

A Preliminary Note on the Pottery Industry of the Hampshire-Surrey Borders

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SUMMARY

This account summarises what is known at present of the extensive pottery industry which is now recognised as having existed from medieval times until comparatively recently in the area of the Hampshire-Surrey borders, especially to the north-east of Farnham, and which was characterised before the eighteenth century by the production of white ware, frequently termed Surrey ware. It also includes observations and tentative conclusions about the economic sources, growth, and geographical extent of this industry, and about the distribution, character, development and dating of the products themselves, with a note on the excavated kilns. A number of the points made have already been briefly covered by the writer elsewhere.¹

THE EIGHTEENTH-NINETEENTH CENTURY POTTERIES

The existence of comparatively recent potteries in the area of the map (Fig. 1) is still a matter of common knowledge to many local residents, and in a few instances is supported by names such as The Old Pottery and Potters' Pool in Mytchett (parish of Frimley), the Potters' Arms public house in Cove, and Claycart Road, Aldershot. The eighteenth-nineteenth century potteries shown in Fig. 1 have with one exception been located from tithe maps of about 1840, or the first edition of the Ordnance Survey 1 inch map of Surrey, published in 1816. They are listed below with the source of information:

<i>Map Reference</i>	<i>Parish</i>	<i>Remarks</i>
SU 872504 } SU 873503 } SU 878501 }	Aldershot	On tithe map.
SU 904509	Ash	O.S. 1st edn. (now York House, Harper's Road)
SU 861555 } SU 862556 } SU 855558 }	Cove	On tithe map.
SU 876564	Farnborough	On tithe map. William Smith's pottery, associated with Street Farm.
SU 890566	Frimley	O.S. 1st edn.

Map Reference	Parish	Remarks
SU 887555	Frimley	Mytchett: house called The Old Pottery. On O.S. 1st edn.
SU 943555	Pirbright	On Rocque's map of Surrey, about 1760. (There was also a nineteenth-century pottery, probably not on the same site.)

There were other potteries outside the area of the map at Brookwood, Frensham and Wrecclesham in Surrey and at Crondall and Church Crookham in Hampshire. Of all these, the only pottery now extant is the one at Wrecclesham.

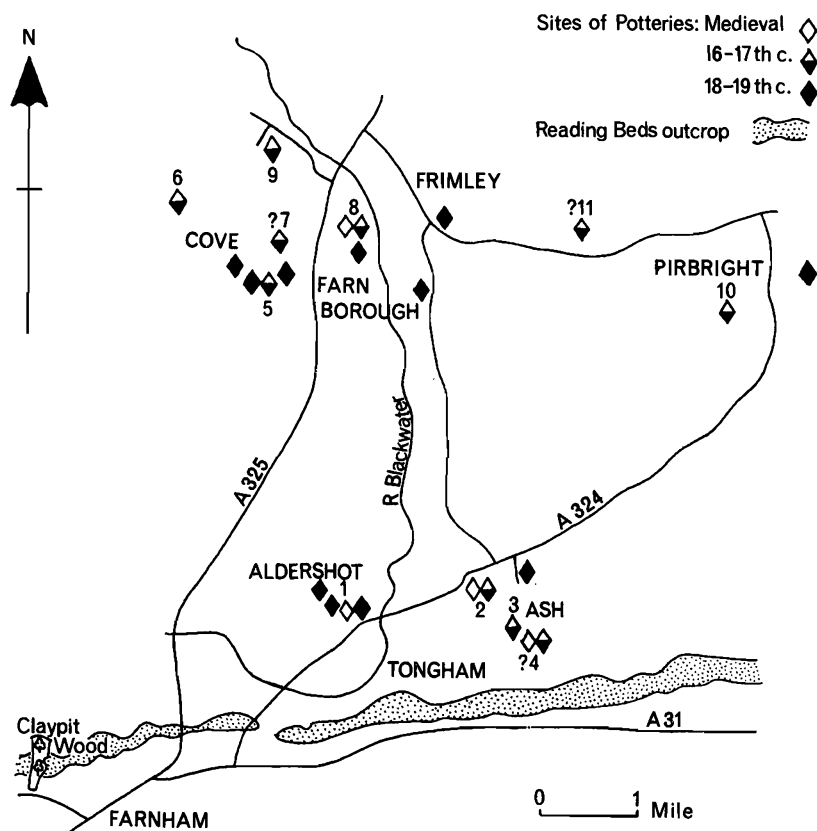


Fig.1. Potteries of the Hampshire-Surrey border in the area north-east of Farnham.

A most valuable source of information on the nineteenth-century industry is a book by George Sturt written under the name of George Bourne.² Sturt was the grandson of William Smith, who owned the pottery at Farnborough from 1809 until his death in 1858. He was succeeded by his son who finally gave up about 1875, after which the pottery was demolished. It was adjacent to Street Farm (now known as the Old Farm) at Farnborough Street, where Smith lived. Sturt gives details of the way in which the local potteries operated, especially concerning their sources of clay and fuel and the disposal of their wares, and it is clear that many more potteries must have existed than are traceable on the maps. He mentions that there were thirteen kilns in Cove alone, although only three are shown on the tithe map. These maps are not infallible, for Smith's own pottery is not mentioned in the Farnborough tithe award, nor marked as such on the map, but his kiln is unmistakably shown as a circular structure occupying the centre of a rectangular building. Had the kiln been smaller, or the building wide enough to enclose it completely, it is obvious that there would have been no sign of it on the map.

THE EARLIER POTTERIES

Several of the nineteenth-century potteries went back to the eighteenth century, including Smith's own pottery which he took over as a going concern, but Sturt gives only two clues to the existence of still earlier potteries. He refers to the discovery of sherds of white ware beneath the Farnborough kiln house when it was demolished, and to other finds of white sherds when the Alma public house was being built in the later nineteenth century. When the site of the Alma was being redeveloped in 1967, Sturt's remarks gained added importance by enabling it to be confirmed as the site of a seventeenth-century pottery. The ware made by the eighteenth and nineteenth-century potters was entirely red, and the significance of white ware is discussed later.

Only two other unspecific clues to early potteries might be said to exist as a matter of generally accessible information. The first is a well-publicised letter of 1594 referring to the source of white clay in Farnham Park from which green-glazed drinking vessels were made for the 'gentlemen of the Temple' during the sixteenth century. This letter, first published in 1835 and fully discussed by Bernard Rackham in 1952,³ gave rise to the name of Farnham ware for the sixteenth-century green-glazed white ware frequently found in London and otherwise known as Tudor Green. It has perhaps drawn attention away from the area in which the early potteries have actually been found, in the expectation that the manufacturing centre for this ware would have been Farnham or its near surroundings.

The other reference relates to the carting of pottery from Farnborough to the royal stews or bath-house at Windsor in 1391,⁴ but this left the identification of the correct Farnborough uncertain (there are three, in Hampshire,

Berkshire, and Kent) until the discovery of the Farnborough Hill site in 1967.

The original stimulus to investigation of this industry came from two coincident events in 1965, when finds of pottery in Ash were brought to Guildford Museum immediately before the Ministry of Works enquired of the museum whether any pottery site at Ash was known. This enquiry stemmed from a published calendar of Surrey wills which included the will of a potter of Ash proved in 1605;⁵ its purpose was to test the possibility that some of the post-medieval white ware frequently found in London might have been made in Surrey as a continuation of the already well-known medieval industry at Cheam, from which the general name of Surrey ware was given to similar medieval pottery with an off-white, buff, or cream surface. The Ash finds confirmed that possibility, and drew attention at Guildford Museum to the importance of tracing further sites, since the London market obviously absorbed the products of many different potteries making similar wares. Up to the time of writing, the investigation of documentary sources and other enquiries, together with finds and information contributed by various people, has resulted in the following list of known or potential sites which are also shown in Fig. 1.

<i>Site No.</i>	<i>Map Ref.</i>	<i>Parish</i>	<i>Remarks</i>
1	SU 878501	Aldershot	Finds in garden of 131, Newport Road reported by Mr C. G. Thomas in 1966. Large buff sherds from cooking pots with vertical thumbled strips and jugs decorated with vertical incised lines. Early fourteenth-century. No positive wasters but disposition suggested outskirts of kiln dump.
2	SU 895505	Ash	Finds given by Mr C. Deacon from site of demolished sixteenth-seventeenth century cottage, The Lime (replaced by Lime Terrace), and also from adjacent land, 1965-6, including kiln furniture and wasters. Thirteenth-fifteenth century ⁶ and mid to late seventeenth-century. ⁷
3	SU 903501	Ash	Finds in garden of Ash Leigh reported by Mr C. Leigh in 1969. Investigation of very small area produced many sherds including

<i>Site No.</i>	<i>Map Ref.</i>	<i>Parish</i>	<i>Remarks</i>
4	SU 908498	Ash	wasters of late sixteenth-early seventeenth-century date. Large scatter of sherds in field reported by Mr C. J. Sage in 1969. Two visits produced many thirteenth-seventeenth century sherds though only one certain waster (post-medieval), but number and variety excessive for domestic site. Medieval ware pink or brownish but some later ware white. A potential site.
5	SU 859555	Cove	Site of the Alma public house redeveloped in 1967. Many sherds including wasters in gardens of new houses. Mid to later-seventeenth century.
6	SU 846569	Cove	Site revealed by ditch of M3 motorway reported by Mr R. G. Thomas in 1969. Working floors cut by ditch with many wasters and signs of occupation in adjacent field. Late sixteenth-earlier seventeenth century.
7	SU 862560	Cove	Large dump of waste pottery in garden of a house in Romayne Close, reported by Mr R. G. Thomas in 1969. Sherds shown to the writer were mid to later seventeenth-century.
8	SU 875566	Farnborough	Site in grounds of Farnborough Hill Convent revealed by fallen tree in 1967. Excavations in 1968-70 and continuing by Farnborough and District Local History Society directed by Mr J. H. Ashdown and the writer have so far located mainly late sixteenth-century working, with three kilns. Fifteenth century and perhaps earlier pottery on site in large quantities, also seventeenth-century.
9	SU 861581	Hawley	Finds at Ye Olde Malthouse, Chapel Lane, reported by Mr and

<i>Site No.</i>	<i>Map Ref.</i>	<i>Parish</i>	<i>Remarks</i>
10	SU 946544	Pirbright	Mrs D. J. Low. Excavations in 1967 under dining room floor revealed part of kiln. ⁸ Prolific site probably about second quarter seventeenth-century. Stanford Farm, now a private house. Site located 1966 from documentary sources: a lease to John Watts, potter, of Ash, 1665. Many wasters. Mid to later seventeenth-century.
11	SU 915566	Pirbright	Many sherds given to Guildford Museum in late 1970-1 by Mr G. C. B. Poulter and others from site not yet investigated but producing much sixteenth-century material and supported by vicinity of Pottage Hill on O.S. 1-inch map of 1816 (now Porridgepot Hill).

Documentary Evidence

Comparatively little has been discovered so far relating to the foregoing sites, largely due to lack of time for investigating possible sources, of which many are in the Hampshire Record Office. A search of parish registers and other documents for information regarding potters in Ash and Pirbright produced a number of names, as recorded in the paper previously referred to, but nothing connecting them with any of the sites except for the lease of Stanford Farm at Pirbright, which has already been mentioned.

The only known reference to a Hawley potter is the will of Richard Trigg, proved in 1655/6, which is in the Public Record Office.⁹ Unfortunately, this will contains no helpful information. The will of John Rogers alias Marnier, a potter, proved in 1648,¹⁰ only mentions property in Cove and Yateley, but he is described as 'of Farnborough'. The writer is indebted to Mr P. C. D. Brears for drawing his attention to these two wills. Two other wills of Farnborough potters, proved in 1622 and 1624, are in the Hampshire Record Office but have not yet been investigated. The court rolls of the manor of Farnborough are potentially a very valuable source. They refer to an apparently disused pothouse in 1780, and no doubt there are earlier references which it has not been possible to pursue up to the time of writing.

Fuel and Clay Sources

The geographical extent of the industry was obviously governed principally

by the location of sources of clay and fuel. Fuel, in this general area north-east of Farnham, would probably have been available within a reasonable distance of any particular locality. Today this area is very largely covered with heath and woodland, much of it given over to military training grounds and ranges. In the eighteenth century peat digging on a considerable scale was practised in the Pirbright area, and extensive peat moors are marked on Rocque's map to the west of the village. Peat, or alternatively turf, is said by Sturt to have been a favourite fuel of the nineteenth-century potters. He mentions in particular the cutting of turf on Cove Common, while Frimley Green is described as producing some of the best. This was in addition to the requirement for small timber, generally trimmings and loppings, which Smith himself bought locally from a number of landowners and in one instance at least obtained from Tongham, more than six miles away.

With regard to the sources of clay, the white clay from Farnham Park has already been referred to. The writer is indebted to Mr A. L. Harris of Messrs Harris' pottery at Wrecclesham for valuable information on this subject given since the paper on the Ash pottery was published. Mr Harris indicated a site in Claypit Wood in Farnham Old Park where clay of a pale greyish colour, containing much gypsum, was formerly obtained during his own period of working in the pottery in order to mix it with the local Gault clay at Wrecclesham to give added porosity. The locality from which the Farnham clay was obtained is within the outcrop of the Reading Beds. Mr Harris remarked on the similarity of some experimental pottery made from this clay alone to a late sixteenth-century Farnham ware jug from the Farnborough site, which the writer showed him. The experimental pottery was fired under the normal conditions which produce a flower-pot red ware from the Gault clay. It is therefore certain that the deposits of this white-firing clay were never exhausted.

A further reference to white clay being found in Tongham, a part of Seale parish adjoining Ash, was quoted in the paper on the Ash pottery together with Sturt's information that the nineteenth-century potters of Farnborough and district were getting their clay from Farnham Park or Tongham. A sale catalogue of Poyle Park in Tongham dated 1818¹¹ lists 'a vein of potters' clay' as one of its assets. The clay referred to in this instance would have been the London Clay, producing the red ware which was the sole output of the nineteenth-century industry, but its proximity to the Reading Beds would involve moving a very short distance to obtain clay of either sort, and Claypit Wood in Farnham Park extends across chalk, Reading Beds, and London Clay. It is significant also that the Reading Beds occur in the Cheam area and traverse Nonsuch Park, a site of ancient clay diggings.

The Development of the Industry and its Cause

Since both types of clay could be found alongside one another, the change in fashion from white ware to red was not a factor affecting the geographical distribution of the potteries. Site No. 4 at Ash, if it is indeed that of a pottery, must be partly excluded from the present discussion because in the

medieval period it did not comply with the practice of the industry by producing Surrey ware, but instead made only pink or brownish pottery. The ware from the other three medieval sites (Nos. 1, 2 and 8) is entirely white; while there are two factors affecting the post-medieval output. In the seventeenth century there is an apparent tendency to produce an increasing proportion of red ware, but this varies according to the distance of the pottery from the sources of clay. Thus, while the mid to later seventeenth-century potters of Ash (site No. 2) made only about 10 per cent of their vessels red, there seems to be about twice as much red ware in the approximately contemporary output at Pirbright (site No. 10). In the late sixteenth-century phase at Farnborough Hill, there are heavier types like chafing dishes and large storage jars, together with those made with least attention to finish like the butter pots, which are commonly red, but the only red pipkin sherd belonged to an exceptionally large pot. Red pipkins are however not infrequent in the output at Hawley which is perhaps a generation later, and some other vessels always made in white ware at Farnborough, like the handled cups, may be red at later sites.

The date when the white ware was finally abandoned cannot be closely estimated at present, but is generally considered to be about 1700. In this connection, the experience of Mr Harris of the Wrecclesham pottery is probably significant. He states that when the experimental white pottery was made there, it was found that the clay had a very narrow tolerance of kiln temperatures, and while firing above 900 degrees C. was necessary to flux the glaze, at 1000 degrees C. the pots collapsed. It may be deduced from this that once there ceased to be any good reason for making pottery white rather than red, the white ware was abandoned. The only apparent reason for its advantage at any time would seem to be its superior appeal to the eye. When, therefore, the increasing availability of tin-glazed wares and the highly organised industry of the Midlands brought attractive table pottery within the reach of modest households, it would seem that the rather humdrum wares of the Surrey-Hampshire potteries were relegated more and more to kitchen usage and the miscellaneous domestic functions of chamber pots, candlesticks, money boxes and the like, for which the colour was not a selling point. Certainly, not a single white sherd was to be seen among a thick scatter of red when the field near the site of William Smith's pottery was ploughed, and this is also the case with other late sites where sherds are visible, such as Church Crookham.

It is suggested that the original stimulus to the growth of this industry was the discovery of the white-firing clay, which gave those potters able to obtain it an advantage in the market place because the medieval housewife preferred to see white pots around her rather than those of darker colour. The modern housewife's preference for brown eggs is a comparable example of the influence of visual appeal when no real difference of quality is involved. The fact that medieval Kentish potters took the trouble to cover their red pots with white slip in order, presumably, to simulate imported French white ware is an indication that appearance could influence the market value of a jug, which the housewife might choose with some care as an

ornament to her table as well as a necessity. The Hampshire-Surrey border potters had a natural advantage through an accident of geology which is not repeated in other areas near London north of the Thames, nor in Kent, and it applied to every kind of vessel they produced. The difficulty experienced with this clay described by Mr Harris is a tribute to the medieval potters, who could rely only on their skill and experience for success in firing it, and it seems highly probable that they would have used the adjacent London Clay instead if they could have done so without loss of business; yet they totally ignored this far more tractable material.

The Beginning of the Industry

At Bentley, about five miles south-west of Farnham, there is a thirteenth-century kiln site which was described by Major A.G. Wade in 1944.¹² It has not been mentioned previously because its products have features which clearly set them apart from those of the other medieval potteries listed in this note. Much of the Bentley ware was pink, and was most probably made from the local Gault clay, but some very fine jugs were made in white fabric and the best finds from this site are in the British Museum. The Bentley jugs have features in common with Sussex pottery, and their decoration and style is quite different from those of the potteries north-east of Farnham. Despite this, the Bentley site must be firmly linked with these other potteries in respect of common sources of clay for their white wares: that is to say, the Bentley potters must have used some of the special white-firing clay from the Reading Beds, although not necessarily from the same localities frequented by the other potters. There seems to be little room for doubt that it was always the Reading Beds that provided the clay for the white wares in the south-east corner of England, for the southern outcrop of these beds runs from Worthing to Arundel and then due west, adjacent to Binsted, Sussex, well known for its production of fine medieval white ware. The outcrop in the south of Sussex and Hampshire is much too far away for the Bentley potters to have reached it, and Farnham Park would probably have been the nearest source.

It is also possible that the Bentley potters may have a further significance as the discoverers of the special clay in the northern outcrop of the Reading Beds which, it has been suggested, provided the stimulus for the growth of the industry described in this note. An indication that this may be the case is provided by a white-ware jug and other pottery from a medieval pit found in Tunsgate, Guildford, in 1970.¹³ The jug in question has a bridged spout similar to one from the Bentley kiln site shown to the writer, and is decorated with the same quatrefoil and trefoil ornaments as a sherd illustrated by Wade. The remaining pottery in the pit consists of indeterminate white sherds and parts of other jugs which also follow Sussex traditions in decoration and other features. There is a homogeneous character about all the white ware, suggesting that it might all come from a single source. At the same time, there are numerous fragments of cooking pots in the pit in various dark or reddish fabrics, including quite a quantity of flint- or shell-

gritted ware. These gritty wares are very common in twelfth-century Guildford deposits, becoming less dominant until it would seem that they finally cease somewhere about the middle of the thirteenth century.

There is evidence at Northolt, Middlesex, that Surrey ware first appears on the scene before 1300,¹⁴ but it does not seem to do so until near the end of the century. In Guildford a fairly late thirteenth-century emergence is supported by the Friary Street pit,¹⁵ for example, which contained a bowl and a rim sherd of Surrey ware with at least seven thirteenth-century cooking pots of a different fabric, but no gritted ware at all, and in the writer's experience it would be unusual to find more than a stray sherd or two of gritted ware along with Surrey ware. In consideration of all the facts one is led to the conclusion that at a date rather nearer the middle of the thirteenth century than Surrey ware is generally supposed to begin, a Guildford household was regularly and exclusively obtaining supplies of white ware differing in character from the normal Surrey ware, and sufficiently homogeneous to suggest that it could all have come from one source, possibly Bentley or some other unknown kiln producing a similar type of ware with Sussex influence. It is reasonable to infer that the industry north-east of Farnham producing the normal Surrey ware had not yet started, since Guildford must have been one of its primary markets from the very beginning.

The Distribution of the Potteries

From discussion in the previous section about the Reading Beds, it may be concluded that there is no reason why potteries making white ware should not have started up almost anywhere within reach of these beds, which evidently contain this special type of white-firing clay in a number of different localities; for example, they might be found along the borders of Hampshire and Berkshire where these beds continue after passing through Farnham, or in a belt of Surrey stretching between Guildford and Cheam. This note is however concerned only with the concentration of this industry dependent on sources in or near Tongham and Farnham, and which may therefore be expected within a radius of perhaps six or seven miles of these two places, although it may be that this range should be extended. Dealing with the Hampshire side of the border first, a complicating factor is that the ancient parish of Yateley included both Cove and Hawley, and thus it is not clear from the parish registers of Yateley, which give the names of many men described as potters in the eighteenth century, whether any of them actually worked in the modern ecclesiastical parish of Yateley. There are however two indications of possible sites there from field names but it has not been possible to confirm them by examination of the ground, and no finds have been reported within the modern limits of the parish.

Cove has already emerged as an early centre of production which maintained its activities well into modern times, and it seems quite possible that the area west of Farnham could similarly contain sites which were forerunners of the Crondall and Church Crookham potteries. On the Surrey side the only pre-eighteenth century sites known at present are in Ash and Pirbright.

Pirbright seems to be emerging as an important centre, yet the areas of Mytchett and Frimley would be as well placed in relation to the Tongham source as Farnborough and Cove are to Farnham Park, and they also share the advantages of a river valley situation. The problem here is that any sites would probably lie in densely built up areas, and in the writer's experience even the keenest gardeners can be unobservant of sherds scattered thickly in the soil.

Meanwhile, south of an east-west line through Farnham there is the familiar phenomenon of the pottery industry recurring in the same area over a very long period in the shape of the intensive Romano-British activity in the Alice Holt Forest, succeeded in turn by the Bentley pottery and the modern Wrecclesham pottery. Other medieval sites, or sites bridging the post-medieval gap, must be a possibility in this area, and if they are found it will be of considerable interest to discover whether they continued to reflect Sussex influences.

The Distribution of the Products

Up to the time of writing no thorough survey of the distribution of Surrey ware has been made. It would seem probable that London absorbed a fair quantity of the output of Surrey ware potteries from the early stages of the industry. A characteristic of the medieval Surrey ware at Northolt, Middlesex, is an increasing proportion of buff-coloured or buff-surfaced pottery beginning after 1350, whereas the colour is off-white before.¹⁶ This rule does not apply to the material from the area north-east of Farnham covered by this note: the colour of the pottery from the three medieval sites on the Hampshire-Surrey borders producing white ware is so variable (the possible site at Ash, No. 4, is excluded because its medieval ware is not white). Ash pottery from site No. 2 is mainly a greyish white, and sometimes definitely grey, in contrast to the Aldershot pottery which is buff-coloured and probably early fourteen-century. The Farnborough pottery is very variable, some whitish like that of Ash, some quite grey, and some buff: occasionally marked variations can be seen in different parts of a large sherd, even to the inclusion of pink patches.

Variable as it is, the material from all three of the above-mentioned sites is distinguishable by the eye from a collection of pottery (in Guildford Museum) excavated from the Cheam kiln, which by comparison has a yellowish, creamy or darker buff colour and is finer in texture. Pottery in the Bentley style also has its own decorative features, unlike those of Surrey ware in the area north-east of Farnham. It is therefore possible that a close study of the Surrey ware found on different sites could indicate, if not the individual sources, the general area in which it was produced and thus whether it was likely to come from within the normal Surrey ware group with which this note is chiefly concerned, or a source nearer the Sussex borders, rather than the industry of the Cheam area. It may be that Cheam, and perhaps the Kingston kiln recently excavated by Mrs Canham,¹⁷ were the primary sources of most of the medieval Surrey ware reaching London,

while Farnborough would be an obvious centre from which to supply Windsor and other parts of Berkshire within a reasonable distance. The writer has not yet investigated in this direction.

Westward into Hampshire the post-medieval ware certainly reached Alton,¹⁸ but the pottery at Basing House¹⁹ included very little that resembles anything so far found in the border industry. Eastward into Surrey both the medieval and post-medieval Surrey ware is naturally very common in Guildford, and apart from the Bentley-Sussex type of medieval white ware it all has the familiar character of material from the group discussed in this note, with nothing that looks like Cheam ware. Further afield seventeenth-century pottery identical with that of site No. 2 at Ash was found at Court Lodge Farm, Horley²⁰ but the chief medieval sources here lay in other directions, although not surprisingly thirteenth-century products of the border industry are recognisable at Weybridge.²¹ The nature of Surrey ware found in the centre and east of Surrey is still little known to the writer, who would welcome any opportunity to see more of it, but it certainly includes post-medieval pottery that may have come from the Hampshire-Surrey borders. A direction in which distribution on any scale would seem unlikely is southward into Sussex or southern Hampshire, in view of the Reading Beds there which gave rise to the production of similar white ware: for example, Portsmouth and London are about the same distance from Farnham, but white ware from local sites in the museum at Southsea Castle includes very little that resembles the products of the border industry. The south of Surrey however lies within reach of the border potteries, and a small quantity of their post-medieval wares reached Ewhurst,²² although relatively little compared with a red ware which, if not from Sussex, may well have come from the Dorking area.

THE PRODUCTS OF THE BORDER INDUSTRY: MEDIEVAL

The ware from all the known sites (again excluding site No. 4 at Ash) has a similar sandy texture. The comparatively small sherds of medieval pottery from the Ash No. 2 site give little idea of the forms of the vessels produced, although the classes of vessel made there seem to have been very much the same as those at Farnborough. The time range for this pottery is suggested as mainly fourteenth century, but with some possibly late thirteenth-century and some fifteenth-century material. The Aldershot pottery which includes cooking pots with applied vertical thumbled strips and fragments of green-glazed jugs with incised line decoration is probably of the first half of the fourteenth century, as previously mentioned. The main production at Farnborough appears to be late fourteenth to fifteenth-century, but most of the medieval material has been so scattered that no reconstruction is possible so far, although it is hoped that an actual working area for this period may be found there before long which will remedy this situation. Meanwhile, standard medieval forms seem to have been produced: jugs and bunghole jars or cisterns with slashed handles and thumbled bases, cooking pots, large

deep bowls or pans with wide flat-flanged rims, and some small bowls. Except at Ash, there is no attempt at decoration apart from the use of incised lines, generally vertical single lines or pairs of lines. Some of the Ash vessels had red slip painted on under the green glaze to give a dark brown pattern, often a series of inverted V-s round the upper part. There are two similar examples from Guildford, notably a large cistern which is dated to the early fourteenth century.²³ The Cheam kiln also produced vessels decorated in a similar technique but with more elaborate curvilinear patterns.²⁴

At Farnborough there was one small group of wasters surrounded by other fifteenth-century material which appeared to be *in situ*, and fortunately this included by far the most interesting medieval pottery found there to date, with fragments from lobed cups and other drinking vessels in a very thin white ware with a fine texture and often with a cream-coloured surface. Three cups could be reconstructed to give the complete form. The cup is not lobed, although of the same profile as a lobed cup, and is the only one of the group to have an apple-green glaze on both sides; it is very fine and could readily be taken for a French import. These vessels are shown in Fig. 2 as Bla.

THE PRODUCTS OF THE BORDER INDUSTRY: POST-MEDIEVAL

The range of types made in the post-medieval period of this industry would appear to have included virtually everything normally made in pottery at the relevant date. The following list gives what might be termed the standard products:

Plates, platters and dishes	Butter pots
Deep dishes or panchions	Storage jars
Bowls	Chafing dishes
Cups and mugs	Costrels
Jugs	Chamber pots
Pipkins or cooking pots	Stool pans
Saucepans or skillets	Candlesticks
Dripping pans	Money boxes
Lids	

Alterations in the range or in different forms and their decoration as time progresses are discussed below. On the question of specialisation in individual potteries, it is only possible at present to refer to three sites, Nos. 2, 9 and 8 at Ash, Hawley and Farnborough, as producing enough evidence to form the basis of an opinion, and No. 6 at Cove as potentially capable of doing so. The three former sites differ in date, and in effect one is comparing late sixteenth-century material (but probably a little earlier than 1600) from Farnborough, since that is the only phase sufficiently investigated there at the time of writing, with the Hawley output which seems unlikely to have be-

gun before about 1620, and the Ash pottery which begins at about the stage where Hawley ends somewhere near the middle of the century and continues for a period impossible to estimate on present knowledge. It is obvious that in the century or more spanned by these sites, there was ample time for some types of vessel to have gone out of use altogether and for new ones to emerge. Even so the comparison brings out one or two apparently valid differences, principally that Farnborough seems to have been the only site where the range was quite comprehensive. At Hawley, despite a great variety of products, there is a complete absence of anything recognisable as a storage jar of the larger size, and sherds from smaller jars could equally have come from the strap-handled chamber pots which were very common there. In discussing the Ash pottery, the relatively small sample of which made generalisations unreliable, the apparent concentration on the larger sizes of plate or dish, large bowls and pipkins of small to medium size was remarked upon. As for what might be termed exotic or luxury products, none has yet been observed at Farnborough, and there was apparently none at Hawley, but site No. 6 at Cove produced, among samples collected along the M3 ditch, a three-tiered candlestick and a fancy flower-pot glazed on both sides, with a decorated rim and an ornamental band below it.

The Chronological Development of the Post-Medieval Ware

It is necessary to stress that everything which follows refers to the products of this industry alone, unless otherwise stated. Observation of the products has shown that there is a consistency between the different potteries in minor features, which has so far made it possible to put any new site into the appropriate phase of the industry with a reasonable degree of assurance, even from a comparatively small sample of material.

At present the only three sites which can be used as a basis for studying the chronological development of forms produced by this industry are those mentioned above, at Ash, Hawley and Farnborough. It has already been remarked that there is a chronological gap between the available material from Farnborough and that from Hawley, and also that there is no indication of how late a stage in the seventeenth century any of the Ash pottery may represent. Surface finds and scattered sherds at Farnborough indicate that production there was in fact continuous from the fifteenth century until at least the earlier seventeenth century, while it is certain that site No. 6 at Cove spans the gap between the late sixteenth-century phase at Farnborough and the earlier Hawley material. It can therefore be only a matter of time before the complete chronological record of this industry is established up to the later seventeenth century, for which better and more productive sites are needed. Beyond this, at least one potentially good eighteenth-century site exists at Pirbright, and there are numerous sources of nineteenth-century material. Other sites are bound to be discovered, and the writer is convinced that it should eventually be possible to establish the sequence of pottery forms within this industry throughout its life of over six hundred years, but this is obviously a long-term undertaking. Meanwhile, it may be

of some use to distinguish the features of certain forms which provide an indication of their position in the chronological sequence, and also to mention a few general points about the pottery at different periods. Before doing so, however, it is appropriate to discuss the indications, such as they are, of any absolute dating for the three sites in question.

Some degree of stratification was provided at Hawley by wasters thrown into a V-shaped ditch, but with few exceptions the various forms show no change throughout the deposit. Chamber pots and pipkins are the most significant of these exceptions. The latest chamber pots have a flat rim and there are relatively few of these, in the top of the ditch filling. The earliest form closely resembles one illustrated in an invaluable study of these vessels, coming from a pit group dated between 1620 and 1650.²⁵ The Hawley chamber pots show considerable variation in rim form between this early type and the flat rim which seems to have become standard later. The expert opinion expressed to the writer by both Dr F. Celoria and Mr A. R. Mountford is that the flat rim had come into general use by about 1660. It is perhaps significant that the only known will of a Hawley potter, referred to previously, was proved in 1655/6, and one is led to speculate whether this marked the end of the pottery, although Richard Trigg in fact had a son, John. If the tentative inference can be drawn that the Hawley site ends soon after the middle of the seventeenth century, the lack of change in so many other forms suggests that it cannot have had a long life, perhaps not more than a generation, so that an approximate placing in the second quarter of the century would seem appropriate from this aspect as well as in agreement with the evidence of the chamber pots.

The lack of change at Hawley is underlined by the fact that everything of comparable form in the late sixteenth-century deposits at Farnborough differs in detail from the Hawley material, while there are also more general differences which will be described later. There are two minor indications of date for the sixteenth-century Farnborough phase. The first is a cup of goblet form with raised bands round the body. This was found in a large dump close to the kilns, and is very similar to one in the Guildhall Museum to which the writer's attention was kindly drawn by Mr Norman Cook. It would appear that pottery vessels of this form, which may have been those described as 'goddards', a type of handleless cup,²⁶ were current for a considerable period in the sixteenth-century. The Guildhall Museum's collection includes at least a dozen of them differing in proportions and details, and some look distinctly earlier than the Farnborough goblet: but the one in question occurred in a pit group immediately below a layer containing clay tobacco pipes of the earliest type. At latest this should place the Guildhall cup in the 1590's, and it could be as early as the 1570's.

Other significant finds at Farnborough are drinking vessels or jugs of two forms identical with those supplied to the Inns of Court and made from Farnham clay. A series of these vessels is illustrated in a paper on the Inns of Court pottery,²⁷ comprising an earlier and a later group belonging respectively to the sixteenth and seventeenth centuries. The Farnborough

pots fall readily into the earlier group. Taking these pointers in conjunction with the innumerable differences between the Hawley and Farnborough material, the writer is inclined to suspect that a date in the 1570's to 1580's may be appropriate at Farnborough, and this tentative suggestion is made in the hope of receiving information about any site producing comparable material with some fairly firm indication of date, for which he would be most grateful. Some of the Ash pottery shows features not seen at Hawley at all, and there can be no doubt that it continues into the later seventeenth century. Here again firm dating evidence for later seventeenth-century forms would be very valuable.

Without any attempt to attach actual dates to these sites, it is perhaps safe enough to divide them into late sixteenth, early to middle seventeenth, and middle to later seventeenth-century, with the necessary proviso that there is a considerable interval between the first two sites. There are many minor points which it is impossible to include in the compass of this note. The writer is however working on a comparative series of drawings showing various forms in a chronological sequence with more detailed notes than can be provided here. The drawings are being reduced and reproduced by the kind offices of the Inspectorate of Ancient Monuments. It is hoped that both drawings and notes will be completed by the time this note is published, and that sets will be available to those concerned with this material on application to the writer. For the limited purpose of this note, certain forms which show marked changes of detail in successive phases are listed below with the main points that serve to distinguish them at different periods. The drawings (Figs. 2-5) illustrating these points are of pottery found on the three sites in question unless otherwise stated. Each form described below is given a prefix capital letter, which is used for its illustration. The numbers 1, 2 and 3 following the letters signify the relevant phase to which each vessel or group of vessels belongs: 1 being the late sixteenth-century Farnborough phase, (with the sole exception of the cups denoted Bla, which are late fifteenth century), 2 the Hawley phase, and 3 the Ash phase. If it is necessary to show successive stages in the same phase, the letters a, b, etc. follow: thus, E2a denotes a Hawley pipkin which is demonstrably earlier than the Hawley form E2b. If, however, as with the decoration of plates at Ash, there is no evidence for any particular method of decoration being earlier or later than another, the lower-case letters are omitted.

A. Plates, platters and dishes (Fig. 2)

The chief distinctions lie in the rim form, the size and proportions, and the decoration. The rim with an indented or outward-sloping edge is a reliable guide to distinguishing the late sixteenth-century forms from the later ones in which the rim is always beaded or rolled. The size is also a useful guide: Many of the Phase 1 plates are not much larger than modern tea plates and are nearer to the shape of modern plates than in the seventeenth century, when small plates are a rarity and the standard form is a dish

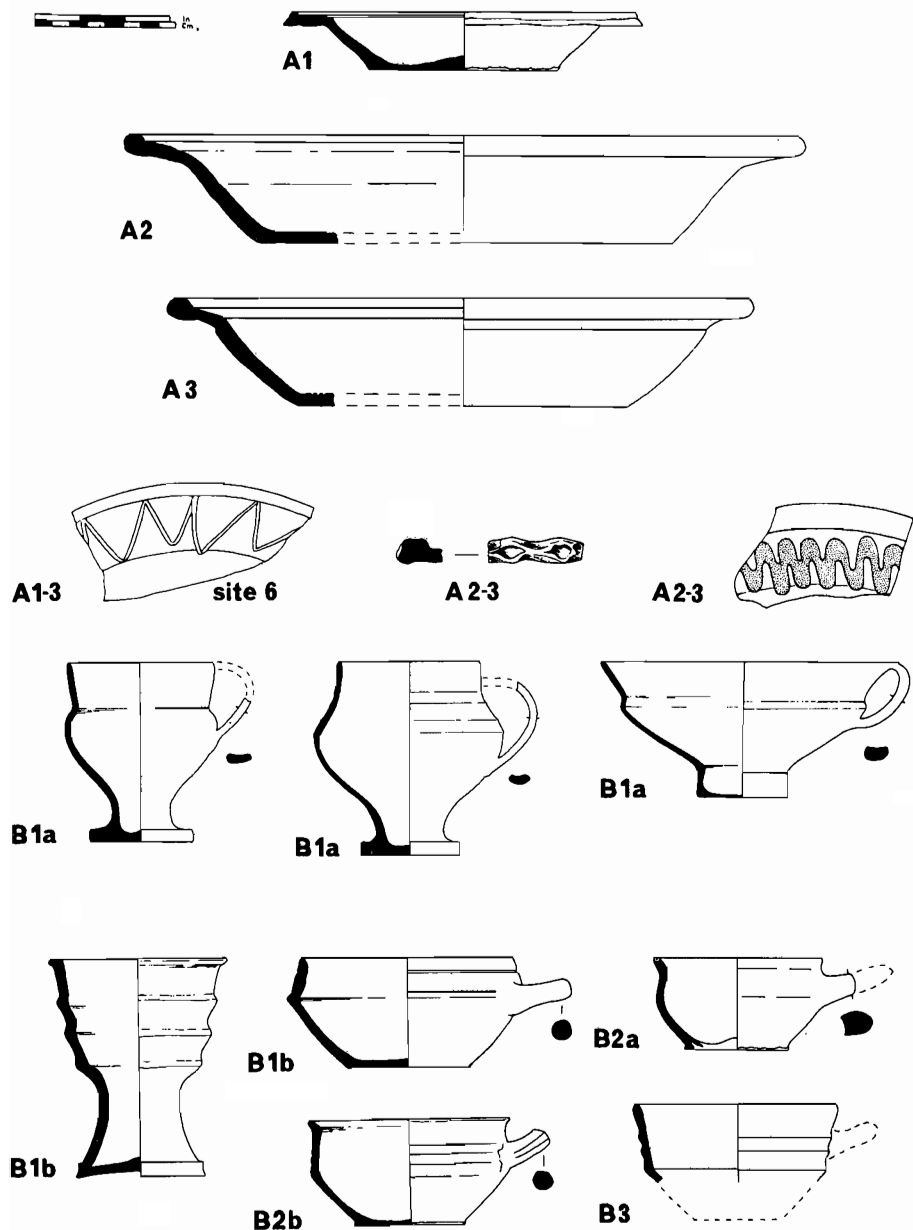


Fig. 2. Pottery from the Hampshire-Surrey border.

fourteen inches across and about two inches or more deep. The largest plate seen at Farnborough was eleven inches in diameter. In the seventeenth century there are considerable minor variations which seem contemporary, and a similar wide flat rim is seen on dishes which vary in depth and in the degree of slope given to the sides. The only form of decoration which has been noted in Phase 1 is an incised wavy line on the rim, and this persists into the later seventeenth century, or occasionally a multiplication of the line to give a combed effect which certainly continues in Phase 2 if not later. Two other forms of decoration which start in Phase 2 and continue later are the elaborate 'pie-crust' rim and the wavy line formed with trailed slip. A very few sherds have been seen with more complex slip decoration, approaching the metropolitan style, but this appears on the whole to be quite alien to this industry. The use of concentric grooves on the rim or inside the base of dishes is peculiar to Phase 3. White is the normal colour for plates at Farnborough, but red is not uncommon later.

B. Cups (Fig. 2)

The only forms (except for one small bulbous cup) seen at Farnborough in the late sixteenth-century phase are the goblet type and, much more commonly, the handled cup: both of these are denoted Blb. The handled cup is always in white ware with green glaze on the inside only. Phase 2 cups are altogether more variable, but the form B2b or a slightly heavier version with a thickened rim is most frequent at Hawley, and cups of much the same type were made at Ash. The Blb handled cups and their B2b equivalent are often found in larger sizes as bowls with similar features and proportions. They are only in white ware at Farnborough, but sometimes red at Hawley. The bowl version was not represented at Ash but this may have resulted from specialisation or the small sample. The form B2a from Cove site No. 6 is interesting as it seems to come into the early part of Phase 2 while pipkins are still ribbed, but disappears entirely later in the seventeenth century.

C. Mugs (Fig. 3)

Phase 1 at Farnborough does not include the bulbous mug which is always glazed on both sides, very thin, and often beautifully made. Details of the form vary but it is usually much smaller than the one illustrated (C2, left), though this shows the typical features: a fairly straight-sided section below the rim separated from a bulbous body by horizontal grooves, or more often two or three raised ribs, which may be repeated just above the base. The body is often decorated with groups of incised lines, generally two or three vertical lines together. The external glaze is nearly always brown, sometimes with a tortoiseshell effect, and the interior brown or green; yellow is never used. There were two examples of the straight-sided mug (C2, right) at Hawley in red ware with a brown glaze imitating stoneware. A fragment of a green-glazed white ware mug probably of

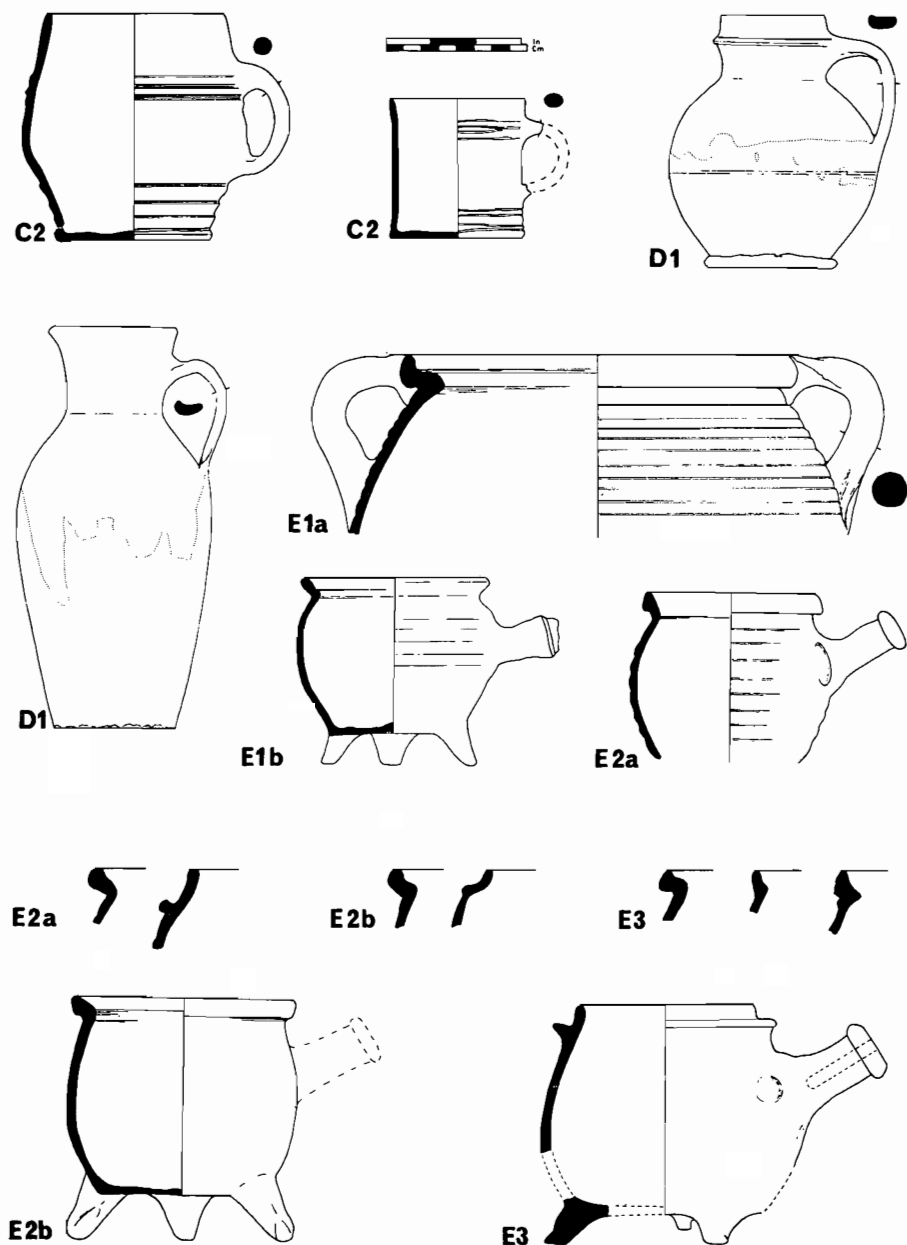


Fig. 3. Pottery from the Hampshire-Surrey border.

similar form was found at Ash, where there were also sherds from the bulbous type, which appears to continue unaltered.

D. Jugs (Fig. 3)

The two jugs denoted D1 are contemporary forms, as made for the Inns of Court: a common type in Phase 1, but not seen on the later sites. No indications have so far been found of larger jugs at Farnborough. Scattered fragments from Hawley cannot be reconstructed, but show a rib or collar below the rim as a recurrent feature, and comparatively few jugs seem to have been made. The only sign of jugs at Ash were sherds from several vessels with straight but sloping sides. They were unglazed inside with marked corrugations and a thick external glaze; a truncated conical form similar to an early sixteenth-century jug at Winchester²⁸ would seem possible, or one with comparatively straight but sloping sides in the upper part, and a carination near the base, which occurs in the seventeenth-century Midlands industry.²⁹ All the jug fragments noted have been white, except for some at Hawley.

E. Pipkins or cooking pots (Fig. 3)

This is one of the most interesting and variable forms, and one which possesses reliable chronological features in respect of the border industry as a whole, so far as the writer is able to judge. The first form, Ela, is only represented by three or four fragments which seem to be survivals from an earlier phase when the handles remained true to the Dutch prototype pipkins first arriving before 1500. Their presence suggests the possibility of an earlier working area at Farnborough associated with a phase in which the handle form is transitional, giving some indication of the relative period at which the change to the projecting tubular handle occurred; this is one of the many unsolved problems of the border industry at present.

Relative standardisation of the rim in the form Elb is a feature of this phase. There is slight variation but not much. The rim with the external lid seating coming into E2a is as rare as Ela in Phase 1, when it was perhaps just beginning; but in the seventeenth century it becomes very common. There is also much greater variation in detail of the rim section in Phases 2 and 3 but this does not seem to have any chronological significance. The rims illustrated are only shown as examples and by no means express the full range or even the variations most often seen.

The ribbing of these pots is an indication of date. All Phase 1 pipkins and the earlier ones in Phase 2 are ribbed. The ribbing tends to be restricted to the upper part of the body in Phase 1, but to cover the whole body later. The ribs are slight and separated by grooves in Phase 1, but later they may be more marked, or take the form of corrugations. After the end of the ribbed phase (for which a tentative date of around 1640 is suggested for this industry), the ribs are not seen at all. Accompanying the change in ribbing is a slight change of form which is usually noticeable except in

quite small pipkins: in Phase 1, the maximum diameter of the body tends to be above mid-level, but it sinks to the mid-level in the seventeenth-century ribbed pipkins, and after the ribs have disappeared it drops lower, giving a pear-shaped outline to the body.

It is evident that pipkins were made in graduated sizes, although the measurements are not standardised so that some of the smallest at Farnborough are squatter and wider than the others while having much the same capacity, which is approximately a half pint. The next size is $\frac{3}{4}$ pint, then 1 and 2 pints and those presumed to be the largest commonly produced hold 4 pints. The fabric is always white in Phase 1 but is sometimes red later. Glaze of a true green colour is not seen on pipkins after the end of the ribbed stage.

F. Saucepans or skillets (Fig. 4)

The taller vessel shown as F1 is common at Farnborough with green or yellow glaze internally. It is not seen in Phase 2. F2 was a single example found nearly complete, but other fragments from probably similar vessels were noted. The writer has no evidence regarding Phase 3. The fabric is always white in phase 1.

G. Dripping pans (Fig. 4)

The drawings show parts only, as insufficient of any one vessel has been found to enable a reasonably accurate reconstruction of its complete form to be made. There is little doubt that they conformed to the usual shape and dimensions with pouring lips at the ends, and one or two handles, which in Phase 1 could be either of the hollow projecting type or stout horizontal loops. Only one example was found at Hawley. The difference in thickness between this and the Phase 1 pans is very marked, with the earlier examples retaining a medieval solidity. Most of those at Farnborough were white ware and the Hawley pan was also white with yellow glaze internally.

H. Butter pots (Fig. 4)

There is no evidence at present concerning Phase 3, but the marked distinctions between Phases 1 and 2 are as follows: in Phase 1 there is no glaze, the pots are usually much corrugated internally, the rim has a seating for a lid, and the lids themselves are common finds, many being complete and undamaged so that there is no apparent reason for them to have been discarded. In Phase 2, there is glaze inside (and at Cove No. 6 site also outside), there is relatively little corrugation inside, the rim is beaded, and there are no lids. In Phase 1 at Farnborough most of them are red, but they are normally white later, thus reversing the general tendency. A further point about these pots is that the coarse internal corrugations of the early ones suggest that they were not intended for re-use, since they could not be effectively scoured out and being unglazed would absorb the

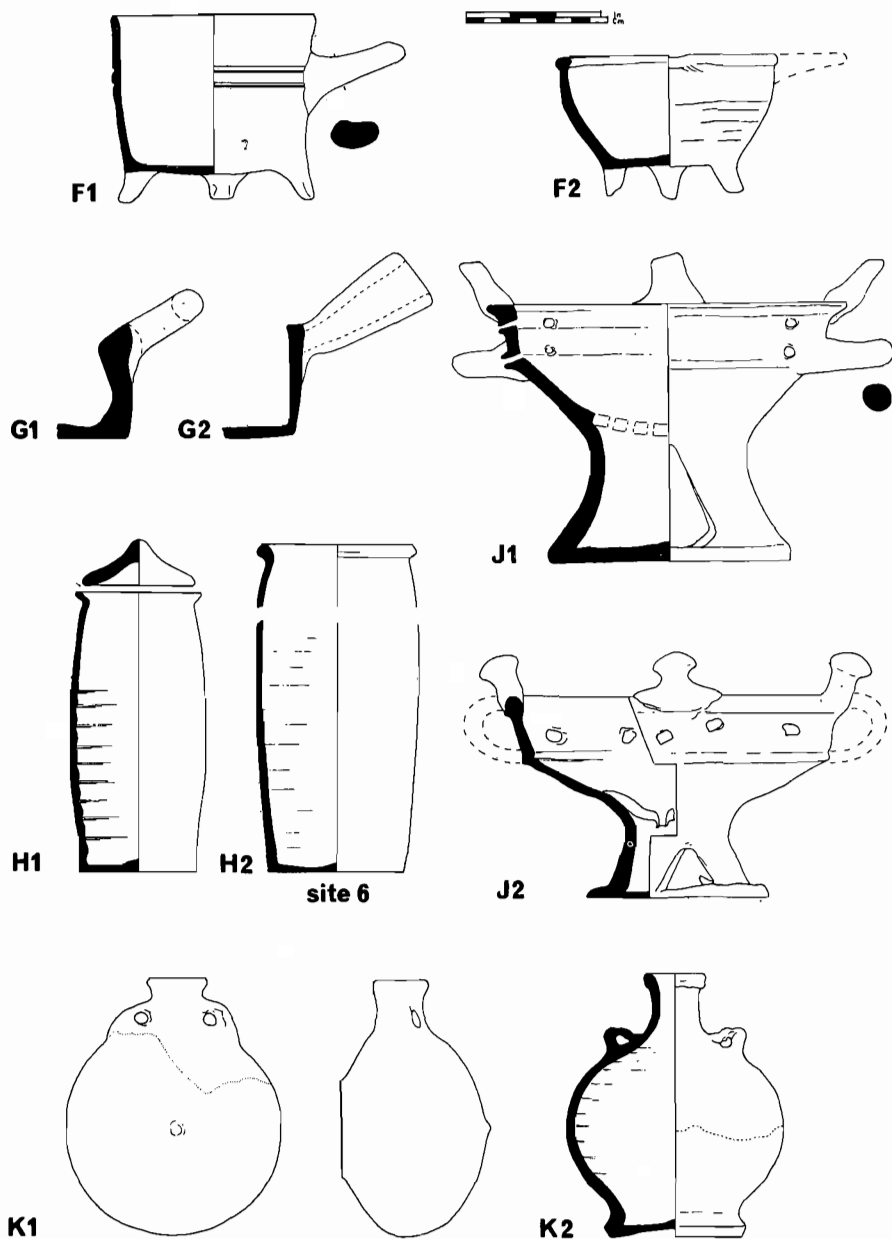


Fig. 4. Pottery from the Hampshire-Surrey border.

grease, so that they were perhaps only designed to convey butter to and from the market, being finally broken to extract the last of the butter after serving as a suitably cool container when stood in water. The later version is better made and could be re-used as it is glazed inside.

J. Chafing dishes (Fig. 4)

There is little evidence from Phase 3 to compare with Phase 2 except for similar glazed knobs. The chief differences between Phases 1 and 2 are that in the early phase, the vessel is heavy, the rim has square projections, and glaze is usually restricted to the lower part of the bowl; also, the bowl may or may not have perforations in the bottom. If it has not, the pedestal foot is open at the bottom, but if it has, the foot is closed by a flat base and there is an opening in the side which may be square, circular or triangular. The later chafing dishes are much lighter in weight, with round knobs on the rim. The glaze covers the inside of the bowl together with the rim and knobs, and the bowl is perforated with a corresponding opening in the side of the pedestal. In both phases the sides of the bowl may be pierced with holes arranged in groups or in an irregular row. The Phase 1 examples are often red, but only white fragments have been seen on the later sites.

K. Costrels (Fig. 4)

Different forms occur in Phases 1 and 2, but there is insufficient evidence about Phase 3 although the Phase 2 form probably continues with little change. The early type, K1, has the general shape of a pocket watch with a flattened patch in the middle of the back, and sometimes it also has a flattened base. The later costrels approximate to the form of a bellarmine and have a rolled rim in place of the simple rim with collar. Glaze is applied externally to the upper half only in both phases. White ware seems to have been the rule for these vessels.

L. Chamber pots (Fig. 5)

These like the pipkins show a considerable change in the course of time. The early type L1 appears to be a standard form, found with little or no variation. L2a is the form previously referred to as very like one found in a pit group dated 1620-1650, but is the earliest type found at Hawley. Several contemporary rim variations all denoted L2b seem to intervene between L2a and the flat rim, while the body remains unaltered in shape. The flat-rimmed type L2c tends to have a squatter body, although the neck cordon persists and is in fact never absent from these vessels although sometimes only in the form of horizontal grooves or incised lines instead of a raised rib. Chamber pots do not seem to be made at Ash, but from examples with other late seventeenth-century material a form very much like L2c appears to continue. Glaze may cover both sides of the flat-rimmed vessels, but earlier ones are only glazed inside. They may be in white ware or red, but if white the glaze used in the seventeenth century always seems

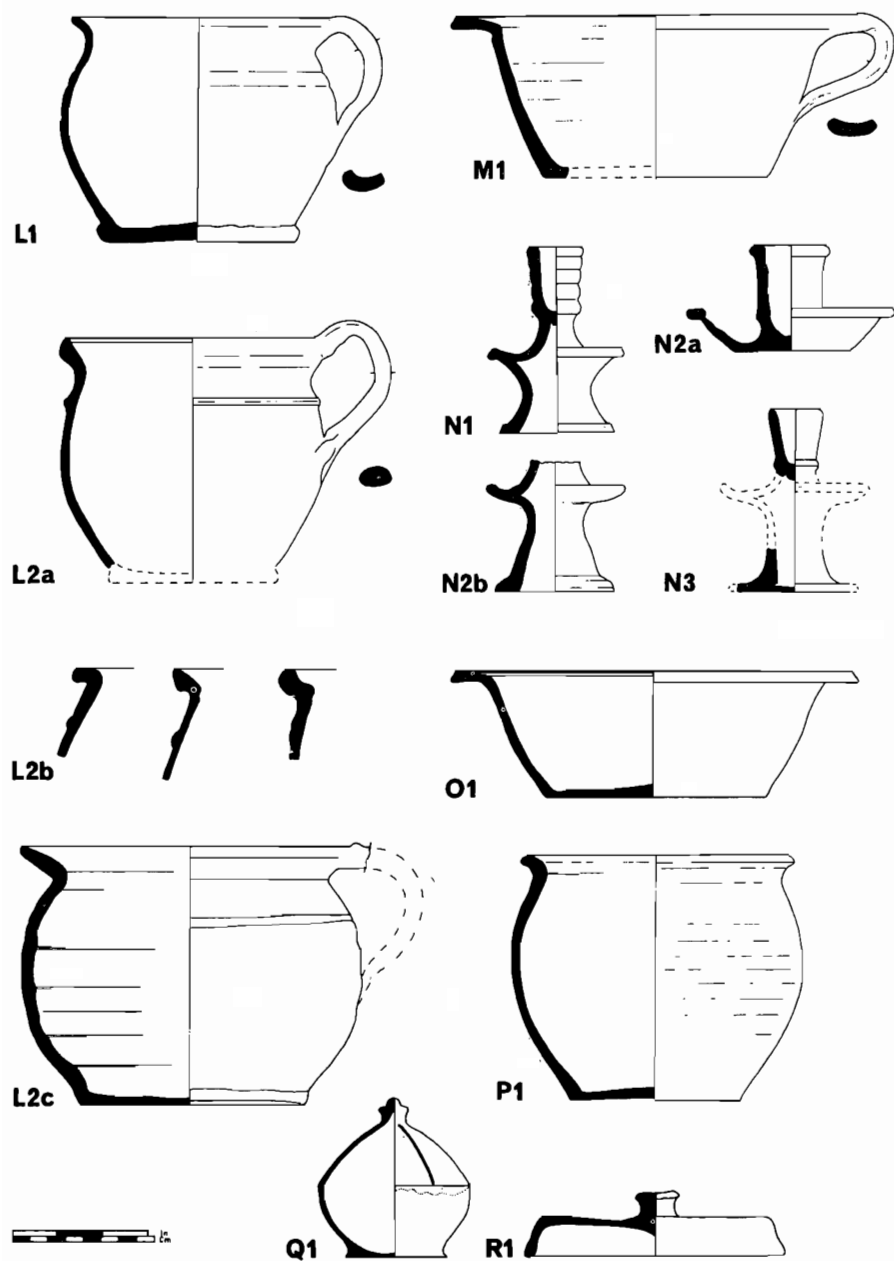


Fig. 5. Pottery from the Hampshire-Surrey border.

to be green, although yellow-glazed chamber pots occur in Phase 1. This is the only example the writer has noticed where green replaces yellow at a later stage of the industry: generally, the tendency is the other way round

M. Stool pans (Fig. 5)

The stool pan illustrated as M1 is a common type at Farnborough in white ware glazed green or yellow. Its similarity to late medieval forms is apparent from a woodcut figured in the work previously quoted.³⁰ At Hawley, however, any bowls of about the same size looked as though designed for the table or kitchen, and no strap handles have been found attached to rims of similar form and dimensions. This suggests the possibility that the late sixteenth-century form of stool pan together with the comparatively light-weight chamber pot may both have been supplanted by the stouter-rimmed seventeenth-century chamberpots, which were very common at Hawley.

N. Candlesticks (Fig. 5)

Their chief interest lies in the fact that this is the only form which appears to continue unchanged from Phase 1 to Phase 2; however, none of the candle sockets were found at Hawley but only the foot and drip tray portions of several examples, all of which had broken at the base of the socket where it is plugged with a small ball of clay. The same thing had happened to nearly all those at Farnborough, where the sockets showed slight variations but were all basically similar to the one illustrated. The form N2a was restricted to the early material at Hawley (two examples), and was also found in probably contemporary material at Cove (site No. 6). It would appear that this form had a comparatively short life and was supplanted by the return of the N1 type, of which N3 is a later version. In all phases the candlesticks may be of either white or red ware.

A few forms were listed as part of the standard range of products but have been omitted from the detailed discussion above. These are bowls, storage jars, money boxes and lids. A single example of each form from Phase 1 at Farnborough is however illustrated, as O1, P1, Q1, and R1. The Farnborough bowls all seem to be very much like O1 or else an enlarged version of the handled cup B1b; but at Hawley there is a great range of bowls of all sizes and proportions with a wide variety of rim forms which may be simple, beaded, flanged or hooked. The Ash bowls were nearly all of large size, again with a variety of rims.

There were apparently no storage jars at Hawley to compare with those of Farnborough, as has been remarked before, and none from Ash. It seems unlikely that money boxes changed much; several from Farnborough are all similar to the example Q1, in white ware with a vertical slot and glazed green on the upper half only. A fragmentary one of much the same shape but unglazed was found at Hawley, and also several green glazed knobs shaped like that of Q1; another similar knob is among the Ash material. Lids, too, seem to show no distinctive changes in the course of time although

they appear to be commoner products in the seventeenth century than earlier. The knobs on the top seem to be quite unstandardised at all periods, and take various forms. The small butter pot lids are however a special case, and occur only in Phase 1 as previously mentioned: presumably the later butter pots with their beaded rims were covered with a piece of cloth or other material.

SOME GENERAL DISTINCTIONS BETWEEN THE SIXTEENTH AND SEVENTEENTH-CENTURY PRODUCTS

A recurrent feature which the writer has noticed as a distinction between the pottery of the sixteenth century and that of the seventeenth is the tendency for the rims of various types of vessel to become thickened or elaborated in the course of time. Many of the Phase 1 types have a simple rim as a general rule, and variations are rarely seen; these include the handled cups and larger bowls of the same form, saucepans or skillets, costrels, and chamber pots. Others, which should perhaps be described as having sloping or indented rims or features, are the plates and flat-rimmed bowls, the butter pots with their lid seating, and the ends of the pipkin handles. The later forms of all these types have rims which are usually beaded or else thickened in some way, with the exception of small thin cups: but many of the Hawley cups, while small, are fairly thick and in this case the rule applies.

The manner of glazing can often be used to distinguish the sixteenth-century pottery from the later material. Much of the glaze at Farnborough has a speckled appearance, with small specks falling outside the area completely covered, as if the glaze had been sprinkled on as a powder giving rise to coloured spots where stray particles fell beyond the main area. Although these isolated specks are not always seen on the sixteenth-century pottery, they are noticeably absent from seventeenth-century wares on which there may however be unevenness or spottiness in the colouring of the glazed area itself. It is clear that in the seventeenth century a tortoiseshell effect was deliberately produced at times, usually on mugs and sometimes bowls; and more rarely a similar dappled effect was produced in green. Some dappled glazes at Farnborough are also probably intentional and include a very pleasing orange marmalade effect, unlike anything later. The use of different glaze colours, which in part has a chronological significance, is discussed below.

Another change also makes itself felt in the later seventeenth-century material as a general impression rather than a characteristic which can constantly be demonstrated in detail. This is the growing tendency towards greater mechanical perfection in shaping the pottery perhaps by the increasing use of templates and other tools, which results in more regularity of the rims and bases, and in general symmetry combined with the elimination to a large extent of the rather corrugated appearance presented by many of the earlier hollow wares.

THE USE OF DIFFERENT COLOURED GLAZES

There is some indication, as remarked in the paper on the Ash pottery, that certain colours were thought appropriate to particular types of vessel. In addition one can observe an overall decrease in the use of green glaze as time progresses except for a few types, mainly those that would normally be placed on the table. One way in which this is most apparent is the use of a true green for pipkins: it seems never to be found after the end of the ribbed phase, although there is plenty of olive green or greenish yellow. At Farnborough all the jugs of Inns of Court type were glazed green, with one exception, and so were all the money boxes and costrels found so far, together with all the cups of the type with a horizontal handle. The later cups are more often yellow, and few of the fragments that could be recognised as parts of jugs were green, while it would seem that costrels could equally well be green or yellow. Possibly green was the accepted colour for money boxes; certainly the only fragments found so far on later sites have been green, but a larger sample is needed for reliable judgment. The plates and flat-rimmed bowls at Farnborough may be either yellow or green, and proportionately there does not seem to be any diminution in the use of green glaze for the later dishes and bowls of varied type. The conventions observed in the glazing of seventeenth-century mugs have already been mentioned, including the fact that they are never yellow. On the other hand, yellow appears to have been the usual colour for the candlesticks in the late sixteenth century and in the seventeenth century, except for the type with the flat tray found in the early level at Hawley of which the two examples were green. It also seems to have been the fashion to glaze the flat-rimmed chamberpots green, that is to say a true green, whereas the earlier ones are more often an olive colour or some shade of yellowish green, although red ware with a brown glaze is not uncommon. The use of a considerable amount of green glaze on these sites in the seventeenth century is of some interest in comparison with the Midlands industry, where from the late sixteenth century to the end of the seventeenth the pottery seems invariably to have had a yellow glaze, and potters obviously aimed at producing a good pale yellow.³¹ There is no sign of such standardisation at any time in the Hampshire-Surrey borders.

The Inns of Court type jugs at Farnborough, together with various other products that have been described earlier like the money boxes, belong to what is generally termed Farnham Ware or Tudor Green; but it will be obvious from the previous discussion that much other pottery of a different colour was being made at the same time and on the same site. It is improbable that an earlier sixteenth-century phase should be absent from the site at Farnborough when the fifteenth-century material is present in large quantities near to late sixteenth-century working areas. If this earlier phase is discovered, it is to be anticipated that the pottery will show a bigger proportion of green glaze in direct descent from the lobed cups and mugs, all of which were glazed green like the medieval pottery of this industry. One of the chief points of interest about the Farnborough site is that it

should have been making Farnham ware at all, when this distinctive pottery has been recognised for over 130 years without any site of manufacture having previously been discovered. There is now a second possible site, No. 11 at Pirbright, where there are sherds which appear to come from Inns of Court jugs; and no doubt many more sites will be found in the course of time.

THE KILNS AND KILN FURNITURE

Up to the time of writing, two kilns and part of a third have been found at Farnborough, and part of another one at Hawley. Two of the kilns at Farnborough (Fig. 6) were side by side and buried in a reddish-coloured matrix of sand incorporating sherds of pottery. Its surface was relatively smooth and compacted, as though after demolition of the kilns the area they occupied continued to be used for some other purpose. The third kiln, of which probably about half survives, was similarly buried below a reddened surface which was traversed by a drainage channel leading from a circular hollow. The channel had a continuation beyond what is presumed to have been the edge of a building in the form of a soil drain composed of brick rubble. This terminated at the side of a large clay dump, where it converged with another drain of similar type but made of broken pottery. The second drain leads from an area not yet excavated at the time of writing.

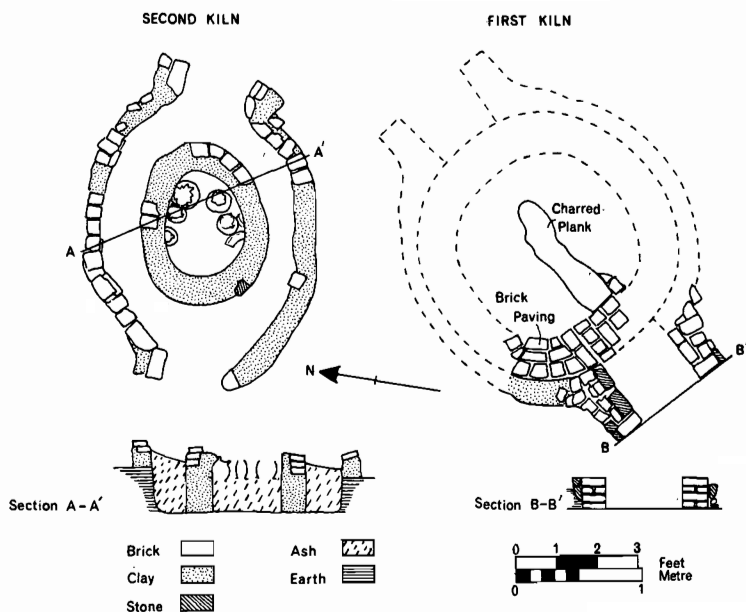


Fig. 6. Two Adjacent late-sixteenth century kilns at Farnborough Hill.

The first of the two adjacent kilns had a floor of bricks, of which only a section remained, but which evidently had been laid in the form of a ring round the outer part of the oven leaving the centre unpaved. The remains of a charred plank lay along the axis of the kiln, which had two flues. Only one flue survived; it was constructed of bricks and a few pieces of sandstone of similar size. There was nothing left of the walls, and the other end of the kiln was badly destroyed by large tree roots. Nothing was found to indicate that this kiln had had a raised floor and the plank suggests that there was none, unless it had been supported by two D-shaped pedestals; but there was no sign of them. It is reasonably certain that the floor of this kiln must have been on ground level at the time of construction, otherwise some trace of the side walls should have survived when it was demolished.

The second kiln was more complete and of quite different construction. Its oven floor had obviously been dug out to below ground level, as shown by the clay walls of the egg-shaped hollow pedestal in the centre. This kiln seems to have been a rather flimsy structure altogether. The walls were only the thickness of a half brick, with no inner lining of clay, and apparently the similarly constructed pedestal must have been found too frail to support a load of pots because a ring of pots was found upside down inside it, well wedged into the pedestal wall to the extent that some of them could not be removed without undercutting it. About half the third kiln has been uncovered up to the present and it is uncertain how much of it survives. One or two blocks of white sandstone, which seem probably to have come from the local Bagshot Beds, were incorporated in part of the wall and a large block of stone full of fossil shells was found in the position where one side of the flue is to be expected. Ash and sherds indicate that this kiln had two flues like the others. It is also clear that it did not have a raised floor, since an arc of pots was left upside down on the floor of the oven; at the time of writing they are still there.

The relationship of the Farnborough kilns to one another is apparent from the fact that the base of the two adjacent kilns is on the same level, so that the second kiln with its sunken oven floor must be the later, though not by any appreciable period since the pottery found inside it is indistinguishable from the contents of the other and of a large dump equidistant from the two, which was removed in 1969. Both these kilns have been reburied very much in the condition to which the potters originally reduced them. Although the third kiln has not been properly examined yet, nor the pottery removed from it, some of the material nearby has a slightly later look but is nevertheless probably not later than 1600, since there is no similarity to the Hawley pottery.

The surviving part of the Hawley kiln, which has been preserved by Mr and Mrs D. J. Low, consists of an arc of oven wall four feet long ending in part of one side of a flue formed of bricks laid at right angles to the presumed axis of the kiln. The wall had an outer skin of half bricks, but inside this was a thick lining of clay, the lower section of which was compacted; the top however was formed in part of curious clay 'bricks' shaped like sausage

rolls. This kiln probably had a sunk floor like the second one at Farnborough since the clay lining extended below the level of the outer brickwork.

The first two kilns at Farnborough had ovens about six feet or a little more in length, and the other two described above were also probably about the same size.

It is quite clear from observations at all the sites that saggars were not used in this industry. Occasional pieces of glazed tile have been found that may have been used as flooring in the kilns, but no kiln furniture apart from ring props with three projections pinched up so as to form separators for the pots. These rings are normally about one and a half inches in diameter or slightly larger. They do not appear in undisturbed parts of the late sixteenth-century deposits at Farnborough, and it seems they must be considered as a seventeenth-century introduction to this industry.

THE DISPOSAL OF THE POTTERY OBTAINED FROM EXCAVATIONS, ETC.

The material recovered from the various sites will be disposed of in the following way. The best examples of each type found in the excavations at Farnborough Hill have been handed over to the Reverend Mother of the Convent, by whose kind permission these excavations take place, and this will continue to apply as further pottery is recovered from the site. Some of the Hawley pottery has been retained by Mr and Mrs D. J. Low. A small collection of good specimens from Farnborough has been given to Camberley Museum for display, as this is the nearest museum to the site. The rest of the material will remain at Guildford Museum except for reference collections which will be given to the Hampshire County Museum, the Farnham Museum, and the national collections of medieval and post-medieval pottery.

CONCLUSION AND ACKNOWLEDGMENTS

The writer remains very much aware of the fragmentary nature of the work done so far on this industry as a whole, and of how far this has fallen short of the attention this subject merits, owing to the impracticability of devoting more time to what is undoubtedly a fascinating study, and one that could profitably be pursued in almost any direction. It will be apparent that in compiling this note, the writer owes a great deal to the contributions of many others, and also to their help in investigating and excavating sites; and he wishes to express thanks to all those whom it has not been possible to mention individually. Finally, the writer will be grateful for communications to Guildford Museum, Castle Arch, Guildford from anyone able to contribute further to the study of the Hampshire-Surrey border industry, either by indicating a possible site, by drawing attention to documentary sources relating to a potter or pottery, or by allowing the writer to examine white ware found on excavations or elsewhere.

NOTES

1. 'Seventeenth Century Pottery from Ash, Surrey', *Post Medieval Archaeology* III (1969, 18-30.
2. *William Smith: Potter and Farmer* (1920).
3. *Surrey A.C.*, LII (1952), 50.
4. L. F. Salzman, *Building in England* (1952), 276.
5. *Surrey Record Society*, IV, Part II (1916), Surrey Archdeaconry Wills, (Herringman Register), 215.
6. *Surrey A.C.*, LXV (1968), 139-142.
7. See Note 1.
8. To be published in *Post Medieval Archaeology*, VI.
9. Public Record Office, PCC 11 Berkley.
10. Public Record Office, PCC 139 Brent.
11. Guildford Muniment Room, 85/2/1⁽²⁾, No. 11.
12. *Country Life*, April 7, 1944, 594-5.
13. To be published in *Surrey A.C.*
14. *Medieval Archaeology*, V (1961), 273.
15. *Surrey A.C.*, LXVI (1969), 125-6.
16. *Med. A.*, V (1961), 274.
17. *Surrey A.C.*, LXVII (1970), 102-3.
18. Confirmed in 1968 by Mr P. C. D. Brears when Curator of the Curtis Museum, Alton.
19. Shown to the writer by Mr S. C. Moorhouse prior to publication of his report 'Finds from Basing House c. 1540-1645: Part I' in *Post Medieval Archaeology*, IV (1970).
20. Shown to the writer by the director of excavations, Dr G. P. Moss.
21. Excavations on an Iron Age and medieval site directed by the Viscountess Hanworth, to be published in *Surrey A.C.*
22. *Surrey A.C.*, LXV (1968), 62.
23. *Surrey A.C.*, LXI (1964), 105-6.
24. *Surrey A.C.*, XXXV (1924), 89-92.
25. P. Amis, *Some Domestic Vessels of Southern Britain: a Social and Technical Analysis* (1968), 32, No. 42.
26. L. G. Matthews and H. J. M. Green, 'Pottery from the Inns of Court', *Post Medieval Archaeology*, III (1969), 2 and 9.

27. *Ibid.*, Figs 1 and 2, Nos. 5-20 and Fig. 3, Nos. 28-35.
28. B. Cunliffe, *Winchester Excavations 1949-1960*, I (1964), 95, Fig. 27, 3.
29. P. Woodfield, 'Yellow Glazed Wares of the Seventeenth Century', *T. Birmingham A.S.*, LXXXI (1966), Fig. 2, Fd.
30. P. Amis, *Some Domestic Vessels, etc.*, 14, Fig. 8.
31. P. Woodfield, 'Yellow Glazed Wares, etc.', *T. Birmingham A.S.*, LXXXI (1966), 79.