Description

These miniature costrels, which range between 50-80 mm in height, are in a dark grey stoneware with a salt glaze which can vary from mottled brown to grey (Pl. 2). They have an ovoid body, slightly constricted neck and a plain, slightly everted rim with two opposed small pierced vertical lugs. The base is splayed and flat.

Distribution

These vessels, which are known to have been produced in Raeren-Born and Aachen, appear rarely in European archaeological literature. Apart from the vessel mentioned by Hurst, the only other reference is to a find from Bergen-op-Zoom in Holland, where fragments of four vessels were found (Vandenbulcke and Groeneweg 1988, 355). In Norway, however, this type of vessel has featured in various publications since 1926 (Mowinckel 1926, 77 – 80). In his 1933 publication of finds from the medieval towns of Bergen and Oslo, Sigurd Greig could list a total of 42 vessels of this type found in Norway (Greig 1933, 189-192). In 1989, Lars Andersson recorded approximately 150 vessels from Norway, but only five in the whole of Sweden and Denmark (Andersson 1989, 138). In addition to these, excavations at the Archbishop's Palace in Trondheim in 1991 and 1992 have produced a further twenty or so examples.

Function

It is obvious that vessels of this type could have had a number of different functions. As well as their suggested use as oil pots, they have been variously referred to in Norway as ointment jars and as pilgrim jars, or *relikviekrukke* (a jar used as a reliquary). It is these last two interpretations that we shall look at in more detail.

A number of these miniature costrels have been found in the vicinity of medieval churches, including most of the examples from the Library site excavations in Trondheim, which were found in the graveyard of St. Olav's church (Reed 1990, 36). One such costrel was found wedged between two stones in the base of St. Olav's well when it was being cleaned out during the restoration of the cathedral in 1885. Further examples have been found in the Bishop's residence in Oslo and in the Archbishop's fortress, Steinviksholm, to the north-east of Trondheim. Perhaps the two most significant finds, however, are the costrels found under the altar tablet in Logtu church, north Trøndelag, and in a side altar in Trondenes church, Troms (North Norway).

At the time of its discovery, the costrel from Logtu contained some small fragments of bone and wood, apparently held in a small bag of light brown silk with green stitching. This bore a wax seal, attached to which was the seal of Archbishop Gaute (1475–1510). The find from Trondenes contained a splinter of bone wrapped in linen and sealed with wax. Attached to it was a piece of parchment with a Latin inscription and a seal. The inscription reads 'Consecratum est hoc altare anno domini McdLXX sexto quarto die mensis septembris per xm (?) in Christo patrem Gautonem Archiepiscopum Nidrosiensem in honore(m) Corporis Christi: beati Andree Apostoli et sancti Olaui regis et martiris'. In this instance the costrel had quite clearly been deposited as a reliquary in connection with the dedication of the altar in September 1476.

Discussion

It is evident from the above that these vessels could be used for religious purposes, in addition to their other possible functions. The find from St Olav's well gave rise, at the beginning of this century, to speculation as to whether these vessels were used as

containers for holy water taken from the well, a point which has not been further developed. It cannot be certain whether the costrels were imported for this purpose, but their close ecclesiastical connection would appear to be indisputable; the question arises as to whether some examples were imported with the express intention of using them as reliquaries, and if this is the case, by whom were they imported?

In this respect, it is interesting to note that Dean Svein Eriksson of the Cathedral staff in Trondheim appears to have played a central role in the production and sale of pilgrim badges in honour of St. Olav during the mid 15th century (significantly, no pilgrim badge from Trondheim is known prior to this date). Svein Eriksson was also connected with Trondenes, where he was parish priest from 1427 until c. 1488. Was it the entrepreneurial initiative of Eriksson, or another member of the cathedral staff which was responsible for the importation of these vessels?

Further questions concern their distribution, which appears at present to be heavily concentrated on Norway. Is this merely fortuitous? Do they in fact occur in equally large numbers elsewhere, as yet unpublished?

Whatever the case may be, it is clear that these vessels occur during the second half of the 15th century, and that they are certainly in use in Norway by the last quarter of that century. These miniature costrels were clearly multi-functional, and it would be of interest to document all their functions, and to confirm whether their use as reliquaries is confined only to Norway.

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THE DISCOVERY OF THE SITE OF A MEDIEVAL ENCAUSTIC FLOOR TILE KILN AT MONMOUTH, GWENT

In November 1991, kiln-damaged encaustic floor tiles of the Great Malvern tradition were found during building work in the front garden of Cadogan House, Monk Street, Monmouth, Gwent (SO 50981315). The site was subsequently excavated by the Monmouth Archaeological Society; no structures were found, but it is believed that one feature discovered was the stoke pit of a tile kiln¹. Clay occurs locally and was certainly used for the production of bricks in the post-medieval period in this part of town.

This site is of importance in that it has provided the first

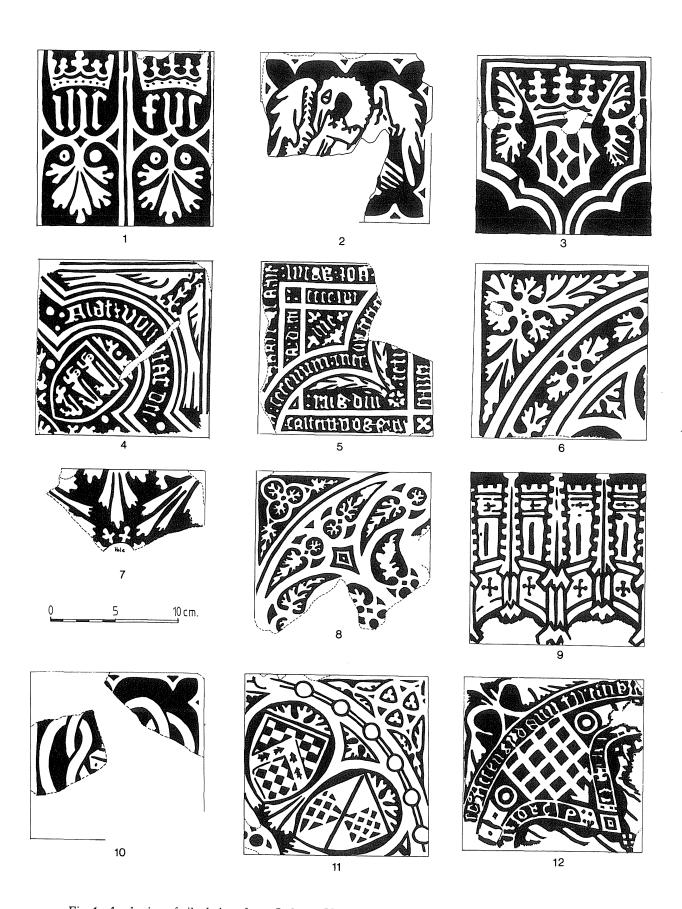


Fig. 1. A selection of tile designs from Cadogan House, Monmouth (drawn by Lyn Harper). Scale 1:3.

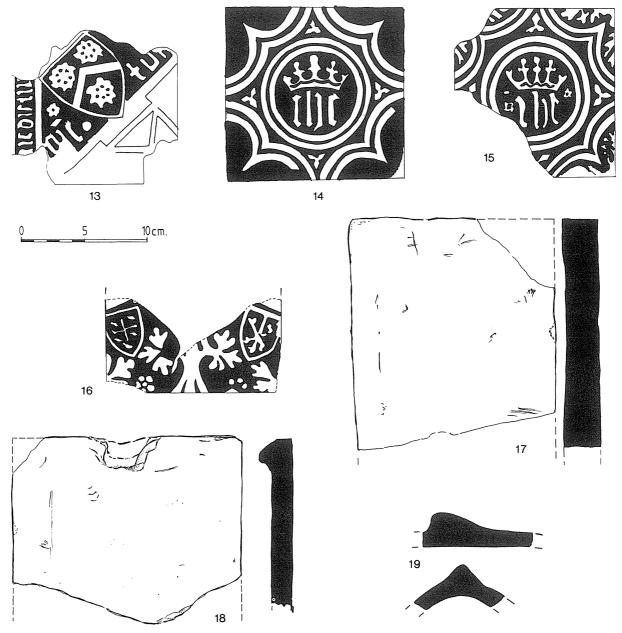


Fig. 2. A selection of tile designs and roof tiles from Cadogan House, Monmouth (drawn by Lyn Harper). Scale 1:3.

evidence of a floor tile kiln in Wales², which is furthermore only the second of the School to be found outside Great Malvern; the other tile kiln using Great Malvern stamps was found at Lenton Priory, Nottinghamshire (Swinnerton 1955). Within Monmouth, similar floor tiles were used in St. Mary's church, to the south of Cadogan House, which contained two medieval tiled floors. These were destroyed during 18th- and 19th-century rebuilding works (Griffinhoofe 1894), but a collection of the tiles that survived (now exhibited in the church) includes examples of both the Great Malvern and Wessex Schools (Molyneux, undated typescript). The Cadogan House site is also of considerable interest for the other kiln products discovered — flat roof tiles, ridge tiles and bricks.

The excavation

The first area excavated was the southern half of the garden,

which produced post-medieval pottery kiln waste and saggars identical to material found at St. James' House, Monmouth (Clarke *et al* 1985) and probably of 16th-century date. Nothing was found of a Malvernian tile kiln, but overlying the natural was a thin layer of soil that contained late 12th- and early 13th-century pottery.

The upper levels of the second area of excavation again produced post-medieval pottery kiln waste and later finds, but earlier material, including Malvernian-style tiles, was also present. It was found that the edge of the garden here almost coincided with two sides of a rectangular feature measuring at least 2 m by 2.2 m, which cut 0.6 m into the natural. This cut has been interpreted as a possible stoke-pit; the base sloped down towards the house, but was otherwise almost level. It was covered with a layer of charcoal up to 25 mm thick. This charcoal layer contained occasional floor tile fragments, together with some unfired pieces of flat roof tile. The main kiln material

came from the sealed fill of this feature, which consisted of a brown loam with clay patches and a 'dump' of bright red clay. This 'dump' was fairly clean, except for a few charcoal flecks, occasional lumps of burnt clay and roof-tile fragments (mainly flat). This clay was not 'as dug' and seems certain to have been prepared for tile production. Some large pieces of wood (as yet unidentified) were found preserved beneath the clay.

It is assumed that the kiln lay immediately to the west of this feature and that it was destroyed during the construction of the cellars of Cadogan House in the 18th century.

The finds

The finds have yet to be studied in detail, and the following is a provisional assessment of the material from the possible 'stokepit', which falls into the categories listed below. Other finds include iron objects and a sherd of ridge tile containing Malvernian rock inclusions.

Great Malvern floor tiles. The assemblage includes at least nineteen of the twenty-nine Malvernian designs on tiles preserved in St. Mary's church, together with six not in the church collection (Figs. 1 and 2). The designs include: the swan crest of Mary de Bohun, mother of king Henry V; various heraldic shields; flowers, foliage and birds; instruments of the passion; the sacred monogram; detailed architectural canopies, and finally, inscriptions in Latin. Plain tiles occur in green, yellow and dark brown.

The tiles are, with slight variations, 140 mm square (5.5 by 5.25 ins) square, and 25 mm (1 inch) thick, with flat, sanded bases and bevelled edges; one (No. 7) has a cleanly cut (or moulded) central hole. Triangular tiles also occur. Many, including the complete examples, are clearly wasters; some are fused together or are badly scarred, while other kiln damage includes vitrification and warping.

Flat roof tiles. These were present in large quantities; they are moulded and seem to fall into two groups (Fig. 2, Nos. 17, 18). The first is 185 mm wide and c. 20 mm thick (no complete examples were found). It has a single central lug, formed by an extension of the mould pulled up from the edge of the tile, which stands c. 20 mm high; there are no peg holes (Lewis 1987; Vince 1985). The dimensions of the second type remain to be determined, but the thickness is c. 32 mm. Both groups have sanded undersides.

Ridge tiles. These are in the established Malvernian form (*ibid*), with small knobs or spurs (Fig. 2, No. 19). There are no knife-trimmed crests. The size has not been determined, but the tiles are up to 13 mm thick, with a green speckled glaze similar to that on examples found in Malvern.

Bricks. One complete brick and three brick fragments were found. The former is surprisingly similar to a modern brick in size, measuring $225 \text{ mm} \times 112 \text{ mm} \times 63 \text{ mm}$. The other pieces are all 112 mm wide, and between 57 mm and 63 mm thick; one has a scar matching a flat roof tile, and another scar from a glazed floor tile. The bricks all have one sanded side and may have been moulded.

Sandstone. Roof tiles with single peg holes were found.

Kiln fabric and furniture. This comprises fired clay with flattened/shaped edges and deep finger prints; sandstone with fired clay adhering; small fragments of local micaceous sandstone with vitrified surfaces; a possible spacer, 30 mm long with a triangular section 20 mm thick. This last find is fused to a piece of flat roof tile 15 mm thick, with glaze on both the tile and separator. Prints left by animals on the tiles prior to firing include those of a cat's paw and a small cloven hoof.

Thin sections have yet to be cut, but a provisional examination of the kiln products indicates that the same clay was used for everything, including the fabric of the kiln itself. The wares are finely micaceous; the inclusions comprise sub-angular to sub-rounded quartz with fine sandstone and clay pellets. The clay from the 'dump' has the same inclusions as the kiln

products, whereas the natural clay from the site seems to be micaceous but devoid of sand. If the site natural was used, therefore, it was not 'as dug', but with added temper.

Discussion

It seems certain that tilers of the Great Malvern School were working on the site of Cadogan House, presumably in the later 15th century. As no documentary references to the laying of the tiled floor in St. Mary's church are known, a close dating is not possible, although a study of the wear and damage to the moulds may put the production in the context of other tile collections. One tile is dated 1456, but this mould may, of course, have been in use for many years.

The production of flat roof tiles is of considerable interest. Ceramic flat roof tiles appear to be unknown in the region at this date. Malvernian fabric flat roof tiles with a lug at one end are extremely rare, with only a few of late 16th- and 17th-century date known from Gloucester and only a few definite examples known from Hereford and Worcester. Local tile production is documented at Gloucester from the mid 17th century, and is known from the late 16th century on archaeological evidence. Worcester tiles are found from the 15th century onwards (Vince 1977). In Hereford, local flat roof tiles with a lug form which is different from the Monmouth examples first appear in the mid 16th century (in fabric A10); they are common in the 17th and 18th centuries (Vince 1985).

The bricks at Cadogan House may have been for use at the kiln site; it seems unlikely that building bricks were in use locally until the 17th century. In 1615 London bricklayers were brought to Monmouth to build almshouses in the town, presumably because there were no local craftsmen (K. Kissack, pers. comm.). Brickmaking was an important industry at Malvern Chase in the 16th century, but only one fragment is known from Herefordshire (from Breinton). Local brick production appears to have developed in the mid-16th century.

The ridge tiles from Cadogan House are clearly in the style of those made in the Malvern kilns, both in shape and glazing. This seems to be the first time that ridge tiles of Malvernian type have been recognised without Malvernian inclusions, although Vince (1985) has noted the similarities between some roof furniture in Hereford fabric A7 and those from Malvern.

Footnotes

- We are very grateful to the owner, Mrs Liz Freeman, for delaying the building work while the garden in front of the house (divided by a central path into the 'northern' and 'southern' plots) was excavated. A full report on the excavation and finds is in preparation.
- 2. The discovery of a Malvern-style kiln in the Welsh Borderland was predicted by Alan Vince in 1980.

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EARLY PANTILES FROM LONDON

Until recently it was generally supposed that pantiles were first introduced to London after the Great Fire of 1666 (Vince 1984, 71-3). However, there is now firm archaeological evidence from three sites in London for their use on a limited scale prior to 1666.

At Billingsgate Fish Market Car Park, the earliest excavated pantiles are dated to c. 1630/50-1666 (Betts 1991). They were found in the vicinity of St. Botolph's church and what appear to be commercial buildings bordering St. Botolph's Lane, all of which were destroyed in the Great Fire. There is no indication which building was roofed in pantile.

At 90-94 Old Broad Street, twenty-one fragments of pantile were found in the main fill and backfill of the post-medieval City ditch. The ditch infill contained a large pottery assemblage dated to c. $1620-early\ 1640s$. Documentary sources indicate that the ditch had been infilled by c. 1642-47, if not earlier. The date of the pantiles is uncertain, but it would seem unlikely that they are earlier than the associated pottery.

A small quantity of pantiles were also uncovered during excavations at the *Royal Mint* site (also known as St. Mary Graces). They were found in contexts associated with the earliest phase of a victualling yard for the Tudor navy, which dates from c. 1565 to the mid-17th century (Crowley 1990, 3).

The early pantiles used in London were probably imported into the City from Holland. This importation began during the 17th-century, and such tiles were still being used in London in the Georgian period (Clifton-Taylor 1987, 279). When pantiles were first manufactured in England is still uncertain. As early as 1636 William Westby was granted a patent for the 'makeing of Pantiles of Flanders Tyles', although according to Clifton-Taylor (*ibid*, 275) there is no conclusive evidence that Westby actually began manufacture. It is generally believed that the first English pantiles may have been those produced by a company at Tilbury from 1701.

After the Great Fire pantiles were used in London in great quantities until the introduction of cheaper slate roofing in the 1760s (Cruickshank and Wyld 1975, 176). During the later 18th century ceramic roofing tiles were gradually superseded by slate roofing and many formerly tiled roofs were resurfaced in slate.

Discussion

Recent work in London has shown that at least a few buildings prior to the Great Fire of 1666 had pantile roofs. However, the amount of pantile which has been recovered is extremely small compared to peg tile, which seems to have been the normal form of roof covering. The evidence from Old Broad Street suggests that pantiles were first being used in the City by the second quarter of the 17th century. Unfortunately, very little has been published on pantile dating elsewhere, and so it is difficult to know whether pantiles were first introduced to other areas of

Britain during the same period. The author would be grateful for any comments on this point.

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CONFERENCE SUMMARIES

'Pottery from 5th - 10th century in North-West Europe' ('La Céramique du Ve au Xe Siècle dans l'Europe du Nord-Ouest')

The second International Colloquium of the Groupe de Recherches et d'Études sur la Céramique (G.R.E.C.) dans le Nord/Pas-de-Calais was held at Outreau near Boulogne from the 10th – 12th April 1992. The first conference in 1988 at Lille had looked at the state of knowledge of medieval and post-medieval pottery research in north France.

While the Colloquium concentrated on pottery of the 5th to 10th centuries, it began with extremely useful and informative surveys of the Roman to early medieval *continuum*, with a paper on late Roman pottery in Belgian Gaul by Marie Tuffreau-Libre, and two contributions of the evolution and distribution of pottery, one on the 4th-6th century in the north of Gaul by Didier Bayard, and the other on the regional and interregional distributions in the 4th and 5th century by Paul van Ossel.

This was followed by a session covering pottery from England. Lyn Blackmore reviewed 5th- to 10th-century local and imported pottery found in London and its hinterland, plotting the evolution of the settlement and parallel changes of pottery use. Alan Vince described the forms, functions, and manufacturing techniques of late 9th- and 10th-century wheelthrown pottery in England, and proposed the testing of several of John Hurst's models for their origins. Ailsa Mainman described the continental pottery from 8th-to 10th-century sites in York, and how the fluctuating proportions of the different wares reflect the changing rôle of York as an international and regional centre.

The following day began with a session on Belgium and the Netherlands. Yann Hollevoet described the pottery found in Merovingian settlements such as Roksem and Kerkhove in the region around the *Castellum* of Oudenbourg (côte flamande, Belgium), which have produced quartz-tempered hand-made pottery, some wheel-turned Rhenish wares, and grey burnished biconical pottery from the Pas-de-Calais/Belgium. Of interest is the occurrence on a few sites of chaff-tempered hand-made wares