

TWO POST-MEDIEVAL POTTERY KILNS AND ASSOCIATED PRODUCTS FROM PROSSER'S YARD, BRILL, BUCKINGHAMSHIRE

W. D. COCROFT

A small rescue excavation in 1977 examined early eighteenth-century kilns exposed in a service trench. Red earthenwares were the principal product with a lesser quantity of whitewares. Several types of kiln furniture were present. This group fills a useful gap in the knowledge of the extensive Brill-Boarstall pottery industry.

Introduction

The longevity of pottery production in the Brill area is well known (see Jope 1953, Farley 1979, Ivens 1981, Yeoman forthcoming), and a number of kiln sites have been excavated (Fig. 1). This paper illustrates a range of pottery produced by two kilns discovered in 1977, which were in operation during the first half of the eighteenth century. The products included a small group of whitewares, which have not been previously recognised as originating from the Brill area.

The two kilns discussed below and the associated material were excavated at Prosser's Yard, Temple Street, Brill, SP 65481405 (Fig. 1). The excavation was carried out under difficult 'rescue' conditions which curtailed the extent of the work possible. The site was excavated by Peter Locke with the assistance of the Buckinghamshire County Museum Archaeological Group, (hereafter BCMAG), over a six day period in February 1977.

The location of another kiln within Prosser's Yard, along with a quantity of pottery was notified to the museum in 1974 by Mr Eric Prosser who had discovered it about sixty years earlier. No suggestion is offered as to the date of this particular kiln, but the probable location has been indicated on the plan (Fig. 1).

The finds from the 1977 site are stored at the County Museum Acc. No. 46.77, Site Reference CAS 2153.

The Kilns

Kiln 1. (Fig. 2) (Plate I).

Kiln 1 was a substantial brick-built structure, the frontage of which was orientated roughly north-east to south-west. It survived to a maximum height of 27 brick courses, 2.30 m, and was 2.70 m at its widest point. The average size of brick used in the kiln frontage was 205 × 110 × 57 mm. The highest surviving brickwork was 0.20 m below the 1977 ground level and the base of the kiln about 2.50 m below the surface. Abutting on the north-west face of the frontage was a semi-circular brick vault, which was one stretcher in thickness and extended one and a half stretchers from the wall. The supporting wall for the vault was traced back 0.50 m from the kiln frontage but certainly extended further north beyond the limit of excavation. The floor area to the north was found to be paved. No return of the kiln frontage wall was found southwards.

At the base of the frontage wall was a single flue tunnel, slightly off centre. This brick-arched flue was 0.82 m in length, 0.44 m in width and 0.74 m in height.

The floor of the tunnel was formed by three bricks laid flat across the tunnel which acted as fire bars, two of which survived. These formed the roof of a small channel beneath the floor of the tunnel, 0.21 m wide, which allowed air to circulate beneath the fire, and probably served as a grate so that ash could be raked out over

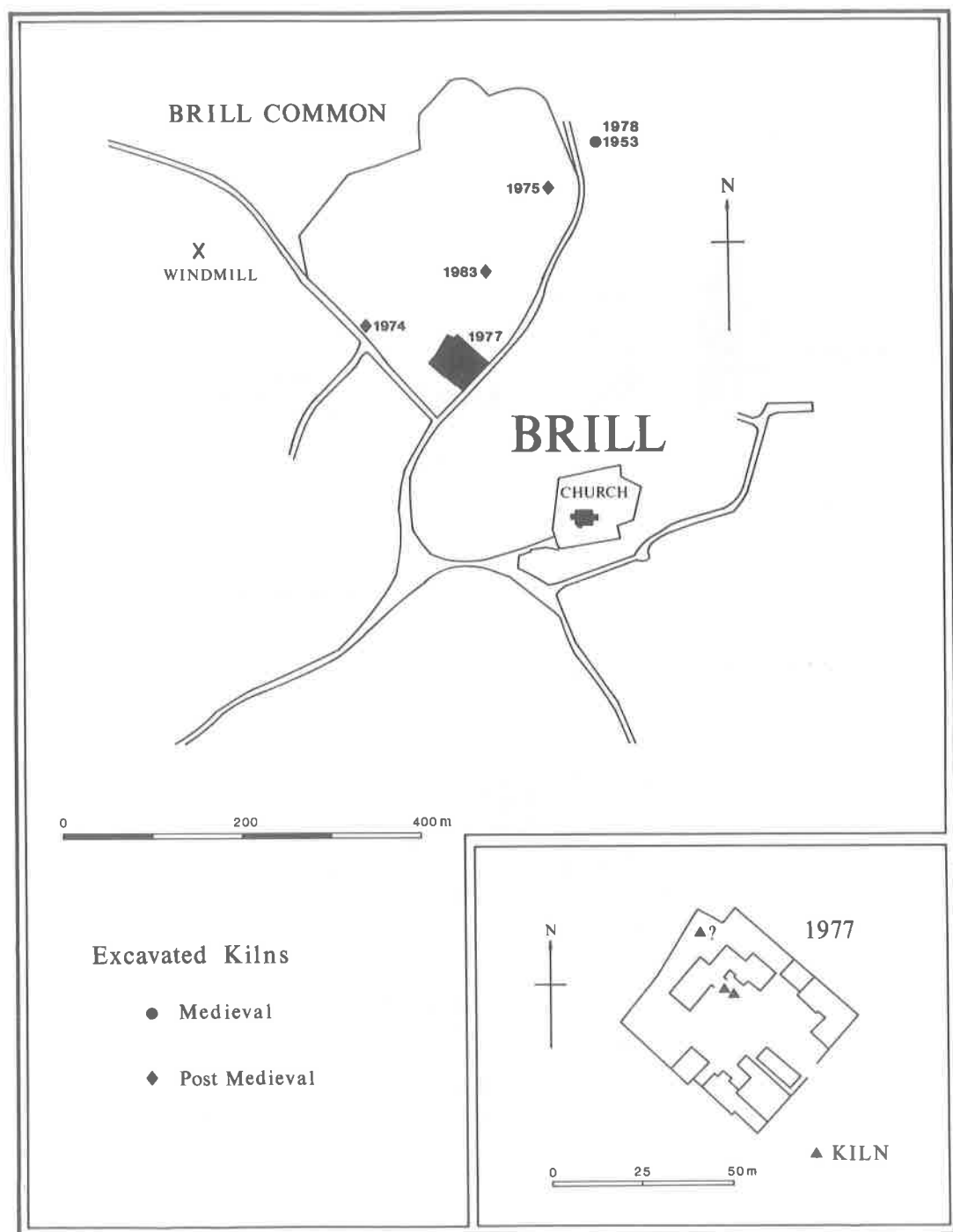


Fig. 1. Brill. Location of 1977 Kiln and other kiln excavations.

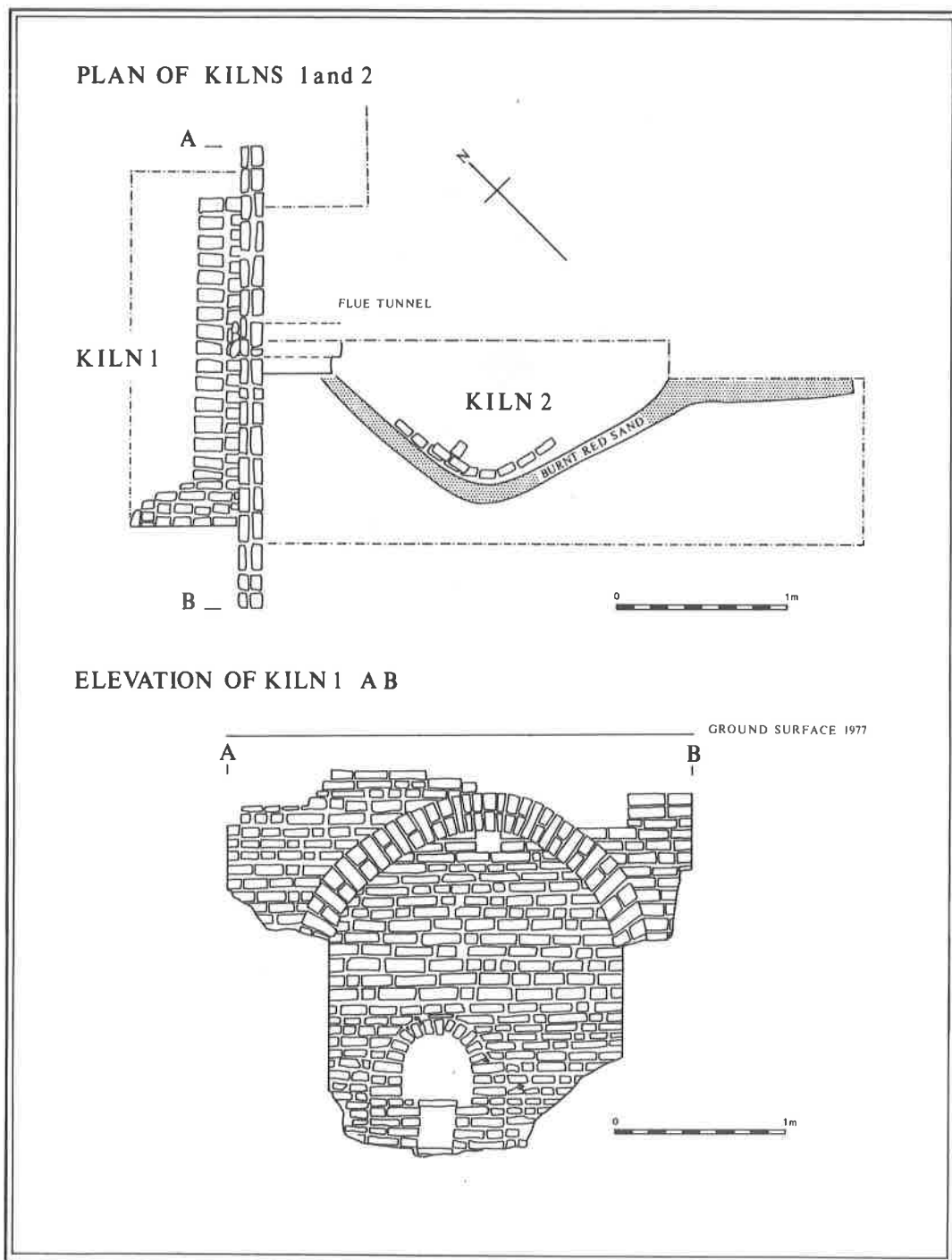


Fig. 2. Upper: plan of Kiln 1 and Kiln 2. Lower: elevation of Kiln 1.

the few days that the firing would take. The flue tunnel extended south-east 0.70 m from the frontage wall.

Blackening and scorching was noted both inside the flue tunnel and on the north face of the frontage wall. There was some indication that the flue tunnel had at sometime been replaced, as straight joints were evident on the northern side of the kiln frontage (see elevation, Fig. 2). Obviously a kiln of this nature would have remained in operation for a considerable period and the flue tunnel would have been particularly prone to shattering by the intense heat.

Owing to the very limited excavation that was possible conclusions about the kiln structure can only be presented tentatively. The principal problem raised by this structure is whether the brick vault spanned the firing chamber of the kiln or its stoke pit. In favour of the vaulted area being the stoke pit it must be noted that in a niche near the apex of the arch, a distorted mug was found (see Fig. 11 no.6) which may be contemporary with the use of the kiln, but equally could represent re-use of the kiln as a shelter after it was disused. Alternatively if the vaulted area was the kiln chamber, this would represent a permanent firing chamber with loading either through the flue tunnel, or an entrance not located in the excavation.

Although only one flue tunnel was found it is possible that there were originally more than one owing to the size of the proposed kiln. No evidence for the use of a mineral fuel was recorded and it is presumed the kiln was wood-burning.

It is thought that the kiln was sunk into the ground when it was in use. The permanent nature of this kiln may imply that it was enclosed within a building, although no trace of any structure was revealed by excavation.

Kiln 2

Kiln 2, to the south of Kiln 1 (Fig. 2), post-dated the in-filling of Kiln 1; it was badly fragmented and was only partially excavated. It is suggested that it was a circular single-flued kiln

without any permanent supports, that had been dug into the infilled Kiln 1. It had an internal diameter of 1.80 m, with an indication of a flue to the south-east, although its opening was not found within the excavated area. The western side of the kiln chamber survived to a height of 3 brick courses, 0.30 m.

A south-east to north-west orientation is likely for Kiln 2, with the kiln perhaps backing on to the still standing frontage wall of Kiln 1. No evidence was recovered for the nature of its superstructure, whether it was brick built or whether the bricks to the west formed a foundation for a clay-built superstructure.

After this kiln had in turn gone out of use the area was used for dumping wasters.

Discussion

Medieval pottery kiln types have been discussed by Musty (1974, 49–66), and pottery kilns of the post-medieval period may generally be seen as a direct development of this tradition. The seventeenth-century kilns earlier reported from Brill (Farley 1979, 27–52) would fit well into this suggested development. Kiln 2, although only partially excavated in 1977, may be seen as part of this general series of either single or multi-flued circular kilns.

Large rectangular brick-built kilns similar to Kiln 1 have often been associated with the firing of tiles. However, the finds recovered from the vicinity of kiln 1 produced no evidence to show that anything other than pottery was fired in this kiln.

Rectangular brick built pottery kilns are rare from the post-medieval period in Britain. Where kilns of this type have been examined they have been associated with the introduction of the Delft ware industries in the late seventeenth century. Examples have been excavated at Lambeth House, London (Bloice 1971, 99–159). The excavator also drew attention to a number of possible continental parallels known from documentary sources. Another rectangular Delft ware kiln was recorded at Montague Close, Southwark (Hurst 1970, 183–4) and was dated to the late seventeenth or early eighteenth century.

The closest parallel to the form of kiln 1 was found at the Fulham Stoneware pottery site (Christopher *et al.* 1974, 17, fig. 5, also 1977, 2nd impression, 15). The relevant feature, which is illustrated in two photographs, was a subterranean cellar-like structure, with external dimensions of 2.48 m × 2.78 m. A brick-vaulted tunnel with dimensions similar to the flue tunnel of kiln 1 was also recorded. The excavator did not believe this structure to be a kiln owing to the lack of burning, but it must be remembered that little evidence of burning was evident in kiln 1 at Brill. The Fulham structure was backfilled in the last quarter of the seventeenth century, which fits reasonably well with the proposed date of the Brill kiln 1.

In conclusion, it is unusual to find coarse wares fired in a large rectangular kiln at this period. Where rectangular kilns have been found they have been associated with either Delft or Stonewares and have a suggested continental origin.

Dating of the Kilns

Little internal dating evidence was recovered for either of the kilns. A single coin of King James I of England provided a *terminus post quem* of 1612 for kiln 2. Among the waster material was a pottery support made from clay pipe stems; stem-bore measurements on these (see below) yielded a central date of 1722. As noted above, a mug (Fig. 11, no. 6), found in a niche in kiln 1, could be relevant to the date of the kiln's use, although it is uncertain whether it was left by a potter in the stoke pits while kiln 1 was in use, or placed in the kiln after it had gone out of use. Unfortunately it is not possible to offer any closely dated parallels for this particular mug form (see below).

By analogy with the other kilns cited earlier, a date in the late seventeenth or early eighteenth century may be suggested for the large rectangular kiln. However, the other excavated rectangular kilns producing either Delft or Stonewares and there may have been a lapse of time before the technology passed down to the earthenware industry.

Kiln 2 clearly post-dated the disuse and in-

filling of kiln 1, although no indication was found of how long a period elapsed between the operation of the two kilns. Kiln 2 was a fairly insubstantial structure and probably enjoyed only a limited period of use.

Kiln Furniture

Considerable quantities of kiln furniture were derived from the excavation, but it was unfortunately not possible to associate a particular kiln with a distinct set of kiln furniture. The material has been divided into two groups, items manufactured specifically for use within the kiln and other ceramic material which has been put to secondary use for this purpose.

(a) Specially Manufactured Kiln Furniture

(i) Ring Stilts (Fig. 3, 9–10 and Plate II):

No. 9 red fabric, brown/black glaze splash on each prong (F4). No. 10 white fabric, green splash on 2 of 3 prongs (F10).

A total of 11 complete and 32 fragments of ring stilts were recovered. They were carefully manufactured from thrown clay cylinders from which they were cut to form a clay ring. It appears that each stilt was thrown individually rather than a series cut from a single cylinder, as each has a lower surface while the top retained its turning throwing marks. Alternatively each may have been thrown from a single cylinder remodelled for each stilt. On the complete examples each had three prongs which had been made by pinching the clay upwards. This would ensure a stable base on which to sit a glazed pot while having minimum contact with the body of the vessel. They were made from either a fine white clay or a fine brick-red clay.

The stilts recovered bore no indication of the type of vessels that they were used to support. Splashes of green glaze were found on the prongs of a number of stilts with a white fabric, and a brown glaze on those with a red fabric. It was noted that where glaze splashes did occur the stilts had only been used once. It was also noted that the ring stilts formed of white clay, sometimes with a slightly pinkish hue, had green glaze splashes on their prongs which was

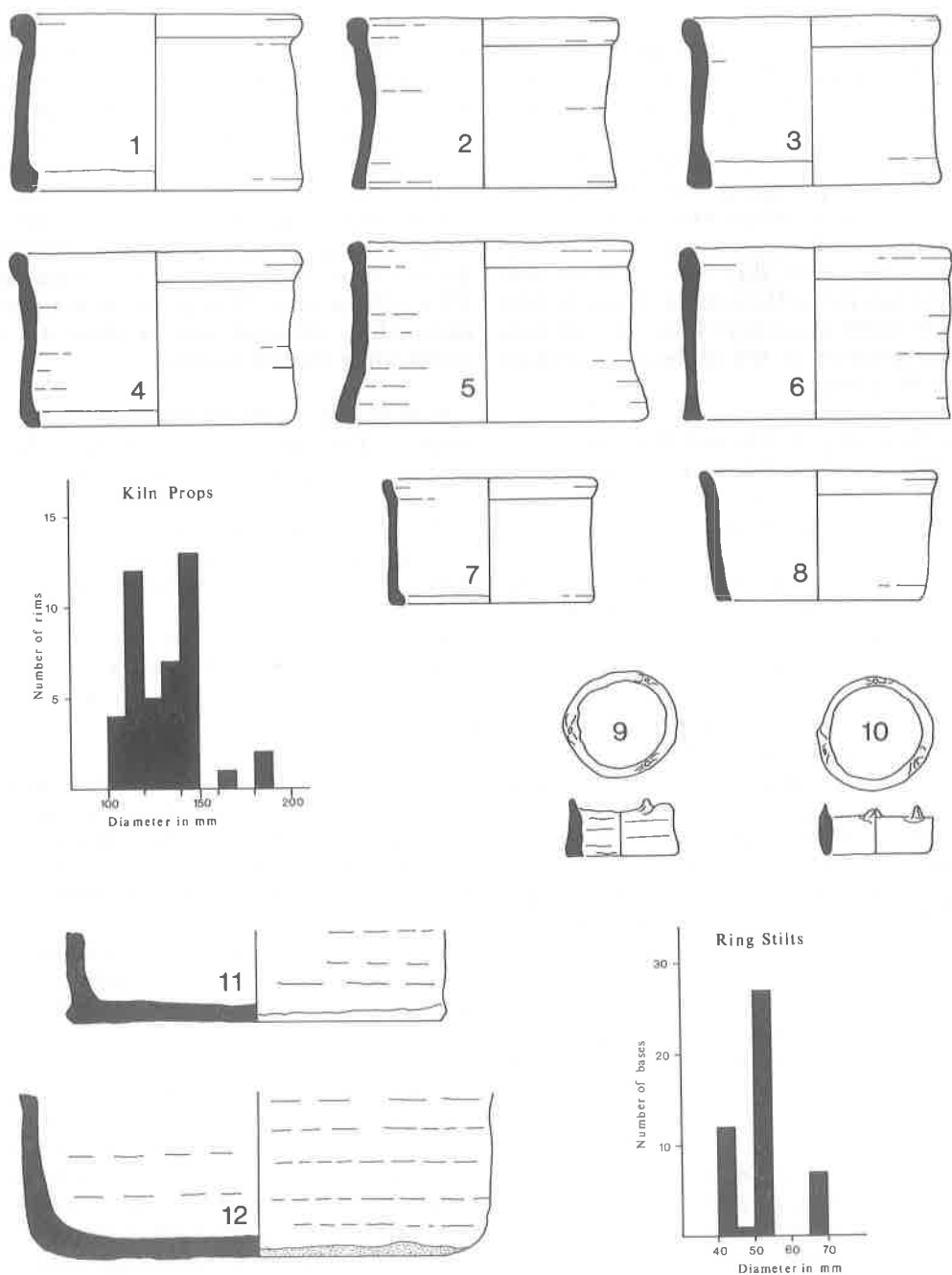


Fig. 3. Kiln Furniture: Kiln props (1-8), ring stilts (9-10), saggars (11-12). (Scale 1:4)

similar to the green wares discussed below. It therefore seems reasonable to suggest that some of them were used in firing of white wares (see also discussion of the clay pipe support below).

Ring stilts of seventeenth-century date are known from Ash, Surrey. These examples, which compare well in size with the Brill types, also display the characteristic pinched vertical prongs (Holling 1969, fig. 7 no. 1). Ring stilts are not known in the Hampshire/Surrey border area from sixteenth-century kilns and are seen as an introduction of the seventeenth century (Holling 1971, 86).

(ii) Kiln Props (Fig. 3, 1–8, and Plate II):

Numbers 1–4, 6 and 8, interior and exterior blackened. No. 5 brick red fabric, exterior slight blackening. No. 7 brick red fabric.

The most enigmatic objects from the site were a quantity of well-made rings, often with rims and flared bases. One complete ring and 62 fragments were found.

The rings appear to have been initially thrown complete with bases, but while the clay was still soft the bases were cut out, knife marks being clearly visible around the inner base of each ring. The rings fell within a relatively narrow diameter range of 11 cm to 15 cm (see Fig. 3), with heights of between 8 cm and 10 cm. They appear to have been subjected to a number of firings. Only a few examples were in a brick-red fabric; the majority had a hard, dark grey to black interior and exterior which is likely to have been the result of repeated firings. Most were glaze-free; where glaze did occur it was only as splashes no larger than a small finger nail.

These rings are interpreted as kiln props. A number of kiln props have been found in medieval contexts, and more have probably gone unrecognised. Brooks and Haggerty (1977, 379–82) illustrate a Scottish group and draw attention to others. To these may be added a fifteenth-century example from Holme-on-Spalding Moor, Yorkshire, in the British Museum, although this is coarser and taller than the Brill props. A single kiln prop was dis-

covered at the Cistercian-ware kiln at Potterton which had a well formed rim and a base (Mayes and Pirie 1966, fig. 8 no. 34). The closest parallel in form and date to the Brill props was found at Potovens (Bartlett *et al.* 1971, fig. 14 no. 15), although in the published drawing the object was restored with a base; it was also coarser and larger than the Brill props. It is suggested that these props were used to support the first layer of pottery loaded into the kiln, to lift it off the floor. The props do not slot into each other, although two or three are quite stable when stacked together.

It is thought unlikely that these rings were saggars. They were very well made whereas saggars are generally coarsely manufactured. Secondly there are only odd glaze splashes on these rings; if they had been saggars, and used in repeated firings as is suggested, more evidence of splashed glaze would be expected.

(iii) Saggars (Fig. 3, no. 11–12):

No. 11 (U/S). No. 12 highly fired to purply colour, base cracked with glaze over the cracks (F1).

Twenty-four fragments of sagger were recovered. All were coarsely made and were highly fired to a purply colour. On a number of fragments were the traces of a finger hole pushed through the wall close to the base.

Only two sherds were found with the characteristic nicked rim previously reported from a late seventeenth-century kiln at Brill (Farley 1979, fig. 9 nos. 1–4).

Saggars were not used in kilns during the medieval period (Musty 1974, 54). They were developed in the post-medieval period in order to protect small fine glazed vessels during firing. The only indication of the type of vessels fired within these saggars was a single impression of a fine glazed rim. Although this gave no firm indication of vessel form, its size suggested it was part of a cup. (For examples of the range of cups produced by the Brill kilns see Fig. 11).

(iv) Pottery Support (Plate III):

This support was roughly circular, 106 mm

in diameter and 16 mm thick. It was coarsely made from a fine white clay with a slight pinkish tinge. Into the clay disc before it was fired were inserted 13 clay pipe stems, one of which had fallen out before firing. The stems pass through the full thickness of the clay base; eleven were arranged in a rough circle with a diameter of about 55 mm, a single stem being placed roughly centrally. The top of the disc was covered with a light to dark green glaze. The cross-sections of the pipes were not covered with glaze, which indicated that they were once taller and had been broken after firing.

The diameters of the 12 stem bores were measured with the cutting end of imperial drill bits as recommended by Davey (1980) and the modified Binford formula, as put forward by Hanson (see Oswald 1975), was used to determine a date for this object. A date of 1722 ± 17 was suggested.

No vessel was found which could be associated with this object, although if the pipes were originally set at varying heights a quite complex and delicate vessel could have been supported. Alternatively each pipe stem may have supported a single very small and delicate object. The fabric and the green glaze was similar to that of the green glazed whitewares discussed below.

A similar object was found at the Longton Hall porcelain factory (Tait and Cherry 1980, fig. 7, no. 16). Glaze also covered the base of this object. It was interpreted as a support for the firing of a number of small porcelain Flowers.

(v) Spacers (Plate IV):

Although no spacers were recovered, indirect evidence for their use was provided by the impression they had left on a number of reused pottery bases, and also on a number of pots. Both white and red clays were used in their manufacture.

On the re-used pot bases the impression indicated straight rilled pieces of clay (see plate 4). Twenty-four complete impressions were measured. They varied in length from

33 mm to 57 mm, the average length being about 42 mm, with a width of about 5 mm.

Evidence for the use of spacers was seen on the pancheons (Fig. 6, nos. 3, 12), and on a jar (Fig. 10, no. 10). On the jar it was observed that the spacer was manufactured from a white firing clay.

(b) *Ceramic Material re-used in the Kiln.*

(i) Tile

Flat roof tiles, with both single and double pegholes, were frequently used as spacers in the kilns. Evidence for their use included glaze splashes on the tile or a glaze coating and a number of tiles had the circular impressions of either pot bases or rims left on their surfaces. On a number of tiles repeated use was indicated by one impression overlying another. Tiny pieces of spalled clay adhered to some of the tiles and pottery sherds adhered to others. The intense heat, to which some of these tiles were subjected, is illustrated by the finding of a brick and a tile fused together.

The use of tile as spacers within kilns has previously been noted in the late seventeenth-century kilns at Brill (Farley 1979, 134).

(ii) Brick

Several fragments of rectangular brick, which had either been used as part of the kiln structure or as furniture, were present. Evidence for their use within the kilns included glazed header ends and, on a number of fragments, pot impressions and glaze splashes.

(iii) Re-used Pottery Bases (Plate IV)

A further group of ceramic material which served as kiln furniture consisted of jar bases. These appear to have been either deliberately selected from wasters or perhaps collected from nearby waster dumps. The diameter of these bases varies from 13.5 cm to 32 cm although the majority are about 22 cm in diameter. All have been trimmed to form discs. These bases shared with the other kiln furniture evidence for use in the kiln, that is glaze splashes and impressions of pots.

A number of sherds were found adhering to these reused pottery bases, including two rim sherds which are illustrated here (Fig. 5, no. 18; Fig. 10, no. 16; see also Plate 4).

It is suggested that the reused pot bases could have been used as an alternative to specially produced clay supports or *bats* (Celoria and Kelly 1973, 12). An example of a manufactured circular clay *bat* was excavated at Newcastle St, Burslem (Kelly 1975, fig. 4, no. 20).

Pottery and Other Finds

Apart from kiln furniture, the finds recovered from the site were mainly pottery. A few pieces of iron and bronze were found, including a coin of King James I of England; none of these have been illustrated, and it is the pottery that is discussed.

No attempt has been made to link a particular group of finds to either kiln, owing to the nature of the recovery. The pottery has been treated as a whole apart from a few clearly intrusive pieces.

The pottery has been classified according to form, and the material had been quantified by a sherd count. Owing to the constricted nature of the excavation, it was felt that quantification by weight would give a misleading idea of the range of forms being produced, and the sample was too small for a minimum vessel equivalent to be used.

The principal aim of the catalogue has been to illustrate all the wasters that were recovered. These are denoted by the suffix (W). Owing to the limitations imposed by space not all the bowl-form wasters have been included. Types that are unusual, commonly occurring or necessary to illustrate the full range of a form have been included.

The Products: a statistical analysis (Fig. 4)

In the discussion below percentages by sherd count are given to the nearest whole number.

A total of 2,483 sherds of pottery were recovered. Of these 73% were unidentified body sherds; the remaining 27% were either rims or

bases, the bulk being rims (Chart A). Redwares predominated, forming 97% of the assemblage. Of the total assemblage 22% bore traces of slip decoration or coating. The unslipped majority, 75%, were generally glazed internally; only occasional sherds, such as those of flower pots and a number of jars, showed no evidence of glazing. A small group of the pottery, 3%, had a white fabric with pinkish tinge, with either a bright green or yellow glaze (Chart B).

The information displayed on Chart C was derived from a rim and base count of the redwares and whitewares. Bowls were the dominant form, representing 54% of the total; of these the wide-mouthed bowls were the most common, 25%. Pancheons may be considered as an extra large type of this form and contributed a further 13%. Flat-bottomed bowls and deep bowls each formed 8% of the total. Jars formed 33% of the total, plates 11%, and cups 2%.

Dating and Discussion of the Pottery

The discovery of these kilns in 1977 was briefly noted as a further example of the post-medieval pottery industry at Brill (Farley 1979, 127). The kiln found in 1975 and discussed in the same paper was attributed to the later seventeenth century, although a date closer to the middle of the century is now proposed. It has been noted (Mellor 1984, 216) that local slipwares were beginning to make their appearance in Oxford by the later seventeenth century and their absence from the Brill kiln would therefore suggest an earlier date for this kiln. A comparison between the assemblages recovered in 1975 and 1977 also suggest a greater lapse in time between their production. Although bowls are common at both kilns, the rims of the 1975 kilns are generally more angular than those of 1977. Important elements of the 1977 kiln material were also absent from the 1975 kilns, including plates and near-vertical sided jars; again this would point to an earlier date for the 1975 kiln. Nor were ring stilts recovered from the 1975 kiln; their introduction to the Hampshire/Surrey border industries took place, it is suggested during the seventeenth century.

Although there was virtually no internal

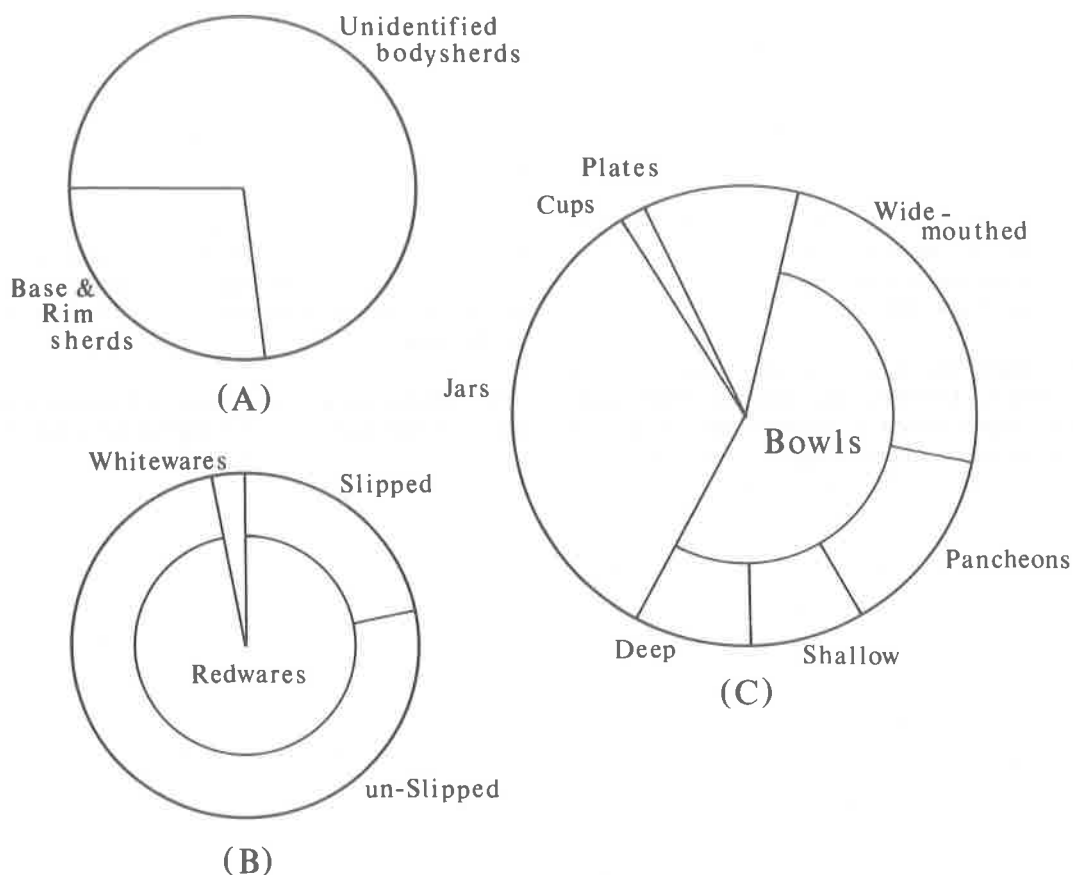


Fig. 4. Statistical analysis of the pottery.

dating for the 1977 group of material apart from that provided by the pottery support, which yielded a date in the early eighteenth century, this date corresponds well with that proposed by the analogy of forms with examples recovered from excavation elsewhere. At Southampton (Platt and Coleman-Smith 1975), bowl catalogue no. 802, p. 117, compares well with Fig. 10, no. 5. An early eighteenth-century date was indicated for these two vessels. A similar jar form was recovered from a cellar at Temple Balsall (Godder 1984, fig. 351, xxvii); the cellar is thought to have been backfilled by 1739.

Comparison may be made with a group of dishes excavated at Aldgate, London, by Thompson *et al.* (1984, 148). Their fig. 22 nos. 62–65 correspond well with the shallow bowls

illustrated here Fig. 7; they dated their group c.1700–1720. A firm date for the mug illustrated in Fig. 11 would be valuable for dating the use of kiln 1. Unfortunately mugs of this form were in use over a long period. Two mugs of similar form and size were found at Albion Square, Hanley (Celoria and Kelly 1973). For their catalogue number no. 100 they proposed a date of c.1700–1730 and for no. 187 a date of c.1730–1775. At another site in Hanley in Old Hall Street a similar mug form was discovered (Greaves and Kelly 1974, cat. no. 63). The assemblage from which this mug derived was dated to 1700–1730. A group of mugs with corrugated sides were recovered from Temple Balsall (Gooder 1984, fig. 16a, 35); this group was presumed to have been deposited prior to 1739. The date of the Brill mug therefore agrees with the date of the assemblage as a whole, but

is of no assistance in providing a more precise date for the operation of Kiln 1.

Oxford was one of the main markets for Brill products throughout the medieval and post-medieval periods and recent publication of excavations have provided general confirmation for the proposed dating presented above. The range of pottery forms in use in Oxfordshire in the eighteenth century is illustrated in Stebbing *et al.* (1980, 32-3).

An important post-medieval sequence from St Ebbe's, Oxford, has recently been published, from which a number of fairly well dated pottery assemblages were recovered (Hassall 1984, 152-276). Local red earthenwares decorated with slip made their appearance in Oxford in the late seventeenth century but did not reach their peak until the middle of the next century. Platters were the most common slipware form, and were probably used for serving food in taverns and inns. It is suggested that the local earthenwares and slipwares suffered a decline on the Oxford market towards the middle of the eighteenth century (Mellor 1984, 217), being pushed out by the superior products of the Staffordshire potteries. If this pattern is repeated on the other urban sites in Oxford and elsewhere, and the Brill potteries were at this time a largely rural market, little refinement of the present chronological sequence is to be expected, since rural sites rarely produce the necessary deep stratification.

Another obvious market for Brill slipwares was Aylesbury, where a number of sherds of slipware have recently been discovered at the Prebendal (pers. comm. M. Farley). Unfortunately no post-medieval pottery was published from the recent extensive excavations in George Street, Aylesbury (Allen and Dalwood 1983, 45). A Brill type slipware bowl from Cuddington in the County Museum provides evidence for rural distribution of Brill's slipwares (Cocroft forthcoming).

That marbled slipware alone was present at Brill contrasts with other seventeenth-century slipware industries. At Potterbury, Northamp-

tonshire, for example, (Mayes 1968, 55-82) designs reminiscent of 'Metropolitan' slipware were common (for examples of Metropolitan slipware see Amis 1968, 28), and a broad range of styles was elsewhere present (Draper 1984, 15-24). A crudely slipped bowl found at Farnham Keep (Moorhouse 1971, fig. 2, no. 27), for which a date of 1642-5 was suggested, may have originated in the hinterland of Oxford. If so, it could represent a precursor of the late seventeenth-century marbled slipwares of this area.

In conclusion it is suggested this assemblage dates to the early to mid eighteenth century, and that markets for the products of the Brill kilns existed in at least Oxford, Aylesbury and the Buckinghamshire countryside.

The Pottery Catalogue

Abbreviations

The following abbreviations have been used in the pottery catalogue:

dia. diameter	ext. external
f/g failed glaze	int. internal
U/S unstratified	W waster

Where information is given in parentheses, e.g. (F2,W,3), F2 refers to the feature number allocated by the excavator (where joining sherds have been used all the feature numbers are given); W indicates that sherds of this type are present as wasters; and the final digit gives the number of sherds of this form present.

Wide-mouthed Bowls (Fig. 5)

All the bowls had a dark brick-red fabric and all the slipped decoration or glazing was internal. No entirely reconstructable form was recovered; the group has been defined on the presumption that the shallow angle of the side would form a relatively narrow basal diameter as compared with the rim. Bowls are also defined by the absence of a sharp break in their profile.

1. Int. light brown glaze (F2,2)
2. Int. over-fired dull glaze (F9,W,2)
3. Int. light brown glaze, sparse green speckles (F2,W,12)
4. Int. f/g (F11,W,6)
5. Int. white slip trailed, over-fired (F3,W,19)

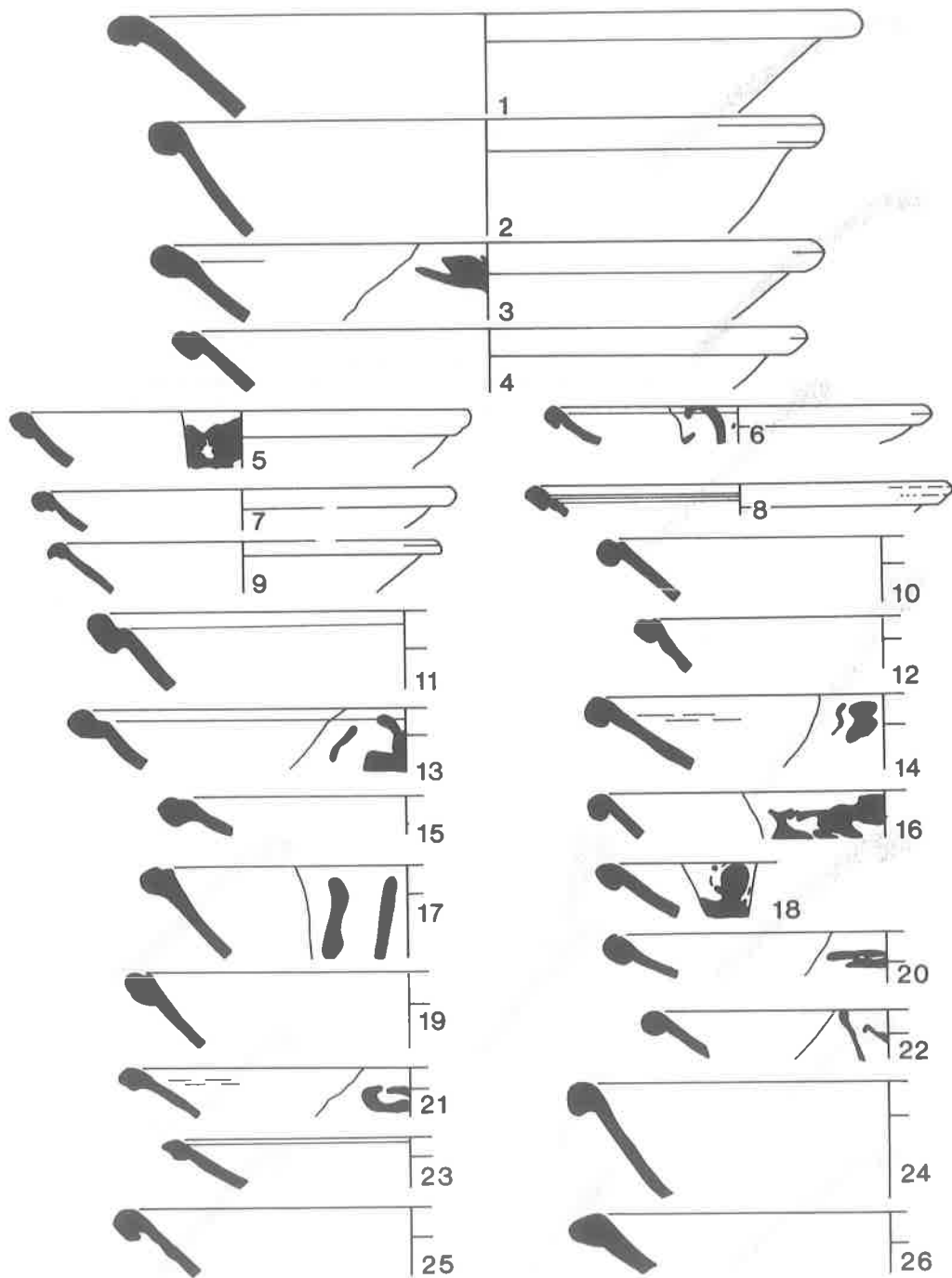


Fig. 5. Wide-mouthed bowls. (Scale 1:4)

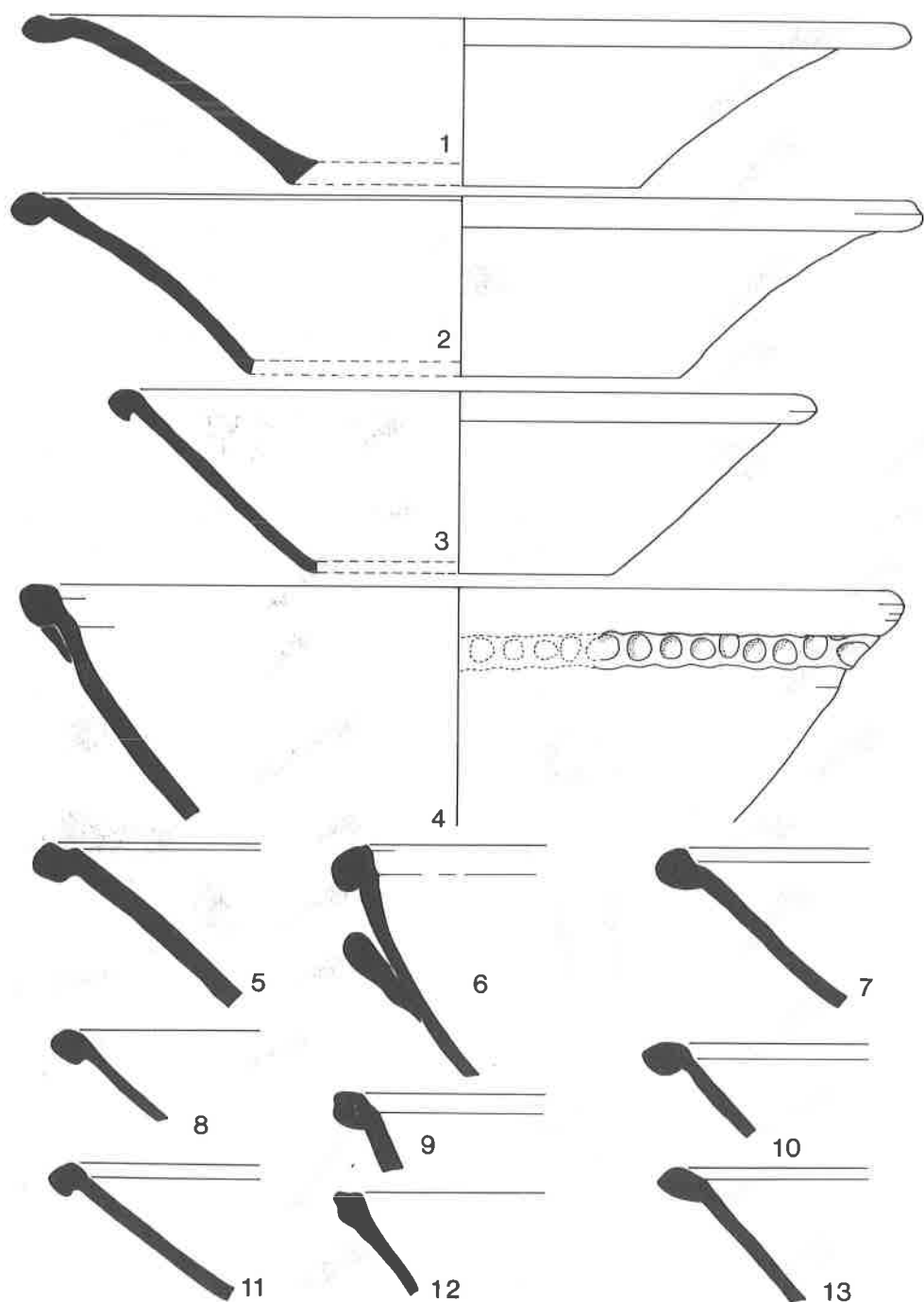


Fig. 6. Pancheons. (Scale 1:4)

6. Int. white slip trailed (F12,W,2)
7. Int. dull glaze (F12,W,1)
8. Int. f/g (F4,W,1)
9. Int. olive green glaze (F9,1)
10. Int. f/g (F9,4)
11. Int. light brown glaze (F3,3)
12. Int. f/g (U/S,W,1)
13. Int. white slip trailed, over-fired (F3,W,19)
14. Int. blurred slip trailing, over-fired (F8,W,8)
15. Int. yellow glaze, over-fired (F3,W,4)
16. Int. white slip trailed, ext. glaze splash over-fired (F5,W,4)
17. Int. mid brown glaze, yellow slip trail (F5,2)
18. Int. white slip trailed, adhered to reused pot base (F9,W,1)
19. Int. f/g (F9,W,2)
20. Int. white slip trail (F3,W,2)
21. Int. white slip trail, dull glaze (F2,W,3)
22. Int. blurred slip trailing (F5,W,1)
23. Int. f/g (F12,W,1)
24. Over-fired (F3,W,4)
25. Int. f/g (F4,W,1)
26. Int. pale yellow/green glaze (U/S,W,3)

Pancheons (Fig. 6)

This group may be considered as a larger version of the wide-mouthed bowls. An arbitrary measurement of rim diameter of 40 cm or above has been used to distinguish this group from smaller wide-mouthed bowls.

All the sherds had a brickly red fabric and were generally evenly fired, although a few did exhibit a greying of the core. Glazing was restricted to their interiors.

1. Int. mid-green glaze on upper third, ext. mid-green glaze splash (F2,7)
2. Int. light brown glaze (F2,W,7)
3. Int. light brown glaze, ext. spacer impression (F2,W,2)
4. Int. light brown glaze, rim formed by folding clay outwards, ext. applied thumbled strip (F3,1)
5. Int. yellow brown/green glaze (F2,25)
6. Int. mid brown glaze, ext. finger impressions around applied handle (F4,2)
7. Int. light brown glaze (F2,17)
8. (F12,W,4)
9. Over-fired (F2,W,2)
10. Int. light brown glaze (F9,W,1)
11. Int. light brown glaze (F2,W,4)
12. Int. light brown glaze, ext. spacer impression (F5,W,2)
13. Int. olive green glaze (F2,W,7)

Shallow Bowls (Fig. 7)

This group has a rim profile at a fairly acute angle; they have wide mouths and basal diameters comparable with the rim. Decoration or glazing is restricted to the interior.

1. Int. olive green glaze, slip trailed yellow and green, ext. knife trimmed base (F18,8)
2. Int. light brown glaze (F9,4)
3. Int. light brown glaze, ext. knife-trimmed base (F11,1)
4. Int. f/g (F11,W,5)
5. Int. clear glaze (F9,W,1)
6. Int. dull olive green glaze, ext. knife trimmed base (f11,2)
7. Int. dull olive green glaze, over-fired (F3,W,2)
8. Ext. knife trimmed base, light brown glaze splash (F3,W,2)
9. Int. mid brown glaze (F3,7)
10. Int. f/g, fire blackened (F11,W,1)
11. Int. olive green glaze (U/S,W,1)
12. Int. f/g, ext. knife-trimmed base (F11,W,2)

Deep Bowls (Fig. 8)

Only one fully reconstructable deep bowl was found. The group has been defined by the presence of a near vertical profile, which it is presumed would have produced a deep bowl in relation to rim diameter.

1. Over-fired (F6,W,1)
2. Int. clear glaze, poorly fired (F8,1)
3. Int. dull f/g, ext. knife-trimmed base (F11,W,2)
4. Int. white slip trail (F10,W,7)
5. Over-fired (F3,W,1) Dia. 19 cm
6. Ext. blackened (F2,W,2) Dia. 16.5 cm
7. Int. white slip trailed, glaze gives yellow trailing, sparse green speckles, (F9,2) Dia. 20.5 cm
8. Int. f/g (F5,2) Dia. 20 cm
9. Int. light brown glaze (F1,3)
10. Dull glaze (F9,W,4) Dia. 18 cm
11. Int. f/g (F2,W,2) Dia. 18 cm
12. Int. f/g, rim folded out leaving hollow core (F12,W,1) Dia. 23.5 cm
13. Int. light brown glazed, distorted (F12,W,2)
14. Int. dull glaze, yellow slip odd green speckles, poorly fired (F4,F5,F12,W,2)
15. Int. light brown glaze, ext. incised fine knife marks (F4,W,1) Dia. 20 cm
16. Int. yellow glaze, over-fired (F15,W,4) Dia. 22 cm
17. Int. dull glaze, blurred slip design (F6,W,2) Dia. 20 cm
18. Int. f/g (F9,W,1) Dia. 32 cm

Plates (Fig. 9)

Plates are distinguished from bowls chiefly by an outward bend of the upper part of the side. Where a complete profile is reconstructable all have a height of less than one fifth of the rim diameter. All the plates were either slip decorated or bore traces of a slip coat internally; the bases were generally knife-trimmed.

1. Int. f/g, poorly fired, ext. knife-trimmed base (F12,W,9)

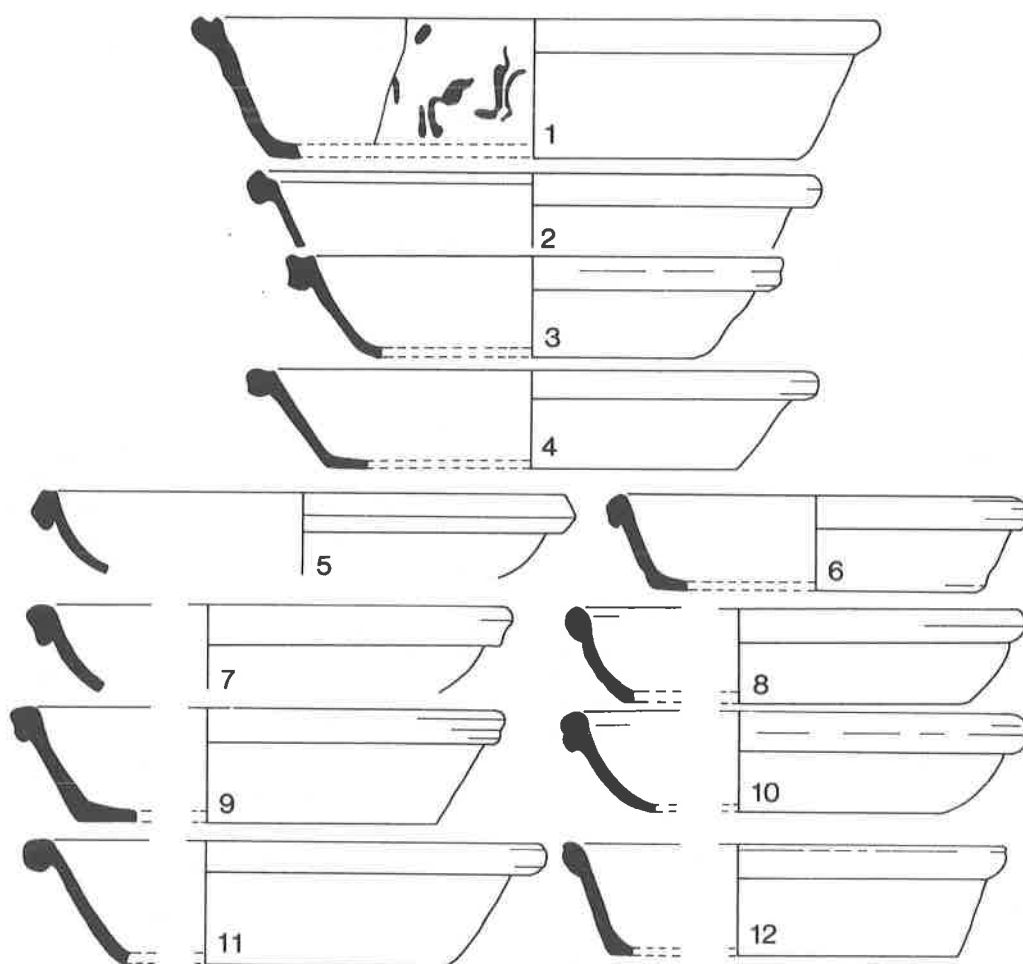


Fig. 7. Shallow bowls. (Scale 1:4)

- | | |
|--|---|
| 2. Int. pale yellow blurred slip trail, some glaze, ext. knife-trimmed base (F5, W, 5) | 17. Int. white slip trail, over-fired, ext. knife-trimmed base (F3, W, 2) |
| 3. Int. f/g (F9, W, 9) | 18. Int. white slip trail, where glazed yellow or green (F3, 3) |
| 4. Int. f/g, ext. knife-trimmed base (F12, W, 1) | |
| 5. Int. white slip trail, ext. knife-trimmed base (f4, W, 1) | |
| 6. Int. light brown glaze, unevenly fired (F4, W, 2) | |
| 7. Int. white slip trail, ext. knife-trimmed base (F4, W, 1) | |
| 8. Int. white slip trail, ext. knife-trimmed base (U/S, W, 1) | |
| 9. Int. white slip trail, ext. knife-trimmed base (F9, W, 8) | |
| 10. Int. f/g, poorly fired, ext. knife-trimmed base (F12, W, 15) | |
| 11. Int. white slip trail, blurred (F5, W, 8) | |
| 12. Int. white slip trail, dull glaze, ext. knife-trimmed base (F11, W, 2) | |
| 13. Int. white slip trail, ext. knife-trimmed base (F5, W, 3) | |
| 14. Int. f/g, poorly fired (F4, W, 1) | |
| 15. Int. f/g (F4, W, 1) | |
| 16. Int. f/g, poorly fired (F12, W, 1) | |

Jars (Fig. 10)

All the jars were made from a brickly red fabric, and most had an internal glaze. They are characterised by a near vertical profile, with a ribbed finger decoration around the shoulders.

1. Int. poorly fired glaze (F2, 4)
2. Int. light brown glaze below rim (F2, W, 26)
3. (F9, 2) Dia. 24 cm

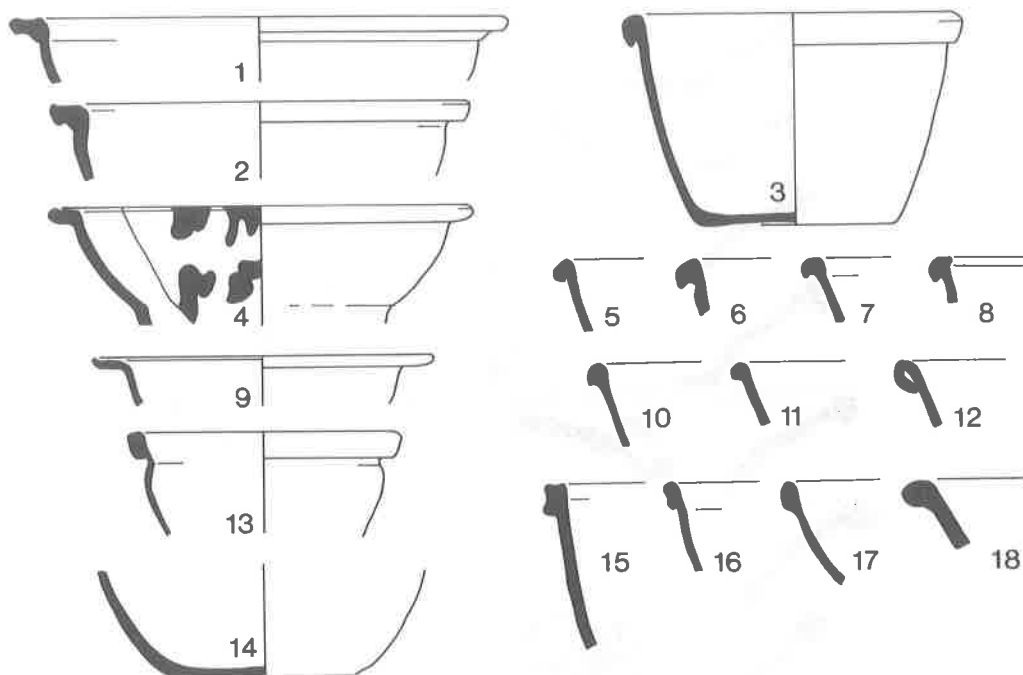


Fig. 8. Deep bowls. (Scale 1:4)

4. Int. light brown glaze (F2,2) Dia. 24 cm
5. Int. light brown glaze (F5,W,10) Dia. 28 cm
6. (F2,41)
7. Over-fired (F5,W,1) Dia. 26 cm
8. (F11,1) Dia. 26 cm
9. Int. mid brown glaze (F4,W,3) Dia. 28 cm
10. Over-fired, ext. 2 impression of white clay spacers on rim (F10,W,1)
11. Int. poorly fired glaze (F12,4) Dia. 24 cm
12. Int. dark brown glaze, glaze on rim also (F12,W,11) Dia. 20.5 cm
13. Int. mid brown glaze (F2,7) Dia. 21 cm
14. (F9,1) Dia. 20.5 cm
15. Int. f/g, (F2,1) Dia. 20 cm
16. Over-fired, adhered to reused pot base (F12,W,1)
17. Int. light brown glaze below rim (F2,W,1) Dia. 30 cm
18. Int. dark green glaze below rim, ext. highly fired (U/S,W,38) Dia. 26 cm
19. Int. mid brown glaze, ext. glaze splash (U/S,W,7) Dia. 29 cm
20. Int. light green glaze below rim (F8,4) Dia. 20 cm
21. Int. olive green glaze, ext. scar of handle (F9,4) Dia. 20 cm
22. Chamber pot. Int. black glaze below rim, ext. ribbed decoration, strap handle applied to rim, slightly distorted (F2,F7,W,1)
23. Int. f/g (F2,W,2)
24. Int. light brown glaze (F4,W,2)
25. Pierced rim, fingered decoration (F11,1)
26. Pierced rim, over-fired, ext. glaze splash (F9,W,1)

Cups/Mugs (Fig. 11)

Nos. 5, 8, 9 which are tyg forms of seveneenth-century date are presumed to be residual to this assemblage of pottery.

1. Int. & ext. dull black glaze, ext. shallow ribbed decoration (F11,1)
2. Int. & ext. dull black glaze, handle applied to shoulder single finger impression at base (F11,3)
3. Large mug/handle pot, int. light brown glaze, ext. glaze splashed, handle applied to rim single finger impression at base (F4,W,1)
4. Brick red oxidised fabric unglazed (F12,1)
5. Int. & ext. light brown glaze (U/S,W,1)
6. Complete vessel found in niche of kiln 1. Int. & ext. dark brown glaze, highly fired purple fabric, ext. handle applied to shoulder of mug, single finger impression at base of handle, slightly distorted, int. volume 550 ml (F17,1)
7. Brick red oxidised fabric, slight blackening of surface (F12,1)
8. Int. & ext. black glaze (F4,2)
9. Int. & ext. olive green glaze (U/S,1)
10. Int. & ext. dark brown glaze (F1,1)

White Wares (Fig. 12)

This group of vessels is distinguished by a white fabric with a pinkish tinge. The majority

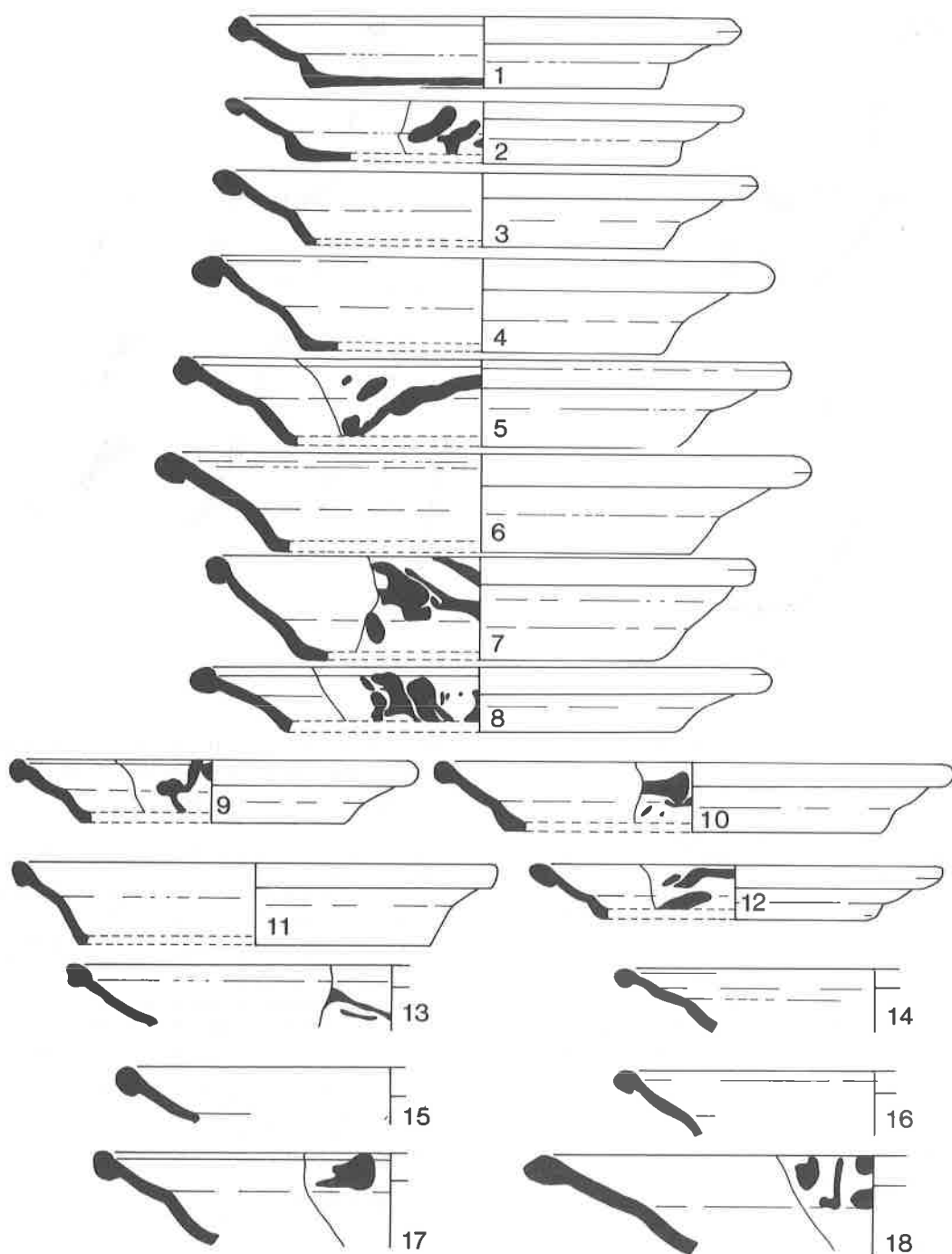


Fig. 9. Plates. (Scale 1:4)

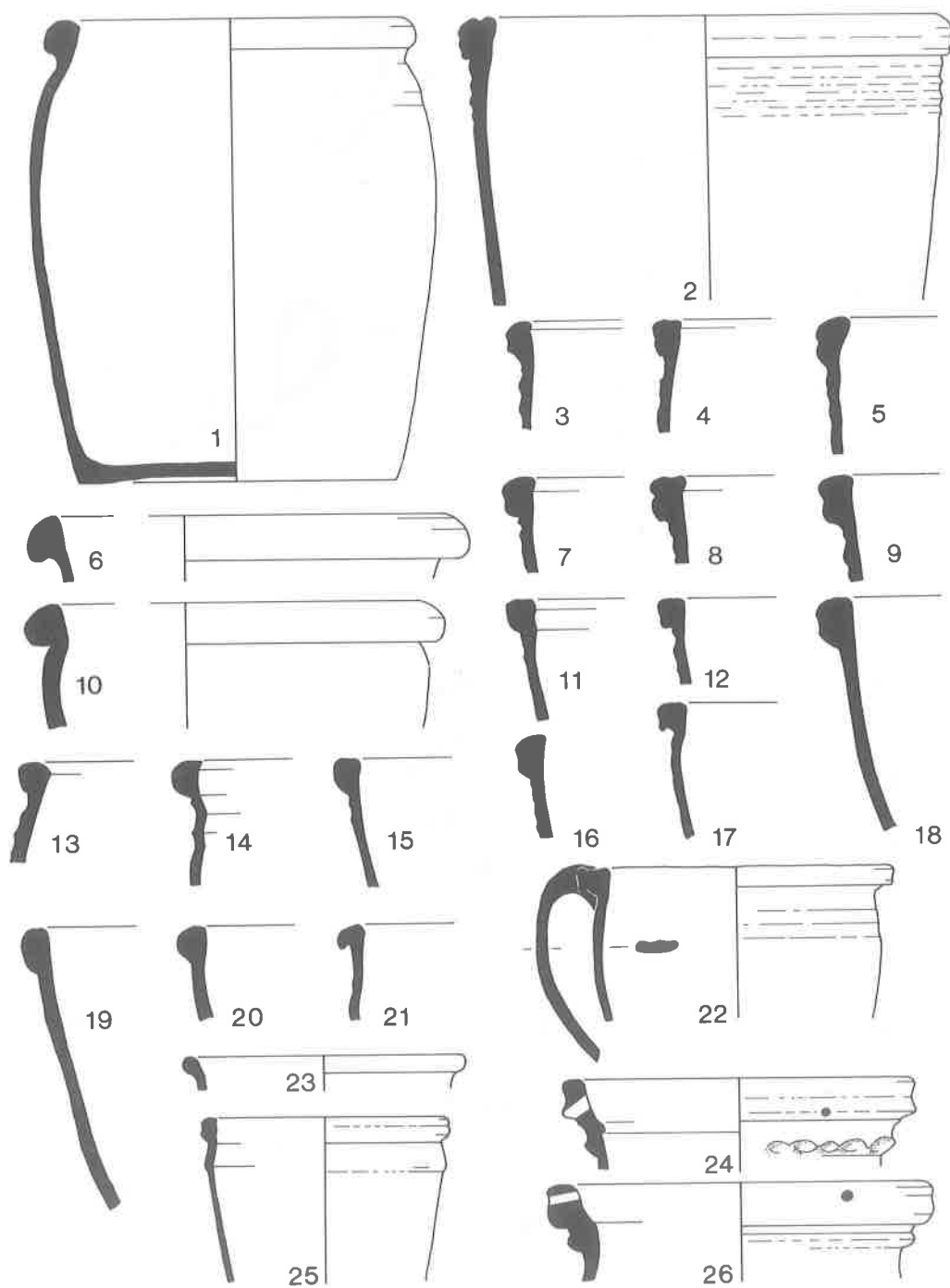


Fig. 10. Jars. (Scale 1:4)

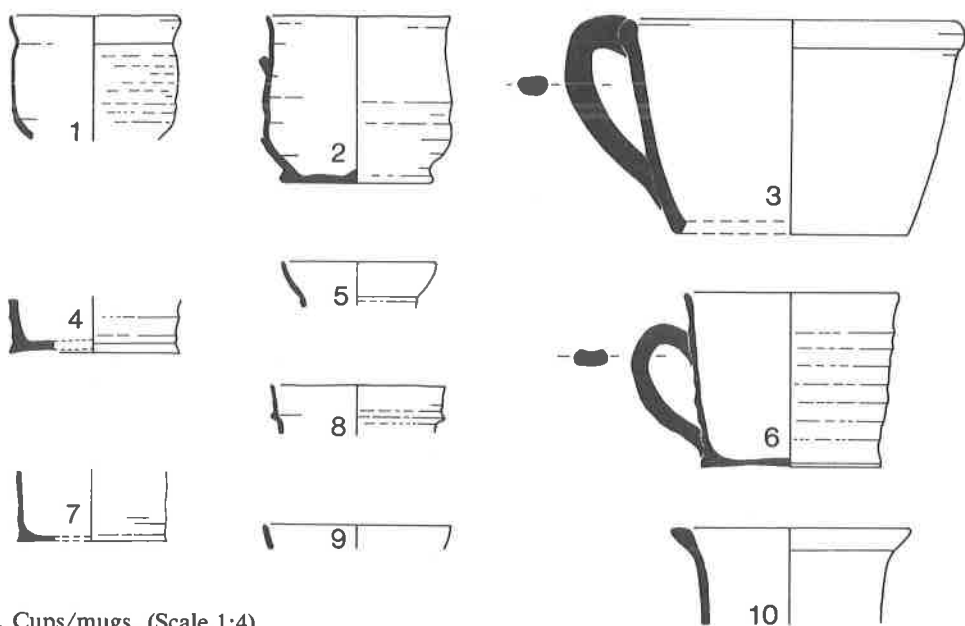


Fig. 11. Cups/mugs. (Scale 1:4)

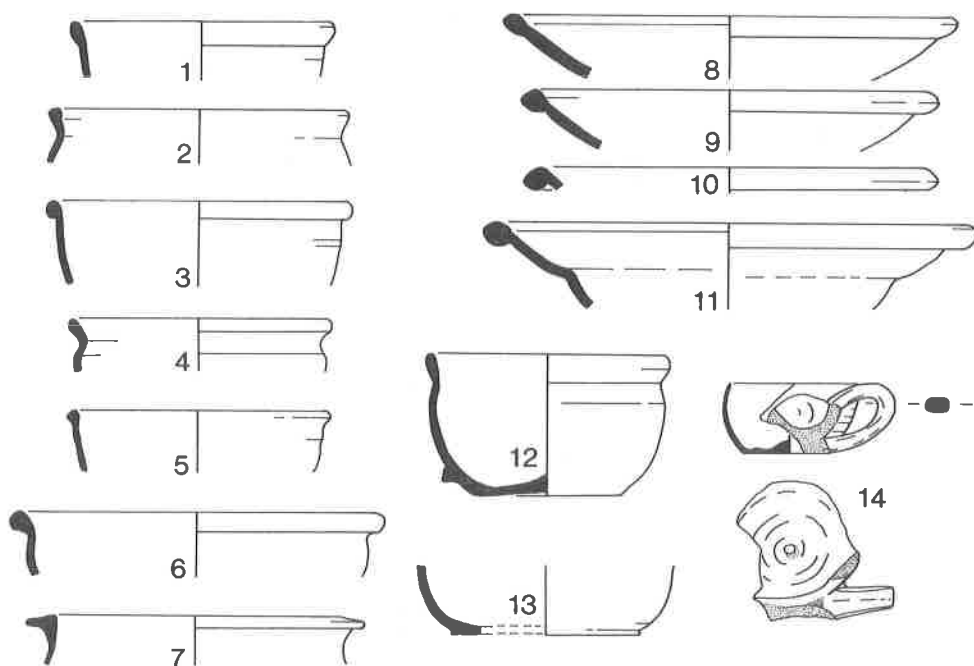


Fig. 12. White wares: deep bowls (1-7), wide-mouthed bowls (8-10), plate (11), cups (12-13), condiment dish (14). (Scale 1:4)

had a bright green glaze, the remainder a yellow glaze. It is unclear whether the yellow glaze was deliberately intended or was the result of maverick conditions within the kiln during firing. It was observed on one waster that the green glaze merged into yellow.

White wares have not previously been recognised as a product of the Brill area. Although they only comprised 3% of the total sherds recovered, a variety of forms were present. Further examples were discovered by contractors digging house footings to the south of the 1983 kiln (see Yeoman forthcoming). Associated with the white wares were a number of ring stilts, formed of a white fabric with green glaze splashes, but not vessels were recovered with ring stilt marks.

The only internal dating evidence for the white wares was provided by the pottery support previously discussed, also in white fabric, which suggested a date in the early eighteenth century.

White-ware industries are well known from the Hampshire/Surrey border (see Holling 1971, 57-88), beginning in the medieval period and continuing into the nineteenth century. Paul Woodfield has recently reassessed the white-ware industries in operation to the north of Brill (Woodfield 1984). These wares have been termed Midland Yellow wares, although they are now recognised as not being exclusively Midlands in extent. An origin in the sixteenth century is proposed for the Midland Yellow wares, with a decline in the early eighteenth century; the best fixed point for their demise is a date of 1725 produced by excavations in Coventry.

A centre producing post-medieval white ware has been recognised about 30 miles to the south east of Brill at Potter Row, Great Missenden (BCMAG 1978, 586-96). The sherds recovered by fieldwalking were attributed to the early seventeenth century, although the possibility that the kiln had a longer life was noted. Some similarity in bowl forms between Potter Row and Brill was observed. Ring stilts were also used at Potter Row, but they were of a far

cruder form than those from Brill. The presence of pipkins at Potter Row and of cup forms at Brill tends to confirm production at opposite ends of the seventeenth century. There is also the suggestion that white wares may have been produced at Potter Row during the fourteenth/fifteenth centuries. (Ashworth 1983, 153-9).

White wares have been recovered from excavations in Oxford. Mellor (1984, fiche III A2) notes the *floruit* of white wares here to be the second half of the seventeenth century.

In conclusion, the white-ware sherds, including wasters, recovered from the excavation point to the existence of an unsuspected white-ware kiln in operation in the Brill area. It is suggested in view of the small number of sherds found that white wares were a relatively minor element in the production of the Brill area and that they may have been in decline by the first quarter of the eighteenth century.

I am grateful to A. G. Vince for providing the following observation on thin sections of four samples of green glazed white-ware from the site:

These all have the same fabric, characterised by abundant angular to subangular quartz 0.2 mm across. Sparse red iron ore (up to 0.05 mm) and white mica (up to 0.1 mm) were present in all sections while single fragments of red iron ore, 1 mm across, and red sandstone 2 mm across, were seen.

1. Deep bowl, int. yellow glaze which runs over rim (F6,W,1)
2. Deep bowl, int. green glaze, ext odd yellow glaze splash (F4,W,1)
3. Deep bowl, int. green glaze (F3,W,1)
4. Deep bowl, int. green glaze, ext. yellow glaze splash, spacer impression (F12,W,2)
5. Deep bowl, int. green glaze (F2,1)
6. Deep bowl, int. yellow glaze (U/S,1)
7. Deep bowl, int. & ext. green glaze (F2,2)
8. Deep wide mouthed bowl, int. dull green glaze (F4,W,1)
9. Wide-mouthed bowl, int. green glaze (F2,1)
10. Wide-mouthed bowl? int. green glaze (F2,7)
11. Plate, int. dull green glaze (F4,W,1)
12. Cup, int. green glaze (F4,W,5)
13. Cup, int. green glaze (F4,W,2)
14. Condiment dish, int. & ext. yellow glaze (F12,W,1)

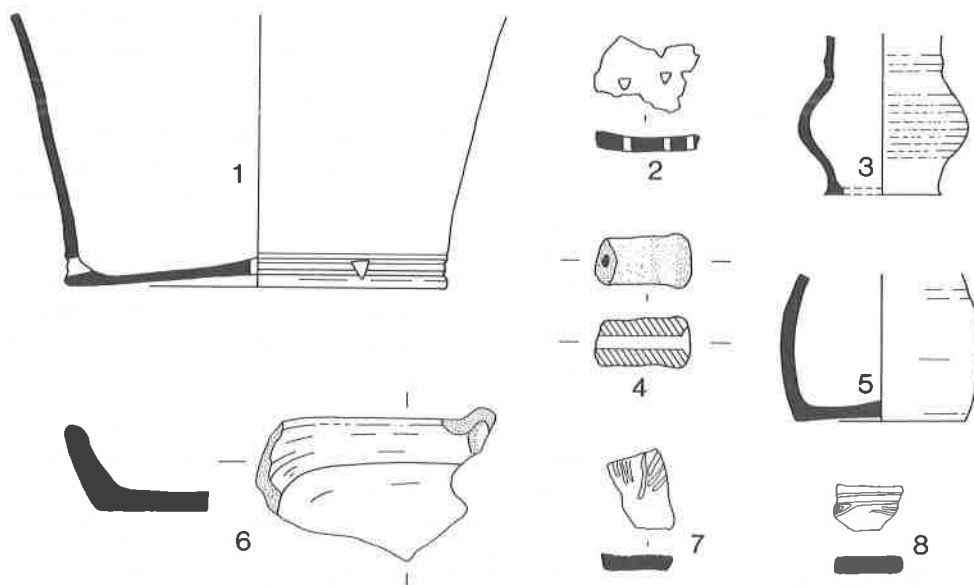


Fig. 13. Miscellaneous: flower pot (1), colander (2), cup (3), spout/handle (4), bottle (5), dripping dish (6), sherds with incised decoration (7-8). (Scale 1:4).

Miscellaneous (Fig. 13)

1. Flower pot, triangular holes pierced through side of pot close to base, single triangular hole through centre of base (F3,6)
2. Colander, int. clear glaze (U/S,1)
3. Cup, int. & ext. olive green glaze, residual, late sixteenth/seventeenth century (F1,W,1)
4. Spout/handle (F11,3)
5. Bottle, ext. light green glaze on upper part (F11,1)
6. Dripping dish, int. dull glaze, ext. knife-trimmed base (F3,1)
7. Sherd with incised decoration, white slip over decorated side (F10,1)
8. Sherd with incised decoration, white slip over decorated side (F1,1)

Coinage

A single coin was recovered from the excavations, a farthing of King James I of England (1603-25), of Lennox type (i.e. post-1613), and was kindly identified by Mr George Lamb of Buckinghamshire County Museum.

Acknowledgements

This report was produced as a project during the Oxford University Department of External Studies/Historic Buildings and Monuments Commission In-Service Training Scheme, while based at Buckingham County Museum Aylesbury. In particular I would like to thank Michael Farley for making the site records available and for his help and encouragement throughout. I would also like to thank Barbara Hurman and Maureen Mellor for their helpful advice. In addition I offer my thanks to Mr Prosser for allowing the excavations to take place and to the County Museum Archaeological Group for their help on the excavation. Finally I acknowledge the use of the original records produced by the excavator of the site, Peter Lock, the site plan and elevation in (Fig. 2) being copied directly from his site notes. All the photographs were taken by the author except for Plate 1 taken by M. Farley.

BIBLIOGRAPHY

- Allen, D. and Dalwood, C. H. 1983. 'Iron Age Occupation, A Middle Saxon Cemetery and Twelfth to Nineteenth Century Urban Occupation: Excavations in George Street', Aylesbury, 1981 *Recs. Bucks* 25, 1-60.
- Amis, P. 1968. 'Some domestic vessels of Southern



Plate I. Brill. Kiln 1 viewed from the north.



Plate II. Brill. Kiln props and ring stilts.



Plate III. Brill. Pottery support made from clay pipe stems.

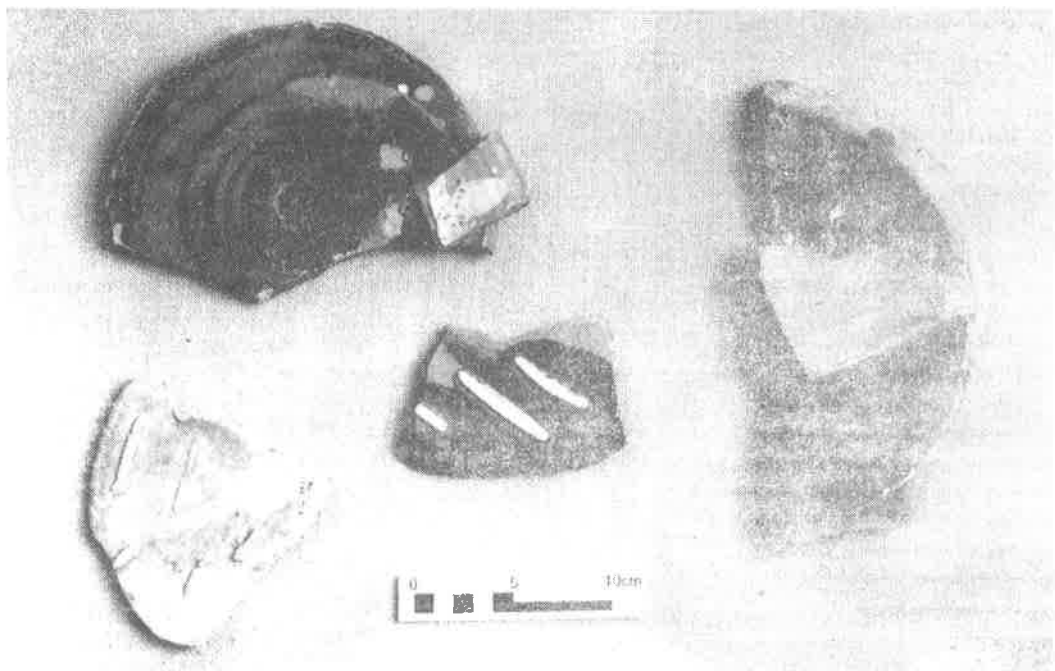


Plate IV. Brill. Pot bases reused as spacers; note sherds adhering to bases (upper), and impressions left by spacers (lower).

- Britain: a social and technical analysis', *J. Ceram. Hist.* 2.
- Ashworth, H. 1983. 'Evidence for a Medieval Pottery Industry at Potter Row, Great Missenden, Buckinghamshire' *Recs. Bucks* 25, 153-9.
- Bartlett, K. J., Brears, D. C. D., Moorhouse, S. 1971. 'Excavations at Potovens near Wakefield 1968', *Post-Medieval Archaeol.* 5, 1-34.
- Bloice, B. J. 1971. 'Norfolk House, Lambeth. Excavations at Delft Ware Kiln Site 1968', *Post-Medieval Archaeol.* 5, 99-159.
- Brears, D. C. D. 1971. *The English Country Potter*, Newton Abbot.
- Brooks, C. N. and Haggarty, G. R. 1977. 'Notes on Scottish Medieval Kiln Furniture from Rattray, Aberdeenshire', *Proc. Soc. Antiq. Scot.*, 379-82.
- BCMAG (Buckinghamshire County Museum Archaeological Group) 1978. 'A Seventeenth Century Pottery at Potter Row, Great Missenden, Buckinghamshire', *Recs. Bucks* 20, 586-96.
- Celoria, F. S. C. and Kelly, J. H. 1973. *A Post-Medieval Pottery Site with a Kiln Base found off Albion Square, Hanley, Stoke-on-Trent Staffordshire, England*, SJ885474, Stafford.
- Christopher, V. R., Haselgrove, D. C., Pearcey, O. H. J. 1974. *The Fulham Pottery* - a preliminary account, London.
- Christopher, V. R., Haselgrove, D. C., Pearcey, O. H. J. 1977. *The Fulham Pottery* - a preliminary account, London.
- Cocroft, W. D. forthcoming. 'A Post-Medieval Slipware Bowl from Cuddington, Buckinghamshire', *Recs. Bucks*.
- Davey, P. J. 1980? *Guidelines for the Processing and Publication of Clay Pipes from Excavations*, Liverpool.
- Draper, J. 1984. *Post-Medieval Pottery, 1650-1800*, Aylesbury.
- Farley, M. 1979. 'Pottery and Pottery Kilns of the Post-Medieval Period at Brill', *Post-Medieval Archaeol.* 13, 127-52.
- Gooder, E. 1984. 'The Finds from the Cellar of the Old Hall Temple, Balsall, Warwickshire', *Post-Medieval Archaeol.* 18, 149-250.
- Hassall, T. G., Halpin, C. E., Mellor, M. 1984. 'Excavations in St. Ebbe's, Oxford, 1967-76: Part II: Post-Medieval Domestic Tenements and the Post-Dissolution Site of the Grey Friars', *Oxoniensia*, XLIX, 153-276.
- Holling, F. W. 1969. 'Seventeenth Century Pottery from Ash, Surrey', *Post-Medieval Archaeol.* 3, 1830.
- Holling, F. W. 1971. 'A preliminary note on the pottery industry of the Hampshire-Surrey borders', *Surrey Archaeol. Coll.* LXVIII, 57-88.
- Hurst, D. G. 1970. 'Industrial Sites in Post-Medieval Britain in 1969', *Post-Medieval Archaeol.* 4, 183-4.
- Ivens, R. J. 1982. 'Medieval Pottery from the 1978 Excavations at Temple Farm, Brill', *Recs. Bucks* 24, 144-70.
- Joep, E. M. 1954. 'Medieval Pottery Kilns at Brill', *Recs. Bucks* 16, 39-42.
- Kelley, J. H. and Greaves, S. J. 1974. *The Excavation of a kiln base in Old Hall Street, Hanley, Stoke-on-Trent, Staffordshire*, SJ 885 475, Stafford.
- Kelley, J. H. 1975. *Post Medieval Pottery From Newcastle St. Burslem, Stoke-on-Trent* SJ867498, Stafford.
- Mayes, D. and Pirie, E. J. E. 1966. 'A Cistercian Ware Kiln of the Early Sixteenth Century Pottery at Potterton, Yorkshire', *Antiq. J.* XLVI, 255-76.
- Mayes, P. 1968. 'A 17th Century Kiln Site at Potterspury, Northamptonshire', *Post-Medieval Archaeol.* 2, 55-82.
- Mellor, M. 1984. Pottery, 211-18 in Hassall, T. G., Halpin, C. E., Mellor, M. 'Excavations in St. Ebbe's, Oxford, 1967-76: Part II: Post-Medieval Domestic Tenements and the Post-Dissolution Site of Grey Friars', *Oxoniensia* XLIX, 153-276.
- Moorhouse, S. 1971. 'Two Late and Post-Medieval Pottery Groups from Farnham Castle, Surrey', *Surrey Archaeol. Coll.* LXVIII, 39-56.
- Musty, J. 1974. 'Medieval Pottery Kilns', in Evison, V. I., Hodges, H., Hurst, J. G. (eds), *Medieval Pottery from Excavations*, 49-66.
- Oswald, A. 1975. *Clay Pipes for the Archaeologist*, Oxford.
- Platt, C. and Coleman-Smith, R. 1975. *Excavations in Medieval Southampton* 2, Leicester.
- Stebbing, N., Rhodes, J., Mellors, M. 1980. *Oxfordshire Potters*, Abingdon.
- Tait, H., Cherry, J. 1980. 'Excavations at the Langton Hall, Porcelain Factory' *Post-Medieval Archaeol.* 14, 1-21.
- Thompson, A., Grew, F., Schofield, J. 1984. 'Excavations at Aldgate, 1974', *Post-Medieval Archaeol.* 18, 1-148.
- Yeoman, P. A. forthcoming. 'The excavation of an Early Post-Medieval Kiln Site at Temple Street, 1983', *Recs. Bucks*.
- Woodfield, P. 1984. 'Recent Researches on Midland Yellow', *West Midlands Pottery Research Group Newsletter* 2, Coventry.