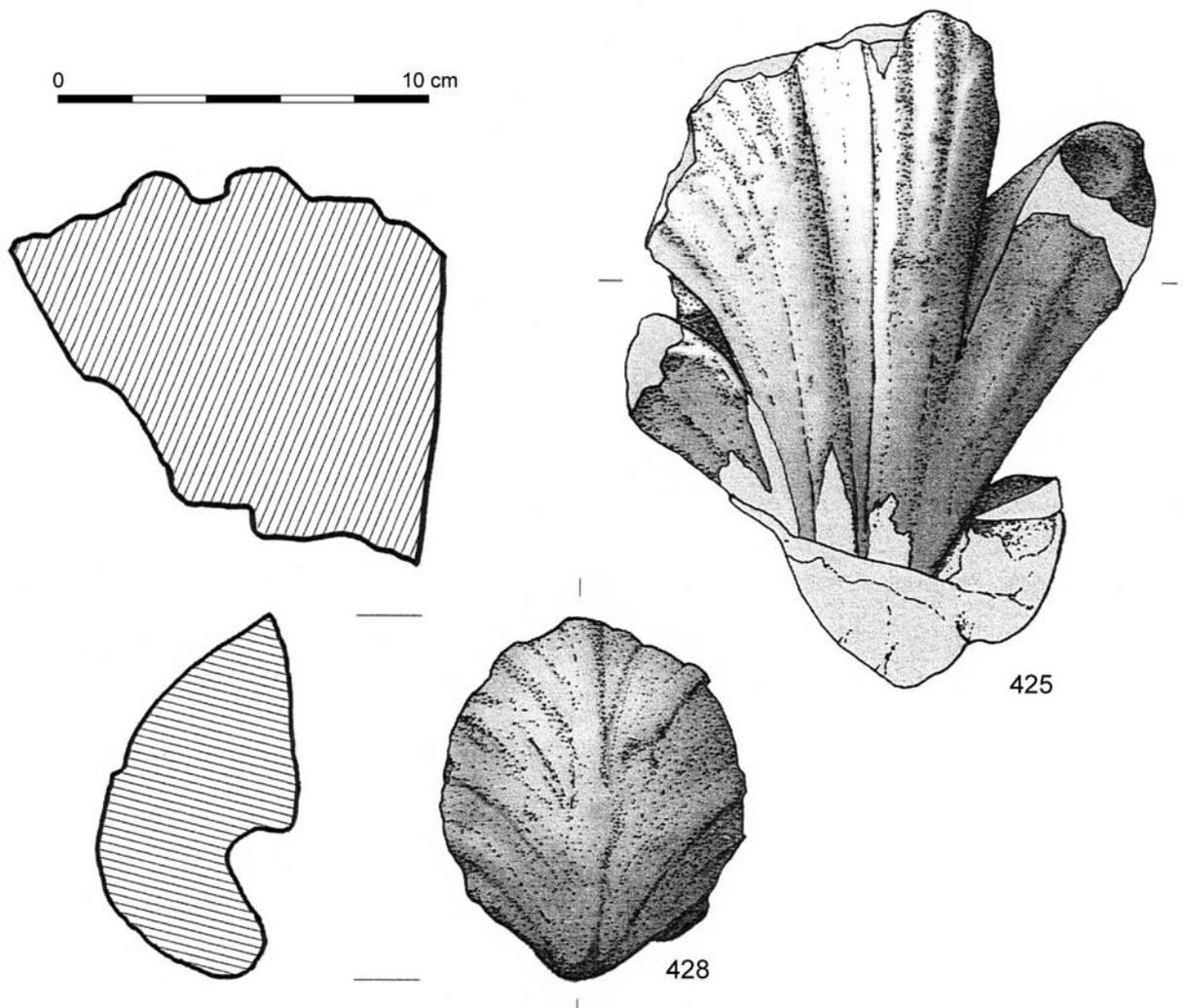
Illus 46 Architectural fragment: 12th-century Romanesque grotesque corbel or beakhead, reused in foundation (C256) of east wall of South Aisle

post-medieval milled comes rather than cast and hand-cut medieval comes. On the inner surfaces of the leaves, and on the web, closely-spaced grooves are indicative of the mill having been toothed. The close spacing suggests a date in the 16th or 17th century (Knight 1986, 31). Those strips of lead which have knife facets were probably cut from H-sectioned comes, and one (C13, P4, SF23) was almost certainly of 16th/17th-century date, having the same toothed mill features as the come from C1 described above. The implication is that most of the comes and lead strips relate to the same episode of glazing as

the assemblage of very thin, Early Modern window glass above.

Discussion

The assemblage of medieval glass is disappointing in its lack of diagnostic decorative detail. There are some hints at 13th-century grisaille which may have entered the archaeological record as breakage during replacement by later glass (if for no other reason than that the lead would probably have had



Illus 47 Architectural fragments: 19th-century foliate cast-plaster ornamental fragments

to be replaced during the course of the Middle Ages). On the other hand, residual fragments of older glass are a common feature of *in situ* glass that has been repeatedly reread up until the present day. The majority of the decorated pieces, taking into consideration the relative homogeneity of the metal and execution of paintwork, the existence of yellow-stained and ruby-flashed examples, would seem to be mid-late 14th or 15th century in date.

With regards to the assemblage of early modern glass, it is tempting to associate this with a period of deliberate, post-Reformation fenestration, replacing formerly coloured and historiated glass with plain glass. If medieval glass images had been destroyed in iconoclastic 'purgings', at St Giles', as in 1559 and early 1560, this would provide a reason to reglaze windows for both practical and theological reasons. However, the iconoclasm at St Giles', at least such attacks as were recorded, seems to have fallen short of breaking the windows (Spicer 2003, 34). Indeed, *The First Book of Discipline* expressly required kirks to have 'close windowes of glasse, thack able to withold raine' (quoted in Howard 1995, 175; Spicer 2003, 34). It is quite likely

that an amount of medieval glazing had to be replaced from this practical imperative alone. Because St Giles' was subdivided rather 'hastily' into four parish churches in 1562–3 (Howard 1995, 177), and galleries had to be inserted (Spicer 2003, 34), some accidental damage may have occurred in the process, necessitating the replacement of windows or panels. Similarly, the attempts to reinstate the building as a cathedral in 1633, and the repartitioning of the interior following the signing of the National Covenant (Howard 1995, 192), may have induced further accidental damage and/or repair to the windows at any time along the way. The fragility of contemporary window glass, particularly in the early 17th century, has been noted above and may have created a pattern of frequent glazing repairs and consequent deposits finding their way into the archaeological record. Contemporary contracts demonstrate that wealthy landowners, at least, expected to have to retain the services of local glaziers for repairs on a regular basis (Turnbull 2001, 54), thus underlining that late 16th/early 17th-century reglazing at St Giles' need not have been the consequence of dramatic events.

10.4.7 Worked stone and building materials

by Thomas Addyman

A very small assemblage of worked stone and building materials was recovered from the excavations in the South Choir Aisle. Within this group were few pieces of recognizable architectural mouldings or other stone. The most important of these was a characteristically 12th-century Romanesque grotesque corbel or beakhead (C246, P3a; *illus 46*), probably from a door-arch similar in style to that which survived as the entrance to the north side of the nave until 1797–8 (*Chambers 1888*, XIII).

Other pieces from medieval contexts included a carved fragment of a moulded detail including a 55mm-wide roll, quirked on one side hard, fine/medium-grained, light pinkish tan sandstone probably part of a window or entrance surround, probably of late medieval date (C97, P3; not *illus*) and a fragment of rounded sandstone moulding extending into a flat surface (60mm-thick), perhaps the edge of a table tomb slab or the nosing of a stair (C101, P2b; not *illus*). A fragment of very hard,

fine-grained though apparently friable limestone (possibly?magnesian limestone) was part of the edge and upper surface of a larger stone, most likely a funerary monument. The upper surface has a high polish and there is a suggestion of diagonal tooling along the remaining part of the side (C128, P3; not *illus*). A large funerary slab of probable late medieval date of very similar stone can be seen within the ruined church of Old St Andrew's, North Berwick.

From the 19th-century debris beneath the aisle floor came two cast plaster gypsum plaster ornamental fragments consisting of parts of foliate sculptural elements in full relief, perhaps crockets, of 14th-century 'Decorated' style though probably of 19th-century origin were, perhaps, part of an ornamental surround of a wall monument (u/s, P4, SF425, SF428; *illus 47*).

Pieces of 11 sandstone roofing tiles in ?Carmyllie stone were recovered, mostly from P4 contexts, although one was found in C137 (P3; not *illus*). Other building materials recovered included fragments of wall plaster and lime mortar, again mostly from P4 disturbed contexts.