

EXCAVATIONS NEAR MERTON PRIORY

1962-3

BY

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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

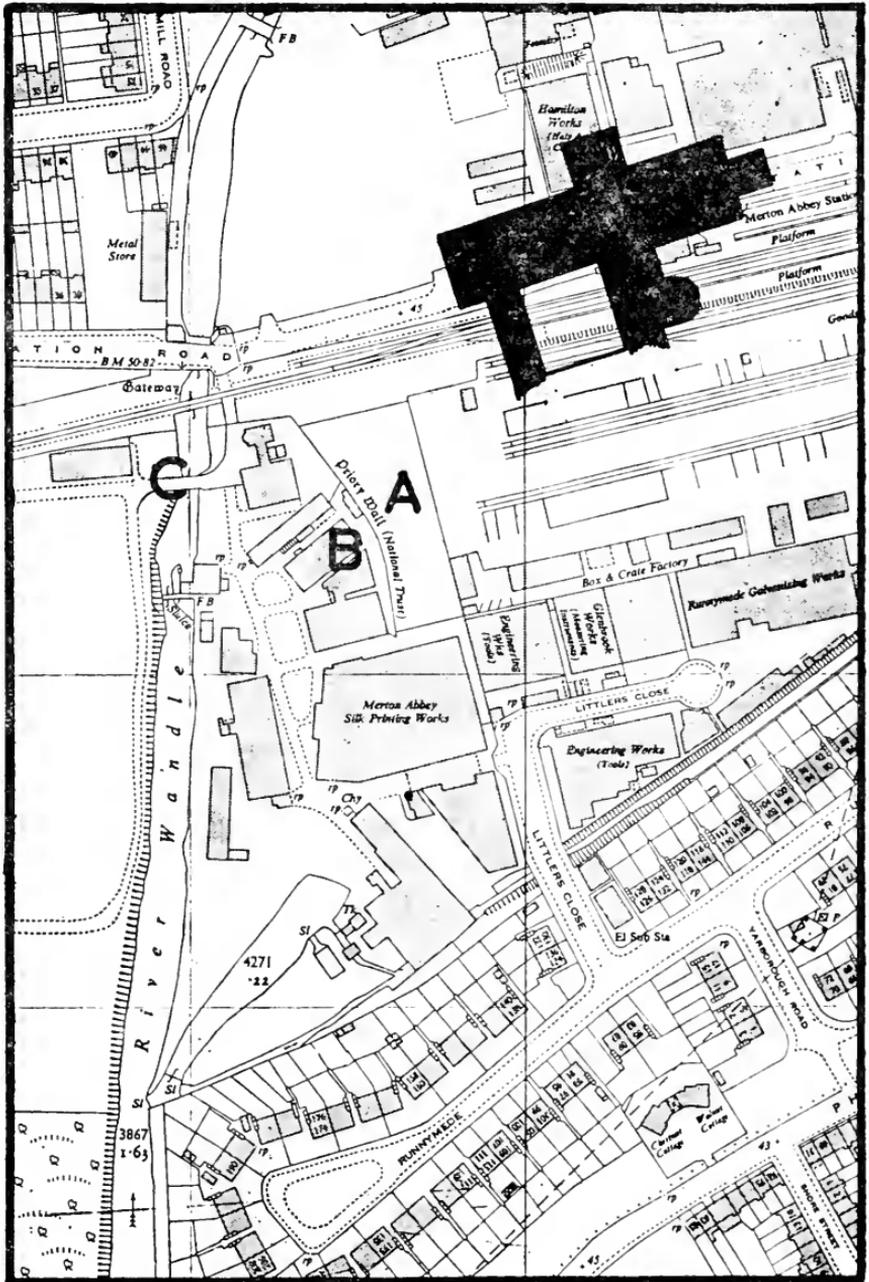
The site of the Augustinian Priory of St. Mary, Merton, is now largely covered by road, railway and factory. Excavations in 1921-2² disclosed the plan of the church, chapter house and cloisters, much of which lie beneath Station Road and adjacent railway property. Between the factories surrounding the 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

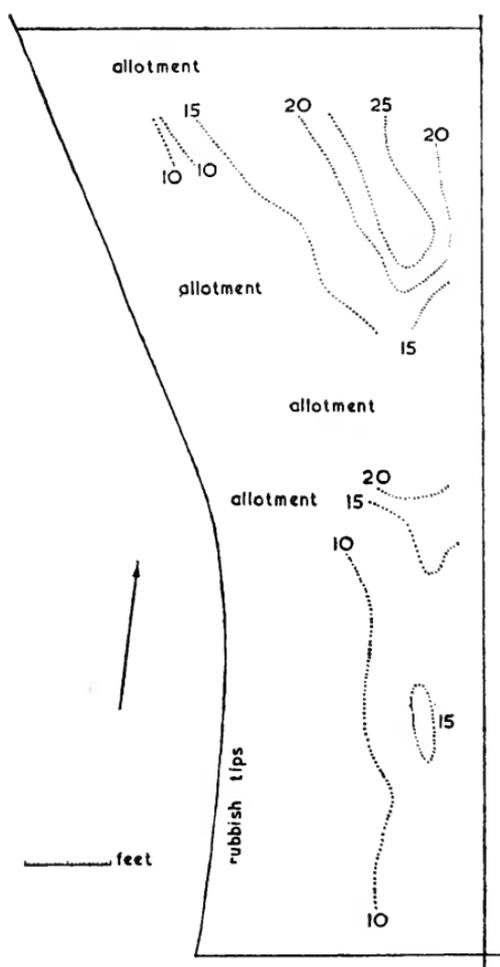


FIG. 2.—ISOPSEPHOGRAPH (RESISTIVITY 'CONTOUR PLAN') OF ALLOTMENT AREA.
Units of resistivity—arbitrary.

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

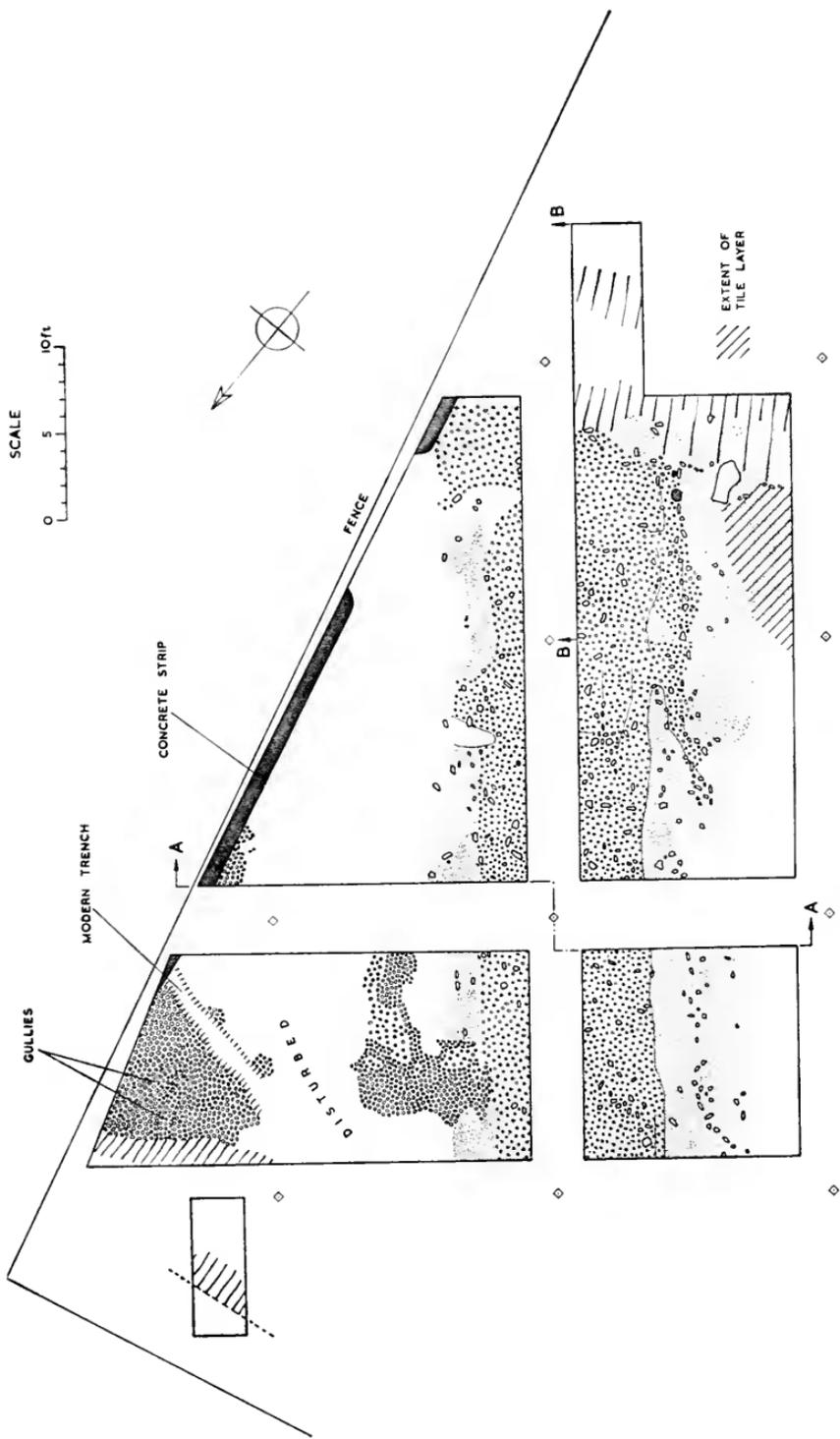


FIG. 3.—PLAN OF EXCAVATIONS, 1962-3.

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.

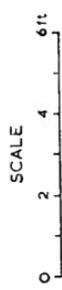
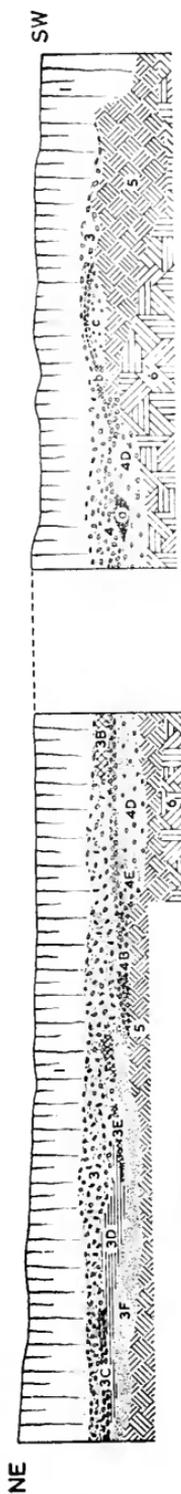


Fig. 4. Section A-A across roadway

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

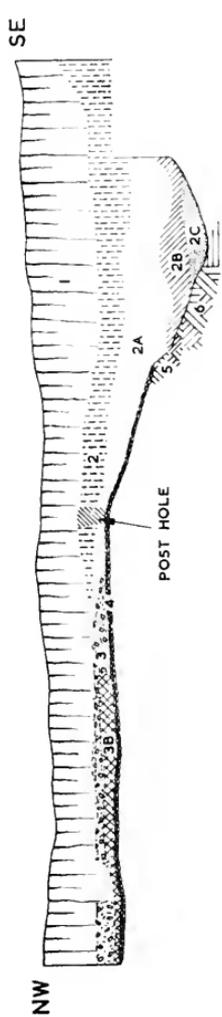


Fig. 5. Section B-B of southern irrigation ditch

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 chequy, 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

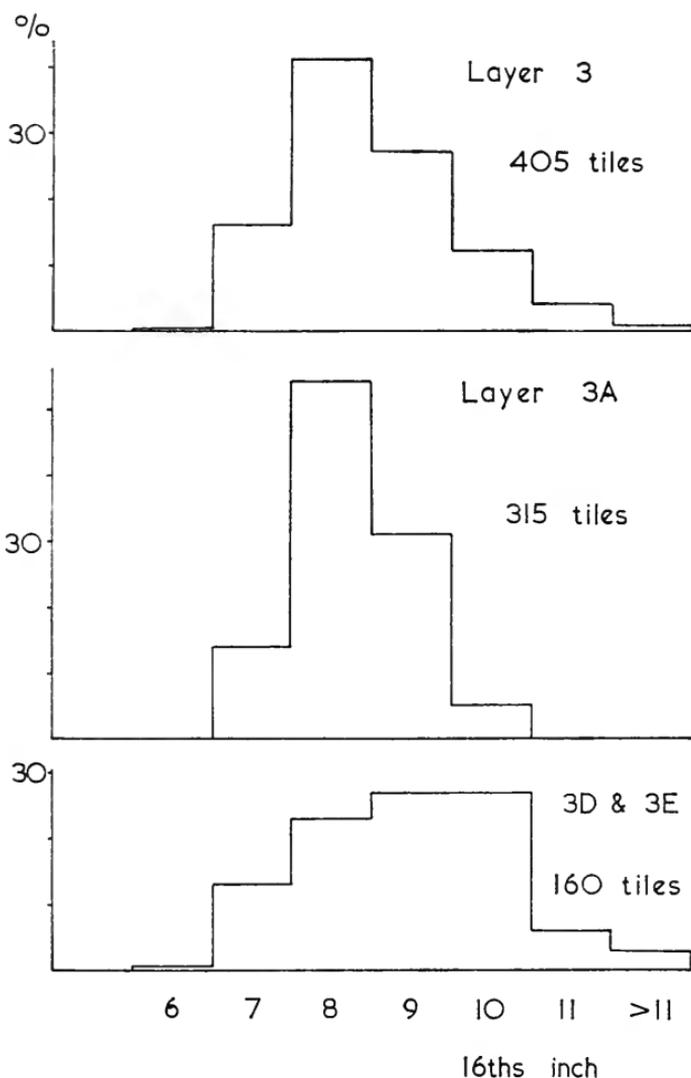


FIG. 7.—HISTOGRAMS OF ROOF-TILE THICKNESSES.

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 3½ 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. 2¾ 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 4½ in. by ?. Light red. From destruction layer.
 77. 2 in. by 4½ in. by ?. Dark purplish red. From destruction layer.
 78. 2¼ in. by 3⅞ in. by ?. Dark purplish red. From destruction layer.
 79. 1¾ 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 Patchesham, 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.

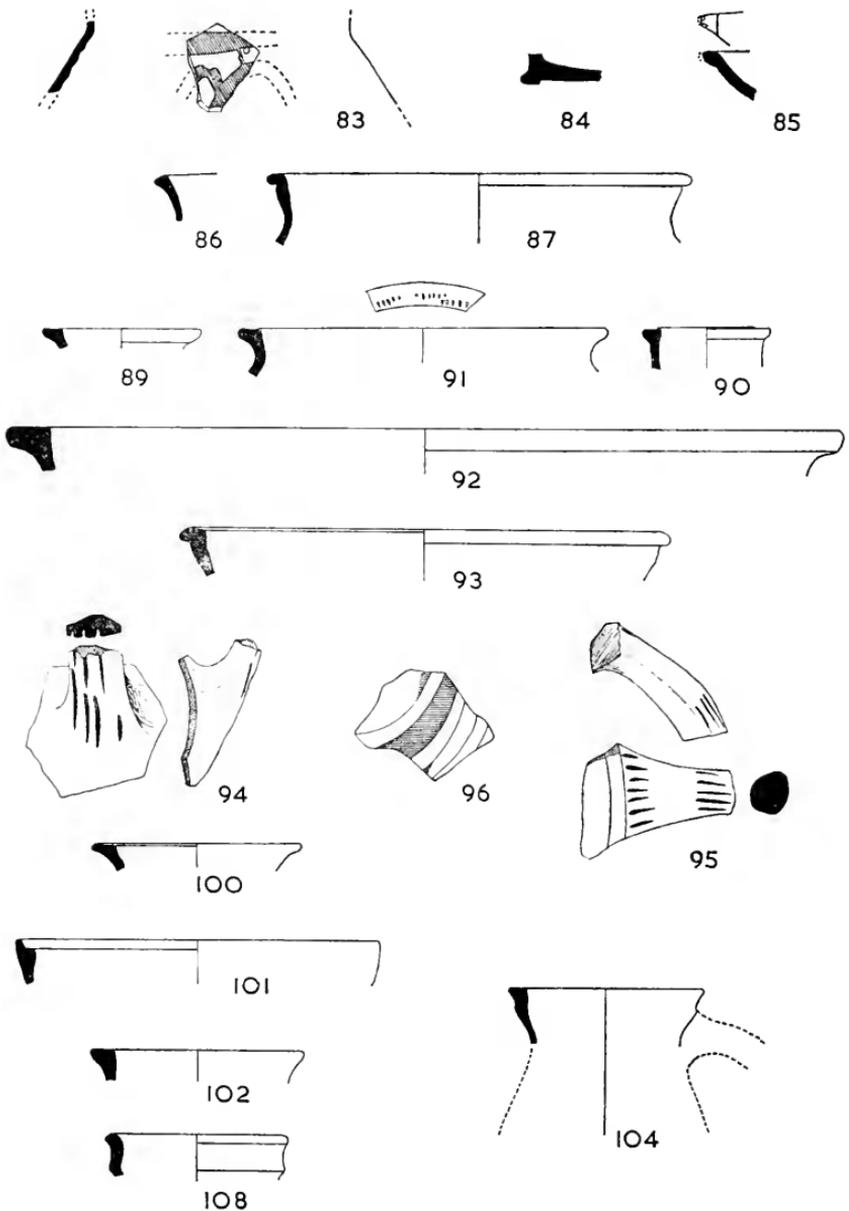


FIG. 8.—POTTERY. (4)

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 Limsfield 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 Limsfield 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 Limsfield. The ware found at Merton was almost certainly manufactured somewhere in East Surrey or West Kent. Both Limsfield 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.

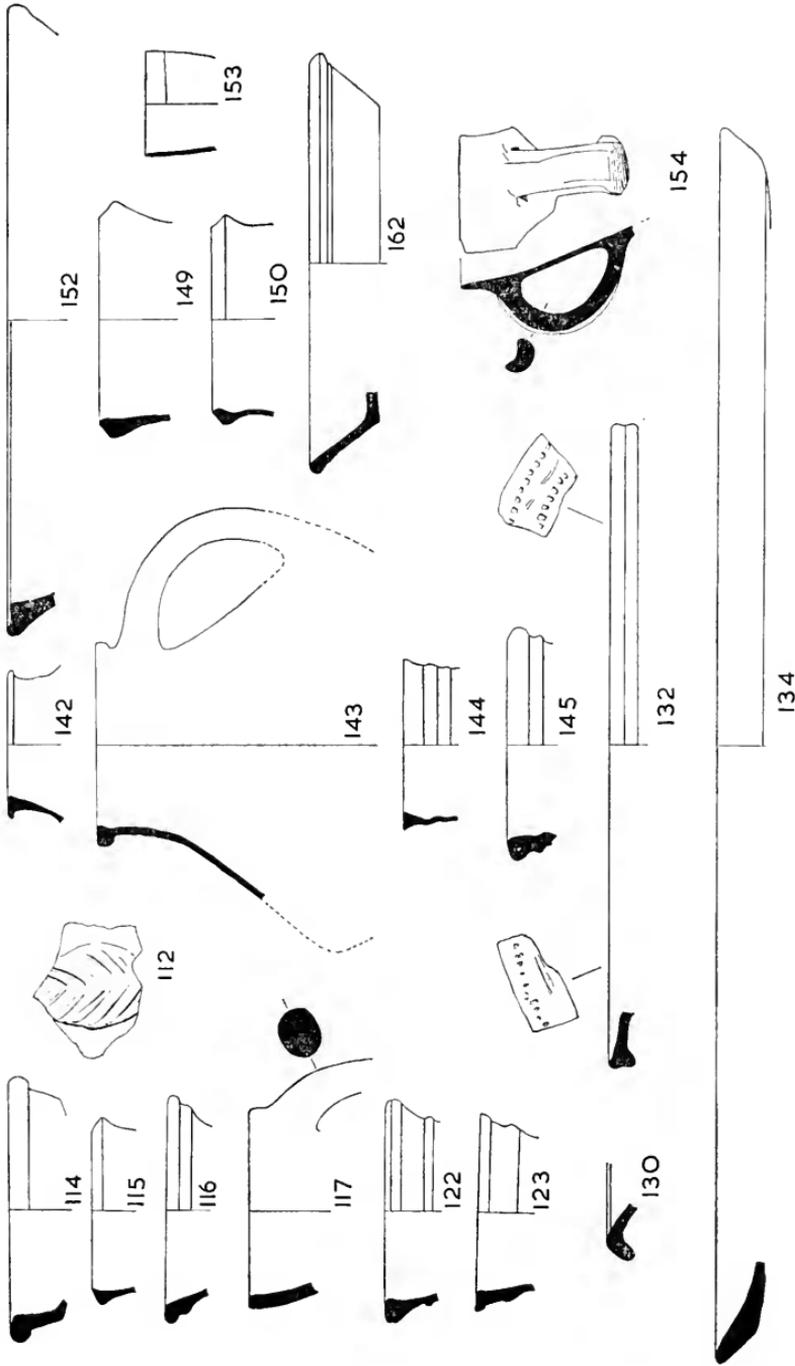


FIG. 9.—POTTERY. (4)

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 Threadneedle 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 oxidation 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 Kaeren 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.

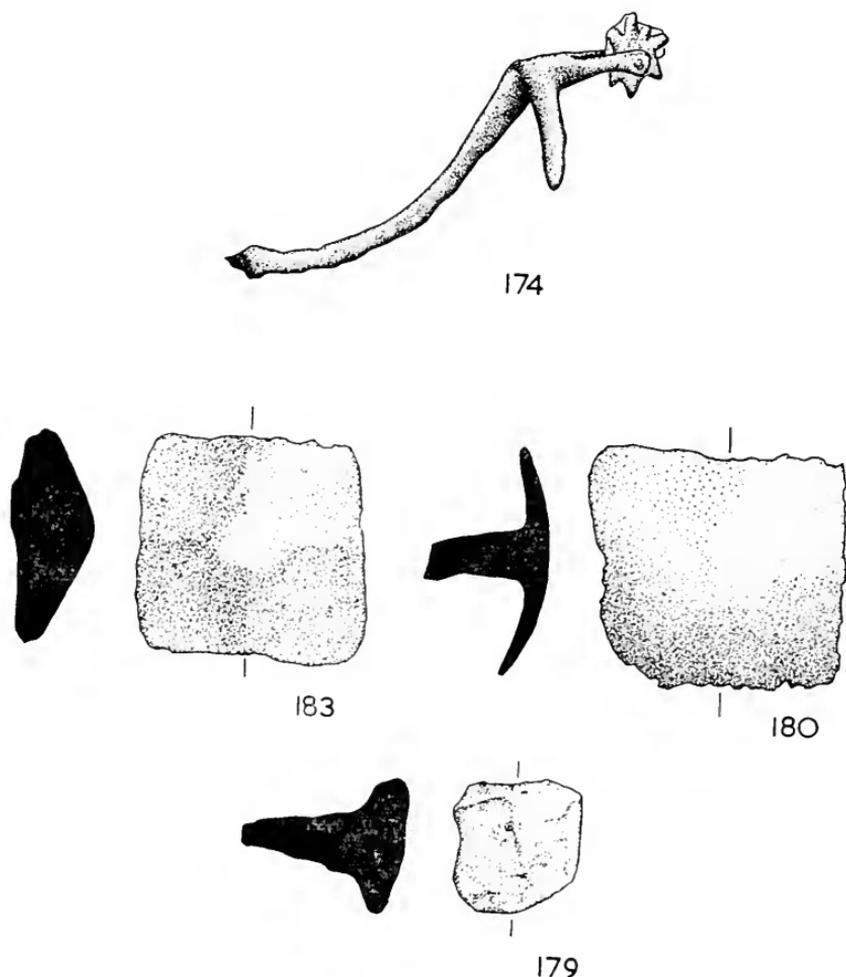
GLASS

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. $2\frac{1}{2}$ 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. $2\frac{1}{2}$ 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.

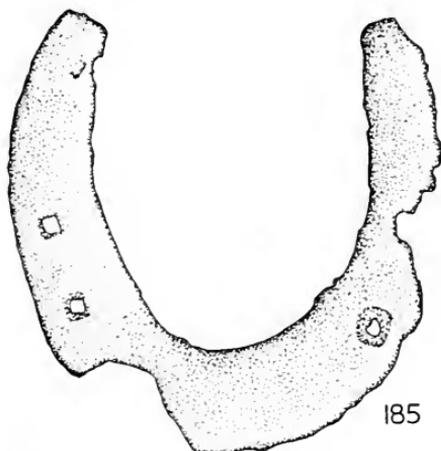
⁵⁶ *Ibid.*, 95, with refs.



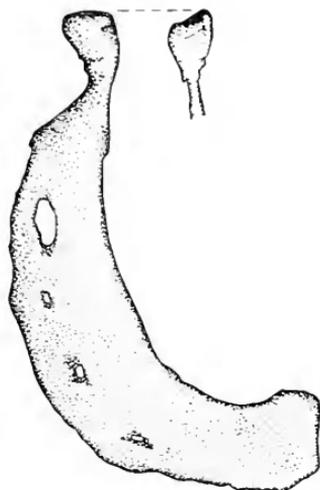
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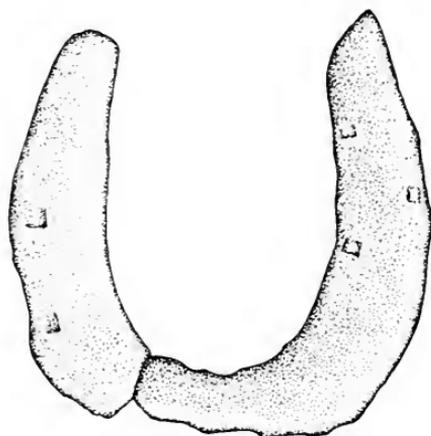
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185



187



186

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 6½. 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 1⅛ in. to 1¼ in. From destruction layer.

196. Threading needle made of ½ in. ribbon twisted together with a loop at one end, pointed at the other, the loop is very worn, 1⅜ 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 $\frac{1}{2}$ 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 *punctilus*.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	34+	6 op.			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> (frgmts)		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.), *Planorbis cornutus* (L.), *Planorbis vortex* (L.), *P. leucostoma* Millet, *Segmentina complanata* (L.) (deadshells), *Oxychilus alliarius* (Müller), *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. mlium* 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>Euconulus 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	Abund- ant	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				