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ABBREVIATIONS

<i>Ant.</i>	<i>Antiquity.</i>
<i>A.J.</i>	<i>The Antiquaries Journal</i> , Society of Antiquaries of London.
<i>Arch.</i>	.	.	.	.	<i>Archæologia</i> , Society of Antiquaries of London.
<i>Arch. Ael.</i>	.	.	.	.	<i>Archæologia Aeliana</i> , Society of Antiquaries of Newcastle upon Tyne.
<i>Arch. Cant.</i>	.	.	.	.	<i>Archæologia Cantiana</i> , Kent Archæological Society.
<i>Arch. J.</i>	.	.	.	.	<i>Archæological Journal</i> , Royal Archæological Institute.
<i>B. & B.</i>	.	.	.	.	Brayley, Britton and Brayley, <i>The History of Surrey</i> (1841).
<i>B.M.</i>	.	.	.	.	British Museum.
<i>B.M.G.</i>	.	.	.	.	<i>Later Prehistoric Antiquities of the British Isles</i> (B.M., 1953).
<i>C. & Y. Soc.</i>	.	.	.	.	Canterbury and York Society.
<i>Evans, B.</i>	.	.	.	.	Evans, J., <i>The Ancient Bronze Implements, Weapons, and Ornaments of Great Britain and Ireland</i> (1881).
<i>G.M.R.</i>	.	.	.	.	Guildford Muniment Room, Guildford Museum.
<i>J.B.A.A.</i>	.	.	.	.	<i>Journal of the British Archæological Association.</i>
<i>J.R.S.</i>	.	.	.	.	<i>Journal of Roman Studies</i> , Society for the Promotion of Roman Studies.
<i>J.R.S.A.I.</i>	.	.	.	.	<i>Journal of the Royal Society of Antiquaries of Ireland.</i>
<i>K.R.O.</i>	.	.	.	.	Kent Record Office.
<i>M. & B.</i>	.	.	.	.	Manning and Bray, <i>History and Antiquities of Surrey</i> (1804-14).
<i>Med. A.</i>	.	.	.	.	<i>Medieval Archæology</i> , Society for Medieval Archæology.
<i>N.G.R.</i>	.	.	.	}	National Grid Reference.
<i>Nat. Grid Ref.</i>	.	.	.		
<i>O.S.</i>	.	.	.	.	Ordnance Survey.
<i>P. Croydon N.H.S.</i>	.	.	.	.	<i>Proceedings of the Croydon Natural History and Scientific Society.</i>
<i>P. Hants. F.C.</i>	.	.	.	.	<i>Proceedings of the Hampshire Field Club.</i>
<i>P. Leatherhead L.H.S.</i>	.	.	.	.	<i>Proceedings of the Leatherhead and District Local History Society.</i>
<i>P.P.S.</i>	.	.	.	.	<i>Proceedings of the Prehistoric Society.</i>
<i>Preh. Farnh.</i>	.	.	.	.	<i>A Survey of the Prehistory of the Farnham District.</i> Surrey A.S., 1939.
<i>P.R.O.</i>	.	.	.	.	Public Record Office.
<i>P.S.A.</i>	.	.	.	.	<i>Proceedings of the Society of Antiquaries of London</i> , 2nd Series.
<i>R.C.H.M.</i>	.	.	.	.	Royal Commission on Historic Monuments.
<i>Rec. of Bucks</i>	.	.	.	.	<i>Records of Buckinghamshire.</i>
<i>Sussex A.C.</i>	.	.	.	.	<i>Sussex Archæological Collections.</i>
<i>Sussex A.S.</i>	.	.	.	.	Sussex Archæological Society.
<i>Surrey A.C.</i>	.	.	.	.	<i>Surrey Archæological Collections.</i>
<i>Surrey A.S.</i>	.	.	.	.	Surrey Archæological Society.
<i>Surrey Rec. Soc.</i>	.	.	.	.	Surrey Record Society.
<i>Surrey R.O.</i>	.	.	.	.	Surrey Record Office.
<i>U.J.A.</i>	.	.	.	.	<i>Ulster Journal of Archæology.</i>
<i>V.C.H.</i>	.	.	.	.	<i>Victoria County History.</i>

BRONZE AGE METAL OBJECTS IN SURREY

BY

WINIFRED E. PHILLIPS

SINCE Dr. Gardner's paper on Bronze Age pottery¹ and Mr. A. W. G. Lowther's local study of the Farnham area² there has been little or no attempt to consider the Bronze Age material in Surrey.

Here all the metal objects have been brought together (*see* gazetteer), and some of the more interesting objects and hoards

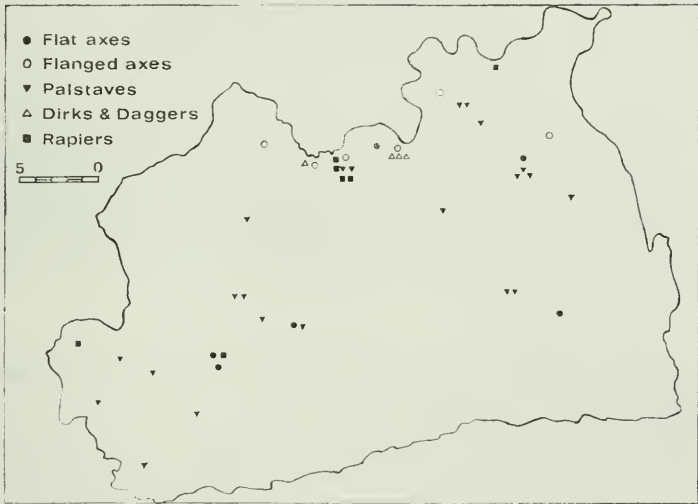


FIG. 1.—EARLY AND MIDDLE BRONZE AGE.

have been discussed in detail. A further paper on finds other than metal is envisaged at a later date.

Distribution maps of the Bronze Age finds in the county (Figs. 1, 2, 3) show two concentrations: the Croydon and Farnham areas, and scattered finds along the valleys of the Wey, Mole and Wandle. This would seem to suggest that movement was restricted to the small river valleys. Movement over the rest of the county would have been difficult. In only a few isolated places, such as the settlement site at Weston Wood, Albury,³ there are finds.

Few of the finds can be assigned to the Early or Middle Bronze Ages and then only on typological grounds, and the majority of the implements are of Late Bronze Age date.

¹ Gardner, Dr. Eric, *Surrey A.C.*, XXXV (1924), 1-29.

² *Preh. Farnh.*

³ Harding, J., *Surrey A.C.*, LXI (1964), 10-7. Weston Wood interim report.

Early Bronze Age

As can be seen from the gazetteer the only finds of this period are eight flat axes. Only one, that from Walton Heath,⁴ has associations (calcined bone), and this possibly denoted a burial. This axe is just over six inches long, with a narrow butt and slightly splayed cutting edge. There is a faint transverse bevel across the face at the start of the expansion of the blade, a not uncommon feature in British axes. From Farncombe, Godalming, comes the only other complete axe; this has a square broad butt, and the face appears to have been left rough. Broad-butted flat axes are uncommon in Britain, and this type possibly came from Central Germany during the Late Northern Middle Neolithic. Neither the Walton Heath nor Farncombe axe have been analysed, but both may well be of Britton's 'Migdale' group.⁵ Similar axes to those from Walton and Farncombe are found in many parts of the country, e.g. Parwich, Derbyshire⁶ and Durham.⁷

A portion of a flat axe from an unknown site in West Surrey⁸ has a narrower, more chisel-like aspect than any of the others, but it and other fragments are difficult to place in either of Britton's two categories, and none are decorated. Apart from papers on analysis of the metal used, there has been no major contribution to the study of flat axes since that of Megaw and Hardy⁹ and, as J. J. Butler¹⁰ has pointed out, British examples have not yet been systematically studied.

The Middle Bronze Age

Thirty-six objects may be assigned to this period comprising twenty-six axes, four dirks and six rapiers. Their distribution is shown on Fig. 1.

Surrey has produced six flanged axes of Middle Bronze Age type, two having splayed blades. Those from Thorpe¹¹ and Beddington Park, near Croydon,¹² had the stop-ridge curved and the blade tips turn upwards, with the upper edges nearly horizontal, like those from Plymstock (Devon),¹³ Buckland (Kent),¹⁴ and Arreton Down (Isle of Wight).¹⁵ This type of axe is seldom found outside the British Isles, being found here in the south and east, and more

⁴ *Surrey A.C.*, LVIII (1961), 111-2. In private collection.

⁵ Britton, D., *P.P.S.*, XXIX (1963), 258 ff. 'Traditions of Metal-working in the Later Neolithic and Early Bronze Age of Britain: Part I.'

⁶ *Inventaria Archaeologica, G.B.*, 19, Fig. 1.

⁷ *P.P.S.*, XXIX (1963), 260.

⁸ Unpublished. Charterhouse Museum, 157-1957.

⁹ Megaw and Hardy, *P.P.S.*, IV (1938), 272 ff. British decorated axes and their diffusion during the earlier part of the Bronze Age.

¹⁰ Butler, J. J., *Palæohistoria*, IX (1963), 'Bronze Age Connections across the North Sea.'

¹¹ Whimster, D. C., *Archæology of Surrey* (1931), 71, Fig. 13.

¹² London Museum Records.

¹³ *Inventaria Archaeologica, G.B.*, 9.

¹⁴ *P.P.S.*, IV (1938), Fig. 10, b.

¹⁵ *Arch.*, XXXVI (1855), 326-31.

rarely further north. A flanged axe said to have been found in Richmond Park¹⁶ is, from the drawing, of European type, and its British origin is doubtful.¹⁷

A single, elongated, straight-sided axe comes from Thames Ditton.¹⁸ It is similar to those from the Medoc area of France, and might be an import.

Two axes with cast flanges on both sides and a slight stop-ridge or central thickening of the blade come from Moated Farm, New Haw, Chertsey,¹⁹ and Weybridge.²⁰ They are of Megaw and Hardy's Type I.

Twenty of the forty-four palstaves which have been found in the county (*see* Fig. 1) have the splayed cutting edge of the Middle Bronze Age palstave of Southern Britain. Decoration is common; three had groups of three or more ribs, five U- or V-shaped shields with and without median ribs, one with a median rib has this continuing into the hafting slot. Plain specimens also occur, of which four are looped.

Of special interest is one from St. George's Hill, Walton-on-Thames, which is of Butler's Type IA 3. It has herring-bone decoration on its sides and short ribs or grooves below the stop-ridge, with a low side loop. It is reminiscent of the decorated flanged axes of Wessex times, and a date of about 1400 B.C.²¹ might be suggested for it. Another with short-rib decoration comes from Wanborough; this is loopless and of M. A. Smith's low-flanged type.²²

A group of three from Carshalton Park²³ seem to be of M. A. Smith's wing-flanged type,²⁴ which, she says, is mostly confined to the North of England.

The flanged palstave from the Crooksbury Hill hoard has the remains of a side loop, the blade sides are nearly parallel, and there are three converging lines on the face below the stop-ridge. This is a version of the shield pattern and resembles Smith's South-Western type with a narrower blade.²⁵

Four dirks or daggers and six rapiers come from Surrey. All are stray finds and can only be arranged typologically.

The dirk from Thames Ditton is discussed by Trump,²⁶ and resembles the German ones from Birkenfeld.²⁷ It is derived from Tumulus Bronze proto-types (Montelius II).

A rapier of the Thetford Class (Trump's Group II) was found

¹⁶ Said to be in Hull Museum.

¹⁷ Note on photostat of drawing at Ordnance Survey, Chessington.

¹⁸ Former Ball Collection, now Dept. of Archæology, University of Durham.

¹⁹ *Woking Herald*, May 1965. The blade is pitted.

²⁰ *P.S.A.*, XXXII (1920), 91; now in Newbury Museum.

²¹ Megaw and Hardy, *op. cit.*, 272 ff.

²² Smith, M. A., *P.P.S.*, XXV (1959), 144 ff., 'Some Somerset Hoards and their place in the Bronze Age of Southern Britain.'

²³ *Surrey A.C.*, XXI (1908), 208-9; not now to be located.

²⁴ Smith, M. A., *op. cit.*, 173.

²⁵ Smith, M. A., *op. cit.*, 177, and Fig. 7, 2.

²⁶ Trump, B. A., *P.P.S.*, XXVIII (1962), 80 ff.

²⁷ Sprockhoff, E., 1941, Teil 2, Abb. 27, b. 14.

at Caesar's Camp, Farnham. This has a strongly moulded blade, and the notches in the butt corners are deliberately cut and are not broken rivet-holes. Two more of this type come from the Wey Ford.²⁸ Trump assigned this group to the twelfth century B.C. Two others from the Wey Ford have stout midribs, and one appears to be of the Barnes Class like the rapier from the mouth of the Wandle. These have butts with narrow, nearly vertical concave sides, but the blade is leaf-shaped and very like a sword from Richmond. Trump assigns the Barnes Class to her Group II, and she dates it to the eleventh century B.C. (Hawkes Middle Bronze II.)

Late Bronze Age

One hundred and seventy-seven objects may be assigned to this period. Their nature and distribution being shown in Fig. 2.

The axes may be considered first. Fourteen of them are narrow,

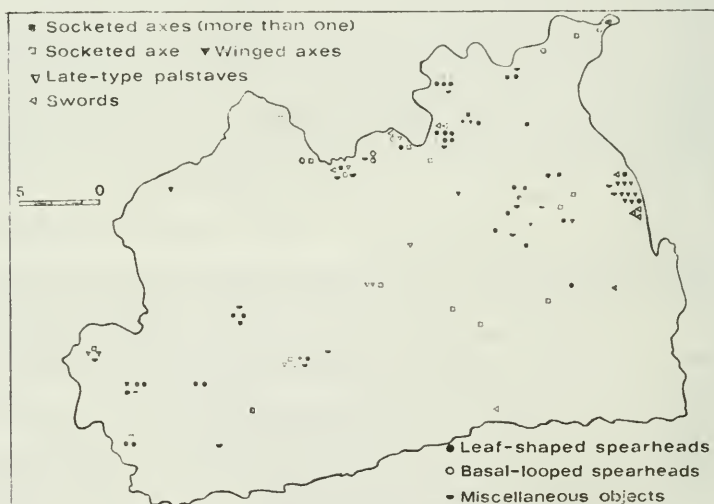


FIG. 2.—LATE BRONZE AGE.

late-type palstaves. They have almost parallel sides, while the stop-ridges are straight. Of these, seven are looped and seven unlooped. Two are decorated with V-shaped shields, two have strong median ribs and ten are M. A. Smith's 'late-type,' and are plain.²⁹ In hoards at Crooksbury Hill, Coulsdon, Hankley Common and Carshalton Park, they were found with socketed axes of slender South-Eastern type. (See pages 9 and 11.) These 'late-type' palstaves are paralleled in the Wilburton hoard,³⁰ where they are

²⁸ Unpublished, Weybridge Museum, No. C.I. and no number.

²⁹ Smith, M. A., *op. cit.*, 176 and see *Inventaria Archæologica G.B.*, 37, for best parallels.

³⁰ Fox, Sir C., *Archæology of the Cambridge Region* (1923).

dated to the end of the Late Bronze Age, Phase I. None of the 'late-type' Surrey palstaves have been found in association with leaf-shaped swords or spears, with the doubtful exception of Farley Heath, Albury.³¹

Eighty-eight socketed axes come from Surrey, and their distribution is shown in Fig. 2.

Five are long, narrow axes with rectangular cross-sections, a single flattened moulding round the socket and a small side loop springing from the base of the moulding. These Hademarschen or Taunton axes are held by C. F. C. Hawkes to come to Britain like the twisted neckrings from the mouth of the Elbe.³² A dating from c. 1050 B.C. to 750 B.C. has been suggested for them.

Fifty-four axes are slender, with rectangular sections, double mouth-mouldings and low loop placings, the last a feature commonly found on the Atlantic coasts, but rare in Northern Europe. Twelve have wing decoration formed by ribbing, or the addition of pellets or dot terminals as well as wings, nine have vertical ribs, X's, horizontal ribs or a combination of all of these motifs. The winged examples are regarded as contemporary with the carp's tongue sword complex (L.B.A. II, *see* below), and there is no evidence for them being earlier in Surrey hoards. Those with double moulding at the mouth and low loop placement may belong to the following Wilburton phase.

The Betchworth axe has, in addition, a pellet decoration on the face and provides a link with the more developed South-Eastern types just mentioned.

Axes with more elaborate mouldings at the mouth and with ribs springing from below the collar come from Addington, Guildford and Kingston. These have been placed at the end of the Carp's Tongue phase (c. 600 B.C.) by Hawkes and Smith.³³

Narrow forms of faceted, socketed axes occur at Beddlestead (Chelsham), Coulsdon, Richmond and Weybridge. The neck mouldings are elaborate, the axes are rectangular in section and the side loops are placed below the collar. These are very graceful axes and have fairly splayed cutting edges. The British examples have not yet been fully listed or mapped, but seem to have reached Britain from North Germany.³⁴ Sprockhoff³⁵ regarded the occurrence of these axes as one of the few (at the time he wrote) examples of North German influences on Western Europe's industries, and Hodges³⁶ lists two types in Ireland. The double and complex mouldings (such as Beddlestead) represent British variants of the single mouth-mouldings of the North German axes. These axes

³¹ *B.M.G.*, 45. This is not now accepted as a certain hoard.

³² Taunton Hoards, *Arch. J.*, XXXVII (1880), 94-8; Hawkes, C. F. C., *P.P.S.*, VIII (1942), 44 ff.

³³ Hawkes, C. F. C., and Smith, M. A., *A.J.*, XXXVII (1957), 185.

³⁴ Butler, J. J., *op. cit.*, 1963, 88.

³⁵ Sprockhoff, E., *op. cit.*, 1941.

³⁶ Hodges, H. W. M., *U.J.A.*, XIX (1956), 29 ff.

occur in Wales with 'Welsh' type socketed axes,³⁷ and in Southern England in hoards with Carp's Tongue swords,³⁸ but continental varieties were still common in Montelius VI and Hallstatt times.³⁹

Four axes from Addington Park, Guildford, and Wandsworth are of the 'Yorkshire' sub-type. Butler⁴⁰ regards them as a development from the ribbed versions of the South-Eastern types, but ribbed axes occur widely in Europe in the late Bronze Age.

The sole certain example of the 'Welsh' sub-type comes from Seale and has a heavy beading at the mouth from which springs the side-loop. The ribs on the face converge towards one another. The axe is squat in form compared to the 'Yorkshire' sub-type. A small fragment from an unknown site in Surrey⁴¹ may be another of this type. This sub-type may have Scandinavian origins.⁴²

Rib-and-pellet decoration is found on highly decorated axes from Kingston⁴³ and Weybridge.⁴⁴ The Weybridge axe is decorated with two ribs, ending in dot terminals, while those from Kingston are more elaborate. One has groups of ribs-and-pellets on one face and an elaborate key-hole decoration, ending in dot terminals, on the other face. The other two have horizontal and vertical ribs as well. This type of axe is represented in the Llyn Fawr hoard,⁴⁵ which is regarded as a Final Bronze Age group.

One 'hatchet' socketed axe comes from Thames Ditton. This somewhat resembles the Irish 'hatchet' axes,⁴⁶ but has its loop on the face of the axe and not on the side as in the Irish specimens. The expanded cutting edge is also smaller than in the Irish examples. The nearest parallels are from Broughslane⁴⁷ and Kirkmoyle.⁴⁸ The Irish axes, although the collars and loops differ, have been regarded by Hodges⁴⁹ as direct copies of Scandinavian ones, dated to Montelius IV (between 900-750 B.C.).

Ten winged axes come from Surrey, eight from the hoards at Addington Park and Wickham Park, Croydon. These are dated to the seventh century (L.B.A. II) through their associations (*see* page 9). One of the two stray finds from Woodside Common, Wimbledon,⁵⁰ appears to be end-winged rather than medium-winged.

From the distribution in Surrey (*see* Fig. 2) this type may well

³⁷ Grimes, W., *The Prehistory of Wales* (1951).

³⁸ *A.J.*, II (1922), 107, Fig. 2.

³⁹ Butler, J. J., *op. cit.*, 89.

⁴⁰ *Ibid.*, 91.

⁴¹ Unpublished. Guildford Museum. No. 955.

⁴² Butler, J. J., *ibid.*, 93.

⁴³ Evans, B., Figs. 137, 141, 142.

⁴⁴ *Surrey A.C.*, XXV (1912), Pl. II, 3.

⁴⁵ *A.J.*, XIX (1939), 369 ff., 367; Grimes, *op. cit.*, 221.

⁴⁶ Hodges, H. W. M., *op. cit.*, 33, Fig. 1, No. 4.

⁴⁷ *Ibid.*, Fig. 1, No. 4.

⁴⁸ *Ibid.*, Fig. 2, No. 2.

⁴⁹ *Ibid.*, 33.

⁵⁰ Now in the Pitt-Rivers Museum, Farnham, Dorset. Nothing further is known of these axes.

have travelled up the Thames. It rarely competed with the already established socketed axes.

Thirty-two spearheads have been found in Surrey and their distribution is shown in Fig. 2. The twelve basal-looped spearheads include three with lozenge-shaped openings at the base of the blade similar to ones from the Nettleham and Stibbard hoards. An exceptionally large specimen (length 31 inches), found in the Wandle Valley, was presumably only used for ceremonial occasions, for the socket is too narrow and too short for any practical purpose. It appears to have been cut into pieces, before being deposited.⁵¹ These are attributed to L.B.A. I⁵² (900–700 B.C.).

Twenty leaf-shaped socketed spearheads with peg holes in the sockets have been found in the county, and their distribution can be seen in Fig. 2. The majority are badly damaged, but decoration survives on some of them. Two from Beddington Park⁵³ had small transverse lines between two sets of horizontal bands on the socket and one from Thames Ditton has a dotted motif above horizontal lines on the socket. In Northern Europe this form of decoration is attributed to Montelius II.⁵⁴

Two socketed spearheads come from Colt Hill, Seale.⁵⁵ Both have the socket extending all the way to the now missing tips. The larger one has an extra 'beading' or moulding defining the socket. This plain type of leaf-shaped spearhead reached Britain before the end of the Wessex period, and continued in use for a long time.

Neither the lunate spearhead nor the hollow-cast blades of the final stages of the Late Bronze Age appear in the county.

Miniature spear or arrowheads have been found unstratified at Farley Heath, Albury and Wickham Park, Croydon.

Two ferrules have been found in Surrey—at Beddington Park and Wickham Park, Croydon. Both had tubular bodies, slightly conical, and that from Wickham Park was dated to the seventh century. Tubular ferrules are rare but widespread in England and Ireland.⁵⁶

Nine complete swords and some other fragments of Late Bronze Age types have been found in Surrey (see Fig. 2). 'Carp's-tongue' sword fragments come from Addington Park and a fragment of a solid-handled 'Auenier' sword from Wickham Park; both are dated by their associations to the seventh century.

Swords from Limpsfield⁵⁷ and the Thames at Kingston⁵⁸ are of 'Rixheim/Lambeth' type. They should date to between 1100–950 B.C.

⁵¹ B.M., Greenwell Coll. W.G., 2255.

⁵² Hawkes, C. F. C., *Scheme for the British Bronze Age* (1960).

⁵³ Anderson, J. C., *Croydon: Prehistoric and Roman* (1874), Pl. III, No. 4. The objects cannot now be traced. Best parallels from Ingham and Reach Fens, Cambs.

⁵⁴ Trump, B. A., *op. cit.*, 82.

⁵⁵ *Surrey A.C.*, XII (1895), 152; *Preh. Farnh.*, 163.

⁵⁶ Isleworth; *Arch.*, LXI (1909), Pl. lxxx, Fig. 75.

⁵⁷ Phillips, W. E., *Surrey A.C.*, LXIII (1966), 168–9.

⁵⁸ Devenish, K., *Surrey A.C.*, LXI (1964), Pl. II, 748.

The remaining five swords are leaf-shaped; those from Kingston and from the mouth of the Wandle are of Peake's type 'G.' The one from New Lock, Richmond, is Peake's type 'E' or 'F'; some fragments come from Chertsey, while that from Charlwood⁵⁹ is 24 inches long, with two rivet holes in the shoulder, the tang broken off.

Tools are scarce in Surrey and only eight have been noted. One trunnion celt or lugged chisel comes from Farley Heath, Albury (see page 12). It does not resemble the North Welsh ones, being more like those from Ireland,⁶⁰ but differs in having the stop-ridge at the sides and not on the face. This type of stop-ridge is found on similar implements from Yattendon.⁶¹ At Broxton there is a very large example,⁶² dated to the Middle Bronze/Late Bronze Age transition by its associations. All have slightly expanded cutting edges, except that from Farley Heath, which more closely resembles that from Plymstock in Devon, which, however, has no stop-ridge. One quoted by Butler⁶³ comes from Veerhout, Holland, where it was associated with 'Welsh' sub-type palstaves and other objects connected with the IJsmoor horizon in North Germany, and equivalent to the Middle Bronze Age in Britain, e.g. Acton Park hoard c. 1450. From the various associations it would appear that these lugged chisels had a long life.

Socketed gouges have been found at Addington, Beddington Park, Purley, Wickham Park, Coulsdon, Richmond and Wandsworth.

Portions of two moulds for socketed axes come from Beddington Park and Wickham Park.⁶⁴ Both are similar to ones from the Isle of Harty.⁶⁵

One elaborate pin has been dredged from the mouth of the Wandle.⁶⁶ It has an expanded head, engraved decoration on neck and swelling which is pierced and resembles a pin from Ramsgate, Kent.

A shield dredged from the river bank at Walton-on-Thames is circular and approximately two feet across. Its decoration consists of concentric rings of small repousee bosses and raised ribs.⁶⁷ It is of the Yetholm type and similar to one from Moel Siabod.⁶⁸

Part of a pennisular ring, with triangular section, came from Weston Wood, Albury. This could be similar to ones from Southall, Middlesex,⁶⁹ and the North of England.⁷⁰

⁵⁹ *Surrey A.C.*, LV (1958), 122 and Fig. 6.

⁶⁰ Evans, B., 69, Fig. 47; likened to examples in Denmark and Hallstatt.

⁶¹ *Arch.*, LXI (1908), 138, Fig. 125; Evans, B., 169, Fig. 196; *P.S.A.*, VII (1878), 480.

⁶² Evans, B., 169, Fig. 197.

⁶³ Butler, J. J., *op. cit.*, 52.

⁶⁴ Hodges, H. W. M., *U.J.A.*, XVII (1954), 88 ff.

⁶⁵ *Inventaria Archæologica, G.B.*, 18.

⁶⁶ Hawkes, C. F. C., *P.P.S.*, VIII (1942), 26 ff., and Fig. 2, No. 5.

⁶⁷ Now in Pitt-Rivers Museum, Farnham, Dorset.

⁶⁸ Coles, J., *P.P.S.*, XXVIII (1962), 156 ff.; *B.M.G.*, 29, and Fig. 9, 1.

⁶⁹ *Inventaria Archæologica, G.B.*, 51.

⁷⁰ Cowen, J. D., *Arch. Ael.*, X (1933), 190, and Pl. XIII, 4.

Awls have been found at Beddington,⁷¹ Combe⁷² and Weston Wood, Albury, the latter being double-ended with one point broken.⁷³

Discs have been found at St. Catherine's Hill, Artington;⁷⁴ Addington Park, Croydon;⁷⁵ and Farnham.⁷⁶ Those from Farnham and Guildford are somewhat similar to that from Heathery Burn, but lack the two staples. The one at Farnham was found with a small Bronze Age urn.⁷⁷ There do not appear to be complete parallels for these discs, but many similar ones have been found on Late Bronze Age sites.⁷⁸ The disc from Addington Park has a short shank and was probably a decorative nail.

Fragments referred to in the reports as 'mountings' and 'terminals' come from Addington Park and Wickham Park, but are too small for comment.

There are two complete socketed knives in the county (at Birchen Reeds and at Weybridge) and fragments from Addington and Wickham Parks. They resemble the ones from Thorndon and Reach Fen.⁷⁹

A bronze bucket was found in 1907 at Weybridge and is dated to between the sixth and fifth centuries.⁸⁰

The Hoards (see Fig. 3)

Eighteen hoards have been found and will now be considered.

It is not proposed here to comment on the Addington Park and Wickham Park hoards as these are well published in the *Inventaria Archæologica*,⁸¹ and are both dated to the seventh century B.C. Of the remainder, eight can no longer be located; Banstead, of which only pieces of metal cake remains;⁸² two at the Railway Cutting, Carshalton, both said to have contained axes, spearheads and ingots;⁸³ Carshalton Park,⁸⁴ which, from the published report, contained three palstaves and seven socketed axes; Kew Gardens, which was said to have contained 'brass celts, lumps of metal and bits of rings';⁸⁵ at Chertsey two urns containing fragments of metal, the point of a sword, a dagger and part of a scabbard were found;⁸⁶

⁷¹ Anderson, J., *op. cit.*, 10-11.

⁷² Devenish, K., *op. cit.*, 1-9.

⁷³ Harding, J., *op. cit.*, 10-7.

⁷⁴ Dance, E., *Surrey A.C.*, LI (1950), 143-4.

⁷⁵ *Inventaria Archæologica, G.B.*, 54.

⁷⁶ *Preh. Farnh.*, 177-8, Fig. 74 and Pl. XVIII.

⁷⁷ London Museum.

⁷⁸ Grimes, *op. cit.*, 191, Parch-y-meirch Hill, St. George's, Denbighshire.

⁷⁹ *Inventaria Archæologica, G.B.*, 17, Card 3, 38.

⁸⁰ *P.S.A.*, XXI (1907), 464-9; *Surrey A.C.*, XXIV (1911), 50.

⁸¹ *Inventaria Archæologica, G.B.*, 39 and 54.

⁸² *Surrey A.C.*, XLVII (1941), 95-7, and Pl. VII, Figs. 1 and 2.

⁸³ *Croydon N.H.S. Survey and Surrey A.C.*, XXXVI (1925), 103. No drawings survive.

⁸⁴ *Surrey A.C.*, XXI (1908), 208-9; present whereabouts unknown.

⁸⁵ O.S. Records and *Arch.*, V (1779).

⁸⁶ Bray, W., *Arch.*, XVIII (1817), 426-7. No trace of present whereabouts.

near Kingston one which consisted of 'missile hatchets,' axes, spears and swords;⁸⁷ also at Carshalton⁸⁸ and Warlingham.⁸⁹

The hoard at Beddington Park is known only from the illustrations⁹⁰ and it is possible that more material was found than was illustrated. The hoard consisted of a socketed axe of South-Eastern type with 'wing' decoration, a socketed gouge, two spearheads with decorated sockets, one ferrule, parts of a mould, two plain socketed axes and some metal cake. Also listed and illustrated is a fragment of a sword not mentioned in Evans,⁹¹ whilst Whimster⁹² also lists a further six socketed axes. The sword fragment is probably part of a leaf-shaped specimen. One of the two plain axes has a splayed cutting edge, double mouth-moulding and a broad



FIG. 3.—LATE BRONZE AGE HOARDS.

body. The spearheads have been commented on earlier (*see* page 7), and are similar to some from Shropshire and Yorkshire.

The hoard from Beddlestead, Chelsham, has been recently republished in the *Proceedings of the Croydon Natural History Society*,⁹³ and consisted of one faceted socketed axe, a bag-shaped Irish axe, two socketed axes of South-Eastern type—one with wing decoration—part of a socketed axe, part of a winged axe and some metal cake, and is of Late Bronze Age date.

⁸⁷ *Surrey A.C.*, I (1858), XV. No trace of present whereabouts.

⁸⁸ *Surrey A.C.*, XX (1907), 235.

⁸⁹ *Surrey A.C.*, XXI (1908), 209.

⁹⁰ Anderson, J., *op. cit.*, 10–11, Pls. II and III; *Surrey A.C.*, VI (1874), 125–6.

⁹¹ Evans, B., 484.

⁹² Whimster, D. C., *op. cit.*, 79.

⁹³ Phillips, W. E., *P. Croydon N.H.S.*, XIII (1967), 246–50.

The hoard from George Lane Gravel Pits, Coombe Warren, Combe, has been republished in 1964.⁹⁴ It contained a small socketed axe, the socket of a spearhead, a small portion of a sword, an awl (mentioned on page 9) and metal cake. Early reports of this find mention 'several other bronzes which have now disappeared.'

The Coulsdon hoard consisted of six socketed axes, part of a winged axe, a socketed gouge, and part of a palstave.⁹⁵ Of the socketed axes the three examined are typical plain South-Eastern types. Of the three now missing, one appears from the illustrations to be a South-Eastern type with rib-and-pellet decoration, one has wing decoration and a wide cutting edge, and the third is plain. The socketed gouge is of a type common in Britain.⁹⁶ This is again a Late Bronze Age assemblage.

The Crooksbury Hill hoard, when first illustrated,⁹⁷ consisted of two socketed axes of plain type and three palstaves; however, this may not have been all the material found. In Guildford Museum is one flanged palstave and two socketed axes. One is a Taunton-type axe (mentioned earlier), and the other, although badly damaged at the mouth, has a splayed cutting edge and broken loop. The remaining palstaves illustrated in 1857 are now missing.

The hoard from Hankley Common, Elstead,⁹⁸ contained a palstave and two socketed South-Eastern type axes—one plain and one with wing decoration and pellets on the face. Both show signs of bad casting and were evidently not finished for use.

The Wandsworth hoard consisted of seventeen objects. There are eight socketed axes (four of them fragmentary), one gouge and metal cake. From the illustrations⁹⁹ three of the axes were plain (one a Taunton-type, the other two South-Eastern type); one axe (already discussed on page 6) is a 'Yorkshire' sub-type, while another has two mouldings—one a particularly large and well-rounded one at the mouth, and a pellet on the face. A Late Bronze II date is likely for its deposit.

In general, apart from the Hadesmarschen/Taunton type axes, most of the material in the hoards is of Late Bronze Age II date, the palstaves being late types which survive alongside socketed axes. It is possible that these hoards were more or less simultaneously deposited towards the end of Late Bronze Age, Phase II, certainly after the arrival of Carp's Tongue Swords and winged axes at the end of Phase I.¹⁰⁰

Farley Heath, Albury, has been published as a hoard,¹⁰¹ but

⁹⁴ Devenish, K. A., *op. cit.*, 1-2.

⁹⁵ *Surrey A.C.*, XXXVIII (1929), 75-8.

⁹⁶ MacWhite, E., *J.R.S.A.I.*, LXXIV (1944), 160 ff.

⁹⁷ *London Illustrated News*, 1857.

⁹⁸ *Surrey A.C.*, XLVI (1938), 143; *Preh. Farnh.*, 163, Pl. XIV, 2 and 3.

⁹⁹ *Surrey A.C.*, XXXV (1924), 125-6. Now in the British Museum, 1928, 1-20.

¹⁰⁰ *Inventaria Archæologica*, G.B., 39 and 54 (Addington and Wickham Parks).

¹⁰¹ Tupper, *Farley Heath* (1881); Evans, B., 69, 169, 322; *V.C.H., Surrey*, I, 240, etc.

doubts are now cast on its being a closed find.¹⁰² The finds consisted of three plain unlooped palstaves of narrow form (one incomplete), a trunnion celt, part of a plain socketed axe of rectangular section with double mouth-moulding and low loop placement, two small socketed spearheads with well-marked central ribs, two dartheads with short sockets and some metal cake.

From the mouth of the Wandle, in 1854,¹⁰³ came a group of objects described as a hoard, but as they were dredged from the river bed it is possible that they are not a closed find.¹⁰⁴ The objects included a pin (mentioned on page 8), a leaf-shaped sword of Peake's Type 'G,' a socketed spearhead of Greenwell/Brewis Type V, and a palstave. The Victoria County History adds that there were other bronzes found.¹⁰⁵ The pin has been exhaustively discussed,¹⁰⁶ and it is similar to one at Ramsgate, Kent.

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¹⁰² *B.M.G.*, 45.

¹⁰³ *V.C.H.*, I, 243; Evans, *B.*, *op. cit.*, 282, 316, 368, 465; Whimster, 74.

¹⁰⁴ *P.P.S.*, VII (1941), 29; *B.M.G.*, 56-7, Fig. 48.

¹⁰⁵ *V.C.H.*, *Surrey*, I, 243.

¹⁰⁶ *P.P.S.*, VIII (1942), 26-48, Fig. 2, No. 5; *Arch. J.*, IX (1852), 7-8.

GAZETTEER OF SURREY FINDS

The Gazetteer has been compiled from the following sources:—

Published Reports of many Societies
British Museum Bronze Implements Index
Ordnance Survey Records at Chessington
London Museum Records
and from the two previous gazetteers made of county material and published in Whimster, D. C., *Archæology of Surrey* (1931), and Copley, J. C., *Archæology of South-East England* (1953).

Note—Finds from the River Thames have been omitted unless objects were found on the Surrey banks.

ALBURY

Farley Heath. TQ 052455

Finds consisting of a trunnion celt, 3 palstaves, 1 socketed axe, 2 dartheads, 2 spearheads, metal fragments and some 'copper cake' were made in 1853 and exhibited in 1854. Regarded as a hoard in earlier publications, but not necessarily so. Evans, *B.*, 69, 169, 322; Tupper, *Farley Heath* (1881); *V.C.H., Surrey*, I, 240; *B.M.G.*, 45.
Now in British Museum—B.M. 1853, 4-19, 18-27.

Weston Wood. TQ 053485

During excavation of a L.B.A./I.A. settlement site by Miss J. Harding, 1961-4, a double-ended, square-sectioned awl (one point broken), part of a small penannular ring, part of the shank of a pin, some pieces of metal and some 'copper cake' were found.
Interim report in *Surrey A.C.*, LXI (1964), 10-8.
To go eventually to Guildford Museum.

Site unknown. (Fig. 1.2.)

Part of a flat axe. Approximately half remains of the slightly expanded cutting edge, the surface of which is eroded. L. 2½ in.
Unpublished.
Now in Charterhouse Museum, 158-1957.

ARTINGTON

St. Catherine's Hill. SU 9948. (Fig. 6.4.)

Bronze disc, similar to that from Farnham mentioned below. No trace of it now.
Surrey A.C., LI (1950), 143-4.
Socketed axe with three vertical ribs running down to a horizontal beading. Found in 1849.
Evans, *B.*, 120, and Fig. 128; *Surrey A.C.*, XI (1893), 244; *Sussex A.C.*, VIII (1856), 295; *Bronze Age Metalwork in Norwich Castle Museum* (1966), 20. Now in Norwich Castle Museum, 76.94 (776). (Cast in Ashmolean Museum, 1875.44.)

BANSTEAD

Banstead Downs. TQ 253610

Plain socketed axe with square mouth section which has two narrow mouldings. A loop springs from lower moulding. The blade is splayed and cutting edge is slightly damaged. B.I. Index lists as U 12 type.
Unpublished.
Now in British Museum—W.G. 1926.

Culgarth House, gardens. TQ 26136043

In 1933 a hoard was found in the north-west corner of the garden, for which no details are now available. All that remains are pieces of 'copper cake.'

Surrey A.C., XLVII (1941), 95-97; Soc. of Ant. Report, 1938, 12.

Now at Epsom College and Guildford Museum—S.7089.

Perrotts Farm. TQ 25715806

Part of a broken socketed axe found in 1954. No further details available. Information from Ordnance Survey Records.

BATTERSEA

Near Grosvenor Railway Bridge

Basal-looped spearhead found in 1865 when making a filter bed. Has a strong central rib.

P.S.A., XXII (1909), 88.

Now in British Museum. 6.1910.2.19.

Near Queen's Road Station

Palstave.

Probably unpublished.

Now in the British Museum. W.G., 1736.

BEDDINGTON

Beddington Park. Approximately 298642

A hoard excavated from the foundations of a house opposite the Rectory in 1866. Said to have consisted of 13 objects and bought by Dr. Strong of Croydon from a Mr. Matthews of the Old Town. It is now missing.

Anderson, *Croydon* (1874), 10-1; Evans, *B.*, 110, 174, 320, 340, 423, 447, 467; *Surrey A.C.*, VI (1874), 125-6.

TQ 30726503

An Awl found in sand-pit north-west of the station in 1922.

Surrey A.C., XVII (1902), 181-3; *Preh. Farnh.*, 180. Formerly in the possession of Mrs. Richardson and now missing.

BERMONDSEY

Southwark Park

Basal-looped spearhead with badly damaged blade.

Information from London Museum records. Unpublished.

Said to be in Horniman's Museum, but not there.

Tooley Street

Bronze mount with embossed scrolls and three pyramidal bosses, one for a rivet.

Fox, C., *Pattern and Purpose* (1958), 30, Pl. 75b; *V.C.H. Somerset*, I, 293, Fig. 61.

Now in British Museum, 1905.11.66 (Smith Coll.).

BEICHWORTH

Broome Park, by path near lake. Approximately TQ 214507

Taunton-type socketed axe.

Surrey A.C., XLIX (1946), 102; *Palæohistoria*, IX (1963), 78.

Now in private possession.

BLETCHINGLEY

Bletchingley Castle. TQ 32335055

Plain socketed axe with square mouth section, groove and ridge below collar; small side loop; plain blade slightly splayed. L. 3½ in.

Mentioned in Croydon N.H.S. Regional Survey.
Now in Guildford Museum, S.7100.

Tilbertstow Hill Common. TQ 347504

Broken spearhead found here in 1871. No details are now available.
P.S.A., VI (1876), 156.
Formerly in the collection of Rev. George House; no trace now.

BUSBRIDGE

Munstead Heath

Part of a flat axe found at Combe Rough in 1933.
Wrongly assigned to Cranleigh in previous gazetteers.
Surrey A.C., XLII (1934), 135; *ibid.*, XLIII (1935), 130.
Now in Guildford Museum, G. 830.

Sile unknown. (Fig. 4.7.)

Part of a socketed axe of narrow type. Remains of stump of loop.
Possibly one mentioned in *V.C.H. Surrey*, I, 243.
Now in Charterhouse Museum, 161-1957.

CARSHALTON

Carshalton Park. TQ 281640

A hoard found in 1905 and consisting of three palstaves, seven socketed axes.
Surrey A.C., XXI (1908), 208-9.
Formerly in the H. C. Collyer Collection and present whereabouts unknown.

Railway Cutting. 'C' TQ 271642, 'D' TQ 272643

Two hoards discovered in 1866 on south bank of cutting. Hearsay says they consisted of 'many axes, spearheads, ingots of copper.' All apparently taken to London and are now lost.
Surrey A.C., XXXVI (1925), 103; Whimster, 121; *Croydon N.H.S. Regional Survey* (mentioned only).

Queen Mary's Hospital. TQ 27876230

During the building of the hospital in Stag Field on a low hill in 1903 a 'copper cake' was found. In 1937, during further building activities, part of a flat axe and a piece of bronze ingot were found.
J. Anthropological Institute, XXV (1905), 387-97; *Surrey A.C.*, XX (1907), 235; *ibid.*, XXII (1909), 195-6; *ibid.*, XLIX (1946), 67; *Preh. Farnh.*, 180, which also mentions a socketed spearhead (which cannot now be traced). No trace now of earlier find; later finds said to have been in Grange Wood Museum, Thornton Heath.

CHARLWOOD

On County boundary. Approximately TQ 261394

Leaf-shaped sword with hilt broken, found during development along the River Mole. L. 24 in.
Surrey A.C., LV (1957), 122, Fig. 6; *Sussex Notes and Queries*, XIII (1953), 291.
Now in the possession of Crawley Development Corporation.

CHELSHAM

Beddlestead. TQ 39845874

A hoard consisting of five socketed axes (includes a faceted axe, a bag-shaped Irish axe), a broken winged axe and 'copper cake.'
V.C.H. Surrey, I, 241; *Croydon N.H.S. Regional Survey: P.S.A.*, XVIII (1901), 285 and re-published *P. Croydon N.H.S.*, XIII (1967), 246-50.
Four axes and copper cake in possession of Croydon Natural History Society and two axes at All Saints Church Hall, Warlingham.

Worm's Heath. TQ 378579

A palstave found about a mile from the Beddlestead hoard.
Croydon N.H.S. Regional Survey (1904-5), 59.
 Now in All Saints Church Hall, Warlingham.

CHERTSEY

Under Bridge. TQ 054666

Part of a leaf-shaped sword, broken off below shoulder. Edges are sharp and surface is slightly pitted.
 Probably unpublished.
 Now in Lukis Museum, Guernsey, Channel Islands.

Laleham Burway. TQ 049684

Bronze fragments and possibly a dagger. Two urns containing these fragments of metal, point of a sword, possible dagger and parts of a scabbard found near small camp at Laleham Burway on Surrey side of the river Thames.
Arch., XVIII (1817), 426-7.
 No trace now.

Moated Farm, New Haw. TQ 051634

Flanged axe with slight stop-ridge; high flange. Appears to be slightly eroded on surface from photograph. Found in 1965.
Woking Herald, 14 May, 1965.
 In possession of Mr. R. Bentley, Moated Farm, New Haw.

St. Ann's Hill. TQ 025675

A socketed axe. Further details unknown.
V.C.H. Surrey, I, 243; *ibid.*, III, 404; *Arch. J.*, XXVIII (1871), 242.
 Formerly in possession of Rev. H. L. Bennett of Thorpe; present whereabouts unknown.

Site unknown. (Fig. 6.5.)

Basal-looped spearhead, damaged with chipped blade and one loop also broken; socket extends only 3 inches; strong central rib. L. 4½ in.
 Unpublished.
 Now in Guildford Museum, G. 828.

CHIDDINGFOLD

Barrow. SU 962333 (approximately)

When Douglas opened a barrow in 1798, he found fragments of 'corroded brass' with the remains of a possible beaker (described by him as a brown drinking cup), none of which survived the excavation.
 Douglas, *Nemia Britannia* (1798), 162; *Surrey A.C.*, XXXV (1924), 3-4.

COMBE

Combe Warren

A hoard from the George Lane Gravel Pits and consisting of an awl, two socketed axes (one now lost), fragments of a spearhead, small fragments of a sword and 'copper cake.' Found in 1869, when it was said to have contained several other bronzes, now missing.
V.C.H. Surrey, I, 241; *Evans, B.*, 82, 423, 467; *Arch. J.*, XXVI (1869), 288; *Surrey A.C.*, LXI (1964), 1-2.
 Now in Kingston Museum, 1091-4.

Near Combe Wood

A socketed axe with plain faces and small side loop.
Evans, B., 113; *P.S.A.*, I (1st Ser.) (1849), 67-8; *P.S.A.*, I (1861), 83,

No. 8; *Surrey A.C.*, XI (1893), 244; Johnson, W., and Wright, W., *Neolithic Man in North-East Surrey* (1903), 20; *Preh. Farnh.*, 164.
Now in Museum of Society of Antiquaries.

Palstave with median rib. No loop. L. 5 $\frac{3}{4}$ in.

Evans, B., 82; *P.S.A.*, I (1861), 82, No. 4.

No trace now.

COULSDON

TQ 29766159

Socketed axe, bronze 'cake' and other fragments found in 1942 when swimming bath was made in Promenade de Verdun. Nothing further known; information from Ordnance Survey records.

TQ 30615816

A hoard found in 1928 consisting of ten items, of which five axes and some 'copper cake' are in Guildford Museum. Remainder of hoard, consisting of three axes and one gouge, is now missing.

Surrey A.C., XXXVIII (1929), 75-8; *Croydon N.H.S. Regional Survey*.

Guildford Museum, S. 7093-8. (For S. 7096. Fig. 8.3.)

Purley

Plain socketed axe with small side loop. Rectangular mouth with double moulding and loop from lower moulding. Blade is damaged with small hole in one face and corner of cutting edge broken off.
Unpublished.

Deposited by Mr. Lucy in 1941 in Guildford Museum, on loan. AS.107.
(Large copper ingot as well as AS.106.)

Russell Hill, Purley. TQ 309621

A bronze gouge found in 1898. No further details.

Surrey A.C., XXI (1908), 209; *ibid.*, LVI (1959), 144.

Formerly in possession of H. C. Collyer; now missing.

CRANLEIGH

Site unknown

Socketed axe with seven rough striations on both faces. Blade expanded, single mouth moulding and low side loop.

Unpublished.

Now in Derbyshire Museum, X.29377.

CROYDON

Addington Park. TQ 36376500

A hoard found in 1914 during the making of bunkers on the golf course, and consisting of 32 items.

Inventaria Archæologia, G.B., 54 (two cards), for full details and references to publications.

Now in British Museum, 1914, 9-24; 1960, 1-8.

Shirley. TQ 365664. (Fig. 6.6.)

South-eastern type axe with wing decoration on one face only; found in a garden in 1961. Rectangular mouth, side loop from lower moulding. Slightly damaged.

Unpublished and in private possession.

Wandle Valley. TQ 315656

A large ceremonial basal-looped spearhead was found in a gravel pit. L. 31 in. Deliberately broken in pieces.

P.S.A., XVIII (1901), 352; Johnson, W., and Wright, W., *Neolithic Man in North-East Surrey* (1903), 20.

Now in British Museum, W.G. 2255.

Wickham Park. TQ 372665

A hoard found in 1855 and consisting of 20 items and 'copper cake.'
Inventaria Archaeologica, G.B., 39, which also lists other publications.
 Now in British Museum, B.M. 2-27, 1-22.

Site unknown. TQ 3267

Plain socketed axe with side loop; casting seams still visible; single moulding at mouth, which is roughly finished.

Unpublished and lent by the Carmarthenshire Antiquarian Society in 1928 to London Museum, 28.181.4.

Site unknown

Plain socketed axe, single mouth moulding, small side loop and round mouth. Casting ridges still visible. Two holes in one face.

Information from Bronze Implements Index (British Museum); sold Sothebys. No further details.

EAST MOLESEY

Island Barn Farm. TQ 137676. (Fig. 5.3.)

A looped palstave of narrow form found in what is now the Metropolitan Water Board reservoir. Good stop-ridge and small shield pattern.

L. 5½ in.

Surrey A.C., XXV (1912), 130.

Cast now in Weybridge Museum, 147-1964.

Site unknown

Point of sword.

Information from Bronze Implements Index (British Museum).

Now in Thames Conservancy Collection.

EGHAM

Runnymede

Spearhead with loops on socket. L. 13.3 cm.

V.C.H. Surrey, 1, 245; Evans, B., 328; Arch. J., XVIII (1861), 158;

Bronze Age Metalwork in Norwich Castle Museum (1966), Fig. 33.

Now in Norwich Castle Museum, 141.27.

Leaf-shaped sword. L. 54.7 cm.

Bronze Age Metalwork in Norwich Castle Museum (1966), Fig. 47.

Now in Norwich Castle Museum.

TQ 03557122

Spearhead.

Berks. A.J., LVI (1958), 54.

Site unknown

Socketed axe with faint wing decoration; rectangular mouth section which has a broad moulding; three narrow lines as well; side loop.

Previously in Ball Collection; sold Sothebys 1949 and no trace now.

ELSTEAD

Hankley Common. SU 87954255

A hoard consisting of a palstave and two socketed axes was found in 1911 on the golf course.

Surrey A.C., XLVI (1938), 142; Preh. Farnh., 163, Pl. XIV, 2 and 3.

Now in Guildford Museum on loan, S. 7086, S. 7084-5.

EPSOM

Site unknown

Palstave found near Epsom. Splayed cutting edge and shield decoration.
 Now in Lloyd Collection, London Museum, 49/107/803.

FARNHAM

Caesar's Camp. SU 835500

A rapier of the Thetford Class, Group II.

V.C.H. Surrey, I, 252; *Evans, B.*, 250; *Preh. Farnh.*, 164; *Surrey A.C.*, XI (1893), 251; *P.P.S.*, XXVIII (1962), 99 (Appendix).

Now in British Museum, B.M. 8-21, 1.

The Holt. SU 81554421. (Fig. 4.6.)

Butt-end of a palstave ending just below straight stop-ridge. Apparently a narrow and unlooped type. Possibly the one mentioned in *V.C.H. Surrey*, I, 252.

Now in Charterhouse Museum, 160-1957.

Snailslynch, Stoneyfield. SU 85454685

Bronze disc found in the gravel workings in 1935. 2½ in. diameter with plain staple at back. Remains of binding round rim.

Preh. Farnh., 177-9 and Fig. 74.

Now in Guildford Museum, AS.111.

Site unknown

Plain socketed axe. Single square mouth moulding; side loop. Bronze Implements Index (British Museum)—U. II 3 type.

Unpublished.

In Horniman Museum.

Site unknown

The cutting edge of a palstave only with remains of a strong median rib below straight stop-ridge; also traces of loop.

Unpublished.

Now in Guildford Museum, S. 7103.

Site unknown

Possible bronze arrowhead with tang broken off. Bought with a leaf-shaped blade and a bronze brooch from a dealer by Dr. Hooper. (Possibly a forgery.) No other details and no trace of objects now.

Surrey A.C., XLIX (1946), 103, Fig. 2.

FRENESHAM

SU 86054204

Looped palstave of South-eastern English type with expanded blade which was found in a field near the River Wey. Butler's Class IA I.

Surrey A.C., L (1949), 137.

Now in possession of F. S. D. Atherton, Frensham.

GODALMING

Farncombe. (Fig. 4.1 and 4.4.)

Two flat axes:

- (1) With splayed cutting edge, surface corroded and flat butt end.

L. 5¾ in.

Unpublished.

Now in Charterhouse Museum, 169-1957.

- (2) With splayed cutting edge; at the broken point one edge has been cut with a sharp instrument and one edge shows signs of hammering.

Unpublished.

Now in Charterhouse Museum, 167-1957.

These could be the ones mentioned in *V.C.H. Surrey*, I, 243, with no details.

Site unknown. (Fig. 4.5.)

Broken socketed spearhead with two opposed rivet holes, blade damaged and point broken off.

Unpublished.

Now in Charterhouse Museum, 165-1957.

GUILDFORD

Stoke Hospital. SU 995519. (Fig. 4.8.)

Palstave with shield decoration. Variation of shield-and-rib decoration. Butler's Class I A2. L. 6 in.

V.C.H. Surrey, I, 252.

Now in Charterhouse Museum, 162-1957.

Excavation on main drain. SU 99835017

Plain socketed axe; two narrow mouth-mouldings, and side loop; slightly splayed cutting edge. L. 3½ in.

Surrey A.C., XI (1893), 250, and Fig. 11.

Now in Guildford Museum, G. 8141.

Site unknown

Palstave with moderately expanded blade and large shield pattern or depression.

Previously part of the Ball Collection. Sold at Sothebys 1949 and present whereabouts unknown.

Site unknown

Two similar socketed spearheads with opposed rivet holes in sockets; blades are slightly chipped in both, and the sockets extend only half way to tips.

Arch., LXI, pt. 2 (1909), 439.

Now in Guildford Museum, G.M. 8336 (Fig. 8.2) and G.M. 8337.

HAMBLEDON

Site unknown

Palstave with strong median rib on both sides of stop-ridge, found in 1875. Slightly splayed blade; no loop.

Unpublished.

British Museum, 1875, 12-29, 1.

HEADLEY

Headley Heath

Narrow type palstave with strong median rib.

Mentioned as being in Haslemere Museum.

Site unknown

In 1907 a broken weapon was found on the heath. No other details known, and it is now missing.

V.C.H. Surrey, III, 290.

HINDHEAD AND CHURT

Site unknown

Socketed axe of South-eastern type with wing decoration, found when road-making in 1906. The wing decoration ends in a horizontal rib on both faces; there is a low side-loop. The surface of the axe is pocked.

L. 4¼ in.

Unpublished.

Now in Guildford Museum, S. 7099.

Site unknown

Two spearheads are mentioned in *Prehistory of Farnham* as having been found to south-east of Colt Hill in Churt. (Are these the Colt Hill spearheads?) No trace of these now.
Preh. Farnh., 163.

HORSELL

Lynwood Estate barrow, Shearwater. TQ 02836085

Unlooped palstave with strong median rib. Butler's Class II B.
Surrey A.C., LV (1958), 122.
Now in Shearwater School Museum.

KEW

Kew Bridge Works

Axe; no description. Information from London Museum records.
Possibly Layton Collection.

Near Kew Bridge

Socketed axe with five short straight ribs on the face. L. 4 in.
Unpublished.
Now in British Museum, W.G. 1748.

Kew Gardens. TQ 186770

A hoard found when digging canal in 1753. Consisted of 'brass' celts, lumps of metal and bits of rings. Dr. Stukeley reported that 'Lord Bathurst had some knife-handles made out of the metal from some of the Celtic instruments found, which looked like gold.'
Arch., V (1779), iii; Stukeley's *Diaries and Letters*, III, 210-1.

Near Kew

Socketed axe with polygonal body and ribs on face.
L. 4½ in.
Unpublished.
British Museum, W.G. 1750.

KINGSTON UPON THAMES

Kingston Hill

Basal-looped spearhead with strong central rib. Blade damaged.
P.S.A., I (1861), 83, No. 9.
Museum of Society of Antiquaries, Roots Collection, No. 1.

Vicinity of Kingston

A hoard said to have consisted of 'missile' hatchets (?), axes, spears, swords, and on exhibition in 1854.
Surrey A.C., I (1858), xv.

Sites unknown

Six socketed axes, three very much decorated.
Evans, *B.*, 124, 125, 126 and Figs. 137, 141, 142. No further details known.

Site unknown

Socketed spearhead with strong central rib.
Information from London Museum.
Unpublished.
In possession of C. Martin.

Site unknown

Sword. Nothing further known. Information from London Museum records.

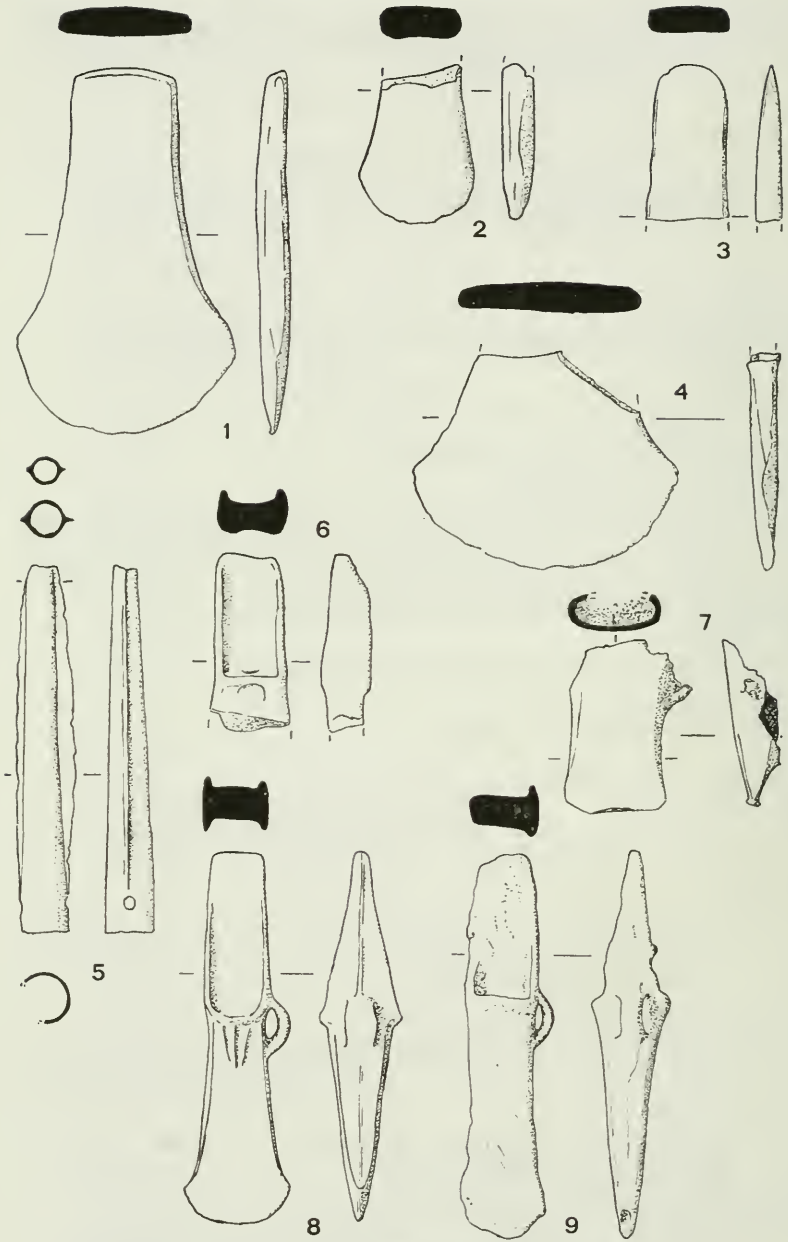


FIG. 4.—BRONZE OBJECTS FROM CHARTERHOUSE MUSEUM. (½)

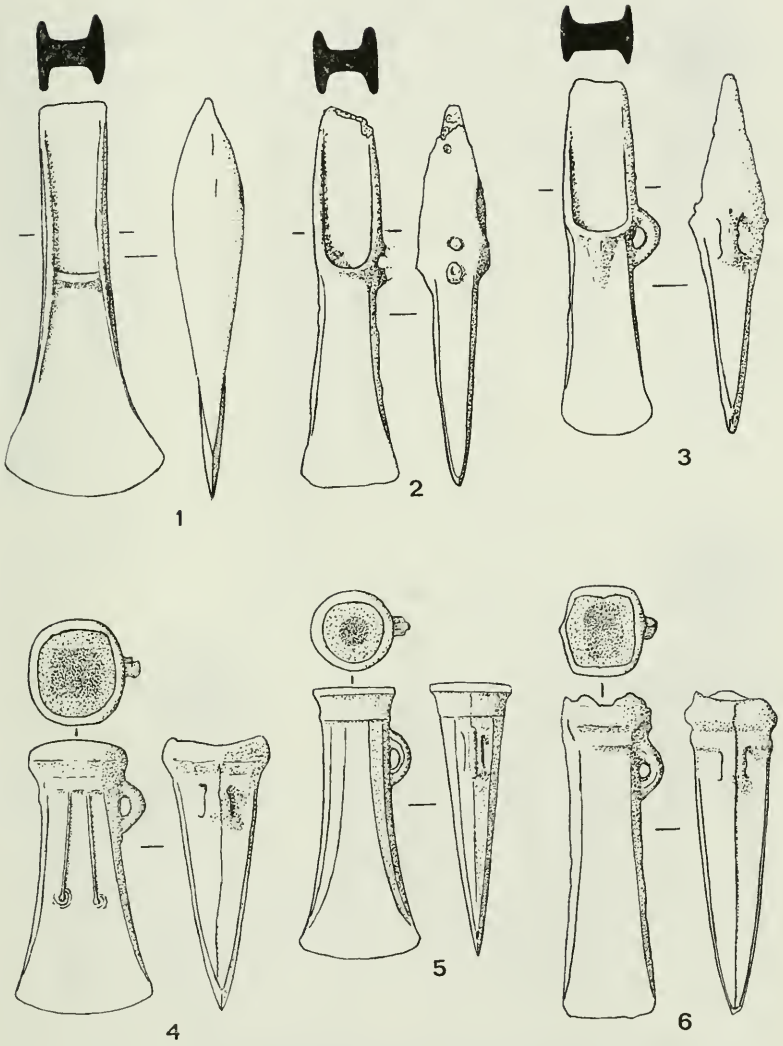


FIG. 5.—BRONZE OBJECTS FROM WEYBRIDGE MUSEUM. ($\frac{1}{3}$)

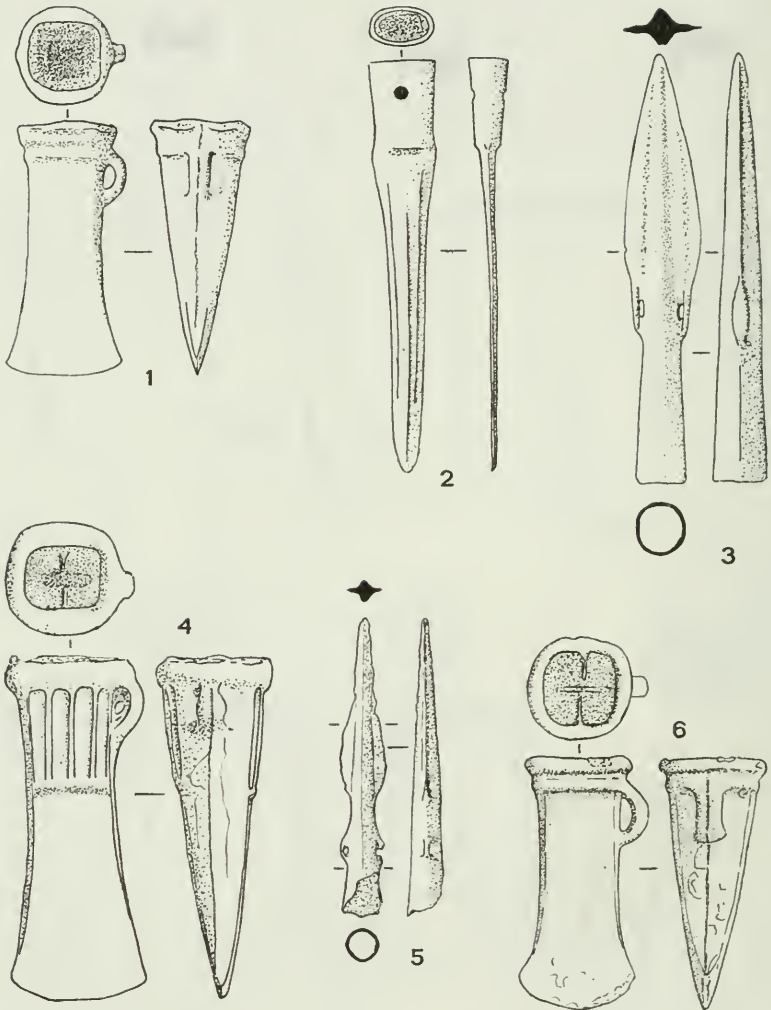


FIG. 6.—BRONZE OBJECTS FROM WEYBRIDGE (1, 2 AND 3), GUILDFORD (5) AND ASHMOLEAN (4 AND 6) MUSEUMS. (½)

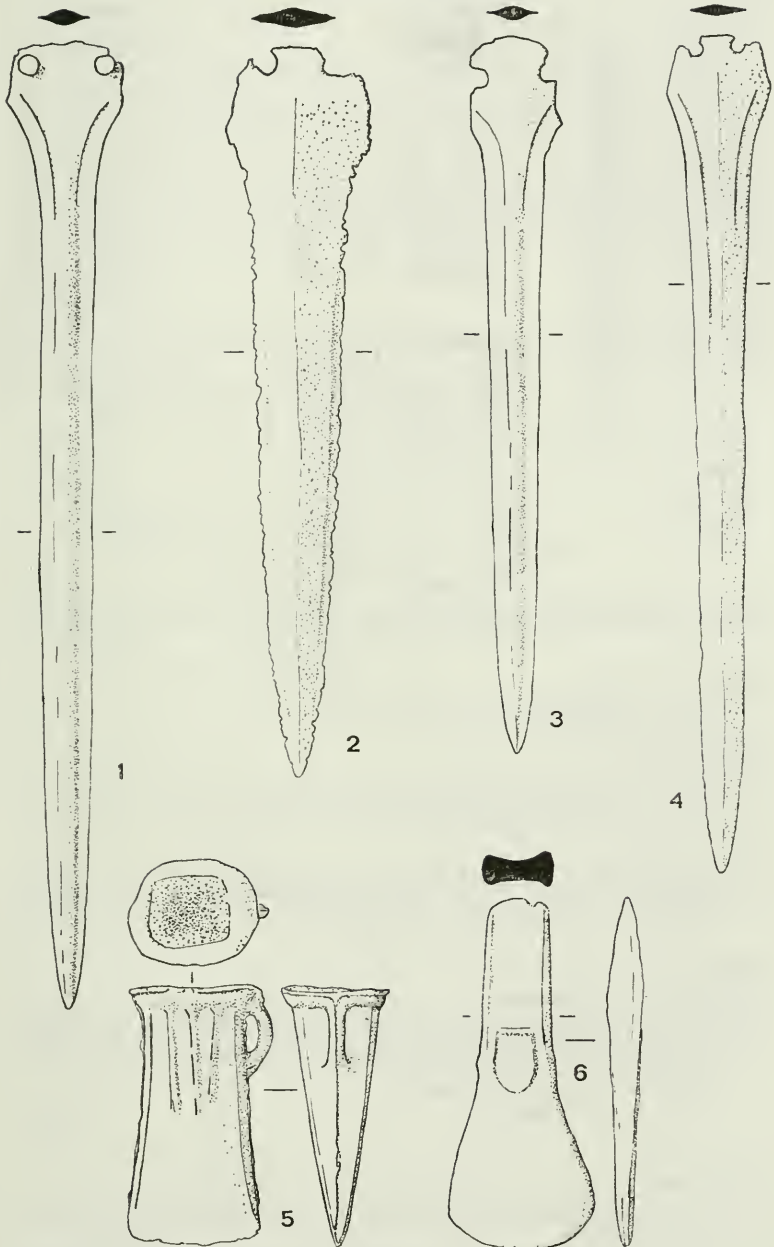


FIG. 7.—BRONZE OBJECTS FROM WEYBRIDGE (1, 2, 3 AND 4) AND GUILDFORD (5 AND 6) MUSEUMS. (1/2)

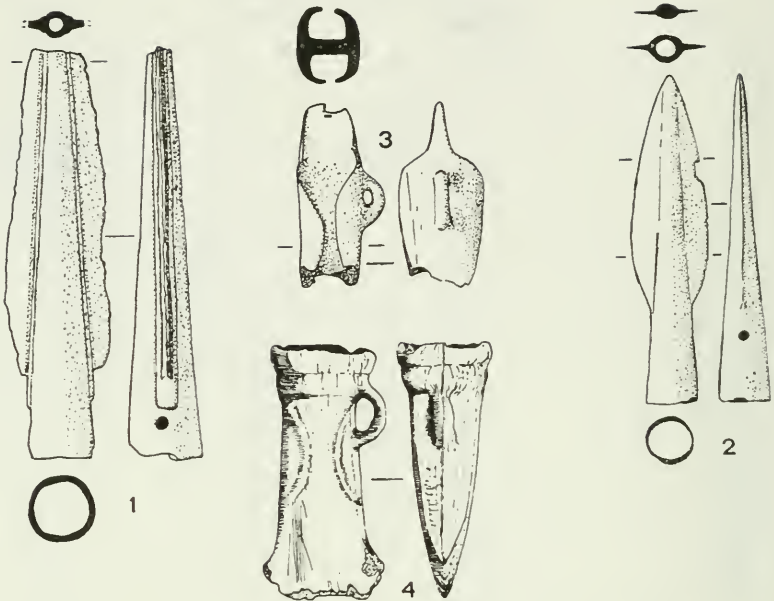


FIG. 8.—BRONZE OBJECTS FROM GUILDFORD MUSEUM (1, 2 AND 3) AND FROM SHIRLEY (4). (½)

Exact site unknown

Leaf-shaped spearhead. No further details.
P.S.A., I (1861), 83.

Site unknown

Fifteen pieces of 'copper cake.' Probably from the Gould Collection.
Arch. J., XX (1863), 372-3; *Surrey A.C.*, LXI (1964), 1.
 Now in Kingston Museum, 506-20.

Sites unknown

A number of objects in the Greenwell Collection are marked as 'found Kingston,' but it is not possible to say whether they are river finds or not, so they are omitted from these lists.

LIMPSFIELD

West Heath. TQ 40385231

Rixheim/Lambeth-type sword found in a garden. It has a rectangular tang and a short ridge between two pairs of rivets, three of which are still in place.
Surrey A.C., LXIII (1966), 168-9.
 Now in private possession.

LONG DITTON

TQ 172669

Three daggers or sword blades found when the waterworks were made in June, 1855.
V.C.H. Surrey, I, 252; *P.S.A.*, I (1861), 83; *Surrey A.C.*, II (1864), xii note only.
 Society of Antiquaries, Roots Collection, Nos. 11, 12, 13.

MITCHAM

Junction Street

Two palstaves found in 1888:—

- (1) Looped with small trident pattern on blade.
- (2) Unlooped with median rib.

Both corroded and have signs of hammering on faces and sides. Possibly the two mentioned in *P.S.A.*, XIII (1891), 151 (not illustrated). Johnson W., and Wright, W., *Neolithic Man in North-East Surrey* (1903), 20.
Both in London Museum (no numbers yet).

Site unknown

Part of the cutting blade of a palstave with a strong median rib and a splayed blade.
Unpublished.
Now in British Museum, W.G. 1863.

REIGATE

Redhill

Small part of a flat axe. L. 1 in.
Unpublished.
Now in Manchester University Museum, No. 05459.

Reigate Heath. TQ 237506

Palstave with shield pattern below stop-ridge; side loop. Found in 1958.
L. 6 in.
Surrey A.C., LVII (1960), 101.
Now in Guildford Museum, AS. 112.

Site unknown. (Fig. 6.5.)

Socketed axe of square section and rounded mouth; splayed blade and ribs inside socket.
Unpublished.
Now in Ashmolean Museum, 1953-1327.

Site unknown. (Fig. 7.6.)

Palstave with shield pattern, slight stop-ridge only and no loop; splayed blade is slightly damaged.
Butler's Class I A1. L. 5½ in.
Unpublished.
Now in Guildford Museum, S. 7090.

The two bronze armlets and spindle whorl noted in *V.C.H.*, I, 245, and in *Arch. J.*, X (1853), 72-3 (also in Whimster), and part of the Ambrose Glover Collection have now been established as coming from Handcross, Sussex, and were not found in Reigate at all. These are the Sussex loops mentioned also in *P.P.S.*, XXV (1959), 153.

RICHMOND

New Lock. TQ 170750

During the building of the New Lock in 1893 a socketed faceted axe was found on the Surrey shore. Square mouth with single moulding and side loop; splayed blade.
Unpublished.
Now in British Museum, W.G. 1749.
At same time as item above a sword of Late Ewart type was also found. *P.P.S.*, XVIII (1952), 145, and Pl. xvii, Fig. 3.

Lock and Weir. TQ 170750

Chape.

Layton Collection in London Museum, D. 1405.

Richmond Hill. TQ 182742

Looped palstave found on the hill; no description given, apart from a rib on the blade face.

P.S.A., III (1867), 90 (no illustration); *ibid.*, V (1873), 428.

Possibly in London Museum, 49/107/196.

Richmond Park

Flanged axe of Central-European type and alleged to be in Hull Museum, but it is not there.

Site unknown

Part of socketed spearhead. Socket and base of blade only left, with small piece of wooden shaft.

Unpublished.

Layton Collection in London Museum, O. 1419.

Site unknown

Socketed gouge from the Surrey bank of the river.

Unpublished.

Now in British Museum, W.G. 1755.

Site unknown

Basal-looped spearhead found in 1895. Information from London Museum records.

Layton Collection in London Museum, O. 1445.

Site unknown

Pegged, leaf-shaped spearhead found in June, 1918.

Formerly in Greenwell Collection.

Now in London Museum, 19784.

SANDERSTEAD

Riddlesdown. TQ 332602

A socketed axe of south-eastern type with wing socketed decoration ending in a horizontal beading across the face.

P.S.A., XVIII (1901), 286 (not illustrated); *V.C.H. Surrey*, I 243 (illustrated). *Croydon N.H.S. Survey* (1966).

In possession of Croydon Natural History Society.

SEALE

Birchen Reeds

A socketed knife of Thorndon type with remains of rivet holes. Blade edges damaged.

Preh. Farnh., 164, Pl. XIV, 4.

Now in Guildford Museum, G. 829.

Colt Hill. SU 88604575

Two socketed spearheads were found in early nineteenth century.

Preh. Farnh., 163, Pl. XIV, 5.

Now in Guildford Museum, S. 7091 (Fig. 8.1) and S. 7092.

Colt Hill. SU 882463

A plain socketed axe reported from the east side of Smuggler's Lane during road works.

Surrey A.C., LV (1958), 122.

No trace now.

Crooksbury Hill. SU 880462

A hoard found in 1857 and said to consist of three palstaves and two socketed axes, according to the *London Illustrated News* for that year.

London Illustrated News, 1857; *V.C.H. Surrey*, I, 241; *Surrey A.C.*, XI (1893), 250; *ibid.*, XII (1895), 152; *Preh. Farnh.*, 163, Pl. XIV, 6 and 7.

In Guildford Museum there are two socketed axes, S. 7087/8 and one palstave, S. 7102.

Site unknown. (Fig. 7.5.)

A Welsh sub-type of ribbed socketed axe with three converging ribs on face; single mouth-moulding with loop from it. A rough-casting, not finished at edges.

Unpublished.

Guildford Museum, S. 7101.

SHALFORD

TQ 00554722

A low-flanged palstave with strong median rib below stop-ridge; no loop; the blade is splayed and the cutting edge is damaged. Pitted surface.

L. 5½ in.

Unpublished.

Now in Guildford Museum, A.G. 109.

SHERE

Gomshall TQ 083477

Socketed axe reported by Ordnance Survey records to be damaged.

Unpublished.

Guildford Museum, R.B. 1386.

SOUTHWARK

Old Kent Road

Socketed axe; double mouth-moulding and side loop; decorated on face with three horizontal ribs beginning and ending in dot terminals.

Unpublished.

Now in British Museum, W.G. 1744.

STREATHAM

Near Common

Narrow-type palstave; no loop. Information from London Museum records.

No trace now.

SURBITON

Site unknown

Socketed axe decorated with ribs and pellets; square socket. *British Museum Bronze Index* says: 'rather brassy looking, possibly not genuine.'

Society of Antiquaries, Roots Collection.

SUTTON AND CHEAM

Site unknown

Narrow-type palstave; no loop; slight central rib from below stop-ridge. Unpublished.

In Glasgow University Hunterian Museum. B. 1914.281.

THAMES DITTON

Site unknown

Socketed spearhead, with decorated shaft. Three rings and punch decoration. Hawkes Type V in British Museum Bronze Implement Index.

Evans, *B.*, 319.

Now in British Museum, 7.56.1.1363.

Site unknown

Narrow form of socketed axe with side loop. Possible shield-like ornament at top of blade, very faint.

Evans, *B.*, 128; *P.S.A.*, III (1867), 398.

Society of Antiquaries Collection.

Site unknown

Medoc-type of flanged axe and formerly in the Ball Collection.

Unpublished.

Now in University of Durham.

Site unknown

'Hatchet' axe of Irish type with expanded cutting edge and small side loop. L. 3 in.

P.P.S., XXV (1959), 188-208 (metal analysis).

Now in British Museum, W.G. 1759.

Site unknown

Spearhead with strong median rib. Found in 1862. L. 20 in.

V.C.H. Surrey, I, 244; *Arch. J.*, XIX, 364; Evans, *B.*, 316.

Presented to British Museum by Earl of Lovelace.

THORPE

TQ 021683

Flanged axe, formerly in the possession of Rev. L. Bennett of Thorpe; present whereabouts unknown.

Surrey A.C., XXII (1909), 198 (where it is called a chisel).

Gravel Pits

Various bronze implements purported to have been found there. No further details available.

WALLINGTON

TQ 288646

Spearhead found twenty-five yards north of Holy Trinity Church on corner of Alcester Road and Manor Road in 1869.

Surrey A.C., LVI (1959), 148.

No trace now.

WALTON ON THE HILL

Walton Heath TQ 224540

A flat axe with a narrow butt and splayed cutting edge.

Calcined bone found with this could suggest a burial.

Surrey A.C., LVIII (1961), 111-2.

In possession of L. W. Carpenter.

WALTON-ON-THAMES

On river bank

A round shield of Yetholm type. Central boss with raised 'dot' decoration in eleven circles, divided by raised ridges. 2 ft. 3 in. diameter.

Now in Pitt-Rivers Museum, Farnham, Dorset.

St. George's Hill

Looped palstave with Irish herringbone decoration on sides of blade; three short ribs below stop-ridge. Butler's Class IA 3.

Surrey A.C., LV (1957), 121 and Fig. 4.

Present whereabouts unknown.

Near Walton Bridge

A basal-looped spearhead found when West Surrey Reservoir was made. Unpublished.

In possession of J. S. Smithers.

Walton Pits

Basal-looped spearhead with slightly damaged blade. Strong central rib.

Found in May 1932.

In Thames Conservancy Collection, Reading Museum.

WANBOROUGH

SU 93674903

Palstave of Butler's Class IA 3 decorated with groups of three short ribs below the stop-ridge.

Surrey A.C., XI (1893), 250, Fig. 13.

Site unknown

Socketed axe with slightly splayed blade; small side loop.

Unpublished.

Now in Guildford Museum, G. 7083.

WANDSWORTH

Earlsfield

A basal-looped spearhead was found in 1915 on site of Power Station.

Now in London Museum, A. 16662.

Gas Company Works

A hoard consisting of eight socketed axes, one gouge and some 'metal cake' found when building the Gas Company's works in 1923.

Surrey A.C., XXXV (1924), 125-6.

Now in British Museum, B.M. 1928, 1-20.

Mouth of Wandle

Group of objects called a hoard in many publications. Consisted of palstave, pin, spearhead and sword, which were found in 1854.

V.C.H. Surrey, I, 243; *P.P.S.*, VIII (1942), 26-48, Fig. 2, No. 5 (pin);

Evans, *B.*, 368, and Fig. 454; *Arch. J.*, IX (1852), 7-8 (pin); Evans, *B.*,

282 (sword); Evans, *B.*, 316 (spear); *B.M.G.*, 56-7, Fig. 48 (pin); *J.B.A.A.*,

XLVI (1890), 78; *P.S.A.*, XVIII (1901), (spearhead).

All in British Museum.

Rapier. Information from London Museum records.

A.J., III (1923), 343-5, No. 4.

Now in London Museum, A. 13942.

WARLINGHAM

TQ 360585

A hoard said to be similar to those at Carshalton Park and Wickham. No details available.

Surrey A.C., XXI (1908), 209; Copley, *Archæology of South-East England* (1958), gazetteer.

WEST MOLESEY

Platt's Eyot

Basal-looped spearhead found in July, 1935.
Information from London Museum records.
Now in Thames Conservancy Collection.

WEYBRIDGE

Brooklands TQ 072629

An axe is stated to have been found in 1907. No details are given and present whereabouts unknown.
Surrey A.C., XXIV (1911), 50.

Brooklands TQ 06856305

A bronze bucket was found in 1907 beside the track running close to the motor circuit and near the railway.
P.S.A., XXI (1907), 464-9; *Surrey A.C.*, XXI (1908), 165-9; *ibid.*, XXIV (1911), 50.
Now in British Museum, B.M. 1907, 7-15, 1.

The Ford TQ 069648

Rapiers:—

- (1) L. 11½ in. With slight central rib and remains of two rivet holes; blade damaged at edges and surface is heavily pitted. (Fig. 7.2.)
P.P.S., XXVIII (1962), 85.
Weybridge Museum, 46-1910.
- (2) L. 14 in. With a trapeze-shaped butt and two rivets in holes; a broad central rib and sharply projecting shoulders. Trump's Group III, Barnes Class. (Fig. 7.1.)
Surrey A.C., XXIV (1911), 50, Pl. 5.
Weybridge Museum, 19-1911.
- (3) L. 13 in. With stout mid-rib and remains of two rivet holes; hafting plate damaged. (Fig. 7.3.)
Weybridge Museum, 2-1919.
- (4) L. 13 in. With well-marked central rib and two broken rivet holes; good condition otherwise. (Fig. 7.4.)
Weybridge Museum, 227-1964.

Socketed spearhead with basal loops and strong central ribs. (Fig. 6.3.)
Surrey A.C., XXIV (1911), 50, Pl. 5, No. 5.
Weybridge Museum, 18-1911.

Socketed knife of Thorndon type with rivet holes in handle. (Fig. 6.2.)
Surrey A.C., XXIV (1911), 50, Pl. 5, No. 6.
Weybridge Museum, 17-1911.

Socketed axes:—

- (1) Plain socketed axe with double mouth-moulding and side loop.
L. 4 in. (Fig. 6.1.)
Surrey A.C., XXIV (1911), 50, Pl. 5, No. 3.
Weybridge Museum, 36-1909/1.
- (2) Faceted socketed axe with double mouth-moulding. L. 4¼ in. (Fig. 5.5.)
Surrey A.C., XXIV (1911), 50, Pl. 5, No. 4.
Weybridge Museum, 36-1909/2.
- (3) Socketed axe with single mouth-moulding and side loop; decorated with ribs ending in 'dot' terminals. L. 4 in. (Fig. 5.4.)
Surrey A.C., XXIV (1911), 50; *ibid.*, XXV (1912), 130, Pl. II, No. 3.
Weybridge Museum, 2-1913.

- (4) Taunton-type narrow socketed axe with single mouth-moulding. L. 5 in. (Fig. 5.6.)
Surrey A.C., XXIV (1911), 50.
 Weybridge Museum, 148-1964.

Palstaves:—

- (1) Flanged palstave with strong stop-ridge, splayed blade. Cast only in Weybridge Museum, 145-1964. (Fig. 5.1.)
Surrey A.C., XXIV (1911), 50, Pl. V, No. 2.
- (2) Narrow-type palstave with strong stop-ridge. Remains of loop only. (Fig. 5.2.)
Surrey A.C., XXV (1912), 130, Pl. II, No. 1.
 Weybridge Museum, 146-1964.

From Weir

Flanged axe with slight stop-ridge; deep side flanges cast in one with the whole. Found 1901.
P.S.A., XXXII (1920), 91.
 Now in Newbury Museum, OA 324.

Site unknown

Palstave with expanded cutting edge; decorative ridges below stop-ridge.
Man, LIII (1953), article 150, p. 98 and Pl. H.
 Now in Newbury Museum, OA 63.

Site unknown

Narrow-type palstave. Information from London Museum records and shown there to be in Leicester Museum, but it is not there.

WIMBLEDON

Near Caesar's Camp

Palstave with strong central rib and expanded blade; no loop.
 Society of Antiquaries, Roots Collection, No. 4.

Wimbledon Common

Narrow Taunton-type socketed axe; side loop and damaged cutting edge; rough surface.
 In Pitt-Rivers Museum, Farnham, Dorset.

Woodside Common

Two winged axes, one damaged.
 In Pitt-Rivers Museum, Farnham, Dorset.

Site unknown

Palstave with strong median rib below stop-ridge and no loop.
Surrey A.C., LXI (1964), 6 and Pl. IV.
 Now in Kingston Museum, K.M. 737.

Site unknown

Socketed spearhead with two rivet holes high on socket and just underneath blade.
 Unpublished. Information from Mr. A. J. Clark.
 In possession of C. Martin.

Site unknown

Socketed axe with square mouth and slight ridges inside. Damaged at mouth and some surface holes on one face.
 Society of Antiquaries, Roots Collection, No. 8.

WINDLESHAM

Bagshot. (Fig. 4.9.)

A 'late-type' palstave of narrow form with nearly parallel sides and slight splay to the cutting-edge, which is damaged; small side loop and the stop-ridge is straight. L. 6 in.

Unpublished.

Now in Charterhouse Museum, 164-1957.

Lightwater

A squat socketed axe and a tanged spearhead.

No further details available.

Unpublished.

Site unknown

According to Whimster there were two palstaves at Bagshot, and the *V.C.H.* also lists a socketed axe. These are untraced now.

Whimster, 222; *V.C.H. Surrey*, I, 243.

Site unknown

Two palstaves. No details but possibly the same as the two from Bagshot.

V.C.H. Surrey, I, 251.

No trace now.

WOODMANSTERNE

Near Brighton Road

Flanged axe found in July, 1960. Expanded blade and only slight flanges. Information from London Museum records.

Possibly in possession of W. Wells, Sudbury, Harrow.

WOTTON

Exact site unknown

In 1787, on the property of Sir F. Evelyn on 'coast hill,' it was reported that two socketed axes, a curved object and 'copper cake' were found and exhibited in 1788. No details of these items can now be found.

V.C.H. Surrey, I, 241; *Arch.*, IX (1789), 99-100 (says articles crumbled on finding).

UNKNOWN PROVENANCE

West Surrey. (Fig. 1.3.)

Part of a flat-axe. Very narrow; could be a chisel or a wedge; one inch wide.

Unpublished.

In Charterhouse Museum, 157-1957.

Site unknown

Small portion of socketed axe with double mouth-moulding and beginning of a vertical rib on face.

Now in Guildford Museum, G.M. 955.

EXCAVATIONS NEAR MERTON PRIORY

1962-3

BY

D. J. TURNER, B.Sc., F.S.A.Scot.

SUMMARY

EXCAVATIONS following a resistivity survey on a site adjacent to that of the Augustinian Priory of St. Mary, Merton, revealed a late fourteenth-century roadway partly overlain by a floor of *c.* 1500. The whole was covered by a destruction layer dating from the demolition of the main Priory buildings which started in 1538. The site was crossed by two early eighteenth-century irrigation ditches. A small stratified sequence of medieval pottery was recovered and derived material in a layer formed during the destruction of the Priory included pottery, bone and metal.

INTRODUCTION

Excavations were carried out in 1962 and 1963 near the site of the Augustinian Priory of St. Mary, Merton. The work was organized by the London Natural History Society (Archæological Section) and the Merton and Morden Historical Society.¹

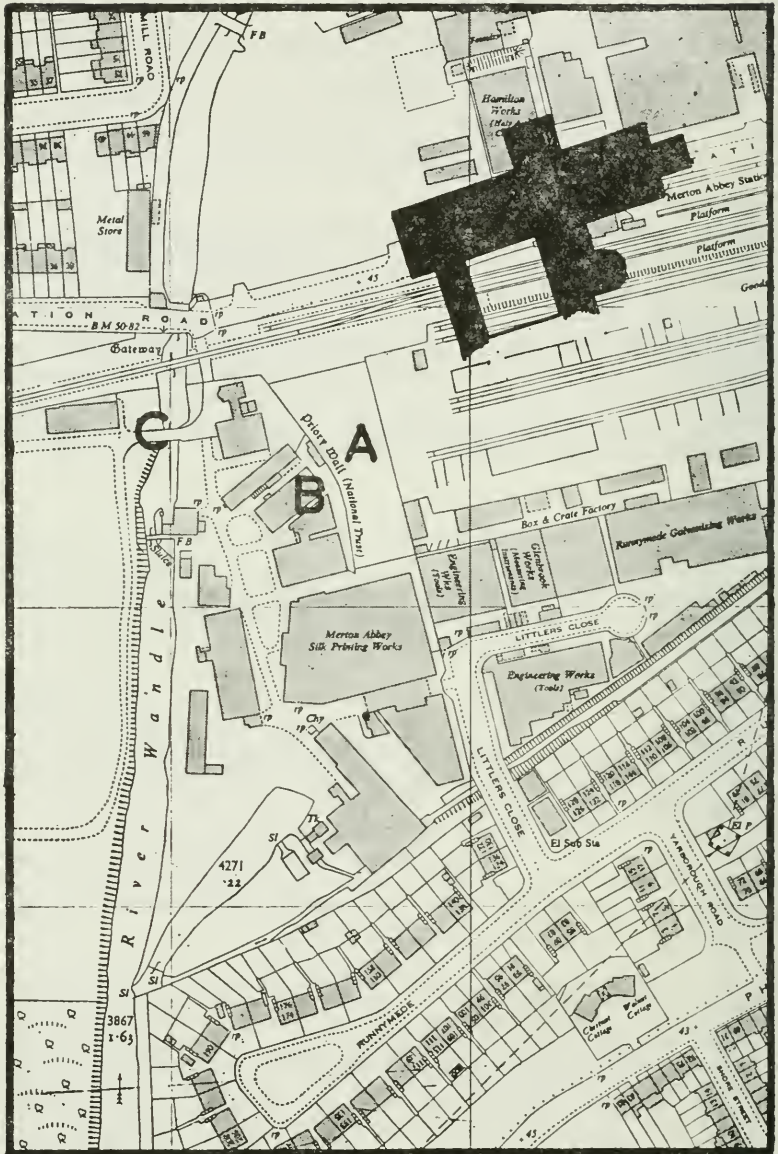
The site of the Augustinian Priory of St. Mary, Merton, is now largely covered by road, railway and factory. Excavations in 1921-2² disclosed the plan of the church, chapter house and cloisters, much of which lie beneath Station Road and adjacent railway property. Between the factories surrounding the church site are a number of small areas of waste land and one plot of allotments remained in 1962. (Fig. 1.)

The allotments³ occupied an irregular strip of land, of rather less than half an acre, between the site of the cellarer's range of the Priory and the known position of some medieval buildings to the west. Until the middle of the nineteenth century a channel of the

¹ The gratitude of all connected with the excavation is due to Mr. A. Slinger, of Liberty and Co., Ltd., and to his wife, whose willing co-operation and friendly interest throughout made the work possible. Approximately seventy people took part in the excavation, too many to mention everybody by name. However, the director's especial thanks for physical help are due to John Collet, John Cross, Malcolm Sims, Bill Rudd, Cyril Easterling, Mr. and Mrs. J. Bell, Peter Pickering, Nicholas Farrant, Susan Malec, Albert Bartrum, the late Mr. Polan, and Linda Fowler. Help has come in the writing of this report from persons named therein. In addition John Creswell has prepared figures 3, 4, 5, 6, 11, 12 and 13, and Sallie Vine drew the pottery. Mrs. M. F. Turner did much typing and re-typing and the director's wife helped untiringly throughout in many ways.

² Bidder, H. F., *Surrey A.C.*, XXXVIII (1929), 49-66.

³ Nat. Grid Ref.: TQ 264698; height 45 feet O.D.; geological formation—Alluvium. The site is published on the O.S. 1/1250 plan TQ 2669 N.E.



Reproduced from the O.S. 25-inch map.]

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FIG. 1.—PLAN SHOWING SITE OF MERTON PRIORY.
(Scale: 25 in. to 1 mile.)

- A—Allotments.
B—Approximate site of chapel, possibly infirmary chapel.
C—Site of Norman arch, discovered 1913.

River Wandle followed the western boundary of the plot, and a curving brick wall still delineates its western bank (incorrectly marked 'Priory Wall' on the O.S. plan). To the east is a goods yard, to the south and west are factories, to the north is the railway. Since the excavations were carried out factory buildings have been erected on the site.

HISTORY OF THE PRIORY

The majority of the known documentary evidence relating to Merton Priory has been transcribed and published.⁴ These documents refer largely to the legal life of the Priory and relate in considerable detail much of the litigation involved in administering the Priory's many properties scattered throughout England and also the juridical activities of the Prior as Lord of the Manor. The documents are sadly lacking in detail about the structural history of the Priory.

Knowledge of the founding of the Priory rests on a fourteenth-century document. According to this, the ville of Merton was granted to one Gilbert the Knight by Henry I some time before December 1114. Gilbert built a church there, probably in 1114, together with buildings suited to the establishment of a monastery. He obtained regal licence for the establishment of the monastery and introduced Rodbert, Sub-Prior of Huntingdon, together with a few brethren. Gilbert endowed the church with land sufficient for two ploughs and a mill worth 60s. per annum. The Canons started to build a new monastery, apparently on a different site, which they entered into in May, 1117. A royal charter was granted in 1121 and Gilbert, the founder, died in 1125.

There is a suggestion in Heales's summary of the fourteenth-century document that the church of 1117 was wooden. However, it is apparent from internal discrepancies that the document derives from more than one source and no great dependence can be placed on it regarding questions of detail. One passage mentions that the 'Convent and edifices' took fifteen years to build, but other documents refer to the dedication of the infirmary chapel in 1161. The documents give little information about the construction of the Priory. It must have had a tower, for the annals of Dunstable Priory record that it was blown down in December, 1222.⁵ Evidence quoted by Heales show that there were royal lodgings within the Priory precincts. Lambarde⁶ relates that a new chapel dedicated to St. Mary was built during the reign of Henry III (1216-1272).

This record is scanty but was supplemented by the results of Col. Bidder's excavations of the church. He was able to distinguish two periods of building. The earlier represents the first stone church while the second phase may have been associated with reconstruction following the fall of the tower in 1222 and includes the

⁴ Heales, A., *The Records of Merton Priory* (1898).

⁵ Green, L., in Jowett, E. M., *A History of Merton and Morden* (1951), 37.

⁶ Lambarde, W., *Topographical Dictionary* (1730).

eastern Lady Chapel. This could well be the chapel mentioned by Lambarde. The presence of Lady Chapels in churches dedicated to St. Mary is common in houses belonging to orders other than the Cistercian. There are some peculiarities of the plan of the east end of the church as recovered by Bidder which suggest analogies with St. Augustine's Abbey, Bristol.

The Priory was dissolved in 1538 and demolition started immediately. Much of the stone was reused in the building of Nonsuch Palace and many interesting architectural fragments from the Priory were found in the excavations there.⁷ After Henry VIII's builders had removed what stone they wanted, the ruins became a quarry for the neighbourhood. By the nineteenth century nothing remained visible of the church and its ancillary buildings except the remains of one chapel.

One other Priory building had been converted to secular domestic use. It became altered out of all recognition and stood until 1913 as Abbey House, a few score yards west of the site excavated. When this was demolished, a Norman archway, set in an ashlar faced wall, was exposed.⁸ The archway has been re-erected in the churchyard of St. Mary's Parish Church, Merton, and it is considered by Prof. Pevsner⁹ to date from *c.* 1175. Parliamentary soldiers are said to have been billeted at 'Merton Abbey' in 1642:¹⁰ this may well have been in what later became known as Abbey House. The name Merton Abbey appears to have become colloquially attached to the Priory even before the dissolution, but it was never justified.

THE RESISTIVITY SURVEY

Twenty traverses were made by Mr. A. J. Clark, on an east-west alignment, spaced, where possible, at eight-foot intervals. The length and spacing of the traverses were dictated by the positions of the allotments under cultivation at the time. Four-foot probe spacings were used throughout. The survey showed two main features:—

- (a) A belt of low resistivity along the west side of the site. This was expected and represented the filled-in channel of the Wandle.
- (b) A strip of high resistivity ten or fifteen feet wide running diagonally across the N.E. corner of the site. This became the subject of later excavations.

The result of the survey is shown as an isopsephograph, or resistivity contour plan, of the site. (Fig. 2.) The technique of resistivity surveying has been shown to produce results that are a function not only of hidden variations in the substrata but also

⁷ Dent, J., *The Quest for Nonsuch* (1962).

⁸ Bidder, H. F., *op. cit.*, 54.

⁹ Pevsner, N., and Nairn, I., *Buildings of England: Surrey* (1962), 310.

¹⁰ Jowett, E. M., *op. cit.*, 78.

of the angle between the traverses and these variations,¹¹ and an isopsephograph based on unidirectional traverses should be treated with circumspection. In this case the principal features noted

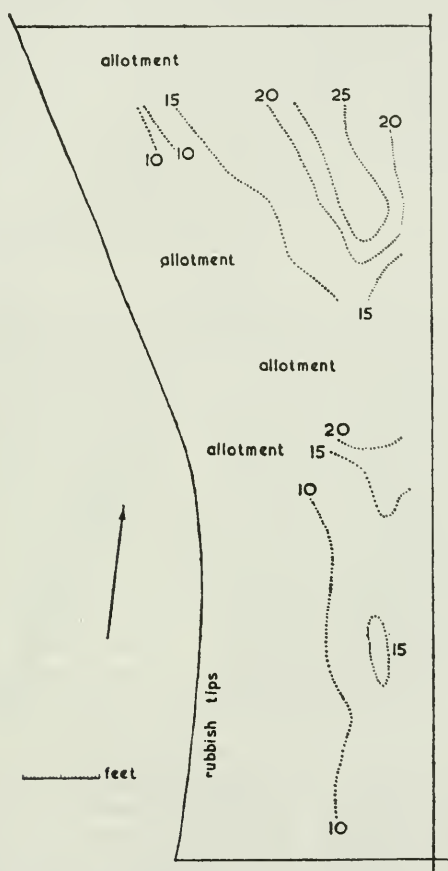


FIG. 2.—ISOPSEPHOGRAPH (RESISTIVITY 'CONTOUR PLAN') OF ALLOTMENT AREA.
Units of resistivity—arbitrary.

appeared to intersect the traverses at large angles and so could be accepted in position and nature.

THE EXCAVATIONS

A 16-foot grid was laid out aligned on the high resistivity feature and 12 foot squares were excavated.¹² Later some baulks were

¹¹ Palmer, L. S., *P.P.S.*, XXVI (1960), 64-75.

¹² Interim reports on the excavations have appeared in *London Naturalist*, 42 (1963), 79-92, and 44 (1965), 139-47.

removed and the limits of the excavated area modified to follow as closely as possible the boundary of the allotments. (Fig. 3.)

A flint cobble roadway approximately ten feet wide was uncovered. It had a low bank covered by small flints adjacent to its western edge, which may have been a raised footpath. A section of the roadway (Fig. 4) disclosed a small ditch at the eastern boundary of the road. Loose cobble from the surface of the road filled the ditch which could not have been open for many years. The ditch fill contained fragments of pottery of probable fourteenth-century date. This dates the ditch approximately, but only dates the making of the road if the ditch was made at the same time. In the absence of any sign of an upcast associated with the ditch, it seems arguable that this was so. Certainly the ditch cannot be earlier than the road.

To the east of the road and overlaying it at one point was a floor of irregular pieces of Upper Greensand laid on a series of dumped layers of clay. In this dumped clay were occasional fragments of soft chalk, some of them up to about 6 inches long. Also in the clay was some pottery, the latest being sherds of fine grey-buff ware of probable fifteenth-century date. Many of the Greensand pieces were dressed on one or more surfaces, and it is possible that all the Greensand was reused building stone. The floor was little more than 3 inches thick and large areas of it had been completely destroyed. It could never have had great strength and as the disturbances were filled with the destruction layer that overlay the site it is probable that the disturbances date from the destruction following the dissolution in 1538. Some fragments of a fine grey-buff ware jug, found in the destruction layer filling a disturbance, were found to join with fragments sealed in the clay below the floor. The clay underlying the floor completely sealed the filled-in side ditch of the road at the point where the floor overlay the road.

At one point a layer of broken roof tiles, laying roughly horizontally, was found. The layer occupied a restricted area to the west of the road and overlay the layer of small stones covering the western bank, and which at this point spread further westwards from the road. The significance of this layer could not be determined and the layer could not be explored further because of the presence of an actively cultivated allotment.

Over the whole of the road and floor was a layer of dark soil containing a considerable quantity of refuse from the demolition of the Priory. Mixed in the layer were a large number of broken meat bones and oyster shells and also much fragmentary pottery. Within the layer were concentrations of mortar two to six inches thick covering several square feet.

The layer appeared to have formed during the demolition of the Priory and so may be dated to 1538 or soon after. Much of the pottery found in it appears earlier in date and probably derives, along with the bones and oyster shells, from a midden disturbed at the time of the demolition. At no point was the transition from

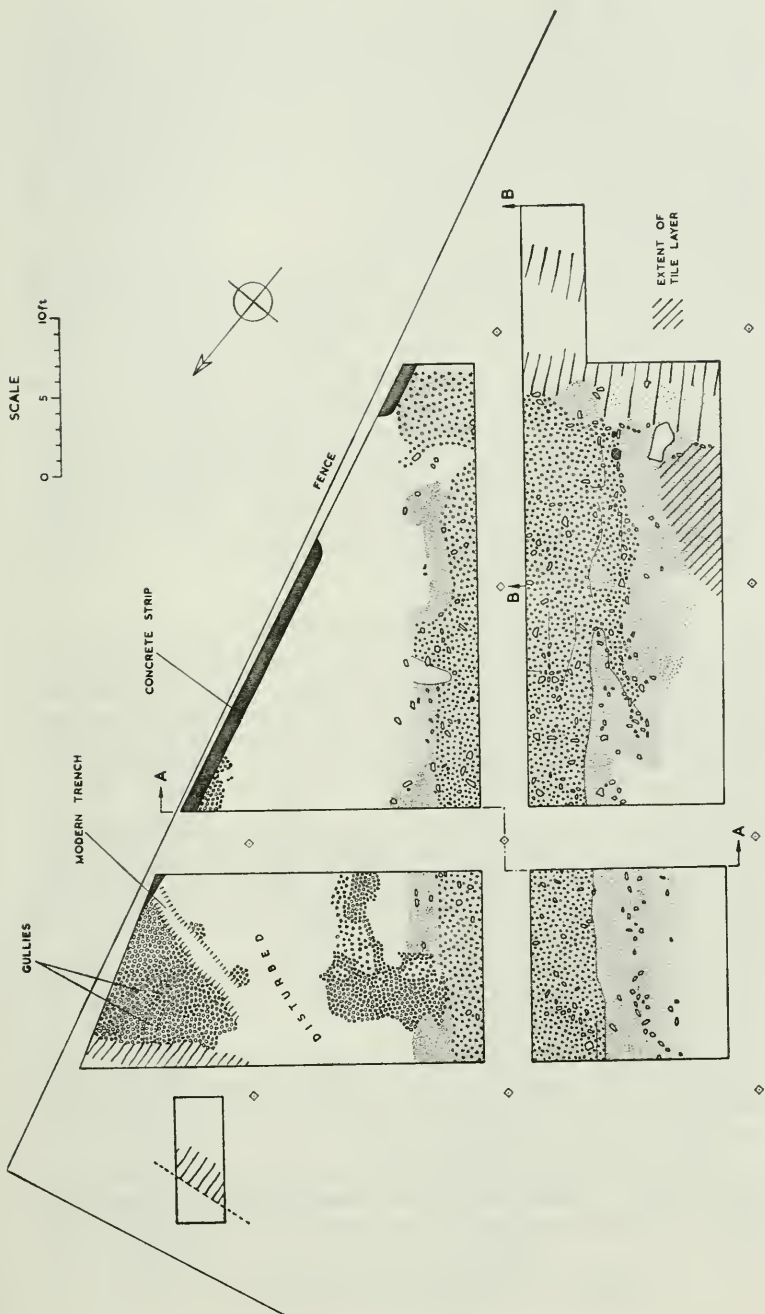


FIG. 3.—PLAN OF EXCAVATIONS, 1962-3.

the top soil to the destruction layer clear as the digging of allotment holders and crop roots had penetrated unevenly. The cultivation had also caused the infiltration of some later material (mainly sherds) into the destruction layer. The mortar deposits within this layer may have been produced by chipping mortar from building stone that was being salvaged. Such a methodical approach is most likely to have taken place between 1538 and 1544 when the Priory was being systematically demolished to provide building stone for Nonsuch Palace.¹³

Two ditches were found crossing the road and running approximately east-west. One of them was sectioned completely (Fig. 5), and the sequence of silting exposed. The ditch can be dated to the early eighteenth century, at which time calico manufacturing was being carried out along the Wandle. The calico was stretched out in the neighbouring fields to bleach in the sun.¹⁴ During the process it frequently had to be wetted and the ditches found were probably water courses cut to facilitate this process. The final filling of the ditches had been carried out by dumping clay into their silted-up remnants. This dumping can be dated to the mid-nineteenth century by pottery, etc., found in the clay. Through the clay dumped in the southernmost of the two ditches a ring of post holes had been made at a subsequent date.

DATING EVIDENCE AND STRATIGRAPHICAL DEDUCTIONS

The amount of stratified material, other than from the destruction layer, is small, but some definite conclusions may be drawn and some inferences made. The dating is entirely from the pottery, details of which are given below, and must be accordingly tentative. However, the Merton stratification also enables some inferences to be made about the pottery.

1. The roadway was apparently constructed some considerable time after the use of shell-tempered pottery died out in the district (six sherds of shell-tempered pottery were found sealed well below the road, only one elsewhere). It is argued below that this date is likely to be not later than *c.* 1250.
2. There is some evidence for the overlap between shell-tempered pottery and the brown-surfaced grey ware (although perhaps not in its cream slipped form).
3. There is little evidence for any overlap between shell-tempered pottery and the hard grey (Limpsfield?) pottery, but there is evidence for overlap between the brown-surfaced grey wares, the hard grey ware and the Cheam series.
4. If the roadside ditch became filled soon after the construction of the road, as seems to be the case, then the road was constructed after the buff-surfaced sandy ware became available. This ware

¹³ Biddle, M., *Surrey A.C.*, LVIII (1961), 1-20.

¹⁴ Slinger, A., in Jowett, E. M., *op. cit.*, 129.

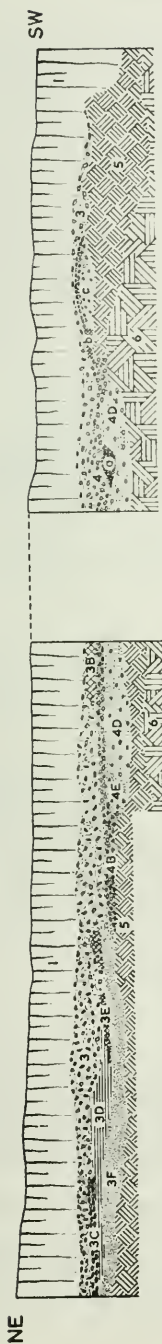
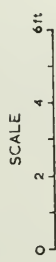


Fig. 4. Section A-A across roadway



LEGEND:

- 1 Top soil
- 2 Clay
- 2A Brown/black clayey layer with patches of chalky soil, fragments of tiles, brick & stone.
- 2B Clayey silt
- 2C Sandy silt
- 3 Destruction layer
- 3B Mortar layer
- 3C Greensandstone 'floor'
- 3D Clay layer with chalk fragments near base
- 3E Chalk lumps & chalky soil
- 3F Grey soil
- 4 Roadway
- 4B Flint cobble
- 4D Orange gravel
- 4E Stony ditch fill
- 5 Brown loam
- 6 Black loam
- a Ash
- b Crushed tile & stones
- c Small cobble over stony soil

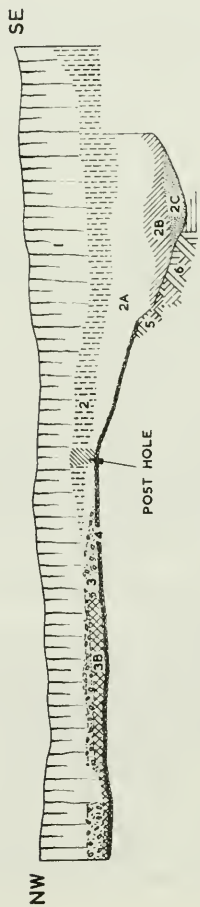


Fig. 5. Section B-B of southern irrigation ditch

appeared at Northolt¹⁵ around 1350. A source near Cheam seems likely and so this ware may have been available at Merton a little earlier than it was at Northolt. But a date of after *c.* 1350 seems probable for the road. The roadside ditch also contained fragments of cream-slipped ware (possibly all from the same vessel) which is in keeping with a mid-to-late fourteenth-century date.

5. There is little evidence for any time variation between the off-white sandy ware and the buff-surfaced sandy ware. At Northolt the off-white ware was distinctly earlier, although there was an overlap. The lack of supporting evidence at Merton for this may be due to the vagaries of the stratigraphy there, but the possibility of differential trading policies can be borne in mind for future investigation.
6. There is evidence that the fine grey-buff wares come later in the Cheam series than the off-white and buff-surfaced sandy wares.
7. The Greensand floor was laid down after the establishment of the fine grey-buff pottery but not very long before the Dissolution. A date early in the sixteenth or late in the fifteenth century seems probable.
8. This suggests a span of from *c.* 1325 to *c.* 1500 for the Cheam series.

FUTURE WORK

The allotment site has now been built over. A few areas of derelict land lie on the north side of Station Road and future work here may relate the cobbled road to the approaches of the Priory and to the cemetery that lay to the west of the Priory.

To the west of the present main stream of the Wandle is the site of Abbey House. Photographs taken in 1913, when this building was demolished and the well-known Norman doorway found, show that the doorway was set in a substantial ashlar faced wall, apparently contemporary with the doorway. Part of the site of Abbey House is now occupied by buildings of Liberty's factory, but it may be possible that excavations in the vicinity could produce further evidence of the ancilliary buildings of the Priory.

THE FINDS (*denotes an illustrated find)

BUILDING STONE

Numerous fragments of building stone were found in the destruction layer and elsewhere. All fragments of mouldings were retained and a selection of others. Forty-seven pieces were submitted to Mr. F. G. Dimes, of the Geological Survey and Museum, for identification: his notes are incorporated hereunder. The remaining material was identified by the writer by comparison with the specimens submitted to Mr. Dimes.

1. Reigate stone. Three small dressed fragments submitted to Mr. Dimes who wrote:—

These specimens resemble in grain size, mineral content and colour, examples in our collections of Merstham, Gatton or Reigate Stone.

¹⁵ Hurst, J. G., *Med. A.*, V (1961), 274-5.

About these three localities (and, indeed, Godstone) a pale, fine-grained sandstone occurs in the Upper Greensand formation. It is usually calcareous, and contains a considerable amount of fragmentary colloidal silica, some glauconite (green in colour and a complex silicate of potassium and iron) and mica. It is well recorded that, in the fourteenth century, the quarries at Merstham were considered so important that they were worked exclusively for the Crown. Use of the stone was prohibited except for Royal and ecclesiastical buildings. I should not like to try to distinguish between the stone taken from this horizon at different localities, for example, Gatton Park, Colley Farm, Godstone, Reigate, and Merstham.

2. Reigate stone. Worn fragment of a block with a rounded edge between two faces at approximately 45°. Tool marks not apparent. From brown loam layer.
3. Reigate stone. Three dressed fragments with only slight traces of tool marks. One fragment apparently sawn. From clay layers sealed below Greensand floor.
4. Reigate stone. Five dressed fragments exhibiting simple convex moulding from string courses, door mouldings, etc. Tool marks not apparent. From destruction layer.
5. Reigate stone. Three dressed fragments with one or two concave cylindrical faces. Fine tool marks visible on some faces. From destruction layer.
6. Reigate stone. Fragment of cylindrically dressed stone, 3.5 in. diameter. No tool marks apparent. Possibly part of shaft. From destruction layer.
7. Reigate stone. Corner fragment of machine (?) cut block, chamfered along two edges. Long parallel marks left by the cutting operation are clear on two faces and both chamfers. From destruction layer.
8. Reigate stone. Corner fragment of a flat polygonal block chamfered along the upper edges. Tool marks not apparent. From destruction layer.
9. Reigate stone. Worn corner fragment of a flat polygonal block. Tool marks not apparent. From destruction layer.
10. Reigate stone. Dressed fragment of a large wedge-shaped block with no two faces or edges parallel. One face has deep triangular keying holes cut, but no mortar adheres. Tool marks not apparent. From destruction layer.
11. Reigate stone. Twenty-one dressed fragments with one or more flat faces. Several have tool marks similar to 7 above but five fragments have tool marks from a narrow cutting tool such as a chisel. From destruction layer.
12. Reigate stone. Small dressed fragment with mortar adhering. From destruction layer.
13. Reigate stone. Corner of dressed block with convex faces. Tool marks not apparent. From topsoil.
14. Purbeck Marble. Fragment of a circular block 4.4 in. diameter, 2 in. deep. Possibly part of a shaft. From clay layer sealed below Greensand floor.
15. Purbeck Marble identified by Mr. Dimes. Dressed fragment bearing the remains of a shallow cylindrical depression approx. 4.5 in. diameter, 0.3 in. deep. Possibly the socket for a shaft of the same dimension as 14 above. From a mortar layer within the destruction layer.
16. Purbeck Marble identified by Mr. Dimes. Two small unstratified fragments.
17. Caen stone. Two small fragments, one with a well-dressed flat surface, submitted to Mr. Dimes, who wrote:—

These specimens match most closely examples in our collection of Caen Stone. Although the supply of limestone in this country for building purposes has always been sufficient, this limestone has been traditionally imported since at least Norman times. It is a fine-grained limestone which has no exact equivalent petrographically or stratigraphically in Great Britain. The geological horizon of the rock is probably represented in this country by strata at the junction of the Inferior and Great Oolites.

Unstratified.

18. Caen Stone. End fragment of cylindrical 'pipe,' tapering in section, but with a true cylindrical inner surface. From the brown loam layer.

19. Caen Stone. Part of a dressed rectangular block with tool marks on two faces. From the filling of the roadside ditch.
20. Caen Stone. Large fragment of a dressed block with a worn roll moulding along one edge. From destruction layer.
21. Horsham Stone. Thirty-six slab-like fragments varying in thickness from 0.2 in. to 1.1 in. Ten specimens were submitted to Mr. Dimes, who wrote:—
These specimens appear to have been used as paving slabs or tiles. For grain size, colour and general texture they compare well with Horsham Stone. This stone is a thinly bedded, ripple-marked, slightly calcareous sandstone occurring in the lower part of the Weald Clay, which is of Cretaceous age. It is particularly well developed around Horsham, where it is up to 30 feet thick, and it was formerly extensively worked for use as paving stones and roofing slates.
From destruction layer or topsoil.
22. Oolitic Limestone identified by Mr. Dimes. Two unstratified fragments.
23. Oolitic limestone. Fragment of a dressed rectangular block with tooling marks on two faces. From destruction layer.
24. Oolitic limestone. Two small-dressed fragments. From destruction layer.
25. Oolitic limestone. Fragment of thin slab, 0.2-0.3 in. thick. From destruction layer.
26. Slate. Fifteen fragments of slate, six of which were submitted to Mr. Dimes who stated that they were almost certainly from North Wales. Fragments were recovered from the brown loam layer, from the clay sealed below the Greensand floor and from the destruction layer.
27. Chalk. Fragment dressed into a rod of elliptical section, axes 1.2 in. by 0.5 in. From clay sealed below Greensand floor.
28. Chalk. Dressed rectangular block with one end rounded 3.7 in. by 2.9 in. by 2.7 in. From destruction layer.
29. Chalk. Two fragments of dressed block. Tool marks remain on one face of one fragment showing the use of the dressing tool in a rotary manner. From destruction layer.

WORKED FLINT

Forty-five pieces of clearly or possibly deliberately struck flint were recovered from the excavation. Most were waste flakes and were unpatinated. Six showed some signs of retouch.

30. Scraper of black and grey flint with patch of cortex on bulbar end opposite scraper edge. 2.5 in. by 1.9 in. by 1.0 in. Unstratified.
31. End scraper of black flint, cortex remaining on one face, little patination. 2.2 in. long, triangular in section. From destruction layer.
32. Wide blade truncated by hinge fracture. Mottled grey flint, some slight retouch or wear on one edge. From destruction layer.
33. Possibly struck flake of brown flint with secondary working. From destruction layer.
34. Probable gun-flint of brown flint. Unstratified.

PATTERNED FLOOR TILES

Many pieces of patterned medieval floor tiles were found during the excavation. They were submitted to Mrs. Elizabeth Eames, of the British Museum, who has kindly provided exhaustive notes on them. Mrs. Eames's notes have been fully incorporated in the description of the tiles given below. Reference is made to the series of tiles published by Hohler,¹⁶ Haberly,¹⁷ and the London Museum.¹⁸ Mrs. Eames divides the material into seven types. Only where the pattern is not similar to one of the accessibly published London Museum series, and is not too fragmentary for satisfactory reconstruction, has it been illustrated (Fig. 6).

¹⁶ Hohler, E. C., *Rec. of Bucks*, XIV (1941 and 1942), 1-49 and 99-132.

¹⁷ Haberly, L., *Medieval Paving Tiles* (1937).

¹⁸ London Museum, *Medieval Catalogue* (1954), 229-53.



FIG. 6.—PATTERNED FLOOR TILES. (↓)

I—*Thirteenth-century Wessex type*. Wessex school inlaid type dateable to the second half of the thirteenth century.

*35. Triangular tile scored to be broken into two triangles half the size.

Part of tile 5·6 in. square, scored to be broken into sixteen triangles. One large circular key centrally placed in the bottom of the square tile. Fabric: light red with dark grey core. Clear lead glaze, traces remaining on surface and patches on sides. Design inlaid in white clay 0·1 in. deep. Pattern is half a pierced 8-foil: the original tile had four pierced 8-foils, each consisting of a ring and eight round petals. From topsoil.

36. Small fragment. Fabric: light red with dark grey core. Traces of clear lead glaze. Design shallowly inlaid in white clay. Pattern is a quasi-heraldic animal, possibly a lion—one part only of one foot is present—within a circle with quadrants in each angle of the tile. From topsoil.

37. Small surface fragment not including any edge or base. Fabric: light red. Design shallowly inlaid in white clay. Pattern unidentified, possibly part of Winchester-type tracery. From destruction layer.

II—*Probably early fourteenth century.* The design is fairly deeply impressed on the surface of the tile and the bottom of the depression is covered with light firing slip, so that the design is in counter relief picked out in yellow. This is well drawn and well executed. An early fourteenth-century date is suggested.

38. Small corner fragment, from the bottom right corner of a tile. Fabric: light red with dark core not reaching the surface. Clear lead glaze. Pattern shows foot in a shoe and part of a leg. Unidentified. From destruction layer.

III—*Relief tile, possibly late fourteenth century.*

39. Small corner fragment. Fabric: light red with dark grey core erupting at surface. Mottled green glaze. No inlay or slip. Pattern unidentified. From destruction layer.

IV—*Line-incised tile, possibly early fourteenth century.* Line-incised decoration. Only one fragment present. A date in the earlier part of the fourteenth century is suggested.

40. Very small surface fragment with no edge or base. Fabric: light red. Clear yellow glaze over a thin coat of white slip. Pattern of one V-shaped impression and two parallel incised lines, possibly part of an incised design. From destruction layer.

V—*Penn type tiles.* Printed type, probably from Penn or related Chiltern factories. Mid to later fourteenth century in date.

41. Nine fragments of tile with similar patterns. Fabric: red or light red with grey or pale grey surface except in the case of two joining fragments with a pinkish buff body. Glaze is either clear yellow or yellow with greenish patches. Pattern is similar to Hohler's P 38, L.M. 2, and Haberly CLIV (a lion passant in lozenge formed by four segments of circle enclosing trefoil ornaments). This pattern is known from Cookham, Berks; Pitstone, Bucks; Dunstable, Beds; Chesterford, Essex; Watford, Herts; and various sites in London. Possibly also from Oxford. One fragment from topsoil, remainder from destruction layer.

42. Corner fragment. Fabric: light red and pinkish buff. Yellow glaze with streaks of green obscuring part of the design. Pattern is probably the same as Hohler's P 63 (pierced eight-petalled flower in guilloche pattern with one dot in the interstices). This pattern is known from Edlesborough, Missenden, and Pitstone, Bucks; Wallingford, Berks; Lesnes, Kent; and various sites in London. From destruction layer.

43. Corner fragment. Fabric: light red. Clear yellow glaze. Pattern could be either Hohler's P 106 or Haberly's CXII. From destruction layer.

*44. Fragment, including one edge and a small part of another. Fabric: light red with a grey core. Clear yellow glaze. Design depressed slightly below the surface. Pattern is Hohler's P 134 (naturalistic oak leaves between two concentric quadrants with two petals at the inner angle). From destruction layer.

*45. Four fragments. Fabric: light red. Clear yellow glaze. Pattern is a continuous one of four contiguous circles enclosing a lozenge with concave sides. Within each circle a foliate pattern with eight or ten leaves. Within the lozenge four spots and a foliate pattern of unknown form. On each tile a complete central figure, halves of four circles and four spots in the corners. From destruction layer and topsoil.

VI—*Sub-Penn (London) type.* This series may be derived from designs used in type V. The clay is different. The designs are more crudely drawn and often rather deeply impressed below the surface of the tile. The glaze is sometimes slightly muddy or opaque. Tiles closely resembling these are known from sites in London and it is possible that they were produced commercially in the London area. The only kiln for the manufacture of decorated medieval tiles known in London was found in Farringdon Street in about 1866, but unfortunately the type of tile found there is not recorded. This series might belong to the late fourteenth or early fifteenth centuries.

- *46. Corner fragment. Fabric: light red with grey core. Muddy opaque glaze. Pattern is similar to Hohler's P 42 (fleur-de-lis with long leaves and foot askew, set diagonally). A debased version of a pattern known from several sites in Bucks. Similar pattern from St. Augustine's, Canterbury. Unstratified.
47. Corner fragment. Fabric: red with grey core. Muddy opaque glaze. Pattern is a variant of Hohler's P 71, L.M. 50, and Haberly's CXXX (pierced cross in ring from which spring fleur-de-lis into the angles and trefoils towards the middles of the sides). Also known from Reading, Berks; St. Alban's, Herts; Chalcombe, Sussex; and London. From topsoil.
- *48. Large fragment of tile originally 4.5 in. square. Fabric pinkish red, orange at base, with large dark grey core erupting over most of surface. Slightly muddy yellow glaze. Very worn. Design depressed below surface. Pattern is a pierced flower of ten petals within a spotted circular band, having twenty spots. Hohler's P 75 is similar but has five petalled flower in 16 spot circle with four spots in the angles. The pattern was too large for the quarry. From clay layer sealed below Greensand floor.
49. Three fragments similar to 48 above. From destruction layer and unstratified.
50. Four fragments (possibly of only two tiles) of tile originally 5 in. square. Fabric: badly mixed dark pink and orange with some grey erupting at the surface. Slightly opaque muddy glaze. Design depressed a little below surface. Pattern resembles Hohler's P 88 and 89, but not identical (saltire cut by a square enclosing a small circle from which spring trefoils). From destruction layer and topsoil.
51. Corner fragment. Fabric: pinkish red. Slightly opaque muddy glaze. Design depressed below surface. Pattern may be a neater version of that on 50 above. From topsoil.
52. Corner fragments. Fabric: pinkish orange. Clear yellow glaze. Pattern similar to Hohler's P 120 and L.M. 19 (part of cusped quadrant with empty cusps: variations of this design normally enclose a dragon below the quadrant and have fleur-de-lis and trefoils in the outer angle). Possibly type VII. See also No. 64 below. From destruction layer.
53. Three corner fragments of a tile 4.3 in. square. Fabric: dark pink with grey core erupting on the surface of the two larger fragments. Slightly opaque muddy glaze. Pattern similar to L.M. 37; Chatwin¹⁹ Fig. 10.6 and Leicester Abbey 19²⁰ (foliate cross set diagonally). Tiles with similar patterns are known from Dunstable, Beds; Bengoe, Herts; Canterbury and Lesnes, Kent; Baginton, Warwick; and four sites in London.
- *54. Approximately half of a tile originally 4.4 in. square. Fabric: pinkish-red with large grey core erupting over most of the surface. Muddy yellow glaze. Design depressed below surface. Pattern consists of a mounted knight, dexter, bearing a shield chequey, quarterly. The left arm raised brandishing a sword. The head of the knight and head and forepart of the horse is missing. Three examples of tiles bearing closely related designs but with the shield Barry, are in the British Museum²¹ from London, Dunstable and of unknown provenance. From topsoil.
- *55. Two joining fragments. Fabric: pinkish red with light grey core erupting over the surface. Muddy yellow glaze. Design depressed below surface. Pattern is the lower part of that described for 54 above. From topsoil and destruction layer.
- *56. Fragment of tile of identical fabric, etc., to 54 and 55 above. Pattern shows part of hindquarters and tail of horse. From destruction layer.
- *57. Corner fragment. Fabric: pinkish red with large grey core erupting over most of the surface. Slightly muddy yellow glaze. Pattern is a pierced quatrefoil in a circle within a lozenge with concave sides. At each edge of

¹⁹ Chatwin, P. B., *Trans. Birmingham Arch. Soc.*, LX (1936).

²⁰ Witcomb, N., *Medieval Floor Tiles of Leicester* (1956).

²¹ Catalogue numbers R 77, R 78 and A 198.

- the tile half of a vesica enclosing lozenges (this part very worn). From destruction layer.
58. Fragment with two lengths of original edge. Fabric: dark pink with grey core erupting at surface. Slightly opaque muddy glaze. Design depressed below surface. Pattern is fleur-de-lis in bloom with four (?) stamens set diagonally. From destruction layer.
59. Two fragments. Fabric: pinkish red with grey core erupting over most of surface. Muddy yellow glaze. Design depressed below surface. Pattern is gyronny of sixteen. From destruction layer and topsoil.
60. Three fragments. Fabric: pinkish orange or pink with grey core erupting at surface. Clear yellow glaze on two pieces. Pattern is gyronny of 64. From destruction layer and topsoil.
61. Two fragments. Fabric: dark pink with dark grey core. Clear yellow glaze. Design depressed below the surface. Pattern unidentified, possibly two legs of a deer. From destruction layer.

VII—*Possible Sub-Penn Type*. This series could also be derived from the Penn type. The technique is better than in Type VI. Designs seem to be clearer in outline and only slightly below the surface of the tile if they are depressed at all, but the patterns seem to be rather finicky. The glaze is clear but of an unusually deep yellow. Tiles of this type are known from London sites and it is possible that they are also products of a London factory. A late fourteenth or early fifteenth-century date may be suggested.

- *62. Corner fragment. Fabric: red with grey core. Yellow glaze. Pattern is variant of Hohler's P 61 (guilloche pattern with oak leaves (?) in the interstices). From destruction layer.
63. Corner fragment. Fabric: light red with grey core. Deep yellow glaze. Pattern probably Hohler's P 66 (pierced eight-petalled flower in ring, and four dots, between four cusped quadrants enclosing alternately trefoil and quatrefoil ornament), very worn. From destruction layer.
64. Corner fragment. Fabric: red with grey core. Yellow glaze. Pattern is variant of Hohler's P 120 (see No. 52 above). From destruction layer.
- *65. Corner fragment. Fabric: red with grey core. Yellow glaze. Pattern possibly a variant of Hohler's P 165 (two concentric quadrants, three pellets between them and one in each angle). Pattern also known from Iver, Bucks. Wrongly described and classed as P 151 in Second Interim Report. Unstratified.
66. Fragment. Fabric: light red with grey core erupting. Yellow glaze. Pattern is gyronny, possibly of 36. From destruction layer.
67. Small fragment. Fabric: red with dark grey core. Deep yellow glaze. Pattern unidentified, two petals and part of surrounding band. From destruction layer.
68. Corner fragment. Fabric: red with grey core. Could be a waster implying fairly local manufacture. From fill of south irrigation ditch.

PLAIN FLOOR TILES

66. One whole plain glazed floor tile of dark blue-green colour, 4 in. square. From destruction layer. Numerous fragments of plain or mottled glazed floor tiles were also found.
67. Twelve pieces of square tile with large circular key. Fabric: light red with thick grey core. One fragment has traces of brown glaze remaining. Dimensions apparently from 6 to 8 in. square and 1 in. or 1½ in. thick. From clay below Greensand floor and destruction layer.

ROOFING TILES

Fragments of roofing tiles were frequent in the destruction layer and in the clay layers sealed beneath the Greensand floor. In addition there was the layer, mentioned above, of broken tiles to the west of the roadside bank. Only rarely was a dimension other than thickness measurable. A selection of tile fragments from each of these three layers was measured and the frequencies of different thicknesses (measured to the nearest one-sixteenth of an inch) are plotted as histograms in Fig. 7. The numbers of fragments from other layers

measured do not justify their presentation in this form. It can be seen that the tiles from the clay layers and those from the tile layer are likely to have a different origin. The smaller thickness of the tiles from the tile layer may imply an earlier date for these than for the tiles from the clay layers. An Act

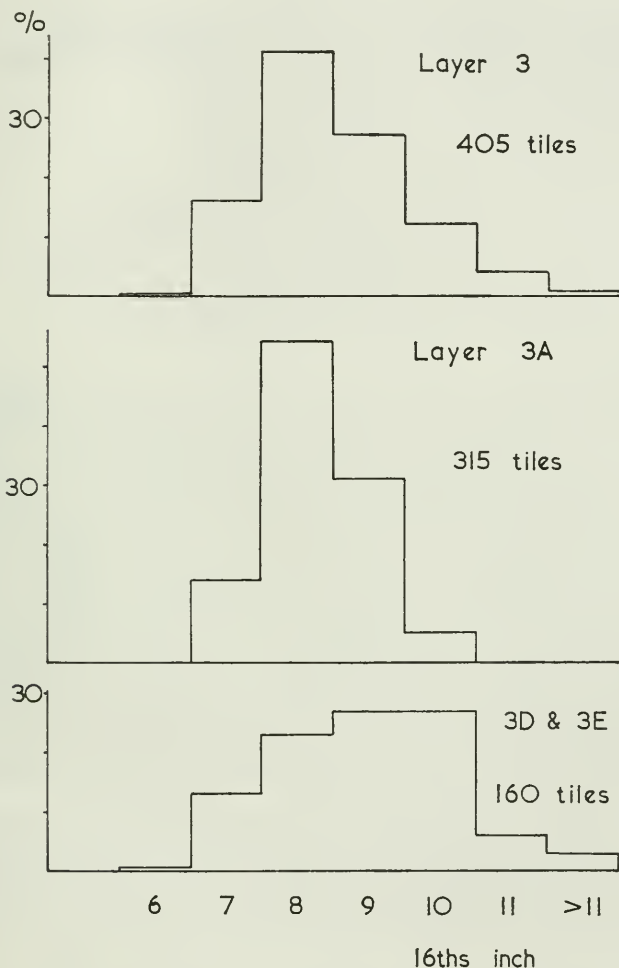


FIG. 7.—HISTOGRAMS OF ROOF-TILE THICKNESSES.

of Parliament of 1477 laid down a standard for roofing tiles of $10\frac{1}{2}$ in. by $6\frac{1}{4}$ in. with a thickness of at least $\frac{5}{8}$ in.²² The histogram for the destruction layer can be seen to be a close approximation to the mean of that from the other two layers.

Approximately 7% of the fragments examined had patches of poor yellow to brown glaze over part of one side. Several fragments of plain ridge tile

²² Salzmann, L. F., *Building in England down to 1540* (1952).

were found. They were suited to a roof pitch of approximately 35° and were $\frac{5}{8}$ in. thick and apparently 8 in. wide by at least 12 in. long. The 1477 Act laid down the standard size of ridge tile as 13½ in. by 6½ in.

BRICKS

68. 2¼ in. by 3⅝ in. by 8 in. Light red. From destruction layer.
 69. 2¼ in. by 3¾ in. by 8 in. Light red. From destruction layer.
 70. Chamfered. 2 in. by 3⅞ in.-3¼ in. by 8¼ in. Light red. From topsoil.
 71. 2 in. by 3¾ in. by 7¾ in. Light red. Unstratified.
 72. 2 in. by 4 in. by 9 in. Purplish red. Unstratified.
 73. 2¼ in. by 4 in. by 8¾ in. Light red. Unstratified.
 74. 2⅜ in. by 3⅞ in. by 8¼ in. Light red. Unstratified.

The following brick fragments were not retained.

75. 1⅞ in. by ? by ?. Dark brown-red. From destruction layer.
 76. 2 in. by 4⅛ in. by ?. Light red. From destruction layer.
 77. 2 in. by 4½ in. by ?. Dark purplish red. From destruction layer.
 78. 2⅞ in. by 3⅞ in. by ?. Dark purplish red. From destruction layer.
 79. 1⅞ in. by 3⅞ in. by ?. Light red. From topsoil.
 80. 2 in. by 4¼ in. by ?. Light red. Unstratified.
 81. 2 in. by 4½ in. by ?. Dark purplish red. Unstratified.
 82. 2¼ in. by 4¼ in. by ?. Light red. Unstratified.

POTTERY

The medieval pottery recovered from the excavations was almost entirely in a very fragmentary condition (Figs. 8 and 9). The bulk of the material came from the destruction layer and so only a moderate amount of stratigraphical information was forthcoming. Recently it has become apparent that previously accepted datings for medieval pottery have been overprecise. While these datings are probably of the right order, large tolerances must be placed on them as few pieces are closely dated and little is known about the persistence of different wares or pot forms. Local variations are of importance and too much dependence cannot be placed on analogies made over long distances. Comparisons are probably only valid if links can be found between sites that are no more than twenty or thirty miles apart. Attention must be paid to regional ties: for example, before the fourteenth century north-east Surrey material is more likely to be comparable to north-west Kent than to Middlesex. An illustration of possible pitfalls may be cited in the superficial resemblances between pottery manufactured on the Surrey-Kent border (presumably in the thirteenth and fourteenth centuries) and that from various Hertfordshire kilns produced at a similar period. Certain wares, such as the cream-slipped pottery described below, may well have had wider distribution and longer ranging analogies may be valid. The same applies, obviously, for imported pottery.

In the absence of the publication of the material from the key Surrey sites of Preston Howe, Banstead, and Pachesham, Leatherhead, analogies have had to be drawn cautiously from Kent and Middlesex. The datings here given must be treated with due circumspection. In most cases the evidence is slender and the datings and classifications must be subject to revision as work, and publication, on other local sites is undertaken.

Imported pottery.

*83. Red painted ware. This sherd was submitted to Mr. G. C. Dunning, F.S.A., who writes:—

Sherd of jug of buff sandy ware with yellow surface. It is from the upper part of the body, with the change in profile into the neck at the top of the sherd. The decoration is red-painted and consists of a broad horizontal band just below the neck and irregular curved stripes lower down. Near the right-hand edge of the sherd is a spot of yellow glaze with a pit-mark at its centre.

The sherd is identified as part of a jug imported from Normandy in the late eleventh or early twelfth century. Closest analogies for the style of the red-painting on the Merton Priory sherd are on two jugs, one found at

Rouen and the other at St. Vincent-de-Nogent, Seine Maritime.²³ The first has irregular loops and curved stripes on the upper part of the body and the second has horizontal bands in this position. The two patterns are combined on the Merton Priory pot.

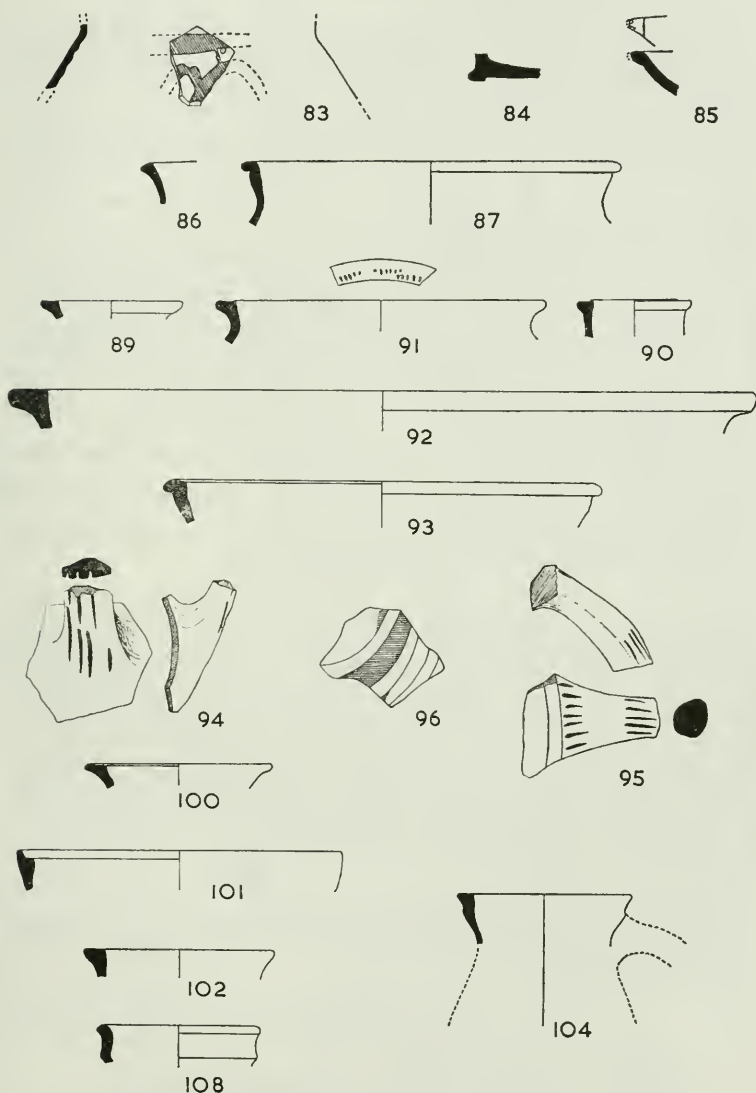


FIG. 8.—POTTERY. (‡)

83-5 Imported ware; 86-7 shell-tempered; 89-95 hard grey; 96-108 cream-slipped, etc.

²³ Dunning, G. C., *Med. A.*, III (1959), 62, Fig. 34, 1-2.

Glaze is seldom found on Normandy jugs of this date. In this feature, however, the spot of glaze on the Merton Priory sherd is precisely matched by one of the imported red-painted jugs found in a deep pit at Pevensey Castle: this has numerous spots of yellow glaze on the body.²⁴

From the destruction layer.

- *84. White ware. Fragment of base angle of large vessel. Pale grey-buff ware with white surface. Patchy apple green glaze externally over thin pale buff slip. Considered by Mr. Dunning to be possibly West French in origin. From brown loam sealed below Greensand floor.
- *85. Sherd of bowl of pale buff ware, rim not complete but trace of embossed decoration remains. Patches of pale yellow glaze externally, mottled yellow-green glaze internally. Possibly imported. From destruction layer.

Shell-tempered ware. Grey or black, lightly shell-tempered ware, usually with a light red-brown surface.

Shell-tempered ware appears to be superseded in the twelfth century at Northolt.²⁵ This site is less than twenty miles from Merton, but the pottery there was derived from East Anglian types. Northolt is almost certainly at the edge of East Anglian influence and Surrey sites are more likely to be under Kentish influence at this time. At Eynsford shell-tempered pottery continues to *c.* 1300.²⁶ However, at Merton the shell-tempered ware is stratigraphically earlier than the dark grey wares that appear related, at least, to Limpsfield ware, which has also been dated to the late thirteenth century.²⁷ The rim forms at Merton appear early and a date running up to *c.* 1250 at the latest might be tentatively suggested.

- *86. Rim sherd. Simple flared rim of wide-mouthed vessel from upper levels of the black alluvial soil that underlies the site.
- *87. Rim sherd. Squared-off bead rim of wide-mouthed vessel from upper levels of the black alluvial soil.
- 88. Plain base angle sherd of dark grey ware with red-brown external surface and some fine shell temper. From brown loam layer.

Hard grey ware. Hard grey reduced pottery, sometimes with a pinkish surface, made on a fast wheel. Wide range of thicknesses. Coarse sand temper stands out, giving a surface slightly harsh to the touch. The fabric resembles that produced by the Limpsfield potteries,²⁸ but is also similar to the hard medieval grey wares of Northolt²⁹ and to pottery from the Manor of the More, Rickmansworth,³⁰ and other sites in Hertfordshire.³¹ The Merton rim forms resemble those from kiln sites at Ashstead³² (where the fabric is different) and Limpsfield. The ware found at Merton was almost certainly manufactured somewhere in East Surrey or West Kent. Both Limpsfield and Ashstead potteries have been given a date of *c.* 1300 and the similar ware from Northolt, probably made in Hertfordshire or Middlesex, is dated 1250-1325.

- *89. Rim sherd. Flat-flanged rim with bevel underneath. From brown loam layer.
- *90. Rim sherd of jug. Flat-flanged rim with tiny upright beading and bevel underneath. From destruction layer.
- *91. Rim sherd. Flat-flanged rim with bevel underneath. Top of rim decorated by simple rouletted pattern poorly applied. From brown loam sealed beneath the Greensand floor.

²⁴ Dunning, G. C., *A.J.*, XXXVIII (1958), 211, Fig. 2.2.

²⁵ Hurst, J. G., *op. cit.*, 258-61.

²⁶ Spencer, B. W., 1964 *Exhibition of Medieval Pottery* (1964), 1.

²⁷ *Ibid.*, 6; Dunning, G. C., *Arch. Cant.*, LV (1943), 57-64.

²⁸ Spencer, B. W., *op. cit.*, 1.

²⁹ Hurst, J. G., *op. cit.*, 267.

³⁰ Biddle, M., and others, *Arch. J.*, CXVI (1959), 136-99.

³¹ Renn, D. F., *Potters and Kilns in Medieval Hertfordshire* (1964).

³² Frere, S. S., *Surrey A.C.*, XLVII (1941), 58-66.

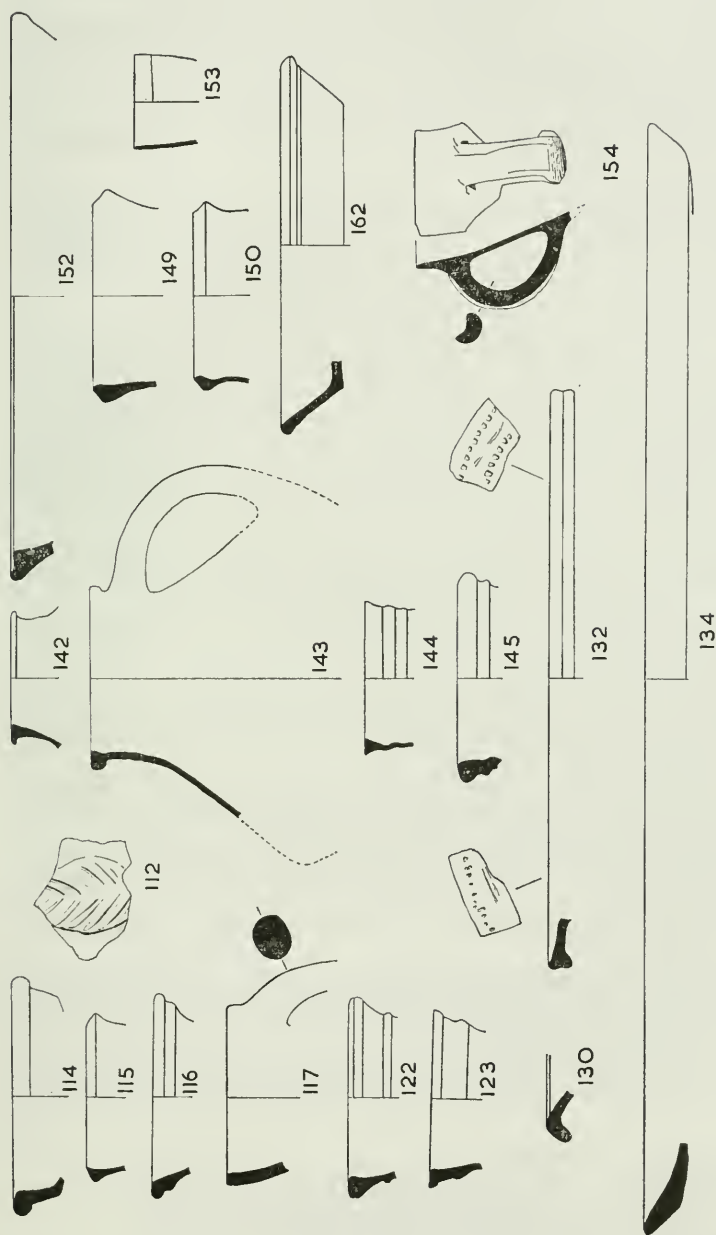


FIG. 9.—POTTERY. (4)

112-7 Off-white sandy; 122-34 buff-surfaced sandy; 142-5 fine grey-buff; 149-52 late oxidized wares; 153-4 Stoneware; 162 17th-18th century wares.

- *92. Rim sherd of bowl. Heavy flat-flanged rim. From the fill of the roadside ditch.
- *93. Rim sherd of bowl. Flat-flanged rim with upper face bevelled into external rounding. From the lowest of the clay layers sealed between the Greensand floor and the brown loam layer.
- *94. Bottom end of slashed strap handle of globular jug. From clay sealed below floor.
- *95. Top end of slashed round handle of similar vessel. From destruction layer.

Cream-slipped and decorated jugs. A number of sherds carrying a cream slip were found. The slip was often covered by a glaze varying in colour from the palest green to deep olive, sometimes mottled with yellow. Four separate fabrics were distinguishable. Sherds of similar fabrics but without slip, although sometimes with other decoration, are considered also, as it seems that the slip and glaze were restricted to the upper parts of vessels.

(a) Brown surfaced grey fabric. This was a uniform ware with a red-brown oxidized surface usually both internally and externally. The pale grey core is due to incomplete oxidization and occasionally extends to the inner surface. Base angles are plain. Jugs have strap, rod or D-sectioned handles, but plain rod handles predominate. The glaze rarely extends over the handle. It is possible that similar ware antedates the introduction of slip techniques, as unslipped sherds were found sealed below the road associated with shell-tempered sherds. Two or three unslipped sherds were found with spots of clear or orange glaze: it may well be that this technique is restricted to the earlier occurrence of this fabric.

(b) Pink-oxidized fabric with some very fine sand temper. Some sherds of this fabric bore traces of imitation polychrome pattern in red, yellow and green. Probably closely related to Fabric (a).

(c) Grey reduced fabric. Very hard, well-fired pottery with a uniform grey showing little temper. Very rare at Merton.

Similar pottery is recorded locally from various sites, e.g.:—

(i) Ashtead. Jugs and dishes of brown or brick-red paste, coated with patchy white slip, found at a kiln site with a range of other vessels of brown, brick red and grey fabric. Also associated, but apparently not made at the kiln, were jugs of glazed off-white sandy ware.³³

(ii) Lesnes Abbey. Jugs, apparently of fabrics (a) and (c) above, associated with Limpsfield ware and imported pottery of c. 1300.³⁴ The survival value of such imported ware is a matter for some speculation.

(iii) Southwark. Jugs, of fabrics (a) and (b) associated with vessels of off-white sandy ware, a decorated jug of buff ware, and a sherd of imported polychrome ware of c. 1300.³⁵

(iv) Joydens Wood. Jug, apparently of fabric (b), found loosely associated with Limpsfield ware.³⁶

(v) Northolt. Brown-ware jugs with zonal decoration of yellow strips and blobs on a red-brown background, and jugs of brown sandy ware, possibly similar to fabric (a) above, with an overall white slip under a mottled green glaze and combed decoration.³⁷

(vi) Burstow. Jug, of fabric (b) above, bearing sgraffito decoration found loosely associated with pottery not closely related to any found at Merton.³⁸

³³ Frere, S. S., *op. cit.*, 58-66.

³⁴ Dunning, G. C., *A.J.*, XLI (1961), 1-12.

³⁵ Dunning, G. C., in Kenyon, K. M., *Excavations in Southwark* (1959), 88-92. Vessel 5 has a brown surface beneath the slip.

³⁶ Dunning, G. C., *Arch. Cant.*, LXXII (1958), 31-9.

³⁷ Hurst, J. G., *op. cit.*, 270-1.

³⁸ Turner, D. J., *Surrey A.C.*, LXIII (1966), 60.

Hurst³⁹ dates fabric (c) as thirteenth-fourteenth century and suggests the first half of the fourteenth century for fabric (b). The distribution of sherds of these wares at Merton suggests that fabrics (b) and (c) may be later than fabric (a), and that, with the exception of the earlier variant of fabric (a), they are all later than the hard grey ware.

The first four sherds listed below (96-9) are not cream-slipped wares but are brown ware jugs with applied cream or yellow slip patterns similar to the brown ware jugs from Northolt. Their fabric suggests a close relationship with the cream-slipped jugs. It is probable that all these decorated jug forms, including the decorated jugs of the off-white sandy ware series (see below), are similar in date.

- *96. Sherd of large jug of fabric (a). Arcaded pattern of concentric strips of white slip covering red-painted band, closely paralleled by vessel at Northolt.⁴⁰ From brown loam.
- 97. Sherd of fabric (a) with pattern of narrow bands of thickly applied cream slip. Clear glaze. From destruction layer.
- 98. Sherd of fabric (a) with pattern similarly produced. Olive green glaze. From destruction layer.
- 99. Sherd of brown ware, with red surface internally. Pattern of crossing bands of cream slip thinly painted on. No glaze. From destruction layer.
- *100. Rim sherd of fabric (a) with cream slip. Mottled dark green glaze externally and on the interior to the bottom of the moulding. From clay layer below Greensand floor.
- *101. Rim sherd of fabric (a) with cream slip and splash of green glaze. From destruction layer.
- *102. Rim sherd of fabric (a) with cream slip and vestigial glaze on top of rim. Flat-flanged rim with bevel underneath, resembling rim form of jugs of hard grey ware found on the site. From destruction layer.
- 103. Plain rim sherd of fabric (a) with cream slip. Neck constricts sharply 0.6 in. below rim. From destruction layer.
- *104. Rim sherd of jug of fabric (a) with mottled yellow and green glaze externally. Rim form is closely parallel to that of biconical jug from Thread-needle Street.⁴¹ Unstratified.
- 105. Vessel and handle junction of fabric (a). Wide strap handle with stabbing. Traces of green glaze. From destruction layer.
- 106. Rod handle of fabric (a) with cream slip. Crude petal-like pads at the upper junction with the vessel. An almost identical handle (unpublished) from Stonar, Kent, is on display at the Deal Castle Museum. The form of decoration is a common one,⁴² and is in imitation of jugs made in Northern France. From destruction layer.
- 107. Three sherds of fabric (b) with cream slip and glazed to give an imitation polychrome pattern in yellow, mottled green and red-brown. From destruction layer.
- *108. Plain rim sherd of fabric (c), glazed externally. Cream slip externally and extends $\frac{3}{8}$ in. below rim internally. Glaze spills irregularly over rim. From destruction layer.

Off-white sandy ware. Very pale grey pottery with a finer temper than that of the hard grey ware. One or two darker sherds, intermediate in texture to the hard grey ware, were also found. At the other extreme, sherds with a buff tinge to the surface implied overlap with the buff-surfaced sandy ware. If this ware may be taken as corresponding to the 'off-white Surrey' ware of Northolt,⁴³ then a date of early fourteenth-century to early fifteenth-century may be inferred.

³⁹ Personal communication.

⁴⁰ Hurst, J. G., *op. cit.*, 270, Fig. 72.1.

⁴¹ London Museum, *op. cit.*, 215, Fig. 69.1.

⁴² Rackham, B., *Medieval English Pottery* (1948).

⁴³ Hurst, J. G., *op. cit.*, 273-4.

109. Small sherd from decorated jug. Raised band of cream slip. Glazed clear on slip band, brown on body. From brown loam.
110. Small sherd of imitation polychrome jug. Pattern of yellow, brown and dark green formed by slip and glazing. From destruction layer.
111. Neck sherd of jug with diverging vertical ribs. Thick mottled dark green glaze. From clay sealed below Greensand floor.
- *112. Sherd with raised 'leaf' or 'fir-tree' pattern. Mottled green glaze. From destruction layer.
113. Sherds of decorated jugs. Combing, heavy raised ribs and simple diamond rouletting on weak raised ribs are exhibited. Glaze varies from mottled yellow-green to mottled green-brown. From, or derived from, destruction layer.
- *114. Rim sherd of jug with sharply expanded neck. Thickly applied apple-green glaze. From brown loam west of bank.
- *115. Rim sherd of jug. Gently thickened rim, with vestiges of glaze externally. A jug of sagging biconical form of buff ware with similar rim was found in a pit at Westminster Abbey and ascribed to the late fifteenth century.⁴⁴ From destruction layer.
- *116. Rim sherd from jug with flaring neck. Mottled green glaze externally. From destruction layer.
- *117. Rim, neck and rod handle junction of jug. Spot of green-brown glaze. From destruction layer.
118. Oval-sectioned handle. With three broad shallow grooves running up back. Unglazed. From destruction layer.
119. Base angle sherd of large jug. Decoratively thumbled, sag of base probably lower than projection of thumbing. Unglazed. Unstratified.

Buff-surfaced sandy ware. Similar in texture to the off-white sandy ware but with a buff surface and slightly greyer body. Occasionally the body of the sherd was also buff and a small group of sherds had a distinct orange tint to their external surfaces. Many of the sherds had mottled glaze and several were decorated. There were many sherds intermediate in fabric between this ware and the fine grey-buff pottery. The 'buff Surrey' wares at Northolt were dated to 1350-1425, with special local reasons for the final terminal date.⁴⁵ Similar ware was found in a pit with a sherd of imported French polychrome ware at Southwark,⁴⁶ together with other early fourteenth-century wares. At Merton a dating of early fourteenth century to late fifteenth century might be acceptable. Pottery intermediate between buff-surfaced wares and other wares has been grouped under buff-surfaced wares.

There is a singular shortage of bowl forms of this ware and of the two preceding wares. Bowl forms of off-white and buff wares are common on other sites such as Northolt. Jugs have plain or decorated handles and rod, oval or D-sectioned forms predominate. Both plain and thumbled base angles were found, there being a wide range of thumbing styles.

120. Sherds of decorated jugs. Two with deep parallel horizontally incised lines, one with parallel grooves and some indeterminate relief moulding. Dark green glaze. From destruction layer.
121. Fragment resembling one of the upright knobs on the rim of a jug found at Northolt.⁴⁷ On the Northolt example there was deep slashing below the knob but on the Merton one there are shallow parallel grooves. This form may be a degenerate face jug and a similar feature is also recorded from St. Catherine's Hill, Winchester.⁴⁸ Glazed externally. From topsoil.

⁴⁴ Hurst, J. G., *A.J.*, XL (1960), 188-94.

⁴⁵ Hurst, J. G., *Med. A.*, V (1961), 274-5.

⁴⁶ Dunning, G. C., in Kenyon, K. M., *op. cit.*, 88-92.

⁴⁷ Hurst, J. G., *op. cit.*, 271, Fig. 72.7.

⁴⁸ Hawkes, C. F. C., and others, *P. Hants F.C.*, XI (1930), Fig. 26.44.

- *122. Rim sherd of jug with surplus clay adhering to top, derived from stacking in the kiln during firing. Mottled green glaze externally. From clay sealed below Greensand floor.
- *123. Rim sherd with mottled yellow-green glaze. Probably from a biconical jug, as the resemblance to the rim form of the jug from Threadneedle Street⁴⁹ is even stronger than in the case of vessel 104. From destruction layer.
124. Four jug rims showing persistence of early form. Flat-flanged rims with bevel underneath, as in vessel 89 above. One glazed externally, three unglazed. From destruction layer.
125. Similar rim but on a sharply everted neck. Glazed externally, glaze spilling over rim. Unstratified.
126. Two other jug rims showing the persistence of early form. Downward sloping flange with tiny upright beading and bevel underneath, a downward canted version of the rim of vessel 90 above. Unglazed. From destruction layer and topsoil.
127. Plain upright rim with sharp constriction of neck $\frac{1}{2}$ in. below rim. Green glaze over rim. From brown loam.
128. Two similar rims without constriction. From destruction layer.
129. Neck and rod handle junction with section of plain rim $\frac{1}{2}$ in. above top of handle. Slightly everted neck. Patches of glaze externally. Similar to vessel 117 above. From brown loam.
- *130. Sharply rounded flange rim of large bowl. Apple-green glaze internally. From destruction layer.
131. Two rim sherds of plain everted rims of very thin vessels, possibly lids. One has glaze on top of rim, the other is glazed externally and has orange surface internally. From destruction layer.
- *132. Rim sherds of flat dish or lid decorated internally with two rows of crudely applied rouletting from a toothed wheel. Mottled apple green-yellow glaze. From destruction layer.
133. Two rims of similar vessels lacking glaze or decoration. One orange ware, the other brown ware (probably over-fired).
- *134. Lid or flat dish of considerable diameter. Mottled green glaze internally. Heavy external burning over large part of perimeter. Where burnt the fabric has changed from buff to dark grey. From roadside ditch fill.
135. Lower end of strap handle, with three deep-thumbed grooves at the junction and stabbing above. Unglazed. From destruction layer.
136. Strap handle with longitudinal grooves near the edges. Unglazed. From destruction layer.
137. Rod handle with two deep grooves and a single line of stabbing up the back. Uneven mottled green glaze. From destruction layer.
138. Oval-sectioned handle with two deep grooves running up the back. Mottled green glaze. From destruction layer.
139. D-sectioned handle with irregular line of stabbing up the back. Mottled green glaze. From destruction layer.
140. Two base-angle sherds of jug. Angle decoratively thumbed with thumbing projecting below slight sag of base. Mottled green glaze externally under base. From brown loam.
141. Small perforated sherd of thin-walled vessel. Unglazed. From destruction layer.

Fine grey-buff wares. Ware finer and thinner than the sandy wares, although several sherds intermediate in fabric were found. Colour is pale and varies from buff to pink or grey. Glaze, varying in density and on parts of vessels only, is usually mottled olive-green to brown. A fifteenth-century date seems likely for this pottery.

- *142. Rim, possibly of biconical jug or measure. Ware transitional between buff-surfaced sandy and fine grey-buff. Spotted with glaze and blackened by fire. From destruction layer.

⁴⁹ London Museum, *op. cit.*, 215, Fig. 69.1.

- *143. Pitcher with bib of mottled olive-green glaze. Flattened D-section handle with single line of stabbing. Joining sherds from clay below Greensand floor and from destruction layer.
- *144. Rim and sherds with very pale grey surfaces. Spot of glaze on neck with streak of pale blue paint-like substance running from it. Similar streaks on body. From destruction layer.
- *145. Rim with orange surface internally. Fragment of dark brown glaze remains externally. From destruction layer.
- 146. Two plain base angles, possibly belonging to vessels 143 and 144. From destruction layer.
- 147. Two sherds of fine grey ware with brown bloom to surface. Decorated with curving trails of white slip or paint. Traces of green glaze. From destruction layer.

The three preceding pottery types, off-white sandy, buff-surfaced sandy, and fine grey-buff wares, are all represented amongst finds associated with the well-known pottery kiln at Cheam.⁵⁰ The material from Cheam was, apparently, derived from a waster midden and there was no stratification except in that a green-glazed costrel appeared later than the bulk of the pottery found. There seems no reason why the Cheam pottery need not be considered as covering a wide time-range and a sequence of two centuries is probably not unreasonable.

Oxidized late- or post-medieval wares. A number of not necessarily related vessels may be grouped under this head.

- 148. Large rim sherd of large dish of uncertain size and shape (not circular) of coarse, red, tile-like ware. Irregular glaze internally resembling the glaze found on some pieces of roofing tile from the site. The wall thickness is $\frac{1}{2}$ in. and oxidization has not been uniform, leaving a grey core. From upper cobbles of road.
- *149. Two rim sherds of jug including part of simple lip. Hard dark brown-buff ware with dark grey band on underside of rim externally. Traces of white painted line on neck. Dated late fifteenth-early sixteenth century by Mr. Hurst. Possibly related to the grey-buff ware described above. From destruction layer.
- *150. Rim sherd of similar jug of hard brown-surfaced pink ware. Similar dating. From destruction layer.
- 151. Rim sherd of costrel of coarse brown ware with poor clear glaze. From destruction layer.
- *152. Rim of large pan of coarse red-brown ware with splashes of poor clear glaze. Thickened rim is recessed slightly on top to take a lid. From destruction layer.

Early stonewares.

- *153. Plain rim sherd of unglazed grey stoneware, pale brown externally. From brown loam.
- *154. Handle and part of wall of cup. Identified by Mr. Hurst as Beauvais stoneware of the later fifteenth or early sixteenth century. From destruction layer.
- 155. Handle of stoneware cup similar to above. From destruction layer.
- 156. Filled base of brown stoneware vessel identified by Mr. Hurst as Raeren stoneware of the early sixteenth century. From destruction layer.
- 157. Filled base of very fine grey stoneware with good quality glaze. From destruction layer.

Seventeenth- to nineteenth-century pottery. Some of the later pottery on the site had stratigraphical significance with respect to the irrigation ditches.

- 158. Two minute fragments of plain Delft drug jar or similar vessel. Early eighteenth century. From lowest silt of south irrigation ditch.
- 159. Rim-to-base sherd of shallow dish of thin dark brown-glazed stoneware. Possibly early eighteenth century. From lowest silt of south irrigation ditch.

⁵⁰ Marshall, C. J., *Surrey A.C.*, XXXV (1924), 79-97.

160. Minute sherd of white, salt (?)-glazed earthenware. From lowest silt of south irrigation ditch.
161. Minute sherd of white porcelain with blue underglaze pattern. From silt of south irrigation ditch.
- *162. Sherds of flat oatmeal-coloured stoneware dish. Eighteenth century. From below clay capping to south irrigation ditch.
163. Rim of vessel of red ware with heavy brown glaze. Horizontal incised line below plain, slightly everted rim. Late eighteenth or early nineteenth century. From below clay capping to south irrigation ditch.
164. Numerous sherds of cream earthenware, including straight-sided jug, plate, etc. Dated by Mr. J. Ashdown as *c.* 1780. From clay capping to north irrigation ditch.
165. Sherds of coarse brown earthenware, including base fragment of chamber pot. Dated by Mr. Ashdown as first half of nineteenth century. From clay capping to north irrigation ditch.
166. Various sherds of decorated earthenware. Dated by Mr. Ashdown as *c.* 1830-50. From clay capping to north irrigation ditch.
167. Three fragments of stoneware. Dated by Mr. Ashdown as *c.* 1900. In view of the dates of the large quantity of other pottery from this layer, these sherds may be regarded as intrusive. From clay capping to north irrigation ditch.

TABLE 1

POTTERY DISTRIBUTION TABLE: NUMBERS OF SHERDS

Ware	Layer													
	6	5SR	5SF	5	4E	4BSF	4B	3F	3E	3D	3C	3A	3	3B
Shell tempered ...	7			1										
Hard grey ...	1		2	6	2			2		4				27
Cream slipped (a)		5		5	30					5				36
Cream slipped (b)				1	1			1	2	3				14
Cream slipped (c)				1						2				3
Off white ...			1	9	6	1	1	3		5		1		126
Buff surfaced ...			2	14	24		1	4	2	9	1			152
Fine grey-buff ...				1		1				6				59
Stoneware ...				1										21

Layer numbers are as in Figs. 4 and 5. Suffix 'SF' or 'SR' means sealed by the Greensand floor or sealed by the roadway.

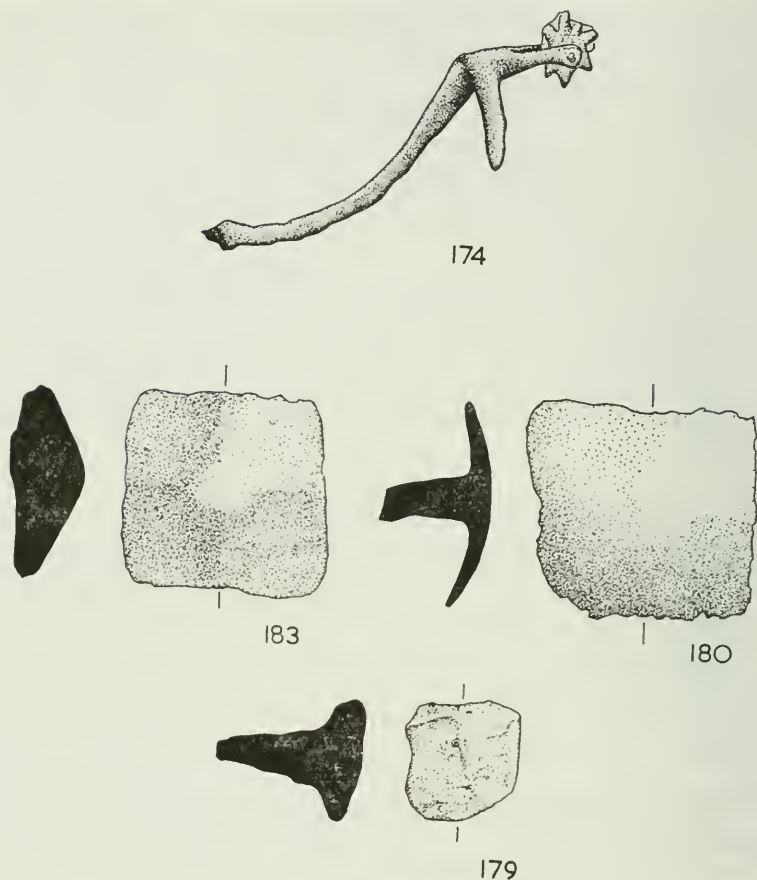
GLASS

A number of minute fragments of glass were recovered. Few had features of note and the majority came from the destruction layer where the possibility of intrusive material being present was high.

168. Fragment of the rim of a shallow dish. From clay sealed below Greensand floor.
169. Fragment of rim of straight-sided vessel. Clear glass. From base of destruction layer above cobble but possibly intrusive.
170. Fragment of rim of a dish. From destruction layer.
171. Rim of a narrow-necked bottle. From destruction layer.
172. Fragment of bottle neck of dark green glass. From destruction layer.
173. Fragment of flat base of bulbous vessel of pale green glass. From destruction layer.

IRON

Several badly corroded finds of iron were made during the excavation (Figs. 10 and 11). Conservation work has been carried out on the material by Mr. P. Humphries and by the London Museum.

FIG. 10.—IRON OBJECTS. ($\frac{1}{2}$)

- *174. Rowel spur with eight-point rowel on short shank. This simple type of spur is difficult to date precisely in the absence of the arm terminals.⁵¹ From destruction layer.
- *175. Part of blade and long tang of a single-edged knife. A common medieval form.⁵² From destruction layer.
- *176. Blade and tang of single-edged knife. Blade approximately 4 in. long. From destruction layer.
177. Part of blade of single-edged knife. 5 in. long, tapering from $\frac{11}{16}$ in. to $\frac{7}{16}$ in. From destruction layer.
178. D-shaped bow and short length of shank of small key. From destruction layer.
- *179. Small doornail, almost complete. Head approximately $1\frac{1}{4}$ in. square, cylindrically domed. Tapering, rectangular-sectioned shank, $1\frac{1}{4}$ in. long. From top of cobble.

⁵¹ London Museum, *op. cit.*, 103-12.

⁵² *Ibid.*, 51-5.

- *180. Head and part of shank of large doornail. Domed head originally $2\frac{1}{4}$ in. by $2\frac{1}{2}$ in. by approximately $\frac{1}{4}$ in. maximum thickness. Tapered rectangular-sectioned shank, $\frac{5}{8}$ in. by $\frac{1}{2}$ in. where it joins head. From top of cobble.
181. Domed head of large doornail or stud. 2 in. by $2\frac{1}{16}$ in. by approximately $\frac{5}{16}$ in. maximum thickness. Embedded in top of cobble.
182. Domed head of large doornail or stud. $2\frac{1}{4}$ in. by $2\frac{3}{8}$ in. by approximately $\frac{1}{4}$ in. maximum thickness. From top of cobble.
- *183. Facetted head of large doornail or stud. $2\frac{1}{4}$ in. by $2\frac{1}{8}$ in. by approximately $\frac{3}{8}$ in. maximum thickness. Embedded in top of cobble.
184. Fragment of horseshoe. From brown loam.
- *185. Horseshoe. Plain outline, no calkins. The lack of calkins suggests a sixteenth-century date⁵³ which is in line with the stratigraphy. From directly on top of cobble roadway.
- *186. Horseshoe. Plain outline, no calkins. From destruction layer.
- *187. Half a horseshoe. Plain outline, originally eight nails, prominent calkin. From destruction layer.
188. Half a badly worn horseshoe. Plain outline, no calkins. From destruction layer.
189. Hook. From uppermost cobble of roadway.
190. End of strap or strut. $1\frac{1}{4}$ in. wide, two nail holes. From directly on cobble.
191. Nails of various forms. Mainly from destruction layer.

COPPER ALLOY OBJECTS

192. Jetton, size 6. From the uppermost of the layers sealed below Greensand floor east of the roadway.

Obv. A king, standing under a canopy of E.E. architecture.

Leg. GRA REX, perhaps for *Dei Gratia Rex*.⁵⁴

Rev. A short cross-crosslet decorated (one of the numerous decorative varieties of the cross-crosslet for which there is no special heraldic or other term) cantoned by eagles displayed, within an inner granulated circle.

Leg. AMOR VINCIT OMNINI . . . (in gothic script).⁵⁵

Partly pierced on rev.

An Anglo-Gallic jetton probably struck at an English mint in France. The partial piercing is a common characteristic of Anglo-Gallic jettons and is discussed by Barnard⁵⁶ who states:—

A peculiarity of the jettons generally accepted as Early English or Anglo-Gallic is that most of them are partly or wholly pierced in the middle . . . It has been suggested that to render the flans more exactly circular, they were worked on a lathe and held in place during this operation by a little spike of hard metal which penetrated the centre of the flan. It may be that the cavity thus made also served to hold the flans fast during the striking, a similar spike being fixed in the die. This is supported by the fact that in an examination of many hundreds of such counters I have never met with a case in which the flan has slipped under the hammer. Why this should have been a feature of Anglo-Gallic and no other, not even French, jettons is, so far, not clear.

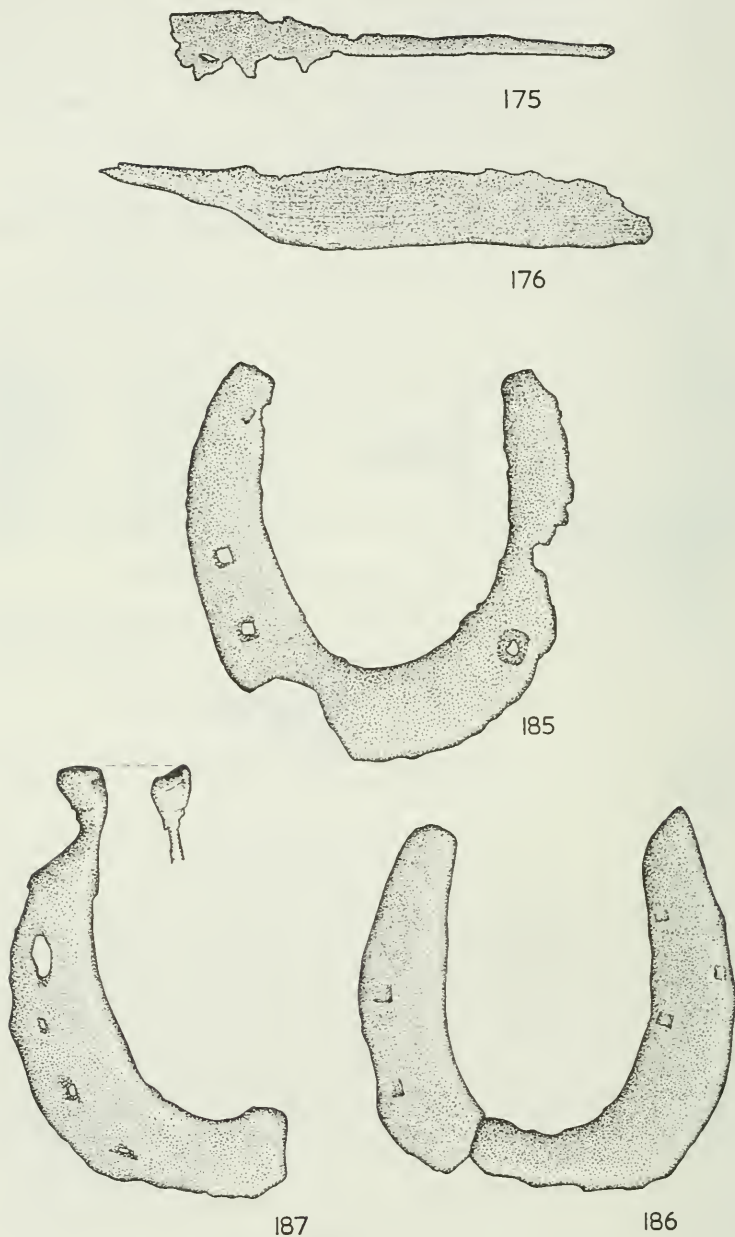
In the case of the jetton from Merton, the partial piercing is central to the flan but not to the design. Also, the piercing is surrounded by a slight raised rim of metal that has resisted wear to a greater extent than the adjacent parts of the surface, probably as a result of the work-hardening

⁵³ London Museum, *op. cit.*, 116.

⁵⁴ C. i., Barnard, F. P., *The Casting Counter and the Counting Board* (1916), 102, No. 39.

⁵⁵ *Ibid.*, 101, No. 37.

⁵⁶ *Ibid.*, 95, with refs.

FIG. 11.—IRON OBJECTS. ($\frac{1}{2}$)

of the metal. This suggests that the piercing was later than the striking of the jetton and supports the contention that the jetton was worked on a lathe.

Barnard suggests that the Anglo-Gallic jettons were not struck later than the end of the fourteenth century. The partial intelligibility of the legend on this example suggests that it falls late within the series, and a date towards the end of the fourteenth century might be implied. Little is known of the survival capacity of individual jettons.

193. Jetton, size $6\frac{1}{2}$. From the destruction layer.

Obv. The Châtel Tournois within a granulated inner circle.

Leg. Indecipherable gothic script.⁵⁷

Rev. A cross of three strands fleurelissée and fleurannée with a quatrefoil in the centre, all within a tressure of four arches fleuroncée at each angle.

Leg. AVG in the spandrels of the quatrefoil (gothic script).⁵⁸

Barnard states that the type of Châtel Tournois was ubiquitous on European coins for more than two centuries, but especially popular in the fourteenth century. It presents a motive of stylized ground plan and elevation, representing, conventionally, the town, castle and church of Tours. There are many variations in the treatment of the châtel type. In the case of the jetton from Merton, the town walls are given in ground plan as three sides of a square with two round towers at the unenclosed side. In the centre rises the elevation of the church spire, crowned with a fleur-de-lis; in the examples detailed by Barnard the spire is surmounted by a cross potent. In front of the town is the ground plan of an outwork.

The reverse is of a character commonly found on medieval jettons and resembles the reverses of various French coins from Louis VIII (1223-6) onwards.

194. Jetton, size 7. From the destruction layer.

Obv. A conventional single-masted vessel at sea with a flag and a streamer fore and aft; above the yard is a G.

Leg. An open crown VOLGUE LA GALLEE (DE FRANCE).

Rev. A lozenge of France-ancient (shown as four lis) within a granulated inner circle; in each spandrel a trefoil between two annulets.

Leg. (V)VE LE BON ROY (DE FRANCE).

Jettons of this type were struck at Nuremburg in great numbers in the sixteenth century. The obverse and reverse combined suggest the arms of Paris and the legend intimates that they were originally intended for use in France. They spread widely and are common in England. An almost identical jetton, but of size 8, is illustrated by Barnard.⁵⁹ The legend on the obverse may be translated 'Sail fair the ship of France.'⁶⁰

195. Seven lace tags or tassel ends: varying in length from $\frac{11}{16}$ in. to $1\frac{1}{4}$ in. From destruction layer.

196. Threading needle made of $\frac{3}{32}$ in. ribbon twisted together with a loop at one end, pointed at the other, the loop is very worn, $1\frac{3}{16}$ in. long. From destruction layer.

197. Tack or shoe nail. From the destruction layer.

198. Pin from brooch. From destruction layer.

199. Cleat-like object. From destruction layer.

200. Fragment of twisted sheet. From fill of roadside ditch.

201. Small fragment of sheet. From cobble of roadway.

⁵⁷ *Ibid.*, 110, No. 4.

⁵⁸ *Ibid.*, 112-3, Nos. 7 and 15.

⁵⁹ *Ibid.*, Pl. XXIX, No. 8; also Barnard, F. P., *Annals of Archaeology*, V (1913), 21-66, No. 10.

⁶⁰ The writer is indebted to the late Prof. Munroe Fox for clarifying the obscurity of this legend.

202. Pins. 191 unbroken spherical headed bronze pins were found and fragments of approximately 65 more. The shortest complete pin was $\frac{3}{16}$ in. long, the longest (by $\frac{5}{16}$ in.) $1\frac{3}{8}$ in. All but five of the pins were between $1\frac{3}{16}$ in. long and $1\frac{3}{8}$ in. long. Twenty-nine unbroken pins and fragments of seven came from the destruction layer (probably as a result of infiltration): the remainder came from the fill of the south irrigation ditch or from the indistinct upper surface of the destruction layer.

LEAD

203. Small piece of wire. From beneath Greensand floor.

204. Two twisted pieces of glazing bar. From beneath Greensand floor.

205. Numerous fragments, mostly in the form of shapeless lumps, apparently waste from melting down lead being salvaged from the Priory. Some fragments were recognizable as part of glazing bars, others were in the form of fragments of sheet. From the destruction layer.

206. Short length of squashed tube. Approximately $2\frac{1}{4}$ in. long, $\frac{1}{4}$ in. diameter, threaded at both ends. From upper fill of south irrigation ditch below clay cap.

BONE OBJECTS (Fig. 12.)

*207. Cylindrical handle. Turned on a lathe; $2\frac{5}{16}$ in. long and $\frac{1}{4}$ in. diameter; one end slightly tapered and has short socket for tang; the other end is decorated by two circumferential grooves on a head, $\frac{1}{8}$ in. long by $\frac{5}{16}$ in. diameter. Possibly from a *punctilius*.⁶¹ From clay sealed below Greensand floor.



207



208

FIG. 12.—BONE OBJECTS. ($\frac{1}{2}$)

*208. Die. Hand made, approximately $\frac{7}{32}$ in. cube; the markings are in the form of small pits slightly less than $\frac{1}{32}$ in. diameter, surrounded by an incised circle $\frac{1}{16}$ in. diameter. Slightly burnt. From destruction layer but could be intrusive.

MOLLUSCA

Samples of soil from various horizons were examined by Messrs. J. P. Castell and J. Cooper of the British Museum (Natural History), who wrote the following report on the mollusca content of the samples.

Samples of material from seventeen locations (ten soil samples and seven groups of shells recovered by excavators) were submitted for examination and from these about 2,750 land and freshwater mollusc shells were extracted. The results are summarized in Table 2.

2 kgm. of each of the soil samples were used for molluscan analysis except in two cases where the sample submitted was less than this amount. In both these cases, however, the samples duplicated second samples from similar contexts. The figures in each column of the table are, therefore, based on at least 2 kgm. of material.

Mollusca were most prolific in the eighteenth-century deposits (layers 2A, 2B and 2C), where the aquatic species are especially abundant. Many of the species are characteristic of rivers and small streams with plenty of vegetation. Fifty per cent of the 1,311 gastropods are aquatic species. There is a remarkable abundance of about 500 specimens of species of the minute bivalve *Pisidium* in the eighteenth-century samples

⁶¹ The writer is indebted to Mr. J. L. Nevinson for this suggestion.

and some 400 come from one sample (layer 2B); most of them have yet to be identified. All three deposits appear to indicate running water rather than stagnant conditions but species characteristic of running water could be transported in times of flood. This is unlikely here as there is no clear evidence of different conditions.

Calcareous granules from slugs belonging to the genus *Arion*, which occur in great abundance in many samples, cannot be identified specifically and the plate-like vestigial shells of the Limacid slugs are very difficult, if not, impossible, to determine satisfactorily.

The great majority of the land molluscs are characteristic of damp or marshy woodland conditions. Some, such as *Pupilla muscorum*, *Vallonia costata*, *V. exentrica*, and *Helicella itala*, are more typical of drier habitats. These species may have been washed into the River Wandle higher up during periods of heavy rain or flooding. They are never abundant.

It will be noticed that five species of marine mollusca were used for food. Oyster shells were particularly abundant in the destruction layer and were presumably imported from the Thames estuary.

Stelfox⁶² recorded 50 species of land and freshwater molluscs as a result of several visits between 1906 and 1908 to the River Wandle and neighbouring ditches and ponds on, and adjacent to, the site of Merton Priory. Three species, including *Arianta arbostorum*, were not found living, and it was thought that these dead shells may have come from deposits along the bank of the Wandle. All the species were abundant with the exception of *Retinella nitidula*, *Vitrea crystallina*, *Planorbis leucostoma*, and *Aplexa hypnorum*.

The species recorded by Stelfox which occur in the samples from Merton Priory are listed in Table 2. It will be seen that 17 species, as well as freshwater Mussels (*Unionidae*) were not seen by Stelfox. Several species recorded by him were not found in the samples.

The ostracods were kindly determined by Mr. S. H. Eager of the British Museum (Natural History).

Oysters. Several hundred (possibly thousand) valves, of varying sizes, were found mainly in the destruction layer where they probably derive from disturbed midden material. In view of the large number of specimens collected from a small area it was hoped that various aspects could be studied, notably any remains of parasite activity, that might possibly lead to a better understanding of the present limits of scientific inference in this field. As yet it has proved impossible to arrange for this to be done. A similar collection of oyster valves from the excavations at Hangleton, Sussex, also awaits study.⁶³

ANIMAL BONES

Considerable quantities of animal bones were recovered from the excavations, mainly from the midden material incorporated in the destruction layer. These have been submitted to Mr. R. E. Chaplin, of the Passmore Edwards Museum, for analysis, but unfortunately it has not been possible to complete the detailed examination of these bones in time for the present publication. The results of the examination will be published in full at a later date. Preliminary work indicates the presence of cattle, sheep/goats, pigs and fallow deer. The material is such that it will be possible to demonstrate the importance of the different species in the diet of the occupants and also indicate the husbandry pattern which provided the meat. The presence of fallow deer as a meat animal is of particular interest, and in this context it may be pointed out that L. Green⁶⁴ has noted that the records of the Priory suggest that hunting with dogs and hawks may have been carried out during the fourteenth century by the Canons.

⁶² Stelfox, A. W., *Journal of Conchology*, XII (1909), 292-3.

⁶³ Biek, L., *Sussex A.C.*, CII (1964), 141.

⁶⁴ In Miss E. M. Jowett, *op. cit.*, 51.

TABLE 2
MOLLUSCA

Layer Numbers (as in Fig. 2)	6	5	3D- 3F	3 & 3B	2C	2B	2A	2	Top- soil	Recorded living in 1908*
Wgt. of sample (kgm.)	2	2†	2†	2†	3.8	2	3.2	2†	2	
AQUATIC GASTROPODS										
<i>Valvata cristata</i> Müller	5	1			2	4	4			x
<i>V. piscinalis</i> (Müller)					15	105	9		1	x
<i>Potamopyrgus jenkinsi</i> (Smith)									1	x
<i>Bithynia tentaculata</i> (L.)‡	3	4			34+	40+	4+	3		x
<i>B. leachi</i> (Sheppard)‡					11 op.	18 op.	1 op.			x
<i>Lymnaea truncatula</i> (Müller)					1					x
<i>L. palustris</i> (Müller)		1			11	26	4			x
<i>L. peregra</i> (Müller)	10				61	154	32		2	x
<i>Physa fontinalis</i> (L.)						1				x
<i>Planorbis carinatus</i> Müller						1				
<i>P. planorbis</i> (L.)					3	15	1			x
<i>P. albus</i> Müller					1	5	1			x
<i>P. contortus</i> (L.)						21			1	x
<i>Ancylus fluviatilis</i> (Müller)					3		1			
AQUATIC BIVALVES										
<i>Unionidae</i> (fragments)		x								
<i>Sphaerium corneum</i> (L.)						10				x
<i>Pisidium amnicum</i> (Müller)			1		1					
<i>P. supinum</i> Schmidt							1			
<i>P. moitessierianum</i> Paladilhe							1			
<i>P. spp.</i>					55	c. 400	16			
LAND GASTROPODS										
<i>Carychium minimum</i> Müller	1				2		6			x
<i>Succinea pfeifferi</i> Rossm.					3	12				x
<i>S. sp.</i>	2		1		1		2			

* The following species were recorded by Stelfox in 1908 but not found in the samples from the excavation: *Theodoxus fluviatilis* (L.) (deadshells), *Lymnaea stagnalis* (L.), *Aplexa hypnorum* (L.), *Planorbarius corneus* (L.), *Planorbis vortex* (L.), *P. leucostoma* Millet, *Segmentina complanata* (L.) (deadshells), *Oxychilus alliarius* (Miller), *O. helveticus* (Blum), *Vitrina pellucida* (Müller), *Lehmannia marginata* (Müller), *Agriolimax reticulatus* (Müller), *A. laevis* (Müller). The following species were recorded by Stelfox in 1908 and may have been present in the samples, but were not specifically identified: *Pisidium casertanum* (Poli), *P. obtusale* (Lamarck), *P. milium* Held, *P. subtruncatum* Malm, *Succinea putris* (L.), *Arion intermedius* Normand, *A. circumscriptus* Johnston, *A. subfuscus* (Drap.), *A. ater* (L.).

† Plus groups of shells recovered by excavators.

‡ The numbers of opercula (op.) have been separated from those of the shells, as some of the opercula might belong to some of the shells.

LAND GASTROPODS (Continued)

Layer Numbers (as in Fig. 2)	6	5	3D- 3F	3 & 3B	2C	2B	2A	2	Top- soil	Recorded living in 1908*
<i>Cochlicopa lubrica</i> (Müller)	18	4	4	2	8	12	29	10	3	x
<i>Vertigo antivertigo</i> (Drap.)					1					
<i>V. pygmaea</i> (Drap.)	2				1			1	1	
<i>Pupilla muscorum</i> (L.)	3			1	4		6	2	3	
<i>Vallonia costata</i> (Müller)	1				2		5	1	4	
<i>V. pulchella</i> (Müller)	39	7		5	17	6	100	23	14	
<i>V. exentrica</i> Sterki	10	2	3	3	14	9	8	7	8	x
<i>Ena obscura</i> (Müller)								2		
<i>Cecilioides acicula</i> Müller	19	14	13	2	8	5	13	17	1	
<i>Arianta arbustorum</i> (L.)			1			1		2		x
<i>Helix (Cepaea) hortensis</i> Müller		1	2					2		x
<i>H. (C.) nemoralis</i> (L.)								10		x
<i>H. (C.) sp.</i>		1			3		2	1		
<i>H. aspersa</i> Müller		1	5	1	frag- ments		1	20	1	x
<i>Hygromia striolata</i> (Pfeiffer)	1			1			9	22		x
<i>H. hispida</i> (L.)	136	34	21	20	80	69	188	267	36	x
<i>Monacha cantiana</i> (Mont.)								11		x
<i>Helicella itala</i> (L.)								3		
<i>Punctum pygmaeum</i> (Drap.)	1									
<i>Discus rotundatus</i> (Müller)		1			2		1	10		x
<i>Eucomilus fulvus</i> (Müller)						1				
<i>Vitraea crystallina</i> (Müller)					1	2	4	4		x
<i>Oxychilus cellarius</i> (Müller)	1								4	x
<i>Retinella radiatula</i> (Alder)			1	1	1		7		1	
<i>R. nitidula</i> (Drap.)							1	10		x
<i>Zonitoides nitidus</i> (Müller)	1									x
<i>Arion spp.</i> (granules)	x	x	x	x	Abun- dant	x	x	x	x	x
<i>Limacidae</i> (plates)	8	3		2	18		5	3	3	
EDIBLE MARINE SHELLS										
<i>Littorina littorea</i> L. (Winkle)			x	x						
<i>Buccinum undatum</i> L. (Whelk)		x	x	x		x				
<i>Ostrea edule</i> L. (Oyster)		x	x	x		x		x	x	
<i>Mytilus edule</i> L. (Mussel)		x	x	x		x			x	
<i>Cardium edule</i> L. (Cockle)			x	x		x				

Layer Numbers (as in Fig. 2)	6	5	3D- 3F	3 & 3B	2C	2B	2A	2	Top- soil	Recorded living in 1908*
CRUSTACIA (OSTRACODA)					⏟					
<i>Herpetocypris reptans</i> (Baird)						x				
<i>Ilyocypris gibba</i> (Ramdohr)						x				

THE GREAT PARK OF NONSUCH

BY

C. F. TITFORD

IN their account of the two parks of Nonsuch, Manning and Bray state that when in 1627 Charles I granted them to his wife, Henrietta Maria, the area of the Great Park, together with the Great Mead, was 1,030 acres, and that of the Little Park 671 acres. Subsequent writers have been content to repeat these figures without further enquiry; yet the period to which they refer was late in the history of the parks and the figures are no guide either to the acreage or to the bounds of the parks in their heyday in the sixteenth century and opening years of the seventeenth. The acreage of the Little Park is not given in any of the documents relating to an earlier period; it can only be inferred by deducting that of the Great Park from the total of the two as given in the Fine of 1592 when they were acquired by Elizabeth I from Lord Lumley.¹ Accordingly, this enquiry will be confined to tracing the acreage and bounds of the Great Park during the period from 1538, when Henry VIII first acquired the area, to *c.* 1607–8, when, after a decade or more of its disuse as a hunting park, James I added to its acreage and restored it to its previous use. It was at this latter date that the Great Park reached its widest extension and spread over parts of the four parishes of Cuddington, Ewell, Malden and Long Ditton. From the available documents it is not difficult to trace its acreage, and we shall do this first; the main difficulty arises in tracing how that acreage was distributed over the four parishes.

The earliest document on the subject is entitled 'Survey of the Manour of Nonesuche—otherwise Codingtonne,'² and is dated 21 November 1538. It is divided into three sections, the second of which relates solely to 'the Seite of the manor'; the two remaining sections itemise 'Landes taken into the Kinges parke there.' From the field names, topographical details and the way in which it is divided it is clear that the items in the first section lay on the north side of London Road and those in the third on the south side. Evidence that will be quoted later shows that London Road—at that time known as London Way—was the dividing line between the two parks; so the items in the first section alone are relevant to this enquiry. Their total acreage as given in this survey was 817 acres.

The next document in order of date is described as a 'Brefe note of a Survey of the Great park of Nonesuche'³ and was compiled about 1558. It gives few details beyond the fact that the acreage of the Great Park was then 927 acres. This shows 110 acres over and above the total of the manorial lands; but the document does not

¹ Final Concord, Lumley to Elizabeth. P.R.O. C.P. 25(2)/227.

² G.M.R. 10/157.

³ G.M.R. L.M. 844.

say that they were added at this time, merely that such was then the acreage of the park. The extra acres may have been enclosed at any time during the twenty years since 1538. It will be necessary to enquire further about these acres later; but for the moment we need merely add 110 acres to the 817 of the manorial survey.

There is no documentary or other evidence of further changes until 1605-7, when a part of Long Ditton and further Malden acres were acquired and enclosed in the Park. State Papers of James I that we shall be considering later indicate that 109½ acres were then added. Later documents do not come within the period of this enquiry; so the total at the end of the period concerned can be summarized thus:—

1538	...	...	...	...	817	acres
1558	...	...	...	...	110	additional acres
1607	...	...	...	...	109½	additional acres
<hr/>							
						1,036½	acres
<hr/>							

The 1538 Survey raises no difficulties concerning the distribution of the acreage over the different parishes as this is expressly stated to have been:—

				<i>acres</i>
Parish of Cuddington	...	...	...	519
Parish of Ewell	...	...	...	153
Parish of Malden	...	...	...	145
<hr/>				817 acres
<hr/>				

The 1558 Survey, however, details the acreage solely in terms of pasture, arable, meadow and wood. But if it can be shown that of the 927 acres of this second survey, 817 acres were identically the same as those of the first survey, the investigation will be narrowed down to ascertaining the location of the remaining 110 acres. The earlier manorial survey details the items both according to parish and topographically, so the following direct comparison can be made:—

	1538	1558
	<i>acres</i>	<i>acres</i>
Arable	26	754
Pasture	727	100
Meadow	23	20
Wood	41	53
	<hr/>	<hr/>
	817 acres	927 acres
	<hr/>	<hr/>

The greatest variance is between the figures for arable and pasture, and taken at their face value they might be assumed to indicate that an additional 728 acres of arable had been enclosed in the park and 627 acres of pasture excluded. Geographical considerations, however, indicate that an interchange on this scale could not have been possible. 627 acres of pasture constituted 76% of the whole

of the manorial pasture land, and of these 483 were in Cuddington alone. If these had been excluded, it would have left only 36 acres of Cuddington parish in the park, and this would not have reached up to the Malden acres from London Way; on the other hand, too, nowhere in either Ewell or Malden adjacent to what would have been left of the park were there 728 acres of arable land that could have been taken in to replace the excluded pasture.

An alternative explanation becomes apparent if the figures of arable and pasture of the 1538 Survey are combined. Together they make a total of 753 acres which is only one short of the figure for arable of the 1558 Survey. This can be readily explained by the fact that after the death of Henry and during the reigns of Edward and particularly of Mary, the park was little used for hunting, and much of it was brought under cultivation. So the figures indicate that only one additional acre of arable was in fact added. A similar change of usage—the afforestation of three acres of meadow—would explain the difference of acreage of meadow and wood, with the addition in this case of nine further acres of woodland. This would account for ten of the additional acres and the item of 100 acres of pasture for the rest. It is thus apparent that 817 of the 927 acres of the 1558 Survey were those as detailed in the manorial survey, and it now remains to ascertain in which parish or parishes the additional 110 acres lay.

Except for the unlikely possibility that the Cuddington and Malden acres of the manorial survey did not abut on one another, it follows that the 519 acres given in that survey comprised the whole of the Cuddington parish north of London Way; and there is no evidence that any part of Long Ditton was enclosed in the park at this early date. The additional 110 acres can thus only have been in Ewell or Malden.

Considering Ewell first, adding the whole of the additional acres to the 153 of the manorial survey would make a total of 263 acres and if this be measured off on a map, it would bring the park pale to a line close to the modern Kingston Road. A century later, much, but still not all, of this area was enclosed in Worcester Park; but that it was not enclosed in the Great Park of 1558 is evidenced by a survey of the parish compiled in 1577 by Thomas Taylor, the Surrey County Surveyor.⁴ This describes the boundaries of the parish starting from what he names as Sleygate on the boundary of the park where it crossed the London Road. The latter must have been constructed at some time after 1538 to provide a route from Ewell village to London Way⁵ alternative to the previous route via East Street (Vicarage Lane) and Codyngton Street that lay in the area acquired by Henry and by him closed to the public. It was the same as that part of London Road of today that lies between the northern end of Church Street and Briarwood Road. From

⁴ Taylor's Survey of Ewell. G.M.R. 10/158.

⁵ Referred to as the 'king's highway to Merton' in *Inquisition of 1422*. Register or Memorial of Ewell, Deedes.

other evidence in Taylor's survey and a later map, it would appear that Sleygate stood at practically the same point as the later toll gate by Woodgate close to the Organ Inn of today. From this point the relevant part of the survey describes the eastern boundary of Ewell as follows:—

from the said gate northwards all along and by the pale of the grete parke of Nonsuch unto East Comon and still along by the said Comon and the same pale of thest and northest ptes unto a Close of George Evelin called Myllclose pcell of his manor of Tallworth and then along the same Close and by the same pke pale unto a place of the said pke pale ageinst which within the said pale near unto the said pale certen okes ben newly m'ked then from thens extending over the same Close west ward to a ditch and post where a gate lately was in Tallworth lane and from thens ou the same lane west ward between twoc oken trees.

From this it is clear that the boundary lay along the park pale to some point where it turned westwards across Myllclose to form the northern boundary of the parish. This point will be indicated if the position of Myllclose can be established. There is no available documentary evidence referring to this Close other than Taylor's Survey; but, unintentionally so far as Taylor himself was concerned, his survey yet gives a very definite indication of its position. On page 65 he gives this description of the Close:—

A Close of G Evelin by Nonsuche grete parke between Tallworth lane and the same parke. George Evelin holdeth the said Close containing of pasture by estimacion xiiij acres whereof lieth in the parishe of Ewell by estimacion vj acres abutting upon the residue of the said Close in the parishe of [blank] of the north parte upon the lane leding to Tallworth being parcell of the wast of Ewell Lordshippe of the west south west parte which parte of the Close is the owtbounds of Ewell Lordshippe and extendeth [in length (deleted)] with the said lane towards Tallworth lordshippe of the north parte to a ditch on the same lane where a post standeth for a gate to hange on so as before containing in Ewell Lordshippe vj acres.

What is singular and significant in this description is the fact that whilst Taylor is so uncertain of the parish in which the northern part of the Close lay that he leaves it unnamed, he has no such doubt about its western side that abutted on Tallworth Lane, and which he states 'extendeth with the said lane towards Tallworth Lordshippe of the north parte.' Yet, obviously, the north and west sides of the Close must have joined at its north-west corner. Along the northern boundary of Ewell there is only one point where doubt could have arisen. From the Hogsmill River eastwards towards the park, there is only one parish abutting on Ewell—namely, Long Ditton—so no doubt could or did arise along this part of the boundary. On the east, however, Long Ditton abutted on Malden. Possibly the position of the boundary between these two parishes was in dispute; but whether or not this was the case, it is at this point alone that the Ewell boundary abutted on more than one parish and could have led to any doubt.

Then, too, as stated in the previous quotation from Taylor's Survey, Myllclose was a part of Evelin's manor of Tolworth, and a document, to be discussed more fully later, states that this manor

included several closes that abutted on 'the way leading from Nonsuch greate Parke to tallworth' and which were on the north side of the river immediately opposite the position indicated as the site of Myllclose. The inference is unmistakable and still further evidence will be quoted later from a seventeenth-century document. At this point, however, reference can be usefully made to two items offering evidence of a circumstantial character. First, there is the fact that Evelyn owned and worked a gunpowder mill somewhere in Long Ditton, as well as at Godstone. There is no direct evidence that the mill in question was the one from which Myllclose derived its name; but the Earl of Worcester, who was keeper of the park in the seventeenth century, resided at Worcester House nearby and also held a licence to manufacture gunpowder, and the powder mills of William Taylor in the eighteenth century lay across the river just at this point. This may be no more than coincidence; but if so, it is a singular one.

The other evidence is supplied by the 1867 O.S. map. This shows the same site as occupied by Worcester Park House (built in 1797) and the general position is unchanged except for the fact that the grounds extend a little further eastwards beyond the ornamental water in front of the House. On Rocque's map of *c.* 1767 this water is called 'Malden Pond,' which suggests that it marked the original boundary between the two parishes. The western side of the grounds is shown as abutting on a lane running northwards to the river. Today, this is part of Cromwell Road and included in the Ewell parish; but the map indicates it as a lane following closely the hedge of Worcester Park House grounds, narrower and running at a slightly different angle than the rest of Cromwell Road which was not constructed until some time after the area had been acquired by William Taylor in 1750. It is thus distinct from the rest of Cromwell Road and tallies with the Tallworth Lane of the Survey.

If now a line is drawn from below the ornamental water on the east side of Myllclose down to Sleygate, it encloses 153 acres of Ewell land in the park in accordance with the figure given in the 1538 Survey and thus indicates that no further acres of Ewell had been enclosed by 1577.

There is another document to which brief reference must here be made. It concerns a grant of the Rectory of Ewell in 1560 to Thomas Reve and George Evelin.⁶ The reference to the park is contained in a passage that, *inter alia*, debars the grantees from receiving tithe that had previously been paid to the Rector on '148 acres of land in the parish of Ewell parcel of the manor there and in the old park of Nonsuch enclosed as of 142 acres in the same parish and within the same park likewise enclosed.' These figures appear to be inconsistent with those of all the other documents; and coming at a time between the manorial survey and Taylor's survey seems to imply that in the interim a further 137 acres of Ewell were first enclosed in the park and then excluded again. This is highly

⁶ Grant of Ewell Rectory to Reve and Evelyn. P.R.O. C66/951 ms. 27,32.

improbable, and there is no evidence whatsoever to suggest that any such changes were effected. On the other hand, according to the Custumal attached to the *Register*, in the early fourteenth century Merton Priory had held 213 acres in Sparfeld abutting on Ewell as part of the manor of Ewell. It may be that 137 of these acres were still so held in the same way that the Priory continued to hold the tenures in other parts of Cuddington that they had held in 1422. Suggestive of this possibility is the fact that among the items of Cuddington in the 1538 Survey is one in Sparfeld of '140 acres *by estimation*' held by Richard Cuddington. As this holding would have become tithe-free when included in the park, it is possible that it is part of the 290 acres given in the Grant. However, this or any other interpretation of the Grant can be no more than conjectural and thus of no value for the purpose of this enquiry. On the grounds stated above, it is clear that only 153 acres of Ewell were enclosed in the park by 1577 and, as will be established later, evidence indicates that this was still the only acreage of Ewell so enclosed up to 1650.

We now have to consider the grounds supporting the conclusion that the additional 110 acres of the 1558 Survey were Malden land, additional that is to the 145 acres given in the Manorial survey. Unfortunately, there is no contemporary survey of Malden available and, indeed, little documentary evidence of any kind relating to the period in question. There are, however, two passages in the 'Vewe and Survey of the Manor of Codyngton,'⁷ that may have some bearing on the subject. This survey was compiled in *c.* 1536 for Henry's information when he was considering acquiring the area, and the items read as follows:—

Thomas Compton holdyth a messuage and C akers lande lyeing in the parysse of Malden and payeth yerly vj d and sute of Courte and a payre of Spurrys [page 23].

Md that the Wardene of mertene Colledge Claymyth xij acres as parcell of hys manor of Malden [wych ?] is not here charged in the holding of the Lord of Quydyngtone [Marginal note, p. 16].

The round figure of Compton's holding is probably 'by estimation'; but in any case the total of 112 acres is close enough to 110 to awaken interest and to suggest the possibility that when Henry acquired the area, he appropriated these acres as being part of the manor he had purchased. This is made the more probable by a sequel in the seventeenth century to be mentioned later; and we may note that Manning and Bray record that Henry appropriated some of the land of the Malden manor, although they put the acreage at 120 acres. However, as the possibility that these acres formed part of the 145 acres mentioned in the 1538 Survey cannot be excluded, the passages cannot be advanced as positive evidence.

As our main guide for the earlier period, we must turn to the figures of acreages. Relating them to a map, it will be found that the area between London Way and the Great Avenue (taking in the Great

⁷ P.R.O. E.315/414.

Lodge) accounts for the 817 acres of the 1538 Survey. This includes 145 acres of Malden, so whether the 112 acres just mentioned were a part of them or not, there still remains the additional 110 acres of the 1558 Survey to be placed and they can only have lain somewhere north of this line. The area between the avenue and the southern boundary as it is today adds only approximately a further 67 acres, leaving 43 acres laying still farther north. Arbitrarily to mark off 110 acres north of the Great Avenue would account for the acreage, but there is a map of a kind dated 1550⁸ that indicates an alternative method of dealing with the matter.

The map was prepared in connection with a dispute between farmers of Morden and Cheam over rights of common on the 'Wast of Sparewefeld.' Like other maps of the period, it is pictorial in character and no reliance can be placed upon the proportions of one part to another. It does, however, give a rough picture of the eastern side of the park as viewed from Morden and Cheam, and affords evidence of several matters relevant to this enquiry. It confirms that London Way formed the dividing line between what it labels as the Old and New Parks. It shows the eastern pale as running parallel with, but a few paces back from, the 'Waye from Cheyme through Sparfeld to Kingestone'; and half way along the pale, it shows a hill called Pystyl Hyll, which must be the high ground at the junction of Balmoral Road and Kingsmead Avenue as this is the only high ground anywhere near here. These last two features afford confirmation that the position of the eastern pale was practically the same as the pre-1933 boundary between Cuddington and Cheam. North of the hill, there is a gate which may be the entrance to the Great Avenue, and still farther north of this the pale is indicated as running along the southern side of a turning off the Waye to Kingestone with Malden Church on the opposite side of the turning. The position in which the church is placed is not in accord with its actual position as we know it to be; but the fact that it is shown at all suggests that the turning can be none other than Church Road, and that in 1550 the park pale abutted on it. Beyond this, the map affords no further guidance; for, as stated, it has none of the accuracy of a modern map. However, with this limited indication of the position of the pale, we can now mark off the 110 acres between the Great Avenue and Church Road, starting from the eastern end of the former. When this is done, it encloses the area up to the broken line on the attached map (Fig. 1). This is not to say that the line represents the actual position of the pale. It is still accounting for the acreage only; and it will be seen that it does not enclose the whole area to the river. This is only to be expected; we have yet to account for the further enclosure of Malden land in 1608, and there can be no question that the park ever extended north of Church Road or it would have taken in Malden village and church. So we now have to consider the additions made in 1608 to

⁸ Map *c.* 1550. P.R.O. M.P.B. 25.

see how they fit into this northward extension of the park as it appears to have been in 1558.

The first document concerning these final additions to the park is a survey of *c.* 1605.⁹ It is described as 'Survey for the enlargement of the Great Park'; and at one point the commissioners state that they have 'surveyed the grounds intended to be taken into

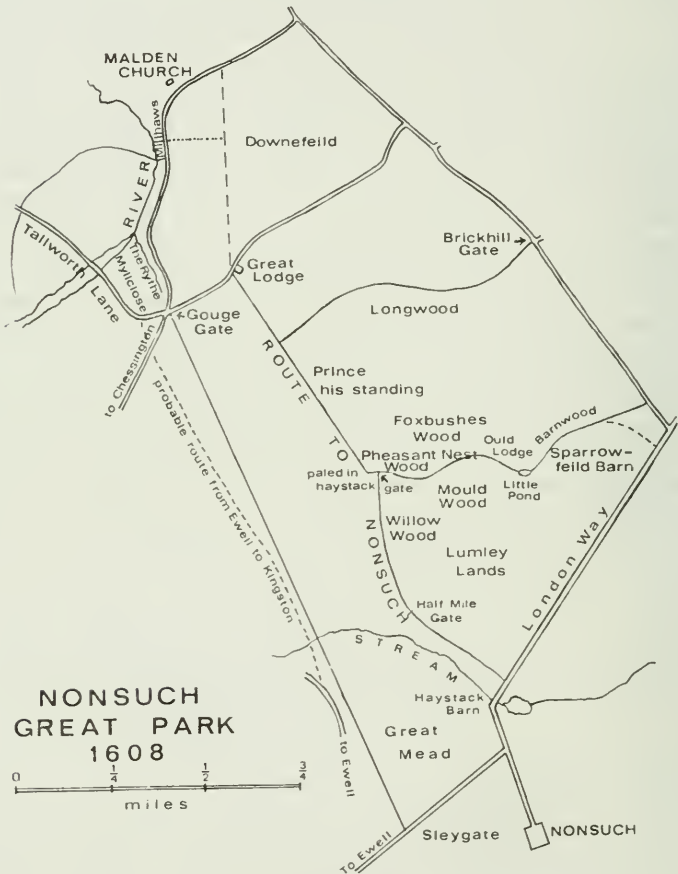


FIG. 1.—MAP.

the said great park of Nonsuch . . . in the parishes of Longdytton and Malden.' The document recounts the results of enquiries into numerous matters in addition to listing the names and holdings of tenants; and this fact and the word 'intended' indicates the character and purpose for which the document was prepared. It is, in fact, very similar in character to the 'Vewe and Survey' prepared

⁹ Survey for enlargement of Great Park 1605. P.R.O. E178/4804/m3.

for Henry before he acquired the Cuddington manor; that is to say, it is not an account of the land actually added to the park, but a preliminary survey of what at the time of its compilation was 'intended' or proposed should be added. For what in the event was actually added, reference must be made to three State Papers¹⁰ of a slightly later date.

The first, No. 47, states 'A Note of such lands as are agreed . . . to be taken into his Ma'tis Greate Park at Nonsuch,' and lists holdings of eleven tenants having a total acreage of 26 acres 3 rods 15 perches, and the glebe of the 'mynester parson' containing 2 rods 17 perches; but no indication is given whether they were in Long Ditton or Malden. The next paper, No. 48, is 'A particular of such lands within Malden as John Goode is to pass unto his Ma'tie for the enlargement of the greate park of Nonsuch,' and lists a total of 20 acres and 2 rods. The final Paper, No. 49, is 'The particulars of the land of Thomas Evelyn in Talworth which is to be enclosed and taken into Nonsuch park,' and lists 61 acres 2 rods 22 perches.

It is the figures of these State Papers, therefore, with which we are here concerned; but as the names and positions of the holdings are not described in the Papers, but are described in the Survey, the latter can be used for this purpose.

Evelyn's land lay on the two sides of the 'way leading from Nonsuch greate Parke to Tallworth.' This would be Tallworth Lane of Taylor's Survey, and the Tolworth Inclosure Map shows this lane as leading north-west towards Tolworth village across the area later known as Riverhill or Riverhead. The boundary of this estate follows a wide semi-circle from the river near Tolworth Court to a point lower down the river opposite Millhaws on the Malden side of the river. The acreage of this area amounts to approximately 66 acres; leaving in round figures $43\frac{1}{2}$ acres of Malden out of the total $109\frac{1}{2}$ acres being added to the park.

The most westerly of the Malden holdings is a part of Millhaws held by John Brown; which, with the rest of the haw not taken into the park, lay

betwene the Ryver on the west and the new grubbed ground of the said John [Goode]. [The latter lay] betwene the said Ryver and the said parcell of Malden of the said John Brown called Millhaws on the west and the common feild of Malden called Downefeild on the East, the one end buttinge vpon the park pale of the said great Park of Nonsuch on the South the other end buttinge vpon the [rest] of the grubbed ground on the North.

From this we know that the river marks the western bound of the Malden area to be marked off; south-east of this were the eastern bound of Myllclose and the pale by the northern boundary of Ewell. If from these sides $43\frac{1}{2}$ acres are marked off, it includes the area eastwards from the river to the broken line on the map and northwards to the dotted line. With these two lines, 110 plus $43\frac{1}{2}$ acres have been marked off and there is still one further item

¹⁰ S.P. 14/xxiv/Nos. 47, 48 and 49.

to be added; namely, the 'rest of the said new grubbed ground on the north' of John Goode. The document does not state the acreage of the latter, but according to our map it was approximately 15 acres. Thus the whole of the area up to Church Road is accounted for by 1608. However, as earlier stated, neither the broken line nor the dotted one can be taken as indicating the actual position of the park pale at either period. All that can be said is that 110 acres north of the Great Avenue formed part of the 927 acres of the 1558 Survey and that the final additions of $43\frac{1}{2}$ acres in 1608 occupied the rest of the area to the river and up to Church Road with the exception of some 15 acres held by John Goode. This does, however, establish beyond doubt that the additional 110 acres of the 1558 Survey were in Malden; and having also allocated the further acres added to the park in 1608, we can now analyse as follows the $1,036\frac{1}{2}$ acres contained in the park at this date:—

	<i>acres</i>
Cuddington... ..	519
Malden—145 plus 110 and $43\frac{1}{2}$	298 $\frac{1}{2}$
Ewell	153
Long Ditton	66
	1,036 $\frac{1}{2}$ acres

In passing, it is reasonable to suppose that Henry VIII had some grounds, legitimate or otherwise, for enclosing in the park 110 acres of Malden land in addition to the 145 acres that formed part of the manor of Cuddington. It may therefore be noted that the Close Rolls of Henry VI include an Indenture of Award, dated 1427, settling a dispute between the 'wardeyn of the hous of scolers of Merton in Oxenforde' and Thomas Codyngton and his heirs concerning rights of common in Sparfield. *Inter alia*, the award gives equal rights to both parties to 'commune with averes and alle manner of beastes communable in all that parcell of waste in Sparwe feld be twene Maldoun towne on the north the arrable felds of Codyngton on the south the Worthfeld on the west and the path called Fishereway on the est.' When Henry VIII acquired the Cuddington manor from Richard Codyngton, he would have acquired this right of common inherited by the latter from Thomas. As stated in the 1538 Survey, Cuddington tenants were assigned 141 acres on the Downs to compensate them for loss of rights of common in Sparfield. And, apparently, Malden tenants were still allowed to pasture their animals in the park area; for in the Court Roll of 1558, they complain that tenants of Sir Thomas Carwarden had stopped 'the two gates in Nonsuch parke by which the inhabitants of Maldon and other did of long tyme use to passe and repasse with their cattell.' Although not in full accord with all clauses of the award, having made these practical concessions to the Cuddington and Malden tenants on the spot, the king apparently judged that he could override any objections that might be advanced by the College. In this he appears to have judged rightly, for as we have as yet to note, it was not until nearly a century later that the College took any action to

recover their land. Assuming this to be a correct explanation of Henry's action, it would add further to the evidence that the additional 110 acres extended the park up to 'Maldoun towne.'

Before leaving reference to the State Papers, one further point may be noted. State Paper No. 48 has a memorandum stating that before the final additions were made, 100 acres of Malden demesne and copyheld land had already been enclosed in the park. As we have seen many more than 100 acres of Malden land had been so enclosed; but this specific mention of 100 acres recalls the 100 acres held by Compton and also the 100 acres of pasture that formed the major part of the additional 110 acres of the 1558 Survey; and we shall have occasion to refer to this same figure again later.

The next matter to be investigated is the length of the perimeter of the park. It must be remarked that even a perimeter of the correct length and enclosing the right number of acres would prove nothing unless the acres enclosed are rightly distributed over the parishes. But having established that factor, the length of perimeter will afford a check on the accuracy of the map.

The length of the perimeter in 1558 presents no difficulties as the survey of that date states that it consisted of 1,593 pole. For the perimeter in 1608, however, there is no such explicit statement; it can be ascertained only by comparing evidence supplied by four documents. The first of these,¹¹ dated 23 October 1605, is an estimate by John Taverner for the 'enclosing with pale Rayle and post of his Ma'tis parke called ye Great Parke of Nonsuch,' and further described as 'The said ground as heretofore enclosed cont: in circuit 1,696 pole after 16 ft. 6 ins. the pole. Also the porticon betwene the meadow ground ther and thupland cont: after the same measure 228 pole—in all 1,924 pole.' The second document¹² is an acceptance of this estimate and authorising payment of £1,076 11s. for the work to be done. Both these documents were drawn up the same year as the preliminary survey referred to above, and can be taken to apply to the area 'intended to be enclosed in the park.' There is no evidence that payment was ever made, the inference being that the work was never in fact executed; and this inference is confirmed by the fact that the third document,¹³ dated 9 January of either 1606 or 1607 is a revised estimate by Taverner for similar but not exactly the same work, but including details of paling to be set up. The cost of the work, too, is considerably less; namely, £611 15s. 2d., plus £30 for extras.

The final document is a 'Declaration of thaccompt of Susan Taverner Executrix of the last will and testament of John Taverner Esq.'¹⁴ The first two items record that the sum of £611 15s. 2d. of the second estimate had been paid in two instalments; the rest of the account details all the work done and expenses incurred, the

¹¹ State Paper. S.P. 15/37/64.

¹² State Paper. S.P. E351/3368.

¹³ State Paper. S.P. 15/39/3.

¹⁴ State Paper. E351/3367 and Ac1/2481/285.

total charge amounting to £1,057 16s. 8d. As there is no question that the paling was set up twice over, it is apparent that the last two documents alone are relevant to this enquiry.

Taverner's revised statement states that 400 pole of paling were required to enclose the newly acquired land; and as these were to be 'ditched and quickset about the outside' obviously no paling was to be set up along the river bank. Of these 400 pole, 180 were to be new but 220 were 'to be sett with parte of the old stuff which shall be taken up in the parke.' In addition to this, a further 100 pole of the 'old stuff' was to be used for a paling round the orchard and garden of the Great Lodge. Deducting 320 pole from the 1,593 of the original perimeter of the park as given in the 1558 Survey (see Table below), would leave 1,273 pole of the old stuff to be re-erected *in situ*. Adding 400 pole required to take in the new area to be enclosed makes a total of 1,673 pole.

Perimeter of park as in 1558 Survey		<i>pole</i>	<i>pole</i>
			1,593
Old stuff required:—			
to enclose newly acquired land...	...	220	
to enclose orchard and garden ...	...	100	
		—	320
			—
To be erected <i>in situ</i> ...	...		1,273
Paling required to enclose newly acquired land:—			
Old Stuff ... ..	...	220	
New ... ..	...	180	
		—	400
			—
			1,673 pole

This final figure, however, cannot represent the perimeter of the enlarged park as it would suggest that it was only eighty pole longer than the perimeter of 1558, which seems unlikely. Thus it is apparent that 'taken up in the park' must have included more than the old park paling; probably paling round some of the areas inside the park that by this time were under cultivation. Another of the items of the estimate reads, 'Setting up 1,780 pole,' which is 107 pole greater than the 1,673 and a far more likely figure for the perimeter. However, there is no statement to that effect, so evidence must be sought, and for this reference must be made to the fourth document. Before doing so, one further item concerning paling must be noted in Taverner's estimate; namely, 60 pole for enclosing with double paling 'a place to feed deer.'

Turning now to the account as submitted by Taverner's widow, the costs are here presented in a different form and include items for materials, labour, cartage and so forth which do not concern us here.

The amount of paling is stated under a separate heading as follows:—

Setting up posts pales railes and shores

<i>pole</i>
1,557
116
50
87
100
<hr style="width: 50px; margin: 0 auto;"/>
1,910 pole

The analysis of these figures can best be presented in the following tabulated form:—

The first two items added together amount to 1,673 pole which is the figure traced in the analysis of the estimate as made up of:—

180 pole new			
220 pole old stuff and			
a further 1,273 old stuff	...	...	<i>pole</i> 1,673

The third and fourth items are accounted for, first by the further 107 pole obtained from some inside enclosure; and on the reasonable assumption that only 30 pole was finally used for the deer pen	137
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The fifth item is for the paling to be erected round the orchard and garden of the Great Lodge	100
			<hr style="width: 50px; margin: 0 auto;"/>
			1,910

To arrive at the length of paling required to enclose the park, the paling round the Great Lodge and the deer pen must be deducted	...	...	130
			<hr style="width: 50px; margin: 0 auto;"/>
			1,780 pole

This confirms that the figure in the estimate for 'Setting up 1,780 pole' represents the length of the park perimeter apart from along by the river that was left unpaled.

One difficulty that arises in all attempts to reconstruct a map from old documents is the fact that whilst they record acreages, as in this case they rarely state dimensions. A ten-acre field, say, can be anything from a square to a long narrow rectangle, which necessarily affects the length of the perimeter where it abuts on a boundary or another field. It is for this reason that, although they enclose the right acreage, neither the broken line nor the dotted one on the attached map can be taken as indicating the exact position of the park pale at these points. It might be possible to adjust their angles in such a manner as to fit the perimeter figures given in the documents without affecting the acreages. But the result would still be hypothetical; so it is best to recognise that the actual lines of the pale at the two dates cannot now be traced other than that in part they lay along the road by the church. Accordingly we can only measure

the perimeters as shown on the attached map. These compare with the documentary figures as follows:—

	1558		1608	
Map	5 miles	252 yards	5 miles	1,255 yards
Documents	4 miles	1,721½ yards	5 miles	990 yards

The difference is less than 300 yards in both cases; so in the circumstances such virtual agreement is fair evidence of the practical accuracy of the map in other respects.

There are two further items in Taverner's estimate of interest to this enquiry. First, there are 'two gates to be taken up in the outeringe of the park as it is now enclosed and to be set again in the outeringe of the park where grounds are to be taken in, one of wh. being the gate where his Ma'tie usually passeth through from Hampton Court to Nonsuch had need to be a faire paire of gates with a wicket.' In view of the fact that the exact position of the park boundary hereabouts prior to the final additions is not known, we can only surmise the position of the two gates to be taken down and re-erected elsewhere. The avenues were apparently not constructed until Worcester House was built as a residence for the Earl of Worcester some time later; but it is probable that there was a track across the park approximately along the same line as the later Great Avenue, and this would doubtless have had a gate at its western end, on the park pale. More certain is the fact that there would have been a gate at the end of the Chessington-to-Malden track where it emerged from the northern bound of the park, south of Malden village and the area later enclosed. As regards where they would be required to be erected: one would be needed on the newly formed part of the boundary with Malden; and the other at one or other end of Tollworth Lane where it crossed the newly added Long Ditton acres. It would be this latter that would be used by the King on his way from Hampton Court to Nonsuch, and the fact that it was to have a double gate and a wicket raises a point of interest. The King would have to pass through other gates on his way into and across the park (see later); yet there is no indication that any of these had a pair of gates and a wicket. The implication is that the track on which these gates were to be erected was used by a considerable amount of heavy traffic. In this connection it has to be recalled that the old route from Ewell and Cuddington villages to Tolworth, Malden and Kingston which lay along the original boundary between the two parishes had been taken into the park and closed to the public; an alternative would therefore have been necessary. On the 1867 O.S. map, there is a field line running northwards from Beggar's Hill towards the lane on the west side of Worcester Park House (alias Myllclose). At the Beggar's Hill end (Steets of Taylor's Survey) it would have been alongside the park pale; but as it proceeds farther north it would have left the line of the pale, cutting the corner where the north and east boundaries of Ewell met at an angle, and joining the Chessington-to-Malden

track, which in turn was joined by Tallworth Lane a little farther north. It would thus seem probable that this marks the line of the alternative route, and that traffic to and from Ewell passed through the gate on the new park boundary on its way to Tolworth, turning east through a corner of the park to reach Malden or either way to Kingston. Walsingham Gardens of today appears to lay along the field line and thus to mark a part of this probable route. This would be additional evidence supporting that earlier given as identifying the position of Myllclose and the park pale.

Similar significance attaches to yet another item in Taverner's estimate. It reads as follows: 'Two cart bridges to be made new over the Ryver in the said park.' As earlier shown, the area of the park in 1558 did not reach the river at any point; Tallworth Lane, however, crossed the river and also, a few yards north of it, it crossed the outflow from the moat of Tallworth Court. The fact that two bridges would be required here, over which traffic could cross to the gate with the wicket, identifies this as the position of the cart bridges in question.

The acres enclosed in the park in 1608 were the last to be added to the Great Park as such. The years that followed witnessed the Civil War, Commonwealth and Restoration; and during this period the park changed hands several times, to be finally reconstituted under the title of Worcester Park and so named after the Earl of Worcester, who was its keeper for a short time before the Civil War and again after the Restoration. Strictly speaking, therefore, subsequent events do not concern the subject of this enquiry. But one such event has so close a connection with matters disclosed by this enquiry, that brief reference will be made to it.

For several centuries prior to Henry's acquisition of the area, the boundary between Cuddington and Malden had been a subject of constant dispute between the lords of the two manors; and from details already recorded, it would seem certain that Henry had ignored the claims of Merton College and appropriated land rightly forming a part of the Malden manor. Elizabeth, too, appears to have been none too scrupulous in her dealings with the College. Doubtless the inclusion in the park of yet a further $43\frac{1}{2}$ acres of Malden land in 1607-8 spurred the College into action, as litigation was instituted against Sebastian Goode, the then holder of the land that they claimed was part of the demesne lands of the Malden manor.¹⁵ A compromise verdict was ultimately obtained under which the land was to revert to the College, but that the Goode family was to retain the lease of the land for a further eighty years. It was finally surrendered in 1707; but the result of the litigation is reflected in a map of 1627¹⁶ which shows the Malden boundary moved south to the position it still occupies today (with the exception of the eastern corner that was slightly changed when the railway was built). The College took the precaution of obtaining a confirmation

¹⁵ *M. & B.*, III, 3.

¹⁶ Lane's Map. Merton College. Reproduced in Ross, *History of Malden* (1947).

of the verdict from Charles I in 1633.¹⁷ In this a further proviso appears, excepting from reversion to the College 'the tenements enclosed in our Park called Nonsuch Great Park.' The only tenements shown in this area, both on the map of 1627 and the 1867 O.S. map, abut on the south side of Church Road, thus confirming the fact that this road had previously marked the park boundary. The acreage thus restored to the College was 100 acres, of which 85 acres had been in the park; and it will be noted that the position of the new boundary was so drawn as to leave the avenues still within the park area.

This enquiry can be most fittingly concluded by reference to a document of 1650;¹⁸ partly because the latter affords final evidence of the position of the western boundary of the park, and partly because it enables an impression to be formed of the general topography of the area. The northern boundary at this time was as shown on the 1627 map; that is, it excluded the acres restored to Malden manor. Similarly, Long Ditton was not included; a Parliamentary Survey¹⁹ made earlier in the same year also makes no mention of it. The document is a report submitted by commissioners who were instructed by Parliament during the period of the Commonwealth to recommend how the park could be divided 'into five parts or divisions of equal value.' As in all such surveys, the bounds of the proposed divisions are described by reference to the position of trees, hedges, ponds and the like that have long since vanished and thus offer no guidance to the modern enquirer. To add to the difficulty, no figures of acreages or distances are given. There are, however, a few items that still have positional significance; but for the rest we have to rely upon hints of direction conveyed by such phrases as 'leaving (so and so) on the north,' 'at the upper end of . . .,' 'as the ditch goes northerly . . .' and so forth.

The opening passage of the recommendations reads as follows:—

We begin at a gate leading to Ewell Common called Gouge Gate and as the slow or rill of water runs down the valley to a great rew or shaw of thorns and underwoods.

As the description of the fourth division starts and ends at this gate and that of the others from points nearby, its position is the key for interpreting the document; and in this connection one further passage must be quoted. It ends the description of the fourth division and is as follows:—

to the west corner of the wall of the great lodge thence per south side of the shaw of thorns to the Rithe at the lower end thereof and thence to Gouge Gate as the Rithe lieth.

From the first quotation, it is apparent that the gate stood on the perimeter of the park at a point where it abutted on East Common; and from the second that it was near the Great Lodge. The only

¹⁷ See note 15.

¹⁸ Several Divisions of the Great Park. P.R.O. E317/Surrey/40.

¹⁹ Parliamentary Survey of the Great Park. P.R.O. E317/Surrey/39.

track that entered the park at this point was that from Chessington to Malden; the section inside the park formed part of the Great Avenue, and the section leading up to this is now a part of Grafton Road. The O.S. map of 1867 shows the point of juncture as just south of the ornamental water in front of Worcester Park House. The position of the gate is further indicated by the statement that it stood on a 'slow (slough) or rill of water' running down a valley. Reference here to a geological map of the area published in 1897 shows that the ornamental water lay lengthwise in a narrow tongue of alluvium jutting out southwards from the line of the Hogsmill River, thus explaining the presence there of a slough and rithe running down a valley. The gate was thus the one by which traffic coming from Tallworth Lane, about 150 yards to the west, entered the park and reached the Great Lodge that stood about 300 yards to its east. Its position is indicated in Fig. 2(a) by the letter A.*

Other points where the divisions contacted the park perimeter must next be established and fortunately the description of these is sufficiently indicative to enable them to be placed with reasonable assurance.

The fifth division consisted of the Great Mead, the northern boundary of which was formed by the stream flowing from the Little Park (now in Nonsuch Park) and across the Great Park to join the Hogsmill River in Ewell parish—S and P/Q on Fig. 2(a). Another point, but on the eastern side of the park, is stated to be 30 rods south of Cheam Gate (on London Way), *see* H. One further point is named 'Brickhill Gate.' This, too, was on the eastern side of the park and is described as a point where the pale turned westwards back to Gouge Gate. The only hill in this vicinity is Pystyl Hyll as shown on the 1550 map. As offering some confirmation that this was Brickhill, the 1867 O.S. map shows a brickfield near this point, so the gate can accordingly be placed adjacent to this, *see* D. With these key points fixed, the main topographical details given in the document can now be filled in on Fig. 1.

Division 1 starts at Gouge Gate, the position of which has been established. From there, the boundary goes to 'Mr. Turner's lodge and orchard to the north' (B); the orchard, we can assume, being that which had been impaled by Taverner alongside the Great Lodge. The boundary then follows along the hedge of the orchard to 'the gate at the upper end of Longwood' (C) and then on to Brickhill gate (D), and from 'thence along as the pale stands westerly till it meets at the gate first mentioned called Gouge Gate' (E and back to A). The second division begins 'two roods from the west corner of

* In passing, it may be noted that on the Inclosure Map of 1802, a gate is shown near the modern Kingston Road, and is described as 'Ancient gate to Worcester Park.' It is possible that this might be mistaken for Gouge Gate. However, it was nearly half a mile away from the river and nearly as far from the Great Lodge; and where it is situated there is nothing to suggest a slough, rithe or valley. Moreover, if the Several Divisions were worked out from this point, Division 4 would overlap and include parts of Divisions 2 and 3, which would make nonsense of the recommendations.

the brick wall of the great lodge' (F). From here it follows the line of the first division to Brickhill Gate; then along the pale (G) to 'an high oak in the pale about thirty rods belowe Cheam gate towards the north (H) thence to Sparrowfeild Barn leaving the said barn and dung yard to the south' (I). On then 'to a little pond (J) down the glade to an oake within 10 rods of the north end of the Ould Lodge' (K), and so back to its starting point, passing in turn 'Pheasant Nest gate' (L), 'where a hay stack has been paled in' (N) and 'the Prince his standing' (O).

The third division starts at the paled-in hay stack (N) and then goes on to the oak near Cheam gate (H). From there it follows the pale along London Way to 'the north corner of the great mead' (P)

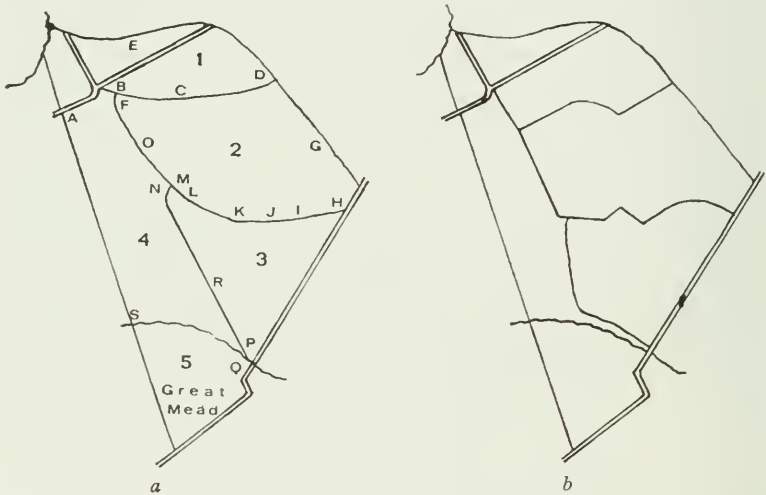


FIG. 2.—(a) THE GREAT PARK DIVIDED (THEORETICALLY) INTO THE FIVE DIVISIONS RECOMMENDED BY THE PARLIAMENTARY COMMISSION OF 1650.

(b) SOME OF THE FIELD LINES AS SHOWN ON THE O.S. MAP OF 1867.

and 'the east side of hay stack barn' (Q), 'thence northerly to the Half Mile gate' (R) and back to its starting point. The fourth division starts at 'Gouge gate per pale against Ewell Common to west corner of the greate meade' (S), 'thence per north side thereof' (Q) and back to its starting point first along the boundary of division 3, and then along part of division 2 and finally of division 1.

It is a long cry from 1650 to 1867, and the area underwent considerable change, particularly when the railway was built across it. Fig. 2(b), however, is a tracing of some of the field lines indicated on the O.S. map of the latter date. From this it will be seen that they divide the area in a manner closely similar to the pattern of the theoretical lines of Fig. 2(a). On the basis of a comparison between these two figures, the details described in the 'Several Divisions' document have been added to the main map. The date of the

document is a little later than the period with which this enquiry is concerned; nevertheless, it is unlikely that the general topography had changed to any considerable extent since the last additions to the park had been made.

Two final comments can now be offered. The first concerns the western boundary of the fourth division. This separated the park from East Common; and it will be seen that this boundary between Gouge Gate down to the western corner of the Great Mead and on to London Way, is identical with the western pale of the park as based earlier on Myllclose and Sleygate. This demonstrates that up to the time when the final additions were made to the Great Park the western pale had remained unaltered since it was first set up in 1538.

The second comment refers to the route by which traffic would have passed across the park between Nonsuch and the Great Lodge and on from there to Tallworth Lane. Of the field lines shown on Fig. 2(b), the one that most clearly resembles the theoretical lines of Fig. 1, is that which runs from the 'west end of the brick wall of the Great Lodge'; and it passes through two gates. Where ridings cross fields, there are certain to be gates, which is circumstantial evidence for the opposite that where there were gates there were ridings. The importance of this riding is the fact that it divides the park into two unequal parts. Division 4 lay on its western side and the other three on its eastern; each of them, however, abutting on it at some point. Then, too, the boundary between the first and second division and that between the third and fourth were also along ridings. The northernmost ran through the gate by Longwood to near Brickhill, the second branched off at Pheasant's Nest gate (M on map) 'to the oake at the ould lodge west corner' and on to Sparrowfeild Barn. From this it is apparent that these ridings gave access to all parts of the park. On reaching the stream north of the Great Mead, the main riding followed the course of the stream eastwards to London Way. This latter, it will be recalled, was an ancient track coming from London via Merton; so there must long have been a ford or bridge for crossing the stream at this point. Half Mile Gate is half a mile from the point where, having crossed the stream, the London Way was diverted to join up with the Avenue leading up to the main gate of Nonsuch. Then, too, it is significant that the Prince's standing should have abutted on this riding, as it is far more likely that it would have been at a point where it could be easily reached on horseback, along a track rather than across open fields. Haystack Barn, the other building mentioned, abutted on London Way and was thus suitably placed for carting the hay.

As stated at the outset, no particulars of the Little Park are given in any of the early documents. According to the Fine of 1592 when Elizabeth acquired the two parks from Lord Lumley, their combined acreage was 1,604 acres. In view of the fact established by this enquiry that the acreage of the Great Park at this time was 927 acres,

that of the Little Park must have been 677 acres. So Manning and Bray's figure of 671 acres probably relates, like those given for the Great Park, to some time late in the seventeenth century.

ADDENDUM

The changes by which the park was reconstituted after 1608 under the name of Worcester Park and ultimately departed in 1670 are not precisely known; there is documentary evidence of acreages only. However, it seems probable that the changes were as follows:—

1608	Acreage of the Great Park as shown in Fig. 1	...	...	...	...	<i>acres</i> 1,036½
1627	85 acres restored to Malden manor	...	...	...	...	85
						<hr/>
Some time before 1650 further Ewell land enclosed, extending the pale westwards and up to the northern boundary of the parish approx.						951½
						<hr/>
1650	Parliamentary Survey, ²⁰ 'by estimation 1,000 acres'...					47½
						<hr/>
1650	Parliamentary Survey, ²⁰ 'by estimation 1,000 acres'...					999
						<hr/>
Some time between 1650 and 1663 the Long Ditton area between the northern boundary of Ewell and the river enclosed... .. approx.						31
						<hr/>
1663	Leased to Sir Robert Long ²¹	...	...	...	...	1,030 acres
						<hr/>

It will be noted that the final figure is the one given by Manning and Bray and is the acreage of Worcester Park in 1663. The total does not differ greatly from that of the Great Park, but the distribution over the four parishes was considerably different, as shown by the following based on the above details:—

	Great Park		Worcester Park	
	<i>acres</i>		<i>acres</i>	
Cuddington	519		519	
Ewell	153		approx. 200½	
Malden	298½		213½	
Long Ditton	66		approx. 97	
		<hr/>		
		1,036½ acres		
		<hr/>		
			<hr/>	
			1,030 acres	
			<hr/>	

²⁰ P.R.O. E317/Surrey/39.

²¹ P.R.O. E317/912.

THE STORY OF TERRACE HOUSE,
BATTERSEA
(OLD BATTERSEA HOUSE)

BY

F. T. SMALLWOOD, M.A.

'A new truth will have much to do to dislodge an old error.'—Henry St. John, Viscount Bolingbroke.

THE PLEASANT SURMISES

TERRACE House, officially re-named Old Battersea House in 1931, is now Battersea's outstanding ancient monument. Its main west front faces the Thames some three hundred yards above the parish church (St. Mary's), and it must not be confused with the old Battersea Manor House, which stood below the church and the last traces of which disappeared some forty years ago. Before 1840 the house did not attract the attention of topographical writers, but in that year Dr. J. P. Kay obtained the use of the premises for his training institution for schoolmasters, and under the name St. John's College the institution continued for over eighty years in Battersea. The name of the College is derived from St. John the Baptist; the St. John ('Sinjun') family, who were lords of the manor of Battersea from 1627 to 1763, never had any connection with the College.

In recent years writers have ascribed the erection of the building to Sir Walter St. John (1622-1708), who was the head of the Wiltshire branch of his family and Third Baronet from 1656 till his death. There is no known reason for doubting that 1699—the date on the sundial—is the date of the erection of the present superstructure, though the problem of the present foundations is not so simple. But as the association of Sir Walter's name with the house did not begin till the present building was nearly two centuries old, the tradition—if that is the right word for such a recent notion—calls for investigation.

In 1894 some former students of the training college decided to form a Masonic Lodge with the name 'The Sir Walter St. John Lodge.' In explanation of their choice, they described Sir Walter's as

a name that would appeal to every Battersea man, the Bolingbrokes being at one time Lords of the Manor, and some portions of the College premises part of the old Manor House.¹

As this is the earliest known association of Sir Walter's name with Terrace House, the statement is worth detailed examination.

The claim that the name 'would appeal to every Battersea man'

¹ The sentence is quoted by courtesy of the Grand Secretary of the United Grand Lodge of England.

is doubtless perfectly true, though it does not imply that Sir Walter had had the house built. From its beginning in 1840 the College used Sir Walter's School as its practising school; in 1857 the School extended its site, thus gaining a common boundary with the College grounds; in 1859 a doorway was cut in the boundary wall, and from that date classes had marched through that doorway for demonstration lessons in the College.

The second part of the statement—'the Bolingbrokes being at one time Lords of the Manor'—is very loose. Sir Walter St. John was not a 'Bolingbroke.' The three St. Johns of Bletsoe in Bedfordshire who were *Earls* of Bolingbroke from 1624 to 1711 do not enter into the discussion. The only two 'Bolingbrokes' who were Lords of the Manor of Battersea were Henry St. John, First Viscount Bolingbroke, and Frederick, Second Viscount, grandson and great-grandson of Sir Walter respectively. Between them they were Lords of the Manor from 1742 to 1763. The applicants could have strengthened their case if they had stated that certain St. Johns of Lydiard Tregoze had been Lords of the Manor from 1627 to 1763. This would have included Sir Walter; but it would not have implied that Sir Walter had had the house built.

The third part of the statement—'some portions of the College premises [being] part of the old Manor House'—was simply not true, as any map of Battersea, particularly the one in the Crace Collection at the British Museum,² shows. The two houses were about a quarter of a mile apart; when the statement was made part of the Manor House still stood, to disprove it; and in between them stood the main features of the old village. The name 'Terrace House' is documented as far back as 1810, and was used in the Report of the Royal Commission on Historical Monuments, 1925. In 1841 Dr. Kay had described the premises as 'a spacious manor-house'; and the name 'The Little Manor House' was freely used during press discussions in 1930. But whether 'Little' or not, the term 'manor house' is a misnomer.

In 1897 Ernest Hammond made the first known printed statement. It runs, 'St. John's College . . . consists in part of an old Battersea Manor House, *said to have been* [present writer's italics] the residence of Sir Walter St. John.'³ Hammond's source is unknown; he may have heard what the old students were saying in 1894, though he was not himself an old Battersea student.

The notion was now well started on its career both within the College and among people interested in Battersea's local history. In March 1903 William Taylor, Head Master of Sir Walter St. John's School, was quite categorical in an article in *The Gazette* of his Old Boys' Association—'The fine old house which forms the original part of the Training College was built by Sir Walter St. John'; and in 1906 Thomas Adkins, writing the history of the College, mentioned 'this beautiful old-world mansion by the river . . . little changed since . . .

² B.M. Crace, XVI/71.

³ Hammond, E., *Bygone Battersea* (1897), 21.

worthy Sir Walter St. John caused it to be built.⁴ In 1912 the *Victoria County History, Surrey*, stated: 'It [the Battersea College] is on the site of Bolingbroke House [i.e. the Manor House] and includes part of the house in which Viscount Bolingbroke lived'; and, doubtless unaware of the contradiction, reproduced a photograph of a part of the Manor House that was still standing about a quarter of a mile away.⁵ Later, J. G. Taylor, son of William and Head Master of the School from 1907 to 1932, wrote: 'The well-known Battersea Training College . . . was opened in the old mansion erected on the riverside by Sir Walter St. John in 1699,'⁶ and 'the core of their college buildings was the old dower-house built by Sir Walter St. John in 1699,'⁷ though elsewhere the statement is more guarded—'Persistent tradition says that it was built by Sir Walter.'⁸

At about this time evidence was being assembled to support the declared fact or reputed tradition, and the interest that was aroused when the property came on to the market in 1928 gave publicity to the discoveries. The sundial's date, 1699, was found to coincide with the fiftieth anniversary of Sir Walter's wedding, and its motto—*Pereunt et imputantur*—to accord well with Lady St. John's temperament. Hence the charming deduction that the house was Sir Walter's golden-wedding present to his lady, intended to serve in due course as a dower-house. (Sir Walter was eight and a half years older than his wife.) Lady St. John's will, made in 1704, proved in 1705, referred three times to a house that she described as her own. Hence the conclusion that Terrace House was that house. Evidence came to light in 1926 that in 1677 Sir Walter and Sir Christopher Wren had both been concerned in a matter involving a property in St. James's Park. Hence the 'interesting speculation' whether Wren designed Terrace House.⁹ The absence of a grand salon on the first floor agreed with the presumption that at the age of 68 Lady St. John was no longer interested in dancing. In its article on Sir Walter's grandson Henry, the Queen Anne politician, the *Dictionary of National Biography* had stated that 'Sir Walter and his son Henry lived together in the Manor House at Battersea,' with the implication that this was during Henry's first marriage. Dr. Taylor had made the same statement, in quite categorical terms,¹⁰ and now in an article in the *Battersea Borough News* (25.1.1929) he marshalled most of the foregoing evidences and extended the last of them to the second marriage of Sir Walter's eldest son. An interesting connection between the make-up of the household at the Manor House and the building of Terrace House followed. Sir Walter 'must often have

⁴ Adkins, T., *The History of St. John's College, Battersea* (1906), 43.

⁵ *V.C.H. Surrey*, IV, 9-10.

⁶ Taylor, J. G., *Our Lady of Batersey* (1925), 283.

⁷ Taylor, J. G., *Short History of the Old Sinjins Lodge* (1935), 15.

⁸ Taylor, J. G., *Our Lady of Batersey* (1925), 86, n. 77.

⁹ For a discussion of the attribution of Terrace House to Wren see Smallwood, F. T., *Battersea Booklist Quarterly* (Spring 1965), and *T. London & Middx. A.S.*, forthcoming.

¹⁰ Taylor, J. G., *Our Lady of Batersey* (1925), 87.

wondered what would be the life of his aged wife in this veritable beehive of a mansion should he predecease her, and it is highly probable that he built Terrace House for her own occupation in that event.'

At first sight the burial of the first three children of Henry St. John's first marriage (1673-8) and the christening of the fourth (the future Bolingbroke)—all at Battersea—would appear to justify the statement in the *Dictionary of National Biography*; and the burial of six young children of Henry's second marriage (1687-1736) at Battersea would seem to justify the extension of the idea to that second marriage. But the unreliability of the Battersea burials of young children as evidence of the Battersea residence of the parents is well illustrated by the case of Sir Edward Henry Lee, First Earl of Lichfield, and his wife Charlotte Fitzroy, a daughter of King Charles II and Barbara Villiers, Lady Castlemaine. Of the eighteen children of this marriage four died in infancy and were buried in Battersea. But three had been born in Windsor Castle, five in the parents' home in St. James's Park, and the other ten in James Street, Westminster.¹¹ Battersea burials do not necessarily prove Battersea residence.

Christenings are a more reliable evidence of the parents' place of residence, particularly as they often took place within ten days or a fortnight of the birth. But even here a caveat must be entered, for young mothers often went back home for the birth of their first baby, and the christening was recorded in the church of the mother's former parish. As will be seen in the case of the future Bolingbroke, unusual factors may throw doubt on fairly obvious deductions.

Five possible places of residence for Henry St. John during his first marriage (1673-8) call for consideration. Lydiard Tregoze, the old family home of the Wiltshire St. Johns, which had been settled on him by Sir Walter; the country residence of his wife's people, the Earls of Warwick, at Leighs near Chelmsford; their town house, Warwick House, High Holborn; the St. John Manor House at Battersea; and their town house in Bury Street, St. James's, acquired in 1675.

The first child was born in Warwick House, was christened at St. Andrew's, Holborn, on 14 February 1675, died at Warwick House on 24 April 1675, and was buried at Battersea in the evening, three days later. The birthplace of the second child, born in 1675, is uncertain. The mother is known to have been at Warwick House and at Lydiard Tregoze during the summer, but the child was buried at Battersea on 22 July. The third child, born on 25 or 26 January 1677, was christened at St. Martin's-in-the-Fields on 4 February—which squares satisfactorily with the parents' residence in Bury Street—died on 8 April, and was buried in Battersea on the 9th.

On 16 September 1678, a fourth child was born, but the place of birth is not recorded. Quite soon the mother died, but neither date

¹¹ Sandford, Francis, *Genealogical History of the Kings and Queens of England . . . continued to this Time* (1707), 651-2. (What Sandford called James Street, Westminster, is now called St. James's Street.)

nor place is recorded. On 2 October the mother was buried at Lydiard Tregoze, and on 10th of the same month the child—the future First Viscount Bolingbroke—was christened at Battersea. His more cautious biographers state the fact of the christening and leave it at that. Others state categorically, apparently without knowing of the mother's burial at Lydiard and of the evidence of the parents' residence there, that he was born in the old Battersea Manor House. If the birth had taken place in Bury Street or at Battersea there would have been good reason for burial at Battersea, for her father's first wedding had taken place there, and her three infant children were already buried there. (The homes of the Warwicks can be ruled out, for the mother's devoted aunt, whose diary provides much of the foregoing information,¹² was now dead.) If the child was born in Battersea and the mother died there, why were her remains taken more than eighty miles into Wiltshire for burial? In short, the evidence of the parents' presence in Battersea—except for the three burials—is so scanty and of their presence elsewhere so substantial that the present writer sees no reason for doubting that the birth had taken place in Wiltshire, and is very sceptical of the opinion that Sir Walter's eldest son lived in the Battersea Manor House¹³ during this marriage.

After eight years as a widower Henry re-married. Evidence of his whereabouts during this interval is scanty and does not point to Battersea. Bath and Tunbridge (probably Tunbridge Wells) are mentioned, and the official record of the coroner's inquest on Sir William Estcourt (1684) describes Henry St. John, one of the murderers, as of London—not of Battersea. Of the twelve recorded children of this second marriage eight died very young, and six of these eight were buried at Battersea. The natural presumption would be that if the parents were living in Battersea, their children would be born there and in that case would be christened at St. Mary's. But not one of the twelve was christened at St. Mary's. The first was christened at the bride's parish church, five of the others at St. Martin's-in-the-Fields. It is known that Henry St. John was assessed for poor rate in Berkeley Street (1692–1700) and in Albemarle Street (1704–17), which accords with christenings at St. Martin's. In the very month in which the last of these twelve children was born, Swift¹⁴ described the father as 'a man of pleasure, that walks the Mall, and frequents St. James's Coffee-house and the chocolate-houses.' (Although Sir Walter had died in 1708, his son was not rated as occupier of the Battersea Manor House till 1717.) Thus, apart from the burials of young children—nine in all—in Battersea, Henry's presence there is strikingly unrecorded.

It is now possible to estimate the make-up of the household in the Manor House in 1699. Sir Walter was 77, Lady St. John 68. His son

¹² B.M. Add. MS. 27351–5.

¹³ Smallwood, F. T., 'Bolingbroke's Birthplace,' *W.A.M.*, LX (1965), 96–9.

¹⁴ Swift, Jonathan, *Journal to Stella*, 11 November 1710.

Henry and his second wife were living in Berkeley Street, and of their twelve children most were already buried or as yet unborn. The surviving son of Henry's first marriage was travelling on the Continent. Of Sir Walter's other children, William, married but childless, seems to have been a Battersea resident, for the School's Trust Deed of 1700, which appointed him as one of the first Trustees, described him as of Battersea; and an unmarried daughter Elizabeth was presumably also a member of the household. Even with servants and a resident domestic chaplain and his wife, the total does not support the picturesque reference to 'this veritable beehive of a mansion'. In the years immediately following 1699 the manorial household rapidly decreased. In 1701 the domestic chaplain became Vicar of Battersea and moved into the Vicarage next to Terrace House. In 1703 the unmarried daughter Elizabeth died, in 1705 Lady St. John herself, and in 1707 William. In short, before Sir Walter died in 1708 the Manor House had become even less of a 'veritable beehive' than it had been before 1699.

What of the 'rambling old mansion' itself? The Crace map of c. 1760 and the eighteenth-century prints combine to show that it was slightly larger than Terrace House, with an H-shaped ground plan. Each house had two main floors, plus attics. The main front of the Manor House had eight windows on the first floor, Terrace House has seven. On the river front the Manor House had westward residential extension of perhaps four or six rooms, and along the south-western boundary of the grounds were three ranges of out-buildings comprising the brewhouses, bakehouses, stables, etc., mentioned in the will of Sir John, First Baronet, and accommodating the corn, hay, straw, horses, cattle, coaches, etc., mentioned in Sir Walter's will. The map, the prints, the wills, and the obvious necessities of the situation all agree.

After much, perhaps most, of the building had been demolished in the 1770's, the topographers got busy. A writer in *The Ambulator*, 1794, mentioned 40 rooms on a floor. In 1813 a writer in *The Beauties of England and Wales* made it 50. Both statements have been repeated, the former quite recently. But a count of the windows and chimneys in the prints of the Manor House and comparison with the accommodation in Terrace House agree with the 1670 hearth tax documents, which assessed Sir Walter for tax on 23 hearths and the occupier of Terrace House—the predecessor of the present building—for tax on 16. In short, the Manor House, though old, was not 'rambling'; it was not much bigger than Terrace House itself, and the make-up of the household does not suggest a 'veritable bee-hive' from which Lady St. John needed a refuge.

In the 1929 newspaper article already mentioned Dr. Taylor stated that he had discovered 'no contemporary documentary evidence' for the 'persistent tradition' that the house was built by Sir Walter, and added that he could 'find no evidence that, after the death of Sir Walter in 1708, Terrace House was ever occupied by any member of the St. John family.' The present writer can repeat both

statements. But four more recent writers have claimed that the house was at the disposal of, and was in fact occupied by, later St. Johns. These views call for investigation.

A correspondent of *The Times* (30.12.1931) mentioned 'the Adam "Diana" fireplace, added during the time when the St. John family still occupied it.' Two facts are relevant—and fatal:—

1. The Battersea rate-books record Benjamin Doggett as the occupier from 1751 to 1766;
2. The Adams had not arrived in London by 1751.

In other words Benjamin Doggett, who was not a St. John, was in occupation from before the Adams arrived in London till after the St. Johns left Battersea.

The second and third writers introduced a novel fiction into a well-known incident that involved Sir Walter's grandson, Alexander Pope, and Hugh, Earl of Marchmont. In 1738 Henry St. John, formerly Viscount Bolingbroke—he had been deprived of the peerage by attainder in 1715, but continued to use the surname Bolingbroke—commissioned Pope to submit the draft of his essay *The Patriot King* to the preliminary, confidential judgement of five or six named persons. After Pope's death in 1744 Bolingbroke, who was now living at the Battersea Manor House, discovered that Pope had tampered with the text and had had 1,500 copies printed.¹⁵ He therefore decided to buy the whole edition, and he asked his friend Marchmont, to whom he had lent the Battersea Manor House in 1742, to be careful to collect all the copies and to burn them at his house. Lady Hopkinson concluded that Marchmont lived at Terrace House;¹⁶ and Mrs. Stirling took her word for it, modified her phraseology, and wrote:—

That night on the lawn at the Dower House a great bonfire blazed heavenwards, astonishing the villagers at Chelsea across the river, and the boatmen who rowed up and down stream wondering if a great victory had been gained in Flanders.¹⁷

The process by which Lady Hopkinson reached her conclusion appears to have been fourfold:—

1. She added to Bolingbroke's letter to Marchmont the recipient's address, which in fact it does not bear, and founded her conclusion on her own addition;¹⁸
2. She ignored Bolingbroke's description of the property he had lent to Marchmont in 1742 as 'an old and decayed habitation.'¹⁹ The description fitted the Battersea Manor House, but not a building whose sundial dates it at 1699.

¹⁵ For discussion of this complicated incident see Barber, Giles, *The Library*, 5th Ser., XIX and *The Book Collector* (1965).

¹⁶ Hopkinson, M. R., *Married to Mercury* (1936), 213.

¹⁷ Stirling, A. W. M., *Merry Wives of Battersea* (1956), 51.

¹⁸ Hopkinson, M. R., *op. cit.*, 237.

¹⁹ *Marchmont Papers* (ed. G. H. Rose, 1831). II. 288.

3. She altered Bolingbroke's phrase 'to help to dry which'²⁰ to 'to keep the house dry.'²¹ As Marchmont had recently moved to a newly-built house in Mayfair, Bolingbroke's words fitted the situation as Lady Hopkinson's variation does not.
4. She ignored the fact that the books were burned, not by Marchmont at all, but by Bolingbroke himself at the Manor House.

The next deduction is a very simple one: if Marchmont resided at Terrace House, so did Bolingbroke himself—was he not Marchmont's self-invited guest in 1743-4?—and there his friends visited him. In 1937 Arthur Mee stated as a fact: 'The house was built by Wren in 1700, and is said to have been ordered by Sir Walter St. John. . . . Here gathered the wits of Queen Anne's day and later: Pope, Swift, Gay, Addison, Voltaire, and the great Duke of Marlborough entered . . . from their boats to the garden room, with its delightful decoration by Wren.'²² Quite obviously, the person whom these distinguished visitors came to see was Sir Walter's grandson, Henry St. John, First Viscount Bolingbroke. The developing fiction almost takes the form of a syllogism. Major premise—Lady Hopkinson's invention: Marchmont occupied not the Manor House but Terrace House. Minor premise—a fact used by Mrs. Stirling:²³ Bolingbroke was a member of Marchmont's household at Battersea during the winter of 1743-4. Conclusion—stated by Arthur Mee and Mrs. Stirling:²⁴ All the distinguished people whom Bolingbroke ever knew, whether they were alive and in England in 1743-4 or not, visited Bolingbroke in Terrace House.

The evidence of the contemporary Battersea rate-books remains to be considered. Although the rate-in-the-pound varied from time to time, and the sums actually payable varied in the same proportion, the assessments themselves representing the annual value of the properties varied but little, and may serve to establish the identity of a property. The name of Sir Walter, as Lord of the Manor, always heads this annual list. If *c.* 1699 he had built himself an additional residence, either his assessment at the Manor House would have been substantially increased, or his name would have appeared elsewhere with a second assessment. But there is no evidence of either.

A final question may be asked. If Sir Walter, the head of an ancient family that made much display of its heraldic inheritance elsewhere—eight large panels of his own heraldic work survive in the church at Lydiard Tregoze—did in fact build Terrace House, why do the St. John arms appear nowhere there either in brick or in stone, in wood, glass, or plaster—not even on the sundial, the ideal feature for the purpose?

To sum up, the present writer agrees with Dr. Taylor (*a*) in having

²⁰ B.M. Add. MS. 37994, f. 46.

²¹ Hopkinson, M. R., *op. cit.*, 237.

²² Mee, Arthur, *The King's England—London* (1937), 785.

²³ Stirling, A. W. M., *op. cit.*, 50.

²⁴ *Ibid.*, 215.

'discovered no contemporary documentary evidence' that Sir Walter had the house built, and (b) in finding 'no evidence that, after the death of Sir Walter in 1708, Terrace House was ever occupied by any member of the St. John family.' But he goes further. He has found no evidence to support the probability that Sir Walter and his Lady 'retired there together, until her death in 1704,' and, with all due deference to Lady Hopkinson and writers who have accepted her conclusion, no evidence that after Sir Walter's death the house was ever at the disposal of any St. John. Moreover, neither Sir Walter's will nor Lady St. John's disposes of any property that can be identified as Terrace House.

THE DOCUMENTED EVIDENCES

So far the present article has discussed two facts—(1) that the date on the sundial (1699) coincides with the fiftieth anniversary of Sir Walter St. John's wedding, and (2) that in her will Lady St. John mentioned her own house three times—and certain notions that have gathered round the building during the last seventy-odd years and particularly during the last forty. The remainder of this paper assembles the available evidence from the seventeenth and eighteenth centuries.

A firm beginning may be made in 1810. In that year the unexpired portion of a 99-year lease of Terrace House, granted by the Earl Spencer (Lord of the Manor) to Daniel Ponton on 10 October 1775 as from Michaelmas 1774 at a rental of £51.10.0. p.a., came on to the market, and a specimen of the auctioneer's particulars of sale is preserved at the House of Lords among the papers of Sir John George Shaw-Lefevre, Clerk of the Parliaments, who later became the leasehold owner-occupier of the property.²⁵ The original lease and counterpart are preserved in the Earl Spencer's archives at Althorp, Northampton, and indicate that the property had previously been 'in the tenure or occupation of Benjamin Dogget.'

In the Crace Collection of maps at the British Museum there is a map of Battersea that must be dated, on internal evidence, between 1758 and 1763.²⁶ On this map Terrace House is marked, and the name of 'Mr. Dogett' is entered on the area of the garden. (The name of 'Mr. Fraigneau'—Vicar of Battersea 1758–78—is similarly entered on the garden of the adjoining Vicarage.) The poor-rate books show Benjamin Dogett as a rate-payer from 1751 to 1766 and a very near neighbour of the Vicar. They also show Benjamin Pierce, Thomas Tritton, and from 1773 Daniel Ponton as Dogett's successors in the occupation of the property.

These three contemporary documentary sources—the lease, the map, and the rate-books—agree in making the situation in the middle of the eighteenth century perfectly clear, and from this starting point it is possible to trace the property backwards in the rate-books

²⁵ House of Lords, Shaw-Lefevre Papers—Particulars of Sale.

²⁶ B.M. Crace XVI/71.

as far back as the rate-books themselves go, namely to 1624. One initial 'difficulty' proves to be far less serious than would at first sight appear. The book for the period 1732-50 is missing, and it is therefore not possible to name the rated occupiers for that period. But comparison of the relevant group of occupiers in 1731 with the corresponding group in 1751 settles the matter.

(Gross assessments in column on left)

1731	1751
4 William Daniel	4 William Daniel
	4 Daniel Danvers
	3 William Chapman
6 Hannah Sanders	8 Hannah Sanders
12 John Bennett	Tudor Smith's empty
10 John now Wid Guy	10 Cornelius Holland
	16 Theodore Darley
30 Mrs. Hannah Poinzs	14 Ditto for Powell's Land
5 John Jones	5 John Hill, to bring Cert.
30 Mrs. Mary Camb	24 Alice Goddard
15 Mr. George Osborn (Vic)	15 The Rev. Dr. Church [Vicar]
3 John Davis	3 Thomas Bassdell
3 Wid Churchill poor	3 Samuel Tickner
30 Daniell Haughton Esqr	26 Benjamin Dogett

(The next entries on each list concern small properties—again with some names in common—obviously too small to have been Terrace House.)

The presence of William Daniel, Hannah Sanders, and the Vicar in both lists and the close correspondence between the gross assessments leave no doubt that the property occupied by Daniell Haughton Esqr in 1731 was occupied by Benjamin Dogett in 1751.

The fact that the property and its occupiers can be traced back to 1624 (except for the period 1732-50) raises the question: 'What then did happen in 1699?' Three comments may be offered: (1) The list of occupiers does not include Sir Walter or any other person who can be identified as a St. John. This fact squares with the fact mentioned already that the rate-books do not record an increased assessment or a second assessment for Sir Walter *c.* 1699. (2) Experts whom the present writer has consulted have no difficulty in accepting 1699—the date on the sundial—as the date of the present superstructure. (3) They point out, however, that the bricks of the present superstructure are of a later type than the bricks of the foundations, which are, in fact, of Tudor type. In the last decades of the seventeenth century London was being re-built, in brick instead of wood. It is possible, though very unlikely, that bricks of Tudor type were still being made near Battersea. It seems more probable that old bricks were re-used for the foundations. The possibility that the old foundations were themselves re-used can at present be neither dismissed nor established.

It seems unlikely that a building only 75 years old would be demolished. The conclusion therefore seems to be that a building that went back to a much earlier date than the earliest surviving rate-book (1624)—possibly to Tudor times—was ripe for demolition and re-building in 1699. But the earlier building seems to have been

of similar size to its successor, for in 1662-4 Mrs. Dubois and in 1670 Mr. Samuel Defisher were assessed for tax on sixteen hearths—which approximates closely to the accommodation of the present building.

The house was one of the largest in the village and served as a landmark. The question therefore arises whether the occupiers recorded in the rate-books were of such means and status as would be expected of the occupiers of a residence which, with the exception of the Manor House, the Archbishop of York's palace, and one or two others, was the most considerable in the parish.

The rate-books show the following occupiers:—

1624-38	Mr. Du Bois
1639-64	Mrs. Du Bois
1665	Mrs. Mary Ottgar—with an addition in the course of the year— 'now Mr. De Fisher'
1666-76	Mr. (Samuel) Defisher
1676-81	Mr. Long(e)
1682-83	Mrs. Long
1684	Mrs. Long, with the addition 'now Mr. Pett'
1684-99	Samuell Pett, Esq.
1699-1716	Madam Pett
1716-17	Capt. Devissor or Madam Devissor
1718-24	Capt. Devissor
1724-28	Madam Grace Devissor
1728-31	Col. Daniel Haughton

Mr. Peter du Bois may well have been a newcomer to Battersea in 1624, for when the assessments were made in the spring of that year another name was entered. But in the course of the year that name was made quite illegible, and the name Mr. Laboyce was entered instead. This spelling deviates farther from the official du Bois than any other of the fifteen variants that occur during the next forty years, and it seems likely that the unfamiliar Huguenot name was beyond the powers of the none-too-literate overseer.

When the Heralds made their Visitation of London in 1633/4 Peter du Boys, merchant, of Cordwayner Ward, was of sufficient status for his pedigree (three generations) to be recorded.²⁷ His grandfather had lived near Lille in Flanders. His father, 'Jaques du Boys, neere Lisle who came over into England in the tyme of Persicution' and died before 1594, settled in Canterbury, and there Peter was born *c.* 1576. By 1618 he was a merchant in London, and had married in 1604 Mary, born overseas, daughter of Jean-Baptiste Friscobaldi of Florence, as his third wife. A daughter was christened at Canterbury in 1617, but no child is mentioned in the Visitation, or in Peter's will, or in his widow's.

Whether Peter du Boys was armigerous or not is not certain. In the place of the usual details of coat and crest the Heralds entered in 1634, 'The arms respited for proof.' This entry was subsequently cancelled. The arms mentioned by various writers as having been

²⁷ Harleian Society, XV (1880), 240.

granted to Du Bois of London in 1634 cannot be authenticated, and this merchant of foreign descent may have fallen an easy victim to bogus heralds who were making 'grants' at that time.²⁸

When Peter du Boys 'of London, Merchant' made his will in 1637 he left £30 'to the poore of the parish of St. Bennett Sherehog, the parishe wherein I live in London,' and substantial bequests to the French Church in Canterbury and to the Dutch Church in London.²⁹ The rate-book evidence of his connection with Battersea is confirmed by a bequest of £3.6.8. p.a. for four years to the poor of Battersea. His monetary bequests totalled over £3,000, and the documents refer to landed property in Essex, Kent, Oxfordshire, and Berkshire. In short, whether du Boys was technically armigerous or not, he certainly was a gentleman of substance and standing, with his town house in London and a notable country residence in Battersea. Moreover, as early as 1605 his wife, attending a christening at Canterbury, was described as 'Marie femme du Sr Pierre du Bois de Londres,' a significant evidence of status.

All this is more than confirmed by the will of Mrs. Mary du Bois, who outlived her husband by twenty-six years and died in 1664.³⁰ Her monetary bequests, which totalled over £18,000, included legacies to the poor of Battersea (£20), of St. Bennett Sherehogg 'where I now dwell' (£100), of Dutch congregations in London (£200), Norwich, Colchester, Sandwich (£100 each), and Canvey Island, and of French congregations in Canterbury and London (£300 each), and to over ninety named individuals. In addition, a suite of five tapestry hangings 'being the history of Julius Caesar,' five diamond rings, various pieces of plate, and her French psalm book with gold clasps were specifically bequeathed with or without monetary legacies.

The will also provides evidence of the social contacts of Mrs. du Bois; her legatees included Lady Bridgett Lydall (formerly Maid of Honour to the Queen of Bohemia and the widow of a baronet); the wife, son, daughter-in-law, and grand-daughter of Sir Thomas Bennett; and Sir Richard Vivian and his lady. Moreover, she was evidently on good terms with the Lord and Lady of the Manor, for there is an interesting reference to her in Lady St. John's correspondence. Soon after the Restoration, King Charles II wanted some 'Muscovia ducks especialy thos that are white of that sort to furnish St. Jeames Park withal,' and Lady St. John wrote to the steward at Lydiard Tregoze asking him to send some up forthwith. She added, 'I can have a drake at Mrs. Deboyses.'³¹

For present purposes the important question is, Why is the name of this very wealthy lady, with a strong interest in seven Dutch or French Protestant congregations and with eminent social contacts,

²⁸ The writer acknowledges his indebtedness to J. P. Brooke-Little, Esq., Bluemantle Pursuivant of Arms, for guidance on this problem.

²⁹ P.C.C. Lee 109.

³⁰ P.C.C. Bruce 108.

³¹ Taylor, J. G., *Our Lady of Batersey* (1925), 80.

followed in the Battersea rate-books for a few months by 'Mrs. Mary Ottgar'? Neither Peter du Bois, who was thrice married, nor his widow named a son or a daughter as legatee. In 1605 and 1606 Mrs. Mary Dubois stood godmother to two children of Jane Freleux and in 1607 to Samuel, son of Jan Freleux, on all three occasions in the French congregation in Canterbury. In 1637 Peter Dubois left £100 each to Abraham Ootgeer and his wife Mary, £300 each to their children Peter and Mary and £100 each to 'Little Susann Ootgeer' and to Jeane Fruleu. In 1643 Mary Fruleu, wife of Abraham Odguier, witnessed a christening at the French Protestant (Huguenot) church in Threadneedle Street. In his will, made in 1674 and proved in 1685,³² their son Peter, already mentioned, referred to the late Mrs. DuBoys as his aunt. He made a bequest to his 'mother-in-law,' i.e. stepmother, and, quite consistently, mentioned two sisters of the half-blood. Moreover, Chancery proceedings arose out of the will of Mrs. Dubois on the grounds that she was of foreign birth.³³ They were brought by Peter Otger's sister Susanna (the 'little Susann' above mentioned) and her husband Thomas Atkins, and the pleadings declared that Mrs. Dubois was 'possessed of a very great personal estate of £40,000' and that Mary Friulieu, late wife of Abraham Otgher, was 'of ye kindred or alliance of the said Peter Dubois or of the said Mary his wife or of one of them.' Mrs. du Bois also bequeathed £1,500 and four cottages in Battersea to her godson John Stables, a minor, son of her late servant John Stables, deceased. This John Stables, the elder, and his wife Jean Fruleu, a native of Canterbury, were married at Battersea 18 October, 1648. It seems likely, therefore, that Peter Dubois had two near relatives named Fruleu—Mary, first wife of Abraham Otger, and Jane, wife of John Stables.

The third name on the above list of occupiers—April 1665 Mistress Mary Ottgar—is thus explained. Eventually Abraham Otgar and his wife Mary (Fruleu) had five children; to all five Mrs. Dubois made particularly valuable bequests but none to Abraham's two daughters by his second marriage. Under one clause all five received £1,000 apiece, under another £100 apiece, and they shared the household goods in London and at Battersea. In addition, Peter, one of her two executors, received the lease of the London residence and a further £1,000. Moreover, Mrs. du Bois bequeathed

all that my house and garden in Battersey in the County of Surrey with all Barnes, Stables, Outhouses, washhouses, yards gardens and appurtenances thereunto belonging in my owne Occupation and all my estate and Interest therein unto Mary Otgher my goddaughter and her heires,

and added a further £500 out of the residue.

Although Mr. and Mrs. du Bois declared in their wills that they lived in the parish of St. Benet Sherehog, there is much evidence that

³² P.C.C. Cann 123.

³³ P.R.O. C8, 321/1.

their legatees had connections with Battersea. All the five young Otgers had been christened in Battersea between 1635 and 1642. In 1646 a daughter of Mr. Caesar Callendrine, minister of the Dutch Protestant (i.e. refugee) congregation in Austin Friars, who received a legacy of £500 from Mrs. du Bois and was the other executor, was also christened there in 1646. The wedding of Jane Fruleu in 1648 has already been mentioned. Peter Otger, who left £20 to the poor of Battersea—one of Battersea's lost charities—£20 to the poor of the Dutch congregation in London, and £5 to the poor of the French (i.e. Huguenot) congregation in Canterbury, declared in his will that he was born in Battersea and, although he described himself as 'of London, Merchant,' he directed that he should be buried in Battersea. (The registers confirm both these details.) Yet no Otger, Fruleu, or Callandrine appears in the Battersea rate-books of the period. The explanation seems to be that while Mr. and Mrs. du Bois had their house in London and were responsible for poor-rate in Battersea, they allowed friends and relatives to occupy or share their Battersea mansion.

The name of Mistress Mary Otger did not remain in the rate-book for long. On 20 April 1665 Mary settled the property on trustees in view of her approaching marriage to Samuel Defisher,³⁴ and the licence for the marriage was issued on 26 April.³⁵ She was just twenty-nine. Under various names she and her relatives remain in the story for sixty-odd years.

Both families—Otger and Defisher—hailed from Flanders and were prominent as deacons and elders of the Dutch Protestant Congregation in Austin Friars. Both families were important enough to be recorded by the Heralds in 1633/4. When Samuel's sister Isabella married James Bovey, her father William was said to be worth six score thousand pounds,³⁶ and the de Visschers bore arms that accorded well with their surname, for on a blue field they displayed three mermaids with mirrors, and for crest they had a dolphin with tail erect and mouth grasping the torse, i.e. the crest wreath.

The Battersea registers record two children of the marriage—Abraham, christened on 18 September 1667 (of whom much more hereafter), and William, buried on 20 January 1669. In a hearth-tax document of 1670 Samuel was assessed for tax on sixteen hearths—Mary du Bois had been assessed on the same number. In 1674 he was churchwarden.

Samuel de Visscher died in the spring of 1676. In his will, proved 12 April 1676³⁷ he is described as 'of London, Merchant.' Apart from a few small legacies to relatives and £10 to the poor of the Dutch Church in London, his will is concerned with his wife Mary

³⁴ Minet Library—Surrey Collection, Deed 215.

³⁵ Harleian Society, XXXIII (1892), 132.

³⁶ Aubrey, John, *Brief Lives* (Clarendon Press, 1898), II, 272.

³⁷ P.C.C. Bence 44, 84.

and his son Abraham. Justus Otgher, a cousin, is named as one of two executors, to act till Abraham comes of age.

The eligible widow lost no time, for on 31 May 1676 the Vicar-General licensed her marriage to Edmund Long of St. Olave's, Hart Street, gent., bachelor aged about 34. (The widow 'aged about 30' seems to have understated her age by about eleven years.) The marriage was of particular interest to Battersea, for the bridegroom's family hailed from Wiltshire, and his maternal grandmother was a St. John, an aunt of Sir Walter's. Consequently his mother was Sir Walter's first cousin; her eldest sister had been married to Edward Hyde, later Earl of Clarendon, at St. Mary's in 1632, and another of his aunts had been the wife of one of Sir Walter's elder brothers. Consequently Widow Devischer's new husband could claim close kinship with the Lord of the Manor, and would note with special interest the heraldic representation of his St. John grandmother's marriage in the east window of St. Mary's.

Edmund Long died in 1681 and was buried at St. Mary's on 25 August. He left no will, but when administration of his estate was granted to his widow (1 Sept., 1681) he was described as of Battersea, Surrey, and Salisbury, Wilts. There is no evidence of any children of the marriage, and for the next three years Mrs. Long was assessed for poor-rate. Meanwhile, her son Abraham (born 1667) was growing up.

In the year of Edmund Long's death Samuel Pett, a member of the famous family of shipwrights of Chatham, Deptford, and Wapping, arrived in the parish with his wife and four young daughters. He was assessed for poor-rate for a property near the Archbishop of York's palace on the south-west bank of the creek formed by the Falcon Brook at its entrance to the Thames. His fifth and sixth daughters were christened at St. Mary's in 1682 and 1683, but soon after the birth of the sixth, Pett's wife herself died. Again events moved rapidly, for on 9 June 1684 the Archbishop of Canterbury's Vicar-General issued a licence for the marriage of Samuel Pett of Battersea, widower, about 40, and Mrs. Mary Long, also of Battersea, widow. Moreover, in the course of the year Pett was replaced in the rate-books by a newcomer at his former residence near the Falcon Creek and himself replaced Mrs. Long as the rated occupier of Terrace House.

Like the more eminent members of his family, Samuel Pett began his career as a shipwright, but after a year or two he switched to administration.³⁸ Before November 1668 he had been employed by the late clerk of the Survey at Chatham, and in that month a request was made that he might be continued under the new clerk. In 1670 he himself became Clerk to the Surveyor of the Navy, and there are a few not very informative references to him in the following years. Presumably he was transferred to London at about the time of his

³⁸ From a pedigree of the family compiled by Mr. C. Knight, of Chatham (ob. 1944) and now in the possession of Mr. Basil W. Pett.

settlement in Battersea. Two letters of his, dated 17 January 1679/80 to Samuel Pepys and 21 March 1681/2 to Sir Phineas Pett, survive in the Rawlinson Collection at the Bodleian Library, and sampling at the Public Record Office has revealed letters of a routine nature written by him from the Admiralty in November 1689.

A disconcerting incident occurred in 1691. One Samuel Allen of London, merchant, who had become owner of the province of New Hampshire and part of Maine and who had contracted with the Navy Board to supply masts, yards, bowsprits, and other timber, asked to be appointed Governor of the province in order to preserve it from destruction and to be himself enabled to comply with his contract. The Privy Council received his petition and referred it to the Committee for Trade and Plantations to examine and report. While the Committee was considering the petition, accusations were made upon oath that Allen had embezzled and conveyed away the victuals provided for their Majesties' Fleet. The Secretary of State for the South (the Earl of Nottingham) thereupon authorized and required one of their Majesties' Messengers in Ordinary forthwith to make strict and diligent search for Samuel Allen and having found him to apprehend and seize and bring him in safe custody to be examined before the Earl concerning these matters. A like warrant of the same date (30 June 1691) was issued to another messenger for the apprehension of Samuel Pett.³⁹ (A coincidence characteristic of the times is found in the fact that the Earl had a connection with Pett's place of residence, for he and Sir Walter's eldest son had married sisters.)

Unfortunately the record of the examinations before the Secretary of State has not been traced, and it is not possible to say how much fire there was behind the smoke. Apparently not much, for the Privy Council minutes for 21 January 1691/2 record that the Committee for Trade and Plantations recommended Allen's appointment as Governor, and the Council ordered the Committee to prepare the draft of his Commission. Moreover, the Index to the Patent Rolls records on 14 March 1693, 'The King and Queen Doe appoint Samuel Pett Esquire Commissioner in Quality of a principall Officer of the Navy (during pleasure) in the Room of Sir Richard Booth Knight deceased; Annual Sallary five hundred pounds.' ('Booth' is a slip for 'Beke' or 'Beach.') Pett's function as a Commissioner was that of Comptroller of the Victualling, though it is on record that in conjunction with two other Commissioners he inspected Plymouth Docks in 1694. His appointment was renewed in July 1698, and he held it till his death early in 1699. The status of his office is indicated not only by the salary. Pett described himself in his will as 'one of the Commissioners of his Majesty's Navy Royall'; his predecessor as Comptroller of the Victualling was a knight, and his successor was no less a personage than Sir Cloudesley Shovell.

³⁹ P.R.O., S.P.D. 44/341, p. 94.

Pett was fairly active in the parochial life of Battersea. By September 1689 he had become Justice of the Peace for Surrey,⁴⁰ and in that capacity he authorized the proposed assessments for poor-rate on twenty-one occasions, using as his seal either the coat—Or, on a fess gules between three pellets a lion passant of the field—or the crest—Out of a ducal coronet or a demi-pelican, wings expanded, argent—that had been granted to one of his forebears in 1583. He attended parish meetings fairly frequently and was churchwarden in 1686. Pett's continuing connection with his wife's family is shown by two incidents. On 11 February 1698/9—a few days after his death—his fifth daughter Henrietta Maria married Peter Olger (*sic* in the register but presumably a slip for Otger) at St. Alphege's, London Wall, and on the same day, when Samuel's will came up for probate⁴¹ and certain deletions had to be explained, Mr. Justice [*sic*, obviously a slip for Justus] Otgar was named as one of the three gentlemen who had searched and found the will now shown with various obliterations.

Meanwhile, early in 1686, Abraham de Visscher, the only surviving child of Mary Otger/Defisher/Long/Pett, had married Grace Webb.⁴² Both parties were about nineteen; consequently Abraham needed and received his mother's consent, and Grace her father's. This marriage was particularly interesting, for by it this wealthy Huguenot family became, for the second time, connected with the Lord of the Manor. (This time one of Sir Walter's great-aunts provided the connection.) Grace, her brother Thomas (Serjeant at Law), and her brother John (General under Marlborough at Blenheim, Ramillies, Oudenarde, and Malplaquet, and himself the hero of Wynecdael 1708) were children of Sir Walter's second cousin once removed, Colonel Edmund Richmond Webb, who had shared with Sir Walter's eldest son Henry the murder of Sir William Estcourt in the Globe Tavern, Fleet Street, in November 1684. Consequently when Abraham and Grace went to church at St. Mary's they could see in the east window the heraldic record of the St. John-Webb marriage from which Colonel Edmund was descended.

From his marriage till 1699 Abraham Defisher was separately assessed for poor-rate in Battersea, and his nine children (of whom three sons and four daughters grew up) were christened at St. Mary's. But in that year he disappeared from the rate-book, and he evidently joined his mother, now widowed for the third time by Pett's death, in Terrace House, for his will (1710) provided that after his mother's decease 'all that house at Battersea wherein I now live' should go to his wife Grace. (Of Pett's six daughters by his first wife, two had died, and certainly three were married. Only Arabella, the youngest,

⁴⁰ He does not appear in the Liber Pacis for James II—P.R.O. C. 193/12. As a magistrate he first authorized the Battersea assessments in September 1689.

⁴¹ P.C.C. Pett 27.

⁴² Harleian Society, XXX (1890), 222.

then fifteen, might still have been living with her stepmother in the Battersea mansion house.)

Concerning Abraham Defisher several interesting details are on record. Evidently he was a horseman of some prowess, for in his will he bequeathed to his three sons 'one tankard each, which I formerly won at the Paddock Course.' Race meetings for owner-riders, with pieces of plate as prizes, were very popular and were regularly organized at many places. Barnes and Wimbledon Common may be mentioned, though the identity of 'the Paddock Course' has not been established. 'Abraham Devischer of Battersea aforesaid Gentleman' was also one of the first trustees of Sir Walter St. John's School. In view of his family's eminence in the parish and its double connection with the St. Johns it is not surprising that he was one of the four who actually signed, sealed, and delivered in Sir Walter's presence on 7 September 1700. (Sir John Fleet, former Lord Mayor of London, and Sir Walter's son William were two others.) His wealth is to some extent indicated by the fact that though he predeceased his mother his monetary bequests exceeded £6,000, including £10 to the poor of Battersea.

Eventually, in the spring of 1716, Mary Otger/Defisher/Long/Pett died, nearly 81 years of age, having outlived her three husbands and both her recorded children. Probably she had been born in Terrace House—certainly she had been christened at St. Mary's; for some 52 years she had been its occupier; presumably she died in it, and certainly she was buried at St. Mary's on 26 March. She left £10 to the poor of Battersea.

For the next twelve years or so the story of the house is the story of Mary's daughter-in-law Grace (born Webb) and grandchildren. After providing for his mother (Mary) and his widow (Grace), Abraham Defisher had made his eldest son Samuel his principal legatee and, in default, his second son Edmund. In the event, Samuel predeceased his grandmother by about two months; he was unmarried, and administration of his estate was granted to his brother Edmund, his mother Grace (widow) having previously renounced. This Edmund and his mother Grace are the 'Captain Devissor or Madam Devissor' who appear in the rate-books from 1716 to 1728.

Madam Grace Devissor disappeared from the Battersea rate-book in the spring of 1728. She spent her last two years in the parish of St. George, Hanover Square, but was buried in Battersea on 3 November 1730. With her departure the Defishers ceased to be Battersea residents after living there certainly since 1664 and very probably since 1635 or earlier. In her will⁴³ Grace bequeathed to Edmund 'all that my Capital Messuage or Mansion House wherein I lately lived at Battersea aforesaid together with the Gardens Coachhouses Stables Outhouses Buildings and other Appurtenances thereunto belonging'; if Edmund predeceased her, the Mansion

⁴³ P.C.C. Auber 302.

House and residue were to go to her third son Abraham and three of her daughters equally.

To his second son Edmund, Abraham had left a mere £400, explaining that he had 'already spent considerable sums for his advancement.' In 1707, at the age of 17, Edmund had been commissioned—in those days commissions were purchased—as ensign to Major Colombiere in Major-General Webb's (i.e. his uncle John's) Regiment of Foot (later the King's, 8th, Regiment of Foot); he became First Lieutenant of the Grenadier Company under Major Peter Hamars in 1708, and Captain in the same regiment in 1709. He was therefore presumably present with his regiment at Oudenarde on 11 July 1708, and at Malplaquet on 11 September 1709. In 1721 he became Lieutenant-Colonel in Colonel John Middleton's Regiment of Foot (later the 25th Foot, K.O.S.B.), was sent with his regiment to Gibraltar in December 1726, and took part in its defence. When his widowed mother Grace made her will in October 1728 she appointed Edmund to be her sole executor, but added that he was now at Gibraltar; if he was unable to prove the will, her son-in-law, Edmund Strudwick, was to be executor during Edmund Devisscher's absence. And, sure enough, in November 1730 probate was granted to Edmund Strudwick.

Edmund did not live to any great age, for his will was proved before he was 47. In it he described himself as of Wellwyn in the county of Hertford, made his principal bequests to his 'dearly beloved Friend Mrs. Elizabeth Bewley now living with me at Wellwyn abovesaid,' and appointed his brother-in-law Edmund Strudwick as sole executor and residuary legatee. The validity of the will was challenged by his niece Grace—a daughter of his deceased brother Abraham and a minor suing by her guardian—and by his four married sisters. Judgement was given first against the niece on 25 February 1737, and, the four sisters 'contumaciously absenting themselves,' second against the sisters on 27 April 1737. As Abraham's only son is not named in these proceedings, he had presumably died, which means that by 1737 the Defishers of Battersea had died out in the male line.

(Incidentally, one of these four sisters, Grace, had married John Bull, grandson of Sir John Fleet, former Lord Mayor of London and one of the first Trustees of Sir Walter St. John's School. In 1722 Bull himself became one of the second group of Trustees.)

Abraham, the third son of Abraham and Grace Defisher followed his brother Edmund into the Army and ultimately became Lieutenant-Colonel of Pocock's Regiment. He died on 30 January 1730 of wounds received the previous day in a duel with Barry Redmond, a member of the Irish House of Commons and a Captain in the same regiment, at Kilmaine, in County Mayo; but when administration of his estate was granted to his brother-in-law and chief creditor Edmund Strudwick in June 1732, he was described as of the city of Cork. He left a widow and three children—Grace, Alice, and Edmund—all under age. He was barely 37.

Meanwhile Daniel Haughton Esq^r, alias Colonel Haughton, appeared in the Battersea assessments from September 1728 to April 1731. The local scribe consistently spelled the surname as Haughton, but the Colonel himself, in his capacity as a Justice of the Peace, twice signed the assessments with the spelling Houghton. In view of the overseer's difficulties with 'Colonel,' which appears twice as 'Corn¹¹' and once as 'Cor¹¹', we may allow him a discrepancy of one letter in the surname. Despite the absence of the Battersea rate-books for the period 1732-50, the date of the Colonel's departure from Terrace House can be fixed within narrow limits. In the probate proceedings 1747-8 he is described as 'late of High Ongar,' and the vestry minute books of High Ongar record the attendance of Daniel Houghton on several occasions from 10 April 1732 onwards. He was first commissioned as lieutenant in Colonel Bowler's Regiment of Foot (1709). Later (1715) he became Captain in Colonel Roger Handasyde's Regiment, and later still Captain-Lieutenant and Lieutenant-Colonel in the 1st Foot Guards (Grenadiers), raised the 45th Foot (now Sherwood Foresters), and became Brigadier-General. In May 1747, while in Brabant, he made a will 'in case of any Accident happening to me this Campaigne,' and he 'deceased' at Osterhout—but not, apparently, as the result of such an 'accident' as he had envisaged in his will—c. 12 September of that year.

The next recorded occupier of Terrace House is Benjamin Dogett, 1751-66. Whether the Houghtons and Dogetts were related to the Otger-Defisher-Pett group is not yet established, but certain details encourage further research. Samuel Pett's elder brother William had married a certain Elizabeth Houghton. She outlived him, and her second husband was Robert Lee. Samuel's eldest daughter married a certain William Lee. John Houghton, notary public of Chancery Lane, witnessed the will of Mrs. Dubois in 1663 and Mary Otger's settlement of her Battersea property in 1665. In 1671 Justus Otgher, cousin of Samuel Defisher, married Elizabeth Doggett, and nearly thirty years later he shared in the finding of Samuel Pett's will. (A certain John Houlton also shared the finding. Is it possible that 'Houlton' and 'Houghton' are variants of the same surname? The probate record of the incident turned 'Justus' into 'Justice.') When Daniel Houghton became Captain in Handasyde's Regiment, John Odgers was commissioned as his lieutenant. If some of these details can be more fully explored, it may be shown that the family's connection with the house lasted not merely to 1728 but to 1766.

Be that as it may, the foregoing discussions may now be summed up. While there is no evidence that Sir Walter or any other St. John ever owned or occupied the house, there is contemporary documentary evidence that it was occupied by people who were wealthy, generally armigerous, and of good social standing. Three of the families were descended from Protestant *émigrés* and were loyally attached to the French or Dutch congregations in London, Canterbury, and elsewhere. They had connections with the City, the

Law, the Army, naval shipbuilding, and local government. In two instances they were related to the Lord of the Manor by marriage. In short, they were just the kind of people whom one would expect to occupy such a property.

The rest of the story is quickly told. Benjamin Dogett, recorded as occupier 1751-66, was succeeded by Benjamin Pierce (1766-8) and by Thomas Tritton (1768-73). Tritton was one of the original proprietors of the old Battersea Bridge (1772-1885). So was Daniel Ponton, to whom the Lord of the Manor granted a 99-year lease of the house as from Michaelmas 1774. Ponton did not occupy the house for long, for he died in 1777. Administration of his estate was granted to his son Thomas, and from 1792—there is a gap in the rate-books till that year—till the end of 1809 Thomas was assessed for poor-rate. Thomas Ponton was a Trustee of Sir Walter St. John's School; Ponton Road, Nine Elms, perpetuates the family name.

In January 1810 the unexpired portion of the lease came on to the market, and John Perry, Esq., shipowner, of Moor Hall, Essex, contracted to buy. Before the purchase was completed he made a codicil to his will (14 February 1810) bequeathing the premises and such contents as were to be purchased to his wife Mary 'for her own absolute use and benefit.' He also did not occupy the house for long, for he died suddenly of apoplexy on 7 November. His wife continued to reside there—at any rate, she appeared in the rate-books—till 1828. Her youngest son Charles (1807-91), later Senior Wrangler and First Bishop of Melbourne (1847), evidently spent his boyhood in Battersea.

In 1828 John George Shaw-Lefevre (1797-1879) acquired the lease from Mary Perry and occupied the house till the winter of 1838-9. This extremely able man—he was Senior Wrangler, and read fourteen languages easily—had a most varied and distinguished career in the public service, becoming K.C.B., F.R.S., D.C.L., and Clerk of the Parliaments. But he must not be confused, as he often has been, with his elder brother Charles (1794-1888), who became Speaker of the House of Commons, first—and last—Viscount Eversley, and 'Father' of the House of Lords; or with his own son George John (1831-1928), who was presumably born in the house—he certainly was christened at St. Mary's—and also had a distinguished public career, becoming first—and last—Baron Eversley. George John claimed to have known personally thirteen Prime Ministers, seventeen Lord Chancellors, and seven Archbishops of Canterbury.

After the house had stood empty for about a year—which explains his description of the garden as 'a wilderness of rubbish, withered grass, and weeds'—Dr. James Phillips Kay, an Assistant Commissioner for the administration of the 1834 Poor Law, obtained the use of the property from Shaw-Lefevre, who was at the time one of the three Chief Commissioners under the same Act, for use as the training institution for schoolmasters that Kay conducted for four years as a private venture with the support of E. C. Tufnell, another

Assistant Commissioner, and with the co-operation of the Vicar of Battersea, the Hon. and Rev. Robert John Eden (later Bishop of Sodor and Man, Bishop of Bath and Wells, and Lord Auckland) as its Chaplain. After four years Kay transferred his venture to the National Society, and as St. John's College it played an important part in the training of schoolmasters, until in 1923 its Principal was appointed to be Principal of St. Mark's College, Chelsea, also—a decision that soon resulted, as was intended, in the amalgamation of the two colleges in Chelsea.

The notion, for which there is no acceptable documentary evidence, that the house was designed by Sir Christopher Wren dates from the late 1920's.⁴⁴ When the S.P.C.K., which had acquired the freehold in 1895, offered the whole property for sale, an appeal was signed by ten gentlemen and supported by the Member of Parliament for East Fulham, asking the Minister of Health to preserve the house, and in the course of the public discussion of the subject the attribution to Wren became widely accepted. The Minister did as requested by making an order in November 1930 preventing the Battersea Borough Council, which had purchased the whole estate, from demolishing the house. Yet even on such a recent episode the facts have been badly garbled. Kent's *Encyclopaedia of London* (revised edition 1951) declares: 'In 1929 when the house was threatened with demolition it was saved by Charles Stirling, who induced the Borough Council to sell him the property.' The facts are that the appeal that saved the house was organized in 1930 by Dr. J. G. Taylor; that Mr. Stirling was not one of the ten signatories; that he and Mrs. Stirling were introduced to the Borough Council as possible tenants after the Minister had refused to rescind his order; and that the Council granted Mr. and Mrs. Stirling a joint tenancy for life.

If the easily verifiable facts of thirty-odd years ago can so soon be distorted, it is not surprising that pleasant surmise has found acceptance instead of the less easily accessible facts of three centuries ago. Perhaps Josh Billings may be allowed the last word: 'The trouble with people is not that they don't know but that they know so much that ain't so.'

The Battersea Registers of christenings, weddings and burials are preserved at the Parish Church (St. Mary's), Battersea. The rate-books are at the Battersea Reference Library, Altenburg Gardens, London, S.W.11. The wills mentioned are at Somerset House, hearth tax documents at the Public Record Office.

For several interesting details the present writer is indebted to an article on the De Visscher family by Charles Evans in 'Notes and Queries,' July 1958.

⁴⁴ Smallwood, F. T., *see* note 9.

THE 1801 CROP RETURNS FOR THE COUNTY OF SURREY

BY

A. G. PARTON, B.A.

ON 1 September 1801, when much of the work of the harvest was over, the bishops of the Church of England, at the request of Lord Pelham, sent letters to their clergy asking them to record the number of acres 'sown since last years' harvest with wheat, rye and other grain as expressed in the enclosed printed form . . . as His Lordship is persuaded that it may be conducive to the Public good.¹ The form referred to required information about the following crops: wheat, rye, barley, oats, potatoes, peas, beans, turnips and rape; the last two crops were sometimes differentiated by the clergy, but were usually recorded together. Space was also left for the clergyman's remarks, which often provide useful additional information. The results of the enquiry, known as the 1801 Crop Returns, are to be found in the Public Record Office.²

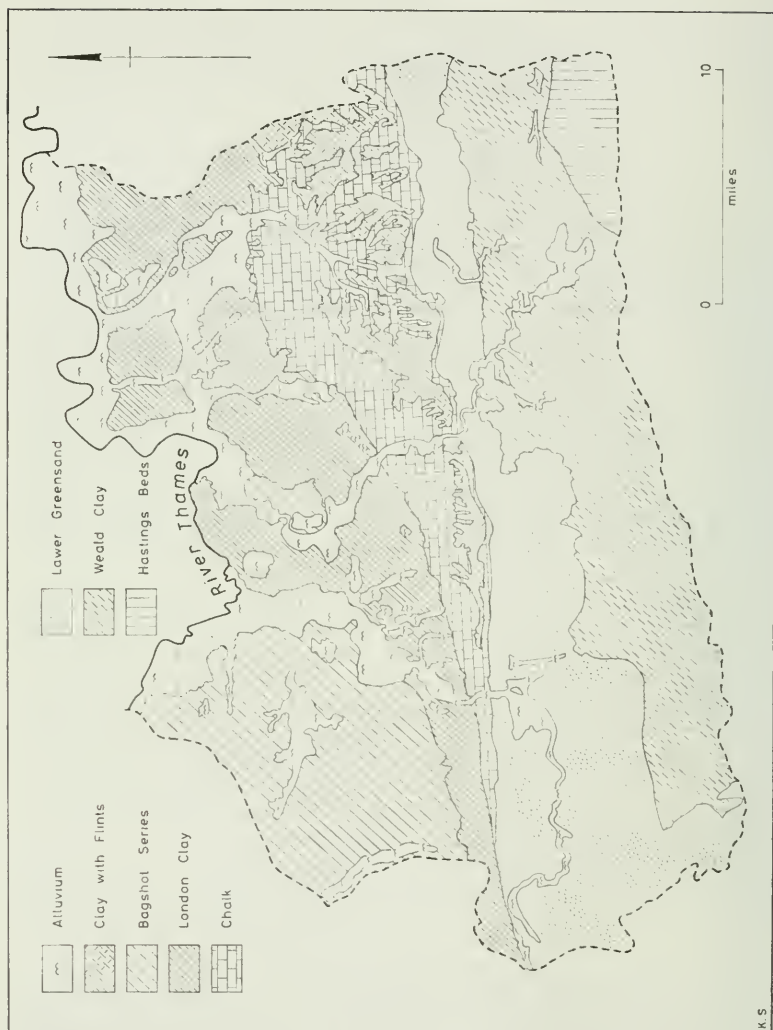
The historical and economic background to the Returns has been dealt with fully elsewhere.³ They were made at a time when grain prices were inflated due to war; together with the first National Census of the same year they mark the beginning of the large-scale collection of information about the state of the nation which became more detailed and more reliable with the passing of each decade. As the 1801 Crop Returns are almost the sole statistical source of information about the agriculture of Surrey at the beginning of the nineteenth century, it is worthwhile considering their value to the local historian or historical geographer.

The fact that the clergy were made responsible for collecting the information was undoubtedly the cause of some errors; farmers were understandably loth to reveal their crop acreages to the man who received a tithe of them; here was good reason for understatement: although in some parishes the tithe owner was a layman. The problem of obtaining a true return was the subject of a number of comments by the clergy; fourteen of the Surrey Returns mention the reluctance of the farmers to give information. The Vicar of Chiddingfold was unable to make any return; he explained, 'the

¹ Extract from one of the original letters found among the Returns for the Diocese of Canterbury.

² The Returns for Surrey are in two parts, those for the Diocese of Winchester P.R.O. H.O.67.24 and the Diocese of Canterbury P.R.O. H.O.67.4.

³ For example see: Galpin, W. F., *The Grain supply of England during the Napoleonic period* (New York, 1925), and Prothero, R. E., *English farming past and present* (1927).



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FIG. 1.—SURREY—GEOLOGY (SIMPLIFIED).

farmers in my parish almost to a man are quite averse to inform me in what manner their land has been cultivated. . . .’ D. Thomas⁴ and R. A. Pelham⁵ point out that there was considerable understatement of acreages in the 1801 Crop Returns, the latter noting

⁴ Thomas, D., *Agriculture in Wales during the Napoleonic Wars* (1963), 56.

⁵ Pelham, R. A., *The 1801 Crop Returns for Staffordshire in their geographical setting. Collections for a History of Staffordshire* (1950-1), 233.

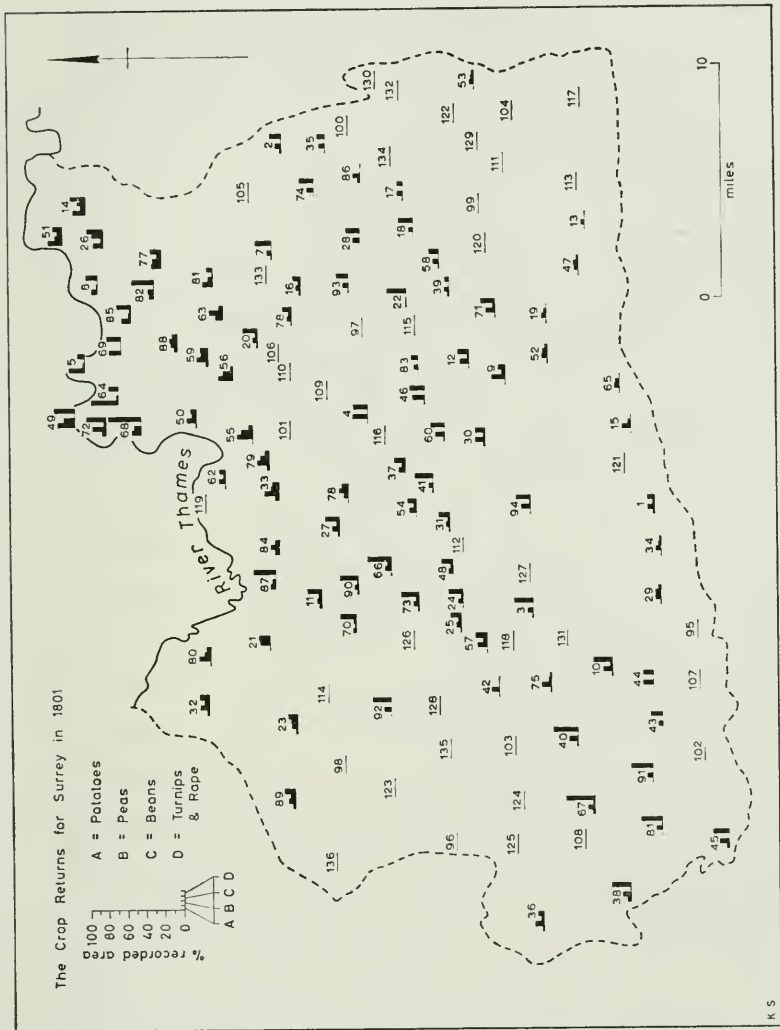


FIG. 2.—1801 CROP RETURNS: LEGUMES AND ROOT CROPS.

that the understatement tended to be made in proportion to the actual acreages shown.

For this reason Figs. 2 and 3 show each crop as a percentage of the total crops recorded for each parish, for while in a minority of cases where a very small acreage was returned this may mislead (for example Guildford, where wheat occupied most land but only amounted to 36 acres), it probably presents a truer picture than would a map of actual acreages (*see* Appendix where the actual acreages recorded are presented).

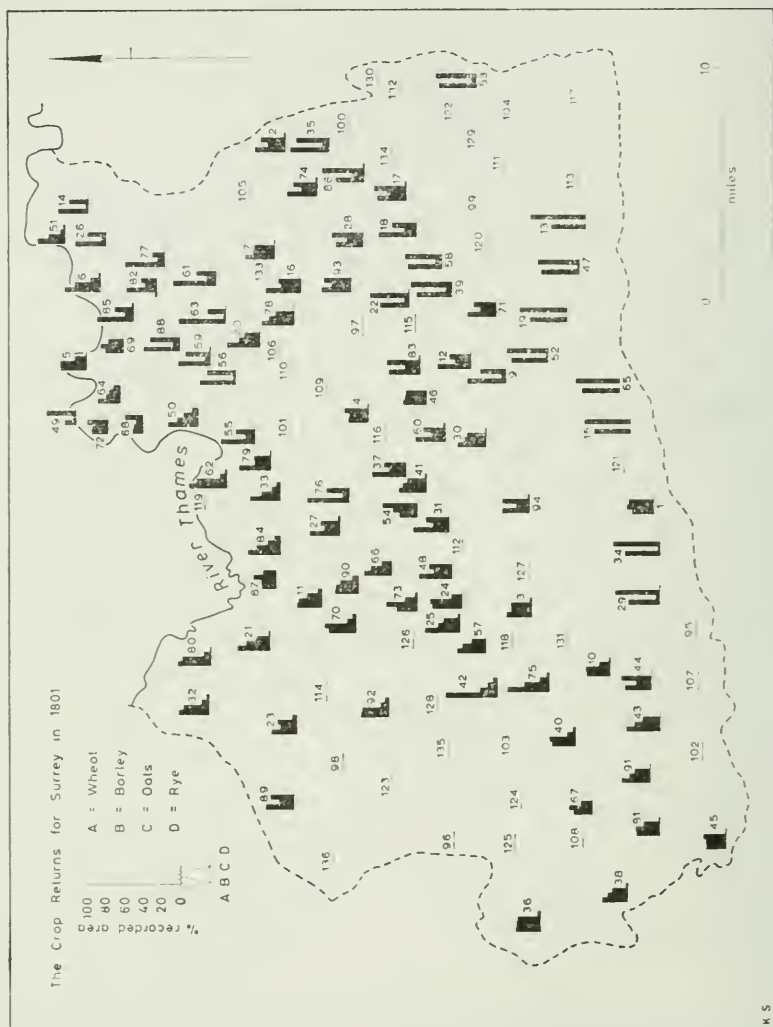


FIG. 3.—1801 CROP RETURNS: CEREALS.

The value of the Returns as a general source of information about the farming of Surrey depends partly on how complete they are. A comparison of the number of parishes for which Returns exist with the number of parishes recorded in the 1801 Census shows that 42 Returns (31%) are missing. Fortunately most of these omissions are concentrated in two areas, the south-east and north-west of the county, which together account for 22 of the missing Returns.

Excepting these areas some regional subdivision of the rest of Surrey is not precluded by lack of coverage.

Perhaps more serious than deficiencies of areal coverage are the limitations imposed by the scope of the enquiry itself, which was by no means comprehensive. Thus no attention whatsoever was paid to livestock, bare fallow, permanent or rotation grasses; neither were market garden crops, so important in north Surrey, nor hops, which occupied a considerable acreage in the west of the county, included. As the Returns refer to the arable land, it is necessary to try and discover from contemporary maps and other sources how significant the arable acreage was in relation to other forms of land-use. The Vicar of Mitcham mentioned that 'about 400 acres are occupied by gardeners and about 500 acres are in grass,' the total acreage given in the Return is 446 acres. The Malden Return includes an extract from a survey made in 1793 giving the total number of acres in the parish as 1,223, of which sown arable amounted to 531 acres 3 roods, common lands 137 acres 3 roods and clover, tares or fallow, 543 acres 3 roods. The 1801 Return for Malden records 482 acres of arable; the incumbent commented, 'the number of acres under each type of grain is, I believe, what is usually sown.' Beddington parish, according to a note made by the vicar, consisted in 1801 of 500 acres of common and waste, 600 acres of sheep down, 500 acres of grass or hay, and about 2,500 acres of tillage or fallow; the actual Return gives the arable acreage as 1,178 acres. In the north of Surrey, where market gardens, the extension of the built-up area of South London, and the lucrative hay crop complicated the pattern of land-use, an informative land-use map, surveyed at the end of the eighteenth century by Thomas Milne,⁶ can be usefully compared with the Crop Returns.

The table on page 118 compares the arable acreage given in the Returns with that shown by Milne and with the percentage of land in the various land-use categories he devised, taken from his map. This enables one to assess to some extent the place of the information given by the Returns in relation to the rest of the contemporary land-use pattern. In most of the parishes considered in this table the arable acreage is less than that obtained from sources other than the 1801 Crop Returns; to what extent the differences are attributable to under-statement or to the exclusion of rotation grass and bare fallow from the enquiry it is not possible to say. The table points to the usefulness of the Crop Returns in expanding the information given by contemporary maps which depict land-use, for few of these distinguish the crops which make up the arable land.

The actual distribution of the crops recorded will now be considered: to facilitate this, two maps, showing the distribution and

⁶ Milne, Thomas, 'Plan of the Cities of London and Westminster circumjacent towns and parishes, etc.: laid down from a trigonometrical survey taken in the years 1795-1799.' King George III's Topographical Collection. B.M.

relative importance of the various crops (Figs. 2 and 3), are presented, together with a geological map of the county (Fig. 1). The soils of Surrey are closely related to its geology as Hall and Russell point out in the most comprehensive study of the soils of the county with particular reference to agriculture.⁷ The distribution of the crops is compared with the observations of two contemporary commentators on the agriculture of Surrey: James Malcolm⁸ and William Stevenson.⁹

In 62% of the parishes wheat occupied the largest percentage of land recorded; in 27% it was of second importance, usually to oats,

Land-use in six North Surrey parishes as shown by Thomas Milne compared with the arable acreage recorded in the 1801 Crop Returns.

Parish	Recorded Arable Acreage (Crop Returns)	Land-use from Thomas Milne's Map									
		Arable Acreage	% Arable	% C.F. Arable	% C.F. Market Gdn & Arable	% C.F. Meadow & Arable	% Market Garden	% Grass	% Commons	% Woodland	% Built-up Area
Barnes	257	254.4	26.54				19.53	18.86	13.68	2.83	18.53
Battersea	370	76.8	3.75		14.47	5.94	19.48	13.69	16.04		26.52
Clapham	193	387.0	34.72					24.67	10.9		29.69
Lambeth	1,000	1,289	28.42				17.76	21.89	7.54	2.97	21.4
Streatham	859	1,466	49.14					19.69	7.61	0.37	23.17
Tooting	107	168	27.13	4.65				33.07	9.04		26.09

Note.—C.F. = Common Field.

on the heavy land of the Weald Clay, Clay-with-Flints and London Clay. As would be expected the distribution of wheat was more even than that of any other crop. Several of the clergy reported that more wheat was sown in 1801 than was customary; the Vicar of Wotton stated that 'this is due to high prices and the failure of the turnip crops,' while at Morden the abnormal wheat acreage was attributed to 'favourable weather at seedtime.' Stevenson, commenting on the relative importance of wheat in Surrey, mentioned six contributory factors. Firstly the need for frequent summer fallowing of the Weald Clay soils, which induced farmers to

⁷ Hall, A. D., and Russell, E. J., *The Agriculture and Soils of Kent, Surrey and Sussex* (1911).

⁸ Malcolm, James, *A Compendium of Modern Husbandry principally written during a Survey of Surrey*, Vols. I-III (1805).

⁹ Stevenson, William, *General View of the Agriculture of the County of Surrey* (1809).

sow wheat, 'in order to pay for the want of a crop,'¹⁰ secondly he suggested that these soils were 'peculiarly adapted for wheat.'¹¹ Of the lighter lands Stevenson pointed out that some wheat was sown on them because of the introduction of the clover ley as a preparatory crop (for wheat), the cheapness of lime and London manure and the proximity of the London food market.

Barley is of first importance in only nine parishes, but second (usually to wheat) in 30% and third in 29% of the recorded parishes. This crop would appear to have been of more consequence on the soils of the Bagshot Sands, Lower Greensand and the Chalk; this was confirmed by Malcolm when he wrote, ' . . . barley is grown in all the hilly chalky and sandy districts enclosed or open extending from Smitham Bottom westerly through Guildford to Bramley and on the left of the road to Farnham.'¹² The fact that barley is not tolerant of poorly drained soils is corroborated by its almost complete absence on the clay soils of the county.

While oats were grown in most parishes, the Returns point to the predominance of this crop, which will tolerate damp and heavy soils, on the claylands; notably on the Weald Clay where more oats than wheat were recorded in most parishes. Stevenson stated that 'this grain does not form a regular part of the rotation on any—except the strong soils, and especially on the clays of the Weald.'¹³ In Surrey oats were chiefly grown as feed for horses, sheep and oxen; proximity to London with its large equine population made the cultivation of oats particularly profitable.

Potatoes and rye were comparatively insignificant crops in Surrey, although potatoes occupied a considerable acreage in a small group of Thames-side parishes: Putney, Barnes, Kew and Mortlake. Several of the clergy commented that potatoes were grown chiefly as a cottage-garden crop.

Malcolm and Stevenson referred to the extensive cultivation of peas at Mortlake, but there is no evidence of this in the Crop Returns, in fact Mortlake was recorded as having had only five acres of peas in 1801, although further up river at Chertsey, Egham and Thorpe about 10% of the recorded average were devoted to this crop. Throughout most of Surrey peas occupied a small part of the recorded arable land.

The Returns do not suggest that many beans were grown anywhere in the county, while Stevenson noted that 'garden beans are grown in considerable quantities near London and on the banks of the Thames about Mortlake, Walton, etc.'¹⁴ The beans acreage for Walton-on-Thames was 53 acres, while for Mortlake the Returns make no mention of this crop.

Tares have been omitted from the maps of the Crop Returns as

¹⁰ Stevenson, *op. cit.*, 202.

¹¹ *Ibid.*, 202.

¹² Malcolm, *op. cit.*, Vol. II, 330.

¹³ Stevenson, *op. cit.*, 226.

¹⁴ *Ibid.*, 233.

they are only recorded in any quantity in Lambeth parish, where 70 acres are said to have been sown. Malcolm and Stevenson refer to the cultivation of tares in Surrey, the latter stated that 'the cultivation of winter tares is extending,'¹⁵ while Malcolm commented, 'in the environs of London they [tares] are grown with a view to cutting them green, for the purpose of soiling horses of every description.'¹⁶

Turnips and rape were not differentiated on the printed forms circulated to the clergy, although in 36% of the Returns for Surrey the incumbents deleted rape, thus indicating that only turnips were grown (the Appendix shows turnips separately when they were recorded so). As the extent to which turnips were cultivated is sometimes taken as an indication of the degree of agricultural improvement at this time, the recording of turnips with rape is particularly unfortunate. It would seem that the turnip was not grown in large quantities in Surrey, for Malcolm stated that 'fewer turnips are grown [in Surrey] than in almost any other corn county that I know.'¹⁷ However, the Returns suggest that in some parishes at least the turnip occupied a considerable proportion of the land; in Reigate, Frensham, Bramley, Albury, Chipstead and Petersham 20-33% of the recorded acreage carried turnips. The absence of turnips and rape from the Weald Clay soils appears to be indicative firstly of the small number of sheep kept in these parishes (Malcolm and Stevenson pointed out that both crops were primarily grown for feeding sheep in Surrey), secondly of the problems of growing the turnip on heavy land. Stevenson also stated that turnips were grown 'to a considerable extent on the strong and rather wet loams in the northern part of the county.'¹⁸ Here the milk cattle, together with those being fattened for the London butchers, and the large number of horses in the Metropolis, favoured their cultivation.

There are many problems of general and particular reliability involved in using the 1801 Crop Returns for Surrey. The general problems include their incomplete coverage of the county, the limitations in the scope of the enquiry and the fact that the acreages recorded are themselves suspect. The discrepancies between the Returns and the accounts of Stevenson and Malcolm with regard to peas, beans and tares, and the difficulties involved in using the turnip and rape return, are examples of problems of particular reliability. Nevertheless the Crop Returns are almost the only quantitative source of information concerning the agriculture of Surrey at this time. If used discriminately they give a general picture of the distribution of the crops recorded and of their relative importance. To a lesser extent the current courses of husbandry can be detected. Thus the dominance of wheat and oats on the Weald Clay soils can be compared with the more balanced rotations

¹⁵ *Ibid.*, 236.

¹⁶ Malcolm, *op. cit.*, Vol. II, 3.

¹⁷ *Ibid.*, Vol. II, 391.

¹⁸ Stevenson, *op. cit.*, 243.

practised in other parts of the county; although a distorted picture would emerge if other sources were not consulted. Despite their deficiencies the 1801 Crop Returns can be a useful source of information if used in conjunction with contemporary maps, descriptions and other evidence to which they are complimentary.

APPENDIX

The 1801 Crop Returns for the County of Surrey

<i>Parish</i>	<i>Wheat</i>	<i>Barley</i>	<i>Oats</i>	<i>Pota- toes</i>	<i>Peas</i>	<i>Beans</i>	<i>Tur- nips</i>	<i>Tur- nips and Rape</i>	<i>Rye</i>	<i>Tares</i>
1. Abinger	1150	1420	1325	100	400	120	—	400	20	—
2. Addington	277	157	221	11	56	—	—	108	9	—
3. Albury	269	219	250	9	62	2	212	—	26	—
4. Ashtead	397	374	459	6	288	9	276	—	19	—
5. Barnes	72	72	32	44	4	2	—	21	10	—
6. Battersea	145	104	39	24	4	—	45	—	8	—
7. Beddington	370	270	260	13	55	—	—	200	10	—
9. Betchworth	447	55	300	5	156	40	—	82	1	—
10. Bramley	254	260	120	12	90	20	—	197	16	—
11. Byfleet	141	131	84	17	26	18	—	80	25	—
12. Buckland	253	120	163	2	67	10	82	—	2	—
13. Burstow	493	790	—	—	45	2	—	2	—	—
14. Camberwell	230	21	145	94	37	60	—	113	6	—
15. Capel	398	—	506	—	92	29	—	7	—	—
16. Carshalton	436	242	275	15	56	28	—	94	1	—
17. Caterham	221	142	243	3	41	—	—	42	12	—
18. Chaldon	241	75	156	26	—	—	—	90	—	—
19. Charlwood	845	15	1103	3	102	50	—	4	—	—
20. Cheam	231	147	103	6	30	11	—	101	5	—
21. Chertsey	26	19	11	$\frac{1}{2}$	8	9	—	—	1	—
22. Chipstead	152	26	206	4	3	—	102	—	5	—
23. Chobham	571	398	427	30	132	152	—	220	104	—
24. Clandon	126	136	47	—	20	9	64	—	—	—
East										
25. Clandon	119	75	56	3	18	9	—	38	6	—
West										
26. Clapham	63	9	38	20	4	24	35	—	—	—
27. Cobham	574	298	373	25	142	54	—	270	32	—
28. Coulsdon	405	259	479	—	109	—	200	—	—	—
29. Cranleigh	834	100	1196	—	153	150	52	—	12	—
30. Dorking	600	450	400	30	200	30	—	200	20	—
31. Effingham	323	147	211	8	29	18	100	—	—	—
32. Egham	457	373	112	35	130	86	148	—	45	—
33. Esher	137	88	39	15	66	36	—	30	17	—
34. Ewhurst	577	34	765	—	81	38	20	—	—	—
35. Farley	135	25	113	1	20	—	—	27	—	—
36. Farnham	467	453	437	23	172	52	112	—	62	—
37. Fetcham	224	109	145	—	44	22	—	72	—	—
38. Frensham	326	258	200	40	105	15	—	250	25	—
39. Gattton	144	24	162	7	17	—	—	16	—	—
40. Godalming	812	889	288	25	300	20	827	—	92	—
41. Great	243	212	177	2	33	—	—	162	13	—
Bookham										
42. Guildford	36	13	7	—	6	—	—	—	4	—
43. Hambledon	196	150	103	25	—	—	—	68	2	—
44. Hascombe	169	96	192	—	70	—	71	—	—	—
45. Haslemere	122	124	137	17	59	—	—	96	6	—

<i>Parish</i>	<i>Wheat</i>	<i>Barley</i>	<i>Oats</i>	<i>Pota- toes</i>	<i>Peas</i>	<i>Beans</i>	<i>Tur- nips</i>	<i>Tur- nips and Rape</i>	<i>Rye</i>	<i>Tares</i>
46. Headley	89	83	82	4	41	—	57	—	—	—
47. Horley	923	54	1006	10	103	112	—	50	—	—
48. Horsley West	333	185	231	2	46	28	—	114	—	—
49. Kew	3	1	9	4	3	—	6	—	—	—
50. Kingston	500	350	250	20	150	70	106	—	100	—
51. Lambeth	300	180	50	150	80	50	100	—	20	70
52. Leigh	497	24	560	5	75	66	—	30	—	—
53. Limsfield	417	53	447	2	45	32	—	23	4	—
54. Little Bookham	53	72	102	—	21	5	25	—	—	—
55. Long Ditton	267	76	152	5	121	92	—	30	—	—
56. Malden	186	15	146	—	71	51	—	13	—	—
57. Merrow	149	119	72	1	49	19	—	60	—	4
58. Merstham	386	77	425	2	65	—	106	—	—	—
59. Merton	255	56	196	18	90	54	—	57	6	—
60. Mickleham	200	98	146	6	59	—	—	93	15	—
61. Mitcham	202	40	93	50	23	7	—	28	2	—
62. Molesey East	93	74	16	1	17	6	16	—	4	—
63. Morden	242	11	93	—	37	72	17	—	3	—
64. Mortlake	86	53	43	102	5	—	34	—	28	—
65. Newdigate	463	1	531	6	56	50	—	8	—	—
66. Ockham	190	146	72	—	43	26	—	161	—	—
67. Peper Harow	32	39	20	4	12	3	—	48	—	—
68. Petersham	12	10	8	10	8	—	35	—	20	—
69. Putney	62	77	50	39	—	38	47	—	1	—
70. Pyrford	101	115	32	12	6	10	—	60	12	—
71. Reigate	484	292	373	6	161	26	234	—	3	—
72. Richmond	22	21	28	6	19	4	—	27	—	—
73. Ripley	393	603	240	20	97	53	—	330	48	—
74. Sanderstead	243	132	193	1	48	—	—	110	13	—
75. Shalford	220	132	53	6	47	15	7	—	16	—
76. Stoke d'Abernon	327	50	174	1	30	75	—	50	—	—
77. Streatham	366	65	106	94	79	46	—	98	5	—
78. Sutton	268	210	154	6	35	24	—	75	7	—
79. Thames Ditton	290	149	159	17	113	81	40	—	8	—
80. Thorpe	266	233	55	5	100	53	34	—	8	—
81. Thursley	214	215	154	1	54	6	191	—	10	—
82. Tooting	2	35	14	6	7	—	—	25	18	—
83. Walton-on- the-Hill	135	66	148	—	17	—	—	31	6	—
84. Walton-on- Thames	434	324	176	56	116	53	—	—	89	—
85. Wandsworth	197	47	107	50	16	10	80	—	9	—
86. Warlingham	208	86	307	17	46	—	—	—	10	—
87. Weybridge	32	33	52	9	7	—	—	50	29	—
88. Wimbledon	218	39	180	19	36	41	—	30	—	—
89. Windlesham & Bagshot	230	124	191	22	62	43	88	—	3	—
90. Wisley	58	57	46	2	10	4	—	45	15	—
91. Witley	415	305	225	6	84	4	310	—	5	—
92. Woking	469	449	131	14	111	19	—	309	60	—
93. Woodman- sterne	203	134	182	3	33	—	—	77	—	—
94. Wotton	302	150	299	92	8	—	—	158	15	—

Parishes for which no Return exists

95. Alfold	109. Epsom	123. Pirbright
96. Ash	110. Ewell	124. Puttenham
97. Banstead	111. Godstone	125. Seale
98. Bisley	112. East Horsley	126. Send
99. Betchingley	113. Horne	127. Shere
100. Chelsham	114. Horsell	128. Stoke-next-Guildford
101. Chessington	115. Kingswood	129. Tandridge
102. Chiddingfold	116. Leatherhead	130. Tatsfield
103. Compton	117. Lingfield	131. Womersh
104. Crowhurst	118. St. Martha (Chilworth)	132. Titsey
105. Croydon	119. West Molesey	133. Wallington
106. Cuddington	120. Nutfield	134. Woldingham
107. Dunsfold	121. Ockley	135. Worplesdon
108. Elstead	122. Oxted	136. Frimley

The parishes of Newington, Rotherhithe, Camberwell and Bermondsey are not included in this list as they were either built upon, or used for market gardens or grass; categories of land-use with which the Crop Returns were not concerned.

MERSTHAM LIMEWORCS

BY

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The first part of this paper outlines the history of the very important quarries and limeworks at Merstham, Surrey. The second part describes the investigation of a nineteenth-century industrial installation in the works. The paper concludes with a note on some of the records of the limeworks, by Marguerite Gollancz, M.A.

HISTORY OF QUARRIES AND LIMEWORCS

THE parish of Merstham straddles the scarp-slope of the North Downs. The village street is some 280 feet above sea level, but in the north of the parish the crest of the downs, just east of Alderstead Farm, reaches 624 feet. These downs are cut, along a north-south line, by a wind-gap in the centre of the parish which is utilized by the present-day Brighton Road (A23) and which was chosen for the course of the Croydon, Merstham and Godstone Railway.

The geology of the district is complicated,¹ the main strata coming to the surface in east-west bands. The village itself lies in the Gault Clay, which is some half-mile wide. To the south, near Albury Moat, the Folkestone Beds are reached, and near Battle Bridge Farm is a large area of brown Brickearth. Overlying the Gault Clay, north of the village, is a narrow band of Upper Greensand, upon which the church is built and which reaches almost to Quarry Dean. Above and to the north of this lies the Chalk, which is finally capped by clay-with-flints on Alderstead Heath.

The good communications north-south, because of the wind-gap, and east-west by the 'Pilgrims' Way' which originally crossed the parish, caused two of the strata, described above, to assume economic importance. These were the Upper Greensand, which yielded the famous Merstham Stone, and the overlying Lower Chalk, which was burnt into lime.

THE STONE QUARRIES

The Upper Greensand yields a building stone, particularly valuable for its free-working properties and its relative immunity to fire damage. It is generally known as the Merstham Stone or the Reigate Stone, both of which names cover the products of many quarries in several parishes along the North Downs.

¹ Geological Survey Sheet 286 refers.

This stone has been used in many famous public buildings² (including Westminster Abbey in the thirteenth century, the Guildhall in 1400-20, and Nonsuch Palace in 1531-3), although in many cases no attempt has apparently been made to identify the particular quarry concerned. Several buildings in Merstham Parish testify to its later use, including 26 High Street (1791), Weighbridge Cottage, Lime Cottage and Quarry Dean itself. Certainly, when Hall and Co. occupied the area (see below) they continued stone working, as one of the buildings at their Croydon Wharf was in this material. It is not known exactly when quarrying ceased in the late nineteenth century. It probably continued spasmodically for years, but, since it could not compete in price with bricks, the demand fell off, latterly being restricted to the linings of furnaces; the Merstham Lime-Kilns being made if it.

The upper layers of the stone are softer and found a use as hearth-stone for scouring hearths and front door-steps. Small quantities are believed to be still mined in the Reigate area.

The stone was won by 'pillar and hall' mining, the hills being honeycombed with galleries of several periods. The entrance was directly to the south of the Limeworks, being blocked, early this century, by blasting, it being considered unsafe. Near this entrance a large assortment of gears and pulleys remains of some machinery believed to have been used in connection with haulage of stone. The granite base of a single-cylinder vertical steam engine, used for stone haulage, was found built into a wall near Lime Cottage.³ This base was formed out of one block of granite measuring 6 feet 2 inches by 3 feet by 16 inches. It is illustrated in Plate I(a). Another entrance lay to the south-east of Quarry Dean and further entrances lay to the east.

In recent years there have been several subsidences and these have been investigated by the Cave Research Group of Great Britain since 1960.⁴ These explorations have been made difficult by the high level of water in the galleries. It is suspected that flooding has long been a problem in the operation of the quarries. Manning and Bray⁵ mention drainage works carried out in 1807-9 and their interference with the water supply to the mill near the church.

Quarry Dean itself is mentioned in 1522 as Quarrepitden in a rental of the Manor of Merstham,⁶ which unfortunately fails to mention the stone quarries. The present house appears to have

² *M. & B.*, II, 253; *V.C.H.*, Surrey, II, 277; III, 214; Dines, H. G., and Edwards, F. H., *The Geology of the Country around Reigate and Dorking* (1933), 173; Hooper, W., *Reigate* (Surrey A.S. 1945), 105; Dent, J., *Quest for Nonsuch* (1962), 264.

³ Information from Mr. John Sanders, ex-manager of Merstham Limeworks.

⁴ Information from Mr. M. W. Harrison, the farmer at Quarry Dean, and from his lecture to the Reigate Society reported in *Surrey Mirror and County Post* (19.2.1960).

⁵ *M. & B.*, II, 807.

⁶ *Surrey A.C.*, XX (1907), 90-114.

been largely reconstructed in the first half of the nineteenth century, probably when it was owned by George Valentine Hall.

ROADS AND RAILWAYS

The 'Pilgrims' Way' passes south of the Limeworks in an east-west direction. This section of the road was closed in 1878⁷ and also the other roads of Merstham have undergone considerable alteration. Hart⁸ gives a map of these changes. Briefly, the present Quality Street was continued northwards to form the road to London. This was diverted in 1807 by the formation of a turnpike road by-passing the village to the east, and this was again diverted (westwards) to form the modern road in 1839 when the South-Eastern Railway came. Also Shepperd's Hill was diverted in 1868 due to undermining by the Lime Quarry.⁹

The story of the iron railways in the area is well documented.¹⁰ The Surrey Iron Railway was opened in 1803 from Wandsworth to Croydon. The Croydon, Merstham and Godstone Railway (C.M.G.R.) was incorporated by an Act of Parliament of May 17 1803 (43 Geo. III., cap 35), and was intended to reach Reigate with a branch to Godstone Green.¹¹ A war-time venture, this was originally intended to be part of a main trunk railway to Portsmouth. Victory at Trafalgar removed the urgency for such an overland connection, and as constructed and opened in 1805 the C.M.G.R. only reaches the Merstham Quarries. The line enters Merstham Parish in a cutting,¹² much of which still exists, some 20 feet deep and approximately parallel to the main road. An overbridge remains, buried to its parapets, and a second and third may be seen just to the north in Coulsdon parish. The Weighbridge Cottage still exists beside the main road, and is shown on the Merstham Tithe Map of 1838.¹³ The railway then diverges eastwards from the main road and passes the site of the old Hylton Arms—the present inn was rebuilt on the main road, as the Jolliffe Arms.

To the south-west of the line are the remnants of some cottages, which were originally stables for horses and a repair depot for the trucks, and which were demolished at the beginning of the recent war. The track continued south-east, past Lime Cottage, and finished at the quarry entrance near Quarry Dean Farm. The line of the track

⁷ Surrey R.O., Highway Proceedings, Q.S. 5/8/412.

⁸ Hart, E., *Surrey A.C.*, XLI (1933), 22.

⁹ Surrey R.O., Highway Proceedings, Q.S. 5/8/316.

¹⁰ Dobson, G. G., *A Century and a Quarter* (privately published for Hall & Co., 1949); Townsend, C. E. C., *Transactions of the Newcomen Society*, XXVII (1956), 51–68; Lee, C. E., 'Early Railways in Surrey,' *Railway Gazette*, 1944; Bing, F. C., *The Grand Surrey Iron Railway* (Croydon Public Libraries, 1931).

¹¹ The copies of the Parliamentary plans deposited with the Clerk of the Peace for Surrey are in the Surrey R.O., Q.S. 6/8/14 and Q.S. 6/8/16.

¹² A scheduled ancient monument.

¹³ Copy in Surrey R.O.

is shown in a series of maps drawn by Lee and illustrating Townsend's paper.¹⁴

Between Lime Cottage and Quarry Dean the line is shown as curving and twice crossing the existing pathway, and the reasons (and evidence) for these diversions are not obvious to the author. Beyond the south-west corner of Lime Cottage the ground has been made up above its natural level, some six feet by spoil from the Limeworks. It has long been suspected that this was laid on top of the track of the railway¹⁵ and the author has located with a mine-detector two parallel metal objects going some ten yards and spaced approximately 5 feet apart. However, these may be the gas and water pipes to the cottage and unfortunately it was not possible to excavate.

The track consisted of flanged plates, supported on square, stone sleepers, each with a central hole in which a wooden peg was inserted, and to this the plates were spiked. It was strictly a plateway, the flanges being on the inner side of the rails and not on the wheels of the trucks, which were horse-drawn and could be used on ordinary roads. The sleepers were rough-hewn in a variety of different stones, mainly millstone grit. A section of track has been erected near the Jolliffe Arms and specimens of rail and sleeper exist in the Guildford Museum. It is surprising that the actual gauge of the line appears to be obscure.¹⁶ Some of the doubts are obviously due to difficulties of definitions of gauge in a plateway. However, the discovery in 1961 of a straight set of sleepers, *in situ*, in the lane between the Jolliffe Arms and the quarry, have made it clear that these were placed in two lines so that the peg-holes were 5 feet apart, and 3 feet 1 inch apart in the direction of the rails. Unfortunately, the road has been resurfaced since observations were taken and the sleepers are no longer visible.

The C.M.G.R., never financially very successful although it provided a ready outlet for Merstham lime, was bought out by the London and Brighton Railway in September 1838, since it wished to use the line as part of its track at Coulsdon. The Brighton line was commenced on 12 July 1838,¹⁷ just north of Merstham Tunnel (1,831 yards), which was completed by 1841. As noted above, this involved a diversion of the 1807 turnpike road.¹⁸ The Tithe Map of 1838 shows the London and Brighton Railway land, but also shows the C.M.G.R. track finishing just short of the limeworks, presumably the section to the stone-quarrying having been abandoned. The limeworks were originally served by the C.M.G.R., and this was

¹⁴ Townsend, C. E. C., *op. cit.* Also *Railway Magazine*, 1947, p. 255. This is shown in greater detail in a plan drawn by Major Taylerson (in Dobson, C. G., *ibid.*, Plate 50).

¹⁵ Information from Mr. Sanders.

¹⁶ Lee, C. E., *op. cit.*, 31.

¹⁷ White, H. P., *Regional History of Railways in Great Britain* (1961), II, 75-80.

¹⁸ Built by Jolliffe & Banks for the Croydon and Reigate Turnpike Trust.

replaced by a single track spur from the L.B.S.C.R.-S.E.R. joint line.¹⁹ When the Quarry line was built, this spur was carried by a bridge immediately south of the tunnel mouth. This bridge was removed when the limeworks closed. Although built by the Brighton Company,²⁰ due to Parliamentary insistence that only one southern route for a railway from London was required, the Merstham section actually passed to the South-Eastern Railway in 1842, and was used by trains of both companies. This caused considerable friction, and the London, Brighton and South Coast Railway built a new line (the Quarry Line), by-passing Redhill, largely parallel to the earlier line and involving a further Merstham Quarry Line Tunnel of 2,113 yards, which was opened in April, 1900. The chalk spoil for this tunnel was dumped on land directly to the south of Lime Cottage, considerably altering the contours there.

When it was realized that the Croydon, Merstham and Godstone Railway was unlikely to be extended beyond Merstham, plans were made to connect it to the Arun by canal. In 1811 the plan²¹ of the proposed Merstham and Newbridge Canal shows that connection between the canal basin at the foot of the downs and the iron railway was to be by inclined plane. This map is interesting in that it marks Jolliffe & Bank's Works (see below) and also an obviously artificial pond to the south of Rockshaw Road, called New Pond. This was intended as a feeder reservoir for the canal and it is interesting to speculate whether this pond existed before 1811 or if it represents the commencement of works on this canal. It is not shown on Rocque's map, but is shown on the Tithe Map. Portsmouth was reached (1823) by canal from the Thames by way of the Wey Navigation, the Wey and Arun Junction Canal, the Arun Navigation and the Portsmouth and Arundel Canal.²²

THE LIMEWORKS

Chalk has been dug from the hills around Merstham for burning into lime since 'time out of mind.' Certainly the small pit south of Alderstead farm is shown on the Tithe Map and is identified by Hart²³ with that of Pit Field mentioned in the Merstham Manor Rent Roll of 1522. Also in a wood to the north-west of the church is an extensive series of marling pits. These were mainly to supply agricultural lime, the use of which increased during the agricultural improvements of the eighteenth century. The effect of this on clay soils and the lime-burning industry has recently been studied by Robinson and Cooke,²⁴ who show that, for economy in transport,

¹⁹ The locomotives used in the Limeworks are listed in *Industrial Locomotives of South-East England* (Birmingham Locomotive Club 1958), 13.

²⁰ The contractors were the Hoof Brothers, one of whom was killed in the tunnel and buried in Merstham Churchyard.

²¹ In Surrey R.O., Q.S., 6/8/68, and *M. & B.*, III, appendix, ix.

²² Vine, P. A. L., *London's Lost Route to the Sea* (1965).

²³ Hart, E., *Surrey A.C.*, XLI (1933), 21.

²⁴ Robinson, D. J., and Cooke, R. U., *Surrey A.C.*, LIX (1962), 19-26.

the lime-burning took place at the farms near the source of fuel. This may explain the absence of earlier kilns at Merstham.

Lime was also used for building purposes. Manning and Bray state:—

The Chalk from this part of the Surrey Hills burns into excellent lime and is in much esteem with builders for any work which requires more than ordinary strength of mortar. In future, it may form a considerable and lucrative article of trade in this particular spot, if the traffic shall be sufficient to support an iron railway, which was completed in 1805, opening a direct communication between this place and the Thames, at Wandsworth. Great quantities of chalk have been conveyed by this means to the vicinity of the metropolis, and the business of lime-burning is now carrying on with great alacrity.²⁵

Thus it appears that it was the improvement in communications resulting from the iron railway that caused the large size of the Merstham Limeworks. Mr. Harrison²⁶ states that the Limeworks opened in 1762, but it is not shown on Rocque's map, nor the Merstham Estate Map of c. 1768 in the possession of Lord Hylton.²⁷ This and several other maps, including Cary's of 1801 and the first edition of Ordnance Survey, show the stone-quarries but not the limeworks. Some of these maps may not have attempted to show limeworks, but the author believes that this indicates that any works here were small in size before the iron railway came.

Tharby²⁸ states that Sir Edward Banks, the contractor, joined Colonel Hylton Jolliffe, M.P., of Merstham House, in developing Merstham Limeworks in 1805, after Banks had completed the C.M.G.R. In 1807 Banks entered into partnership with Hylton Jolliffe's younger brother, the Rev. William John Jolliffe, to form the firm of Jolliffe & Banks, Public Works Contractors. This Company had many famous contracts, including Dartmoor Prison (1809–10), Waterloo Bridge (1812–7), Sheerness Dockyard (1813–23), the new London Bridge (1824–31) and that over the Serpentine (commenced in 1824). In their public works they were the first to introduce Aberdeen granite to the South of England, and the millstones of this material found at the Merstham site are undoubtedly connected with them. The Company's offices were at the Merstham Limeworks and are shown in the map of the proposed Merstham and Newbridge canal (1811), and are included in the Land Tax returns for 1809 and later.²⁹

It appears that Jolliffe and Banks worked the lime here until 1824, when the lease of the Limeworks, Quarry Dean, and surrounding fields were taken by George Valentine Hall, who was previously employed there. He became the founder of the firm of Hall & Company Ltd., whose history has been excellently covered by Dobson,³⁰ and was described as a lime-burner. The firm of Jolliffe &

²⁵ *M. & B.*, II, 253.

²⁶ Lecture to the Reigate Society, *see* note 4.

²⁷ Photocopy at Castle Arch, Guildford.

²⁸ Tharby, W. G. *The Life of Sir Edward Banks* (1955).

²⁹ Plan and Land Tax returns in Surrey R.O.

³⁰ Dobson, C. G., *op. cit.*

Banks continued to have their offices on the site until they wound up in 1834, and continued to use Merstham lime and stone in happy business relationship with George Valentine Hall. The Hall family lived at Quarry Dean, and the Company were connected with the site until 1864, when the conditions imposed for a renewal of lease being too heavy due to the landlord's annoyance that the firm had recently acquired a second site at Coulsdon, they gave up the Merstham Works and concentrated their resources at Stoa's Nest Quarry, Coulsdon, which closed in 1962.

About 1872, the workings were taken over by Mr. J. S. Peters, whose family had been connected with lime in the Lower Medway Valley. He appears at first to have only taken over the works area to the north of the bridle road to Quarry Dean, which he does not appear to have leased until 1890,³¹ when he also acquired rights on the land behind the bridle road and the site of the Pilgrims' Way. The limeworks were run by the Peters, uncle and nephew, until 1934, when the Merstham Grey-stone Lime Company was formed. This Company continued until 1956, when the works lay derelict for several years. Finally in 1961, Croydon Corporation bought the land for the dumping of household rubbish and eventual restoration of the original contours.

An illustration exists of the Limeworks in 1824 in a hunting print by D. Wolstenholme, *Full Cry—crossing the Brighton Road at Merstham*.³² This shows on the left the old Hylton Arms and Jolliffe Row and, on the right, Lime Cottage. This building is constructed of the Merstham Stone and appears to date from the early part of the nineteenth century. It may be the cottage first mentioned at Jolliffe & Banks' Works in the Land Tax in 1815. It is, however, reputed to have been a mill building,³³ and this was confirmed by the discovery within the wall of timber supports, presumably for a bearing, during alterations carried out in 1962.³⁴ The exterior before alteration is shown in Plate I(b). This house is marked on the Tithe Map of 1838³⁵ with the form of hatching used for industrial buildings rather than dwellings. The eastern end was the office of the Company at least since 1870, and may have been so earlier. Remains of an archway are faintly visible in the stone work of the south face, and this was reputed to be connected with its industrial origins.³⁶ The cottage has been retained, but renamed 'Old Quarry Cottage'.

Remains existed until recently of two rows of old conical flare kilns, the upper one of eight kilns and the lower of three. The upper row is known to have been built by George Valentine Hall in 1830.³⁷

³¹ Lease from Lord Hylton to J. S. Peters, 1890 and 1899 in Surrey R.O., Acc. 641.

³² Reproduced in *Surrey A.C.*, XLIII (1935), Plate V.

³³ Information from Mr. Sanders.

³⁴ Information from Mr. R. Teesdale, Croydon Corporation, Engineer-in-Charge.

³⁵ In Surrey R.O.

³⁶ Information from Mr. Sanders.

³⁷ Dobson, G. C., *op. cit.*, illustrated in Plate 49.

These are illustrated in operation in an engraving by Elliott Seabrooke³⁸ and photograph A.4636 of the Geological Survey taken in 1929, reproduced by kind permission as Plate II. In 1934 continuous running kilns were installed and these were in use until the works closed. All the kilns used coal as fuel and this was a back-carriage in return for lime. All the occupiers of the site seem to have carried on a subsidiary coal-merchants' business due to this.

Several mill-stones were discovered during operations by Croydon Corporation. They were all apparently of Aberdeen granite, and included two halves, forming a platform 9 feet 5 inches diameter, with an 8 inch diameter hole. There were also two 5 feet 10 inch diameter, with an 11 inch square hole, fitted with a metal bearing for a 4½ inch shaft. It is suspected that these two were rotated edgewise on the platform, but it is not clear whether they came from Lime Cottage or perhaps elsewhere on the site. Two other mill-stones, approximately 3 feet 6 inches, were found, but had to be covered over.³⁹

K.W.E.G.

INVESTIGATION OF A NINETEENTH-CENTURY INDUSTRIAL INSTALLATION

During the many visits paid to Greystone Limeworks by Mr. K. W. E. Gravett in the course of his researches into their history (as described in the first part of this paper), the former quarry manager, Mr. John Sanders, who then lived at Old Quarry Cottage (formerly Lime Cottage), kindly drew his attention to a circular earth bank just inside the thicket, across the lane which runs south of the cottage.⁴⁰

As the purpose of this was not apparent, and as it was unlike any of the other known remains of the working days of the quarry or limeworks, investigation seemed desirable. Further inspection showed that there were, in fact, two contiguous circles (Fig. 1). There was no record of disturbance for many years, and indeed the thicket was dense and unbroken. In view of this prospect of uncovering a probably complete industrial installation (the circles had nothing ancient about their appearance), and of the imminent filling in by Croydon Corporation of the quarries, and the possible threat to the circles thereby, it was decided to excavate. Permission was kindly given by the ground landlord, Lord Hylton, and the Croydon Corporation; both showed continuous interest in the work, and much gratitude is due to them.

The excavation took place in June 1962 under the writer's direction, assisted by Mrs. M. C. Wood, Mr. Gravett, Mr. N. P.

³⁸ Reproduced in Green, F. F., *The Surrey Hills* (1915), 58.

³⁹ Information from Mr. R. Teesdale.

⁴⁰ This lane follows the line of the extension of the Surrey Iron Railway, which ended at Quarry Dean, a quarter mile beyond Lime Cottage. It was not possible to excavate beneath the lane for traces or actual remains of the track, but some of this has since come to light at Quarry Dean (1967).

Thompson and Mr. David Herbert. The work was visited by Mr. W. G. Tharby, of the Bourne Society.

The site is on a narrow spur of Lower Chalk, left standing on the southern edge of the quarries. Just to the south-east of it are the Merstham stone layers which were mined here for many centuries (see page 125).⁴¹ The rock (which is a very hard greyish clunch) falls away in a scarp a few yards south of the circles, but the formation is here obscured by the high piles of outcast from the railway tunnels and cuttings, which were built up against it. The cutting of the railway into the quarry runs under the lane some 50 yards north-west of the site.

But these features (except the chalk) are unrelated to the choice of site for the circles. These seem in fact to be sited in close relation

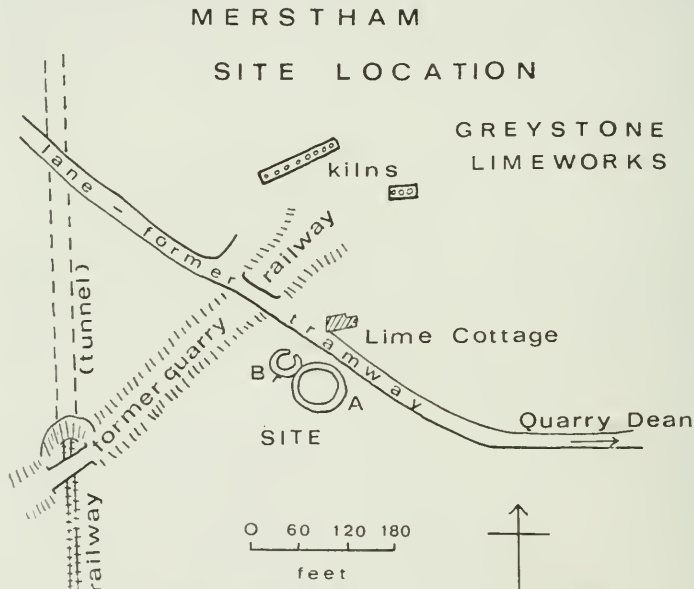


FIG. 1.—MERSTHAM LIMEWORKS: SITE LOCATION MAP.

to the lane to Quarry Dean, or rather, no doubt, to the iron railway which preceded it. This lane or railway could provide access, and a means of transporting the raw materials for, and the products of, the site. In fact, the entrance to the smaller circle (see below) faced the lane.

The circles consist of banks of chalk (covered with a thin topsoil) some 3 feet 6 inches high. They are some 60 feet and 24 feet in diameter. The smaller has a gap on the north side, the larger is unbroken (Fig. 1).

⁴¹ The lime quarries are in the Lower and Middle Chalk; the building-, road- and hearthstone beds (Merstham stone), to the south of them, form part of the Upper Greensand. Dines, H. G., and Edmunds, F. H., *The Geology of the Country around Reigate and Dorking* (1933), 100.

EXCAVATION METHOD

Although it was presumed that the circles represented the emplacements of rotary machines connected with processes of the lime industry, their precise contents could not be guessed from external inspection. They showed merely as gently-dished circular platforms, the level inside being higher than that of the soil surface outside the banks. Excavation, therefore, took the form of trenching (down to the natural undisturbed rock) across the larger circle from one of the few accessible points on the bank on the lane side, in towards the centre; examining a wider area at the centre, to see if there were any central feature; then continuing the trench towards the part of the bank where it touched, or rather appeared actually to form for a certain length, the bank of the smaller circle. From this point the trench was continued across the smaller circle, through its centre, to the bank on the far side. From the centre trenches were then taken, one to the gap on the lane side, the other in the opposite direction as far as the bank, and across it to test the flat platform which was observed in the angle where the banks of the two circles met.

Excavation was at all times hampered, and to some extent conditioned, by the dense cover of hawthorn bushes, with their roots, which entangled the entire site. Clearance of this vegetation was in fact so laborious that the minimum passages were cut consistent with adequate trenches, plans and sections being obtained. But in the result a clear picture was, in fact, achieved.

THE LARGE CIRCLE (A)

This was 60 feet in diameter, measured from the centre (highest point) of the bank. The bank was 3 ft. 2 in. high (above the present ground level outside the circle), and had a spread of 10 feet from the top in each direction. The top was rounded, and only slightly flattened. The soil level inside the circle was 1 ft. 9 in. below the top of the bank, i.e. 1 ft. 5 in. above the soil level outside. The top soil, which covered the whole area, including the inside of the circle, was 4 inches thick.

The *bank* was made of chalky material, and rested on the natural rock. Indeed, the whole circle was evidently cleared down to the rock before the bank and the interior layers were laid down.

The *interior* consisted of carefully laid and levelled thicknesses of clay (Fig. 2). The bank had evidently been allowed to settle before the interior was dealt with, as it showed a 'foot' or spread of some five feet from where the bank proper would have ended. Inside this some five inches of reddish brown clay (which outcrops at South Merstham) had been spread on the natural rock. Over this lay eight inches of clay, grey over the spread of the bank, merging into light brown over the red layer. It is possible that this is an effect of leaching or soil-water.

Some four inches of recent topsoil covered both the bank and the clay layers inside it. At the base of this, roughly coterminous with the brown part of the upper clay layer, was a thin (up to two inch)

layer of small pieces of apparently unburnt chalk and chalky soil, resting on the brown clay. On the assumption that Circle A was an artificial pond, this chalky matter might be seen as the remains of whatever the pond was meant to contain (*see below*), or might have been added to prevent damage by animals, perhaps oxen from the nearby grinding mill.⁴²

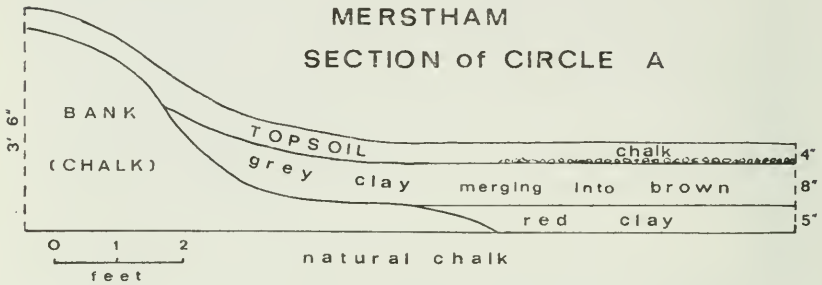


FIG. 2.—SECTION OF CIRCLE A (part—the circle is 60 ft. in diameter).

THE SMALL CIRCLE (B)

This was about 24 feet in diameter, between the tops of the bank. But the bank on the side of Circle A merged into the latter's bank, and for several feet was indistinguishable from it, forming one stretch of bank common to both circles.

The angles between the two circles were blocked with heaps of chalky rubble, perhaps spreads from the banks.

Midway along the common bank was a *platform* of brickwork laid transversely across the bank. This consisted of an oblong platform four bricks wide (two feet), and 3 ft. 8 in. long. On the outside rows of brick another course of bricks had been laid, forming low retaining walls. These did not extend across the ends of the platform (which therefore had the form of a tray with no lip at the shorter sides). The structure was laid on an inch layer of mortar on the top of the bank.

Below this, covering the slope of the bank inside Circle B, had been a *facing* of slates, of which many fragments were found. This must have been fastened to a wooden framework. If the purpose of the brick platform was (say) to rest buckets of water or some other liquid on, in transit between the two circles, then the slate facing would have prevented erosion of the bank by spilt liquid.

Inside the circle (*see plan*, Fig. 3), the bank had been prolonged by a flat shelf or berm some five feet wide, and 1 ft. 6 in. thick. On this (resting on a layer of sand) was laid a brick *floor* 3 ft. 6 in. wide, one brick thick, which ran continuously right round the circle. The outside edge of this floor, on the bank side, had been built up by a low retaining wall two bricks high and two (one foot) thick. There

⁴² Such a layer was commonly added to dewponds for this purpose. *See* Martin, E. A., *Dewponds* (1915), 104, and also Clutterbuck, J. C., 'Prize Essay on Water Supply,' *Journal of the Royal Agricultural Society*, 2nd Ser. I (1865), 271.

was a gap of about a foot between the retaining wall and the base of the bank, lined with sand (which may be merely part of the spread on which the floor was laid). The bank had spread over the wall, except under the brick platform on the Circle A side, where the slate facing had protected it for a time. When the slates collapsed the bank spread, but only up to the wall and not over it.

MERSTHAM
PLAN OF CIRCLE B

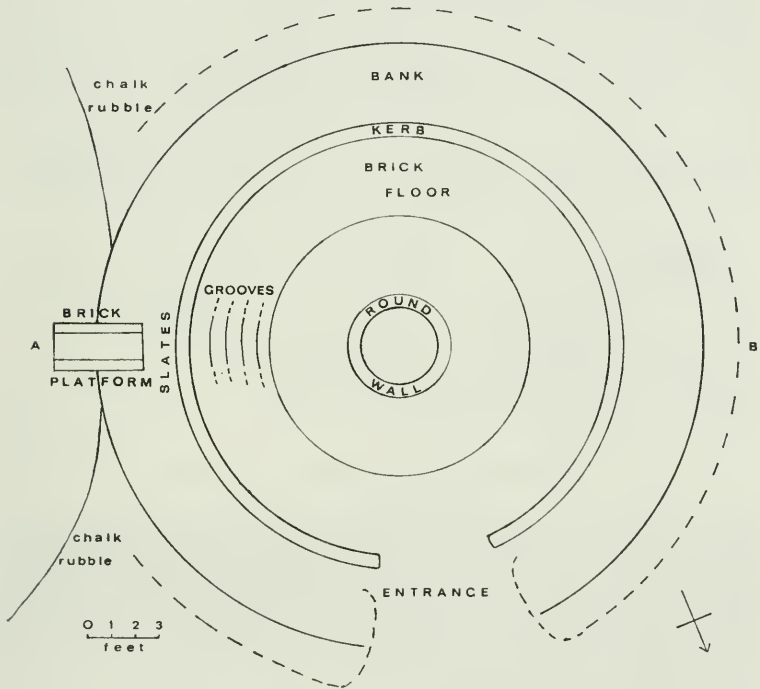


FIG. 3.—PLAN OF CIRCLE B.

The bricks which formed the floor were laid in diagonal rows of four bricks each, lengthwise (*see* Plate IV(b)). Four somewhat irregular grooves, one inch wide and up to three-quarter inch deep, had been worn into the brickwork by the passage of some heavy object(s) dragged across it. The amount of irregularity of these grooves may be gauged by measurements taken at two places:—

	Wall to 1st groove	1st groove to 2nd groove	2nd groove to 3rd groove	3rd groove to 4th groove	4th groove to inner edge of floor
a	3 in.	11 in.	6 in.	9 in.	9 in.
b	3 in.	9 in.	8 in.	9 in.	12 in.

The circular space, 11 ft. 6 in. in diameter, contained by the floor, was, of course, two feet deep from the surface of the floor to the natural rock, inside the inner slopes of the berm. In the centre of this space (and thus in the centre of the entire circle) was a low *circular wall*, one brick (lengthwise) thick, and two bricks deep, resting on the natural rock. This was 3 ft. 3 in. from the brick floor, and its inner diameter was 3 ft. 6 in. (*see* Plate IV(a)).

On the side of the circle nearest the lane (or railway) was a gap in the bank and retaining wall (but not the floor), 4 ft. 6 in. wide. This was evidently the *entrance* to the structure, but no trace of an actual doorway was found. Indeed, the absence of roofing material in the filling of the circle suggests that the structure was open to the sky. The flooring in the entrance was much broken up, no doubt partly by intensive wear. The bank had spread from both its ends over the entrance.

The topsoil layer, which ran, as stated above, over the bank, dipped into the centre of the circle (*see* section, Fig. 4). It was about

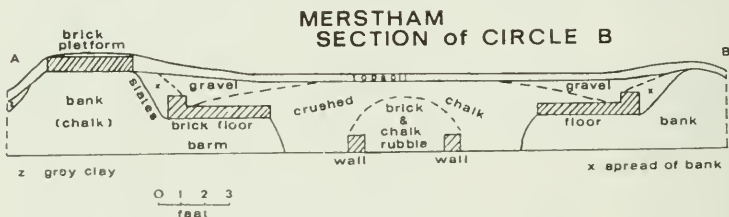


FIG. 4.—SECTION OF CIRCLE B (from A to B in Fig. 3).

a foot above the brick floor, and then ran level across the circle until it rose to the top of the bank on the far side. Above the floor the soil was brown and gravelly. The central circular feature was filled with rubble consisting of broken brick and chalk; this not only filled the central feature, but rose above it for about 1 ft. 3 in. The rest of the space inside the brick floor was filled with crushed and broken chalk.

The *bricks* measure $8\frac{1}{2}$ in. by 4 in. by $2\frac{1}{2}$ in. They are red, close-textured and hand-made, and have no frogs or makers' marks. Mr. Norman Cook, F.S.A., Keeper of the Guildhall Museum, who kindly examined one, places it earlier than the middle of the nineteenth century, but not much earlier than the end of the eighteenth.⁴³

The *small finds* are consistent with this dating. Nothing of importance was found in the areas excavated, but this was not unexpected in a site of this kind. The finds consisted of:—

Short piece (1.75 in. long) of an iron strap 1.25 in. wide. From the floor on the south side of Circle B.

⁴³ Lloyd, N., *A History of English Brickwork* (1925), gives the date of the introduction of this size of brick in England as 1776; the present size came in after 1850.

Square iron nail (tip missing), with flattened conical head—length of fragment 2.6 in.; width of sides 0.3 in.; head 0.7 in. across.

Large iron nail or staple, of flattened section, with broad flat head—this may be complete—it thins off at the end to an edge. Length 5.1 in.; width halfway along 0.6 in.; thickness 0.4 in.; head 1.25 in. by 0.9 in. From the floor on the south side of circle B.

Part of bottle, of dark green glass (0.2 in. thick), heavily iridized. The fragment stops short as it turns inwards toward the base, which is kicked.

Mouth, probably of the same bottle—thickened, with incised line round it. Diameter of mouth 0.8 in.; overall diameter 1.3 in.

These two pieces came from the central feature of Circle B.

Fragment of thin dark green bottle-glass.

Fragments of thin flat pale green glass.

Fragment of thin clear glass, from bottle of the 'medicine-bottle' type—two raised letters BL. From the brick platform.

Nondescript piece of glazed earthenware. From the entrance.

Piece of bone (part of sheep's clavicle). From the central feature of Circle B.

Piece of a bituminous or tarry substance.

The *slates* from the slope of the bank below the brick platform are grey. They are of two thicknesses, 0.3 in. and 0.2 in. They are bevelled off along one edge. The size of the slates could not be determined.

DISCUSSION: THE PURPOSE OF THE CIRCLES

A satisfactory interpretation of this seemingly simple, but in fact puzzling, site has not been at all easy to arrive at. There seem to be no surviving or even recorded parallels, and the site is not mentioned in the published history of the Merstham quarries.⁴⁴ Indeed, the lime and allied industries are far from copiously documented from the historical point of view. Most of the literature deals with the modern industrial processes and plant, and (as for glass and some other industries) the references to the pre-industrial phases are not informative as regards the details of the plant and equipment used. Indeed, except for kilns, the equipment is scarcely referred to at all, let alone described or illustrated.

The Merstham site, as it clearly predated fully modern industrial practice, had therefore to be interpreted by inference from what little was known of the processes and products of the industry before, say, Johnson's breakthrough in the manufacture of cement in 1845 (*see* page 138). Even then, the results are not wholly conclusive; it is difficult to suggest a process and product which demands the use of all the evidence which the site provides.

⁴⁴ Dobson, C. G., *op. cit.*

Besides searching the literature, the problem was discussed with two people who had intimate knowledge of the industry and its history—Mr. Sanders, the former manager of Greystone Limeworks, and Mr. A. J. Rook, B.Sc., formerly of the Chalk, Lime and Allied Industries Research Association. I am greatly indebted to these authorities for their kindness in giving thought to this, and in making suggestions and elucidating obscurities. They are not committed by what follows.

It will make the discussion clearer if the evidence is related, in turn, to the various main processes of the industry:—

One of the three main primary products of a limeworks was of course *lime*.⁴⁵ This is made by burning chalk (or limestone), at about 900° C., in a kiln to convert it into *quicklime*. The chalk is mainly calcium carbonate, with various impurities; heating resolves it into carbon dioxide gas and calcium oxide (the quicklime). The stone is burnt in kilns (as at Merstham) usually close to the quarry; if not sold away at this point as lump lime, it is then ground and hydrated in plants adjacent to the quarry. Ground lime is also sold away.

For both agricultural and building purposes ground quicklime is *slaked*—that is, covered with water; it combines with the water, generating heat, to form *slaked lime*, which is mainly calcium hydroxide. Under specially controlled conditions a purified powder can be made called *hydrated lime*; hydration (or slaking) is usually done on site, but hydrated lime can be sold away and used after mixing with water. Sand is mixed with slaked or hydrated lime to produce *mortar*.

When excess water is used, the slaked lime in suspension in the water is *milk of lime*; when this is allowed to stand it thickens into *lime putty*, used for mortar and plastering.

The grey chalk of Merstham produces a semi-hydraulic lime, that is, one which will, with water, produce a relatively hard and impervious mortar or cement.

Another main product, using chalk as a raw material, is *cement*, which depends for its properties on the types and proportions of clays, earths or gravels with which the chalk is mixed. They are crushed together in a wet mill and calcined into a mass which is ground into a fine powder. Quality improved throughout the early nineteenth century, under the influence of men like Vicat and Frost, and in 1824 Joseph Aspdin patented a cement of modern type ('Portland cement'). But the first fully reliable cement was not produced until 1845, by I. C. Johnson at Swanscombe. *Reinforced concrete*, patented by W. B. Wilkinson in 1854, was the final stage in this long development, but is outside our concern here.

Various mixtures were experimented with in the making of cements and concretes. G. R. Burnell,⁴⁶ for example, describes in 1850 a process (no doubt not then new) in which hydrated lime was made into a thick paste, and made into a mortar before being mixed with gravel. It was 'wheeled in on a level, and beaten with a rammer.' Burnell gives details of mixtures of lime, earths, sand, gravel and broken limestone; burnt clay or pounded bricks could be substituted for the earth.

The third product of chalk is *whiting*. This is finely divided calcium carbonate, used in gesso, paints, putty, etc. No chemical process is involved; the chalk is merely ground in water; the fine material is separated by sedimentation, and the settled sediment dried and powdered. Normally, in this process, the chalk was broken up and crushed in a wash mill (a circular floor) by rollers drawn round a central upright. The resulting 'slurry' was transferred, or flowed, into an artificial pond, where the coarser material sank to the

⁴⁵ For a good general account of the various lime products see Davey, N., *A History of Building Materials* (1961), 97 ff.

⁴⁶ Burnell, G. R., *Rudimentary Treatise on Limes, etc.* (1850), 73. Burnell draws partly on Pasley, C. W., *Observations . . . on Cement, etc.* (1830).

bottom. At intervals, say once a year in the summer, the pond was allowed to dry; the fine material was dug out, dried, and broken to powder, perhaps in the same mill. The coarser pieces were usually left in the pond.

We are now in a position to review the evidence from Merstham, and suggest solutions.

Circle A is obviously a pond, constructed of layers of clay like a dew-pond.⁴⁷ Circle B is more difficult. At this point it should be noted that analysis of the chalky remains in either circle cannot be conclusive. Slaked lime (calcium hydroxide) under conditions of exposure is carbonated by the atmosphere, and reverts to calcium carbonate, which is chemically indistinguishable from chalk. In fact, Mr. A. J. Rook kindly examined the chalky substance from Circle B, and confirmed it as simply chalk, which appeared to have gone through no other process than the one which produced the small lumps recovered from the circle and sent for analysis; these could have been fractured by natural means. Mr. Rook⁴⁸ points out, however, that whiting would have the same chemical composition, but its consistency would be like whitewash that has dried out—much softer than the samples, and without their rather rectangular fracture. We can therefore eliminate whiting from the enquiry, and the site must be considered in the context of lime, mortar or cement.

Mr. Sanders pointed out that Circle A (the pond) was larger than normally used for slaking lime, for which quite small pans were usual. It was at first reasonable to assume that Circle B was the site of a rotary crusher or grinder, for which it was about the right size.⁴⁹ But against this, no trace of a central post or pivot was found (unless a pivot had been mounted on the central brick feature and since removed);⁵⁰ there was no sign of the compression on the ground inside the floor which would be the result of the passage of a heavy roller; and the brick floor showed no signs of the crushing or damage which would be caused by horses' hooves (and in any case brick would make the coefficient of friction completely wrong for horseshoes—a brick floor would speedily break up under shod hooves).

Thus the floor must have been intended for human use, either to watch or control a process taking place in the centre (although as the centre is 8 feet from the edge of the floor this idea also has practical difficulties).

One possibility is that this process could have been that of running down lime into lime putty. This is made⁵¹ by putting quicklime on a sieve and pouring water over it. Only the pure lime goes through—

⁴⁷ Pugsley, A. J., *Dewponds in Fable and Fact* (1939), 30 ff., and references in note 42.

⁴⁸ In correspondence.

⁴⁹ Information from Mr. F. Atkinson (Bowes Museum).

⁵⁰ This enigmatic feature may have been to stand a container of some sort on or in, but its real purpose remains obscure. Perhaps it was merely to guide something round the centre.

⁵¹ Information from Mr. Sanders.

the ashes and unbaked chalk stay on the sieve. It is then allowed to ripen and can be used either with sand to make mortar or, when allowed to dry a little into a stiff paste, for plastering walls and ceilings.

A similar process is described in 1819:—

A pit is dug in the ground, which is bricked at the bottom and sides, into which the operator puts the lime. He has command of a small stream of water, which is conveyed at pleasure into the pit, and in a few days the lime is sufficiently slaked; he then puts the lime and sand or gravel into the mill. . . .⁵²

The size of the pit is given as making six bushels at a time. The pit at Merstham is somewhat larger than this.

The grooves or scratches on the brick floor suggest that something heavy had been dragged round. This may have been some kind of stirrer, but more likely a large sieve on a wooden frame, which would have been agitated and used to remove the unburnt lumps from the quicklime.⁵³

That the circle was used for mixing and not crushing is also strengthened by indications, found by Mr. Gravett, that an animal mill for crushing probably existed in part of Lime Cottage across the lane. The signs of wear in the floor in the entrance of Circle B could suggest that the crushed material was brought across from the cottage and unloaded at the entrance to the circle, for distribution and use inside. The grooves on the floor could, in this event, represent the dragging of receptacles full of crushed material round the floor to the places where it was required.

Cement, rather than putty or mortar is, however, suggested by the gravel and broken brick and stone found together with chalk (lime) in the filling of Circle B. And the problem of accepting the circle as a slaking-pit is that lime was, until recently, only slaked for use as lime-mortar and was used as soon as possible after slaking. Hence it was always slaked at the place where it was to be used, and never sold in the slaked condition, but only as quicklime. Also slaked lime has considerably greater volume and weight than quicklime and transport costs are greater.

The use of the platform for conveying water (or liquid) from Circle A to Circle B is reasonably clear.

All this points to the plant having been constructed for a large local building work. It was at first thought that the products were sent off along the Surrey Iron Railway to works in London, such as the building of Rennie's new London Bridge (completed in 1831), for which the Merstham Limeworks had the contract.⁵⁴ But the

⁵² Rees, Abraham, *Cyclopaedia* (1819), XXIV under 'Mortar.'

⁵³ These lumps might explain the pile of chalk rubble between the circles at the back.

⁵⁴ And for which lime mortar was used; see Dobson, C. G., *op. cit.*, 191. A list of works, for which the firm of Jolliffe & Banks had the contract, is given in Dickenson, H. W., 'Jolliffe & Banks, Contractors,' *Transactions of the New-comen Society*, XII (1931-2), 1, but this paper does not deal with Merstham Limeworks or its contributions.

above arguments point, however inconclusively, to a work much closer at hand.

This is conveniently provided (as Mr. Gravett very ingeniously suggests) by the first Merstham Railway Tunnel. Certainly contractors' rails were laid from the limeworks to the railway works, and fragments remained of the trucks used until after 1950.⁵⁵ The plant could thus have been built to supply mortar or cement for the tunnel lining, and perhaps the size of the contract would account for the oversize of the slaking-pit itself. The tunnel was built between mid-1838 and mid-1841,⁵⁶ and thus the site would date from *c.* 1840. This is entirely consistent with the construction, bricks, slates, small finds, and many of the considerations above.

An approximate estimate of the quantity of slaked lime required for the tunnel is 950 cubic yards. This could be provided by the pit investigated, assuming it was used six days a week for nearly the three years.⁵⁷ The lime must have been mixed with sand somewhere, but no doubt this was done on the spot, by the tunnel. A short life would account for the absence of modifications, the relatively light wear (and good condition), and the abandonment of the plant thereafter.

This may indeed well be the true explanation, although much still remains obscure. One may hope that parallels to this interesting site will be found elsewhere, and more precise knowledge gained on their purpose. Other limeworks were visited by Mr. Gravett, but nothing like this site was seen. Perhaps one should look rather in the neighbourhood of major construction works, such as bridges, or canal and railway tunnels. It was no doubt merely a coincidence that the Merstham tunnel was close to a limeworks, and, after all, this site may indeed, for this reason, be unique.

SUMMARY

Two conjoined earth circles were investigated at Merstham Limeworks. One was an artificial pond, the other a structure with a circular brick floor round a space containing a central brick feature. This is a plant of the lime industry, and may have been built for the production of mortar or cement for the nearby railway tunnel, about 1840. The small finds are in Guildford Museum.

Acknowledgements

I am most grateful to the owner and lessees for permission to investigate this site. Several experts have given thought to the problems it raises, and have answered questions. These are mentioned in the text, but I should like to repeat my gratitude to them here. The paper, and the enquiry itself, also owes a great deal to Mr. Gravett, who kindly read the draft and contributed much.

E.S.W.

⁵⁵ Information from Mr. Tharby and Mr. Sanders.

⁵⁶ Marshall, C. F. D., *History of the Southern Railway* (1936), 267-8. This is not the tunnel shown in Fig. 1, but a little to the west.

⁵⁷ This estimate is based on a straight tunnel of length 1 mile 71 yards and horseshoe profile of span 22 ft. 6 in. and height 23 ft., lined throughout with four rings of brickwork (Mr. Gravett's calculations).

THE RECORDS OF MERSTHAM LIMeworks⁵⁸

A PRELIMINARY NOTE

BY

MARGUERITE GOLLANCZ, M.A., COUNTY ARCHIVIST

The records formerly preserved at the Merstham limeworks and since 1961 deposited in the Surrey Record Office at County Hall, Kingston upon Thames, extend back in broken series to 1872. Although these records have suffered considerably through damp and only a few are at present available for study, these few are important as illustration of the value of business archives to the historian and to those interested in industrial archæology.

By 1870 the Peters family had established an interest in the operation of the limeworks which formed part of Lord Hylton's estates in Merstham, for in that year Edwin Peters was qualified to vote at parliamentary elections in respect of joint occupation of limeworks and farm. Though he changed his abode in 1875, moving first to Rochester and later to Maidstone, his name was retained on the Merstham register. From 1885, however, the qualification for Peters' vote was in respect of Quarry Dean. The name of Henry Peters of Wouldham Hall, Rochester, Kent, replaced that of Edwin Peters in 1888 and was followed in 1891 by Joseph (S.) Peters whose abode was in Merstham, from 1896 to 1899 at the limeworks, then at Quarry Dean.⁵⁹

It is assumed at present that the bulk of the records relate to the works of Peters Brothers, later Joseph S. Peters,⁶⁰ lime-burners, at Merstham, but a closer study may show that some of them include business of the Peters family elsewhere. The considerable business with Peters of Wouldham, Kent, Peters of 199 Old Kent Road and Peters of Paddington requires investigation. It should be noted in this connection that Henry Peters of Wouldham Hall was party to the lease of 1890,⁶¹ and that he qualified for inclusion in the occupiers' section of the electoral roll for Merstham in respect of Quarry Dean, as already shown. A small book, of later date, containing transport rates for lime from Merstham and cement from Snodland, in the Medway valley some miles south-west of Wouldham, may also be significant.

The main series of pre-1934 records includes journals (or day books), of which unfortunately only that for the years 1872-6 survives, trade ledgers, ledgers, purchases and sales accounts and wages books. There are also subsidiary cash books and a few less formal records, including a small note book containing accounts

⁵⁸ Surrey R.O., Acc. 566 (ledgers, etc.), and Acc. 641 (deeds). All records subsequent to 1933 are closed to searchers.

⁵⁹ Surrey R.O., Voters Lists for Surrey, Middle, later Reigate Division, 1870-1905.

⁶⁰ Cf. *Kelly's Directory of Surrey*, 1882, 1,246; 1891, 1,368.

⁶¹ See below, p. 145.

for harness repair between 1890 and 1896, this notebook having escaped the damp which has penetrated so many of the formal records.

One of the earliest surviving records is the journal, a large leather-bound volume of which only the first 270 of the 706 pages are used. It opens with entries for 1 January 1872, and breaks off on 25 May 1876. The pages have been ruled and the printed headings include name and residence; place of delivery; carman; yards lime, with separate columns for grey, ground, chalk; cement; sand; coals; and amounts paid. It provides a daily analysis of outward business, mostly the sale of grey lime, though there are also some sales of ground lime and chalk. Considerable use was made of the various branches of the South-Eastern Railway. Indeed the rails and sidings at the limeworks were extended between 1890 and 1899 as the plans annexed to the deeds of these dates show.⁶²

Among other volumes available for study are the ledger, 1876–84, and the Merstham trade ledger, 1885–9. The main part of the former is useful as giving the names and addresses of customers and the extent of their accounts. At the end of the volume, however, there are special accounts, including those for rents; rates, taxes and tithes; horses; horse keep; plant; loose tools, etc.; and the South-Eastern Railway. Debit and credit references to Peters Brothers occur on most pages of this section of the ledger. For the types of materials invoiced to the different customers and the destinations to which materials were despatched it is necessary to turn to the trade ledger. At the end of this volume, too, there is a section of special interest, in this case a daily analysis of sales of different materials, together with weekly, monthly and annual totals for the five years 1885–9.

The journal and trade ledger show that grey and ground lime and other materials were distributed throughout Kent; destinations in Surrey included Nutfield, Redhill, Dorking, Kingston and Virginia Water; in Berkshire, Wokingham and Reading. Except for nearby deliveries much of the transport was by rail, over the various lines of the South-Eastern net-work. The terminus at Bricklayers Arms was used frequently, for the abbreviations 'B. Arms' and 'B.A.' recur throughout the records in association with entries relating to Peters of Old Kent Road and others. Among the few carmen then employed was P. Wood who, in the years 1872–6, made trips to Nutfield, Redhill and Reigat, Caterham and Chipstead.

Supplies were sent to gas companies, including the Wokingham Gas Co., the Crystal Palace Co. at Sydenham, the Phoenix and the South Metropolitan. Among customers at Caterham was the asylum which received various types of materials and goods. Godson and Co., who received supplies at Croydon, may probably be identified with Richard Joseph Godson and Co., coal merchants

⁶² See pp. 126–8, Fig. 5; also plan of proposed connection between present siding and London, Brighton and South Coast new line received by the Engineer from Mr. Peters on 16 June 1899, and returned to him on 21 July 1899, Surrey R.O., Acc. 566.

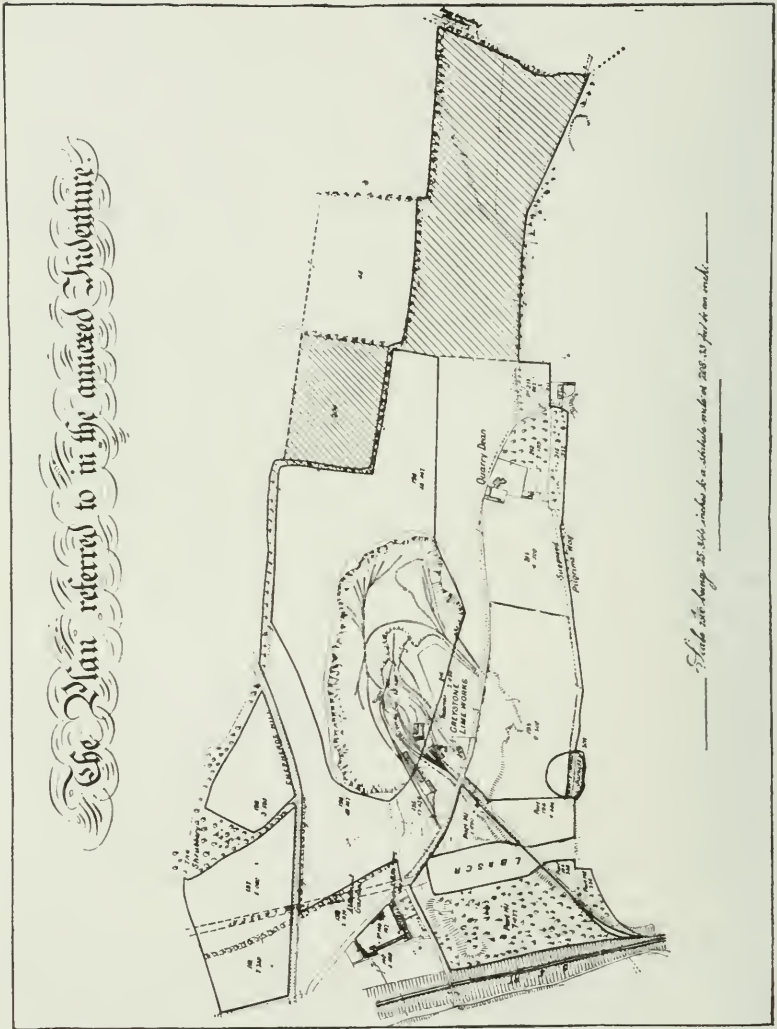


FIG. 5.—PLAN ANNEXED TO DEEDS OF MERSTHAM LIMEWORKS.

and building material merchants of 55 George Street,⁶³ and A. Brooks, Kingston, with Mrs. Adelaide Brooks, lime and cement merchant, of Clarence Street.⁶⁴ In 1885, for example, she received fortnightly 10 yards of grey lime at 7s.6d. and once, on 26 February, 1½ of ground lime at 8s.6d. In 1889 F. Higgs (probably Frederick Higgs, contractors, of Station Works, Camberwell)⁶⁵ had materials sent, for example, to Eltham and Norbiton, as well as to Marden Park. These are a few random examples of business connections that can be found in the records.

The wages book 1884-94 is made up of weekly accounts giving the names of those employed at daily rates, followed by companies paid for piece work. Wheelwrights and blacksmiths, paid 5s.2d. or 4s.8d. daily rate, and bricklayers, 4s.10d. or 4s.6d., were distinguished from the rest. Usually only one in each of these two classes was on the pay roll. With one exception they were paid more than the other workers whose duties were unspecified and who received between 4s.6d. and 1s.3d. or occasionally 10d. A rate of 3s.8d. was usual. One of those receiving this pay over a considerable period was W. Chillman who sometimes received 6s. or 7s. a week extra, on a piece-work rate, for clipping horses. The highest paid worker was R. Atkins who headed the lists until January 1893, with a daily wage of 7s.1d. He was not replaced. A six-day week was general. The weekly wage bill varied considerably. For example, for the week ending 10 October 1884, the total was £61 14s.0d., of which £42 2s.8d. was divided between 14 companies for piece work, and 17 day-rate workers. In the week ending 12 October 1888 the number was 15. Between them they received £16 19s.0d. and £31 3s.1½d. was paid for piece work.

Among the records which are the subject of this note there is no deed earlier in date than that of 31 March 1890, by which Lord Hylton leased to Joseph Stilwell Peters of the Welches, Bentley, near Farnham, Hants, Esq., and Henry Peters of Wouldham Hall, Esq., a workshop, 18 kilns, buildings, railways, spoil banks, works and pieces or parcels of land known as the limeworks and containing 19 acres 1 rod and 36 perches included within the red verge on the plan annexed to the lease, together with the messuage or farm house, cottages and buildings thereon and all quarries and beds of chalk and stone open or under the limeworks, with all yards, bridges, walls, fences, water courses, etc., with authority to work and extend the existing quarries of chalk and stone in an additional area, with the proviso that chalk and stone within 50 yards of the hedge on the south-east side of the new public road, up Shepherds Hill, was to be left unworked. In this deed Joseph Peters was described as the tenant. His lease was for two years from 25 March 1890, and was then to continue from year to year until determined by either party

⁶³ *Kelly's Directory of Surrey*, 1882, 1, 128.

⁶⁴ *Ibid.*, 1, 227.

⁶⁵ *Ibid.*, 1, 051.

giving the other two years' notice in writing to terminate on any 25 March.

Among other conditions the tenant was to pay the lessor £300 yearly on quarter days, 3 per cent royalty on each cubic yard of small chalk sold or carried away before being converted into lime, 5¼d. on each ton of dry or other chalk (except small chalk) sold or carried away before being converted into lime, one shilling for each ton of soft stone so sold, and 6d. for each ton of rough burrs. There was also a special rent of £20 for any new kiln erected, unless to replace one that had been pulled down. The tenant was also to pay any land tax, all taxes, tithes and rent charges in lieu thereof. He was to be responsible for the repair of all buildings, kilns, railways, railway bridges, roads, walls, fences, drains, ditches and, without the consent of the landlord, was not to convert into tillage or otherwise break-up meadow or pasture. The landlord was to be provided with lime of suitable quality at the lowest current selling price for the repair of his buildings. In addition to the care of a weighing machine or machines the tenant was to keep in some convenient part of the premises regular books of accounts and to enter accounts by weight or measure of chalk or stone liable to royalty that was sold or carried away and the times and dates and also particulars of waggons, carts and horses used. Copies of the books of account were to be delivered to the landlord each quarter. The schedule to the deed shows, in addition to over 16 acres of lime-works and quarries, and a cottage, stable and other buildings, over an acre of orchard and house and garden, these being part of Quarry Dean.

In contrast to that of 1890 the lease of 13 December 1899 was for 21 years, Joseph Stilwell Peters of Quarry Dean being described as the lessee. He was still the lessee in 1904 when the lease was modified, part of the main plot (195) being exempted from the conditions of the lease under a 99-year agreement referred to in the endorsement on the lease now described. The area as shown on the annexed plan (Fig. 5) now covered 109 acres 1 rod and 12½ perches and included quarry farm with the lime-works, the farm house known as Quarry Dean, 18 kilns, spoil banks, workshops, the upper part of the cottage (No. 86) included in the earlier deed and all railways belonging to Lord Hylton, the lessor. As in the earlier lease there were provisions for extending the workings, to cover repairs, payment of taxes, the keeping and submitting of accounts, and good farming and husbandry. The lease was also subject to the rights of the National Telephone Company to fix, inspect and repair poles and wires, of the London, Brighton and South Coast Railway to enter certain fields to deposit spoil, and of the lessor, tenants and others so authorised by him, with or without carts or waggons, to drive cattle, sheep and other animals over the road from Joliffe Row past Quarry Dean to Noddyshall cottages.

The yearly rent was increased to £430. The lessor was to be paid 2d. on each ton of lime manufactured in excess of 25,000 tons, 3d.

a cubic yard on small chalk sold or carried away and 5½d., 1s. and 6d. respectively on dry chalk, soft stone and burrs, as in the earlier lease. The schedule shows that 61·911 acres of the land was arable, 15·740 was pasture and the rest, 31·677 acres, included woodland and buildings.

It is tempting to suggest that we owe the detailed records of the business transactions of the Merstham limeworks that have survived from 1872 to the provisions in these leases that accounts should be prepared, and to similar provisions which may have been included in an earlier agreement or agreements with members of the Peters' family or their predecessors as lime-burners, and which have not survived among the archives of the Merstham limeworks.

THE CHURCH OF ST. GEORGE CROWHURST, SURREY

BY

R. W. McDOWALL, O.B.E., F.S.A.

CROWHURST is not mentioned in Domesday Book. The earliest documentary reference to the church is in a taxation return of 1291 when the church of St. George at Crowhurst was taxed 100 shillings. Henry de Guldeford granted the advowson of the church to the Prior and Convent of Tandridge and the appropriation of the rectory is recorded in June 1304. A vicarage was not however established until 1868. The priory was founded as a hospital for three priests, and lay brethren. They maintained a house near the church which has survived as a range of four tenements known as Altar Cottages. The parish registers date from 1567.

The church consists of Chancel, Nave, South Aisle and South Porch, and a timber Steeple. The south aisle was added towards the end of the twelfth century. The original church, dedicated to St. George, may have been built soon after the miraculous intervention of St. George in aid of the Crusaders at Antioch in 1098. The chancel was reconstructed with new lancet windows early in the thirteenth century and the east end of it was again rebuilt in the early fifteenth century. The timber steeple was also built in the fifteenth century over the west end of the nave, but it had to be completely rebuilt after a fire in 1947.

The parish register records that in 1652, on 20, 21 and 22 January, part of the church was repaired 'which had lien in heaps a long time.' It has been suggested that this was the repair of damage done in a Civil War skirmish a few years previously and the finding of a cannon ball in the yew tree in the churchyard supports this theory. There is now no division between nave and chancel but when the chancel arch was removed is not known. The east wall of the chancel was decorated in 1882 in memory of the Third Earl of Cottenham by his widow Theodosia Selina.

The Chancel. The rebuilding carried out in the early fifteenth century is defined by a substantial plinth reaching six or seven feet along the north and south walls, and by the use of larger squared stone which contrasts with the smaller random masonry of the earlier work. The east window, with perpendicular tracery, and the eastern window in the south wall, with four lights in a square head, are of the fifteenth century. The eastern window on the north side is of similar size to that opposite, but of three lights only, and is of sixteenth-century date. In the western part of the chancel are thirteenth-century lancet windows, one to the north partly restored and one to the south renewed after having been blocked. There are also traces of former lancet windows further east.

The Nave has three windows to the north, a late fourteenth-century window of two lights under a segmental head between two modern lancets in thirteenth-century style. That to the east replaces a window of two square-headed lights shown in a drawing by Hassell,¹ dated 1823. Traces of the west jamb of this window remain on the outside. A patch of rebuilding in the lower part of the wall suggests a former north doorway and this is shown still surviving in a sketch by Hassell, dated 1824. The original south-east corner of the nave appears externally where the dressed stones of the corner remain in the upper part of the wall. The archway to the south aisle was made when the aisle was added at the end of the twelfth century. High up in the wall to the east of the arch is a recess which may represent access to a former rood-loft. Now only a single beam spans the junction of nave and chancel. The doorway to the porch has a pointed arch built below the lofty semicircular rear-arch of the original doorway. The west window is of the fifteenth century and

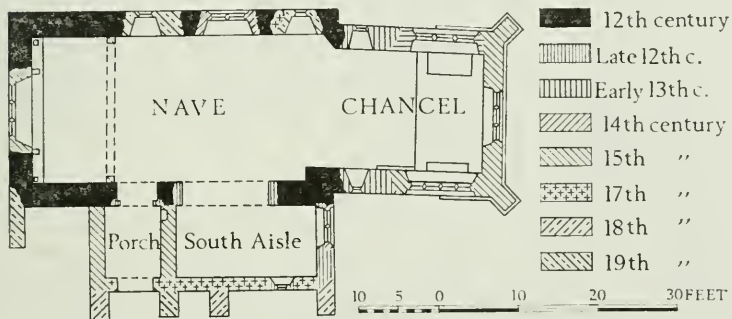


FIG. 1.—PLAN.

part of the wall above it has been rebuilt, but the thickening in the upper part of the wall reproduces an old feature evidently designed to carry a bell-cote before the fifteenth-century steeple was built.

The South Aisle was presumably the chapel of the Holy Rood in which John Harlynge, in his will of 1504, wished to be buried. In the east wall is a window with an original late twelfth-century semicircular rear-arch springing from side shafts, with the remains of carved leaf capitals, but the window itself is of the late fourteenth century, with two lights and a tracery quatrefoil under a segmental head. In the south wall is a window of one very small light with a later trefoiled head. Two buttresses to the south wall were probably added early in the eighteenth century.

¹ A series of water-colour sketches by Hassell are bound into a copy of Manning and Bray's *History of the Antiquities of the County of Surrey* (1814), in the British Museum. All are dated in the eighteen twenties.

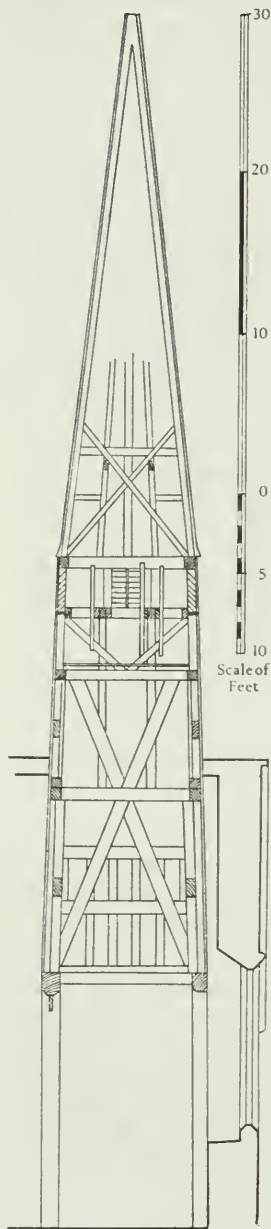


FIG. 2.—THE OLD STEEPLE, redrawn from a survey by E. E. Bowden, dated 1905.

The South Porch is structurally a continuation of the aisle. It is entered by a simple pointed arch between two buttresses, that to the west of the late eighteenth century, that to the east probably added in the restoration of 1852.

The Steeple is entirely modern, but two of the timber posts on which it stands, together with a moulded beam against the west wall, survive from the original structure. A measured drawing showing the steeple was prepared in 1905 (Fig. 2). The three old bells were all recast and a fourth added after the fire of 1947.

The Roofs of the chancel and nave are of simple trussed-rafter construction with moulded wall-plates. Differences in the mouldings between nave and chancel and the slightly larger size of the timbers in the nave suggest that the nave roof is the earlier. The chancel roof was probably erected in the early fifteenth-century restoration

The Gainsford Family is commemorated by several interesting monuments. The first John Gainsford to acquire land in Crowhurst was a Judge of the High Court in the reign of Edward III; he married Margery de la Poyle who brought him land in Crowhurst, and he made several further purchases of land in the parish between 1331 and 1348. In 1418 his grandson John (III) acquired the manor and Crowhurst Place. His son John (IV) sat in Parliament in 1430 as Knight of the Shire of Surrey and died in 1450, leaving instructions that he should be buried in front of the statue of St. George. His tomb is on the north side of the chancel. His son John (V) died in 1460 and is buried with his wife Anne (Wakehurst) in the canopied tomb on the south side of the chancel. Their grandson John (VII) was knighted and served as sheriff of the county and was married six times. His third wife was Anne Fiennes and a floor-slab now in the south aisle bears a brass plate recording that she was the daughter of Lord Dacre.

The title of Lord Dacre was granted to Sir Richard Fiennes in 1459 and passed to the family of Lennard on the death of Gregory Fiennes in 1594. Anne had no children but his other wives bore John twenty children. One of his grandchildren, Anne, married William Forster and is commemorated by the remarkable cast-iron slab in the chancel floor. Another grandchild, Erasmus, married Johanna, daughter of the Richard Cholmley, who is commemorated by a brass set in a slab in the floor of the chancel. The male line of Gainsford of Crowhurst failed at the end of the seventeenth century and the heiresses sold Crowhurst Place in 1724 to the first Duchess of Marlborough.

There were two other branches of the Gainsford family in Surrey and Nicholas Gainsford, commemorated on the north wall of the nave, belonged to the Carshalton family.

The Gainsford Tombs. The tomb of John (IV) on the north side of the chancel consists of a stone chest with panelled sides containing plain shields within quatrefoils. Set in the forest marble top are three brasses: a figure in full plate armour, a shield-of-arms of Gainsford quartering de la Poyle, and an inscription plate. Above the tomb a length of timber cornice, moulded and embattled, is fixed to the sill of the window. The tomb of John (V) opposite has a similar chest set under an arched canopy. The arch is decorated with the Gainsford badge of a grapnel, and various grotesques, including human faces surrounded by grapes and by leaves, suggesting the wild man of the woods (the woodhouse) and other rural superstitions. The shields of the tomb-chest are carved with the arms of Gainsford, Gainsford quartering de la Poyle, and Wakehurst. On the top of the tomb-chest are brasses. The inscription plate records John's death on the feast of the Translation of St. Thomas the Martyr 1460. A shield bears the arms of Gainsford quartering de la Poyle impaling Fiennes quartering Dacre, showing that this shield belongs to the floor-slab of Anne Gainsford in the south aisle. The main brass shows a figure in plate armour but with no helmet. The armour is of gothic character in contrast with the Italianate armour of John (IV). John (V) has a gusset of chain mail at the right armpit where the plate leaves room for the lance to be held. There is a further gusset of chain between the tassets which cover the thighs. The lowest plate of each tasset is unusual in being attached with a buckle. John (IV) has a reinforced breast plate with no allowance for the lance and instead of tassets a full skirt which, on horseback, would necessitate the use of a special high saddle, the skirt making a seat on an ordinary saddle impossible.

The floor-slab of Anne has a broken inscription plate. For a long time half this plate was missing but it was replaced *c.* 1961. There are indents for two shields, one of which is now fixed to the tomb of John Gainsford (V).

The iron floor-slab to Anne Forster has some of the letters reversed. As well as the inscription, there is a figure enveloped in a shroud between panels showing Anne's two sons under the initials WR and

her five daughters; there are also shields-of-arms of Gainsford and of Forster. Duplicates of this casting have been used as firebacks, one being recorded as far away as Norfolk (*Gentleman's Magazine* for December 1788).

The monuments to Nicholas Gainsford and his wife are of painted canvas, like miniature hatchments. Hassell's drawings show that the church formerly contained a number of hatchments now destroyed.

The Angell Monuments. The Angells came to Crowhurst early in the seventeenth century and occupied the Mansion House standing across the road from the church. In the chancel are two fine black marble floor-slabs. One is to John Angell, died 1670, who was 'caterer' at Windsor Castle to James I, Charles I and II, with a shield-of-arms of Angell impaling Edolph. The other is to William Angell, died 1674, the son of John, with achievement-of-arms of Angell impaling Gosson. On the south wall of the chancel is a monument with side scrolls and broken pediment to Justinian, fifth son of John; he died 1680. On the north wall is a monument with flanking columns and broken scrolled pediment to Thomasina, daughter of John Angell and wife of Richard Marryott.

Other Monuments. A table-tomb on the north side of the chancel, with cusped panelled chest and a canopy, has no inscription or other means of identification (fifteenth-century). In the nave is a wall-tablet to Margaret Donovan, 1826, and James Donovan, 1831, of Chellows Park.

Glass. In the tracery of the east window are fragments of fifteenth-century glass, including three angels whose appearance was probably inspired by the feathered costumes worn for miracle plays, and a figure of the Virgin from an Annunciation scene. Fragments of heraldic glass of the sixteenth century remain in the main lights of the east window and in the middle window on the north side of the nave.

Pulpit. The pulpit drawn by Hassell has disappeared and the present pulpit is made of sixteenth-century panelling, probably of secular origin.

The Font has a not very elegant bowl, square at the bottom, brought to an octagonal top by broached corners and standing on an octagonal drum and four smaller shafts. It is probably of the thirteenth century.

The Stoup, in the east wall of the porch, is a broken medieval fragment, recently uncovered.

The old door with medieval ironwork, mentioned in earlier descriptions of the church, has been replaced by a modern door.

The Churchyard contains several old head-stones near the east end of the church, conspicuous for their great thickness. Most are probably of the late seventeenth century but the earliest legible date is 1709. Table-tombs include two good late eighteenth-century tombs with moulded ends, and others enclosed by cast-iron grilles with phoenix standards. Memorials consisting of wooden boards between posts at the ends of the grave are of nineteenth-century dates. Two monuments of similar design, but made of stone, are of 1743 and 1753, and a third is dated 1900.

The yew tree near the east end of the church is of remarkable size. The hollowed trunk was fitted with seats early in the nineteenth century. The seats and a doorway into the tree are shown in Hassell's drawings.

Sources :—

Reg. John de Pontissara I in *Cant. and York Soc.* XIX, 168.

Taxatio of Pope Nicholas IV (Record Commission), 208.

Gaynsford Cartulary, Brit. Mus. Harleian MS., 392.

An Heraldic Book, written and tricked by Mr. Richard Mundy. Brit. Mus. Harleian MS., 1561.

O. Manning and W. Bray, *The History and Antiquities of the County of Surrey* (1814).

Somerset House Wills. P.C.C. 12 Rous, 12 Alenger, 27 Holgrave.

Unpublished notes by R. N. Gillespie in possession of the Vicar of Crowhurst.

THE CHURCH OF ST. PETER, LIMPSFIELD SURREY

BY
KAY PERCY

HIGH above the road at the north end of the village of Limpsfield stands the Church of St. Peter. Built of ironstone and sandstone rubble, roofed part tile and part Horsham stone, with a squat shingled tower, it sits serenely above the ancient stone wall which borders the High Street (Plates I(a) and (b)). A flight of stone steps and an ironstone path take the visitor through the lychgate, probably ancient, though much restored in 1891, to the sixteenth-century south porch, where one enters the church.

The first record of a church in Limpsfield is in the Domesday Survey of 1086. Nothing remains of this church; it may have been of timber, but most probably it was built of local stone, for Domesday Book records two stone quarries in the manor.¹ The church and manor, once belonging to King Harold, were given by William I to the Abbey of Battle as part of William's thank-offering for his victory.² The Abbey, however, did not appropriate the living as happened in so many manors. This meant that the Abbey appointed the rector but the tithes and offerings remained the property of the incumbent.

The oldest remaining part of the present church is the tower c. 1180. This twelfth-century church consisted of a chancel, nave and tower placed, unusually, to the south of the chancel. The nave has never been completely rebuilt, but all four walls are pierced by later work and nothing of its original character remains.

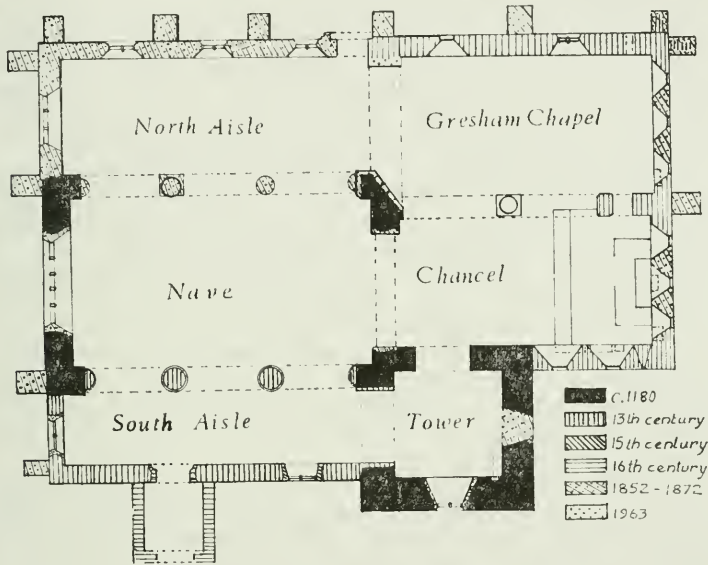
The **CHANCEL** (Plan and Plates II(a) and III(a)) was rebuilt and probably lengthened to the east in the first quarter of the thirteenth century; the east part of the south wall butts against the tower but is not bonded into it. The three lancets in the east wall are modern reconstructions of the original windows, which had been replaced by a single window of three lights in the early sixteenth century.³ When the church was 'restored' in 1871-2 the whole of the upper part of the east wall was rebuilt and the sills and outer jambs of the original windows were discovered *in situ*. Below the window the remains of a stone reredos, probably of the fifteenth century, were found but these have not been preserved.

¹ Domesday Book, f. 34a, col. 1.

² Lowther, M. A., *The Chronicle of Battle Abbey* (1851), 26, and British Museum Cotton Charter, XVI, 28.

³ Evidence from wills of 1536. Surrey Archdeaconry Court. Pykman, f. 194. Mychell, f. 153.

Behind the present Communion Table there is a cupboard, rebated to take a door, perhaps intended for some sacred relic. South of this is a second recess measuring 22 by 18½ inches and 16 inches in depth which has a flue, 6 inches in diameter, built into the top. So much of the wall has been rebuilt that there is now no exit for the flue, but there is no doubt that it was an oven for baking the communion bread or Hosts. This task, both before and after the Reformation, was carried out with due reverence and ritual in a place set aside for it.⁴ This is a comparatively rare survival, only four others being



(Scale: approximately 24 ft. to 1 inch.)

PLAN OF LIMPSFIELD CHURCH.

recorded in Surrey. Low down at the east end of the south wall is a narrow window with wide splays which lights the area in front of the oven and it seems probable that it was so placed for this purpose.

In the south wall also is a *piscina* with a simple chamfered two-centred head and a second recess, probably a *sedile* or priest's seat, of similar shape. The original purpose of the third recess with segmental head is not known, although between 1823 and 1872 it was used as a door to a vestry, built in the angle between the tower and chancel.⁵

The two widely splayed lancets above the moulded string-course have external glass rebates and showed, until recent years, remains of simple painted stone-jointing and rosettes dated c. 1230 on the

⁴ Crawley, J. M., and Bloxam, R. N., 'Church Wafer Ovens,' *The Amateur Historian*, VII (1967), No. 5.

⁵ Limpsfield Parish Register, No. VI, pp. 137, 160.

internal splays.⁶ The present modern glass of SS. Peter and Andrew is the work of Mr. F. Powell in memory of Canon Edward Rhys-Jones, 1870-1900. The west part of the south wall is formed by the tower in which there is a plain flat-soffited arch of the twelfth century. The chancel arch of thirteenth-century form was considerably raised in 1851.⁷

The north wall has a doorway and an arcade of two bays opening to the Gresham Chapel. These are all of the thirteenth century but the circular pier between the arches has a modern capital.

The **GRESHAM CHAPEL**, north of the chancel, takes its present name from the Gresham family who acquired the manor of Limpsfield and the advowson of the church in 1538.⁸ It was built towards the middle of the thirteenth century, perhaps by Ralph, who was Abbot of Battle from 1235 to 1260 and it was, presumably, the Lady Chapel referred to in the will of Alys Bysset 1488.⁹

The three modern lancets in thirteenth-century style in the east wall replace a fourteenth-century window of three lights. In the north wall is a fifteenth-century window of two lights, containing fragments of sixteenth-century glass under a square head, and further west is an original lancet heavily restored. Towards the east end one jamb of a blocked doorway remains.

The little spray of sculptured foliage set in the east wall is of uncertain date but probably fourteenth-century. There is also a rectangular recess rebated for a door. In the wall, south of the present organ arch, remains of a doorhead can be seen which apparently led diagonally through the wall to the blocked doorway in the nave, north of the chancel arch.

The **NAVE** (Plates II(a) and (b)) retains its original twelfth-century size. To the north is an arcade of three arches built in 1851 when the north aisle was added. The south arcade was pierced through the twelfth-century wall in the first half of the thirteenth century when the narrow south aisle was built. Above this arcade, at the east end of the south wall, is a blocked doorway with rebated jambs which once led to the rood-loft mentioned as 'newe' in the will of 1488. The west window is modern, replacing a fifteenth-century window of five lights; it was inserted sometime between 1828 and 1851, possibly when the extension of the west gallery which ran along the west end of the north wall was removed. The west gallery itself was finally removed in 1871.¹⁰

The **SOUTH AISLE** arcade is of three bays with circular columns and half round responds, all with moulded capitals and bases. There is a modern (1851) west window of two lights replacing a single light. The west wall of the tower, within the aisle, shows the

⁶ Johnston, P. M., *Surrey Archæological Collections*, 'Low side windows in Surrey churches,' XIV (1899), 104.

⁷ Limpsfield Parish File. Incorporated Church Building Society, 7 Queen Anne's Gate, S.W.1.

⁸ Letters and Papers of Henry VIII, II, 191.

⁹ Surrey Archdeaconry, Ct. Spage 284. Surrey Record Society, XVII, 82.

¹⁰ Limpsfield Parish Register, No. VI, p. 159.

thirteenth-century roof line well below the present roof. The aisle roof was raised probably in the fifteenth century when the present square-headed window of two lights was inserted. Remains of an earlier window can be seen beneath this window in the outside wall.

The **TOWER** (Plates I(a) and (b)), built in the late twelfth century, has small windows to the belfry, each of two lights with modern heads. In the north wall a plain archway of a single two-centred order springing from chamfered imposts communicates with the chancel. In the east wall is the arch of a blocked fifteenth-century window and above it, spanning the full width of the tower, a second arch which may have covered a recess for the altar which once stood here; a *piscina* in the south wall is evidence that the tower was used as a chapel, probably the chapel of St. Katherine referred to in wills. In the west wall there is a thirteenth-century arch with boldly moulded capitals to the responds; there are indications of a former screen between tower and south aisle.

The modern **NORTH AISLE** has three two-light windows in the north wall and a three-light window in the west wall; at the east end, next to the Gresham Chapel, is a doorway. Below the west window is the board mentioned by Aubrey in the early eighteenth century,¹¹ listing the benefactors of the parish. The modern organ, which is built above the newly formed arch between north aisle and chapel, is the fourth organ at St. Peter's. The first was subscribed for in 1822, 'in consequence of the Church Singers having left off singing'¹² and erected in the west gallery. In 1872 Arthur Leveson Gower, Esq., presented an organ which was erected in the chancel; this was replaced in 1948 by a Compton Electronic Organ. The present organ was given in memory of R. H. Aisher in 1963.

The trussed-rafter roof of the Gresham Chapel may be original, of the thirteenth century; the chancel roof, now boarded, is of the same period, though some timbers have been renewed. The nave roof of lower pitch is a good example of cradle form. The south aisle has a fifteenth-century lean-to roof.

The **FONT** is thirteenth century but has been recut. It consists of a simple square stone hollowed with a circular basin. This is supported on a fluted pillar, probably part of the original font recut in Jacobean times, but the four corner shafts and base were renewed in 1871-2.¹³

The **PULPIT** (Plate III(b)), once much taller with a sounding board and clerk's seat,¹⁴ was the gift of Samuel Savage, Esq., in 1764. It was cut down and now stands on a stone base. The **CHURCH PLATE** includes nine pieces of silver and silver gilt also given by Mr. Savage in 1765, and a silver gilt cup and paten of

¹¹ Aubrey, John, *Natural History and Antiquities of Surrey*, III (1710). 8.

¹² Vestry Minute Book. 1822-26. Parish Clerk's Office, Limpsfield.

¹³ Limpsfield Parish Register, No. VI, p. 160.

¹⁴ See Plates. Manning and Bray, *History and Topography of Surrey*, XI, contains a series of water colours by J. Hassell painted between 1821-1828. British Museum North Library, Press Mark Crack 1, tab. 1, b. 1.

1888 in memory of Mary, the wife of the Rector, Edward Rhys-Jones.

Until 1877 there were only four **BELLS**, but in that year two were recast and two more added. The six bells bear the following inscriptions:—

- No. 1 D Cast by J. Warner & Sons 1877 and weighing 594 lbs.
'Fiat voluntas tua.' E. Atkinson } Church Wardens
 J. Eliot }
 R. Ridley Clerk.
- No. 2 C Cast by J. Warner & Sons 1877 and weighing 684 lbs.
'To the Glory of God.'
- No. 3 B *'Sancta Margareta Ora Pro Nobis'* T.H.
 This is an ancient bell probably made by Thomas Hillman, a bell founder of Canterbury between 1350 and 1400.
- No. 4 A *'Bryan Eldridge made mee 1619,'* weighing 964 lbs.
 The inscription has a heart between each word. Bryan Eldridge was a well-known founder of Surrey and Sussex bells.
- No. 5 C *'In multis annis Resonet Campana Johannis,'*
 weighing 1,456 lbs. It was recast in 1877; the original was probably a fourteenth-century bell.
- No. 6 F *'Sum Rosa Pulsata Mundi Maria Vocate,'* weighing 1,626 lbs. A large bell recast in 1877 by John Warner, from the original which was thought to date from c. 1500.

The bells were last tuned and rehung by Gillet & Johnston in 1948.

The **CHURCHYARD**, enlarged in 1862, 1893 and 1934, is the resting place of several notable people, including Florence Barclay the authoress and Frederick Delius the composer. Near to the south porch are some good early eighteenth-century grave stones bearing names of families still living in the village.

The registers are very well preserved; they run from 1539 to the present day with few gaps; the earliest register was transcribed in 1600. They are deposited in the County Record Office at Kingston upon Thames. Those up to 1837 have recently been transcribed and typed copies are kept at the Rectory.

I am indebted to Mr. R. W. McDowall, M.A., F.S.A., for his kindness in advising me on architectural detail and the presentation of this description.

LIST OF KNOWN RECTORS

Roger le Brun	1296	Edmund Knight	1546
Nicholas de Taunton	1333	John Huntley	1554
William Goffe	1335	John Wilson	1555
Roger de Leighton	1336	William Danby	1556
Walter de Merstham	1347	Thomas Bell	1572
John Ketteringham	1378	John Rhodes	1597
John Ireland	1378	Patrick Balfour	1617
John Flamstede	1394	John Lorkin	1618
John Wodehall	1394	Edward Lorkin	1655
Thomas Roke, LL.B.	1398	John Campion	1688
REGISTER 1415/1446 lost.		William Walker	1700
John Ingryth	1450	John Holman	1728
Gilbert Emworth	1450	George Lewis Jones	1757
John Hasard	1459	William Steed	1775
William Polman or Portman	1459	Legh Hoskins Master	1781
Robert More	1461	Robert Mayne	1806
William George	1473	Thomas Walpole	1842
John Shadewell	1481	James Haldane Stewart	1846
John Wyld	1481	Charles Baring	1855
Thomas Poyner	1481	Samuel Charlsworth	1857
Thomas Bowman	1487	Edward Rhys-Jones	1870
REGISTER 1492/1500 lost.		Ernest Morrel Blackie	1900
John Wallysh*	1488	Gerald Gurney Richards	1906
John Goodwyn*	1517	Charles Sterr	1928
Roger Wylkynson*	1521	Paul R. Wansey	1951
Stephen Sythwarren	1534		

* Traced through Surrey Archdeaconry Wills.

NOTES

Mesolithic Flint Axe from Woking.—The axe illustrated in Fig. 1.4 was found in May 1957 in the old Jackman's Nursery¹ by Mr. Lucas of Edgley Road, Woking, who has presented it to the Guildford Museum.²

The axe is of mottled grey unpatinated flint. One face has been dressed fairly flat and the other has a median ridge formed by the removal of a few large flakes. The cutting edge, which is of tranchet type, has been chipped, no doubt by subsequent use.

The find spot is about a quarter mile from the Hoe Stream, a tributary of the River Wey, on the Lower Bagshot Sand.

E. E. HARRISON.

Mesolithic Flint Axe found at Thursley.—A flint axe (Fig. 1.1) was found many years ago in a garden at Pitch Place, Thursley,³ by a relative of the present owner, Mr. Gale, who kindly loaned it to Guildford Museum for recording.

The implement should probably be classed as an adze rather than an axe, since the weight is unevenly distributed on either side of the cutting edge. It is of grey flint, and has what appears to be a natural round hollow in the humped side (not figured) about five-eighths of an inch in diameter, and the same distance from the cutting edge.

F. W. HOLLING.

Flint Axe from Frimley.—The axe illustrated in Fig. 1.3 was found in the Frimley Gravel Pit⁴ in May 1962 by Mr. G. H. Rickwood of Frimley, who has deposited it on loan in the Guildford Museum.⁵

The implement is of reddish-brown unpatinated flint with patches of rough cherty material. It is worked over the entire surface and the cutting edge is produced by the intersection of several small flake-beds parallel to the axis. There are no traces of polishing. The implement has a pointed oval section and the butt end has an unusual waisted profile.

The find-spot is situated on the west side of the Chobham Ridges where the ground begins to slope gently westwards toward the River Blackwater. The site, which is on the Upper Bagshot Beds, is in a region of light heathy vegetation such as was favoured by Mesolithic man, although in point of fact Rankine lists no Mesolithic material from the immediate vicinity.⁶

In the absence of associated finds the implement must be dated by typological criteria. It lacks the tranchet edge and the thick angular section of the typical Mesolithic axe, but the rather irregular outline and the coarse flaking suggest that it is Mesolithic rather than Neolithic.

E. E. HARRISON.

Neolithic Axe Found at Shamley Green, Wonersh.—A large flint axe (Fig. 1.2), very finely flaked on both sides, was found about 1954 in a field at Lordshill, Shamley Green.⁷ The axe is $7\frac{1}{4}$ inches long, patinated a light olive-brown, and is virtually undamaged. It is in the possession of Mr. W. C. Banting, of Westland Farm, Lordshill, Shamley Green, who kindly loaned it for drawing.

F. W. HOLLING.

¹ N.G.R. SU 99625697.

² Catalogue number RB 1781.

³ N.G.R. SU 891391.

⁴ N.G.R. SU 904590.

⁵ Receipt number TRB 996.

⁶ Rankine, W. F., *The Mesolithic of Southern England*. Research Paper No. 4, Surrey A.S. (1956), 19 *et seq.*

⁷ N.G.R. 027433.

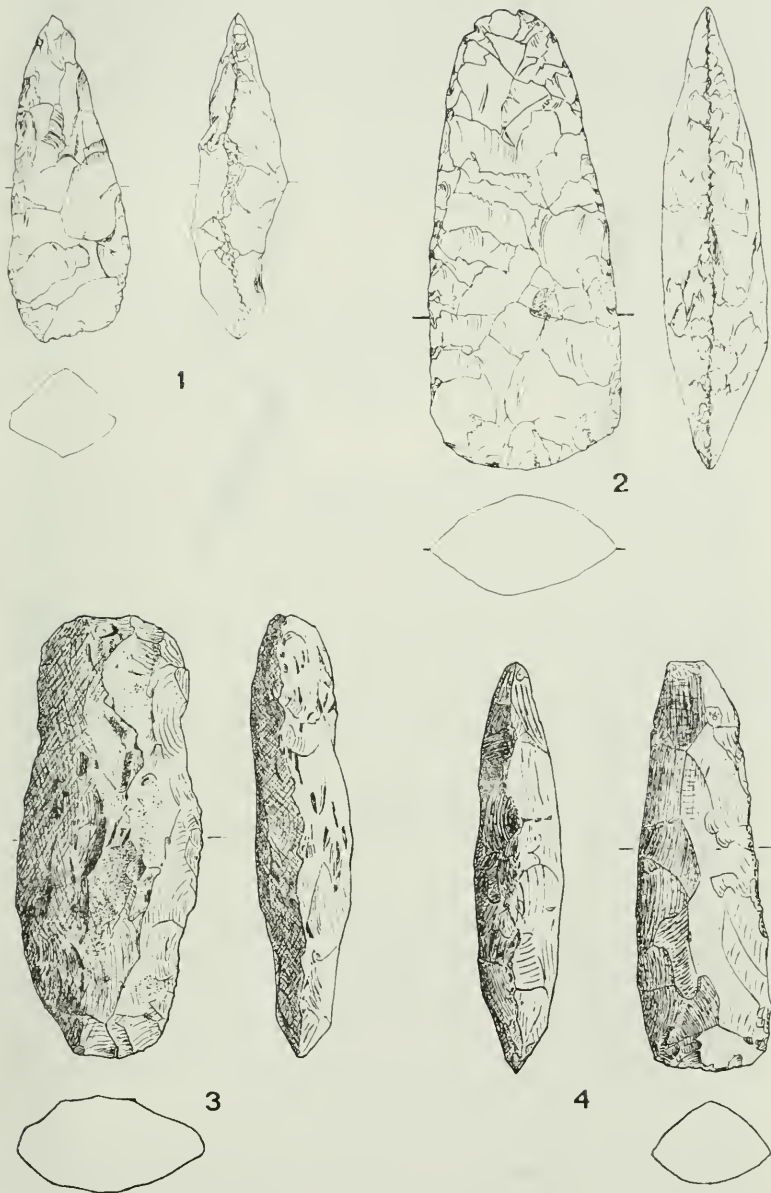


FIG. 1.—FLINT AXES FROM THURSLEY (1), SHAMLEY GREEN (2), FRIMLEY (3), AND WOKING (4). ($\frac{1}{2}$)

Pottery from Chessington.—In September 1963, in response to a call from a member of the Surbiton and District Historical Society, the writer and Mr. Creese, of the above Society, visited the site of the British Legion Hall at Church Fields, Chessington.¹ The site lies on a knoll of the Claygate Beds. From the spoil of foundation trenches pottery sherds ranging in date from the Pre-Roman Iron Age to the nineteenth century were recovered. Unfortunately, concrete had already been placed in the trenches and nothing could be seen in them.

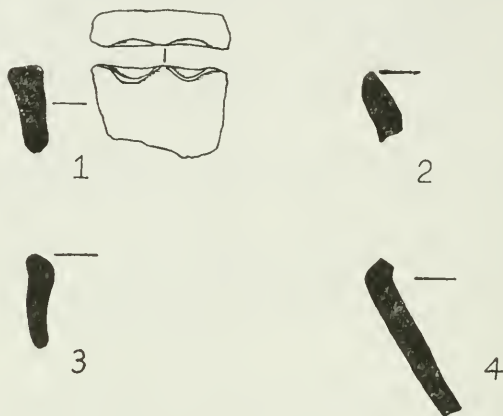


FIG. 2.—IRON AGE POTTERY FROM CHESSINGTON. ($\frac{1}{2}$)

Some seventeen sherds of Iron Age pottery were found (including the three rims here illustrated, fig. 2). The bulk are small scraps of body sherd, all very much abraded. The ware is mainly of two types:—

- (i) A coarse hard sand and flint-grit filled ware with brown or red surfaces.
- (ii) A finer, softer, grey or brown ware, shell-filled, now largely vesicular, with brown, reddish-brown, or black surfaces bearing traces of a light burnish.

Only four sherds are worthy of note:—

1. A flat-topped rim in hard coarse grey ware with profuse sand filling and light brown surfaces. This sherd is slightly unusual in having two shallow finger-tip impressions on the internal edge of the rim, a feature which is paralleled at Hawk's Hill,² Longdown Lane,³ and Coombe Hill.⁴
2. A short simple rim in soft grey ware, shell-filled with reddish-brown interior, and brown exterior, surfaces. Both surfaces are smoothed, the exterior one having a light burnish.
3. An out-turned rim in hard grey ware with profuse sand filling and reddish-brown surfaces.
4. A shoulder fragment in soft grey ware, shell-filled, with reddish-brown interior, and black burnished exterior surfaces.

¹ N.G.R. TQ 18486357.

² Cunliffe, B., in Hastings, F., 'Excavation of an Iron Age Farmstead at Hawk's Hill, Leatherhead,' *Surrey A.C.*, LXII (1965), 1-43, Fig. 10, Pit. 9, I.

³ Frere, S. S., 'An Iron Age Site near Epsom,' *A.J.*, XXII (1942), 123-38. Fig. 3.

⁴ Unpublished. Kingston upon Thames Museum. Acc. No. 1091 A.

The rim forms are common on Surrey Iron Age sites and the assemblage may be paralleled particularly with Hawk's Hill.

There were also some eleven sherds of very hard coarse, sand-filled, grey or brown ware with brown or black surfaces, of medieval date.

Nine sherds of post-medieval glazed wares, all of seventeenth–eighteenth century date, were also recovered, along with nineteenth-century 'china.'

These sherds have little archaeological significance, but it was felt that it was time for them to be placed on record. The abraded nature of the Iron Age and Medieval sherds tends to indicate field scatter, but the number of Iron Age sherds concentrated in such a confined area may be indicative of some occupation in the immediate locality.

The material is held by the Surbiton and District Historical Society.

M. W. BISHOP.

Two Unrecorded Earthworks.—Two apparently unrecorded earthworks of medieval or later date have been discovered within a mile of Botley Hill, near the North Downs scarp. Both are in dense thicket. The Ordnance Survey have been informed and have carried out surveys of both features. A third small earthwork, previously recorded¹ but undated, is close by in Coldharbour Beeches. The sherds recovered from the two former sites have been deposited at Castle Arch, Guildford.

Kitchen Grove, Titsey Parish

This earthwork which lies to the north of Cheverells Farm, in the southern half of Kitchen Grove, centres on TQ 39555675. It consists primarily of two banks which almost meet at the southern end of Kitchen Grove but diverge northward into the wood, until approximately 300 feet from the southern end of the wood they are 120 feet apart. Connecting these two banks transversely run two other banks and a ditch, forming in effect three enclosures, the largest being the most southerly. There are occasional breaks which may represent entrances.

One can only conjecture about the function of these enclosures without excavation, but there is some evidence of the date. Thirteen unglazed medieval sherds of sandy/gritty fabric have been collected from the surface within the earthwork. The sherds include two rim fragments—one upright with a squared rim, the other also with a flat top but curving into the wall beneath. The top of the latter has a wavy line incised. Also included among these sherds is a pitcher handle of round section with knife slashes on the upper side. The interior of the vessel shows three stab marks penetrating into the handle. Another sherd has a thumbled strip applied vertically. All of these sherds could have come from one of the Limpsfield kilns—identical handles to the one described have been recovered from Scearn Bank and dated to the thirteenth century.

Hell Shaw, Limpsfield Parish

This earthwork which lies in Hell Shaw, north of Woldingham Road, is of simpler form than the Kitchen Grove earthwork, being roughly in the shape of a parallelogram. It centres on TQ 39135499, and is delineated by a ditch with internal bank on all sides. The long sides, roughly 250 feet long, run north-north-west. The vertical height from the base of the ditch to the top of the bank varies around 3 feet. A small disused chalk pit cuts into the northern ditch and another is just inside the north bank. An old field bank runs the length of Hell Shaw to the east of the enclosure and finishes at the eastern ditch.

Four medieval sherds have been recovered from the surface inside the enclosure, including two rim fragments with flat tops and curving into the wall beneath, identical to those from Kitchen Grove, and one thin fragment showing five impressed or punched dots.

M. E. FARLEY.

¹ TQ 406557. Congress of Archaeological Societies, Earthworks Committee Report, 1919, p. 10. *P. Croydon N.H.S.*, IX (1925), 60.

Romano-British Pit at High Billinghamurst, Dunsfold, containing Iron Ore.—The excavation of a Romano-British pit at this site¹ was reported previously.² In March 1966 another pit was disclosed by ploughing in the field adjoining the ditch, at a point about twenty yards west of the first one. The new pit was irregular in shape, with maximum dimensions of approximately 5 feet by 4 feet and 2 feet 6 inches deep. There was no stratification, and other than the finds described below the pit contained only a thin deposit of ash at one end, some tiny scraps of bone, and remains of several ox teeth, mostly in fragmentary condition. The material is in Guildford Museum.

The Pottery. This is not figured, since it is mainly very similar to that from the first pit, and the exceptions are sherds too small to warrant illustration. As before, the effect of the wet Weald clay filling the pit has been to destroy the original surface and also to obliterate the signs of wheel manufacture, if any, on many of the pots.

The number of pots represented exceeds twenty. Most are sandy, a few calcite-gritted. At least nine were bead-rimmed jars of varying size: five of the smaller ones were black and retained signs of burnishing or semi-burnishing, which may not have extended below the shoulder. There was only one cordoned jar, clearly wheel-made, and this had zigzag ornament on the shoulder very similar to a sherd from the other pit.³ Another small, thin-walled jar was of the same general form but had no cordon, and the shoulder was slightly concave, giving a sharply angular carination. No Patch Grove ware was present, but a few sherds of finer fabric contrasted with the remainder, and with all the pottery found in the previous pit. These consisted of rim sherds from two vessels, presumably of butt-beaker form, in a fine light brown sandy fabric, and one hard, light red sherd which might come from a pseudo-Samian form 30.

Stone. A quartz pebble 3½ inches long, with a rounded nose; has a small polished area near the tip, and was evidently used for burnishing.

Bog Iron Ore. A feature of this pit, unlike the other, was the presence of a large number of dark reddish-brown lumps of clayey material. Samples were analysed at the Iron and Steel Institute through the courtesy of Mr. Henry Cleere, who reported that it was typical bog iron ore, a surface concretion not confined to the Weald clay in its occurrence, but in this case having the characteristically high manganese content of bog ore from the Weald.

Quantities of this ore were found by S. E. Winbolt in 1934 in association with an Iron Age hearth at Kirdford, Sussex,⁴ and more recently its use as a source of iron is discussed in a paper on iron ore workings in the western Weald.⁵ There is no definite evidence at High Billinghamurst, but a few small pieces of iron cinder or slag were seen on a track through the rough woodland behind the ditch in 1965, and it would seem possible that small-scale smelting for domestic consumption was carried on at this site. The main area of occupation is presumed to lie in this woodland, which should be worth examination when the site is eventually cleared.

F. W. HOLLING.

Roman Coin from Sutton.—In 1956, Mr. B. H. Maddock, when removing turf from a garage site at 105, Upland Road, Sutton,⁶ found a worn Roman coin. The find was reported to the Ordnance Survey by his brother, Mr. O. R. Maddock. It is recorded on O.S. Record Sheet, Surrey 13 S.E., as Site 26. At the time the coin was identified as an *as* of Marcus Aurelius.

Although the coin is genuine, more recent enquiries have established that it is unlikely that it was an ancient loss. The coin is now owned by Paul Maddock (aged 13), the son of the finder, who produced it for examination,

¹ Nat. Grid. Ref. TQ 023368.

² *Surrey A.C.*, LXIII (1966), 171.

³ *Op. cit.*, 172, Fig. 4, No. 9.

⁴ *Sussex A.C.*, LXXVII (1936), 246.

⁵ Worssam, B. C., *Proc. Geologists Assocn.*, LXXV, Pt. 4 (1964), 530.

⁶ N.G.R. TQ 268635.

but who produced also four other 'Roman' coins, all of which, he said, came from a collection started by his grandparents, who built the house which has been occupied by the family since.

The five coins concerned, i.e. the 'find' and the four others, were submitted to Dr. J. P. C. Kent, who identified them as follows:—

1. (The Find.) A coin of Marcus Aurelius (A.D. 161–180). Minted at Caesarea in Palestine. Being from an eastern mint, it could not definitely be described as an *as*.
2. A coin of Elogabalus (A.D. 218–222). Minted at Antioch.
3. A coin of Numerian (A.D. 283–284) *Clementia temp.* Minted at Antioch.
4. A coin of Hadrian (A.D. 117–138). A copper *drachma* of Alexandria.
5. A coin of Maurice Tiberius (A.D. 582–602). Byzantine 40 *minimi*. Minted at Antioch.

Coins from eastern mints have been found in quantity in seaports such as Reculver and Burgh Castle, but Dr. Kent thought it 'extremely unlikely' that the find was an ancient loss.

It seemed probable that the coin of Marcus Aurelius was originally in the Maddock family collection, that it was lost by the grandparents and innocently found by their son. The new evidence was accordingly submitted to the Ordnance Survey through Mr. C. W. Phillips, who made the original record but who was, of course, not aware of the existence of the family collection or that it included coins of this type. The Survey immediately agreed that it was probably not an ancient loss and undertook to amend their records accordingly.

A. S. GILBERT.

The Early Foundations of St. Mary's Church, Guildford.—At the invitation of the Rector, the Rev. M. Hocking, an examination was made between November 1966 and January 1967 of several features in the church. This was made possible by the removal of the old flooring for major restorations which involve reflooring with York stone paving laid on concrete.

The object of the investigations was chiefly to locate the foundations of the original north and south aisles, which were narrower than at present, and to search for any other signs of early foundations. The results summarised below supplement and correct the information given in the paper on St. Mary's by J. H. Parker,¹ which is illustrated from drawings made by Goodchild, the architect of the extensive nineteenth-century restorations.

The Original Aisles. Parker suggests that a nave with narrow lean-to aisles was built on to the west side of the tower in the later twelfth century, and that there was no earlier structure on this side which it replaced. He dates the nave arches to the time of Henry II, or about A.D. 1160, and the widening of the aisles to their present extent to Henry III's reign, the north aisle about 1230 and the south about 1250. A footnote states that part of the original north aisle wall was actually seen by Goodchild. The plan reproduced from his drawings bears no scale, but from the dimensions of the church itself the scale is approximately fifteen feet to the inch. On this scale the original aisle walls are shown six feet from the pillars of the nave on both sides.

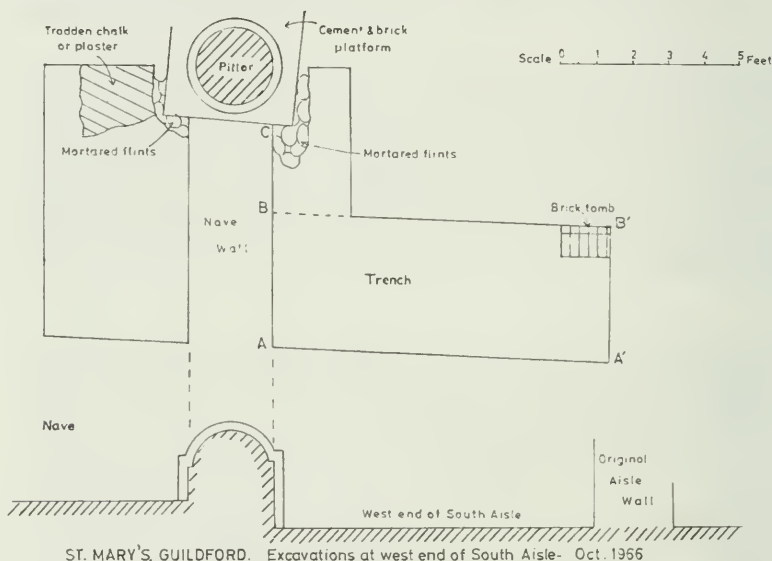
A trench was dug (Fig. 3) to locate the original south aisle wall which Goodchild was not stated to have seen. There was no trace of it in the area trenched, which was between four and eight feet from the west wall of the church, and it became apparent that burials of various periods, especially the construction of brick vaults, had probably resulted in its almost complete removal. A small section was found to survive at its junction with the west wall (Fig. 3), and it was then discovered that its position on the Goodchild plan is incorrect, the distance from the inner side of the aisle wall to the line of the pillars being 8 ft. 6 in. and not six feet as shown. The wall was 2 ft. 2 in. wide. The position of the aisle wall is in fact indicated by a line of chalk jointing blocks in the west wall, revealed by removal of the old plaster;

¹ *Arch. J.*, XXIX (1872), 170–80.

these continue below the floor level, where they key in with the surviving wall footing.

In the west wall of the north aisle a similar arrangement of blocks showed that the position of the original aisle wall on this side was also given incorrectly on the plan: the width of this aisle was eight feet, and not six as shown. Almost certainly the wall itself will have been completely destroyed in the installation of the old central heating system.

It was impossible to check the width of the original south aisle at its eastern end because a large brick vault extended across the line of the south wall. In the north aisle, the area close to the transept wall at the eastern end was undisturbed, but here solid chalk was only six inches below the floor surface, so that no other foundation was necessary. There was, however, a step-like



ST. MARY'S, GUILDFORD. Excavations at west end of South Aisle- Oct. 1956
 FIG. 3.—ST. MARY'S, GUILDFORD: PLAN OF TRENCH DUG TO LOCATE ORIGINAL SOUTH AISLE AND NAVE FOUNDATIONS.

rise of an inch in the level of the chalk on the projected line of the wall's outer face. About three feet from the transept the chalk had been excavated for the insertion of burials.

The Nave. The trench at the west end of the south aisle reached solid chalk 4 ft. 10 in. below floor level. It was taken across the line of the pillars to see whether any earlier foundations could be traced on this alignment, and this disclosed that at the western end of the church the pillars rest on a foundation wall extending down to the chalk. The top of this wall was just below floor level; it was 2 ft. 4 in. wide, and mortared on both faces. The north side was not examined below a depth of twelve inches to avoid disturbing an old wooden coffin. On the south side, the base of the mortaring was just over two feet below floor level in the centre of the trench and followed a slope (Fig. 4.3) conforming closely to that of the stone coping retaining the soil in the churchyard on the south side of the church. Below the mortar, the base of the wall was studded with flints projecting about an inch from the face.

The material excavated on the south side of the nave wall was a mass of unadulterated powdered mortar and flints, extending to a depth of nearly four feet and for a distance of seven feet from the wall. Beyond and below this the filling was of soil (Fig. 4). The nature and the quantity of rubble was consistent with the assumption that it represented the material of a nave

wall 10½ feet high which was taken down to be replaced by the arcade when the aisle was added, the rubble being used to build up the floor in the new aisle to the level of the nave floor. The mortar facing of the wall below the pillars, finished on the outside on a slope corresponding to the slope of the ground, makes it clear that this was originally an external wall and that the nave was originally built without aisles.

The Tower. According to Parker's estimate, based on architectural details, the tower may date from about 1050, and most probably was a rebuilding of an original timber structure.

A trench, stretching to the centre of the tower floor from the middle of the south wall, uncovered only one feature—a vertical-sided slot twelve inches wide and fifteen inches deep with a flat bottom. It was cut into the solid chalk, which rose to sixteen inches below the surface of the floor. The slot was filled with rubble and ran parallel to the south wall at a distance of eighteen inches from it. When followed, it was found to continue under the base of the arch

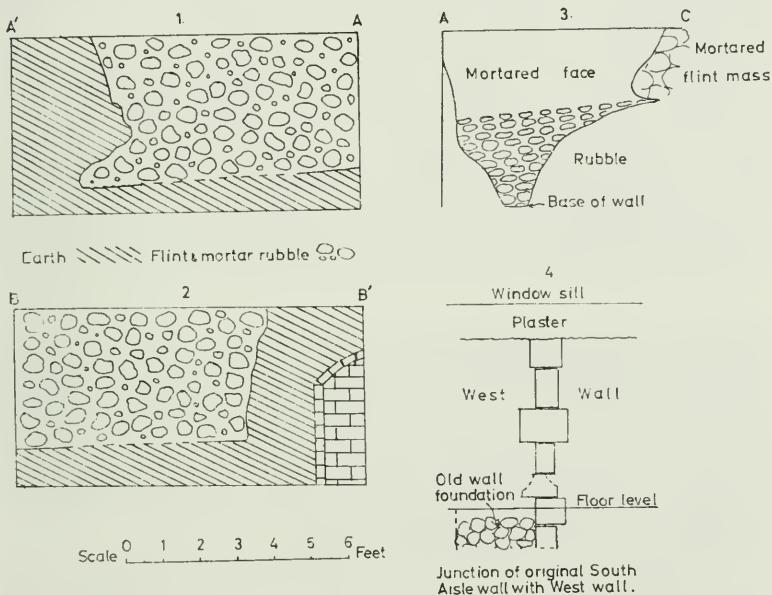


FIG. 4.—1. SECTION A'A (WEST SIDE OF TRENCH). 2. SECTION B'B' (EAST SIDE OF TRENCH). 3. SECTION AC (SOUTH SIDE OF NAVE WALL BELOW FLOOR LEVEL). 4. WEST WALL ELEVATION: CHALK JOINTING BLOCKS ALIGNED WITH ORIGINAL SOUTH AISLE WALL. (FIG. 3.)

over the steps down to the nave. This slot must be attributed to the earlier timber building which Parker supposed to have preceded the present tower.

The Use of Chalk and Flint in the Structure. The foundation wall under the pillars of the nave appeared to consist almost entirely of mortared flints, from observation of the surface exposed at various points. This conformed to the mortar rubble in the trench, which contained only a few small pieces of chalk. The surviving portion of the old south aisle wall was constructed of flints and a few fair-sized lumps of chalk, without any definite arrangement. The base of the north wall of the church, which Parker dates to about 1230, was seen at its eastern end, and this consisted entirely of chalk blocks; the footing of the south wall of the tower was also of chalk.

Finds. Several small sherds of medieval pottery, probably between eleventh and thirteenth-century in date, were found in the aisles, but the only sherd of any significance was found in the chalk footings of the south wall of the

tower and from its position could not have intruded after the construction. It has been identified by Mr. J. G. Hurst as early medieval ware, made between about 1050 and 1150, which agrees closely with the generally accepted dating of the tower to not long before the Norman conquest.

A small hollow cylinder of bone, three-quarters of an inch in length and diameter, was found near the bottom of the trench in the south aisle. It has been turned and is incised with parallel lines in three groups. It may have formed part of a composite knife handle, or possibly decorated a processional staff or similar object.

Summary. The results of these investigations confirm Parker's suggestion that the church originally had narrower aisles than at present, but their width is incorrectly shown in his plan as six feet on both sides. The north aisle was in fact eight feet wide, and the south 8 ft. 6 in. Before this, however, there was almost certainly an earlier phase unsuspected by Parker, when an aisleless nave was built. Part of its wall survives as a footing for the pillars at the west end, and is constructed almost solely of flints, whereas the wall of the narrow aisle contained a small percentage of chalk.

A slot found in the tower floor can only relate to a timber building, and confirms Parker's opinion that the stone church replaced an earlier wooden one. Slight though it is, the evidence of the small sherd from the wall footing confirms the general view that the tower was not built before about 1050.

It appears that the surface of the solid chalk under the nave has a slope of about 1 in 9, judging from its depth below the floor at the east and west ends. When the nave was first built, the ground was probably a natural slope and the base of the walls resting on it could be seen from outside the church, with a mortared facing parallel to the ground surface. The level of the churchyard is now everywhere at least as high as the floor of the church, which must always have been considerably made up at the western end to bring it to a level.

F. W. HOLLING.

Ordinations in the Interregnum.—Mr. A. J. Willis, in his *Winchester Ordinations, 1660–1829*, gives the names of six Surrey incumbents ordained during the Commonwealth period by the Bishop of Ardfert and Aghadoe. They were Richard Parr of Camberwell, John Bunting of Addington, Richard Carter of Cobham, John Bonwick of Mickleham, Francis Clarke of Stoke d'Abernon, and John Holney of Dunsfold.

Ardfert (where Casement landed) is in co. Kerry, six miles north-north-west of Tralee. The See was founded by St. Brendan in the sixth century, and the cathedral was finally abandoned in 1641. Aghadoe is near Killarney, and has the ruins of a church called Aghadoe Cathedral.

The bishop concerned was Thomas Fulwar (Fuller), appointed by patent on 26 September 1641. He soon found it prudent to cross to England, and became a doctor of divinity of Oxford in 1645. After the Restoration he became Archbishop of Cashel, and Ardfert and Aghadoe were united with Limerick. From 1646–7 to 1660 Fulwar appears to have acted as shadow Bishop of Lincoln, and performed over 250 of the 1,300 Anglican ordinations known in the Commonwealth period. Orders were conferred *in loco congruo* ('in a suitable place') and it would not normally have been safe for a priest to have carried his new Letters of Orders about with him. Much is still obscure, but a flood of light has been thrown on the subject by the Rev. C. E. Davies, assistant chaplain at Pembroke College, Oxford, to whom I am greatly indebted.

T. E. C. WALKER.

The Great Rees David Mystery:—

1. Roger ap David, curate of West Horsley. Witnesses will. Surrey Archdeaconry, Pykman, f. 134. October 1539.
2. Richard Davys, priest of West Horsley. Witnesses will. (B.M. Add. MS. 24925, p. 23.) 2 Feb. 1543/4.
3. Mr. Richard Davyd, instituted to Compton, presented by William More. 15 Aug. 1554. (Gardiner Register. C. and Y. Soc. ed., p. 141.)

4. Sir Richard David, instituted to Calborne, Isle of Wight, presented by William Browne. 4 Sept. 1554. (*Ibid.*)
5. Richard David, presented by the Crown to East Horsley. 13 May 1554. (*Let. Pat. Philip and Mary*, vol. 1, p. 38.)
6. Rees David, clerk, chaplain to Lady Anne Knevet of Sutton, and John Brace, gent, grants lease of Compton parsonage to Brace. (L.M. 347/7.)
7. Ryce Apdavia is apprenticed to Thomas Cordrey of West Horsley, William More's cook, 11 Mar. 1565/6. (L.M. 348/43.)

It has for some time been a pretty story that this last Ryce Apdavia whom More found wandering and masterless was the same man whom More himself had presented to Compton in 1554. The *V.C.H.* chapter on the ecclesiastical history of Surrey (by H. E. Malden) uses it as an example of how even such an honest and conscientious man as More was reduced to filling his benefice cheaply with a semi-literate Welshman, and for good measure mentions that More's later presentation, John Slater, was also found wandering some years after his deposition. The story is repeated in Lady Boston's *History of Compton* (1933), 196, and having gathered together the array of Davids and Davies listed above I felt that further fuel could be added to the flames by making him a triple pluralist as well. However, a note in the Baigent collection (B.M. Add. MS. 39984, f. 215) leads to a will in Hampshire County Record Office, B series: it is that of 'Sir Resse Davyd, parson of Compton, sec in body and of good remembrance,' and it is dated and filed under the year 1558. The register is missing, so the exact date of probate cannot be found. The opening formula is, as would be expected, Catholic: he wishes to be buried in 'my sade parysh churche' and leaves 20s. to cover these expenses. £13 are specifically distributed to various people, including his sister, housekeeper, and 'Master More.' The residue goes to the vicar of Woking and 'Sir Rychard parson of Horsley.'

The will is written in a curious hand with some spellings uncommon even by Tudor standards, but it is not illiterate, especially if we remember it was written by a dying man. So Rees David of Compton did not become a cook, nor did he also hold East Horsley. (No Richard is named as either rector or curate of West Horsley at this period.) 'Sir Rychard' must be his near namesake who was presented in 1554 and deprived in 1560.

But there are further complications. Even the two like-sounding curates of West Horsley cannot be definitely linked, as in 1541 George Forest was paid as curate there (Gardiner Register. C. and Y. Soc. ed., p. 184). Possibly one of them could have been the future rector of Compton, as Sir Henry Knevet was granted the next presentation to West Horsley in 1542 (*L. and P. Henry VIII*, vol. 17, no. 1012 (16)), which forms a link with Compton's Rees David, who was chaplain to Lady Knevet.

The East Horsley Richard David is not, as we have seen, incumbent of Compton, but he is the same as the Richard David instituted to Calborne, for in 1566 he is before the Winchester Consistory Court (Act Book 25, ff. 2 *et seq.*) and his credentials are in question. He was able to show letters of institution, dated 26 Sept. 1561, some time after his deprivation from East Horsley, but his original letters dimissory had been left at East Horsley. After several adjournments of his case the letters seem to have been found and are copied in Act Book 26, f. 18: he was licensed by Fulco Salusbury, Dean of St. Asaph on 26 May 1542. The problem seemed to have been solved, although for several years David's name appears in the act books, cited for unspecified offences. Could he have wandered back towards Horsley after his credentials had been challenged and found himself a cook's apprentice? It seems unlikely that the indenture would omit mention of such a recent fall from grace, as he would have been recognised in the area. Also, Horne's register states that the next institution to Calborne was in 1572 on David's death. We have no burial register to support this, and a mere probate act at Somerset House for 8 March 1571/2 for Richard Davys, *clericus*, with the diocese named as St. Asaph, cannot be taken to refer to the Calborne Richard David.

We can only fall back on the fact that David and Rees or Richard were common Welsh names, and their combination not rare: emigration from Wales was also quite usual, as the many Welsh names among the sixteenth-century Surrey clergy bears out—and not all these were rogues either. It seems there must still be at least four men of similar names:—

1. The rector of Compton and chaplain to Lady Anne Knevett;
2. The rector of East Horsley and of Calborne;
3. The cook's apprentice;
4. The priest whose will was proved in 1571/2;

and probably two curates of West Horsley, one of whom could be equated with the second, or more probably the first of these four.

R. A. CHRISTOPHERS.

BOOKS RECEIVED

The attention of readers is drawn to the following books which have been received:—

THE GLASS INDUSTRY OF THE WEALD. By G. H. Kenyon. Pp. xxii+231. 22 pls., 19 text figs., 2 maps. Leicester University Press, 1967. £2 10s.0d.

This important book is the first general study of the Wealden Glass Industry to appear since S. E. Winbolt's *Wealden Glass* was published in 1931. It deals with techniques, types of glass produced, the administration of the industry and the families concerned, and it contains also a full schedule and description of known glass-house sites. We hope to review the book in our next volume.

AGE BY AGE. By Ronald Jessup. Pp. 96. 46 drawings, 4 maps. London: Michael Joseph, 1967. £1 10s.0d.

This book, which has the sub-title *Landmarks of British Archaeology*, is profusely illustrated with drawings by Alan Sorrell. The first part surveys the prehistory and history of Britain up to the Viking settlers, and the second part deals with a variety of topics, including archaeological methods.

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(a) MERSTHAM LIMeworks. BASE OF STEAM ENGINE BUILT INTO WALL NEAR LIME COTTAGE.



(b) MERSTHAM LIMeworks. LIME COTTAGE FROM WEST.



[By kind permission of Geological Survey.]

MERSTHAM LIMWORKS IN OPERATION IN 1929. VIEW LOOKING WESTWARDS.



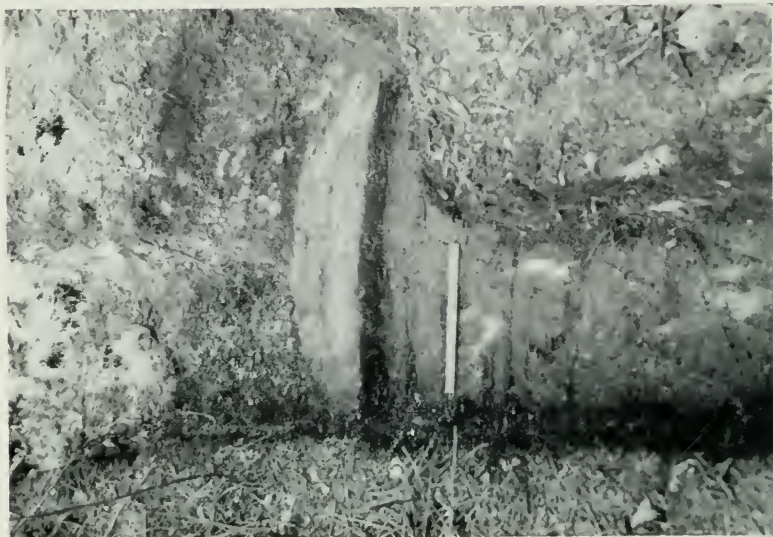
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SECTION OF THE MERSTHAM TITHE MAP (1838).

(Note.—North is to the left of the diagram.)

KEY TO PLACES MENTIONED:—

- 57 Pit field showing small lime-pit.
 - 69 Alderstead Farm.
 - near 108 Weighbridge Cottage.
 - near 109 Croydon, Merstham and Godstone Railway.
 - 217 Ponds, perhaps connected with the Canal project.
 - 270 Quarry Dean, in occupation of George Hall in Tithe Award 1841.
 - 361 Jolliffe Row.
 - 362 Chalkpit Limeworks, in occupation of George Hall in Tithe Award 1841.
 - 363 Land required for London and Brighton Railway.
- The turnpike and turnpike diversion are also shown.
 Lime Cottage is the southernmost building in the Limeworks site. The two circles were identified by Mr. Sanders as wells.



(b) MERSTHAM LIMWORKS : DETAIL OF FLOOR IN
CIRCLE B, SHOWING WORN GROOVES.



(a) MERSTHAM LIMWORKS : VIEW ACROSS CIRCLE B
TOWARDS CIRCLE A, SHOWING CENTRAL FEATURE,
CIRCULAR FLOOR AND BRICK PLATFORM ON BANK.



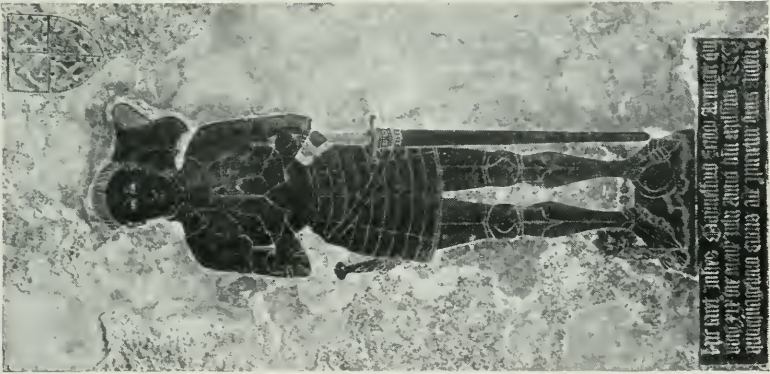
[*National Monuments Record.*

CROWHURST CHURCH FROM THE SOUTH-EAST.

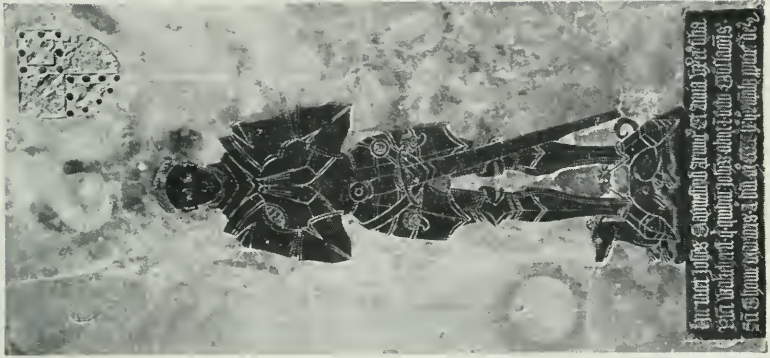


[National Monuments Record.]

CROWHURST CHURCH INTERIOR.



(a) BRASS OF JOHN GAINSFORD (IV),
1450.



[National Monuments Record.

(b) BRASS OF JOHN GAINSFORD (V),
1460



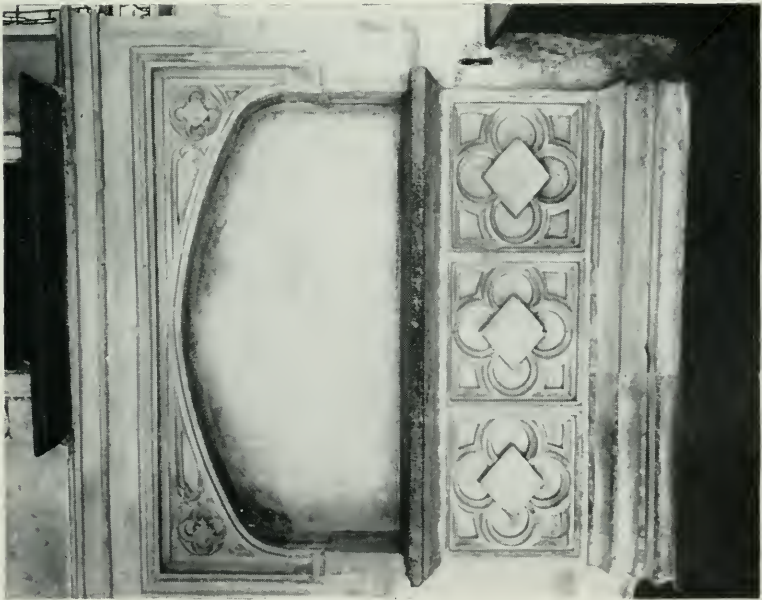
[*National Monuments Record.*

(c) EAST WINDOW IN SOUTH AISLE.



[National Monuments Record.

(b) TOMB OF JOHN GAINSFORD (V).



(a) ANONYMOUS TOMB.

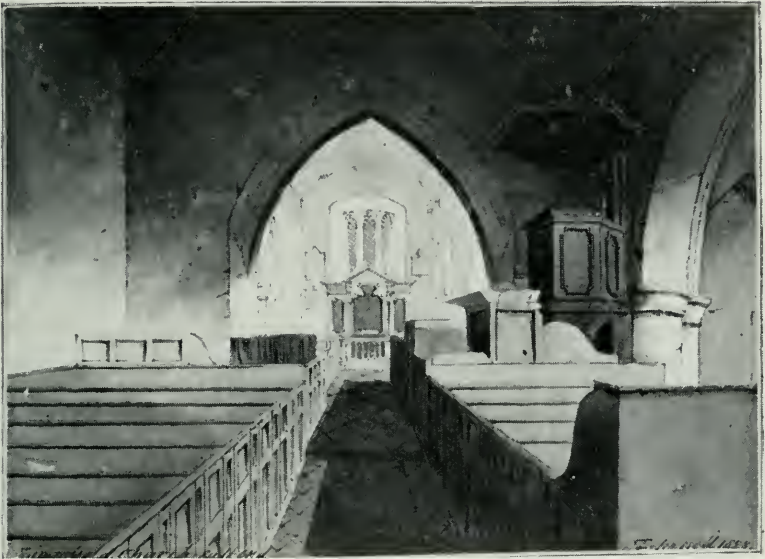


(a) LIMPSFIELD CHURCH FROM SOUTH-WEST.



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(b) LIMPSFIELD CHURCH, EAST END. 1825.



[Reproduced by permission of Trustees of British Museum.]

(a) EAST END IN 1828, SHOWING ALTAR PIECE ERECTED IN 1713.



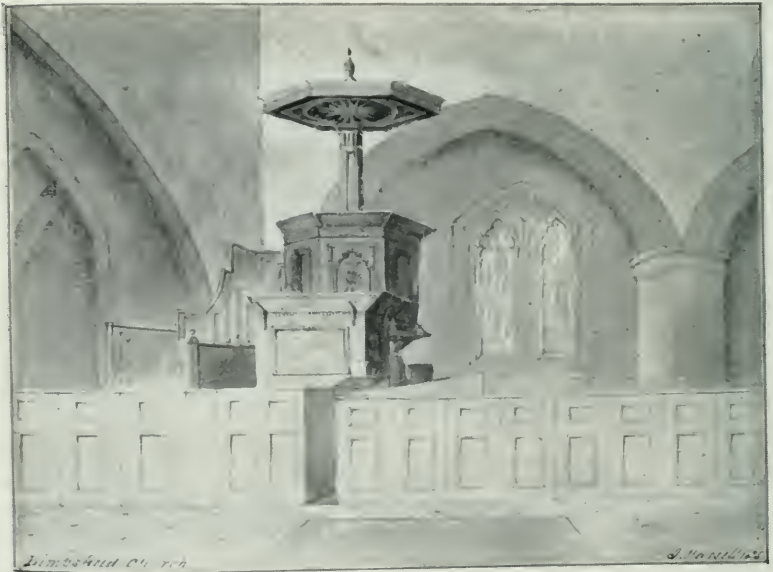
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(b) WEST END IN 1828, SHOWING GALLERY AND ORGAN.



[Photo: Michael Wall.]

(a) CHANCEL FROM GRESHAM CHAPEL, LOOKING SOUTH-EAST.



[Reproduced by permission of Trustees of British Museum.]

(b) LIMPSFIELD CHURCH IN 1825, SHOWING BOX PEWS ERECTED IN 1713 AND PULPIT WITH CLERK'S SEAT.

REPORT OF THE COUNCIL

for the year ended 31st December, 1966

The Council of the Surrey Archæological Society has much pleasure in presenting its 112th Annual Report with the Accounts for the year 1966.

INTRODUCTORY

During the year the work of the Society has continued to make good progress in all fields. Details of excavations, publications and many other activities will be found in later sections of this Report. The Council records with particular appreciation and gratitude the action of His Grace the Duke of Northumberland in placing on loan with the Society the archæological collections of the late Helen, Duchess of Northumberland. Some account of these is given below in the report on acquisitions.

The Council also desire to express their grateful thanks for the bequest of a collection of water colours of historic buildings in Ewell, made by the late Mr. J. A. Rowles.

The Surrey Local History Council has made a fine start with a notable Symposium which packed the Dorking Hall to capacity.

Plans are being drawn up for the organisation of rescue digs and for the better co-ordination of Museum services.

ADMINISTRATION

Mr. E. S. Wood has resigned as Hon. Secretary and has been succeeded by Mr. A. S. Gilbert, but he continues to represent the Society on a number of important outside bodies.

Mr. R. W. McDowall has assumed responsibility for all questions relating to the preservation of ancient buildings.

Mr. Christmas continues to assist the Honorary Treasurer, Mr. Coley. Mrs. Chiles has resigned as Secretary of the Visits Committee, but continues to be responsible for the distribution of the Bulletin. Miss C. Smith has succeeded Mrs. Chiles as Hon. Secretary of the Visits Committee and has most generously agreed to take over from Castle Arch the work in connection with the binding of individual copies of the "Collections." This has made it possible for us to continue to offer bound copies to those members who desire them.

Dr. Dance and her staff, together with a number of voluntary helpers at Castle Arch, continue to be the keystone of the arch of our support and the Council is most grateful to each of them individually and to Guildford Corporation for this great help.

FINANCE

The audited Accounts and Balance Sheet covering the financial year to the 31st December, 1966, are printed at the end of this report. It will be seen from the Revenue Account that the additional income from increased subscriptions is insufficient to cover the ordinary running expenditure of the Society, and that there is a deficit of £121. Apart from some small additions to the working expenses, this is mainly due to increases in the cost of the "Collections" and the Bulletin, and on the income side that the interest received from the investment of the Margary Fund together with the interest on the special deposit account £77 has been credited direct to that Fund, and not brought into the general income. As far as the "Collections" are concerned, Volume 62 cost £210 more than had been provided, a provision of £1,300 has been made for Volume 63, which will be issued in March, 1967, and is a double volume, and the sum of £400 has been set

aside for Volume 64. However, the appreciation expressed on all sides regarding the Bulletin and the "Collections" shows how much they are appreciated by the membership as a whole.

During the year a great deal of extra work for the staff at Castle Arch has been caused by members continuing to pay their subscriptions at the old rate, and, therefore, the attention of all members is drawn to the fact that the ordinary subscription is now £2 per annum.

ACCOMMODATION AT CASTLE ARCH

A further setback must be reported to the hopes mentioned in the two previous reports of re-housing the Society and Museum in larger and more suitable premises. The development of the new Civic Centre at Guildford, where a site had been earmarked to replace Castle Arch, was deferred, and no radical solution to the problems of Castle Arch can be expected for some time.

Meanwhile, however, after some delay for town planning reasons, a start has been made on adapting premises in Castle Street as additional storage space for the Museum. This will enable more space to be released at Castle Arch for the Society's growing library. We are grateful to the Corporation for this helpful measure.

PUBLICATIONS

Volume 63 of the "Collections" was issued early in 1967. The Council regrets that it was not possible to issue it before the end of 1966, but hopes that the next volume will be out this year.

INDEX OF "COLLECTIONS"

Work is continuing on the preparation of an Index of Volumes 39-60 of the "Collections" which has been undertaken by Miss J. M. Harries, to whom the Council are much indebted.

THE SOCIETY'S BULLETIN

The second year of publication of the Bulletin has seen an encouraging increase in contributions, and the Council decided to allow the size to be increased to six pages whenever there was sufficient material. This has enabled a wider range of activities and discoveries to be publicised. That the Bulletin is appreciated by many members was perhaps best indicated by the number of complaints received when the September issue was unfortunately delayed as a result of a misunderstanding with the printers. The Council is much indebted to the Joint Editors, Mr. and Mrs. D. J. Turner, for the hard and exacting work which they have put into this successful project.

GUIDES TO SURREY CHURCHES

In addition to guides being published in the "Collections," members have also written new guides to Limpsfield and Pyrford Churches which will be published shortly.

HISTORIC BUILDINGS

During the second half of 1966 six proposals to demolish listed buildings were made. In three cases Preservation Orders were made, in one case planning permission for redevelopment of the site was refused. In the case of the Bear Inn and Culpeper House, Friary Street, Guildford, the Town Council decided to oppose demolition. In one case the proposal was withdrawn.

MUSEUMS IN SURREY

The Council has continued to have under close review the question of an effective museums service in Surrey, and the part which the Society should play in this.

A sub-committee set up to recommend a policy in this matter reported during the summer, and as a result steps are being taken towards closer co-operation between the Society, local authorities and museums, and area museums federations and services. In this the Council has as objects the building up of common standards of preservation, restoration, etc., the regular exchange of information, the maintenance of a common index, the avoidance of needless fragmentation of material, sharing in activities of mutual or public advantage, and acting in concert on appropriate issues. Guildford Museum, in the Council's view, provides the most convenient central point for this co-operation, and the most suitable basis for a County Museum.

A standing Museums Committee has been set up to initiate and develop action along these lines.

C.B.A. GROUP 11A

The standing committee met twice during the year. A matter of particular concern is the promotion of Industrial Archæology in the area, and it is fortunate that Mr. S. Harker has offered his services as co-ordinator for the Group in this field. The Committee also considered the subject of the preservation and scheduling of buildings.

The Annual General Meeting was held at Tunbridge Wells on Saturday, 1st October, and our President, Miss Kathleen Kenyon, was in the chair. Mr. J. H. Money gave an illustrated talk entitled "Early Iron Working in the Weald."

The first Group 11A Symposium was held on Saturday, 26th November at the Institute of Archæology, London. The subject was "Science in Archæology" and the meeting was very successful with a succession of talks by specialists distinguished in their various fields.

SURREY LOCAL HISTORY COUNCIL

The Surrey Local History Council held its first Annual General Meeting on 12th March, 1966, at Dorking. The Chairman, Mr. R. Dufty, reported on the proposed programme of work, and three speakers told of the assistance which can be given to Local History Groups by other organisations. A "List of Sources" is in preparation, and will probably be prefaced by a "guide to methods." The Council is interested in a List of Maps, which it is now understood is likely to be sponsored by the County Council and the Record Society. A scheme for collecting local history records awaits a volunteer to tackle this work. A list of organisations interested in local history directly and indirectly is being compiled. It is intended that it should be combined with a similar list of organisations interested in archæology being prepared by the Society. A Symposium on local history jointly sponsored by the Society was held at the Martineau Hall, Dorking, on 5th November, and the six talks, together with the attendant exhibition and bookstalls, attracted a capacity crowd. The next Annual General Meeting will be held on 8th April, 1967, and the speaker will be Mr. N. Cook, Director of the Guildhall Museum. There are now 25 member organisations of the Council.

EXCAVATIONS

In addition to the principal sites at Weston Wood and Rapsley a number of other excavations were undertaken, although excavation of the glasshouse at Alfold had to be postponed through illness. Brief details of the year's work follow:

Weston Wood, Albury: Mesolithic Settlement (T.Q. 053485). Excavation has continued at weekends throughout the year under the direction of Miss Joan Harding. It has been mainly with the investigation of the *Mesolithic Horizon*. The area of maximum occupation appears to coincide with that of the Late

Bronze Age hearths and is sealed four feet below the present forest level. Mesolithic type flints are distributed in the horizon of wind blown sand which immediately underlies the Late Bronze Age occupation layer and which extends to a further depth of some two to three feet.

One clearly stratified hearth has been found. This contains sufficient oak charcoal for a C14 analysis. Five other areas containing charcoal and calcined flints suggest further hearths. The identification of structures is made difficult by the presence of natural concentration and scatters of carstone over parts of the site; but a circular area, twelve feet in diameter, cleared of carstone and near the hearth indicates a shelter.

The flint industry is very late Wealden in character, and a provisional date of not earlier than 3500 B.C. has been suggested. It includes two small core axes, 16 end-scrapers, 12 burins, three awls and two narrow tranchet arrowheads. More than 100 microliths have been found. These are notable for the number of very small scalene triangles which almost equal that of the obliquely blunted points. There are no Horsham points. There are many micro-burins and cores.

Scattered sherds of a Neolithic tripartite Peterborough bowl have been found not far from the Mesolithic chipping floors and hearth. With a little spring rising not far away, this sheltered hillside would have made a suitable resting place for wandering peoples.

Rapsley, Ewhurst—Roman Villa (T.Q. 080415). Excavation has been continued under the direction of the Viscountess Hanworth. Site 2, the field, is finished, and the land has been returned to its owners. This year the western and southern boundary walls, two entrances, several pits, an early enclosure system of ditches which contained stake holes, a further masonry building outside the boundary wall, and a timber building of Period 2 beneath the southern building, were all examined. More work was also done on the basilican building, and a shrine was found. This was a timber structure with a curved northern wall. Its dimensions were 31ft. 6ins. by 15ft. 9in. It had a tessellated floor, and half circle tiles indicated some form of pilaster. In the centre was a solid masonry semi-circle, 8ft. 6ins. by 9ft., with vestiges of an edging wall. It had been rendered with opus signinum and it might have been a basin. A drain led southwards to a soakaway outside the boundary wall. The shrine was contained in a temenos area not yet fully excavated but approximately 42ft. square. A preliminary examination of the Samian indicates a late Antonine date for the shrine (as also for the bulk of the masonry of the villa), but continued use may be inferred by painted New Forest pottery in the drain.

An enamel disc brooch in good condition was found during the final weekend: it is now at the Institute of Archaeology undergoing conservation treatment. A brass coin of Trajan was found at the bottom of a rectangular rubbish pit containing much burnt material of late second century date. An almost complete carinated first century vessel was found in a pit with dateable Samian ware, several plain pieces of "Mural Crown" vessel were also found, but no decorated sherds. Work will continue on Site 1 in 1967, subject to the owners' permission; a resistivity survey has indicated a possible further building which would complete a courtyard. Much credit is due to the volunteers who worked in conditions which were often far from pleasant, due to heavy rainfall.

Ashstead Forest: Roman Tillery (T.Q. 178602). In spite of very bad weather two areas were examined under the direction of Mr. J. N. Hampton. At the site of the kiln excavated in previous years, another but smaller clamp kiln was identified. It appeared to be of one phase, which leads us to hope that it may be possible to clarify structure details and the firing method.

At the other site, south of the main villa building, a slight low wall consisting of brick with some flint was set in a "mortar" of buff clay. Although only a short length was identified, it does suggest the sill wall of a timber building, and this hypothesis is supported by the number of iron nails recovered, together with

a few fragments of window glass. Close to the wall a gully with burnt sides represented an earlier phase. It contained charcoal, pottery and burnt material. Further excavation is planned for 1967.

Wanborough: Round Barrow on Hog's Back (S.U. 937484). This excavation was started by the boys of Charterhouse under Mr. E. E. Harrison and was continued by volunteers under the direction of Mr. A. J. Clark. Although reduced by ploughing to a height of 3½ feet, it had been a magnificent bell barrow, characteristic of the Bronze Age Wessex Culture: the diameter of the mound was about 75 feet and of the ditch 120 feet. This had been 8-9 feet wide and at least 3 feet deep, with a flat bottom and almost vertical sides. The main burial was lost, as the centre of the mound had been much cut about by robber trenches intersected in turn by a well-cut trench apparently made under the direction of the Committee of our Society in 1858 (a fact discovered in Volume II of the "Collections" and probably relating to this barrow). Tool marks, some made by a blade 1½ inches wide, others by a point only ¼ inch wide, were found in the ditch bottom at one place, and a mould of them was taken with Ruvulex latex emulsion. The south-west quadrant of the barrow was almost completely stripped in an unsuccessful search for secondary burials: however, it did produce several Roman objects—an iron arrowhead, an early brooch and eight bronze coins that probably formed a second century hoard. Romano-British sherds associated with a rapid filling of the upper part of the ditch indicated ploughing up to the foot of the mound in that period. A grave containing a skeleton had cut into the ditch filling on the east side; a coin two inches above its chest suggested a Roman date, although this could have been fortuitous and the burial later.

In view of its proximity to the village and the lack of other likely mounds, it seems very probable that this is the Wen Barrow which gave its name to Wanborough. The barrow has since been destroyed by road widening.

Woodlands Park, Oaklawn Road, Leatherhead: Romano-British Site (T.Q. 151587). Excavations were carried out in September, 1966, under the direction of Mr. F. A. Hastings. A large area roughly paved with flints was revealed and this had been extensively robbed in places. Adjacent to the paving was a shallow drainage ditch filled with dark soil containing pottery including Samian ware, charcoal and some bone. Excavation of this feature will be continued next season. Trial trenching over a large area of the summit of the hill was completely negative. Quite a lot of pottery and some roofing and flue tile was found in the topsoil, but this had obviously been spread by tree-blasting when the site was cleared for cultivation in 1960. It was originally thought that the evidence from the trial trenching in March was enough to suggest that the site of a Roman building had been discovered, but further indication is now required and a resistivity survey will be carried out. The quantity of pottery suggests an important site. Thanks are due to Mr. F. W. Blake, the farmer, for his kind co-operation.

Badshot Lea, Farnham: Moated Site (S.U. 863486). The village of Badshot Lea lies some two miles north-east of Farnham. When word was received that the moated site at Park Farm was threatened by impending development, arrangements were made for the Farnham Field Research Group and the Surrey Archaeological Society to carry out an investigation of the site.

Excavations commenced at Whitsun, 1966, under the direction of Mr. I. G. Dormor. A resistivity survey of the area enclosed by the dry moat ditch (Site 1) was carried out and the main grid was laid out in accordance with the results. A Tudor brick wall and a large quantity of pottery of the same period was found. Among the finds from Site 1 was a 14th century English token. In August the excavation was transferred to the area enclosed by the wet moat. Here, on Site 2, two Tudor brick drainage culverts and associated chalk floors were found along with the partly robbed walls of an earlier building. A sealed Tudor rubbish pit contained a great many sherds of green glazed and coarse wares. The moat is walled in places and work carried out therein by a diving team would suggest

that it was dug in the first period of occupation of the site in the late 13th century and the revetting walls added in Tudor times. The partial filling of the moat probably took place in Georgian times when the site was cleared for the construction of the Period III house. Excavation will continue on Site 2 throughout 1967. It is hoped to examine the Tudor house and the earlier structures.

THE FOLLOWING EXCAVATIONS WERE SUPPORTED BY THE S.A.S.

Watendone Manor (T.Q. 321594). Excavations have been carried out during the summer by the Bourne Society to locate the site of the deserted medieval village of Watendone. Traces of buildings were found with pottery from the 13th to 17th centuries. The foundations of a flint structure measuring 48ft. by 62ft. were found which are probably the remains of the church mentioned in Domesday. Outside the north-west corner of this structure there were signs of occupation, i.e., charcoal mixed with loose flints, a hearth, pieces of painted glass and pottery of the 13th century. To the north of this flint structure 14 burials were found; there were no grave goods associated with the burials. The burial ground probably covered about one acre, but this has not yet been fully excavated. The Bourne Society was helped by Mr. A. J. Clarke with a resistivity survey and by Mr. B. J. Philp who directed a mechanical excavator which enabled them to locate the site quickly in an area about eight acres in extent.

Mitcham: Discovery of Burials (T.Q. 267691). In late October, 1966, workmen, excavating trial holes on derelict land at the north end of Phipps Bridge Estate, found two adult burials. The skeletons were extended in shallow graves, oriented north-south, and apparently without grave goods. The police pathologist pronounced that they were at least three hundred years old.

A trial excavation, directed by Mr. D. J. Turner, was arranged by the Merton Historical Society with the help of the Beddington, Carshalton and Wallington Archæological Society. Over four hundred square feet of trenches were dug but only one further skeleton, of an adolescent, was found. This burial was also in a shallow grave, oriented north-south, and had no grave goods. There was a scatter of medieval pottery in the top soil and a flat bottomed ditch containing Romano-British pottery was found.

The orientation of the burials suggests pagan rites. The site is too far from the well-known Mitcham Anglo-Saxon cemetery for it to be part of it and too close for it to be probable that this is another Anglo-Saxon burial ground. The site was part of the common fields of Mitcham until enclosure.

There is a possibility that further excavation may be undertaken here before development takes place.

Southwark. The Society, as one of the constituent bodies of the Southwark Archæological Excavations Committee, helps to support a varied programme. The main sites in 1966 were:

Borough Market (T.Q. 326802). Excavations were carried out under the direction of Mr. G. J. Dawson on behalf of the Southwark Archæological Excavations Committee by the Southwark and Lambeth Archæological Society at 4 Southwark Street, Borough Market. The excavations took place in a small cellar which had a considerable amount of loose rubble in it which constricted the area available for excavation to 15ft. by 5ft. The middle of 8ft. of this was a modern wall which destroyed all earlier features.

The modern cellar had destroyed all features dating after c. 1300 except for the bottom of one pit which cut down to the natural and which may be late medieval or post-medieval. Apart from this the latest feature on the site was a deep ditch of which the top fill at least was early medieval but it is possible that the ditch was cut in Roman times since the lower layers seem to contain only R-B pottery.

Elephant and Castle (T.Q. 319789). Excavations were carried out under the direction of Mr. G. J. Dawson on behalf of the Southwark Archaeological Excavation Committee by the Southwark and Lambeth Archaeological Society on a large cleared area fronting on to Newington Butts immediately south of the Metropolitan Tabernacle. The area lay close to the village of Newington, but on the earliest maps it is shown without any buildings though such existed on both sides of it. In the time available it was only possible to excavate an area 10ft. square.

No features earlier than the end of the 18th century were found. Three periods of brick walling were found, all of 19th or 20th century date, and two brick-lined circular pits. These pits may have been cess pits, but they lay on top of a clay layer and this would have made drainage from them difficult. Also there was no black organic layer at the bottom as there should have been if they were cess pits. Therefore it is more likely that they were wells. Below the 19th century building lay a thick layer of light grey silt containing four or five sherds of medieval pottery.

It is known that a stream, called the Tigris in the 19th century, flowed alongside the north boundary wall of the site and another stream seems to have joined it from the south. The excavation showed that the area must have been liable to repeated floodings from these streams until they were converted into sewers in the 19th century and that this prevented settlement until then.

Post-Medieval Site, Lambeth (T.Q. 306788). A site in Lambeth High Street was examined under the direction of Mr. B. J. Bloice. Eighteenth and nineteenth century buildings were planned, including a corner fireplace. Sealed under these was a furnace and layers of ploughsoil with early post-medieval pottery in them. The site has produced an amount of Delft and stoneware material but was rather disturbed.

Kennington Palace (T.Q. 312782). Excavation work under the direction of Mr. G. J. Dawson was carried out on the site of the medieval Kennington Palace. The plans of the hall, principal chamber block and two or three subsidiary ones have been obtained, besides a possible stable, garden enclosure and two ditches. The Tudor long barn and the basement of one of the Tudor manor houses have also been plotted.

Park Street (T.Q. 324803). Excavations were carried out under the direction of Mr. G. J. Dawson on behalf of the Southwark Archaeological Committee by the Southwark and Lambeth Archaeological Society on a strip of land at the north end of Courage's car park in Park Street. A trench 55ft. by 10ft. was laid down, but the western forty feet or so was solid concrete and excavation there was impossible, so the excavated area was only approximately 11ft. by 10ft. Another major problem was water: the trench had to be pumped and baled dry four times.

The earliest feature on the site was a layer of sticky grey clay which was at least eight feet thick (its base was not reached). It contained a few bones and tiles, mainly in its upper parts. Immediately on top of this was a flimsy floor made of re-used roofing tiles perhaps associated with two post holes, one of which may have been repaired. Over this were several layers of occupation debris full of kitchen refuse dating from the late 16th century at the bottom to early 17th century at the top. Cut a little into the top of this was the remains of a brick building with a chimney breast and, outside this building a brick and stone surface which is probably Naked Boy Alley. Both of these features can be dated to the middle of the 17th century. The building had been altered at some time during its life and was demolished in the mid-18th century by Thrale to create a garden opposite his house (see *Survey of London, Vol. XXII, Bankside*, p. 78).

Three important points have been raised by this excavation:

1. Roman Channel. The evidence for this was slight, but the grey clay still

existed at Oft O.D. at which level Mr. Marsden found peat with R-B material on it on the other side of Park Street. Thus it would suggest an area of lower land, if not a channel, here in Roman times.

2. The development of the marsh. Both here and at Emerson Place it would seem that the river was still depositing clay up to c. 1500 or later, and, since this clay has almost no organic content this would suggest that the river covered the area at most high tides. Not until some time in the mid or late 16th century was the area used, even for farming. This would suggest that some time in the early 16th century work was carried out on embanking the river.

3. Alleyways. Alleys are a characteristic of Southwark on the earliest detailed maps, but the Park Street evidence may suggest that they are a post-medieval development, probably part of the decline to slum conditions which occurred in Southwark in the late 16th and 17th centuries. It is interesting to note that the first development of the site, in the late 16th century, was on a more spacious scale and it was only in the 17th century that more houses were crammed into the same place.

Horley, Court Lodge Farm (T.Q. 273431). In November a second season of excavations were completed at this site by Dr. G. P. Moss. The work was organised by the Holmesdale Archæological Group in conjunction with this Society. The medieval manor house of Horley was clearly in the vicinity of this site.

A drainage ditch leading towards the moat was traced for 17ft. starting about 43ft. from the edge of the moat. Cutting across the ditch there was a deep pit 2ft. by 5ft. Two short pillars of unmortared bricks were found near opposite corners of the pit. Their function is unknown. Several well-formed post holes were uncovered including four, each 4ft. apart and 2ft. from the ditch. Some crude post holes clearly were derived from a fence leading to the corner of the great tythe barn (pulled down in August). A large area was cleared showing only ill-defined features. During the closing stages of this season's work the wall of the manor house was mainly located by a robber trench, back filled with mortar and soil and traced for 35ft. This may well correspond to the north wall of the building shown on the 1602, 1799, 1812 and 1846 maps. A possible sleeper wall trench of an earlier building was found lying immediately adjacent to the robber trench.

Due to the lack of stratigraphy the dating of features is as yet not possible. Considerable quantities of sherds have been found dating from about the twelfth century to the present day. The many high quality decorated sherds include a medieval face-on-front jug which shows similarities with pottery from Rye (cf. *Sussex Archæological Collections*, 101 (1963), p. 132). Two sherds of German Westerwald salt glazed stoneware have been found and a selection of clay pipes of all ages. A 15th century French jetton also was uncovered.

The extensive records of Christ's Hospital have illuminated many aspects of Court Lodge Farm from their purchase in 1602 to 1847, when the old manor house was dismantled for building materials. It is hoped to resume excavations at the site next Easter.

SYMPOSIUM

The fifth annual Symposium on recent archæological work in South-East England was held in Guildford on 26th March and was attended by some 150 people.

The following papers were read:

Mesolithic Site at Orchard Hill, Carshalton: Mrs. M. Turner.

Roman Villa at Eccles, 1962-5: Mr. A. P. Detsicas.

Romano-Gaulish Clay Figures: Mr. F. Jenkins.

Romano-British Ironworks at Bardown: Mr. H. Cleare.

Anglo-Saxon Cemetery at Orpington: Mr. P. J. Tester.

Excavations in Kennington: Mr. G. J. Dawson.

Royal Abbey of Faversham: Mr. B. J. Philp.
St. Anne's Chapel, Chertsey: Mr. W. J. Bult.
Two Late 17th Century Vaults at Cheam: Mr. D. R. Cousins.

These symposia, which provide an opportunity for the exchange of ideas and information between both societies and individuals engaged in excavation work, continue to prove popular and valuable. It was realised that conditions were now right for permanent arrangements to be made for the continuance of these functions. In his vote of thanks to the speakers, Mr. K. W. E. Gravett, who had been connected with their organisation since their inception, announced his retirement, and that responsibility for the Symposium had been assumed by the Excavations Committee.

VISITS AND LECTURES

The following meetings and lectures were held during the year:

10th February. Stationers' Hall and St. Sepulchre's Church, Holborn Viaduct, and Roman City Wall in basement of G.P.O. Organiser, Capt. Wilson.

12th March. Lectures in Guildford. Mr. Victor Smith spoke on English Country Houses, and Miss Joan Harding on the Late Bronze Age Settlement at Weston Wood.

16th April. Visit to Brighton in conjunction with the Brighton and Hove Archaeological Society. Organiser, Capt. Wilson. Visit to Hollingbury Hill Fort, Stanmer Park, and Brighton Museum, and conducted party round the "Lanes."

7th May. Visit to Essex. Organiser, Mrs. Chiles. Visit to Greenstead Church. Speaker, Mr. R. S. Simms. Blackmore, described by the Vicar. Visit to Bradwell Lodge, St. Peter's Church (on the Wall), Maldon Church. Speaker, the Vicar.

4th June. Godalming visit. Organiser, Mrs. Sidney Smith. Visit to the Church, Westbrook House and The Old Mill. Also Peperharow and Church.

9th July. Visit to Great Bookham Church, in conjunction with the Leatherhead and District Local History Society.

23rd July. Guildford Town Walk. Organiser, Miss J. Carter. 50 members attended this very well thought out and interesting day.

10th September. Walk—Betchworth to Dorking, in conjunction with the Holmesdale Club.

15th October. Visit to Westminster Abbey 900th Centenary Exhibition. Organiser Mr. R. S. Simms. Mr. MacMichael, Assistant Librarian, conducted the party.

27th October. Lecture in conjunction with the Bourne Society by Mr. Austen Clark, "With a Camera in the Bourne Valley."

12th November. Lecture in Guildford. Mr. B. K. Davidson on "The Saxon Town of Thetford," and Viscountess Hanworth on The Roman Villa, Rapsley, Ewhurst.

2nd December. Treasure Trove—Joint meeting of the Society and the Bourne Society.

The Council wishes to record its thanks to the organisers, to the lecturers at the meetings, and to all who contributed to their success.

LIBRARY

During the year 75 books were added to the Library by gift and purchase. The Council wishes to express its grateful thanks to those members who have generously presented books, pamphlets and other graphic material to the Library.

The Council is indebted to all the members who have assisted with the work of the Library, and especially to Mrs. Murphy for her regular help with so many tasks.

ACQUISITIONS

PRINTED BOOKS AND PAMPHLETS

Gifts

From: Miss P. M. Brewer: Blaker, N. P., *Sussex in Bygone Days* (1919); Miss E. M. Dance, *Lewis Carroll and Guildford* (1966); Harley, J. B., *English County Map-making in the Early Years of the Ordnance Survey. The Map of Surrey by Lindley, J. and Crossley, W.* (1966); I. Dill: Margary, I. D., *Military Field Kitchens of the 18th Century* (1965); Mrs. Garland: Hawkins, M. and Webster, T., *A Short History of Molesey* (1966); Miss B. Hills: Knight, E. C. W., *The Church of St. Mary, Chiddingfold* (1966); Mrs. F. H. Murphy: *The Salvation Army Service of Thanksgiving* (1965), *Guildford Cathedral, Thanksgiving Service for Completion of the Building* (1966); D. J. Turner: Greenwood, G. B. (Edited by), *Notes Towards a History of Hersham* (1966); T. E. C. Walker: Historical Association, *English Local History Hand List* (1965); G. R. Wells: Voysey, R., *Voysey's Rural Rambles (Book 3)* (1939), Stephen, E. F., *Two Centuries in the Local Coal Trade: the Story of Charringtons* (1952); the authors: Cox, R. C. W., *Some Aspects of the Urban Development of Croydon, 1870-1940* (1966); Gosney, D. C., *Story of Grafham Grange* (1966).

Purchases

Wheeler, K. S., *Geographical Fieldwork* (1965); Willis, A. J., *Winchester Ordinations, 1660-1829, Vol. II* (1965); Gross, C., *A Bibliography of British Municipal History, 2nd Edition* (1966); Temple, N., *Farnham Inheritance, 2nd Edition* (1965); Wrigley, E. A., *Introduction to English Historical Demography* (1966); Pevsner, N., *Buildings of England, Berkshire* (1966); Bond, M., *The Records of Parliament* (1964); Emmison, F. G., *Archives and Local History* (1966); Harris, J. M., *Holy Trinity Church, Knaphill, 1907-1957* (1957); Elim, Rev. C. R. S., *Some Notes on East Horsley Church and Parish* (1908); Harper, C. G., *Southwark Past and Present* (n.d.); Rendle, W., *St. Thomas's Hospital, Southwark* (1883); Bell, W. J., *Esher and District* (n.d.); Reynolds, L. F., *A History of the Clapham Congregational Church* (1912); Hall, E. T., *Dulwich, History and Romance, 967-1916* (1917); Goodliffe, W., *Horsham and St. Leonard's Forest* (1905); Dawber, E. G. and Davie, W. G., *Old Cottages and Farmhouses in Kent and Sussex* (1900); Taylor, H. R., *The Old Surrey Foxhounds* (1906); Sturt, G., *The Wheelwright's Shop* (1943); Cousins, S., *The Dorking British School* (1919); Christophers, R. A., *George Abbot, Archbishop of Canterbury, 1562-1633* (1966); Humphreys, D. W., *Local History for Students* (1966); Rolston, G. R., *Haslemere, 1850-1950* (1950); Lewis, M. J. T., *Temples in Roman Britain* (1966); Stevens, I. D., *Story of Esher* (1966); Dunbar, J., *A Prospect of Richmond* (1966); Corcoran, J., *The Young Field Archaeologist's Guide* (1966); Bass, G. F., *Archæology under Water* (1966); Massingham, B., *Miss Jekyll, Portrait of a Great Gardener* (1966); Hudson, K., *Industrial Archæology of Southern England* (1965); Smith, D., *Industrial Archæology of East Midlands* (1965); Vine, P. A. L., *London's Lost Route to the Sea, 2nd Edition* (1966); Wachter, J. S., *The Civitas Capitals of Roman Britain* (1966); Farries, K. G. and Mason, M. T., *The Windmills of Surrey and Inner London* (1966); Marshall. —, *Agriculture in Surrey* (1798).

Reviews

Merrifield, R., *The Roman City of London* (1965); Forge, Lindus, *Oatlands Palace* (1966); Rivet, A. L. F., *Town and Country in Roman Britain* (1966); Thomas, S., *Pre-Roman Britain* (1965).

PRINTS, MAPS AND OTHER GRAPHIC MATTER

GIFTS: From Prof. S. S. Frere, two large-scale plans and two volumes of explanatory notes, of the Roman Road, West Wickham to London, from the papers of the late B. F. Davies; from T. E. C. Walker, Notes on the Godalming Sema-

phore; Price list of parts of the Victoria County History available from the Institute of Historical Research; from the County Librarian, print of Brockwell Hall; from A. S. Gilbert, transparency of the keystone of an arch, now at Langley Park Road, Sutton, perhaps from Somerset House; from Mrs. Rice, newspaper cuttings relating to Woking; from Miss Irene Codd, typescript corrections to *The Story of Esher* by I. D. Stevens; from The Beddington, Wallington and Carshalton Archaeological Society, typescript report of West Lodge, Carshalton, by K. W. E. Gravett; bequest of Mr. J. A. Rowles, nine water colours of Ewell.

MUSEUM MATERIAL FOR DEPOSIT IN GUILDFORD MUSEUM

GIFTS: From Mrs. Meade-Waldo, miscellaneous flints (some Surrey); from Prof. S. S. Frere, box of surface flints from Sanderstead; from Mr. Airey, Neolithic Stone Axe from Coulsdon; from M. E. Farley, medieval sherds from Hell Shaw, Limpsfield, and Kitchen Grove, Titsey.

LOANS: From His Grace the Duke of Northumberland, one Romano-British pot and a quantity of sherds, 78 Roman coins and other miscellaneous archaeological specimens, quantity of chalk fossils, all from the Albury Estate.

GUILDFORD MUSEUM

Mr. E. S. Wood remains the Society's representative on the Library, Museum and Arts Committee of Guildford Corporation, with Mr. N. P. Thompson as his deputy.

Among the more interesting accessions during the year, in addition to those deposited by the Society as described above, the Curator reports the following:

A collection of medieval and 17th century pottery sherds, including kiln wasters of both periods, from Ash Street, Ash (the sherds from Manfield School, Ash, mentioned in last year's report were found very near and are obviously part of the same site): flint and stone axes of various periods from Frimley (temporary loan only), Limpsfield and Woking; some hundreds of 19th century prints, drawings and other graphic material relating to Guildford and neighbouring villages, a gift from Mr. H. W. Stevens, which will be kept together as the Stevens Collection.

MEMBERSHIP

At 31st December, 1966, there were 1,011 members; honorary 8, life 50, subscribing individual 833 and institutional 120. During the year 11 members died, 100 resigned, and 27 were struck off under Rule VII. There were 85 new members, six of them being institutional. The net loss is thus 53.

OBITUARY

Major H. C. Patrick, D.L., who died on 9th December in his 84th year, is one who will be greatly missed in every walk of life (and they were many) with which he was connected, and in none more than in the Society, which he joined in 1938. He was a member of the Council continuously from 1949 until his death, except that in every fifth year, according to the rules of the constitution, he had to stand down for one year. He was also local secretary for Farnham and a member of the Visits Committee. Any expedition he led was always interesting and well organised. As a resident of Farnham and a member of the Urban District Council (for three years its Chairman) he did everything he could to preserve the charm of the old town, and he was very interested in the opening of Willmer House as its museum. During the restoration of the church, while he was churchwarden, he found the old hatchments, dirty and neglected, in a room in the tower. He had them cleaned and put in good order and they now hang on the walls in the nave and transepts, giving beauty and colour and demonstrating the historical connection of the church with old Farnham families of

note. He also took a great interest in keeping Farnham's footpaths open and, until recently, when the Ramblers' Association took on the work for him, walked them all himself before the review of the Definitive Map. He served for many years on the Parochial Church Council and was a Deputy Lieutenant of the County.

Mr. Frederick Bevan Burgess, who became a member in 1962, has died at the comparatively early age of 55. As a youth his interest in old stone-carved memorials was born and developed through his visits to the Suffolk churchyard by his parents' home. Eventually, becoming an art teacher, painter, designer and lecturer, he devoted much of his leisure time to scouring churchyards all over the country, recording and photographing outstanding examples of 18th century craftsmanship in design and lettering. His exhibition in 1952, sponsored by the Arts Council, and showing the fruits of his efforts over 20 years, was shown in the provinces, and later in London. In 1963 his volume *English Churchyard Memorials* was published (reviewed in the "Collections," Vol. XLI). Thereafter, by lecturing, writing and organising exhibitions, Mr. Burgess sought to promote interest in such memorials, and greater appreciation of their artistic and historical value, and pleaded for their preservation. For many years his wife has shared his keen interest and given him practical assistance. The summer walk round Epsom graveyard, originally organised by Mr. Burgess for this Society and the Bourne Society, will now be led by his widow, Mrs. Pamela Burgess, who intends to carry on his researches.

Mr. C. M. Duncan, D.S.O., M.C., J.P., who died on 17th December, 1966, had been a member of the Society since 1932. A prominent citizen of Reigate, he was for 30 years a J.P., was Chairman of Reigate Borough Bench, and held many other local appointments. He took the chair at local meetings arranged by the Society in 1960 and 1962. He was a grandson of Dr. Henry Duncan of Rothwall, Dumfriesshire, who founded the Savings Bank Movement in 1810.

The Council also reports with regret the death of the following other members: Mr. B. R. Bonas, Mr. C. H. Heath, Mrs. E. N. T. Griffiths, Mr. P. A. W. Roffey, Sir Osmund Cleverly and Miss Marson.

OFFICERS, COUNCIL AND COMMITTEES

At the 1966 Annual General Meeting, Miss Kathleen M. Kenyon, C.B.E., D.Litt., F.B.A., F.S.A., was re-elected President of the Society. The Honorary Secretary, Mr. E. S. Wood, B.A., F.S.A., to the great regret of the Council, having found it necessary to resign, was elected a Vice-President of the Society. Both the Council and the members of the Society at the Annual General Meeting offered him their most grateful thanks for his long and valuable service as the Honorary Secretary. He was succeeded by Mr. A. S. Gilbert, C.B.E., LL.M. All the other Honorary Officers were re-elected. On the Council's nomination The Viscountess Hanworth, Mrs. J. T. Banks, A.L.A., and Messrs. J. G. J. Dawson, B.A., J. N. Hampton, A. T. Ruby, M.B.E., and N. P. Thompson were elected to serve until 1970. The Honorary Auditor, Mr. A. A. Wylie, F.C.A., was re-elected.

The following served on Committees during the year:

Library Committee: Mr. T. E. C. Walker, F.S.A. (Chairman), Miss P. M. St. J. Brewer, A.L.A. (Hon. Librarian), Miss E. M. Dance, M.A., Ph.D., Mr. E. E. Harrison, M.A., F.S.A., Miss M. D. Liggett, B.A., F.L.A., Mr. J. L. Nevinson, F.S.A., Mr. A. S. Gilbert, C.B.E., LL.M.

Excavations Committee: Mr. A. W. G. Lowther, A.R.I.B.A., F.S.A. (Chairman), Messrs. B. P. Blake, A. J. Clark, F.S.A., I. G. R. Dormor, J. N. Hampton, The Viscountess Hanworth, Miss Joan M. Harding, Messrs. E. E. Harrison, M.A., F.S.A., F. A. Hastings, F. W. Holling, N. H. Nail, N. P. Thompson (Honorary Excavations Organiser), D. J. Turner, B.Sc., E. S. Wood, B.A., F.S.A., A. S. Gilbert, C.B.E., LL.M.

Visits Committee : R. S. Simms, F.S.A. (Chairman), Capt. M. A. Wilson, R.N.R. (Honorary Treasurer), Major H. C. Patrick, D.L., Mrs. J.T. Banks, A.L.A., Miss J. M. Carter, Mr. H. V. H. Everard, B.Sc., Mrs. M. N. Trier, Miss C. Smith (Secretary).

Museums Committee : Mr. E. S. Wood, B.A., F.S.A. (Chairman), Mr. E. E. Harrison, F.S.A., Mr. J. G. W. Lewarne, Mr. J. L. Nevinson, F.S.A., Miss Joan M. Harding, Miss E. M. Dance, M.A., Ph.D., Mr. J. C. Batley.

REPRESENTATION

Council for British Archæology : A. J. Clark, E. S. Wood.

Council for British Archæology, Group 10 : D. J. Turner.

Council for British Archæology, Group 11A : E. E. Harrison.

Library, Museum and Arts Committee, Guildford Corporation : E. S. Wood, N. P. Thompson.

Southwark Archæological Excavations Committee : E. S. Wood.

NOTICES

All subscriptions are for the calendar year and are due on January 1st. Members two pounds; associate members (relatives of members living in the same house) ten shillings; junior members (between 16 and 21) ten or twenty-five shillings (without or with the "Collections"). Cheques should be made payable to "The Surrey Archæological Society."

Membership : The Honorary Secretary urgently requests members to inform him at once of any change of address; failure to do this may result in members not receiving the publications and circulars to which they are entitled. He would be obliged if they could notify him of their intention to resign, and also if they learn of the death of any member. Candidates for election to the Society must be nominated by two members on a form obtainable from the Honorary Secretary.

Gifts, when relevant to the work of the Society, will be gratefully accepted by the Council; it may not however be in a position to accept all offers. The chief categories of acceptable gifts are: Printed books and pamphlets relating to Surrey or standard archæological works; lists of particular *desiderata* are published from time to time; maps, prints, original drawings and other graphic matter relating to Surrey and areas immediately adjacent; M.S. material relating to Surrey and embodying the results of original research (for example, collections made for parish histories); archæological finds or other objects bearing on the history of Surrey, for deposit in Guildford Museum (these should in every case be accompanied by full particulars regarding the place of origin, and date and circumstances of finding); furniture or other equipment suitable for use in the Library, Stock or Students' Rooms. The County Archivist, Surrey Record Office, County Hall, Kingston upon Thames, and the Curator-Archivist, Guildford Muniment Room, Castle Arch, Guildford, welcome information about records relating to Surrey, including manorial documents, estate and other accounts, title deeds, maps and plans, letters, and family business records, and are pleased to accept them from owners and custodians, either as gifts or on deposit.

Articles and Notes for Publication : The Honorary Editor is collecting material for forthcoming Volumes. Now that the Volume appears annually there is no accumulation of unpublished material and the Editor will be glad to consider papers and notes. These should be typed and as free from error as possible. Corrections and alterations, especially once such articles have been set up and are in proof stage, add materially to the cost of production.

Excavations: Members who wish to assist should respond to the notices in the Bulletin. A wide variety of skills is required, including surveying, drawing, washing finds, etc., as well as the hard work of digging. Institutions on the list may normally nominate one person for this. These restrictions are necessary on some sites, because the number of volunteers often exceeds the number which can be accommodated on a site of limited area, but larger sites of more general character are advertised in the C.B.A. Calendar of Excavations, and on these any volunteer is welcomed. Members should enquire in advance whether any special equipment is needed, but should, in any case, always bring a pointing trowel.

The Surrey Record Society was founded in 1913 for the sole purpose of publishing editions of Surrey records. Members who use these publications in the course of their historical and archæological searches are asked to assist the work of the sister society by becoming members. The subscription is £2 a year. Further details may be obtained from the Hon. Secretary at Castle Arch.

All Communications should be addressed to the appropriate officer of the Society at Castle Arch, Guildford, except that letters relating to Visits should be sent to the Hon. Visits Secretary, Elyots, Minster Road, Godalming.

SURREY ARCHÆOLOGICAL SOCIETY

REVENUE ACCOUNT FOR THE

Year to 31st

Dec., 1965

£	£	£ s. d.	£ s. d.	£ s. d.
70	Castle Arch Rent, etc. ...			75 9 3
49	Excavations Expenses ...			104 10 11
40	Library Books ...			70 9 4
	<i>Collections:</i>			
	Deficit on Volume 62 ...	290 18 3		
27	Less C.B.A. Donation ...	75 0 0		
		215 18 3		
900	Further Provision Vol. 63		400 0 0	
—	Provision Volume 64 ...		400 0 0	
927			1015 18 3	
130	Visits and Lectures Expenditure ...		85 2 0	
121	Less Receipts ...		80 0 6	
9			5 1 6	
107	Symposium Expenditure ...		63 13 0	
72	Less Receipts ...		25 6 6	
35			38 6 6	
304	Bulletin Expenses ...		366 14 10	
106	Secretarial Expenses ...		129 17 6	
214	Printing and Stationery ...		181 15 4	
70	Postages ...		58 12 1	
18	Sundry Expenses ...		19 15 1	
52	Subscriptions to Allied Societies ...		52 13 6	
			£2119 4 1	
	£1894			

CAPITAL ACCOUNT

£		£ s. d.
—	Fire Extinguishers ...	18 7 6
60	Compensation Returned ...	— — —
35	Cost of Printing Revised Rules ...	— — —
471	Adverse Balance for the Year ...	121 1 1
		139 8 7
566	Balance carried to Balance Sheet ...	2712 10 10
2782		£2851 19 5
	£3348	

SURREY ARCHÆOLOGICAL SOCIETY

YEAR ENDED 31st DECEMBER, 1966

Year to 31st

Dec., 1965

			<i>£</i>	<i>s.</i>	<i>d.</i>	<i>£</i>	<i>s.</i>	<i>d.</i>
	948	Members' Subscriptions, Current Year	1529	19	0			
	8	Members' Subscriptions, Arrears ...	24	14	7			
	58	Tax Recovered from Covenants ...	68	11	2			
1014	—		—	—	—	1623	4	9
	269	Interest on Investments and Deposits ...	200	9	8			
	11	Margary Fund—Net Balance ...	—	—	—			
280	—		—	—	—	200	9	8
	226	Sales of Publications ...	229	15	7			
	97	Less Expenditure thereon ...	55	7	0			
129	—		—	—	—	174	8	7
						1998	3	0
1423						121	1	1
471		Adverse Balance for the Year ...						

£1894

£2119 4 1

CAPITAL ACCOUNT

<i>£</i>		<i>£</i>	<i>s.</i>	<i>d.</i>
3211	Brought forward 1st January, 1966 ...	2782	1	5
47	Entrance Fees ...	59	5	0
10	Donations ...	10	13	0
80	Life Subscriptions ...	—	—	—

£3348

£2851 19 5

SURREY ARCHÆOLOGICAL SOCIETY

BALANCE SHEET AS

31st Dec.,
1965
£

		£	s.	d.	£	s.	d.
	<i>Capital Account</i>						
2782	Balance as per Account						
	Annexed				2712		10 10
	<i>The Margary Fund</i>						
	Balance as at 1st January, 1966				7452		0 0
	Interest on Conversion Stock	363		0 0			
7452	Interest on Deposit Account	77		7 0			
					440		7 0
					7892		7 0
	<i>Provision for Cost of Collections</i>						
	Volume 63				1300		0 0
1700	Volume 64				400		0 0
							1700 0 0

- NOTES: 1. The Current Market Value (February, 1967) of the Securities held by the Society was, on Investment Account £3,660, and on Margary Fund Account £5,974.
2. The Balance Sheet excludes the value of the Society's Exhibits, Books, Furniture and Equipment.
3. For Insurance purposes, the Society's Library Books, Maps, Prints and Collections were last valued in October, 1965, at £8,533.

DENYS J. COLEY, *Chartered Accountant,*
Honorary Treasurer.

£11934

£12304 17 10

SURREY ARCHÆOLOGICAL SOCIETY

AT 31st DECEMBER, 1966

31st Dec., 1965

£	£	£	s.	d.	£	s.	d.	£	s.	d.
		<i>Investments at Cost</i>								
		£1000	4½%	Defence Bonds	1000	0	0			
3568		£2800	5%	Conversion Stock 1971	2567	17	0			
								3567	17	0
		<i>Investments on Margary Fund per contra</i>								
5999		£6050	6%	Conversion Stock 1972						
				at cost	5998	16	5			
7452	1453			Trustee Savings Bank Special Deposit	1893	10	7			
								7892	7	0
		<i>Current Assets less Liabilities</i>								
872		Cash at Bank on Current and Deposit Account			895	1	8			
	13	Cash in Hand			13	3	8			
885					908	5	4			
	78	Debtors and Debit Balance								
963	£				908	5	4			
		37		Less Subscriptions paid in advance	14	7	0			
	49	12		Provisions for Current Expenses	49	4	6	63	11	6
914	—	—						844	13	10

£11934

£12304 17 10

Report of the Auditor to the Members of the Surrey Archæological Society

I have examined the Revenue Account and the above Balance Sheet of the Surrey Archæological Society together with the books and vouchers presented to me, and I have verified the assets to the best of my ability. In my opinion, these accounts correctly set forth the position of the Society's finances.

A. A. WYLIE,

Chartered Accountant, Honorary Auditor.

“Winton,” 46, London Road, Guildford.
11th March, 1967.

