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Department of
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*Transactions of the
London & Middlesex
Archaeological Society*

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London & Middlesex Archaeological Society

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EDITOR'S NOTES

The Editorial Sub-Committee will be glad to consider papers submitted for publication in *Transactions*. Contributors are asked to note that:

- (i) Papers should be typed in double spacing, on one side of the paper. In general form, and in points of detail such as abbreviations, quotations, and references, papers should conform as far as possible to the usual style of *Transactions*.
- (ii) All papers, except the briefest, should begin with a summary of their aims, main points, and conclusions.
- (iii) Line drawings should be in Indian ink on good quality white board. Lines and lettering should be bold enough to admit of any necessary reduction. Where required a scale should be included.
- (iv) Photostat copies are seldom suitable for reproduction. When photographs are supplied, they should be of the highest possible quality, and have a glazed finish.
- (v) Full details of 'House Rules' are obtainable from the Editor on request.

The Editor takes this opportunity of thanking contributors for their support and co-operation, which are much valued.

London & Middlesex Archaeological Society

115TH ANNUAL REPORT OF THE COUNCIL FOR THE YEAR ENDING
30TH SEPTEMBER, 1970.

There were fifteen meetings including lectures on 24th October: Emergency Excavations in Kent, by B. J. Philp, A.C.C.S.; 21st November: Pate's Manor, Bedfont, by F. Clive Ross, J.P.; 12th December: Kennington Palace, by G. J. Dawson, B.A.; 23rd January, 1970: Annual General Meeting and Presidential Address, Churches and Chapels of St. Marylebone; 13th February: The Picture Collection of the Guildhall Art Gallery, by J. L. Howgego, B.A., A.L.A.; 13th March: Excavations in the Tower of London, by B. K. Davison, B.A.; 17th April: The Anglo-Saxon Cathedral at Winchester, by Martin Biddle, M.A., F.S.A.; and visits on 4th October: West Drayton Local History Exhibition; 18th October: St. Bride's Church; 6th December: British Museum; 21st February: Joint meeting with the Historical Society of the City Literary Institute, Timekeeping in History, by C. A. Osborne, F.B.H.I.; 25th April: Tour of City; 23rd May: West Ham and Abbey Mills Pumping Stations; 27th June: whole day visit to Salisbury; 26th September: Eton and Stoke Poges.

The usual two Conferences were held and were well attended. The Local History Conference was held on 15th November, the principal speaker being Francis Steer, M.A., F.S.A., on Local Historical Studies since 1939. The Archaeological Conference was held on 14th March and speakers reported on recent excavations in Southwark, the City of London and East London. The Stow Service was held at St. Andrew Undershaft on 15th April and the address was given by Miss M. B. Honeybourne, M.A., F.S.A. The Pepys Service was held at St. Olave, Hart Street, on 13th May and the address was given by Sir Martin Flett.

Transactions Vol. XXII pt. 2 was issued as well as three numbers of the News Letter.

Membership at 1st October, 1969, was 562 and at 30th September, 1970 was 542 made up as follows: Life members 47; Honorary members 7; Student members 14; Junior members 24; Annual members 450. There are 37 Affiliated Societies.

It is regretted that the Society's library is temporarily inaccessible owing to building work in progress at Bishopsgate Institute which may take several months to complete. A catalogue of the books is now in preparation.

The Society's accounts for the year show a surplus similar to that achieved in the previous year. The substantial expenditure which was anticipated in 1969/70 on additional publication is now expected to fall into 1970/71 and it is likely that a deficit in the latter year will absorb the current surplus. Our financial position is stronger now than it has been for many years and our thanks go to all those members and benefactors who have made this possible.

The Council would again like to express its appreciation of the services of its honorary officers.

By direction of the Council.

S. W. HOWARD, M.C., F.I.B.,
Chairman of the Council.

E. E. F. SMITH,
Honorary Secretary.

LONDON & MIDDLESEX ARCHAEOLOGICAL SOCIETY

BALANCE SHEET as at 30th September, 1970

		LIABILITIES		ASSETS	
1969	1970	1969	1970	1969	1970
£	£	£	£	£	£
				Equipment	Cost
		Accumulated Funds:		Projector -	119
		Subscriptions compounded	664	Proton magnetometer	150
		General Fund—		Library shelving	30
		Balance at 30.9.69	262		8
297		Surplus for the year 1969-70	291		20
257		Committee's funds unspent	—		30
		Proceeds of sale of library books	45		22
					£299
554	598				£227
					£72
		Less:			
254		Deficits of earlier years	—	Investments at Cost:	Market
38		Rent adjustment	—	£949 12 1 4% Consols	value
				£100 0 0 5½% National	413
262	598			Development Bonds	689
				£110 14 3 6¼% Treasury	100
	1,262			Loan 1976	107
919					100
					889
				(1969 £617)	£620
57	69	Schools Section:		Sundry Debtors	—
12	3	Balance 30.9.69	69	Bank and Cash Balances	—
		Subscriptions received	—		82
100	100	G. E. Eades Memorial Fund	—		758
4	11	Add: accumulated interest	11		
104	111				
		Grants Unexpended:			
226	220	Future publications	—		
	30	Archaeological projects	—		
226	250	Sundry Creditors	—		
193	106				
	£1,801				
	£1,511				
	£1,801				

Notes: (1) The Society also holds funds for other bodies as Trustee which amounted at 30.9.70 to £1,527 (1969 £427).

(2) No value has been attributed in these accounts to the Society's library, stock of publications or sundry equipment.

We have examined the above Balance Sheet and attached Income and Expenditure Account with the books and vouchers of the Society as submitted by the Honorary Treasurer. We have verified the Bank Balances and Securities with the Society's Bankers.

In our opinion and to the best of our knowledge, these Accounts together with the Notes, are correct and in accordance with the books and records of the Society.

(Signed) O. T. ALLEN, F.C.A.
E. H. SPELLEN
Honorary Auditors.

1st December, 1970.

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ARCHAEOLOGICAL FINDS IN THE CITY OF LONDON 1967-70

BY PETER MARSDEN

Guildhall Museum

This is an account of some archaeological investigations in the City of London between 1967-70. I am indebted to those people who have helped in the excavations, and especially to Mr. R. Inman who supervised the work on the Blackfriars wreck II; to Mrs. V. Fenwick who supervised the initial part of the excavation of Blackfriars wreck III; to Mr. H. Chapman of Guildhall Museum who assisted in the recovery of the most important timbers of Blackfriars III and worked in the bed of the Thames for 30 hours continuously with hardly a break; to Mr. J. Clark of Guildhall Museum who not only assisted on the excavation of Blackfriars wreck III, but also drew the dagger published here (Fig. 8), and to members of the City of London Archaeological Society who assisted with the investigation of wrecks II, III, and on the site of the medieval London Bridge. Thanks are also due to the City Engineer, Mr. H. King, and his colleague Mr. Bromfield; to Messrs. FitzPatrick & Son Ltd., contractor, and to the Port of London Authority.

The watery flavour of this paper is entirely accidental and is caused by the rebuilding of London Bridge and part of the City's waterfront near Blackfriars. Two important investigations took place on land during this period but the reports on them have not yet been completed.

Reference is made in this paper to groups of excavated objects which have been recorded in the Museum Excavation Register (e.g. E.R. 1279). These groups comprise the dating evidence for archaeological features described in this report but, owing to a lack of time and staff, none of them can be drawn at present. It is hoped that these groups will be published eventually, but meanwhile they are available for study on application to the Director, Guildhall Museum, Gillett House, 55 Basinghall Street, London, EC2V 5DT.

SITE I. BLACKFRIARS EMBANKMENT SCHEME, 1969-70

A series of coffer-dams were constructed in the bed of the Thames to facilitate the building of a new embankment wall from off the Mermaid Theatre to just east of Trig Lane. These coffer-dams, each just over 20 feet wide, were a continuation of the series in which in 1963 a Romano-British shipwreck was found (P. Marsden, "A Roman ship from Blackfriars, London", published by the Guildhall Museum).

The recent excavations within the coffer-dams were carried out to a deep level, below that of the Roman period, and three more wrecks were found (Fig. 2), as well as many extremely interesting objects. As these wrecks were all found fairly close together and in the proximity of Blackfriars, they have been given this nomenclature:

Blackfriars wreck I, found in 1963, dated to the 2nd century A.D.

Blackfriars wreck II, found in 1969, dated to the 17th century A.D.

Blackfriars wreck III, found in 1970, dated to the 15th century, A.D.

Blackfriars wreck IV, found in 1970, dated to the 15th century A.D.

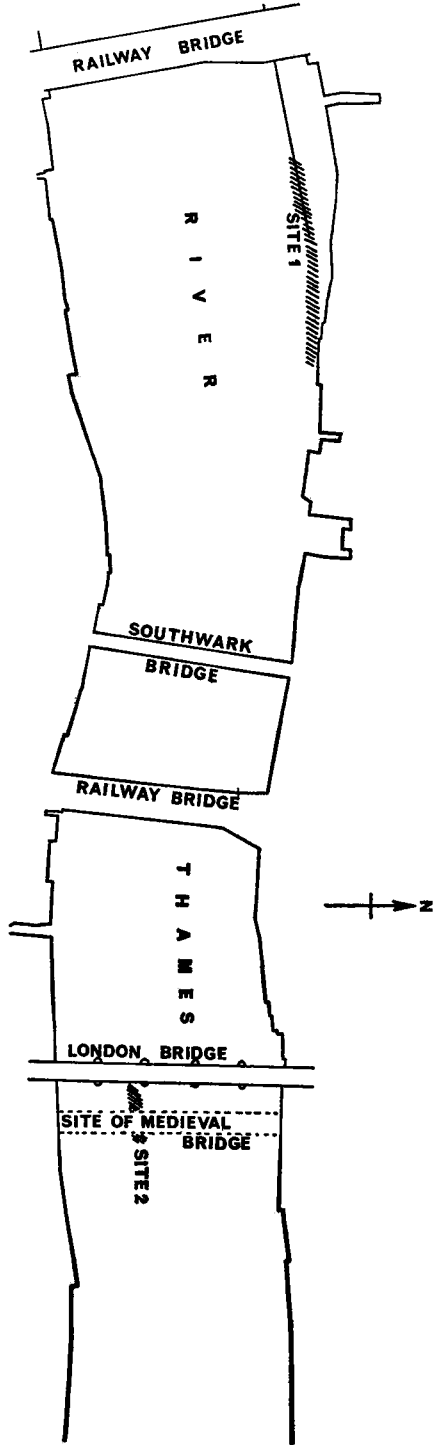


Fig. 1
Sites investigated in the River Thames in 1967-70

BLACKFRIARS WRECK II

This 17th-century wreck was found on 5th June, 1969, and during my absence, Mr. R. Inman directed the excavation of the vessel during one weekend, and Mr. R. Merrifield took a comprehensive photographic record. The excavation uncovered the inner planking which was recorded, and Mr. Inman managed to recover a sufficient quantity of objects from within the boat to enable it to be dated. Unfortunately, there was not sufficient time to fully investigate the construction of the boat. On my return a small portion of the boat still remained *in situ*, but the timbers from the rest of the vessel lay torn apart and scattered around the coffer-dam. These were collected together and the significant pieces were drawn. I am grateful to Mr. Inman for making his excellent record of the boat, and to Mr. Merrifield for his extremely valuable photographic coverage before the wreck was destroyed. I am also grateful to Mr. B. Bathe of the Science Museum for his help and advice during the preparation of this paper.

Site of the wreck

The wreck lay roughly east-west in the bed of the Thames several feet below the river bed, and was surrounded by black muddy gravel. Its bottom lay about 3 metres below Ordnance Datum, and its position east of Blackfriars Bridge is shown on Fig. 2.

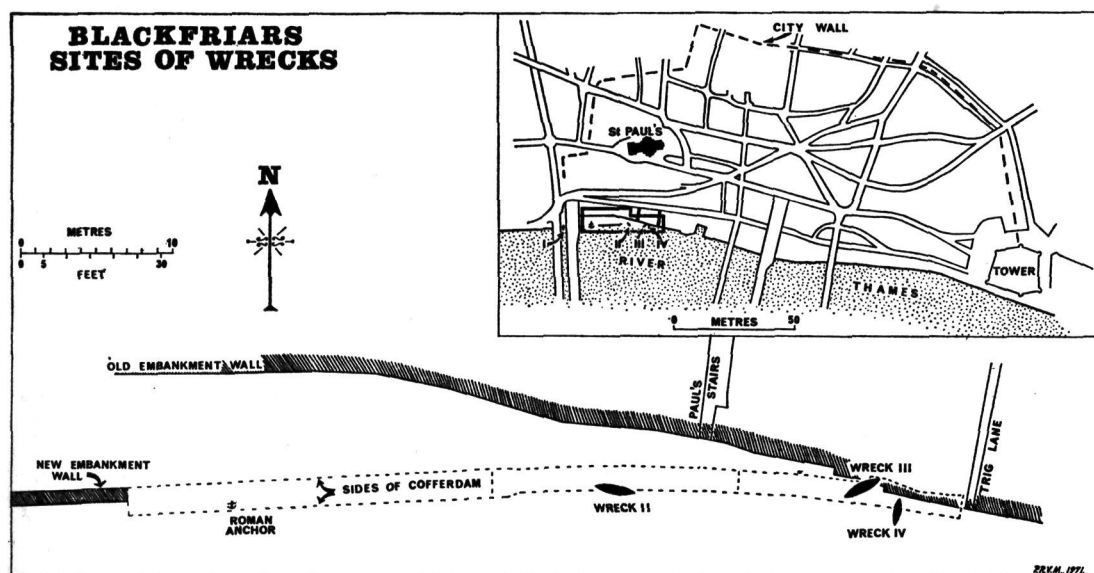


Fig. 2
Site of wrecks in the Thames east of Blackfriars. The concentration of sixteenth-century knives and daggers was between wrecks II and III.

The boat (Fig. 3).

A considerable part of the west end of the boat had been destroyed before the vessel was recognised, and part of one side lay outside the coffer-dam and may not have been disturbed by the excavations (Plate 1). The east end of the boat was sharp, and if the missing west end had also been sharp the boat may have been about 14 metres long. It was clinker

BLACKFRIARS WRECK II

SEVENTEENTH CENTURY

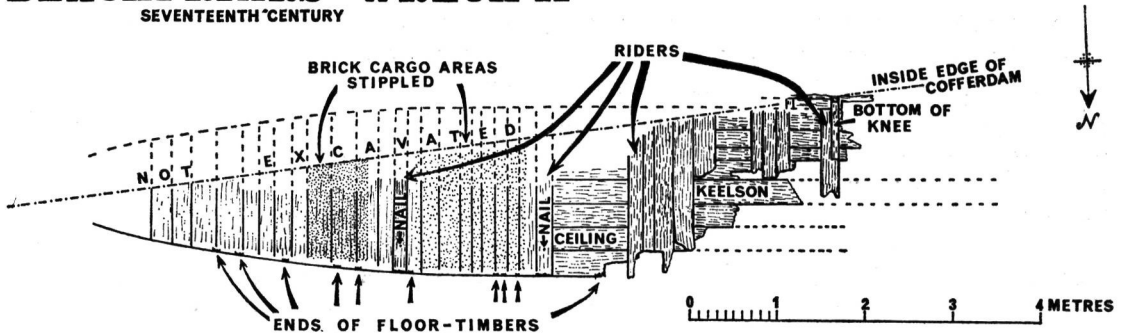


Fig. 3
Plan of the seventeenth-century Blackfriars wreck II.

built, flat-bottomed, and each side met the flat bottom to form a chine (Fig. 4). The sides had been almost completely destroyed, so it is impossible to judge the beam of the vessel. The maximum distance between the chines, however, was just over 2 metres.

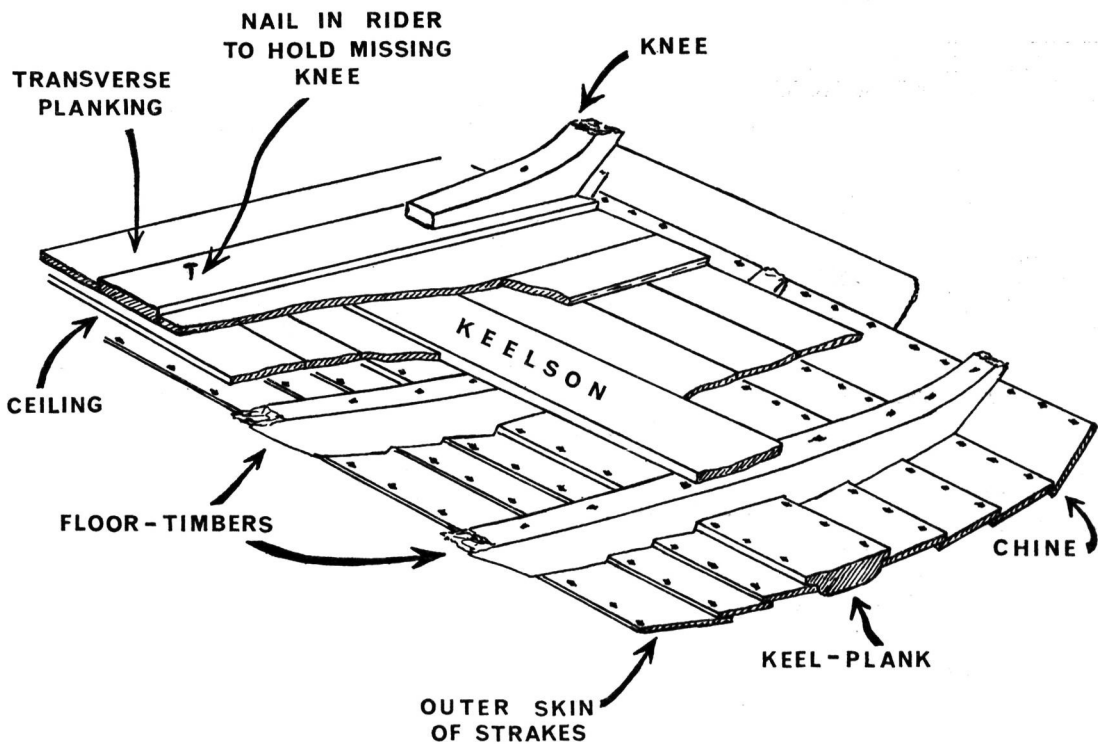


Fig. 4
Drawing to illustrate the construction of wreck II.

The keel-plank was of elm (*Ulmus* sp.), 17 cms. wide and 5 cms. thick. It was therefore little more than an extra thick plank. This keel-plank was only studied in its fragmented

state and not *in situ*. The garboard strakes fitted into rabbets on each side of the keel-plank and were held in place by iron rivets spaced about 9 cms. apart. The joint was caulked with an unidentifiable plant-like material.

The floor-timbers were small, between 4 and 7 cms. wide and roughly 5 cms. deep, and were notched on their undersides to accommodate the keel-plank and the overlapping strakes. Because the construction of this part of the boat was not examined *in situ* it is difficult to judge the spacing of the floor-timbers. However, a portion of the keel bore the impression of two floor-timbers 49.5 cms. apart on its upper surface. One of the floor-timbers clearly overlay a rivet holding the garboard strake to the keel, showing that the outer skin of strakes had been built first and that the ribs had been added after. This was the usual method of constructing clinker-built vessels. The floor-timbers have long rivets at the steps in the undersides where the overlap of the strakes must have occurred. The rivets used in this boat are all of the same form but of varying lengths; each comprises an iron nail with a flat head and square shank which is driven through the wood from outside the boat and the point is bent or clenched down over a small diamond-shaped iron rove (Fig. 5, no. 15). The roves had been cut from a strip of iron, as two were found still partly joined together, and each was punched into a domed shape.

A keelson, about 25 cms. wide, ran along the centre of the vessel on top of the floor-timbers, and was held by ordinary iron nails with flat heads and square shanks. On either side there was an inner skin or ceiling of planks, a sample of which has been identified as Pine (probably *Pinus silvestris*). These were laid longitudinally, and on top of them were a large number of transverse planks and riders (Fig. 4, plate 2). The purpose of the transverse planks was evidently to save the bottom of the boat from damage when loading and unloading a cargo of bricks. The riders, however, were thicker than the transverse planks and their primary purpose was evidently to support the lower ends of the side frames. None of the side frames had survived except on the south side where a knee, which may have been the lower end of a side frame, had been attached to the top of a rider by a large iron nail. On the north side of the boat the ends of several riders had similar large nails projecting out of them with the head of each several centimetres above the top of each rider, and clearly these had once held other knees. The spacing of the riders was not very regular but it would seem that 1.70 metres was a rough average measurement. On the south side of the boat the first side strake above the chine was fastened to the knee, but on the north side of the boat this strake was missing. It is interesting that the knee was not directly fastened to the top of the floor-timber, as this would seem to have been a much stronger construction.

The outer skin planking was of Oak (*Quercus robur* type) and 1.5 cms. thick. Although only fragments of the outer skin planking could be studied it is clear that each strake comprised an unknown number of planks which were joined end-wise with a simple overlap scarf of about 15 cms. The outer end of the scarf was secured by an iron rivet centrally placed in the strake, and by a number of small iron nails. The seam was caulked with a felt-like material. The overlapping strakes were held together by iron rivets spaced at intervals of about 7 cms. A small area of the outside of the outer skin of the east end of the boat was recorded *in situ* and was found to be sheathed probably with oak planks about 5 mm. thick. This was fastened by many small iron nails with square shanks, spoon-shaped pointed ends and with curious waisted flat nail heads (see Fig. 5, no. 16).

A careful study of the boat and its dismembered timbers has made it possible to judge the approximate length of the vessel. The small portion of the east end of the boat which

was seen *in situ* was found to be V-shaped in cross section. Many of the floor-timbers saved from the boat generally, however, showed that the vessel had a flat bottom amidships, and a photograph of the surviving west end of the boat shows a curving floor-timber, proving that this part of the vessel was beginning to narrow towards the west end and that the middle of the boat probably lay just west of the cargo area.

No trace of any mast-step was found, but in the conditions under which this boat had to be investigated it would not be surprising if this feature was not detected.

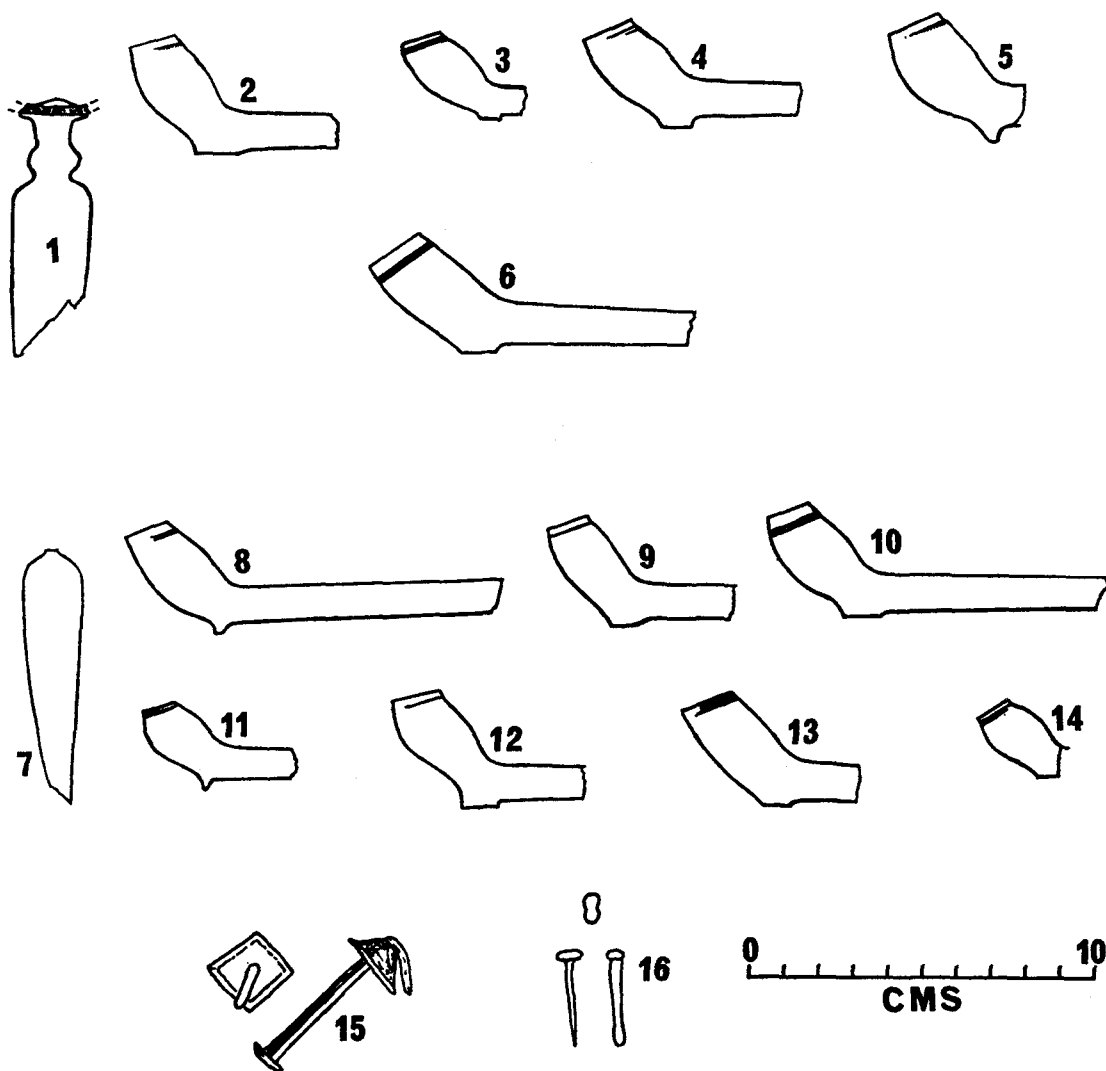


Fig. 5
 Dating evidence for wreck II. Nos. 1-6 from on the bottom of the boat;
 Nos. 7-14 from immediately beneath the boat.



PLATE 1. View from above of the bottom of the seventeenth-century Blackfriars wreck II, after the cargo had been cleared. Scale of feet.

PLATE 2. The longitudinal and transverse planking in the bottom of wreck II, over the floor-timbers.



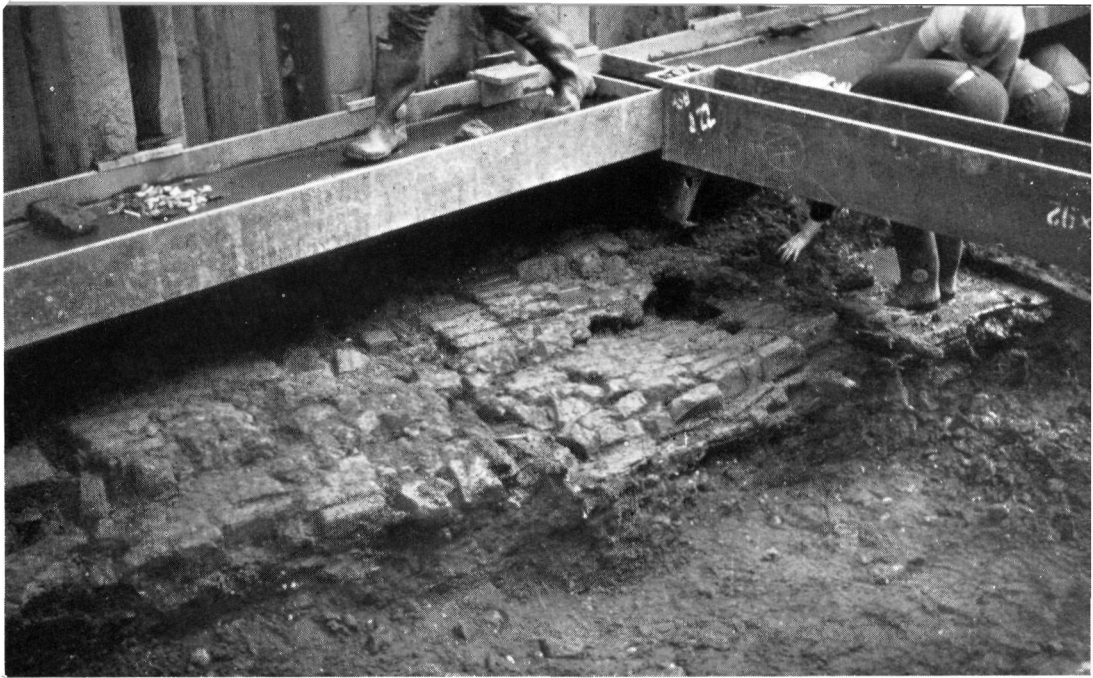


PLATE 3. The brick cargo of wreck II *in situ*.

PLATE 4. View of the fifteenth-century wreck III looking aft. The floor-timbers, mast step and the stringer have all been removed. The sternposts can just be seen in the far distance. Scale of half metres.



The cargo

This flat-bottomed boat was carrying a cargo of red bricks and was evidently a barge. These were carefully laid on top of the transverse planks in two areas, three bricks deep (Plate 3). Each brick was a featureless rectangular block $22\frac{1}{2}$ cm. long, $10\frac{1}{2}$ cm. wide, and $5\frac{1}{2}$ cm. deep. None of the bricks had ever been mortared together so it is likely that they were being brought new from brickworks somewhere to London for building purposes.

Dating evidence

Evidence to date the loss of the boat was recovered from both inside the boat and from the silty gravel beneath the boat. The significant dateable material from inside the boat on the bottom boards comprised a number of clay pipes (Fig. 5, nos. 2-6) of the period 1650-70. Other finds from inside the boat include part of a wine glass stem (Fig. 5, no. 1), sixteen brass pins with twisted wire heads, three small brass pin cases, iron nails, several small lumps of coal (at the east end), and two fragments of brown coarse ware pottery.

From immediately beneath the boat were recovered 25 clay pipe bowls all of the period 1650-70 (Fig. 5, nos. 8-14). Other finds include a broken wine glass stem (Fig. 5, no. 7), parts of a Bellarmine jug with the bottom of a bearded face and a rose medallion, a fragment of black glazed ware, small fragments of buff ware with the pale greenish-yellow glaze which is typical of the 17th century, and several small fragments of brown glazed red coarse ware.

Clearly the boat was wrecked during the third quarter of the 17th century, and it is likely that it was carrying bricks to London for the intensive rebuilding which occurred after the Great Fire of 1666.

Conclusion

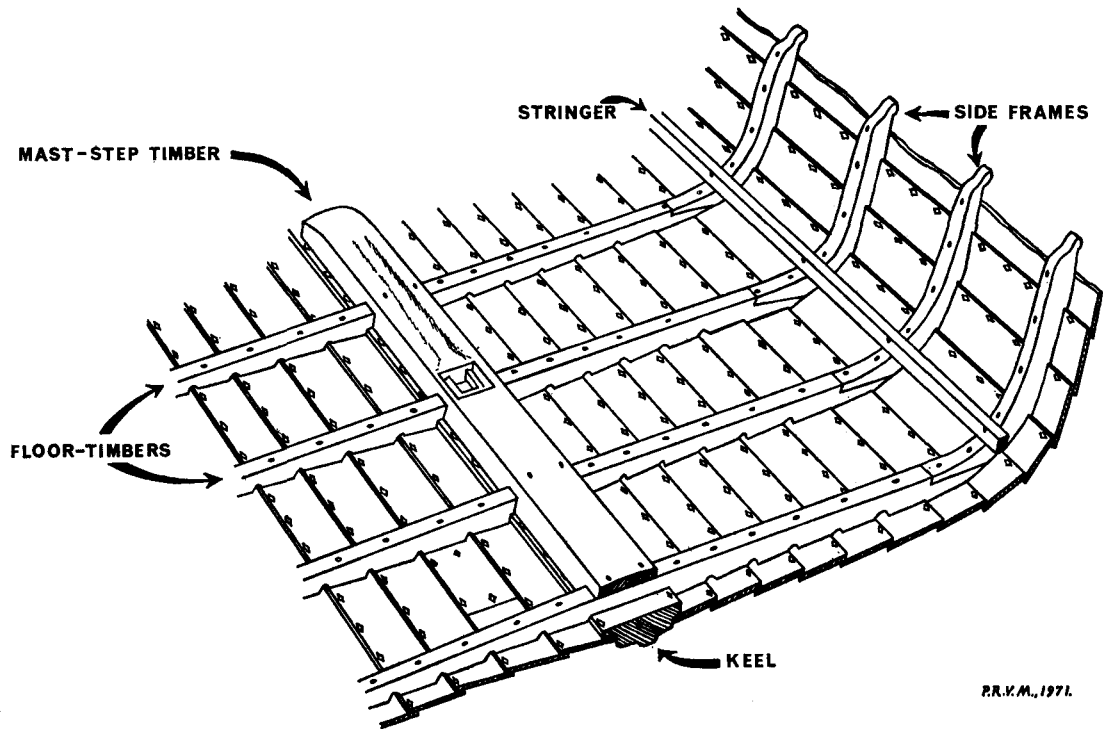
This is the first boat of this period to have been investigated in Britain, and as the documentary records of small craft of this period are almost non-existent, it is a particularly important discovery. The construction of this barge is surprisingly "medieval" in appearance with its clinker construction and plank-like keel, and this shows that our knowledge of shipbuilding is not sufficient for us to be able to date old boats simply by their construction.

BLACKFRIARS WRECK III

This 15th-century wreck was found on 25th November, 1970, and special thanks are due to those who helped on the site, and especially to Mrs. V. Fenwick and Miss A. Evans of the British Museum, Mr. H. Chapman of the Guildhall Museum, and Mr. R. Inman. Thanks are also due to Mr. B. Greenhill, Director of the National Maritime Museum, for providing facilities for cleaning and storage of the most important timbers at very short notice. These timbers, which comprise all of the surviving ribs, the keel, the keelson, the mast-step timber, the stem and sternposts, and some of the planking, were given to the National Maritime Museum in January, 1971.

The boat

A considerable amount of the boat had survived showing that it was originally about 16 metres long, and about 3 metres wide (Plate 4). It had a flat bottom and both ends of the craft were pointed. Its overlapping planks, riveted together, showed that it was clinker built (Fig. 6). Unfortunately the bow had been destroyed during the contractor's excavations prior to the discovery of the wreck, but the junction of the stempost and the keel had



P.R.V.M., 1971.

Fig. 6
Drawing to illustrate the construction of the fifteenth-century Blackfriars wreck III looking aft.

survived. The stern, however, was very well preserved (Plate 5), and the sternpost stood to a height of several feet. Inside, the boat was strengthened by many floor-timbers and side frames, and a stringer fastened to the top of the ribs gave some longitudinal strength. The main longitudinal timber, however, was the keel which, although quite wide, was only a few inches thick, and was really nothing more than a rather thick plank.

The ribs were fastened to the planks by wooden pegs (treenails) at the ends of which had been inserted wooden wedges. On top of the ribs roughly amidships was a longitudinal timber containing a mast-step, showing that the boat was propelled by sail.

Dating evidence

The loss of the boat has been dated by objects lying in the primary sand filling in the bottom of the vessel. It seems likely that most of these had been dumped on the wreck site soon after the boat was lost, but a few objects were probably on board when the vessel sank. The whole collection, which mostly comprises broken pottery and parts of leather shoes, has been provisionally dated to the last quarter of the 15th century. Two small pewter or lead pilgrim badges were also found which date from this period.

The boat was clearly old when lost as its bottom planking had been extensively repaired, and in view of this it is likely that the boat was built during the first half of the 15th century.

A few other interesting objects were found in and around the boat, and amongst these are parts of three wooden bowls, and the blade of an oar.

Was the boat wrecked?

No obvious clue to the cause of the loss of the boat could be found. There were no old holes in its bottom; and its planking, although extensively repaired seemed to be strongly fastened together. Not all of the bottom of the boat had survived, however, due to some destruction by the site contractor in 1970 prior to its presence being detected, and this might have removed the evidence for the loss of this vessel.

That the boat was wrecked, rather than deliberately abandoned due to old age, is suggested by its inconvenient situation close to the medieval waterfront. In that position the wreck would impede the access of other vessels, and it would be a danger to shipping in the Thames.

Purpose of the boat

It was almost impossible to differentiate between the objects which were in the boat when it sank and the rubbish which had been dumped in the Thames on the wreck site soon afterwards. There was no cargo, and no planking on top of the ribs to protect the hull from possible damage caused by loading and unloading a cargo, and this may indicate that the boat was not intended to carry a cargo.

There was, in fact, evidence that it might have been a fishing boat, for on its bottom, and concentrated forward on the starboard side, were nearly 2,000 cylindrical lead weights, each about an inch long and half an inch in diameter. A hole passes longitudinally through each of these, and it seems reasonably certain that they were weights for a fishing net. Two heavier lead weights of different form were also found, one in the forward part of the boat, and one outside the vessel.

Only a brief examination of the finds has yet been made, and it is likely that more definite evidence of the purpose of the boat will be forthcoming when all the finds have been studied in detail.

BLACKFRIARS WRECK IV

This wreck was found a few yards east of Blackfriars Wreck III on 1st December, 1970. A grab had dug through the vessel and a section across it was visible in the side of the hole. Unfortunately this boat was found during the investigation of Blackfriars III and little time could be spared to make anything but the most hurried record of it.

The boat

The boat was clinker-built, and was lying north-south in the coffer-dam. Part of the boat still survives in the river bed south of the new embankment wall. The keel-plank was 41.5 cm. wide and about 10 cm. thick, and the garboard strakes were riveted to rabbets in the sides of the keel. The strakes were 1 cm. thick, and the overlapping strakes were held together by iron rivets similar to those used in Blackfriars III. The method of attaching the strakes to the floor-timber was not established. The underside of the floor-timber did not seem to be notched to accommodate the overlapping strakes, but two limber holes were found cut in the underside of the floor-timber on each side of the keel to allow the flow of bilge water. The boat would seem to have been a small river craft judging by the width of its bottom.

The cargo

Overlying the floor-timber in the section was a spread of irregular lumps of Kentish ragstone, which evidently formed part of the cargo. None of the pieces seen had been shaped, and some were quite large (up to 50 cms. across).

Dating evidence

There was no time to recover any dating evidence from this wreck, and in any case the section in which the boat was exposed was rather dangerous. Nevertheless, it seems that the wreck was of late medieval date as workmen were finding large quantities of 15th-century pottery at about this level in the river bed very close to the wreck.

Comparative levels are a particularly important clue to age as the sands and gravels in which wrecks III and IV lay were deposited by the river and were sufficiently firm not to allow them to subside into the river bed. The level of wreck IV was a little lower than that of wreck III which has been dated to the 15th century.

Purpose of the boat

There are two indications pointing to the purpose of the boat. Firstly the thinness of the strakes, only 1 cm., strongly suggests that this boat was merely a river craft which did not sail at sea; and secondly, the ragstone, which in a boat of this small size must have been a cargo, indicates that the boat was a barge.

IRON ANCHOR

The lower part of an iron anchor (Museum accession no. 25389) was found in 1969, but as the digging was carried out by a mechanical excavator it was not found associated with

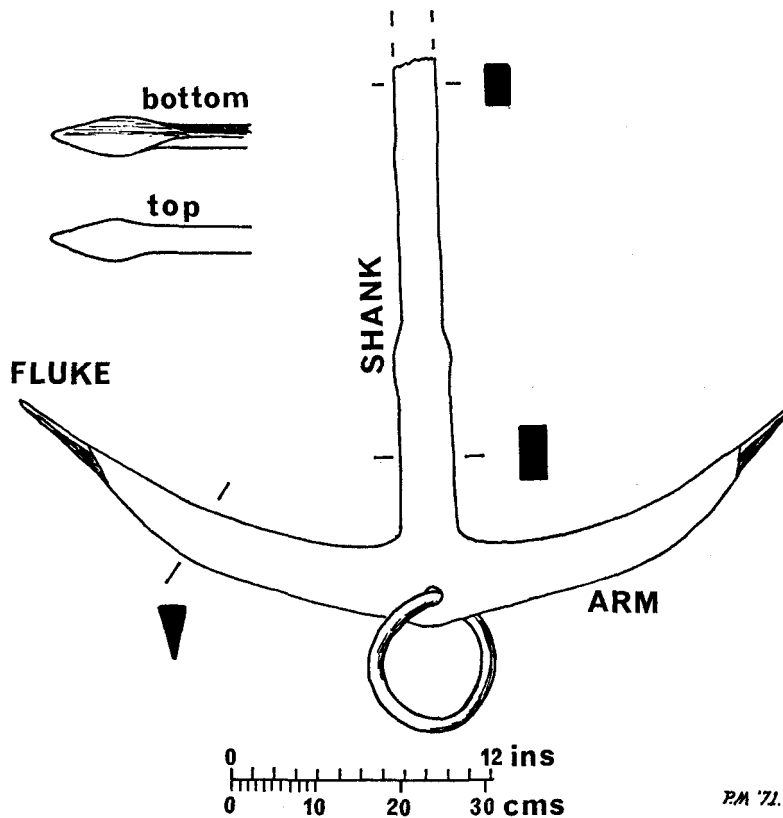


Fig. 7
Iron anchor from the Thames at Blackfriars, probably Roman.

any dating evidence (Fig. 7). From its depth, form, and condition, however, it is clear that the anchor is not of recent date, and is most likely to be Romano-British.

The surface of the anchor had corroded, and this corrosion had fortunately impregnated the surrounding sand and gravel so that it is clear that the anchor was lying in a deposit of clean sand and gravel. Small pieces of wood in the gravel had split open on drying, and a piece of blackened leather had dried biscuit hard. The clean sand and gravel is a particularly significant point, because archaeological observations in that coffer-dam had shown that there are two distinct deposits in the river. The lower comprises a layer of clean sand and gravel, which has been found to contain only Roman objects, and above this is a black silty gravel which contains objects of 15th-century date and later. No deposits belonging to Saxon, Viking or earlier medieval times have been noted and very few objects of those periods have been found despite several attempts to locate deposits belonging to those periods. It therefore seems most likely that the anchor was found in the Roman deposits.

The form of the anchor itself is a useful clue to its date, although it must be remembered that very little is known about the development of the anchor in Northern Europe until recent times. The shank is broken and only the lower half survives. The shank is rectangular in form with a curious swelling close to the crown. The arms are triangular in section, and the crown is pierced for an iron ring. The flukes are pointed and have a flattened triangular cross section.

Features of the anchor can be paralleled in Roman and Viking iron anchors which have a similar form, although an exact parallel cannot be found. Probably the closest parallel in form is the anchor from the great Viking ship found at Oseberg in Norway, and this has arms which are triangular in cross section. The ends of the flukes are broad, however, unlike the London anchor which has pointed flukes.

A feature of the London anchor which may be significant is the curious swelling on two sides of the lower part of the shank. To my knowledge this has only been found on an iron anchor of Roman date from Pompeii; and a similar feature is indicated on a cast taken of a natural concretion-mould of a corroded Roman anchor from the sea bed off the south coast of France, now preserved in the Boreli Museum at Marseilles.

THE KNIVES AND DAGGERS

As the excavations were carried out in the coffer-dams from west to east, a remarkable concentration of mostly 16th-century knives and daggers was found opposite Paul's Stairs, and there seems to be little doubt that the Stairs were used as a point from which they could be thrown. The collection which the Guildhall Museum has acquired from the labourers must be merely a small part of the total number of objects lying in the river bed.

It comprises 25 daggers, seven of which are of the kidney type, and two of the rondel type. An additional kidney dagger in private hands is illustrated here (Fig. 8). It has a damaged wooden handle at the end of which is an iron terminal with a brass wash. The iron blade has been irreparably damaged in antiquity by being chopped on the cutting edge. There are also four quillon daggers, and a fine main-gauche with a decorated blade.

There is also a 14th-century iron sword, 83 cms. long; and the iron and bronze boss from a 16th-century buckler.

The bulk of the group, however, comprises 74 iron knives of many forms and with varied handle terminals such as a horse-shoe (two examples) and a *fleur-de-lys*.

A curious feature of the daggers is that ten of them (excluding that in private hands) have been deliberately damaged before they were thrown into the river. The blades of seven have been bent sufficiently so that the iron is fractured, and three other daggers have blades completely broken.

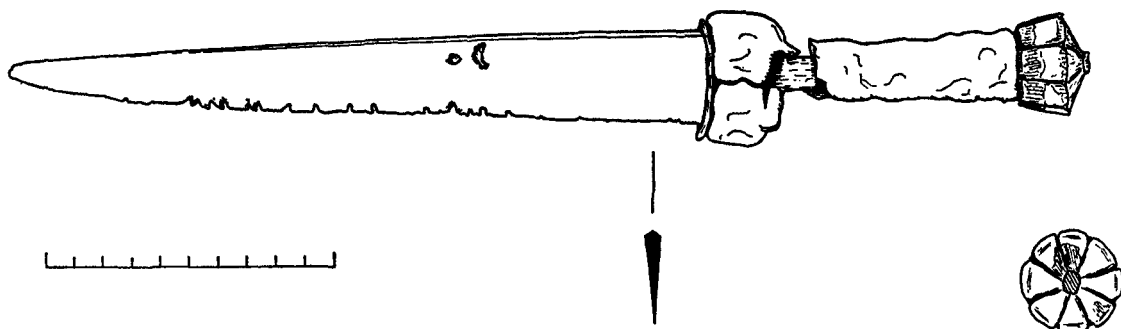


Fig. 8
Kidney dagger from the Thames at Blackfriars. Scale of centimetres.
(Drawn by J. Clark).

LONDON BRIDGE

Between 8th and 13th November, 1967, the Port of London Authority dredged a channel east of the 19th-century London Bridge, opposite the second arch from the Southwark side, and across the site of the medieval bridge (Fig. 9). The dredger used a grab to excavate generally to a depth of 5 feet into the river bed, and the debris was dumped into a dumb-barge lying alongside. Members of the City of London Archaeological Society were on board, and after each grab of black muddy gravel had been dumped into the barge, they quickly raked through the material looking for objects.

The dredging began just east of the medieval bridge site and worked westwards till it went under the second arch of the 19th-century bridge from the Southwark side. As the dredging approached the site of the medieval bridge so the density of objects increased until, at the medieval bridge site, every grab was bringing up many objects. Because the bridge was not demolished until the 1830's many of the objects were of comparatively recent date; but there were also some medieval objects. The objects recovered comprise three iron grappling hooks, three iron axe heads; iron nails of assorted sizes up to 71 cm. long; an iron bucket handle; two iron padlocks with brass fittings; four spurs (three rowel and one prick); three horse-shoes; sixteen keys; many brass pins; an iron dagger blade; two two-pronged forks; three lead wool seals; iron scissors; top of a 16th-century candlestick; a brass badge bearing the arms of the City of London, and inscribed on the back: "FOR CHRISTOPHR JACKSON A FREEMAN ON STREET 1699"; a pewter mug inscribed: "H BICKERS, KINGS HEAD, WEBB ST, BORO."; another pewter mug inscribed: "S.B.T., LONDON ROAD COFFEE HOUSE, ST GEOR FLD."; and there were coins including two 15th-century tokens, two halfpennies of George II, two pennies of Victoria dated 1861 and 1863; a halfpenny of George VI dated 1951, and a modern token, probably for a "fruit machine." (E.R.1279A).

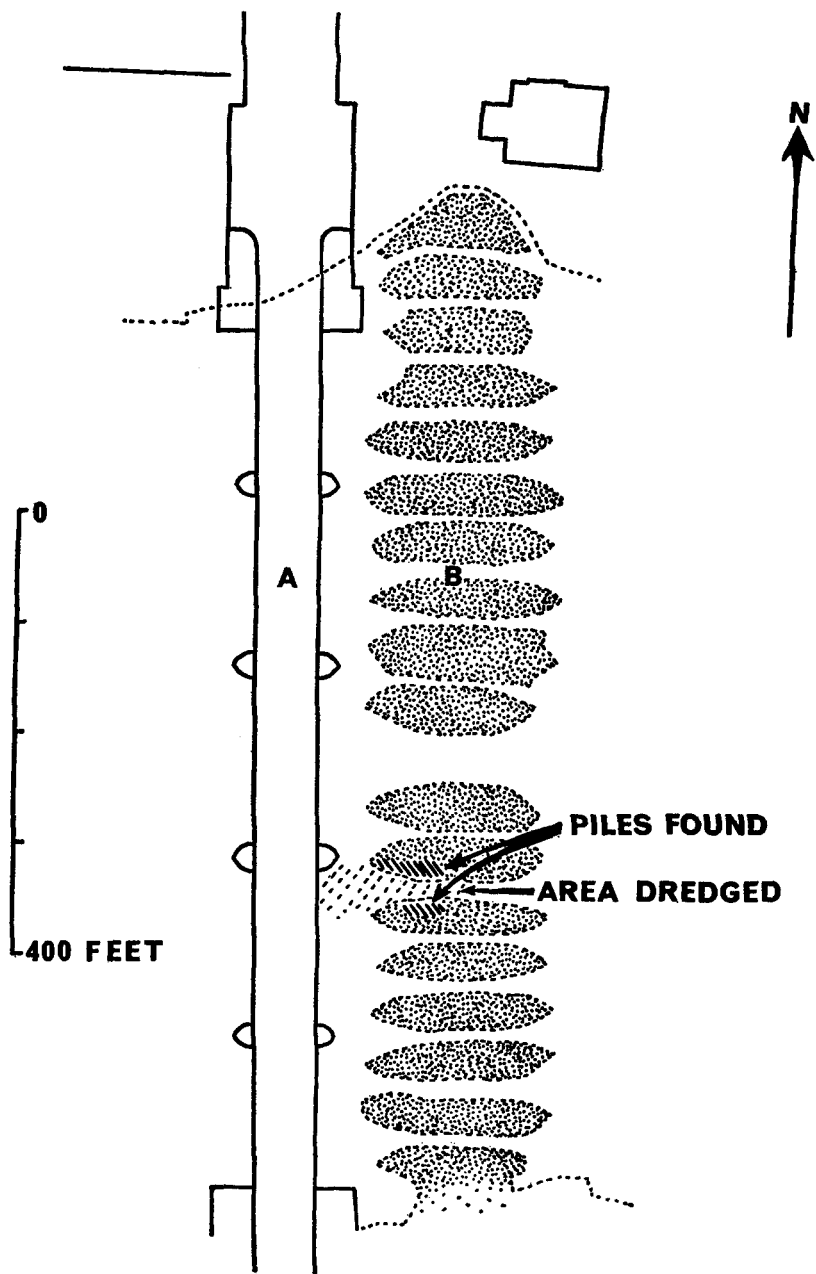


Fig. 9
Plan of London Bridge region to show area of dredging in 1967. "A" is the nineteenth-century bridge, now being re-built; and the stippled areas marked "B" are the foundations, or starlings, of the medieval London Bridge.

As the dredger dug it brought up many large facing blocks from the old bridge, and even two portions of the 18th-century balustrade, very waterworn. It also pulled up many timber piles from the foundations of two of the starlings of the bridge. They belonged to two types—the “old” piles roughly cut from individual tree-trunks and roughly 45–60 cms. in diameter. The lower end was always pointed and many piles had this end fitted with an iron point or shoe. The grab had chopped off the tops of most of these piles, but it seems that their average length was in the region of 4.5 metres, but one especially long pile was 7 metres long. The soft spongy and stained colour of this wood indicated that they were of considerable antiquity, whereas the more recent piles, which were square in section, were hard and only superficially discoloured. These were also fitted with iron points. From amongst the piles the grab also brought up great quantities of chalk and ragstone rubble.

As the dredger worked away from the medieval bridge westwards to the 19th-century bridge, the antiquities became fewer and fewer, and, instead, modern items which had been thrown off the bridge were found. These comprised lorry tyres, two 1940–45 World War German pistols still in their leather holsters, a German revolver of similar age, and a very fine brass knuckle-duster. (E.R.1279B).



PLATE 5. View from above of the interior of the stern of wreck III. The floor-timbers have been removed leaving merely the side-frames.

THE STOW COMMEMORATION SERVICE 1971

BY S. W. HOWARD, M.C., F.I.B.



Photograph

KEITH ELLIS

For many years it has been a tradition to hold this Service at the Church of St. Andrew Undershaft, St. Mary Axe, E.C.3., annually in April in commemoration of JOHN STOW (1525-1605), tailor, historian and antiquary, who was buried in this church on the 8th April, 1605.

This year the Service was held on Friday, 30th April, and was attended by the Lord Mayor of London, Sir Peter Studd, G.B.E., M.A., D.Sc., Sheriff Peter Gadsden, M.A., J.P., and their ladies; by Alderman Sir A. Charles Trinder, G.B.E., M.A., D.Sc., Alderman of Aldgate Ward, and the Common Councilmen of that Ward; by the Lord Reigate, Master of the Merchant Taylors Company, and the Court of the Company; and by the President and Council of the London and Middlesex Archaeological Society (sponsors of the Service). The Service was conducted by the Rector, the Venerable H. A. S. Pink, M.A., the Lesson was read by the Lord Reigate, and the Address in commemoration of Stow was given by the well-known historian, Dr. A. L. Rowse, F.B.A. (see page 15).

In connection with the Service, an essay competition has been held annually since 1939 for scholars attending secondary and grammar schools in London and Middlesex, and the subject has been connected with the history of the City of London. In recent years it has been open to such schools in the Inner London Education Authority, and those connected with the City of London.

In the course of the Service is the ceremony of the changing of the quill held in the hand of the effigy of Stow in the memorial erected by his widow, and this part of the ceremony dates back very many years. The Lord Mayor places a new quill in the hand of the effigy (see photograph above), after the old quill has been withdrawn by Dr. Rowse (on the right of the photograph), who places it in a special case. The Lord Mayor then presents the prize to the winner of the essay competition, and hands the old quill in its case to the representative of the school of the essay prize winner.

This year the essay prize winner was Lesley Gibbs of The Lady Eleanor Holles School for Girls, Hampton, Middlesex, who, in addition to the book prize, received an Honorary Student Membership of the London and Middlesex Archaeological Society.

Whilst Stow was born in the City of London, and lived as a tailor for several years at the junction of what are now Leadenhall and Fenchurch Streets, and later near to Lime Street, yet he dedicated most of his life to topographical and historical work. He is probably best known to us by his *Survey of London* (1598), describing the City of London ward by ward.

JOHN STOW AS AN HISTORIAN

A COMMEMORATION ADDRESS

BY A. L. ROWSE, M.A., D.LITT., F.B.A.

We are gathered here to do honour to a modest and sober Elizabethan, a good historian, and a devoted citizen of London. It is good for us that we should do so — and pay tribute to real and permanent values in a shifting and shiftless age. Who now remembers most of the glittering and gilded figures who attracted so much attention in their time? — John Stow has lasted longer and garnered more enduring respect.

The Elizabethan age saw the beginning of the modern writing of history, as it saw the beginnings of the marvellous achievements of this small country in the four centuries to come — achievements in so many fields: at sea, in the oceanic voyages, colonisation, the creation of an empire; in literature, drama, the arts and sciences; commerce, industry. All the result of initiative and hard work — a splendid arc of achievement spanning modern history — of which we are now seeing the end.

John Stow was one of the best historians of that age; indefatigable in the trouble he took, thorough and conscientious, accurate — above all things devoted to truth — unlike our television historians today. He said: “in histories the chief thing that is to be desired is the truth” — that indeed is the whole point of history; these gentry today would do well to fix this as a motto above their glib typewriters and try to adhere to it.

John Stow did throughout a lifetime of hard work. He began, as perhaps a young man should, more interested in poetry, and later made useful contributions to the study of Chaucer, best of our medieval poets, also a citizen of London. He admitted that then he hadn't “esteemed history, were it offered never so freely.” But as he grew older he corrected that and graduated to our delightful science — history is the proper interest of mature minds. That he should *write* history was suggested to him by that cultivated Renaissance prince, the Queen's favourite, Leicester — though he collaborated more closely with good Archbishop Parker, a more respectable figure.

Shortly on coming before the public as an author, there followed a feud with another historian — not unknown in the profession today, for, as we know, *odium theologicum* is nothing compared with *odium archaeologicum*. The chronicler Grafton, also a citizen of London, jeered at Stow's addiction to old ways and “superstitious fables foolishly Stowed together.” Stow replied, in Elizabethan fashion, by deriding the empty, echoing *tuns* and fruitless *grafts* of his adversary, Grafton. He has had the last word with posterity, for he was a better historian, worked harder, and produced the goods. His *Summary* of English Chronicles was a best-seller — and this does not give unadulterated pleasure to one's colleagues; edition after edition was called for, so that his dedication of the book is to successive Lord Mayors, with aldermen and commonalty, over the years.

But in the Elizabethan age you did not make money by writing books, and Stow was always poor. He earned his living for thirty years as a tailor, and then the Merchant Taylors gave him a diminutive pension — though, a mere historian, he was never admitted to the

Livery. He writes of his popular book, the *Summary*: "it hath cost me many a weary mile's travel, many a hard-earned penny and pound, and many a cold winter night's study." But this was in no complaining spirit, for he was a merry old fellow, very pleasant and cheerful; I'll bet he enjoyed those winter nights' study — it was all a labour of love — and his foot-slogging kept him healthy to the end, a ripe old age, working joyfully to the last. It is true that in his last years he had to appeal to charity, but that may be partly that he spent too much money on books — it has been known. Once, when walking with Ben Jonson, they met two cripples begging; Stow asked them what they would take to admit him to their order.

Something very Elizabethan about him was the ambition, the sheer scale of his intended enterprise — it is so like the grandeur of their aims, the expanding horizons that led them on. How inspiring it must have been to live then! — everything bore one up, everything encouraged effort, instead of dragging one down, nothing to inspire one, nothing to encourage, nothing but what creates contempt on every hand.

Edmund Spenser wrote six books of the *Faerie Queene*, the great poem of the age, but he intended twelve; he was only forty-six when he died. Sir Philip Sidney, who was only thirty-two, never finished the *Arcadia*. Sir Walter Raleigh's *History of the World* did not get much beyond the Roman Republic; Richard Hooker did not live to complete his *Laws of Ecclesiastical Polity*. Similarly, Stow never published his vast intended *History of this Island*, of which his fat volumes are in a sense parts:

Lie heavy on him, earth, for he
Laid many a heavy pile on thee.

But altogether, not a bad record for a working tailor! — of course, there were not wanting people to say that his volumes were "stitched together".

Actually they were written in good straightforward prose, like the stout broadcloth of the garments he fashioned, and described by his later editor: "Expect no filed phrases, ink-horn terms, uncouth words nor fantastic speeches, but good plain English without affectation, rightly befitting chronology. If Cicero's eloquence, Plato's oratory, or Virgil's lofty verse be thy chief desire, Paul's churchyard is now plenteously furnished to satisfy thee."

Stow's *Annals*, with the increments added for the years as they passed, constituted his weightiest contribution, and the age considered it his most important. No doubt Stow thought so himself. It would not be the only time an author has been mistaken about his own work, and a book he undertook just for pleasure — as it were with his left hand — turned out the best, the book by which he lives to posterity. If Renan's recommendation be true, that one should write only about what one loves, then Stow's *Survey of London* is the book by which he lives for us still. He was born to write *that* book — others could write chronicles and text-books; only Stow could have written the *Survey*; he was in love with the subject. He had the right temperament for writing it; every parish, every street, every church, house and object of any interest was alive to him, with its memories and associations. And he had a most observant eye — he missed nothing, except, alas, the theatres of which, as a sober citizen, he disapproved. (So did the Lord Mayor and Corporation; they were always trying to suppress the theatres, when nobody was looking. Think of it, if the Lord Mayor and aldermen had had their way, there would have been no Shakespearean drama! Only the personal protection of the Queen saved it — one of her many contributions to the age, so rightly called by *her* name).

In dedicating his *Survey* to the Lord Mayor, Commonalty and Citizens, Stow described it as "the discovery of London, my native soil and country." It is as much a voyage of discovery, if by foot, as Francis Drake's or any other of the famous voyages of discovery by sea, setting sail from the port of London. (By the way, he tells us just where Drake lived in the City: in the great house in Downgate Street called the Arbour, "lately builded by Sir Thomas Pullison, Mayor," but this was after Drake made fortune and fame by his voyage round the world). The book is wonderfully alive: this is Shakespeare's London brought before our eyes, with its gardens and green spaces filling up with tenements, with increased prosperity and population; with the water being brought into the city, the new conduits going up, the swift water-channels and runnels; the transformation of so many churches to secular uses; the different characters of the wards still marked, the noise and hammering of the brass-founders, candlestick-makers and copper-workers in Lothbury; the bustle of trades, the clatter of signs, the busy, mercurial life of citizens, so vividly evoked about the same time at the beginning of Shakespeare's *Julius Caesar*.

I cannot go in detail into the book here, though it is precisely in its authentic evocative detail that the value of the book consists — unlike the generalities of sociologists, or the theories of historians anxious to be "with it". That great physiologist, Sir Charles Sherrington, tells us that "a fact does not decay"; theories do, and no one is so quickly out of date as those anxious to be "with it". John Stow, indeed, was very anxious *not* to be "with it" — the phrase itself is already out of date — that is why he has lasted. And he was very independent-minded; he didn't mince his words about the great — he was positively rude about the Queen's father, Henry VIII, for example, whom he disliked and disapproved of. (He turned after his Yorkist grandfather, Edward IV, not in the least after his Tudor and Lancastrian side).

London at that time was engulfed in the process of emerging from the Middle Ages. The Reformation meant a vast destruction of monasteries and churches, of which the city had had far too many. This went to Stow's heart, as it would have to mine, had I been living then. He bitterly deplored the destruction of monuments and brasses in the churches, as did another inhabitant at the time:

When I have seen by Time's fell hand defaced
The rich, proud cost of outworn buried age;
When sometimes lofty towers I see down-razed,
And brass eternal slave to mortal rage . . .

Stow always lets us know about the towers down-razed, the monuments destroyed, the brasses ripped up. On the other hand, he does not fail to let us know the immense outpouring of charity on the part of London merchants, their works of philanthropy, the almshouses founded in almost every parish, the hospitals put on a stronger footing, the schools started. To this day the general public is unaware of the incredible achievement of the Elizabethan merchants of London in schools, almshouses, benefactions, not only or even mostly in London, but in practically every county, all over the country. It was, quite simply, one of the grandest achievements of the age, along with everything else; it was one of the biggest, most constant and determined efforts. You don't hear about it from ordinary historians; they haven't the imagination, or perhaps the magnanimity, to appreciate it. But Stow saw to it that, at least in London, their charities should not be forgotten.

Since we do not have time to perambulate about the city with him, let us recall briefly the places where we know Shakespeare was living at the time. In the earlier 1590's he was

living in the parish of St. Helen's, Bishopsgate, for he failed to pay his assessment of tax there — a congenial, not to say endearing, failing. Stow has a full description of these whereabouts, so familiar to the dramatist and so convenient for the earlier theatres beyond the gate in the fields of Shoreditch, where the theatre-folk and writers for them hung out. Stow describes Crosby Place, where Richard III had resided at the time of his *coup d'état*, and of course it features in the play: a monument of the past familiar to everybody. In the church the great merchant Sir Thomas Gresham had been recently buried under his fine tomb; his house he bequeathed for his foundation of Gresham College. Several ranges of almshouses had recently been set up by the generosity of Gresham, Sir Andrew Judd and his daughter, the wife of Customer Smith.

At the time Shakespeare wrote the French scenes in *Henry V*, about 1600, he was lodging in Cripplegate ward in the household of the French Mountjoys, headdress-maker to the Queen. With Stow, go down Wood Street, "there lower down in Silver Street, till ye come to the east end of St. Olave's church on the south side, and so to Monkswell Street on the north." The house stood at the corner of Silver Street and Monkswell Street; in fact we have a tiny manuscript drawing of it, with its shop's-pentice in front; the whole area obliterated by the barbarians in the blitz of 1941. Of Shakespeare's parish church here, St. Olave's, Stow tells us that it was "a small thing, and without any noteworthy monuments." A few years later, in the summer of 1607, there was buried in St. Giles' Cripplegate the base-born child of Shakespeare's youngest brother, Edmund, another actor. Edmund was himself buried the last day of that year in St. Saviour's, now Southwark Cathedral, aged only twenty-six, "with a forenoon knell of the great bell."

A few years previously, about 1599, William had a spell on Bankside, about the time James Burbage was transferring his theatre from Shoreditch to build the new Globe on the South Bank. At the end of his life Shakespeare owned a half-share in the gate-house going into Blackfriars, very convenient for the theatre within, of which he was part-owner. Stow has a full description of the precinct, which, since the destruction of the monastery, had filled up with an interesting variety of inhabitants, from grandees like Robert Cecil's troublesome aunt, Lady Russell, to foreign craftsmen, jewellers, printers like Shakespeare's school-fellow, Richard Field, who printed his *Venus and Adonis* there.

Our one regret, our one legitimate criticism of Stow, is that his mind was so set on relics of the past that he neglected some of the amenities of the present — one cannot see him attending the theatre, for example. Twice the Fishmongers get a wiggling for being so ignorant of their antiquities as not to know why or when they were joined in amity with the Goldsmiths; and when they repaired the monument of Sir William Walworth, the Mayor who struck down Wat Tyler, "for lack of knowledge they followed a fabulous book" and inscribed Jack Straw. Evidently they should have consulted John Stow.

Indeed, we should continue to consult him; with him to guide us we can hardly go wrong about Shakespeare's London. And beneath the facts and the sober prose of the historian, we sense the life: the games between the scholars of St. Bartholomew's and St. Anthony's, dancing for garlands in the streets, running at the quintain on Cornhill, out into the fields that lay all round for May morning, garnishing the doors with boughs and flowers for Midsummer, decking the churches with green at Christmas; we seem to hear the bells of St. Peter's Cornhill, that were the fairest ring of six bells in all England.

And so we bring old John Stow home to his resting-place here in St. Andrew Undershaft. We are right not to forget him, for, in the end, he was a good man.

REPORT ON RECENT EXCAVATIONS IN SOUTHWARK

PART II

BY PETER R. V. MARSDEN

INTRODUCTION

This report contains the results of observations on three building sites in Southwark. It is pleasant to record my thanks to Mr. R. Chaplin, who, as a member of the staff of the Cuming Museum, Southwark, carried out much of the recording on the site of 18-20 Southwark Street. Thanks are also due to the Southern Project Group of the Central Electricity Generating Board for permission to visit the Bankside Power Station site; and to Mr. K. Thompson, the Resident Site Engineer, of the Courage and Barclay site in Park Street for permission to watch the rebuilding work there. Mr. C. P. Castell of the Department of Palaeontology of the British Museum (Natural History) kindly reported on the mollusca from the Bankside site; Mr. R. Chaplin and Miss J. Coy kindly reported on the bones under their Bone Research Scheme; Mr. G. Hart of the Timber Development Association Ltd. kindly reported on the Roman barrel staves; Mr. R. Charleston kindly reported on the 15th century glass fragment from Bankside; Mr. J. Waterer of the Leathercraft Museum kindly reported on the leather from the Bankside site; the Director of the Royal Botanic Gardens, Kew, Surrey, kindly identified the plant remains from the Bankside and Courage and Barclay sites; and Mr. N. C. Cook and Mr. R. Merrifield have kindly helped in various ways. The finds from 18-20 Southwark Street are now deposited in the Cuming Museum, and the Bankside finds are at the London Museum.

160-166 BOROUGH HIGH STREET

In 1959 contractor's excavations exposed part of a black silt-filled depression, possibly a pond, several feet deep on the south side of the site (fig. 1). In the silt were found a few Roman sherds.

In the north-eastern quarter of the site was exposed an area of thick burnt material in which lay burnt timber planks and beams, and the stumps of vertical timber posts. These burnt timbers lay in no apparent order, and no dating evidence was found in the burnt level, which lay only a few inches above the natural sand. Below the burnt level was found a nearly complete Samian Ware dish of Drag. form 18 stamped OPASSIIV (Passenus of La Graufesenque; Period:- Nero-Vespasian). From its depth the burnt level appears to represent the remains of a Roman timber structure destroyed by fire.

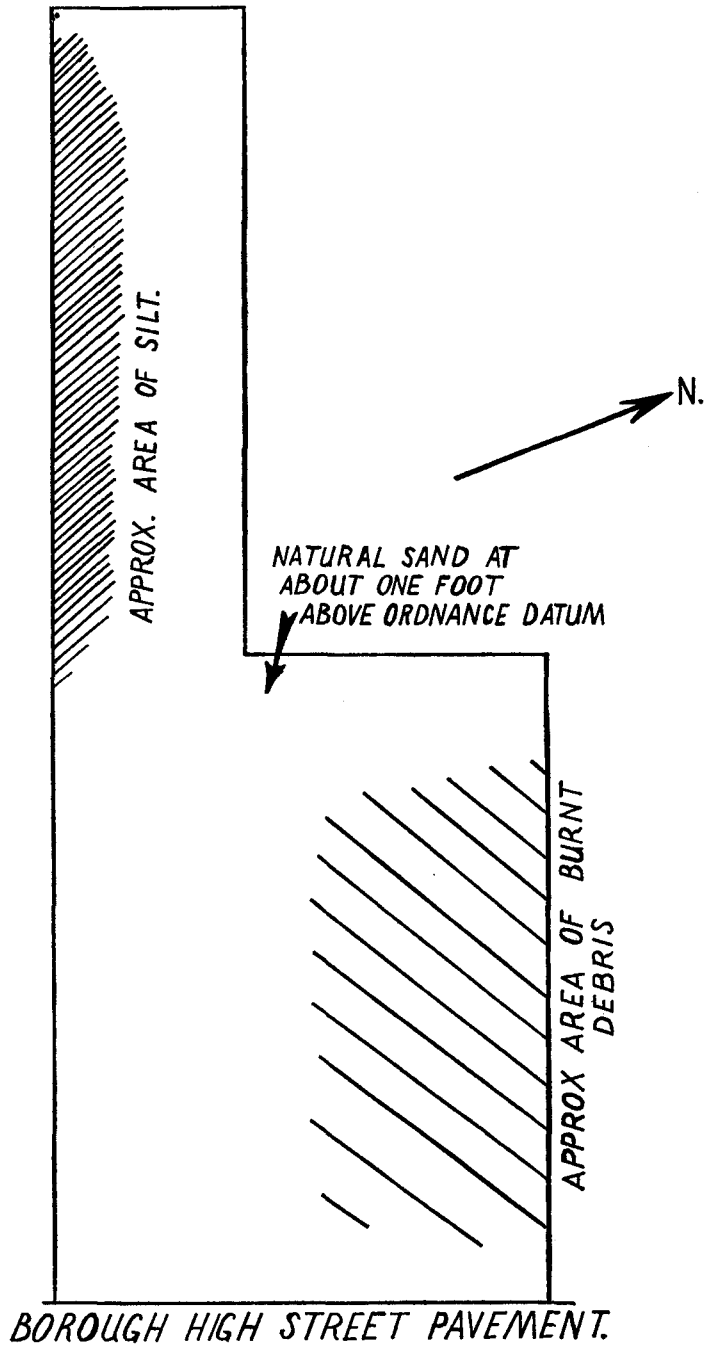


Fig. 1
Sketch plan of 160-166 Borough High Street.

18-20 SOUTHWARK STREET

THE SITE lies at the south end of the Borough Market and was excavated during 1961-62.

THE EXCAVATION (figs. 2, 3)

The surface of the natural sand lay at an average of about 5 feet above Ordnance Datum, and thus this is the highest known point of the "sandspit" on which the Roman settlement was built¹.

The earliest traces of human occupation on this site were found in trench "E" at the north-east corner of the site (fig. 2). Section J-K shows the various strata in the south face of the trench (fig. 3). Overlying the natural sand was layer 1, a deposit of grey sand containing flecks of wood ash and one Roman brick fragment. Level 2 was a stratum of gravel containing a few sherds of the period Nero-Vespasian (fig. 8, nos. 12-17). Level 3 was a clay floor which in its upper part had been scorched or burnt to a red colour. The reason for this was shown by the overlying level 4 which consisted of red burnt daub, some of which showed traces of wattling. Layer 4 was clearly the debris of a wattle and daub building which had been destroyed by fire, and the objects found in this deposit (a complete cooking pot, fragments of domestic pottery, fragments of a lamp, a bone dice, and an iron key) suggest that this structure was a dwelling. The scorching of the underlying clay floor proves that the fire, and therefore the building, lay on that spot. Pottery from the burnt daub level 4 (fig. 8, nos. 18-23, 28) is of the period Claudius-Nero, indicating that the building might have been destroyed during the destruction of London by Boudicca in A.D. 60.

Traces of another fire originally on or near the south end of the site were found in trench "B" where level 5 in section A-B, and level 6 in section C-D, was a single deposit of burnt clay overlying the dirty natural sand. This may be the debris from another building which had been destroyed by fire, and as the position of the stratum in relation to the natural sand suggests, this occurred possibly early during the Roman period. Pit 5 (section C-D), which had been dug down into the fire debris, contained a few sherds of the 1st century, which seem to confirm this suggestion.

At the north-west corner of trench A was found the south side of a drainage ditch first discovered in 1945-47, at which time it was securely dated to the late 1st century². All the strata above the natural sand in section E-F seemed to overlie the filling of the ditch. There was no clear evidence of any building in this part of the site but the strata in section E-F suggest building activity and destruction nearby. Overlying the natural sand in section E-F was the sticky yellow clay layer 7, and over that was level 8, a thin layer of mortar which, because of its varying thickness, had the appearance of a mortar mixing "floor" rather than the floor of a building. Overlying layer 8 was a stratum of black earth, level 9, which was in turn partly covered by layer 10, a stratum of broken Roman tiles lying in wood ash. Layer 11 was a deposit of unburnt yellow clay which was in turn overlaid by level 12, a stratum of red burnt clay and wood ash, and level 13, another layer of red burnt clay and wood ash. The burnt debris overlying the unburnt clay layer 11 must have been dumped, otherwise layer 11 would have been burnt. Perhaps the burnt layers 11 and 12 represent successive spreads of debris from a nearby building which had been destroyed by fire.

In trench "C" was revealed a spread of hard gravel metalling. One Samian ware sherd of the Flavian period (fig. 8, no. 27) was found in the metalling, and another of the same period was the only find in pit 4 which had been cut into the metalling.

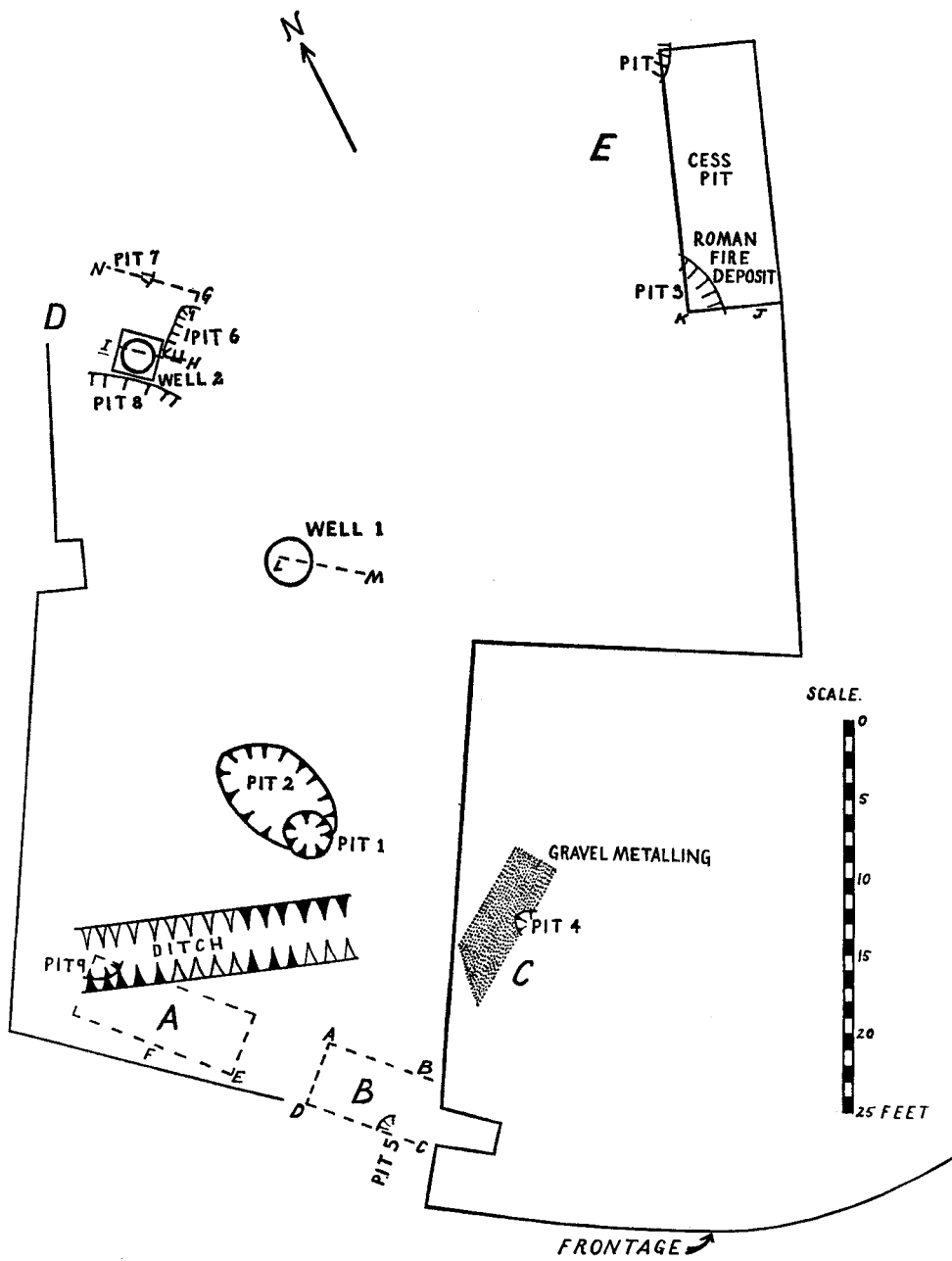


Fig. 2
Plan of discoveries at 18-20 Southwark Street, 1961-62.

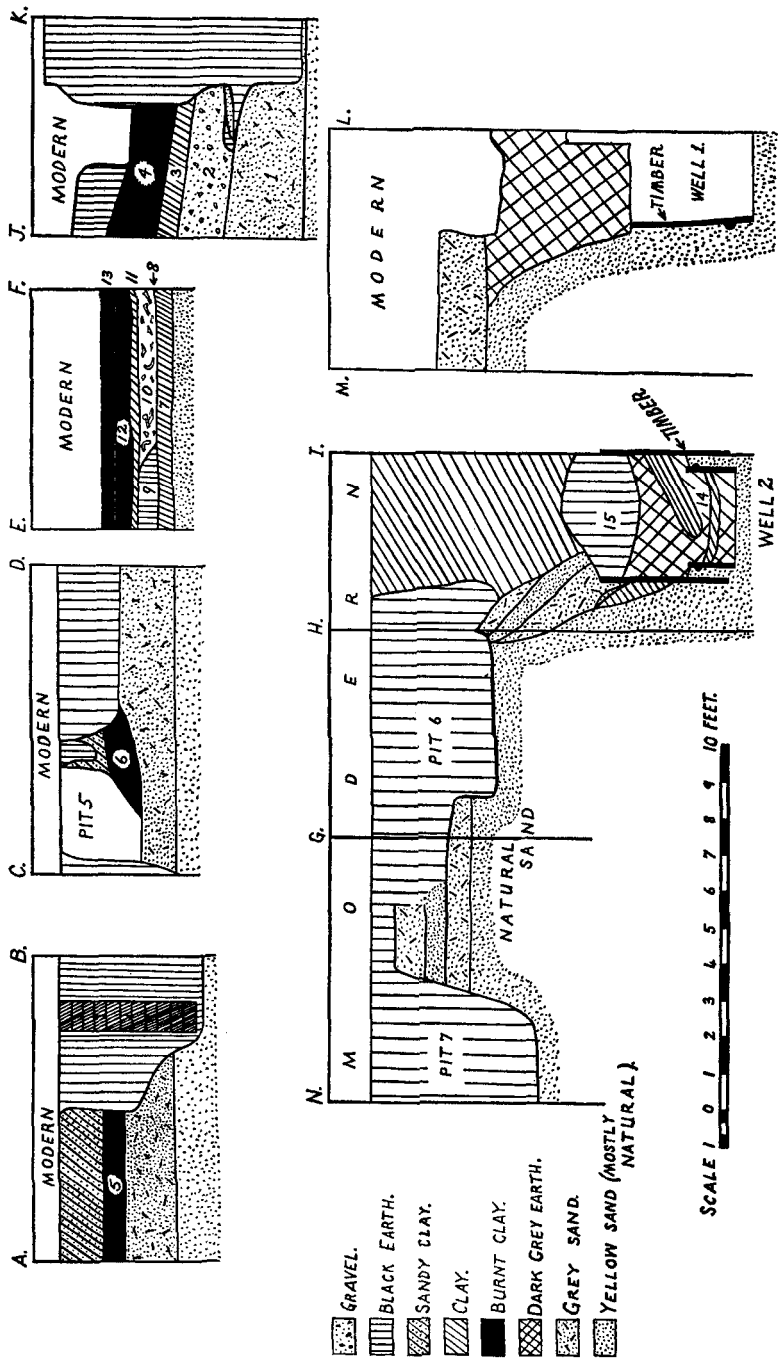


Fig. 3
Sections at 18-20 Southwark Street.

Trench "D" near the north-west corner of the site revealed barrel-lined well 2. The lower part of a barrel was found lying on end in a pit with its base at about one foot below Ordnance Datum. Around the barrel was a square box-like timber structure slightly wider than the diameter of the barrel. The space between the "box" and the barrel had been filled with clean sand, and several clay and sand deposits outside the "box" probably represent the filling of the pit in which the well had been constructed (see section H-I). Pottery from the rubbish filling, layer 14, inside the barrel at the base of the well (fig. 10, nos. 60-62) is of the Flavian period. The barrel staves were made from quarter or "rift cut" timber, and the timber itself is Fir (*Abies* sp.). Unfortunately it was not possible to determine the species of the timber with any certainty but it may have been *alba*, a native timber of southern Spain.

In section H-I level 15 was an intrusion from pit 8 which had been partly undercut into the filling of the well. Pit 8 seems to have been Roman in date because its filling was similar in character to the Roman deposits on the site, and in addition in it was found a small Roman bronze box fitting in the form of a lion's face. Also in the pit were preserved a number of large tree branches, but it was not possible to remove any samples for identification.

Well 1 was found near the centre of the site (see section M-L) and was also made from a barrel constructed of quarter cut staves of Fir (*Abies alba*[?]). The base of this well lay at 1.6 feet below Ordnance Datum, but unfortunately its filling had been disturbed in modern times. The Roman pottery from the disturbed well filling was consistently dateable to the late 1st century, and in view of its depth and filling, it is probably Roman in date.

Pottery of the 2nd and 3rd centuries was completely absent on this site, as far as can be judged in this kind of excavation, except for one fragment of Castor ware of the late 2nd century from the filling of the medieval pit 3. Instead, overlying the early Roman strata throughout the site was a layer of black soil. In trench "D" (section G-H) pit 6 was found cutting down into the earlier Roman deposits from the above mentioned layer of black-earth. In the pit were found a few fragments of Roman material including a fragment of red colour-coated ware of the 4th century (Fig. 8, no. 24).

One unstratified find from the site should be mentioned here, and that was a substantial fragment of grey lava from a Roman quern. The quern was found lying beside trench "D" and almost certainly came from it.

The Roman strata were overlaid by dark coloured medieval and later deposits. Pit 2 was discovered in 1945-47 and contained pottery of *circa* 1300. In 1961 was found pit 3 (section J-K) which contained pottery of a similar period (Fig. 8, nos. 5-9). In addition a scatter of pottery of the same period existed all over the site. No evidence of any medieval structures was found, but the pottery scatter and the rubbish pits indicate medieval occupation on or near the site. If the occupation existed on the site then it was probably in the form of timber buildings, which are difficult, if not almost impossible, to recognise on a building site, so it is probable that this site lay within the occupation area of late 13th century Southwark.

Pit 1 was found in 1945-47 and contained Tudor pottery. In 1961 in trench "E" was found part of a square brick-lined cesspit which contained pottery of the period 1650-1700 (Fig. 8, nos. 1-4).

BANKSIDE POWER STATION

THE SITE lies between Bankside in the north and Park Street in the south, and the excavations were carried out in 1960.

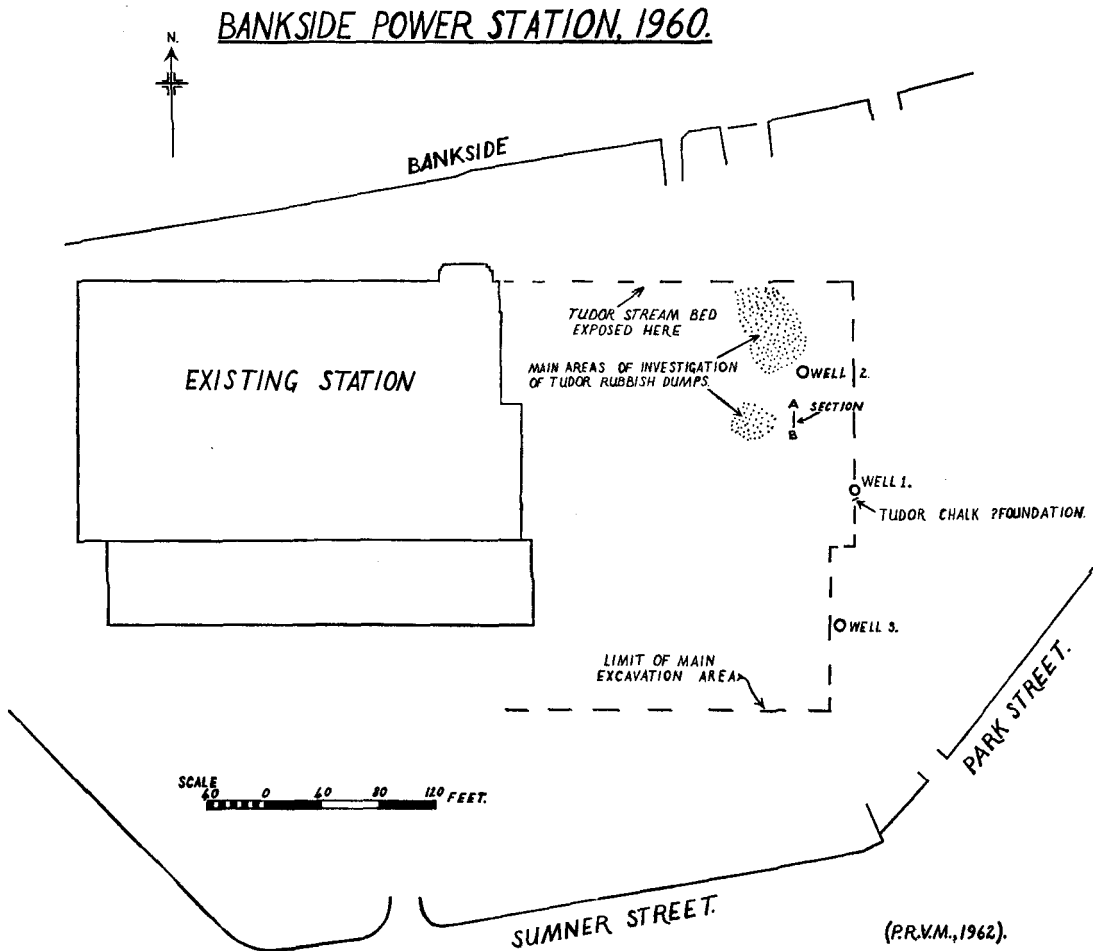


Fig. 4

THE EXCAVATIONS (Fig. 4)

The base of the flood-plain river gravel was not horizontal, but sloped fairly steeply down towards the south-west corner of the site. At the north-east corner of the site the base of the river gravel lay at about 18 feet below Ordnance Datum; at the north-west corner

BANKSIDE , SECTION.

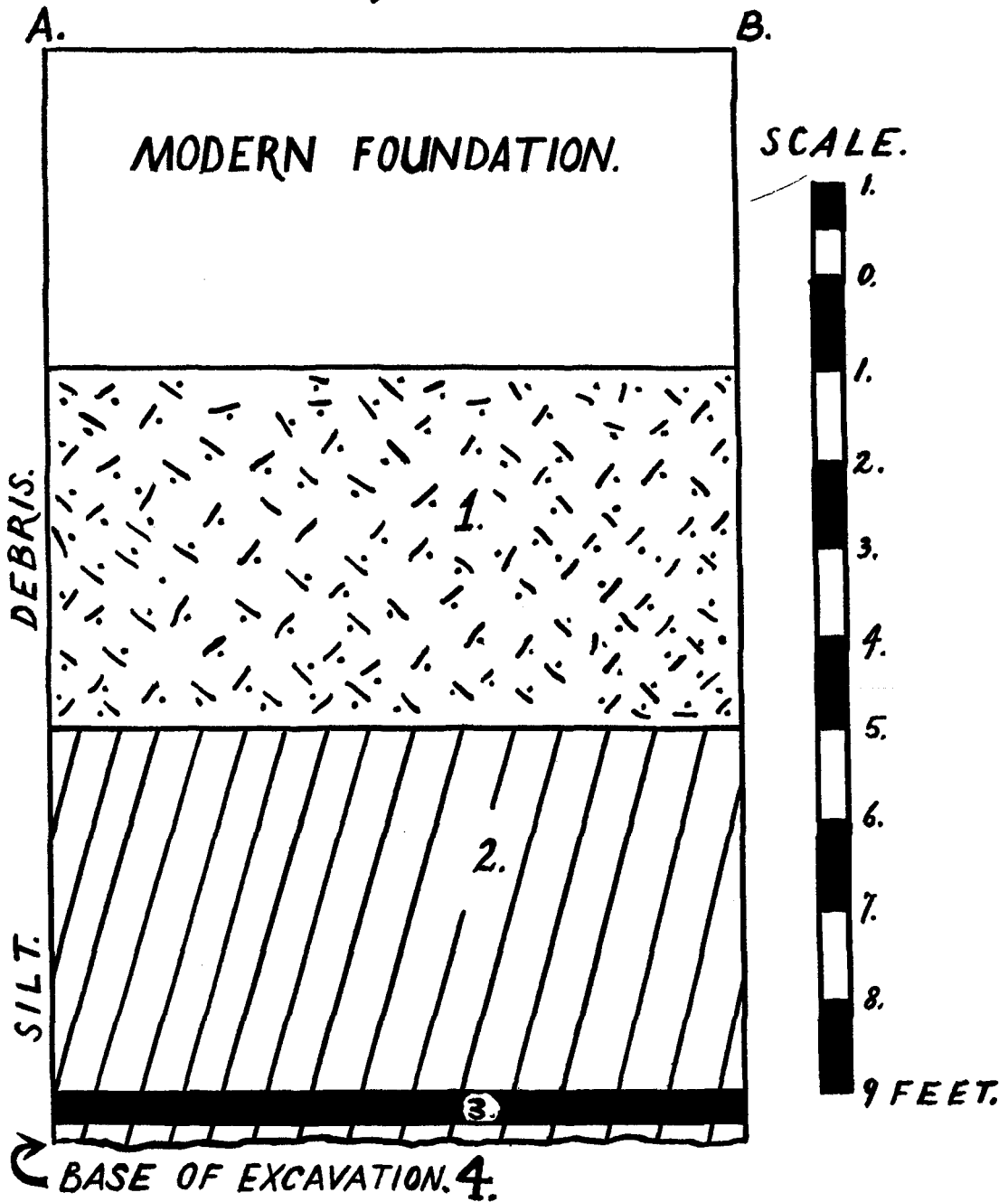


Fig. 5
Section at Bankside Power Station.

it lay at about 22 feet below Ordnance Datum; at the south-east corner at about 26 feet below Ordnance Datum; while at the south-west corner it lay at about 32 feet below Ordnance Datum. This drop in the base of the river gravel can only be accounted for if it is assumed that the Thames, or a tributary of the Thames, flowed much below the normal base of the flood-plain river gravel in order that it could erode deeply into the under-lying London clay. A period at which this erosion could have taken place was when the "Thames Gorge" was being formed³.

The top of the river gravel lay at a depth of about 15 feet (about 2 feet below Ordnance Datum) at the north of the site, while overlying the gravel all over the site, as far as could be judged, were numerous small sandbanks, the maximum heights of which were about 5 feet. Mixed in with the sand of the sandbanks were minute shell fragments. The channels or hollows between the sandbanks were filled with a clean bluish-grey silt the top of which was level with the top of the highest sandbanks. Level 4 in section A-B (Fig. 5) is the silt filling between some sandbanks.

Overlying the tops of the sandbanks and the silt was a layer of black silt, level 3 in section A-B, of varying thickness and depth which seemed to cover the whole site. In some places this layer contained rubbish dumps, the pottery from which has been dated to *circa* 1500 A.D. (Fig. 9, nos. 30-59). Apart from the man-made objects there were numerous quantities of cockle shells and, to a lesser extent, mussel shells. In the rubbish dumps were also pieces of the wood and the bark of Birch (*Betula* sp.). Also found in this layer, and at the east side of the site, was a line of chalk rubble about 2 feet wide which may have been a foundation for a wall or the filling of a drainage gully. The apparent lack of much plant debris associated with level 3 suggests that this site was part of an area of riverside mud flats at that period. At one point small freshwater mollusca in the silt, together with one or two late medieval sherds, indicated the former presence of a small slow-flowing stream which flowed into the Thames (see Appendix 1).

Level 2 was a grey silt deposit containing scattered animal bones, oyster shells, and lumps of chalk. In the top one inch of level 2 at one point on the site was found a clay pipe bowl, probably of the period 1650-1670 (Fig. 10, no. 67). This pipe bowl may have been trodden down into the silt in antiquity from the overlying post-medieval deposits, but anyway it probably indicates the period at or after which frequent flooding of this site ended.

Level 1 was the thick post-medieval made ground above the silt deposits. The soils of this made ground were largely black in colour, and contained considerable quantities of post-medieval rubbish of all kinds. Two sherds (Fig. 10, no. 68) were recovered from the bottom of this make-up just above silt layer 2, and probably date from the first half of the 17th century.

The only dated post-medieval structures on the site were two wells. Wells I and II were brick-lined and contained Mocha ware, transfer printed Staffordshire ware, and clay pipes of the mid-19th century in their top fillings (see Fig. 10, nos. 64-66). The upper fillings of both wells must have been deposited simultaneously for a fragment of a glazed pot found in well II joined onto two fragments of the same vessel from well I. One other brick-lined well was found on the site and was identical in size and construction to wells I and II, and probably dates from the same period.

Interesting unstratified finds from the site include a few fragments of late 17th or 18th century biscuit delft ware; a wooden water-pipe made from a hollowed-out tree trunk; and a scatter of timber piles, probably post-medieval, were found driven into silt layer 3.

COURAGE & BARCLAY BREWERY, PARK STREET

THE SITE (Fig. 6) lies on the inner or south-west corner of where Park Street turns westward through almost a right-angle, and the excavations were carried out in 1961.

THE EXCAVATION

Unfortunately the excavations were largely limited to pile-driving operations and therefore archaeological observation was extremely limited. The borehole sections (Fig. 7) related to Ordnance Datum, clearly show that the upper surface of the flood-plain river gravel was very uneven. At the south-eastern corner of the "excavated" area the gravel was found to rise up to very approximately the level of Ordnance Datum, although the position of the excavation where this was revealed (section A-B, Fig. 6) was such as to make it difficult to plot the depth of the strata in relation to street level or Ordnance Datum.

The borehole sections reveal the existence of a thick deposit of silt overlying the river gravel, and above the silt a deposit of peat up to 6 feet in thickness. The impression given by such excavations as were carried out on this site is that in the area shown on the plan the river gravel did not rise above Ordnance Datum. The peat layer and the underlying silt clearly shows that the site was marshy when the peat was being laid down.

There is no doubt that the peat was at least in part formed during the Roman period because pottery of that period was found in a small excavation carried out by a bulldozer in the south-eastern corner of the site (see site plan Fig. 6; also section A-B, Fig. 7) where a peat layer was revealed. The natural flood-plain river gravel was found to rise up from the west and from the north to a level not far removed from Ordnance Datum where the section lay. Above the gravel was level 1, a stratum of pebbly silt. Overlying that was level 2, a deposit of brownish black peat about 5 ins. thick in the middle of which was found a small fragment of a grey coarse ware Roman poppy-head type beaker with dots *en barbotine* on its surface. On analysis, a sample of the peat was found to be so far decomposed that it was impossible to determine its vegetable origin. Some fine roots were present and also some Birch wood (*Betula* sp.). Level 3 was a layer of clean bluish silt 14 ins. thick, which did not contain any pebbles, but it did contain a few sherds of the 1st or 2nd centuries (Fig. 10, no. 69). Above that was the dark grey pebbly silt layer 4 which was at least 8 ins. thick but had been truncated by the modern basement floor. Some pottery found in level 4 was dated to the late 2nd century (Fig. 10, nos. 70-75). The silt layer seems to have been deposited during a period of flooding and the pebbles in the silt indicate the force of the flood-water.

Later deposits on the site were not examined in detail, but it is worth noting here that at the southern end of the site a number of human burials from the Deadman's Cemetery were uncovered. The extent of the cemetery is shown on Rocque's map of 1746.

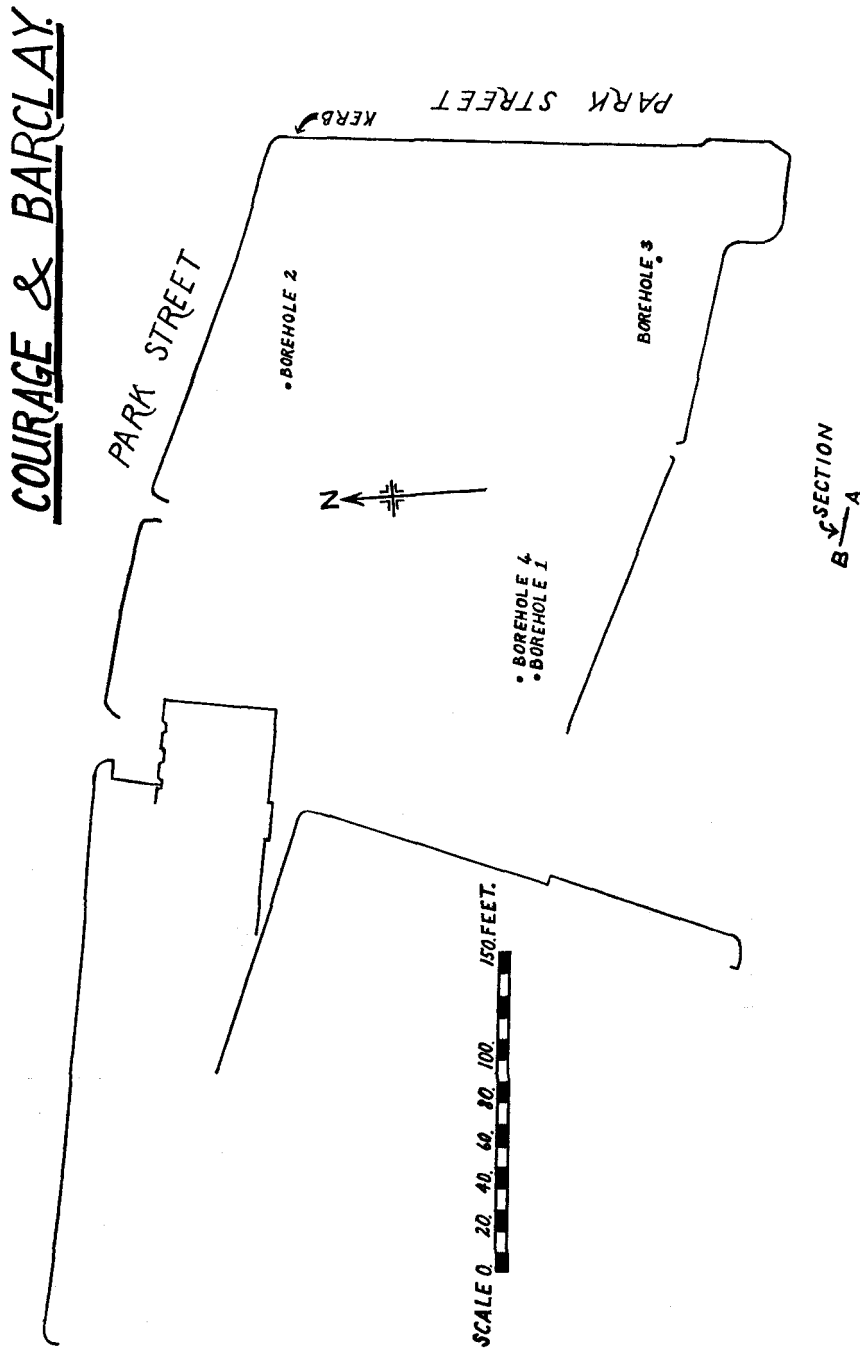


Fig. 6

COURAGE & BARCLAY.

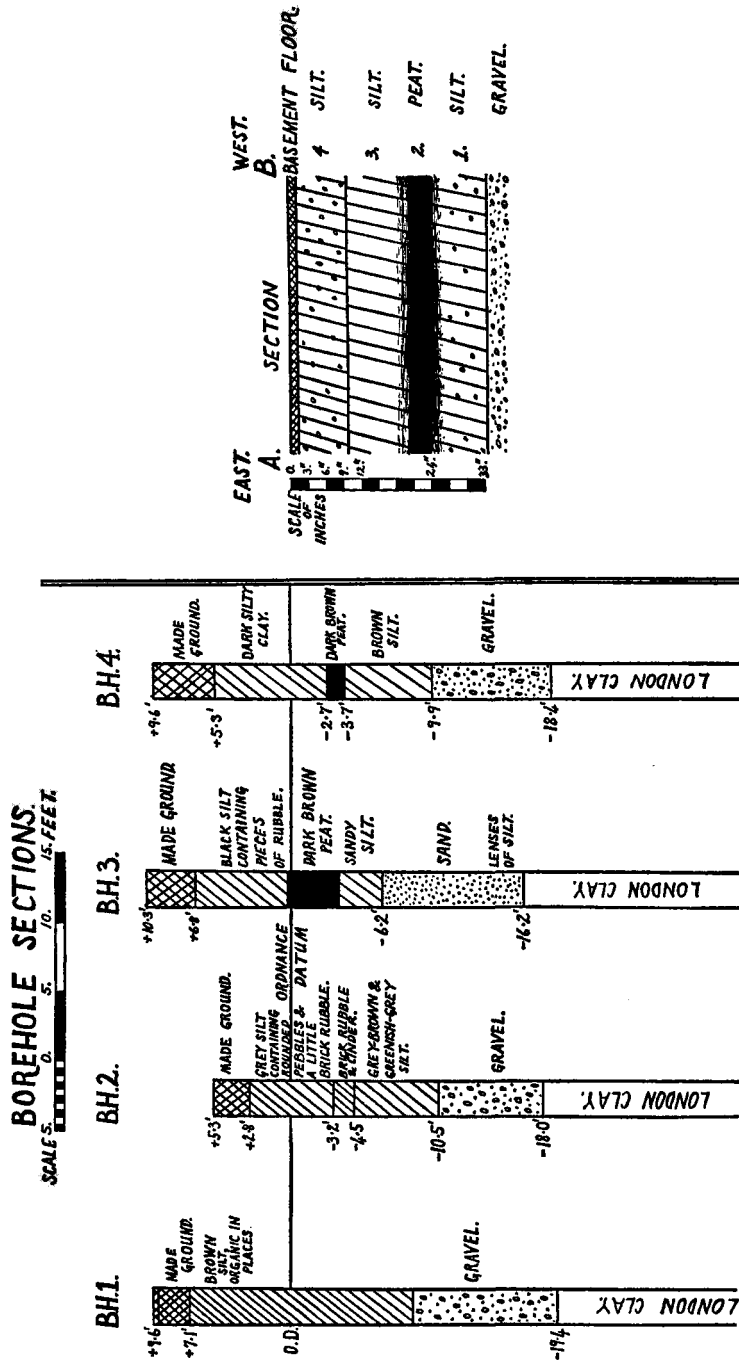


Fig. 7

THE FINDS

A. Pottery

18-20 SOUTHWARK STREET

CESS PIT

1. Lambeth delft ware jug, originally with three spouts. Yellow ware with white glazed surface.
2. Clay pipe bowl from cess pit. Dated about 1650-1670.
3. Plate of Lambeth delft ware with decoration inside of blue and a little yellow of a poor "willow pattern" type design. Yellow ware with white and blue glazed surface.
4. Large drug pot of Lambeth delft ware with decoration of blue blobs and brown rings on outside. Pink ware with white glazed surface.

PIT 3

5. Base of the handle of a buff ware jug, circular in section. Green and yellow glaze on outside of fragment, but no glaze on inside of small remaining portion of the inside of the pot.
6. Rim of dark grey coarse ware. Yellow glaze inside below rim.
7. Small fragment of white coarse ware with green glaze and yellow slip and rouletted diamond decoration outside.
8. Small fragment of a brownish pink coarse ware with a grey core. On the outside are vertical applied strips of white clay and a yellow glaze. $\frac{1}{8}$ inch thick.
9. Fragment of the side and base of neck of a jug. Grey coarse ware with pink inner surface. Applied blobs and vertical strips of whitish grey clay, and yellow and red glaze outside.

Other finds from this pit include a number of Roman sherds, fragments of medieval roof tiles, one of which had half a peg or nail hole $\frac{1}{2}$ inch in diameter at the top and $\frac{3}{8}$ inch diameter at the bottom. Also another tile fragment $\frac{1}{2}$ inch thick with a patch of greenish glaze on top and curved somewhat like the Roman *imbrex* tile. Also small sherds of soft grey ware containing small shell fragments.

Section A-B. Grey Sand below Layer 5

10. Peg of amphora. Pink ware with white slip outside.

PIT 9

11. Pot base fragment of grey ware with greenish yellow glaze in patches on the outside.

Section J-K. Level 2

12. Fragment of a lamp of fine white coarse ware with light brown slip outside.
13. Base of pale pink rather sandy coarse ware.
14. Fragment of dark grey coarse ware pot with burnished diagonal lines.
15. Bead rim of sandy light grey coarse ware with black surface.
16. Very light grey coarse ware rim sherd with polished outside.
17. Grey coarse ware base of platter with burnished lattice pattern on outside and burnished circles on underside of base.

This deposit also includes two sherds of 'rough cast' ware.

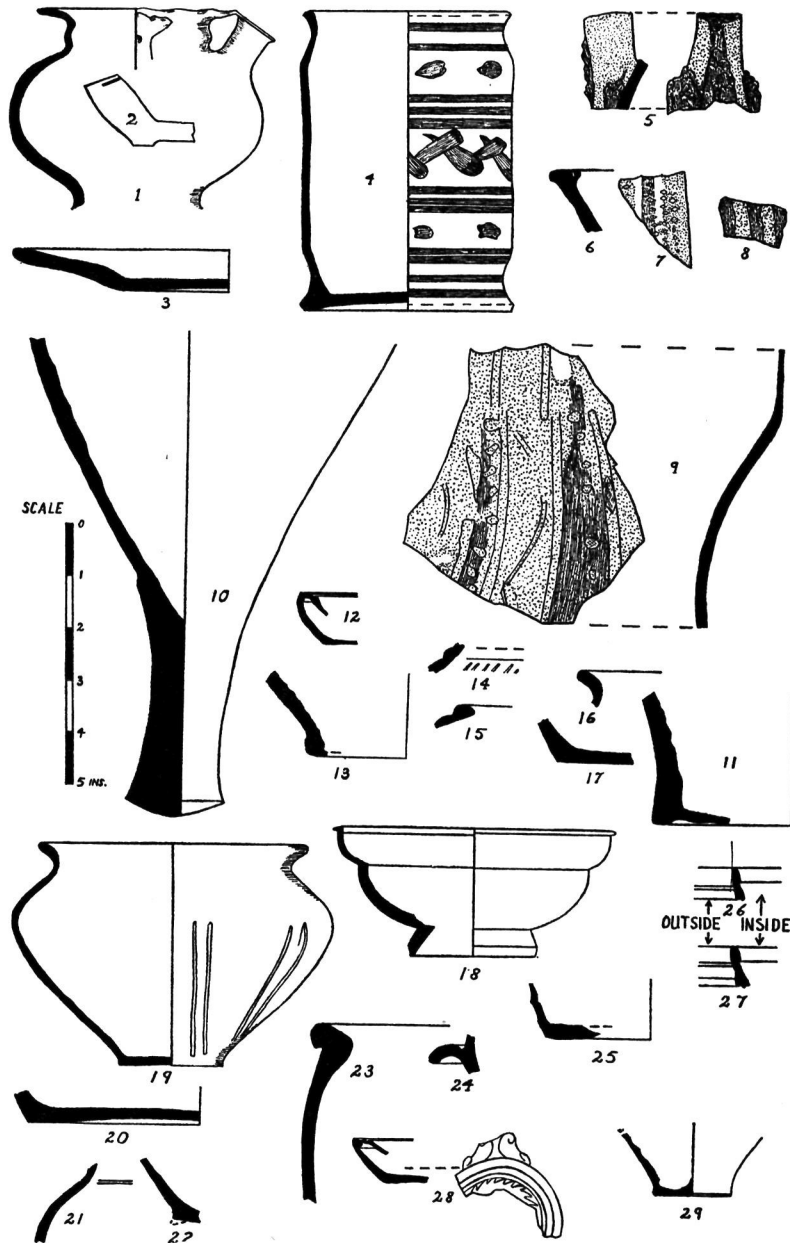


Fig. 8
Pottery drawings.

Section J–K. Level 4

18. Samian ware Drag. form 27 burnt black.
19. Cooking pot with double burnished vertical lines at intervals running from foot to shoulder of pot. Burnt to a pink colour.
20. Base of pink and grey coarse ware platter.
21. Shoulder of pot of a hard light grey coarse ware with horizontal groove.
22. Fragment of a base of light grey coarse ware. Footring broken.
23. Rim of coarse ware storage jar, burnt to pink colour.
28. Fragmentary lamp with wreath decoration in discus.

PIT 6

24. Flanged rim of red colour colour-coated ware mortarium. Pink ware and grey core, with red slip on inside and outside.

Pit also contained one roofing tile fragment, one amphora fragment, one fragment of buff coarse ware, all Roman.

Section A–B. Sandy Clay above Layer 5

25. Base of brown coarse ware with grey surfaces. Slightly soapy to touch. Layer also contained two other Roman coarse ware sherds.

Section J–K. Layer 3, Burnt Clay

26. Rim fragment of Samian ware Drag. form 15/17. Layer also contained three Roman coarse ware sherds.

Trench C. Gravel Metalling

27. Samian ware rim fragment of Drag. form 15/17.

PIT 5

29. Base of pot of fine white coarse ware.

BANKSIDE POWER STATION

Section A–B. Level 3

30. Sagging base of a cooking pot, unburnt, with thumb impressed bottom edge. Creamy white ware, with patches of green glaze on base.
31. Base, heavily burnt and inside covered with black burnt material. Brown and grey ware with outside heavily pitted. Inner surface covered with white slip.
32. Base of creamy white ware.

33. Probably jug neck, of pink ware with patches of brown glaze outside below rim.
34. Rim of grey ware with black inner and outside surfaces.
35. Sagging base, unburnt, of creamy white ware with inside of pot covered with yellowish green glaze.
36. Probably sagging base. Pink "micaceous" ware with thin greenish yellow glaze inside.
37. Base of creamy white ware, burnt on outside and green glaze inside.
38. Neck of jug, with strap-handle 1.75 ins. wide with central groove running down outside and also containing square stab holes. Creamy white ware.
39. Rim fragment of creamy white ware. Black carbon deposit outside and patch of greenish yellow glaze on inside.
40. Rim fragment of creamy white ware.
41. Rim fragment of creamy white ware, with patch of greenish yellow glaze on outside.
42. Rim fragment of creamy white ware; burnt outside, and patch of green glaze on inside just below rim.
43. Rim of small pot of creamy white ware. Greenish yellow glaze on most of inside and outside. Unburnt.
44. Jug neck of soft brown shelly ware with a grey core.
45. Sagging base of a pink ware with small patches of greenish yellow glaze outside and brown glaze inside.
46. Rim of cooking pot, unburnt, of creamy white ware, with small patches of yellow glaze on inside and outside.
47. Rim of cooking pot, with black carbon deposit inside. Creamy white ware with a patch of green glaze on rim and outside of vessel.
48. Rim, possible a jug neck, of creamy white ware, burnt on outside. Small patch of green glaze inside pot, and slight traces of a red pigment which is soluble in water.
49. Rim, possibly a jug neck of creamy white ware, unburnt, with large patches of greenish yellow glaze on outside.
50. Rim, of sandy brown ware with a grey core.
51. Rim fragment of a large cooking pot of creamy white ware, with patches of green glaze under rim. Possible traces of burning outside.
52. Siegburg ware vessel, with thumb impressed base and horizontal grooves and ridges around body. Hard light grey ware, unglazed.
53. Jug of Siegburg ware, with thumb impressed base and sharp horizontal ridges around body. Fine hard grey ware. Unglazed.
54. Spout on side of pot. Creamy white ware with patches of green glaze.
55. Fragment of a floor tile with glazed surface design of yellow (white on drawing) and red (black). Grey ware.
56. Floor tile with glazed surface design in yellow (white on drawing) and brown (black on drawing). *cf.* Medieval Catalogue, [1940], of London Museum, Fig. 77, no. 20 —probably made at Penn). Pink ware, and thickness is $\frac{3}{4}$ inch.

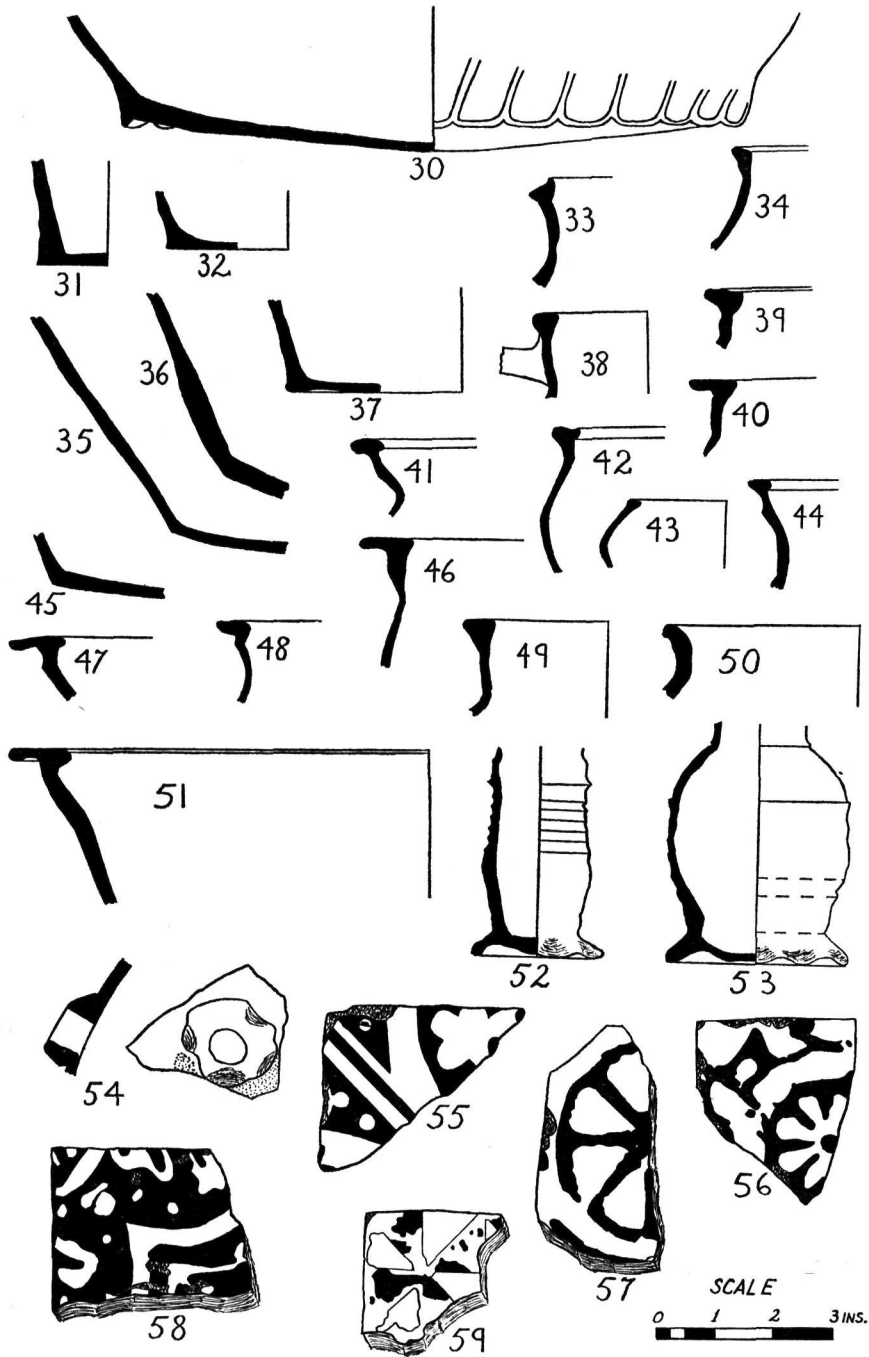


Fig. 9
Pottery and Floor Tile drawings

57. Floor tile with glazed surface design of brown (black on drawing) and yellow. Red ware. (*cf.* Med. Cat. [1940] of London Museum, Fig. 78, no. 27).
 58. Floor tile of buff ware, with glazed surface design of yellow (white on drawing) and red (black on drawing). Thickness is 1 inch.
 59. Floor tile of red ware, with glazed surface design in yellow (white on drawing) and brown (black on drawing).

18-20 SOUTHWARK STREET

FILLING OF WELL 2

60. Amphora handle of buff coarse ware, with the potter's stamp]GL ▲[.
 61. Lamp of buff coarse ware with mica dusted surfaces. Handle broken. Traces of burning in nozzle.
 62. Samian ware footring of Drag. Form 31 or 18/31.
 Also found in the well were four fragments of grey coarse ware cooking pot with lattice pattern and one fragment of rough-cast ware.

FILLING OF WELL 1

63. Rim of amphora in buff coarse ware.

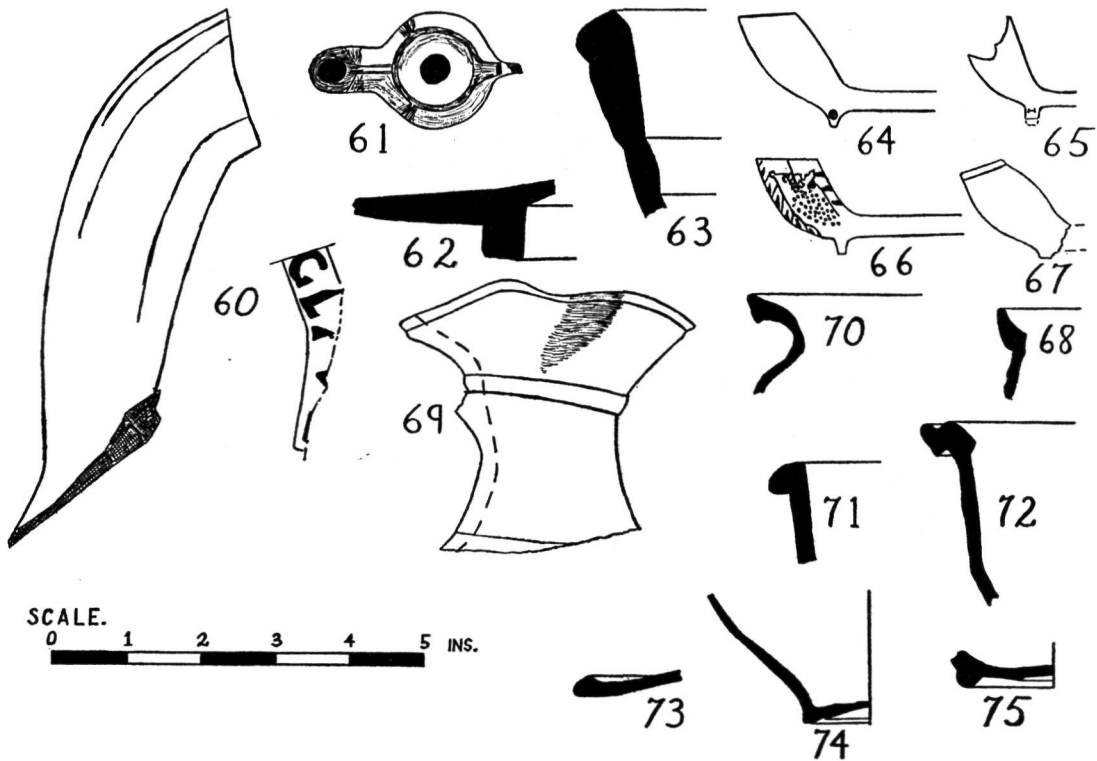


Fig. 10
Pottery drawings

BANKSIDE POWER STATION

WELL I (c. 1860)

64. Clay pipe bowl, with rosettes on peg and stamped impressed shield on bowl with the arms of the City of London and the inscription]CHETE . . . LO[NDON].
65. Clay pipe bowl, stamped I, I on peg.
66. Clay pipe bowl with unidentifiable stamps on peg. Bowl decorated with bunches of grapes.

Also from this well was recovered the stem of a clay pipe inscribed]T BORO / T ? ? CT[.

Section A-B. Level 2

67. Clay pipe bowl.

Section A-B. Level 1

68. Rim of grey coarse ware, with black carbon deposit on outside and green glaze inside.

Also from this layer was a fragment of pinkish grey ware with pinkish glaze on inside and outside.

COURAGE AND BARCLAY

Section A-B. Level 3

69. Jug neck of buff coarse ware with the spout in the form of a figure of eight. Raised ring around neck immediately above junction of handle and neck.
- Other finds include three fragments of Samian ware Drag. 18.

Section A-B. Level 4

70. Rim of olla of gritty brown coarse ware with a grey-brown surface.
71. Rim of platter of pale sandy grey coarse ware with black slip inside and outside.
72. Rim of reeded bowl of red gritty coarse ware with black outer surface, ?burnt.
73. Edge of a lid of buff coarse ware.
74. Base of Rhenish ware beaker. Pink ware with black-brown slip inside and outside.
75. Pot base of pink coarse ware with white slip outside.

REPORT ON FOOTWEAR, ETC., FROM BANKSIDE POWER STATION, DATED CIRCA 1500. SECTION A-B. LEVEL 3

BY JOHN W. WATERER

The soles and portions of footwear examined all seem to be roughly of the same period, namely from mid-14th to mid-15th century. There is no means of dating the other objects which could, however, be of the same period.

The majority of soles and shoes display the marked pointed toe associated with the type of shoe usually called a "poulaine"; the moss found was used for stuffing the points. A few appear to have been of more orthodox shape although still with a point but much less marked; these are probably of the same period. All upper portions and most soles belong to what is called the "turn-shoe" type, that is they are sewn together inside out; the stitching goes from the inner surface of the sole, turns at a right-angle and emerges at the side, thus having passed through only half the thickness of the leather; when the shoe is turned right

side out, the stitching is hidden and protected from wear. Insoles or linings were probably stuck inside. Three soles still have fragments of thread remaining; this is not very common, the thread usually having rotted completely. Only analysis could determine whether the thread was made from flax or hemp yarn.

After turning, the edges of the soles tend to be pulled upward by the strain on the upper; this tendency can be clearly seen on several soles. One sole has been patched, showing that such footwear was not amenable to sound repair.

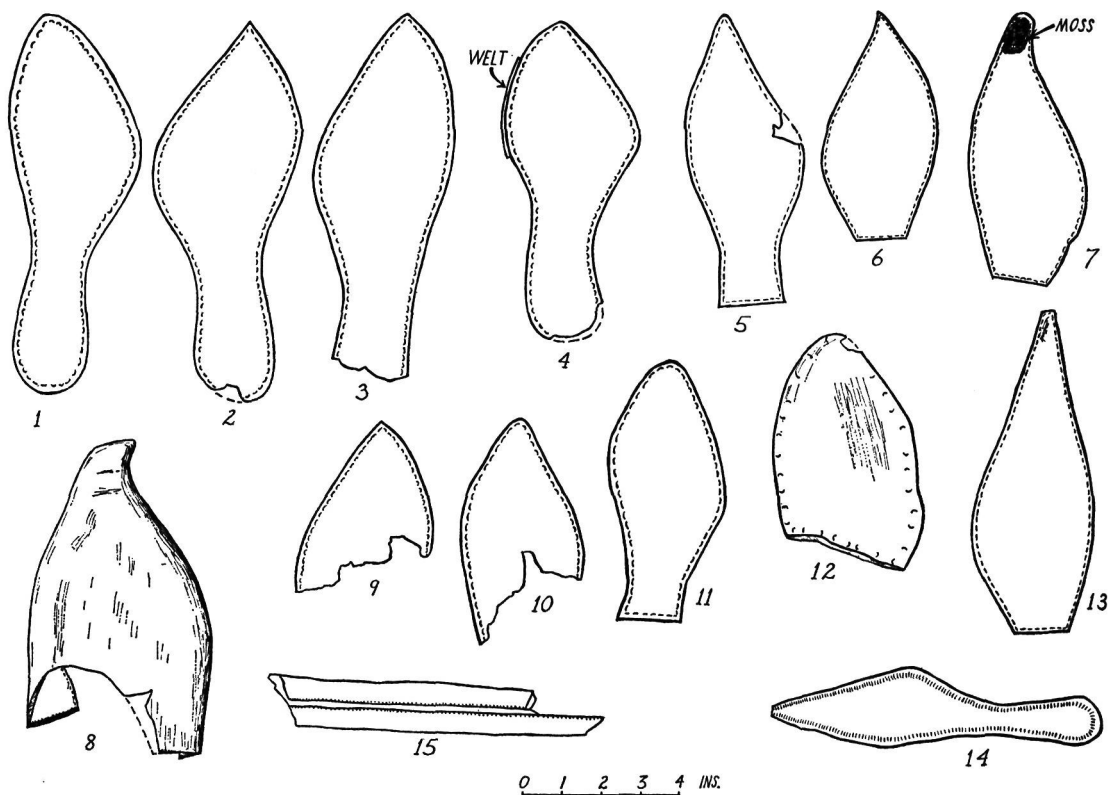


Fig. 11

An object of particular interest is the sole of a small, long-pointed shoe (for right foot, probably a young boy's) (Fig. 11, no. 14). This more exaggerated form of pointed shoe is sometimes called a "cracowe". The usual explanation of this term is that the style was introduced into England by Anne of Bohemia, but pointed shoes can be traced back to Hittite cultures. This small sole comprises seven layers of thin leather sewn together; the awl-holes are very clear. The present lowest layer shows signs of wear but the awl-holes go right through this layer. In the absence of the other parts it is not clear exactly how this was made. Stitching left unprotected on the surface of the outer sole would last no time. There is no sign of a "channel" which even after much wear usually leaves some traces. Perhaps there was once another layer which, when badly worn, was torn off, leaving unprotected stitching.

Another item of interest is the sole which has the remains of a welt which was inserted between sole and upper; this feature is unusual in such a shoe (Fig. 11, no. 4).

Among the shoemaker's scraps is one from which a half-sole has been cut, probably for patching (Fig. 11, no. 12).

"Split closing" has been used for joining the different parts of the uppers in most examples; in this method, as with the soles mentioned above, the stitches pass, from the back or flesh side of the leather, through only half the thickness, thus making a butt-joint in which the stitching is hidden.

OTHER OBJECTS

The pieces of goatskin show signs of use and are probably parts of jerkins. The oblong strip (Fig. 11, no. 15) with edges turned up so as to form a "channel" shape, I cannot identify. It is not, I think, part of a sheath or scabbard because the leather is much thinner than normally employed for this purpose, the outer edges (where folded) are quite straight and parallel, whereas a sheath is usually shaped, and there is no clear evidence of the normal raised seam. This would be an unusual way to make a strap or belt; it might be a covering for a flat piece of metal, for example a cobbler's flat-blade knife from which the leather was cut away as the metal wore down, but it is rather long for this.

Leather from Bankside Power Station; Section A-B. Level 3, circa 1500 A.D. (Fig. 11).

- 1-3. Leather soles of poulaines.
4. Leather sole of poulaine. Right foot. Welt preserved on left side of toe.
- 5-7. Half-soles of poulaines. These were joined to the heel part with split-closing.
8. Fore-part of a large right foot poulaine. This is the upper of no. 7.
- 9-10. Fragmentary toe ends of soles of poulaines.
11. Half sole of poulaine. Right foot.
12. Patch from toe part of a leather shoe. Right foot.
13. Half-sole of poulaine. Left foot.
14. Laminated sole of a boy's right foot "cracowe".
15. Piece of leather with both edges folded back to meet in the middle. Stitch holes on one side only. Purpose unknown.

APPENDIX I

Bankside Power Station: Analysis of silt sample from stream filling dated *circa* 1500 A.D.

(A) *Mollusca*, by C. P. Castell.

“Your silt sample produced the following:

<i>Valvata piscinalis</i> (Müller)	18
<i>Bithynia Tentaculata</i> (L)	7 + 7 opercula
<i>Bithynia leachi</i> (Sheppard)	5
<i>Lymnaca peregra</i> (Müller)	8
<i>Planorbis planorbis</i> (L)	1
„ <i>albus</i> (Müller)	8
„ <i>contortus</i> (L)	1
<i>Succinea</i> sp.	1
<i>Helix aspersa</i> (Müller)	fgt.
<i>Arion</i> sp.	3 granules
<i>Pisidium</i> spp.	17 valves
<i>Ostrea edule</i> L(Oyster)	fgt.
<i>Mytilus edulis</i> L(Mussel)	fgts.
Ostracod	2 valves
Fish vertebrae	2
Newt vertebra	1
Plant remains (see (B)).	

The fauna suggests a slow-flowing stream. The mollusca are nearly all aquatic, with the exception of *Helix aspersa* (the garden snail) and the slug *Arion*. *Succinea* is a marsh dweller”.

(B) *Plant Remains* by Sir George Taylor.

“The greater part of the sample consists of Oak wood (*Quercus* sp.). A few pieces of twigs bearing branch thorns are probably Blackthorn (*Prunus spinosa*). Half of a single seed was noted, but it was not identified”.

REPORT ON THE ANIMAL BONES FROM 18-20 SOUTHWARK STREET

BY RAYMOND E. CHAPLIN and JENNIE P. COY, B.S.C.

The series of bones from this site have been examined and are detailed below. They are of no great interest as they are largely fragmentary and few in number. Such measurements as could be taken show no unusual features. It is unfortunate that the fragmentary remains of the birds do not permit specific identification.

FROM 1ST CENTURY DEPOSITS

Bos. Fgt. proximal end metacarpal. Max. width proximal end, 49mm.

Sheep/goat. Fgt. of tibia, ramus of mandible, olecranon process of ulna.

Bos. Proximal phalange. Maximum overall length, 52mm.

Sheep/goat. Distal end of radius, width distal end, 29mm. Fgt. lumbar vertebra.

FROM 13TH CENTURY DEPOSITS

Sheep/goat. Distal end of humerus, max. width distal end, 29mm.

Bos. Six fragments. Astragalus, length 59mm.

Sheep/goat. 1 fgt. *Bird*, 2 fgts. *Dog*, 1 fgt.

VERTEBRATE REMAINS FROM BANKSIDE POWER STATION

Two bones were submitted for report from this site, both dated *c.* 1500 A.D. One was the right posterior portion of the cranium of a sheep, cut obliquely across the parietal bone. The second, a fish bone, was identified by Mr. A. C. Wheeler of the fish section of the British Museum (Natural History). It is the right dentary bone of the Whiting-pout (also known as the Pout, Pouting or Bib) *Trisopterus luscus* (L). It is a common fish in the Thames Estuary today and can be caught on lines or in seine and trawl nets. It is quite good eating, comparable with its near relative—the Whiting.

¹ For sandspit see *Illustrated London News*, March 10th, 1962, pp. 3746375.

² K. M. Kenyon, "Excavations in Southwark", *Surrey Arch. Soc. Research Paper No. 5* (1959), p. 26.

³ See W. B. R. King and K. P. Oakley, "Pleistocene succession in the lower parts of the Thames Valley". *Proceedings of the Prehistoric Society*, 1936, pp. 52-76.

EXCAVATIONS AT LEFEVRE ROAD, OLD FORD, E.3.

SEPTEMBER 1969-JUNE 1970

BY HARVEY SHELDON

I. AIM

The aim of this excavation was to try and locate either of the two Roman roads which have been suggested as running north-eastwards from London to join at the River Lea crossing point of Old Ford before continuing on to Colchester.¹ One of these roads should, theoretically, run to the Lea straight from Aldgate;² the other on a more easterly course, should come from Old Street.³

II. THE SITE

The site chosen, which could be crossed by either, or both, of the proposed roads, is approximately $2\frac{1}{2}$ miles north-east of the Roman city and $1/5$ th mile south-west of the traditional fording point of the Lea.⁴

The main area available for examination comprised a triangular stretch of ground lying between the houses at the back of Lefevre Road and Lefevre Grove, and the cutting excavated for the North London Railway.⁵ (See Fig. 1, site plan). Both the houses and the railway were of mid 19th century date and there is no record of any building here prior to them.⁶

Although there is little difference in height to the north and south of the site, to the east the land drops away as it approaches the Lea.⁷ Geologically the first natural layer encountered is a sandy clay which lay about a foot deep on top of the gravel. The gravel, which is mingled with layers of sand and sandy clay, is shown by deep borings to descend for about 20 feet onto the London clay.

III. THE MAIN RESULTS

A. THE ROAD

The excavation resulted in the finding of a Roman road⁸ which appears to be aligned on Aldgate and on the assumed crossing point of the Lea at Iceland Wharf.

In its initial phase the road had a total metalled width of 66-67 feet, and had been designed as a "three-track highway" with a raised central portion. From pottery incorporated in the construction of the first phase it would seem that the road was laid down soon after the Claudian invasion.

Two major reconstructions can be recognised: in the first of these the southern track was raised to the level of the central one, and the "three-track" aspect of the road was thus abandoned.

In the second, the southern track was again raised so that it was slightly higher than the centre one. Coin and pottery evidence associated with this last phase suggest that the road continued in use until at least the end of the 4th century A.D.

B. THE SETTLEMENT

Alongside, and to the south of the road, evidence of 4th century A.D. settlement has been obtained from a number of pits and ditches as well as from laid pebble yards and a structure which might be interpreted as a tile kiln. The pits and ditches contained much pottery,

building material and animal bone as did a seemingly general scatter of debris extending about 40 feet south of the road. It is possible that this roadside occupation continued into the 5th century A.D.

IV. THE ROAD AND ITS STRUCTURE

A. GENERAL

The road lay at the northern edge of the area available for excavation. Its line had been cut through to the west of the site by the Lefevre Road houses and to the east by the railway. To the north the cellars of the Lefevre Grove houses had also been dug into it; on the main area of excavation, therefore, it was only possible to examine in detail the southern track of the road. Fortunately, by clearing down the side of it the railway cutting, and working into it, it was possible to obtain a complete section of the road.

Much of the following information is based upon the evidence gained from the railway cutting section (see Fig. 2).

B. THE FIRST PHASE (see Fig. 3a)

In its initial phase the road appears to have been designed as a "three-track highway" built upon a bed of cemented gravel and clay. The following measurements for the metallised surfaces are suggested:

<i>Description from south to north</i>	<i>feet</i>
Southern track flat – – – – –	10·0
Southern track rise – – – – –	12·5
Centre track flat – – – – –	12·5
Northern track fall – – – – –	16·0
Northern track gentle rise – – – – –	5·0
Northern track flat – – – – –	11·0
	<hr/>
Total metallised width – – – – –	67·0*
	<hr/>

It would seem that initially gravel and sand had been dug from the area where the road was built and that the quarry area was then filled back with clay. Fig. 3a shows that the depth of the quarrying was not even and had a pitted base. Other sectional evidence on the site confirmed this; it could be that a general quarrying ditch was deepened when it was judged that extra material was needed.

The clay fill which served as a base for the agger was also shaped to make the sloping areas between the central and the side tracks. It was generally chocolate to tan in colour and very clean except for flecks of charcoal and the occasional sherd of pottery. Its top 2 inches were in part greyer and stiffer with a greenish tinge as though exposed for some time.

The agger, a solid core of thickly cemented pebbly gravel, had a base width of 25 feet, and a top width of just under 13 feet. It was approximately 1 foot thick at its maximum, and, like the clay beneath it, was shaped to accommodate the side slopes of the road. In common with the side tracks it had a surface of small but irregular-shaped pebbles.

The southern track was composed of a single but very solid pebble layer rammed hard into the clay. Its flat surface had a width of 10 feet and was approximately 1·5 feet lower than the central track. It had a rising track width of 12·5 feet.

* As it was not possible to obtain a section exactly at right angles to the road 66ft. may be a more exact width.

The first phase of the northern track seems to have also consisted of just one layer of rammed pebbles falling 16 feet from the centre track into a small hollow which may have served as a drainage gully. It then rose gently for 5 feet and ran horizontally for a further 11 feet at a height of some 2 feet below that of the centre track. It partially overlay what was presumably a shallow quarrying area, backfilled with clay and extending northwards out of the section.

Much of the evidence for the construction date of the road came from one part of the site. Here a quantity of pottery, daub and charcoal was found lying in a black greasy burnt deposit on top of the clay sub-structure and underneath the first surface of the rising southern track.

Although a few similar pottery sherds were found in other areas of the site where the clay base was exposed and excavated, only in this area was there such a concentration of it. It may represent part of a camping area used by native road labourers.⁹

The pottery (some of which is illustrated in Fig. 4) is similar in both form and fabric with Conquest period material from CAMULODUNUM¹⁰. It also has strong affinities with the Belgic pottery from the Kentish hill-fort of Oldbury.¹¹ The absence of Romanised forms is perhaps significant and implies that the London-Colchester road was built soon after the start of the occupation.

In terms of fabric, two types of vessels are represented. Firstly "quality" vessels which have a fine even paste, feel hard and smooth, and possess everted rims (Fig. 4; 1, 2, 3 and 4). Secondly, "coarse" vessels with beaded rims (Fig. 4; 5, 6, 7, 8 and 9). The "coarse" vessels are generally denser than the "quality" ones; their surfaces may be described as "pitted" or "pock-marked" and they have a texture which has elsewhere been referred to as "corky" or "porridgy".

Three of the four base examples (Fig. 4; 10, 11 and 12) are in the former type of fabric. No. 12 has a pronounced foot ring; the others and No. 13 are flat-bottomed.

Fig. 4 (1) *Everted rim jar*: light grey in section, a fairly fine fabric with particles of grog visible. Darker grey on the surfaces with the external one burnished. The vessel has a hard smooth feel. One cordon occurs at the base of the neck; a less pronounced one, between grooves, is found at the shoulder.

Fig. 4 (2) *Jar or beaker with slightly everted rim*: the fabric and finish is very similar to (1) above.

Fig. 4 (3) *Probably a jar with an everted rim*: in section this vessel has a light grey core in a buff sandwich. The paste is fine with grog particles visible. The surfaces are light buff in colour. The external one has been smoothed and has a hard feel. A double cordon is at the base of the neck and another one occurs at the lowest surviving part of the body.

Fig. 4 (4) *Probably a butt beaker*: medium dark grey in section with a fine paste. The surfaces are greyish-brown and probably burnished.

Fig. 4 (5) *Bowl (or jar) with beaded rim*: this vessel is light brown to pink throughout. The surfaces are "pitted" — very rough and uneven and the texture is "corky". Two similar examples have not been drawn. Small particles of shell or chalk are visible.

Fig. 4 (6) *Bowl (or jar) with beaded rim*: fairly similar to (5) with a pink "corky" fabric and "pitted" surfaces.

Fig. 4 (7) *Jar (or bowl) with beaded rim*: the section varies in colour from grey to pink-brown. The external surface is orangy-brown — the internal one pink-brown. The texture is "corky" and the surfaces "pitted". Particles of grog visible. There is a slight indication of a swelling below the rim on the external surface.

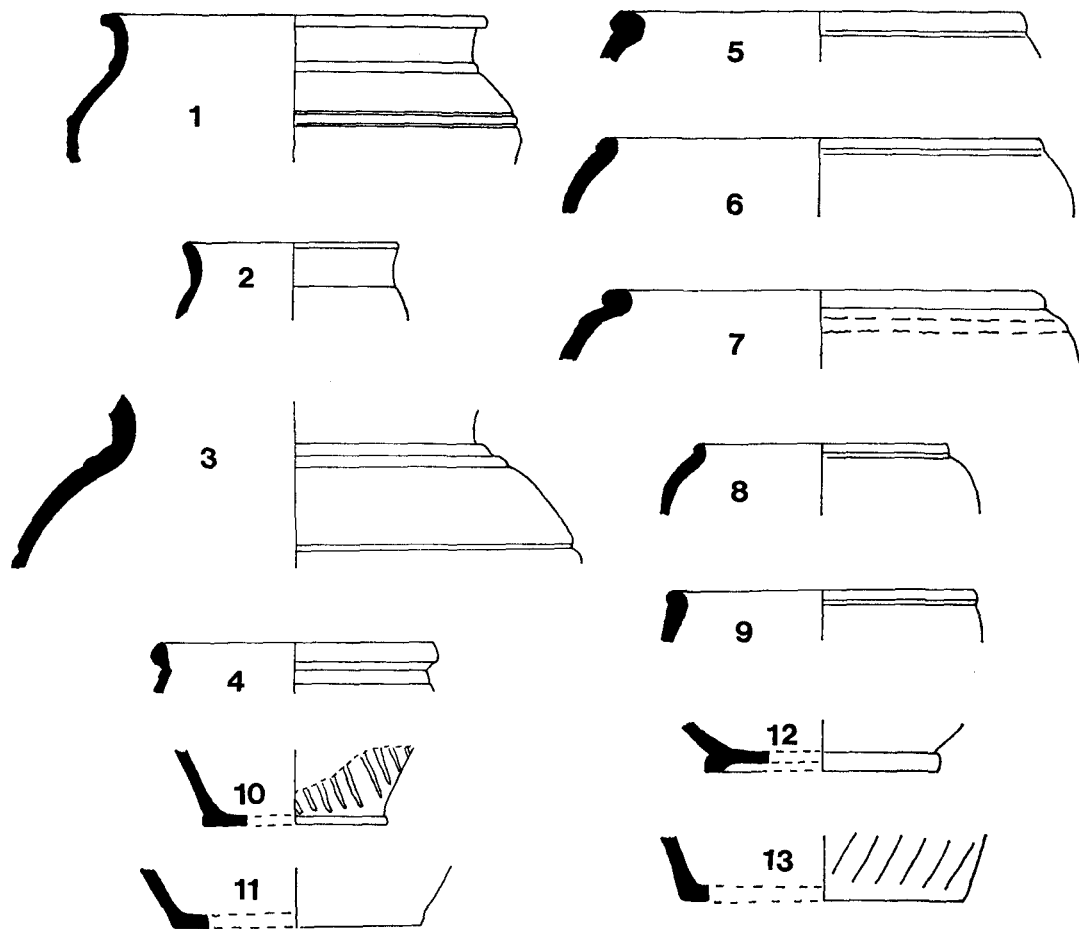


FIG.4 ; POTTERY FROM THE CONSTRUCTION PHASE $\frac{1}{4}$

Fig. 4 (8) *Probably a jar with a beaded rim*: This vessel is light grey in section. The internal surface is pinkish at the rim and possibly under-fired. The external surface is darker grey and lumpy, with a marked groove below the rim. Both surfaces are "pitted".

Fig. 4 (9) *Bowl with a beaded rim*: the fabric of this vessel is dark grey in colour with a "corky" texture and "pitted" surfaces.

Fig. 4 (10) *Flat base*: coloured dark grey in section with a fine paste. The surfaces are pinker with combed lines on the external one.

Fig. 4 (11) *Flat base*: pink coloured in section, surfaces a greyer-pink. Similar to (10).

Fig. 4 (12) *Base with a marked foot ring*: very fine light grey paste. The surfaces are whitish-grey, but probably burnt. Very smooth feel externally.

Fig. 4 (13) *Flat base*: medium grey in section with grey-brown surfaces. "Corky" texture and "pitted" appearance. Lightly combed on the external surface.

The "three-tracked" structure of the road at Old Ford compares well with evidence gathered from what is considered to be its Colchester end in 1934.¹² Although it was "disturbed along the surface of its central roadway" the excavator concluded that it had a total width between side ditches of 67 feet. He believed that a reconstruction "on level ground" would show an agger with a 33 feet base having on top a central roadway of 27 feet, with two lower side tracks each of $16\frac{1}{2}$ feet. Other evidence of the "three-tracked" type of road in Britain has come from Ermine Street at Ware.¹³ Here a section produced evidence of the road having a total width of 65 feet between ditches, consisting of "two side portions, each about 20 feet wide with a central and thicker roadway about 24 feet wide".

There is little clear evidence of side ditches during the initial phase of the road at Old Ford. The ditch at the south of the road (see Fig. 2) overlies a quarrying area of the Flavian period, and had an earlier ditch occurred here it is likely to have been destroyed by this later activity.

To the north nothing like an open road ditch was recorded¹⁴ although a feature probably related to the laying out of the road was seen. This was a small box-shaped depression about 3 inches to 4 inches deep and 2 feet wide, seemingly running parallel to the road. It lay just outside the northern edge of the metalling and its outer edge was 42 feet north of the centre of a pit, apparently cut into the clay sub-structure of the road after only part of it had been laid. This pit, which had been filled back with gravel, was just under 2 feet 6 inches wide at its top and 2 feet 6 inches deep. If there had been a southern counterpart to the box-shaped depression, it would have been removed by Flavian quarrying. It is possible that the central gravel-filled pit and the northern depression were the remains of initial surveying features. Their 42 feet distance fits well with Margary's observation that 84 feet was a standard layout measurement for first class roads.¹⁵

At the north of the road two features beneath the clay sub-structure were seen (see Fig. 2). Both were backfilled with dirty clay containing streaks of charcoal and bricky traces. Whether they were pits or ditches is not clear, but they may be indications of activity during the early part of the construction phase.

C. THE SECOND PHASE (see Fig. 3b)

We have little indication of the length of the life of the first phase of the road. Neither the south nor the north track showed any real signs of heavy wear; there was little washed gravel and no patches or layers of dirt on the surfaces.

At the north only one reconstruction was seen which was interpreted as a remodelling of the road. Apparently the height was raised with a level of sandy-orange gravel to that of the southern flat track. Accompanying this reconstruction, the northern track was provided with a 12 feet wide shoulder of fine cementy gravel which had a greenish coloured tinge. This rose about 1 foot over its length towards the north, partially overlying the old track.

As the northern flat track was raised to the same height as its southern counterpart, it could imply that the original three-track design was retained during the re-modelling. If so, the following revised measurements for the road apply:

<i>Description from south to north</i>	<i>feet</i>
Southern track flat - - - - -	10.0
Southern track rise - - - - -	12.5

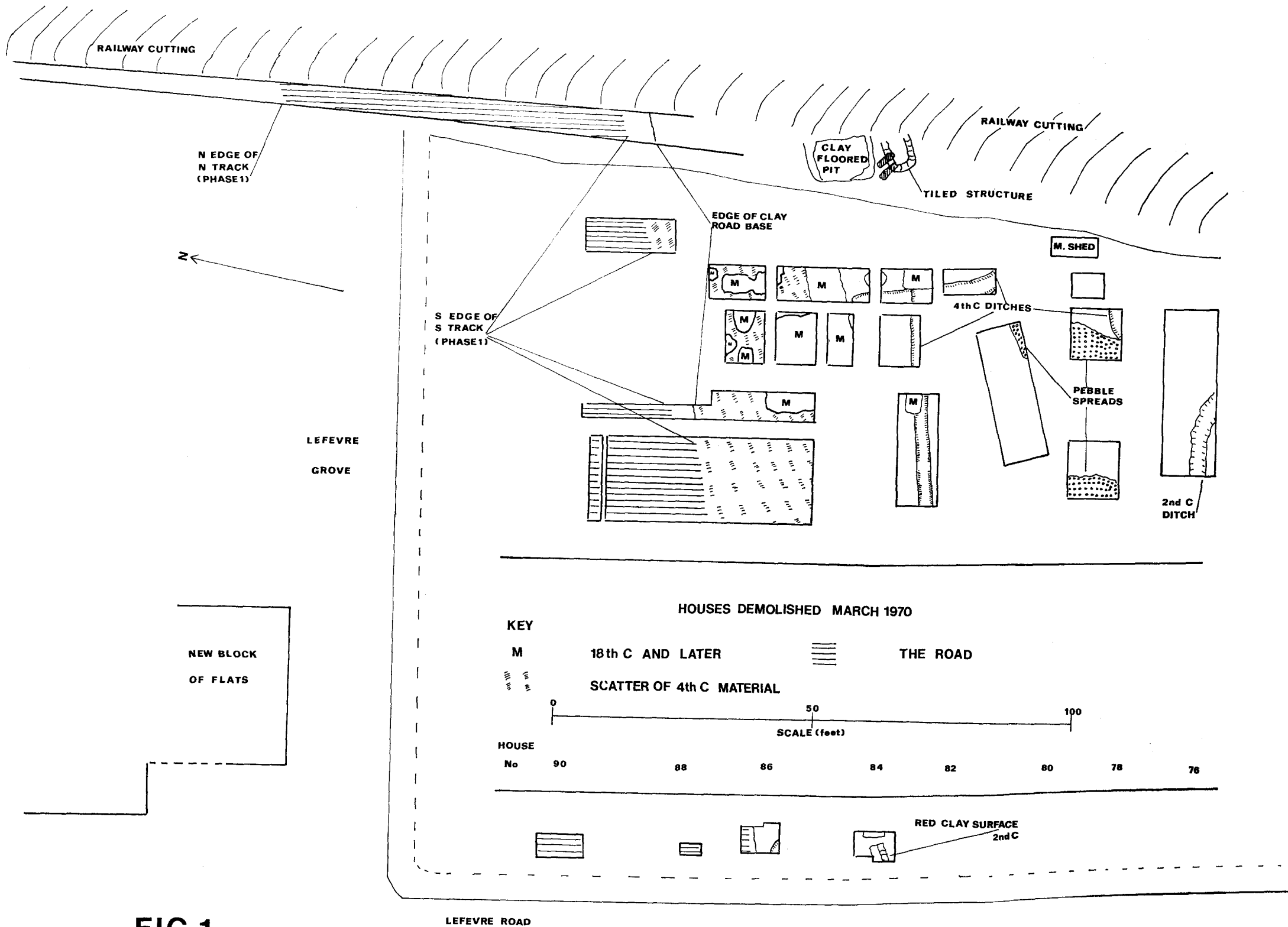


FIG. 1

LEFEVRE ROAD; SITE PLAN

Centre track flat	-	-	-	-	-	-	12.5
Northern track fall	-	-	-	-	-	-	10.5
Northern track flat	-	-	-	-	-	-	17.0
							<hr/>
Total metalled width	-	-	-	-	-	-	62.5
							<hr/>

If this interpretation is correct then the road in this phase was 4 feet to 5 feet less in width than in its initial phase.

The material to provide the gravel for the redesigned northern track could have come from the quarry ditches which were found to the south of the road.¹⁶

These pits were backfilled with clay and then capped with pebbles to form a ditch bottom and southern shoulder to the road. The quarry ditch shown in Fig. 3(b) contained quite an amount of pottery, including fragmentary sherds of various Samian vessels. From this evidence it may be assigned to the Flavian period.

If this quarrying is related to the second phase of the northern track, then a Flavian date for the re-modelling may be given. The only Samian sherd on this second northern track has been dated as Hadrian-Antonine.¹⁷

The final gravel surfacing on the northern track was probably a local feature. A loose pebble spread was laid over the track running up to the agger; it was traced as a continuous surface for over 60 feet running north out of the section. Its horizontal top was about 1.5 feet below that of the central track.

This gravel spread was not observed in a contractors' section some 35 feet to the west of the railway cutting, and it could perhaps have served as a pebble track leading to part of the settlement. It would suggest that the northern track went out of use as part of the road.¹⁸ The date for this is uncertain but a clue might come from the 1934 Colchester excavation.¹⁹ Here also the northern track was found to have been abandoned and the excavator judged, from the pottery in the side ditch, that this occurred in the Antonine period.

D. THE THIRD PHASE—FIRST MAJOR RECONSTRUCTION (see Fig. 3(c))

The first major remodelling of the road involved raising the southern track so that it approached the height of the original centre one. This fundamentally changed the original design and probably converted the appearance of the road to that of a more conventional highway.

The level was raised firstly with a layer of gravelly sand, and then capped with a surface of irregular pebbles. It is probable that this spread continued as a fresh surfacing over the original centre track.

Dating evidence for the remodelling is sparse, but a Samian sherd of Trajanic-Hadrianic date, found on the original southern track, suggests that it did not take place before the early 2nd century A.D. A few sherds in the build-up for this phase were of Antonine, or possibly later, date.

If we assume that the northern track was abandoned as part of the remodelling²⁰ then the roadway would have had a flat track width of about 21 feet, with a marginal drop of about 4 inches over a further 2 feet, followed by a further flat stretch of 11 feet. In all, therefore, it would have had a total width of 33 to 34 feet.

The road in this phase was accompanied to the south by a shallow ditch some 17 feet wide, which contained 2nd century A.D. pottery lying in a greenish coloured fill. Over the southern edge of the ditch was a deposit of brownish earth overlaid by bands of silty clay and blacker earth. The interpretation of these strata is difficult, but they could have been a deliberate banking for a spread of gravel some 29 feet wide which ran over the bank and up to the southern edge of the road. This spread was dirty and thin at its highest area over the bank, but clean, and on average 6 inches thick, over the ditch.

A similar spread was recorded in the other sections to the south of the road. The gravel, which had a raised shoulder some 6 feet wide at its extreme south, may have been laid to function as an additional track.

It is possible that, although this gravel spread was laid on to the edge of the phase three road, it was designed as part of the final reconstruction described below. The gravel spread, and the bank, are shown as relating to this last phase (Fig. 3 (d)).

E. THE FOURTH PHASE—SECOND MAJOR RECONSTRUCTION (see Fig. 3(d))

In the final phase of the road the area over the old southern track was again raised, with a layer of sandy gravel; this was some 19 feet wide and had a maximum depth of about 7 inches. Although the new surface was some 3 inches higher than the surviving top of the rest of the road, there is no evidence to suggest that the latter went out of use. As with the previous phase this reconstruction had the effect of moving the centre of the road further to the south.

It is likely that the roadway, in its last phase, was about 34 to 35 feet wide. To its side lay the loose gravel spread described above, with the southern shoulder at approximately the same height as the main roadway.

We have no evidence in the structure for the date of this — the last — remodelling of the road. However, above the gravel spread, in the ditch-like hollow between the shoulder and the road edge, was found pottery of the 4th century A.D. This lay in a grey-black earth deposit with animal bone and building tile. The mixture was very similar to that found alongside the south of the road elsewhere on the site. The debris, found in quantity to the side, did not extend over the top; this suggests that the road was still in use at the end of the 4th century A.D. Certainly there is no evidence from the final surface that the road was abandoned before that time. The excavation showed that the final surface — where intact — had been covered by a fine light brownish soil, containing abraded sherds of Roman pottery.

F. POTTERY ASSOCIATED WITH THE LAST PHASE OF THE ROAD

Vessels from the area south of the road are illustrated in Fig. 5. Some are from the ditch-like hollow (Fig. 5, nos. 4, 8, 9, 11, 13, 14, 17, 19, 23, 24 and 25). The remaining examples are from the scatter deposit (Fig. 5, nos. 1, 2, 3, 5, 6, 7, 10, 12, 15, 16, 18, 20, 21, 22, 26 and 27).

Dishes

1. (T2 L3): hard fine light grey fabric. Surfaces are dark grey; internal surface almost black and is burnished (worn in places); external surface has been smoothed except for a roughened band just below the rim and another at the base. (*cf.* Lockleys, Fig. 9, no. 4; dated to 300–340).

2. (T₁₅ L₁): coarse hard grey fabric. Surfaces are dark grey; internal surface has two rough broad grooves below the rim and a looped burnished line towards the base. (*cf.* Alice Holt, Fig. 4, no. 35).

3. (T₁₅ L₁): hard buff fabric. Surfaces are black and polished; internal surface and rim are smoother than the external surface. There is a groove and roughened band on the external surface just below the rim.

4. (RC₃ L₁): hard fine light grey fabric. Internal surface, rim and top $\frac{1}{4}$ inch of external surface have polished grey slip. Rest of external surface is the same colour of the core, and is smoothed except for a reserved band about $\frac{1}{2}$ inch wide immediately below the slip. A broad shallow groove divides this reserved band.

5. (T₁₅ L₁): hard fine buff/grey fabric. Surfaces are dark grey and polished; internal surface and rim are smoother than the external surface. No decoration. (*cf.* Alice Holt, Fig. 4, no. 36, 4th century).

Jars (a) with "cavetto rims"

6. (T₂ L₃): hard fine light grey fabric. Surfaces are burnished.

7. (T₁₅ L₁): hard fine grey fabric. Surfaces are grey; internal surface above the neck and external surface below a line $\frac{1}{4}$ inch above the neck have polished grey slip. The rest of the internal and external surfaces are fairly smooth, and there is no decoration.

8. (RC₃ L₁): hard fine pale grey fabric. External surface and internal surface down to about $\frac{1}{4}$ inch above the neck have grey slip, which is patchy on the external surface. The rest of the internal surface is grey-brown and fairly smooth.

9. (RC₃ L₁): hard sandy grey fabric, showing traces of oxidisation near the surfaces. The surfaces are grey and have been slightly smoothed. There is no slip or decoration.

Jars (b) others

10. (T₂ L₃): hard fairly fine light grey fabric, with a gritty fill. The external surface is a darker grey, with a groove at the base of the neck.

11. (RC₃ L₁): hard coarse sandy grey fabric. Surfaces are grey and rough, with no slip or decoration.

12. (T₁₅ L₁): hard fine grey fabric, oxidised to red-brown towards the surfaces. The surfaces are grey; the internal surface is lumpy and unsmoothed, and the external surface is polished and smooth. There is a cordon and groove at the junction of the neck and shoulder. (*cf.* Alice Holt, Fig. 3, no. 19).

13. (RC₃ L₁): hard coarse sandy fabric, off-white at centre but buff near the surfaces. Surfaces are buff with darkening at the rim. No slip or decoration.

Miscellaneous

14. (RC₃ L₁): small bowl in hard sandy light red fabric. Surfaces are light red and smoothed. No slip or decoration.

15. (T₁₅ L₁): flange in hard fine orange-buff fabric. The surfaces have orange slip and there is white-painted decoration and rouletting on the upper surface.

Flanged bowls

16. (T₁ L₃): coarse dark grey fabric. Both surfaces have been burnished, the external surface less carefully than the internal.

17. (RC₃ L₁): hard fairly fine fabric. The surfaces have black slip; the external surface and the upper surface of the flange are burnished and smooth, but the internal surface is badly abraded.

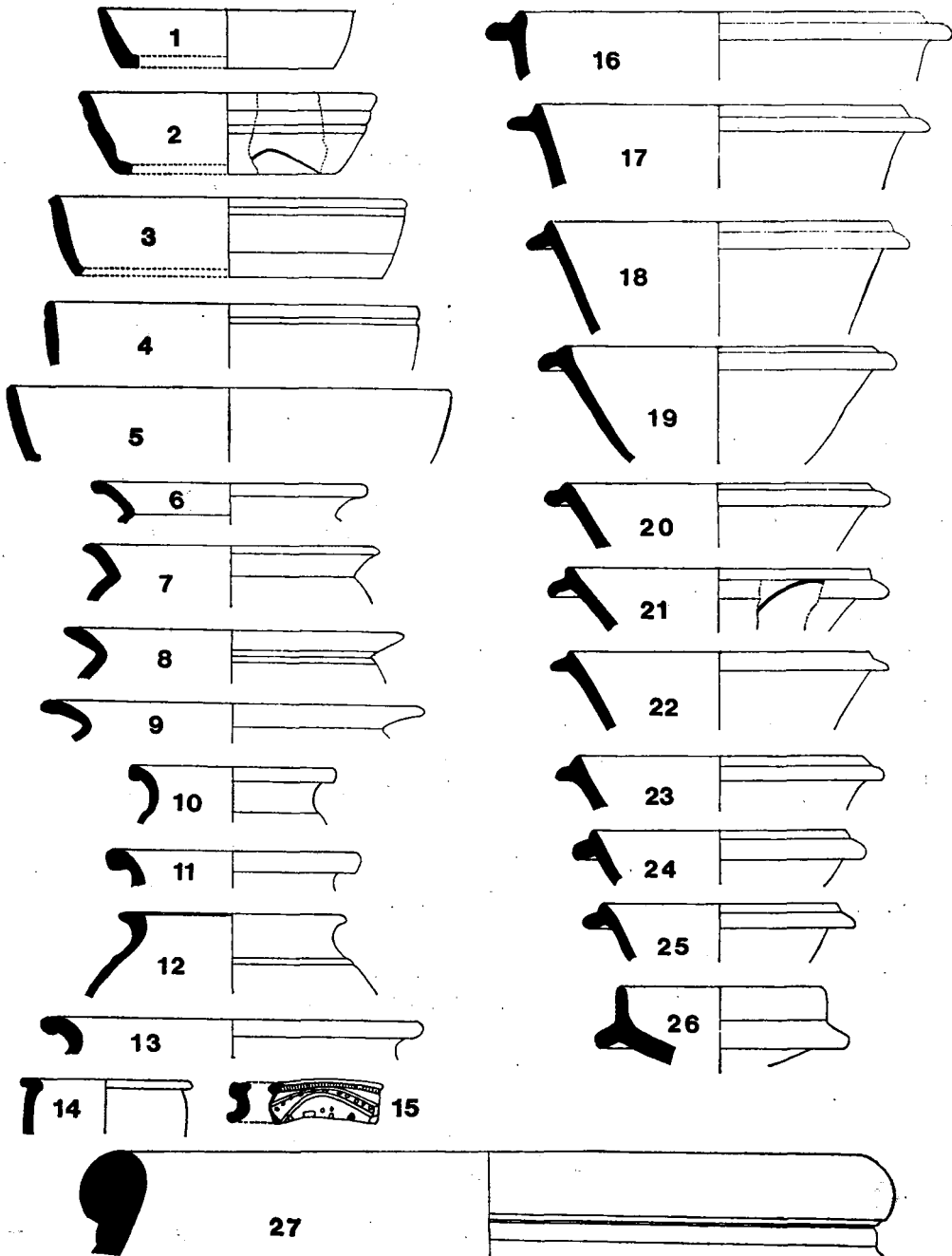
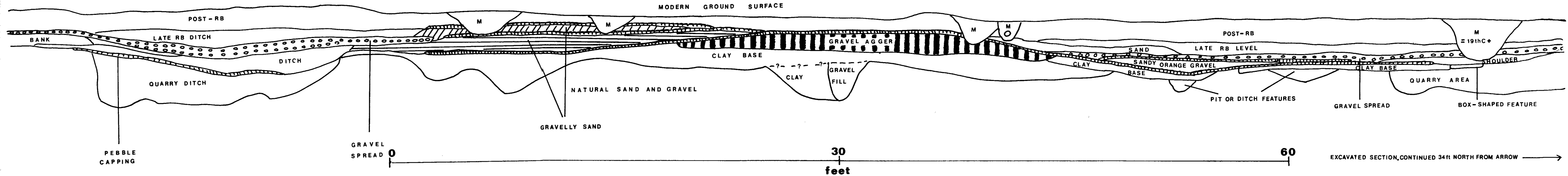


FIG. 5 ; POTTERY FROM LAST PHASE OF ROAD $\frac{1}{4}$

FIG 2 ; THE ROAD IN THE RAILWAY CUTTING (facing west)

ROAD SURFACES : 



18. (T2 L3): hard fine light grey fabric. Both internal and external surfaces are burnished. (*cf.* Lockleys Fig. 9, no. 11, dated 300–340).

19. (T17 L1): hard fine cream-coloured fabric. Internal and external surfaces are covered by dark brown slip which tends towards orange on the flange, with a bright orange patch on the inner part of the lip.

20. (T15 L1): hard sandy grey/buff fabric. The surfaces are grey/orange; both have been smoothed but the external surface is slightly astringent. No decoration.

21. (T15 L1): hard granular black fabric. The surfaces are black and polished, and the external surface is decorated with a burnished looped line.

22. (T2 L3): hard fine grey fabric. Both the internal and external surfaces are burnished a darker grey. No decoration.

23. (RC3 L1): coarse hard grey fabric. The surfaces have been smoothed; the internal surface continuously and the external surface in horizontal bands. The flange has been damaged.

24. (T17 L1): fine hard grey fabric. The surfaces are smooth; the internal surface and the upper part of the rim have a white slip and are burnished.

25. (T17 L2): coarse hard sandy fabric, shading from dark grey in the flange to orange-brown towards the internal surface. Surfaces are dark grey; the external surface and the flange are burnished, while the internal surface is rough.

26. (T15 L1): fine hard buff fabric. The surfaces are buff/grey; the external surface is polished but worn and the interior is slightly lumpy. There is a low flange at the bottom of the vertical side to the vessel. No decoration.

Storage jar

27 (T2 L3): coarse hard light grey fabric. The surfaces are darker grey; the external surface is smoothed but the internal surface is uneven. There is a groove just below the rim.

V. THE SETTLEMENT

A. THE EVIDENCE FOR SETTLEMENT

Evidence of settlement near to the highway was obtained from a number of ditches and pits as well as from laid pebble yards. The former contained much pottery, animal bone and building tile, as did a seemingly general rubbish scatter extending for about 40 feet south of the road. The pottery and associated coins suggest that most of the occupation features are of 4th century date (see Fig. 1 Site Plan).

Our knowledge, from this excavation, of the layout of the settlement and of its social and economic nature is very limited. The loose spreads of pebble did not appear to be the floors of structures. There was no evidence of accompanying post-holes or beam slots to suggest that they were walled, and there was no notable concentration of collapsed building material lying over them.

The ditches may have served boundary or drainage purposes. One, which ran parallel to the road about 40 feet from its southern edge, had been cut down through earlier Roman levels. Material in it dated to the 4th century and the top fill contained a fairly clean brown earth suggesting that it finally silted up after the end of the settlement. A second ditch cut from the edge of one of the pebble spreads ran towards the east. This also contained late pottery.

Well over 90 per cent of the total animal bone recovered from the ditches and the rubbish scatter was ox, but horse, pig, sheep and dog were also found.²¹ Much of the skeletal evidence was fragmentary and there was no suggestion of complete burial except in the case of two dogs.

A fair proportion of the oxen were immature animals (see Appendix 11). This suggests that they were deliberately killed for food, an idea supported by the chop marks identified on many of the bones. As all parts of the animals were represented it is probable that they were butchered on the site. The evidence does not suggest a weighting in favour of the non-edible parts and it is possible therefore that they were consumed locally with the remains being thrown away as debris.

B. THE CLAY-FLOORED PIT AND THE TILED STRUCTURE

The excavation on the railway cutting produced evidence of very late Roman activity, probably of an industrial nature. Less than 10 feet south of the edge of the road complex was a rectangular clay-floored pit and next to it—slightly further south—a tiled structure.

(i) *The Clay-floored Pit*

This pit lay about 9 feet south of the edge of the gravel spread associated with the second or third major phase of the road. Although its eastern side had been taken out in the railway excavation it was apparently rectangular in shape, with a north-south width of 10 feet 6 inches at the west, widening to nearly 12 feet where the railway had destroyed it. Its east-west width was at least 7 feet. It had been cut down to a depth of about 6 feet, and floored with a layer of white clay which followed the outline of the pit. The edges of this floor were located: they had a maximum north-south width of 9 feet 6 inches and an east-west width of nearly 7 feet.

The clay floor, which was about 3 inches thick, contained a hearth in the centre of its northern area: this was a circular burnt area with some charcoal in the circumference. Found on the floor were various bronze objects, a complete box tile with mortar adhering, and several coins. Over part of the floor was an area of similar but slightly dirtier material; embedded in it were large fragments of plain and decorated tile. This level scaled the coins found on top of the clay floor, one of which (Appendix 1, no. 129) suggests that the pit was in use at a date not earlier than 383 A.D.

After the pit went out of use it was filled back with earth containing an amount of pottery, animal bone, daub and charcoal. Thirty-seven coins were recorded from the pit fill. One, found near the bottom (Appendix 1, no. 138) shows that this took place at a date not earlier than 395 A.D. The base of a 5th century glass vessel (Appendix 111, no. 10) indicates that the back filling—and possibly even the use of the pit—could have occurred at a date substantially later than that which can be proved by coin evidence.

(ii) *The tiled structure*

This structure had been cut down into the natural sandy gravel, and was substantially intact only below this level. Its northern edge was 3 feet south of the pit described above. The back wall and about 5 feet of the parallel side walls had survived to where they had been taken out in the mid-19th century railway excavation. At some time after this the northern wall had been damaged by the insertion of two large wooden beams with long iron rods bolted to them.

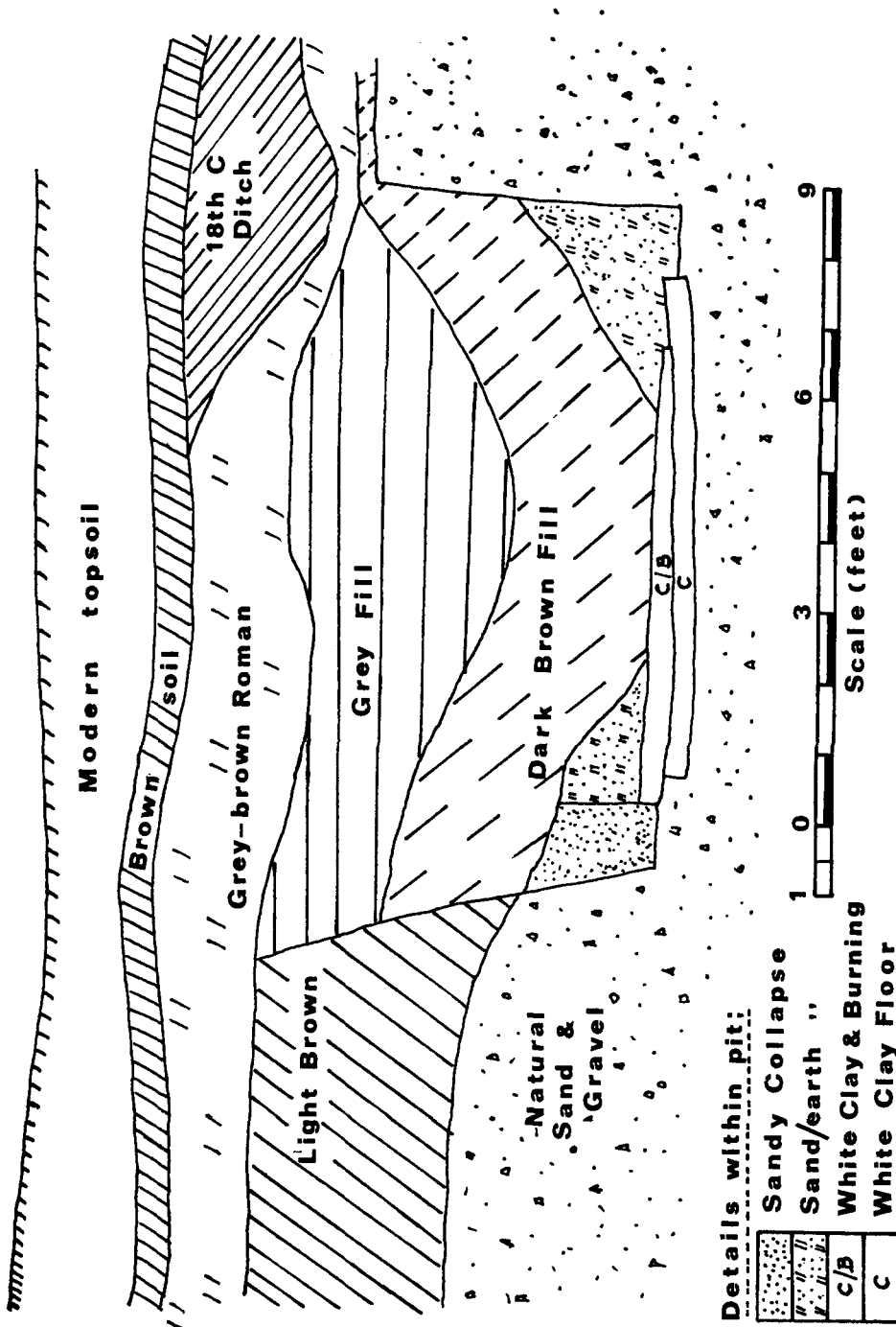


Fig. 6

**CLAY-FLOORED PIT ASSOCIATED
WITH TILE-BUILT STRUCTURE**
(view facing west)

The back and side walls had been built of layers of tile set in clean white clay. At the back, six layers of the tile survived, on the south wall four, on the north wall five. The internal height of the walls was, on average, 1 foot 6 inches at the sides, and a maximum of 2 feet at the back. The tiles were approximately $1\frac{1}{2}$ inches thick and some had mortar attached, probably showing previous use.

A layer of burning, about 3 inches thick, lay on the gravel at the base of the structure. This burning did not extend right up to the walls, and the clay bonding was fairly plastic. It is possible that the inside of the walls had been faced with earth, although this was not recognised in excavation. The structure itself had the appearance of a flue or furnace with an internal width of 2.5 feet and a surviving length of 5 feet. The height is unknown but must have been at least 2 feet. Detailed examination of the wall construction was not possible as the structure was destroyed by vandals the evening after the inside had been cleared.

Although there was no evidence of wasters, a likely interpretation of the structure is that it was the flue of a tile kiln. It has similarities to one found at Canterbury which "consisted of two much mutilated parallel walls, each 2 feet thick, built of flat Roman building tiles set in puddled clay, in a trench about 3 feet deep and 7 feet wide at original ground level". Here the main flue was 3 feet wide and 19 feet 6 inches long.²² Another tile kiln, from St. Albans, was "constructed in a rectangular pit, dug 4 feet into the natural clay". This kiln had a central flue, nearly 16 feet long and approximately 3 feet wide.²³ It was noted that the cross-flues commenced "at a height of 21 inches from the tiled floor of the main flue". There was no sign of cross-walls in our structure, but it is possible that they could have been built up from ground level and destroyed when the kiln went out of use.

If the interpretation of the structure as a tile kiln is correct then it should be assigned to Grimes Type II Rectangular Kilns,²⁴ distinguished as having "horizontal flue bottoms above the level of the main flue".

That the structure was contemporary with the pit is indicated by the identity of the material in the two fills. Sherds were recovered from one which joined with those recovered from the other. Their functional association is also likely; both stood together and the clay used for the floor of the pit was similar to that which bonded the tile layers together.

Assuming that the structure was a tile kiln, then the pit could have been intended for the storage of tile "cut-outs" in the process of drying, or finished products awaiting collection. If bulky products were to be made and stored in proximity to a road, then a pit with a cover at ground level might be a relatively safe method of concealment.

(iii) THE POTTERY FROM THE CLAY-FLOORED PIT AND THE TILED STRUCTURE

(Figs. 7, 8 and 9)

This pottery has been dealt with in some detail; the forms and fabrics suggest that it is substantially of a 4th century date. Although some sherds are undoubtedly survivals, very few earlier types are apparent in any quantity. For example, only one sherd was definitely from a "poppy beaker". Similarly, only eight out of the almost 2,000 sherds in the pit fill came from Samian vessels: all, except one of these, were worn and abraded.

The coins spread through the fill of the pit support the belief that most of the pottery is late. Of the 37 found only one was pre-3rd century, while 26 were definitely 4th century, and a further six either 3rd or 4th century.

Of the 120 vessels illustrated, 112 were from the clay-floored pit and six from the associated tiled structure (Fig. 7 (1), (21); Fig. 8 (5), (20); Fig. 9 (21), (23)). (Two vessels were found to have joining parts in each context (Fig. 8 (2), (32)).)

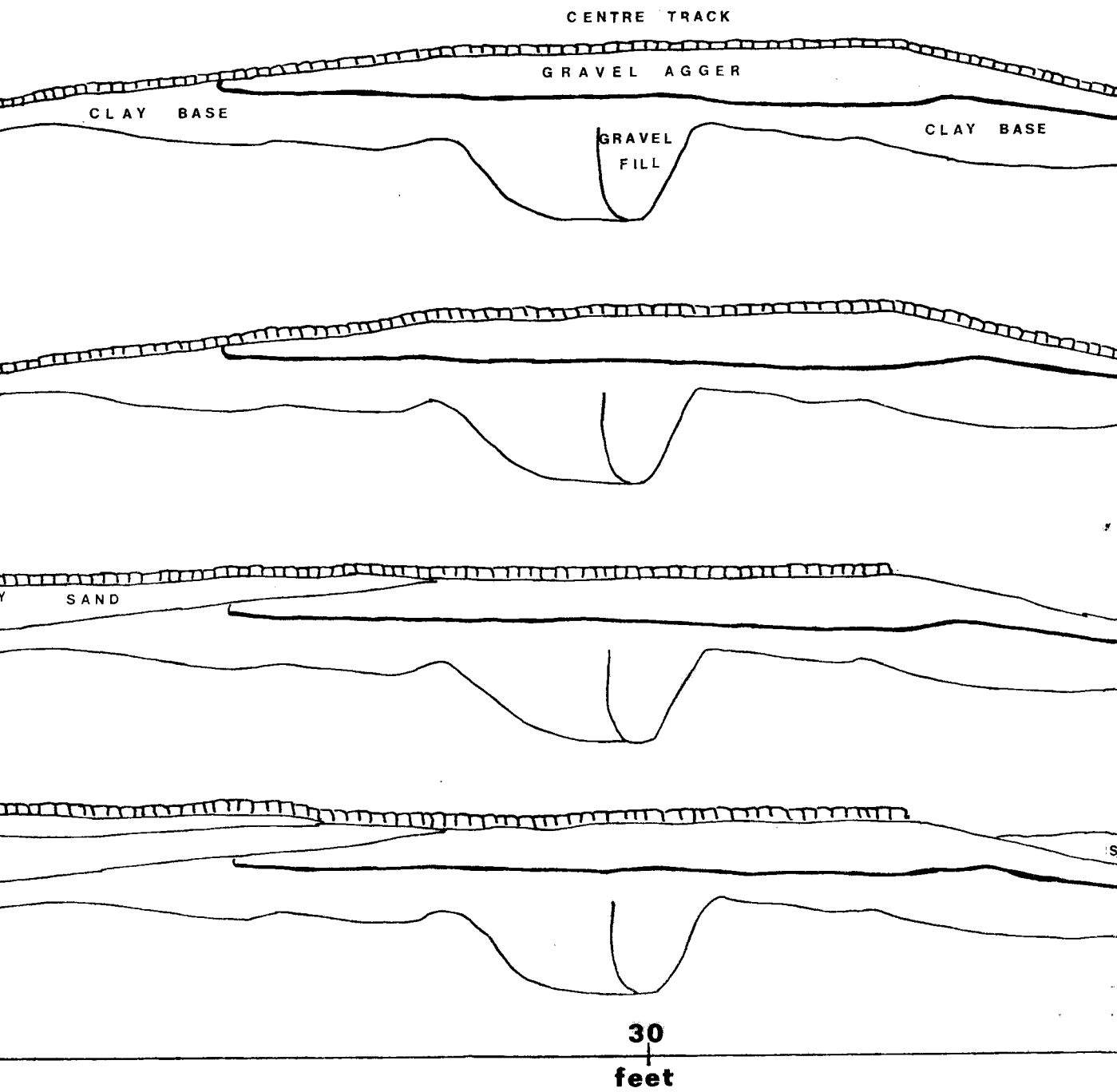


FIG 3 ; THE ROAD PHASES (facing west)

An interpretation of the

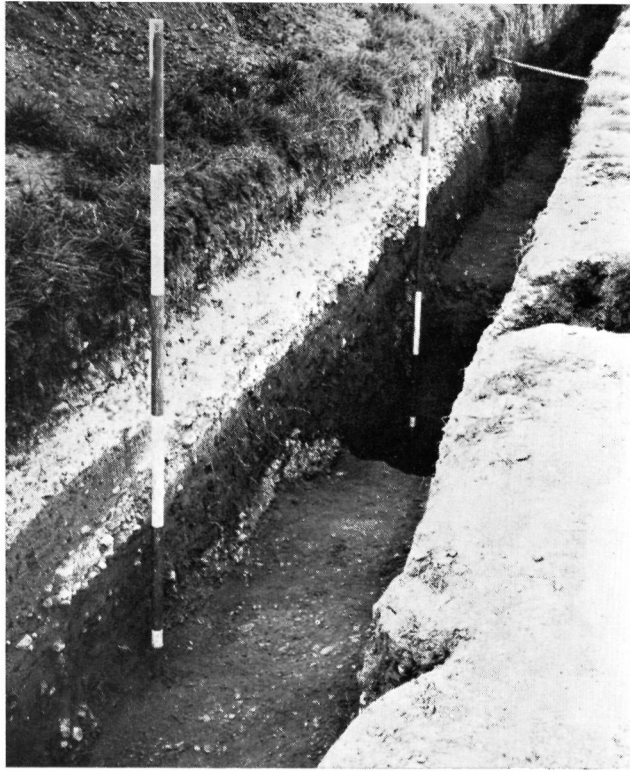


PLATE A. The road in the railway cutting looking north. The picture shows the raised centre track with the northern track in the distance. In the foreground, the raised southern track is seen to overlie its earlier lower version. Scale in feet.

Photographs by Bernard Brandham

PLATE B. A detail of the rising southern track of the road (first phase) overlain by the later higher versions (third and fourth phases). Scale in feet.

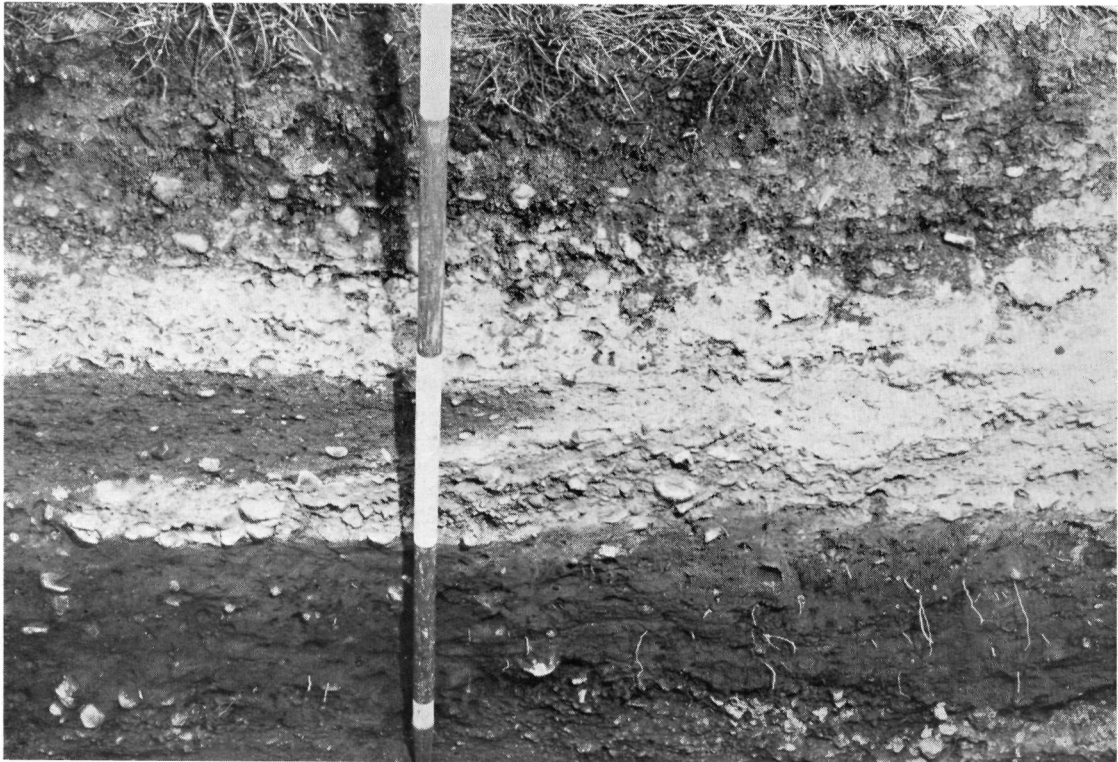




PLATE C. The tiled structure.

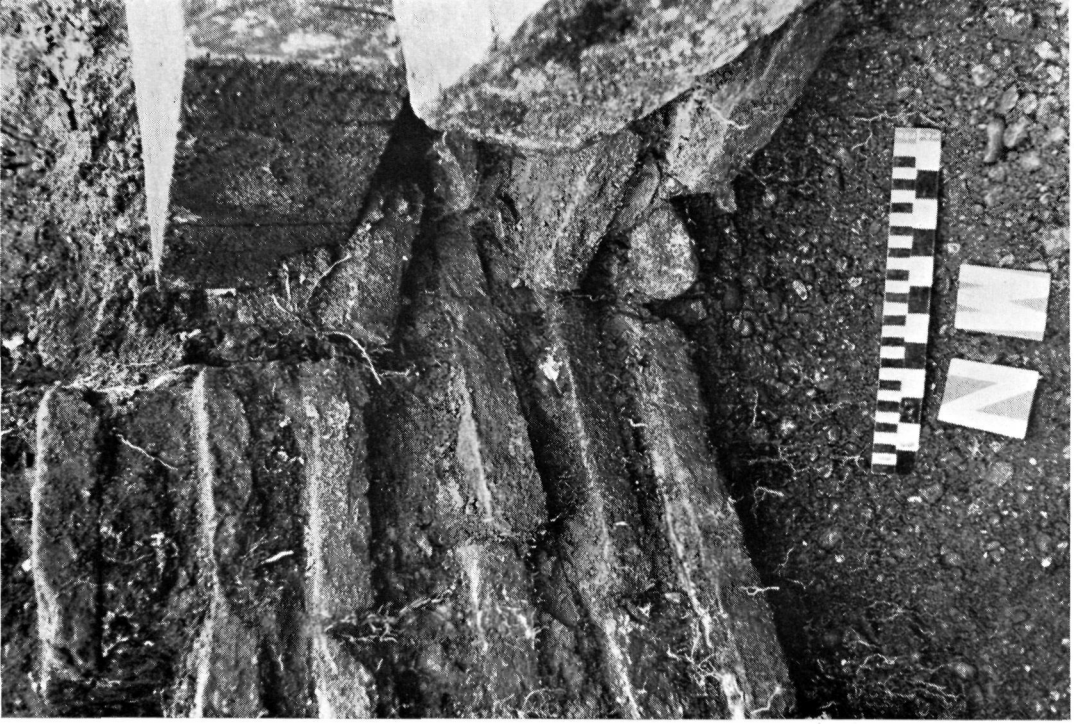


PLATE D. Detail of the north-west corner of the tiled structure (the two large beams are later intrusions).

Photographs by John Earp

FIG. 7

Dishes and Platters

(i) Internal decoration and external horizontal groove

1. Hard, fine grey fabric, outer surface polished lightly. External groove $\frac{1}{4}$ inch below rim. Internal tooled looped scrawl decoration, cut at top and bottom by burnished bands.
Similar unpublished specimens from Alice Holt Forest, in Guildford Museum Collection.
2. Smooth, light brown fabric; light grey polished slip on lip, extending down rim $\frac{1}{4}$ inch on outside, $\frac{1}{5}$ th inch on inside. Crude, lightly tooled criss-cross pattern on inside face.
q.v.: *Park Street, Fig. 20, 4 (late 4th century); Lockleys, Fig. 9, 5 (325-30 A.D.).*

(ii) External decoration

3. Chamfered base. Black, somewhat coarse ware, burnished on surface, but with a rough unburnished band, c. $\frac{1}{2}$ inch wide, $\frac{1}{2}$ inch below lip on exterior face. Scribed horizontal external wavy line decoration, displaying a lean to the right.
q.v.: *Shakenoak, Fig. 17, 19, for shape and fabric: all periods of occupation.*
6. Hard, dark grey gritty fabric, smoothed surface, but with external narrow unsmoothed band below lip. Light brown film on inside face, fading towards rim. Lightly tooled line pattern on exterior face. Letter "A" scratched into exterior.

(iii) Plain

4. Hard, smooth grey fabric, surface layer (c. 1 mm.) oxidised red-brown. Light grey slip, lightly smoothed on surface.
5. Hard, black sandy fabric, lightly polished. *Similar to Richborough I, 106.*
7. Hard, sandy grey-brown fabric. Dark grey slip, lightly smoothed on inside.
8. Hard, brown gritty fabric, smoothed, but rough bands remaining on interior surface. Black polished slip on surface.
9. Hard, light grey sandy fabric. Dark grey slip, lightly smoothed. *Similar to Park Street, Fig. 18, 5 (first half 4th century).*
10. Smooth grey fabric. Surfaces oxidised brown. Coated with dark grey roughly smoothed slip.

Flanged Bowls and Dishes

(i) Bowls with decoration on flange

11. Foot-ring base. Hard smooth red-brown fabric, fired or subsequently burned from red-brown on outer surface layers, through pink-brown and purple in central layers, to chocolate-brown on inner surface layer. Coated with light chestnut slip, burnt grey or burnt away on inside face. Black slip scroll pattern on flange; also three vertical parallel streaks of slip over part of flange burned grey, apparently of lighter colour slip. Fabric somewhat "bubbled" and slightly warped along one of the lines of break, showing burning on both faces at this point.
Similar to Verulamium, Fig. 11, 19; Dorchester, 217 (late 4th century).
12. Smooth hard light-brown fabric with grey core, burned grey throughout in many parts, either during firing or from subsequent burning. Burnished chestnut slip over both faces, burned metallic grey in parts. White scroll pattern on flange.
q.v.: *Lockleys, Fig. 12, 3 (early 4th century); Dorchester, 211 (late 4th century).*

(ii) Other flanged Bowls or Dishes

13. Hard, smooth purplish-pink fabric, fired orange on surface and coated with a smoothed deep orange slip. Imitating Samian form Drag. 38. *Type typical of 4th century wares from Dorchester, Oxon.*
14. Smooth powdery light grey fabric. Light grey polished slip. Diameter uncertain.
q.v.: *Verulamium Theatre, 1934 (unpublished specimen, Institute of Archaeology Collection).*
15. Thick, stubby, hooked flange. Hard, slightly rough, sandy, light grey fabric, lightly smoothed.
16. Thick, stubby flange. Hard, slightly rough, sandy, grey fabric. Fired darker grey on surface. Light grey slip, lightly polished on flange, rim and inner surface.
q.v.: *Verulamium Theatre, unpub., Inst. Arch. Coll.*
17. Thick flange. Hard, rough, somewhat gritty, grey-buff fabric. Surface smoothed in horizontal bands with spatula-like instrument.
q.v.: *Verulamium Theatre (as 15), Shakenoak, Fig. 18, 52 (second half 4th century); Richborough I, 122 (4th century).*

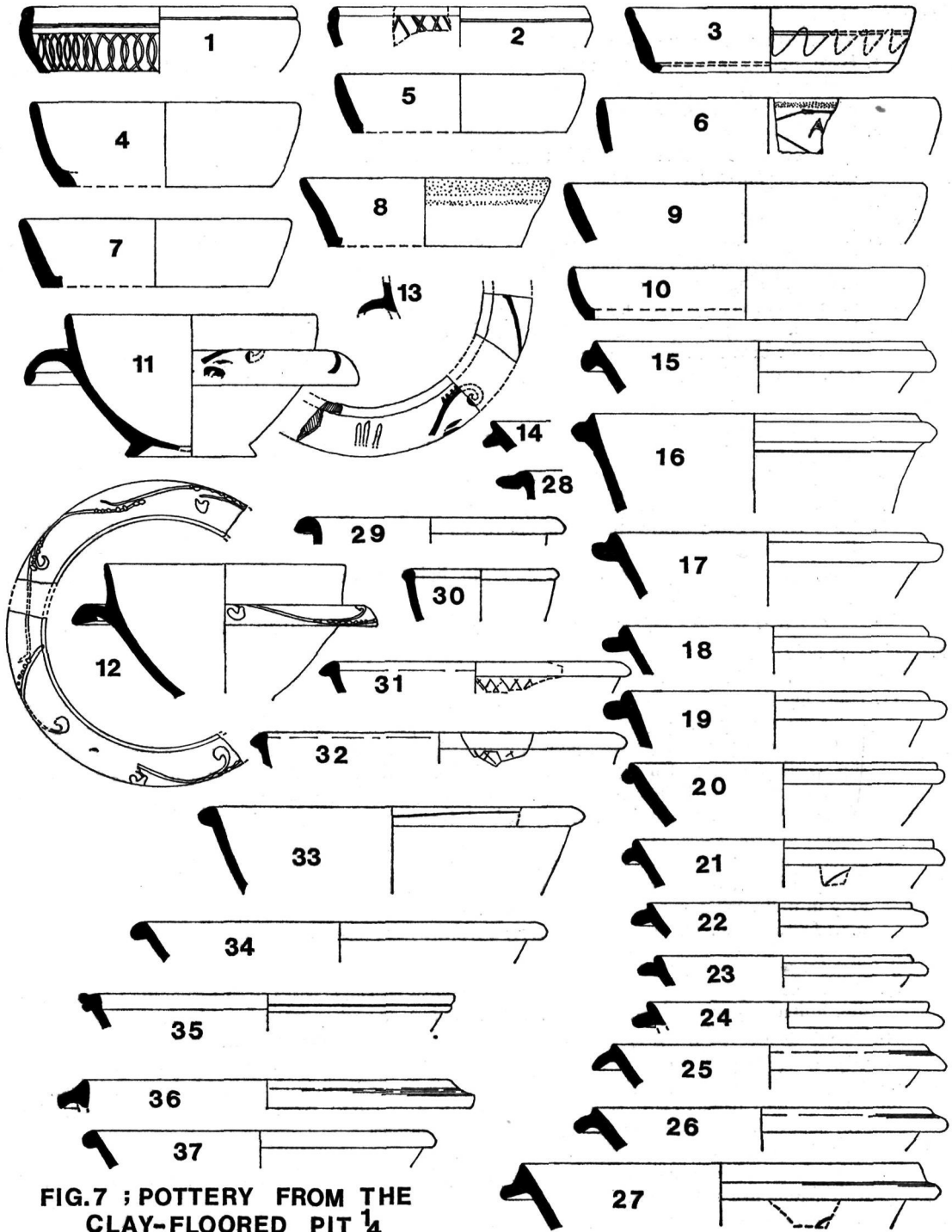


FIG. 7 ; POTTERY FROM THE CLAY-FLOORED PIT 1/4

18. Smooth powdery light grey fabric. Surface treatment as 17.
q.v.: *Park Street, Fig. 18, 12 (first half 4th century)*.
19. Thick rounded flange. Sandy, powdery, dirty-grey fabric. Polished grey slip.
q.v.: *Verulamium Theatre, unpub., Inst. Arch. Coll.*
20. Vestigial flange, grooved at junction with rim. Hard grey-buff sandy fabric. Smoothed grey slip on inner face, rim and top of flange. Exterior surface matt, smoked dark grey.
21. Small, slightly hooked flange. Hard, gritty, grey-brown fabric. Matt black slip. Vestige of lightly tooled external decoration, probably intersecting arcs.
q.v.: *Shakenoak, Fig. 18, 48 (240-430)*.
22. Hard, slightly gritty fabric. Grey-brown core, surfaces oxidised chestnut-brown. Coated with black polished slip. q.v.: *Lockleys, Fig. 9, 12*.
23. Smooth, powdery, light grey fabric. Light grey polished slip. *Fabric similar to Verulamium Theatre specimen in Inst. Arch. Coll., unpub.*
24. Hard, slightly gritty, dirty grey fabric, with dark grey burnished slip.
25. Wide, thin flange. Hard, sandy, dirty-grey fabric. Micaceous dark grey slip, very lightly polished on flange.
26. Hard, slightly gritty, grey fabric. Dark grey polished slip.
27. Large, slightly hooked flange and large triangular-section rim. Rough, hard, gritty grey fabric, oxidised dark brown on surface and coated with dark grey polished slip. Vestige of external tooled pattern, probably intersecting arcs.
q.v.: *Park Street, Fig. 18, 14 (first half 4th century); Gillam 228 (310-370 A.D.)*.

Other Bowls

28. Hard, smooth fabric, basically blue-grey, but in parts fired reddish or light grey on surface. Thick grey-white slip, especially thick below rim projection.
q.v.: *Godmanchester, Fig. 9, 3; Jewry Wall, Fig. 45, 15-18 (both Antonine)*.
29. Horizontal everted rim. Hard, rough sandy grey fabric. Pinkish-grey smoothed slip.
30. Small bowl, rounded rim, with slight overhang on inner lip. Hard, sandy self-coloured pink-red fabric, smoothed with spatula-like instrument, with horizontal strokes on rim and vertical strokes on exterior surface.
31. Dish or bowl. Triangular rim with slight overhang on inner lip. Hard, rough sandy grey-black fabric. Coated with lightly polished black slip. Lightly tooled external lattice body pattern.
32. Dish or bowl. Similar in form, fabric and slip to 31, though surface layers of fabric reduced deep brown. Body pattern similar to 31.
33. Rounded rim. Hard, sandy, dirty grey-brown fabric, surface smoked black. Milk-chocolate-coloured slip, smoothed, and with a light polish on rim and inner face. Scribed undulating line pattern on outer edge of rim.
34. Rounded rim. Hard, sandy, light-grey fabric. Creamy grey slip, polished externally, and tending to grey-brown on rim and inner face.
35. Square-section rim, grooved on top and outer edge. Hard, smooth off-white self-coloured fabric. Ochreous-red slip on top and outer face of rim. A side "keel" and several base fragments, all with ochreous brown decoration, of this ware also found.
q.v.: *Verulamium Theatre (unpub., Inst. Arch. Coll.); Richborough II, 303 (late 3rd, 4th century)*.
36. Bowl with flange-like rim. Hard, rough, calcite-tempered grey-brown fabric; rim and flange burned through to black.
q.v.: *Irchester, p. 126, no. 65 (from late structure): Verulamium, Fig. 11, 27; Dorchester 233 (late 4th century); Park Street, Fig. 20, 5 (late 4th century)*.
37. Rounded rim. Soapy-feel grey-brown fabric, smoked dark grey on surface.

FIG 8

Mortaria

1. Side-wall rim. Hard, salmon-pink fabric; slip of same colour on exterior surface, burnished on top of rim. Applied external criss-cross pattern in white slip. Pink-brown grit.
q.v.: *Dorchester 213 (late 4th century); Richborough I, 107*.

2. Triangular-section flange. Fine hard grey fabric, core fired dull red in parts. Both surfaces coated with grey-white slip. Pink and grey grit. Sherds of this vessel found in the tile-built structure, and both in and above the associated pit.
Similar to Richborough III, 360.
3. Square-section flange and groove in top of rim. Hard, smooth off-white fabric. Pink grit.
4. Hard, slightly rough cream fabric. Traces of cream-pink slip. Greyish grit.
Similar Sandford, Fig. 6, 31.
5. Hard, smooth pink-brown fabric. Traces of cream slip on inner and outer surfaces. Pink and grey grit. This sherd was built into the south wall of the tile-built structure associated with the pit.
q.v.: *Sandford, Fig. 6, 33; Lullingstone, Fig. 9, 42; (A rim sherd of very similar form and fabric, from the surface of the Saxon shore fort of Brancaster, Norfolk, is in the possession of M. J. Hammerson).*

Jars(i) *Everted rims*

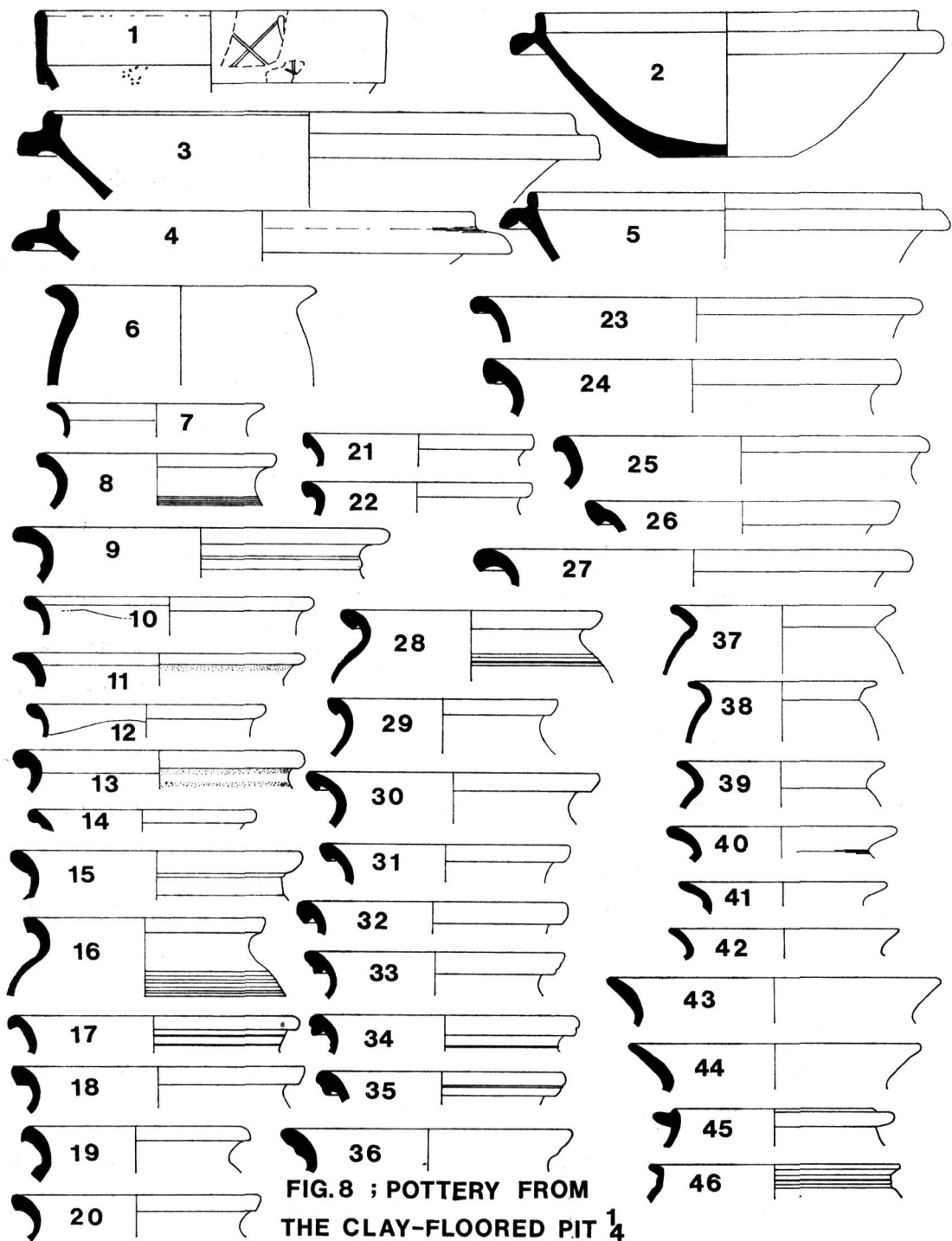
6. Hand-made. Hard, coarse, gritty fabric with "corky" appearance. Colour varies from dirty pink to light grey. *Similarity to Sumner, pl. XIV, 10-11.*
7. Hard, sandy dark grey fabric, burnished on outer face, and on inner face down to point of minimum diameter.

Rims with slight thickening at tip

8. Hard, black calcite-gritted fabric. Surface has smooth silky feel. Light combed pattern on shoulder. Surface colour varies from black to grey-brown.
q.v.: *Verulamium (unpub., Inst. Arch. Coll.); Park Street, Fig. 18, 33 (first half 4th century).*
9. Hard, sandy grey-buff fabric, dark grey on surface. Outer face of lip and rim lightly polished. Cordon on shoulder. q.v.: *Lockleys, Fig. 13, 5 (mid-4th century).*
10. Smooth light grey fabric, fired darker grey on surfaces. Light grey slip on lip and outer surface, smoothed except on inner lip.
11. Thick neck, rim sharply everted. Hard, sandy grey fabric. Smoothed grey-white slip on outer surface, and on inner surface to about half-way down neck, though absent from underside of rim overhang.
12. Smooth hard grey fabric. Light grey slip on outer face and rim, polished on outer surface and top of rim.
13. Hard, sandy grey-brown fabric. Outer 1 mm. thickness of surface reduced grey. Rim smoothed. Two horizontal burnished bands below rim.
14. Hard, smooth light grey calcite-gritted fabric, lightly smoothed.
15. Rough sandy grey self-coloured fabric, surface layers reduced slightly darker grey.
16. Cut-off rim. Self-coloured hard sandy cream-coloured fabric. Horizontal combed shoulder pattern. Surface of rim lightly smoothed. Rim has been burned blackish. (Two other similar rims, several body sherds, and bases of at least seven other individual vessels, all displaying horizontal combing pattern, found. Bases showed withdrawal from potter's wheel by "cheese-wire" method).
18. Smooth, gritty matt self-coloured orange fabric. Rim with light grey core.
Similar to Park Street, Fig. 20, 13 (late 4th century).
20. Hard, sandy grey-brown fabric, tending to grey on surfaces and in core. Outer face smoothed and grey-brown.
q.v.: *New Forest 1965, Crock Hill Type E.2, Fig. 6, 13.*

Hooked and undercut rims

17. Hard, smooth grey-brown fabric, partly burned dark grey. Matt surface. Two narrow burnished bands around neck.
19. Smooth, sandy matt self-coloured grey fabric, though the core is sandwiched by thin red-brown layers.
21. Hard, sandy grey fabric, with smoothed, somewhat milky-grey, surface.
22. Hard, black smoothed calcite-gritted fabric, lightly polished on inner face.
q.v.: *Verulamium (unpub. Inst. Arch. Coll.); Shakenoak 106 (second half 4th century).*
23. Smooth, hard grey self-coloured fabric, lightly smoothed on lip and outer surface. Traces of red slip on outer face of neck and rim.
24. Hard, sandy self-coloured grey fabric, lightly smoothed.



25. Hard, sandy grey-brown fabric. Surface layer dark grey, smoothed on inner face; outer face slightly rough. *Similar New Forest 1965, Crock Hill Type E.2, Fig. 6, 14.*
26. Rim slightly stepped on inner face. Hard, black slightly porous-textured calcite-gritted fabric. Smoothed surfaces.
27. Hard, smooth orange fabric, grey core. Smoothed surfaces.
28. Hard, red-brown sandy fabric, rim with grey core, surfaces smoked dark grey. Three shallow horizontal shoulder grooves.
29. Hard, smooth grey fabric. Surface matt, lightly "smoked" darker grey.
30. Hard, smooth grey fabric, oxidised dull red on surface. Grey surface slip of identical colour to fabric.
31. Hard, black calcite-gritted fabric, surfaces lightly smoothed. Inner face below rim oxidised dull pink.
q.v.: *Lockleys, Fig. 12, 2 (early 4th century); Verulamium (common in 4th century deposits); Irchester, p. 126, no. 55 (second half 4th century); Shakenoak 108 (second half 4th century); Dorchester 231 (4th century).*
32. Slightly gritty grey-brown fabric. Surfaces "smoked" dark grey, and lightly smoothed.

"Cornice-rim" Jars

33. Hard, sandy grey self-coloured fabric.
34. Hard, gritty grey self-coloured fabric. Incised horizontal shoulder groove.
35. Vestigial cordon around centre of "cornice". Hard, smooth grey fabric; surfaces smoothed and with brownish tinge.
36. Smooth fabric. Core and surface light grey, sandwiching a thin orange-brown layer.

"Cavetto-rim" Jars

37. Possibly hand-made. Hard, smooth grey self-coloured fabric. Exterior surface lightly polished.
38. Hard, sandy self-coloured grey-brown fabric, smoothed on rim and exterior surface.
39. Hard, sandy self-coloured fabric, dull chestnut-brown. Rim and exterior smoothed.
40. Smooth light grey fabric. Exterior surface smoothed in horizontal bands with a narrow spatula-like instrument; also on interior surface down to narrowest point of neck.
41. Hard, smooth chestnut fabric, but neck has thin grey core. Outer face polished; also inner face to narrowest point of neck. Exterior surface reduced dark grey-brown.
42. Hard, sandy grey-brown fabric. Smoothed on outer surface and top of rim. Internal surface reduced dark grey.
q.v.: *New Forest, 1965, Type C.1, Linwood North.*
43. Hard, rough sandy fabric, grey core, outer layers dull grey-brown. Inner face of rim and exterior of neck polished.
44. Hard, sandy black fabric, burnished on inner face of rim, and on outer face of body below neck.

Miscellaneous Jars

45. Flanged rim. Hard, sandy light grey self-coloured fabric, lightly smoothed.
Type and fabric similar to wares occurring at Crock Hill (New Forest, 1965); Type F.2.
46. Offset-neck jar with sharply everted rim. Two shallow incised horizontal bands on neck. Hard, fine salmon-pink fabric with matt chestnut-coloured slip.

FIG 9

1. Neckless jar, undercut rounded rim. Hard, rough sandy self-coloured grey fabric, lightly polished on exterior surface.
q.v.: *Verulamium Theatre (unpub., Inst. Arch. Coll.); Alice Holt (unpub., Farnham Mus. Coll.); Alice Holt, 1963, Fig. 3, 14.*
2. Neckless jar, rounded rim. Hard, rough grey-brown fabric. Surface reduced matt grey.
q.v.: *Alice Holt (unpub., Farnham Mus. Coll.).*
3. Neckless jar, oval-profile rim. Hard, rough sandy grey fabric. Outer surface, and top of rim, polished.
q.v.: *Verulamium Theatre (as 1 above); Alice Holt (as 2 above).*
4. Neckless jar. Rim folded over outwards to form rounded profile. Hard, sandy grey fabric. Outer surface, and top of rim, polished.
q.v.: *Alice Holt (as 2 above).*

5. Body only of globular jar. Hard, fine, quite smooth orange-red fabric. Outer face lightly polished. Three incised grooves in shoulder.
6. Rounded rim, offset neck. Single band of rouletting around neck, cut by lightly tooled groove. Smooth, hard, fine pink-brown fabric with lightly polished orange-brown colour coat.
q.v.: *Lullingstone, Fig. 8, 35; Dorchester, 224 (4th century)*.
7. Everted round-rimmed jar. Hard, sandy polished orange fabric. Roughly applied and crudely-finished hand-pressed neck frill. Incised wavy line on edge of rim above frill, with loops displaying slight lean to the right.
8. Flat-topped everted rim. Coarse soft grey-buff fabric, heavily gritted with small pinkish grit. Traces of ochreous slip over rim. Top of rim has incised wavy line pattern, displaying slight lean to the right.

Storage Jars

9. Coarse rough soft reddish-brown fabric; tempering material burned or leached out, leaving "corky" appearance. Hand made.
10. Hard, rough, sandy grey fabric, surface fired dirty grey. Square, undercut, everted rim, with horizontal lip groove. Dark grey burnished slip on top and outer face of rim.
q.v.: *Alice Holt unpub., Farnham Museum Coll.*
11. Diameter uncertain, but possibly in excess of 15 inches. Hard, coarse grey-brown fabric, fired grey in patches on outer face of rim. Shallow groove around upper outer edge of rim, and step in shoulder profile.
12. Diameter uncertain. Hard, rough sandy grey fabric, oxidised slightly reddish on inner body wall. Surface lightly smoothed.
13. Hard, sandy grey-brown, rather rough. Fired red-brown on surface. Outer face, and top $\frac{3}{4}$ inch of inner rim, smoothed.
14. Hard, quite fine, light grey fabric, with polished creamy-grey slip on outer body and rim. Shallow groove in top of rim, and two horizontal grooves in shoulder below rim.
q.v.: *Alice Holt (as 2 above)*.
15. Body of storage jar, maximum diameter c.15 inches. Hard, smooth grey-brown self-coloured fabric. Zone of thinly-applied grey slip, of uncertain width, above herring-bone pattern. Beneath slip zone, a matt zone, with burnished lines in centre and at base of zone; herring-bone pattern centred on the central burnished line, each panel of decoration applied by hand with a six-toothed instrument, the "V's" of the pattern pointing to the right; the entire zone 1 11/16th inches wide. Below this, a further zone of thinly-applied grey slip, 2 inches wide. Below this, body is matt, but with five horizontal burnished lines, each from $\frac{1}{2}$ inch to $\frac{3}{4}$ inch apart; between the first and third lines, two burnished wavy lines, the lower somewhat irregularly applied.
q.v.: *Alice Holt (as 2 above)*.

Beakers

16. Offset neck beaker, hard smooth fine fabric. Grey core sandwiched by salmon pink surface layers, but the inner surface layer considerably thicker, on the whole, than the outer. Exterior surface, and rim, has dark brown polished colour coat. Horizontal rouletted body bands on body, probably four in all.
q.v.: *Lullingstone, Fig. 8, 36 (but no rouletting); Cowley, Fig. 20, 21 (but slip red)*.
17. Rounded rim, with neck groove cutting into rim. Horizontal shoulder groove. Hard, smooth pink-orange fabric, with dark chocolate colour-coat having a somewhat metallic sheen.
18. Rounded rim. Soft smooth grey fabric, surfaces oxidised salmon pink. Exterior face, and interior of rim, coated with dark chocolate-colour coat. Two horizontal rouletted bands around neck, and an (apparently) circular pattern of impressed squares immediately below.
19. Everted beaker, smooth fine light-grey fabric, self-coloured. Lightly smoothed. Two horizontal rouletted bands around shoulder, of differing patterns.
20. Plain-rimmed beaker with horizontal groove just below lip, giving rim a hooked profile. Diameter and angle uncertain. Hand made. Hard, pink-brown calcite-gritted ware, of rough appearance. Surface dark grey, and has a smooth feel.
21. Rounded rim. Hard, slightly rough, orange fabric. Core slightly purplish in parts. Smoothed on rim and outer body surface.

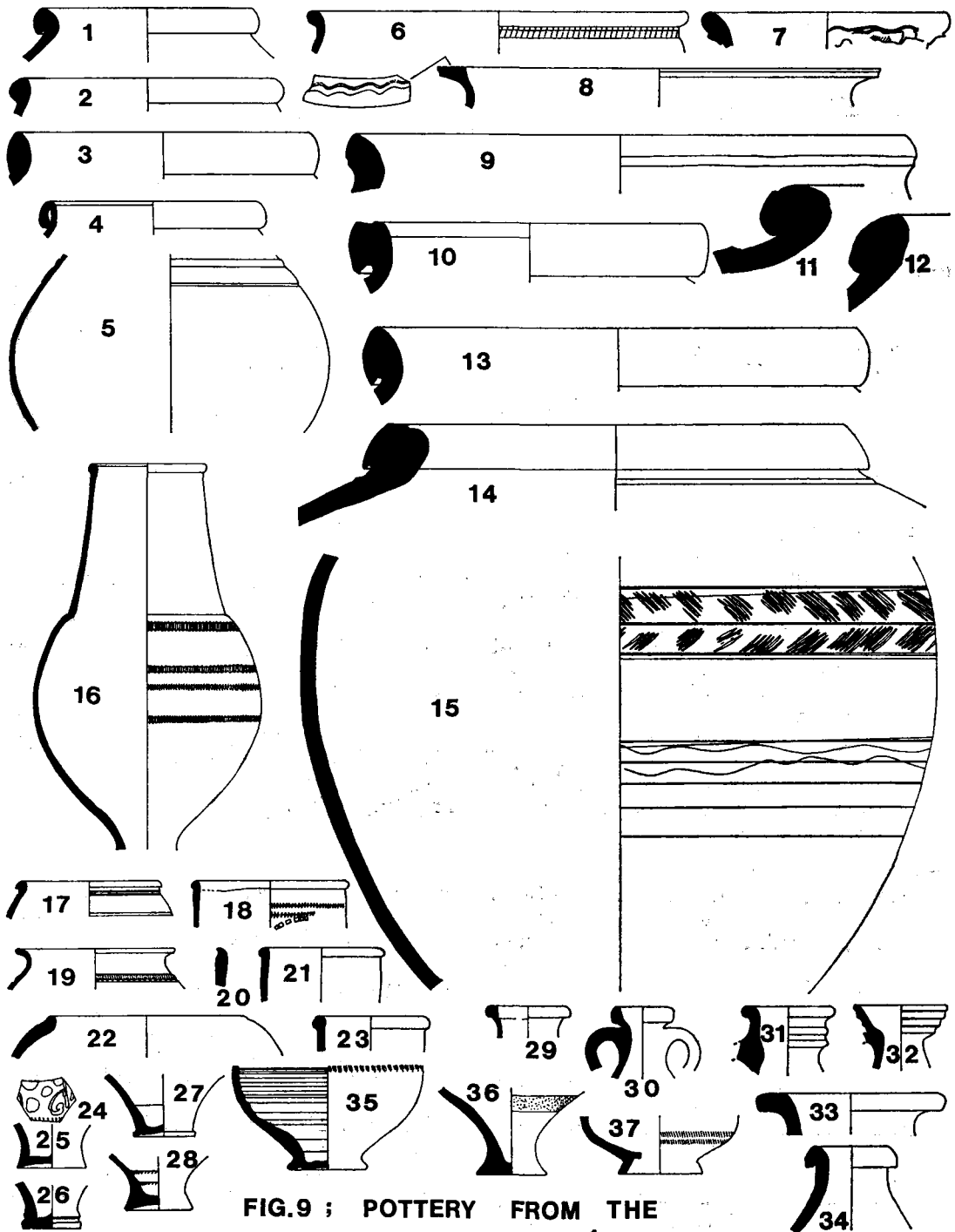


FIG.9 ; POTTERY FROM THE CLAY-FLOORED PIT 1/4

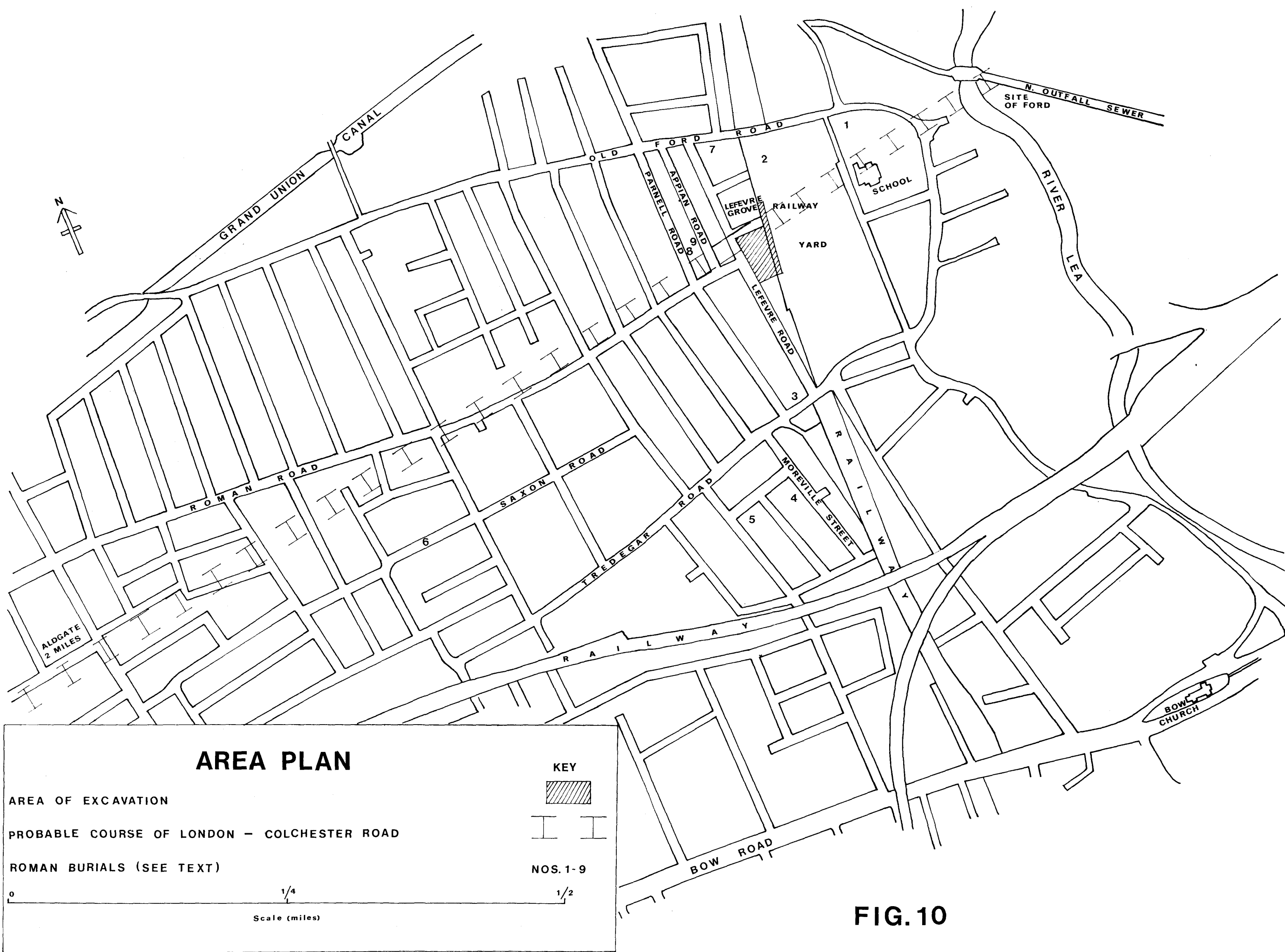


FIG. 10

22. Slightly upturned rim. Hand made. Fabric almost identical to Beaker 20 above, but of a more red-brown colour. Most of the exterior surface dark smoky grey.
Similar to Gillam 155 (160-200).
23. Rounded rim, inner lip projecting slightly. Smooth hard orange fabric, self-coloured. Smoothed with spatula-like instrument; on rim, by horizontal strokes, on outer body by vertical strokes.
24. Beaker sherd. Sandy grey-brown ware. Metallic brown colour coat on outside with unusual applied white slip decoration in round blobs and scroll pattern. Traces of rouletting at base of sherd. Inside face matt dark blue-grey.
25. Beaker base. Hard, smooth, light grey ware. Outer and inner surface layers fired pink-brown, and both covered with chocolate colour coat, lightly polished on outer surface. Three patches around foot without slip where vessel was held during dipping into slip.
26. Beaker base. Sandy dirty-pink ware. Outer surface coated with dull brown colour coat. Roughly incised rings around foot, and on base.
27. Beaker base. Hard, smooth grey-brown ware, outer and inner surface layers fired pinkish. Both surfaces and underside coated with metallic chocolate colour coat, polished on exterior body. Three patches around foot, as 25.
28. Beaker base. Hard, smooth orange-brown ware, coated on inner and outer surfaces with chocolate colour-coat, polished to a metallic sheen on outer surface. Marks around foot, as 25.

Flagons

29. Rounded rim, with slight internal step. Light sandy grey self-coloured fabric, exterior "smoked" slightly darker.
(Similar New Forest (1964), Crock Hill Type A.2)
30. Collar rim, two handles. Hard, sandy grey-brown fabric; black slip on exterior surfaces, and on interior of spout down to narrowest point, burnished on exterior.
q.v.: *Alice Holt, unpub., Farnham Mus. Coll.*
31. Ring-necked, one(?) handle. Smooth sandy fabric. Partly fired pink-brown throughout; partly grey core with pink-brown surface layers. Surface smoky grey. Lightly burnished on high points of neck rings. Part of rim has spongy or flaky appearance, suggestive of misfiring.
32. Ring-necked, one(?) handle. Hard grey-brown core, outer layers oxidised red-brown. Thin cream slip on both surfaces, though only patchy on inner.
33. Hard, off-white fabric. Core of rim pink.
34. Undercut rounded rim. Smooth, fine fabric; outer half fired grey-brown; inner half oxidised orange-brown.

Miscellaneous

35. Base, jar or beaker. Smooth, fine grey-brown fabric. Outer surface covered with lightly polished brown slip. Horizontal rouletted band decoration.
36. Pedestal base. Hard, grey sandy ware, outer surface polished, with exception of a matt horizontal zone nearly $\frac{1}{2}$ inch deep.
37. Foot-ring base of small bowl. Hard, fine smooth fabric, salmon pink with purplish-pink core. Coated with dull orange slip. Two horizontal rouletted bands on exterior of "keel". Possibly in imitation of Samian form 29.

C. OTHER LOCAL FINDS

The occupation evidence is not altogether surprising. Nineteenth-century building development and railway excavation led to the discovery of at least six places containing either inhumation or cremation burials within half a mile of the Lefevre Road site. The finds (see Fig. 10, Area Plan 1 to 6) were summarised and discussed by Reginald Smith in 1910.²⁵

Smith thought that the burials were of London inhabitants and that they indicated the proximity of a road.²⁶ It is possible, though, that some at least of these remains were of people who lived more locally than the city. In an earlier description of one of the burials²⁷ Roach Smith noted that it had been found "contiguous to fields and gardens in which

Roman urns have occasionally been found and Roman coins in great abundance". He also recorded that "the tenant of one of the gardens . . . told us that he had dug up within the last few years, at least 500 Roman coins".

Current redevelopment in Old Ford has led to a renewal of burial discovery during 1969. On the Lefevre Road project the staff of John Laing Construction recorded a cremation probably of 1st century date (Area Plan 7) and an inhumation contained in a stone coffin (Area Plan 8).²⁸ A further inhumation was found some 100 feet north-east of the latter in October, 1970, in a machine-dug section (Area Plan 9).²⁹

D. THE NATURE OF THE SETTLEMENT

From this limited amount of excavation it is not possible to obtain a clear picture of the Old Ford community, either in terms of size or function.

The weight of evidence, from this site, points to a late date. Only two of the non-road features investigated belong to an earlier period. One, a ditch, lay 90 feet south of the road, away from the area of late scatter and contained 2nd-century pottery. The second was a red clay surface, baked hard by fire, which lay near to the southern edge of the road, at the extreme west of the site. Only its eastern part could be examined; the rest lay under the Lefevre Road pavement. The feature was accompanied by a rectangular pit which contained pottery, also of the 2nd century, lying in a burnt deposit.

It is possible that we are investigating some "ribbon development" alongside the main road. This could, in turn, be the western part of a settlement on the Ford relating to the road crossing, and possibly to the docking of river transport. Equally, we might be in a village, or on the outskirts of a farmstead or a villa. It would be unwise to decide at the moment.

In order comprehensively to understand the nature of this settlement more excavation is required during the next few years in liaison with the Tower Hamlets and G.L.C. development programmes in Old Ford. Probably much of the settlement was destroyed during 19th century building operations; we have evidence that some went unrecorded in the cutting made for the North London Railway. Undoubtedly more will go as the large development programme planned for the early 70's radically alters more than the face of Old Ford.

ACKNOWLEDGEMENTS

This excavation, carried out on behalf of the London Museum, was intended to last only two weeks in September, 1969. Due to alterations in the Lefevre Road building programme it was possible to continue, mainly during weekends, until June, 1970. In that month the site was finally cleared and much of it was mechanically excavated away to a depth well below any cultural levels.

By that time the initial objective had been achieved and, in addition, a large proportion of the available area examined. This was due largely to the efforts of the following: John Earp, Mike Hammerson, Becky Warren, Pete Daniels, Eddie Phillips, John Barrett, Geoff Toon, John Warbis, Win Exley, Elizabeth Pye, Geoff Barratt and Alison Laws. John Earp also acted as site photographer.

On their behalf I would like to thank the many others who gave assistance on the site: Sheila Phillips, who made so many hundred cups of tea during the winter of 1969-70; Gwenno Caffel and Savilla Connolly who washed most of the pottery.

Thanks are especially due to the following: the Site Agent and Staff of John Laing Construction for their encouragement and provision of many facilities; Tower Hamlets' Architects Department for their advice, help and co-operation, Tower Hamlets Borough Council and the Department of Environment (then Ministry of Public Building and Works) for making grants towards the cost of the work to the London Museum.

Much of the post-excavation work on the pottery was undertaken by Mike Hammerson, Clive Orton, Pat Evans, Geoff Toon, John Earp, Win Exley and Becky Warren. Bernard Barrell was responsible for the information on local history; Elizabeth Pye undertook the conservation work on the small finds, and also drew them; Joanna Morris examined and reported on the Samian.

I would like to thank Dr. John Alexander and Mr. Ralph Merrifield for frequently visiting the site and giving advice; Mr. Ray Farrar for his comments on the pottery; and Bernard Brandham of the Horniman Museum for taking an additional photographic record of the road. Roy Canham, the London Museum Field Officer, was responsible for the initiation of the dig and its administration and gave much valuable help at every stage.

Facilities for post-excavation work were provided by E. M. Hutchinson who made space for storage and working available at the N.I.A.E., and also by the Director and Librarian who allowed us to use the Institute of Archaeology Library. The report was typed by Win Exley.

ABBREVIATIONS USED IN REFERENCES FOR POTTERY Illustrated in Figs. 5, 7, 8 and 9.

Alice Holt	"A Romano-British Kiln-mound in Alice Holt Forest" (Bennett, Davies, Thomas and Vignaux; <i>Surrey Arch. Coll.</i> , 1963).
Alice Holt (unpub., Guildford/Farnham Mus. Coll.)	Alice Holt — unpublished specimens in Guildford/Farnham Museum Collections.
Cowley	"Two Romano-British Potters' Fields near Oxford" (D. B. Harden, <i>Oxoniensia</i> , 1936).
Dorchester	"Excavations at Dorchester-on-Thames (S. Frere, <i>Archaeological Journal</i> , Vol. CXIX, 1962).
Gillam	"Types of Roman Coarse Pottery in Northern Britain" (<i>Archaeologia Aeliana</i> , 1957).
Godmanchester	"A Roman Farm Settlement at Godmanchester" (W. H. C. Frend, D.D., F.S.A., <i>Procs. Camb. Ant. Soc.</i> , LXI, 1968).
Irchester	"Excavations at the Roman Town of Irchester, 1962-63 (D. N. Hall and N. Nickerson; <i>Arch. Jnl.</i> , CXXIV, 1967).
Jewry Wall	"Excavations at the Jewry Wall Site, Leicester (K. M. Kenyon; <i>Res. Rep. of Soc. of Ant.</i> , 1948).
Lockleys	"The Roman Villa at Lockleys, Welwyn" (Ward Perkins; <i>Ant. J.</i> XVII, 1938).
Lullingstone	"Lullingstone Roman Villa"; 2nd Interim Report.
New Forest, 1964-65	"Report on the Excavation of Three Pottery Kilns in the New Forest" (B. Cunliffe; <i>Procs. Hants. Field Club</i> , 1964, 1965).
Park Street	"The Roman Villa at Park Street, near St. Albans, Herts." (<i>Arch. Jnl.</i> , CII, 1945).
Richborough, I, II, III	1st, 2nd and 3rd reports on the Excavations of the Roman Fort at Richborough, Kent (J. P. Bushe-Fox, F.S.A.; <i>Soc. Ant. Lond.</i> , 1926-28-32).
Sandford	"On the Pottery from the Waste Heap of the Roman Potters' Kilns Discovered at Sandford, near Littlemore, Oxon., in 1879" (T. May; <i>Archaeologia</i> , 72, 1922).
Shakenoak	"Excavations at Shakenoak" (A. C. Brodribb, A. A. Hands, D. R. Walker (Privately Printed), Part I, 1968).
Sumner	"Excavations in New Forest Pottery Sites" (H. Sumner, London, 1927).
Verulamium Theatre	"The Roman Theatre at Verulamium" (K. M. Kenyon; <i>Archaeologia</i> , 84, 1934); also: unpublished specimens in the collection of the Institute of Archaeology.
Institute of Archaeology Collection	Institute of Archaeology Collection, London.

APPENDIX I
COINS FROM THE EXCAVATION

BY M. J. HAMMERSON

The excavation produced 172 Roman coins, ranging almost entirely from the Gallic Empire to the end of the Roman occupation. A summary follows:

1st-2nd century Asses, unidentified	2		
Vespasian	1		
Trajan	1		
Hadrian	2	Claudian-Antonine	9
Antoninus Pius	1		
Marcus Aurelius	1		
Faustina Jr.	1		
<hr/>			
Early 3rd century (incl. one coin of Julia Domna)	2	Severan	2
<hr/>			
Gallienus	2		
Postumus	2		
Claudius II	2	Mid-3rd century	8
Claudius II (Barbarous imitations)	2		
<hr/>			
Victorinus	3		
Tetrici	9		
Other Gallic Empire, uncertain	10	Gallic Empire	29
Barbarous Radiates	7		
<hr/>			
Antoninianus, unidentifiable	1		1
<hr/>			
Carausius	5		
Allectus	1	British usurpers	6
<hr/>			
Maximian or Maximinus II	1		
Licinius I	2		
Constantine I	4		
Constantinopolis	3		
Urbs Roma	3		
Helena	1	House of Constantine	41
Crispus	1		
Constantine II	3		
Constans	4		
Constantius II	4		
Other House of Constantine, uncertain	6		
Barbarous imitations, House of Constantine	9		
<hr/>			
Magnentius	1		
Gratian	4		
Valentinian I	5	House of Valentinian	31
Valens	17		
Other, unidentified	3		
Barbarous imitation of Valens	1		
<hr/>			
Magnus Maximus	2		
Theodosius I	1		
Aelia Flacilla	1		

Arcadius	3	House of Theodosius	21
Honorius	2		
Other, uncertain	8		
Barbarous imitations	4		
	<hr/>		
Other 4th century, uncertain	6		
Minimi	5	Other Roman	24
Unidentifiable	13		
	<hr/>		
Post-Roman (18th–19th century)	8		8
	<hr/>		
		Total	<hr/> 180

DETAILED COIN LIST

- Notes:* 1 Left-hand column shows coin numbers as referred to elsewhere in report.
 2 All coins bronze, except numbers 9 and 10.
 3 ***indicates from tile-built structure; *from associated pit fill; ** from beneath dirty clay deposit over floor of pit.
 4 N after reference number indicates coin from non-Roman context.
 5 Numbers in right-hand column are small-find numbers allotted to coins.
 6 Dates refer, where possible, to period during which coin was minted; otherwise to reigns.

Abbreviations: RIC: Mattingly & Sydenham, "Roman Imperial Coinage"
 LRB I/II: Carson, Hill & Kent, "Late Roman Bronze Coinage", Parts I and II.

Probable condition at time of deposit indicated by letters in right-hand column.

A=little or no wear; B=light wear only; C=average wear; D=fairly heavy wear; E=very heavy wear. Where two letters are given, condition is somewhere between the two grades.

Whilst these categories represent the writer's opinion alone, and are therefore subjective, it is hoped that they will provide a relative guide to the length of time during which the coin may have been in circulation.

1/N	AE As, Claudian or Flavian	244a	D/E
2	Vespasian. Rev. SECVRITAS AVGVSTI, AE As, (71–73)	183	B/C
3	AE As, late 1st–early–2nd century	164	E
4	Trajan (98–117): AE Sest. Obv. [IMP CAES NER TRAIAN OPTI]MO AVG GER DAC P . . . Rev. Standing figure	205	E
5	Hadrian (123–4) AE Sest., Alexandria Mint. Obv. (in Greek) TRAIAN ADRIANO. Rev. Sphinx L., holding wheel; between L and H	257	C/D
6*	Hadrian (117–38), AE Sest.	230	E
7	Antonius Pius (157–8), AE Sest., Rev. TR POT (X)XI . . . S C	260	E
8	Marcus Aurelius (161–80), AE Sest.	81	±D/E
9/N	Faustina Jr. (146–61), RIC (Marcus Aurelius) 1678/9	84	E
10/N	Julia Domna (211–17), AR Ant., RIC (Caracalla) 373a	202	C
11	Unidentified Empress, early 3rd century, AR Ant.	180	?
12	Gallienus (253–68). RIC 180	144	D/E
13	Gallienus (253–68). RIC 283	130	D/E
14	Postumus (259–61). RIC 53, 54 or 55	174	B
15	Probably Postumus (259–68), AE Ant.	153	D
16	Claudius II (268–70). RIC 62 or 63	71	C
17	Claudius II (268–70). AE Ant.	50	C/D
18	Barbarous imitation, Claudius II, type RIC 261/262	151	D
19	Barbarous imitation, Claudius II, possibly type FIDES MILITVM	126	E

20	Victorinus (268-70). RIC 78	96	C
21	Victorinus (268-70). RIC 114	72	D
22	Victorinus (268-70). AE Ant.	123	E
23	Tetricus I (270-3). RIC 79-81	142	C/D
24	Tetricus I. RIC 148	132	D
25*	Tetricus I. AE Ant., type LAETITIA AVG, irregular die	220	B/C
26	Tetricus I. AE Ant., type PROVIDENTIA AVG	128	D/E
27/N	Tetricus II (270-3). RIC 270-4	255	D
28/N	Tetricus II. AE Ant.	184	E
29	Tetricus II. AE Ant., type SPES AVGG	212	D
30	Tetricus II. AE Ant.	138	C
31	Tetricus II. AE Ant., type SALVS AVG	165	E
32	Victorinus or Tetricus I (268-73). AE Ant.	187	E
33	As 32	211	D/E
34	As 32. Possible rev. type Victory L	185	D/E
35*	As 32. Rev. type SALVS AVG	220	C/D
36/N	Probably as 32. AE Ant.	11	D
37	Probably Tetricus I or Allectus (270-96). AE Ant.	14	D/E
38/N	AE Ant., uncertain	15	D/E
39	As 38	168	E
40/N	As 38	197	B/C
41/N	As 38	83	E
42	As 38	137	E
43	Barbarous AE radiate	196	D
44	As 43, rev. type figure with olive branch and cornucopiae	152	E
45*	As 43. Rev. figure L. holding olive branch. Inscription PAE (imitation of PAX or PIETAS)	217	B
46	As 43	167	D/E
47	As 43, type of PAX AVG	171	A
48***	As 43. Obv., portrait of Gallic Emperor. Rev. GENI(VS EXERCITI), type of Claudius II	251	B
49*	As 43, rev. figure with spear or standard	216	B
50/N	Carausius (287-93). RIC 895	22	C
51	Carausius. AE Ant., type PAX.AVG, mint unattributable	173	C
52/N	Carausius, AE Ant.	258	C
53***	Carausius, AE Ant., probably London mint, type HILARITAS AVG	250	C/D
54/N	Carausius, AE Ant., type PAX AVG	54	C/D
55	Allectus (293-6). RIC 55	198	B/C
56	AE Ant., late 3rd-early 4th century	260	E
57**	Maximian (306-8) or Maximinus II (309-13), AE Follis, type GENIO POPVLI ROMANI, Trier Mint	252	A
58/N	Licinius I (310-13), RIC 845b	8	D
59/N	Licinius I (320-1). RIC 295	9	B
60	Constantine I (307-24), AE Follis, London mint, type SOLI INVICTO COMITI	161	C
61	Constantine I (320). RIC (London) 169	47	C/D
62	Constantine I (321). RIC (Trier) 303	149	B
63*	Constantine I (324-6). AE 3/4, type VICTORIAE LAETAE PRINC PERP	248	C
64/N	Constantinopolis (330). LRB I-52	190	C
65	Constantinopolis (330-5). LRB I-71	135	C/D
66	Constantinopolis (330-5). AE 3/4	69	B
67	Urbs Roma (334). LRB I-389	159	D
68	Urbs Roma (330-41). AE 3/4	201	C
69	Urbs Roma (330-41). AE 3/4	191	D
70	Helena (337-41). LRB I-112	195	C/D
71	Crispus (322-3). RIC (London) 247	155	D

72	Constantine II (320-1). RIC (London) 190	162	E
73/N	Constantine II (325). RIC (Siscia) 194	88	B/C
74	Constantine II (337-41). LRB. I-686, 686a, 690 or 692a	178	C
75	Constans (330-5). AE 3/4, type GLORIA EXERCITUS, possibly Lyons Mint	166	C
76	Constans (341-6). LRB I-140	29	A/B
77	Constans (341-6). LRB I-142a	127	B
78	Constans (341-6). LRB I-456	134	B
79	Constans or Constantine II (341-6), type VICTORIAE DD AVGGQ NN	41a	E
80	Barbarous imitation, Constans, type (330's) (Trier), GLORIA EXERCITVS	136	E
81	Constantius II (324-30). LRB I-298, 307, 313, 317 or 325	80	A
82	Constantius II (335-7). LRB I-94	66	C
83	Constantius II (346-60). AE 3/4, rev. type FEL TEMP REPARATIO	177	C
84	Constantius II (337-61). AE 3/4, possibly barbarous imitation	157	?
85/N	Constans or Constantius II (341-6). AE 3/4, rev. type VICTORIAE DD AVGGQ NN. Mint possibly Aquileia, Siscia or Thessalonika	193	E
86/N	As 85, possibly barbarous imitation	85	C/D
87	Constans or Constantius II (335-7). AE 3/4, rev. type GLORIA EXERCITVS, one standard. Mint of Rome or eastwards	179	E
88/N	AE 3/4, rev. type GLORIA EXERCITVS (one standard)	94	D
89*	Barbarous imitation, Constantius II, type FEL TEMP REPARATIO. AE 20mm	214	D
90	As 89, AE 15mm	45	B/C
91*	As 89, AE 15mm	213	C
92	As 89, AE 14mm	175	C
93	As 89, AE 13mm	207	E
94	As 89, AE 12mm	125a	C
95	Barbarous imitation, mid-4th century. AE 15mm, elliptical flan	147	E
96*	Barbarous imitation, mid-4th century. AE 10mm	232	C/D
97	Magnentius (351-3). AE2, type VICTORIAE DD NN AVG ET CAES	133	E
98*	Constantius II or Julian II (355-60). AE 4, type SPES REIPUBLICAE	247	B
99	Gratian (367-75). RIC (Arles) 15	125	D
100	Gratian (367-75). LRB II-1324	48	C
101	Gratian (367-75). AE3. rev. type GLORIA ROMANORVM, mint mark R.A.G. Carson suggests that it may be a defective LRB.II-1421-3, with the F appearing as a P	$\frac{P}{R} \frac{R}{A}$	
102*	Gratian (367-78):AE3, rev. type SECVRITAS REIPUBLICAE, possibly LRB II-726 or 731)SISC(189	B/C
103	Valentinian I (367-75). LRB II-300, 307, 313 or 317	222	D
104**	Valentinian I (364-7). LRB. II-490	145	B
105*	Valentinian I (364-7). LRB II-992	245	C
106	Valentinian I (367-75). LRB II-1418, 1419 or 1429	236	C/D
107*	Valentinian I (365-78). AE3, type SECVRITAS REIPUBLICAE	160	D/E
108*	Valens (364-7). LRB II-276	239	C
109/N	Valens (364-7). LRB II-483	237	C/D
110	Valens (364-7). LRB II-970	39	B
111	Valens (364-7). AE3, rev. type GLORIA ROMANORVM	68	B/C
112	Valens (364-78). Rev. as 111	194	E
113	Valens (364-75). LRB II-285, 292, 303, 305, 306, 309, 315, 319 or 322	146	E
114	Valens (367-75). LRB II-303	70	D
115	Valens (367-75). Rev. type of SECVRITAS REIPUBLICAE	172	C/D
116*	Valens (364-75)	131	D/E
117	Valens (364-78). Rev. as 115	240	D/E
118*	Valens (367-75). LRB. II-104	129	E
119*	Valens (367-75). LRB II-344	228	C
120	Valens (367-75). LRB II-499	215	C
		121	C

121/N	Valens (367-75). LRB II-502	203	D
122	Valens (367-75). LRB II-528	86	E
123	Valens (367-75). LRB II-1042 or 1743	148	D/E
124	Valens (367-78). LRB II-725	143	A
125	Barbarous imitation of Valens, LRB II-513 type	95	A
126***	AE4, type SECVRITAS REIPVBLICAE (367-78)	200	E
127*	As 126	249	E
128	Magnus Maximus (387-8). LRB II-156 or 157	188	C
129**	Magnus Maximus (383-7). LRB II-559	254	A
130	Theodosius I (378-83). Rev. type VOT X MVLT XX, possibly Aquileia mint	74	C
131*	Aelia Flaccilla (383). LRB II-2163	223	C/D
132*	Arcadius (383-92). LRB II-392, 566, 1087 or 1578	219	D
133*	Arcadius (388-402). LRB II-164/7, 170, 392/5/7, 566/9, 571, 1577 or 1581	233	C
134	Arcadius (388-402). AE4., rev type VICT(ORIA AVGGG)	141	D
135*	Barbarous imitation, Arcadius, rev. type VICTORIA AVGGG. AE 12mm	241	C
136	Barbarous imitation, Arcadius, type LRB II-566/569. AE 14mm	206	B/C
137***	Honorius (394-408). Possibly LRB II-806/9, 810/1, 1111/3, 2194 or 2579	199	C
138*	Honorius (395-402). LRB II-174, 398 or 572	238	C/D
139*	AE4, rev. type SALVS REIPVBLICAE (388-408)	225	E
140	As 139	156	E
141	As 139. Mint of Rome or eastwards	208	D
142*	AE4, rev. type VICTORIA AVGGG (388-402). Possibly Trier mint	243	B
143	As 142, mint uncertain	150	E
144*	AE 3/4, 2nd half 4th century	209	E
145*	As 143	235	E
146	AE4, late 4th century. Rev. type Victory advancing L	176	E
147*	Barbarous imitation, rev. type SECVRITAS REIPVBLICAE, AE 11mm	246	C
148*	Barbarous imitation, late 4th century. AE 8mm	218	D
149/N	AE 14mm, 4th century	120	?
150	AE 12mm, 4th century	139	?
151	AE 11mm, 4th century	140	?
152*	AE 11mm, 4th century	226	?
153	AE 11mm, 4th century	163	?
154*	AE 10mm, 4th century	242	?
155/N	AE Minim, 8mm	244b	?
156	AE Minim, 8mm	204	?
157	AE Minim, 8mm	158	?
158*	AE Minim, 6mm	256	?
159*	AE Minim, 5mm	229	E

The following probably all 3rd or 4th century, but otherwise unidentifiable:

160	AE 16mm	61
161	AE 16mm	192
162/N	AE 14mm	81
163*	AE 14mm	221
164	AE 12mm	97
165	AE 12mm	170
166	AE 11mm	41b
167*	AE 10mm	234
168*	AE 10mm	224
169*	AE 10mm	227
170	AE 9mm	112
171	AE 7mm	68a
172	AE (disintegrated during cleaning)	169



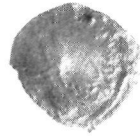
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48



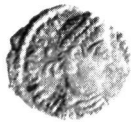
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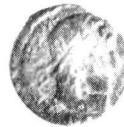
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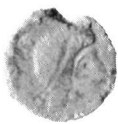
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90



91



92



94



101



125



135



136



147

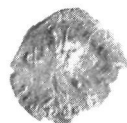


PLATE E. Selection of notable and barbarous coins.

Modern

173/N	George II, halfpenny, 17(129)	182	B
174/N	George III, penny, 1806-7	18a	D
175/N	George III, halfpenny, 1806-7	18b	D
176/N	17th-18th century coin weight	186	-
177/N	18th-19th century token	12	E
178/N	Victoria, farthing, 1839	7	A
179/N	Victoria, penny, type 1860-94	2	E
180/N	Victoria, penny, type 1860-94	259	B/C

COINS FROM THE TILE-BUILT STRUCTURE AND
ASSOCIATED CLAY-FLOORED PIT

The discovery of these features, the fills of which contained joining sherds, provided a further 44 bronze coins, marked on the detailed list with asterisks. The emphasis on third and 4th century occupation, apparent from the coins as a whole, was especially noticeable in this group, 34 per cent of which represented the House of Theodosius. The following lists show comparisons of percentages of coins attributable to each period of occupation, for firstly, the site as a whole, and secondly, for the structure and pit only.

<i>Period</i>	<i>Total Coins from site</i>	<i>From Structure and Pit only</i>
	<i>(Total number 172)</i>	<i>(Total number 44)</i>
	<i>per cent</i>	<i>per cent</i>
1st-2nd century	5	2
3rd century	27	14
House of Constantine	24	14
House of Valentinian	18	18
House of Theodosius	12	34
Other 3rd-4th century	14	18

Significant dating evidence came from the fill of the structure, in which was found a coin of Honorius datable to 394-408; and on the floor of the pit was a coin of Magnus Maximus, datable to 383-7.

Mint Marks

The table below is an analysis of identifiable 4th-century mint-marks. It will be noticed that a higher proportion of the later coins come from easterly mints.

	London	Mints from Rome westward						Mints east of Rome				
		Trier	Lyons	Arles	Rome	Other	Total	Aquileia	Siscia	Constantinople	Other	Total
House of Constantine (307-324)	4	1					5					
" " (324-360)		6		3			9	1	1		2	4
House of Valentinian (364-378)		1	5	6	2		14	2	3		1	6
House of Theodosius (378-408)		2		1		1	4	1		1	2	4
TOTALS	4	10	5	10	2	1	32	4	4	1	5	14

Coins meriting individual mention

No. 5: Hadrian, Alexandria mint. Very few of these coins have been found in definite Romano-British contexts.

No. 48: Barbarous Radiate, imitating portrait of Gallic Emperor, but with reverse apparently imitating a type of Claudius II.

No. 101: Gratian. Possible a mint-mark not recorded in RIC or LRB. See comments in detailed list, and illustration.

No. 131: Aelia Flaccilla, wife of Theodosius I. Uncommon in Romano-British contexts.

The "Barbarous" Coins

Several of these have been illustrated. Total of barbarous coins attributable to each period as follows:

To mid-3rd century	Nil
Gallienus-Claudius II	2 out of 8
Gallic Empire (excluding Carausius and Allectus)	7 out of 29
House of Constantine	9 out of 41
House of Valentinian	1 out of 31
House of Theodosius	4 out of 21

Defacements, etc.

<i>Ref. No.</i>	<i>Details</i>
15, 166	Possibly drilled near edge and subsequently broken.
46, 95	Struck on elliptical flan
91	Possibly an overstrike.
107	Cut or snapped in half in antiquity
116, 160	Clipped.
124	Square depression, c.1mm wide, punches near centre of reverse.
137	Very fine hole through centre. Unlikely a result of corrosion, as coin is otherwise in a good state of preservation.

ACKNOWLEDGEMENTS

R. Merrifield, Esq., of the Guildhall Museum, for kindly checking the identifications, making amendments or adding comments where necessary, and for his invaluable assistance in identifying some of the badly-preserved coins.

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R. A. G. Carson, Esq., of the British Museum (Dept. of Coins and Medals), for his helpful comments regarding coins Nos. 5, 101 and 131.

APPENDIX II THE ANIMAL BONES

BY DERRICK RIXSON

INTRODUCTION

The animal bone was generally in a good state of preservation, although most of it was fragmentary. The only whole bones were phalanges, carpals, tarsals, one cattle metatarsal, one cattle metacarpal, one sheep metatarsal; also one horse femur was almost complete. There was considerable evidence that the cattle bone had been chopped in the course of butchering the animals, which would have initiated the break-up of the bones with further fragmentation occurring subsequently.

More than 90 per cent of the total bone was from cattle, but this fact is not reflected in the total number of individuals, as the individuals of other species were mainly represented by a small number of bones.

METHOD

The bones of each trench and layer were sorted and recorded separately. They were sorted into specie and then into skeletal order. The details recorded under each specie were:

- Number of bones or fragments of each bone.
- Any evidence of fusion or non-fusion of the epiphyses or tuberosities.
- Age category based on the fusion state.
- Minimum number of individuals.

The minimum number of individuals recorded for each bone, e.g., 6 distal right humerus and 2 distal left humerus; minimum number of individuals, 6. The total of individuals for each trench-layer would be the highest number of individuals recorded against any single bone; likewise, the totals for each age category. The totals of individuals for the site are the sum of the totals of each trench-layer.

The fragments of skull, maxilla, premaxilla, horn core and mandible were listed separately. The teeth, including loose teeth, were sorted into incisors, canines, upper and lower premolars and upper and lower molars and, where possible, the numbers of the teeth, e.g., third molar, third temporary molar.

The age categories are as follows:

	Cattle	Sheep	Pigs
A.	Less than 1 year	Less than 1 year	Less than 1 year
B.	1-2½ years	1-2 years	1-2 years
C.	2½-4 years	2-3½ years	2-3½ years
D.	4 years and over	3½ years and over	3½ years and over

These figures are approximate and there will be some degree of overlap of the categories. The individual animals were placed into these age categories according to bone fusion and tooth eruption. The categories B/C and C/D include those individuals which belong to one or other of the two categories, but could not with certainty be placed in either of them.

Some of the bone material was adequate to define a separate individual, but was not that part of the bone that would show evidence of age; therefore, the total number of individuals exceeds the sum of the totals of the separate age categories.

The division of bones for the different parts of the body was as follows:

<i>Forequarter</i>	Radius, ulna, humerus, scapula, cervical and thoracic vertebrae.
<i>Hindquarter</i>	Tibia, femur, patella, pelvic, lumbar and sacral vertebrae.
<i>Feet</i>	Carpals, tarsals, metatarsals, metacarpals, phalanges.
<i>Head and Teeth</i>	Skull, mandible, horncore, teeth.

The division of bones into these categories can aid conclusions relating to social and economic significance of the bone material.

FINDINGS

The bone findings could indicate that the cattle, sheep and pigs were slaughtered on or near the site and were then butchered and the meat consumed locally. This would be supported by the definite signs of chopping on many of the bone fragments from cattle. The bones of cattle were fairly evenly representative of all parts of the body, apart from the lower number of individuals represented by hindquarter bones (54) which would not constitute a really significant difference considering the nature of the bone material. This even representation would be contrary to what would be expected if the animals were slaughtered at the site and the meat transported for consumption elsewhere.

The sheep and pigs are represented by a higher proportion of head and teeth than by other bones, which, coupled with the more even representation of cattle bones, could indicate that this bone residue is from the point (butcher's shop) where the carcasses were butchered and the meat taken to dwellings in the vicinity for cooking and consumption. The beef could have been taken boneless and the pork or mutton cuts taken with the bone; hence the small representation of pig and sheep individuals by bones other than head and teeth.

The total of animals show as many individuals less than mature (approx. 4 years) as there were fully mature (over 4 years). These young animals which were being slaughtered may have been animals reared specifically for meat, or they may have been animals that were being reared for breeding stock, milk or draught, and then, for some reason, slaughtered off.

The chopping signs on the bones indicate that chopping was the main method of breaking a carcass down into the various joints. All the heads of the femurs found were separate from the shaft and most had been chopped, while the remainder had separated at the epiphyseal joint, but may have been originally chopped. This could indicate that the hind limb was removed from the pelvis in this way. There were consistent signs of chopping on the ulna in a ventral dorsal direction at the point where the shaft curves to the olecranon. This could have been for the separation of the humerus radial joint. For the remainder of the bones, there did not appear to be a consistent pattern of the chopping signs. Although many of the vertebrae were chopped, it was mainly across and not in a posterior/anterior direction; therefore the indications were that the carcasses were

not split in two through the vertebrae. If the facilities for hanging whole carcasses were inadequate it would have been more suitable to place a carcass, back down, on a firm surface and chop it into joints similar to the method employed by a butcher today when cutting up a lamb on a block.

The only two reasonably complete burials were of two dogs; one was found in the fill of a pit, another in a ditch. Both were well south of the main bone scatter.

There were no clear signs of pathology in the bone material. One cattle mandible had a third molar with only two cusps instead of three. This is probably a genetic feature which has been reported in Iron Age, Roman and Saxon cattle (*personal communication* - Barbara Noddle).

Totals of animals represented by the bone material:

		Cattle	Sheep	Pig	Horse	Dog
Total of individuals		117	38	15	6	4
Number of individuals in each age category	A					
	B	9				
	BC	6	1			
	C	16	4	3		
	CD	4	1			
	D	32	6	3		
Number of individuals represented by bones of different parts of the body	F ₄ [*]	73	11	4		
	H ₄ ^{**}	54	16	2		
	Feet	77	8	1		
	Head and Teeth	70	31	13		

* F₄ = Forequarter

** H₄ = Hindquarter

APPENDIX III

THE SMALL FINDS—FIGS. 11 AND 12

Drawn by ELIZABETH PYE

1. Bronze Lion-headed Handle with Iron Bar. The head is designed to be viewed horizontally and probably the object in use was placed in that position. Small holes drilled into the corners of the mouth could have been for a loop. It was found lying in what is considered to be the make-up for the top surface of the road's southern track. A functional parallel could be the bronze terminal found at Tarrant Hinton Down, Dorset, which was described as possibly belonging to "the pole of a chariot or the frame of a bed or funerary bier" (*Ant. Journal*, 1970, L. 337-8 and Plate LVI).
2. Bronze Pin: Found lying on the sand above the northern track of the road.
3. Bone Pin: Knob Headed. In the Late Roman ditch.
4. Bone Pin: Round Headed. Later Roman scatter.
5. Bone Pin: Lozenge Headed. In the Late Roman ditch.
6. Shaped Bone Object. Possibly a handle. A hole had been drilled through the bone. Clay-floored pit.
7. Bronze Stud. A similar object from Reculver in Maidstone Museum was labelled as a "Military and Harness fitting". Clay-floored Pit.
8. Probably a Small Bronze Bell. Clay-floored Pit.
9. Bone Pin: Knob Headed. Clay-floored Pit.
10. Base of a Glass Vessel. Miss Dorothy Charlesworth commented: "Probably a jar. The pad base overlies intersecting notched trails. Greenish glass with slight iridescence. 5th century". Clay-floored pit.

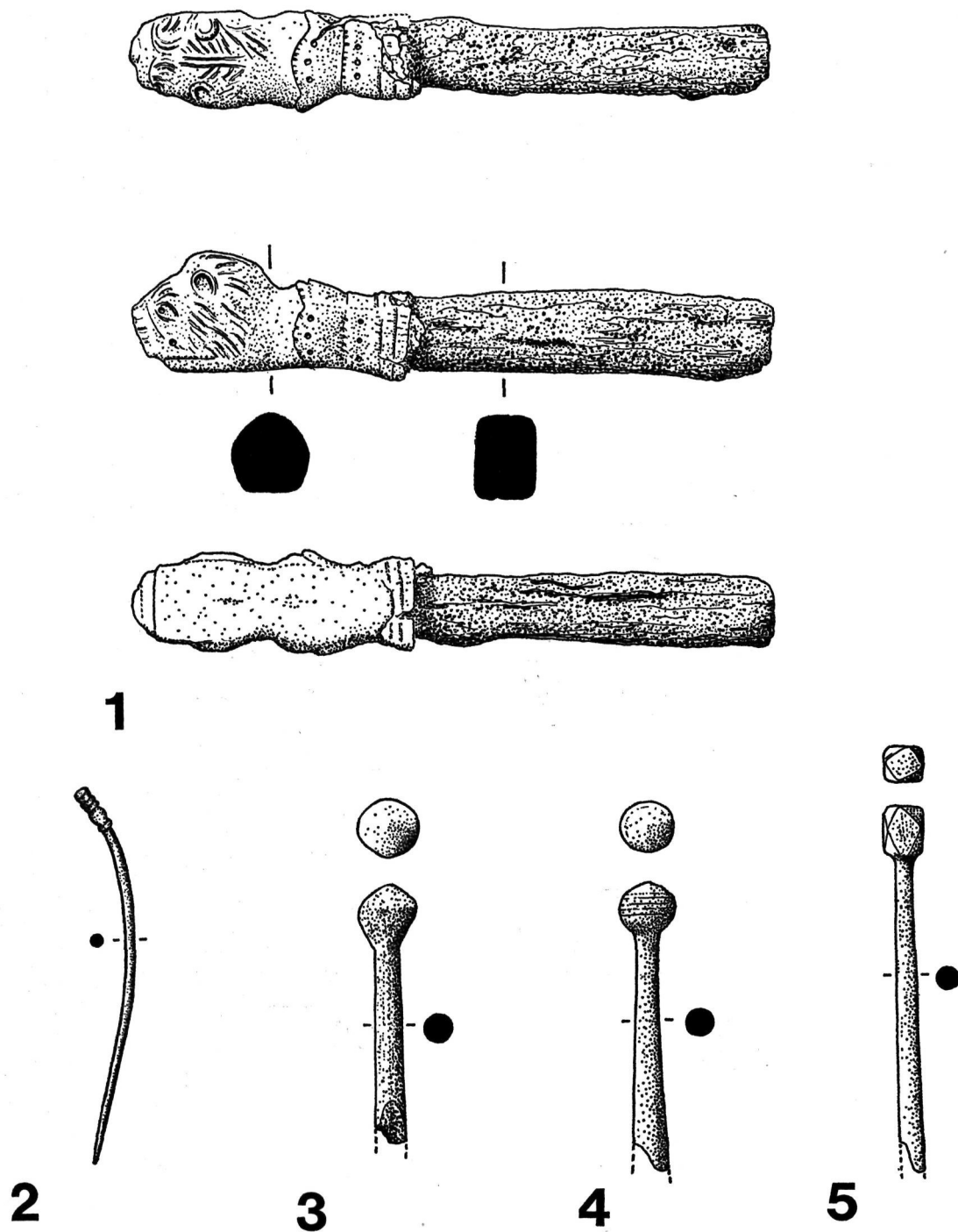


Fig. 11
Small finds. Scale: 1 and 2 half size; 3, 4 and 5 actual size.

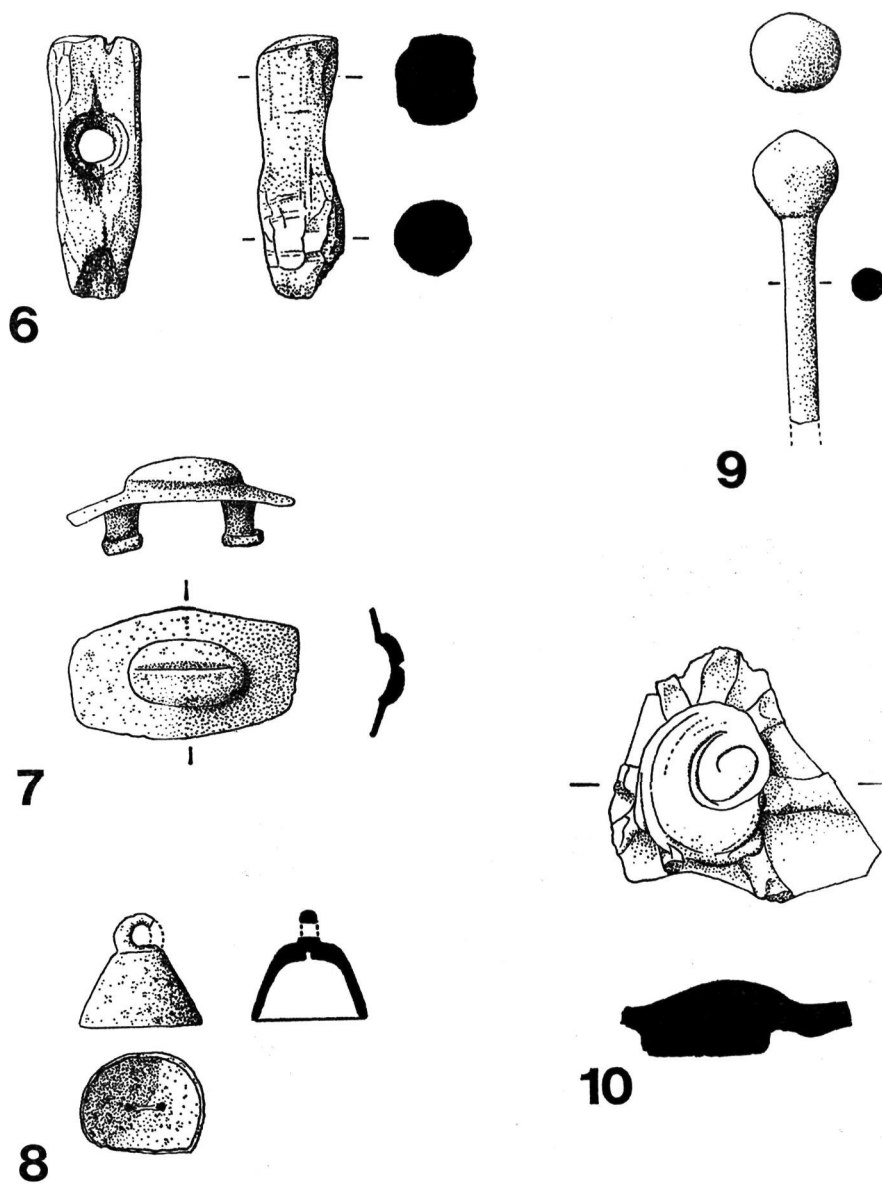


Fig. 12
Small finds from the clay-floored pit. Scale: 6, half size; 7, 8, 9 and 10 actual size.

NOTES

- ¹ The course of both these roads east of the city and west of the Lea have generally been treated as hypothetical.
- ² Margary stated that "a direct road probably led from London Bridge through Aldgate to Old Ford though remains of it have not yet been traced" (p. 246). He thought it to be "one of the earliest of the main Highways" (p. 56); "Roman Road in Britain", 1967 edition.
- ³ Its existence might be indicated in the report of Roman road surfaces seen at Bethnal Green (*J.R.S.*, Vol. 29, 1939, p. 217). Some authorities suggest that this road follows the line of a pre-Roman track (Grimes: "The Excavation of Roman and Medieval London, 1968, p. 45; Margary: "Roman Roads in Britain", 1967, p. 54).
- ⁴ This traditional point is at Iceland Wharf. A short un-named access road which still leads to the Wharf was shown on Gascoigne's map (1703). In 1906 pieces of herring-bone masonry, thought to be Roman, were dredged up from the Lea river bed "opposite the Chemical Works of Forbes, Abbott and Leonard" *Victoria County History of London*, Vol. 1, p. 31-32. The description of the find spot was vague, but according to Kelly's Post Office London Directory of 1870, the premises owned by the firm were at Iceland Wharf.
- ⁵ It was also possible to examine small areas in the front gardens of Lefevre Road. The Lefevre Grove houses had been demolished before the excavation started; those in Lefevre Road were pulled down while it was still in progress.
- ⁶ Fields are shown in John Jenning's "A Survey of Land Owned by Christs Hospital" (1655), and in the maps of Gascoigne (1703) and Rocque (1740).
- ⁷ At the north-eastern corner of the site (TQ 3705.8360) the land surface was approximately 40 feet Ordnance Datum.
- ⁸ Sections of the road were exposed at intervals over a distance of some 135 feet.
- ⁹ Only a small area could be examined; to the west stood the Lefevre Road houses and to the north the road had been cut by the Lefevre Grove cellars.
- ¹⁰ Hawkes and Hull, *Camulodunum*.
- ¹¹ Excavations on the Iron Age hill-fort of Oldbury, near Ightham, Kent. *Archaeologia*, Vol. 90, 1944. Ward Perkins believed that the re-population phase of Oldbury, from which his Belgic pottery came, was occasioned by "the invasion of Britain by Claudius' armies in 43 A.D." The pottery is in the Maidstone Museum Collection.
- ¹² *J.B.A.A.*, 3rd series, 6-7, 1941-42, pp. 53667. "A Three-tracked Roman Road at Colchester". The author quoted continental examples of three-tracked roads and argued that Stane Street and probably some other British roads were of this type.
- ¹³ *E.H.A.S. Trans.*, V. XIII, Part II, 1952-54, pp. 156-158; "The Ermine Street at Ware".
- ¹⁴ In June, 1970, it was possible to quickly examine a contractor's trench approximately 35 feet west of the railway cutting. Here two ditch-like features were noticed at the north of the road but their relationship to it is not clear.
- ¹⁵ I. Margary: "Roman Roads in Britain".
- ¹⁶ Quarry ditches were found in two of the three sections across the southern part of the road.
- ¹⁷ Basal sherd, Dr 31, central Gaul.
- ¹⁸ Above the pebbles, thin patches of sand were found in the earth over part of the area of the old northern track. This might imply another phase. On top of this was a scatter of late Roman pottery and bone.
- ¹⁹ "A Three-tracked Roman Road at Colchester", p. 57.
- ²⁰ We have no direct evidence to support the idea that they were contemporary, but both the remodelling of the south and the abandonment of the north meant a radical change. The Colchester excavation suggested that the northern track was out of use in the Antonine period, and our remodelled southern track could have been built at this time.
- ²¹ In fact oxen only represented two-thirds of the individual animals distinguished. It is possible that the remains of 180 were found, of which 117 were ox, 38 sheep, 15 pig, six horse and four dog. This may be an overestimate as each trench and layer were treated as separate entities.
- ²² "A Roman Tillery and Two Pottery Kilns at Durovernum (Canterbury)"; Frank Jenkins, F.S.A., *The Antiq. Journ.*, 1956, p. 40.
- ²³ "Roman Tile Kiln at Park St."; B. F. Rawlins. *Watford & S.W. Herts. Arc. Soc. Bulletin*, No. 10 (New Series), Oct. 1969.
- ²⁴ "Holt, Denbighshire: The Work Depot of the Twentieth Legion at Castle Lyons". W. F. Grimes, M.A.; *Y Cymmrodor*, 1930.
- ²⁵ "A Stone Coffin and other Roman Burials found at Old Ford"; *P.S.A.L.*, Second Series, Vol. XXIII, p. 230.
- ²⁶ Which he believed ran from Old Street to Old Ford.
- ²⁷ *Archaeologia* 31 (1846), pp. 308-11.
- ²⁸ Information on Area Plan 7 and 8 from Roy Canham, London Museum. Both burials were found in 1969.
- ²⁹ The burial was observed by Peter Daniels in a site-watching operation. The find led to an excavation on the site which commenced in March, 1971.

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SOME NOTES ON THE WESTMINSTER AND LONDON TOBACCO-PIPE MAKERS' GUILD

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These notes are the by-product of work done at the University of Bath on the history of the clay pipe industry with specific reference to that in Bristol, and were already in manuscript form when J. F. V. Woodman's account of the London pipemakers' guilds appeared in Atkinson's and Oswald's study of London pipes and pipemakers¹. By a curious coincidence, the research by Woodman and that by this writer each produced findings largely un-noted by the other; it therefore seemed worthwhile to publish the latter's findings for the benefit of researchers who may wish to do further work in this field. I am very grateful to my friends A. J. H. Cooksey, R. H. Cooper and A. H. Oswald, F.S.A., for discussion and information and to Mrs. M. Tatchell for assistance with a number of the documentary sources.

For the first half of the 17th century the London area was the major centre for clay tobacco-pipe making, and it was here that a pipemakers' guild was set up. Unfortunately, references to this company are extremely confused, and many of its records appear to have been lost. Ditchfield² describes many London companies, but makes no mention of the pipemakers; Unwin^{3/4} makes only brief references to the company's existence. The following pages attempt to summarize what has been stated, however conflicting, and to include the evidence of the three 17th-century charters of the guild, in order to assist any future study. (Unwin⁵ lists the following documentary material on the company — 1619 *State Papers Domestic* cix. 160; 1620 *SPD* xcv. 53, cxv. 104, cxvi. 83; 1627 *SPD* lxxxix.12; *Privy Council Records* 19th August 1638; 1662 *SPD* lii.32, lx.9, lxi.12; 1663 *SPD* lxxii.70; 1664 *xcvii.65*.)

According to Jewitt⁶, Thursfield⁷ quoting Jewitt, and — probably quoting them without acknowledgement — T. P. Cooper⁸, the company enjoyed a monopoly of making pipes from 1601, although it was not regularly incorporated until 18 years later. This is based on a remark by Cecil, Elizabeth's Secretary of State⁹, where such a monopoly is mentioned on 24th November 1601. The context was an uproar in the House of Commons about monopolies in general, and Cecil, urging "Zeal with discretion" in protesting monopolies, advises that the Queen be petitioned. He continues "One [Member] would have had us proceed [against monopolies] by Bill, and see if the Queen would have denied it: Another, that the Patent should be brought before us and cancelled; and this were bravely done. Others would have us proceed by way of a Petition, which Course doubtless is best; but for the first, and especially for the second, it is so ridiculous, that I think we should have as bad success as the Devil himself would have wished in so good a cause. Why, if idle courses had been followed, we should have gone forsooth to the Queen with a Petition to have repealed a Patent of Monopoly of Tobacco Pipes (which Mr. Wingfield's note had) and I know not what conceits: but I wish every man to rest satisfied till the Committees have brought in their resolutions according to your Commandments." It is not clear why a petition against a pipe monopoly should be deplored when the use of a petition to the Queen on monopolies generally is extolled, but it seems quite clear that by 1601 there was a pipe monopoly, presumably on their production. (It is also unclear whether the reference to Mr. Wingfield

refers to the Member who had moved the action or to the holder of the monopoly.) No other reference to a pipe monopoly this early appears to be known.

A letter¹⁰ dated 20th August 1618, almost 14 months before the first charter was granted to the Westminster pipemakers' guild, refers to pipemaking monopolies in the following terms after mentioning various new taxes and laws: ". . . and not so much as Archie the dizzard but that hath ingrossed the making of tobacco-pipes to him his deputies or assignes, which though yt seeme a small matter, yet they say yt concerns a number of poor men." Archie the dizzard appears to be a reference to Archibald Armstrong, the Court fool — dizzard means fool — but there is no record of Armstrong getting such a monopoly and almost certainly the expression means that any Tom, Dick, or Harry could now get a document allowing him to make tobacco pipes to the exclusion of others in the same trade. This would certainly imply that quite a number of monopolies were being granted at this time.

The first charter¹¹ dated 5th October 1619, strongly implies there had been no control of pipemaking prior to that date, for its *raison d'être* is given as repairing the disrepute brought about by inexpert makers and the growing number of "loose and idle persons intruders into that trade," and to organise the trade and suppress "unskillfull" makers¹². However, the very references to intruders and inexpert makers may reflect the monopolies given to Tom, Dick, and Harry in the preceding years. It seems clear that the 1619 charter is the first attempt to organize the industry on some rational basis, which suggests that the earlier "monopolies" apparently dating to at least as early as 1601 were quite different in their application and terms of reference¹³.

As the present reconstituted company points out¹⁴ the original company was that of the Tobacco Pipe Makers of Westminster in the County of Middlesex (so 1619 charter), and was not, as is generally implied¹⁵, a London company. However, its rights extended throughout England and Wales: no person not a member of the company was to make pipes anywhere in these countries, and the company had the right to search shops, warehouses, and ships for unlawfully-imported pipes. These rights were typical of royal monopolies of the period — the Society of Soapmakers of Westminster, for example, founded in 1632, had similar privileges and was able to use them to break the Bristol soapmakers' guild¹⁶. Brown¹⁷ quotes a Royal proclamation (he dates it 20th May 1620 but Rogers¹⁸ says 27th May and this is confirmed by the *SPD*) which mentions the Westminster pipemakers' charter of the previous year — though its date is given as 6th October — and expresses displeasure that the monopoly given the company and intended to cover England and Wales was being broken. Those causing the royal displeasure are noted as being in London, Middlesex, and Surrey — they were fortifying their houses to resist attempts to stop their work, and the proclamation allowed two of the company's members, together with a law officer, to enter and search any suspected place. (There is a considerable confusion here in the literature. Robinson and Spence¹⁹ refer to these powers and give August as the month, and in fact appear to be referring to a second proclamation of 30th August²⁰. Rogers [confirmed in the *SPD*] claims the search authority was contained in the second proclamation, but Brown²¹, quoting verbatim, notes it in the earlier one. Presumably it was in both — there are no search rights specifically against non-members given in the 1619 charter, a flaw which the proclamations of 1620 were presumably designed to rectify.)

As constituted, the company comprised a Master, four Wardens, and 12 Assistants; in addition 19 other names are listed as, in effect, charter members, which gives a total — in-

cluding two Masters-elect — of 38, indicating that there were at least this number of pipemakers in the London area by 1619.

(Fairholt²² refers to the guild as having a Master, four Wardens, and “about twenty-four Assistants.” This is repeated by Jewitt²³ and Price²⁴ — both probably quoting Fairholt without acknowledgement — and by Pritchard²⁵ — who does give Fairholt as his reference. Penn²⁶ states flatly there were 24 assistants. Harley²⁷ also states that there were “twenty-four Assistants” and goes on to say, in quotation marks, that the company was “to be active in London, Bristol, Selby and Hull’ ”. Where this statement is taken from is not mentioned, but it is not in the 1619 Charter, which is where Harley implies it is. This is but one of quite a number of inaccuracies in Harley’s work.)

The company, however, had a brief existence, for a proclamation of 1621 abolished, amongst other evils, “the sole making of tobacco pipes.”²⁸

The company appears to have been backed by, or perhaps more realistically was a pawn in the hands of, four courtiers who had been instrumental in obtaining the charter and had sunk £3,000 into the venture. What follows is not clear: Unwin²⁹ talks of the Mayor and Recorder of London trying to “make friendly accord” among the four courtiers³⁰, but it is not clear whether they had fallen out among themselves or with someone else. Unwin goes on to say that soon after the accession of Charles I these financiers found their interests threatened by another court favourite (probably Sir Thomas Willoughby referred to in 1627³¹ as a rival claimant to the monopoly), and “ultimately the old charter was declared invalid and a new one granted on condition of the payment of £100 a year to the king.” This suggests the first charter, elsewhere noted as being withdrawn in 1621, continued until after Charles I’s accession in 1625, for the new charter mentioned appears to be the second, granted in 1634, as the payment noted above is that recorded in this charter. However, the 1627 SPD reference referred to is a petition from the three individuals — Thomas Warricke, Robert Maxwell, and Charles Maxwell — to whom the first charter was specifically granted asking that Willoughby not be assisted in his attempt to obtain the monopoly “originally granted by James I to the petitioners to their loss through the falsehood of the company of £3,000.” This indicates the company had foundered by 1627 but that its backers were still hoping to salvage their investment.

The second charter³² is dated 4th December 1634. It was granted to a group of 24 individuals, eight of whom appear among the names in the 1619 charter. Warricke and Robert Maxwell again play a leading part, they and Richard Mathewes and Richard Cox asking for the charter on the grounds that some of the petitioners (whether this means of these four or of the other 20 listed later is not clear) had discovered a way of firing pipes from “Seacole or pittcole” instead of wood “to the consumption and greate decay thereof.” It can thus be concluded that Warricke and the Maxwells had successfully fended off Willoughby and eventually regained their monopoly, which is not Unwin’s interpretation. The Maxwells, in view of their Scottish name, may well have been favourites of James I, who was very prone to have such courtiers. James’s favourites were very unpopular, and it may well have been that with his death there was considerable jockeying for position, such as Unwin implies, when Charles I succeeded. There is a slight suggestion that Mathewes and Cox may have been the pipemakers who had found out how to fire pipes with coal, Warricke and Robert Maxwell being their backers. By the early 17th century there was a great scarcity of good timber because so much was being used in industrial work and the promise to use no wood for firing was clearly designed to obtain royal favour (the 1619 charter specifically allowed

pipemakers to use any fuel they wished.) The company was to pay a yearly rent of £100 in two equal portions, a marked contrast to the 44s rent mentioned in the 1619 charter and no doubt indicative of the growing financial difficulties of the Crown during this period.

(Oswald³³ notes a Maxwell and one Kirk — again another Scottish name — as being granted a monopoly apparently sometime after 1619 to supply pipeclay in return for instructing pipemakers on how to fire pipes with coal — this appears to be a distorted version of the granting of the second charter. The clay monopoly is discussed below. Robinson and Spence³⁴ give the date of the second charter as 1633, but this is incorrect; to further confuse the subject they list [p. 203] an entirely different set of officials to that given in the 1634 charter. The list they give is in fact one of early 19th-century makers — most of the names can be identified from Oswald's list³⁵ as pipemakers working in the first 30 or so years of the 19th century.)

The present company's pamphlet referred to earlier³⁶ gives the date of the second charter as 10th December 1634 instead of 4th December, and also says that the title of the company was changed at that time to that of the Tobacco Pipe Makers of London and Westminster and England and Wales, but the charter in fact gives exactly the same title for the company as that given in the first charter. This source also notes that the charter was forfeited for non-payment of rent, the Civil Wars — commencing in 1642 — probably contributing to the dissolution of the company. Oswald³⁷ quotes a source indicating that the company was still active in 1643 (see below), but in fact the guild was ended by a proclamation of 31st March 1639 which cancelled the grants of incorporation to a motley group of manufacturers, including hatband, spectacle, gutstring, comb, and tobacco-pipe makers^{38 39 40}.

The third charter of the company⁴¹ was dated 20th April 1663, and here the title of the company is changed to that of the Tobacco Pipe Makers of the Cities of London and Westminster and the Kingdom of England and Dominion of Wales. As with the second charter the guild promised to use only coal for firing pipes. There was to be a Master, four Wardens, and 15 or more Assistants. The annual rent was to be four nobles, obviously a largely nominal sum, the age of monopoly-granting to gain money for a hard-pressed Crown being by now over. This charter does not give a date for the termination of the preceding charter, but it does note that the rent had not been paid and that the Letters Patent "have been long since forfeited and voyd."

The charter prohibited the importation from overseas of any kind of tobacco pipe and also, repeating an act of Parliament of 8th May 1661, forbade the export of any pipeclay. The guild was to have rights of search, with the assistance of a constable, of shops, houses, cellars, warehouses, and ships for any imported pipes or exported clay.

(According to the present company's pamphlet⁴² the company was re-incorporated on 29th April 1663 and recognized as a City company without a grant of Livery on 2nd July. Rogers⁴³ gives a date for incorporation of 21st September 1662 [see below]. Further confusion is added by a reference⁴⁴ to a petition in the Calendar of State Papers dated 7th March 1662 [confirmed in the *SPD*] from the "Masters, Wardens, etc., of the company of Tobacco-Pipe Makers" requesting assistance against Dutch inroads in the colonial trade and "unskilful persons" making pipes for the home market, which suggests the guild was already in existence. This seems contradicted by a quotation from the same source dated 21st September 1662 [confirmed in the *SPD*] about two pipemakers, Thomas Lyddall and Mathew Warner, requesting incorporation "under such constitutions as formerly made" [presumably a reference to the previous charters], but the confusion must lie in the use of the old dating

system when the year started on 25th March: in this case 7th March 1662 would be 1663 new style. The March petition is presumably a formal application for the charter granted the following month, though its terms suggest the officials had already been elected. [The reference to these officials does not appear to relate to officers of the previous companies, for the 1663 charter's Master, Wardens, and Assistants do not include any of the names mentioned in the 1619 and 1634 charters]. Curiously, the two individuals, both pipemakers, who submitted the September petition do not appear in the 1663 charter's list of officials.)*

On 29th April 1664⁴⁵ the guild asked for a reconfirmation of its powers because so many people were flouting its authority⁴⁶. As noted above, the present Company says the company was re-incorporated on 29th April 1663 — it seems likely it has confused 20th April 1663 (the date on the charter) with 29th April 1664 (the date of this reconfirmation).

According to T. P. Cooper⁴⁷ and Oswald⁴⁸, the company, at the same time as it received its new charter in 1663, petitioned parliament to forbid the export of pipeclay to the Netherlands as Dutch pipes damaged the market for their own pipes. This, these sources say, was granted in return for a promise to use only coal for firing pipes. In fact, these points were incorporated into the new charter — this may be the petition of 7th March 1662/3 referred to above but in any case there had also been the act of parliament of 8th May 1661 noted in the 1663 charter. (Over 100 years later, when Duhamel du Monceau was writing, the export of English pipeclay was apparently still forbidden⁴⁹.) According to T. P. Cooper⁵⁰ and Lipson⁵¹ the guild asked in 1664 (the *SPD* give the date as 16th December) for their trade to be included in the Statute of Apprentices whereby only those who had served a seven-year apprenticeship could become pipemakers — they noted “their threatened ruin because cooks, bakers, and ale-house-keepers and others made pipes, but so unskilfully that they are brought into disesteem.” As all three charters were equally specific about apprenticeship it seems likely that the guild was in fact trying to refute an argument that because its trade had not specifically been included in the 1563 Statute of Apprentices pipemaking was exempt from its provisions. (In the following century it was to be held that that Statute was non-retroactive — that is, trades not specifically mentioned in it were excluded from its provisions. This applied to the growing industries in the North and Midlands in particular, though apprenticeship was normally replaced by a seven-year indenture⁵².)

(It is possibly a misreading of this reference that leads Hughes⁵³ to state that this Statute — he like Cooper miscalls it the Statute of Labourers — specifically included a reference to pipemakers when it was promulgated in 1563. MacKenzie^{53a} notes this error, but refers to a five-year apprenticeship. He also says that “years later” [*i.e.* subsequent to 1563] the London pipemakers appealed to the Statute to stop Bristol pipemakers cutting them out, but this writer has been unable to verify this statement and it is unclear on what grounds such an appeal could have been made. Bristol pipemakers certainly followed the customary seven-year apprenticeship, as the writer's present Bristol research proves.)

Robinson and Spence⁵⁴ note the new by-laws of the “Worshipful Company of Tobacco Pipe Makers, of the Cities of London and Westminster (and the Kingdom of England and the Dominion of Wales)” dated 23rd January 1805, forbidding the employment of “unskilful and unfit persons, as women and young girls” as this resulted in poor products — no women were to be employed except the widows of men who had been in the trade for at least seven years. No member of the company was to “carry or cause to be carried, any

*Atkinson and Oswald list (*op. cit.*, 225–6) the members appearing in the 1619 and 1634 charters. As, however, they do not list those appearing in the 1663 charter, these are listed in Appendix A at the end of this Article.

Tobacco Pipes about the Street . . . hawking or offering to sale [*sic*] the same . . .” By the rules and ordinances approved by the Lord Chancellor and the Chief Justices of the King’s Bench and the Common Pleas on 3rd April 1821⁵⁵ admission was by “Patrimony (Birth), Apprenticeship for 7 years, working at the trade unmolested for 7 years, or by serving His Majesty in the Army or Navy.” The charter gave the guild jurisdiction over all pipemakers in England and Wales, but the guild did not extend this right beyond 20 miles round London. Not so long before 1821 it destroyed defective moulds, and at that time officers could and did enter shops within the 20-mile radius warning any person who was not entitled to the freedom of the company and fining the master if such a person was not discharged. (This aspect of the Guild’s function, and the losing battle carried into the 1850’s by the Guild to try to assert its authority, is described by Woodman in Atkinson and Oswald *op. cit.*, pp. 175–6.)

(Hughes⁵⁶ says that after the incorporation of the guild in 1619 its monopoly was confirmed by subsequent monarchs until 1821, when George IV failed to renew it “being influenced by the makers of the more sweetly smoking briar pipes, then newly introduced.” Hughes is not a reliable source, and briar pipes were certainly not appearing until almost 40 years after 1821; Hughes also claims the guild’s monopoly dates from 1610, perhaps a misprint for 1601, but as previously noted this seems certainly not to be the case. Pritchard⁵⁷ notes that according to one source⁵⁸, the company petitioned Queen Anne for a charter of incorporation but this was not allowed. Presumably his reference is in error, for the guild was already incorporated by that date and appears to have remained so until ca.1870. Perhaps the request was for a livery.)

Between 1801 and 1833 there were 528 members admitted by patrimony or apprenticeship, though as there were only 316 members in 1833 there must have been a high attrition rate. Moreover, how many of these 316 were working pipemakers, and how many of these (if any) worked outside London, is not stated. Presumably these members included journeymen and not just masters. (The list of officers given by Robinson and Spence⁵⁹ is almost certainly that for 1821 and should fit in at the end of the seventh paragraph on p.208. The list gives a Master, four Wardens, and 19 Assistants, which last number indicates that the guild had taken advantage of the 1663 clause allowing it more than 15 Assistants if it wished.*)

The company was still in existence in 1866, but by 1875 was recorded as extinct⁶⁰. This agrees with the present company’s pamphlet⁶¹ which says the 1663 charter remained effective for just over 200 years until lack of members ended the company. (Woodman in Atkinson and Oswald *op. cit.*, 177 indicates the company became defunct in 1868 or 1869).

The present company, under the title the Company of Tobacco Pipe Makers and Tobacco Blenders, was formed on 24th March 1954. On 5th March 1956 it was granted a coat-of-arms based on that of the old company, with their old motto *Producat Terra*. On 20th December 1960 Livery was granted⁶².

The original coat-of-arms⁶³ differed fairly markedly in detail from the modern one. The original motto, according to all these sources, was “Let brotherly love continue,” not *Producat Terra*. A source of 1747⁶⁴ notes that the company was 78th in precedence as a City company, and that it had neither Hall nor Livery; another source of the same year⁶⁵ also notes the company was 78th in precedence.

According to Brongers⁶⁶ one of the reasons James I granted the company its charter was to control pipe production, especially the production of the so-called Raleigh pipes. These

*Officers listed in Appendix B.

were elaborately-moulded pipes with the bowl modelled as Raleigh's head and the stem in the form of a crocodile attempting to swallow him (an allusion to a story about Raleigh which claimed that on one of his expeditions he had been attacked by a crocodile which found him so impregnated with tobacco that it had let him go.) These pipes are supposed to have been produced in The Netherlands from ca.1620 based on English prototypes^{67 68 69} but as in fact they are extremely rare in England and almost all those that are known are inferior to those found in The Netherlands, it seems more reasonable to explain the few known English examples as indifferent copies of a Dutch model than to identify them as prototypes of the Dutch examples⁷⁰. While it seems reasonable to suppose these pipes may have initially represented Raleigh and that James, who was both anti-smoking and anti-Raleigh (he had disgraced Raleigh in 1603 and had him executed in 1618) would have been angry at any widespread appearance of these pipes in England, there appears no evidence to suggest his granting a monopoly for pipe-manufacture was connected with the appearance of these pipes, particularly if these pipes were not English. (Brongers and Friederich say these pipes continued to be produced until ca.1700 in The Netherlands, and one probably Dutch example at Blaise Castle Folk Museum, Bristol (plate.) is marked IONAS — the N and S being retrograde and 1683 on the stem, suggesting continuing production and an identification of the motif in this instance as Jonah and the great fish.)

It seems therefore, that there is considerable uncertainty about the history of the company, which reinforces the impression that it was never able to enforce its theoretical power — certainly not beyond the London area as the 1634 and 1663 charters implied by their grandiloquent titles. Indeed, as Oswald notes⁷¹, the existence of independent guilds at York and Bristol — the latter founded in 1652⁷² — and a guild of grocers, apothecaries, and tobacco-pipe makers founded at Gateshead in 1675⁷³ indicate that the company was not recognized there, and anything less like the guild at Gouda in The Netherlands with its dictatorial powers over every aspect of trade⁷⁴ is difficult to imagine. Brongers' source for his statement about Raleigh pipes being the major target for James's wrath is not given, and this writer has not been able to find any confirmatory evidence. However, R. H. Cooper⁷⁵ notes that a few years before the outbreak of the Civil War in 1642 members of the London company visited Southampton to search out any unlicensed pipemakers, so some efforts were made to enforce the monopoly beyond the London area. One signatory of the 1619 charter, Swithin Bonham, was described in 1618 as a gentleman of Poole, a major source of pipeclay (see below), so possibly the guild had a more effective writ than generally supposed⁷⁶.

As Oswald notes⁷⁷, most of the records of the Westminster-London pipemakers' guild are lost, but in view of the variety of and the disagreement among the sources cited in the preceding pages, a re-examination of the company's history might be worthwhile.

The granting of such monopolies was standard policy in the first half of the 17th century, as can be seen from the unsuccessful attempts between 1615 and 1638 to make tobacco-importing a monopoly⁷⁸. According to Oswald⁷⁹, a monopoly to supply clay for pipemaking was granted to Messrs Kirk and Maxwell in return for their services in securing the incorporation of the tobacco-pipe makers in 1619 and for instructing them in how to fire pipes with coal. T. P. Cooper, however, states⁸⁰ that a Philip Foote of London obtained a licence in 1618 to sell clay for pipe-making for 21 years, and that a little later his brother William was granted the right as Philip had died "and bad clay [was being] sold by others."

The Foote monopoly appears to be correct, for it is noted in the *SPD*⁸¹ and referred to in at least two documents in the Public Record Office. One⁸², is a writ to find whether

"Phillipp Foote" of London, a cooper, had discovered any means "to prepare clay or earth of such Composition, temper and quality as hath benefitt and good for the use of Tobacco pipemakers to make thereof their Tobacco-pipes" as specified in Letters Patent granted him on 24th July 16 Jas I (1618); whether he had used or now uses "any mixture or art at all in the mingling or preparing of the clay or earth" for sale to pipemakers or whether he sold it as taken from the ground; whether others used the same clay as Foote had undertaken to sell and if so how long they had used it before Foote's undertaking; and whether Foote had paid the annual rent of £6 13s 4d as specified in the Letters Patent. The result of the inquiry, held in the "Towne Court House" in Westminster on 24th September 21 Jas I (1623) gave the answer no to points one, two, and four; and noted in answer to point three that on 1st May 10 Jas I (1612) and prior to that a Lambeth potter named Peter and an East Smithfield distiller called Walters (a blank is left for each christian name) had supplied and used the same type of clay as Foote had undertaken to sell. This indicates that Philip Foote was still alive in 1623, so if T. P. Cooper is correct in saying Philip's brother William continued the monopoly Philip's death must have occurred after that date. Presumably Philip was able to continue to hold his monopoly despite what seems to be an extremely adverse finding by the inquiry.

The other document⁸³ has recently been transcribed by R. H. Cooper, to whom I am grateful for information on its contents⁸⁴. It concerns an infringement of Foote's patent — which here is dated not to 1618 but to 18th July 1620 — to be the sole supplier of clay for pipe manufacture (which he was obtaining from a John Overy of Hartley, Kent) "in this Realme of England or the Domyinion of Wales." This document too gives Foote's occupation as that of citizen and cooper of London.

Presumably this Philip Foote is the same as that listed as one of the first Wardens of the Westminster pipemakers' guild in its 1619 charter. (This charter also mentions an Alexander Foote, but no William.)

According to Oswald⁸⁵ the monopoly in clay was withdrawn in 1639; this date would coincide with the end of the 21-year licence granted Foote in 1618. (The *SPD* for the years 1638–40 have several claims and counterclaims by those trying to continue a monopoly in clay and those protesting the illegality of these actions.) There is no reason why such a monopoly should not be granted before the formation of the pipemakers' guild and its monopoly, for pipemaking had been a going concern in London from well before 1600. The whole question of clay monopolies may always have been one of confusions and rivalries, however, for A. J. A. Cooksey⁸⁶ has found two agreements for the exploitation of Poole clay for tobacco-pipe manufacture during this period. One of the agreements was among three men for a four-year right and was dated 1618, the same year as the Foote monopoly; the other was a similar one for a 21-year lease made in 1625. On the face of it, these arrangements contradict the Foote monopoly — hopefully, further research will be done on the history of the Poole monopolies.

London, as already noted, was the major pipemaking centre during the first half of the 17th century. Successfully appealing against a tax imposed on pipes, the Westminster company claimed that "near 1000 poor people in London and Westminster lived in tobacco pipe making who now for want of such employment are beggars. Several thousands of other tobacco pipe makers throughout England and Wales are in like manner ready to starve."⁸⁷ It went on to claim that the pipe industry had been cut to an eighth, foul pipes were being reburnt, and the sea trade was being lost. (Oswald gives the date here as 1643⁸⁸, but this

appears to be an error, as the guild had been dissolved in 1639 — see above.) Oswald notes⁸⁹ 106 London pipemakers recorded in the period 1600–50 and 224 for the period 1650–1700, and suggests that when other as yet unknown pipemakers and the assistants likely to have worked with each pipemaker are included, 1,000 connected with the trade ca.1643 may not be so far from the mark. However, in citing a source of ca.1800 that seven Liverpool pipemakers employed 60 men and as many women as grounds for there being a considerable number of pipemakers' assistants in the earlier 17th century Oswald is juxtaposing a 19th-century industrial concern with the small family business of the earlier period, which is not valid. However, even allowing for an exaggeration in the number connected with the trade ca.1643 it seems likely there existed more pipemakers than those at present known, and if each employed four or five assistants — which seems a probable figure — there could still have been several hundred people connected with the trade at this time, to which could be added those involved in supplying the clay. Certainly Oswald's recent figures emphasize even more than his earlier ones that London was the centre of the industry in the first half of the 17th century. However, by 1660 the age of monopolies was passing and it was becoming too late for weak companies such as the London pipemakers' guild to assert their theoretical rights. The disruption of the Civil Wars and the Commonwealth had allowed Bristol to establish its own pipe-makers' guild in 1652 and during the second half of the 17th century Bristol pipemakers, aided by their city's rapidly-expanding overseas trade with the North American colonies, took over as the major export centre of clay pipes in England, a position it maintained until into the second half of the following century.⁹⁰

APPENDIX I

Officers of the London pipemakers' guild noted in the third charter, 20th April 1663:

William Browne	—	Master (to be elected annually from among four Wardens)
Thomas Cobnell	}	Wardens (to be elected annually)
Richard Humphreys		
William Allen		
Henry Thompson		
Thomas Parrett	}	Assistants (elected for life)
Timothy Trigg		
Thomas Anderton		
Uriah Debney		
Thomas Symonds		
Edward Bansborough		
John Boughton		
Robert North		
Edward Robins		
Robert Moore		
Robert Rowley		
John Micheill		
Ferdinando Hullin		
John Lockwood		
James Booth		

(There was a provision for there to be more than 15 Assistants if desired.)



The lower pipe is an almost-complete example of the so-called Raleigh pipe. It is dated 1683 on the stem and has the name IONAS (the N and S retrograde) on the opposite side of the stem. Its present overall length is $7\frac{9}{10}$ inches (the end of the stem is missing) and its bore diameter is $\frac{4}{64}$ of an inch. (Photograph copyright of the City Museum, Bristol).

APPENDIX II

Officers of the London pipemakers' guild noted in 1821 (as given in P. M. Robinson and A. L. Spence *The Robinson Family of Bolsover and Chesterfield* 1937, p.203):

John Dearden (1823-40 — as Deardon ¹)	—	Master
Sam Walker (1823-39 ¹)	}	Wardens
John Hedges (1805-11 ¹)		
Thos Duggan (1823-28 — as Duggen ¹)		
George Benson (1802-20 ¹)		
Thomas Balmer (?) (1805-40 — as Balme ¹)	}	Assistants
George Clark (1805-28 — as Clarke ¹)		
James Jones (1802-40 ¹)		
John Carter (1802-35 ¹)		
Rodger Dix Moon (?) (not found)		
George Brown (1799 ²)		
John Ford (three known: 1823-35; 1826-65; 1830-3 ³)		
Samuel Lambert (1832 ²)		
Joseph Tester (?) 1805-8; another 1823-88 ¹)		
John Jarman (1805-47 ¹)		
William Ditchburn (1832-45 ¹)		
John Brookesbanks (1832 — as Brookbanks ¹)		
William Swan (not found)		
George Bradely (not found)		
Saml Tester (1828 ¹)		
John Bishop (1817-39 ¹)		
Saml Burch (1828-36 — as Birch ¹)		
Thomas Wooten (1820-46 — as Wootten ¹)		
William Burstow (1828 — as Burston ¹)		

NOTES

- 1 B. J. Bloice in D. Atkinson and A. Oswald "London Clay Tobacco Pipes," *JBAA* 1969, pp. 216-25.
- 2 A. Oswald "The Archaeology and Economic History of English Clay Tobacco Pipes", *JBAA* 1960, pp. 55-102.
- 3 I. C. Walker [Ford Family of Pipemakers] *The London Archaeologist*, Spring 1969, pp. 47-8; this gives more recent information on the various Ford pipemakers in 19th-century London.

NOTES

- 1 D. Atkinson and A. Oswald "London Clay Tobacco Pipes", *Journal of the British Archaeological Association*, 3rd ser. Vol. XXXII (1969) pp. 171-227. J. F. V. Woodman's history of the pipemakers' company is on pp. 172-7.
- 2 D. H. Ditchfield, *The Story of the City Companies* (n.d.).
- 3 G. Unwin *Industrial Organization in the 16th and 17th centuries* (1904, 1957 ed.).
- 4 G. Unwin *The Guilds and Companies of London* (1908, 1963 ed.).
- 5 Unwin *Industrial Organization* . . . , p. 262.
- 6 L. Jewitt, "A Few Words on 'Fairy Pipes'," *The Reliquary* III (1863) 77; repeated in L. Jewitt *The Ceramic Art of Great Britain* . . . (1878) Vol. I, p. 295.
- 7 T. H. Thursfield "Early Salopian Pipes", *Transactions of the Shropshire Archaeological and Natural History Society*, Ser. III, Vol. VII (1907) p. 160.
- 8 T. P. Cooper "The Story of the Tobacco Pipe", *The Reliquary and Illustrated Archaeologist* (N.S.). Vol. XIII (1907) p. 104.
- 9 S. D'Ewe *The Journals of all the Parliaments during the Reign of Queen Elizabeth* (1682) p. 651.
- 10 PRO ref. SP 14/98.
- 11 PRO ref. C.66/2206 Patent Rolls 17 Jas. I. 5 Oct. No. 6.
- 12 P. M. Robinson and A. L. Spence *The Robinson Family of Bolsover and Chesterfield* (1937) 200, confirmed in *SPD*.
- 13 Robinson and Spence also say (*loc. cit.*) that the company's by-laws were framed on 6th October, but this has not been confirmed.
- 14 *The Worshipful Company of Tobacco Pipe Makers and Tobacco Blenders* (pamphlet issued by the company).
- 15 H. W. Fairholt *Tobacco: its History and Associations* (1859) pp. 166-7, quoting Stowe; and following him, T. G. H. Price "Notes upon some Early Clay Tobacco Pipes from the Sixteenth to the Eighteenth Centuries found in the City of London, in the Possession of the Author", *Archaeological Journal* LVII (1900) p. 229; J. E. Pritchard "Tobacco Pipes of Bristol of the XVIIth Century and their Makers", *Transactions of the Bristol and Gloucestershire Archaeological Society* XLV (1923) p. 167; and A. Oswald "The Archaeology and Economic History of English Clay Tobacco Pipes", *Journal of the British Archaeological Association*, 3rd ser. Vol. XXIII (1960) p. 40.
- 16 F. H. Rogers *The Bristol Craft Guilds during the 16th and 17th Centuries* (unpublished Ph.D. thesis, University of Bristol) (1949) pp. 156-7.

- 17 A. S. Brown "Pipes and Pipe Smoking", *Tobacco* Vol. LXXVI, No. 13 (26th July 1923) 17 and 19.
- 18 Rogers *op. cit.*, p. 165, n.2.
- 19 Robinson and Spence *op. cit.*, p. 201.
- 20 Rogers *op. cit.*, p. 165, n.3.
- 21 Brown *loc. cit.*
- 22 Fairholt *op. cit.*, p. 166.
- 23 Jewitt *op. cit.*, 1863: p. 78 and 1878: I, p. 295.
- 24 Price *loc. cit.*
- 25 Pritchard *loc. cit.*
- 26 W. A. Penn *The Sovereign Herbe: A History of Tobacco* (1900) p. 26.
- 27 L. S. Harley "The Clay Tobacco Pipe in Britain", *Essex Field Club Special Memoirs*, VIII (1963) p. 12.
- 28 Robinson and Spence *op. cit.*, pp. 201-2.
- 29 Unwin *The Guilds and Companies of London*, p. 319.
- 30 SPD, 24th June 1620.
- 31 SPD, Charles I, p. 493.
- 32 PRO ref C66/2645 Patent Rolls 10 Chas. I. (No. 5).
- 33 Oswald *op. cit.*, p. 42, No. 5.
- 34 Robinson and Spence *op. cit.*, p. 202.
- 35 Oswald *op. cit.*, pp. 55-102.
- 36 *The Worshipful Company of Tobacco Pipe Makers and Tobacco Blenders*.
- 37 Oswald *op. cit.*, p. 42.
- 38 Robinson and Spence *op. cit.*, p. 203.
- 39 Rogers *op. cit.*, p. 165, n.4.
- 40 Valerie Pearl *London and the Outbreak of the Puritan Revolution: City Government and National and National Politics 1625-43* (1961) p. 87.
- 41 PRO ref. C.66/3040 Patent Rolls, 15 Chas. II. (No. 7).
- 42 *The Worshipful Company of Tobacco Pipe Makers and Tobacco Blenders*.
- 43 Rogers *op. cit.*, p. 165, n.5.
- 44 Robinson and Spence *op. cit.*, p. 204.
- 45 Rogers *op. cit.*, p. 165, n.6, confirmed in the SPD.
- 46 T. P. Cooper *op. cit.*, pp. 104-5.
- 47 *Ibid.*, p. 104.
- 48 Oswald *op. cit.*, p. 43, 47.
- 49 H.-L. Duhamel du Monceau *L'art de faire les pipes a fumer le tabac* (1771) p. 10.
- 50 T. P. Cooper *op. cit.*, pp. 104-5.
- 51 E. Lipson *The Economic History of England*, Vol. III *The Age of Mercantilism* (second part) (1931, 6th ed 1956) p. 282.
- 52 T. S. Ashton *An Economic History of England: The 18th Century* (1955, 1961 ed) pp. 223-4.
- 53 G. B. Hughes "The Clay Tobacco Pipe Maker", *Country Life* 28th December 1961, p. 1663.
- 53a C. Mackenzie "Sublime Tobacco" (1957) p. 79.
- 54 Robinson and Spence *op. cit.*, p. 208.
- 55 *loc. cit.*
- 56 G. B. Hughes *op. cit.*, pp. 1633-4.
- 57 Pritchard *op. cit.*, p. 168.
- 58 Given only as "Marryat" but perhaps his *History of Pottery* which is noted in H. E. Smith "Notes on Clay Pipes: Their Uses and Forms, Makers and Dates", *Transactions of the Historic Society of Lancashire and Cheshire* XII (1859-60) p. 212.
- 59 Robinson and Spence *op. cit.*, p. 202.
- 60 *Ibid.*, 210-1.
- 61 *The Worshipful Company of Tobacco Pipe Makers and Tobacco Blenders*.
- 62 *Ibid.*
- 63 Fairholt *op. cit.*, p. 167 and *illus.*, quoting Strype's edition of Stowe, Vol. II, p. 247 and Allen's *History of London*; Pritchard *op. cit.*, pp. 167-8, quoting C. Welch's *Coat-Armour of the London Livery Companies* (1914); Robinson and Spence *op. cit.*, p. 200, no source given.
- 64 *A General Description of All Trades . . .* (1747), p. 167.
- 65 R. Campbell *London Tradesmen . . .* (1747) p. 337.
- 66 G. Brongers *Nicotiana Tabacum* (1964) p. 35.
- 67 *Ibid.*, pp. 34-5.
- 68 F. H. W. Friederich "Pijpelogie", Pt. III *Westerheem*, Vol. XIII, No. 3 (June 1964) pp. 59-60.
- 69 I. C. Walker "Sir Walter Raleigh Pipes", *Quarterly Bulletin, Archaeological Society of Virginia*, forthcoming.
- 70 A. Oswald with J. Barber "Marked Clay Pipes from Plymouth, Devon", *Post-Medieval Archaeology*, Vol. 3 (1969) pp. 140, 141; Fig. 59: 79.
- 71 Oswald *op. cit.*, p. 47.
- 72 Bristol Public Archives 04369 (1).
- 73 J. E. Parsons "The Archaeology of the Clay Tobacco-Pipe in North-East England", *Archaeologia Aeliana* Vol. XLII (4th ser.) (1964) pp. 241-2 and Pl XIII.
- 74 G. C. Helbers and D. A. Goedewaagen *Goudsche Pijpen* (1942) *passim*.
- 75 Personal communication 29th July 1968.
- 76 Oswald, personal communication 21st July 1970.
- 77 Oswald *loc. cit.*, "The Evolution and Chronology of English Clay Tobacco Pipes", *Archaeological News Letter*, Vol. 7, No. 3 (September 1961) p. 55.
- 78 C. M. MacInnes *The Early English Tobacco Trade* (1926) pp. 52-8.

- 79 Oswald "The Archaeology and Economic History of English Clay Tobacco Pipes", p. 42, n.5.
80 T. P. Cooper *op. cit.*, p. 104.
81 *SPD* 24th July 1618.
82 *PRO* ref. E.178/4242.
83 *PRO* ref. C.2/38.
84 Personal communication 8th October 1968.
85 Oswald *op. cit.*, p. 43.
86 Personal communication 2nd January 1969.
87 Quoted in Oswald *op. cit.*, p. 42.
88 Also given in A. Oswald and R. E. James "Tobacco Pipes of Broseley, Shropshire", *Archaeological News Letter*, Vol. 5, No. 10 (March 1955) p. 187.
89 Oswald "The Clay Tobacco Pipe: Its Place in English Ceramics", *Transactions of the English Ceramic Circle*, Vol. 7, pt 3 (1970) pp. 227-8; Oswald "Tobacco Pipes", *The Concise Encyclopaedia of Antiques*, Vol. IV (1959) p. 202 gives 75 London makers for 1600-50 and 116 for 1650-1700; cf also Oswald "The Archaeology and Economic History of English Clay Tobacco Pipes", p. 42.
90 Oswald "The Clay Tobacco Pipe: Its Place in English Ceramics", p. 227; Walker *The Bristol Clay Tobacco-Pipe Industry* (Bristol City Museums pamphlet 1970).

BOOK REVIEW

London 1808-1870: The Infernal Wen. By FRANCIS SHEPPARD. Secker & Warburg. 1971. xx plus 427 pp. £4.50.

Not a work of original research but nevertheless an impressive contribution to the Secker & Warburg series *The History of London*. In this splendidly produced and well-illustrated volume Mr. Sheppard deals at great length with some of the more important aspects of the history of London between 1808 and 1870, including local government, the Poor Law, public health, trade unionism, and the transport revolution, as well as the role of church and state in education. The book ends with a useful chapter-by-chapter bibliography. Mr. Sheppard's familiarity with available primary sources is very clear.

LSS

THE PLAGUE OF 1625 AND THE STORY OF JOHN BOSTON, PARISH CLERK OF ST. SAVIOUR'S, SOUTHWARK

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Among the many misfortunes of the House of Stuart must be counted the fact that the accessions of James I in 1603 and of Charles I in 1625 were both accompanied by severe outbreaks of the plague. The plague of 1625, indeed, might well have become known as "the Great Plague" had not its horrors been surpassed by the even more terrible "visitation" of 1665. The year had opened with floods and storms, and in the late, cold spring the dreaded disease was already showing itself in the cities of London and Westminster and in the suburbs.¹ On 25th March, two days before King James died, the Privy Council had rebuked the Lord Mayor of London and the aldermen for neglecting to enforce the Plague Orders; the infection had already been spreading for some weeks, for the first case of a death from the plague had been reported in January. As the Privy Council followed up their rebuke to the City authorities on 5th April with warnings to the Justices of the Peace for Middlesex, Surrey and Westminster, the Plague Orders were presumably then put into effect. These Orders, the outcome of the bitter experience of earlier plague years, were sent to all aldermen to be publicly displayed in the City's wards. They are summarised in Chapter II of F. P. Wilson's *The Plague in Shakespeare's London*. According to these Orders, every house where a case of plague had been reported was to be closed for forty days, the house was to be marked with a cross and the inscription "Lord, have mercy upon us". Watchers were appointed to view the bodies of persons dying in their parish, to search for signs of the infection, and to report all deaths to the constable, who in turn reported to the aldermen. Bills of Mortality were drawn up by the City authorities. According to the Yearly Bill of Mortality for 1625, by the end of December 54,265 deaths had been recorded in the cities of London and Westminster and neighbouring parishes, of which 35,417 were believed to be "of the plague". Only one parish was recorded as "cleane" of infection.

The alarm of the Privy Council, during April and May, was intensified by the fear of infection spreading amongst the crowds which were expected to assemble to see the new King and to celebrate Charles I's coronation and his marriage to the French king's daughter. London welcomed Charles and his bride, who arrived by water from Dover on 13th June, with bonfires, incessant bell-ringing and other signs of rejoicing. But when Parliament met on 18th June, it was against a gloomy background of infection spreading rapidly, of houses closing and trade declining, scenes of mourning and of horror, and general fear of contagion. Parliament sat for only three weeks, before being adjourned to meet again at Oxford; and meanwhile the Court had left Whitehall. A proclamation of 30th June forbade persons from London, Westminster and other infected places to approach such Royal houses as Hampton Court, Windsor, Richmond and Nonsuch, "for the more safety of his Majestie and the queenes Majestie and such lords and ladyes that necessarily are to attend at Court . . . upon pane of his Majesties heavy indignation."²

The Privy Council had issued instructions to Londoners to stay in their homes and not carry infection into the country. Nevertheless, the exodus proved uncontrollable, and large numbers left the city, though they were far from welcome in the towns and villages in

which they sought refuge. In July, the Privy Council urged aldermen and other officials to stay and carry out their duties. Nevertheless, some aldermen, as well as clergymen, churchwardens, constables and others had fled with their families to country districts. Indeed, the City seemed desolate, owing to the closing of the shops and houses of those who had fled to the country, as well as the compulsory shutting up for forty days of sufferers from the plague and their families. Shopkeepers perished, with their servants and apprentices. Markets for the sale of foodstuffs were relegated to districts beyond the City's outskirts, such as Tothill Fields, St. James's Fields, and St. George's Fields. Theatres were closed; bear-baiting, dancing and even football were prohibited.

The lack of employment and the virtual cessation of normal buying and selling must have left many penniless and added hunger and hardship to the terrifying circumstances in which they lived. Some of the City parishes petitioned for relief, and in June the Lord Mayor pointed out to parish clergy and churchwardens the need for relief of the poor, and ordered a collection to be made each Wednesday for that purpose. The City Companies were commanded to forego their usual feasts and to send the money saved for poor relief. On 7th July, the Lord Mayor made a stronger appeal to certain City companies for contributions for the relief of "poor people whose houses are visited."³ In August, the poor rate was doubled; a Brief was issued ordering a collection to be made throughout the kingdom for the relief of the poor in London and Westminster, and payments were made to provide food for the unfortunate prisoners starving in the London jails.

As the City authorities put it: "the hand of God lyeth heavy upon the City by reason of the greate visitation of the plague which now increaseth." By August, the number of deaths from the plague was rising to a peak, as is shown by the monthly Bills of Mortality, which were published, rather belatedly, from 21st July onwards.

<i>Week ending</i>		<i>Buried in all</i>	<i>Of the Plague</i>	<i>Parishes infected</i>
July	7	1222	593	57
	14	1741	1004	82
	21	2850	1819	96
	28	3583	2471	103
Aug.	4	4517	3659	114
	11	4855	4115	112
	18	5205	4463	114
	25	4841	4218	114
Sept.	1	3897	3344	117
	8	3157	2550	116
	15	2148	1672	107
	22	1994	1561	111
	29	1236	852	103

Much of the heaviest mortality was in the parishes without the walls.

No doubt citizens fleeing from the "infected" parishes into Middlesex, Kent and Surrey carried the infection into the districts on the outskirts of the City. Only three London parishes, in this year of disaster, recorded more deaths than did two adjacent Southwark parishes: St. Saviour's and St. Olave's. In St. Saviour's parish, south of London Bridge in Bridge Ward Without, the mortality rose throughout the spring and summer, as shown in the Parish Clerk's Monthly Bills, preserved in the Greater London Record Office.⁴ From the fairly normal rate of burials of 40 in February and 43 in March, the number of persons buried in St. Saviour's parish reached 65 in April and 101 in May. In June, in spite of hopes

that the unseasonably cold weather would check the spread of infection, the number of deaths rose to about 180. In July, there were buried in the parish 539 named persons "and many unknowne", as the harassed parish clerk wrote. In August, in this one parish at least 800 perished, probably over 900; in September, 570. Even in October 90 persons were buried; in November, 58; not till December did the monthly total drop to the more normal figure of 37. The records show multiple deaths in some families; for instance:

25th August John Gloster and his wife Rebecca buried in the South Quire
 28th August John Gloster a youth buried in the South Quire
 6th August Edmund Ashton a victler buried in the South Quire
 Martha Ashton in Childbedd and Chrisam. (5)

Large numbers of those who died were poor persons from "the divers streets, ways and winding lanes all full of buildings inhabited" described by Stow in his "Survey of London". Especially was the mortality high in the congested area of Bankside. These narrow, crowded and insanitary alleys and "rents" (such as Pepper Alley, Angell Yard, Normans Rents, Frying Pan Alley, Fowle Lane)⁶ must have provided a perfect habitation for the spreaders of the plague, the house rat and its parasite. Entries in the Monthly Bills and other parish records afford ample evidence of the heavy mortality among the poor, some of whom could not be identified; several entries end "and many poor persons unknowne." One entry, on 18th August, gives a string of seven names, adding "all poore boys and girls." On 16th August, "John Bassett, a boy, and divers others poore unknowne." It is clear that many apprentices and servants were among the dead, as the following examples illustrate:⁷

John Wall and Richard Weaver, two guilding apprentices.
 Edward Turner shoemaker and Edward Mason his servant.
 Henry, a servant, a porpentyne, buried in the pitt.
 Anthony, a poor blackamore.
 Cissly Lewes, a prentice girl.

It was alleged, subsequently, when the plague had abated, that "the best and most sufficientest men of the said parish of St. Saviour's did leave the said parish and betake themselves to severall partes in the countrey."⁸ Nevertheless, the burial records include examples of Southwark citizens of substance who perished in this plague summer:

7th August John Marshall, a vestry man, buried in the church.
 24th August Robart Harvy, a vestryman (father of John Harvard, founder of Harvard University).
 25th August George Payne (formerly a churchwarden) and his wife in the South Quire.

Other victims who cannot be described as poor or insignificant include:

29th August Thomas Thaire, a phisition
 28th August John Fletcher, a poet in the church⁹

The minister, Mr. Archer, seems to have visited the parish from time to time, but to have left the burial of the dead, among other duties, to the parish clerk, who remained in Southwark. The usually vigorous parish life of St. Saviour's seems to have come to a standstill; the Vestry Minute Book records no meeting of the churchwardens between 28th June and 7th October, in contrast to the customary frequent meetings. At the meeting held on 7th October the members appointed four new vestrymen, presumably to take the places of men who had died. They also had to appoint other new parish officials, including a sexton, and they "made choice of" a new parish clerk.¹⁰

One of the victims of the plague was John Boston, parish clerk of St. Saviour's from 1604 to 1625.¹¹ Before dying of the plague himself, he steadfastly performed his duty in peculiarly horrifying circumstances. Boston lived in a house "in the churchyard, within Cheynegate", next door to the parson, Mr. Archer.¹² He was married and had a family, the youngest an infant in arms in the summer of 1625.¹³ An inventory of his possessions, made shortly after his death, shows that his house was well, though not lavishly, furnished, and indicates that he was a man of some culture. Books are mentioned to the value of several pounds, pictures and a wide assortment of musical instruments.¹⁴ We know that he supplemented his earnings by private teaching and by letting a room.¹⁵

John Boston's main duty as parish clerk was to assist the parson in saying and singing services.¹⁶ He was a deacon and, as such, was authorised to perform, when necessary, christening, wedding, churching and burial services.¹⁷ He had also to keep the parish register. In St. Saviour's parish we know, from the records, that it was the custom for the clerk to prepare "monthly bills." In these he set down the names of all those who were married, christened, churched or buried during the month, and, except in the case of christenings,¹⁸ beside each entry he wrote the amount of the fee or duty due to the parish for the service provided, and collected by him to be handed over to the churchwarden in charge of parish accounts (known in this parish as "Keeper of the Great Account.") The lists of names in the monthly bills were then copied into the parish register.¹⁹ On his appointment as parish clerk Boston had to provide a bond as security against failing to hand over the fees which he collected.²⁰

John Boston's burial took place on 22nd September, 1625. At a vestry meeting held on 7th October it was recorded: "It is ordered that some course of lawe be taken to call Mrs. Boston to an account for the money which Mr. Boston received this last summer for the use of the churchwardens" (*i.e.* the church and parish of St. Saviour). The result of this resolution was a suit in Chancery, heard on 10th February, 1627, between the churchwardens, headed by Thomas Wicherley, then Keeper of the Great Account, and Robert and Sarah White (Boston's widow, Sarah, having, by this time, remarried).

Two lengthy documents²¹ dealing with the case remain in the archives of the Corporation of Wardens of St. Saviour, oddly enough both concerned with the defence. They are:

1. The Answer to the Bill of Complaint, prepared by a lawyer named Edward Dennell, which includes a list of questions to be put to witnesses.
2. An account of the statements of witnesses called by the defence.

The Bill of Complaint and statements of witnesses called by the prosecution are missing. But it is possible to reconstruct the prosecution's case, to some extent, from the rebuttal of charges at the conclusion of the Answer to the Bill of Complaint, and also from the answers of the prosecution's main witness, Richard Wright, to the defence's questions. The court's decision on the case is to be found in the Chancery records.²²

The vestry of St. Saviour, represented by Thomas Wicherley and the five other churchwardens holding office at the time, charged Sarah, Boston's widow, and her new husband, Robert White, with failing to hand over money which had been collected by John Boston for burial fees during August and the first half of September, 1625, to the amount of £100. In support of their case they referred to a "notebook" kept by Boston, containing the names of all who died during that period, amounting to 1318 people, and claimed that Boston, during the time of his sickness, confessed to having received the burial fees for all these people, except those due for the burial of a certain George Payne and his wife. They further

claimed that Boston had admitted that he held £100 which was due to the parish, and that Sarah had later admitted this also, the figure of £100 being arrived at by "the casting up of the said notebook."

The Answer to the Bill of Complaint is in the names of Robert and Sarah White, but it is, of course, based almost entirely on Sarah's statements as wife, and later as widow, of John Boston. The story it tells is certainly a moving one. It begins by claiming that Boston "did well and honestly demean and carry himself in the said place and office of parish clerke," and points out that this is agreed by the prosecution. It then draws attention to the fact that those who "were indigent and not able to paie" the dues for burials were excused from payment and the clerk, by consent of the parish, was allowed a fee in respect of each person so excused. The Answer to the Bill of Complaint then goes on to describe the outbreak of plague in July. When "the contagion was lamentably spread almost through all the said parish" the minister,²³ most of the churchwardens and the richer inhabitants of Southwark went into the country "and desired the said John Boston, being a deacon, to celebrate divine service and performe the rites of burials . . . which said charge and care the said John Boston was enforced to undertake." Boston then sent his wife and two of his young children into the country²⁴ "to his greate grieffe." He was thus left without the support of his wife, besides having to cope single-handed with the harrowing task of conducting the funerals of ever-increasing numbers of the dead. Often he did not know the names of the people who had died — "This defendant Sarah saith that she hath crediblie heard that sometimes, in one day, there hath been twenty or thirty corpses left at the place of buriall, and the said John Boston knew not who brought them thither . . . but after buried them, and then took greate paynes in inquiring and doing his best for knowing their names, so that he might make Certificat accordingly for discharge of his Dutie." (*i.e.* that he might know what fees were due for each to the parish). The Answer to the Bill of Complaint tells of "the unspeakable wattchings, labour and travell, both daie and night" which Boston had to endure. Robert White was one of his acquaintances and Boston "being weary and fayntinge under this, his great burden and charge," offered him his place as parish clerk.²⁵ White, not unnaturally, refused. During September, Sarah Boston heard that her husband was "dangerously sick," and returned as quickly as she could to Southwark. Before she could get there, he had died. She found that he had made no Will, so took out letters of administration, and proceeded to make enquiries "from those who were present with the said John Boston during the time of his sickness" what amounts he had paid in for parish dues. She was told that he had paid the dues for July, but had not managed to do this until the beginning of September (the inference being that, as Boston was taken ill in mid-September when the plague was still raging, he could not possibly have had time to collect the dues for August and the first half of September). As Sarah put it: "the Infeccion was so great and dangerous, and the ymployment of the said John Boston so full of continual labour, that he could not have convenient tyme and leisure to gather up the said fees." She also made the point that as it was only the better off people who could afford to travel away from the plague-stricken parish, a great number of those who died were poor and therefore exempt from burial dues — she estimated that this applied to "a third part of those who died." Further, she stated, her husband had not received the fees allowed him by the parish for the burials of these poor people. Nor had he been refunded the 30/- which he had had to spend on a new burial cloth.

The Answer to the Bill of Complaint then gives Sarah's account of a visit to her home in Southwark "in or about the month of October"²⁶ by Richard Wright, churchwarden,

and, as Keeper of the Great Account, responsible for the recovery of debts to the parish. He asked what money she had in the house. She answered that "she knew not, but afterwards opened a presse within the house . . . where her late husband had used to . . . putt up money which he had received for the use of the parish, and there she found, in two gloves, the some of thirty seaven poundes, eighteen shillings, or thereabouts, which she paid to the said Richard Wright." When Wright had taken the money from her, he asked for John Boston's "notebook wherein he kept the names and numbers of the dead."²⁷ He went off with this, and since that day had refused to let Sarah or Robert White (after he became her husband) even have a look at what was written in it. Sarah maintained that this book was one in which Boston "did keepe a noate or memoriall of the names of persons buryed, married etc. . . . and the severall fees accustomed to be paid on every such occasion . . . to the end that he might have recourse to the persons which had not paid." (This statement of Sarah's thus challenged the prosecution's view of the notebook as being a record of the money collected by Boston).

We come now to the statements of witnesses summoned by the defence. The person of most standing among these was Richard Wright. He is described as "citizen and Grocer of London, of the parish of St. Saviour in Southwark, of the age of forty-eight yeares or thereabouts." Wright agreed that Boston had performed his duties faithfully during the plague period, and also accepted the suggestion that, because of the pressure of these duties, he had scarcely any time left to collect parish dues. Nevertheless, said Wright, "about the 18th or 19th daye of September, 1625, when he was speaking with John Boston after he was stricken with the plague, the said John Boston, out of the window, told him that he had collected . . . all the payments due to the said parishe . . . saving for the burial of one, Mr. Payne, and his wiffe." Wright confirmed that the parish had undertaken to give Boston "a stipend" for his work in burying poor people, and said that "thirty and odd shillings" were due to the clerk for this stipend and his ordinary wage for the quarter in which he died. His widow had not claimed this. If Boston had paid 30/- for a burial cloth, the parish would refund this to the defendants on condition that they produced the money owing for burial fees. Wright agreed that, after Boston's death, he had received £37.18 from Sarah Boston in the presence of Thomas Wicherley, a churchwarden, and a certain Lambert Daggett. He gave no acquittance to Sarah Boston, nor, as far as he could remember, had she asked for one. Wright agreed that Sarah gave John Boston's notebook to him on that occasion, and he described it as a book "in which is sett downe the money which John Boston had received which is due to the said parishe." The book showed that "there is yett a greate some of money due to the said parishe," and he intended to keep it until the defendants had paid in full.

Another witness was Lambert Daggett, "of the parishe of St. Saviour in Southwark . . . Cordwayner, of the age of 50 yeares or thereabouts." The same ten questions were put to him as were put to Richard Wright. Daggett gave full answers to only three of the questions; to four questions he gave partial answers; to the remaining three questions he replied that "of his own knowledge or hearsaye he can say nothing at all." He gives the impression of being an uneasy witness. However, Daggett testified that John Boston had "wholly applied himself" to his duties at the time of the plague, and said that he had therefore had "very littal or noe tyme at all to collect duties." Daggett had himself, at Boston's request, given him some help with the collection of burial fees. He believed that, at the time of Boston's death, there were many fees uncollected. He agreed that he was present when Sarah Boston

handed over the sum of £37.18s. to "some of the churchwardens", mentioning two by name, "Mr. Whicherley and Mr. Watts." (It is perhaps significant that he did not mention Richard Wright). He also saw the handing over of the notebook by Mrs. Boston, which, he said she did "at the earnest intreaty of the said churchwardens or some of them." He followed Wright in describing the notebook as one which Boston "kept for his own Remembrance concerning the burials in the said parishe and the duties due to the said parish which he had received."

Finally, two women were called by the defence, Elizabeth Harbert, "wiffe of George Harbert, cittizen and Cuttler of London, of the parishe of Sainte Brides . . . near Fleete Street, of the age of three score yeares or thereabouts", and Jane Wyatt, "wiffe of Richard Wyatt, of the parishe of St. Saviour in Southwarke . . . shoemaker, of the age of fortye yeares or thereabout." Both these women had been with Boston at the time of his sickness, and Jane Wyatt had "kept" (*i.e.* cared for) him at that time. They were examined only on what he had said to them during his last illness. Elizabeth Harbert described how she had endeavoured to persuade him to send for his wife. He had refused, saying that he did not wish "to endanger her or her children." She then tried to get him to make a will. Boston replied "that he would not make any will, for that he should not leave his wife indebted if God did take him." This matter of a will was evidently connected in his mind with his parish accounts, for he went on to say that "his wife was to accompte with the churchwardens . . . for a monthe's bill or thereaboute which was not summed up nor gathered in" and "uppon a juste and due accompte to be made between the parish and himself, there would be more founde due from the said parishe to him than he was to pay the parishe." Jane Wyatt's evidence agreed exactly with Elizabeth Harbert's, except for one small addition to Boston's reported words. He said to her that "*nothing troubled his mynde but his monthes' bill, which was not summed up nor gathered in.*" Even in his last illness, Boston was worrying about his work.

The court was thus faced with conflicting evidence on the question as to whether or not Boston had collected all the burial dues for August and the first half of September before his death. On the one hand, Richard Wright quoted him as saying, just before his death, that he had collected all the burial fees save two; on the other hand, both the women witnesses maintained that he had told them, on his sickbed, that he had failed to collect about a month's fees. An explanation of this conflicting evidence may, perhaps, be found in the characters of Richard Wright and John Boston as they appear to emerge from the records. Everything points to Wright being a competent, unimaginative and overbearing man of business. This is apparent in the forthright way in which he gave evidence, and especially in his treatment of Sarah Boston when he called at her house immediately following her husband's death,²⁸ and demanded money and the notebook. He seems to have assumed at once that she was withholding money, without considering that the extreme difficulty of the circumstances in which Boston had been working might have made it impossible for him to collect all the burial fees. He appears to have had no sympathy for the bereaved woman whose husband had served the parish faithfully for years, or any thought for her welfare. The outstanding impression one gains about John Boston's character is his extreme conscientiousness. The monthly bills which he kept are carefully written throughout. The bills for July and August, written at a time of tremendous stress, are still clear and legible, though blotted in places and with some crossings out. Even the notebook entries for the plague months are legible. In both bills and notebook the fees are carefully entered — in

the case of burials, so much for ground, so much for bell, coffin and burying cloth when used. The amounts varied, in accordance with the age of the dead person, and the place of burial, ranging from 2d. to 26s. 8d. To read the cramped pages of the monthly bills and the notebook for the plague period causes amazement at the man who could give care to such details at a time when he was run off his feet by duties of a most distressing nature. Boston's action in sending his wife and young children into the country and his refusal to send for his wife when the plague struck him, show him to have been unselfish and affectionate. A man like this, facing Richard Wright "out of the window" when he was near death, and perhaps confused in mind, might well have been frightened into saying that he had collected all the burial fees save two, when, in fact, he had not.

Another question arising from the evidence was the nature of Boston's notebook. Was it a record of all the dues actually received by him, as the prosecution maintained, or was it, as the defence held, an *aide-mémoire* in which Boston entered each person who died and the correct amount of the fee for burial, as it occurred, and later hoped to collect? The notebook was produced in Court by the prosecution. The burial fees entered in it for August, and the first half of September, were not totalled — this would have been difficult, in any case, owing to the fact that Boston wrote so closely to the edges of the pages. However, there exists what appears to be a fair copy of the burials entered in the notebook for the period in question.²⁹ It is carefully written and neatly set out (as though by a professional scribe) and though the fees are not totalled, one may assume that a calculation was made from it and used by the churchwardens to justify their claim of £100.³⁰

The Court must have decided that the defence was right in describing the notebook as a record, not of money actually received by Boston, but as a book of memoranda to help in preparing the monthly bills and the collection of fees. It must also have been convinced that, in the appalling pressure of his time and energy, Boston could not possibly have collected burial fees for all who died. The entry in the Chancery records reads:

"Upon a full hearing of the matter in question this present daie in the presence of the Councill, learned in both parts, for and touching the duties and profitts belonging to the Rectorie of St. Saviour's, for which the plaintiffs by this bill pray reliefe, this Cort saw noe cause at all to give the plaintiffs any reliefe touching the same. Tis therefore ordered that the matter of the plaintiff's bill be from henceforth clerely and absolutely dismissed out of this Cort."

APPENDIX I

JOHN BOSTON'S NOTEBOOK

The cover of this book is of vellum over board, measuring 13 inches by $5\frac{1}{2}$ inches, so that it has long, narrow pages. It has a worn appearance and the corners of the pages have been rubbed away. The paper is so thin that the writing on one side of a page shows through on the other, producing a smudged effect. The notebook is chiefly devoted to a record of christenings, churchings, weddings and burials for the period 1st March, 1619–15th September, 1625. In the case of burials the fees are carefully entered beside each name and are totalled monthly. No fees are entered for christenings and, in the case of churchings and weddings, it is the exception for fees to be entered. The July and August lists for 1625 show signs of stress on the writer's part—the entries are very close together, so as to cram as many names as possible on to a page, and there are some erasures and smudges due to a bad pen. The record ends with the last entry for 15th September: "Geo. Garrod an apothecarie in the chapel xxvi, j.s. 8d.". Boston often put an X against a name—possibly a way of reminding himself that a fee was outstanding.

Among other entries in the notebook are various memoranda; some concerning the parish, *e.g.*, names of preachers, and food provided at a feast on 5th November, 1621, with costs; some personal, *e.g.*, "Mr. Gabriel Bolte began to take my chamber the 26th Feb. 1623", and "William Trigg began to learne, August 16th 1624."

The final entry is signed R. Chettle: "This book was shewed unto R. Wright and L. Daggett at the tyme of their examynacions taken in Chancery, *ex parte* Thom. Witcherley *et al.* v. R. White *et uxorem suam defend.*"

APPENDIX II

RICHARD WRIGHT'S CALCULATIONS

Richard Wright's handwriting first appears in the records when he signed his name at the end of the monthly bill for March, 1625: "£7.3.8 rec. 2nd Aprill, 1625. Rich. Wright." His writing is clear and firm and he always used Arabic numerals. (Boston used a mixture of Roman and Arabic which must have made addition difficult). After his interview with Sarah Boston, which he records as taking place on 19th September, Wright had to take quick action. Boston had not begun the September bill and people were still dying of the plague in great numbers. Wright therefore copied the entries in Boston's notebook for the period 1st to 15th September, to form the beginning of the September bill. (It is an interesting comment on the stress produced in even the most business-like people by the prevailing circumstances that he omitted 17 burials entered in the notebook for 1st September). After entering the last burial on 15th September, Wright wrote: "Thus far is Mr. Boston's account before he sickened. Som totall for buryalls I finde to be 32.3.4." (The entries in the bill after 15th September are in another hand which we know to be Lambert Daggett's because, at the end of the bill, is written: "Sum. tot. £16.2.0 Rec. of daggott. R.W."). Having found out the total for the first half of September and totalled the entries in Boston's August bill (which Boston had not managed to do), Wright made the following calculation on the back of the August bill (his arrangement has been simplified):

Total of August bill	70	18	0	
,, ,, bill for 1st – 15th Sept.	32	3	4	
	103	I	4	
From this he deducted:				
Amount rec. from Sarah Boston after Boston's death	37	18	4	
Amount rec. for the burials of Mr. and Mrs. Payne	2	15	–	
	40	13	4	
	62	8	0	

As Wright put it: "Rest still in Mrs. Boston's hands which I could not receive – 62.8.6." (He seems to have added a sixpence). "But there is some allowance to be made to hir" — presumably for Boston's unpaid wage and "stipend" and for the cost of the burial cloth. These items, we have seen, would add up to about £3. If, therefore, the churchwardens had based their claim on the monthly bills, they could only have demanded about £60 from the defendants. They chose instead to use the notebook figures which they found to amount to £100.

REFERENCES

- ¹ A full account of the plague of 1625 is given in F. P. Wilson's *The Plague in Shakespeare's London* (Oxford University Press, 1927), chap. V. The Bills of Mortality for 1625 are printed on p. 174.
- ² Journal recording Proceedings of the London Court of Common Council, 30th June, 1625, in Guildhall Library Record Office.
- ³ Journal, P.L.C.C.C., 7th July, 1625.
- ⁴ Greater London Record Office, P.92/SAV/384.
- ⁵ G.L.R.O., P.92/SAV/405.
- ⁶ " P.92/SAV/214
- ⁷ " P.92/SAV/405.
- ⁸ " P.92/SAV/799.
- ⁹ " P.92/SAV/405.
- ¹⁰ " P.92/SAV/450.
- ¹¹ " P.92/SAV/450.
- ¹² " P.92/SAV/214.
- ¹³ " P.92/SAV/384.
- ¹⁴ " P.92/SAV/1960.
- ¹⁵ " P.92/SAV/406.
- ¹⁶ " P.92/SAV/450. V.M.B. for 7th October, 1625, records the appointment of Boston's successor, John Ryce after he had "read a chapter openly in the church and tuned a psalm, both now well liked of . . ."
- ¹⁷ G.L.R.O., P.92/SAV/800. Richard Wright in evidence.
- ¹⁸ These fees were probably the parson's perquisite.
- ¹⁹ Other parishes may have used this method, but, if so, their monthly bills have not survived.
- ²⁰ G.L.R.O., P.92/SAV/450, 5th March and 23rd April, 1604.
- ²¹ G.L.R.O., P.92/SAV/799 and 800.
- ²² P.R.O., C.33/152, *Wicherley v. White*.
- ²³ In St. Saviour's records, the incumbent was always referred to as the minister.
- ²⁴ G.L.R.O., P.92/SAV/406: "My wife went to Rootham, the 19th Julie, 1925".
- ²⁵ This appears to confirm the allegation that most, if not all, the churchwardens had left the parish; normally the parish clerk was appointed by the vestry.
- ²⁶ But see *infra*(p.92) for this date.
- ²⁷ See Appendix I for description of notebook.
- ²⁸ This occurred on 19th September, not "in or about the month of October". See Appendix II.
- ²⁹ G.L.R.O., P.92/SAV/405.
- ³⁰ See Appendix II for Richard Wright's calculations.

ACKNOWLEDGEMENT

The subject of this article was suggested by the late Miss Ida Darlington—until her retirement in 1967, Head Archivist at the Greater London Record Office. The authors would like to place on record their gratitude to her for her readily-given help and advice.

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EXCAVATIONS AT PARNELL ROAD AND APPIAN ROAD, OLD FORD, E.3.

FEBRUARY-APRIL 1971

BY HARVEY SHELDON

with a description of the pottery from Appian Road by M. J. HAMMERSON

I. INTRODUCTION

The work done at Lefevre Road during 1969-70 had produced evidence of a major Roman highway crossing the site, and shown that a settlement had existed alongside it there during the later phases of the Roman period.¹

Early in 1971 two areas which formed part of the Lefevre Road Development project (in Parnell Road and in Appian Road) became available for examination. A grant by the Department of the Environment to the London Museum made it possible to undertake two months' work on these sites. The results are described below.

II. THE PARNELL ROAD SITE

A. PRELIMINARY WORK (OCTOBER 1970)

Late in 1970 an area measuring some 18 metres east-west by 17 metres north-south was mechanically excavated to a depth of about 1.20 metres for the construction of a children's playground. The southern side of this cut lay less than 50 metres north of the line of the Roman road, and its south-western corner lay about 10 metres north of an inhumation burial found during construction work in April 1969.² (See Fig. 1; Location Plan.)

During the course of this machining a pit was noticed in the southern face of the excavated area (Pit 1).³ It was approximately 1.50 metres wide and its bottom 60 cms survived under a deposit of earth containing *c.* nineteenth-century or later material. (See Fig. 3.)

On the floor of the pit, at the west, lay a skull with the top of the head to the north. East of the skull were two vessels probably deliberately placed in the grave as part of the burial. The pit had been back-filled with a light brown sandy soil and contained a few sherds of Roman pottery, including a worn flanged bowl rim. Four nails near to the skull could have represented the remains of a coffin. (Fig. 1, no. 9.)

It was possible to remove the skull and in so doing more of the body was seen extending into the pit. It is probable that the burial was orientated with the head to the north and feet to the south. Under the bones was a thin whitish layer which, on analysis, was shown to be calcium carbonate.⁴

The skull was examined by Dr. T. E. Dussek of the Anatomy Department, Guy's Hospital Medical School. He reported that "most of the left side of the skull is complete, although in fragments. The left maxilla is present and also a small part of the first cervical vertebra. The skull is probably of a male but the markings are rather indeterminate. The age is between 25 and 40 years. The teeth are particularly interesting in that there is little wear and considerable caries".

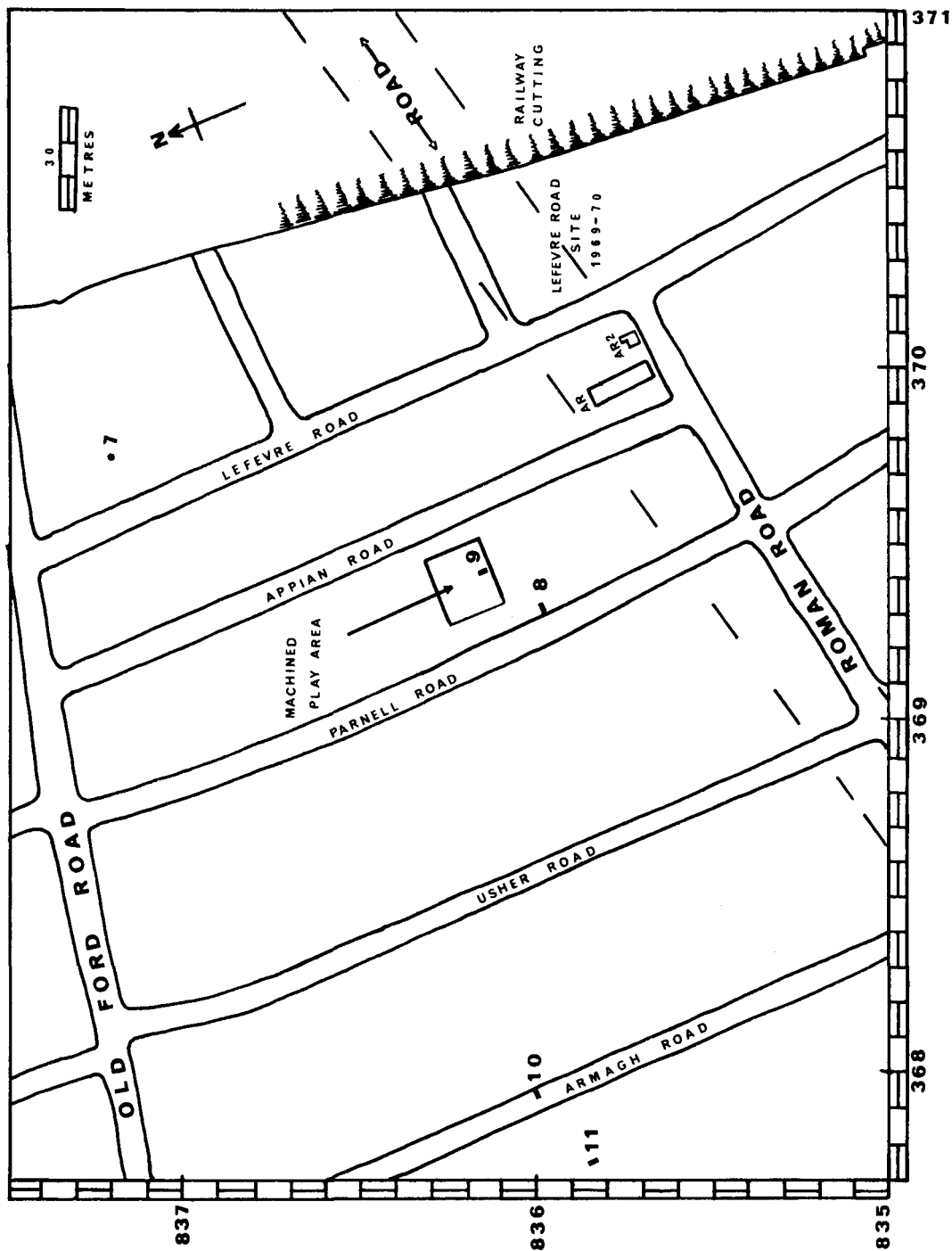


Fig. 1
Location plan (7 - 11: Roman burials — see text)

The two vessels accompanying the burial are illustrated in Figure 2.

- FIGURE 2, No. 1. Bulbous Flagon. Coarse sandy fabric, pinkish in section, but reduced or smoked to grey inside the mouth and over the external surface. Low cordon at the base of the neck.⁵
 No. 2. Dish. Coarse sandy fabric, pink in section with finer (slipped) grey-black surfaces.

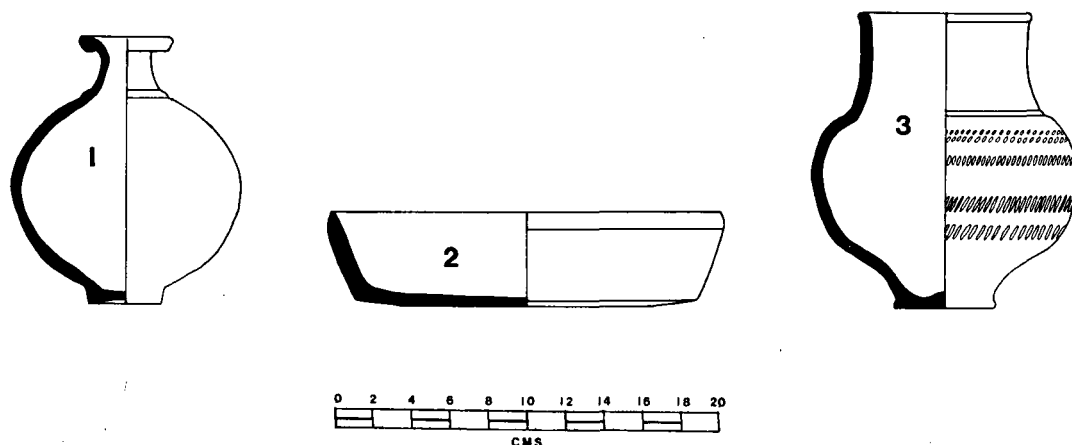


Fig. 2
Pottery from Pit 1 and Pit 5

Two features flanking Pit 1 were observed in this southern section: one started 1.20 metres west of the western edge of Pit 1; the other 90 cms east of its eastern edge. In common with Pit 1 they were each about 1.50 metres wide and they could also have been dug to contain burials. Cleaning down the exposed faces produced a few sherds of Romano-British pottery, including, from the westerly one, the rim of a colour-coated beaker. Unfortunately it was not possible to excavate either of them or the rest of Pit 1 before they were taken out by machining.

B. LATER WORK (FEBRUARY 1971)

1. INVESTIGATION OF THE PLAYGROUND SECTIONS

According to the development plan the playground was to form part of an open area, enclosed to the north, south and east by the three blocks of flats known as Lefevre Walk, and bounded to the west by Parnell Road.⁶ By this time the ground level east of the playground had been substantially raised for landscaping, and turfed over. To the north the excavated area ran almost up to the service road for the northern block of flats. Consequently only to the south⁷ was there much room for archaeological work.

An examination of the sections left after the completion of the playground excavation revealed a number of features cut into the natural sandy-gravel. Three were visible in the eastern side, two in the southern, and one in the north. Clearly all had been partially destroyed by the machining.

Their investigation, which is described below, showed that in all probability three were related to late Roman burials (Pits 3, 5 and 8), and that one was a late Roman ditch running north-south (Ditch 1). (See Fig. 3.)

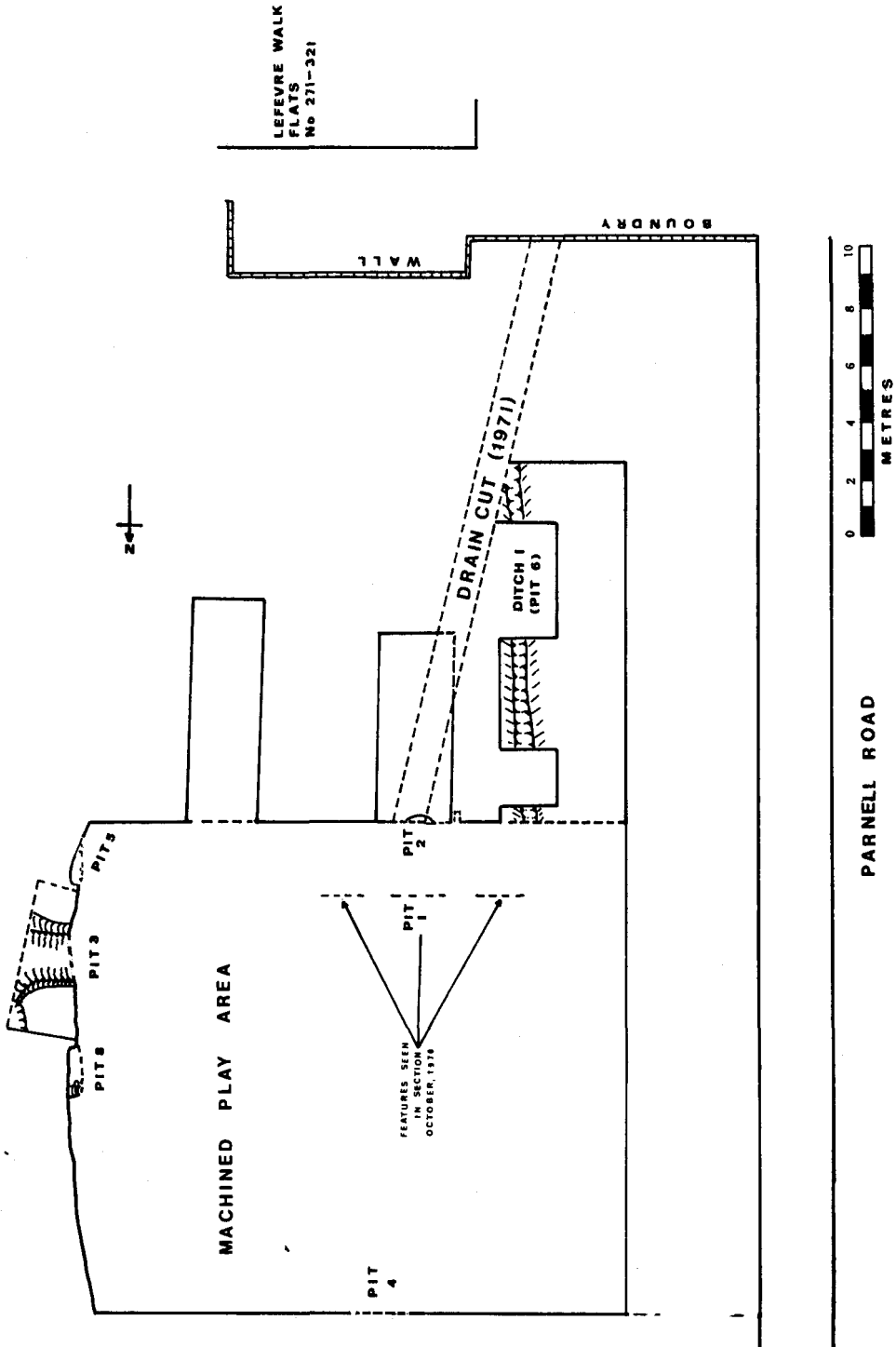


Fig. 3
Parnell Road Site Plan

(i) PLAYGROUND SECTION—NORTHERN FACE

PIT 4. This lay about half way along the northern face and was filled with sandy brown earth, including some gravel. Although similar in shape and fill to the known Roman pits there was nothing definite to prove that it belonged to that period. Two post-medieval sherds were found at the very top of the fill although these could be the intrusive results of animal activity or ploughing. Due to its proximity to the service road the feature was not excavated. (See Fig. 4a.)

(ii) PLAYGROUND SECTION—EASTERN FACE

Three features lay close together here.

PIT 8:

This was the most northerly, with a length of at least 1.40 metre and a depth of 50 cms. Part of a human skull was seen in section at the north of the pit, but no other parts of the body were found. The top of the skull and the northern edge of the pit had been earlier removed by a drain trench. The body seems to have been orientated north-south.

PIT 5:

This pit was the most southerly of the group, with a length of 1 metre and a depth of 40 cms. In cutting back the section a beaker was found resting on the sand at the north of the pit. Burnt flints were found near to the beaker, and small flakes of charcoal were incorporated in the sandy brown earth fill. The vessel is illustrated in Fig. 2.

FIG. 2, No. 3

Beaker: external surface black, burnished. Cordon at base of the shoulder. Body decorated with four rows of impressed dots. Fabric is light grey in section. Internal surface has a rough sandy feel; sand particles visible. The form is similar to the types made at Crambeck where the production is dated to between 350-400 A.D.⁸

PIT 3:

The pit, which lay between Pit 5 and Pit 8, was 2.2 metres wide in section and 75 cms deep. It was investigated in greater detail than the other two, by cutting back eastward to the edge of the turfed area. Excavation showed that the Pit ran to the east before turning sharply to the north (3b) where it seemed to cut a shallower gully (3a). Pit 3 was filled by fine sandy brown earth containing pebbles and a few sherds of pottery. Fragments of bone were recovered including a human vertebra. One coin, dating from the late third century was also found in the pit. (See Appendix 1, No. 19.) See Fig. 4b, for sections of Pit 3 (left) and Pit 5 (right).

There seems little doubt that these three pits represent burials dating from the late Roman period. Fortunately an extensive area to the east of the playground has survived destruction in the redevelopment and should be available for future archaeologists. Investigation here should show something of the density of the burials.

2. EXCAVATION TO THE SOUTH OF THE PLAYGROUND

Three trenches were opened south of the playground in order to excavate the features showing in the southern section, and to examine the undisturbed area in more detail.

PIT 2:

Only a small amount of this pit was left to the south of the section: the fill contained darkish brown soil with sandy patches and a little charcoal. It is possible that Pit 2 represented the back of the Burial Pit 1. No further features were seen in the trench excavated south from the pit, nor in the strip dug some 4 metres to the east.

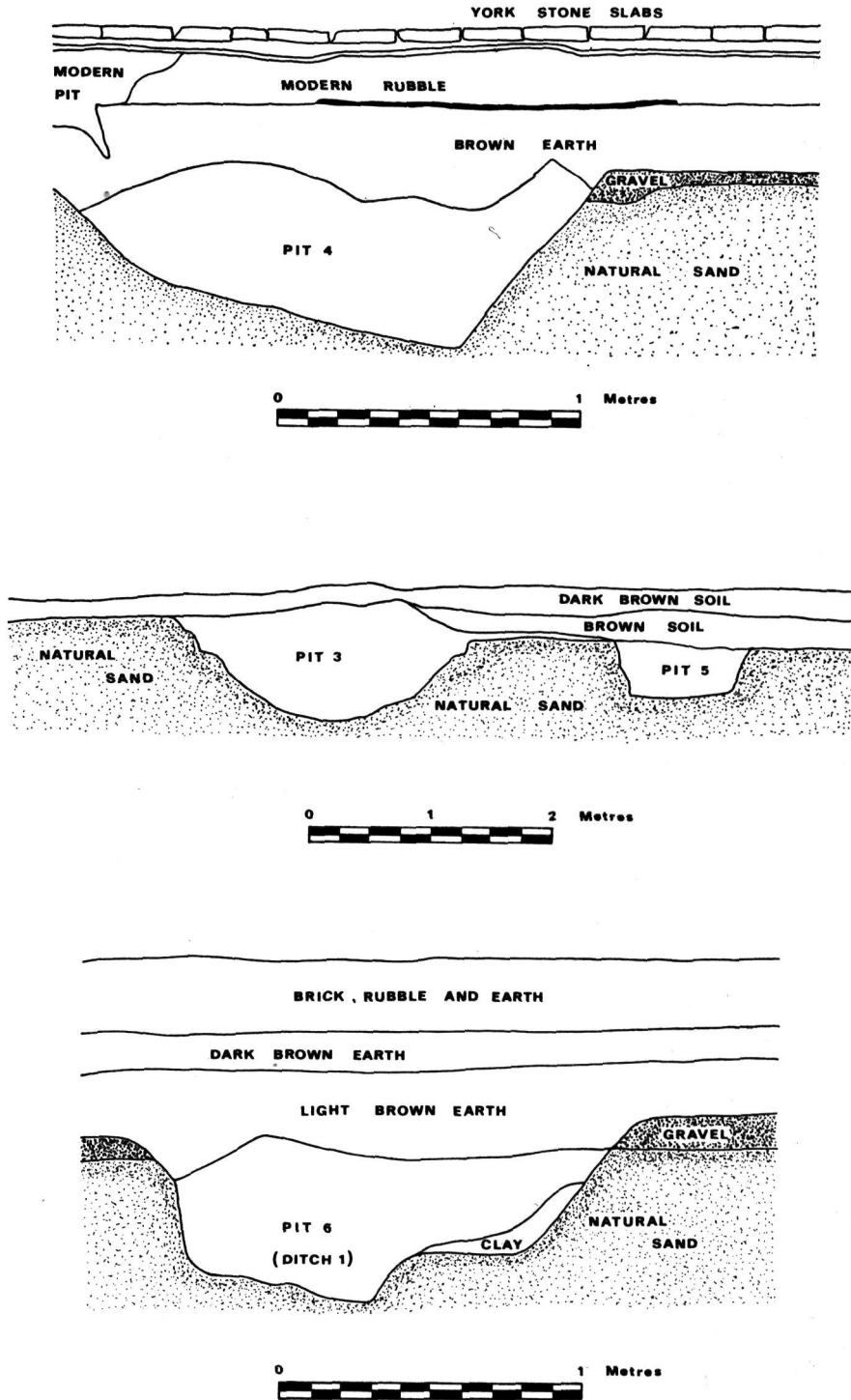


Fig. 4 Parnell Road Sections (top) 4a Pit 4 looking North
 (middle) 4b Pit 3 and Pit 5 looking East
 (bottom) 4c Pit 6 (Ditch 1) looking South

PIT 6:

In excavation this feature showed as a ditch (Ditch 1), not a pit. It ran south from the section towards the Roman road, and was about 1.60 metres wide and 55 cms deep. Two fills were distinguished: the earliest fill was of sandy clayey soil, and the top layer of dark silty brown earth. This level contained pottery, building material and animal bone, including most of the skeleton of a horse. Some slag, probably indicating smithing, was also found (see Appendix 3). The pottery which included flanged bowls and colour-coated sherds, suggests that the ditch was filled in during the fourth century. See Fig. 4c, for section.

Apart from the ditch fill it was noticeable that this area, although only some 40 metres north of the road, contained none of the concentration of debris resulting from late Roman activity seen south of the road both at Lefevre Road (some 100 metres away) and at Appian Road (70 metres away). Above the natural gravel and clayey sand was a 10 cms to 15 cms layer of fine brown soil containing pebbles with a light scatter of usually abraded Roman sherds dating from at least the second century onwards. The incorporation of a few post-Medieval sherds as well as a Medieval jeton (see Appendix 1) might indicate that this was a level affected by ploughing, and that this activity had destroyed the Roman ground surface. Even so, the relatively thin scatter of material and the presence of the burials suggests that it is away from the late Roman living areas.

III. THE APPIAN ROAD SITE

This site, which extended across the old Appian Road from Parnell Road to Lefevre Road (see Location Plan) was to be developed as another play area. Two trenches were dug here. One (AR) was cut across the supposed course of the road and the second one (AR2) was laid out slightly further east. The aim of the work was firstly to examine the structure of the road, and secondly, to see whether the roadside occupation extended this far west.

Trench AR succeeded in locating all but the northern side of the road, which lay outside the site. In the south of AR and throughout AR2 further evidence relating to late Roman settlement was obtained. (See Fig. 5.)

A. THE ROAD

The road in trench AR had survived substantially intact. Its top lay only about 50–60 cms below the modern ground level⁹ and it was overlaid by a 20–30 cms level of brown soil. In broad respect the excavation confirmed the 1969–70 Lefevre Road findings showing again that the highway was originally of a three-track design with the southern side later being raised to the level of the centre. But the evidence differed in two important respects. Firstly, the substructure was unsubstantiated; there was no core of cemented gravel forming the agger, as in the railway cutting section some 70 metres to the east. Secondly, only two main structural phases could be clearly distinguished as compared to three at Lefevre Road.

I. FIRST STRUCTURAL PHASE (A)

The section cut at the west of trench AR (see Fig. 6) showed that the road in its first phase was accompanied by a pebble capped shoulder some 2.90 metres wide. Calculation of the width of the southern flat track and the rise to the centre of the road was complicated by a gravelled area laid astride the two, which may have been a localised repair. It is probable that the flat track was originally some 3 metres wide and the rising part some 2.20 metres.

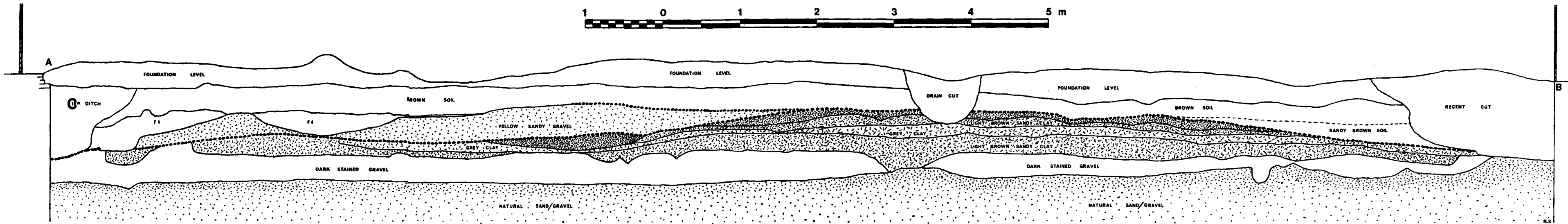


Fig. 6 The Road on the Appian Road Site (facing West)

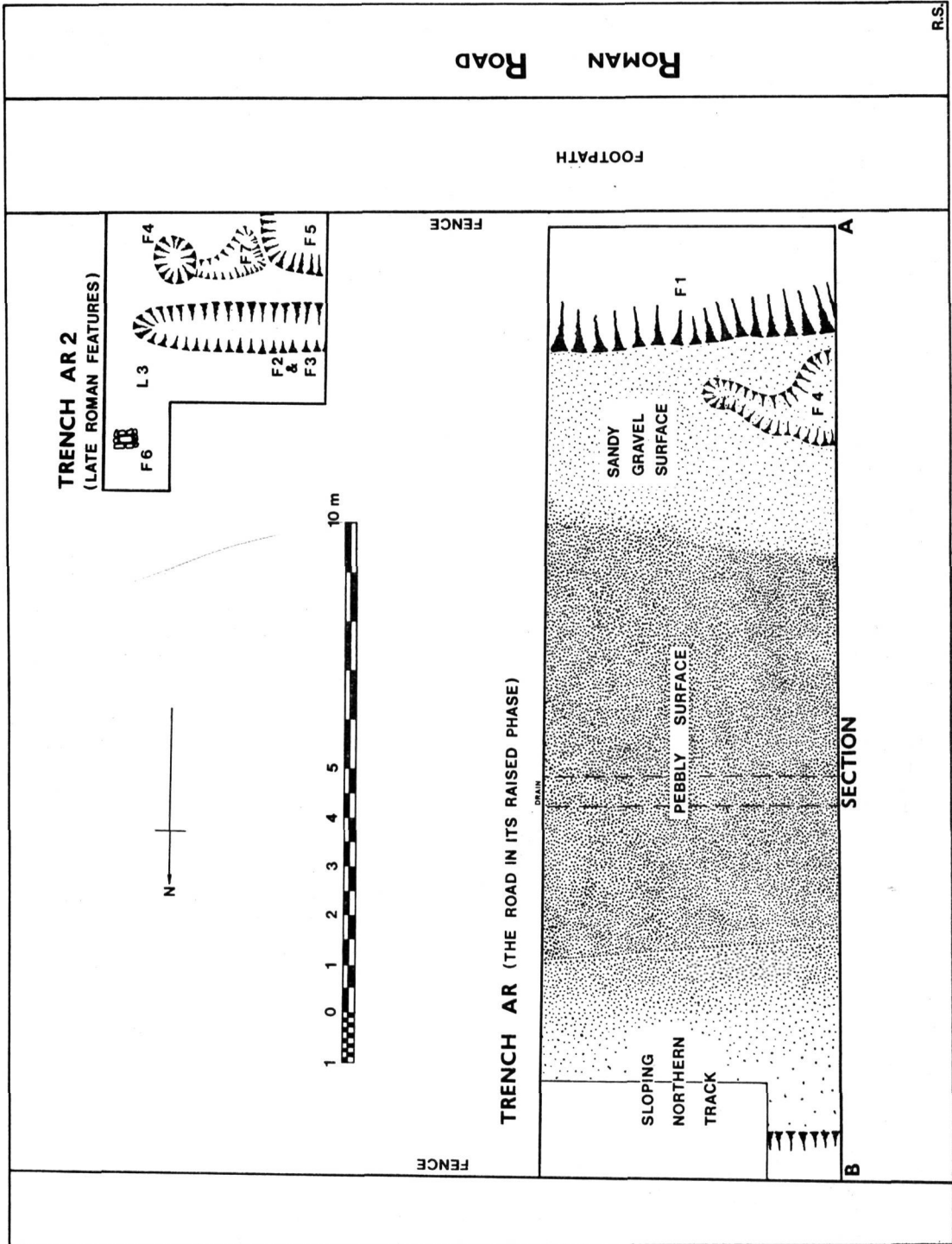


Fig. 5
Appian Road Site Plan

The accompanying high centre track was clearer with a width of 4.60 metres. North of this the road sloped down again for a further 3.60 metres. It seemed to be just straightening again for the northern flat track at a point where it was cut away by a modern pit.

In construction the central and southern site for the road appears to have been cleared down more or less to a flat depth below the top of the naturally curving layers of sand and gravel. (See the northern part of Fig. 6.) Into this hollow a foundation bed of very pebbly gravel was laid; this varied in thickness but was on average some 20–30 cms deep. The higher part of the substructure consisted of clay, mainly sandy and light brown in colour, but paler and harder towards the top. The southern edge of the clay was found, and it continued for 16.60 metres before being cut by the modern disturbance at the north of the trench.

The clay was fashioned to accommodate the intended shape of the road. For example, under the central track it was sometimes more than 40 cms thick; under the southern track less than 15 cms.

It appears that on top of the clay the road's substructure was deliberately strengthened by a capping of pebbles under the centre track and the higher parts of the rising sides. This capping was on average some 10 cms thick. The surfaces on the side tracks were of single pebble thickness—as at Lefevre Road. The centre track surface was probably also of single stone thickness—but interpretation was complicated by the pebble capping of the substructure and this could not therefore be definitely ascertained.

There was no new evidence as to the construction date and the conclusion that the highway was laid out in the immediate post-Conquest period still stands.

2. SECOND STRUCTURAL PHASE (B)

In this second phase the southern track of the road was raised to the level of the centre. A bank of gravelly sand 9 metres wide was laid over the southern track. The only dating evidence incorporated in the sand was a samian sherd of the late first or early second century. (Appendix, 4, No. 1.) In the sand, near to its top, was a bronze bar which could have been a broken arm from the cross of a surveying instrument. (Appendix 3, No. 10.) It is probable that the pebbles surfacing the sand did not stretch over the whole length of the road; they were absent from the southern part of trench AR in plan. In this case the road would have had one central pebble surface of about 8.00 metres with a level sanded track to the south of about 4.50 metres.

It was possibly at this stage that the northern track went out of use. As at Lefevre Road it was not raised to the level of the central one. Some patches of sand could have indicated a second surface, but at not much above the original level. Although there were some Roman sherds in the brown sandy earth overlying the track, there was no dense scatter of material as at the south of the road.

Lying alongside the southern edge of the sandy gravel was a hard pebble capped surface, sloping down to the south. It seemed to relate to this later phase of the road, and was traced for about 1 metre before it reached the edge of the site. No dating evidence was recovered here, but a very similar spread in trench AR2 contained, in its make-up, a coin minted between 218–222 A.D. (See Appendix 1, detailed coin list No. 3.) If this gravel capping was contemporary with the raising of the road, then an early third century date could be suggested for the change in design.¹⁰

Coin evidence indicated that the road was in use until the end of the Roman period. One, found on the pebble surface, was minted between 383–395 (Appendix I, No. 113); another was produced between 388–395 (Appendix I, No. 127). Overlying the sandy gravel part of the road was a thin layer of grey-brown earth (AR layer 3). This contained a number of coins dating from the later third century onwards, as well as one minted between 388–395 (Appendix I, No. 134) and another struck between 378–408 (Appendix I, No. 145).

3. A COMPARISON WITH THE LEFEVRE ROAD EVIDENCE

The evidence from Appian Road concerning the highway was generally complementary to that from Lefevre Road. But a number of questions are raised by apparent differences in substructure, phases and width. Firstly, why was there no cemented gravel agger on the western site? Secondly, why are only two major phases of the highway apparent at Appian Road, compared with three at Lefevre Road? Thirdly, why was the central track of the road in both phases at Appian Road slightly wider than at Lefevre Road? (In the first phase at Lefevre Road it was judged to be 3.80 metres compared to 4.60 at Appian Road. In the second and third phases at Lefevre Road some 10.80 metres compared to 12.50 metres at Appian Road.)

Possibly the answer to these questions relates to the proximity of the Ford. In general the road runs along level ground north-eastwards from the city until reaching the edge of the Lea Valley. From there the land level drops some 8 metres over about one quarter of a mile to the Ford. Perhaps the highway at Lefevre Road incorporates specifications more suitable to crossing a valley. Consequently the road-builders might have judged that from the approach to the Lea down to the Ford the road's foundations would need to be more solid to counteract the pressure of traffic moving up and down hill. This might also account for the seemingly additional surface at Lefevre Road. Perhaps, also, the road would be narrowed down as it approached the fording place.

B. SETTLEMENT EVIDENCE

I. FEATURES AND LAYERS

Alongside the south of the road in trench AR was a deposit of fine dark brown soil¹¹ which overlay a gravel surface.¹² This surface, which may possibly have been a hardstanding area, was sloping down to the south. On it lay animal bone and pottery not dissimilar from that found in the overlying earth. The latter, which at its maximum was about 50 cms deep, contained a quantity of pottery, animal bones, building tiles, burnt clay and metal pieces. As there was no obviously distinguishable layering in the soil the material derived from it has been treated as one deposit (AR, Feature 1). Eighteen coins were recovered from the feature and they ranged in date from the later third century to the later fourth century A.D.

North of Feature 1, and cutting into the southern part of the road, was what seemed to be a pit, filled with grey soil, starting in trench AR and widening as it ran out to the west. There was no direct evidence as to its stratigraphic relationship to Feature 1, but the probability is that it was the result of later activity. Feature 1 appeared to accumulate alongside the road edge, whilst Feature 4 intruded into the actual road structure. Also, although the fill material was comparatively sparse, one of the four coins found there could have been issued at late as 408 A.D. (See Appendix I, No. 140.)

Similar occupation evidence was found in trench AR2. The top surviving Roman layer (which comprises L(1), L(2) and L(4) in the pottery report) was a spread of dark brown earth. It was similar in texture to AR Feature 1 and contained the familiar mixture of pottery fragments, animal bone, building debris and metal. The coin evidence suggests a late date for the deposit; of the 59 coins recovered, six could have been minted as late as 402 A.D., and one 408 A.D. These layers rested in a spread of grey sandy earth (Layer 3) which sloped down to the south. This was sparse in finds containing only a few abraded sherds, small pieces of bone and four coins dating to the later part of the third century A.D. Running south under L(3) was a greener-coloured gravelly layer (5) which again contained some bone, tile and pottery. Four coins were found here; two were worn first to second-century types, and two belonged to the later third century. Fragments of at least seven late Samian vessels dating to the late second and third centuries were also found in this layer. (See Appendix 4.)

Layer (5) overlay a hard gravel surface with bone and tile lying on it. This was in appearance very similar to the gravel underlying Feature 1 in trench AR which related to the raised phase (B) of the road. In the make-up for this gravel was a coin, only slightly worn, minted between 218–222 A.D. (See Appendix 1, No. 3.)

A number of features were seen cutting down into Layer (3). One was a round-ended gully which ran out of the trench to the west (Features 2 and 3). This was at least four metres long and its top width was about one metre. Its total depth was about 90 cms, including a narrow round-bottomed base channel some 40 cms wide and 40 cms deep. The feature was cut down below the gravel surface under L(5) and could possibly have been dug to contain a beam. The only evidence to support this was the finding of three nails¹³ in the fill which also included a quantity of pottery, tile and burnt clay. Perhaps a more likely explanation is that it was dug for drainage; the bottom sloped slightly downhill to the west. Coin evidence suggests that the feature was not filled up until the early part of the fifth century A.D.

Approximately two metres north of the round end of this gully was a small rectangle of chalk blocks and bedded tiles lying on end. This enclosed an area some 15 cms by 25 cms wide and 30 cms deep, which was filled with sandy earth, but devoid of any material debris. The tile and chalk could conceivably have served as packing round a post.

To the south of the gully, also cutting through Layer (3) were three areas identified on the surface by the darker colour of the soil. All three features (No. 4, 5 and 7) contained some pottery, a small amount of tile (including tegulae in F4 and F7) and animal bone. Feature 5 contained the skulls of two oxen. Feature 7 was of half-moon shape and seemed to be only some 10 cms in depth. It was apparently cut by the circular pit, Feature 4, which was about one metre in diameter and 30 cms deep. On the limited coin evidence Features 4 and 7 would be assigned to the later third century, and Feature 5 to the later third or fourth centuries.

2. THE POTTERY (by M. J. HAMMERSON)

The pottery from trenches AR and AR2 is described under headings for the individual features and layers. A short note for the dating of each deposit on the basis of coin evidence, is given under the respective headings.

AR/FI (Fig. 7: 1-35; Fig. 8: 1-48; Fig. 9: 1-17).

DATING FROM COIN EVIDENCE

Emphasis of coin dating is on period Gallienus-Carausius (6) and the House of Constantine (8) 317-c. 355. However, the House of Valentinian is represented by two coins.

BOWLS

Flanged Bowls

- 1 Rounded flange. Hard sandy dark grey fabric, rough fracture. Covered with black burnished slip. Burnished arcaded decoration on body exterior.
- 2 Uncertain diameter. Flanged bowl or dish. Smooth sandy light grey self-coloured fabric.
- 3 Bowl with angular flange. Hard sandy fabric, rough in fracture. Dull grey-brown colour, slightly greyer at core. Coated with dull black slip.
- 4 Bowl with thick, short flange. Hard sandy fabric with slightly soapy feel, dirty light grey in colour. Interior face (except for a band at the base), exterior lip, and two thirds of flange covered with burnished grey-black slip.
- 5 Bowl with thick flange. Smooth sandy grey-buff fabric. Surface layers fired brown-buff. Covered with polished black slip. Lip and inner face heavily worn.
- 6 Bowl with thick rounded flange. Hard sandy grey fabric, slightly coarse at fracture. Surface layers (c. 1 mm) fired dull brown. Interior face, lip and top half of flange coated with polished grey slip, lighter on interior parts of vessel, burned darker on exterior.
- 7 Hard sandy grey-buff fabric, with a little large grit. Coated with lightly polished black slip.
- 8 Smooth grey-buff fabric, covered with polished black slip. Broad shallow external groove directly below flange.
- 9 Hard sandy dirty-grey fabric, core more steely-grey. Interior face, and rim to half-way down flange, coated with burnished light grey slip.
- 10 Bowl with slightly hooked flange. Hard sandy light grey fabric, rough at fracture. Upper half of flange, lip, and interior face (with the exception of a narrow band above the base), covered with a blue-grey slip, slightly abraded at lip. The interior of the base is self-coloured and lightly smoothed.
- 11 Bowl with rounded flange; hard sandy light grey fabric; exterior of body smoked blue-grey; interior of body, and lip to half-way down flange, coated with burnished dark grey slip.
- 12 Bowl or dish with tapered flange. Very hard fine sandy fabric, light steel-grey colour; thin dull brown layer sandwiching core, c. 1 mm below surface, seen in fracture. Surfaces incompletely smoothed in horizontal bands.
- 13 Hard sandy fabric, coarse fracture. Dark dirty-grey colour. Coated with polished dark grey slip, very abraded on interior face.

Not illustrated:

Rims: (i) four worn fragments, smooth hard sandy buff-grey fabric, with pink-brown surface layers. Coated with smoothed black slip. Dia. c. 10½ in.

(ii) four various rims, grey fabrics, all worn, mostly with smoothed black slip.

(iii) two fragments, worn, sandy grey fabric, one very hard and sandy. Self-coloured.

Other fragments of bowls or dishes in similar wares:

Mostly grey or grey-brown, fabrics, hard and sandy or smooth and powdery, with black or dark grey slips:

twenty-two fragments of bases, one with a burnished straight line across the interior face, relative to the diameter of the dish as a chord of an arc to a circle.

nineteen other sherds.

BOWLS

In "Dorchester" Wares

- 14 Flanged bowl in hard gritty pink fabric, imitating Samian Form 38. Sherd burnt.
- 15 Flanged bowl, in smooth, fairly hard salmon-pink fabric, imitating Samian Form 38. Traces of matt red colour coat. Sherd very worn and burned.

Not illustrated:

Very similar type to above, worn but not burned; and three flange fragments of B₃ bowls. Fragments of B₁ and B₅ bowls, and an M₁ mortarium in imitation of Drag. Form 45.

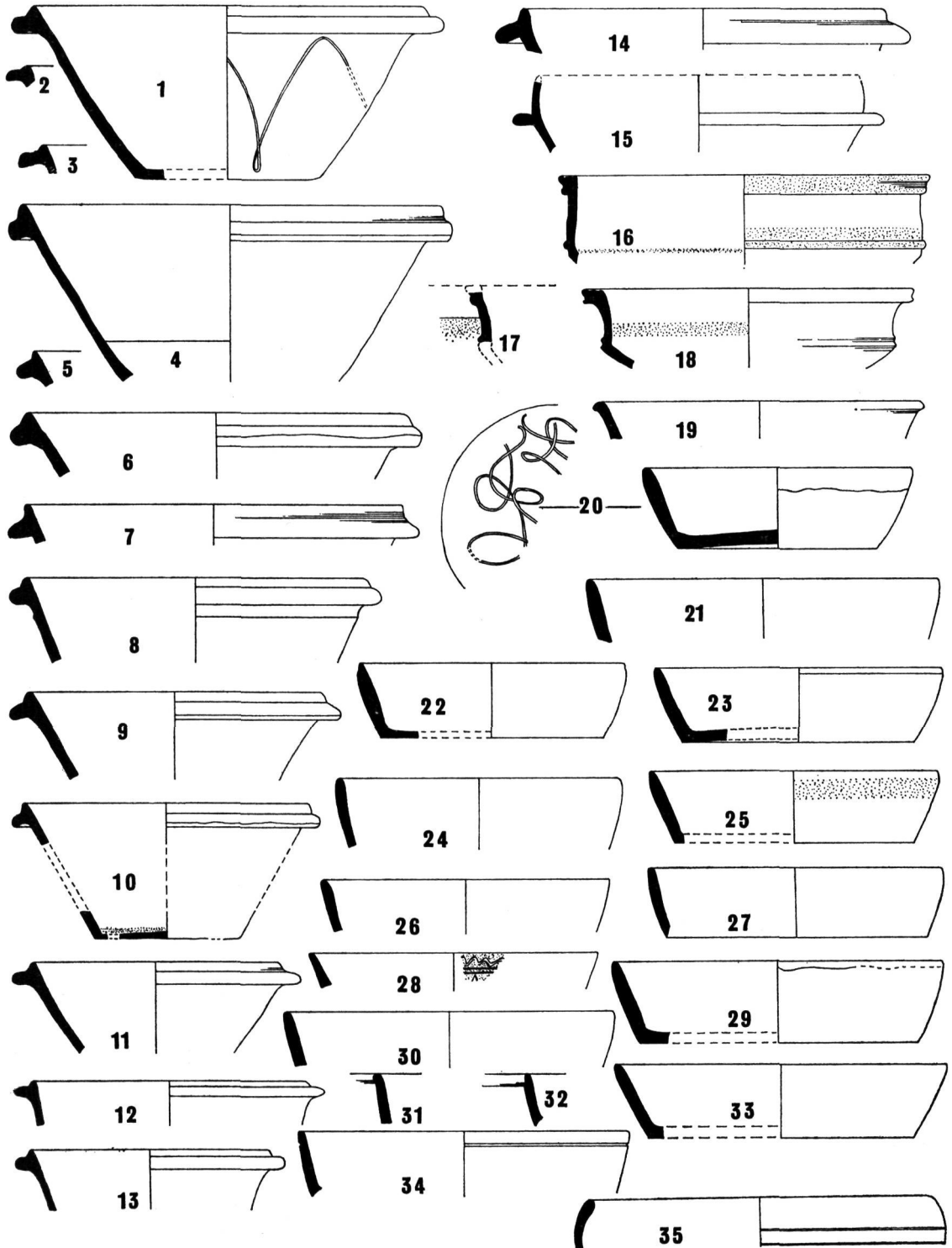


Fig. 7
Pottery from Appian Road ($\frac{1}{4}$)

- 16 Carinated bowl in "parchment-coloured" ware. Hard smooth dull pink fabric, surface layers (c. 1 mm thickness) fired creamy-white. Orange-buff painted decoration in horizontal bands, shown on drawing by stippling; also on top of rim.
- 17 Bowl, similar fabric to above, though off-white throughout. Dark chocolate-coloured horizontal band painted on exterior of body above "keel", shown in drawing by stippling.
- 18 Similar to 16 in fabric and form. Dull ochreous-brown horizontal bands painted on top of rim, and on interior of body (shown by stippling in illustration). Weathered appearance.

Not illustrated:

Small sherd of similar fabric, traces of ochreous-red band painted on exterior.

Other:

- 19 Slightly everted lip. Soft smooth dull-grey brown fabric, "smoked" darker grey-brown on surface. Interior surface smoothed.

DISHES

- 20 Hard sandy light grey fabric with slight brownish tinge. Inner surface and upper part of outer face coated with burnished grey slip. Tooled scrawl decoration on underside of base.
- 21 Hard dark grey fabric, heavily gritted with sand and small stones. Surfaces "smoked" darker grey. Lightly smoothed.
- 22 Slightly tapering lip. Hard, smooth, slightly sandy, light grey fabric. Smoothed dark grey slip on inner surface, roughly applied with a brush-like instrument, the strokes being plainly visible.
- 23 Fairly soft, sandy, light grey fabric. Dark polished blue-grey slip on inner face and base, and overlapping top and outside face of lip.
- 24 Hard smooth buff-grey fabric, coated on both surfaces with smoothed black slip.
- 25 Hard sandy grey fabric, coated with black slip, polished on inner face, but matt on outer face, which has a rough zone c. 15 mm wide just below lip (*q.v.* Old Ford, 1971, Fig. 7:8)
- 26 Hard grey-black sandy fabric, self-coloured, smoothed on surface.
- 27 Hard dark grey fabric, heavily gritted with sand; coated with dark grey matt slip, applied in horizontal brush strokes, visible plainly on outside face. Two rim frags., one body sherd, four base sherds found.
- 28 Hard sandy black fabric, coated with black slip, burnished on inner face. Indistinct horizontal pattern on exterior below lip, probably a zig-zag of inverted V's, incised or stamped in fabric; two rough horizontal lines directly beneath.
- 29 Hard smooth sandy light grey fabric. Dark grey burnished slip on inside face and top of lip.
- 30 Soft smooth dirty-buff fabric, coated with matt black slip.
- 31 Diameter uncertain. Slightly beaded rim. Hard smooth blue-grey fabric, surface layers oxidised dull brown. Coated with matt grey slip.
- 32 Diameter uncertain. Hard, slightly sandy, light grey fabric, surfaces "smoked" darker grey. Inner face and top of lip coated with polished creamy-grey slip. Shallow horizontal groove on outer face below lip.
- 33 Hard grey sandy fabric. Inner face and top of lip coated with smoothed grey slip of similar colour to fabric. Outer surface self-coloured, lightly smoothed, smoked darker grey.
- 34 Hard grey sandy fabric, surfaces oxidised grey-brown and coated with black slip, matt on outside surface, smoothed on inside surface. Horizontal external groove below lip.
- 35 Dish with rounded inturned rim. Hard sandy grey fabric, reduced almost to white on outer 1mm of surface, and coated with matt whitish-grey slip. Two shallow horizontal grooves on exterior, on and just below point of maximum diameter.

Not illustrated:

Five rims in dark grey fabric, hard and sandy, with black slip (two sherds from same vessel).

Five rims, smooth grey-buff wares: one with black slip, three with traces of cream or grey slip, one self-coloured.

Fig. 8

JARS

- 1 Jar, plain everted rim. Hard, smooth, slightly sandy grey-buff fabric. Most of rim and upper part of body coated with polished grey-black slip, as far down as a shallow tooled horizontal groove at about the point of maximum body girth. Below groove, a lightly-tooled obtuse-angle lattice decoration. Areas without slip are stippled in drawing. Fifteen sherds of vessel found.

- 2 Plain everted jar, lip slightly squared. Hard smooth dirty light grey fabric. Self-coloured, but a thin chestnut-brown layer *c.* 1 mm below the surface sandwiches the core. Surface is matt.
- 3 Similar to 2; surface lightly smoothed, and has a slightly buff hue.
- 4 Wide-necked everted jar; hard dirty-grey-white fabric, tempered with crushed flint; has a "corky" appearance in section. Surface smoothed, self-coloured, has a soapy feel.
- 5 Jar, everted rounded rim, slightly cut-off on underside. Hard dull grey fabric, tempered with crushed flint (but of a "finer" grain, in section, than 4). Surface smoothed, self-coloured.
- 6 "Cavetto-rim" jar. Hard sandy dark-grey-brown fabric, surface (except for lowest part of inner surface) smoked dark-grey. Matt finish.
- 7 "Cavetto-rim" jar, hard smooth light grey fabric, covered with lightly smoothed light-blue-grey slip. Two fragments.
- 8 "Cavetto-rim" jar, hard sandy dull-brown fabric burned (as earlier) black at one point of fracture. Surface reduced grey-black, coated with black slip, lightly smoothed on top of lip and inner face.
- 9 Everted plain-rim jar. Smooth sandy dull chestnut fabric, coated with matt dark grey slip.
- 10 Everted jar, triangular-section rim. Hard sandy smoky-grey fabric, self-coloured, surface lightly smoothed.
- 11 Everted jar, rounded rim. Hard smooth light grey fabric. Exterior surface, and interior of lip, to lowest level of everted section, coated with smoothed creamy-grey slip.
- 12 Jar, everted rounded rim. Hard smooth light-grey-buff fabric, surface layer fired darker grey-brown; surface self-coloured. Lightly tooled burnished horizontal line around point of narrowest neck diameter; below this, a double wavy horizontal line pattern, rather irregular.
- 13 Everted jar, hard, very sandy, smoky-grey fabric. Core of rim fired dull brown. Self-coloured. Horizontal combed grooves on shoulder.
- 14 Jar, everted rounded rim. Dull light grey self-coloured fabric, core fired dull red-brown. Hard, slightly sandy. Surface lightly smoothed.
- 15 Plain everted jar, hard off-white fabric, tempered with finely crushed flint, thus giving section a very rough appearance and feel. Surface lightly smoothed. Probably hand-made.
- 16 Everted jar, slightly cut-off rim. Hard, sandy, light grey self-coloured fabric.
- 17 Everted jar, undercut rim, almost identical fabric to 18, but surface only smoothed, and slightly sooty.
- 18 Everted jar, undercut rim. Hard, slightly sandy, dirty grey self-coloured fabric. Lightly polished on outer surface and top of inner lip. Two sherds.
- 19 Everted jar, undercut rim. Hard sandy dull buff fabric, self-coloured. Cordon around narrowest point of neck.
- 20 Everted jar, hard sandy blue-grey fabric, surface layers a more smoky grey. Self-coloured.
- 21 Everted jar, slightly undercut rim. Hard gritty dark grey fabric, self-coloured.
- 22 Jar, rounded rim, cut off underneath. Hard sandy gritty fabric, dull steely-grey surface and core, sandwiching a dull dirty-grey-brown layer. Self-coloured, lightly smoothed.
- 23 Everted jar, hooked rim. Fabric similar to 25. Colour grey-black at fracture, surface fired dull brown-buff, but rim and upper part of neck burned blackish. Probably hand-made.
- 24 Plain everted jar; hard, sandy grey-buff fabric, surface smooth and soapy and fired red-buff in parts. Tempered with shell-fragments. Probably hand-made.
- 25 Everted jar, rounded rim, hard shell-gritted fabric with smooth "soapy" surface. Fabric dirty grey, surface layer fired dull pink-brown. Slightly burned around rim. Probably hand-made.
- 26 Very similar fabric to 25, though surface mostly burned grey. Possibly part of the same vessel.
- 27 Jar, rounded rim. Hard sandy fabric, mottled grey and rusty brown. Coated with matt black slip.
- 28 Cornice-rim jar. Hard sandy fabric, the rim fired grey-black throughout, the neck and shoulder fired dull brown with a smoked-grey-black surface.
- 29 Cornice-rim jar. Hard, slightly sandy fabric, grey surface layers and core sandwiching a dull-red-brown layer (grey core absent from neck). Surface dirty dark grey, self-coloured.
- 30 Cornice-rim jar; smooth, hard, slightly sandy, light grey fabric, self-coloured.
- 31 Cornice-rim jar. Hard smooth fabric, rim burnt black throughout. Neck has grey-black core, sandwiched by dull brown surface layers. *c.* 1 mm thick; top of these surface layers smoked dark grey.
- 32 Cornice-rim jar. Fabric very similar to 33.
- 33 Cornice-rim jar. Hard, smooth, slightly sandy grey fabric, self-coloured; surface smoked dark grey.
- 34 Cornice-rim jar. Hard sandy steel-grey fabric, self-coloured, surface lightly smoothed.
- 35 Cornice-rim jar. Hard, smooth, sandy, orange-buff fabric, self-coloured, smoked orange-grey on outer surface. Outer layers of rim burnt greyish.

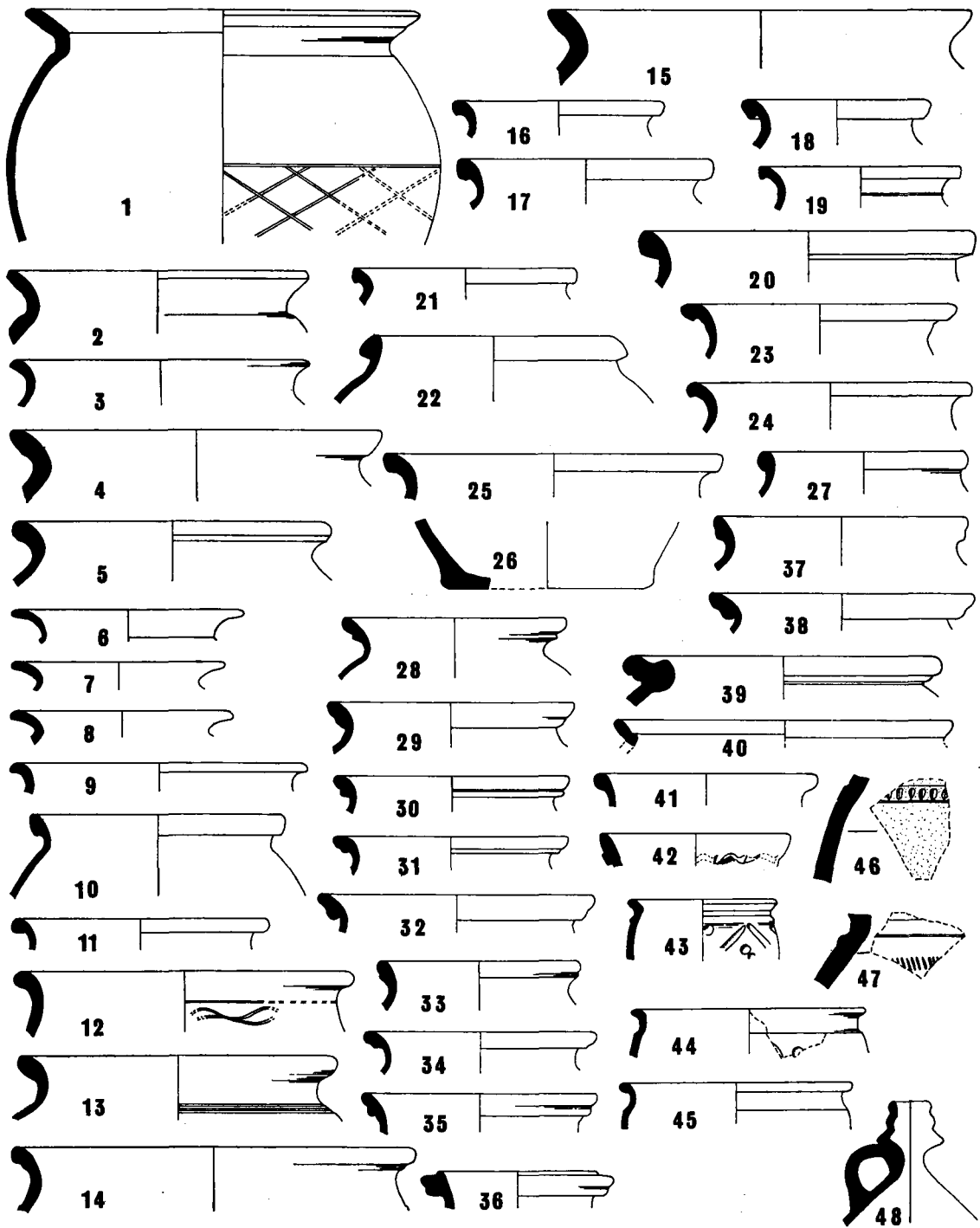


Fig. 8
Pottery from Appian Road ($\frac{1}{4}$)

- 36 Everted jar rim with flange, having a cornice-type design. Smooth, fairly hard, dull grey fabric, with surface layers (c. 2 mm thick) fired dull grey-brown. Exterior surface probably coated with grey slip.
- 37 Cornice-rim jar. Hard, smooth fabric, core fired dull grey, outer layers fired dull red-brown. Coated with matt black slip.
- 38 Cornice-rim jar. Hard, smooth, slightly sandy dull brown-grey fabric, surface layers (c. 1 mm thickness) fired dull steel-grey. Surface self-coloured.
- 39 Everted neckless jar with sunken internal lid-groove. Hard creamy-grey fabric densely tempered with crushed flint.
- 40 Everted jar. Hard smooth dull-grey ware core fired dull grey-brown; surface lightly polished. Jar has internal seating for lid.
- 41 Everted jar rounded rim. Hard slightly sandy fabric grey core becoming pinkish towards surface. Surface layers (top 1 mm) orange. Matt self-coloured.
- 42 Everted narrow-necked jar, possibly with internal lid seating. Hard sandy orange fabric, with grey core. Surface matt, self-coloured. Frilling applied round neck by pinching clay between thumb and forefinger (*q.v.* Old Ford, 1971, Fig. 9:7).
- 43 Lipped everted beaker-like jar. Smooth, hard, light-grey fabric. Self-coloured, lightly smoothed on exterior face and top of lip. Decoration of stamped lines, forming (?)zig-zag pattern, and stamped circular indentations. Also similar sherd, 6½ ins. diameter, *not illustrated*.
- 44 Lipped everted jar. Smooth, fine grey-buff fabric coated with black slip, lightly smoothed on exterior and lip. Traces of two (?)circular stamped decorations.
- 45 Everted rounded-rim jar, dirty dark-brown-buff fabric, surfaces fired dull red-brown. Coated with dark chocolate slip, polished lightly on shoulder.
- 46 Shoulder fragment of large jar, found with six plain sherds and two base sherds of same vessel. Hard sandy fabric, with some grit tempering, dirty red-grey colour, surfaces smoked black. Fabric has a very rough appearance, though it feels soapy and only slightly rough. Diameter of base c. 8 ins. Shoulder has single band of stabbed decoration, made with a broad pointed instrument, above a roughly incised horizontal line and below a shallow shoulder groove.
- 47 Shoulder and neck of large jar, in hard rough sandy fabric, dirty-grey-buff in colour. Surface smoothed, dull grey. Some shell temper. Band of diagonal slashed decoration on shoulder, below a shoulder cordon.
- Jars not illustrated:*
Six rims of "cavetto"-type. Hard grey wares, two sandy, four smooth; the former with black polished slip on inside face of rim diameters 7 ins. and 8 ins.; the latter, two self-coloured, two blue-grey polished slip, diameters 7 ins., 5¼ ins., 6½ ins., uncertain.
Ten fragmentary rim sherds, plain everted jars. One, brown-buff ware with white slip, the rest grey self-coloured, or black with polished black slip.
Six sherds, jars with rounded everted rims; various self-coloured grey fabrics; five hard and smooth, one hard and sandy. Also one similar sherd, reddish-buff fabric; soft, sandy, traces of black slip.
Everted hooked or undercut rims: four in various grey wares; one grey-brown and one chestnut-brown, each with matt black slip. Two rims and four body sherds in grey-buff shell-tempered fabrics. One rim in smooth hard pink-buff fabric.
One everted narrow-necked jar with rounded rim (8½ ins.); one rounded rim (8 ins.+), one folded-over rim (8 ins.+), smooth grey fabrics; worn.
Seven other various rims in buff to whitish wares.

Flagons

- 48 Single-handled flagon. Hard smooth light grey ware, self-coloured, exterior lightly polished.

Fig. 9

- 1 Flagon neck only, (?)one handle. Hard, slightly sandy, self-coloured off-white fabric, tending to yellowish. Two horizontal incised shoulder grooves, and a neck cordon c. ½ ins. above point of narrowest diameter split by a central groove.
- 2 Flagon in hard, smooth, cream-buff fabric, core slightly pinkish. Lip has interior overhang, and is considerably twisted out of horizontal in firing.

Not illustrated:

Very worn fragment of large flagon handle in grey-buff fabric with traces of polished dark grey slip.
Weathered fragment of flagon handle in orange-pink fabric with grey core, coated with chocolate-coloured slip.

Large handle, soft smooth pink fabric, with two "ribs". Very worn.

- 3 Amphora, hard smooth fabric, with grey-buff core, pink-buff surface layer, sandwiching thin dull red layer. Traces of creamy slip on exterior. Heavily worn. And a small sherd of similar fabric.

Mortaria

- 4 Hard, quite smooth, light parchment-buff fabric. Grits brown to pink, a few whitish. Folded-over flange.
5 Shallow horizontal groove on flange. Hard smooth white fabric. Black grits. Two worn fragments.
6 Hard white sandy fabric, slightly pinker at core. Grits grey, pink. Spout formed by roughly pushing lip forward onto flange.

Not illustrated:

Seven sherds buff wares, with pink grits; some worn.

One sherd red fabric, grey core, soft smooth ware, pink and grey grit. Very worn.

One flange fragment, diameter c. 14 ins., hard smooth off-white fabric.

Beakers

- 7 Neck of large beaker. Hard smooth dull grey-brown fabric, core tending to greyish. Surface coated with matt black slip, interior and exterior.
8 Neck and base of indented beaker (a few side sherds also found). Hard smooth light brown-buff fabric, fading to dirty light grey on exterior. Surface smoothed, self-coloured.
9 Miniature beaker, smooth hard pink-orange fabric; pedestal base with false foot-ring. Coated with matt chocolatey-red slip, now almost entirely worn away. Traces, mostly around girth, of tooled scroll pattern, burnished into slip.
10 Slightly undercut beaded rim. Smooth, fairly hard, dull grey-buff fabric, covered with dark grey slip, polished on exterior.
11 Beaker base. Hard, smooth, pink fabric, with grey-fired exterior surface layer. Upper part coated with matt chocolate slip; lower part and underside of base coated with metallic brown colour coat.
12 Shoulder sherd of beaker in hard, smooth, dirty pink ware, with three bands of rouletted decoration—two on neck and one just below shoulder, with traces of a circular stamped decoration below this band. Remains of ochreous slip over indentations of rouletting and at junction of neck and shoulder, elsewhere worn away. Also, a body sherd showing further remains of circular stamped decoration, and a band of rouletting identical to that below the shoulder, though slanting in opposite direction. Connection in drawing is inferred.
13 Another sherd from same vessel as 12, considerably worn. Traces of rouletted band, and a double arc-shaped line of indentations, mostly half-moon shaped.
14 Shoulder sherd of beaker in hard, smooth salmon-pink fabric. Faint horizontal rouletted line immediately above shoulder, and stronger horizontal rouletted line below shoulder. Sherd coated on both surfaces with ochreous slip. Body shows remains of scroll decoration in creamy-pink slip, applied over ochreous slip. And (*not illustrated*) a further shoulder-herd with slight traces of creamy-pink slip decoration.
15 Body sherd from same vessel as 14, with decoration of similar character. Also (*not illustrated*), two sherds from same vessel, one with two parallel lines in slip decoration, aligned approx. north-east-south-west relative to design; and one plain, from lower part of vessel.
16 Beaker sherd, hard, white sandy fabric, coated on both surfaces with matt black slip. Decorated with six roughly circular blobs of white slip.
17 Beaker sherd in hard, sandy pink-white fabric, surface fired pink and coated with dark chocolate slip. Decoration in thickly-applied cream slip, forming design of uncertain type.

Beaker and other colour-coated sherds, not illustrated:

Three beaker sherds in hard, smooth, pinkish fabrics, coated with dark chocolate slips, and bearing traces of applied line decoration in white or cream slip.

Beaker sherd, grey-pink fabric, hard and smooth, with chocolate slip on both surfaces.

Beaker sherd, hard, slightly sandy off-white fabric, coated with matt chocolate slip.

Eight beaker sherds in dirty pinkish fabric, with single rouletted band below shoulder. Thin, smooth hard ware, traces of dark chocolate slip.

Excavations at Parnell Road and Appian Road, Old Ford, E.3

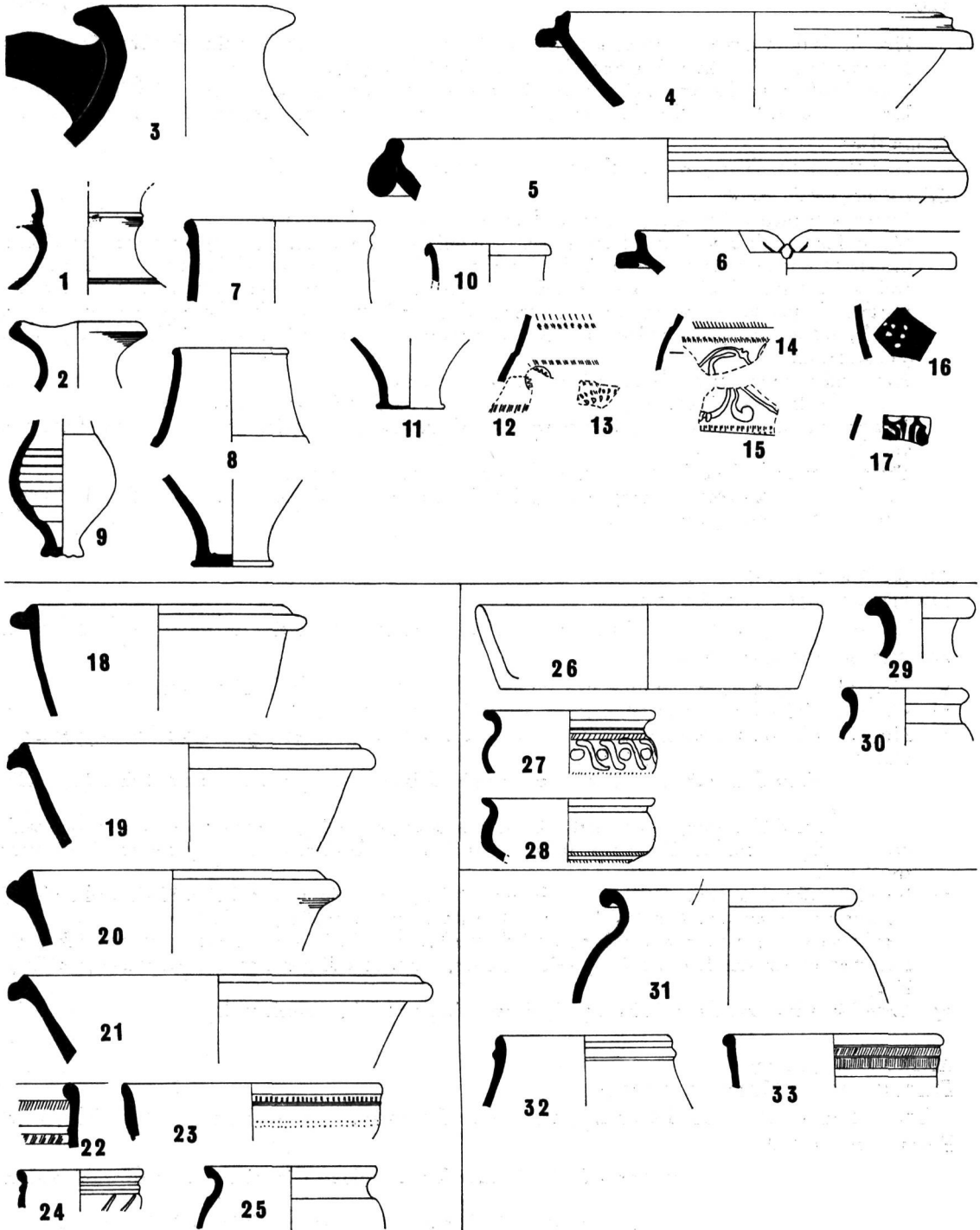


Fig. 9
Pottery from Appian Road (¼)

Five sherds from lower part of beaker, in dull salmon-pink fabric, with dark chocolate slip. Traces of at least two bands of rouletted horizontal line decoration below girth.

Three sherds of shoulder and neck of beaker in hard, smooth, fine pink ware, coated with thin dark chocolate-colour coat. Narrow faint band of rouletted decoration at base of neck, and also below shoulder.

Samian Ware

Nine fragments, all very worn, including two mortaria sherds.

Other Wares, not illustrated:

Seventy-one sherds of various plain white, buff or parchment-coloured wares.

Ninety-four sherds in various red wares, including imitation Samian forms, Dorchester wares, etc. These include 11 fragments of a large jar in hard, smooth self-coloured orange fabric with a grey-black core, with at least three horizontal grooves below the shoulder (fragments burned in some cases, but not weathered); and 20 very worn sherds of a vessel of uncertain type, possibly a large jar with at least one handle, in hard, sandy, dirty pink ware. Also two fragments of a bowl in North African red slip ware. (See Appendix 4.)

Five hundred and fourteen plain sherds, mostly in grey wares.

Sixteen sherds, self-coloured grey wares, with horizontal combed decoration on shoulder.

Twenty-four sherds, self-coloured grey wares, with lightly-tooled lattice decoration (seven from one vessel).

Three sherds, self-coloured grey wares, with horizontal wavy line pattern.

One jar sherd, self-coloured grey ware, polished on shoulder, with extremely faint tooled diagonal (north-west-south-east) decoration.

AR2/L1 (Fig. 9, 18-25)

DATING FROM COIN EVIDENCE

Sixteen of the 34 coins are of the House of Theodosius, with dating in six cases as late as 402 and, in one case, 408 (126).

- 18 *Flanged bowl*: hard sandy dark grey ware, smoothed on both surfaces. (Appendix 5, No. 8.)
- 19 *Flanged bowl*: hard sandy grey self-coloured fabric. (Appendix 5, No. 9.)
- 20 *Flanged bowl*: hard smooth grey fabric, coated with smoothed light grey slip on inner face. (Appendix 5, No. 10.)
- 21 *Flanged bowl*: hard smooth grey fabric, coated with black burnished slip on inner face and rim. (Appendix 5, No. 7.)
- 22 *Bowl* in Oxfordshire ware, Soft smooth salmon-pink fabric, becoming darker pink to grey at core, with dark red slip on surface. Horizontal rouletted bands below bead rim and body cordon. Sherd very weathered.
- 23 *Bowl* in Oxfordshire ware. Smooth pink-brown fabric, plain, slightly everted rim. Horizontal rouletted band below lip, and double dotted line decoration on body. (Appendix 5, No. 4.)
- 24 *Small bowl* with everted rim, and horizontal groove below neck. Hard smooth dirty-orange-pink ware, smoothed on exterior face. On body below groove, traces of a diagonal groove pattern. (Appendix 5, No. 5.)
- 25 *Everted jar* with cut-off rim, in hard sandy dirty-pink-grey fabric, self-coloured.

AR2/L2 (Fig. 9, 26-30)

DATING FROM COIN EVIDENCE

Two coins of later third century, and two "Barbarous" issues of the type "Fel Temp Reparatio" (350's).

- 26 *Dish*: hard, slightly sandy, light grey fabric. Exterior face self-coloured, interior face coated with polished steel-grey slip.
- 27 *Small bowl* in Oxfordshire ware. Form B-8. Hard smooth salmon-pink fabric, with light-polished slip of slightly darker colour on surface. Horizontal band of rouletted decoration below neck, and two further bands just above lowest surviving portion of sherd. Body decoration in creamy-white applied slip, of a horizontal band of reverse S-shapes, alternating with roughly circular blobs. (Appendix 5, No. 1.)

- 28 *Small bowl* of Oxfordshire ware. Form B-8. Similar to 2, but rouletting band only at "keel". Very slight traces of what may be a wavy line decoration in cream slip. Core of body is fired grey. (Appendix 5, No. 2.)
- 29 *Flagon*: hard, sandy pink-brown fabric, fired pink-grey in parts. Coated with slip, fired creamy-brown around rim, cream-coloured on shoulder.
- 30 *Everted rounded-rim jar* in hard sandy pink-brown fabric, self-coloured. Neck slightly offset.

AR₂/L₄ (Fig. 9, 31-33)

DATING FROM COIN EVIDENCE

Three coins of later third century, and one of Arcadius (388-95).

- 31 *Jar*: everted hooked rim. Hard, slightly sandy light grey self-coloured fabric.
- 32 *Beaker*: cornice-rim. Hard, very sandy, dull grey fabric, lightly smoothed on exterior face.
- 33 *Bowl* of Oxfordshire ware, salmon-pink fabric, core slightly greyish. Two bands of rouletting below rim. Sherd weathered.

AR₂/L₅ (Fig. 10, 1-10)

DATING FROM COIN EVIDENCE

Two worn coins of first-second century date, and two of period 270-3.

- 1 *Flanged bowl*: hard gritty smoky grey fabric, with polished darker grey slip on surface. Lightly tooled arcaded decoration on exterior of body.
- 2 *Flanged bowl*: hard smooth grey fabric, coated with polished black slip.
- 3 *Flanged bowl*: hard sandy light grey fabric, lightly smoothed on surface.
- 4 *Flanged bowl*: hard smooth white fabric, coated with dark chocolate polished slip.
Not illustrated:
Flanged bowl in Oxfordshire ware. Form B-3. Hard smooth salmon-pink fabric with chocolate-red slip. (Appendix 5, No. 6.)
- 5 *Dish*: hard sandy dirty grey fabric, with two horizontal external grooves below lip. Coated with matt black slip. Faintly tooled decoration on exterior.
- 6 *Jar*: cornice rim, smooth dull grey fabric, surface smoked dark grey.
- 7 *Jar* with plain everted rim, in hard, very sandy grey-brown fabric, with smoothed steel-grey slip on inner face, down to narrowest point.
- 8 *Jar* with internally lid-seated rim, in smooth, fairly hard buff-grey fabric, coated with matt dark grey slip. Neck cordon.
- 9 *Everted neckless jar* in hard, smooth, dull grey fabric, coated with smoothed blue-grey slip.
- 10 *Bowl* with "incipient flange". Fairly hard smooth grey fabric, surface smoothed.

AR₂/F₂ (Fig. 10, 11)

DATING FROM COIN EVIDENCE

One "Barbarous" radiate (late third century), one Constans (341-6), and one other unidentifiable third-fourth century.

- 11 *Dish*: hard sandy grey fabric, exterior face self-coloured; interior face has lightly smoothed grey slip.

AR₂/F₄ (Fig. 10, 12-13)

DATING FROM COIN EVIDENCE

One coin of Tetricus I (270-3).

- 12 *Mortarium*: flanged, hard smooth fabric; surface layers white, core fired through pink to dirty grey at centre. Pink grits.
- 13 *Small bowl* in hard smooth white fabric, with ochreous-red slip decoration, shown on illustration by stippling.

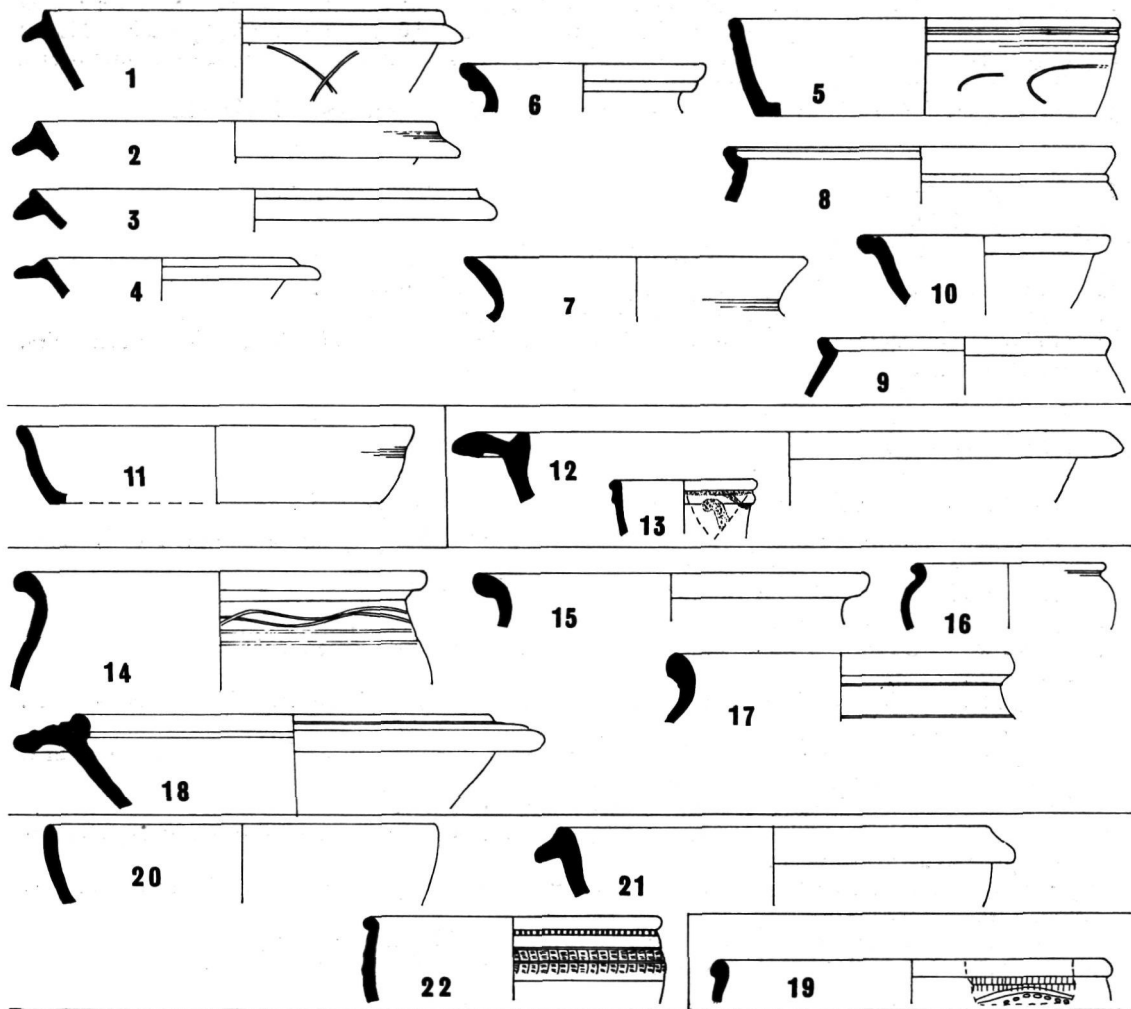


Fig. 10
Pottery from Appian Road ($\frac{1}{4}$)

AR₂/F₅ (Fig. 10, 14-18)

DATING FROM COIN EVIDENCE

One coin of Tetricus I (270-3), one of Constantine I (317-20), and one "Barbarous" minim of late third or fourth century date.

- 14 *Jar*: everted rounded rim jar, hard slightly sandy dark grey fabric, lightly polished on exterior surface, except for band which has double wavy line decoration. Almost identical to 12 and 14. Fig. 8 (AR₁/F₁), and probably from the same vessel as the latter.
- 15 *Everted jar* in hard, gritty, shell-tempered fabric, dirty-grey-brown in colour. Possibly hand-finished.
- 16 *Small everted jar* in hard sandy fabric. Surface layers fired grey-brown, core greyish.
- 17 *Everted jar* with rounded rim. Hard sandy dirty-grey-brown fabric, lightly polished on exterior surface.
- 18 *Flanged mortarium* with horizontal grooves on flange, in hard sandy parchment-coloured fabric. Large black grits, worn down to surface of vessel.

AR2/F7 (Fig. 10, 19)

DATING FROM COIN EVIDENCE

One coin of Tetricus I (270-3).

- 19 Bowl in Oxfordshire ware. Hard smooth salmon-pink fabric, core fired greyish-pink. Coated with darker coloured smoothed slip. External decoration of line and dots, in applied creamy white slip. (Appendix 5, No. 3.)

AR1/F4 (Fig. 10, 20-22)

DATING FROM COIN EVIDENCE

One "Barbarous" radiate, one coin of Valentinian II, and two coins of House of Theodosius (388-408).

- 20 Dish in hard gritty dirty grey fabric, coated on surface with slip of similar colour, smoothed on inside face.
- 21 Flanged bowl in hard, soapy-feeling, heavily shell-tempered dark grey fabric. (*q.v.* Old Ford, 1969-70, Fig. 7:36.) (Appendix 5, No. 11.)
- 22 Bowl in Oxfordshire ware. Hard smooth pink fabric, with darker coloured slip on surface, lightly smoothed. Horizontal rouletted band below rim. Horizontal body band of stamped quarter-rossette decoration, split by an incised groove through the centre of the band.

AR2/F3 (Fig. 11, 1-32)

DATING FROM COIN EVIDENCE

Eleven of the 22 coins from the layer are of the House of Theodosius, with possible dating as late as 408 (No. 140).

Bowls: "Flanged"

- 1 Bowl with short rounded flange, 6½ ins. diameter. Fine sandy light grey ware; external surface smoothed lightly and smoked slightly darker grey. Exterior of rim, from c. half-way down flange, to lip, and interior face, coated with dark grey burnished slip. Narrow band on interior face matt and decorated with a crude burnished criss-cross pattern. On interior of base, a burnished, crudely executed, spiral decoration, roughly in the shape of a figure "9". (*N.B.* the internal criss-cross pattern may have extended over more of the face than is now apparent, but sherd too worn to ascertain.)
- 2 Bowl with short down-turned flange, diameter 7¾ ins. Fabric and surface treatment similar to 1, but exterior of body burnished, and criss-cross burnished line pattern covers whole of interior face. Four horizontal burnished bands are superimposed on the interior pattern.
- 3 Bowl with upward-turned flange, diameter 7¾ ins. Slightly gritty light grey fabric. Considerable quartz or mica content, especially apparent on surface of body, which is only lightly smoothed. Upper part of flange and inside face of bowl have darker grey slip, unpolished, also with micaceous content. Small patch of same slip on surface of body; uncertain whether part of a pattern or accidental.

Flanged bowls not illustrated:

- (i) Smooth light grey fabric. Slightly downbent flange. Upper part of flange and inner face coated with smoky grey slip, lightly polished.
- (ii) Smooth, light-brownish-grey fabric. Small rounded flange and stubby rounded lip. Covered with creamy polished slip, burnt grey in parts.
- (iii) Orange-brown fabric, burnt grey-brown externally. Traces of black micaceous slip on flange and exterior face, polished. Considerably worn.

Bowls: other

- 4 Diameter 7½ ins. Cornice-rim bowl of hard fine orange-pink fabric, with dull red slip on both surfaces. Two single horizontal rouletted lines around "keel" of vessel. Traces of decoration in thick white slip, at broken edge of sherd, possibly of a crude scroll form, together with a faint patch nearby (*not illustrated*), probably accidental smudge. Body above "keel" very worn, and lower parts, both internal and external, burned. Oxfordshire ware. Form B-7.

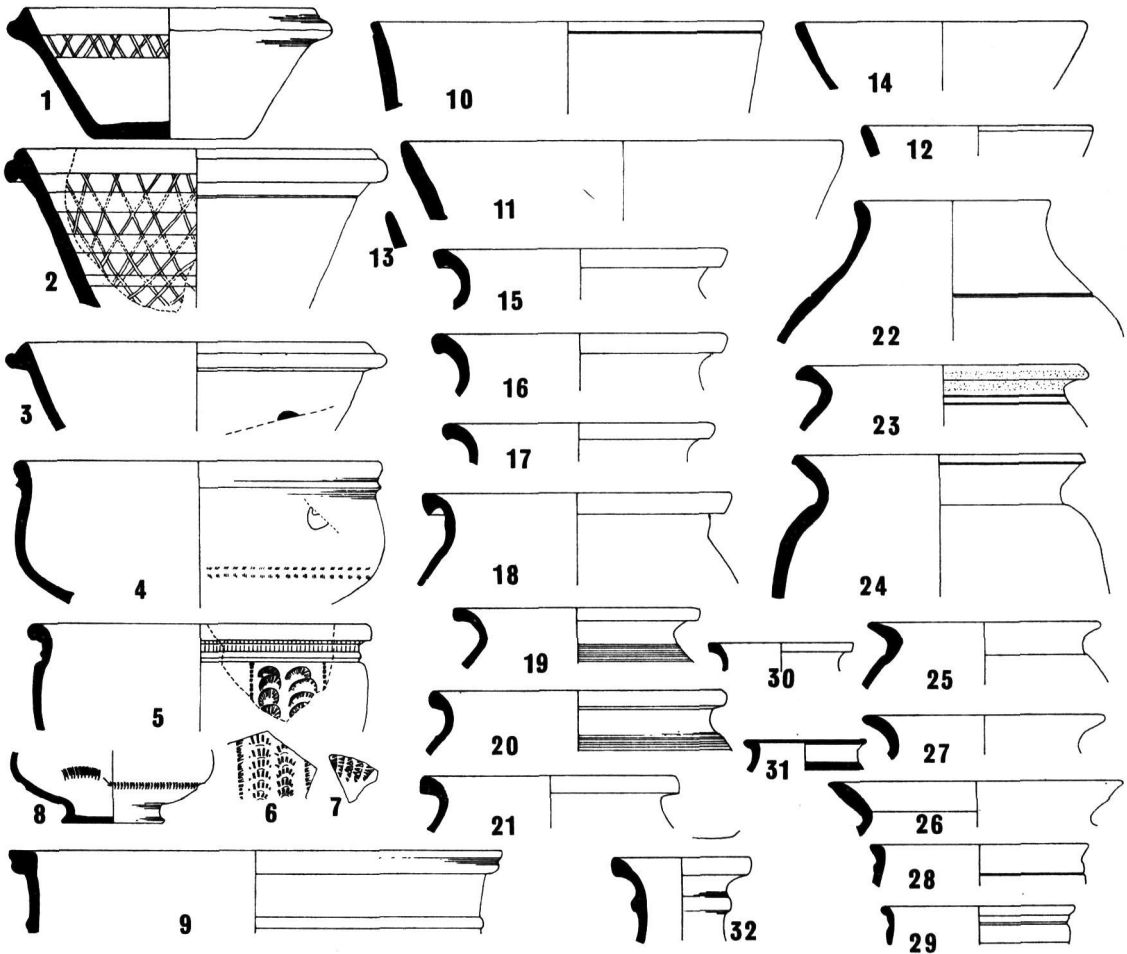


Fig. 11
Pottery from Appian Road ($\frac{1}{4}$)

- 5 Diameter 7 ins. Bowl of similar style to 4 with rounded everted rim. Hard smooth orange-red fabric with grey core, covered with orange-red slip. Narrow rouletted bands of single vertical lines on exterior, beneath lip and on neck. Body pattern of panels each consisting of two vertical rows of stamped rosettes; each rosette c. 13 mm in diameter, and the lower overlapping the one above; the two rows bordered on either side by single vertical rows of small square depressions. The rosettes are more deeply indented on their left side than on their right. The stamping shows through the fabric as raised areas on the interior surface. Sherd worn on rim exterior. Oxfordshire ware.
- 6 Wall and "keel" of vessel of same type as 5. Grey core sharply defined and sandwiched by thin layers of red fabric. Stamped "paw-mark" pattern, variant of that on 5. Lower part of vessel, below "keel" has two horizontal lines of single rouletted pattern. Slightly worn around "keel". Oxfordshire ware. Form B-8.
- 7 Another variant of 5. Small sherd only, very worn. Oxfordshire ware. Form B-5 to 8.
- 8 Base with foot-ring $2\frac{1}{2}$ ins. diameter. Similar fabric to above red-ware bowls, but red throughout. Small patches of thick white slip, at edge of sherd (*not illustrated*), possibly parts of a pattern (nature indeterminate). Also shown is vertical view of rouletting at "keel"; the smaller vertical lines between each set of larger vertical lines are in fact much closer to the larger line lying to their immediate right than can be accurately illustrated at $\frac{1}{4}$ -scale. Oxfordshire ware. Form B-5 to 8.

Similar red wares, not illustrated:

- (i) Plain everted-rim sherd, dull pink fabric, similar neck rouletting to 5. Slip of similar colour with considerable mica content. Oxfordshire ware. Form B-6.
 - (ii) "Keel" sherd, fabric similar to 5. Slip polished externally. Trace of scroll pattern, in white slip, on side wall. Small vessel. Oxfordshire ware. Form B-5 to 8.
 - (iii) Base sherd, similar to (ii), but of larger vessel. Single horizontal rouletted line on interior. Slip polished on both faces. Oxfordshire ware. Form B-1 (probably).
 - (iv) "Keel" sherd, similar to 6. Trace of horizontal rouletting. Oxfordshire ware. Form B.5 to 8.
 - (v) Flake of rim sherd, small everted lip, similar fabric to above. Probably of a small bowl.
 - (vi) Eight other sherds in Oxfordshire red ware, including a B-3 bowl fragment and a beaker sherd.
- 9 Oxfordshire "parchment ware" bowl, diameter 10 ins. Hard sandy off-white fabric, with brown slip on top and exterior face of rim and on side cordon. Sherd considerably abraded.

Other, not illustrated:

Rim fragment, beaded-rim bowl, hard sandy dirty-dark-grey fabric with lightly polished black slip.

Dishes and Platters

- 10 Diameter 8 ins. Dirty grey sandy fabric, surface layer beneath exterior face burnt dark grey. External horizontal groove 5 mm beneath lip. Surface coated with dark grey slip, polished on lip and internal face.
- 11 Diameter 9 ins. Smooth, light grey, lightly sandy fabric. Patchy smoothing on exterior face. Top of lip and interior face covered with "blotchy" blue-grey slip, roughly burnished.
- 12 Diameter $4\frac{3}{4}$ ins. Light grey sandy fabric. Rim and inner face covered with lightly burnished cream slip (fired blue-grey on rim).
- 13 Diameter uncertain. Gritty, grey-brown fabric, surface covered with lightly smoothed black slip.
- 14 Diameter c. 6 ins. Sandy fabric; smokey grey core, sandwiched by outer layer of red-brown colour, c. 1 mm thick. Surface of vessel fired same colour as core.

Other dish/platter sherds, not illustrated:

- (i) Side-fragment, large vessel. Gritty grey-brown fabric, outer layers fired grey. Exterior surface smokey-grey colour. Interior surface covered with lightly smoothed black slip.
- (ii) Side fragment, small vessel. Light grey sandy fabric. Exterior surface dirty grey. Interior surface partly covered with matt dark grey slip; there is a band with no slip below this.
- (iii) Side fragment, gritty grey fabric. Burnished blue-grey slip on interior face.
- (iv) Base fragment. Smooth light grey fabric with internal light grey polished slip.
- (v) Similar, but exterior surface smoked dark grey.
- (vi) Base fragment, hard sandy grey-brown fabric. Exterior fired grey-black. Interior with dark grey slip.

Jars

- 15 Everted jar, undercut rim. Diameter 6 ins. Hard sandy fabric. Orange-grey core, outer layers smoked darker and greyer. Surface smoothed, but still rough to feel.
- 16 Everted jar, 6 ins. diameter. Similar in fabric and appearance to J-1, but core smokey grey throughout. Six body sherds found in association, possibly from same vessel, with horizontal rilling on shoulder. Eight further similar body sherds with creamy slip on interior surface. Exteriors of most show some burning or cooking.
One further sherd, similar fabric and treatment, but dull salmon colour, and slip only on exterior.
One base, similar fabric, well "cooked" on exterior, dull smokey grey. Core dull pinkish brown. "Cheese-wire" marks on underside.
- 17 Everted jar, similar type to J-1 and J-2. Core dirty pink; surface layers dirty cream colour, covered with slip of similar colour.
- 18 Everted jar, hooked lip, diameter $6\frac{1}{4}$ ins. Hard shell-gritted fabric, dirty grey-brown in colour. Surface smooth and soapy to feel. Probably wheel-turned with hand-finished rim.
- 19 Everted jar, rounded rim. Diameter 5 ins. Hard, smooth, soapy-feeling fabric, dirty brown colour. Shell-gritted. Faint horizontal rilling on shoulder. Rim probably hand-finished.

Not illustrated:

- Nine body and three base sherds of similar shell-gritted material, some possibly from vessels J-3, 4, 5.
- 20 Everted jar, diameter 5 ins. Smooth dirty grey fabric. Rim possibly hand-finished. Faint horizontal rilling on shoulder.

- 21 Everted jar, diameter $5\frac{1}{4}$ ins. Very hard smooth grey ware.
- 22 Jar with narrow neck and slightly everted rim, diameter 4 ins. Hard smooth light grey core and surface layers, sandwiching a layer of dull chestnut-brown fabric. Surface smoothed. Shallow horizontal shoulder groove.
- 23 Everted jar, slight thickening at lip. Diameter 6 ins. Hard dirty grey fabric with a small amount of shell or calcite tempering. Shallow horizontal groove at base of neck. The exterior surface below groove, and two bands above groove, are burnished; also top of lip, and interior of rim to point of smallest diameter.
Not illustrated:
Three everted undercut jar rims, two everted jar rims with beaded lips, all in grey self-coloured wares.
- 24 Offset-neck jar, diameter 6 ins. Light grey fabric, thin layer below surfaces fired brown. Hard smooth fabric, surface smoked dirty grey.
- 25 Offset-neck jar. Hard sandy dirty-grey fabric. Light steel-grey burnished slip on body, from shoulder offset downwards, and on top and lip of rim, extending inwards to point of narrowest rim diameter.
- 26 "Cavetto"-rim jar, diameter $6\frac{1}{2}$ ins. Hard sandy dirty-grey fabric. Exterior surface self-coloured. Interior surface of rim, down to point of narrowest diameter, has steely-glue-grey slip, unpolished. Patchy application of slip to exterior underside of rim.
- 27 Everted jar, diameter c. 5 ins. Dark grey self-coloured fabric, with sand and large grit temper. Leached-out shell temper gives "corky" appearance. Quite crude appearance, possibly hand-made.
Other offset- or "cavetto"-rim jars, not illustrated:
(a) Light grey, hard smooth fabric. Steely blue-grey slip on shoulder and exterior underside of lip.
(b) Hard light grey sandy fabric. Polished dark blue-grey slip on inner rim face, and lower half of outer rim face.
(c) Hard black sandy fabric, with black burnished slip on shoulder and interior of rim (similar to Lefevre Road 1969 dishes).
(d) Hard, very sandy, dull brown fabric, reduced grey on surfaces. Thin silver-grey slip on lower half of outer lip, and inside face of rim.
(e) Hard sandy self-coloured dirty brown fabric; thin grey slip on interior rim face.
- 28 Triangular-section rim jar, diameter $4\frac{1}{2}$ ins. Smooth hard dirty grey fabric. Shallow groove below neck. Top of rim and external surface of vessel burnished.
- 29 Beaker-like jar, diameter c. 4 ins. Rounded rim, constricted neck. Groove at base of shoulder. Smooth, fine, fairly hard, light grey fabric.
- 30 Everted jar or beaker. Diameter c. 3 ins. Dirty off-white fabric; hard, slightly rough fracture. Exterior of vessel and top of lip has thin, worn chocolate slip. Oxfordshire ware.
- 31 Small everted jar or bowl, diameter c. $2\frac{1}{2}$ ins. Hard, smooth, chestnut-brown fabric. Underside of lip and c. 7 mm of neck coated with band of cream slip; below this, body is coated (over the cream slip?) with a red-brown band of slip. Top of lip self-coloured, but remainder of inside face coated with thin cream slip. Imitation Oxfordshire parchment ware.

Beakers and Flagons

- 32 Flagon neck, diameter $2\frac{7}{8}$ ins. Hard smooth white fabric, slightly sandy. Everted rim. Cordon around narrowest part of neck. Coated with light chocolate-colour coat; this has run down the interior of the neck, and below the point of narrowest diameter, has fired a rusty colour.
Also: two body sherds from the same vessel; one having three single horizontal rouletted lines; the first and second 5 mm apart, the second and third 21 mm apart; the other sherd has two rouletted lines, c. 1 mm apart. None of the rouletting on the two sherds appears to be from the same horizontal line of decoration; the vessel this has at least five horizontal bands of rouletted decoration.

Other colour-coated sherds, not illustrated:

Three fragments of beaker bases, all salmon-pink fabric; with dark brown colour coat. One has a dull colour coat, on exterior only; two have colour coats on both surfaces, the exterior slightly polished. One fragment of a base, possibly from No. 32, but colour coat fired rusty brown on both surfaces. Also, one plain body sherd of similar fabric; both worn.

Sherds with rouletted decoration:

Two sherds; thick hard smooth white fabric; outer surface layer fired pinkish. Shallow rouletting applied with wide-toothed tool. Outer surface has orange-brown slip; inner surface, slip fired chocolate-grey. One sherd, similar; slip on inner surface orange-brown.

One sherd, hard dirty pink-white fabric, possibly Castor ware. Fine rouletted pattern, dark chocolate colour coat on both surfaces. Fine ware.

Two sherds, hard fine smooth fabric, brown core sandwiched by blue-grey surfaces, coated with dirty dark-chocolate colour coat. Fine, shallow rouletting.

Undecorated sherds:

Small sherd, very fine hard smokey-grey fabric, with well-burnished grey-black slip. Possibly Castor ware.

Shoulder or "keel" sherd, hard smooth dirty off-pink fabric, polished black colour coat on both surfaces. Medium thickness.

Shoulder/neck sherd; quite thick, dirty light brown fabric; hard, smooth; outer half of fabric (in section) fired greyish. Matt dark brown colour coat on outer surface.

Other:

Small worn sherd of "rough-cast" type beaker; smooth hard fabric, dark chocolate colour coat on both surfaces.

Other pottery, not illustrated:

Storage vessel sherds in blue-grey fabric:

- (i) Herring-bone decoration, in combed band 37 mm wide, between two horizontal bands of blue-grey polished slip.
- (ii) Decoration of horizontal combed band, at least 30 mm wide, bordered by at least one band of polished grey slip.

Jars, bands of white or grey slip and burnished lattice decoration:

- (i) Six sherds, hard sandy dirty grey "smoked" fabric; lattice lines form acute angles. Pattern displays "lean" to the left.
- (ii) One sherd, similar fabric, but lighter grey.
Sherd of large jar, grey sandy ware, with trace of burnished horizontal wavy line decoration.

IV. SOME TENTATIVE CONCLUSIONS

The work at Appian Road has therefore produced evidence similar to that from Lefevre Road, indicating late Roman settlement along the London-Colchester highway. The occupation revealed by this excavation bordered the southern side of the road after that side had been raised to the level of the centre track. The earliest layer containing pottery, tile, animal bone and coin and therefore indicative of habitation probably results from settlement in the later third century (AR₂, L₅). Much of the material, however, appears to represent a community active certainly in the fourth century, and possibly in the early fifth century.¹⁴

The building material, which included pegged, curved and flat tiles as well as baked clay, suggests that structures of some size stood in the immediate vicinity south of the road. Most of the iron objects recovered were nails: these as well as the staple and hook could be associated with building construction (See Appendix 3.). Evidence for iron smithing came from the ditch in Parnell Road, as well as from Appian Road, and there was possible indication that bronze articles of adornment were being made locally. These could, presumably, have been intended for local use, taken for sale elsewhere, or purchased by travellers on the road. (See Appendix 3.)

The information available from Old Ford so far points to the structural aspects of the settlement at least occurring along the line of the highway. The excavations at Lefevre Road showed that the main debris deposit of pottery, bone, tile, and building material extended some 13 metres to the south. Observation of the constructors sections immediately north of the road again showed later Roman features, though these could not be adequately recorded. The trenches dug at Parnell Road some 30-40 metres north of the highway revealed a thin scatter of worn and abraded sherds in a plough-soil which could have been

post-Roman. Only the material in the late Roman ditch was clearly *in situ* and relatively substantial. This area in any case was used for burials.

With these findings must be set the results of observation of a Water Board trench cut along Armagh Road in February 1972. This produced a late Roman burial enclosed in a stone coffin some 115 metres north of the road (see Location Plan No. 10),¹⁵ but little else until close up to the northern edge of the road. Here the now familiar mixture of late Roman pottery as well as tile with some animal bone and coins, was thrown up by the construction gang. It is probably a fair assumption that the roadside occupation extended at least between Armagh Road and the Lefevre Road railway cutting, a distance of some 230 metres.

Clearly if the settlement is laid out along the length of the road, then an integral relationship between the two might be expected. Presumably a major usage of the road would be to transport food and other products from the Essex countryside into London. A centre some two miles from the city could serve as a market or trading area, especially if the commodities included bulky livestock requiring space and pasture.

Two substantial aspects of the finds, the coins and the animal bones, may well help in interpretation. Over 350 coins were found on the sites at Lefevre Road and Appian Road; the great majority of these were associated with the late Roman deposits. Even if their loss is indicative of carelessness or a final decline of usage, they may well represent exchanges from considerable trading.

The animal bones are dominated by cattle. It is possible that a minimum of 150 individuals (see Appendix 2) were represented from the finds at Lefevre Road and Appian Road. There is strong evidence of butchering and it is probable, but not certain, that the cattle were killed for local consumption. The animals need not, however, be locally reared livestock.

Is it possible that the road was used for driving herds of cattle from farms in East Anglia and Essex into London? If so, then the cattle, after crossing the marshy ground east of the Lea, and the ford itself, could have been stopped on the higher ground to the west. Here they could have been rested before making the final journey to the city, only some two miles away. They may have been traded to London merchants, or even slaughtered off for the city. There are later parallels for all three activities.

In 1806, in a reference to herds coming down from the north,¹⁶ it was noted that "the cattle, sheep, etc., after resting at Islington and its neighbourhood on Thursday, are driven to Smithfield . . .". Presumably the resting would have the dual function of allowing the beasts to feed up, and to wait for a proper time of entry to the meat market. Old Ford would lie in a similarly convenient position, representing about one hour's driving time from the Roman city.¹⁷ It could have been here that the cattle changed hands. The post-Medieval custom for East Anglian herds may provide a useful parallel.¹⁸ "After Stratford the drovers crossed a bridge over the River Lea and entered the village of Bow. By now they were almost at the journey's end, for they were only a short distance from Mile End where the cattle were met and taken over by salesmen, who took them on to Whitechapel and through the City's crowded streets to Smithfield". The amount of coinage could suggest the sale of cattle at Old Ford in the late Roman period.

It would seem unlikely that the cattle slaughtered at Old Ford were intended for city consumption, but other considerations may have been taken into account. In later periods

there were complaints about the stench, filth and disease associated with city butchering habits. During the reign of Edward III as a protective anti-plague measure "it was ordained that no animals be slaughtered nearer to the city eastward than Stratford . . .".¹⁹

Clearly we have evidence from Old Ford of settlement alongside the road in the late Roman period. Associated with this we have a quantity of coinage and slaughtered cattle. Equally clearly claims as to relationships between the coins with the cattle, and indeed the use of the road for cattle droving must as yet be treated as hypothetical.

APPENDIX I
COINS FROM THE EXCAVATION
BY M. J. HAMMERSON

The excavation produced 187 Roman coins; this figure excludes five further fragments which may or may not be clippings from coins. As in the excavation at the adjacent Lefevre Road site (L.M.A.S. 23, Pt. I, p. 66), practically all these date from the Gallic Empire to the end of the Roman occupation in Britain. A summary follows:

			TOTAL
Sestertii, first-second century	..	-	2
Julia Maesa	..	-	1
Gallienus	..	-	3
Salonina	..	-	1
Claudius II	..	Official	2
		Barbarous	2
Tetrici	..	Official	7
		Barbarous	4
Other Gallic Empire	..	Official	1
		Barbarous	13
Carausius	..	Official	5
		Barbarous	4
Allectus	..	-	2
Constantine I	..	-	9
Constantinopolis	..	Official	1
		Barbarous	2
Urbs Roma	..	-	1
Crispus	..	-	2
Helena	..	-	1
Theodora	..	-	1
Constans	..	-	4
Constantine II	..	Official	3
		Barbarous	1
Constantius II	..	Official	3
		Barbarous	8
Other House of Constantine	..	Official	7
		Barbarous	1
Magnentius	..	-	1
House of Valentinian	..	-	12
Magnus Maximus	..	-	1
Theodosius I	..	Official	6
		Barbarous	1
Arcadius	..	-	11
Honorius	..	-	3
Other House of Theodosius	..	Official	20
		Barbarous	1

Other fourth century, otherwise unidentifiable ..	-	2
"Minimi" ..	-	8
Other third-fourth century, otherwise unidentifiable ..	-	30
Medieval ..	-	1
Modern ..	-	2

DETAILED COIN LIST

- Notes:* 1. Left-hand column shows coin numbers as referred to elsewhere in report.
 2. All coins bronze unless stated otherwise.
 3. Numbers in right-hand column are small-find numbers allotted to coins.
 4. Dates refer, where possible, to period during which coin was minted; otherwise, to reigns.
 5. Probable condition at time of deposit indicated by letters in right-hand column: A=little or no wear. B=light wear only. C=average wear. D=fairly heavy wear. E=very heavy wear. Where two letters are given, condition is somewhere between the two grades. "Condition" here means probable condition at time of deposit, not at time of excavation; thus, corrosion effects are, as far as possible, ignored. The categories are the writer's opinion alone, but will, it is hoped, give a relative guide to the length of time a coin might have been in circulation.
 6. "Barbarous" imitations of official coins. While no dates are given in the list, current opinion favours their being contemporary with the coins they imitate, and they are thus classified accordingly here.

Abbreviations: RIC: "Roman Imperial Coinage"

K: J. P. C. Kent, "The pattern of bronze coinage under Constantine I", *Numismatic Chronicle*, 1957


LRB I/II: R. A. G. Carson, P. V. Hill and J. P. C. Kent, "Late Roman Bronze Coinage", Spink and Son, 1965

A. G. Askew, "The Coinage of Roman Britain", Seaby, 1957

	<i>Date</i>		
1. Faustina Jr. RIC(Marcus Aurelius) 1663 ..	d.175	D	303
2. Sest., unidentifiable emperor ..	1st/2nd C.	E	298
3. Julia Maesa AR. RIC(Élagabalus) 271 ..	218-222	B	310
4. Gallienus. RIC 230 (Sole reign) ..	260-8	D	243
5. Gallienus. Ant., Fig. std. L. ..	260-8	C	285
6. Gallienus. Ant. ..	260-8	?	97
7. Salonina. Ant., silver-washed ..	d.268	D	262
8. Claudius II. Ant. Fig. L with cornucopiae ..	270-2	D	55
9. Claudius II. Ant. Fig. L with ?spear ..	270-2	C	308
10. Barbarous, AE 15 mm, Claudius II. Elliptical flan. Std. fig. with ?spear ..		C/D	a
11. Barbarous, AE 7 mm, Claudius II. Type CONSECRATIO (Altar) ..		A	68
12. Tetricus I. Ant. Spes. or Laetitia L., with wreath ..	270-3	C	247
13. Tetricus I. PAX AVG ..	270-3	C	266
14, 15. Tetricus I. Ant'i. Fig. L ..	270-3	C, B	85,305
16. Tetricus I. Ant. Fig. L. Coin clipped ..	270-3	C	22
17, 18. Tetricus I. Ant'i. Fig. std. ..	270-3	C	117,302
19. Barbarous, AE 17 mm, Tetricus I, Type Virtus L. with spear. Oval flan ..		A/B	PR. 3
20. Barbarous, AE 12 mm. Tetricus I ..		C	142
21. Barbarous, AE 17 mm, Tetricus I ..		B/C	252
22. Barbarous AE 12 mm, Tetricus I or II. Fig. L, with transverse spear or palm ..		D	216
23. AE Ant., unidentifiable Gallic usurper ..	259-73	C/D	235
24-36 "Barbarous Radiates"			

24. AE 19 mm	..		C	198
25. AE 18 mm. Providentia L, with sceptre and cornucopiae	..		B/C	178
26. AE 17 mm. Draped fig. L. with olive branch and sceptre	..		C	139
27. AE 15 mm. Draped fig. L, with palm and cornucopiae. Flan almost square, corners rounded	..		B	191
28. AE 14 mm. Arm visible, holding wreath L, type LAETITIA	..		A/B	156
29. AE 14 mm. Pietas type (sacrificial implements)	..		C/D	35
30, 31. AE 14 mm. Fig. L, with spear and sceptre	..		C	264,288
32. AE 11 mm. Spindly fig. advancing L. Flan. almost diamond-shaped	..		C/D	166
33. AE 10 mm. Fig. std. L. Almost triangular flan.	..		D	113
34. AE 10 mm. Struck on fragment of official coin	..		D	161
35. AE 17 mm. Fig. std. with spear	..		B	79
36. AE 5 mm	..		C/D	31
37, 38. Carausius. RIC 118 (London)	..	287-93	C, A	25,134
39. Carausius. RIC 121 (London)	..	287-93	A	294
40. Carausius. RIC 98-117 (London)	..	287-93	C/D	115
41. Carausius. Ant., type PAX AVG. Clipped into triangular shape with rounded corners and concave sides	..	287-83	B	263
42. Barbarous AE 20 mm, Carausius. Overstruck on Tetrican Ant. Reverse, fig. std. L, with two spears or standards; inscription I II I II II II II II	..		B	246
43. Barbarous AE 21 mm, Carausius. Type PAX AVG, olive branch and vertical sceptre	..		C	177
44. Similar, AE 20 mm	..		B/C	118
45. Similar, AE 18 mm	..		B/C	7
46. 47. Allectus. RIC 124 (Colchester)	..	293-6	A	185, 26
48. Constantine I. K-188 (Trier)	..	317-20	B	271
49. Constantine I. K-378 (Arles)	..	317-20	B	67
50. Constantine I. VIRTUS EXERCITI VOT XX. Mint mark TSE	..	317-20	A	290
51. Constantine I. K-207 (Trier)	..	320-4	A	100
52. Constantine I. K-212 (Trier)	..	320-4	A	124
53-55. Constantine I. K-215 (Trier)	..	320-4	A	105, 132, 217
56. Constantine I. K-312 (Lyons)	..	320-4	C	295
57. Constantinopolis	..	330-7	C	188
58. Barbarous, AE 17 mm, Constantinopolis. Imit. mint of Siscia	..		A	5
59. Barbarous, AE 10 mm, Constantinopolis	..		B	279
60. Urbs Roma	..	330-41	C/D	196
61. Crispus. K-216 (Trier). Flan cracked in striking	..	320-4	A	60
62. Crispus. Either K-86, 89 (London), 209, 213 (Trier), 313 or 316 (Lyons)	..	320-4	B	119
63. Helena. Probable LRB I-135 (Trier)	..	337-41	D	187
64. Theodora. LRB I-113, 120 or 129 (Trier)	..	337-41	C	54
65. Constans. LRB I-140 (Trier)	..	341-6	B	237
66. Constans. LRB I-155 (Trier)	..	341-6	C	28
67. Constans. LRB I-156/7 (Trier)	..	341-6	B/C	200
68. Constans. LRB I-449 (Arles)	..	341-6	B/C	213
69. Constantine II. A-867 (London)	..	324-6	A/B	258
70. Constantine II. LRB I-193 (Trier)	..	335-7	A	244
71. Constantine II. VICTORIAE DD AVGGQ NN. Western area mint	..	341-6	C/D	162
72. Barbarous AE 18 mm, Constantine II, type VIRTUS AVGG, imitating LRB I-306 (Arles); mint mark M.V. L. Very good copy	..		A	272

73. Constantius II. LRB I-40 or 46 (Trier)	..	324-30	A	208
74. Constantius II. LRB I-135 (Trier)	..	337-41	C	186
75. Constantius II. FEL TEMP REPARATIO (horseman), clipped to AE4 size	..	346-60	C	233
76-83: <i>Barbarous imitations of FEL TEMP REPARATIO (Fallen horseman)</i>				
76. AE 15 mm	..		D	b
77. AE 15 mm	..		A/B	201
78. AE 15 mm	..		C	204
79. AE 13 mm	..		A/B	203
80. AE 12 mm	..		A/B	81
81. AE 11 mm	..		D	190
82. AE 10 mm	..		D	207
83. AE 9 mm	..		A/B	239
84-90: <i>Other House of Constantine (official), emperors uncertain</i>				
84. Crispus or Constantine II. AE Follis. K-216 or 217 (Trier)	..	320-4	B/C	65
85, 86. AE4, GLORIA EXERCITUS (2 standards)	..	330-5	E	168, 1
87. AE 4, GLORIA EXERCITVS (2 standards), Trier	..	330-5	C	PR. 1
88. 89. Constans or Constantius II. AE4, VICTORIAE DD AVGGQ NN. Western mint	..	341-6	?,D/E	2, 12
90. Constans or Constantius II. Clipped fragment of AE4 GLORIA EXERCITVS. Fragment contains right-hand soldier and small part of exergue	..	341-6	?	128
91. Barbarous AE 13 mm, type GLORIA EXERCITVS (1 standard), imit. Arles mint	..		B/C	171a
92. Magnentius. AE3, VICTORIAE DD AVGG ET CAES VOT V MULT X (Western mint)	..	351-3	B/C	171b
93. Valens. LRB II-97, 104 or 120 (Trier)	..	364-75	A	311
94. Valens. LRB II-319 (Lyons)	..	367-75	C	197
95. Valens. AE3 SECVRITAS REIPVBLICAE. Half coin only	..	364-75	C/D	280
96. Valens. Sliver of bronze, cut off edge of AE3 type GLORIA ROMANORUM, with only VALE and GLORI on it	..	364-78	?,C	180
97. Valens or Valentinian I. AE3, GLORIA ROMANORVM (Trier)	..	365-75	B/C	3
98. Valens or Valentinian I. AE3, type SECVRITAS REIPVBLICAE. Half coin only	..	364-78	C	227
99. Uncertain AE3 SECVRITAS REIPVBLICAE. Half coin only	..	364-78	C/D	172
100. Gratian. AE3 SECVRITAS REIPVBLICAE (Siscia or Thessalonica)	..	367-75	C	241
101. Gratian. AE3, type uncertain	..	367-75	A	64
102. Magnus Maximus. LRB II-795 (Rome)	..	387-8	C	29
103, 104. Valentinian II. LRB II-1105 (Aquileia)	..	388-92	C	222, 291
105. Valentinian II. AE4 SALVS REIPVBLICAE, Eastern area mint	..	388-92	C	122
106. Theodosius I. AE 4, VICTORIA AVGGG. Western area mint	..	383-95	B/C	167
107. Theodosius I. LRB II-169 (Trier)	..	388-92	C/D	293
108, 109. Theodosius I. LRB II-565 or 568 (Arles)	..	388-95	B	116, 228
110. Theodosius I. LRB II-1106 or 1109 (Aquileia)	..	368-95	C	20
111. Theodosius I. LRB II-2577 (Cyzicus)	..	393-5	A	184
112. Barbarous AE4, Theodosius, type VICTORIA AVGGG. Good copy, but poor, irregular lettering, and large nose on obverse portrait	..		B	234

113. Arcadius. Clipped fragment (c. quarter coin) of AE2, GLORIA ROMANORUM ..	383-95	B/C	52
114. Arcadius. LRB II-566, 569 or 571 (Arles) ..	388-95	C	269
115. Arcadius. LRB II-566 or 569 (Arles) ..	388-95	C	287
116. Arcadius. LRB II-392 (Lyons) ..	388-92	B	277
117. Arcadius. AE4, VICTORIA AVGGG. Gallic, Roman or Adriatic mint ..	383-92	C/D	259
118, 119, 120. Arcadius. AE4 VICTORIA AVGGG. Gallic, Roman or Adriatic mint ..	383-95	C/D	206, 218, 240
121. Arcadius. LRB II-801 or 805 (Rome) ..	388-95	B/C	211
122, 123. Arcadius. AE4, type SALVS REIPVBLICAE ..	388-402	B	69, 179
124. Honorius. LRB II-806 or 809 (Rome) ..	394-402	C/D	209
125. Honorius. LRB II-810 (Rome) ..	395-402	C/D	254
126. Honorius. LRB II-811 (Rome) ..	402-8	C/D	224
127-146. Other House of Theodosius, Emperors unidentifiable			
127-137: Type VICTORIA AVGGG.			
138-146: Type SALVS REIPVBLICAE.			
127. LRB II-386-96 (Lyons) ..	388-95	D	62
128. LRB II-562-72 (Arles) ..	388-95	C/D	273
129. AE4. Western area mint, possibly Rome. Clipped ..	378-402	C	299
130, 131, 132. AE4, Western area mint ..	388-95	C,C,A	15, 176, 260
133, 134, 135, 136. AE4 ..	388-95	D-E	16, 129, 245, 289
137. AE4, probably VICTORIA AVGGG ..	383-402	C/D	195
138. LRB II-806-9 (Rome) ..	394-402	D	275
139. AE4, Rome or Eastern area mint ..	399-402	C/D	183
140. AE4, ?Rome ..	388-408	C	251
141, 142, 143. AE4, rev. types uncertain ..	388-402	?	24, 214, 225
144. AE4. Only one-third of coin remaining ..	383-95	?	137
145. AE4, detail lost. High lead content suggests mint of Rome ..	378-408	?	114
146. AE4, rev. type uncertain ..	378-408	?C	227
147. Barbarous House of Theodosius, AE 11 mm, type VICTORIA AVGG. A short knife-incision has been made, cutting into the edge ..		A	221
148. AE4, fourth century, uncertain type. Obv. Diad. head R. . .		?	160
149. AE 8 mm, fourth century, diad. head R ..		B/C	192
150-157. Barbarous "Minimi", third and/or fourth century. All have good round flans except 155. No detail visible unless stated			
150, 151, 152. AE 8 mm ..			17, 210, 212
153, 154. AE 7 mm ..			169, 248
155. AE 6 mm. Probably clipped from larger coin ..			18
156. AE 6 mm, ?std. fig. on reverse ..			155
157. AE 5 mm ..			256
158-185. Other third/fourth century coins. All detail lost; Numbers in brackets are, first, small find number; and second, diameter in millimetres			
158 (53-18); 159 (61-14); 160 (26-13); 161 (120-13); 162 (11-12); 163 (78-12); 164 (143-12); 165 (205-12); 166 (32-12); 167 (23-11); 168 (71-11); 169 (166-11); 170 (215-11); 171 (238-11); 172 (PR2-10); 173 (56-10); 174 (157-c.10 mm. Only half coin remaining; possibly clipped); 175 (144-9); 176 (151-8); 177 (63-7).			
178. AE 13 mm. One quarter of coin has been cut off, thus: 			220
179-185 (6, 21, 126, 145, 146, 159, 193). All small clipped fragments of coins			
186. Barbarous AE 11 mm. third/fourth century ..			181

187. Barbarous AE 10 mm, third-fourth century. Obv. Head R (portion with diadem or radiate crown broken off); rev. fig. L	..	B	236
188-192 (19, 133, 163, 202, 261). Small bronze fragments, possibly from coins	..	B	PR. 4
193. French Jeton	..	E	30
194. George III, 1d.	..	A	36
195. Edward VII. ¼d.	..		

Analysis of Identifiable Fourth-Century Mint Marks

DATE	"WESTERN AREA"					"EASTERN AREA"					TOTAL
	London	Trier	Arles	Lyons	Other	Rome	Aquileia	Siscia/ Thessalonica	Cyzicus	Other	
317-24	1	6	1	1	1						10
326-41		6									6
341-60		3	1		4						8
364-78		2		1			2	1		1	7
378-95		1	5	2	5	2	1		1		17
378-402					4	1					5
395-408						5				1	6
TOTAL	1	18	7	4	13	8	3	1	1	2	

Coins from the sites, as a percentage of each period of occupation (total number in brackets)

Period	..	Lefevre Rd.	Appian Rd.	Average
		1969/70	1971	
First-second century	..	5 (9)	1 (2)	3%
Third century	..	27(46)	25(45)	26%
House of Constantine	..	24(41)	25(45)	24.5%
House of Valentinian	..	14(31)	5(12)	9.5%
House of Theodosius	..	12(21)	23(43)	17.5%
Other third/fourth century (unidentifiable)	..	14(24)	21(40)	17.5%

Proportion of Barbarous imitations to official issues

	..	Lefevre Rd.	Appian Rd.
		1969/70	1971
To mid-third century	..	—	—
Gallienus - Claudius II	..	2 out of 8	2 out of 8
Gallic Empire	..	7 out of 29	17 out of 25
House of Constantine	..	9 out of 41	12 out of 45
House of Valentinian	..	1 out of 31	Nil out of 12
House of Theodosius	..	4 out of 21	2 out of 42

The 1971 percentage table shows continuing emphasis of activity at the site down to the latest period of the Roman occupation, especially toward the latest phase of the period; activity prior to the mid-third century continues to appear almost non-existent.

A regrettable factor is the large number of unidentifiable coins. However, if the average total of 17.5% is allotted proportionately between the third century, Constantinian and Valentinianic/Theodosian coins from the two years' excavations the allocation to each category would be approximately equal, *i.e.* c. 6%, and any conclusions reached need not be altered.

The table of Barbarous imitations shows the predominance of irregular coin production to have occurred under the Gallic Empire; there is a marginal increase in the number of Constantinian imitations, but a considerable decrease of imitations amongst later issues. Clipping or other defacement was noted among the coins classified as unidentifiable, and these cannot be attributed to any of the above periods.

Slight evidence may be inferred for the production of irregular coinage at the site, or nearby, from the clipped coins found (List Nos. 16, 27, 34, 41, 75, 90, 95, 96, 98, 129, 144, 155, 179-85, and bronze fragments 188-92). These appear to cover the entire period of occupation on the site. Of greater interest in this connection is No. 147, a barbarous Theodosian coin which has a short cut through the flan; and 178, unfortunately unidentifiable, from which a quarter of the coin has been cut. No inference can be made regarding the origin of the Carausian overstrike No. 42.

SUMMARY OF COIN FINDS FROM THE EXCAVATION

listed according to archaeological strata where discovered (Numbers refer to list numbers given in detailed coin list). (For dating, see detailed list)

APPIAN ROAD: Trench 1

Clearing Layer: 162, 194, 195

Layer 1

10, 16, 29, 35, 36, 37, 45 (Claudius II-Carausius); 58, 64, 66, 75, 76, 84, 88, 89 (Constantinian); 101, 102 (Valentinianic); 110, 122, 125, 130, 133, 141, 144 (Theodosian); 150, 155, 158, 159, 160, 163, 164, 166, 167, 168, 179, 180 (other third/fourth century).

Layer 2: 156 ("Minim").

Layer 3: 17, 40, 44 (Tetrici-Carausius); 90 (Constantinian); 134, 145 (Theodosian); 181, 189 (other third/fourth century).

Road Surface "A":

8 (Claudius II).

Road Gravel (top):

175, 176, 182, 183 (other third/fourth century, unidentifiable), 127 (Theodosian, 388-95).

Road Surface under L1:

113 (Arcadius).

Brown earth above sand B:

56 (Constantinian).

Top of Sand B nr. F.1:

39 (Carausius).

Feature 1:

6, 11, 14, 20, 26, 38 (Gallienus-Carausius); 49, 51, 52, 53, 59, 61, 62, 80 (Constantinian); 93, 95 (Valentinianic); 173, 177 (other third/fourth century).

Feature 4:

33 (Barbarous radiate); 105 (Valentinian I); 108 (Theodosius I); 146 (Theodosian).

APPIAN ROAD: Trench 2:

Top of Roman strata:

34 (Barbarous radiate); 71 (Constantinian); 148 (Theodosian); 174, 184 (other third/fourth century).

Layer 1:

5, 22, 24, 27, 32 (Gallic Empire); 54, 55, 57, 67, 68, 73, 74, 78, 79, 82, 85, 91, 92 (Constantinian); 94, 96, 98, 99, 102 (Valentinianic); 106, 109, 111, 118, 119, 121, 123, 124, 126, 131, 137, 139, 142, 143, 147, 149 (Theodosian); 151, 152, 153, 165, 169, 170, 178, 185, 186, 190, 191 (other third/fourth century).

Layer 2:

25, 43 (later third century); 77, 81 (Barbarous Fel. Temp. Reparatio).

Layer 3:

12, 23, 31, 42 (Gallic Empire-Carausius); 112 (edge of F2), 116 (edge of F3) (Theodosian); 192 (probably not a coin) (AE Fragment).

Layer 4:

30, 41, 47 (Gallic Empire-Allectus); 114 (Arcadius).

Layer 5:

1, 2 (first-second century); 9, 15 (270-3).

Sand below L.5:

3 (218-222).

Feature 1:

60, 63, 86 (Constantinian).

Feature 2:

28 (Barbarous Radiate); 65 (Constantinian); 187 (other third/fourth century).

Feature 3:

4, 7 (Gallienus); 50, 69, 70, 72, 83 (Constantinian); 100, 104 (Valentinianic); 107, 115, 117, 120, 128, 129, 132, 135, 136, 138, 140 (Theodosian); 154, 171 (other third/fourth century).

Feature 4:

13 (Tetricus I).

Feature 5:

21 (Tetricus I); 48 (Constantine I, 317-20); 157 ("Minim").

Feature 7:

18 (Tetricus I).

APPIAN ROAD: Area of modern disturbance at the east of the site:

All strata in this trench were disturbed by modern work: 46 (Allectus); 172 (other third/fourth century).

PARNELL ROAD:*PR.1, L.1:*

87 (Constantinian), 330-5.

P.3 in T.4:

19 (Barbarous Radiate).

PRT.4:

193 (Medieval).

T.3, L.1:

172 (third/fourth century).

APPENDIX 2
ANIMAL BONES
BY DERRICK RIXSON

INTRODUCTION

The animal bone was, on the whole, fragmentary but in a good condition. The only whole bones were as follows:

<i>Cattle</i>	1st Phalanx	34
	2nd Phalanx	19
	3rd Phalanx	12
	Radius	1
	Metatarsus	1
	Metacarpus	1
	Astragalus	1
	Patella	1
<i>Horse</i>	2nd Phalanx	1
	3rd Phalanx	1
	Radius	2
	Metatarsus	1
<i>Dog</i>	Metacarpus	1
	Cervical Vertebrae	4

Much of the cattle bone bore signs of chopping which probably occurred during the butchering of these animals and could have been a major contributory factor to the fragmentary nature of this bone.

The few horse bones were mainly whole. The dog bones were found together in one feature.

The total bone, although considerably less than that obtained from the 1969-70 excavation, was very similar in condition and the ratio of species represented; the main bulk being of cattle bone.

METHOD

The bones of each trench and layer were sorted and recorded separately. They were sorted into specie and then into skeletal order. The details recorded under each specie were:

Number of bones or fragments of each bone.

Minimum number of animals in each specie (Table 1).

Any evidence of fusion or non-fusion of the epiphyses or tuberosities.

Age category based on the fusion state of bones and dental state (Table 2).

Number of animals represented by bones of different parts of the body (Table 3).

Measurement of the length, proximal width, mid shaft width and distal width of bones (Table 4).

The minimum number of individuals were recorded for each bone; this means that six distal right humerus and two distal left humerus would equal a minimum number of six individuals. The total of individuals for each trench-layer would be the highest number of individuals recorded against any single bone; likewise, the totals for each age category. The totals of individuals for the site are the sum of the totals of each trench-layer.

The fragments of skull, maxilla, premaxilla, horn core and mandible were listed separately. The teeth, including loose teeth, were sorted into incisors, canines, upper and lower premolars and upper and lower molars and, where possible, the numbers of the teeth, e.g. third molar, third temporary molar. The age categories are as follows:

		Cattle	Sheep	Pigs
A	..	Less than 1 year	Less than 1 year	Less than 1 year
B	..	1 - 2½ years	1 - 2 years	1 - 2 years
C	..	2½ - 4 years	2 - 3½ years	2 - 3½ years
D	..	4 years and over	3½ years and over	3½ years and over
E	..	Aged	Aged	Aged

These figures are approximate and there will be some degree of overlap of the categories. The individual animals were placed into these age categories according to bone fusion and tooth eruption. The categories B/C and C/D include those individuals which belong to one or other of the two categories, but could not with certainty be placed in either of them. The evidence for placing individuals into Category E was based solely on excessive wear of the third molars and incisors of cattle and sheep, particularly the corner incisors.

Some of the bone material was adequate to define a separate individual, but was not that part of the bone that would show evidence of age; therefore, the total number of individuals exceeds the sum of the totals of the separate age categories.

The division of bones for the different parts of the body was as follows:

Forequarter	..	Radius, ulna, humerus, scapula, cervical and thoracic vertebrae.
Hindquarter	..	Tibia, femur, patella, pelvic, lumbar and sacral vertebrae.
Feet	..	Carpals, tarsals, metatarsals, metacarpals, phalanges.
Head and Teeth	..	Skull, mandible, horn core, teeth.

The division of bones into these categories can aid conclusions relating to social and economic significance of the bone material.

FINDINGS

Cattle (*Bos Taurus*). There were a minimum number of 37 animals represented by the bone material. The bones were fairly evenly representative of all parts of the animal's body (Table 1). This, coupled with the evidence of chopping, would indicate that the animals had been slaughtered for local consumption. The evidence showed that there were approximately half as many immature (A-C categories - Table 2) cattle as there were mature animals (D and E categories - Table 2). In the previous report this ratio had been about equal. The aged animals were obviously breeding stock, milk cows or draught animals which had been slaughtered at the end of their servicable life. Those animals falling into the D category (Table 2) may have been originally used as breeding stock, milk cows or draught animals but this category could equally include cattle that had been reared specifically for beef as it was quite common in the past for beef cattle to reach 4-5 years of age before slaughter.

Category D (Table 2) probably includes some animals that were aged, as the extreme wear of the third molars was the only criteria for placing the individuals shown under Category E; very few incisor teeth were found. Some of the individuals placed in Category D would certainly have been young, fully mature cattle.

Those animals in the B and C categories could have been cattle reared specifically for beef. Alternatively they were possibly reared for breeding stock, milk or draught and then slaughtered off because of a change of circumstances. They may have been casualty or diseased animals.

The animals in the A category were most likely casualty or diseased animals or those animals slaughtered off because there were too many for the winter keep available.

Among the bovine remains there was the part of one mandible having only two premolars (there was no alveolus for the second premolar). Meek and Grey, reporting on excavations at Corstopitum¹ recorded finding the mandibles from thirteen animals similarly possessing only two premolars.

The bovine teeth included the third lower molars from two animals having only two cusps (Plate 4) and the third lower molar from one animal having only a rudimentary third column (Plate 1). (One two-cusped third lower molar was mentioned in the previous report and, as stated then, this is probably a genetic feature that has been reported in Iron Age and Saxon cattle remains as well as Romano-British).

One third upper molar which was worn down to the small central column on the lingual surface of the tooth showed peculiar wear of the posterior cusp in that on the posterior side of the tooth, it was almost as long as the tooth had been on eruption (Plate 3). The worn surface of the posterior cusp was in a straight line from the posterior surface of the tooth to the centre of the tooth. This resulted in the posterior cusp being much longer than the anterior cusp. Such wear of an upper third molar would be consistent with a two-cusped third lower molar and may have ultimately resulted in gum troubles due to the posterior cusp of the upper molar cutting into the lower gum.

The top half of a bovine metatarsal was found which appeared to have two distinct layers of bone growth (Plate 2); an inner and an outer layer. The outer layer broke away from the inner layer at the shaft cleanly, leaving a very smooth surface to the inner layer similar to the periosteal surface of the shaft of a normal bone. The double layers extended right into the proximal extremity.

Sheep (*Ovis aries*). There was a small amount of bone from sheep representing a minimum of six animals; two being 2-3½ years old and one 1-2 years old (Table 2). There was the same evidence of chopping indicating butchery.

Pigs (*Sus scrofa*). The bone remains of pigs was equally small, representing a minimum of six animals; three of which were less than 3½ years old (Table 2). These bones also showed evidence of butchery.

Horses (*Equus caballus*). The bone remains of horses included a high proportion of whole bone compared with the rest of the material. This, coupled with the fact that there were no signs of chopping, would support a conclusion that these animals were not butchered. There was a minimum of five horses represented by the material; two of them being young animals under 3½ years old (Table 2). The largest of these would have been about 14½ hands and two about 13½ hands.

Dogs (*Canis familiaris*). There were the remains of two dogs found in one feature. Both would have been of medium size (about 35 cm high).

The reason for this habitation to have existed at this particular spot gives scope for hypothesising. If it had been a site for the slaughter of animals to supply meat to the City of London, one would expect to find bones of the feet and head representing large numbers of individuals, with only small numbers of the main carcase bones (*i.e.* those of the hindquarter and forequarter). If cattle had been slaughtered here to supply the city, then the carcasses after slaughter and evisceration must have been taken to the city complete with head and feet.

It is possible that cattle being driven in from Essex to supply the city, were held at this point, after fording the River Lea, until they were ready to be received at the slaughter points in the city. If cattle were being driven in from Essex, it would have taken a number of days for the journey and they would have been unlikely to arrive at the time they were required, therefore a holding point would have been necessary. In any event, it would have been most advisable at this time in history, to get the cattle across the ford and hold them on the city side of the River Lea. The bones found at the site may be the remains of animals slaughtered to feed the drovers and others residing at this site. The relatively small amount of sheep and pig remains, compared with cattle, is difficult to explain. Essex was an area more suited to cattle and pigs than sheep rearing, which could help to explain the lack of sheep numbers.

TABLE I—MINIMUM NUMBER OF ANIMALS IN EACH SPECIE

<i>Cattle</i>	<i>Sheep</i>	<i>Pig</i>	<i>Horse</i>	<i>Dog</i>
37	6	6	5	2

Metatarsals	Prox.W.	47
	M.S.W.	30
	Dist.W.	50
	T.L.	272

Note: Prox.W.—Maximum width (medial to lateral) of the proximal extremity.

Dist.W.—Maximum width (medial to lateral) of the distal extremity.

M.S.W.—Mid shaft width (medial to lateral).

T.L.—Total overall length.

The last three bovine third molars were those with only two cusps.

NOTES

1 *Arch. Ael.*; 3rd ser., v. ii.

APPENDIX 3

METAL OBJECTS AND METALLURGICAL WASTE PRODUCTS

BY R. TRIBBICK

I. METAL OBJECTS

A. Non-Ferrous metal

This is confined to base metals.

1. Pin, Bronze, 9 cms long but not complete at point.
Head of two annular raised rings integral with shank and not attached thereto by soldering. Tin content 4%. Illustrated. AR.F.1.
2. Penannular brooch, Bronze, 2.1 cms diameter. No pin and no evidence of wear from pin. One terminal of flattened spiral-rolled type, neatly formed, the other not completed, as it split during forming the flattened end. Illustrated. Fowler¹ Type C and Camulodunum² Type A. AR.2.L1.
3. Ring, Bronze, 2.3 cms diameter inside, D section. No decoration. Weight 2.7 grms. Illustrated. AR.2.L5.
4. Ring, Bronze, 1.8 cms diameter inside. Flattened round section. Weight 2.2 grms. This seems too small for wear and it is possibly an intermediate stage of production. Illustrated. AR.2.L1.
5. Bracelet, Bronze, part only, about 6 cms diameter when complete. Formed from three wires, two yellow and one red bronze in that order, spirally twisted, reduced to two at the end which was slightly pointed by hammering and originally soft soldered into a tubular terminal decorated with two annular raised rings, reminiscent of the pin-head 1. Illustrated. AR.2.L5.
6. Mirror fragment, Speculum Bronze, 2 mm thick. One face highly polished, other smooth. Both faces only slightly discoloured. Heavy corrosion where contaminated with foreign material.
Curvature of bevelled edge suggests original diameter of about 15 cms. Original fractured edges indicate very brittle alloy. Fresh fracture brittle and white in colour. Tin content 24.7%. Illustrated. AR.2.L5.
7. Pin Head, Bronze, pyramidal. Illustrated. AR.Fr.
8. Ornamental Strip, Bronze, 4 cms long, 4.5 mms wide, decorated with repeated patterns composed of square dots arranged in S form. The spacing between the dots appears regular but the spacing between the groups is slightly irregular which suggests the use of a multiple punch such as that illustrated. Depression of the spaces between the dots seems to support this. AR.2.F3.
9. Strip, Bronze, 2.7 cms long, 3.5 mms wide, crude irregular markings. Illustrated. AR.2.L1.
10. Shaped Bronze bar, 26 cms long, 455 grams weight. Tin content 4.9%. Lead 5.7%. One end hammered to plano-concave shape 6 cms diameter with central hole 1.1 cms diameter. Two filed ears at junction with shank. Hole at opposite end 1.1 cms diameter. Bend of arm and distortion of fractured concave end suggests horizontal mounting. Illustrated half size. AR. Top of Sand B.
This object was incorporated in the top of the sand used to raise the level of the southern side of the road. It could be one of the arms forming the horizontal cross-post of the Roman surveying instrument known as a "groma".
"The Roman Land Surveyors" by O. A. W. Dilke (David and Charles, 1971) includes an illustration of the dismantled "groma" from a first century A.D. North-Italian tombstone, p. 50.
11. Tube, Bronze, 6.7 cms long, 5 mms diameter outside. Formed from sheet. Seam apparently dry (not soldered). AR.2.F3.

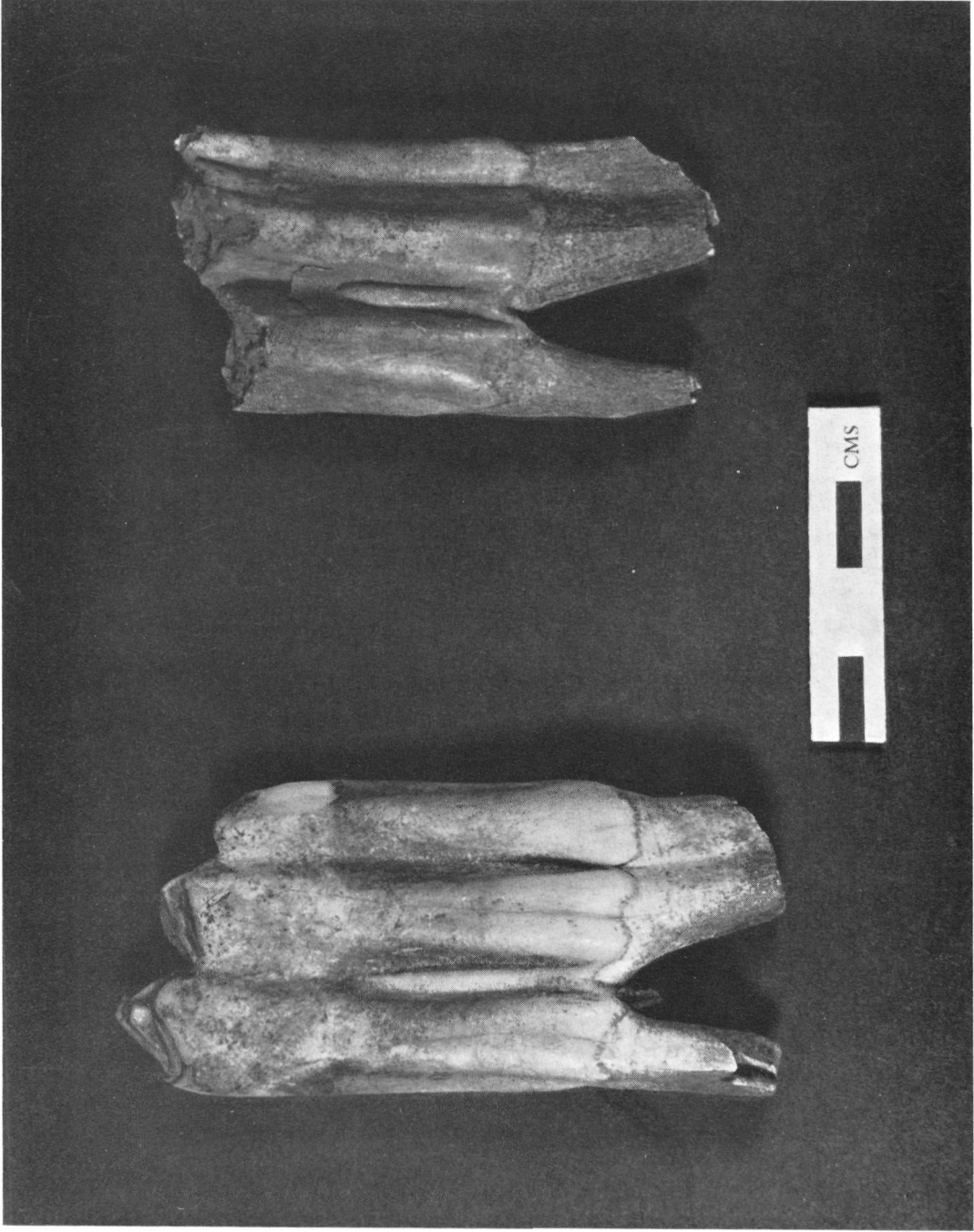


PLATE I. Bovine third lower molar having a rudimentary third column is shown on the right.
A normal bovine third lower molar is shown on the left.



PLATE 2. Two aspects of a bovine metatarsal showing distinct separate layers of bone. Above can be seen the very smooth outer surface of the inner layer. The picture below shows the two layers running together to the top of the bone.

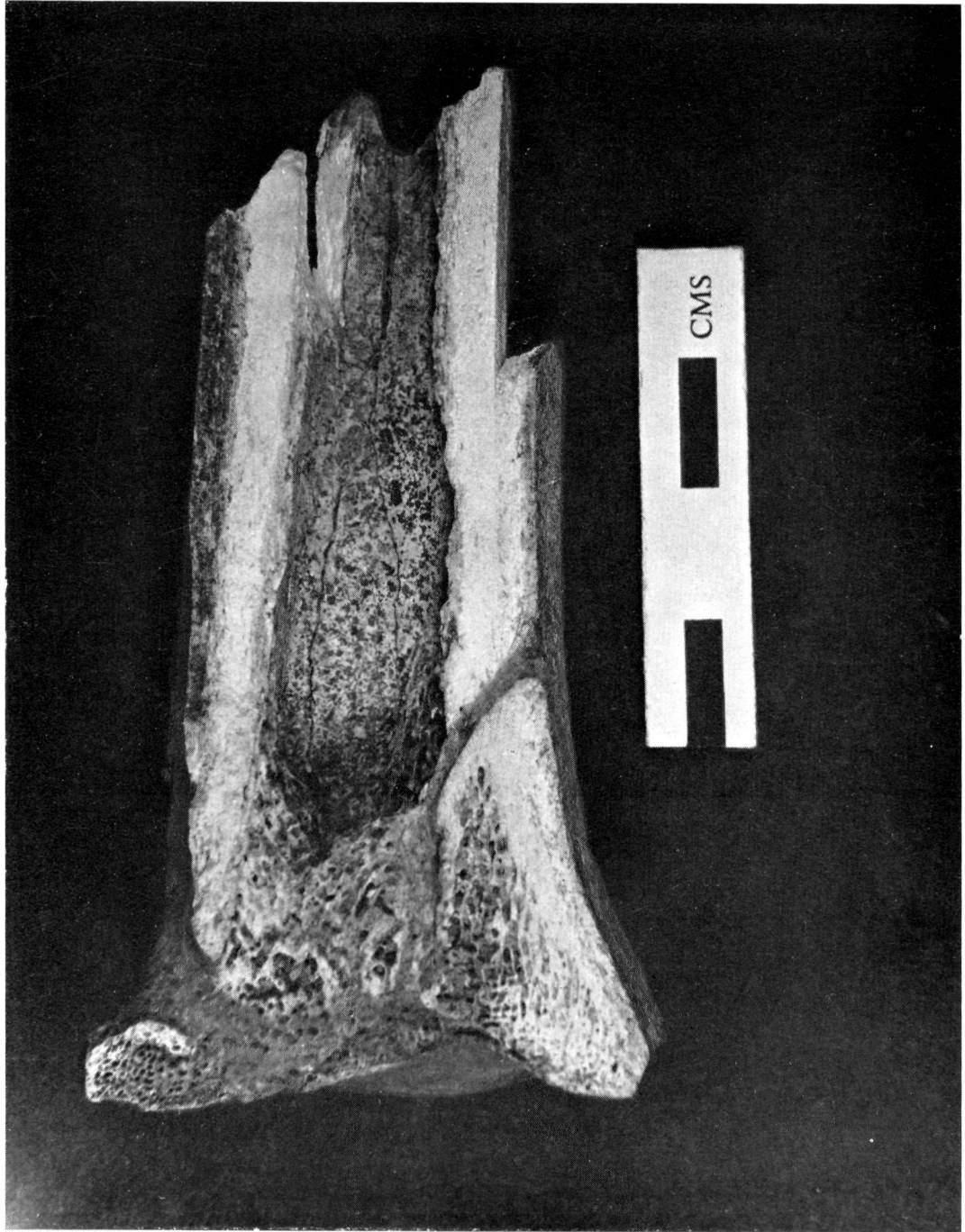




PLATE 3. Bovine third upper molar showing normal wear of the anterior cusp, but lack of wear of the posterior part of the posterior cusp.

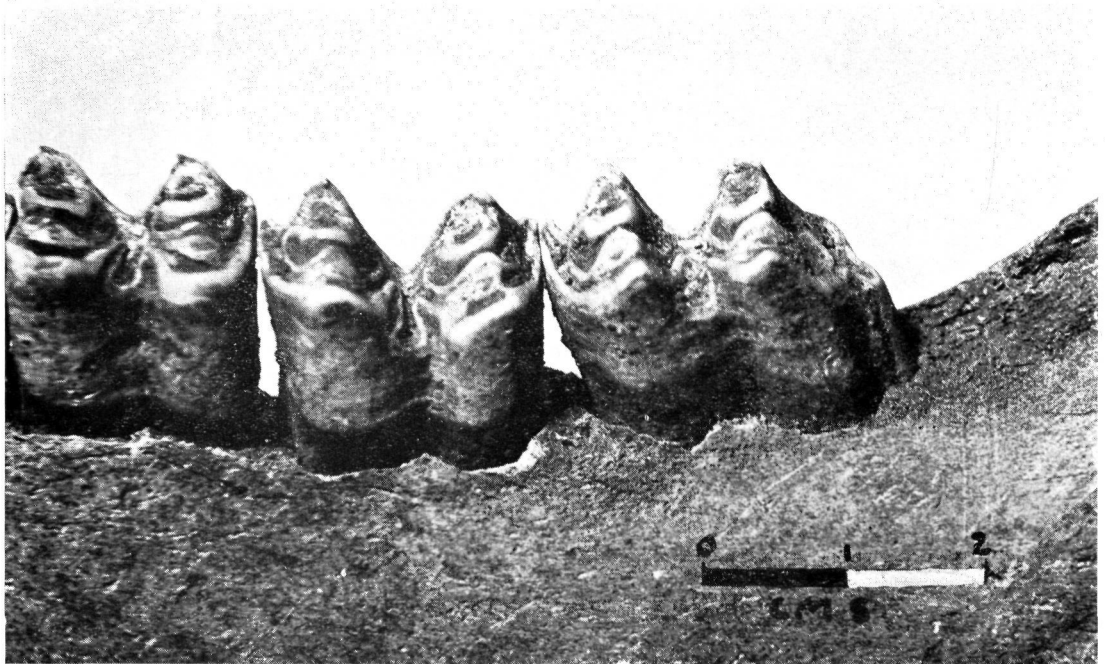


PLATE 4. Mandible of a bovine having a third molar with only two cusps.

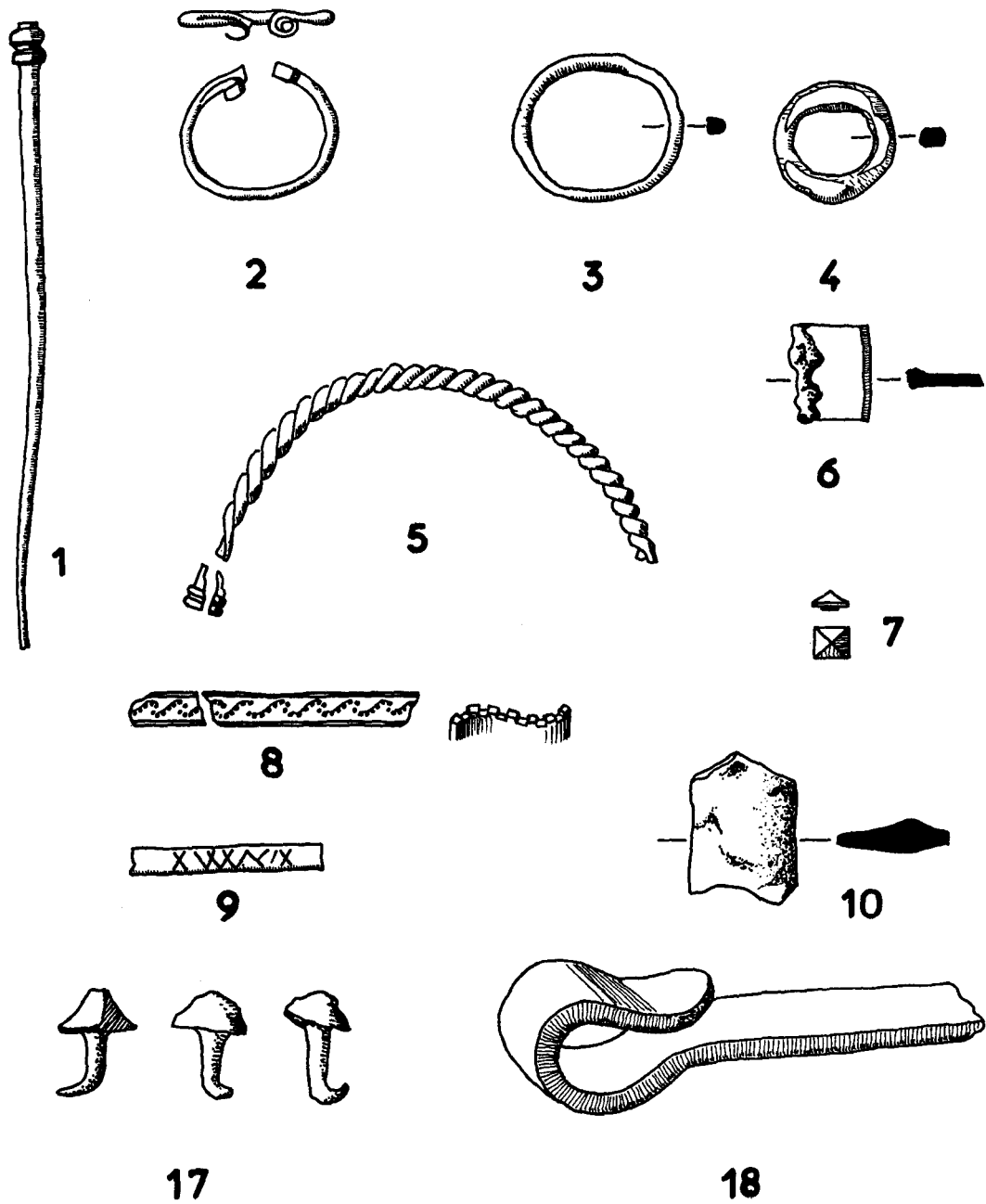
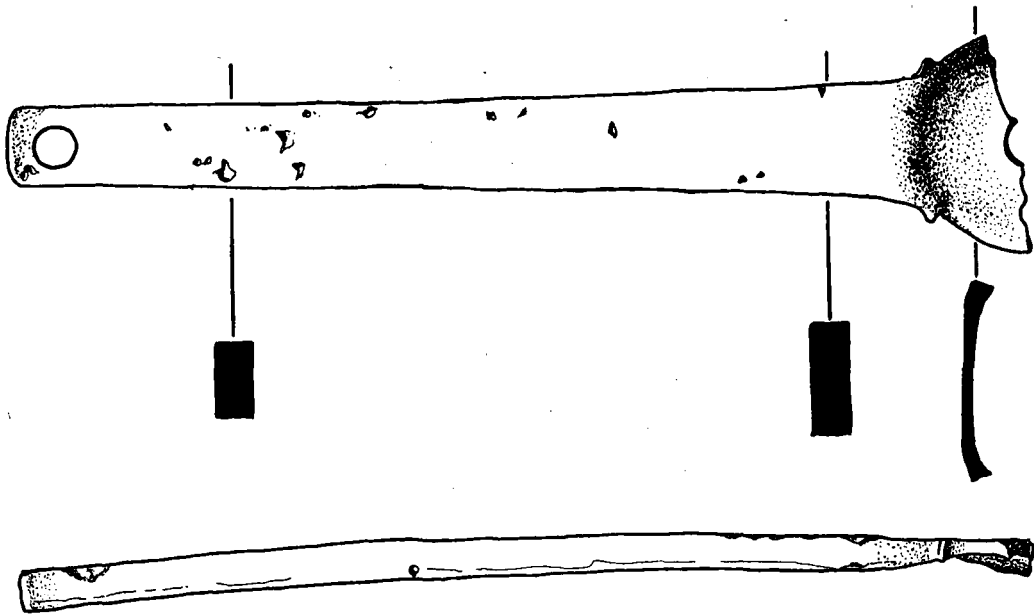


Fig. 12
Metal objects (actual size)



10

Fig. 13
The shaped bronze bar (half actual size)

12. Tube, Bronze, 1 cm long, 1.5 mms diameter outside, .75 mms bore. Apparently used as wire in a spirally-wound object such as Bracelet 5. Seam spiral to axis. AR2.L1.
 13. Curled fragment, Lead. Sheet material 2 mms thick. Result of trimming the rough edge of a sheet with shears or with a chisel using a shearing action. AR2.L1.
 14. Fused fragments, Lead. AR2.L1.
 15. Shaped piece. Lead with cut point. Possibly raw material from which pieces have been cut. (The bronze objects are of leaded bronze). Illustrated. AR.L1.
B. Ferrous Metal
 16. Nails, general purpose. Quantity 63. Three of these clinched-over (object about 2 cms thick). Various locations—see distribution table.
 17. Nails. Hob-nail proportions. Quantity 26. Three cleaned examples illustrated. AR.F1 and AR2.L2.
 18. Hook shaped strip, incomplete at straight end. Illustrated. AR.F1.
 19. Strip 8 cms long, 2.5 cms wide. AR.F1.
 20. Chisel 8 cms long, 5.5 cms across blade edge. AR.F1.
 21. Staple 2.5 cms long. AR2.L2.
 22. Nail, 2.5 cms long, in clean sharply-defined condition, uncharacteristic of this excavation. Soft dark-red pigment under head. Iron oxide chemically, but not a corrosion product. State of preservation of the nail suggests the production of a stable oxide skin by burning of the object which contained it. AR.L1.
- All iron, with the exception of 22, was severely distorted by local soil concretion and the items above represent the recognisable items. About an equal weight of unrecognisable material was submitted (Item 23).

AR1.F1. and PR.T5.F1.

II. METALLURGICAL WASTE PRODUCTS

24. Smithing residue. Sand/Iron silicate mixture loosely fritted. Six pieces up to 2 cms on major axis. External colour varied over surface from blue-black to pale straw, vitreous texture. Examination of fracture surfaces showed that all consisted of white sand-grains cemented by varying amounts of a darker fused material. The sand grains predominated. Iron was detected (chemically) and all pieces showed slight magnetic attraction. Under high-power magnification a prepared section showed the darker, linking material as a slag-like duplex material of dendrites in a darker matrix. Such material results from fusion of sand and iron-scale at temperatures in excess of 1000°C as in a smithing operation. AR2.L1.
25. Smithing residue. Iron rich mixture of sand and iron oxide completely fused to iron silicate slag. Five pieces, up to 5 cms on major axis. Charcoal impressions and actual charcoal present on some fracture surfaces. Fractures blue-black with considerable porosity. All showed positive magnetic attraction. A prepared micro-section was of a heterogeneous character, containing a three-phased structure of light dendrites in a light and dark mixed matrix typical of an iron-silicate slag, together with featureless blue-black areas of magnetite. PR.T5.F1.

In view of the heterogeneous nature of these pieces and those of 24, analysis was not carried out.

DISCUSSION

There are strong indications of a smithing operation in the vicinity, probably both ferrous and non-ferrous as shown by the unfinished (?) penannular ring 2, the unfinished (?) small ring 4, the lead shearing 13, and the iron silicate slag 24 and 25. There is a notable lack of strictly domestic, household pieces among the non-ferrous items submitted. The small actual weight of evidence might suggest an itinerant smith rather than a resident, but it could equally mean that the actual site of the operations has not been uncovered. A smith supplying a road-side stall is a possibility which might explain the bias towards adornment and away from domestic appliances.

The brooch 2 and the fine "tube" 12 illustrate the method of producing wire by twisting a narrow strip and then rolling it. In some cases this resulted in a tube as in 12, in other cases a wire with a longitudinal defect which in the brooch 2 gave difficulties in the terminal forming operation and probably caused it to be abandoned. It would not be saleable in this form.

The iron-work is unremarkable, being chiefly fasteners—nails, staple, hook, etc., associated with building construction. The chisel 20 is the only tool identifiable. The slag is typical of a smithing product where sand was used to clean the heated iron for welding and where magnetite (iron-oxide) fell into the hearth and combined with the furnace lining. This produced an iron-silicate slag, at temperatures exceeding 1000°C, with varying amounts of free magnetite and/or silica (sand).

During excavations at the nearby Lefevre Road a mass of about 8 ins. cube was found, in a scatter of fourth century debris. It consisted of an agglomeration of pebbles and sand, identified as shrave, a natural iron-oxide cemented gravel, geologically feasible in this area.³ Its presence is of interest in view of the analysis (see below).

Analysis:

		Fe	SiO ₂	Al ₂ O ₃	Mn
Shrave	..	28.7	43.0	13.7	0.32

Although the iron-silica ratio (29-43) is unsuitable for iron-smelting by the primitive direct process, where the silica is fluxed by the iron, material of a more favourable composition could well have been available at this site as it is a variable mixture. However, as shrave does not normally persist laterally as strata,⁴ it cannot be considered as a significant source of iron.

DISTRIBUTION OF METAL AND METALLURGICAL WASTE PRODUCTS

Location	ITEMS, NUMBER OF PIECES IN BRACKETS			
	Bronze	Lead	Iron	Slag
AR.F1.	1, 7	14	16(24), 17(25), 18, 19, 20	
AR2.F2			16(3)	
AR.F3			16(1)	
AR2.F3	8, 11			
AR.F4		14		
AR.L1		15	16(12), 22	
AR2.L1	2, 4, 9, 12	13, 14	16(4)	24
AR2.L2			16(9), 17(1) 21	
AR2.L3			16(2)	
AR2.L4			16(2)	
AR2.L5	3, 5, 6			
PR.T5.F1.			16(7), 23	25
Sand B	10			

NOTES

- 1 E. Fowler. "Origins and Development of the Penannular brooch in Europe"; *Proc. Prehist. Soc.* xxvi (1960); p. 151.
- 2 Hawkes and Hull; "Camulodunum"; *Soc. of Ant. of Lon. Report* xiv, 1947; p. 327; Fig. 59, No. 1.
- 3 and 4 Institute of Geological Sciences; private communication.

APPENDIX 4

SAMIAN AND NORTH-AFRICAN RED WARE

BY JOANNA MORRIS

SAMIAN

AR.Sand B Sherd, South Gaulish, Flavian–Trajanic.

AR2.L5 Base, Dr 31, Central or East Gaul, later second–third century.

Rim, Dr 45, Central Gaul, Antonine.

Rim, Dr 31, East Gaul, later second–mid-third century.

Rim, Dr 38, East Gaul, later second–third century.

Dr 33, probably Central Gaul, Antonine.

Dr 33, East Gaul, later second–third century.

Dr 31, Central Gaul, mid-later second century.

Dr 31, Central Gaul, mid-later second century.

Lug Tg, Rheinzabern, later second–third century.

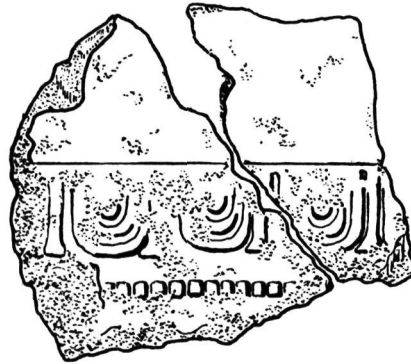
Dr 37, Lezoux. The ovolo is damaged but is probably that used, with a similar square beadrow, by Doeccus (S. and S. pl. 149, 28).¹ Date: c. 160/170–200 A.D. (Fig. 14, 1)

Two Central Gaulish fragments, later second century.

Three East Gaulish fragments, later second–third century.

Fig. 14
Samian and
North-African
Red Slip Ware
(actual size)

1



2



NORTH-AFRICAN RED SLIP WARE

AR.F1 ²Hayes form 52B with applique animal on the rim; slipped on top of the rim but not underneath.

Probably one of the later versions of this form. (Fig. 14, 2)

Date: mid-fourth–early fifth century.

NOTES

1 S. and S.: J. Stanfield and G. Simpson; *Central Gaulish Potters*; (London 1958).2 Hayes: J. W. Hayes, *Late Roman Pottery* (London 1972).

APPENDIX 5
REPORT ON THIN SECTIONS NOS. 1-11
BY S. A. MACKENNA

1. The clay mineral matrix is anisotropic,¹ the inclusions are well sorted² and consist of angular³ to sub-angular grains averaging from 0.06 to 0.03 mm in size. Quartz predominates with occasional grains of plagioclase feldspar, fine crystals of mica up to 0.1 mm in size are common, chert and microcline are scarce. The slip is very fine, dense and has an average thickness of 0.02 mm.
2. The matrix is anisotropic and its inclusions generally resemble 1 with slightly more chert present. There is a very fine dense slip 0.02 mm thick.
3. The matrix is isotropic, the inclusions resembling those of 1 and 2. The dense slip is very fine and averages 0.02 mm in thickness.
4. The matrix is isotropic. The inclusions are not well sorted, ranging up to 0.07 mm in size with the majority of grains between 0.015 to 0.030 mm, angular to sub-angular. Quartz predominates and there are occasional crystals of mica. The fine slip has an average thickness of 0.03 mm.
5. The slightly anisotropic matrix contains very well sorted inclusions, average size 0.08 mm. The inclusions are predominantly quartz, angular to sub-angular. The chert, which is abundant, is mostly sub-angular. No slip is present.
6. The slightly anisotropic matrix contains badly sorted inclusions. The grains are up to 0.2 mm in size, most of the smaller grains are angular to sub-angular, but some well-rounded grains of chert and microcline are present—size 0.06 to 0.1 mm. There is a dense, fine slip with an average thickness of 0.03 mm. Quartz predominates.
7. The anisotropic matrix contains very badly sorted inclusions. Grains are up to 0.5 mm in size with the majority of grains present being in the range of 0.03 to 0.05 mm. The smaller grains are angular to sub-angular, the larger grains sub-angular to sub-rounded. Occasional grains of chert, mica and feldspar are also present. Traces of an anisotropic slip are present 0.04 mm in thickness. Quartz predominates.
8. The isotropic matrix contains very well sorted inclusions, the majority of grains being between 0.04 to 0.02 mm in size, but the odd grain of up to 0.1 mm is also found. Quartz predominates, chert is common with occasional grains of mica and feldspar. The grains are angular to sub-angular. There are definite indications of some form of surface treatment, but no evidence of slip.
9. The isotropic matrix contains well-sorted inclusions, 0.015 to 0.03 mm in size, angular to sub-angular. Odd grains, 0.4 to 0.9 mm in size, are rounded to sub-rounded. Predominantly quartz, with rare grains of feldspar, chert, chalcedony and mica. Traces of an anisotropic slip are present, 0.03 mm in thickness.
10. The anisotropic matrix contains badly sorted grains up to 1 mm in size. The larger grains are sub-angular to sub-rounded, the smaller grains are angular to sub-angular. Quartz predominates, with occasional grains of chert, a few crystals of mica up to .03 mm in size are present. An anisotropic slip is present with an average thickness of 0.09 mm.
11. The isotropic matrix contains shell fragments up to 3 mm in size (about 25% of the section area consists of shell. Fragments of marine micro-organisms are also present. No slip is evident.

SUMMARY

Thin sections 1 to 6 have been identified as products of the Oxfordshire kilns. The analysis indicates the presence of four separate groups, one formed by Nos. 1, 2 and 3, all of which show a marked similarity indicating a probable common source. Nos. 4, 5 and 6 show quite marked dissimilarities, indicating different sources.

There are no marked resemblances between members of the group of grey wares (Nos. 7-11), except that some are well sorted and some badly sorted, so forming two very general groups, whose members are easily differentiated from one another.

No. 11 is interesting in that alongside the shell tempering are the remains of marine micro-organisms, indicating the likelihood that the tempering material was derived either from a shell beach or from a fossil limestone.

A study based on such a small group is of limited value; however, it does indicate the need for a thorough survey of both kiln and occupation site material. This is not only necessary for the correlation of production site material with that found on occupation sites, but also for the investigation of the technological methods in use at kiln sites themselves.

NOTES

- 1 The terms isotropic and anisotropic refer to the appearance of the material when viewed between crossed polars. Anisotropic clay minerals break down at about 850°C and form new isotropic minerals.
- 2 Sorting is a measure of the "spread" of the grains over different size classes, *i.e.*, a well sorted deposit is one whose grains are of approximately uniform size, a badly sorted one has grains of various different sizes.
- 3 The roundness or angularity of a grain is a measure of the curvature of its corners and edges.

REFERENCES

- 1 Lamas Transactions Vol. 23, part 1, 1971; "Excavations at Lefevre Road, Old Ford, E.3."
- 2 TQ 3693.8360; Stone coffin with head to west, orientated east-west. Opposite 85 Parnell Road; 16th April 1969. See Location Plan No. 8.
- 3 TQ 3694.8361; observed by Peter Daniels, 25th October 1970. Location Plan No. 9.
- 4 Examined by S. A. Mackenna; usually the white substance in which the bone is laid or encased is referred to as "gypsum" (calcium sulphate), or "lime".
- 5 The Roman potters' kilns of Colchester; M. R. Hull; Research Report XXI, Soc. of Antiq., 1963. See forms 281 (to 350 A.D.) and 282 (250-350 A.D.).
- 6 Appian Road no longer exists. Part of it is incorporated in the open area.
- 7 Where turfing had not yet taken place.
- 8 A pair of fourth-century R.B. pottery kilns near Crambeck; Philip Corder; *Ant. J.*, xvii, p. 404; Fig. 4; No. 12.
- 9 The modern ground level here was just under 41 feet OD.
- 10 And not Antonine (see Lefevre Road Report, p. 47).
- 11 A distance of about 1-50 cms survived south of the road; there it had been cut out by a ditch containing eighteenth-century pottery.
- 12 At the extreme east of the trench the gravel surface was laid at a level lower by about 20 cms. The significance of this was not clear—but might be elucidated by further excavation.
- 13 But a quantity of these were distributed in the late Roman deposits on the site.
- 14 As this site, incorporating the part of Roman road which lies immediately to the south, will be kept as an open play area within the Lefevre Road development, the rest of the site should be available for future investigation.
- 15 Further Roman burials were found during building work in May 1972 some 25 metres west of the Armagh Road burial (Location Plan No. 11).
- 16 *The Drovers*; K. J. Bonser; Macmillan, 1970; p. 220.
- 17 *The Drovers*; *ibid.*, p. 45. It was estimated that the eighteenth-early nineteenth century herds of cattle travelled about 2 miles per hour.
- 18 *The Drovers*; *ibid.*, p. 222.
- 19 *The Drovers*; *ibid.*, p. 218.

ACKNOWLEDGEMENTS

This excavation was carried out by a full-time team consisting of Eric Ferretti, John Earp, Geoff Barratt and Wendy McIsaac with assistance, principally at weekends, from Pete Daniels, Mike Hammerson, Eddie Phillips, Eddie Jefferys, Bernard Johnson, Richard Locke, Bernard Barrell, Pat Evans, Win Exley and Iris Roseveare. Eric Ferretti was responsible for the recording of "small finds" and John Earp for the site photography.

The site plans and sections included above were drawn for publication by Robert Symberlist and John Earp. Mike Hammerson undertook work on the pottery from Appian Road and was assisted by John Earp, Bernard Johnson and Win Exley. Richard Locke and Eddie Jefferys also contributed pottery drawings. C. T. Young identified pottery from the Oxfordshire region.

Specialist appendices have been provided by Mike Hammerson, Derrick Rixson, Ron Tribbick, Joanna Morris and Tony MacKenna.

Professor R. Warwick and Dr. T. E. Dussek of the Department of Anatomy, Guys' Hospital Medical School examined the skeletal remains.

Those of us who worked on the site would like to thank the staff of John Laing Construction and the Tower Hamlets Architects and Planning Department for their help. We are also grateful to Dr. E. M. Hutchinson and his successor Arthur Stock who provided facilities for post-excavation work at the National Institute of Adult Education.

We would also like to thank Roy Canham, the London Museum Field Officer, who undertook the administration of the excavation.

The report was typed by Win Exley.

EXCAVATIONS AT BROCKLEY HILL, MIDDLESEX SULLONIACAE (N.G.R. TQ 174941) 1970

BY STEPHEN A. CASTLE

EXCAVATIONS IN 1968

In 1968 rescue excavations were conducted in Field 157, immediately to the south of the Orthopaedic Hospital, prior to the tipping of soil and rubble. Bulldozing of the topsoil prior to this tipping brought to light considerable quantities of Roman tile and pottery. Limited excavation at the eastern edge of the field disclosed clay-pits, gullies and a well alongside a road with ditches which may be Roman Watling Street. Although this area could not be adequately excavated, a good cross-section of its history was obtained and material recovered includes pottery datable from the first to fourth centuries, coins, a bronze dog ornament, bracelet and Dolphin type brooch.

A kiln and associated clay-pits and ditches was discovered in the central area of the field together with considerable quantities of coarse pottery datable to the period c.A.D. 70-120. Of particular interest are the stamped mortaria, including some of the potters Candidus, Doinus, G. Attius Marinus and Gissus. There seems good reason to believe that other kilns lay nearby; however, the encroaching tip prevented further investigation.

Observation and excavation was particularly useful in confirming that the linear earthwork Grims Ditch ends on the eastern edge of Pear Wood.

All the finds from these excavations have been donated to the London Museum for eventual inclusion in the proposed Museum of London. A large illustrated and costly report has been prepared and whilst it is regretted that it could not appear before this present report it is hoped that funds will be raised to enable its publication in the not too distant future.

Excavations were conducted on this site from January to March of 1970, by members of the London and Middlesex Archaeological Society. Stanmore Orthopaedic Hospital kindly permitted excavation on a site north of Brockley Hill House, prior to the laying of a North Sea Gas main.

It was decided to excavate here in order to obtain a clearer picture of the nature of the ribbon development on the west side of modern Watling Street. Trenches were dug to the north and south during 1950-54.¹ Excavation in 1970 was severely limited by the presence of a modern layer of clay in places 2-4 ft. (60cm.-1.2m) thick which was dumped here about 1956.

SITE A (FIGS. 1 AND 2)

Excavation has disclosed the west lip of the eighteenth-century road ditch discovered to the north in 1950-51 and south in 1953-54.² Its clay and silt infill contained a large quantity of eighteenth-century material, including fragments of wine bottles, stems of clay tobacco pipes, brick rubble and much brown glazed pottery. This feature is the west ditch of eighteenth-century Watling Street which seems to have gone out of use in 1800-1820 on the advent of the present road.³

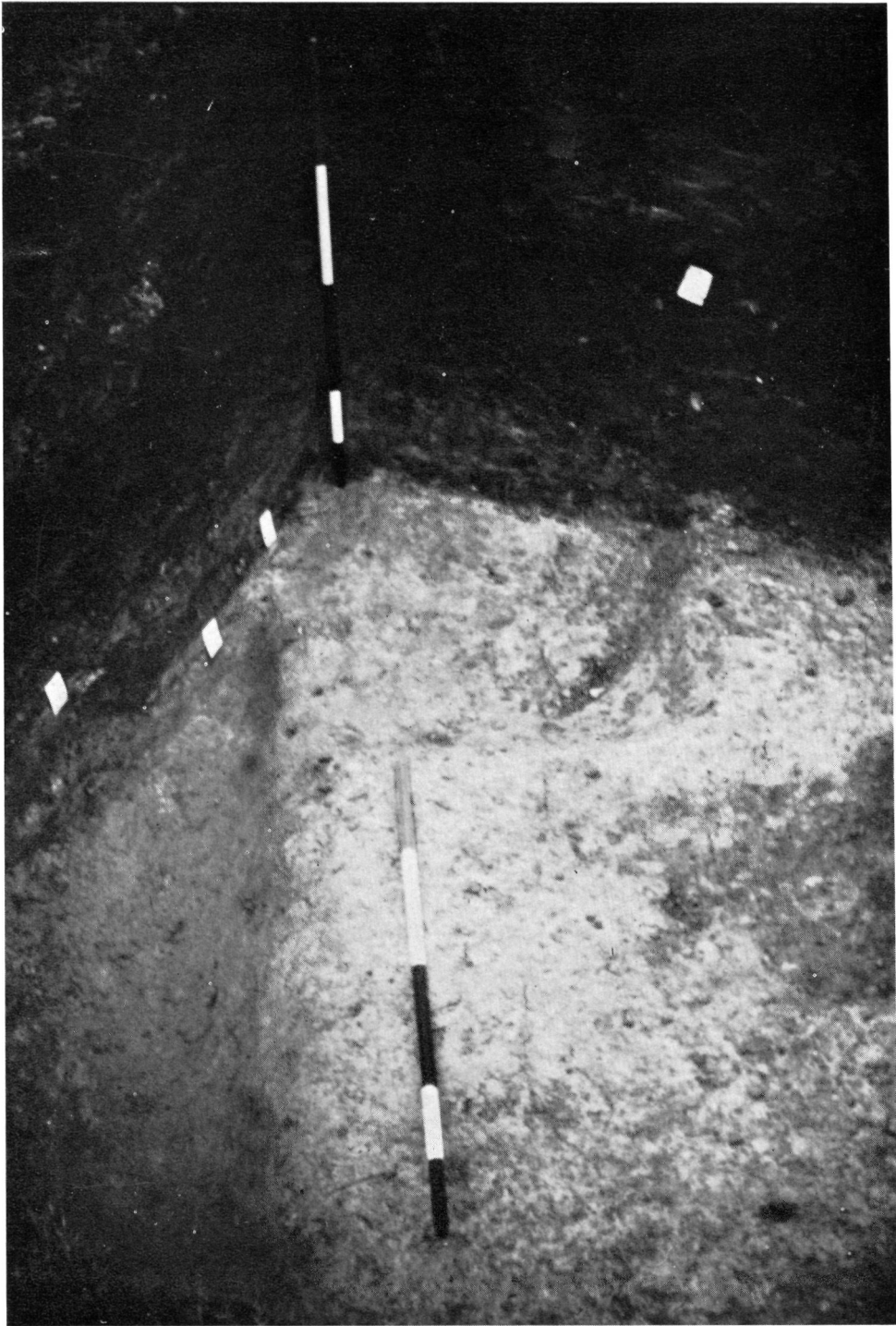


PLATE A. Early ditch and Pit A



PLATE B. Cobbled working area

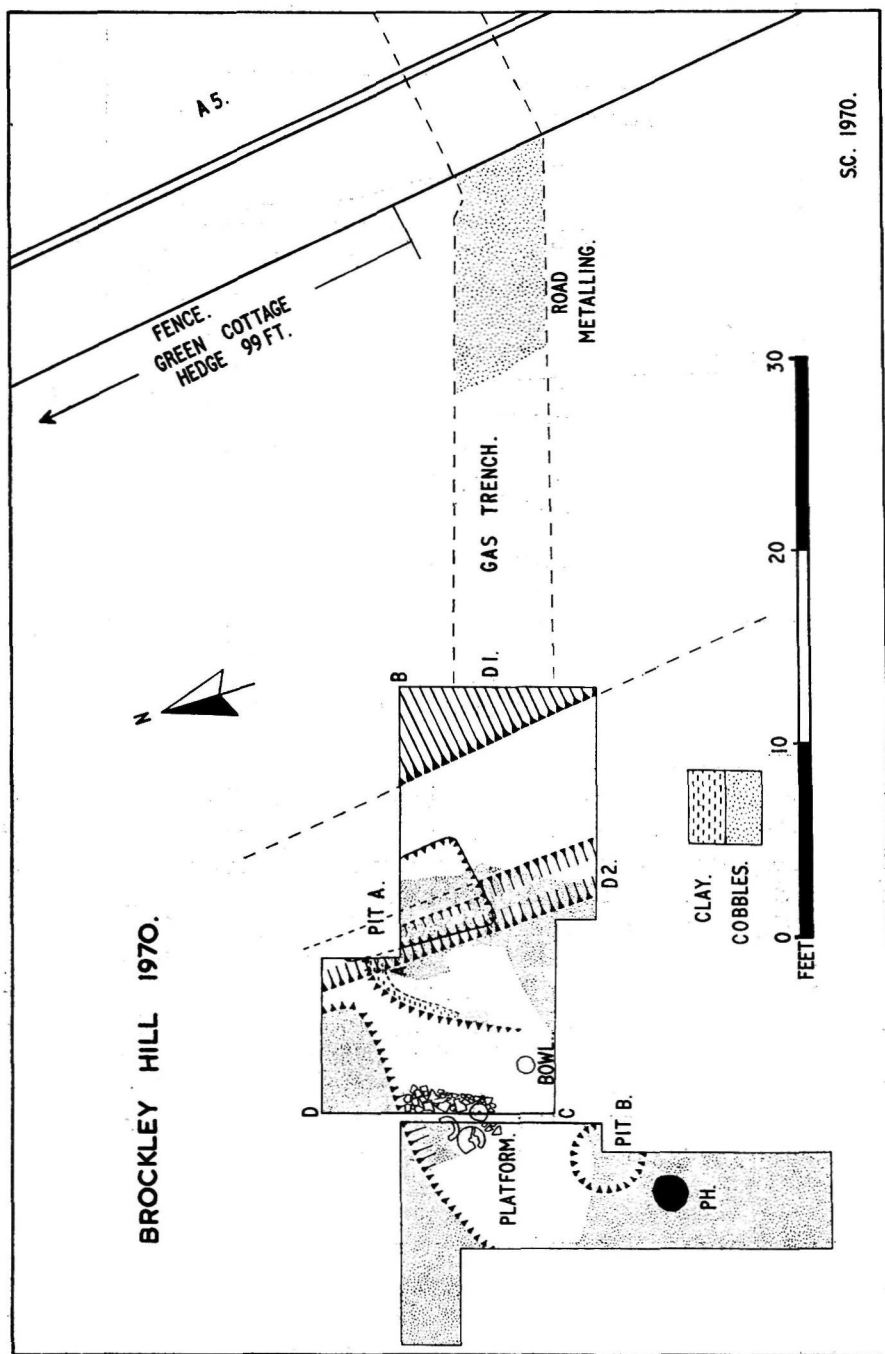


Fig. I
Plan of Site A

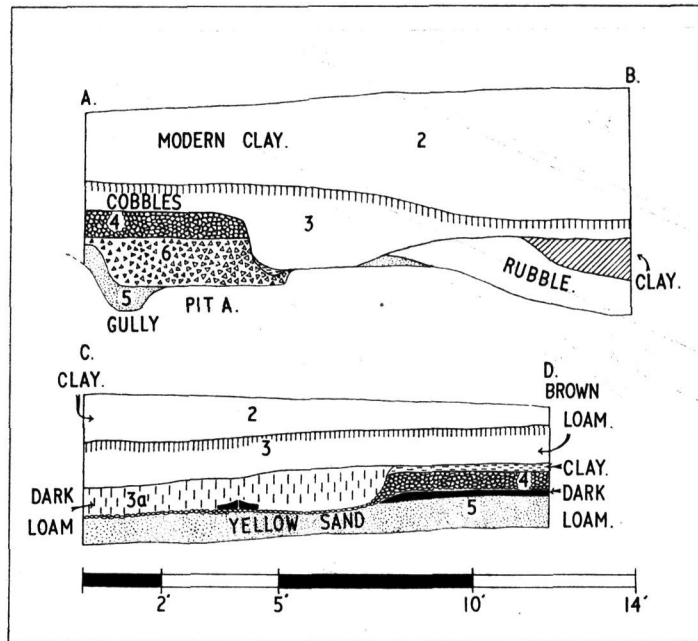


Fig. 2
Sections of Site A

MID-FIRST CENTURY DITCH? *Plate A*

A little to the west and running almost parallel to it was a small U-shaped ditch approximately 2 ft. 3 ins. (68cm.) wide and 1 ft. 6 ins. (45.7cm.) deep. Its infill, which consisted of yellow sand with fine gravel, contained not a single artifact. This layer continued to accumulate long after the ditch had silted up and in the upper levels was a considerable quantity of Flavian pottery (Fig. 3, 1-4) mostly local wares probably produced at the kilns nearby, a bronze dolphin brooch and a dupondius of Vespasian A.D. 69-79 (Fig. 5). This evidence would seem to indicate that the earliest Roman occupation at this part of the settlement is Flavian and that the ditch is mid-first century and, in view of its position, was probably associated with Roman Watling Street. Gravel metalling 9 ins. (23cm.) thick on a clay bank was disclosed between the ditch and modern Watling Street when the trench was cut for the gas main in June 1970. It seems likely that this metalling was part of Roman Watling Street. This metalling had been badly disturbed by the digging of the eighteenth-century ditch.

WORKING AREA ASSOCIATED WITH KILNS TO THE NORTH

More Flavian pottery was found in the upper levels of the yellow sand layer in the two trenches dug to the west, including notably a sherd of yellow glazed St. Remy ware (Fig. 5), of which no closer dating than c.A.D. 70-100 can be offered. Above this layer was a much-disturbed deposit of dark loam, ash and white clay containing a large quantity of Flavian pottery, probably also the products of the nearby kilns. Dug into the yellow sand

and contemporary with this ashy layer, sometime in the late first century were two shallow puddling holes, one circular in plan, the other rectangular. These were filled with a thick deposit of white potters' clay and charcoal which contained a fair quantity of sherds of local coarseware of the period *c.A.D.* 70–120 (Fig. 3, 6–11) and a few very small fragments of samian ware dated *c.A.D.* 55–80. These puddling holes were evidently associated with the nearby kilns. The rectangular puddling hole was dug across the early ditch.

COBBLED WORKING AREA (*Plate B*)

By the late third to early fourth century, pottery dumps associated with the kilns, which were in action during the period *c.A.D.* 70–160, were levelled and cobbling was laid down over the entire area. Dug into the cobbling was a shallow depression, on the floor of which was a tile platform, next to which lay two rotary querns (corn grinding stones). The larger of these stones, which was 16½ ins. in diameter, was of Rhenish Lava, it was badly cracked and could not be lifted in one piece. The smaller stone, 12 ins. in diameter, was of sandstone, as were the fragments of the upper stone of the same quern. This working area was associated with the hut found immediately to the west in 1950.⁴ Its construction appears to have been rather flimsy and the posthole found in 1970 appears to be part of it. Associated with this working area was a fair quantity of fourth-century pottery (Fig. 3, 21–35) sherds of colour-coated ware and other domestic articles including a bronze pin and a silver-plated brooch (Fig. 5). Resting on the cobbling nearby was a coin (Ae 3) of Constantius II *A.D.* 341–346.

Above the working area was a layer of plough-disturbed light brown loam containing a few sherds of fourth-century pottery, a first- or second-century dupondius, two coins (Ae 3s) of Constantine I, dated *A.D.* 330–335 and a large quantity of residual first- and second-century pottery.

CONCLUSIONS

This excavation gives confirmation of pottery production at Brockley Hill in the period *c.A.D.* 70–160. Judging by the pottery from this and the 1950–51 excavations it would seem that the kilns in this area were mainly engaged in the production of smaller vessels: jars, flagons and bowls, rather than mortaria and amphorae-type flagons, though doubtless a few of these were also produced. It is interesting to note that the production of pottery at the workings north of the hospital continued well into the Hadrianic to Antonine period, in contrast to the apparent ending of production in *c.A.D.* 120–130, at both the workings excavated in 1947 and 1968.⁵ At the kiln workings excavated in 1950–51, by *c.A.D.* 110 a new clay fabric had been introduced from which vessels in fine-textured red ware (Fig. 3, 18 and 34) usually coated with cream slip, were produced. The potter Driccius had access to this clay with which he produced mortaria sometime during the period *c.A.D.* 110–150. He had kilns at Radlett and it seems likely that he also had some at Brockley Hill where he was probably also engaged in the production of jars and “short expanding neck type” ring-necked flagons.⁶

Although there is no evidence of pottery production on this site after *c.A.D.* 160, it is clear that occupation of a more domestic nature continued into the third and fourth centuries. Furthermore, a badly worn coin of Valentinian I, *A.D.* 364–375, found resting on the cobbling near the hut in 1950 would seem to indicate that occupation on this site continued almost to the close of the fourth century.

Of special interest is the small quantity of worked flints (Fig. 5), four from Layer 5, stratigraphically the earliest layer on the site. Dr. Andree Rosenfeld, of the British Museum, is of the opinion that one of these is a core tool of Mesolithic type (Fig. 5, F5). It is possible, therefore, that this area was subject to Mesolithic activity but it must be stressed, however, that flint tools were used as late as the Belgic Iron Age; therefore the evidence is at present insufficient to establish this.

An interesting surface find made while excavations were in progress was a barbarous radiate coin of Victorinus A.D. 268–270. It was found by Mr. G. Robinson, in the hospital grounds to the south-west of the site. This is the first recorded third-century coin from the Brockley Hill settlement.

OBSERVATIONS DURING THE CUTTING OF THE TRENCH FOR THE GAS MAIN, JUNE 1970

SITE B

Following the excavation of Site A, watch was kept when trench digging operations were in progress. A shallow pit was disclosed immediately to the west of Site A, containing a considerable quantity of potsherds, including wasters and samian ware of first- and second-century date (Fig. 3, 39–44). Doubtless this pit was associated with the nearby kiln workings.

SITE C

Observations of the trench, where cut on the eastern side of modern Watling Street, showed that this area had been much disturbed by the track leading to Brockley Grange Farm. Eighteenth- and nineteenth-century material was found at a depth of 2 ft. (61cm.) resting on the natural clay subsoil. East of the farm, TQ 176941, the trench turned southwards in the direction of the Pipers Green Lane and Watling Street road junction. Stopping at a point some 100 yards north of the junction it turned due west across modern Watling Street, *c.* TQ 179933. A small quantity of pottery of first to fourth-century date was found at this point, on the east side of modern Watling Street (Fig. 3, 45). Nothing structural was revealed and it seems likely that this material represents roadside rubbish. In 1955, Roman cremation burials apparently of first-century date were discovered a little to the south on the north side of Pipers Green Lane.⁷

DATING EVIDENCE I

The Coins

- Trench 1, layer 5, grey to yellow sand.
1. Ae dupondius of Vespasian A.D. 69–79. Obverse, head of Vespasian right, IMP CAES . . . Reverse, illegible.
- Trench 2, layer 3, brown loam.
2. Ae dupondius, obverse, unidentifiable head right, reverse illegible, *c.* first or second century.
 3. Ae 3 of Constantine I, Urbs Roma type, mintmark illegible, *c.* A.D. 330–335.
 4. Ae 3 of Constantine I, Constantinopolis type, mintmark illegible, *c.* A.D. 330–335.
- Trench 3, layer 3, resting on cobbles.
5. Ae 3 of Constantius II. Obv, CONSTANTIVS PF AVG. Rev, VICTORIAE DD AVGG Q NN. Mint of Trier. L.R.B.C. 139/140. A.D. 341–346. South-west of Site near Greenhouses.
 6. Barbarous radiate of Victorinus A.D. 268–270.

DATING EVIDENCE II

POTTERY (Fig. 3)

Trenches 1-3, layer 5, yellow sand.

1. Jar with beaded rim in orange ware.
2. Base of jar in sandy cream ware.
3. Shouldered jar in hard grey to red ware.
4. Rim of an amphora in hard sandy cream ware. Cf. Brockley Hill 1947, p. 15, 85, but rim more rounded.
5. (Fig. 5). Shard of yellow glazed St. Remy ware in orange to buff ware with scale decoration on the exterior.

Only the top of this layer contained Roman material, intermixed with which and below was a small quantity of worked flints (Fig. 5). The infill of the ditch contained not a single artifact. The pottery in this layer is of Flavian type and date and this is confirmed by the presence of a dupondius of Ves-pasian and a "Dolphin" type brooch typical of the period c. A.D. 50-100. A few small sherds of native ware were also present.

Trenches 1-2, Pit A, white clay and charcoal (Puddling Hole).

6. Rim of a narrow-necked jar or flagon in overfired blue ware, probably a waster.
7. Large rectangular rimmed bowl in buff sandy ware.
8. Shouldered jar in hard grey ware with burnished surface. Part of this vessel was also in Pit B.
9. Ring-necked flagon in buff ware. Cf. Brockley Hill 1947, p. 10, 35 and 37 which are c. A.D. 70-120. Samian Ware.
- S1. South Gaulish, Dr 18, c. A.D. 60-80.
- S2. S.G. Dr 27, fine ware and flat-topped rim, c. A.D. 55-80.
- S3-4. S.G. Dr 27, two sherds from different cups, c. A.D. 70-80.

The coarseware sherds from this pit which are in local ware, and the samian ware suggest a date of after c.A.D. 80 for its use as a puddling hole. The samian sherds are in remarkably good condition. Trench 3, Pit B, white clay and charcoal (Puddling Hole).

Native Ware.

10. Base of a platter in black to brown gritty ware without a stamp.
11. Bead rim jar in black gritty ware, hand made then probably finished on a wheel. Cf. Park Street, 1945, p. 83, No. 2, Claudian. Romano-British Ware.
8. Jar, part of which was found in Pit A. Pit B is more or less contemporary with Pit A. Trenches 2-3, layer 4a, dark loam with ash and a little white clay. Much disturbed by cobbling of layer 4 above.
12. Reed-rimmed bowl in hard light grey ware, rectangular shaped rim. Found resting on layer 5 and containing white clay (Fig. 1). Cf. Brockley Hill 1947, p. 9, Nos. 11-19, Flavian.
13. Reed-rimmed bowl in hard orange ware, rectangular shaped rim and similar to No. 12.
14. Jar in grey sandy ware with black exterior. Samian Ware.
- S5. S.G. Dr 15/17, ware badly burnt, c. A.D. 70-100.
- S6. S.G. Dr 27, c. A.D. 70-100.
- S7. S.G. Dr 18, c. A.D. 70-100.

This layer which is contemporary with Pits A and B contained a few sherds of native ware and fragments of a large amphora in non-local ware.

Trenches 1-3, layer 4, cobbles.

Native Ware.

15. Hand made jar in dark brown to black gritty ware with burnished surface. An Iron Age form with everted rim, c. first century A.D. Similar to R.E.M. Wheeler, Maiden Castle, 1943, p. 200, 42 and 47. Romano-British Ware.
16. Small jar in pink to buff ware. Cf. Brockley Hill 1950, p. 221, 40, first half of the second century.
17. Shouldered jar or beaker in hard light grey ware with milk white slip. Cf. B. Cunliffe, Winchester Excavations 1949-60, vol. 1, p. 75, 3, first century.

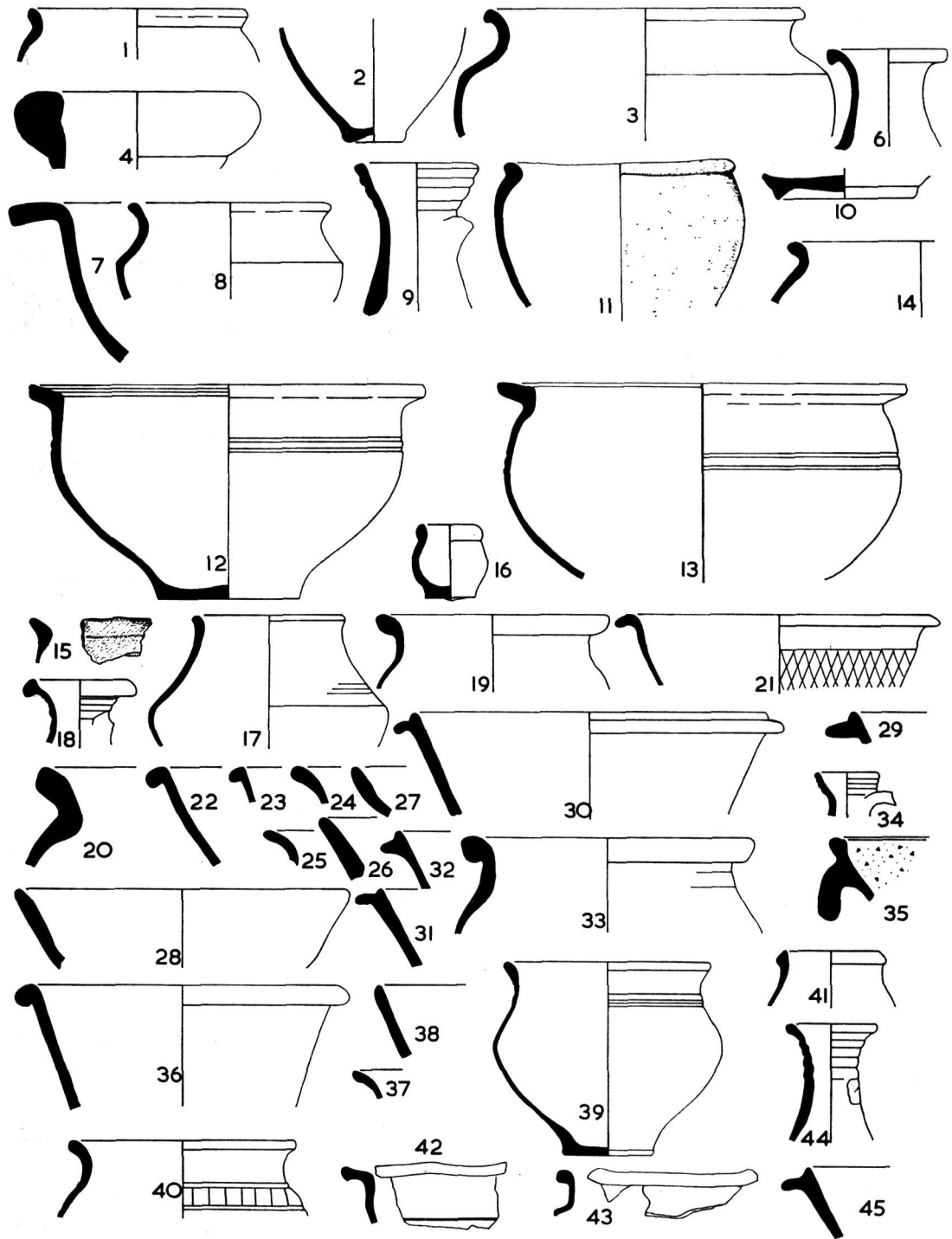


Fig. 3
The Pottery

18. Ring-necked flagon in grey to red fine textured ware with cream slip.
19. Jar in pink sandy ware slightly blackened and without cordon. Cf. P. Corder. Roman Pottery at Verulamium, p. 288, B, "Antiquaries' Journal", 1941, third century.
Samian Ware.
- S8. S.G. Dr 27, c. A.D. 70-100.
- S9. S.G. Dr 18/31, c. A.D. 70-100.
- S10. S.G. Dr 18/31, edge of stamp, c. A.D. 70-100.
- S11. Central Gaulish, Curle II, orange ware, dull slip and traces of burning, c. A.D. 100-140.
- S12. C.G. Dr 27, A.D. 100-120.
This layer was laid down by the late third to early fourth century and consists of rammed pebbles mixed with a considerable quantity of first and second century potsherds many of which are wasters. Resting on this layer at the south end of Trench 3 was a coin of Constantius II, A.D. 341-346.
Trench 2, cobbles below tile platform.
Native Ware.
20. Large jar in brown gritty ware with smooth exterior.
Samian Ware.
- S13. C.G. Dr 18/31, extremely micaceous ware with remains of light orange slip and traces of burning, c. A.D. 150-200.
Trench 2 and 3. Layer 3a, dark brown loam with charcoal.
Romano-British Ware.
21. Roll-rimmed bowl in black burnished ware with angled-trellis decoration. Cf. Leicester, p. 206, No. 1, fourth century.
22. Roll-rimmed bowl in buff to grey ware.
23. Roll-rimmed bowl in black burnished ware.
- 24-25. Cavetto-rimmed jars in black burnished ware, fourth century.
- 26-27. Straight-sided dishes in black burnished ware.
28. Straight-sided dish in grey ware with black burnished exterior.
- 29-32. Flanged bowls in black burnished ware. Cf. Park Street 1945, p. 86, 11-12, fourth century.
33. Jar in hard orange ware without cordon. Cf. P. Corder, Roman Pottery at Verulamium, p. 288, B, third century, "Antiquaries Journal", 1941.
34. Ring-necked flagon of short expanding neck type in grey to red fine-textured ware with cream slip. Cf. Verulamium 1963-64, "Hertfordshire Archaeology", vol. 1, p. 32, 2-4, 1968, c. A.D. 130-165.
35. Mortarium in cream ware with pink core. Cf. Brockley Hill 1951, p. 181, M6, early second century, but this rim-form persists into the fourth century.
Samian Ware.
- S14. S.G. Dr 37, c. A.D. 70-80. Medallion with animal apparently a crouching griffin, which was used by CRESTIO (Knorr 1919, Taf 27, 6).
- S15. S.G. Dr 37. Ware badly burnt and ovolo unidentifiable, c. A.D. 70-100.
- S16. S.G. Dr 30, two sherds, one showing part of an arrow head panel and a blurred rosette, c. A.D. 70-100.
- S17. S.G. Dr 37, c. A.D. 70-100.
- S18. S.G. Dr 33, c. A.D. 70-100.
- S19. S.G. Dr 37, c. A.D. 70-100.
- S20. S.G. Dr 18/31, sherds representing a number of vessels, c. A.D. 70-100.
- S21. C.G. Dr 18/31, unusual low footring, ring with fine rouletting, c. A.D. 100-140.
- S22. C.G. Dr 18/31, c. A.D. 100-140.
- S23. C.G. Dr 18/31, c. A.D. 120-160.
- S24. C.G. Dr 36, c. A.D. 120-140.
- S25. C.G. Dr 33, c. A.D. 120-140.
- S26. C.G. Dr 37, ovolo blurred but probably ADVOCISUS ovolo I (C.G.P. pl. 112, I), c. A.D. 140-160.
- S27. C.G. Rim fragment of a vase, c. A.D. 140-160.
- S28. C.G. Dr 45, lion spout very pale ware with brownish slip, c. A.D. 150-200.
- S29. C.G. Dr 45, sherds of vessel larger than that previous, c. A.D. 150-200.
- S30. C.G. Dr 27, c. A.D. 150-200.
- S31. Vase with rouletted decoration, either East Gaulish c. A.D. 140-160 or not true samian ware.
- S32. East Gaulish, Dr 38? c. A.D. 150-200.

- Trenches 1-3, layer 3, light brown sandy loam.
Romano-British Ware.
36. Roll-rimmed bowl in buff ware with blackened exterior.
37. Cavetto-rim jar in black burnished ware. *Cf.* Park Street, p. 86, 9, fourth century.
38. Straight-sided black burnished dish.
Samian Ware.
- S33. C.G. Dr 38? *c.* A.D. 120-160.
S34. C.G. Dr 36, *c.* A.D. 120-160.
S35. C.G. Walters 79, pink ware with brownish gloss, *c.* A.D. 140-160.
S36. C.G. Dr 33, six sherds, *c.* A.D. 140-160.
S37. C.G. Dr 18/31, ware very yellow, *c.* A.D. 140-160.
S38. C.G. Dr 18/31, *c.* A.D. 140-160.
S39. C.G. Dr 27, ware badly burnt.
Site B, Gas Main Trench, Pit C.
Native Ware.
39. Cordoned beaker or bowl in grey gritty ware with an everted rim and brownish-black burnished exterior. *Cf.* Camulodunum, No. 217. First century A.D.
Romano-British Ware.
40. Cordoned jar in grey ware with red core and milk white slip. *Cf.* Verulamium 1949, p. 70, No. 23, late first century.
41. Small jar in cream sandy ware. *Cf.* Verulamium 1963-64, p. 32, 6. *c.* A.D. 130-165, "Hertfordshire Archaeology", vol. 1, 1968.
42. Bowl with rectangular shaped rim in buff ware, a waster.
43. Jar in overfired blue ware which is badly distorted and therefore a waster.
44. Ring-necked flagon in cream ware. *Cf.* Brockley Hill 1947, p. 10, 39. *c.* A.D. 70-120.
Samian Ware.
- S40. S.G. Dr 37, leaf-tuft and an animal probably a hound which cannot be matched with any in Oswald. Figures above also unidentifiable. *c.* A.D. 80-100.
S41. S.G. Dr 37, *c.* A.D. 80-100.
S42. S.G. Dr 18/31, *c.* A.D. 80-100.
S43. C.G. Dr 18/31, *c.* A.D. 100-140.
S44. C.G. Dr 36, *c.* A.D. 120-160.
S45. C.G. Dr 33, *c.* A.D. 120-160.
S46. C.G. Dr 33, base with stamp RVFFLM (Ruffius) Lezoux, *c.* A.D. 140-160, stamp badly weathered. Gas Trench north of Pipers Green Lane on east side of modern Watling Street.
Romano-British Ware.
45. Flanged bowl in grey sandy ware and exterior much blackened. *Cf.* Park Street 1945, p. 86, 11-12, fourth century.

STAMPED MORTARIA (FIG. 4)

BY MRS. K. F. HARTLEY

- MS1. Trench 2, Tile Platform. The stamp on this fragment reads EECIT for *fecit* or perhaps even L. (Lugdunum) *fecit*, a type of counter-stamp in particularly common use in the potteries south of Verulamium (including those at Brockley Hill and Radlett) in the Flavian and Trajanic periods. The die used for this example belonged to Doinus and is of special interest because he used it not only in conjunction with one of his name-dies (Die B) but also alone, so that some of his mortaria are stamped FECIT//FECIT instead of DOINUS//FECIT. In spite of this practice it is uncommon compared to the name-stamp B, surviving in the proportion of ten to twenty-six, which suggests that it had a short life. Ware buff to cream with pink core.
Die B is one of his earlier dies and should be dated within the period A.D. 70-100.
- MS2. (Not illustrated). Trench 2, Tile Platform. It is not possible to identify this very poorly impressed stamp. The buff to cream fabric and form indicate local manufacture within the period A.D. 90-140.
- MS3. Trench 3, Layer 3a. The most likely reading for this fragmentary stamp is)BTOD(retrograde, but only the discovery of further examples will allow a certain reading. The sandy pink fabric is typical of mortaria made in this area and should be dated A.D. 110-150.

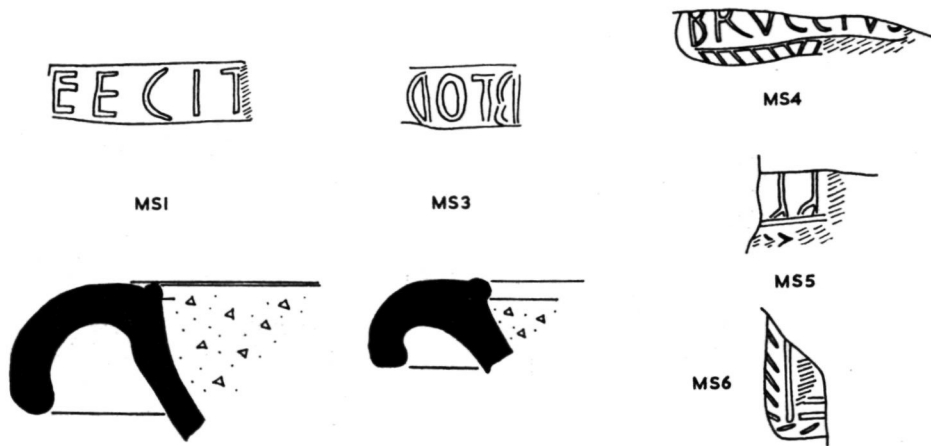


Fig. 4
Stamped Mortaria

- MS4. Trench 1, Layer 4. This broken buff ware fragment has the lower half of a stamp of Bruccius. His overall activity can be dated *c.* A.D. 80–110/115. There is sufficient alteration in his rim-forms to suggest that this is the earlier of his two dies.
- MS5. Trench 2, Layer 4. Fragment in cream ware with stamp reading)LL(retrograde. A broken stamp of Lallans of the period *c.* A.D. 90–125.
- MS6. Stamp found by Dr. John Scales in 1968 near Kiln Site in Field 157. This fragmentary stamp cannot be identified with certainty. It could perhaps be from the same die as a FECIT counterstamp found at Leicester but only more complete examples of this stamp will permit full identification. It is closely similar to another fragmentary stamp found in 1968 at Brockley Hill (M13). It is undoubtedly to be dated within the period A.D. 80–130.

SMALL FINDS (FIG. 5)

1. Trench 1, Layer 5. Bronze "Dolphin"-type brooch. The pin is missing. In view of its association with the dupondius of Vespasian and the sherds of Flavian pottery, this brooch is almost certainly of the period A.D. 70–100. (Collingwood Group H).
2. Trench 3, Layer 3a. Bronze silver-plated "Disc"-type brooch consisting of three circles in which there is green glass inlay and silver dots. Almost certainly of the period *c.* A.D. 300–350.
3. Trench 3, Layer 3a. Fragments of a bronze pin.
4. Trench 3, Layer 3a. Bronze pin with spherical head and rings below. Similar to bone pin head, Leicester, P 265, No. 9.
5. Trench 2, Layer 4. Small bronze pin or tack.
6. Bronze pin head in the form of a ram's head.
7. Disc-headed fastener in cast bronze; having a flat disc head inscribed with a criss-cross pattern which may represent part of a chi-rho monogram, *c.* fourth century. Cf. J. P. Wild, "Button-and-loop Fasteners in the Roman Provinces", pp. 137–155, type Vc. *Britannia*, vol. I, 1970.
8. Melon Glass Bead, light green glass. Cf. Leicester, p. 269, nos. 7–9.

WORKED FLINTS (FIG. 5)

As in previous excavations at Brockley Hill a small quantity of worked flints was found in the Roman stratification.

Fr-4. From Layer 5. F5. A Mesolithic type core tool in brown flint from Layer 3a. F6 in brown flint from the posthole in Trench 3.

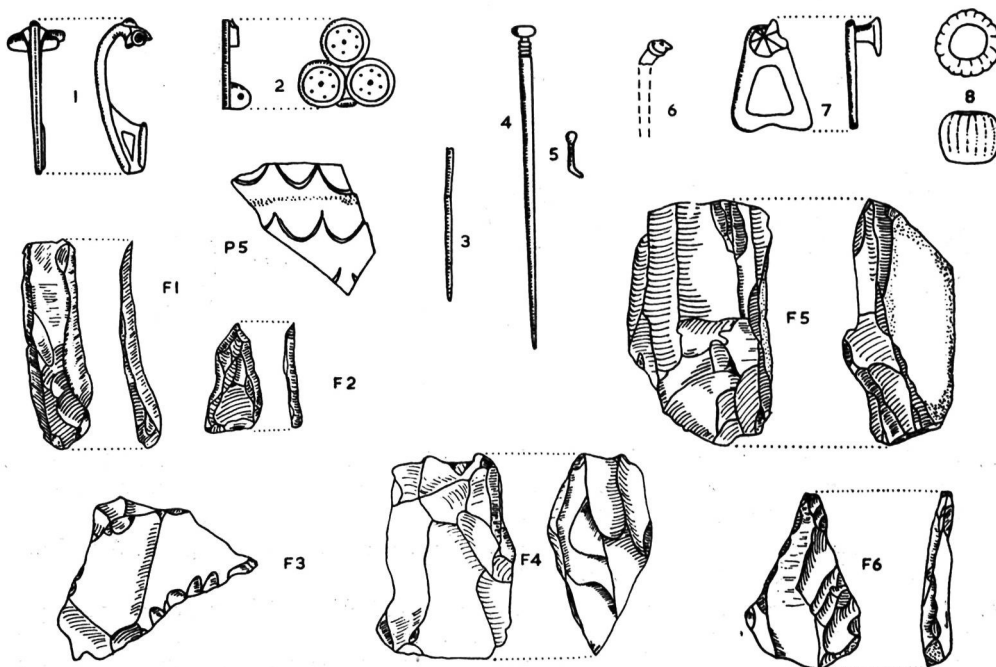


Fig. 5
Small finds and worked flints

ANIMAL REMAINS (TEETH)

BY A. W. GENTRY, BRITISH MUSEUM (NATURAL HISTORY)

Few animal remains were found during these excavations and with the exception of two specimens all were so badly decomposed that examination was impossible.

The two specimens examined were:

1. Trench 1, Layer 5. Left lower third molar from a cow or ox.
2. Trench 2, Layer 5. Left lower molar or premolar of a horse.

CHARCOAL FRAGMENTS

BY DR. D. F. CUTLER, ROYAL BOTANIC GARDENS, KEW

1. Trench 1, Layer 4. Fragments of maple (*Acer campestre*).
2. Trench 2, Layer 3. Fragment of oak (*quercus* of *robur* type).

NOTES

1. Transactions of the London and Middlesex Archaeological Society, 1951, 1953 and 1956.
2. Ditto.
3. S. A. Castle and J. H. Warbis: "Rescue Excavations at Brockley Hill, Sulloniaca, 1968". Report forthcoming.
4. Trans. L.M.A.S., 1951, S. H. Applebaum, Sulloniaca 1950, pp. 203-205.
5. Trans. L.M.A.S., 1948, K. M. Richardson, "Excavations at Brockley Hill, Middlesex, August to September, 1947".
6. Information from Mrs. K. F. Hartley. The stamped mortaria of Driecius were found in a pit at Radlett in 1959 (N.G.R. c.TQ 163989) and are in Verulamium Museum, St. Albans.
7. Trans. L.M.A.S., 1956, P. G. Suggett, "Excavations at Brockley Hill, Middlesex, 1953-54, p. 68.

ACKNOWLEDGEMENTS

I am indebted to Commander G. R. Roantree, Secretary of the Royal National Orthopaedic Hospital for permission to excavate this site, the finds from which he has generously presented to the London Museum. Mr. J. Upton, the hospital engineer, is also thanked for his helpful co-operation. Thanks are due to: Mrs. K. F. Hartley for her report on the stamped mortaria; Miss C. Johns, B.A., of the British Museum, for notes on the Samian ware; Mr. A. W. Gentry, British Museum (Natural History) for identifying the animal remains; and Dr. D. F. Cutler, of the Royal Botanic Gardens, Kew, for identifying the charcoal fragments. Mr. R. A. G. Carson, F.S.A., and Dr. J. P. C. Kent, F.S.A., are thanked for their help in identifying the coins. Appreciation is expressed to the London and Middlesex Archaeological Society for a grant to meet excavation expenses, including insurance.

Last, but not least, thanks are due to all who helped on this excavation which was conducted in conditions far from ideal. Mr. Ralph Merrifield, F.S.A., of the Guildhall Museum, kindly read this report and is thanked for his useful and helpful suggestions.

BOOK REVIEW

MARTIN NAIL: *The Coal Duties of the City of London and their Boundary Marks*. vi-30 pp.

Two line drawings and one map. Pub. by the author from 123 Hookfield, Epsom, Surrey, at 50p., post free.

Contains a useful historical introduction and a list of surviving examples of the boundary marks set up by the Corporation of the City of London under the various Coal Duties Acts.

STEPHENS, W. B., *Sources for English Local History*. Manchester U.P., 272 pp. £3.60, or paperback £1.80.

A useful guide on how to approach English local history for those who may be studying it for the first time.

SNELL, LAWRENCE S. (ed.). *Essays Towards a History of Bewdley*. Pub. Corporation of Bewdley, July 1972. 122 pp. One illus. £1.

A history of Bewdley from original MSS sources is anticipated in this useful volume of essays.

L.S.S.

AN IRON AGE ENCLOSURE ON STAINES MOOR, MIDDLESEX

BY A. E. BROWN

WITH AN ACCOUNT OF THE POTTERY

BY T. C. CHAMPION

This note is a record of trial excavations carried out during 1963 and 1964 on a site of the Early Iron Age on Staines Moor, Middlesex.

THE SITE

The site was discovered on an air photograph of Staines Moor taken by Fairey Surveys Ltd. on 14th June 1959. At TQ 03257413 the photograph showed a grass mark representing the silted up ditch of an enclosure (Plate A). The eastern portion of the enclosure lay in another field which had just been cropped and the full outline could not be made out, but it was probably sub-rectangular. There was an entrance gap in the south-west side. The internal area of the visible portion of the enclosure was about 500 sq. yards.

The enclosure is in a low-lying position between the rivers Colne and Wyrardisbury, 200 yards from either; both flow into the Thames at Staines, 3000 yards to the south of the site. The subsoil is gravel, capped by about one foot of alluvium of sandy clay.

To the east of the Colne and 600 yards from the site lies the King George VI Reservoir. Since the excavation took place a new reservoir has been built by the Metropolitan Water Board in the area of the Runemede Rifle Range, around TQ 025735, but the site has so far (1971) remained safe from destruction and lies in rough pasture.

In addition to the enclosure the air photograph showed a large number of ditches forming complicated patterns to the north of the site in the area of TQ 034745 and in the vicinity of the site itself. Some of the markings around TQ 034745 can be seen to tie in with existing hedge lines and many correspond with field boundaries shown on a map of Stanwell parish in 1748 preserved in the Middlesex Record Office, but others in this area and around the site could not be explained in this way and belong to a different system of narrow straight-sided fields and field ways arranged in a very regular fashion and unrelated to the existing boundaries.

THE EXCAVATION

The excavation was carried out at weekends during late 1963 and the middle of 1964 at the suggestion of the then Field Officer of the London Museum, Dr. Francis Celoria. Much of the equipment was provided by the Museum and many of the problems of transportation were solved with his help. A debt of gratitude is also due to the volunteers who worked on the site.

The aim of the work was the stripping and excavation of that portion of the enclosure visible on the air photograph. As a preliminary a section was cut through the enclosure ditch and a start was made on the laying out and excavation of a grid of trenches in the interior of the site. However, while this was in progress, the land unexpectedly changed hands and the new owner refused to allow the work to continue. The trenches had to be filled in, and the account offered here is, therefore, a brief record of a very incomplete excavation. The field notes and drawings, together with the finds, have been deposited in the London Museum.

STAINES MOOR:ditch section

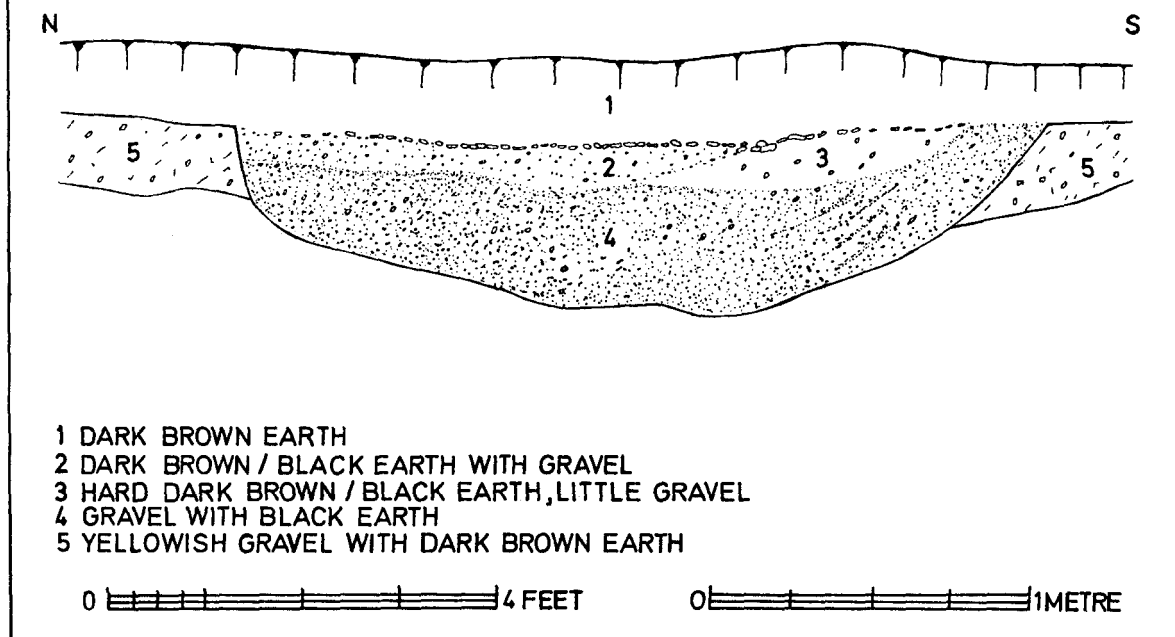


Fig. 1 Ditch section, Staines Moor

1. THE DITCH

The south-west side of the enclosure was sectioned at a point 25 feet from the south-east hedge of the field in which the site was identified. The ditch was U-shaped, 8 feet wide and 2 feet 6 inches deep (Fig. 1). The fill contained burnt flints, flint flakes, pieces of burnt clay, pottery fragments and animal bones.

2. Features within the enclosure. A line of trenches was laid out as a continuation of the line of the ditch section, to serve as a basis for a complete grid. In these trenches the following features were identified:

- (a) 21 feet from the inner edge of the ditch, a pair of more or less oval depressions (Features 1 and 2) filled with dark soft earth. Feature 1 was shallow and 10 inches across; Feature 2 was 1 foot 9 inches deep and 1 foot 6 inches across and contained a piece of unidentifiable bone.
- (b) 12 feet to the north-east of (a) two gullies (Features 3 and 4) running north-west to south-east. Both were filled with dark earth and pebbles. Feature 3 terminated in the trench and was 1 foot 6 inches across and 2 feet deep; it contained some burnt flints. Feature 4 was 3 feet across and 2 feet 4 inches deep; it yielded pottery fragments, many small pieces of burnt clay, some bone fragments, burnt flints and a small flint flake.
- (c) To the north-east of (b) the end of a gully or small oval pit (Feature 5). This contained black earth and gravel together with some burnt clay and burnt flints. To the north-east of this was an extensive spread of hard dark earth and gravel (Feature 6). A section across it showed it to be cut 5 inches into the gravel subsoil at the point excavated. It produced burnt clay, burnt flints, and pottery fragments.

A start was also made on the excavation of the entrance and the outline of the butt of the ditch on the north side of this was exposed but not excavated. Pottery and burnt clay was found in the topsoil and on the surface of the ground in the area of this feature.

FINDS
POTTERY
BY T. C. CHAMPION

The 96 sherds from Staines Moor were all small, and very few joins were possible. Many were badly abraded at the edges, and on most the surfaces had suffered from the gravel in which they had been buried. Only seven sherds showed distinctive features, four bases and three rims; the remainder were all body sherds with no angles and no decoration. No profiles were restorable.

Five different groups of fabrics were represented, with variations between individual sherds in each group:

- A Dark greyish-brown surfaces, grey to black in the core, containing very much medium-sized sharply-angled flint gritting which protrudes through both exterior and interior surfaces.
- B Surfaces orange-brown and black, core brown to black containing much tempering, both of flint which is mostly small but can be up to 8 mm in length, and also of crushed pottery. The surface is rough and in some cases very pitted.
- C Lightish grey surfaces with darker grey core, containing small amounts of very fine flint grits and occasional finely crushed pottery fragments. Fabric very sandy, giving surfaces a slightly gritty feel.
- D Similar to C in colour of core and in tempering, but of finer clay and much less sandy. External surface smoother than C, and grey to greyish-white in colour.
- E Similar to B, but finer and darker. Moderate amount of tempering, of finely ground flint and pottery.

Of these five groups, A was clearly distinct from the others, while D and E seemed to be finer versions of C and B respectively. The distribution of the groups is shown in the table.

The seven sherds with distinctive features are shown in Fig. 2.

1. From Feature 4. Fabric E. Thick base well smoothed on the interior.
2. Topsoil. Fabric B. Sherd from the bottom of the body, but not actually the base. From the way the fracture has occurred, it is probable that the vessel was made by applying the wall to the outside edge of a clay disc forming the base.
3. Topsoil. Fabric B. Small fragment of worn base. Diameter indeterminable.
4. Topsoil. Fabric B. Very badly abraded fragment of a base of indeterminable diameter.
- 5 and 6. Topsoil. Fabric C. Two small fragments of rim. Possibly from the same pot despite variations in precise form.
7. Topsoil. Fabric B. Two small abraded joining fragments of rim of a vessel of unknown diameter. The top is decorated with one complete circular impression and traces of a second. These are made not with the finger, but with the end of a bone or stick.

The interpretation of these sherds is made difficult by the almost total lack of diagnostic features and of local groups for comparison. The commonly-used criteria of form and decoration are of little use, since there are no profiles and only a single decorated fragment, while the surviving rims and bases are of the most generalised types. On the evidence of the fabric the group can be assigned to the Iron Age, and to the earlier rather than the later part of it, because of the absence of the smoother, dark-coloured fabrics so common in the later phases of the Iron Age, and the presence of impressed ornament, which seems to be characteristic solely of the earlier phases. Further precision is impossible until more and better pottery groups are available for the area.

Decoration on the flattened top of the rim is less common in Iron Age pottery than that on the vertical surfaces of shoulder, neck or rim, and it appears to be predominantly a south-eastern feature. Cabling in such a position occurs not infrequently, e.g. at West Harling (Clark and Fell, 1953, Fig. 12, Nos. 22, 29, 30 and Fig. 13, Nos. 33-36); Leigh Hill,

Cobham (Lowther, 1945, Fig. 4, B1) and Abington Pigotts (Fox, 1924, Fig. 2A), but circular impressions are harder to parallel. Among published examples are those from West Harling (Clark and Fell, 1953, Fig. 12, No. 18) and Danbury (Dunning, 1934, Fig. 1, No. 1), and there are unpublished sherds with similar decoration from Minnis Bay, Birchington, Kent, and in Prittlewell Priory Museum, Southend-on-Sea.

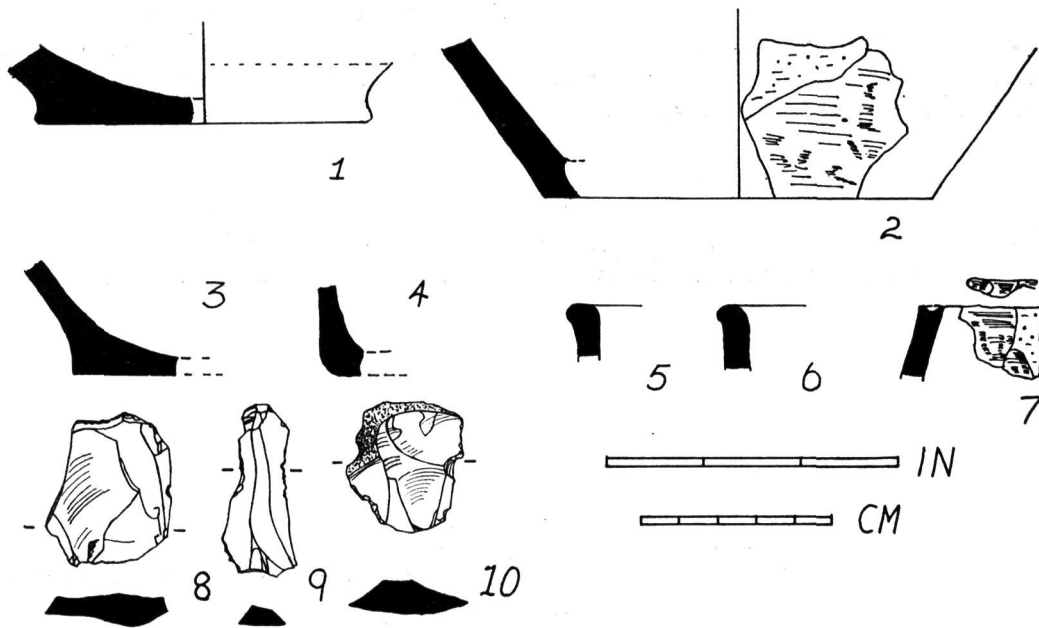


Fig. 2
Pottery and flints, Staines Moor ($\frac{1}{2}$)

TABLE TO SHOW DISTRIBUTION OF POTTERY BY FABRIC GROUPS

Location	A	B	C	D	E
Topsoil	1	34	8	-	-
Ditch Layer 4	-	1	-	1	-
Feature 4	-	5	-	-	2
Feature 6	1	33	2	-	-
Area of entrance	-	8	-	-	-
	2	81	10	1	2

BURNT CLAY

A considerable quantity of small pieces of soft reddish burnt clay was found, either in the topsoil or in the features noted above. This could have come from a variety of sources and, for example, represent daub, or material from ovens.

FLINT

Some 70 flint flakes turned up in the excavation, mostly from the topsoil. For the most part they were simple flakes struck from gravel nodules. The presence of flints on an Iron Age site need cause no surprise; for other examples see Staple Howe (Brewster, 1963, p. 135) and Grimthorpe (Stead, 1968, p. 165). Three flints are illustrated in Fig. 2:

8. Crude scraper of coarse flint patinated yellow.
9. Thin flake with some retouch along the edges.
10. Rough scraper, patinated cloudy blue but re-worked along one edge to show brown flint.

A quantity of burnt flints was also recovered from the topsoil and from some of the features. These are common on Iron Age sites and are the result of cooking or the parching of spelt before threshing (Helback, 1952, pp. 232-3).

BONE

Few bone fragments were recovered; one tooth each of horse and cow from Layer 4 of the ditch and a few unidentifiable fragments from Features 2 and 4 and the topsoil.

REFERENCES

- Brewster, 1963: T. C. M. Brewster, *The Excavation of Staple Howe* (1963).
 Clark & Fell, 1953: J. G. D. Clark and C. I. Fell, "The Early Iron Age Site at Micklemoor Hill, West Harling, Norfolk, and its Pottery", *Proc. Prehist. Soc.* XIX (1953), 1.
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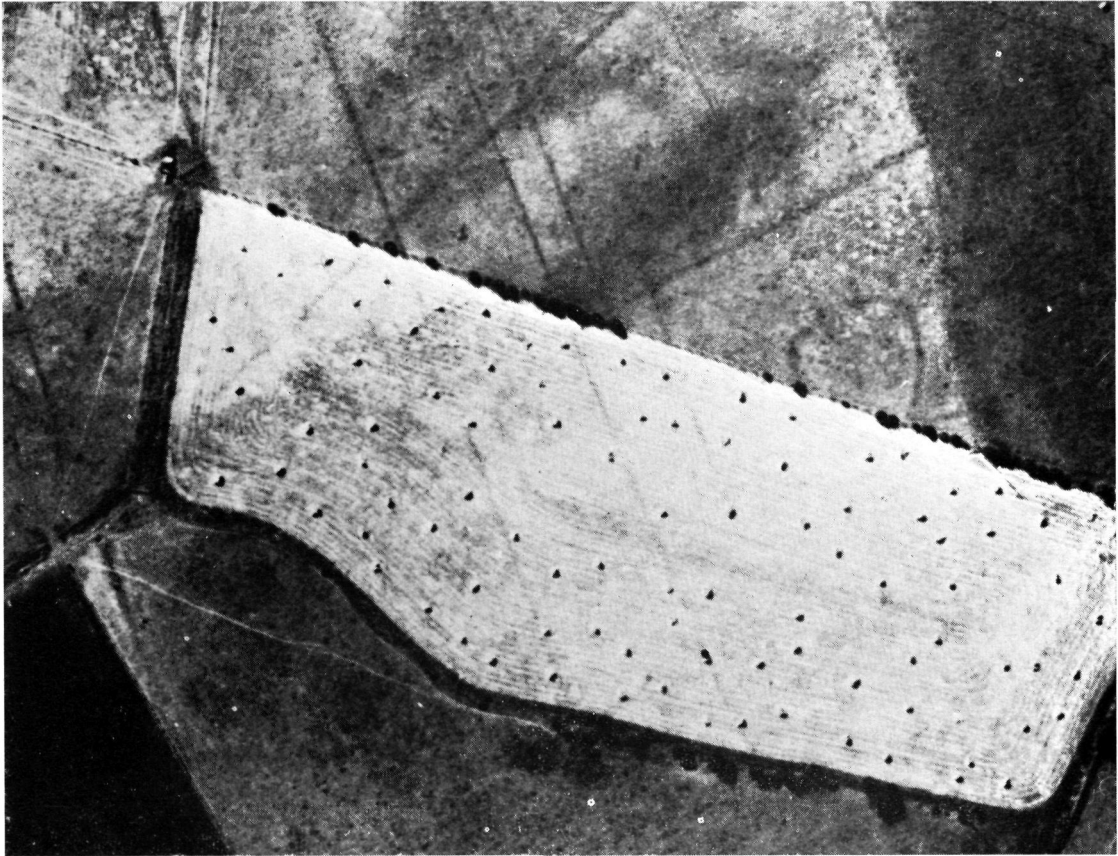


PLATE A. Air photograph of Staines Moor to show Iron Age enclosure, reproduced by permission of Fairey Surveys Ltd. Scale: about 1:2000. North is on the right of the picture.



The Cranley Gardens Pot as now reconstructed
Photograph by kind permission of the Trustees of the British Museum

THE CRANLEY GARDENS HOARD

BY CAROLINE NEUBURG

AIM

The aim of this paper is to place the Roman find of 1928 from Cranley Gardens, Muswell Hill, London N.10, into the context of the other Roman antiquities from the Highgate and Muswell Hill areas. A complete report of the coins from this find was made in the *Numismatic Chronicle* in 1929¹ but neither a report nor an analysis of the associated finds of a pot, a spoon and a ring have yet been made.

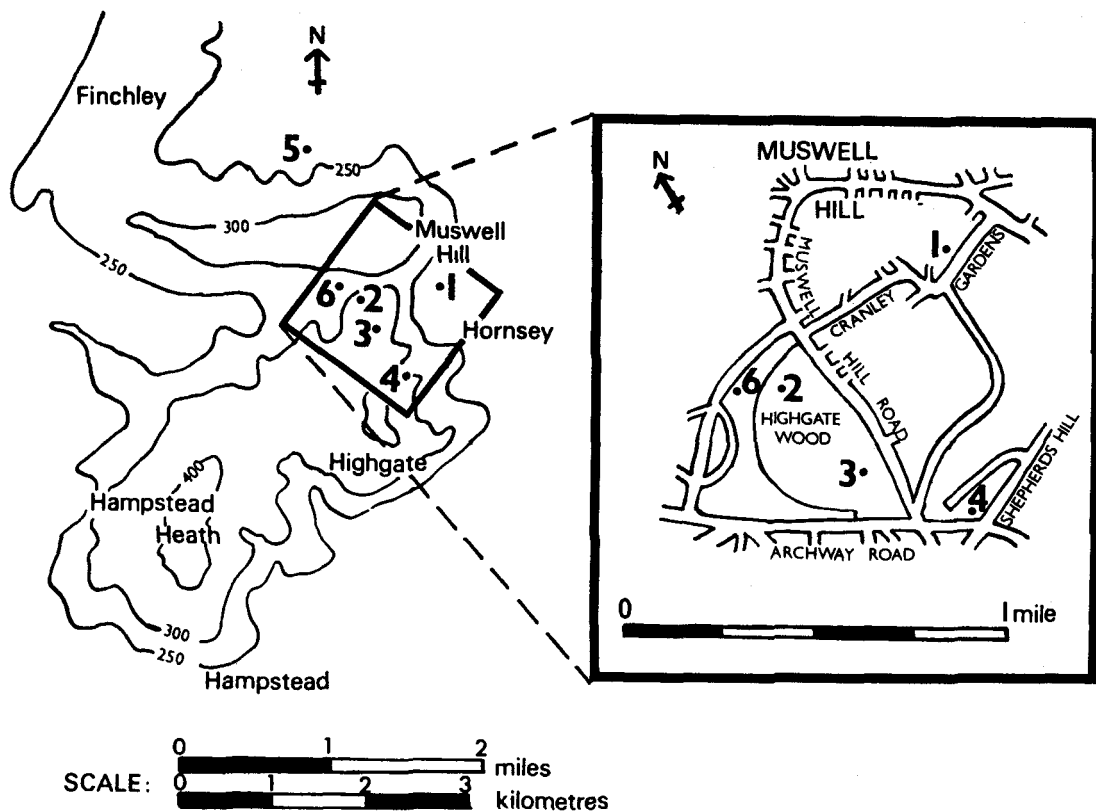


Fig. 1

Location plan of the Cranley Gardens hoard and other local finds. Based upon the Ordnance Survey Map with the sanction of Her Majesty's Stationery Office. Crown Copyright reserved.

Key to the finds:

1. Cranley Gardens Hoard.
2. Highgate Wood Pottery Factory Site.
3. Highgate Wood second site.
4. The Priory, Shepherd's Hill.
5. Barrenger Road, Muswell Hill (coin).

THE SITE

The Cranley Gardens Coin Hoard was found on September 6, 1928, in the garden of No. 104 Cranley Gardens (TQ 292891) and the site is shown as No. 1 on the location plan (Fig. 1). According to the original report the find was made at an approximate depth of four feet and was embedded in clay.² The Geological Survey shows the area as London Clay and just under half a mile north-west is the southern tip of the Pleistocene Boulder Clay and Glacial Gravel.³

THE FINDS

The discovery consisted of a pot containing over six hundred coins, a silver spoon and a bronze ring. It was adjudged to be Treasure Trove, and was examined by the British Museum in 1928.⁴

(A) THE POT

Madge (1938) reproduced a photograph of the pot as it was originally reconstructed but it was unfortunately reproduced upside down.⁵ After its initial reconstruction the pot was separated again and the sherds were examined early in 1970.⁶ The fabric was found to be of a gritty, light red type, unevenly fired. On present knowledge the fabric cannot be paralleled to the material from the Roman Pottery Factory at present under excavation in Highgate Wood.⁷ The sherds had the appearance of having been burnished rather than slipped or colour coated. It was not possible at this stage to form an idea of the shape of the vessel, although the foot-ring was considered to belong to a beaker-type of vessel.

Later in 1970, the vessel was reconstructed, and it again assumed the bulbous shape depicted in the photograph referred to above. A new photograph is shown at Plate 1. There is a small slit 2.5 cms long and 1.25 cms wide, not in the top but on the irregular shoulder. A roughly executed groove runs round the shoulder of the vessel, and the whole is 15 cms high. Fig. 2 shows the section of the pot.

Because of the unusual form of this pot, and its lack of parallels, it is felt that some justification for its form of reconstruction should be given. Maureen Robson (Conservation Assistant, Department of Prehistoric and Romano-British Antiquities, British Museum), who reconstructed the vessel kindly provided the following observations:

"The initial reconstruction of the vessel took the form of two shallow spheres, one with the foot ring attached, the other with an incised line decoration and a small hole in the upper portion. The two halves were linked with one join giving a globular shape. At this stage the form was found to be slightly distorted. The upper portion of the pot was brought in, so that its lower edges followed exactly the profile of the lower pot. This explains the flatness in one area of the upper pot.

"The following observations led to the completion of the globular form:

- (a) There was no evidence of a rim, or change in contour in the sherds forming the upper pot.
- (b) The profile from the curve of reconstructed sherds suggested an enclosed top.
- (c) The pot section thinned towards the top and the throwing rings faded, suggesting that the clay was originally drawn up and into the centre in order to complete the globular form".

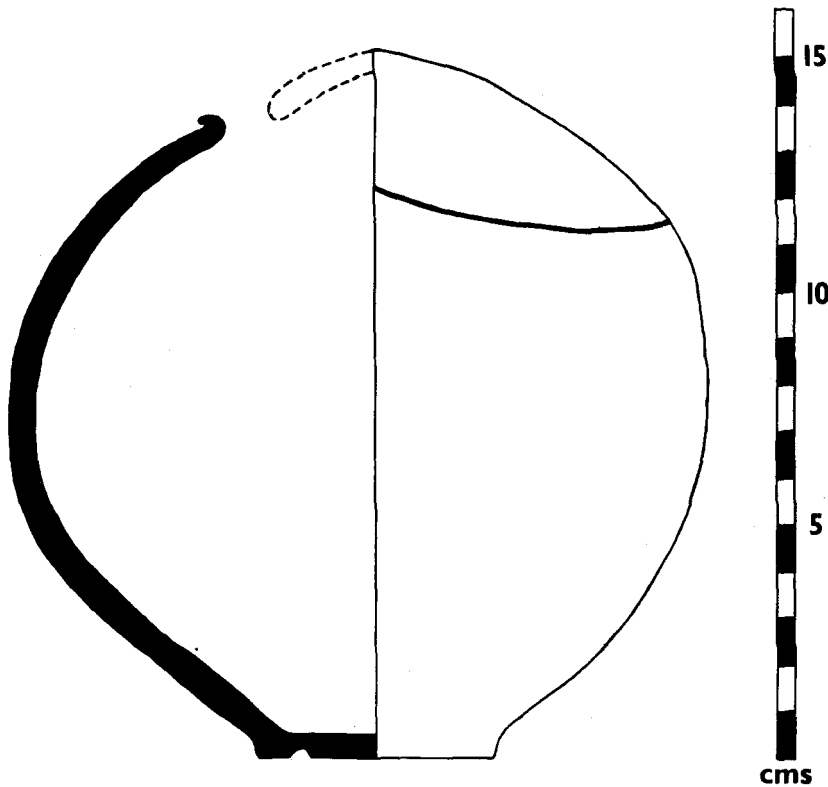


Fig. 2
Section of the Cranley Gardens Pot as now reconstructed

It has not been possible to find any parallels to the form of this vessel. The opening in the top of the vessel may indicate that it functioned as a "money-box". One example of a Roman money-box may be found in the British Museum. This vessel was found in Lincoln and contained coins dated AD 307-340. Its shape is not unlike some Medieval money-boxes which had to be broken in order to extract the money. The Lincoln money-box cannot be quoted as a parallel to the pot from Cranley Gardens for reasons of size and shape. It is mentioned here in order to show that the idea of a money-box is a possibility to be considered.

It should be mentioned here that in his account of the find Dr. Draper (1936) records the presence of two bowls.⁹ It has, however, been impossible to substantiate their existence, and it may well have been a misinterpretation of the broken sherds. The reconstructed pot is now in the British Museum Reserve Collection.

(B) THE COINS

The hoard consisted of 653 denarii and one drachm. The earliest of the coins in date were ten denarii of Mark Antony. Such coins are not unusual in hoards of this kind so that the real dating of such a hoard usually begins with the next in the series, in this case, with

Neronian coins.¹⁰ A full description of the coins was published in the *Numismatic Chronicle* and the hoard was adjudged "not of an uncommon type".¹¹ The coins enable the date of burial of the hoard to be fixed at about AD 210.

Forty-one of the coins were retained by the British Museum, all but one of these being of Roman mint. The exception is a denarius of Eastern mint. The London Museum were given disposal of the remaining coins of which they retained 13.¹² The residue was dispersed and a number were put up for sale by a London dealer early in 1970.¹³

(C) THE SILVER SPOON

A photograph of the spoon is also shown in Madge (1938) with the pot.¹⁴ The spoon, which is in the British Museum, is of silver and is 18.5 cms long. It has a narrow, pointed stem and its round bowl has a grooved lip. Parallels to it may be seen in the British Museum Reserve Collection. An example is one from Colchester, Essex, on exhibition in the British Museum.¹⁵

(D) THE BRONZE RING

No mention of the bronze ring appears in the British Museum's Register of Antiquities for 1928 and it was not retained by the British Museum. Its ultimate disposal is unknown and, unfortunately, no satisfactory description of it survives.

DISCUSSION

In the area under investigation there are only six established sites where Roman material has been found (Fig. 1). By far the most important find in the area is just over half a mile due west of the Cranley Gardens site. This is the Romano-British Pottery Factory centred on TQ 28298897 in Highgate Wood¹⁶ (No. 2 on Fig. 1). This major industrial site is considered on present evidence to have been in production between 60 and 120 A.D. There is a further suspected Roman site in Highgate Wood, approximately one third of a mile south of the known Pottery Factory site (No. 3 on Fig. 1). This second site is centred on TQ 28398845 and has been defined by a surface pottery scatter.¹⁷

Approximately three-quarters of a mile south-west from Cranley Gardens is the site of a find made sometime between 1830 and 1850 (No. 4 on Fig. 1). This find was made when the house known as the Priory (now Shepherd's Hill Library) in Shepherd's Hill Road (now Shepherd's Hill) was under construction (TQ 287881). The discovery is alleged to have consisted of "a fine bronze sword handle' and pottery filled with 'many coins'," the disposal of which is now unknown.¹⁸

Another find reported but with no trace remaining, is that from Shepherd's Cot.¹⁹ No accurate location can be assigned to this find to justify its being placed on the distribution map. Research is being undertaken to attempt to establish more information but it seems possible that this was the hoard of coins "rumours of which reached the British Museum in 1925".²⁰ The find was probably made on the demolition of the property known as Shepherd's Cot Farm, Shepherd's Hill Road.

Another established find in the area was made in 1937, approximately a mile north-west of Cranley Gardens. It was in a garden in Barrenger Road, although the exact site is not known. This find was a single coin of fourth century date.²¹

The final established Roman find in the area is a sherd of pottery found less than a quarter of a mile north-west of the Highgate Wood Pottery Factory. The find was made in May 1970 in the grounds of a house in Woodside Avenue at TQ 281891²² (No. 6 on Fig. 1). The sherd measures approximately 4 cms x 5 cms and 1 cm thick. It is of grey fabric with incorporated mica. There are some lightly incised grooves on the exterior and some vertical marks which are probably scratches. Internally the sherd is darker in colour and shows the marks of wheel-turning. The sherd is not of Highgate make and it is difficult to assign a date to so small a sherd.

In analysing the evidence for the Romano-British occupation in the small area of the present survey, it is worth noting that all the sites mentioned above are situated below the 350 ft. contour (Fig. 1). This may well have no significance, but no signs of Roman occupation have as yet been obtained from the top of Highgate Hill, which is the highest ground in the vicinity. It is a popular belief that the Romans settled on high ground, and the reason why this appears not to be the case in this area may very well be due to the lack of careful looking, rather than to a dearth of occupation.

It must be said that neither the find from Cranley Gardens, nor the other finds from the area, do in themselves prove a Roman settlement. They do, on the other hand, make likely the supposition that there were Romans settled somewhere in the locality.

After considering these few established Roman finds and remembering the industry present in Highgate Wood, one must think about the possible Roman road network in the area. In the vicinity of this group of finds there are no established Roman roads, although several theories do exist. The Viatores route No. 220²³ passes within approximately one mile to the west of the area under discussion. This route is considered to run from Cripplegate to Stevenage via Islington, Highbury, Wood Green, Southgate, Brookman's Park and Hatfield. The line of the road appears to be well established north of Potters Bar,²⁴ but one cannot accept without question the rest of this route into Cripplegate. No archaeological evidence has yet been described for this line in the north London area.

Another route often considered is north from the City via Maiden Lane (now York Way and Brecknock Road) and Dartmouth Park Hill.²⁵ The extension of this route would align in a northerly direction approximately along the central portion of the Muswell Hill Road shown in the location plan (Fig. 1). That this happened is pure supposition, but many authors have claimed Maiden Lane to be an old road, though its existence as a Roman alignment has not been proved. Two Roman finds are, however, associated with Maiden Lane. A monumental inscription was found in the vicinity of its southern end at Battle Bridge in 1842.²⁶ Also, in 1845, an iron urn allegedly containing gold and silver coins of Constantine was found under the foundations of a house in Maiden Lane.²⁷

There is a third possible route that could serve the Highgate and Muswell Hill areas. Norden (1593) described an "old and ancient highway to High Barnet" via Grays Inn, Crouch End, Muswell Hill, Colney Hatch and Whetstone.²⁸ This line also has no archaeological evidence to support it, and so the road network in the Highgate and Muswell Hill areas remains a matter for conjecture. Roads undoubtedly existed, but it will take time and patient research to prove convincingly exactly where they were.²⁹

As regards the dating implications of the few finds reported in this paper, the Cranley Gardens find is at least a century later in date than the Highgate Pottery Factory. The find of a fourth century coin at Barrenger Road gives a continuity from the first to the fourth

century in this small area. Patient research and observation, together with excavation will, it is hoped, eventually show that this area was settled by the Romans and that it is not the archaeological desert it is so often thought to be.³⁰

NOTES

1. *Numismatic Chronicle*, ix (1929) 315.
2. *ibid.*, 315.
3. *Geological Survey of Great Britain (England and Wales)*, 1951; Sheet 256 (North London).
4. British Museum, "Muswell Hill Hoard", *Treasure Trove*, 1908-31, E-Z.
5. S. Madge, *Early Records of Harringay*, Hornsey Public Libraries, 1938, 21.
6. Examination by Mr. Harvey Sheldon and the author.
7. A. E. Brown and H. L. Sheldon, "Early Roman Pottery Factory in North London", *The London Archaeologist*, i (1969), 39.
8. *Guide to the Antiquities of Roman Britain*, British Museum, 1964, No. 27/36.
9. Dr. F. W. M. Draper, *Muswell Hill Past and Present*, Hornsey Public Libraries, 1936, 5.
10. The Antonian denarii remained in circulation for some time after that ruler's death. Personal communications from R. A. G. Carson, Deputy Keeper, Department of Coins and Medals, British Museum.
11. *Op. cit.* in Note 1, 318.
12. Personal communication from the London Museum.
13. *Numismatic Circular*, Spink and Son Ltd., April 1970, 155.
14. S. Madge, *op. cit.* in Note 5, 21.
15. Unpublished. Found in 1852 in Colchester. British Museum registration No. 54-11-20.
16. A. E. Brown and H. L. Sheldon, *op. cit.* in Note 7, 39.
17. A. E. Brown and H. L. Sheldon, *op. cit.* in Note 7, 44.
B. Robertson, "Resistivity Surveying Based on a Highgate Site", *The London Archaeologist*, i (1970), 195.
18. J. H. Lloyd, *History of Highgate*, 1888, 8, 15.
19. *Hornsey Journal*, 21 September 1928.
20. *Numismatic Chronicle*, v (1925), 398.
21. *Evening Standard*, 20 March 1937, 4, col. 4.
22. The author is indebted to Miss R. Warren for permission to publish this find.
23. *Viaiores Roman Roads in the South-East Midlands*, Gollancz, 1964, Road No. 220, London (Cripplegate) to Stevenage, pp. 165-201.
24. I. D. Margary, *Roman Roads in Britain*, John Baker, 1967, 201.
25. W. F. Grimes, *The Excavation of Roman and Medieval London*, Routledge and Kegan Paul (1968), 43.
26. *Old and New London*, Edward Woolford (), ii, 278.
27. *ibid.*, 278.
28. Norden, *Speculum Britanniae* (1593).
29. The author is indebted to Brian Robertson for his help into research in this field.
30. *Map of Roman Britain*, Ordnance Survey (1956), 12.

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Editor's note: Since the completion of the above article, a new find of Roman material has been made within the area surveyed by Miss Neuburg. A report of this find from Southwood Lawn Road, Highgate, follows.

ROMAN POTTERY FOUND AT 37, SOUTHWOOD LAWN ROAD, HIGHGATE VILLAGE

BY JOHN BARRETT, HARVEY SHELDON, ROBERT SYMBERLIST

CIRCUMSTANCES OF THE FINDS

Two vessels were found during the digging of an extension for the back of the house by Mr. Holt (a local builder) on 9th December 1971. Vessel 1 lay on its side about 3 ft. 9 ins. below the current ground surface. (The sherds belonging to the other vessels were some 18 ins. below the current ground surface.) According to the finder sand lay all around the flagon, even sealing the mouth. It contained the equivalent of a handful of "black soil-like material". The vessels are described below.

THE POTTERY

VESSEL 1:

Ring neck flagon with three rings at the top of the neck. One handle, no decoration. Wheel made.¹ (Fig. 3, 1).

Core: Soft pink sandy fabric. Oxidised, possibly underfired.

Surface: Buff white, sandy feel, sand visible.

VESSEL 2:

Base of a similar vessel, but probably larger. No decoration. Wheel made. (Fig. 3, 2).

Core: Pink, but greyer and harder near to the internal surface.

Surface: Pink (oxidised), very "eaten" externally.

Examination of the excavation sections showed, below the modern surface, a layer of brown sandy soil. This was a fairly clean band, usually two or three inches thick, but dipping in one part, as though filling a pit. Mr. Holt noted that it was in similar coloured soil that the remains of Vessel 2 had been found. A check on the brown sandy soil produced a few very small sherds of red pottery and a few pieces of burnt clay, and possibly tile. The pottery was similar to that from Vessels 1 and 2. It is not possible to say much about the layer except that it could have formed the top of the subsoil in the Roman period. As a modern ground surface lay directly on it, it is possible that any Roman levels—had they been there—could have been removed in landscaping.

EXCAVATION

It was decided to investigate the area of garden in the immediate vicinity of the finds. This was a flowerbed, south of the findspot, some 80 sq. ft. in area, due for landscaping and, therefore, extensive disturbance. Some disturbance had already taken place with the removal of soil cutting down towards the north of the area (see section). Layer 1 was composed of flowerbed soil and this was removed and the underlying surface cleaned. Layer 2 was a light brown sandy soil in which it had been hoped to trace features which could be connected with the original finds but, however, none were located.

However, in the south-west corner a feature was located (see plan). It was found to be a small depression, probably a pit, with a fill of soil, slightly darker than Layer 2 but of very similar texture; in places the edge was difficult to locate. The pit contained nine tile fragments, all seemingly Roman, and a fragment of sandstone. Some other disturbance had also taken place on top of Layer 2 and although no further features were located, two small fragments of porcelain and a sherd of green glazed ware were recovered from the top of

the layer. It would seem probable that the top of this layer had been cut away prior to the laying out of the garden as this upper surface sloped at a slightly greater angle than the natural slope indicated by the junction of Layer 2 and the underlying natural sand (see section). If this is the case then only the bottom of the pit was recovered.

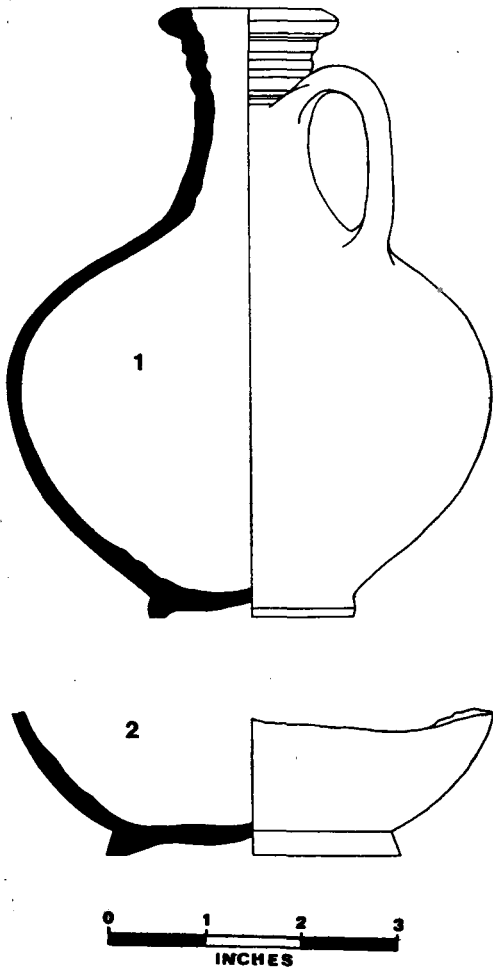


Fig. 3
Pottery found at 37 Southwood Lawn Road

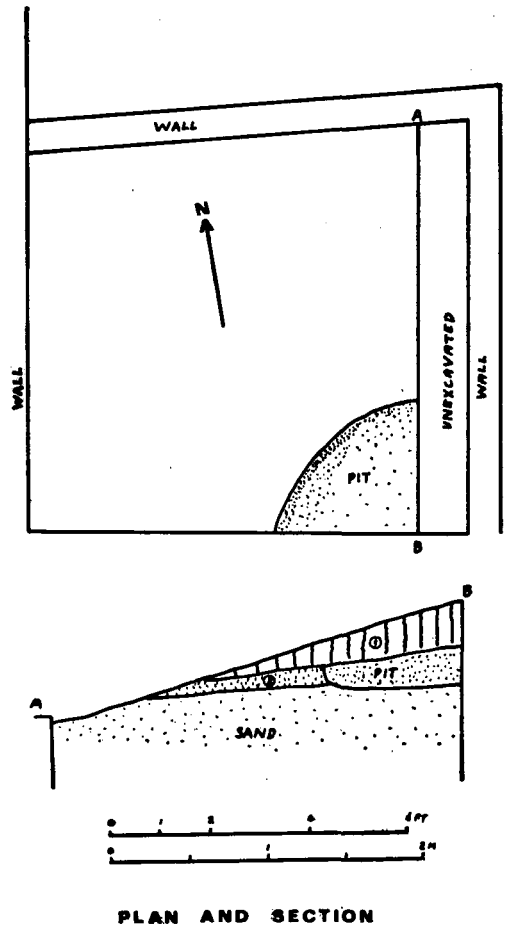


Fig. 4
37 Southwood Lawn Road

FINDS

Layer 1: This layer contained the expected garden detritus and a few sherds of indistinguishable pottery. It also produced two tile fragments.

1. Tile with "keying" for plaster, possible a box flue tile fragment.
2. Tile fragment with curved section, possibly an "imbrex" tile.

Layer 2: Two small fragments of porcelain.

1. Sherd, green glazed with dark filler but pink hard fine fabric.
2. Tile fragment. On one surface is a slight patch of glazing, brown green in colour, the fabric is comparable to the other tile from this layer and the pit.
- 3-6. Plain tile fragment.
- 7-9. Three sherds of pottery, fine pink fabric.
10. Tile fragment, one side carries "keying" for plaster and from the fracture this would seem to be a fragment of a box tile.
11. Sherd of pottery, fine, soft, brown fabric.
12. Sherd of pottery, fine, soft, grey fabric.
13. Sherd of pottery, fine, soft, dark grey fabric.

Pit:

- 1-6. Six plain tile fragments.
7. Fragment of box tile with "keying" for plaster.
- 8-9. Two fragments of tile with "keying" for plaster, both possibly fragments of box flue tiles.
10. Fragment of sandstone, worn on one surface.

If Layer 2, No. 2, is an example of "flash glazing" rather than a piece of deliberately glazed tile (this glazing is very slight and localised), then it would indicate repeated firings at high temperatures, indicative *perhaps* of a kiln structure.

INTERPRETATION

Two possibilities are suggested for consideration:

1. The flagons found by Mr. Holt could be part of a burial group. In favour of this would be the complete nature of Vessel 1 and its occurrence within a pit.
2. These, and the pieces of tile, could be residue from kiln production. The soft, possibly underfired, nature of the pottery, and the possible "flash glazing" on the piece of tile from Layer 2 (No. 2) would support this idea. In terms of known "local activity" we have evidence of Roman pottery production from a site at the northern end of Highgate Wood, only about three-quarters of a mile away. A probable second site in the Wood, as yet unexcavated, is evidenced by surface pottery and tile scatter. This lies less than half a mile to the north of Southwood Lawn Road.

NOTES

- 1 Flagons, similar in appearance, are dated to the period A.D. 60-75 at Verulamium (Verulamium Excavations, vol. 1. Research Report of the Soc. of Antiquaries of London, v.28, p.273).

ACKNOWLEDGEMENTS

We would like to thank Mr. Holt for informing us of the find. This, and the support of the house-owners, Mr. and Mrs. G. C. Farmer, enabled us to do the work described above. It is hoped that all the pottery and tile will be deposited in Haringey Museum.

THE PARISH AND THE POOR IN NEW BRENTFORD 1720 - 1834

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“Anyone who studies the Old Poor Law must be a very dull dog indeed”. Too many historians think that. It can be both interesting and informative to study the administration of the Poor Law in a small township. This essay is an attempt to demonstrate that such an investigation will throw light on questions that intrigue historians.

Firstly, one may ask whether the accepted view of eighteenth-century institutional development is correct. After 1688, England’s old-established institutions, like the Poor Law, supposedly became sacrosanct and mouldered away as they lost touch with a changing society. Instead of being radically altered, England’s institutions became encrusted with a reef of *ad hoc* machinery, which grew up without any long-term plan.¹ More particularly, the Poor Law administration decayed during the eighteenth century and the years up to 1834. Occasional attempts at reform, however, punctuated this long tale of decline.²

The criterion by which decay may be measured is quite clear. If the system did not sufficiently develop to cater satisfactorily for a changing society, then surely decay is proven. But what is “to cater satisfactorily”? What satisfies one person does not satisfy another. It would be wrong for the historian to measure the eighteenth-century Poor Law by his own attitudes towards the welfare state. The result would be mere propaganda. Unfortunately, we cannot tell how satisfied the poor of New Brentford were. The Old Poor Law must be judged by the degree of satisfaction which the parochial authorities felt, who have left us some records. If the authorities were not satisfied, the causes of their discontent ought to be elucidated.

Secondly, the historian wishes to know who really laid down administrative policy—the central or local organs of government. A thoroughly bureaucratic regime has never governed England. Central organs have always relied on local amateurs, be they Tudor J.P.’s or modern town councillors, to implement national policy. The central body has always had to be careful to ensure that its local limbs co-operate. The centre ensured this co-operation by taking its local agents into partnership. The centre, once it had laid down a rather woolly policy, allowed the local agents to translate it into hard administrative fact very much how they liked. In so doing, these local authorities moulded the soft, shapeless clay of national policy into thousands of sharply-defined local policies. One can see local authorities doing this whether one examines the Tudor Poor Law or Conservative retrenchment. The relative importance of the centre and local organs as policy makers has varied from period to period. In Tudor and modern times, the central governments laid down very narrow guidelines to follow. In the eighteenth century, governments did not support and constrict their local agents with narrow parallel bars. Between the Glorious Revolution and the Great Whig Reform, governments scarcely governed.³ Elizabethan and later Acts provided a broad administrative framework. New Acts concerning the Poor Law originated not from government, but from private initiative. After the experience of the Stuarts, the “Grand National Quarter Sessions” were unwilling to see the government regulate the behaviour of the leaders of local society, the country gentry. If the leaders of a locality wanted to undertake a new

direction in administration in their area, Parliament would usually give its sanction in a local Act. When M.P.'s had been bothered by a sufficient number of parishes all wanting to make the same change, or sufficient had gone ahead and made a change with little reference to legality, Parliament would legitimise the practice in a general Act. Such Acts were generally permissive or were at least treated as such and allowed the localities to get on with what they wanted to do. By and large, the more widely reaching were the provisions of an Act, the less compulsion there was to implement them.

Only three general Acts need concern us for the moment. The Act of 1601 laid down a few important general principles. Each parish was to set the able poor "on work" and to relieve the impotent, and had, when necessary, to levy rates to pay for relief of the poor. The justices were to appoint two overseers of the poor yearly from amongst the inhabitants of each parish. These part-time unpaid, overseers were entrusted with the duty of carrying out the provisions of the Act. The two important eighteenth-century Acts were largely permissive, whereas the 1601 Act was compulsory. Knatchbull's Act of 1722 is regarded as having been unsympathetic to the poor. Parishes were allowed to refuse relief to those who would not go into a parish workhouse, where they would be forced to work. Parishes could combine together for the purpose of setting up a workhouse. If they wished, they could farm the poor to a contractor. There was only one compulsory provision, which gave the overseer more authority than the justice in ordinary relief. Gilbert's Act of 1782 reiterated the provision that parishes could combine together to set up a workhouse. The Act envisaged however, that only the impotent would be relieved in the house, but the able-bodied could be paid pensions if the parish wished. The only compulsory provision reversed the one in Knatchbull's Act. The magistrate was given more authority in the granting of relief. Historians have thought that Gilbert's Act was much more humanitarian than Knatchbull's. The difference is supposed to be apparent in the relative importance accorded to the hard-hearted overseer, *vis-a-vis* the soft-hearted justice.⁴

Most writers would also emphasise certain other features of the Poor Law. The principle that each parish should look after its own ran deep in English society.⁵ It was axiomatic that each parish was responsible for its own poor wherever they might be. The Act of Settlements in 1662 was the classic expression of this commonplace.⁶ If a person could not pass a stiff test designed to prove that he (or she) was economically self-sufficient, then the parish where he was living could send him back to his home parish.⁷ If he could pass this test, then he could only be expelled if he actually became chargeable. The courts and statutes laid down a long series of definitions of what was to be considered a person's home parish. An Act of 1697 mitigated the operation of the Act of 1662 by setting up the special category of certificated persons.⁸

There was no bureaucracy which could enforce action by issuing orders. If people wished to force any local government organ to carry out some action, they had to resort to the cudgels of litigation. Thus the administrative decisions of the Quarter Sessions took the form of legal judgements.⁹ The great nuisance of this system was that litigation tended to be slow, costly and unsure in the result.

Generally speaking, parishes had to pay all their expenses from their own rates.¹⁰ Every parish was therefore tempted to exploit the settlement laws to reduce the number of people chargeable to it. The picture historians present is one of a thousand odd parishes each trying to prevent its own people being returned.¹¹ In these perpetual duels, parishes could not avoid resorting to the only method of enforcing action—litigation. Thus they became

entangled in the increasingly complicated meshes of the settlement laws and much money was wasted all round.¹²

Marc Blaug has recently revised our attitude to the Old Poor Law. He has said that Chadwick's strictures of it were not justified, and that his criticisms were levelled with little reference to the facts. One must ask whether a study of the Old Poor Law in Brentford tends to confirm Blaug's position or not.¹³

The system of relief which existed in New Brentford before 1756 was comparatively undeveloped. The administrative system displayed many characteristics one would expect to find in a seventeenth-century parish. Knatchbull's Act made only a slight impact on the township. Backward New Brentford exhibits a strong contrast to the neighbouring parishes of Ealing and Isleworth.¹⁴

The adult poor were relieved in a variety of ways. The settled parishioners received the weekly parish pension. This seems sometimes to have supplemented insufficient income rather than to have provided full support to life.¹⁵ The parish might also pay their rents or provide free accommodation in the poorhouse. Though sometimes referred to as the workhouse, the poorhouse was really a type of almshouse. As was usual with such institutions, it was under the charge of a woman who had paid security for her good conduct to the parish.¹⁶ No attempt was made to set the poor "on work" or to institute a workhouse test. It was impracticable, really. Many of the paupers could not be profitably employed because of their age. New Brentford, moreover, had too few paupers to employ in a proper workhouse. In 1735, there was only one adult pauper. Isleworth and Ealing, because they were so much bigger than New Brentford, could afford to set up workhouses.¹⁷ In the early eighteenth century, the township was a rather sleepy backwater.¹⁸

Casual relief covered a multitude of disbursements such as those given to the sick parishioners and to travellers. Itinerant paupers were often relieved under the explicit proviso that they leave and be no further charge to the parish. It was cheaper to buy off the pauper. Removal could be expensive and might take a long time to implement, and by the time the procedure had been completed, the pauper might have caused more expense to the parish. Travellers might bring smallpox. Pregnant women might give birth to illegitimate children, whom the parish would have to support, for they gained a settlement where they were born. The practice of buying off the travelling pauper remained common throughout the eighteenth century.¹⁹

New Brentford's organs of local government were quite capable of dealing with the township's small problems. The work was not beyond the capacities of the overseers, who were able to divide the year's work evenly so that each was only active in alternate months. Two rates were usually levied, but not always. The overseers were usually tradesmen or professional men. In Middlesex such people could be expected to have had a reasonable education.²⁰ In practice, the overseers were responsible to the open vestry, not the justices, and the vestrymen seem to have been satisfied with the overseers' performance of their duties.²¹ Before 1732, the vestry itself met very infrequently. This inactivity reflects the lack of anything for the vestrymen to be concerned about. If any matter was beyond their capacities, the vestry could always fall back upon the services of its active local gentry—James Clitherow II and John Drinkwater.

In this sleepy climate, the treatment of poor children is the most interesting facet of the administration. In the 1730's this topic was discussed a great deal. The township's authorities made arrangements to send the parish children to the New Brentford Charity School.²²

The vestry probably hoped that the atmosphere of the school would turn them into honest members of the community. A circular issued by the trustees of the school in 1705 certainly stressed how education would stop pauper children pilfering.²³ The school seems to have maintained about seven boarders for the parish in reasonable comfort by the eighteenth century standards. By the 1730's, the Charity School had seriously degenerated. Much of the time, the children may have been employed in gainful labour. The schoolmaster, who was also a cobbler-cum-tailor, educated the children in a very discontinuous way.

Once the children had finished their formal education, if any, the parish officers provided for their charges by binding them as apprentices, as ordered by the Act of 1601. The Elizabethan legislation wanted pauper children to learn a trade in order that they might maintain themselves in adult life. In the early eighteenth century, however, the original intention of the legislators was already being lost from sight. The settlement laws caused much of the abuse of the system of parish apprenticeship. The apprentice gained a settlement where his master was domiciled. The parish officers made sure the young paupers never went on the parish by ensuring that they gained settlements by apprenticeships in other parishes. So long as this was achieved, the officers cared not a whit about the paupers' training or welfare. If they became chargeable that was someone else's look-out. For example, one John Rowse had been apprenticed to a surgeon. On his master's death, the officers bound him to a fisherman in a neighbouring parish. The training of the surgeon-fisherman can scarcely have formed a coherent whole. The parish appears to have sacrificed John's education to the noble cause of reducing the number of paupers.²⁴

There was more than one way of achieving this object. The Act of 1601 had insisted that the immediate family should, if possible, maintain its own paupers rather than let them become chargeable. The vestry insisted ruthlessly on this responsibility.²⁵ The beadle was usually a man with a dependent relative. One must suspect that the parish appointed such a man in order to use his salary as security for the discharge of his responsibilities. The treatment of bastardy cases also reveals exploitation of the principle of family responsibility. The father had to pay for the support of the child or be put in Bridewell.²⁶

On occasion, the parish did involve itself in serious litigation in an attempt to shift responsibility. Appeals against orders of removal appear infrequently in the minutes. Only a few persons seem to have been removed each year. In the 1730's, however, the vestry jumped into the legal quagmire. One Deborah Street became ill and chargeable to the parish until her death.²⁷ It appeared that there had been an annuity due to her which she had not received. The vestry decided to recoup the township's expenditure on her by recovering the annuity. The case dragged on from 1732 until 1738 or 1739. The parishioners seem to have had little joy of the affair and the overseers even less. They had to pay the legal bills and wait a considerable time before the parish repaid the money. In 1735, the township again bore heavy legal costs of £50 which helped send the total expenditure for the year soaring. This time a battle which was fought to recover money due to the township from the Lady Spencer Charity probably accounted for most of the outlay.²⁸ The vestry seems to have been more cautious in the next period, 1757-84. In 1767 the vestry refused to involve the township in another case similar to the affair of Deborah Street.²⁹ The parochial authorities learnt some of the lessons which experience taught.

New Brentford did not remain a sleepy township where the vestry was only concerned with a few children and evading its responsibilities. The first murmurs of dissatisfaction arose during the 'forties. In the period from 1720 to 1756, expenditure rose after periods of

prolonged rises in the price of bread, which probably brought epidemic disease in their wake.³⁰ In the late 'twenties, the price of wheat shot up and expenditure was high. Then it fell again together with the price of wheat. Total disbursements in the 'thirties were low for two reasons. Firstly, the number of paupers was small. Quite probably a high proportion of the paupers, who would have been amongst the weakest members of the community, were killed off by an epidemic following the period of high bread prices. Secondly, there were no prolonged rises in the price of wheat in the period from 1734 to 1737, although prices were often high. In 1739 and 1740, there were bad harvests, however. Bread prices and casual expenditure rose severely in the period 1731 to '41. In 1741, pension relief made a massive jump, although prices were already falling. Disease and destitution were doubtless left in the wake of the bad harvests. The inhabitants seem to have objected to the heavy disbursements necessitated.³¹ Expenditure was brought down from its high peak of 1742 by a series of good harvests from 1741 to 1750, which prevented total disbursements welling up.

In the 1750's there arose a dissatisfaction with the system of administration and not merely with the level of the rates. In May 1753, it was mooted that the poor be farmed to a Mr. Tull. Again in October 1756, the vestry discussed the possibility of farming.³²

The proposals offered by both the prospective farmers were turned down. The first proposition, in 1753, was rejected as "unreasonable". If it was anything like the second proposal, in 1756, the reason for the rejection is obvious. At the rate offered, the farmers would have had to have mistreated the poor in order to make a profit.

The question of farming was discussed because expenses were again running at a high level. Firstly, bread prices were not so favourable as in the period from 1741 to 1750. Prices were again high in 1752-53. In May 1753, the vestry decided to economise. Although prices fell in 1753-54 and 1754-55, there was another prolonged rise in 1755-56 and 1756-57. By Lady Day 1757, the price of wheat was extremely high—£3.8.0 per quarter. Secondly, from mid-century, the coaching traffic became increasingly important. Wealthy travellers, inns and made-up roads probably attracted increasing numbers of itinerant paupers.

The surprising fact is that farming was suggested in the high price period of the 1750's but not in the late 1720's. It seems possible that a deterioration in the discipline of the poor may have hardened the vestry's attitude to the less fortunate. Discipline was declining, in part at least, because the beadle was becoming lax.³³ It would, however, be wrong to overstress the point that the vestry may have thought a change in the administrative system would cure bad behaviour. When the workhouse was set up in 1757, the vestry was more troubled about expenditure than discipline. Quite probably, the poor were reduced to good order after the beadle was installed in the house in 1753.³⁴

By the 1750's New Brentford had woken up. There was more concern with Poor Law matters than in the 'thirties. Meetings of the vestry were now more frequent. Although the vestry was dissatisfied with the way matters were being conducted, the township still had not abandoned its archaic system.

The period from 1757 to 1783 presents a strong contrast to the unadventurous era preceding. In 1757, the vestry finally took advantage of the 1722 Act and tried to catch up with its more progressive neighbours. Failure, however, rewarded the township for its initiative. From about 1775, the seeds of trouble can be discerned; by 1784, the forest of tares was plain to all.

In 1757, the vestry set up a workhouse regime in the hope of curing some of the problems encountered in earlier years.³⁵ The new system was aimed primarily against the high rates.

Expenditure was to be reduced not by the profits of pauper labour but by applying the workhouse test. The vestry earmarked the profits for the master's salary, and little, if any, was directed to the paupers' upkeep.³⁶

The test was rigidly applied in the early years. Pension relief was totally abolished and casual relief severely restricted.³⁷ In 1764, the vestry reprimanded the overseers for disbursing pension relief, although they had strayed no further than granting casual relief in money. The test was not very harsh. The parish authorities did not attempt to make indoor relief particularly unpleasant by eighteenth-century standards. The paupers could not complain of being overworked. There were sufficient beds to go round, at least in the early days from 1757 to 1769. The paupers were, moreover, fed liberally.³⁸ Though not brutal, the test was rigid enough to be effective. Severe restrictions upon movement and drinking probably galled the paupers most.³⁹ Initially, the test frightened off quite a few of them.⁴⁰ Annual expenditure from 1757–58 to 1764–65 was usually considerably lower than in the period 1754–55 to 1756–57. An easing of the price of wheat may have accounted for at least part of the drop.

The vestry did not introduce any special measures to improve the behaviour of the poor. The regulations threatened the disobedient pauper with confinement and bread and water.⁴¹ It seems, however, that no room of confinement was provided until 1787.⁴²

The moral edification of the paupers was sadly neglected. The vestry had intended that they be paid a small sum from the profit of their labour to encourage them in their work.⁴³ It must remain an open question whether the vestry was trying to teach the poor the benefit of labour, or merely trying to ensure that they earned the master's salary. Nothing may have come of this proposal until 1789.⁴⁴ Some attention was paid to the religious education of the paupers. Neither Bible nor Prayer Book, however, appears in the inventory of the goods at the house.⁴⁵ Only two measures were taken which might have helped to improve the poor. Gin was not allowed in the workhouse and the parish children who went to the Charity School were to continue to attend.⁴⁶ In general, the atmosphere in eighteenth-century workhouses was unedifying because insufficient attention was paid to separating the sick from the healthy, and the anti-social from the young. The workhouse did not lack merely a room of confinement. The vestry ordered that a separate room for the sick be provided, but this attempt to contain infection did not succeed.⁴⁷ The house did, however, contain a separate nursery room.⁴⁸

The reason for the new departure in administration should be sought partly outside the realm of what is normally thought to bear directly on the Poor Law. In 1755, the second James Clitherow died and was succeeded as squire by his much-respected son, the active James Clitherow III. In the establishment of the workhouse, we see him making his first youthful attempt to carry out his duties. He provided the driving impetus which changed an idea into a reality. Doubtless, the vestry would have eventually succumbed to the strong forces in favour of a workhouse without the influence of James Clitherow. He was responsible for the exact timing of the changes in 1757.

During the period from 1757 to 1783, two important administrative changes took place. Instead of leaving the choice of overseers entirely to the bench, the vestry began in 1762 to recommend suitable candidates to the justices.⁴⁹ They seem to have always followed the vestry's wishes down to 1805.⁵⁰ James Clitherow seems once more to have been the driving force behind a change which brought New Brentford into line with current practice.⁵¹ In the period from 1762 to 1781 it probably did not make much difference whether the

magistrates or the vestry appointed the overseers. In either case, the opinions of James Clitherow III and his colleague, John Drinkwater, must have carried much weight. After 1781 this new development was probably quite important.

The second change partially overcame one of the major problems of the Old Poor Law. Because two fresh overseers were appointed annually, policy and administration lacked continuity in many parishes. Both men had, moreover, to learn the job from scratch by a process of trial and, more likely, error.⁵² From 1756–57 the practice grew up of re-appointing each overseer for a second term in such a way that, in any year, both one experienced and one fresh overseer were serving.⁵³ The man who had served the year before could impart his knowledge to the tyro.

The first change described may, in fact, have facilitated the second. The longer periods of continuity appear after 1762, when the vestry began to nominate overseers.

The rejuvenated administrative system displayed serious weaknesses from the beginning. The vestry joined the office of workhouse-master to that of beadle and bellman.⁵⁴ In so doing, the vestrymen presented the master with a difficult task. How the man was expected to wring profits out of the paupers after he had spent half the night ringing the bell, is anybody's guess.⁵⁵ Admittedly, the master was allowed to hire a deputy to discharge his nocturnal duties.⁵⁶ There is no record in the vestry minutes that a deputy was ever appointed. In all likelihood, the profits from the workhouse were too low to allow the master to part with any of his emoluments.⁵⁷ There does not seem to have been enough work to employ all the paupers.⁵⁸ Four spinning wheels and a cardstick were not going to transform the master into a Richard Arkwright.⁵⁹ New Brentford was not situated in the right area to allow the workhouse a profit from wool. The paupers produced the coarsest yarns.⁶⁰ The return to the labour cannot have been great, because this type of work required the least skill. The master had no labour costs, of course, and this fact should have helped boost his profits. Pauper labour was not, however, noted for high productivity. Firstly, the poor were probably unwilling to work for somebody else. Secondly, workhouses usually contained those who could not maintain themselves because they were not efficient workers.

The workhouse was administered under a system which was half-way between farming and direct parish management. Like the farmer, the master had every incentive to make the inmates work. If there were no profits, then he received no salary. The parish was responsible for the paupers' maintenance, whereas if a farmer had taken over the house, he would have been bound to provide for them.

The vestry always made one big mistake in the regulation of the workhouse. The vestrymen thought wonders could be worked at the house merely by making it in the master's interest to be economical. They did not seem to realise that an inefficient or corrupt man will retain his faults whatever the system.

Every parish with a workhouse faced one major problem—how do you find a suitable workhouse-master? He could only expect a meagre income and was regarded as occupying practically the same social level as the paupers themselves.⁶¹ Such mean rewards did not attract men of integrity or education and did nothing to make the paupers respect the master in a way that would enable him to keep discipline. The workhouse-master was efficient only so long as he was kept under surveillance. The Biggins family ran the workhouse well at first.⁶² The rebuilding of the chapel between 1762 and 1766, however, claimed much of the attention of James Clitherow and the vestrymen.⁶³ In 1766 Mr. and Mrs. Biggins were dismissed for extravagance and mismanagement.⁶⁴

Although the workhouse regime may originally have reduced expenditure, the success was not maintained for long. From 1764-65 to 1774-75 annual outgoings fluctuated between £201 and £294 except for a record peak of £312 in 1771-72. In 1775-76 a new record peak of £366 was reached. From then until 1783-84, spending never fell below this level, but reached great heights in 1782-83 and 1783-84. A breakdown in the administration accounts for at least part of the extra disbursements. The peak of 1771-72 can be correlated with a break in the continuity which had been established in the overseers' offices. Similarly, the beginning of the period of very high expenditure in 1775-76 corresponds closely to the final abandonment of the "continuous system". In 1783-84, the overseers were criticised for spending too much but were excused because one of them was ignorant of the customs of the township.⁶⁵ There are various signs that in the early 'eighties the overseers were finding it more difficult to cope. Under the old system, each overseer paid out money in alternate months only. From 1780-81 we find that both overseers were making payments in some months. From 1783-84 they were usually both disbursing money for most of the year. Some overseers, moreover, became very reluctant to undertake their duties. The revelation of the inefficiencies of the men who served in 1783-84 sparked off the enquiry of 1784.

It is difficult to uncover the exact cause of growing inefficiency. The most likely explanation is that society was becoming too complicated for the old amateur and voluntary system. During the late eighteenth century, New Brentford was attracting a considerable amount of highly capitalised industry. This development may well have been accompanied by growth of the local population.⁶⁶

The waste and corruption which were involved in victualling the workhouse were a constant bane of the system. If not checked, the suppliers would make hay in the township's meadow, whilst even the overseer would fleece the community. The rules established in 1757 laid down stringent procedures to ensure that the victuallers did not cheat the parish.⁶⁷ Biggins' extravagance probably involved a conspiracy with them to supply more goods than were necessary.⁶⁸ Doubtless, the overseers had become lax in ensuring that the suppliers behaved. Even at the best of times when the overseers were not lax, there was little to stop them channelling their energies into cheating the township. A Mr. Ross, overseer in 1775-76, probably used his position to have himself appointed as one of the suppliers.⁶⁹ The difficulty was to draw the line between what was allowed and what was not. The overseers were permitted a few drinks on the parish to compensate for their onerous labour, but this "perk" could easily grow into something worse.⁷⁰ The presentation of tenders to the vestry became increasingly a matter of form as the pressure of work began to defeat the overseers.⁷¹ The same people supplied the house year after year. Tenders for bread and meat ceased to appear at a very early date. On occasion, the suppliers did not even bother to submit proposals. The enquiry of 1784 revealed even more abuses than the records for previous years show.

By 1783 the township's new system of administration had failed because the Old Poor Law was not sufficiently flexible to meet adequately the needs of a changing society. The period from 1757 to 1783 is one of the most interesting of all because it is sometime about 1775 that we discern the beginning of the collapse of the Old Poor Law. Much of the story from 1784 merely recounts how these same problems became accentuated and how the parochial authorities made the same mistakes in trying to meet the difficulties. The last fifty years of the Old Poor Law can, however, be extremely interesting. Although the basic framework was not flexible the vestry retained a wide area of manoeuvre. The vestrymen

adopted a variety of expedients to try to prevent the decay of the system. Although none of them would have cured the canker, they might have relieved a great deal of pain. As it was, parochial authorities seem never to have realised the need for a consistent policy or to have adequately understood the problems which had to be dealt with.

The committee of enquiry of 1784 revealed a sorry state of affairs.⁷² The overseers had been lax. The township was supporting too many people in the workhouse.⁷³ The practice of making written contracts between the parish and those who victualled the house had ceased many years before. Finally, the master had connived with the suppliers to overcharge the township.

The report reveals how little the committee understood the problems under investigation. The report ought to have blamed the vestrymen. They should have ensured that the overseers did their job properly and that abuses did not arise. The report laid too much blame on the master, Simpson. He said that when he had queried the meat bill, the supplier, Mrs. Piper, had told him that because there was no contract, she could send in what she liked. We must admit that the master could have reported the incident to the parish officers, but we cannot expect too much from that eighteenth-century dogsbody. The report blamed the few rather than the many. What was worse, it laid blame on individuals rather than the system.

After 1784, the old notability helped less and less to support the system. This development was due to both local and general causes. Death and advancing age took their toll of active men. John Drinkwater died in the 1780's, and James Clitherow III in 1805.⁷⁴ As the urban areas of Middlesex grew so did the need for more magistrates whilst, on the other hand, the number of suitable candidates decreased. Middlesex had always lacked a sufficient quota of country gentry who possessed the education, leisure and sense of social duty so necessary to the leaders of society.⁷⁵ In the late eighteenth century, the deficiencies were made up by appointing tradesmen to the commission of the peace, but they lacked the necessary qualifications. During the period from 1781 to 1822 these men were often corrupt.⁷⁶ Increasing reliance was also placed upon clergymen justices, who usually were qualified.⁷⁷ Like the middle-class justices, their clerical colleagues often did not reside in the crowded urban area in which they functioned. Non-residency increasingly affected the Church up until the 1830's. Non-resident magistrates lacked the local knowledge that was so essential a part of the equipment of the J.P. and had little interest in keeping the rates down. The baneful effects of the decay of the bench were aggravated by the increasing importance of the justice in Poor Law matters since the passage of Gilbert's Act in 1782. Doctor Samuel Glasse, the curate of New Brentford from 1780 to 1785, was the typical non-resident squarson.⁷⁸ The vestry was not completely satisfied with his performance as a J.P.⁷⁹ As the vestry had usurped the right of nominating the overseers, the township was to some extent cushioned against the operations of the magistrates. Although bourgeois vestrymen could be just as corrupt as any trading justice, they did have an interest in maintaining efficiency and keeping the rates down, and ought to have known who in the township had administrative talent. Although the justices destroyed the system of nomination by the vestry in 1805, they still had to pay some deference to the wishes of the vestrymen.⁸⁰ New Brentford was fortunate in that it possessed the services of a conscientious line of established country gentry.⁸¹ As society became more and more complicated, it thrust even more duties upon the shrinking social élite. Even with the best will in the world, the Clitherows could not do everything.⁸²

The strain on the overseers became immense during this period. They did not halve the

year's work between themselves until the boom of 1825 relieved some of the pressure.⁸³ The dislocations of war between 1792 and 1815 caused extra work. Rapid inflation brought about a huge increase in poverty. New duties were thrust upon the overseers.⁸⁴ The population grew rapidly whilst New Brentford continued to attract industry. It became difficult to check properly who were worthy objects of relief and who were not.⁸⁵ Money was being given out too freely for the vestry's liking in 1797.⁸⁶

During the late eighteenth century, there was a marked increase in the number of times the vestry met each year. The vestrymen seem to have disliked turning up to frequent meetings. Often few inhabitants besides the parish officers attended. At times, the vestry degenerated into a corrupt little oligarchy. In 1810, the vestry recommended that the overseers order supplies from the tradesmen as nearly in rotation as possible, in order to stop arguments between them.⁸⁷ In 1829, a suggestion that open tenders be presented to the vestry was turned down.⁸⁸ So small did the attendance become that often the parish officers did not bother to call a meeting. Instead, they made their own decisions in holes and corners. The vestry itself installed only one workhouse-master (in 1828) out of the four or more who held that office between 1807 and 1832.⁸⁹

By the end of the French wars the workhouse regime had reached its nadir. Matters had come to such a pass even before the wars that the workhouse test was dropped. Pensions crept in bit by bit. They were first paid to parishioners in 1785–86 but were disguised as monetary casual relief.⁹⁰ In 1789, the vestry authorised the continuation of the pensions that were being currently paid.⁹¹ The minutes of another meeting in 1789 make it clear why pension relief was sanctioned.⁹² It was cheaper to maintain people outside the house so they were to be brought in only if they could not survive on the parish pension. A pauper could be paid a very small allowance which would force him to contribute to his own maintenance by undertaking casual labour. If brought into the workhouse, he would have to be supported completely by the township. What with all the petty speculation associated with victualling the house, the vestry could expect to pay a very stiff price for maintaining paupers there. Later developments reinforced the tendency for pensions to be offered rather than the house. It became very dilapidated during the early nineteenth century but the township could not afford the cost of rebuilding.⁹³ Quite possibly the workhouse just would not hold all the poor. During the French wars, inflation made it impossible for many to live on their incomes. The cheap way of dealing with this problem seemed to be to make up the deficient wages rather than have the depressed groups wholly dependent on the parish.⁹⁴ The parochial authorities may have hoped that substituting outdoor for indoor relief would help to keep the poor docile at a time of dangerous social unrest. Quite a few inhabitants must have been able to remember the dangerous Wilkite riots in New Brentford.⁹⁵ By the end of the French wars, relief in aid of wages was definitely established, although no specific mention was made of the Speenhamland scale.⁹⁶ The workhouse was no longer the major form of relief. By 1810 there were only eighteen persons in the house.

Between 1787 and 1796, discipline at the workhouse deteriorated. In 1787, it is recorded that the divisional magistrates had recommended that the township provide a room of confinement for paupers who rioted.⁹⁷ In 1791, Joseph Smith, the master, was dismissed by the vestry because he had had an improper relationship with a young woman in the workhouse who thought she might be pregnant.⁹⁸ In 1795 the master and mistress were discharged for failing to keep proper order.⁹⁹ The next couple seem to have been little better.¹⁰⁰

During the period from 1784 to 1836, one of the parish's favourite cure-alls was to farm

the house.¹⁰¹ This was done from 1796 to 1807 and again from 1832 to 1836.¹⁰² In 1789, it was suggested that the poor be farmed, quite probably because some inhabitants were becoming dissatisfied with the heavy rates.¹⁰³ In 1796, the house was farmed in order to reduce the rates and to restore discipline.¹⁰⁴ In 1830, the management committee suggested farming.¹⁰⁵ It seems that they were mainly concerned with the ratepayers' pockets. Large numbers of people defaulted on their rates in 1831 and thereby upset the workings of the administration.¹⁰⁶ The vestry, therefore, handed the house over to a contractor in 1832, in order to reduce expenditure.

The benefits which farming could provide were bound to be limited. At best, it could only improve management. Farming could do nothing, however, to prevent a genuine increase of poverty in the 1790's and 1830's.

Farming was foredoomed because the workhouse was not economically viable. By 1802, an important amount of wool processing was still being undertaken but some paupers were doing other work.¹⁰⁷ Profits from spinning coarse yarn were probably already feeling the pinch from cotton factory production. Straw hats were being made, probably by the children.¹⁰⁸ This unskilled labour, which was done in many workhouses, must also have produced few profits.¹⁰⁹ The house also contained an excellent set of cobbling equipment.¹¹⁰ The contractor, Povey, evidently tried to find work which would best fit each of the varied capacities of his charges. Thereby he lost all benefit of the division of labour. Povey also turned to food production to cut costs and, perhaps partly because production for the market had failed. At any rate, he built a pigsty and a chicken run.¹¹¹ He could not, however, push this policy to the limit for there was no room for a garden or a cow.¹¹²

The farmers, moreover, found the rent burdensome which they had to pay before the township gained ownership of the house in 1807.

The greatest difficulty was the unsuitability of the labour force. Only those paupers had to enter the house who could contribute little or nothing to their own support by casual labour. The contractor was obviously not going to make a fortune out of such unfortunates.

Jeffries, Povey's successor, was aware of the benefits of large-scale production and of buying supplies in bulk. There were just too few paupers in the house in 1802 and 1806 to employ and maintain profitably, partly because so many paupers received out-relief and partly because the township was small.¹¹³

New Brentford normally paid its farmers so much per head for each pauper they maintained. Dorothy Marshall pointed out that farmers paid in this way, rather than by one lump sum, always had an interest in increasing the numbers in the house to gain more profits.¹¹⁴ The extra returns which could be gained from large-scale production and bulk buying only increased the temptation. In 1804 and in 1833, the vestry discovered that the farmer had illegitimately increased the numbers in the workhouse.¹¹⁵ The only way the vestry could overcome this problem in 1806 was to adopt a more expensive system, whereby the amount paid per head increased as the numbers decreased.¹¹⁶

Both 1796 and 1832 saw the poor farmed out as the economic outlook was gloomy. The vestry was being very sanguine if it thought any farmer would make a profit. It would have been a good idea if the vestrymen had appointed an efficient man to be the farmer in 1796. As usual their penny-pinching attitude defeated their object. They chose as contractor the person who offered the lowest price—the current master, John Povey, who had already been convicted of mismanagement.¹¹⁷ The vestry did not realise that a change of system will not turn bad managers into good ones.

It almost goes without saying that the farmers could not survive on the money allowed to them. Three out of the four farmers were granted rises, whilst the fourth only lasted a year.¹¹⁸

Farming did nothing for discipline. Some order was not restored until Charles Collett was installed in 1810 under direct parish management.¹¹⁹ A new system could no more transform bad disciplinarians into good than bad managers into good.

After the township resumed control of the workhouse in 1807, production for the market seems to have ceased, and in 1816 no work was going on.¹²⁰ Thereafter, there is no indication that the paupers were occupied with anything more substantial than odd jobs or simple public works.¹²¹

The vestry failed to learn the lesson of the period 1796 to 1807 that something should be done to change the type of administrator. From 1811 at least, the master received a proper salary, not the profits of pauper labour.¹²² The vestrymen did not, however, take the opportunity to ensure that the remuneration would attract the right men. Instead, the master was only paid £20 per annum.¹²³ In 1830, the vestry rejected a proposal that his salary be raised. One of the masters actually ended up drawing the parish pension in 1828.¹²⁴ The workhouse-master could be no more trusted to keep expenditure within proper bounds than before. In 1830 the vestry forbade him to buy articles for the house.¹²⁵ The by now familiar train of abuses appears once again in the nineteenth century. In 1826, there were irregularities in the management of the workhouse.¹²⁶ The master and mistress were reprimanded in 1832 for not calling medical or spiritual aid to a child which was dying unbaptised and for having it buried secretly in consecrated ground.¹²⁷

A number of attempts were made to reform the administration. For a period in the 'nineties the vestry again adopted the "continuous system" of overseers which had been used in the 'sixties.¹²⁸ In the early nineteenth century, the appointment of an assistant overseer was a favourite panacea. At least it ensured that there was some continuity of policy and that the parish authorities had an expert's advice on hand. It was suggested, in 1823 and 1829, that the vestry should appoint an assistant overseer.¹²⁹ Both proposals were rejected although the vestry almost implemented them.¹³⁰ As always happened, when the pressure of expenditure was not too heavy, as in 1823 and 1829, the vestrymen felt no urgent necessity to do anything. On the other hand, when disbursements were high, nobody wanted to spend extra money, however salutary the cause might be. Alternatively, the vestrymen may just have felt that New Brentford was not large enough to obtain its money's-worth from an assistant overseer.

Attempts were made to increase the checks on expenditure. In 1816, the vestry ordered the overseers to present their accounts quarterly.¹³¹ Although this order was reiterated in 1821, the overseers presented their accounts only at every half-year from 1818 onwards.¹³² Still, half-yearly checks were better than the previous yearly audits. The vestry, in 1821, realised the major obstacle to a quarterly presentation of accounts: people were unwilling to turn up to more meetings. The vestry tried to avoid having any more by ordering that a special committee would undertake the quarterly audits.¹³³ It was never set up, however.

After the township regained direct control of the workhouse in 1807, the overseers themselves decided up to 1816 who should victual it.¹³⁴ In that year, the vestry ordered that tenders were to be presented quarterly.¹³⁵ The tradesmen usually complied with this order until 1822. Thereafter, in only two years (1823 and 1831) were tenders presented four times. In each of the years, 1824, 1825 and 1830, the vestry received tenders only once. Perhaps

the vestry's interest in preventing waste declined along with expenditure in the early 1820's. Quite probably, the presentation of tenders was never much more than a formality.¹³⁶

In 1816, it was also ordered that the vestry must examine the list of pensioners quarterly.¹³⁷ This was done fairly regularly. The inspection tended to be rather cursory when the vestry was not worried about the level of disbursements.¹³⁸ A committee may have been inspecting the list monthly in 1834.¹³⁹ The vestry, in 1816, decided too that the pensioners should turn up to each quarterly meeting so that the vestrymen could check that all those on the pension list were proper objects of relief.¹⁴⁰ This provision must have fallen into abeyance for a similar procedure was again laid down in 1831.¹⁴¹

During the period from 1784 to 1836, there was a tendency to set up management committees which by-passed the vestry. They appear to have had a dual origin. Firstly, the parish officers were expected, from 1757 onwards, to meet regularly to check that goods were being supplied to the house correctly.¹⁴² Secondly, the vestry turned the committee of enquiry of 1784 into a management committee, which was to assist the overseers.¹⁴³ In the 1830's, *ad hoc* committees seem to have been distinct from management committees. They were usually set up in an attempt to involve more parishioners in the administration of the Poor Law. Membership was usually very wide.¹⁴⁴ Where all the members' names were specified, they usually outnumbered the inhabitants at the meeting which had established the committee. A large number of these people were usually appointed as members. The vestrymen were not trying to pass the buck to others or to consummate the tendency for a corrupt oligarchy to gain control. If the committees had been intended as vehicles of peculation, the vestry would not have appointed such large numbers of members or included the parish notability amongst them.

The great drawback was that many people were not willing to serve on committees for long. Once one had been appointed, nobody heard much about it again. The committee of 1830 asked to be wound up.¹⁴⁵ Inhabitants were so unwilling to serve that committees which dragged on probably consisted of no more than a corrupt oligarchy in the end. It should be noted that some of the contractors who victualled the workhouse were amongst the most enthusiastic committee members.

Ad hoc committees were much smaller. The minimum membership was three. Some of these little groups were probably corrupt. One should be very suspicious of one committee set up in 1818. The vestry entrusted three contractors with the task of auditing the overseers' accounts!¹⁴⁶

Generally speaking, none of the administrative reforms achieved much. The committees suffered from all the same drawbacks as the rest of the amateur machinery—too many people in responsible positions were ignorant, lazy or corrupt. Management committees were only set up when things were going wrong: in 1784, 1796, 1797, 1830, 1831 and 1833.¹⁴⁷ Similarly, the other reforms were only tried out in the 'nineties, in 1816, 1821 and 1831, when the outlook appeared black. If the system had not been allowed to degenerate during the bright spells of the 'eighties or mid-1820's the township might have negotiated the patches of black ice with less trouble. As it was, inclement situations were always catching the vestry off balance and the vestrymen hastily adopted all sorts of temporary expedients which were bound to fail in the long term.

The vestry usually reacted to heavy expenditure by cutting the paupers' rations.¹⁴⁸ When the system was running smoothly, the vestrymen did not really worry how well the poor ate. It was all too easy to economise without any permanent reform. Once again, short-term

devices replaced constructive change. The vestry's attitude is all the more surprising when one considers that the vestrymen were often more humanitarian in the period 1784 to 1836 than before. It would not do to ignore the fact that some of this apparent concern was pure humbug.¹⁴⁹

It is, perhaps, all too easy to castigate the vestry for its failings. The parish faced severe problems because the causes of poverty were changing. Before 1784, the township was dealing with a few of the perennial unfortunates: widows, children, the sick and vagrants. It is, however, difficult to over-exaggerate the extent of poverty about 1800. The records still convey the urgency with which extraordinary measures were taken to reduce the consumption of wheaten bread.¹⁵⁰ In the early nineteenth century, fluctuations of the trade cycle induced the ebb and flow of the tide of expenditure. It reached high levels in 1815–16, 1819–20 and 1831–32, when the economy was depressed. Short-time working and under-employment were probably forcing people onto the parish. When there was a boom in 1825, the township's expenditure reached its lowest recorded level in the post-Napoleonic period. The small township of New Brentford could do nothing to prevent the alternation of boom and slump. At the caprice of the waves she rode the crest or sank into a trough.

In the last depression in 1831–32 New Brentford's problems were accentuated by her economic decline. Doubtless, the fishing industry was decaying already.¹⁵¹ Migration was probably causing a net loss of local population.¹⁵² It is likely that the township was no longer attracting new industries.

A discussion of settlements and removals must loom large in any treatment of the period 1791 to 1817. In the 'nineties and at the end of the wars the vestry seems to have tried to prune the number of paupers in order to cut expenditure. Before applying to the justices for an order of removal, the parish officers were not too fussy about the rights and wrongs of the case. Many attempts to remove people seem to have failed when the parishes which were to receive these unfortunates appealed to the justices. Other localities do not seem to have tried to drive out large numbers of people who had settlements in New Brentford.¹⁵³ It is quite possible, though, that the township was shedding excess mouths merely because other districts were not willing to reimburse the township for relief it had provided for their own settled paupers.

Towards the end of the Napoleonic Wars, the ratepayers were forced to contribute heavily towards the demobilisation of the troops.¹⁵⁴ The only way to ensure they reached home was to have them removed. Parishes like New Brentford which lay on main roads leading out of London had to support the soldiers and other unfortunates whilst they were in transit.¹⁵⁵

After 1816 we hear no more about removals, settlements or attempts to force relatives to support their kin. Urban society was probably becoming too complicated to allow the overseers to go chasing after every "foreigner" or every pauper's family. An alteration in the law of settlement in 1797, which theoretically made removal more difficult, probably made little difference in practice.¹⁵⁶

Parish apprenticeship had degenerated into a complete farce by the early nineteenth century. The vestry became very explicit about its desire that parish children should be apprenticed outside the township.¹⁵⁷ As society changed, honest tradesmen sought fewer and fewer apprentices. By 1842, the lack of potential masters was worrying the trustees of a charity which provided money to bind poor boys. Parish apprenticeship was not abandoned in Middlesex in the face of difficulties, as the Report of 1834 would have us believe.¹⁵⁸ The children apprenticed must have been little more than bond servants or wage labourers and

could not have been receiving much education. It is well known that early factory owners took parish apprentices because it was difficult to attract free labour to mills. In 1791, the vestry supplied children to a flax manufactory and in 1800 sent some to a cotton mill.¹⁵⁹ On the second occasion, it should be noted that the vestry deprived the paupers of any veto over the binding of their children, which was left in the officers' hands.¹⁶⁰ The use of compulsion does not say much for the benefits boys and girls gained from pauper apprenticeship. The manufacturers found, after about 1810, that they could attract free workers more easily and we hear no more of this forced labour in factories.

This study has tended to confirm many, but not all, aspects of the usual view of eighteenth-century institutional development. The measuring rod used was satisfaction. The parochial authorities were usually satisfied so long as the rates could be kept down. Using this yardstick, the historian should not judge that the years before 1775 constituted "a period of decay punctuated by occasional attempts at reform". For a time at least, the administrative improvements of the late 1750's and early 1760's seem to have arrested a decline which became visible in the 'fifties. After 1775, the basic inflexibility of the system began to tell. Whatever the inhabitants might do, they were tied to dealing with problems at a parochial level by means of amateur officers and voluntary effort. The basic fact of life with which the vestry had always to cope was the township's small size.¹⁶¹ Although the vestry co-operated with Isleworth to some extent in the early years, no attempt was made to pool New Brentford's administrative resources with another parish.¹⁶² Local patriotism and the hostility which the law of settlements engendered between parishes probably prevented such collaboration.¹⁶³ The smallness of the township accounts for much of the local administrative development and failure. Could such a small parish have set up a workhouse in the 1720's? Could the farmer really have made profits from a house with so few inmates? There was some room for manoeuvre within the basic structure. By 1775 the township was running out of manoeuvres that would do any good. A workhouse had been tried and had failed. The parish authorities could only return to giving outdoor relief. Farming was bound to fail. The only reform which might have proved useful and had not been tried by 1775 was the appointment of a paid assistant overseer. Only after jettisoning the basic format could the administration have kept up with the needs of a changing society.

Whereas there had been some consistent policy between 1757 and 1783, there was no coherent or constructive policy afterwards. The township was largely at the mercy of circumstances beyond the control of the parochial authorities. We discern few signs of *ad hoc* machinery taking the place of the old institutions. The Brentford and Ealing Savings Bank, the Brentford Dispensary and the National School, all of which were set up in 1818, only touched the peripheries of the problem of poverty.¹⁶⁴ Under-employment and low real wages remained uncured.

On one level, administrative policy had a two-fold origin. The parochial authorities made their own decisions as to how they would play the script left by the Elizabethan legislators. On a more general level, the attitude of the contemporary society and the circumstances of the day dictated policy. Many parishes adopted much the same answers to the problem of poverty as New Brentford, because the problem was everywhere much the same and all rate-payers shared much the same attitudes. Peculiar local circumstances in each of the 15,000-odd parishes, however, ensured that a slightly different version of the general solution to the problem was adopted in each of them. In New Brentford, the district's small size accounts for many of the local aberrations.¹⁶⁵

The usual view of the position of statute law holds largely true in New Brentford. Very little reference was made to Acts of Parliament. The dictates of parliamentary ukases did not push the vestry into setting up a workhouse in 1757 or sanctioning pension relief in 1789. An important point to note is that the vestry did not adopt the most important provisions of Knatchbull's and Gilbert's Acts until well after they had been passed. If Acts followed fashions, then New Brentford was never *à la mode*. The township's small size was probably the ultimate reason why the parochial authorities were so dilatory. The workhouse was not established until 1757 because in earlier years there were not enough paupers to make one worth while. Outdoor relief was not adopted until 1789 quite probably because the overseers did not feel the pressure of rapid social change so early as they would have done in a larger parish. They were, therefore, able to make sure that the local workhouse did not run downhill so early as in other places.

Too much stress has, perhaps, been placed on removals and settlements. In New Brentford at least, they seem to have become rare after 1816-17.

Finally, one must decide whether the criticisms offered by the Report of 1834 were justified. It gave the impression that the Old Poor Law had somehow been "soft" on the paupers. The vestry, in 1816, restricted the poor in the house to no more than 16 oz. of meat per week and, in 1828, ordered that the poor men there clean up some sewage.¹⁶⁶ A pauper's life was not very eligible by early nineteenth-century standards. The Report was correct when it said that the old amateur machinery could not cope. Too much criticism was offered without enough consideration of the facts. Detailed returns to the Commission's enquiries were received from only about eight places in Middlesex outside the City, although the Metropolis contained so large a proportion of England's population. A study of more places like New Brentford would have helped the Commissioners to assess Middlesex's special problems, such as the lack of an active squirearchy. As it was, the Report sweepingly condemned relief in aid of wages because Chadwick did not try to understand why it was given in urban areas. The Report concentrated too much upon the baneful effects of the Speenhamland system in agricultural districts. Although New Brentford was only a tiny stone in a big mosaic, a study of the township's administration of the Poor Law does help us to see the whole picture.

FOOTNOTES

V.M. The Vestry Minutes
P.A.B. The Poorhouse Accounts Book

1. This view of eighteenth-century institutions appears in G. M. Trevelyan's "English Social History".
2. This is a rough sketch of the view presented by J. R. Poynter in his "Society and Pauperism", 1969 (hereafter J. R. Poynter). "The typical pattern in each locality was periodic reform interrupting gradual decay"; J. R. Poynter, p. 8.
3. The rest of the paragraph is closely based on the opinions of J. R. Poynter and Dorothy Marshall; J. R. Poynter, p. 13; Dorothy Marshall, "The English Poor in the Eighteenth Century", 1926 (hereafter D. Marshall), Introduction, p. 128.
4. J. R. Poynter and Dorothy Marshall have explained these Acts. She thought Knatchbull's Act was less humanitarian than Gilbert's; D. Marshall, pp. 55, 56, 89, 159.
5. For instance, an Act in 1563 made each parish responsible for its own roads.
6. See J. R. Poynter and D. Marshall for this Act.
7. To pass the test, one had to occupy a tenement worth £10 or more annually. More correctly, a person was passed back to the parish of his (or her) last legal settlement rather than his home parish. J. R. Poynter and D. Marshall explain how settlements were gained.
8. The churchwardens and overseers comprised the parish officers. They could, if they wished, issue special certificates to anyone—in effect any inhabitant of their own area. By so doing they acknowledged that the bearer had a settlement in that particular community and that it was responsible for him, if he could not support himself. These documents were designed to facilitate travel. A certificated person could not be removed from any other parish unless he actually fell chargeable. Even if he did, he was not necessarily removed; the officers of the district that had issued the certificate might well prefer to reimburse the locality that had assisted him than receive him back. D. Marshall explains the Act of 1697.

9. Sydney and Beatrice Webb, "English Local Government".
10. The Act of 1601 laid down a provision that justices could levy extra rates in one parish to help another which could not raise sufficient money. This procedure was scarcely ever implemented.
11. "The local officers . . . waged internecine war over settlements"; J. R. Poynter, p. 7.
12. For example, *V.M.*, 4 March 1789. See J. R. Poynter on the complications of the settlement laws.
13. Marc Blaug, "The Myth of the Old Poor Law and the Making of the New", *The Journal of Economic History*, June 1963.
14. These places set up workhouses in the 1720's.
15. Some pensions went up in winter, when employment was scarcer, and down again in summer, when more work was available.
16. *V.M.*, 8 November 1751.
17. New Brentford covered 230 acres; Isleworth Parish, 3,120; Ealing, with Old Brentford, 1,120; Census Report, 1833.
18. During the 1710's New Brentford was elevated from the position of a hamlet within the parish of Hanwell to the level of township. In the eighteenth and nineteenth centuries the vestry usually used the terms "township" and "parish" indifferently to describe New Brentford. For ecclesiastical purposes, this district remained a chapelry within Hanwell.
19. For some early examples taken at random see the accounts of the overseers for 1732, Leach and Garrard, and of those for 1733, Jennings and Cripps.
20. Investigations conducted into marriage registers have shown that a higher proportion of people in the Metropolis could sign their names than in most other districts. It would appear, therefore, that Middlesex had a higher rate of literacy by eighteenth-century standards.
21. The vestry found a petty fault in the accounts of one of the overseers; *V.M.*, 18 June 1733.
22. *V.M.*, 8 April, 9 February 1733; 20 May, 9 October 1735.
23. A copy of the circular is to be found in the Charity School Minute Book.
24. *V.M.*, 19 September 1722.
25. For examples, see *V.M.* 19 February 1753; 31 December 1766.
26. For a later example, see *V.M.* 15 June 1760.
27. It appears from the overseers' accounts for 1733 that she died in that year. For the case, see *V.M.* 4 February 1732; 21 July 1734; 3 May, 27 July 1736; an undated meeting, probably in 1736; 23 May 1737; 13 November 1738; 1 June, 26 December 1739.
28. *V.M.*, 8 December 1753; 7 March 1754.
29. *V.M.*, 20 April 1767.
30. For bread prices and figures of annual expenditure, see Tables 1 and 2 respectively. See footnote 46.
31. In 1744 and 1745, especially elaborate precautions were taken to make sure people could not complain that they had been overcharged on the rates. See Rate Book.
32. *V.M.*, 21 May, 23 July 1753; 15 October 1756.
33. *V.M.*, 19 February 1753; 8 November 1751.
34. *V.M.*, 2 November 1753.
35. For the establishment of the workhouse, see *V.M.* 31 December 1756; 15, 18 January 1757.
36. *V.M.*, 15 January 1757; 13 May 1789.
37. *V.M.*, 18 January 1757.
38. In 1759-60 each pauper received an average of 3 - 3½ lb. of meat per week. This figure was derived by calculation from the meat bills in P.A.B. Meat was eaten three times a week according to the bill of fare; *V.M.*, 18 January 1757.
39. *V.M.*, 18 January 1757.
40. *V.M.*, 27 January 1757.
41. *V.M.*, 15 January 1757.
42. *V.M.*, 28 November 1787.
43. *V.M.*, 15 January 1757. The vestry failed to stipulate what proportion of the profits the poor ought to receive.
44. It was laid down that the paupers were to receive twopence in the shilling; *V.M.*, 13 May 1789.
45. The inventory is at the back of P.A.B.
46. *V.M.*, 18 January 1757.
47. *V.M.*, 18 January 1757. A child had to be removed from the house lest it infect others with whooping cough; *V.M.*, 25 January, 1769.
48. P.A.B. Inventory; see footnote 46.
49. *V.M.*, 12 April 1762. A recommendation was not made in 1763 but was every year thereafter.
50. *V.M.*, 15 April 1805; the justices had rejected the vestry's nominees.
51. D. Marshall states that by about 1750 most communities nominated their own overseers.
52. D. Marshall points out these difficulties.
53. The overseers served thus:
- | | | | | | |
|---------|----------|---------|----------|---------|----------|
| 1756/57 | A plus B | 1763/64 | J plus K | 1770/71 | R plus S |
| 1757/58 | A plus C | 1764/65 | K plus L | 1771/72 | T plus U |
| 1758/59 | C plus D | 1765/66 | L plus M | 1772/73 | V plus W |
| 1759/60 | D plus E | 1766/67 | N plus O | 1773/74 | W plus X |
| 1760/61 | F plus G | 1767/68 | O plus P | 1774/75 | X plus Y |
| 1761/62 | F plus H | 1768/69 | P plus Q | 1775/76 | X plus Z |
| 1762/63 | I plus J | 1769/70 | Q plus R | | |
54. *V.M.*, 31 December 1756; 21 February 1757.
55. *V.M.*, 31 December 1756.
56. *V.M.*, 31 December 1756.

57. When the offices of beadle and bellman were separated from the workhouse-master's function in 1789, a single man took over the house, although the vestry usually preferred a married man to be master. Presumably, the master just could not support a wife on the profits alone. The advantage of appointing a married couple was that the township did not have then to pay a salary for the mistress. See *V.M.* 21 February 1757; 16 June 1758; 29 April, 13 May 1789.
58. From 1757 to 1769 the numbers at the house fluctuated between about 19 and 30; *P.A.B.* Spinning was not men's work.
59. The inventory in *P.A.B.*; see footnote 45.
60. *V.M.*, 15 January 1757.
61. The workhouse-master and his family were usually included without distinction with the rest of the paupers whenever the people in the house were listed in *P.A.B.* On occasion, the list was headed as though it contained only paupers.
62. Mr. and Mrs. Biggins were appointed in 1758; *V.M.*, 16 June 1758. The vestry gave gratuities to her on account of her good management; *V.M.*, 26 December 1761; 26 December 1764.
63. The vestry thanked James Clitherow III for the enormous amount of work he had done; *V.M.*, 18 July 1766.
64. *V.M.I.*, 4 May 1766.
65. *V.M.*, 10 November 1784.
66. The first mention of Dr. Walter Johnson in *V.M.* occurs in the 1770's. He owned a starch mill in the township. Phillip Norbury, the local printer, attended the vestry for the first time in the same period.
67. *V.M.*, 18 January 1757.
68. A vestry meeting is recorded in *P.A.B.* in 1766; a pair of scales were to be bought in order that the officers could check the weights of goods supplied. One suspects the vestry was shutting the door after the horse had bolted.
69. He does not appear as a victualler in any other year; *V.M.*, 28 September 1775.
70. Robert Avery, an overseer in 1770/71, was not allowed to charge two bottles of wine to his official account. He was too blatant.
71. No more entries were made in *P.A.B.* after 1769.
72. *V.M.*, 2 December 1784.
73. 52 persons: 7 men, 19 women and 26 children; *V.M.*, 2 December 1784.
74. James Clitherow III signed the rate assessment in his capacity as a justice for the last time on 21 September 1782. John Drinkwater's last signature in the Rate Books appears under the entry on 1 March 1780. These two had nearly always signed the assessments previously. A succession of magistrates from outside New Brentford performed the task from then onwards.
75. See Robbins, "Middlesex", pp. 119-120.
76. Robbins "Middlesex" (hereafter Robbins), p. 121; Sydney and Beatrice Webb, "English Local Government".
77. See K. B. Smellie, "Two Centuries of Local Government".
78. Faulkner, "Antiquities of Brentford, Ealing and Chiswick", 1845 (hereafter Faulkner). Dr. Glasse was the largest landowner in the Parish of Greenford; K. A. Smalley, "Greenford", 1963.
79. *V.M.*, 25 May 1797.
80. See footnote 50. After 1805, the vestry sent a list of a dozen or so names each year to the justices, who chose two men from it to be overseers.
81. When James Clitherow IV retired in 1839 he received encomiums from the vestry and the divisional magistrates; Faulkner.
82. When James Clitherow IV died in 1842 he was holding 18 important offices. Many, such as the vice-presidency of the Royal Humane Society, were fairly recent innovations.
83. *V.M.*, 3 November 1825.
84. They had to perform many new tasks connected with the militia. The overseers took the censuses; *V.M.*, 18 March 1801; 27 August 1811.
85. The records of casual disbursements in the last decade of the eighteenth century tell us very little when they are compared with those of, say, the 1730's; see especially the accounts of Silvanus Ronalds, 1794/95; Henry Eyles, 1795/96; and Christopher Glover, 1797/98.
86. *V.M.*, 25 May 1797.
87. *V.M.*, 24 May 1810.
88. *V.M.*, 17 December 1829.
89. *V.M.*, 15 April 1811; 24 March 1821; 5 August 1828. There is no record of the appointment of Mr. Head at all in *V.M.* We cannot be sure who was master from 1791 to 1795, and 1807 to 1810; *V.M.*, 27 July 1791; 12 December 1795; 30 March, 25 June 1807; 15 April 1811.
90. Accounts of William Turner and John Collet.
91. *V.M.*, 11 June 1791.
92. *V.M.*, 15 December 1789. The pensions being paid in 1833 were lower than the amount that the farmer received for each pauper; 22 September 1832; 9 May 1833.
93. *V.M.*, 5, 11 July 1832.
94. None of the pensions being paid in 1800 came up to the level of the four shillings per head being paid to the farmer; *V.M.*, 3 July 1799; Overseers' Accounts. At least one person received only a shilling per week as a pension. This must have been relief in aid of wages; no one could live on such a pittance in 1800.
95. See George Rudé, "Wilkes and Liberty".
96. Many of the pensions in the early nineteenth century were too small to provide total subsistence; e.g., *V.M.*, 17 April 1828; particularly 7 November 1828; 13 May 1830. The shilling paid to Callis, the workhouse-master, was definitely relief in aid of wages; *V.M.*, 17 April 1828. Payments to militiamen's families seem to have followed some sort of scale.
97. *V.M.*, 28 November 1787.
98. *V.M.*, 18 July 1791.

99. *V.M.*, 12 December 1795.
 100. *V.M.*, 7 December 1796.
 101. J. R. Poynter states that this was a favourite device in the second quarter of the eighteenth century; by the time Eden wrote, farming had fallen into disrepute.
 102. *V.M.*, 7 November 1796; 22 September 1802; 30 March, 25 June 1807; 22 September 1832; 25 October, 15, 18 November 1833.
 103. *V.M.*, 29 April, 13 May 1789.
 104. *V.M.*, 7 September 1796.
 105. *V.M.*, 7 October 1830.
 106. *V.M.*, 27 January 1831.
 107. See the loose inventory of goods in the house, dated 1802, which is amongst the manuscripts. This document will henceforth be called the *Inventory of 1802*. See also *V.M.* 7 October 1802.
 108. Inventory of 1802.
 109. D. Marshall.
 110. Inventory of 1802.
 111. Ditto.
 112. *V.M.*, 3 July 1799.
 113. *V.M.*, 23 December 1802; 22 September 1806. See also footnote 17.
 114. D. Marshall, pp. 131-132. The farmer who was paid so much per head made his profit from the margin between the *per capita* payment and earnings accruing from each pauper on the one hand, and the cost of his keep and raw materials on the other. The greater were the efficiency of the workhouse and the number of inmates, the larger were the marginal profits. The contractor who was paid a lump sum usually tried, by fair means or foul, to reduce the numbers of poor in the house. Every additional pauper, even if his labour helped to support him, represented another deduction from the money paid over by the parish.
 115. *V.M.*, 16 May 1804; 11 July 1833.
 116. *V.M.*, 22 September 1806.
 117. *V.M.*, 7 September, 7 November 1796.
 118. For extra payments made to Povey, see *V.M.* 28 November 1799; 10 May, 18 July, 10 December 1800; 28 January, 14 May, 11, 18 June, 13 August 1801; for Jeffries, see *V.M.* 23 December 1802; 9 February, 11, 22 September 1806; for Edghill, see *V.M.* 14 April 1836. Clements ran the house for only a year.
 119. *V.M.*, 15 April 1811.
 120. *V.M.*, 17 April 1816.
 121. *V.M.*, 10 April 1818; 22 September 1828.
 122. *V.M.*, 15 April 1811.
 123. *V.M.*, 5 August 1828.
 124. See footnote 96.
 125. *V.M.*, 7 October 1830.
 126. *V.M.*, 28 September 1826.
 127. *V.M.*, 1 March 1832.
 128. The overseers served thus:

1792/93 A plus B	1794/95 C plus D.
1793/94 B plus C	1795/96 D plus E.
129. *V.M.*, 25 March 1823; 26 February 1828 (in fact, 1828 should read 1829).
 130. See footnote 129; *V.M.*, 3 April 1823; 12 March 1829.
 131. *V.M.*, 17 April 1816.
 132. *V.M.*, 18 April 1821.
 133. Ditto.
 134. *V.M.*, 24 May 1810; 2 May 1816.
 135. *V.M.*, 17 April 1816.
 136. No one bothered to send in tenders for 7 April 1819; see *V.M.*
 137. *V.M.*, 17 April 1816.
 138. See e.g. *V.M.* 4, 24 March 1827.
 139. *V.M.*, 25 April 1834.
 140. *V.M.*, 17 April 1816.
 141. *V.M.*, 23 June 1831.
 142. *V.M.*, 15 January 1757; 2 December 1784.
 143. *V.M.*, 2 December 1784.
 144. *V.M.*, 25 February 1830; 14 April 1831; 9 December 1831.
 145. *V.M.*, 14 April 1831.
 146. *V.M.*, 2 April 1818. Jones was ordered to supply food to the workhouse; *V.M.*, 27 June 1821. Gregory often supplied bread to the workhouse. On nine occasions between 1820 and 1827, he was ordered to do so by the vestry.
 147. *V.M.*, 2 December 1784; 30 September 1796; 24 May 1798; 25 February 1830; 14 April 1831.
 148. *V.M.*, 17 April 1816.
 149. *V.M.*, 20 July 1832. The vestry claimed to believe that farming "would be alike to the interest of the Poor and of the Township". An *ad hoc* committee considered this measure would "promote the welfare and comfort of the poor".
 150. 3 October 1795; Royal proclamation on the reduction of wheaten bread.
V.M., 27 January 1796; a special meeting of the principal inhabitants resolved that they would voluntarily restrict the consumption of wheaten bread by their families.
V.M., 10 December 1800. Royal proclamation on corn shortage.
V.M., 8 February 1801; a proportion of outdoor relief to be given in food not money.

151. Industrialisation caused river pollution, which, in the early nineteenth century, decimated the fish in the Thames. Faulkner noted that there were some fishermen still when he was writing.
152. The township's population after about 1821 seems to have grown much more slowly than that of England as a whole. Unless one is going to assume that the birth or the death-rate in New Brentford was extremely peculiar, emigration from the township seems to be the only way to explain the slow increase.
153. *V.M.*, 5, 11 September 1791; 24 March, 6 April 1795; 4 March 1796; 18 October 1797; 14 July 1806; 10 February, 4 September 1815; 3 April 1816.
154. In the year 1814/15 the expense incurred through persons travelling with passes amounted to £45.19.3. The annual average for the ten years from 1800-1810 was £8.2.1.
155. A parish from which a pauper was being removed had to bear the costs of transporting and maintaining him only until he reached the parish boundary. Then the next community had to shoulder the burden of conveying him to the next border and so it progressed until he reached his destination. New Brentford lay on the main road to Bath.
156. The Act placed everybody on the same level as the certificated person. After 1797, only people who had actually become chargeable could be removed. It seems probable that, in the last decades of the eighteenth century, parish officers, in the Metropolis at least, were acting very much as though the 1797 Act had already been passed. The complexities of urban life must have been hindering any attempt to remove people on mere suspicion that they might become a burden to the community, even if removals had not become as difficult as in the early nineteenth century.
157. *V.M.*, 16 May 1804.
158. *V.M.*, 20 April 1835. The Vestry ordered that five parish apprentices' indentures, dating from 1826-1833, be deposited in the chest. Two boys had been bound in 1833.
159. *V.M.*, 23 October 1791; 9 March 1800.
160. The Act of 1601 empowered the overseers to bind poor children without reference to the parents' wishes and to take measures to force tradesmen to accept parish apprentices. No case has come to light in New Brentford of a master being compelled to employ an apprentice. This procedure went out of fashion very early on, except in the North of England; see J. R. Poynter and D. Marshall.
161. See footnote 17.
162. For instance, the vestry ordered that the parish children be maintained in Isleworth Workhouse. It is not unlikely that they were never sent there; even if they were they did not stay for long.
163. The township had a long tradition of local patriotism. On one occasion in the sixteenth century, the men of Isleworth, who were beating the bounds, fought the men of Hanwell, who were likewise perambulating their borders, on Brentford Bridge; see Robbins. At that time New Brentford was part of Hanwell; see footnote 18. In the mid-Victorian period, there was a sizeable agitation in New Brentford against co-operation with Old Brentford in a national celebration.
164. Faulkner.
165. See footnote 17.
166. *V.M.*, 17 April 1816; 10 April 1818.

MATHIAS SPRINGHAM, 1561-1620

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Mathias, son of Richard Springham, was born in the city of London in August 1561.¹ During his son's early years Richard Springham, who was a Mercer, enjoyed an acknowledged position in his Company and among the merchants of London,² but the tide had definitely turned against him by 1568, when he was given protection for a year, as "he is bound to the Crown in a great sum . . . and many of his creditors propose to sue him for debt within that period".³ Indeed, he eventually found himself in so great financial difficulties that he appealed to his Company for help on 9 March 1575/6, and, as a result, was granted a pension of £20,⁴ the last payment of which was made to his widow in July 1579.⁵ The fact that his father had had the uncomfortable experience of receiving relief from the Mercers' Company may have been a reason why Mathias Springham did not seek the freedom of that Company. Whatever the reason may have been, it was of the sister company the Merchant Taylors, that he sought to be a freeman. After serving his apprenticeship to Charles Hoskyns, he was made a freeman on 11 November 1588.⁶ So, at the age of 27, a later age than was usual, he began to trade for himself.

TRADING ACTIVITIES

At first he was lent "dyvers great summes of mony to relieve his wants when he was destitute of other means" by Edward Elmer, Grocer, who had married Mathias Springham's maternal aunt, Elizabeth, when she was widowed by the death, in 1580, of Matthew Field, Mercer.⁷ When in 1598 a lawsuit arose between Mathias Springham and his aunt and her third husband, Otto Nicolson, she stated in her pleadings before the Court of Chancery that it was on her entreaties that Edward Elmer had made these loans and that he had protested "that if it were not for her sake he would not trust any Alderman of London with so great estate".⁸ In spite of this unpromising beginning he has established himself sufficiently by 1595 to become one of the Livery members,⁹ who, as Clode comments, were "men of substance able to bear the sacrifice of time and money which the choice entailed, as of attending civic ceremonies, paying higher assessments, acting as stewards or providers for public entertainments".¹⁰

Some pieces of information have survived which illustrate how wide-ranging his business activities were. He had trading connections with Ireland *ante* 1602, because in that year, when Exchanges were set up for the adjustment of the value of English and Irish coins after the debasing of the Irish coinage, he claimed at the Royal Exchange in London one sum of £500 and another of £298.13.7 for goods which he had supplied to merchants in Ireland.¹¹ In 1607, when the Merchant Taylors' Company entertained James I and Henry, Prince of Wales, to a banquet in their Hall, Mathias Springham supplied, as the accounts show, "19 ells $\frac{1}{2}$ taffite to make clothes for the three singers in the shipp and for him that made the speech to his Ma^{ty} at 13s.4d. an ell".¹² In 1608 he was a member of a syndicate which dealt in land in Yorkshire.¹³ On 16 July 1611 he was in debt £10 or £12 to Lionel Cranfield, Mercer, later Earl of Middlesex, one of the merchant magnates of the time.¹⁴ On 20 June 1612 he headed a list of London merchants who made an appeal to the Corpora-

tion of Exeter for Valentine Tooker, who was in danger of being deprived of the New Inn there.¹⁵ It is probable that Mathias Springham and the other signatories had made use of the New Inn for exhibiting their cloth at the four fairs which were held annually in Exeter.¹⁶ There is a hint that his trading connexions with Ireland continued, for, when he came over in 1613, as will be explained later, as a commissioner to make enquiries into the progress of the Londonderry plantation, he remained behind when his colleagues returned to London, not only to continue oversight of the plantation but also “for some affairs of his own”.¹⁷ The absence of any information about his trading activities in the later years of his life may be fortuitous. It may, however, be due to the fact that instead of earning profits by trading he had turned to money-lending. *A tract against usury* by Sir Thomas Culpeper, 1621, points out that “generally all merchants when they have gotten any great wealth leave trading and fall to usury, the gain thereof being so easy, certain and great”.¹⁸ As evidence of this in the case of Mathias Springham, there are the loans of sums of £300 and £600 he made to Sir John Bouchier¹⁹ and of £800 to Sir Ralph Bingley.²⁰

EAST INDIA COMPANY

Of the three great trading and colonizing ventures of the last days of Elizabeth I and the early days of James I, in which the members of the London Livery Companies took part, in a corporate capacity or as individuals, the first was the Honourable the East India Company, the charter of which was granted on 31 December 1600. As Mathias Springham was not named in the charter, it is clear that he was not a member at the beginning. But a service which he rendered to the East India Company in November 1613, when he was in Ireland, suggests that he may then have been financially interested. This service consisted in going to Sir Arthur Chichester, the Lord Deputy of Ireland, and from him to the Earl of Ormond, Vice-Admiral of Leinster, to ask for the release of the *Peppercorn*, which had on board a cargo reputed to be worth £300,000, and which had been detained in Waterford Harbour because of a charge of piracy brought against its captain by a member of the crew.²¹ His action in this matter may only indicate a desire to help his fellow merchants in London and the fact that the East India Company repaid his expenses is perhaps support for this view.²² He certainly possessed stock in the East India Company later. One of the sentences in his Will made in September 1620 was as follows: “I . . . give unto . . . Henry Springham my stocke w^{ch} is in the Easte India Company and all the profitts w^{ch} will arise thereby and doe intreat the said Companye to accept of him and make hime a lovinge brother amongst them”.²³ The continuing interest of the family in the East India Company is shown by the purchase in 1621 by his widow of £200 stock.²⁴ A further link between Mathias Springham and the East India Company is provided by Christopher Newport, who has been described as “a sort of sailor of fortune ready to enter the service of any group of men who wanted him”. After being employed by the Virginia Company from 1606 to 1611 he entered the service of the East India Company.²⁵ Before he sailed on what proved to be his last voyage he made his Will on 16 November 1616 and named his “very good friends, Mathias Springham and John Goodfellow”, as overseers with Sir Thomas Smythe, first Governor of the East India Company, as executor.²⁶

VIRGINIA COMPANY

When the second Virginia Company received its charter on 23 May 1609, Mathias Springham was among those named in it as having taken shares.²⁷ He had thus a part in this

venture, of which it has been said that "to read the names of the Adventurers is like hearing the roll-call of the most active elements of the society of the last days of Shakespeare".²⁸

LONDONDERRY PLANTATION

The same spirit which animated the subscribers to the Virginia Company appears in those London citizens who were concerned with the plantation of what became known as the County of Londonderry. They indeed regarded the plantation of Ulster, as a whole, and, in particular, the area assigned to them by James I as having greater possibilities than that of Virginia. They shared the opinion of Sir Arthur Chichester, the Lord Deputy of Ireland, who declared that he would "rather labour with his hands in the plantation of Ulster than dance or play in that of Virginia".²⁹

It is important to observe the part played by Mathias Springham in the Londonderry plantation. Though a body, consisting of a Governor, Deputy-Governor and 24 assistants, had been formed on 30 January 1610/11 in the City of London to manage the Plantation,³⁰ the first time that Mathias Springham's name occurs in connection with it is when he was appointed on 8 January 1612/13 an Assistant along with his fellow Merchant Taylor, John Slany.³¹ When that body, later called the Honorable the Irish Society, received its charter on 29 March 1613, he was named in it as an Assistant as representing the Merchant Taylors' Company, which had provided a larger sum of money for the Plantation than any other company, along with John Slany, already mentioned, John Gore, and Robert Jenkinson.³² The fact that the Governor of the Irish Society and five of the Assistants were to be Aldermen and the rest of the Assistants were to be commoners suggests that Mathias Springham was a member of the Common Council.

Shortly after the grant of its charter to the Irish Society, there was a general feeling that commissioners should be sent from London to Londonderry to investigate on the spot what progress had been made and to present a detailed report. The Common Council, therefore, decided on 24 June 1613 that "some great and worthy maiestrat of this citty, accompanied and assisted by some commoner of special countenance and credit, be sent . . ." It was because of this decision that Alderman George Smithes, Goldsmith, as "the great and worthy maiestrat" and Mathias Springham as "the commoner of special countenance and credit" undertook the task, "preferring the general profit and service of the city before their own private".³³ The two commissioners in due course set off for Ireland, taking with them silver-gilt chalices and patens for the churches in Londonderry and Coleraine,³⁴ the chalice for the church in Londonderry bearing this inscription: ECCESIAE DEI IN CIVITATE DERENSI DONUM LONDINENSIVM.³⁵ By 5 August they had arrived in Dublin, and the Lord Deputy of Ireland, who had received instructions from the Privy Council in England to show them special favour,³⁶ reported in his reply on that day that they were "in point to goe down thither" (*i.e.* to Londonderry and Coleraine).³⁷ Having arrived there they spent a busy two months inquiring into the state of the Plantation, rectifying abuses and taking measures to forward the work. Their most important task was to divide the land of the County (as distinct from the City of Londonderry and the town of Coleraine, which were reserved for the Irish Society) into twelve parts, which were later assigned by lot to the Companies. On their return to Dublin they drew up and signed, on 15 October, their report, which Alderman Smithes presented to the Common Council on 8 November.³⁸ Before this at a meeting of the Merchant Taylors' Court held on 3 November a letter from Mathias Springham was

read, in which he said that he had decided “for good causes and considerations as well for the good of the whole citty as for the good of the company and some affairs of his own” to stay in Ireland for the winter.³⁹ It was not until 27 August 1614 that on his return Mathias Springham presented his supplementary report to the Common Council and received commendation for his efforts.⁴⁰ Now back in London, he was still busy with the affairs of the Londonderry Plantation. A letter from him, the text of which is extant, was addressed on 14 September 1614 to Peter Benson, a citizen of London, Tyler and Brick-Layer. In it *à propos* of a suggestion that Benson should submit a tender for the building of the walls of Londonderry he gave him cautious encouragement: “I will not doubt that doing it as cheap as anyone else you shall have the refusal”.⁴¹ In the sequel, as Benson obtained the contract for the building of the famous walls,⁴² which were to provide security for the citizens in three sieges, particularly that of 1689, some credit is due to Mathias Springham for his part in the transaction.

As the charter of the Irish Society required that Assistants should go out of office after two years, presumably Mathias Springham ceased to be an Assistant in February 1615. In spite of this he was called upon in 1616 to go for a second time to report on conditions in Londonderry and Coleraine and in the County of Londonderry. His companion on this occasion was Alderman Peter Proby, Grocer. The gifts which Alderman Peter Proby and Mathias Springham took with them were swords for use on civic occasions at Londonderry and Coleraine. After about three months spent in inquiring into and speeding the work of the Plantation they presented their report on 1 October. Embodied in this report was the promise which Mathias Springham had given, to build in Londonderry in the next year, “at his own charge” a free school for which his colleagues and he had “allotted” 300 acres, as an endowment.⁴³ In allotting this land they were providing for the school in Londonderry what had been already provided, as the conditions of the Plantation required, for the schools in the other five escheated counties of Ulster. For some reason this proposed land endowment for the free school of Londonderry did not materialize and in its stead the Irish Society granted, at their pleasure, an annual sum of 20 marks (£13.6.8) for the school master.⁴⁴

SCHOOL HOUSE IN LONDONDERRY

Mathias Springham duly performed his promise to build a free school in Londonderry. As he could not supervise in person the building of the schoolhouse, that duty was discharged for him by Robert Goodwin, the chamberlain and town clerk, who revealed this fact some years later when writing to the Drapers’ Company.⁴⁵

The plans of the City of Londonderry made in 1618–19,⁴⁶ 1622,⁴⁷ and 1625⁴⁸ show that the schoolhouse was in the south-western quarter between Bishop’s Gate and New (now Butcher’s) Gate. It had on its left, as one looks towards the river, Lord Docwra’s Bastion (later the Royal Bastion and now the site of Walker’s Monument). Behind it were the Bishop’s residence and the church, which, formed out of the ruins of an Augustinian monastery, was used by the citizens as a place of worship until St. Columb’s Cathedral was finished in 1633. It was on the upper side of what was called, at the time of the siege in 1689, Schoolhouse Lane and is now known as Society Street. The measurements of the building were 67 feet by 25 feet.⁴⁹ It was made of lime and stone and slated, with a “base court” (*basse cour*) or yard. The epithet applied to it is “fair”, which here may mean “handsome”.⁵⁰

On a stone placed over the door the following inscription was cut:⁵¹

MATHIAS SPRINGHAM AR [miger]
AD HONOREM DEI ET BONARUM
LITERARUM PROPAGATIONEM
SCHOLAM HANC FUNDAVIT
ANNO SALUTIS 1617°

This inscription indicates that the type of school envisaged was a grammar school, as the study of *bonae literae* (i.e. Classical Latin) was the distinguishing mark of a grammar school, which was indeed the typical school of the period. Expression is also given to the religious aim, which was a feature of education in the Middle Ages and which was intensified by the Reformation. The *pietas literata*, which is set forth as the aim of Mathias Springham's school was the aim also of many schools at this time in the British Isles, but no similar inscription in Latin has yet been found.

MERCHANT TAYLORS' COMPANY

At this point some account may be given of the part played by Mathias Springham in the Merchant Taylors' Company. As has been stated, he became a freeman on 11 November 1588 and a livery member on 23 June 1595. When pageants were presented at the time of the coronation of James I, he paid the two amounts at which he was assessed.⁵² In 1607 in connection with the banquet at which James I and Henry, Prince of Wales, were entertained by the Company, he not only provided, as a matter of business, the taffita required for the garments of those who entertained the royal personages, but also, when it was decided that "some competent judge of wine must be appointed to make the selection and give directions in these matters", he was "entreated to be chiefe and master butler to command all the butlers that shall be used in this service".⁵³ As John Hudson was paid £5 "for his paynes being chief butler",⁵⁴ Mathias Springham's services, if he undertook the duty assigned to him, were in an honorary capacity. He became a member of the Court on 24 March 1611/12 at the same time as Thomas Marsham,⁵⁵ who had married his youngest sister, Magdalen, and who became Master, 1621/2.⁵⁶ He was elected renter warden on 20 July 1613, but "in regard to his extraordinary occasions being chosen a committee to goe into Ireland [he] could not stay dinner and therefore took the oathe for the faithful and due execution of his place on his return and soe departed".⁵⁷ As he was not able to discharge his duties as renter warden because of his decision to remain in Ireland for a longer period than was first envisaged, he was relieved of the wardenship and another appointed in his stead.⁵⁸ However, office in the Company came to him on 17 July 1615, when he was elected head or upper warden. Then two years later came the final honour, the office of Master.⁵⁹

His year as Master was marked by his attendance, accompanied by the four wardens, three former masters and two associates, at the reception in November at Tower Wharf of the Russian Ambassador. A precept had been issued by the Lord Mayor for ten members of the Company to be present on the occasion "apparrelled in velvet coates, with rhaynes of gold, well mounted on horseback in comely and decent order".⁶⁰ He was present at the "probations" (examinations) of the Merchant Taylors' school.⁶¹ On these occasions his thoughts may have turned to the schoolhouse which he had built in Londonderry. He was certainly reminded of the Londonderry Plantation, when it was decided on 8 May 1618 that he and the wardens should go to the Clothworkers' Hall to have a conference about the Clothworkers' estate in County Londonderry in which his Company had a share.⁶² On the same occasion he made a proposal "on the behalfe of the Almsmen of the Livery w^{ch} dwell

in the Company's Almshouses neere unto theire Hall for the taking in of the new river water for the ease and benefite of the poore men and sweete keeping of the said house". This proposal, which was approved, reflects Mathias Springham's kindly concern for the almsmen and also his shrewd business sense in realizing the importance of the new water system for London which Sir Hugh Middleton had devised.⁶³

FAMILY

When his father was in financial difficulties, Mathias Springham was taken into her home by his maternal aunt, Elizabeth, then the wife of Matthew Field. She had shown a similar kindness to Elizabeth Costerdine, a niece on her husband's side, who continued to live with her after her (Elizabeth Field's) marriage to Edward Elmer. After his death in July 1593, in her desire to bring about a marriage between Mathias Springham and Elizabeth Costerdine, she offered to forgive him £100 of his debt to Edward Elmer and treat that as a dowry for Elizabeth Costerdine. The prospective bridegroom, not satisfied with this offer, asked that £254 of the debt should be cancelled, which would leave a round figure of £400.⁶⁴ The marriage was arranged on these terms and took place on 11 November 1593.⁶⁵

Some details of the children born to Mathias Springham and Elizabeth his wife are now given which throw a light on the social standing of the family. The eldest was Anne, born in 1594.⁶⁶ In 1608 she married Henry Cutts,⁶⁷ who, as an apprentice of her father, had obtained the freedom of the Merchant Taylors' Company in 1607.⁶⁸ He was the third son of Robert Cutts, Ironmonger, who was Master of his Company for the second time in the year of the marriage of his son Henry to Anne Springham.⁶⁹ The next child was Elizabeth, born in 1596.⁷⁰ She was married in 1610 on the anniversary of her parents' marriage, to Benjamin Valentine.⁷¹ She died in 1616, probably in giving birth to a son, who was called Mathias after his grandfather.⁷² Her husband has a place in British history, for he was one of the M.P.s who took part with Sir John Eliot and others in the lively scene in 1629, when the Speaker of the House of Commons was held down in his chair, while resolutions protesting against the arbitrary rule of Charles I were read, and for his part in this episode was kept in prison until 1640.⁷³ The third child was Mary, born in 1599.⁷⁴ In 1615 she married Arthur Puckle, Leatherseller,⁷⁵ whose Will made in May and probated in July 1617 shows that he was a man of means.⁷⁶ She married Thomas Cowen as her second husband.⁷⁷ Of him all that is known is that he fell foul of his mother-in-law, for in a codicil to her Will, made on 4 Oct. 1625, she instructed her son Henry, as executor, to take legal steps to obtain from Thomas Cowen a sum of £36.13s.4d. which he had received in her name and had retained.⁷⁸ The fourth child was Henry, born in 1601.⁷⁹ He entered Gray's Inn in 1610.⁸⁰ This was not with a view to the study of law but for a training in the social graces, which the Inns of Court provided for young boys, usually the sons of the nobility.⁸¹ In 1616 he went to Christ Church, Oxford, but did not take a degree.⁸² Henry Springham's training would seem to have been of a kind to fit him for an appointment at the Court. This he obtained as Cup-bearer to Charles I.⁸³ While Henry was still a minor, his maternal uncle, Thomas Costerdine, as his guardian *ad lites*, sought unsuccessfully to establish Henry's claim under the Will of Richard Springham, his uncle, of Kingsclere, Hants., against his cousins, Robert Tower(s), son of Mercimite Springham by her first husband, the Rev. Robert Tower(s), and Edward Kynaston, son of Martha Springham, who had married Brian Kynaston, of Moose, Essex.⁸⁴ In 1637 Henry Springham married Frances Boyers of Hertford.⁸⁵ Another son, called Mathias after his father, died at an early age.⁸⁶

WILL AND DEATH

Mathias Springham "being at this present sicke in bodye but of perfect minde and memorie" made his Will on 23 September 1620.⁸⁷ It contains some interesting features. He left £2000 to his wife, who was also his residuary legatee and executrix, £1000 to Henry, his son and heir, and, as has been already stated, his stock in the East India Company, £50 to his daughter Anne Cutts "in full satisfaction of her portion beinge formerlie advaunced", £50 to his other surviving daughter, Mary Puckle, "beinge likewise formerlie advauced, £50 to his grandchild, Mathias Valentine, and smaller sums to other relatives and his servants. The interest of £80 per annum on the loan made to Sir Ralph Bingley⁸⁸ was to be divided between Mary Puckle (now a widow), Henry Springham, and George and Matthew Costerdine, brothers-in-law, the first two to receive £30 each, the last two £10 each, and if the loan should be repaid, then the capital sum was to be divided among the four above-mentioned in the same proportions. He left "to the poore people of the hospitall ioyninge to the hall" £6.10s.0d, which he had lent to the Merchant Taylors' Company to buy corn,⁸⁹ and to the poor of Richmond £3 to be distributed on the day of his funeral. Personal gifts were his "best standing cupp all guilte" to his brother Richard, and to Richard's wife "a like guilte cupp" and to his brother-in-law, Thomas Costerdine, and his wife his "neste of sacke bowles w^{ch} agree newe and gilt". He left sums of £5 and £2 to several people to buy, in accordance with the custom of the time, memorial rings. Of these beneficiaries the most interesting is "My Ladie Herick". Her husband, Sir William Herrick, Goldsmith, money-lender and principal jeweller to James I, and uncle of the poet, Robert Herrick, signed first of the witnesses to the Will.⁹⁰

Mathias Springham lived only a short time after making his Will. He was buried in the parish church of Richmond on September 29.⁹¹ In the pavement at the west end of the church is a memorial slab with the following inscription:

MATTHIAS /S/PRINGHAM ESQUIRE
WHO DEPARTED THIS LIFE THE
25th SEPTEMBER ANNO 1620.
HERE LIETH INTERRED UNDER THIS STONE
A MAN OF CHARITIE ALONE
WHICH WHILE HE LYVED DID GOOD TO ALL
HE WAS AN HELP TO GREAT AND SMALE
HE LEFT THE WORLD ALL FULL OF SINN
HE LYVED IN CHRIST AND DYED THEREIN
HE HOPED IN GOD HIS SOULE TO SAVE
AMONG THE SAYNTS WHICH NOW THEY HAVE.

REFERENCES

1. The entry in the parish register of St. Bartholomew ye litle (Guildhall Library, MS 4374) at August 1561, is as follows:

"The 27th day

Mathias Springham the sonne of Richard Springham christened".

A question arises about his Christian name: should it be Mathias (Matthias) or Matthew(e)? The latter form is found chiefly in the records of the Merchant Taylors' Company. The evidence for Mathias is clear. It is the name used, among other places, in the parish register (as quoted above), at his christening, in the preamble to his Will, which he signs "Math." (Somerset House, P.C.C. 93, 94 Soame), in the Will of his brother Richard (P.C.C. 8 Dale), in the codicil to his widow's Will (P.C.C. 154 Hele), in the charter of the Hon. the Irish Society (*An historical narrative . . . of the . . . Irish Society*, London, 1865, p. 22), and on the *fundavit* stone of the schoolhouse he built in Londonderry, to which reference will be made later. It is easy to understand how Matthew, a better known name, came to be substituted for Mathias.

2. There is a good deal of material available for a biography of Richard Springham, but it must suffice here to indicate his importance by two facts: (i) that he was elected a Warden of the Mercers' Company on 26 July 1562 (Mercers' Hall, Acts of the Court of Mercers, 1560–95, f. 36); (ii) that he was named with other London merchants in the revised charter granted to the Merchant Adventurers on 18 July 1564 (*Cal. pat. rolls, Eliz. 1563–6*, pp. 178–9). He married in 1547 Mary Meredith (*Allegations for marriage licences issued from the faculty office of the Archbishop of Canterbury, 1543–1869*, p. 10). She was the eldest daughter of Robert Meredith, Mercer, who by his Will made on 28 Dec. 1546 and proved on 28 Jan 1546/7 (P.C.C. 26 Alen) entrusted the bringing up of his children to Richard Springham and Thomas Nicolls. C. M. Clode, *The early history of the Merchant Taylors' Company*, London, 1888, ii, 59fn., mistakenly asserts that Richard Springham was a Merchant Taylor. He was, however, intimately associated with Richard Hilles and other prominent Merchant Taylors (Clode *op. cit.* ii, pp. 141, 149). I have made considerable use of the work of C. M. Clode, the historian of the Merchant Taylors' Company, and given references, wherever possible, to his two books, *Memorials of the Guild of Merchant Taylors*, London, 1875, and *The early history of the Merchant Taylors' Company*, 2 vols., London, 1888. I have, however, used also the original records in Merchant Taylors' Hall and given references to them where they deal with matters not mentioned by Clode. In the latter part of the reign of Mary I, Richard Springham was an exile in Germany, living at Basle and later at Strasburg. He was accompanied by his wife, to whom a daughter, Mercimite, was born during their stay on the Continent (C. H. Garrett, *The Marian Exiles, 1553–1559*, Cambridge, 1938, pp. 292–3).
3. *Cal. pat. rolls, Eliz. 1566–9*, p. 265.
4. Acts of the Court of Mercers, 1564–95, f. 292.
5. Rentwardens' accounts of Mercers' Company, 1577–1603, f. 28.
6. Clode, *Early History*, ii, 344–5. Charles Hoskyns was Master of the Company in 1582.
7. *The register of St. Lawrence Jewry, 1538–1676*, pt. i., Harl. Soc. LXX, 1940, p. 122.
8. P.R.O. C.2 Eliz. S 2/60: "The joynte and severall answers of Otto Nicolson and Elizabeth his wife to the bill of Mathias Springham complainant". This action was brought by Mathias Springham in furtherance of his claim to property in Hackney, which he averred his aunt and promised to him before her third marriage.
9. C. L. Hopkinson, *Report on the records in the possession of the Merchant Taylors' Company, 1563–1603*, privately printed, 1915, p. 107.
10. Clode, *Early History*, i, 44.
11. *Cal. S. P. Ire., 1601–3*, p. 400 (where Martin is given for Mathias); and p. 508 (where he is stated to be a Mercer).
12. Clode, *Memorials*, p. 177, *Early History*, i, 317:
"In the shipp which did hang alofte in the Hall three rare men sang to his majtie, and 'a very proper child delivered a short speech . . .' devised by Mr. Ben Johnson [Jonson] the poet". (Clode, *Early History*, i, 290, quoting from the original record).
13. *Yorkshire fines for the Stuart period*, ed. W. Briggs, Yorks. Arch. Society, 1915–17, i, 1603–14, p. 82.
14. *Sackville MSS.* (Hist. MSS. Comm.), i, 348.
15. Exeter City Archives, Ancient Letter, 147; *Report on the records of the City of Exeter* (Hist. MSS. Comm., 1916), p. 86.
16. W. T. MacCaffrey, *Exeter, 1540–1640: the growth of an English town*, Harvard University Press, 1958, p. 80.
17. Minutes of the Court of Merchant Taylors Company, vii, 1611–20, f. 102.
18. Quoted in L. Stone, *The crisis of the aristocracy*, Clarendon Press, 1965, p. 532.
19. For Sir John Bouchier, see *D.N.B.* and for Sir Ralph Bingley see note 88 given later. The loans to the former led to lawsuits after the death of Mathias Springham, Bouchier Miles v. Elizabeth Springham (P.R.O., C.2. Jas. I B 5/41), and Eliz. late widow of Mathias Springham v. Sir John Bouchier (P.R.O. C.2 Jas. I S 10/55).
20. See details of the Will of Mathias Springham.
21. *Cal. S.P. Ire., 1611–14*, pp. 425–6, 428–9, 433–5 and 438; "Chichester letter book", ed. R. D. Edwards in *Analecta Hibernica* viii (1938), p. 133. The voyage of the *Peppercorn* was the sixth and last of the separate voyages (G. Birdwood and W. Foster, *The register of letters of the Governor and Company of Merchants trading with the East Indies 1600–1619*, London, 1893, pp. 46 fn., 318 fn.).
22. *Cal. S.P. Col. East Indies etc., 1513–1616*, p. 272.
23. P.C.C. 93, 94 Soame.
24. *Cal. S.P. Col. East Indies, etc., 1513–1616*, p. 516.
25. A. L. Rowse, *The Elizabethans and America* (Trevelyan lecture), London, 1959, p. 66.
26. P.C.C. 92 Meade.
27. S. M. Kingsbury, *The records of the Virginia Company of London*, 4 vols., Washington, 1933, iii, pp. 88, 334.
28. Rowse, *op. cit.* p. 70.
29. *Cal. S.P. Ire., 1608–20*, p. 250.
30. T. W. Moody, *The Londonderry Plantation, 1609–41*, Belfast, 1938, p. 81.
31. City of London Records Office, Journal of the Court of Common Council of London, 29, f. 16v. John Slany was Master of the Merchant Taylors' Company, 1620, (Clode, *Early history*, ii, 345).
32. *An historical narrative . . . of the Irish Society*, p. 22. Moody, *op. cit.*, pp. 122–142 describes the charter in detail without, however, naming the individual members of the Irish Society. John Gore became Lord Mayor of London in 1625. G. E. Cokayne, *Some account of the Lord Mayors and Sheriffs of London, 1600–1625*, London, 1897, p. 99. Robert Jenkinson who had been first warden of the Merchant Taylors' Company in 1612, was named as Master for 1615, (Clode, *Early history*, ii, 344–5).
33. Moody, *op. cit.*, p. 144; Letter-book of the City of London, E.E. f. 136 and Journal of the Court of Common Council of London, 28, f. 75.
34. J. Betts, *The story of the Irish Society*, London, 1913, p. 57.
35. A vignette of the chalice and paten given to the church in Londonderry in 1613 and now in St. Columb's Cathedral there, appears on p. 35 of the above-mentioned book.
36. *Acts, Privy Council, 1613–14*, p. 120. *Cal. S.P. Ire., 1611–14*, p. 382.

37. "Chichester Letter-Book" in *Analecta Hibernica*, viii (1938), pp. 124-5.
38. Moody, *op. cit.*, pp. 145-154, gives a full account of their work and a summary of their report.
39. Minutes of the Court of the Merchant Taylors' Company, vii, 1611-20, f. 102.
40. Moody, *op. cit.*, pp. 156-7.
41. *Londonderry and the London Companies, 1609-29*, ed. D. A. Chart, Belfast, 1928, pp. 45-6.
42. Moody, *op. cit.*, p. 275.
43. Moody, *op. cit.*, pp. 167-176 deals with the appointment of the commissioners and their work. Peter Proby was Sheriff, 1614-15, and Lord Mayor of London, 1622-3 (G. E. Cokayne, *op. cit.*, pp. 94-5). "Free School", about the meaning of which there has been much discussion, almost certainly meant a school of which the master, because there was an endowment in money or land, was required to give free tuition to a limited number of pupils. The term was nearly always applied to a grammar school. In the "Project" of the Ulster Plantation, Jan. 1608/9, before the citizens of London had been invited by the Crown to be responsible for the settlement of Co. Coleraine (later Co. Londonderry), 693 acres in the County of Donegal were to be "equally allotted to 2 freeschooles one at Derry the other at Dunegalle", while in the County of Coleraine 6 balliboos (townlands), which for the purposes of the plantation were reckoned to contain 60 acres each, were "allotted to the maintenance of a free schoole to be erected at Lemivaddy". ("Ulster plantation papers" in *Analecta Hibernica*, viii, pp. 291, 289).
44. "The estate of the diocese of Derry", 1622, in *Ulster Journal of Archaeology*, 2nd ser. ii, pt. 4 (July 1896), p. 225, B.M. Add. MS. 4756 f. 115v., *Londonderry and London Companies*, p. 54. The Irish Society in assigning to the schoolmaster in Londonderry a salary which was below that usually given to grammar schoolmasters may have thought that he would have an income also from the proposed land endowment. £13.6.8 per annum was the amount which Sir James Deane in 1618 by his Will provided for the maintenance of a petty (*i.e.* elementary) schoolmaster at Basingstoke: "Who shall teach little children to write and read but especially to read and learn the catechism in the principles of religion" (F. Watson, *The English grammar schools to 1660*, Cambridge, 1908, p. 153).
45. Robert Goodwin was admitted to the Middle Temple on 5 Aug. 1612 (A.C. Sturgess, *Register of admissions to the Middle Temple*, 3 vols., London, 1949, I. 98). "5 Aug. 1612 Mr Robert Goodwin, gent., second son of Robert Goodwin, late of London, gent. deceased, specially by assent of . . . and by request of John Gordon, dean of Salisbury, because of the transmigration of the said Robert to Ireland on account of the plantation there by the citizens of London; his fine was assessed at 13s 4d (*Middle Temple Records*, 4 vols., London, 1904, ed. C. P. Hopwood, including Minutes of Parliament of the Middle Temple translated and edited by C. T. Martin, II, 1603-49, p. 552. Robert Goodwin played a significant part in the plantation as chamberlain and town clerk of Londonderry for many years) (Moody, *op. cit.*, pp. 281, 450), as one of the M.P.s for Londonderry in the Irish parliament, 1634-9 (*Cal. S.P. Ire.*, 1633-47, p. 65), and as collector of customs for Londonderry, his successor in the last-named office being named on 22 Jan. 1647, in anticipation of Goodwin's death, if indeed it had not already taken place (*op. cit.* p. 598). Robert Goodwin to John Watters, clerk to the Drapers' Company, 16 Dec. 1622 (Drapers' Hall, Drapers' Company documents classified as Manor of Drapers, B.264).
46. Moody, *op. cit.* facing p. 186.
47. *Londonderry and the London Companies, 1609-29*, facing p. 12.
48. Moody, *op. cit.*, facing p. 276. O.S. *Memoir, Londonderry*, Dublin, 1837, between pp. 98 and 99.
49. Pynnar's survey, 1618-19 (*Cal. Carew MSS.*, 1603-24, p. 419).
50. George Downham, Bishop of Derry, Report to regal visitation, 1622: "The estate of the diocese of Derry", *Ulster Journal of Archaeology*, 2nd ser., ii, pt. 4 (July 1896), p. 225; Report of the commissioners, Sir Thomas Phillips and Richard Hadsor, 1622 (B.M. Add. MS. 4756, f. 115v); Petition of citizens of Londonderry c. 1622 (*Londonderry and the London Companies*, pp. 54-5).
51. City of London Records Office, Irish Society records, Transcript book, entitled "Entry of Leases and Companies proportion and other Valuable Entries", flyleaf somewhat scorched. Moody, *op. cit.*, p. 188 fn. in quoting this inscription gives "Matthias" instead of "Mathias" and omits the raised "o" after 1617. "Ar." in the inscription stands for Armiger. The arrangement in five lines, here adopted, is that of the O.S. *Memoir, Londonderry*, p. 140. As given in the transcript, above referred to, it is in one long line ending with "hanc" and a much shorter second line. The date of the disappearance of the stone is not known.
52. Clode, *Memorials*, p. 591.
53. Clode, *Memorials*, p. 148, and *Early history* 1,279.
54. Clode, *Early history* 1,308.
55. Minutes of the Court of the Merchant Taylors' Company, vii, 1611-20, f. 32.
56. Thomas Marsham became Master (Clode, *Early history*, ii, 345). He was married to Magdalen, Mathias Springham's youngest sister, who was christened on 3 Aug. 1567 (Guildhall Library, MS. 4374, Parish Register of St. Bartholomew ye little). See also *Familiae minorum gentium*, iv, Harl. Soc. XL, 1896, p. 1,307, under Locke family, and *Miscellanea genealogica et heraldica and the British Archivist*, vii, 5th ser., 1929-31, p. 35.
57. Minutes of the Court of the Merchant Taylors' Company, vii, 1611-20, f. 88.
58. Clode, *Early history*, ii, 344.
59. *ibid.* p. 345.
60. Clode, *Memorials*, p. 547, and Minutes of the Court of the Merchant Taylors' Company, vii, 1611-20, f. 433.
61. Minutes *op. cit.*, ff. 426, 454, 464.
62. *op. cit.* f. 458.
63. Clode, *Memorials*, p. 48.
64. An account was given by Elizabeth Nicolson (previously Elmer) in her pleadings in the case brought by Mathias Springham against her and her husband in 1598 (P.R.O. C.2 Eliz. S 2/60). She revealed also that she gave money for the bride's wedding dress and for the wedding banquet and provided a home for the pair for more than a year after their marriage.

65. Record Office, County Hall, London (Parish Register of St. John, Hackney). Transcript of this register is in Guildhall Library, MS 479).
66. Christened on 17 Feb. 1594 (*The Register of St. Lawrence Jewry, 1568–1676*, Harl. Soc. LXX, 1940, pt. i, p. 24).
67. 19 June 1608 (Register of St. Mary Stoke Newington, of which there is a transcript in the Society of Genealogists, London).
68. Freemen's Register, Merchant Taylors' Company, vi, 1607–18, f. 5.
69. *The visitation of London anno 1633, 1634 and 1635*, Harl. Soc., xv, p. 213, J. Nicholl, *Some account of the . . . Company of Ironmongers*, 2nd ed., London, 1881, p. 535.
70. Baptized on 18 April 1596 (Guildhall Library, MS 4392, Parish register of St. Martin Pomeroy, Ironmonger Lane).
71. Guildhall Library MS 4293 (Parish register (marriages) of St. Martin Pomeroy). Benjamin Valentine may have been a relative (? a son) of Thomas Valentine, who, as an apprentice of Mathias Springham's father, had obtained the freedom of the Mercers' Company in 1560 (Typescript list of freemen of the Mercers' Company in Mercers' Hall).
72. Buried on 18 Sept. 1616 (Guildhall Library, MS 4392, Parish register of St. Martin Pomeroy). Mathias Valentine was baptized on 16 Sept. 1616 (*op. cit.*).
73. D.N.B., Benjamin Valentine.
74. Baptized on 23 Dec. 1599 (Guildhall Library, MS 4392, Parish Register of St. Martin Pomeroy).
75. 29 May 1615 (Guildhall Library, MS 4292, Parish register (marriages) of St. Martin Pomeroy).
76. P.C.C. 66 Waldon.
77. *The parish register of Richmond, Surrey*, pt. i (Surrey Parish Register Society, i), London, 1903, p. 144. Gewin is here given in error for Cowen.
78. P.C.C. 154 Hele.
79. Baptized on 26 July 1601 (Guildhall Library, MS 4392, Parish register of St. Martin Pomeroy).
80. 4 March 1609/10 (*Gray's Inn Admission Register*, ed. J. Foster, p. 123).
81. J. Fortescue, *De laudibus legum Angliac*, ch. 49., edited and translated by S. B. Chrimes, Cambridge, 1942. The practices of the Inns of Court described in this book, which was written in 1468/71 and first published in 1545/6, continued to a much later date.
82. *Alumni Oxonienses*, ed. J. Foster.
83. *The visitation of the county of Northampton in 1681*, Harl. Soc. No. LXXVII, 1935, p. 95.
84. P.C.C. 8 Dale, Sentence 82 Dale. P.R.O., C. 2 Jas. I S1/22; Chancery Inquisitions post mortem II, vol. 395, no. 92; Wards Inquisitions, vol. 63, no. 56.
- Mercimite Springham, born in Germany c. 1557, was married to the Rev. Robert Tower(s), prebendary of St. Paul's Cathedral, 1571, and incumbent of Northall or Northolt, Middlesex, 1571–5, and of Great Leighs (Much Lees), Essex, 1575–85, (G. Hennessy (*Alumni Cantabrigenses*, ed. Venn), *Novum repertorium ecclesiasticum parochiale Londinense*, London, 1898, pp. 54, 353), *Lincoln pedigrees*, Harl. Soc., no. LII, p. 1,006, *The visitation of Essex*, i, Harl. Soc., no. XIII, 1878, under Bristow family, *The visitation of Sussex in 1530 and 1633–4*, Harl. Soc., no. LII, 1905, p. 196., and P.C.C. 16 Windsor, Will of the Rev. Robert Tower(s) made on 10 Nov. 1585, proved on 3 March 1585/6. Mercimite (Mercy) Tower(s) married on 7 April 1586 Richard Bristow of Pitsey, Essex (*Essex Parish Registers*, London, 1914, p. 109).
- Martha Springham, christened 4 Sept. 1559 (Guildhall Library, MS 4374, Parish register of St. Bartholomew ye little) was married at Hackney in 1579 to Brian Kenner (Kynaston) of Moose, Essex (*Allegations for marriage licences by the Bishop of London, 1520–1610*, Harl. Soc., XXIV, 1887, p. 89; *London marriage licences, 1521–1869*, ed. J. Foster, London, 1887, p. 89; and *The Visitation of London anno 1533, 1634 and 1635*, ii, Harl. Soc. no. XV, p. 39).
- See also *Familiae minorum gentium IV*, Harl. Soc., XL, 1896, under Locke family; and *Miscellanea genealogica et heraldica and the British archivist*, vii, 5th ser., 1929–31, p. 35.
85. 15 June 1637, County Record Office, Hertford, Parish Register of All Saints and St. John's, Hertford.
86. Buried on 1 Jan. 1604/5 (Guildhall Library, MS. 4392, Parish Register of St. Martin Pomeroy).
87. P.C.C. 93, 94 Soame.
88. Sir Ralph Bingley who had borrowed £800 at 10 per cent interest from Mathias Springham was named as Alderman of Londonderry in the charter of the Hon. the Irish Society, 1613, and was Mayor of Londonderry 1624 (Moody, *op. cit.*, pp. 132, 448).
89. The Merchant Taylors' Company, like the other Livery Companies, was under obligation to buy foreign corn (as the supply of home-grown corn was insufficient) for the citizens of London. Each company called on its individual members to advance money for the purchase of corn. (W. Herbert, *The history of the twelve great livery companies of London*, 2 vols., London, 1837, i, 147).
90. D.N.B., Sir William Herrick.
91. *The parish registers of Richmond, Surrey*, pt. i (Surrey Parish Register Society I), London, 1903, p. 177.
92. A. C. Piper, *A history of the parish church of St. Mary Magdalene, Richmond, Surrey*, London, 1947, p. 49.

EDITOR'S NOTE: It is noted with regret that W. S. Ferguson, the author of this article, died in Londonderry on July 31st, 1972.

THE HOUSEHOLD GOODS OF THOMAS HOBBS
(1647? - 1698),
SURGEON TO JAMES II, PHYSICIAN TO DRYDEN

by

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The inventories reproduced here are part of the Reply¹ by Katharine Hobbs,² widow and executor of Thomas Hobbs, to the Bill of Complaint³ filed in the High Court of Chancery by her infant children, Thomas and Susanna. The widow probably instigated the action: the children were very young,⁴ and sued by a next friend, Laurence Stanyan, who was either uncle or cousin of their mother.⁵ Their main complaint was that the allowance for Thomas' maintenance in his father's Will was "farr too meane and narrow". Their mother, who had control of the whole estate,⁶ was required to give an account of it.

She did so in four Schedules. The first contains the inventories, separated by lists of debts to the testator amounting to about £4,500 and a list of his leasehold property, worth about £400 p.a. The second is an account of the money she had received since his death,⁷ the third an account of all payments by her—including £3 "for Inventorying the Goods in Towne and in Hampshire"—and the fourth a list of his freehold property, worth about £1,000 p.a. The house in Lincoln's Inn Fields⁸ was valued at £60 p.a., the house at Rookley⁹ at £30 p.a.

Thomas Hobbs¹⁰ was clearly a successful surgeon. He followed his former master, James Molins,¹¹ as Surgeon in Ordinary to James II in March 1686/7 and became Master of the Company of Barber-Surgeons in July of the same year.¹²

However, he resigned his post as Surgeon for the Stone at St. Bartholomew's Hospital in 1693,¹³ and thereafter practised as a physician.¹⁴ It was to "Dr. Tho. Hobbs" that the second printing of Nahum Tate's translation of Fracastoro's "Syphilis" was dedicated in 1693;¹⁵ and Dryden attributed any recovery of his health by 1697 to Dr. Hobbs and another physician.¹⁶

It was as "Dr. in Phisick" that Thomas Hobbs made his Will.¹⁷ His wife was to have the use of either house¹⁸ and of all his household goods, furniture and plate, together with an income of over £400 p.a. Their daughter Susanna was allowed £50 p.a. for maintenance until she was 12, then £100 p.a. until she was 21 or married, when £5,000 was to be raised for her. Thomas, the son, was allowed £70 p.a. until the age of 14, then £150 p.a. until he was 21, when he would come into the bulk of the estate for life.¹⁹ As his education had cost £72 and his clothing £40 in the year after his father's death, his mother must have been glad that the court increased his allowance to £130 in each of the first two years and then £150 p.a.²⁰ She was also allowed the £150 cost of housekeeping for the six months after her husband's death, and the £20 wages of his "Six meniall Servants" for the half year in which he died.

Katharine Hobbs did not succeed in her claim to some of the silver, which she said had been given to her by "a particular friend" during her husband's life. But the jewellery, coach, organ and harpsichord, which she said her husband gave her, were excluded from the trust estate.²¹

The total value of all the household goods was assessed at £1,133.15s.6d.
The inventories have been transcribed literally.

The first Schedule to which the Answr. above written doth refer

	L	s	d
Impris. In ready money in Testators dwelling House at the time of his death and menconed } in the second Schedule to be reced by this Def t. }	030	00	00
The Testators wearing Apparell was of Smale value and was given away amongst the Servants	000	00	00
The Testators Watch and Seale valued at	010	00	00
His two Gold rings one of them being Sett with diamonds and four pair of Gold Buttons valued at	014	00	00
Two Caines, two old Swords and belt valued at	001	05	00
A Saddle and Bridle, three Cases of Pistolls, two Musketts or Carbines and one Blunderbush valued at	020	00	00
The Testators Study of Bookes valued at	150	00	00
One old Calash and one Old Charriott valued at	021	15	00
Three Gueldings valued at	055	07	00
Two old Stoned Horses valued at	014	00	00
A Trunk with severall instruments in it valued at	005	00	00
Some old Hay and Oates, an Asse, a Wagon, traces & tackle for four horses, some Timber and firewood, thirteen thousand bricks, The use whereof are not devised to this Def t. as She is Advised, and therefore She Submitts to Account for them, being valued at	025	00	00
Goods Claymed by this Def t. for her owne proper use and benefitt			
A Brest Jewell A Ring, a Watch, a pair of Eare rings and four diamond Pinns			
An old Coach valued at	021	10	00
An Organ valued at	015	00	00
An Harpsicord valued at	010	00	00
The Plate vizt.			
A Silver Tankard valued at	08	10	00
Four Salts valued at	01	15	00
Ten Spoones and a Laddle and seaven Tea Spoones valued at	07	05	00
A Standish and a boxe for Medicines valued at	07	10	00
The Silver Cupp and Cover and the pair of Chocolett Cupps menconed in in the Answr. valued at	07	15	00
The Little Silver dish and the Cover to the Lamp menconed in the Answr. valued at	09	00	00

Goods in the Testators late dwelling house in Lincolnes Inne feilds. vizt

In the Back Garrett. A Bedstead and Sacking bottom, a Suite of Old Sadd Coloured Moe=haire Curtains, valliences and bases lyned with blew Silke, two feather Bedds, one Boulster, two Pillowes, three Blanketts, one Callicoe Quilt, two Window Curtaine rodde, four redd Curtaines, five dutch Chaires, one Bass Chaire, three Cane Chaires, one stoole, a Wall Nutt Tree Chest of Drawers, one side Table, A Grate and Doggs, A Picture and Brass Hearth and one four:leaved painted Screen: /

In the Clossett adjoining to the back Garrett. A Wall Nutt Tree Chest of Drawers one Squabb with ends, one Squabb and Cusheon, two Boulsters, three Bass Chaires, four Striped Crape Window Curtaines, A small foulding Table with some velvett, A Sett of Dutch Boxes and Bassetts two small looking Glasses and two Boxes.

In the other Clossett adjoining to the Back Garrett. One Picture, a small Trunk two feather pillowes, a Close stoole and pann, one Lute, two pictures and some Lumber.

In the fore Garrett. A Bedstead and some Old Greene Curtaines Tester and Headpeice A Feather Bedd, Boulster and three pillows, a Cover Cloth and one Blankett, two Ruggs, two Curtaines, a Turkey Carpett, Eightene Yards of Blew Cloth, a Trunk and some old things.

In the next Garrett. An Iron Chest, two brass Sconces, four Bassetts and some Lumber

In the Chamber two pair of Staires forward, being Mr. Hobbs Lodging Roome. A Leather Screene, and a Small Screene four stuff Chaires one Squabb with ends, and a Squabe Cusheon, a Bedstead and a Crimson

Damaske furniture, a Case for the bedd and a Carpett, a feather Bedd and Bolster, two pillowes, three Blanketts, a wrought Counterpane Leather Quilt, Six pair of Holland Sheetes, A dozen of Diaper Towells, Six pair of Pillowveeres, Six Cupboard Cloathes, an easy Chaire, some damaske Window Curtaines, a Table and a pair of Stands A Chest of Drawers A Small Table Covered with velvett, a Japan'd Cabinett and Lackered frame, a Tea Table with Cheney and other Wares, a small Indian Cabbinnett and frame, one large looking Glass, and a small dressing Glass, four peices of Tapestry Hangings, three pictures²² of the Doctor his Wife and two Children one pickture over the Chimney, A repeating Clock, A Copper Lamp and Teapott and Trevitt, A Steel fire hearth, one pair of Doggs, Shovell and Tonges.

In the Black roome one pair of Staires backwards. A Bedstead and Indian damaske Curtaines Basses Teaster and Head Cloth, a Feather bedd bedding and furniture, four Elbow Chaires, four Cusheons, two round Stooles, two dutch Chaires, one Cusheon, two pieces of Tapestry hangings, ————w—————w————— a picture over the Chimney a Grate, Fendall, fire Shovell and Tonges.

In the Clossett adjoining to the blacke roome. Blew damaske Hangings, one velvett Chaire, two whyte window Curtaines, two large looking glasses, a Shelfe, thirteene pictures, one Mapp, nine prints, three low Stooles.

In the Middle Roome two pair of Staires. A Feild bedstead with a yellow damaske furniture, Feather bedd, Bolster and two blankett, one Callicoe Quilt, one Iron Chest, some hangings and Matting, Hangings and Matt in a little Clossett adjoining to Mr. Hobbs roome

In the Clossett two pair of Staires Backwards. The Hangings and Matt, Table, dressing Box, Chair and Cusheons, two Trunks, one picture.

In the Chamber two pair of Staires backwards, a Bedstead and Scarlett Crape furniture all Compleate, a Feather Bedd, Bolster, two pillowes, three blanketts, three Chaires, one Cusheon, two peices of Tapestry Hangings, a looking glass and three window Curtaines, A Stove Grate and two pictures, a Close Stoole and pann.

In the dineing Roome. A Stove Grate, fire Shovle and tonges, a Table and pair of Stands, eight Cained Chaires and Cusheons

In the fore=Parlor. A Leather easy Chaire, seaven Cained Chaires, two falling Tables, one looking Glass and a weather glass, a picture and two Sconces, a Stove grate and pair of tonges and—Shovell, a Copper Cesterne or Monteth.

In the Middle Roome. A Bedstead bord and Tester, Feather Bed, bolster, one pillow two blanketts and a Callicoe Quilt, two Trunks and a writing deske

In the Back Parlour. Eleaven Cained Chaires, one Squabb, a Squabb Cusheon and two other Cusheons, two Smale Tables, a Clock and Case, two Sconces, two pictures, a Stove two pair of Tonges, a fire Shovle and poker

In the Testators Studdy two Chaires a picture and a smale Grate besides the Testators said Bookes

In the Kitching. A grate Fendall & Spitt, Racks, two fire Shovles, one pair of Tonges a Poker a Crane Hook and Hussey, a Broyley and Gridiron, a Choping Kife and Cleaver, a Jack Chaine weight and two Spitts, a frying pann, one Boxe Iron and heaters, three Brass Potts and Covers, two Brasse Kettles, Eight brass Candlesticks, a Warming pann, a brass Ladle and spoone, four dozen of Pewter plates, nine Pewter Dishes, four Mazereens, one pye plate, one Pewter Pott, one Beddpan, a Table two formes and Stepps and other odd things.

In the back Cellar. a pair of Grates, A Copper and Irons, a Lead Cesterne, an Iron Stove, a Napkin press, fifteen dozen of Glass bottles, a Still, and some Lumber.

Other Lumber, Glasses, Earthen Wares and other utensills of smale value.

In the Roome in the Yard. A Table a Bedstead Feather Bedd, and bolster and other Bedding and a Cained Chair

A family picture and forty five other pictures upon the staires

Other Lynnen vidls Three pair of fine Holland Sheetes, tenn other pair of Holland Sheetes, five pair of Canvas Sheetes, two damaske Table Clothes, fiteene Diaper Table Clothes, three syde board Clothes ditto, Six dozen of Damaske Napkins, fiteene dozen of Diaper Napkins, twelve Diaper Towells, two dozen of Hockaback Napkins, Eighteene Course Towells, Ten pair of Pillowveers.

In the Roome over the Stable. A Bedstead feather bedd and Bolster, two blanketts, one rugg

Goods in the Testators other late dwelling house in Hampshire

In the Great Parlor. Eight Cained Chaires, one Couch, one Stone Table, one other Table a pair of playing Tables, Nineteen printed paper pictures, one Iron Iron Hearth, fire Shovle, Doggs, and Tonges and a pair of Bellowes

In the Clossett adjoyneing to the greate Parlour. One hundred and one Cutts of Virgill Cutts, four low Caine Stooles, Curtaines Valians and Rodds

In the Hall. Two Tables, Six Caine Elbow Chaires, two dutch Prints, a pair of Doggs

In the Little Parlor. Seaven Caine Chaires, two Tables, five dutch prints, an Iron Hearth, Doggs fire shovle and Tongs and a pair of Bellows.

In the smoakeing roome, two Tables, Five Chaires, and one pair of Doggs.

In the servants roome. One Table, two Formes, a pair of Tonges, Six Gunns of Severall Sorts a Sword, a water Engine

In the Kitching. One Jack, two Racks, three Spitts, three Potthookes, two Gridirons, two Fendalls fifteen pewter dishes, four Mazereenes, five dozen of Plates, one dozen of Knives and forks, two Smale Kettles and a Skellett, a Saucepan, a warming pann, a Skimer Ladle and Lumber

In the Doctors Chamber, One wrought redd-lyned bedstead, one feather bedd and bolster three blanketts, a Callicoe Quilt and a Holland Quilt, Case, Curtains and Rodds, one Chest of Drawers, one Table, two looking glasses, a Caine Couch, Six dutch Chaires, one dozen of Cusheons, one Squabb and pillow, three peices of Irish Slicht Hangings, one Iron Hearth, Shovle and Tonges and window Curtaines

In the Little Chamber Adjoyning, One Indian Sattin Bedd, Bolster and pillowes, three Blanketts, a Silk Quilt, a Sack bottome bestead, one Table and Cedar Close Stoole, two and twenty little paper prints, Window Curtaines and Valians of Callicoe, Roome Hanged with Bengall and Dutch Matt.

In the Roome within the Little Chamber last menconed, one Canopy Bedstead and Druggett Curtaines, Feather Bed, Bolster three pillowes, one Dutch Chaire a Warming pann, one Blankett, the roome Hung with paragan, And a Dutch Matt.

In the dining roome, Eight Dutch Chaires, two earthen Beakers, and two earthen Jarrs and the Pictures on the StaireCase

In Doctor Traffles²³ Chamber, one worsted Camblett Bedd, sacken Bottom bedstead Feather bedd bolster and pillow, three Blanketts and a Callicoe Quilt, four Case Curtaines of Dimity and a Rodd, four Dutch Chaires, a Cane Chaire, one Table, two Stands, one looking=Glasse, brass hearth, fire Shovle and Tonges and window Curtaines and rodds.

In the Clossett on the Stairehead. one Canopy bedstead with Searge Curtains, a feather bedd, two bolsters, three pillowes and one Blankett.

In the Little roome at the back Staires head, one blew paragan Bedd, a Sacken bottom bestead, feather bedd and bolster a pair of Blanketts, a Callicoe Quilt window Curtaines and valians two Scotch pladd Chairs, the roome hung with blew Paragan and Dutch Matt

In the other roome at the back Staires head, One green Mohair bedd lyned with Sacken bottom, bestead Feather bedd, bolster and pillow, three Blanketts, one Silke Quilt four Scotch Pladd Chairs the roome Hung with golden coloured Paragan, one Table, one window Curtaine

In the Green Garrett, Green printed Stoffe Curtaines, Sacken bottom, bedstead Feather bedd, bolster, three blanketts, and a Rugg, two Cane Chaires, the roome Hung with the same of the bedd.

At the Staire Head, a Canopy Bedstead, a feather bedd and Pillow

In the Roome adjoyning. A Sacken bottom bedstead, a feather bedd and Pillow, one Landskipp Screen, one Limbeck, a Buff Coate, one Table, one writing deske and other Lumber.

Lynnen at Rokely. forty two Napkins, Nyne Table Cloathes, Fyfteene Towells, Six Syde boardes, Seaven dozen of Damask Napkins, Six pair of fyne sheetes, Six pair of Course Sheetes.

In the Larder. Two porridge potts, two Kettles, a frying pann Gridiron Chaffing dish and other Lumber Thirty dozen of Bottles and eight Hogsheads

Over the Kitchin two bedds and bedsteads, Bolsters and five Blanketts and some old Curtaines

NOTES

1. Sworn 24 May 1699.
2. Eldest daughter of John Stanyan, of Harefield, Middlesex, and his wife Susanna (née Pritchett). She was baptised there 14 October 1666 (parish register).
3. Public Record Office; Chancery Proceedings, C 5/200/15 (Crown copyright).
4. Thomas was 17 at his death in 1707 (memorial inscription at Ashley, Hants.). Susanna was baptised 23 September 1689 at St. Clement Danes (parish register).
5. Laurence Stanyan, of Monken Hadley, Middlesex, was the brother of John Stanyan of Harefield (see Note 2; they are both mentioned in the Will of their step-mother, Mary, wife of Abraham Stanyan, of London, proved P.C.C. 10 February 1668/9: PROB 11/329, f.23). His eldest son, Laurence, was baptised at Monken Hadley 13 May 1671 (parish register).

6. Of the other executors, Lord Somers, Lord Chancellor, had reserved his right to prove the Will, while Sir John Hawles, Solicitor General, and John Lilly, of Clifford's Inn, had joined the widow in probate (P.C.C., 20 October 1698: PROB 11/447, f.215) but taken no part in the administration.
7. 12 July 1698 in these documents. The memorial at Ashley has 12 June 1698, aged 51.
8. Later known as No. 40. Its site became part of the Royal College of Surgeons in 1836.
9. Nearer to Stockbridge than Winchester, at the western end of the parish of Crawley; now known as Rookley Manor.
10. Son of Moses Hobbs, of the City of Winchester, gentleman, deceased, when he began his apprenticeship to James Molins, 7 May 1667 (Barber-Surgeons Company, Register of Apprentices, 1657-1672: Guildhall MS 5266/1, p. 127). A fuller biography is in preparation.
11. On the death of Molins, Hobbs was promoted from Surgeon to the Household to Surgeon in Ordinary, 8 March 1686/7 (P.R.O., Kings Warrants: T 52/12, p. 57).
12. Barber-Surgeons Company. The Names of the Masters and Wardens, 1308-1793 (Guildhall MS 5278).
13. 5 June. Minutes of the Board of Governors, Ha 1/8, f.65.
14. He had obtained the Licence of the Royal College of Physicians 22 December 1684 (Royal College of Physicians, transcript Annales, v, f.25). He paid the arrears of his subscription 30 September 1693, and then paid regularly (Royal College of Physicians, MS Cash Book, 1664-1726, *passim*).
15. Published by Jacob Tonson as an appendix to Examen Poeticum, the third part of Dryden's Miscellany Poems, London, 1693. The first edition of *Syphilis* (London, 1686) was dedicated to "Mr. Hobbs, Surgeon to His Majesty".
16. William Gibbons, F.R.C.P. (1649-1738). The tribute is in the postscript to *The Works of Virgil* (London, 1697); *The Poems of John Dryden*, ed. J. Kinsley, Oxford, 1958, iii, p. 1426.
17. Dated 13 October 1697. The original is in the P.R.O. (PROB 10/1312).
18. She chose the house in Lincoln's Inn Fields (C 5/200/15).
19. Failing him and his male issue, the estate was to descend in tail male through the four nephews of Dr. Thomas Hobbs, Abraham, Francis, Thomas and Hobbs Weekes. They intervened in the action to protect their contingent interests. (P.R.O.: C 5/200/39).
20. Chancery Decrees and Orders, 11 August 1699 (P.R.O.: C 33/291, f. 609).
21. *ibid.*
22. These portraits have not been traced.
23. Probably Richard Traffles, D.C.L., who became Warden of New College, Oxford, in 1701 (J. Foster, *Alumni Oxonienses, 1500-1714*, Oxford, 1892, iv. p. 1502).

ACKNOWLEDGEMENTS

I am grateful to the Archivist of St. Bartholomew's Hospital, to the Librarians of the Guildhall and the Royal Colleges of Physicians and of Surgeons, and to the staff of the Public Record Office for their help; and to Dr. H. R. Claff for pointing out the Tate and Dryden references.

PEPYS AND HIS OXFORD FRIENDS

BY A. L. ROWSE, M.A., D.LITT., F.B.A.
Fellow of All Souls College, Oxford

Samuel Pepys was one of the best public servants this country has ever had, and, since the publication of his Diary, we all know that he had a streak of genius. Then, too, few men have had so full and fruitful a life: not only the devoted administrator of the Navy but scholar and connoisseur, book-collector and musician, the writer and amateur of curiosities, *amateur* — in the best sense — of the fair sex. All these are aspects of his intense vitality and enjoyment of life; the genius consisted in his capacity to express them and communicate them to us, for genius annihilates the years. Mr. Pepys is as alive to us today, as when he attended church here.*

Various aspects of this many-sided man have been presented from this familiar place: may I present a side to him that is less familiar? He was a loyal son of Cambridge, and left his nursing mother the magnificent bequest of his Library, so beautifully housed there at Magdalene. But it so happens that in his later years he became acquainted with a number of Oxford men, and much of his correspondence is with them. It was Oxford, not Cambridge, that awarded him a diploma — I suppose an honorary degree — which he much prized: after that, it becomes 'my dear Aunt, the University of Oxford.'

So my subject is Pepys and his Oxford Friends.

The first and greatest friendship, the closest and most long-lasting, is, of course, with that Balliol man, John Evelyn. It is too often overlooked that Evelyn was a projector, and that the Royal Society was virtually an Oxford foundation. Evelyn suggested a number of projects of great value to the country, and one of them was a college to advance experimental science. He was a foundation Fellow at the first meeting at New Year 1661; four years later Evelyn had the pleasure of welcoming his friend as a Fellow, who became President in 1684. Evelyn was twice pressed to accept the office, but declined it.

Both Pepys and Evelyn were devoted to the public service, the first as a professional, the second — as an independent country gentleman — appearing as an amateur; but, in fact, their interests converged in deep love of their country. Soon they found that they shared intellectual interests and common tastes, and then came to have deep respect and warm affection for each other. Their friendship is one of the most appealing in that admirable English tradition; and it is curious to think that it was the publication of Evelyn's Diary first — he was much better known — that suggested that of Pepys. Pepys's came to overshadow its precursor, by its greater vivacity and sparkling sense of life.

Evelyn and Pepys worked together in the Dutch War; the first, as commissioner for the wounded, conceived the project for a Seamen's Hospital, which they discussed together in Lord Sandwich's coach. 'Which I mightily approve of and will endeavour to promote it, being a worthy thing and of use — and will save money.' Pepys was as good as his word; the Navy Office took it up — the origin of Greenwich Hospital.

As commissioner of the Mint — and never were there more beautiful coins engraved than then — Evelyn was in and out of the Tower, as Pepys was on ordnance for the Navy. Until the surprising day came when Pepys found himself incarcerated there. Buoyant as a cork, he

* Paper read at St. Olave's, Hart Street, 14 June 1972.

was not at all downcast—after all, one was nobody in that age if one wasn't sent to the Tower, one could hardly be said to have lived; and besides, wasn't it the place for peers, not commoners? The King himself sent him a fat buck from Enfield Chase to feast his friends, and Evelyn came to sympathise, and dine and wine. 'Mr. Pepys is to be pulled to pieces,' someone wrote; not a bit of it: he greatly enjoyed himself as usual, and the added consequence it gave.

Both Pepys and Evelyn were patriots: I gather that one is supposed to apologise for that nowadays — it certainly would not recommend them to the B.B.C., or TV, which of course are above such people. After the Dutch War Evelyn gave Pepys a drawing of the Dutch fleet in the Medway, which had so grieved them both. Pepys particularly — to the Navy man the reproach gave him as much disquiet, he said, as the man who recognised his portrait in Michelangelo's Hell. He wished that Evelyn's drawing of the disgraceful event of 1667 might take the place in the House of Lords of the famous Armada tapestries of '88, 'till the depravity of this were reformed to the temper of that age, wherein God Almighty found his blessing more operative than (I fear) he doth in ours.'

— So we, in our time, have reason to look back on the wonderful achievements of last century, the Victorian Age, when all went well with us.

Evelyn was writing a salutary History of the Dutch War, which was held up and frustrated by the pro-French minister, Lord Clifford of the Cabal, a kind of Appeaser of the day, who carried off Evelyn's papers to Devonshire. I don't know if they are still there at Ugbrooke, along with the unique copy of the Secret Treaty of Dover, the pearls and diamonds that are duplicated in the portrait of Queen Catherine of Braganza, and Dryden's white deer in the park.

Meanwhile, Pepys was endeavouring to write his Memoirs of the Navy, and putting a host of queries to Evelyn for answer. Evelyn expressed his readiness to be 'subservient to such a genius as Mr. Pepys.' The latter found the job beyond him: 'it is not imaginable, to such as have not tried, what labour an historian — that would be exact — is condemned to. He must read all, good and bad, and remove a world of rubbish before he can lay the foundation.'

We need not conclude that it is easier to make history than to write it, or that it is less difficult to administer than to be a writer; but evidently these eminent diarists found it an easier option to write a diary than to become historians.

Neither of them finished his history; on the other hand, their diaries became first-hand sources for the historians of their time. Even Pepys's Second Diary is, the Journal of his official Voyage to Tangier, the interest of which people are apt to underestimate — perhaps because there were no ladies present to enliven the diarist's fancy (but he was twenty years older and staid, now in 1683). Evelyn wrote to him with charming courtesy: 'You leave us so naked at home that, till your return from Barbary, we are in danger of becoming barbarians. The heroes are all embarked with my Lord Dartmouth and Mr. Pepys; nay, they seem to carry along with them not a colony only but a college; nay, an whole university, all the sciences, all the arts, and all the professors of 'em too.'

What a polite way of writing they had! But that it was not just politeness we know from Evelyn's concern at the wreck of the Duke of York's ship approaching the Scottish coast, when he feared that Pepys was on board: 'which gave me apprehensions and a mixture of passions not really to be expressed, till I was assured of your safety.'

Then as the old friends get older, we find them consoling each other over their ailments, recommending each other possets and medicines. Pepys has left off all malt-drink and is

betaking himself wholly to barley-water, 'blanched with a few almonds and sweetened with a little sugar.' Evelyn is down at Wotton gardening and planting, and when it rains too hard, reads and scribbles and builds castles in the air. 'I am sewing (draining) of ponds, looking after my hinds, providing carriage and tackle against reaping time and sowing. *Venio ad voluptates agricolarum*, which Cicero reckons amongst the most becoming diversions of Old Age.' Meanwhile young John Evelyn is giving up Balliol College; and Pepys fully agrees 'with your excellent grandson in thinking it no longer worth his while to stay there.'

Pepys having retired from London, Evelyn can never pass York Buildings without a sigh: 'Saturday, which was wont to be a jubilee . . . and the most diverting to me of the weekly circles, is from a real sabbath now become wholly saturnine, lugubrious and solitary.' They had had so much to talk about, shared so many interests, and now it was over.

In these later years Pepys was making a number of friends at Oxford, though none so close as Evelyn. One of his many good qualities was his faculty for admiration — it shows a want of good nature to be unable to admire, and Pepys was above all good-natured. He had the deepest respect for John Wallis, whom Oliver Cromwell had sent over from Cambridge to teach Oxford mathematics — Wallis was the immediate precursor of Newton, who learned much from him.

Pepys formed the project of having Wallis's portrait painted to present to the University. When Kneller learned of this, he jumped the gun — like the boorish German he was — and incontinently went down to Oxford and painted it. Pepys was having a medallion of himself made by Cavalier; but Sir Godfrey writes, in broken English, 'this man having received so much kindness in Germany, has spoiled him, being a Frenchman and should be kept low.' The affair led to a good deal of correspondence, and Pepys's acquaintance, the Master of University College, reported to him: 'It was a very sensible satisfaction to me that the obscurities of Sir G. Kneller's proceedings were unveiled, which to me were all shadow, and natural cause of umbrage.'

However, the upshot was that Oxford got a fine portrait, which Kneller thought one of his best: there is Wallis, in full doctor's robes, in the Bodleian today for us all to see. We owe it to Pepys, and Oxford was duly grateful.

The Master of University's young companion, Humphrey Wanley, who shared Pepys's passion for book-collecting, wrote in much better style than Kneller: 'Tis never any drudgery to wait on Mr. Pepys, whose conversation, I think, is more nearly akin to what we are taught to hope for in Heaven, than that of anybody else I know.' It seems that that did not go down at all badly with Mr. Pepys.

In fact he became so loyal to 'his dear Aunt, the University of Oxford' that he took her side against the famous Bentley in the celebrated controversy over the Letters of Phalaris. Actually, Bentley though rude, was right: in the end that one Cambridge man demolished all the young wits and chits of Christ Church.

Pepys was luckier with his All Souls acquaintance. He became friendly with the eminent lawyer, Sir Nathaniel Lloyd, whose portrait I see every night when dining in hall, who went from Oxford to teach Cambridge law. We find Lloyd, a generous and philanthropic Welshman, bringing a volume of Oxford Poems up to Pepys in London.

We know how kind Pepys was in doing good turns to everybody, how he took on the burdens of his hopeless brother-in-law, Bartholomew St. Michel; and then of his house-keeper, Mrs. Skinner's graceless son, who got into trouble by getting to know the republican Milton and fixing up to publish his work in Holland. (I suppose young Skinner was a relation

of Cyriac Skinner of Milton's Sonnet; anyway the young man departed without saying goodbye to Pepys, but leaving an apology, 'as for Milton or his works or papers I have done withal; and indeed never had had to do with him, had not ambition to good literature made me covet his acquaintance.' It seems a sufficient excuse, but Milton was dangerous ground.)

Pepys had better luck in using his influence with Lloyd to get the admirable scholar, Thomas Tanner, elected Fellow of All Souls. Pepys backed a winner in him: not only did Tanner become a great antiquarian, an authority on manuscripts and coins, after Pepys' own heart, but he even attained to an episcopal throne, if the diminutive one of St. Asaph.

I do not think that Pepys was a friend of our Warden, Warden Finch; for, from what the Tory Hearne said about him, I think he must have been a Whig. Hearne's principle was that of Dr. Johnson, not to let the Whig dog have the best of it — and what Hearne said was, 'Warden Finch is an enthusiastic actor and an outrageous debauch.'

We wonder indeed what Mr. Pepys would make of it all — though we may be sure that he, whom neither the Dutch in the Medway nor imprisonment in the Tower could daunt, would find something to amuse him, something to enjoy in it. At the very end we find him relishing a third reading of that great Oxford book, Clarendon's *History*. 'with the same appetite, I assure you, to a fourth that ever I had to a first.' While Evelyn reciprocates with 'I cannot but let you know the incredible satisfaction I have taken in reading my late Lord Chancellor's *History of the Rebellion*, so well, and so unexpectedly well written.' To this day the University profits from its sales.

And so to that last communication from Pepys' nephew, sending Evelyn mourning and mourning rings for remembrance of 'my good uncle Pepys, whose body was last night interred in the parish church of St. Olave's, Hart Street, by the Navy Office.'

One word as to Pepys' historic public achievement: it was his energy and efficiency that pushed through the decisive programme of building 30 capital ships from 1677 onwards. Only that saved this country, and helped to save Europe, from the domination of Louis XIV. The sheet-anchor of our security for three centuries — our great days — was to make ourselves the linch-pin of a Grand Alliance of all the smaller powers whose existence was threatened by a greater, whether by Philip of Spain, Louis XIV or Napoleon, or the Kaiser's Germany. We lost sight of that only in the 1930's, to appease Hitler's Germany — and ruined our country.

In Pepys' time the House of Commons, as usual, was slow to realise the danger. But Pepys not only urged his programme upon the Commons, but carried it through as an administrator. He rightly regarded his Thirty Ships programme as his greatest achievement. A rapid and efficient worker, 'his activities extended over the whole field of naval administration' — he himself saw to everything: the insatiable curiosity we recognise in the Diarist became an asset to the nation.

For his outstanding services he was *twice* put in the Tower. Where do you think we should put the disastrous makers of the Anglo-German Naval Agreement of the 1930's?

In the long run it was William III and Marlborough who profited from Pepys' ships, and they succeeded, after twenty years, in defeating Louis XIV. Yet, such is the irony of politics, that when William III captured the English throne, Mr. Pepys was popped into the Tower again.

But very briefly: he was soon out and about. His comment on this was, 'the worse the world uses me, the better I think I am bound to use myself.'

It seems to me a very good principle to hold on to in bad times.

Pepys's gift for friendship is related to those keynotes of his personality and character: his constant kindness and his enjoyment of life. Though he had a good conceit of himself, he had no spiritual pride. It is sound Catholic doctrine that sins of the flesh are more forgivable than sins of the spirit. He was very human — particularly about the ladies; really innocent and naif: it is part of his charm, part of his acute sense of life, though his rendering of it back again to us amounts to genius. At bottom he was really a humble man of heart: we might say of him, *anima naturaliter christiana*.

NOTE ON A LONDON PIPEMAKER

BY IAIN C. WALKER, M.A.

(*Head of Artefact Research, National Historic Sites Service, Ottawa, Canada*)

Out of a total of 347 pipemaker-apprentices recorded in the Bristol Apprentice Rolls between the first such entry in 1619 and the last in 1827, two were sons of Londoners, and of these one was the son of a London pipemaker.

This later youth was George King, described in the Apprenticeship Rolls as the son of John King "late of the City of London, tobacco-pipe maker", and he was apprenticed 3 June 1740 for seven years to Elizabeth, widow of Maurice Phillips, and with him was paid £3 charity money.¹ (Maurice Phillips had been apprenticed 1714, became free 1721, and must have died only shortly before his widow took King apprentice, for he is recorded voting at the 1739 election.)

Nothing further is known of George King; his freedom is not recorded, and it seems probable he died during his apprenticeship. The Bristol Apprenticeship Rolls, though they record dismissals of pipemaker apprentices, never note deaths, though they must have been frequent. The father, however, *John King*, may be the John King recorded taking his freedom in London in 1733.² If so, he may have died only a few years later, for the expression "late of" in the Bristol Apprentice Rolls usually, though not invariably, is associated with the word "deceased" after the trade, though the latter is not used here.

An unusual point here is the apprenticeship of a London pipemaker's son to a Bristol pipemaker at a time when the Bristol industry was beginning to decline after three or four decades of prosperity due to a rich North American trade³ and when Bristol pipemakers were beginning to drift to London from the 1730's onwards in the traditional manner of people seeking better chances in the capital. Poll book entries record this drift of pipemakers from Bristol (virtually all to London) from the 1730's at least into the 1780's; almost half the Bristol pipemaker-voters in 1784—21 out of 44—were in London or the Greater London area (Southwark, Lambeth, Brentford). However, King may have had Bristol connections, which might also explain why his son was granted Bristol charity money for his apprenticeship: a Richard King, pipemaker, took his freedom in Bristol in 1660 by virtue of having married the daughter of a freeman-pinmaker; a William King son of a Bristol turner became free 1695/6 by apprenticeship; and a John King son of a Bristol brick-maker became free 1739 also by apprenticeship and was still alive in 1754. The London John King may therefore have been a relative of one or more of these Bristol pipemakers.

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1. Bristol Apprentice Rolls, volume for 1740-60, f.4. I am very grateful to Miss M. E. Williams, City Archivist, Bristol, for much help with these rolls.
2. D. Atkinson and A. Oswald, "London Clay Tobacco Pipes," *JBA* 3rd ser. XXXII (1969) 213.
3. I. C. Walker, *The Bristol Clay Tobacco-Pipe Industry* (City Museum, Bristol, 1972).

OBITUARY

WILLIAM WHEATLEY, M.A., A.R.I.C.

No one can have been so well known to members of the Society as William Wheatley, who has given such long and loyal service to the Society, and with his passing, no one is so likely to be missed. He died on the 7th April, 1972, at the age of 89.

He was born at Nottingham in 1883, and was at University College Nottingham from 1897 to 1903. From there he became a Non-Collegiate member of Oxford University, remaining until 1907. Concurrently with his degree work he attended the Oxford Day Training College from 1903 to 1906. He read for the Final Honours School of Natural Science, and was placed in the Second Class for Chemistry in 1907. He was awarded his M.A. in 1910, and became an Associate of the Royal Institute of Chemistry in 1918.

His first teaching post was at Preston Grammar School from September 1907 to December 1909, and then he went to Queen Elizabeth's Grammar School, Blackburn, as senior chemistry master from January 1910 to March 1917. During the War years he was engaged on scientific work connected with the War effort. In 1919 he was appointed an assistant master at Latymer Upper School, Hammersmith, W.6., where he stayed until he retired in 1953.

To appreciate his character and achievements, it is necessary to know how he occupied his leisure, for never did a man's activities so usefully complement each other, exercising both hands and brain. Apart from his skill as a worker in metal and wood, he was a keen draughtsman, and a student of geology. His collection of minerals he has given to the School.

Whilst delving into the historical side of science, examining documents and papers relative thereto, he became aware of his aptitude for historical research, which gave him considerable pleasure, but what was more important, it was pointing the way for work with which his name will always be connected.

When he came to Latymer Upper School very little was known of the life of the Founder or the early history of the Foundation, and this is where his skill found exercise for a period of about twenty years. He searched the records in churches, libraries, etc., in various parts of the country, until he eventually recounted the results in his very readable — *The History of Edward Latymer and his Foundations*. Cambridge University Press. 1936; a revised and enlarged edition was published in 1953.

The same skills were devoted to his science, and aided by his rare mechanical skill, William Wheatley successfully repeated some classical chemical experiments hitherto not carried out in schools. His methods attracted much attention in the educational world, and his experiments were published in the *School Science Review*. The models and charts he used in his science teaching were shown at a Conference of Science Teachers, and the Ministry of Education incorporated the underlying ideas in their *Report on Visual Aids*.

It was with our Society that he gave the remainder of his boundless energy, for he joined us in 1933; was Auditor in 1943; elected to Council in 1944; Director of Meetings 1948–1966, i.e. for 18 years. It was in this capacity that he will be best remembered, for there is no doubt that the Society owes him a great debt of gratitude for all the hard work he put in arranging the excellent programmes of visits and lectures which in no small measure helped to rebuild the Society after the Second World War.

He was Deputy Chairman of Council 1948–1963, and he was elected a Vice-President in 1967.

Another of his interests was the Hammersmith Local History Group of which he was a Founder member. (Now the Fulham and Hammersmith Local History Society.) Under the auspices of this Society he wrote the booklet entitled — *Isaac Le Gooch the King's Jeweller and Latymer Benefactor* 1964., which completes the picture of that Foundation.

Having done so much in life to further the interests of these bodies, it remains to say that in his Will he has left the sum of £5,000 to the School Governors to be invested to create a Closed Scholarship for Latymer Upper boys to read Mathematics or Science at St. John's College, Cambridge (Edward Latymer's College). And, he has left the sum of £250 to be used to place a permanent memorial to Isaac Le Gooch in the School premises.

To our own Society he has left the sum of £500 to be used by Council as they may think fit. A legacy has also been left to the Fulham and Hammersmith Local History Society.

Those who knew him best would say that under his quiet exterior there was a fund of humour, generosity and humanity. In his passing he has left a fitting memorial by which we shall always remember him, and be profoundly thankful.

A genius was in our midst and we knew it not.

S.W.H.

(The author is indebted to the Headmaster of Latymer Upper School for the academic information about the late William Wheatley.)

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