

# Excavations at Oxford Castle, 1965-1973

By T. G. HASSALL

## SUMMARY

*The redevelopment of large areas of the site of Oxford Castle provided the occasion to examine late Saxon occupation levels under the Castle Mound and the east part of the Castle, as well as aspects of the Castle Moat and the Barbican. Finds from the site included groups of Saxo-Norman pottery, medieval textiles, a halfpenny of Eadred, and large quantities of medieval and later leatherwork and iron objects. The possibility that the Church of St. George in the Castle was on a pre-Conquest site is also discussed.*

## ACKNOWLEDGEMENTS

THIS report is the product of the work of many people over a large number of years and it is a pleasure to thank them now. Access to the sites could not have been obtained without the permission of the former Oxfordshire County and Oxford City Councils. Many of the officers of these two authorities provided constant help, notably Mr. G. G. Burkitt, the Clerk of the County Council, Mr. H. M. Walton, the County Archivist, Mr. H. C. Bedwell, the County Treasurer, Mr. J. Davies, Assistant County Architect, and Mr. M. Reeves of the County Architect's Department. From Oxford City Council special thanks are due to the City Architect and his staff, in particular Mr. P. G. Beresford and Mr. G. F. Spray and the City Estates Surveyor, and in particular Mr. L. R. Flint of his staff. The excavations themselves were largely carried out by a small and dedicated number of individuals, especially Messrs. B. G. Durham, J. Haslam, D. A. H. Richmond, K. W. Sheridan, T. Ward and H. Woods. During the main construction phases observation on the site would not have been possible without the full co-operation of the contractors, Benfield and Loxley and Taylor Woodrow and their staff and sub-contractors. The publication of this report has involved the collaboration of a number of specialist contributors without whose assistance the report could not have been completed: Miss Maureen Mellor compiled the pottery report; Dr. Martin Henig was responsible for reports on worked stone, knife-sheaths and decorated leather and bone objects; Mr. Andrew Sherratt reported on the worked flint; Dr. Michael Metcalf wrote the report on the round halfpenny or farthing of King Eadred; Miss Elizabeth Crowfoot described the textiles; Miss Jennifer Jones worked on the leather shoes, belts and clothing fragments; Mr. Ian Goodall and Mrs. Blanche Ellis reported respectively on the metalwork and the spurs; Professor Brian Marples and Miss Mary Harman described respectively the animal and human bones. Dr. J. Mason assisted with information on Christ Church's purchase of the Castle site. Mr. Mark Robinson identified the wood, and Professor G. C. Varley identified the fly puparia. Dr. Janet Cooper compiled the Appendix on St. George's in the Castle. The drawings were prepared by Mr. D. R. Sheard, Miss R. Askew, Mrs. E. Beard, Mrs. J. New-

comer, Miss W. Lee, and Miss P. Roberts. The text has been typed by Mrs. A. Lipson. Many of the objects have been conserved by Messrs. B. V. Arthur and A. Shishtawi of the Oxford City and County Museum, now the Oxfordshire Department of Museum Services.

From the start of these excavations many colleagues have advised on problems relating to the site, notably Messrs. D. Benson and D. A. Hinton, Professor E. M. Jope and Mr. D. Sturdy. The greater part of the work described in this report was carried out under the auspices of the Oxford Archaeological Excavation Committee. The members of the Committee have provided constant advice and encouragement and especial thanks are due to Miss J. M. Cook, Secretary of the Committee from 1967 to 1970 and to Miss C. M. Preston, Assistant Secretary of the Committee from that date. Finally a special tribute is due to the late Peter Spokes, Chairman of the Committee until his death in 1976. Without his inspiration the excavations might never have been undertaken.

#### HISTORICAL BACKGROUND

Oxford Castle is first recorded in 1071 when a later account, the *Annals of Oseney*, states that 'in that same year was built the Castle of Oxford by Robert de Oilly the First'.<sup>1</sup> The Castle was inserted into the western end of the late Saxon town and it made use of the river in its defences. The site had previously been occupied by houses as Professor E. M. Jope demonstrated in 1952 when he found a honeycomb of undisturbed late Saxon pits under the south side of the Castle Mound (FIGS. 1 and 2).<sup>2</sup> It is possible that these houses were extra-mural, for Domesday book refers generally to buildings both within and without the wall,<sup>3</sup> and the line of the pre-Castle town defences is uncertain at this point. Subsequently the Castle provided the entire western defence of the town.

The Norman Castle was presumably of earth and timber, in plan comprising a mound and bailey. It is possible that the Mound is a secondary addition and that the Castle when first built may have taken the form of a 'ring-work'.<sup>4</sup> Possible support for this suggestion comes from Professor Jope's excavations in which a deposit of dirty gravel separated the uppermost late Saxon occupation and the first tip layer of the Mound construction.<sup>5</sup> This layer can be interpreted as a layer associated with a 'ring-work' phase of the Castle before a later building of the Mound, although this interpretation was not suggested by Professor Jope. If this interpretation is correct then St. George's tower may have preceded in date the construction of the Mound. It is also possible that St. George's Tower and the Crypt (FIGS. 1 and 2), the earliest surviving Norman stonework, may have stood on the site of an earlier church.<sup>6</sup> The Castle had little history, except during the Anarchy, when in

<sup>1</sup> *Annales Monasterii de Oseneya* (*Ann. Mon.*, IV, Rolls Ser. 1869), 9.

<sup>2</sup> E. M. Jope, 'Late Saxon Pits under Oxford Castle Mound', *Oxoniensta*, xvii-xviii (1952-3), 77-111.

<sup>3</sup> *V.C.H. Oxon.*, I, 396.

<sup>4</sup> E. S. Armitage, *The Early Norman Castles of the British Isles* (London, 1912), 70-2. See also B. K. Davison,

'The Origins of the Castle in England: the Institute's Research Project', *Arch. J.*, cxxiv (1967), 205-7, and for a discussion of the term 'ring-work' see R. Allen Brown, 'An Historian's Approach to the Origins of the Castle in England', *Arch. J.*, cxxvi (1969), 133-5.

<sup>5</sup> Jope, *op. cit.* note 2, 81-2.

<sup>6</sup> See the Appendix below.

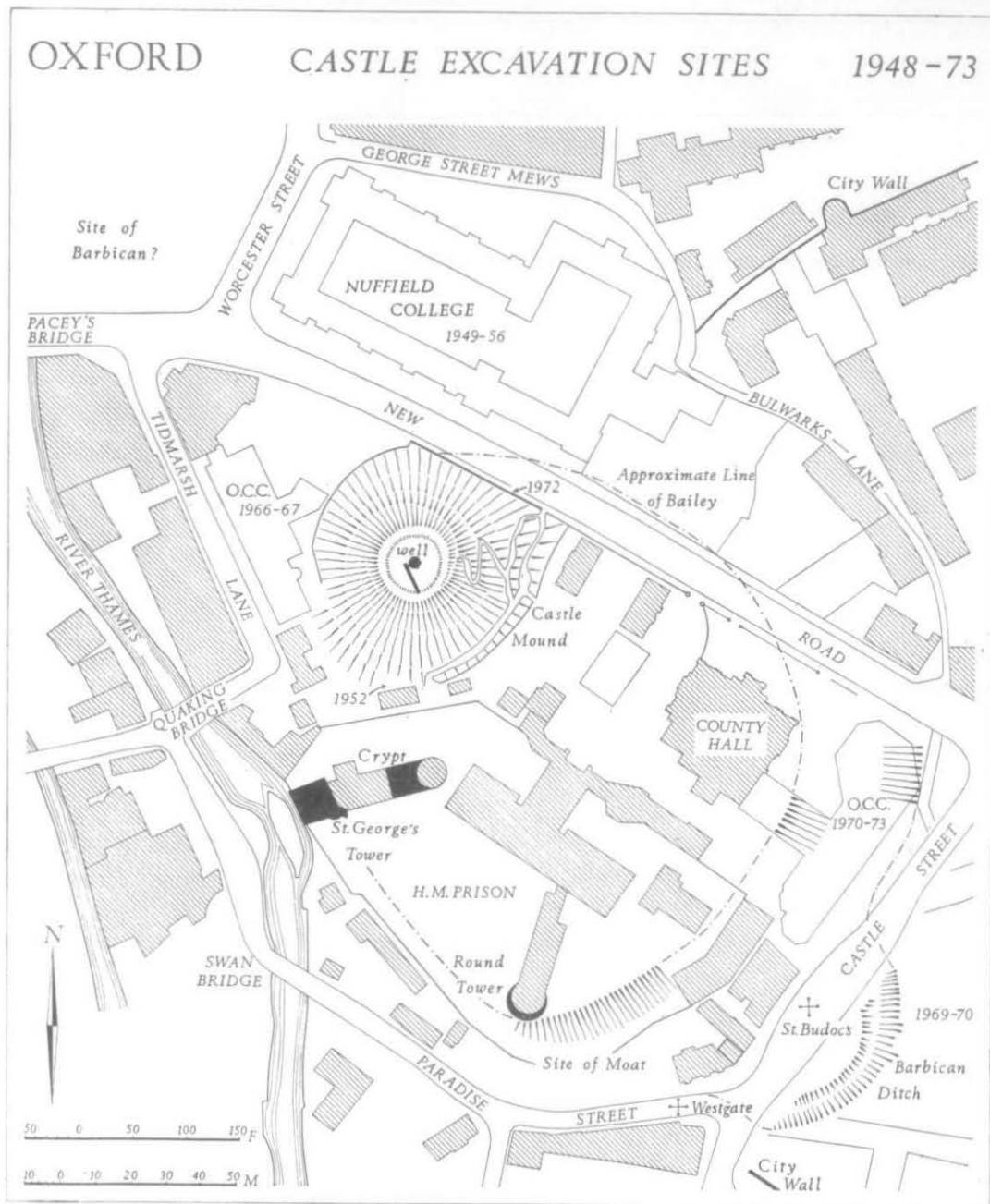


FIG. 1

1142 King Stephen besieged the Empress Matilda.<sup>7</sup> The Castle was again under attack in the Barons' War of 1215 and an eastern Barbican was constructed in the following year (FIGS. 1 and 5).

The royal records which survive from the end of the 12th century constantly refer to repairs carried out to the Castle and it is clear that the original wooden buildings were all replaced by stone ones, including the surviving base of the Round Tower and the Well Chamber (FIGS. 1 and 2).<sup>8</sup> From the middle of the 14th century the Castle was allowed to fall into decay and its functions ceased to be military; it remained useful as a gaol and assizes were held there up to 1577.<sup>9</sup> Despite its decline in importance Agas' map of 1578 shows the Castle as an impressive building, although the eastern Barbican had disappeared and encroachments had begun to appear on the Moat.<sup>10</sup>

In 1546, Christ Church acquired St. George's in the Castle, and in 1613/14 the college purchased almost all the rest of the site. The state of the building at that time can be seen in a contemporary plan.<sup>11</sup> During the Civil War, the Castle was re-garrisoned by the Royalists. In 1649 the Commonwealth Army refortified it and this work resulted in the levelling of most of the wall towers. Three years later the new works were destroyed. The extent of the destruction can be seen in David Loggan's map of 1675.<sup>12</sup> All the stonework had been removed except St. George's Tower, the base of the Keep, and the Round Tower and the ruins of the original Shire Hall.

The end of the 18th century saw further great changes. In 1776 New Road was built across the northern part of the Bailey. In 1785 the County Justices acquired the site and a new prison was built. Five years later the construction of the Canal terminus completed the in-filling of the Moat. The building of County Hall in 1841, a Militia Armoury in 1854 (from 1876 used as the Oxfordshire Constabulary Headquarters and demolished in 1966) and the extended prison in 1856 largely obscured the site.

In the 20th century further buildings were erected, including the present County Education Offices in 1912 at the corner of Tidmarsh Lane and New Road, on a site previously occupied by the Parochial School of St. Peter le Bailey and before that the City Pound. Nuffield College replaced the Canal Terminus between 1949 and 1958.

In 1966 the former Oxfordshire County Council decided to build the new headquarters of the Council on the present Castle site and not outside Oxford. Stage I of the redevelopment was on the Oxfordshire Constabulary Headquarters site, adjacent to the Castle Mound. The Council gave the Oxford City and County Museum (now the Oxfordshire Department of Museum Services) permission to carry out rescue excavations in 1966. The excavations were conducted by the writer and the results were supplemented with information from the County's own

<sup>7</sup> The medieval history of the Castle is described in *The History of the King's Works*, ed. H. M. Colvin, II, 771-5.

<sup>8</sup> R.C.H.M. *City of Oxford* (1939), 156-8. The Round Tower is not discussed by the R.C.H.M. but it is so described by the Ordnance Survey.

<sup>9</sup> T. W. Squires, *In West Oxford* (1928), 52-84. This chapter describes the post-medieval history of the Castle and conveniently prints extracts from the maps cited below.

<sup>10</sup> *Ibid.*, Pl. XXX.

<sup>11</sup> *Ibid.*, Pl. XXXI.

<sup>12</sup> *Ibid.*, Pl. XXXIV.

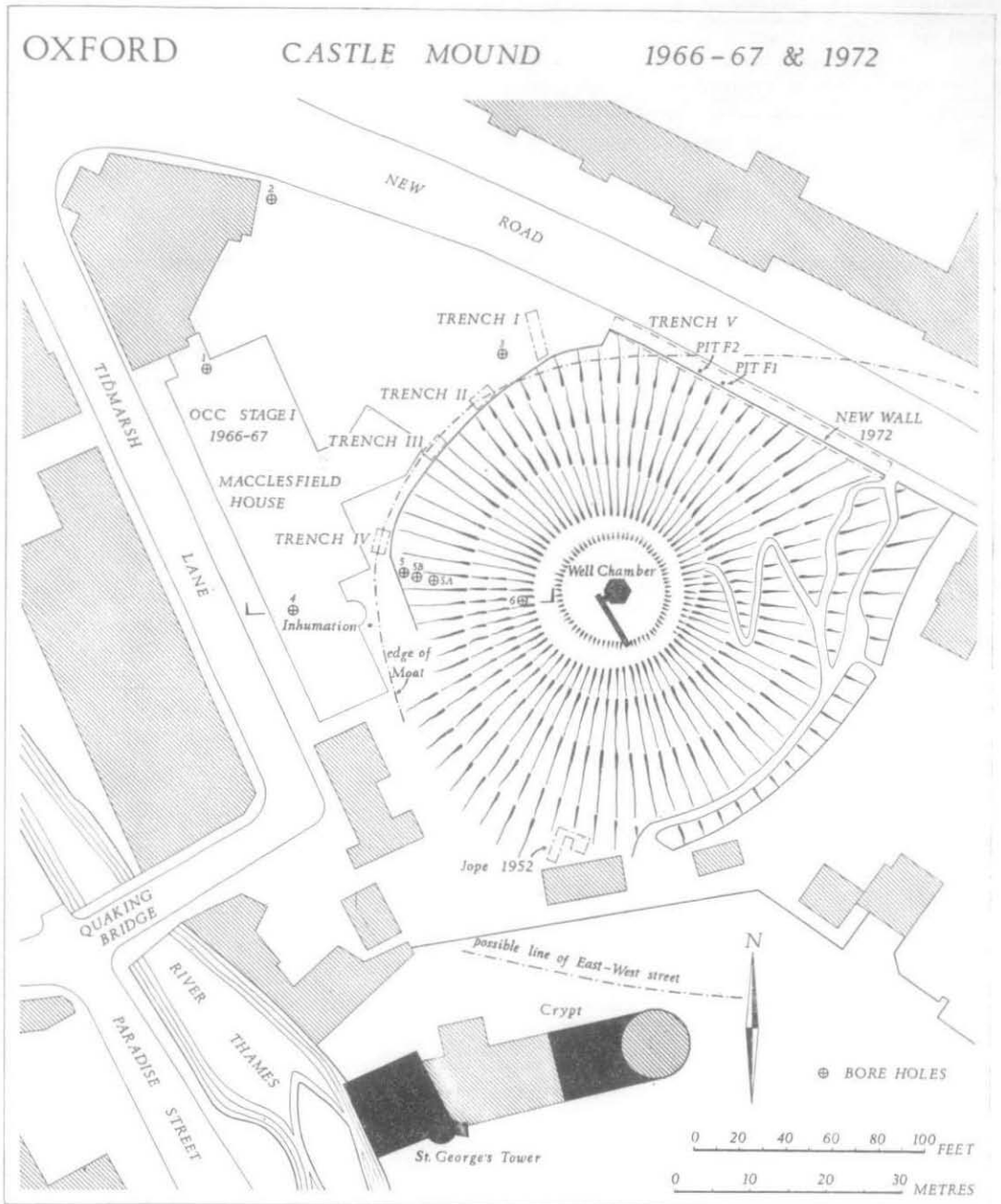


FIG. 2

subsoil investigation in 1965. In 1967 the contractor's work was observed, together with building works on New Road in 1972, under the auspices of the Oxford Archaeological Excavation Committee. All these investigations into the area of the Castle Mound from 1965-7 and 1972 are described in the first section of this report.<sup>13</sup>

Preparation for Stage II of the County Council development began in 1970. The Oxford Archaeological Excavation Committee conducted a preliminary excavation in that year and this excavation was extended in 1972 and 1973.<sup>14</sup> Meanwhile the former Oxford City Council had begun its Westgate development in 1969 which also impinged on the Castle.<sup>15</sup> These 1969-75 results have been grouped together in the second section of this report.

#### I. CASTLE MOUND, 1965-7 AND 1972

The excavations (FIG. 2) carried out between 1965 and 1972 were concerned with the northern side of the Castle Mound, *i.e.* on the opposite side of the Mound from Professor Jope's excavation of 1952. The 1965-7 excavations took place in the triangle of land enclosed by New Road (N), the Mound itself (E) and Tidmarsh Lane (W). This site was previously occupied by the Oxfordshire Constabulary Headquarters which was used as the Oxford Militia armoury and barracks from 1854 to 1876. The site is now occupied by Macclesfield House, the completed Stage I of the County Offices, together with its northern forecourt.

The 1972 excavation lay parallel with New Road and was necessitated when the wall retaining the Mound, built in 1776, partially collapsed in March 1972. It was replaced by a reinforced concrete retaining wall faced in stone.

Preliminary site investigation was carried out by George Wimpey and Co. for Oxfordshire County Council in 1965. This investigation consisted of eight boreholes 1-5, 5A, 5B and 6, sunk into the Mound and the surrounding areas to determine the nature of foundations required for the Stage I offices and the stability of the Mound.

In the Spring of 1966 four archaeological trenches, I-IV, were dug by hand in the north-western side of the Mound. They were sited at intervals around the base of the Mound adjacent to the retaining wall. Further observations were made during the basement work which began in the Autumn of 1967. The method used by the contractors was to line the perimeter of the site with interlocking steel sheet piles and then to excavate the interior by machine.

The new retaining wall on New Road built in 1972 was constructed in 10 metre sections. To prevent the Mound from slipping the contractors drove a series of short piles about 1 metre behind the old wall. Once these piles were secured the old wall was taken down and the footing for the new wall excavated. The new footings are much wider than the old wall although the same alignment is preserved. Throughout the whole operation it was possible to observe the stratigraphy and examine archaeological features. The contractor's trench has been called Trench V.

<sup>13</sup> T. G. Hassall, 'Excavations at Oxford, 1972', *Oxoniensia*, xxxviii (1973), 280-1.

<sup>14</sup> *Ibid.*, 280-5.

<sup>15</sup> T. G. Hassall, 'Excavations at Oxford, 1969', *Oxoniensia*, xxxv (1970), 18.

## 1. THE BOREHOLES, 1965

*Boreholes 1-4 (FIGS. 2 and 3)*

These four boreholes were sunk in the area of the proposed office block. They showed fill consisting mainly of soft to firm brown clay with rubble and stone fragments; below this fill was alluvium consisting generally of soft to firm organic clay, silt and peat underlain by very stiff to hard fissured grey clay (Oxford Clay) at depths varying between 3.65 m. and 5.18 m. below modern ground level.

The detailed sequence in one of these boreholes (Borehole 4) is shown in FIG. 3. The layers excavated were: layer 1, soft to firm brown clay with rubble and stone fragments; 2, loose grey and brown silty sand and gravel; 3, soft black organic silt; 4, medium dense clayey coarse sand and gravel; and 5, very stiff to hard fissured clay, *i.e.* the Oxford Clay.

It is clear that all these boreholes were penetrating the Castle Moat and this interpretation was confirmed in 1967 when the bulk excavation took place. No finds were recovered from the boreholes.

*Boreholes 5, 5A, 5B and 6 (FIG. 3)*

Boreholes 5A and 5B were both abortive. In each case the auger penetrated the topsoil, layers 10 and 12, but the auger was of a type which could not cope with the gravel and clay make-up of the Mound, layers 11 and 13.

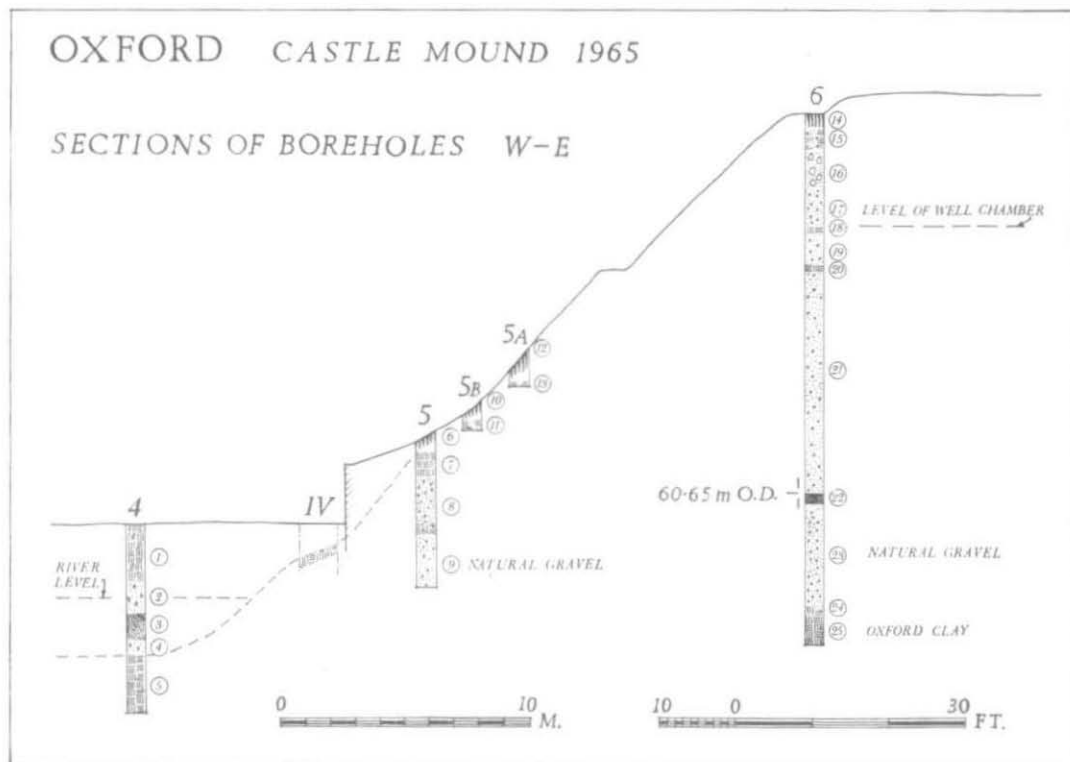


FIG. 3

Boreholes 5 and 6 were sunk by shell and auger and were able to penetrate right through the Mound into the natural gravel below. Borehole 6 reached the underlying Oxford Clay, layer 25.

The sequence of layers in Borehole 5 was : 6, topsoil ; 7, firm brown sandy clay with some gravel and topsoil ; 8, brown silty fine to coarse sand with fine to coarse gravel ; 9, brown fine to coarse sand with fine to medium gravel. From the position and description of 9 it must be the natural gravel.

Borehole 6 was the most instructive of the boreholes through the Mound. As with the other boreholes it first penetrated topsoil, layer 14, and below that the layers were : 15, brown silty sand with some coarse sand, stone fragments, and pockets of firm brown sandy clay ; 16, boulders in some sand ; 17, medium dense brown silty sand and gravel ; 18, stiff grey sandy clay with fine gravel and stone fragments ; 19, brown silty sand and fine gravel with some clay pockets ; 20, stiff grey clay ; 21, brown medium to coarse sand and fine gravel with occasional silty pockets. At 60.65 m. O.D. the auger reached a layer of soft brown clayey silt with fine to medium gravel, 22. From this description it would seem that layer 22 was the original topsoil covering a layer of brown silty medium to coarse sand and fine to coarse gravel, 23, *i.e.* the natural gravel which overlay 24, firm to stiff mottled brown and grey clay with some fine gravel, and 25, very stiff fissured grey clay (Oxford Clay).

## 2. EXCAVATIONS 1966-7 (FIGS. 2 and 4, and TABLE I)

### *Trench I*

The trench (FIG. 2) was cut by two modern service trenches, I,2 and I,3, but was otherwise undisturbed. Below the tarmac was a gravel surface of the former drill yard, I,13, and a flower bed adjacent to the modern retaining wall, I,4. Below these layers was a series of miscellaneous tip layers, I,5-17 which extended to a depth of 1.67 m., the limit of the excavation. Finds from this trench ranged the 18th and 19th centuries.

### *Trench II*

The gravel surface, II,1, seen in Trench I extended over Trench II (FIGS. 2 and 4) except where cut through by modern services, II,1a. A layer of mixed loam and clay, II,2, provided a base for this gravel and in turn 2 overlay a layer of washed gravel and loam, II,3. Beneath the gravel and loam was a hard-packed rubble pathway, II,4. The pathway rested on a layer of dark loam, II,5, and skirted a layer of compacted clay with gravel, II,6, about 25 cm. thick, which formed the capping of the Mound.

Beneath the capping of the Mound, at a level of 58.48 m. O.D. was a small gully filled with gravel and a layer of clay, II,7. There was a single sherd of late Saxon pottery in this feature. The gully had been cut through a layer of dark brown loam, II,8 which was firmly sealed by the capping of the Mound and in turn sealed a layer of hard gravelly loam with some clay, II,9. 9 rested on clean natural gravel. There was no trace of the old topsoil.



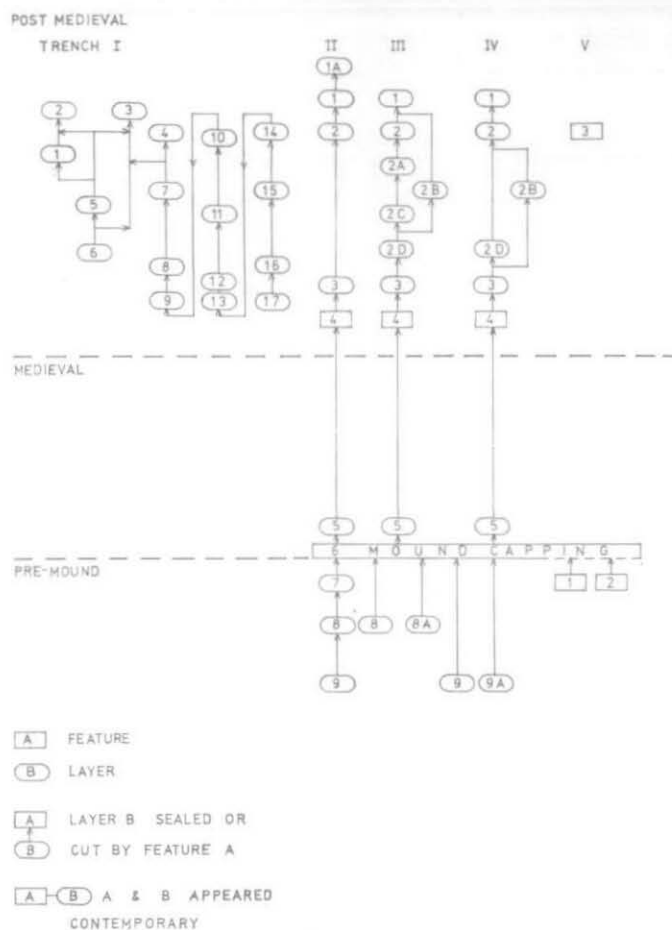


TABLE I

Flow diagram showing the relationship of Features and Layers in the Castle Mound Excavations, 1966-7 and 1972.

### Trench III

The sequence of layers in Trench III (FIGS. 2 and 4) followed that of Trench II. Beneath the modern levels, III, 1-2d, and the foundation trench for the retaining wall of the Mound, III,2b, was a layer of washed loam, III,3, following the angle of the Mound, levelling off on a hard parallel gravel and rubble pathway, III,4. This pathway sealed a layer of black loam, III,5, which in turn rested on the clay capping of the Mound, III,6. The capping appeared to have been stepped into the natural gravel.

Below the capping at 58.51 m. O.D. was an apparent occupation level, II,8 and 8a: these two layers were separated by a root hole or animal burrow. This level comprised gravel and loam mixed with charcoal fragments and a small piece of slag (SF III,4) and as with II,8 and 9 it rested directly on the natural gravel. It was the only layer to produce a reasonable quantity of pre-Mound pottery (38 sherds).

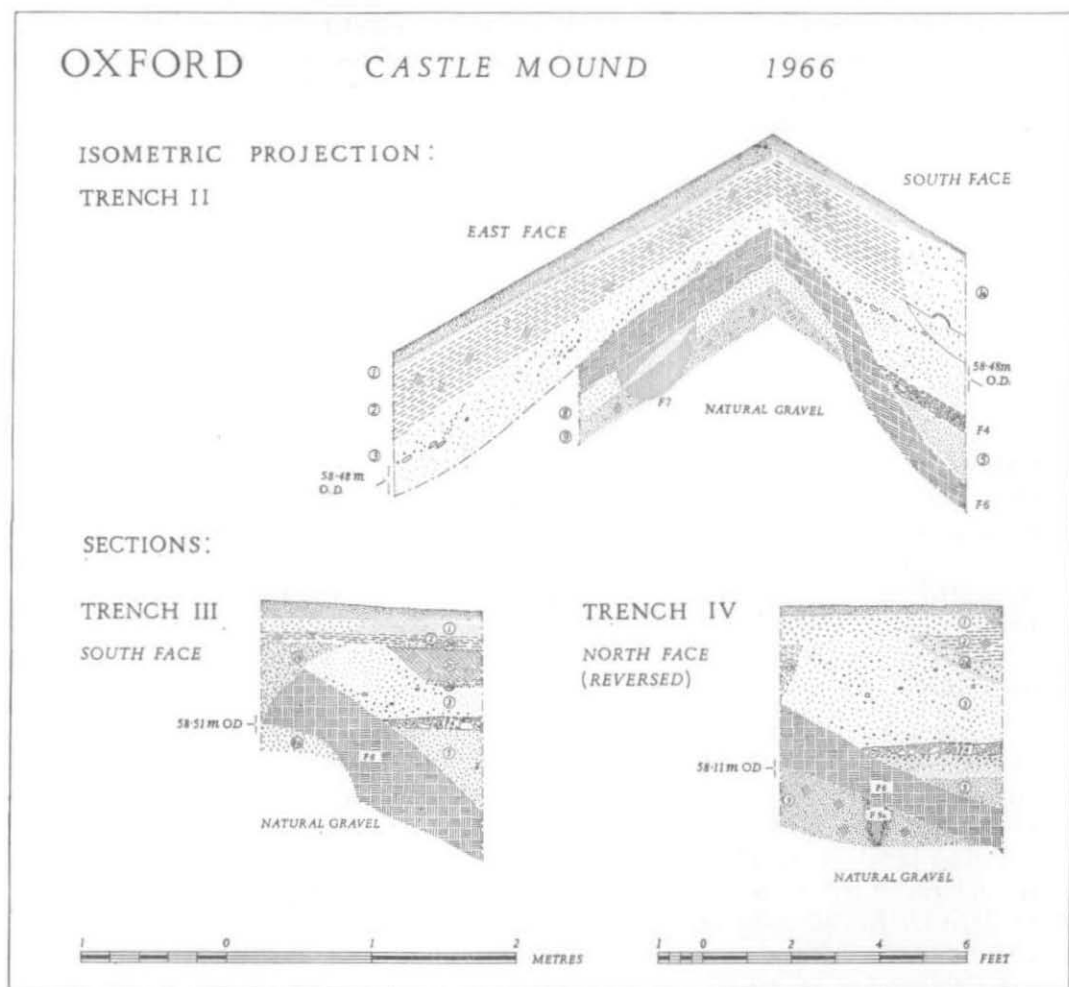


FIG. 4

*Trench IV*

In this trench (FIGS. 2 and 4) the layers of modern make-up, IV,1-3 were deeper than in Trench III. 3 contained two late 17th-/early 18th-century coins (SF IV, 1 and 2). Again a pathway, IV,4, sealed a layer of clay, loam and gravel, IV,5, lying on top of the clay capping of the Mound, IV,6, which was not stepped, but at a slightly acuter angle than in Trench III.

Beneath the Mound at 58.11 m. O.D. was a pre-Mound surface of gravel with some clay, IV,9, into which was dug a post-hole, IV,9a, 0.125 m. in diameter and 0.30 m. deep. Beneath 9 was natural gravel.

*The Contractors' bulk excavation*

Because the site was sheet piled no detailed sections were obtained but nevertheless some records could be made.

On the eastern side of the site the natural gravel beneath the Mound was exposed. No further pre-Mound features were observed with the exception of a single inhumation (FIG. 2). No dating evidence was found in association with the burial nor could its alignment be determined.

The western two-thirds of the bulk excavation was entirely in the Moat. The fill of the Moat was organic silt with mud-preserved plant remains. At no time was the bottom of the Moat reached, nor was its western edge seen, which must lie under or beyond Tidmarsh Lane.

### 3. EXCAVATION 1972

#### *Trench V*

The ground in this trench (FIG. 2) had been very badly disturbed by a long deep trench, F3, recently dug into the Mound behind and parallel to the 1776 retaining wall which was being replaced. It had been dug through the accumulation behind the retaining wall, through the clay capping of the Mound and into the natural gravel. In only a few places could the clay capping of the Mound be observed.

Two small pits, V,F1, and 2, beneath the Mound were recorded. They contained small quantities of pre-Mound pottery but they had been badly disturbed by F3.

#### DISCUSSION

Taken together, the results of the boreholes, the excavations and the additional observations between 1965 and 1972 compliment Professor Jope's excavation of 1952 and provide information on three aspects of the site: the pre-Mound levels, the Moat, and the Mound.

The boreholes emphasize that the Castle was built at the extreme edge of the second gravel terrace where it sloped down to join the river. The site is above the modern controlled flood level and presumably was also above the flood level in historic times. There was therefore no geological control on settlement on the site, yet the number of pre-Mound features was very few when compared with the density encountered by Professor Jope in 1952. There are three possible explanations. First, the evidence of boreholes 5 and 6 suggests that the original natural ground surface may have been higher than that encountered in the hand dug trenches. Second, the pottery evidence suggests that pre-Mound features dated only from the half century before the building of the Castle. Therefore there would have been little time for dense deposits to have accumulated. Thirdly, the area examined may have been part of the rear of properties fronting the east-west street which presumably ran across the site prior to the building of the Castle. This street would have continued the line of the modern Queen Street at Bonn Square to the western end of St. Thomas' Street at Quaking Bridge. Thus Professor Jope's site with its building debris would have been situated on a developed street frontage while the site under discussion would have been set well back. It is still not possible to say whether this settlement was inside or outside the 11th-century defended perimeter of the town.

The inhumation beneath the Mound is undateable and may not be connected

with the late Saxon deposits in any way. It would seem to be too far away from St. George's Church to be connected with a pre-Castle burial ground of a possible late Saxon church (see Appendix below).

Although no detailed cross-section of the Moat was obtained its eastern profile where it joined the Mound can now be reconstructed (FIG. 3). There can have been no berm separating the two. The clay lining of the edge of the Moat which continued as a capping for the Mound presumably provided sufficient stability to prevent the Mound from slipping although there seems to have been some early wash off the Mound, layer 5 in II, III and IV. The clay lining would also have prevented the natural gravel from eroding into the Moat. The sequence of silting in the Moat is shown by borehole 4 and Trench I. Only the centre of the Moat was wet by the time the pathway was constructed around the base of the Mound in the 17th century.

The current excavations throw no light on the problem of the chronology of the building of the Mound. The boreholes show that the capping extends over much of the surface of the Mound clay and gravel mix, but its main interior constituent is gravel. Borehole 6 shows that the interior of the Mound is not homogeneous near the top and it is quite possible that the Mound was originally lower than at present, possibly terminating at a level with layers 18 or 20. The upper layers would then be associated with the building of the stone Keep which presumably replaced an original wooden tower. It may be significant that the level of the Well Chamber floor coincides with layer 18, because this level may be the original top of the Mound.

## 2. THE EAST PART OF THE CASTLE, 1969-73

Between 1969 and 1973 a series of excavations and observations were carried out on the eastern defences of the Castle in connection with Oxfordshire County Council's Stage II development, now known as County Hall, and with Oxford City Council's re-alignment of Castle Street and building of Westgate (FIGS. 1 and 5).

New County Hall is an eastwards extension of the Assize Courts of 1841. Historically the site first formed a part of the late Saxon town until the building of the Castle in *c.* 1071. Most of the new building lies over the Castle Moat, but the block which connects the old and the new buildings crosses the line of the Bailey Bank. This bank, crowned by a stone curtain wall, is shown in Agas' Map of 1578 and it is particularly clear in David Loggan's Map of 1675, by which time the curtain wall had been dismantled.<sup>16</sup> The north-eastern corner of the new building extends just as far as the outer lip of the Moat. There were major encroachments on this part of the Moat from at least as early as the 16th century, although the Moat did not entirely disappear until the end of the 18th. A Salvation Army Citadel was built in 1888, in the side wall of which a large settlement crack used to be clearly visible. Other buildings which were demolished to make way for the new building consisted of various County Council offices and the canteen, at one time the Oxford Electric Cinema.

The realignment and widening of Castle Street at its southern end together with the construction of the basement for Westgate affected the area occupied from 1216

<sup>16</sup> T. W. Squires, *op. cit.* note 9, Pls. XXX and XXXIV.

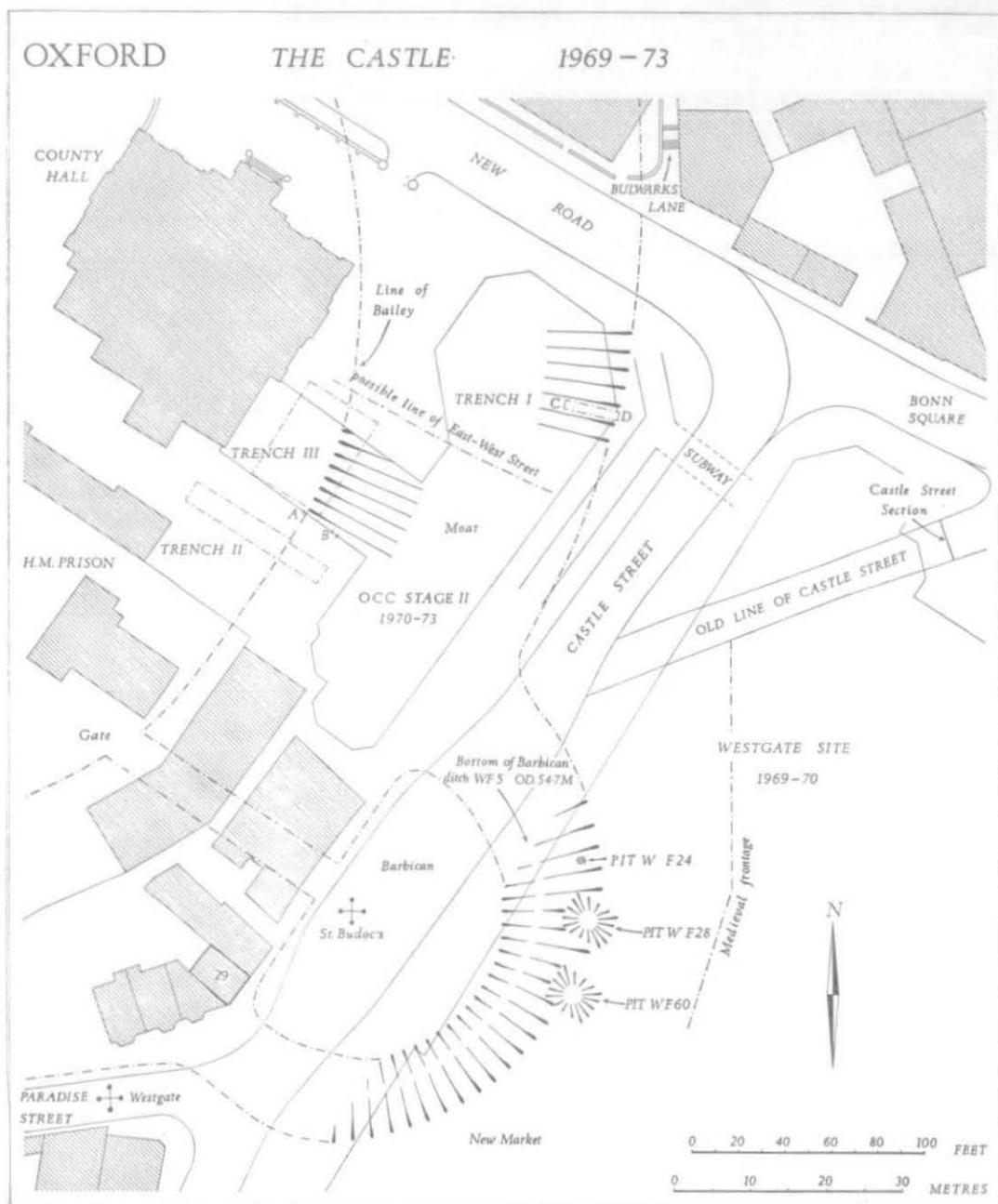


FIG. 5

until some time in the 15th century by the Barbican in front of the main gate and bridge of the Castle. The Barbican was built by Faukes de Bréauté after his capture of the Castle during the Barons War.<sup>17</sup> In order to build the Barbican de Bréauté demolished the Church of St. Budoc which was subsequently rebuilt outside the Westgate. While the Barbican was in existence the street from what is now called Bonn Square to the Westgate at Paradise Street would have been on a north-south alignment with tenements on its eastern frontage. This street, together with the site of the disused Barbican had become known by the 15th century as New Market.<sup>18</sup> By the 16th century the New Market had been encroached upon on its eastern side and the street had shifted westwards onto the pre-1969 alignment of Castle Street. Thus the present alignment of Castle Street represents its third.

On the County Hall site it was possible to combine limited controlled excavation with observation of building works. After the site was cleared of building in 1970 and before its use as a temporary car park, a single trench, I (FIGS. 5 and 6), was dug mechanically at right angles to Bath Place, the southern continuation of Bulwarks Lane and not now in existence. The purpose of this trench was to confirm the position of the eastern lip of the Moat. Subsequently in 1972 two further trenches, II and III, were dug across the presumed line of the Bailey Bank. During the contractors' excavation for the new basement it was possible to observe additional features adjacent to all three trenches as well as in the area largely occupied by the Moat between the three trenches.

On the Barbican site no formal excavation was possible at any stage. The site of St. Budoc's Church was uncovered during the roadworks in 1969 while the Barbican ditch and associated features were exposed during the contractors' bulk excavation for Westgate. In fact the discovery of the Barbican was unexpected. The contractors had totally to excavate its fill, and back-fill the ditch with concrete before building could take place.

### Trench I

This trench (FIG. 6 and TABLE 2) was dug by machine across the outer eastern lip of the Moat which was found precisely where it was predicted. Like the Castle Mound the edge of the Moat had been revetted by a clay lining which had sealed one pit, F49, as well as holding back the sloping gravel sides of the Moat. The subsequent contractors' excavation allowed the plan of the Moat to be extended and revealed further features both ante- and post-dating the Moat. A ditch, F17, may have been the earliest feature, since it was filled with old topsoil. This ditch was similar in shape and fill to F27 in Trench III. Only a very short stretch was uncovered. This ditch and the pit F49 preceded the construction of the Moat, while pits F43, F44, F45, F46, F47 and F62 all seem to post-date it. These pits were presumably associated with the first encroachments on the Moat which appear to have taken place as early as the mid 12th century.

The top fill of the Moat, L12 (Section C-D, FIG. 7) consisted of mixed material

<sup>17</sup> *Walter of Coventry* (R.S.) ii, 226; *Rot. Litt. Claus.*, I, 498; *Close Rolls* 1227-31, 350; 1234-7. In *The History of the King's Works*, ed. H. M. Colvin, II, 771-5, only a western barbican is mentioned.

<sup>18</sup> H. E. Salter, *Survey of Oxford*, ed. W. A. Pantin and W. T. Mitchell, O.H.S., N.S., xx (1969), 75. For New Market see *Wood's City of Oxford*, ed. A. Clark, O.H.S., xv (1889), 491.

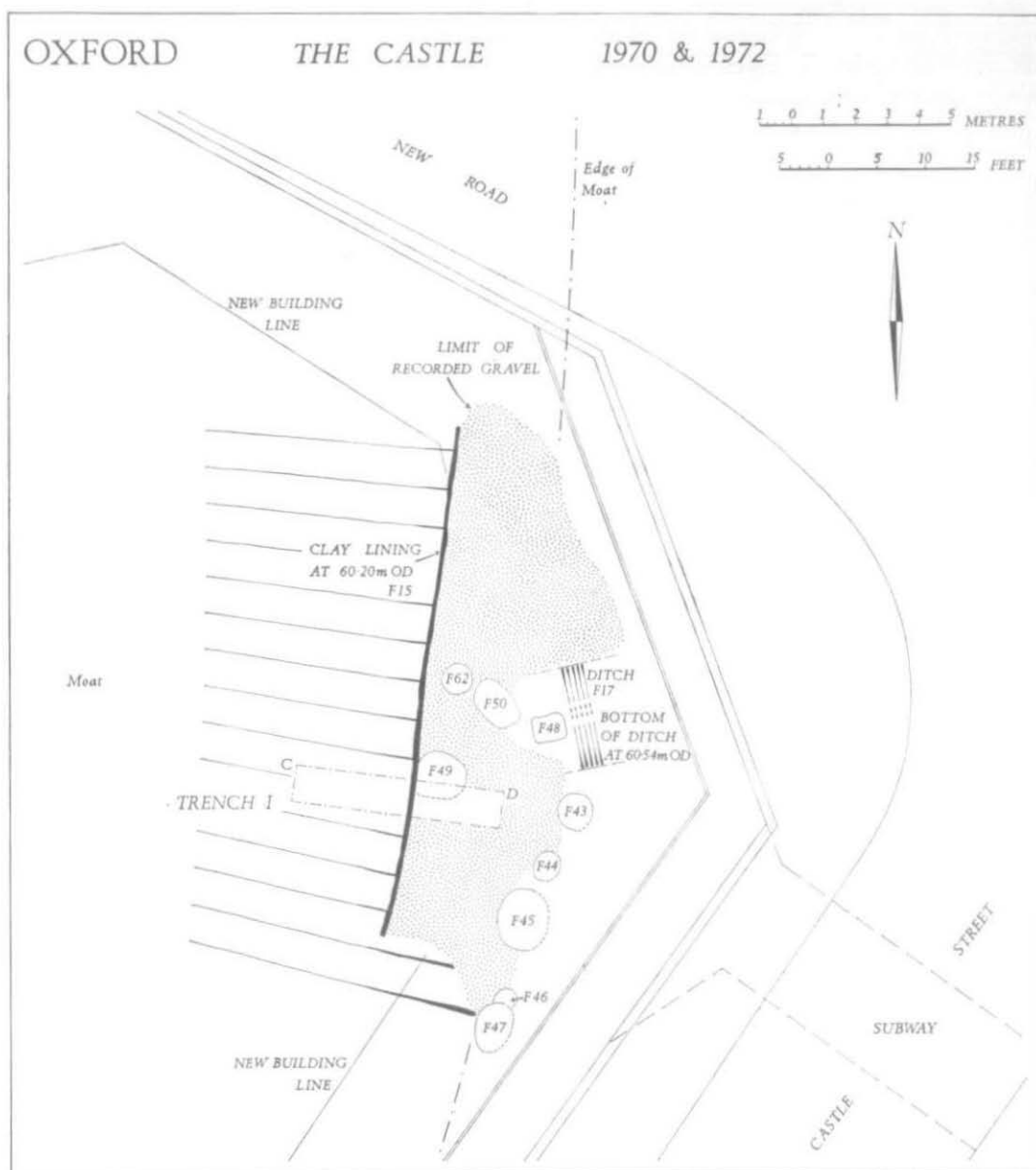


FIG. 6

POST-MEDIEVAL

TRENCH I-III

WESTGATE

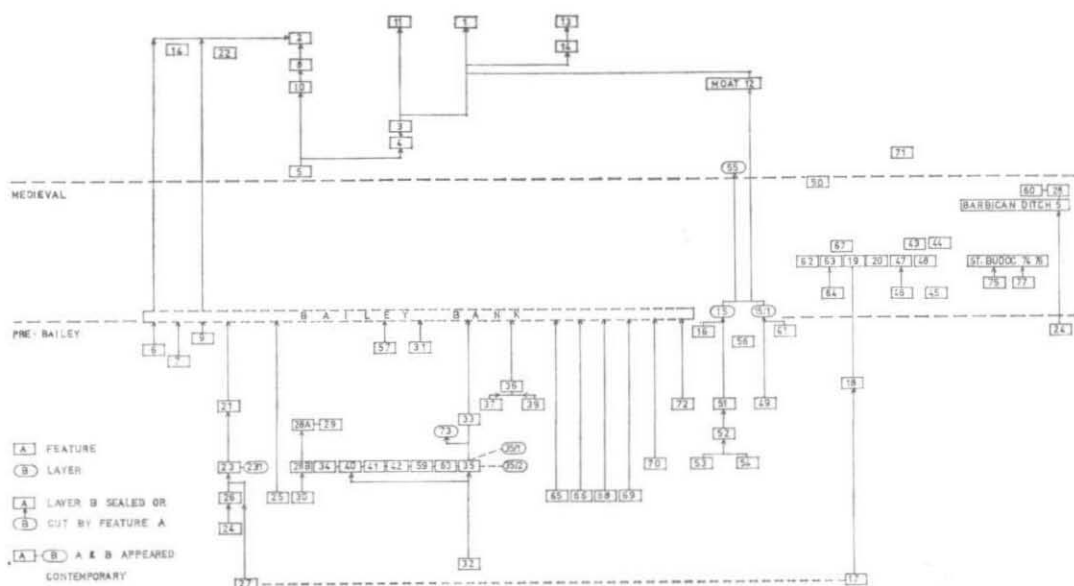


TABLE 2

Flow diagram showing the relationship of Features and Layers in the East Part of the Castle Excavations, 1969-73.

and brown loam, possibly derived from the Bailey Bank. The Moat itself was filled with black organic material. During the later bulk excavation by the contractors the fill of the Moat was divided into three layers for the purposes of separating the finds: 12/1, the fill down to the formation level of the new basement; 12/2, the material dug out of the pile caps below the basement level, and 12/3, the deepest excavation of all from the base of the lift shaft. On later examination the material from these layers showed no chronological significance.

On the opposite side of the Moat a second section A-B (FIG. 7) was recorded. At this point the clay lining was very eroded and had been thickened by an additional layer of clay and gravel in the 17th century. Below the lining was a series of pre-Castle pits, F51, F52, F53 and F54.

### Trench II

This trench (FIG. 8 and TABLE 2) was heavily disturbed by modern features, F1-10, but a few earlier features survived. There was no sign of the Bailey Bank, presumably because it was thrown down into the Moat when this was finally filled, but three pits of pre-Castle date were found, F6, F7 and F9. F6 was split by the concrete footing F2 but the filling was so similar that it was considered to be one single pit. These three pits were all cut into the natural gravel whose top level was nowhere seen. The implication is that these pits were all well below the pre-Bailey ground surface and they must therefore have been sealed by the Bailey Bank. This suggestion is confirmed by the fact that the eastern part of F6 was firmly sealed beneath the sloping clay lining of the Moat, F15.



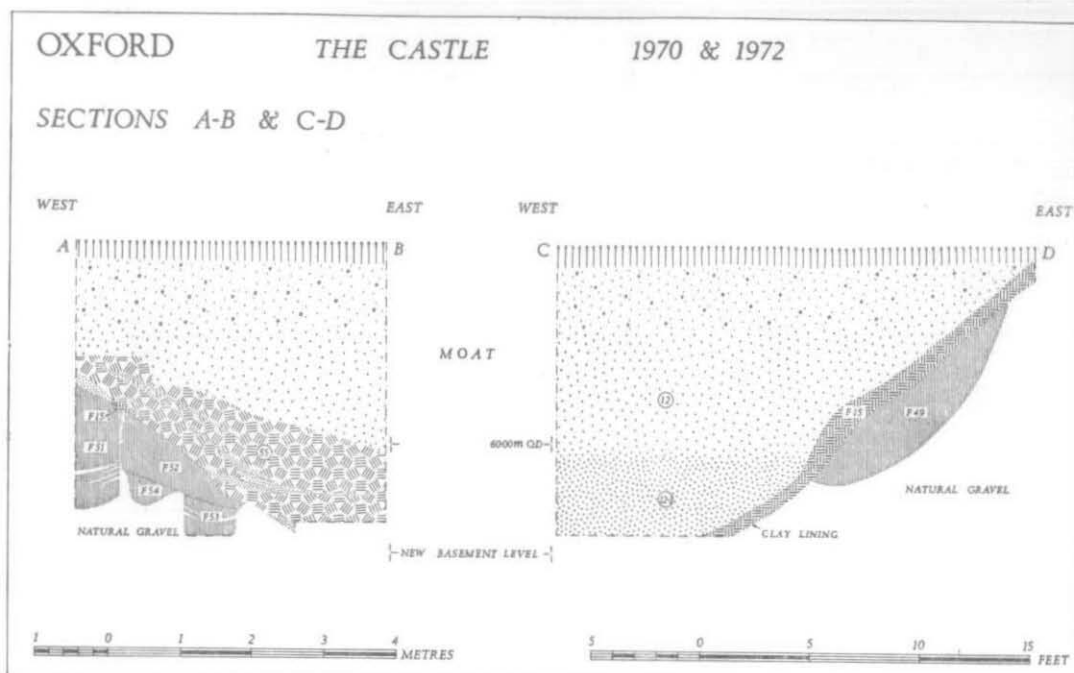


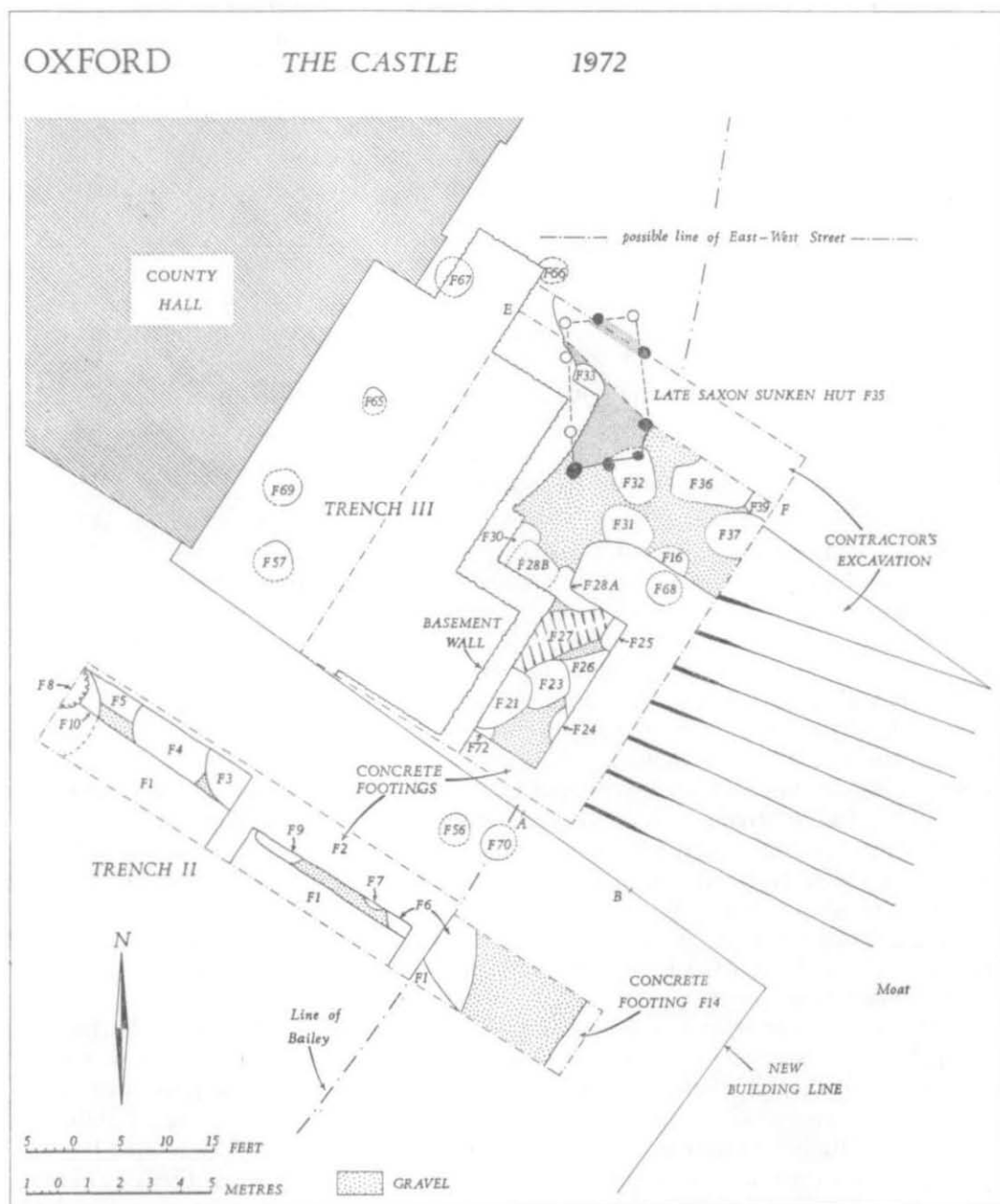
FIG. 7

### Trench III

This trench (FIG. 8 and TABLE 2) was again first excavated mechanically and later greatly extended during the contractors' bulk excavation. Like Trench II, this trench was heavily disturbed by the footings of buildings and part of a basement adjoining the old County Hall. The majority of the features were either sealed by the clay lining of the Moat, F15, or would have been sealed beneath the Bailey Bank. In some places the old topsoil was visible and a V-sectioned ditch, F27, at least 0.7 m. deep, was filled with it. This feature contained a single rim sherd of Fabric *S* so that it was certainly a late Saxon and not an earlier feature. The remainder of the trench was largely taken up by pits. The internal relationships of these pits and others recorded during the contractors' excavation is shown in TABLE 2, while the finds are described below. Pit F23 was notable for a coin of Eadred (948-954 A.D.).

On the northern side of this trench it was possible to see a build-up of occupation levels above the natural. The sequence began with a pit, F32, which was the earliest feature dateable by ceramics. The pottery from this feature, Fabric *B*, a late Saxon ware, dates from the late 8th/early 9th century to the late 10th century.<sup>19</sup> Sealing F32 was the floor of a sunken hut (FIG. 9). This small building was heavily disturbed and in part destroyed by an extension to the contractors' excavation. Nevertheless, it was possible to reconstruct its plan and section. The floor of the

<sup>19</sup> This chronology depends on the type sequence at the St. Aldate's Oxford sites, to be published in a report by B. G. Durham in a subsequent *Oxoniensia*. A typescript is available at the Oxfordshire Archaeological Unit, 46 Hythe Bridge Street, Oxford OX1 2EP.



hut, layer 35/2, measured 2.26 m. E.-W. by 4.78 m. N.-S. The floor was sunk 1.04 m. below the old topsoil and consisted of red clay beneath which was mixed gravel and red clay. At the southern gable end there were three post-holes, F34, F40 and F42. Two further post-holes were excavated on the eastern side, F41, F59, but only one post-hole, F60, was excavated in the middle of the northern gable end. The positions of the remaining four post-holes could be inferred. The diameters of the post-holes ranged from 0.6 m. to 0.3 m. On top of the floor was an ashy occupation level, layer 35/1. The interior of the hut was filled (up to the level of the old topsoil) with clean gravelly material. The post-holes could be seen rising through this material. A sherd from the floor, layer 35/2 and two sherds from the back-filling, F35, were Fabric R, St. Neot's type ware. A further sherd from F35 was Fabric S, an early sandy fabric.

Above the back-filled hut a series of occupation levels, layer 73, sealed it (FIG. 10). Further sherds of Fabric R were recovered from this level (small finds 14, 16, 17 and 18 marked on section E-F). As in section A-B the lining of the Moat, F15, had been thickened in the 17th century by an additional layer of clay and gravel, L38, section E-F.

#### *The Site of St. Budoc's Church and the Barbican Ditch*

During the reduction of the level of Castle Street in 1969 a coffin, WF74, was uncovered beneath the former eastern pavement of the street (FIGS. 5 and 11; TABLE 2). A previous coffin was reported to have been found in 1682 somewhere in this area.<sup>20</sup> The coffin was sealed by a layer of clay above which was a layer of mixed loam and gravel. The coffin itself lay so near the surface that all but the western end of its cover showing the top of a cross, as well as most of the burial inside, was destroyed by the machine levelling the site. The burial still contained fragments of textiles with fly puparia adhering to it. The coffin lay on the north side parallel to a stone wall footing. This wall could not be traced in either direction since its eastern end had been destroyed by a basement and its western end by services under Castle Street. To the south of the wall lay a further burial, WF76.

Both the burials sealed earlier pits. The coffin sealed WF75 from which four sherds were recovered: Fabric AE: 1 body sherd; Fabric Y: three tripod pitcher sherds. These sherds must date from the late 11th to early 12th centuries. The other pit, WF77, was of the same date and seven sherds were recovered from it: Fabric Y: 4 body sherds; Fabric AC (an early medieval ware): 1 base (diameter 21 cm.) and 2 body sherds.

During the subsequent building of Westgate in 1970 the plan of the Barbican Ditch, WF5, was exposed during the contractors' excavation. The ditch had cut through an earlier pit, WF24. No meaningful sections were recovered since the only ones to survive were at the edge of the new basement which was at an oblique angle to the ditch. Once the black organic fill of the ditch had been removed it was possible to record the bottom level at 54.7 m. O.D. The ditch itself was cut into natural gravel with a profile steeper on its inner than on its outer edge. Like the main Moat, the sides of the ditch were lined with blue clay up to 10 cm. thick.

<sup>20</sup> *Wood's City of Oxford*, ed. A. Clark, O.H.S., xv (1889), 208.

OXFORD

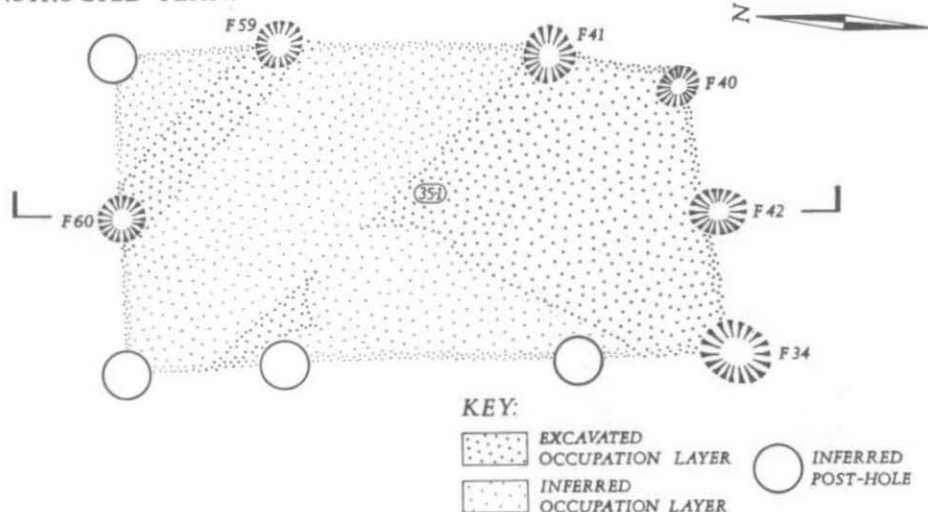
THE CASTLE

1972

TRENCH III

LATE SAXON SUNKEN HUT

RECONSTRUCTED PLAN:



CONJECTURAL SECTION:

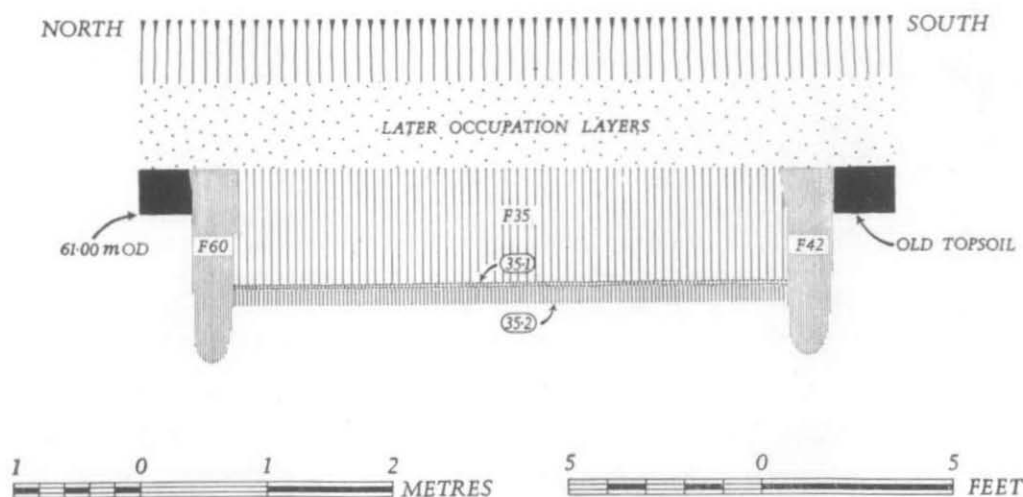


FIG. 9

## OXFORD

## THE CASTLE

1972

## SECTION E-F

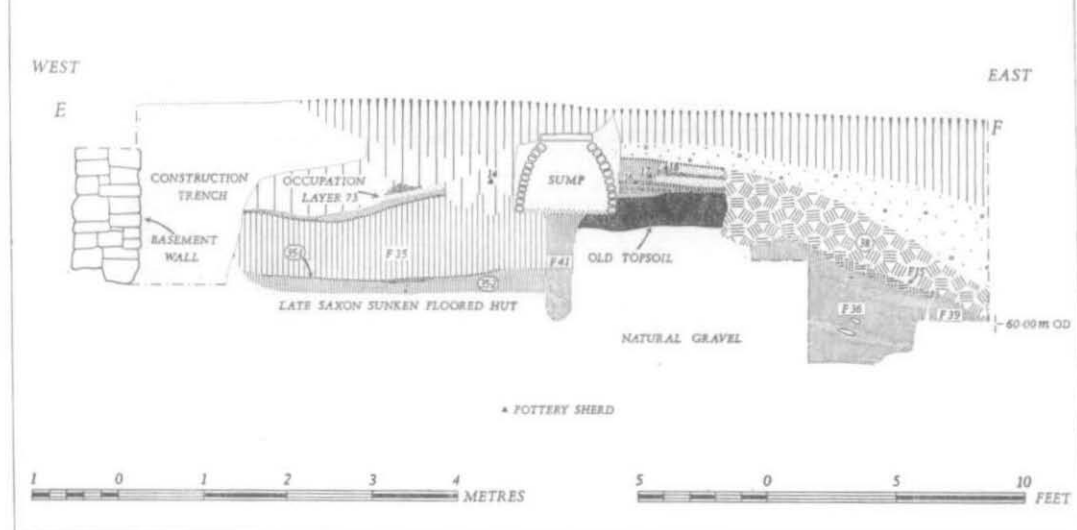


FIG. 10

Beneath this lining was a layer of hard packed gravel and stones. The lower inner and outer slopes of the ditch especially on the northern side were overlain by spreads of large stones.

There were two distinct fills in the ditch. The lowest silt layer was a mixture of sand and gravel containing a few finds. Above this primary silt was a thick black deposit containing layers of organic material and stones as well as large quantities of pottery, leather and bones (both animal and human), as well as some wooden objects, textiles and metalwork.

Adjacent to the ditch and apparently related to it were two very large pits, WF28 and WF60. Like the ditch these pits were only seen in plan. They were filled with the same kind of organic material. Their function is uncertain since they were much larger than conventional pits. Their interpretation is further complicated by the fact that from their position they would appear to have been situated between the medieval street and the Barbican ditch.

## DISCUSSION

These excavations and observations taken as a group illustrate clearly the development of the eastern defences of the Castle from the pre-Castle urban occupation, through the period of the first building of the Moat and the subsequent addition of the Barbican ditch, to the final abandonment of the Barbican and later the Moat.

The evidence of Trench III with its depth of occupation levels points towards the

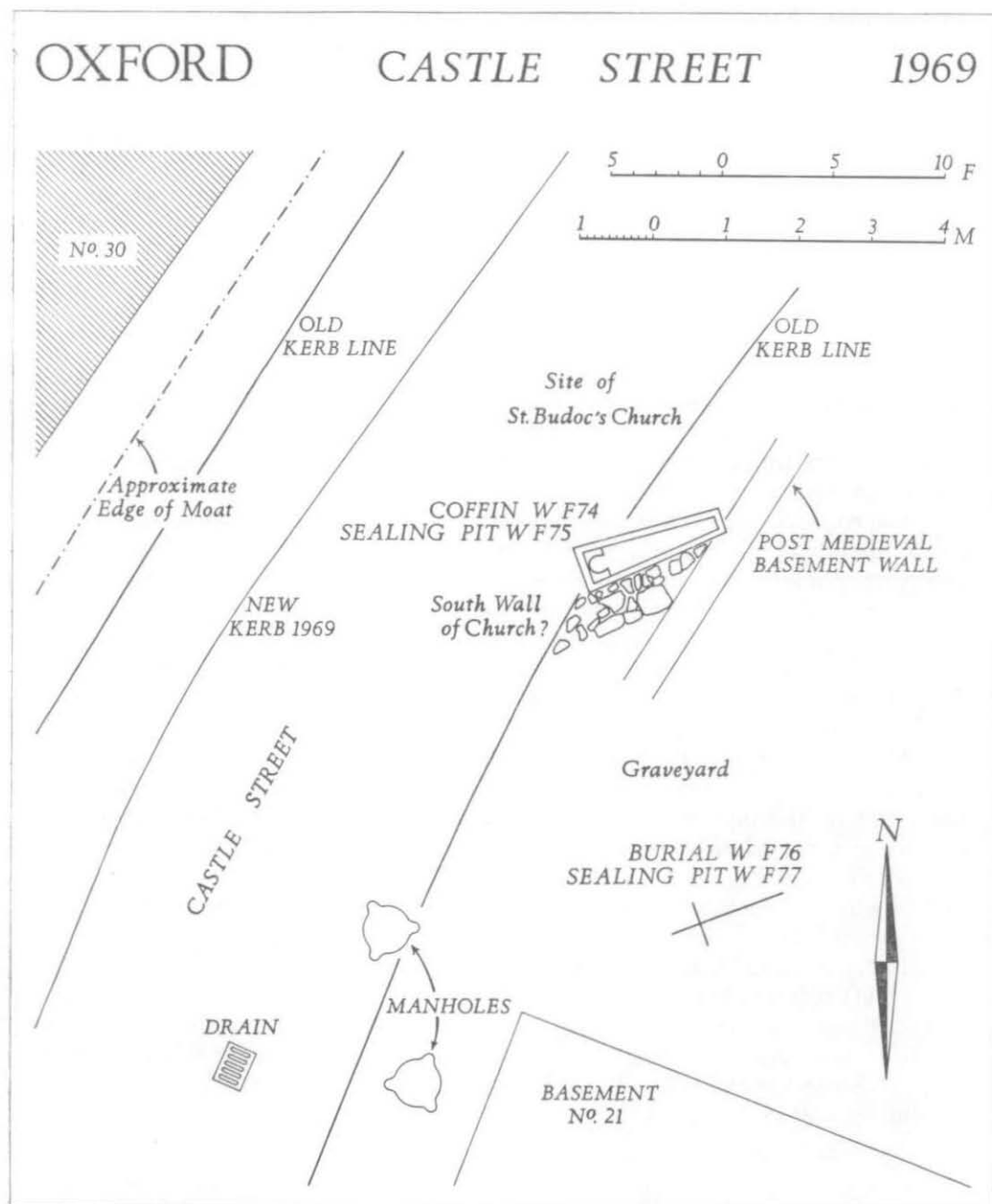


FIG. 11

existence of a developed late Saxon street frontage. This street was apparently on an east-west alignment and was presumably the continuation of Queen Street from Bonn Square across the site of the later Castle Bailey. The ceramic evidence points to the occupation levels beginning in the mid-late 10th century. It is not known whether these houses and pits would have been within the defended perimeter of the town or whether they belonged to suburbs outside the 'burh' defences. The only building whose plan could be reconstructed was the sunken hut. The existence of the ashy occupation layer on the floor implies that this was an actual living level although there could have been an upper storey. If this interpretation is correct, however, the interior was back-filled with clean material before the surrounding posts were withdrawn. The hut may have been contemporary with pits F23, F28B and F70. An analogous structure has subsequently been excavated at All Saints Church, where a late Saxon cellar was apparently finally used as a conventional cess pit.<sup>21</sup> Cellars of this type and date have been found before in Oxford from such sites as the Examination Schools site in High Street in 1876, and no less than nine were found at the Clarendon Hotel. However, in all these cases no signs were found of timber lining or of the house superstructure.<sup>22</sup> Similar structures are known from other late Saxon towns, notably Thetford.<sup>23</sup>

The construction of the Castle must have involved a diversion for traffic around the south side of the Castle and through the medieval Westgate. This diversion presumably made use of Castle Street whose original north-south alignment has been argued above.<sup>24</sup> The pits found beneath the site of St. Budoc's Church may have belonged to houses fronting on the western side of this street. St. Budoc's Church itself, or at least its churchyard, appears to date from the 12th century.<sup>25</sup> This church was not the only early encroachment close to the Castle Moat as the pits in Trench I demonstrate.

The construction of the Barbican ditch clearly involved a major local disruption. Its useful life seems to have covered a period of perhaps two hundred or at the most two hundred and fifty years by which time the accumulated rubbish within it had consolidated enough to allow the space to be used for the New Market.

By the later medieval period the main Moat was also becoming heavily silted and by 1600 it was fringed by houses with gardens apparently running down into it. One such house has recently been recognized at No. 29 Castle Street, which is apparently a modified late medieval structure.<sup>26</sup> Despite this, the evidence from Trench III points towards a partial refurbishing of the inner side of the Moat at that point, presumably during the Civil War. The subsequent dismantling of the Castle in 1652 and more probably the building of New Road, the Prison and the original Assize Courts, resulted in the complete levelling of the bailey bank down to the underlying late Saxon levels.

<sup>21</sup> T. G. Hassall with B. G. Durham and H. Woods, 'Excavations at Oxford 1973-4', *Oxoniensia*, xxxix (1975), 54-7.

<sup>22</sup> E. M. Jope, 'The Clarendon Hotel, Oxford. Part I. The Site', *Oxoniensia*, xxiii (1958), 9-10, for a discussion of previous finds from Oxford.

<sup>23</sup> For a summary of late Saxon urban structures see P. V. Addyman, 'The Anglo-Saxon House: a new review', *Anglo-Saxon England*, I (1972), 291-5. For Thetford see Brian K. Davison, 'The Late Saxon Town of Thetford: an Interim Report on the 1964-6 Excavations', *Medieval Archaeology*, xi (1967), 189-208.

<sup>24</sup> See p. 245.

<sup>25</sup> E. M. Jope, 'Saxon Oxford and its Region', *Dark Age Britain* (1956), ed. D. B. Harden, 239.

<sup>26</sup> I am grateful to Messrs. J. Blair and P. Lankester for this information.

## THE FINDS

## THE POTTERY. By MAUREEN MELLOR

*Introduction*

The aims of this report are :

- (a) to describe the fabric of the sherds and the associated potting techniques and correlate them with the sequence established at 79/80 St. Aldate's.<sup>27</sup>
- (b) to assist in the dating of the Castle Mound, the area probably rendered sterile by the Bailey Bank, and of the infilling of the Castle Moat and the Barbican Ditch.

About 550 sherds of cooking-pots, bowls, a cup, and pitchers were recovered from truncated pits in late Saxon and early medieval deposits. 21% of the sherds were associated with the Castle Mound; 47% were excavated from pits and a structure, F35, probably sealed by the Bailey Bank, and 8% from an area sealed beneath the clay capping of the Castle Ditch. A further 24% were salvaged from pits outside the outer lip of the Moat.

The sherds were very fragmentary and only two complete profiles, both bowls, were reconstructed. The pits were largely unassociated and only a few contained enough sherds to be representative of proportional trends. The pit groups as a whole within each area were however considered helpful in assisting the dating of that part of the site. Fabric percentages of the sherds within each feature and their internal relationships were illustrated (TABLES 1, 2 and 3). The sherds were recorded as miscellaneous where they were too fragmentary to be assigned to a fabric type. P23/0/1 is the pottery number of the sherd in layer/feature 23, P23/1/1 is the pottery number of the sherd in layer 23/1. Sherds from pit groups associated with St. Budoc's and the Barbican Ditch do not appear in the Tables.

The pottery groups sealed by the Castle Mound, its early defences, and those presumed sealed by the Bailey Bank, suggested a mid to late 10th- to late 11th-century date, while pits excavated outside the outer lip of the Moat suggested a mid 12th-century or possibly later date. 16 fabrics were noted, three of which were not local (Fabrics G, X and Z). The majority of pre-Castle wares were tempered with limestone grits (Group I).<sup>28</sup>

These wares were superseded by sandy wares (Group III) after the building of the Mound and Castle Defences. Flint wares with other inclusions (Group II) represented a very small proportion at any one period.

About 450 sherds were salvaged from the Moat, F12. 41% were medieval, the rest post-medieval. A homogeneous group of about 1,200 sherds, ranging from an early 14th-century to mid 15th-century date, was salvaged from the Barbican Ditch, F5.

*The Medieval Pottery**Group IA—Shelly Limestone. Fabrics B and R*

Fabric B, Oxford late Saxon Ware : about 18 sherds were found, including two rimsherds (FIG. 12, 1)<sup>29</sup> and a base sherd.<sup>30</sup> A piece of tooled fired clay which had suffered severe secondary burning on the internal surface was also found. It may have been a lamp base (FIG. 12, 2).<sup>31</sup> All the sherds from F32 were Fabric B, the only feature to contain a substantial quantity of this fabric. Fabric B was also recovered from the excavations under the Castle Mound in 1955<sup>32</sup> and was the dominant fabric from the late 8th/early 9th century to the late 10th/early 11th century at 79/80 St. Aldate's (Phases 1-4).<sup>33</sup>

Fabric R, St. Neot's type Ware : ten sherds of this ware were selected from F23 and F23/1 for analysis and were found to contain fossil shell associated with bryozoa. Since non-fossilized bryozoa may be too fragile to survive wedging and throwing, this is evidence

<sup>27</sup> See note 19.

<sup>28</sup> Durham, *op. cit.* note 19. Classification of the Pottery.

<sup>29</sup> Durham, *op. cit.* note 19, P211/0/1.

<sup>30</sup> Durham, *op. cit.* note 19, P216/1/7.

<sup>31</sup> I am grateful to Professor Jope for this suggestion. E. M. Jope, 'Late Saxon pits under Oxford Castle Mound', *Oxoniensia*, xvii-xviii (1952-3), 105, Fig. 35, No. 56, for possibly similar lamp.

<sup>32</sup> *Ibid.*, 87, 93, for a published description of a similar fabric.

<sup>33</sup> Durham, *op. cit.* note 19, histogram.



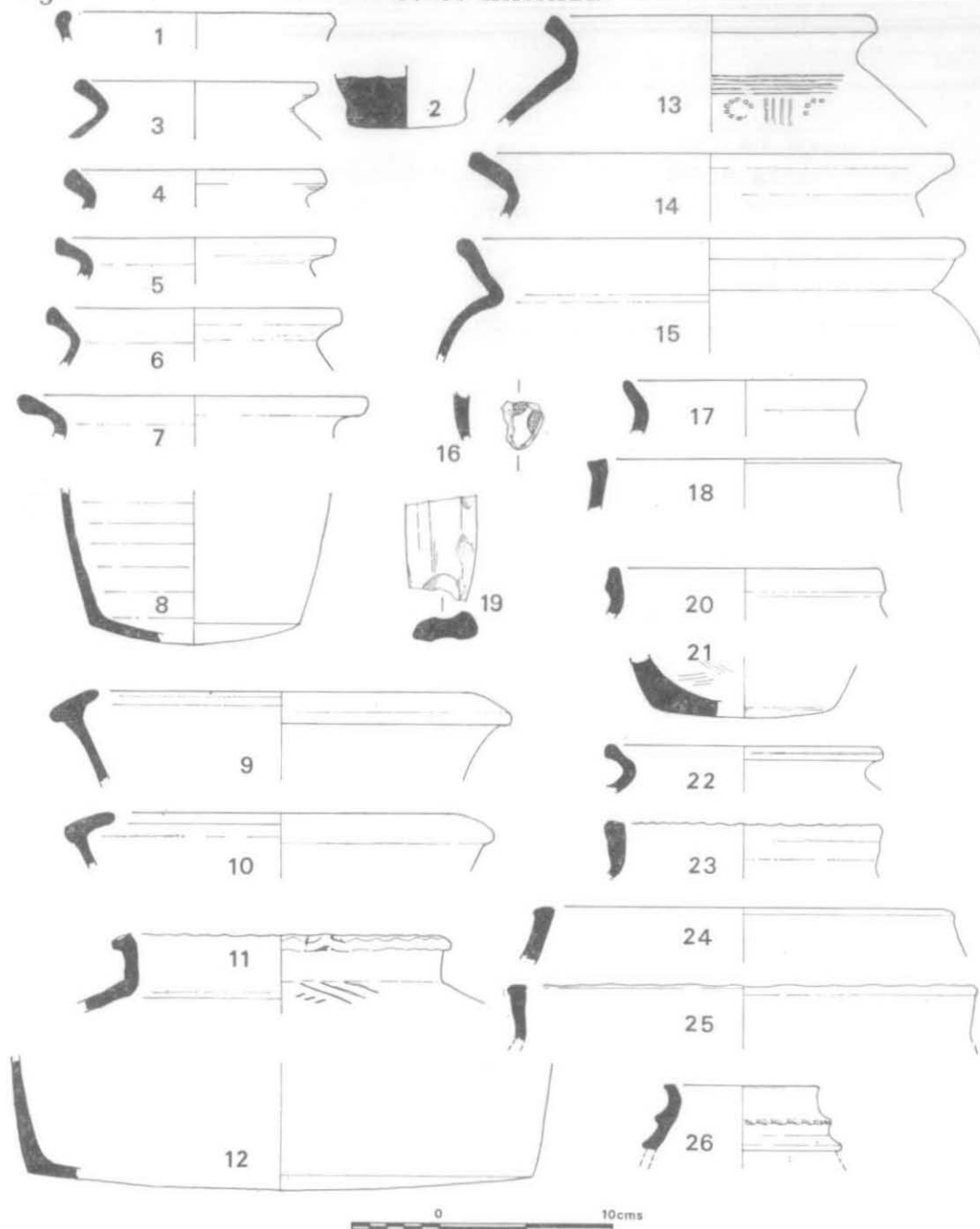


FIG. 12

Pottery from under Oxford Castle Mound and from under the presumed Bailey Bank.  
 1. P8/0/2 B; 2. P32/0/1 B; 3. P23/1/3 R; 4. P23/1/1 R; 5. P23/1/2 R; 6. P49/0/1 R; 7. P23/0/2 R; 8. P35/0/1 R; 9. P51/0/1 R; 10. P51/0/2; 11. P21/0/3 AQ; 12. P28A/0/1 AQ; 13. P56/0/1 AC; 14. P6/0/2 AC; 15. P28A/0/1 AC; 16. P45/0/1 BF; 17. P51/0/3 BF; 18. P31/0/1 BF; 19. P9/0/2 BP; 20. P27/0/1 S; 21. P23/1/4 S; 22. P36/0/1 G; 23. P21/0/1 BR; 24. P6/0/1 BR; 25. P36/0/2 T; 26. P9/0/1 T. Scale  $\frac{1}{4}$ .

that fossil shell was used in the Oxford region. It was suggested ' that the gritting may in fact be added as a crushed shelly limestone temper'.<sup>34</sup>

The usual characteristics associated with this type of ware in the region were noted.<sup>35</sup> The vessels represented were round cooking-pots,<sup>36</sup> and straight-sided bowls/cooking-pots. The cooking-pot rimsherds were :

16 rolled everted (diameters 140-190 mm.) (e.g. FIG. 12, 3, 6).

7 flared everted (diameters 150-180 mm.) (e.g. FIG. 12, 7). The cooking-pot rim forms appeared to be of no chronological significance as they were found in the same contexts (e.g. FIG. 12, 4, 5).<sup>37</sup> One base sherd from a cooking-pot, F28A, joined base sherds from F35 (FIG. 12, 8). The sunken hut, F35, yielded three sherds in this fabric and a series of occupation levels which sealed the hut contained three sherds of Fabric R (SF's 14, 16, 17). Only two rimsherds from straight-sided bowls/cooking-pots were found (FIG. 12, 9, 10).

St. Neot's type Ware accounted for some 15% of the pottery excavated from under the Castle Mound (Trench III, layer 8), compared with 10% from Professor Jope's excavation in 1952.<sup>38</sup> But it was the predominant ware in most of the pits probably sterilized by the Bailey Bank and F23, F28B and F70 contained more than 85% of it,<sup>39</sup> while at 79/80 St. Aldate's this ware never represented more than 26% of the total at any one period.<sup>40</sup> The small percentage of St. Neot's type Ware found under the Mound suggested that this ware had met competition from another major fabric before the building of the Mound (c. 1070).

*Group IB*—Oolitic and other limestone. Fabrics *AC*, *BP*, *BR*

Fabric *AC*, Oxford Early Medieval Ware : bulbous cooking-pots,<sup>41</sup> straight-sided bowls/cooking-pots,<sup>42</sup> shallow dishes<sup>43</sup> and a spout<sup>44</sup> were found in this fabric. The bulbous cooking-pot rims were simple (FIG. 12, 14, 15), diameters ranging between 110 mm. and 280 mm. Bases were convex (diameters 110 mm. to 250 mm.). Cooking-pots in this fabric were found under the Castle Mound and in the area probably sterilized by the Bailey Bank while a straight-sided bowl/cooking-pot with more developed rim (FIG. 13, 6) and two shallow dishes (FIG. 13, 2, 3) were found in the early wash off the Castle Mound (Trench III, layer 5)<sup>45</sup> and in the pits outside the Moat, F63. Incised linear decoration was noted on two sherds (FIG. 13, 1) while a third had both incised linear and stabbed rosette decoration (FIG. 12, 13).<sup>46</sup> Decorated sherds in this fabric were not recovered from certain pre-Castle deposits.

Fabric *AC* was found in pre-Mound contexts in 1952<sup>47</sup> and 1966, and in the 1966 excavations it appeared to have superceded Fabric *R* (St. Neot's type Ware) as the major ware prior to the building of the Castle Mound. It was also present in some features which were probably sterilized by the Bailey Bank and was still a major ware in many of the pits outside the Castle Moat.

One partially glazed ridge tile in this fabric was recovered from the Barbican Ditch,

<sup>34</sup> R. Hunter, unpublished Bradford University M.A. thesis *Neutron Activation Analysis of St. Neot's type Ware* (1975), 79.

<sup>35</sup> E. M. Jope, 'Medieval Pottery in Berkshire', *Berks. Arch. Journal*, I (1947), 54. Fabian Radcliffe, 'Excavations at Logic Lane, Oxford', *Oxoniensia*, xxvi-xxvii (1961-2), 54-8.

<sup>36</sup> Radcliffe, *op. cit.* note 35, 56, Fig. 9, No. 1.

<sup>37</sup> *Ibid.*, 56.

<sup>38</sup> Jope, *op. cit.* note 31, 85.

<sup>39</sup> Radcliffe, *op. cit.* note 35, 58.

<sup>40</sup> Durham, *op. cit.* note 19, Phase 6a.

<sup>41</sup> E. M. Jope, 'The Clarendon Hotel', *Oxoniensia*, xxii (1958), 64, Fig. 17, B1B39.

<sup>42</sup> *Ibid.*, 48.

<sup>43</sup> Radcliffe, *op. cit.* note 35, 62, Fig. 12, No. 9.

<sup>44</sup> Jope, *op. cit.* note 31, 103-4, Fig. 34, Nos. 36 and 37 for form only.

<sup>45</sup> *Ibid.*, 94-5.

<sup>46</sup> Radcliffe, *op. cit.* note 35, 61, Fig. 13, Nos. 6 and 7.

<sup>47</sup> Jope, *op. cit.* note 41, 37.

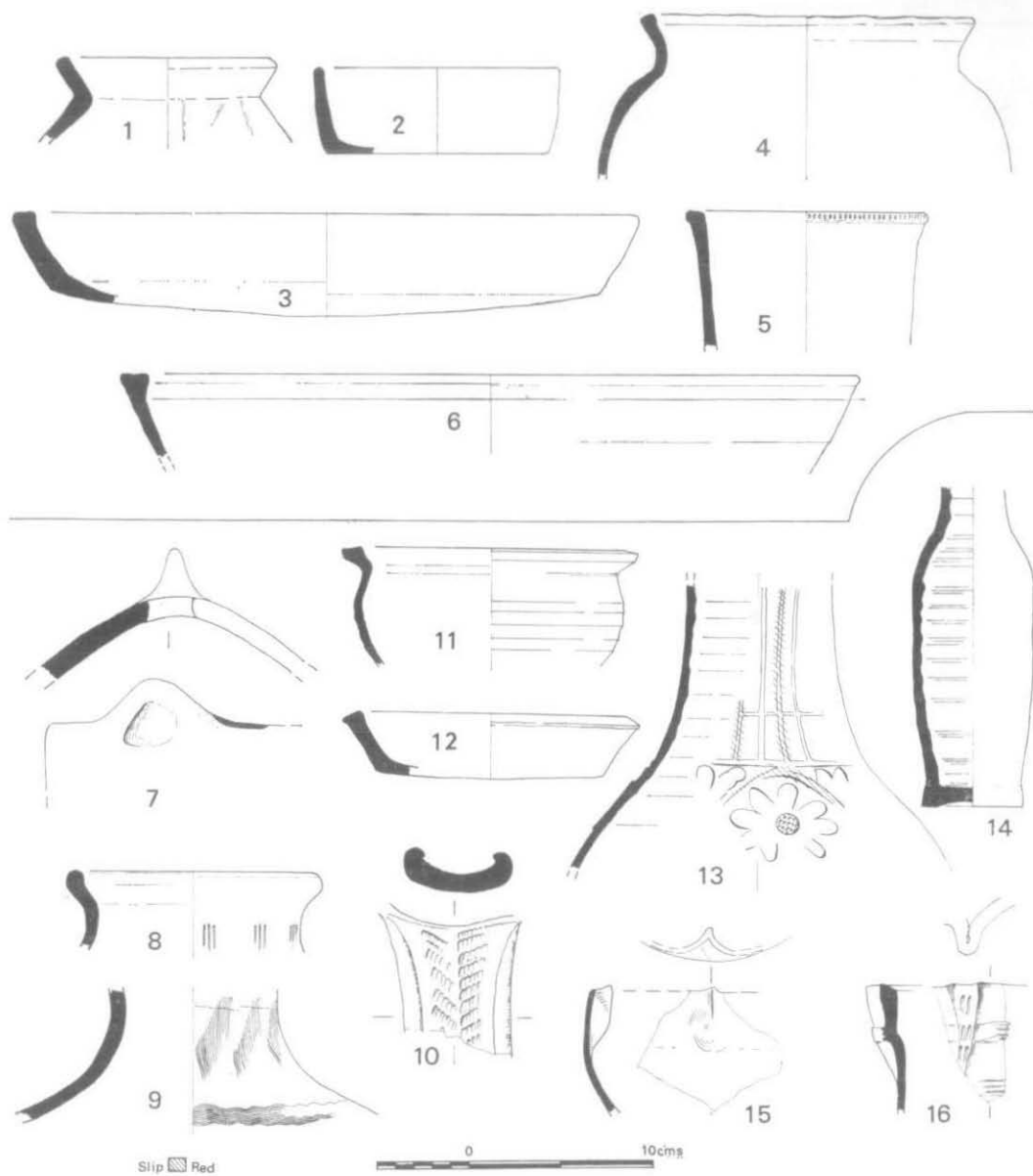


FIG. 13

Pottery from the early wash off the Mound, the pits beyond the Moat, and the Barbican Ditch.

1. P47/0/1 AC; 2. P5/0/4 AC; 3. P63/0/2 AC; 4. P63/0/3 Y; 5. P63/0/1 Y; 6. P5/0/2 AC; 7. WP5/0/9 AC; 8. WP5/0/3 AQ; 9. WP5/0/2 AQ; 10. WP5/0/1 AQ; 11. WP5/0/8 AM; 12. WP5/0/6 AM; 13. WP5/0/4 AM; 14. WP5/0/7 AM; 15. WP5/0/10 BC; 16. WP5/0/11 BC. Scale  $\frac{1}{2}$ .

F5 (FIG. 13, 7).<sup>48</sup> It is unusual to find glaze on non-sandy wares in Oxford although non-sandy glazed fabrics are known from Ascot Doilly<sup>49</sup> and Seacourt.<sup>50</sup>

Fabric *BP*: this hard ware (Moh 7) was wheel-thrown; internal grooves were visible on the internal surface. It was uniformly fired in a reducing atmosphere to grey. This fabric has not previously been recognized in Oxford.

The two sherds were found in F9 and F36 in the area presumed sterilized by the Bailey Bank. F9 yielded an asymmetrical strap handle with a thumb groove down the centre of the external surface and a very distinct thumb mark at the base of the handle (FIG. 12, 19).

Fabric *BR*: about 14 sherds from all areas of the site were found, including two cooking-pot rimsherds (diameters 150 mm. to 240 mm.) and a convex base sherd (diameter 220 mm.). One cooking-pot rimsherd was decorated with light finger tipping (FIG. 12, 23) and the other rimsherd although fragmentary appeared to be slightly inverted (FIG. 12, 24). The base sherd, too small to be illustrated, may have been the base of a jug with a partly glazed internal surface.<sup>51</sup> It was from a disturbed context (Trench III, layer 3). This fabric was not noted at 79/80 St. Aldate's.

*Group II*—Flint with other inclusions. Fabrics *AQ* and *BF*

Fabric *BF*: 16 sherds including two cooking-pot rimsherds (FIG. 12, 18) and one bowl rimsherd (diameter 280 mm.) from F46 were recovered. One rimsherd with a slight thickening at the shoulder is a rim type not usually associated with Oxford wares (FIG. 12, 17). One sherd with a lattice pattern stamp was noted (FIG. 12, 16).<sup>52</sup>

This fabric represented only a small proportion of the wares found associated with the Castle.

Fabric *AQ*: 1 rimsherd with deeply impressed finger tipping on the rim and linear decoration on the shoulder of the cooking-pot (FIG. 12, 11), together with three body sherds and two bases (FIG. 12, 12) were found in this fabric in the area probably sterilized by the Bailey Bank. Deeply impressed finger tipped decoration has previously been thought characteristic of wares associated with a slightly later period.<sup>53</sup> Although no sherds in Fabric *AQ* were found before the 13th century at 79/80 St. Aldate's<sup>54</sup> comparable sherds from Abingdon have been found in probable 11th-century contexts.<sup>55</sup> 36 sherds in this fabric were recovered from the Barbican Ditch; these included four comb-decorated rimsherds, and a shoulder of a pitcher (FIG. 13, 8, 9). A strap handle with stabbed decoration in this fabric was also found (FIG. 13, 10). A similarly decorated pitcher in a similar fabric was found with a well group at 83 St. Aldate's,<sup>56</sup> dated late 14th to mid 15th century by analogy with pottery from 79/80 St. Aldate's.<sup>57</sup> The presence of this type of pitcher in the Barbican Ditch confirmed the evidence from 83 St. Aldate's that such comparatively coarse wares were in use together with the finer late medieval wares.

*Group III*—Sandy and Finer Wares. Fabrics *G*, *S*, *X*, *Y*, *Z*, *AE*, *AG* and *AM*

Fabric *G*, Northampton type Ware :<sup>58</sup> three sherds of this fine fabric including one

<sup>48</sup> E. M. Jope and R. I. Threlfall, 'The Twelfth-Century Castle of Ascot Doilly, Oxon.; Its history and excavation', *Antiq. J.*, xxxix (1959), 265, Fig. 19, K8, possibly similar. E. M. Jope, 'The development of pottery ridge tiles in the Oxford Region', *Oxoniensia*, xvi (1951), 86-88, Fig. 21.

<sup>49</sup> Jope, *op. cit.* note 48 (1959), 256.

<sup>50</sup> M. Biddle, 'The deserted medieval village of Seacourt, Berks.', *Oxoniensia*, xxvi-xxvii (1961-2), 136, Fabric 3.

<sup>51</sup> See notes 21 and 22.

<sup>52</sup> R. L. S. Bruce-Mitford and E. M. Jope, 'Eleventh and Twelfth Century Pottery from the Oxford Region', *Oxoniensia*, v (1940), 47-8, Fig. 8, No. 4.

<sup>53</sup> Jope, *op. cit.* note 41, 48.

<sup>54</sup> Durham, *op. cit.* note 19, Phase 8.

<sup>55</sup> M. Parrington, 'Excavations at Broad Street', *Oxoniensia*, xl (1975), 31, Pit 80, Fabric C.

<sup>56</sup> Durham, *op. cit.* note 19, well group F45.

<sup>57</sup> *Ibid.*, Phase 11.

<sup>58</sup> J. H. Williams, 'A Saxo-Norman Kiln group from Northampton', *Northamptonshire Arch.*, 9 (1974), 46-56.

rimsherd were recovered from F36 and F49 (FIG. 12, 22). Sherds of Fabric G are known from the Clarendon Hotel<sup>59</sup> and 79/80 St. Aldate's.<sup>60</sup>

Fabric S : 15 sherds were found beneath the Castle Mound and the Bailey Bank. These are among some of the earliest sandy wares found in Oxford and may be either hand-made or wheel-thrown. One rimsherd was recovered from the Ditch F27-F17 (FIG. 12, 20), while another rimsherd (diameter 170 mm.) was found in Trench II, layer 7. One much hand-worked base sherd was also found (FIG. 12, 21). Sherds of this fabric from F21 appeared to have suffered secondary burning. Similar sherds have been found elsewhere at 79/80 St. Aldate's<sup>61</sup> and All Saints Church.<sup>62</sup> The variable potting techniques associated with this fabric and its presence on several sites suggest that Fabric S was of local origin.

Fabric X : this fabric is an import to the region and three sherds only were recovered from the area presumed sealed by the Bailey Bank.

Fabric Y, Oxford Medieval Ware : few sherds were stratified below the Bailey Bank though in pits disturbed by a concrete footing, F2, were a partially glazed sherd which was found to be very similar in fabric to the sherd with linear red slip decoration, excavated by Professor Jope in 1952,<sup>63</sup> and an unglazed rimsherd with notched decoration, possibly from a cup (FIG. 12, 26).<sup>64</sup> A lightly thumbbed rimsherd (FIG. 12, 25) and a body sherd were recovered from F36 and two body sherds were found in F49, sealed by the outer clay capping. Although no certain stratified glazed wares in this fabric were found in pre-Castle contexts, glazed sherds in Fabric Y were found in the early wash off the Castle Mound (Trench III, layer 5). The presence of four sherds in this fabric in pre-Castle contexts shows that Oxford Medieval Ware (Fabric Y) was being made before c. 1070 and the presence of unglazed wares such as cooking-pots and pitchers (FIG. 13, 4, 5) in the pits outside the moat suggested that this ware continued in production for a long time afterwards. Both glazed and unglazed wares in this fabric were first noted in Phase 6a at 79/80 St. Aldate's.

Fabric Z, Stamford type Ware :<sup>65</sup> three stratified sherds were found ; one body sherd with thin pale green lead glaze from F28A (Stamford type A)<sup>66</sup> and two body sherds from F31 (Stamford type G) with bright and pale yellow lead glaze—one may have belonged to a straight-sided bowl. Fabric Z was first noted at 79/80 St. Aldate's in Phase 6a.<sup>67</sup>

Fabric AE : 20 sherds including one rimsherd (diameter 130 mm.) and one base sherd (diameter 190 mm.) were found under the Castle Mound and in the surrounding area. It was present at 79/80 St. Aldate's, Phase 4-8. Fabrics AE and S represented the earliest local sandy wares from the site.

Fabric AG : two well glazed wheel-made sherds were found in F63 and F64, beyond the Castle Moat, in association with Oxford Medieval Ware (Fabric Y). This fabric was noted in Phase 6a and subsequent phases at 79/80 St. Aldate's.<sup>68</sup>

Fabric AM, Oxford Late Medieval Ware : 36% of the sherds from the Castle Moat, F12, were in this ware ; sherds were for the most part very fragmentary. The pottery salvaged from the Barbican Ditch, F5, yielded 80% of Fabric AM. They included two

<sup>59</sup> Jope, *op. cit.* note 41, 35-6, B1A1 ; 36, B1B1 and B1B4 for published description of similar fabric.

<sup>60</sup> Durham, *op. cit.* note 19, P180/1/1.

<sup>61</sup> *Ibid.*, Phases 2, 4, 6a and 6b.

<sup>62</sup> B. G. Durham, 'All Saints Church', forthcoming, F75.

<sup>63</sup> This sherd is visually very similar to Winchester Tripod Pitcher ; I am indebted to Katherine Barclay for this information. Cf. Jope, *op. cit.* note 31, 90-2. I am grateful to Professor Jope for showing this sherd to me.

<sup>64</sup> Martin Biddle and Katherine Barclay, 'Winchester Ware', in V. I. Evison *et al.* (eds.), *Medieval Pottery from Excavations. Studies presented to Gerald Clough Dunning* (1974), 146, 156, Fig. 7, Nos. 3-6, for further information on cups.

<sup>65</sup> J. G. Hurst, 'Saxo-Norman Pottery in East Anglia', *Proceedings of the Cambridge Antiquarian Society*, LI (1958), Part III, 37-65.

<sup>66</sup> I am grateful to Kathy Kilmurry for identifying these wares.

<sup>67</sup> Durham, *op. cit.* note 19, histogram.

<sup>68</sup> *Ibid.*, histogram.

double shelled lamps<sup>69</sup> partially glazed in mottled green glaze ; two shallow bowls, poorly finished and glazed on the interior with a green glaze (FIG. 13, 12) ;<sup>70</sup> two porringers (FIG. 13, 11), both partially glazed on the interior ;<sup>71</sup> bottles, partially glazed on the upper part with a thick green glaze (FIG. 13, 14) ;<sup>72</sup> one biconical jug, two bulbous jugs, one with applied strips of clay, alternating red with white and a flower pattern with a grid-stamped red clay centre (FIG. 13, 13) ;<sup>73</sup> 96 baluster bases ;<sup>35</sup> square cut rims ;<sup>74</sup> 33 strap handles, 26 rod handles and two pipkin handles. The lack of cooking vessels in this ware was marked.<sup>75</sup>

About 5% of the body sherds were highly decorated, usually with applied strips of clay in either the same clay as the body or an iron-rich red clay. Other decorated sherds included a face mask,<sup>76</sup> thick red clay spirals,<sup>77</sup> and pine cone scales.<sup>78</sup> Thin patchy green lead glazes predominated.

Fabric *BC*, Tudor Green type Ware : two sherds were recovered from the Barbican Ditch, F5, both sherds evenly glazed on the interior and exterior surfaces with a thick mottled green glaze. The fabric of these local wares was very similar to the sparsely tempered sherds in Fabric *AM* but appeared to be fired to a slightly higher temperature and were always glazed on both surfaces. One sherd was from a lobed chafing dish (FIG. 13, 15)<sup>79</sup> while it was not clear whether the other had been part of a chafing dish or an unusual pitcher rim with pinched out spout. This anomaly was decorated with incised lines both vertically and horizontally (FIG. 13, 16). Similar wares in this fabric are known from Phases 9-11 at 79/80 St. Aldate's.<sup>80</sup>

#### *The Post-Medieval Pottery*

During the 18th and 19th century the Castle Mound suffered extensive pit digging, while the area probably sealed by the Bailey Bank showed little interference since the early medieval period. 56% of the pottery from the Castle Moat was post-medieval in a wide range of fabrics. But the ceramic evidence was fragmentary ; few profiles were reconstructed and the pottery recovered added little to the present knowledge of post-medieval wares in Oxford.<sup>81</sup>

The post-medieval sherds from this site are not described in as great a detail as the medieval, but the positions of the pits are illustrated in the Flow Plan (TABLES 1 and 2). Castle Mound 1966 Trench I, 94 sherds, including 18th-century Tin glaze, Creamware and 19th-century Black Basalt Ware.

Trench II, layers 2 and 3 : seven sherds, similar in date to Trench I.

Trench III, layer 3 : 22 sherds, ranging from the 13th to the 18th centuries in date.

Trench IV, layer 3 : 16 sherds, including Staffordshire Slipware and 18th-century coarseware.

Castle Mound 1972 Trench V, Feature 3 : 19 sherds, including wares of 13th- to 19th-century date.

Castle 1972 Trench II, layer 1/1 : eleven sherds including a 19th-century bottle.

Feature 3 : five sherds, including two sherds in Fabric *R* (St. Neot's type ware) and post-medieval coarseware.

<sup>69</sup> E. M. Jope *et al.*, 'Pottery from a late twelfth-century well filling and other medieval finds from St. John's College, Oxford, 1947' *Oxoniensia*, xv (1950), 57-60, Fig. 21, Nos. 6 and 7.

<sup>70</sup> G. Lambrick, 'Excavations on the Second Site of the Dominican Priory, Oxford', *Oxoniensia*, xli (this volume), P29/1/1.

<sup>71</sup> Durham, *op. cit.* note 19, P111/1/2 ; Lambrick, *op. cit.* note 76, P247/0/1.

<sup>72</sup> Biddle, *op. cit.* note 50, Fig. 19, Nos. 14 and 15 ; 160, Fig. 25, No. 12.

<sup>73</sup> Durham, *op. cit.* note 19, P109/3/1.

<sup>74</sup> Biddle, *op. cit.* note 50, 158, Fig. 25, No. 2.

<sup>75</sup> Lambrick, *op. cit.* note 70, where there is also an absence of this type of vessel.

<sup>76</sup> D. A. Hinton, 'Medieval pottery of the Oxford region', (Ashmolean Museum, 1973), No. 12.

<sup>77</sup> E. M. Jope, 'Some recent finds of medieval pottery', *Oxoniensia*, vii (1942), 73, Fig. 17, No. 8.

<sup>78</sup> Hinton, *op. cit.* note 76, No. 12.

<sup>79</sup> J. G. Hurst, 'Imported pottery from the Saintonge', in *op. cit.* note 64, 250-3, Fig. 11, Nos. 1-2.

<sup>80</sup> Durham, *op. cit.* note 19, Phases 10 and 11.

<sup>81</sup> Personal communication from Mrs. Jo de Goris.

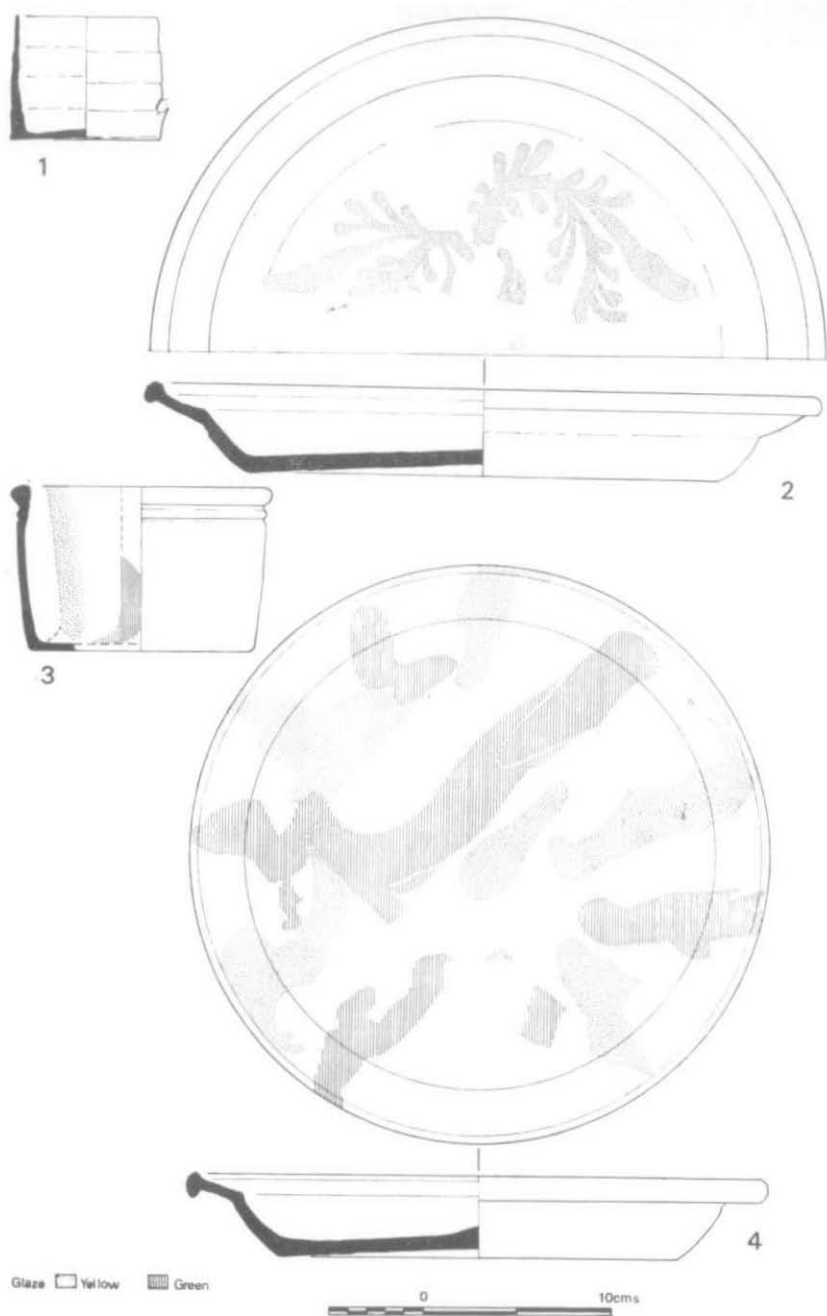


FIG. 14

Pottery from the Castle Moat.

1. P12/0/1 Y; 2. P12/2/4 Post-Medieval; 3. P12/0/2 Post-Medieval; 4. P12/2/3 Post-Medieval.  
Scale  $\frac{1}{4}$ .

Feature 4 : 43 sherds ranging in date from the 12th to the 16th century.

Feature 5 : five sherds including 18th-century earthenware.

Castle 1972

Trench III, Feature 71 : one sherd of post-medieval coarseware.

pipe stems.

Feature 38 : four sherds of 17th-century earthenware and two clay

The wares salvaged from the Castle Moat included post-medieval coarse ware, Tudor Green wares, 15th- to 19th-century stonewares, 18th-century tin glazes, slipware, both Staffordshire and local, and an 18th-century platter and a bowl of Brill type slipware. These were decorated in white slip and glazed with a colourless lead glaze ; copper filings were added to alternate bands to give alternating yellow and green bands (FIG. 14, 3, 4). A second platter with a fern design in white slip was also thought to have originated from Brill (FIG. 14, 2). Pearlwares, saltglaze wares, creamwares and 18th-century earthenwares were also recovered. One cup in Fabric *Y* (Oxford Medieval Ware) was also found (FIG. 14, 1). Throwing grooves were apparent on exterior surfaces. It was thinly glazed on both surfaces with a mottled green glaze. No parallel for this cup is known from Oxford but it was tentatively dated to the 15th century.

#### Conclusion

Four major medieval fabrics (*B*, *AC*, *Y*, and *AM*) have been shown to be chronologically significant at 79/80 St. Aldate's.<sup>82</sup> This sequence seems convincing as it reflects improvements in firing which necessitated the use of fabrics which could be fired at greater temperatures than the shelly limestone wares, and the sequence has therefore been used to aid the ceramic dating of the Castle Mound and its defences.

Fabric *B*, Oxford late Saxon Ware, was shown to be the dominant fabric from the late 8th/early 9th century to the late 10th century at 79/80 St. Aldate's (Phase 1-4). However, only one feature, F32, beneath the presumed Bailey Bank, contained exclusively Fabric *B*. Assuming that the ceramic sequence established at 79/80 St. Aldate's applied to all parts of Oxford, features with Fabric *B* should pre-date features containing Fabric *R* (St. Neot's type Ware), its successor. Therefore, F32 was the earliest dateable feature on the site and was 10th-century or possibly even earlier in date.

Most of the pits in the area probably sealed by the Bailey Bank, and the pits sealed by the clay lining of the Moat, had a preponderance of Fabric *R* with little of Fabric *AC*. The dating of these pits is difficult. Evidence from the Clarendon Hotel<sup>83</sup> had already suggested that Fabric *R* was no longer in such demand in the late 11th century and this was confirmed by the small proportion of this ware found under the Castle Mound in 1952 and 1966. A coin of Eadred (948-954 A.D.) found in association with Pit F23 which contained 90% Fabric *R* suggested a mid to late 10th-century date and this and the high proportion of Fabric *R* from some other Oxford pits notably B4 and C1 at Logic Lane<sup>84</sup> indicates that this ware predominated in some parts of the town possibly from the mid 10th to the mid 11th centuries. But a substantial proportion of this ware (26%) was not noted until Phase 6a at 79/80 St. Aldate's where it was found in association with local glazed wares and was dated to the late 11th century or slightly earlier. The absence of both local unglazed and glazed wares (Fabric *Y*, Oxford Medieval Ware) from the majority of pre-Castle deposits suggested that these features were almost certainly earlier than Phase 6a and the absence of Fabric *B* from the Castle site suggested an intermediate phase between St. Aldate's Phase 4 and 6a. However, the comparisons of two such different sites may be misleading and features containing a predominance of Fabric *R* may be contemporary with Phase 4 at 79/80 St. Aldate's which would agree with the numismatic dating for F23.

The sunken hut, F35, and pits F28B and F70 were probably contemporary with F23. F70 also contained a minute sherd with thick pale green glaze on both surfaces (recorded

<sup>82</sup> Durham, *op. cit.* note 19, histogram.

<sup>83</sup> Joze, *op. cit.* note 41, 59.

<sup>84</sup> Radcliffe, *op. cit.* note 53, 58.



as miscellaneous, see TABLE 3), the fabric and glaze similar to a handle from 44-6 Cornmarket (Fabric *M*).<sup>85</sup> Two evenly glazed non-local sherds were noted in Phase 4 at 79/80 St. Aldate's.

Features sealed by both the inner clay lining, F16, F51, F52, and the outer clay lining of the Moat, F49 and F61, were comparable with the majority of the features in the area of the Bailey Bank.

Fabric *AC* had superseded Fabric *R* in the latest pre-Mound deposits, e.g. Trench III, layer 6, so these deposits were later than the majority of pre-Bailey deposits. The continued presence of Fabric *AC* as seen in the early wash off the Mound, e.g. Trench III, layer 5, indicated that it was still a major fabric during the early life of the Castle. The appearance of Fabric *AC* with another major fabric, Fabric *Y*, in the pits outside the outer lip of the Moat suggested that these pits were dug at the period of transition from Fabric *AC* to Fabric *Y*. The presence of more moulded rim forms and knife trimming on the body of the cooking-pots in Fabric *Y*, together with glazed sherds in this fabric and Fabric *AC*, in F63 and F64, suggested a mid 12th-century or slightly later date. Thus Fabric *AC* was the dominant fabric from the mid 11th century to mid 12th or slightly later, as at Banbury Castle<sup>86</sup> and 79/80 St. Aldate's, Phases 6a-7. The pottery from pits F6 and F9 appeared to be later than the other pits in the area probably sealed by the Bailey Bank, and although both pits were cut by a concrete footing F2, no contamination appeared to have resulted. These features may be contemporary with Phase 6a at 79/80 St. Aldate's. Pit F56 sealed by the clay lining was thought to be contemporary with F6.

The ceramic evidence from the Castle suggested that Fabric *Y* was in use just prior to the building of the Castle and that this ware gradually increased its share of the market, e.g. Trench III, layer 5, during the early life of the Castle, until it became the dominant fabric in the pits outside the Moat, F43, F47 and F63. The presence of these wares in pre-Castle contexts confirmed evidence from 79/80 St. Aldate's Phase 6a that Fabric *Y* was in use by the end of the 11th century.

No certainly primary deposits were salvaged from the Moat, but a high proportion of Fabric *AM*, dated to the early 14th to mid 15th century at 79/80 St. Aldate's<sup>87</sup> may have been a primary deposit or may have been redeposited at a later date. But wares dating from the 16th century to the 18th suggested that the Moat was infilled slowly during this period.

Many fewer baluster type rims were salvaged from the Barbican Ditch than bases and handles, either because salvage work was selective, or because rims were more likely to break into small, less easily recovered sherds. Cooking vessels were noticeably absent.<sup>88</sup>

The high proportion of Fabric *AM* (Oxford Late Medieval Ware) together with coarse wares that can be paralleled from the well group at 83 St. Aldate's<sup>89</sup> suggested a 14th- to mid 15th-century date for the homogeneous group of pottery from the Barbican Ditch. The presence of so many baluster jugs also suggested that this type of vessel may have continued in use throughout the 14th century and even into the 15th, but further evidence from the late medieval period is needed to confirm this.

F24, sealed by the Barbican Ditch, contained 10 sherds (not illustrated in TABLE 3) comparable with those excavated from F1 under the Castle Mound; while 13 sherds from F60 represented pitchers in Fabric *AM* and were probably of similar date to those recovered from the Barbican Ditch.

The pre-Mound deposits excavated in 1966 were found to be comparable with those from the excavations conducted by Professor Jope in 1952,<sup>90</sup> and despite the truncated nature of the pits probably sealed by the Bailey Bank, the earlier pits were thought to be comparable with pits B4 and C1 at Logic Lane, while pits B1A and B1B at the Clarendon

<sup>85</sup> T. G. Hassall, 'Excavations at 44-6 Cornmarket Street, Oxford', *Oxoniensia*, xxxvi (1971), Fig. 5, No. 17/1.

<sup>86</sup> P. J. Fasham, 'Banbury Castle', *Oxoniensia*, xxxviii (1973), 329, 337, Fabric 1.

<sup>87</sup> Durham, *op. cit.* note 19, Phases 10 and 11.

<sup>88</sup> Jope, *op. cit.* note 69, 65.

<sup>89</sup> See note 46.

<sup>90</sup> Jope, *op. cit.* note 31, 83-98.

TABLE 3 Oxford Castle Fabric Types

Group/ Fabric	CASTLE MOUND													PRE-BAILEY						
	II L6	L7	III L5	L6	L8	IV L9	V F1	F2	F6	F7	F9	F21	F23	F25	F26	F27	F28A	F28B	F29	F31
IA B					3		15					5	1					8		
R					16							64	94	100	100		40	85		
IB AC	100		50	63	63		62	100	33	50		5					17			
BP												17								
BR			3	4	3		8		10			17								
II AQ												8					14			
BF																			100	33
III G																				
S		100	6	19	5	100						8	4		100	6				
X									5							3				
Y									5											
Z												17								
AE			6	4	3					50							14			67
AG																				
AM																				
BC																				
Misc.			13	7					5								3	8		
Total Sherds	1	1	32	27	38	1	13	1	21	2	6	39	66	2	1	1	35	13	1	3

PRE-BAILEY (cont'd.)										PRE-INNER MOAT LINING			PRE-OUTER MOAT LINING			OUTSIDE MOAT									
F32	F33	F35	F36	F66	F68	F69	F70	L73	F16	F51	F52	F56	F49	F61	F18	F19	F20	F43	F45	F46	F47	F48	F62	F63	F64
100	25		5																						
	50	75	45	100	100	100	86	100		62	50	33	60							33	3				
			14				7		100			44	13	100				20			32	50		40	50
			5							15															
										8		11	7		100					25	3				
		25		14								7							50	33	5				
				9			3																		
													13			100	100	80	25	33	54	50	100	46	17
	25		5							15	50	11									3			12	17
																							2		17
			5				3																		
10	4	4	22	2	1	1	29	4	2	13	2	9	15	1	1	1	1	10	8	3	37	2	1	65	6

Hotel were comparable with the pre-Bailey features.<sup>91</sup> Pits 27 and 35 at 44-6 Cornmarket Street were probably earlier than the majority of pre-Bailey features and may be contemporary with F32.<sup>92</sup> It was not easy to equate the Castle excavations with those of St. Aldate's. It is as yet not clear whether the earliest features under the Bailey Bank were comparable with Phase 4 at 79/80 St. Aldate's or whether they date to an intermediate period between Phases 4 and 6a. The later features under the Castle Mound and in pre-Bailey deposits may be comparable with Phase 6a: it was thought that Phase 6a was comparable with the early wash off the Castle Mound, Trench III, layer 5, while the pits outside the ditch were comparable with Phase 7. However, further work in other parts of the town is obviously necessary to establish whether a ceramic hiatus did exist at St. Aldate's in the early 11th century, or whether the sites are contemporary and the difference in the pottery is because of different activity or occupation on them.

The vessels from the pre-Castle deposits were predominantly cooking-pots; a variety of local wares was available. This suggests an increasing choice of pottery in comparison with earlier periods where the shelly limestone wares (Group IA) tradition predominated.<sup>93</sup> The small proportion of imported wares confirmed previous evidence that Oxford was engaged in some long-distance trade involving pottery before 1070.<sup>94</sup>

The Castle site produced a fabric type series that in general could be correlated with the St. Aldate's fabric type series, but two new fabrics were added.<sup>95</sup> With the evidence from the Castle excavations it was possible to date the transition of shelly limestone wares (Fabrics B and R, Group IA) to oolitic and other limestone gritted wares (Fabric AC, Group IB) to pre-1070, but the significance of Fabric R (St. Neot's type Ware) in Oxford in the late 10th/early 11th century is as yet not clear. But it seems surprising that the long tradition associated with shelly limestone wares was so rapidly superseded at 79/80 St. Aldate's as the abundance and ease of availability of shelly limestone in the Oxford Region was undiminished. The rapid change may have been necessitated by a change in technology, or perhaps by some development in the pottery trade which may in turn account for the apparent divergence of ceramic evidence during the 11th century at St. Aldate's and the Castle site.

#### STONE OBJECTS. By MARTIN HENIG

- 1 Piece of micaceous schist hone (Castle, late Saxon pit F36, sf 22) 31 mm. Other hones of this type have been found before under the Castle Mound.<sup>96</sup>
- 2 Hone (Castle, late Saxon pit F23, sf 23). Grey green fine sandstone with bi-valve fossils rounded at one edge, another has apparently been roughly cut at right-angles. Clear evidence of sharpening on two flat faces. 77 mm.
- 3 Hone (As 1, sf 25). Fine red sandstone, sides uneven, main planes flat. 100 mm.
- 4 Faceted lump of chalk (Castle, late Saxon pit F28A, sf 4) 30 mm. by 35 mm. A find diagnostic of late Saxon occupation in Oxford.<sup>97</sup> The use of these pieces of chalk remains uncertain, although they generally show signs of use as rubbers or polishers. They may have been employed in some manufacturing process.
- 5 Piece of (?) lower quernstone (Castle, late Saxon pit F32, sf 27) 120 mm. across; 20 mm. thick.

<sup>91</sup> Jope, *op. cit.* note 41, 14-15.

<sup>92</sup> Hassall, *op. cit.* note 85. The pottery from Pits 27 and 35 was originally thought to date to the eleventh century but recent evidence now suggests that they date to the tenth century or earlier.

<sup>93</sup> Durham, *op. cit.* note 19, Phases 1-4.

<sup>94</sup> Jope, *op. cit.* note 41, 34-5, 40-4.

<sup>95</sup> Durham, *op. cit.* note 19, Fabrics BR and BP.

<sup>96</sup> E. M. Jope, 'Late Saxon pits under Oxford Castle Mound', *Oxoniensia*, xvii/xviii (1952 and 1953), 98, Fig. 38A.

<sup>97</sup> Cf. E. M. Jope, *op. cit.* note 96, 98, Fig. 38B and C for earlier discoveries of chalk lumps from the Castle Mound. Also J. Munby, '126 High Street. The Archaeology and History of an Oxford House', *Oxoniensia*, xl (1975), 303, where examples from elsewhere in the City are cited.

- 6 Piece of worked stone (Barbican Ditch WF5, sf 71). One side is rough but the other which is curved shows a smooth finish. Perhaps part of a quern or mortar. 170 mm.  
 7 Piece of stone bowl or mortar with well smoothed sides (As last, sf 74). Height 133 mm.; width of rim 35 mm.<sup>98</sup>  
 8 Part of lower stone of (?) Purbeck quern, tooled on the outside and smooth within (As last, sf 232). Side projection, width of rim 20 mm.; projection from rim 25 mm.<sup>99</sup>  
 9 Length of sawn stone (?) part of a moulding (Castle, Moat 12/2, sf 49). 165 mm.

## WORKED FLINTS. By ANDREW SHERRATT

Neolithic or Bronze Age material came from the east part of the Castle, secondarily incorporated in later contexts. The large size and obvious character of the pieces submitted suggests that many less obvious worked flints would not have been recovered, so there may have been a larger body of material. The quality of 3 suggests possibly chalk-flint; the others gravel-flint. These flints are indicative of some 3rd/2nd-millennium activity in this area which is not unexpected.

- 1 Distal end of blade (post-medieval pit F3, sf 1) 7 mm. thick at median ridge.  
 2 Flake-blade (early medieval pit F46, sf 12) 4.7 cm. by 2.8 cm. with deep platform (1.1 cm.); possible utilization at distal end of one side edge.  
 3 Broad, flat blade (early medieval pit F45, sf 45) 8 cm. by 3.3 cm., 5 mm. thick; prepared platform; apparent marks of use on side edges.  
 4 Irregular blade (late Saxon pit F23, sf 20) 6.4 cm. by 2.2 cm., triangular section up to 8 mm. thick; poor flint.

## BUILDING MATERIALS

Burnt daub with the impression of wattle was found in four of the late Saxon pits, F28B, F31, F36 and F53 in the eastern part of the Castle (sf 26, 33, 34 and 40). There was a particularly large quantity in pit 36. Further daub was found in one of the early medieval pits (F20, sf 3). From the Barbican Ditch, WF5, there was a piece of limestone roofing tile with a circular hole containing a circular peg, width c. 5 mm., and a further fired clay tile also with a round hole containing a rectangular wooden peg.<sup>100</sup> The tile pegs have been identified by Mr. M. Robinson as oak (*Quercus* sp.).

## A ROUND HALFPENNY OR FARTHING OF KING EADRED, FOUND AT THE CASTLE AND OF THE OXFORD MINT. By D. M. METCALF

A 10th-century Anglo-Saxon coin of considerable rarity and interest was found beneath the eastern defences of the Castle at Oxford, during the excavation of a rubbish- or cess-pit, F23, into which the coin had apparently fallen.<sup>101</sup> When found it was very heavily encrusted and could only conjecturally be recognized as a coin at all. It was brought to the Ashmolean Museum for identification, and was very skilfully and patiently cleaned there by Miss O. Rennie, mainly by mechanical means under a binocular microscope.<sup>102</sup> This revealed a tiny silver coin of King Eadred (946-55), which was almost certainly minted in Oxford, as it is by the Oxford moneyer Wynnem. The coin was the subject of a Treasure Trove Inquest held at Oxford in 1972. It was adjudged the property of

<sup>98</sup> Cf. P. A. Rahtz, *Excavations at King John's Hunting Lodge, Writtle, Essex 1955-57* (1969), 81, Fig. 43, No. 12A.

<sup>99</sup> Cf. M. Biddle, 'The Deserted Medieval Village of Seacourt, Berkshire', *Oxoniensia*, xxvi/xxvii (1961-2), 186, Fig. 32, No. 15.

<sup>100</sup> Cf. M. Henig in T. Tatton-Brown, 'Excavations at the Custom House Site, City of London', *Trans. London and Middx.*, xxvi (1975), 153, No. 58. I am grateful to Dr. M. Henig for this reference.

<sup>101</sup> For the details of the coin's discovery, see above p. 248.

<sup>102</sup> The process of removing the corrosion by pressure with a fine point was assisted by brushing with ammonium thiosulphate.

Oxfordshire County Council, the owners of the site, and thus passed into the keeping of the Oxfordshire Department of Museum Services. It has been placed on temporary loan in the Ashmolean Museum.

The coin is in very fine condition and is presumed to be a halfpenny, but its weight is now only 0.287 g. (4.4 grains), whereas Eadred's pennies weigh 20-22 grains, and the few known halfpennies weigh 8½-9 grains. Although 4½ grains would be a most appropriate weight for a farthing, there is a general reluctance among numismatists to accept such an interpretation. It is considered preferable to suppose that the coin has lost a substantial fraction of its original weight through corrosion and leaching in the ground. The arguments will be examined in more detail below. The coin is obviously brittle and corroded, and has unfortunately cracked at the edge, as may be seen from the photographs (PL. VIII, A : natural size, and enlarged × 2).

In the 10th century, the silver penny was virtually the only coin struck in England, other denominations being produced in minimal quantities. If a smaller sum of money than a penny was required, a coin was cut into two equal halves—or even into quarters. Such halves and quarters were much more freely used than the hoard evidence might lead one to imagine, since fractions were carefully excluded from hoards, and are known mainly from the slender evidence of stray losses.<sup>103</sup>

In addition to cut halves there are also very rare round halfpence of Alfred (871-99), Edward the Elder (899-924), Eadmund (939-46), Eadred, and Eadgar (959-75)—but none among the tens of thousands of surviving coins of Aethelraed II (979-1016) or Cnut (1016-35).<sup>104</sup> After a period of three-quarters of a century the issue of round halfpennies was abandoned, apparently, because cut halfpennies were preferred.<sup>105</sup>

Blunt was able to list only 17 surviving specimens of round halfpence from the 10th century, including two cut halves (*i.e.* farthings).<sup>106</sup> Among these were five of Eadred—as against hundreds of pence surviving from the reign. A listing of them offers several clues to their interpretation :

- 1 Standard 'two-line' reverse type, ornamented with 3 crosses and 2 trefoils. Moneyer Biorhtulf. Mint : very probably Bath. 8.7 grains. Found at Tewkesbury.<sup>107</sup>
- 2 Cut or broken halfpenny (*i.e.* farthing?). Similar. 4.25 grains.<sup>108</sup>
- 3 Unique obverse type of twelve-rayed ornament. Moneyer Mangod. Mint : Winchester?. 8.9 grains.<sup>109</sup>
- 4 Standard type. Moneyer Gilles. Mint : presumably Chester ; Gilles also struck for Howel Dda. From the Chester (1950) hoard, No. 260. 8.6 grains.<sup>110</sup>
- 5 Same design as a coin of Edward the Elder (Brooke Type 4, BMC Type VII).

<sup>103</sup> The classic site for fractions is Meols, in the Wirral. The finds recovered over many years are summarized in D. M. Metcalf, 'Some finds of medieval coins from Scotland and the north of England', *Brit. Numismatic J.*, xxx (1960-1), 88-123, at pp. 111 ff. Cf. also the Dunwich finds, consisting mainly of cut halves and quarters, for which the same general explanation suggests itself : R. Seaman, 'A further find of coins from Dunwich', *Ibid.*, xli (1972), 27-33.

<sup>104</sup> The most complete type-catalogue is J. J. North, *English Hammered Coinage*, I (1963).

<sup>105</sup> The weight-standard of the round halfpenny was slightly less than half that of the penny, presumably to compensate the mints for the extra trouble and expense involved in making the smaller coins. Even so, it would seem that they were reluctant to make them ; and the public may have preferred cut halves on the grounds that their intrinsic value was higher. For details, see R. H. M. Dolley, 'A new type for the halfpenny of Eadred', *Brit. Numismatic J.*, xxviii (1955-7), 182-4.

<sup>106</sup> C. E. Blunt, 'Tenth century halfpennies and C. Roach Smith's plate of coins found in London', *Brit. Numismatic J.*, xxxi (1962), 44-8.

<sup>107</sup> Formerly in the A. E. Bagnall collection, ex-Sotheby, 17 November 1913, lot 426, Pl. XII (Carlyon-Britton collection ; ex-Murchison, Shepherd, and Rashleigh collections). North, *op. cit.* note 104, 721, but type as North 706, not 708. Blunt, *op. cit.* note 106, No. 7 ; L. V. Grinsell, *The Bath Mint, An Historical Outline*, London (1973), 15. A moneyer Biorhtulf also coins a halfpenny for Eadmund.

<sup>108</sup> Dolley, *op. cit.* note 105. Blunt, No. 9.

<sup>109</sup> *Brit. Numismatic J.*, xxv (1945-8), Proceedings, p. 98 (this coin exhibited and discussed by Mr. H. A. Seaby) ; Sotheby, 17 March 1955, lot 30 (this coin) ; North 722 ; R. H. M. Dolley, *op. cit.* note 105, gives a full publication and discussion. Blunt, No. 10.

<sup>110</sup> C. E. Blunt and R. H. M. Dolley, 'The Chester (1950) hoard', *Brit. Numismatic J.*, xxvii (1952-4), 127-60, at pp. 135 f. Blunt, No. 8.

Moneyer Hildulf. Cut half (*i.e.* farthing). From the Chester (1950) hoard, No. 261. 3.8 grains.<sup>111</sup>

Other round halfpennies of Eadgar deliberately reproduce Alfredian designs of at least sixty years earlier. Knowledge of them presumably derived from official records, for they were mostly small-scale issues in the first place, and would not have survived in circulation for that length of time.<sup>112</sup>

The first half of the 10th century saw, in the context of burghal development, a hesitant renewal of the traditions of urban life at a few places in the south and west, particularly Winchester, Exeter, Bath, Gloucester, and—apparently—Oxford; and this new political and civic consciousness is reflected in small issues of coinage bearing city names, and sometimes of exceptional iconographic interest and quality, among a far greater mass of coinage giving no indication of the places of issue.<sup>113</sup> One may recall the much-debated OHSNAFORDA coins of which the prototype at least, we may now believe, was minted at Oxford late in Alfred's reign, even if the issue is known at the present day mainly from Danelaw imitations on a lighter weight-standard. Bernwald, the moneyer who struck the coins at Oxford, went on to produce stylistically very similar coins for Edward the Elder, presumably also in Oxford.<sup>114</sup>

One may venture the further suggestion that the new stirrings of civic consciousness prompted the issue of halfpence, for use as small change. The Bath halfpennies, found at Tewkesbury and Cheddar,<sup>115</sup> already hinted that such coins tended not to circulate far and wide in the same way as pennies; and the Oxford find of an Oxford-minted coin helps to confirm that conclusion.

The new coin is by the moneyer Wynnelm, who worked at Oxford under Aethelstan, Eadred, and Eadwig.<sup>116</sup> It is of the standard 'two-line' type, with obv. +EADREDREX around a cross pattée; rev. Wynne/lmmo (see FIG. 15) separated by a central line of 3 crosses, which are weakly struck but very neatly engraved. Above and below the moneyer's name is a group of 3 dots. A careful study of the reverse die under magnification shows clearly enough the ligated NE and the rather small L. There is a long titulus above the letters MO (*monetarius*) which does not show up too well in the photograph—on which, however, the bars of the two N's can be seen. The serif on the left-hand limb of the Y is turned sideways, suggesting, perhaps, a curved stroke. These details may be compared with very similar traits, and an absolutely identical reverse inscription and type, on Wynnelm's penny for Eadred, the obverse of which carries the mint-signature OX VRBIZ<sup>117</sup> (The same spelling occurs on a penny of Wynnelm for Aethelstan).<sup>118</sup> Another very similar

FIG. 15

<sup>111</sup> *Ibid.*, Blunt, No. 11.

<sup>112</sup> Dolley, *op. cit.* note 105.

<sup>113</sup> For a general background to the tenth century coinage, see R. H. M. Dolley, *Anglo-Saxon Pennies* (1961), 20-4.

<sup>114</sup> The OHSNAFORDA coinage has been reinstated by C. S. S. Lyon in a Presidential Address to the British Numismatic Society: see *Brit. Numismatic J.*, xxxix (1970), at pp. 196 f. and Pl. IX, where the two coins by Bernwald from near-duplicate dies are illustrated. See also A. Anscombe, 'The inscription on the Oxford pennies of the *Ohsnaforda* type', *Brit. Numismatic J.*, III (1906) 67-100 at pp. 86-8, for an exhaustive philological discussion—which turns on the acceptability of *hs* = *x*. I am indebted for this last reference to Mr. Lyon, who kindly drew my attention to it.

<sup>115</sup> Grinsell, *op. cit.* note 107, 14.

<sup>116</sup> C. L. Stainer, *Oxford Silver Pennies from A.D. 925-A.D. 1272* Oxford Historical Society, XLVI (1904), gives coins of Eadmund and Eadred by the moneyer Reingrim to Oxford. This attribution is dismissed in C. E. Blunt, 'The crowned bust coinage of Edmund, 939-946', *Brit. Numismatic J.*, XL (1971), 17-21.

<sup>117</sup> Stainer, *op. cit.* note 16, 7. Brooke, *English Coins*, Pl. XV, 6.

<sup>118</sup> *BMC* 78.

penny, for Eadwig, has the 'three line' reverse type *Wynne/Oxna/lmmo*, with a triple ligation of NNE (see FIG. 15).<sup>119</sup>

To return to the question of the weights of the coins. The three halfpence of Eadred listed above, for which weights are available, are remarkably close to each other in weight, lying between 8½ and 9 grains. And the cut halves are close to half the same weight. Three halfpennies of Edward the Elder weigh 9.3, 9, and 8 grains; two of Eadmund weigh 9.1 and 8.4 grains; the Eadwig halfpenny in the Chester hoard weighs 9.7 grains, and those of Eadgar from the same find weigh 7.0 grains and 10.8 grains, while another weighs 8.4 grains. It would seem that care was taken to control the weight-standard of halfpence within narrow limits, and also that most surviving specimens are still close to original weight. It is, no doubt, possible that the Oxford find, weighing 4.4 grains, has been much reduced in weight by corrosion and leaching, but the argument looks like special pleading.<sup>120</sup> In the later middle ages, halfpence and farthings were sometimes struck from the same dies, and numismatists have found great difficulty in deciding whether certain individual specimens were rather light halfpence or rather heavy farthings.<sup>121</sup> In principle, if one had enough specimens, a histogram should show two peaks; but the 15th-century coins were not quite as carefully weight-adjusted as those of the 10th, and they suffered a great deal more wear and tear.

Round halfpennies were struck quite regularly during the first half of the 10th century, although in small quantities. Many different moneys are known to have produced them. They have evidently had a low survival rate; and the survival rate for farthings is likely to have been at least as low. From Eadred's reign we know of three round halfpence and two cut farthings, and the Oxford find. Its weight suggests that it may be a round farthing, and if so it is unique for the 10th century. Opinion will inevitably remain divided on its interpretation, but whether it is a halfpenny or a farthing, it is a most welcome and important find.

#### Other Coins from the Castle Site :

- 1 Scotland. Charles I. Twopence or turner. 2nd issue (1632 or later). Crown with central cross flanked by 2 lis. Stewart 237. Piece missing from edge (as struck?). 0.65 g. (Castle Mound IV, sf 2).
- 2 England. William III, halfpenny, 1695-8. Peck 642? Well worn, 7.60 g. (Castle Mound IV, sf 1).
- 3 George II, halfpenny. Corroded and worn. 6.17 g. (Castle Moat, F12, sf 44).

#### SLAG

Pieces of slag were found in three pre-Castle contexts; Castle Mound III, layer 8 (sf 4) and the eastern part of the Castle pits F28A and F34 (sf 10 and 29). A further piece of slag came from an early medieval pit, F63, beyond the Castle Moat (sf 15). No analysis of this slag has been carried out.

#### WOOD. By MARTIN HENIG

- 1-3 Pins, 96 mm. (FIG. 16, 1) and 134 mm., Barbican Ditch WF5 (sf 43 and 44), and 118 mm. Castle Moat F12 (sf 149). Compare with examples from the Custom House, London.<sup>122</sup>
- 4 A wooden object swollen at one end and narrowing markedly at the other (FIG. 16, 2)

<sup>119</sup> Chester (1950) hoard, No. 290.

<sup>120</sup> Cf., for example, the weights of the Dunwich coins (note 103 above).

<sup>121</sup> L. A. Lawrence, 'Halfpence and farthings of Henry VIII', *Numismatic Chronicle*, 4th Ser., XIX (1919), 265-8.

<sup>122</sup> M. Henig in T. Tatton-Brown, 'Excavations at the Custom House Site, City of London', *Trans. London and Middx.*, xxv (1974), 200 f. Nos. 251-6; *Ibid.*, xxvi (1975), 153, Nos. 28-53.

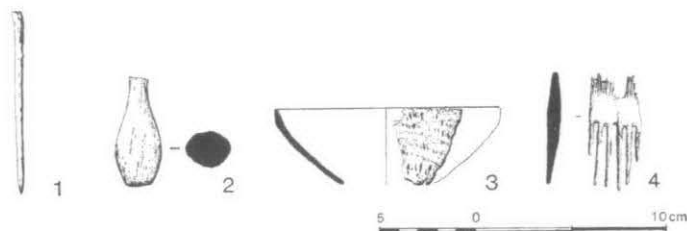


FIG. 16

Wooden Objects. 1. Pin, No. 1; 2. ?Peg, No. 4; 3. Bowl, No. 5; 4. Double sided Comb, No. 10. From the Barbican Ditch, WF5, thirteenth to fifteenth centuries. Scale  $\frac{1}{4}$ .

Barbican Ditch WF5 (sf 41). Probably a peg or bung, 58 mm. Similar objects from Southampton and London.<sup>123</sup>

5-9 Fragments from simple wooden bowls, all of the straight-rimmed type: 50 mm. (FIG. 16, 3), 37 mm., 75 mm., 50 mm. Barbican Ditch WF5 (sf 42, 45, 46, 235); 62 mm. Castle Moat F12 (sf 127). Compare with various examples from London<sup>124</sup> and Southampton.<sup>125</sup>

10 Part of a double-sided comb (FIG. 16, 4) Barbican Ditch WF5 (sf 40); one side with long teeth widely spaced and the other side with the teeth short and closely packed. Width 60 mm.<sup>126</sup>

11 Piece of turned wooden disc with double chamfer around the top edge; Castle Moat F12 (sf 203). ?Trace of paint or varnish. Part of a barrel top or a trencher.<sup>127</sup> 162 mm. Post-medieval.

12 Bobbin, lathe turned; As last (sf 47). 113 mm. Post-medieval.

In addition to the wooden objects various fragments of wood were recovered from the Barbican Ditch, WF5, and the associated pit, WF28. This wood has been identified by Mr. M. Robinson who reports that the wood from the Barbican Ditch was mostly oak (*Quercus* sp.), with some beech (*Fagus* sp.), willow (*Salix* sp.), and elder (*Sambucus* sp.). In the pit there were many species present including pine (*Pinus* sp.), rose (*Rosa* sp.), sloe or plum, etc. (*Prunus* sp.), elm (*Ulmus* sp.), oak (*Quercus* sp.), poplar or willow (*Populus* sp. or *Salix* sp.), ash (*Fraxinus* sp.) and perhaps holly (cf. *Ilex*). Some of the oak and beech seems likely to have come from structural timbers, the others are in too fragmentary a condition to say. The two pieces of charcoal (sf 30) identifiable as oak (*Quercus* sp.) were from the late Saxon pit F28A, sealed beneath the Bailey Bank.

#### THE TEXTILES. By ELISABETH CROWFOOT

It is only in recent years that any attention has been paid to domestic textile remains from medieval excavation sites. Precious fabrics, saved for their rich materials, the beauty of their workmanship or their religious associations have been preserved in cathedrals, churches or museums; but the woven goods of every day life, buried, lost or thrown away on scrap-heaps, must in many past excavations either not have been noticed, or discarded as 'old rag' of no possible interest. Matters are now improving, with results from Sweden<sup>128</sup>

<sup>123</sup> *Ibid.*, 153, Fig. 25, No. 27. C. Platt and R. Coleman-Smith, *Excavations in Medieval Southampton, 1953-1969*, II, 231 and Fig. 229, No. 1945.

<sup>124</sup> G. C. Dunning, 'A Fourteenth-Century Well at the Bank of England', *Antiq. J.*, xvii (1937) 416 ff., Fig. 2; Henig in *op. cit.* note 122 (1974), 201 and Fig. 42, No. 246; (1975), 153 and Fig. 25, No. 12.

<sup>125</sup> C. Platt and R. Coleman-Smith, *op. cit.* note 123, 228 ff., Nos. 1613, 1615, 1617 and 1627.

<sup>126</sup> Cf. M. Henig, *op. cit.* note 122 (1975), 153 and Fig. 25, No. 8, and C. Platt and R. Coleman-Smith, *op. cit.* note 123, 231 and Fig. 229, No. 1941.

<sup>127</sup> Cf. P. V. Addyman and J. Marjoram, 'Post-Medieval Finds from St. Neots', *Post-Medieval Archaeology*, 6 (1972), 94 and Fig. 41, No. 27.

<sup>128</sup> Anne Marie Franzén and Agnes Geijer, 'Textile Finds from Excavations in Swedish Towns, 1960-66', *Res Medievales*, III (1968), 130-1.



and Poland,<sup>129</sup> and in England with woven fabric remains from the excavations at Winchester gradually mounting up, and now adding some interesting information.

There are only six textile items from the 1970 Oxford excavations, one from a burial at St. Budoc's church which must date from before 1216, and five from the area of Westgate and the Barbican Ditch, WF5, dated to the 13th to mid-15th centuries. This area was waterlogged, providing the right conditions for the preservation of animal fibres, wool and leather, but owing to some fortunate chemical accident, vegetable bast fibres were also found in reasonable condition, in contrast to the situation in the Scandinavian bog finds, or at Gdańsk, where, as might be expected from the low marshy site, woollen goods were found in profusion, but much of the linen and hemp was destroyed by humic acids.<sup>130</sup>

The Westgate pieces are obvious domestic debris, two of which provide details from clothing. No. 1 (PL. VIII, B ; FIG. 17, 1) appears to be part of some form of headgear, its half-circle curve suggesting the edge either of a cap or the brim of a hat, most probably, from its size, belonging to a child. The narrow strip of woollen material is too matted and brittle for dissection, and may be either a heavily fulled woven fabric, or a felt. The edge is neatly bound with a fine twill binding or ribbon of a bast fibre, a lighter colour than the naturally pigmented wool, perhaps a brown cap with a binding of yellow or beige.

No. 2 (PL. VIII, C ; FIG. 17, 2) is from a narrow woollen braid made with five strands, the closed starting loops of one end of the work being preserved. It was found near many shoes, and was probably part of a shoelace. The technique is still a favourite for braids ; medieval examples, employing more threads and several colours, were found at Gdańsk, and a much wider band in the Mammen find in Denmark, dated c. 1000 A.D.<sup>131</sup>

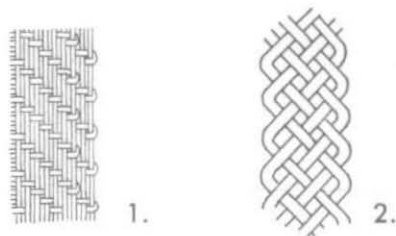


FIG. 17

1. Selvedge and weave of binding ; 2. Five strand braid. From the Barbican Ditch, WF5, thirteenth to fifteenth centuries.

A small fragment of red woollen cloth (No. 3) found with the braid, a napped or fulled tabby weave, would have been a suitable fabric for any outer garment. Two rather coarser 14th-century examples from Nottingham<sup>132</sup> are of similar weave, as is also part of the fabric of the 'Rogart shirt' from Sutherland.<sup>133</sup> In all these pieces the spinning is Z in one system, probably the warp, and S in the other, a combination particularly useful in a fabric intended to be napped, since the fibres of both yarns will lie in the same direction and be easier to raise, though the practice is also common in unnapped twills, where it is considered to emphasize the surface texture of the weave. Kamińska and Nahlik have demonstrated from the plentiful woollen material on their sites that the proportion of tabby weaves decreased from the 11th to the 13th century, giving place to twills,<sup>134</sup> particularly

<sup>129</sup> Janina Kamińska and Adam Nahlik, 'Études sur l'industrie textile du Haut Moyen Age en Pologne', *Archaeologia Polona* III, Wrocław (1960), 89.

<sup>130</sup> Kamińska and Nahlik, *op. cit.* note 129, 91-92.

<sup>131</sup> Margrethe Hald, *Olddanske Tekstiler* Copenhagen (1950), Figs. 246 and 247. Janina Kamińska and Adam Nahlik, *Włókiennictwo Gdańskie w.X-XIII Wieku*, Acta Arch. Universitat L. Lodziensis. 6, Lodz (1958), 98, Fig. 43.

<sup>132</sup> Castle Museum, Nottingham ; from Pepper Street, Nottingham and Attenborough, Notts. The latter piece has part of a seam.

<sup>133</sup> A. S. Henshall and S. Maxwell, *Early Textiles found in Scotland*, National Museum of Antiquities Publications (1954), 86.

<sup>134</sup> Kamińska and Nahlik, *op. cit.* note 129, 115-17, Figs. 22 and 23.

three-shed (2/1 and 1/2) twills, as weaving became more of a professional activity, and the more sophisticated horizontal loom with treadles replaced the vertical warp-weighted and two-beamed looms; they had, in fact, no woollen tabbies from Gdańsk after the 11th century. Two fragments of woollen three-shed (2/1) twill of the 13th century have been found at Carrickfergus Castle, Ireland<sup>135</sup> and one, mid-14th century, from Closeburn, Dumfriesshire,<sup>136</sup> but with so little material from sites in the British Isles yet recorded it is obviously impossible to say that these tabby weaves indicate domestic rather than professional production.

Fragments of coarse weave in either hemp or flax (No. 4, PL. VIII, D) seem to come from a strong band, possibly a horse's girth.

A small lump of carbonized textile (No. 5, PL. VIII, E) consists of layers of a fine regular tabby weave. The top surface and edges of at least six thicknesses are well preserved, but underneath the threads have melted and bubbled; it seems possible that they were of fine flax, lying on top of a layer of wool or leather, or, perhaps more likely, since the thread shows practically no twist, silk, the lower layers of which have begun to melt in the heat that carbonized the fibres.

The 12th-century fragments from a stone coffin burial on the site of St. Budoc's church have close parallels from monastic or clerical graves at Thetford Priory and Wymondham Abbey, Norfolk,<sup>137</sup> probably of the 13th century, and two from Winchester, one recently excavated on the Cathedral Green (Cist XLVIII) and the other a chalk coffin uncovered some years ago, whose contents are preserved in the Cathedral Library. All these fabrics, though in varying conditions of preservation, are of pigmented animal fibre and have a very similar appearance, plied thread in one or both systems, and coarse tabby weaves. Fibre examinations at the Wool Industries Research Association have shown the most recent Winchester sample to be of goat hair, while the Thetford and Wymondham pieces are described as being made from wool from sheep having a double-coated fleece, *i.e.* including hairy fibres (kemps). A strikingly similar fragment of coarse goathair cloth is illustrated from the Swedish finds at Soderkoping.<sup>138</sup> In view of the very close resemblance of the Oxford and Winchester fabrics, both of which have noticeably harsh surfaces, two samples were examined, but unfortunately neither was sufficiently well preserved to show the scale pattern on the coarse fibres, by which sheep and goat hair can be distinguished. These textiles would certainly seem to come from garments, rather than shrouds. The Wymondham and Thetford pieces may have been from monastic gowns, where the natural black or brown pigmentation of the wool would be necessary for the dark robes of Cluniac houses, since dyed cloth was not approved for monks' robes. It can perhaps be suggested that the Winchester fabric, and possibly the Oxford one, were from hairshirts. A tabby weave with similar coarse plied threads, but of fine horse body-hair, has been traditionally employed for these, but the use of goat and camel hair by hermits of the early church is known, and it is possible that these fibres were also permitted.<sup>139</sup>

<sup>135</sup> G. M. Crowfoot in D. M. Waterman, 'Excavations at the entrance to Carrickfergus Castle, 1950', *Ulster Journal of Archaeology*, 15 (1952), 115.

<sup>136</sup> Henshall and Maxwell, *op. cit.* note 133.

<sup>137</sup> H. B. Carter and A. S. Henshall, 'Textile from Burial Q, St. Mary's Priory, Thetford', *Medieval Archaeology*, 1 (1957), 102: a similar textile from Kelso Abbey is mentioned. Wymondham, textile the property of Mr. Quinton Gurney, from a tomb? *tempus* Edward I.

<sup>138</sup> Franzén and Geijer, *op. cit.* note 128, Pl. 5, 133.

<sup>139</sup> I should like to acknowledge my indebtedness to Mr. H. M. Appleyard of the Wool Industries Research Association (WIRA) for his study of fibres from Nottingham, Wymondham and Winchester as well as those from Oxford; to the Prior of St. Hugh's Charterhouse for information relating to hair shirts; and to the Castle Museum, Nottingham, the Castle Museum, Norwich, and the Winchester Excavation Committee for permission to describe unpublished material. Since this report was written, comparative material from medieval levels at Southampton has been excavated and published (Elisabeth Crowfoot, 'The Textiles' in C. Platt and R. Coleman-Smith, *Excavations in Medieval Southampton, 1953-1969* (1975) II, 334-339) and considerable material from c. 1350 and 1499 docks at Baynard's Castle, London, is being studied.

## Catalogue

*Barbican Ditch, WF5 (13th to 15th century)*

1 (PL. VIII, B; FIG. 17, 1). One piece, 21 cm. long, 1 cm. round, bent in a half-circle, probably from the bound edge of a cap (sf 47).

(a) Inside, fabric heavily fullered or felted, Z and S spun threads visible, *i.e.* a felt including spun threads, or a weave, Z, S, heavily fullered; from examination of the edge probably tabby weave.

*WIRA* General appearance indicates wool fibres, some pigmented.

(b) Binding, 0.8 cm. wide, S, S, fine regular 3/1 twill (FIG. 17, 1), both selvages present but one turned under; sewn to (a) with Z, S ply thread (c), the stitches passing through the felt to catch the edge of the binding on the other side. Light colour.

*WIRA* (b and c) Both these have the appearance of vegetable fibres, possibly a bast fibre.

2 (PL. VIII, C; FIG. 17, 2). Part of braided shoelace, 11.5 cm. long, 0.4 to 0.45 cm. wide. Thread, Z, S ply, black or very dark brown, used in strands of 4 threads each; simple braid of 5 (FIG. 17, 2). The starting loops are preserved at one end (sf 48.I).

*WIRA* Animal fibre.

3 Fragment of red woollen, 3.5 by 1.9 cm. from a garment? Thread Z, S, no selvedge preserved; probably a tabby weave, count 18/12 (taken as 9(Z)/6(S) on 5 mm.) but the Z thread is deteriorated, and the fabric well fullered (sf 48.2).

*WIRA* Animal fibres, the remaining scale structure indicates that they are wool.

*Pit WF28 (13th to 15th century)*

4 (PL. VIII, D). Coarse textile, three fragments (a) two probably joining, 24.5 by 12.5 cm. overall, (b) 4.5 by 8.0 cm. Warp Z in pairs, weft Z single, very coarse yarns, tabby weave, count *c.* 8 (4 pairs)/2 per cm., simple selvedge along one edge of pieces. The fabric is deteriorated and was probably quite solid; it may be coarse sacking, but the whole width is possibly present on (a), as some broken wefts curl round as if to re-enter the weave; in this case the pieces probably come from a coarse band, ? girth, width 12.5 cm. (sf 50).

*WIRA* Very small fragments, but their appearance suggests vegetable fibres.

5 (PL. VIII, E). Lump of carbonized textile, 2.5 by 1.3 cm. across the best surface; at least six layers clear from edges, undersurface of lump melted. Spinning Z, Z, very regular, only very slight twist, weave tabby, again regular, count 28/17 (first count taken as 14 on 5 mm.), no selvedge preserved. Silk or flax (see above). There is a patch of strong ultramarine blue on the surface, but the fibres are completely carbonized in this area as well, and the colour must come from something with which it was in contact (sf 49).

*Burial, St. Budoc's Church, WF74 (12th century)*

6 (PL. VIII, F). Textile on burial inside stone coffin, fragments 29.0 by 11.0 cm., 15.0 by 15.0 cm., 13.0 by 11.0 cm., 15.0 x 12.0 cm., 10.0 by 12.0 cm., and smaller scraps. Thread slight S, strong Z ply, one system ? warp slightly tighter and more even, both yarns variable, no selvedge preserved, plain weave, count 2/2 per cm. in best preserved piece. The fabric has deteriorated and was probably a close weave. ? hair shirt (sf 51).

*WIRA* H. M. Appleyard writes: 'Animal fibre, but I cannot say definitely what its origin is. There are some coarse fibres with very wide medullae and some fine fibres; some of both groups are naturally pigmented. Unfortunately I could not find any evidence of scales, and it is by the cuticular scale pattern that one could distinguish between wool and goat hair. . . . If this sample is not goat hair then I would say that it is a coarse wool from sheep having double coated fleece, like our present-day British Mountain breeds.'

## THE LEATHER. By JENNIFER JONES

*Shoes, Belts, Clothing Fragments from the Barbican Ditch (WF5) and associated features (WF28, F43 and F60)*

An examination of the material suggests a date range between the 13th and 15th centuries, which is consistent with the suggested termination date for the Barbican Ditch. The dating cannot be more specific, as none of the material examined shows characteristics which can be very closely dated, nor was there a stratigraphic sequence within the ditch. That the material covers a period of roughly two centuries is shown by the variation in sole shape.

The soles were of turnshoes, with four exceptions, the most notable being FIG. 18, 18. Turnshoe soles have a pointed or rounded toe, or a shape some degree between the two, and a well-defined waist. The fronts of the uppers are usually plain, with either a straight instep edge, a central slit with thong holes as in FIG. 19, 21, or a rounded throat with a strap like FIG. 19, 24. The backs of the uppers very often have a curved top edge, and are cut low by the ankle, the quarters seam rising to a point in front of this, e.g. FIG. 19, 20. Alternatively, some shoes are cut from a single piece of hide, usually joining at the inside instep with a short seam and thongs. The children's shoes, in general, follow the pattern of the adults'.

There is no evidence amongst this material for very dainty or decorated shoes, or for examples displaying extremes of fashion. The most pointed are as FIG. 18, 8. While this may in part be due to the fact that the site was terminated before the mid 15th century—the period of the most extreme pointed toes—this disparity is also explained by the fact that the wearing of the most fashionable shoes was confined to the upper classes. These shoes, if constructed from the finest leather, were delicate and must have had a very short lifespan: their speedy and complete destruction was assured by their flimsiness and the conditions in which they were worn. The shoes of the majority of the populace mirrored the changes in fashion, but always stayed within the bounds of reason, and were constructed from more durable cowhide, thus being more likely to survive. The shoes under examination were made to last: their importance to their owners is shown by the large number of soles which had been repaired, often several times, before being finally discarded, and also by the large number of repair pieces found. The exceptions are the children's soles, the majority of which show no repairs, when whole, as FIG. 18, 12, for instance. Whilst this may be explained by the fact that they were very often outgrown before they were worn through, it would seem strange that they were not passed on to another child before being discarded.

The turnshoe technique used in the manufacture of these shoes was a very widespread and efficient method used for many centuries, at first almost exclusively and then alongside other, more complicated processes. The upper is initially sewn to the sole inside out, and is turned the right way out before the end of the job, the leather being kept wet throughout. A section through a turnshoe is shown in FIG. 19, 30, demonstrating how the upper was joined to the sole. A welt can be included in the construction, but few of the Barbican Ditch shoes seem to have had one. However, the welt would rapidly become detached from the sole, once discarded.

Many of the uppers examined have what are almost certainly their top edges pierced with stitch holes. This is quite common, and has been noted by the author on many of the medieval shoes from the Customs House site in London,<sup>140</sup> and also by Mr. D. Sturdy, among the shoes from the Clarendon Hotel site in Oxford.<sup>141</sup> This appears to have been done both as a decorative touch and also to give added strength to the edges and discourage splitting and stretching.

The material shows parallels with other groups of medieval shoes, both from this country and abroad. Specifically, it can be compared with the leather from the Lund site

<sup>140</sup> J. Jones, 'The Medieval Leather' in 'Excavations at the Customs House Site, City of London', *Trans. London and Middx. Archaeol. Soc.*, xxvi (1975), 155.

<sup>141</sup> D. Sturdy, 'The Leather' in 'The Clarendon Hotel, Oxford', *Oxoniensia*, xxxiii (1958), 75.

in Sweden<sup>142</sup> and with the leather from the Customs House site, mentioned above. Both these groups consisted of quite ordinary boots and shoes, showing a mixture of pointed and more rounded toes. The Barbican Ditch material probably contains rather more examples where the uppers are constructed with separate front and back pieces, than did the London material.

A feature often noted amongst the Customs House leather was a small hole, with a short, knotted thong, situated in the middle of the instep edge of the upper, its function being purely decorative: this does not seem to have been a fashion followed in Oxford at that period.

A specific example which finds a close parallel among the London material is FIG. 20, 41 (and also FIG. 18, 19), which is very similar to the complete child's bootie shown in Plate 5 of the Customs House site report.

Many of the sites which have produced medieval leather can show parallels to the Barbican Ditch material, principally in sole and upper shape, and also in methods of construction. These reports, coming from different parts of the country, suggest that the basic design of the footwear of the greater part of the population varied only in details from place to place.

#### Catalogue

The letters 'A' and 'B', where used in sole measurements, refer respectively to the width of the widest point on the sole, usually across the ball of the foot, and to the narrowest part, usually across the waist.

The letter 'S' used in the illustrations indicates that the edge had a seam.

The material described represents approximately one quarter of that originally examined.

The term 'quarters', used in describing the construction of the uppers refers to a piece which is sometimes inserted at each side of the shoe, between the front and back sections of the upper, at about the instep.

All the objects are from the Barbican Ditch (WF5) unless stated otherwise.

#### FIG. 18

1 Almost complete child's right foot turnshoe. The sole has a round/pointed toe, and is damaged along the back heel edge. *c.* 14.9 cm. long; 5.1 cm. at A; 2.9 cm. at B; 3 mm. thick; 3 stitches per 2 cm. The round-toed upper is presumably of one piece construction, though a small piece has become detached, and the seam edges are damaged. The shoe appears to have a wide, open front, but the top edges of the leather, except perhaps the back heel edge, have been cut down. Leather is 2 mm. thick and seams have 2 stitches per cm. Several fragmentary pieces of welt, 4-6 mm. thick, 3.5 mm. wide, fit around the outline of the sole (sf 106).

2 Right foot turnshoe sole, pointed toe. Inside toe edge damaged. Nail marks on underside of heel suggest an extra heel layer as the original is not worn. Few nail marks also visible on the front part of the sole. 23.8 cm. long; 7.5 cm. at A; 2.5 cm. at B; 3 mm. thick; 5 stitches per 2 cm. (sf 112).

3 Front of turnshoe sole, left foot, to just beyond the waist. The extreme toe has been cut off, suggesting a repair, now missing. The waist edge has stitch holes suggesting a heel repair, or a 2-part sole. Nail marks on the underside suggest a further repair to the front, or an additional sole layer. 17.9 cm. long; 9 cm. at A; 4.4 cm. at B; 2 mm. thick; 2 stitches per cm. (sf 114).

4 Front of round toed turnshoe sole, right foot, to the waist. There are possible stitch holes across the waist edge. 17.2 cm. long; 9.4 cm. at A; 4.4 cm. at B; 2.5 mm. thick; 3 stitches per 2 cm. (sf 115).

5 Heel repair piece, with pairs of tunnelled stitches, irregularly spaced, on the upper side. 11.2 cm. long; 7.5 cm. wide at mid-heel; 4 mm. thick. (sf 117).

6 Round-toed, right foot turnshoe sole. Back heel edge missing, small hole under the ball of the foot. 24.8 cm. long; 8.4 cm. at A; 3 cm. at B; 2 mm. thick; 2 stitches per cm. (sf 122).

<sup>142</sup> R. Blomquist, 'Medeltida skor i Lund', *Kulturen* (1938), 189.

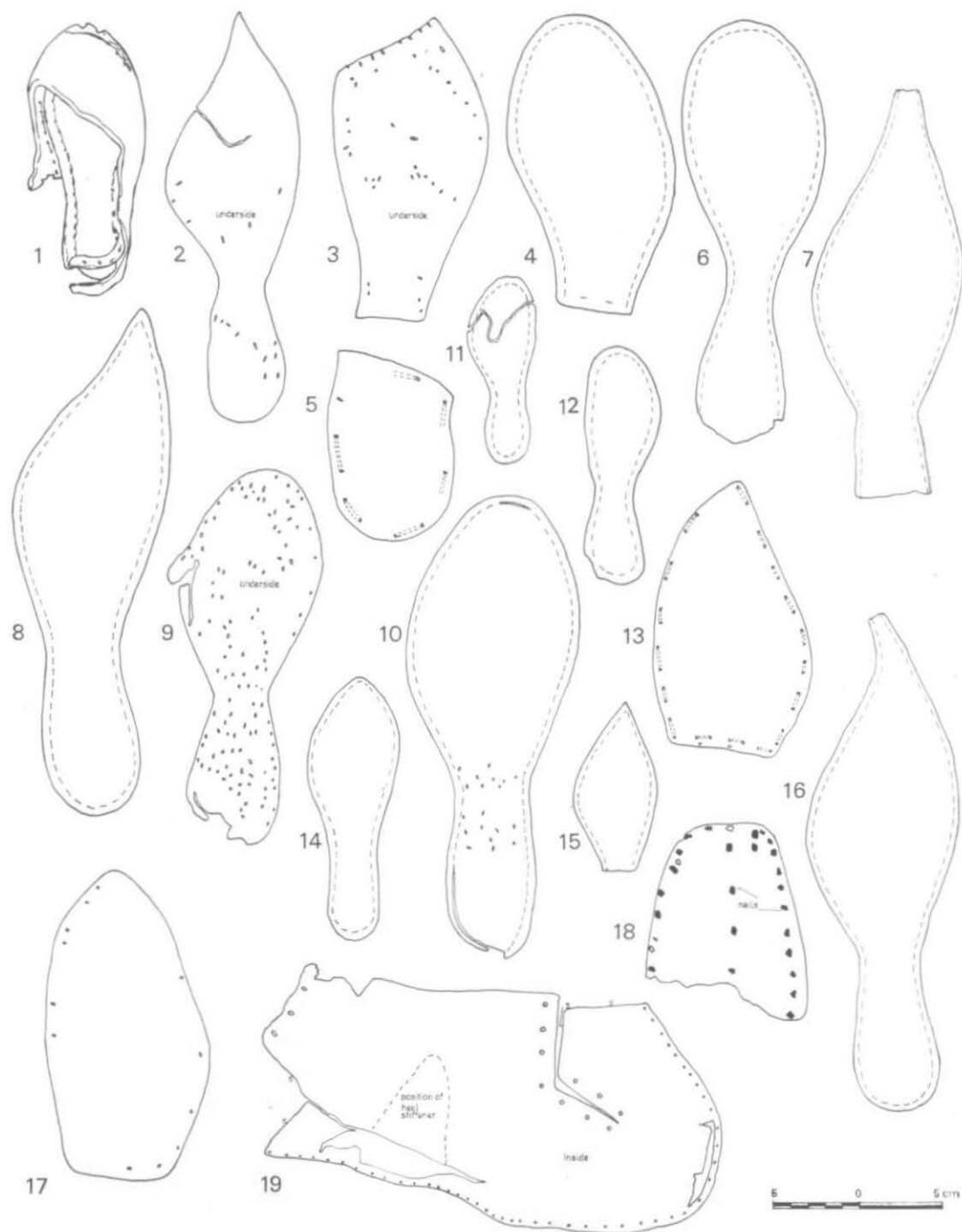


FIG. 18

Leather from the Barbican Ditch, WF5, thirteenth to fifteenth centuries. Scale  $\frac{1}{4}$ .

- 7 Front and waist sections of very pointed, left foot turnshoe sole. Heel missing. The full length of the point cannot be determined as it is damaged. 24.5 cm. long ; 8.5 cm. at A ; 3.5 cm. at B ; 3.5 mm. thick ; 2 stitches per cm. (sf 126).
- 8 Left foot turnshoe sole, pointed toe. 29.7 cm. long ; 8.5 cm. at A ; 4.2 cm. at B ; 3.5 mm. thick ; 2 stitches per cm. (sf 129).
- 9 Round-toed turnshoe sole, right foot, outside heel edge damaged. Large number of nail marks on the underside, suggesting numerous repairs to front and heel. 21.8 cm. long ; 7.9 cm. at A ; 3 cm. at B ; 2 mm. thick ; 2 stitches per cm. (sf 133).
- 10 Round-toed, left foot turnshoe sole, toe and heel stitch margins damaged. Nail marks across the waist penetrate right through the sole—probably for the attachment of an extra heel layer. 27 cm. long ; 9.8 cm. at A ; 4.5 cm. at B ; 4 mm. thick ; 3 stitches per 2 cm. (sf 127).
- 11 (a) Child's round-toed turnshoe sole, left foot, now in two pieces. 11 cm. long ; 3.8 cm. at A ; 1.9 cm. at B ; 3 mm. thick ; 2 stitches per cm.  
 (b) Two tiny scraps of probable upper, consisting of little more than stitch margins. 1 mm. thick ; c. 3 stitches per 2 cm., though irregularly spaced.  
 (c) Two short sections of welt. 4–6 mm. wide ; 2 mm. thick ; 2 stitches per cm.  
 It is likely that (a), (b) and (c) belong together, but the pieces are too fragmentary to be certain. (sf 142).
- 12 Child's round-toed turnshoe sole, right foot. Some lamination on the underside. 13.5 cm. long ; 4.4 cm. at A ; 1.9 cm. at B ; c. 2.5 mm. thick ; 2 stitches per cm. (sf 139).
- 13 Pointed toe, right foot front repair piece. Pairs of tunnelled stitches, c. 1 cm. apart, and some irregularly spaced nail holes. 15.7 cm. long ; 9.1 cm. at A ; 6.4 cm. across bottom edge ; 2.5 mm. thick. (WF28, sf 146).
- 14 Child's left foot, pointed turnshoe sole. Rather narrow heel. 15.4 cm. long ; 5.4 cm. at A ; 2.6 cm. at B ; 3 mm. thick ; 3 stitches per 2 cm. (WF60, sf 143).
- 15 Front section of child's pointed toed turnshoe sole, left foot. The stitch margin continues across the waist edge, indicating a 2 part sole, or a repair to the heel. 9.9 cm. long ; 4.7 cm. at A ; 1.9 cm. at B ; 3.5 mm. thick ; 5 stitches per 2 cm. (WF28, sf 147).
- 16 Excessively pointed left foot turnshoe sole. 29.2 cm. long ; 8.9 cm. at A ; 3.5 cm. at B ; 3 mm. thick ; 2 stitches per cm. (WF28, sf 149).
- 17 Round/pointed toed front repair piece, with pairs of tunnelled stitches, which have become very much worn and flattened. Right foot. 17 cm. long ; 9.6 cm. at A ; 4.6 cm. at B ; 3.5 mm. thick. (WF28, sf 145).
- 18 Front section of square toed composite sole, to just above the waist. The piece is very heavy, hard and completely inflexible. It consists of an insole plus 2 or 3 sole layers, at least one of which is probably a repair layer. There may also be a welt surviving in the construction, but the piece is very brittle and compressed. The layers are held together by vertical stitching, but there are also nails protruding through the bottom layer all round the edge, with also a row down the middle. These nails have no heads, and such is their regularity that they may well represent a hobnail effect. 12 cm. long ; 9.5 cm. at A ; 1.3 cm. thick altogether. (WF43, sf 154).
- 19 Child's right foot turnshoe bootie upper. The piece is constructed in one piece ; a short extra section with side lacing is missing. The uppers join at the inside instep with thongs, which is quite unusual as the central front opening also has thong holes. There is evidence for a heel stiffener, on the inside of the piece. The toe and right side edges are damaged. 26.8 cm. long (opened out) ; 13.8 cm. wide at instep ; 1.5 mm. thick ; sole seam 3 stitches per cm. ; quarters seam, 3 stitches per cm. (sf 158).

FIG. 19

20 Back portion of turnshoe upper, to quarters seam on left side, small lace holes on right side. Top edge is sharply curved and the left side quarters seam comes to a point at the top. There are a number of small, tunnelled stitch holes at the left side of the top curved edge. This is probably where the front portion overlapped the back with a small tag, fastened down at this point. Bottom edge stitch margin is damaged. 9.5 cm. long ;

19.9 cm. wide ; 1.5 mm. thick ; sole seam 2 stitches per cm. ; quarters seam 3 stitches per cm. (sf 157).

21 Complete child's left foot turnshoe uppers, though damaged at the back. Made in one piece joining at the inside instep with a 4 cm. seam, 2 stitches per cm. The toe is pointed and the upper has a central front opening to within 4 cm. of the toe, and having 2 pairs of thong holes at the instep edge of the opening. The upper is cut so that the top edge is high and curved at the back and cut low just in front of the ankles. There are small, tunnelled stitches just inside the top edge, perhaps indicating the addition of a narrow decorative band. 15.2 cm. long, when joined up ; c. 6 cm. at A ; 3 cm. at B ; 2 mm. thick ; sole seam 2 stitches per cm. (sf 164).

22 Almost complete adolescent's left foot turnshoe bootie. Of one piece construction, fastening at the inside instep with thongs. An extra flap with further thong holes is missing from the top edge of this opening, and also missing is a small, triangular piece which fitted at the instep between the sole and the thong holes. Stitch margin missing at the back and inside edges. Evidence for heel stiffener inside the piece. c. 17 cm. long when joined up ; 1.5 mm. thick ; sole seam 2 stitches per cm. ; side seam 4 stitches per cm. (sf 166).

23 Almost complete round/pointed toed turnshoe upper, left foot. Of 2 piece construction, joining at the inside instep with thongs. The front edge, with thong holes, is intact at this join, but a rectangular piece having the other set of thong holes and joining the main part of the upper towards the heel, is missing. All the top edges of the upper were over-stitched. Evidence of lace hole strengthener and heel stiffener on the inside. 29.7 cm. long (opened out) ; 19 cm. wide at the instep ; 1.5 mm. thick ; sole seam 3 stitches per 2 cm. ; quarters seam 3 stitches per cm. (sf 170).

24 Front of right foot, pointed turnshoe upper. To quarters seam on right side, left side fragmentary. The front has a large, squarish opening, with a short, wide integral strap at the right side instep, with 2 thong holes and remains of knotted thongs. The opening is slightly damaged. 19.3 cm. long ; 13.4 cm. wide at instep ; 1.5 mm. thick ; sole seam 3 stitches per 2 cm. ; quarters seam 5 stitches per 2 cm. (sf 172).

25 Back portion of turnshoe upper with high, rounded top edge. 5 thong holes down the left side, with 2.5 cm. of seam below them. Quarters seam at right side, the top of which is pointed in front of a low-cut area over the ankle. 9.5 cm. long ; 20.2 cm. wide ; 1.5 mm. thick ; sole seam 5 stitches per 2 cm. ; quarters seam 3 stitches per cm. (sf 173).

26 Front of upper of round or pointed toed shoe (the extreme toe is missing). Left foot. Outside edge to quarters seam. Below the instep edge on the left side is an integral strap terminating in a buttonhole. All the stitch margin is missing. 17 cm. long ; 7.9 cm. wide maximum ; 2 mm. thick. (sf 195).

27 Pointed toed front of turnshoe upper, to quarters seam each side. Instep edge rounded and over-stitched. Right side stitch margin damaged. 15.7 cm. long ; 22.5 cm. wide at instep ; 2 mm. thick ; sole seam 2 stitches per cm. ; quarters seam 5 stitches per 2 cm. (sf 174).

28 Back portion of turnshoe upper, top edge curved, to quarters seam on each side. Right side quarters seam has a slightly pointed top. Evidence of large heel stiffener on the inside. 9.2 cm. long ; 17 cm. wide ; 2 mm. thick ; sole seam 3 stitches per 2 cm. ; quarters seam 5 stitches per 2 cm. (sf 176).

29 Almost complete child's round/pointed toed turnshoe upper, of one piece construction. The upper joins at the inside instep with a seam. It has a short, central front opening, with 4 lace holes on the left side and 3 on the right. A small piece joining to the top edge of the right side of the opening, with the fourth lace hole, is now missing. A fragmentary thong remains, threaded through 2 of the lace holes. Evidence of heel stiffener on the inside. Stitch margin damaged at the back. 22.6 cm. long ; 16.3 cm. wide, maximum ; 1 mm. thick ; sole seam 5 stitches per 2 cm. ; quarters seam 5 stitches per 2 cm. (WF28, sf 187).

31 Pointed toed front of turnshoe upper, to quarters seam on each side. An integral strap on each side, the right side one being fragmentary, the left side having a buttonhole. Instep edge squarish, toe rather damaged. 19 cm. long ; 20.8 cm. wide at instep ; 2.5 mm. thick ; sole seam 2 stitches per cm. ; quarters seam 5 stitches per cm. (WF28, sf 186).



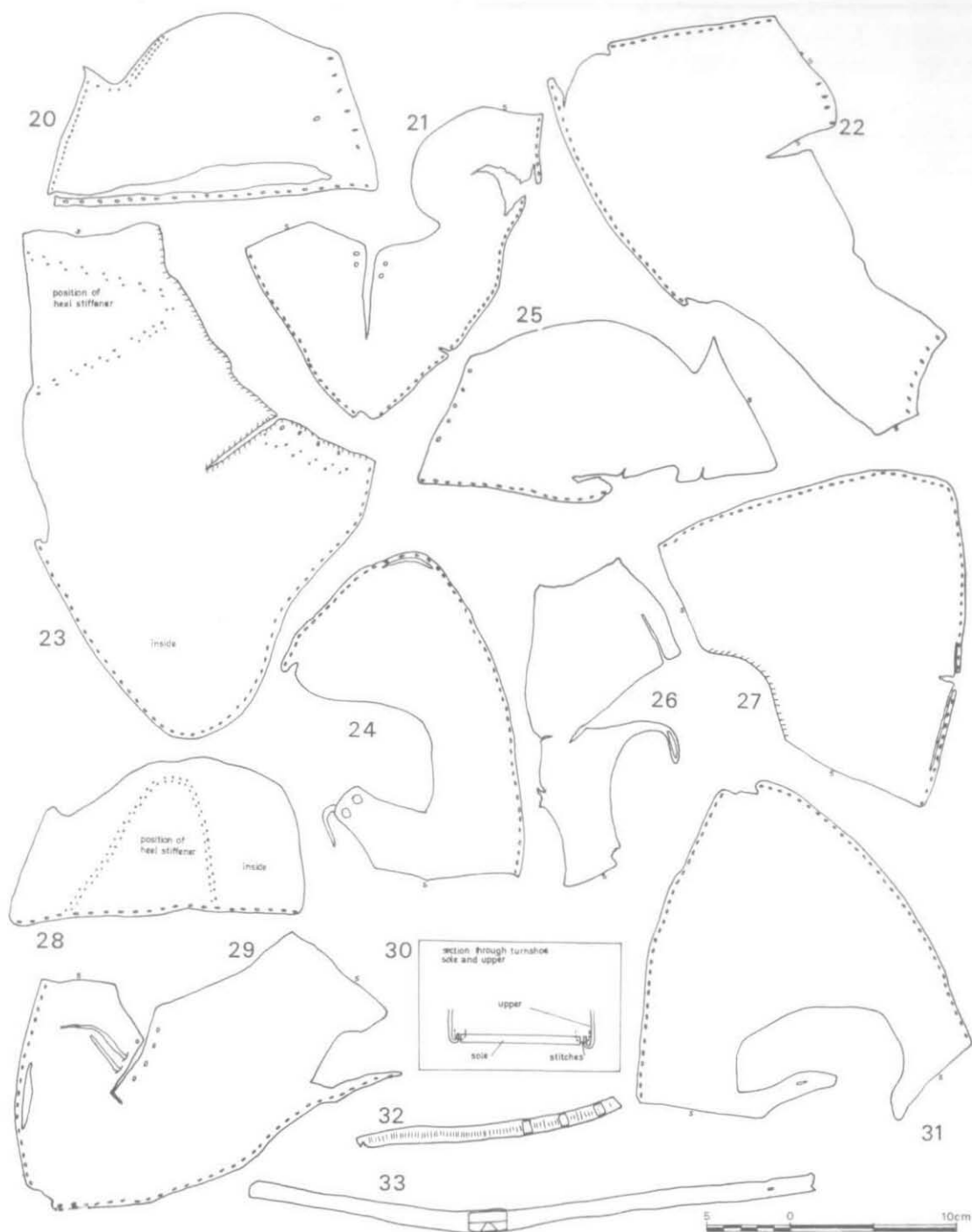


FIG. 19

Leather from the Barbican Ditch, WF5, thirteenth to fifteenth centuries. Scale  $\frac{1}{4}$ .

32 Fragment of strap or belt with tiny slashes, 6 per cm., centrally placed down its length, penetrating right through the leather. Towards one end are 3 metal studs, *c.* 2 cm. apart. These are plain rectangles, 5 mm. long; 8 mm. wide, each fastened by a single round rivet on the underside, 3 mm. diameter. Leather is 16 cm. long; 8 mm. wide; 3 mm. thick. Despite the dimensional differences, this piece and the next are very similar in general appearance, and are therefore probably from the same, or closely related articles, perhaps pieces of harness (sf 202).

33 Fragment of strap or belt with metal stud in position, fastened to the leather by 2 circular rivets on the underside, 7 mm. diameter. The stud is rectangular, 1.9 cm. long; 9 mm. wide, with a triangular section, and a small triangle in relief on one of the angled sides. Both ends of the leather are damaged, though one has a buckle tongue hole. Leather 32.2 cm. long; 9 mm. wide; 3 mm. thick (sf 201).

## FIG. 20

34 Large clothing fragment, possibly the right side front of a jerkin. The top edge has 2 angled sides coming to a point, with edge/flesh stitching, 2 per cm. One long side has buttonholes, 1.6 cm. long, 2 cm. apart. The bottom edge is partly sloped, with edge/flesh stitching, and partly cut off. The side opposite the buttonholes is shaped with stitch holes, and has 3 holes with knotted thongs still in them. The garment was possibly fastened with buttons down the front, and had an adjustable thong arrangement under the arm. It must have been quite a small garment if the extant piece is half the full width of the piece. 19.2 cm. long; 21 cm. wide, maximum; 2.5 mm. thick (sf 189).

35 Length of strap, made from a piece of leather folded in half widthways. The end has been knotted. Not complete. 13.8 cm. long; 2 cm. wide as folded; 2 mm. thick. (sf 190).

36 Length of plain strap or belt. At one end, a further section has been joined on by means of an ingenious knot. The long section has various cuts in it, both ends are damaged, and the piece is generally misshapen. 58 cm. long; 3.5 cm. wide; 3 mm. thick. (WF60, sf 208).

37 Possible piece of belt or strap, made from a length folded widthways, with a series of largish, oval holes *c.* 1 cm. long, punched through both thicknesses, *c.* 1 cm. from the folded edge. Remnants of a thong exist in one of these holes. Very damaged. 36.5 cm. long; 5.9 cm. wide, as folded; 6 mm. thick, as folded (sf 203).

38 Piece of belt or strap with a series of tiny slashes along its length, *c.* 4 mm. from each edge. 17.1 cm. long; 2.7 cm. wide; 3 mm. thick (sf 204).

39 Complete lace hole strengthener. This is made from a piece 2.4 cm. wide at the bottom edge, split into 2 strips 1.2 cm. from the bottom. The strips are 16.9 cm. long; 2.5 cm. tapering to 1.3 cm. wide, and 16.3 cm. long; 1.9 cm. tapering to 1.1 cm. wide, respectively. Both are 2 mm. thick. The thong holes are along the inner edges of the strips, *c.* 1 cm. apart. The bottom edge of the piece has stitch holes 3 per 2 cm., where it was attached to the sole, along with the upper. Both edges and the top of each strip were originally overstitched to the upper. Pieces like this were sewn onto the inside of boot and shoe uppers, in order to strengthen the lace or thong holes. Though seldom found *in situ*, very many uppers show evidence, in the form of stitch-holes, of their having had strengtheners (sf 206).

40 Roughly triangular piece, with semicircle cut from the top edge. The right side and the edge of the semicircle have neatly placed stitch holes, 7 per 2 cm. The left side has less neatly placed possible nailholes, *c.* 3 per cm. On this side also, an area of up to 8 mm. from the edge is slightly flattened. There are further lines of neat stitch holes, possibly for decoration. The piece is not complete and is rather damaged. Of unknown use. 22.6 cm. long; 11.4 cm. wide, maximum; 1 mm. thick (sf 231).

41 Complete child's turnshoe bootee, left foot. Slightly pointed sole, worn along the outside edge. The sole is 14.5 cm. long; 5 cm. at A; 3 cm. at B; 4 mm. thick; 2 stitches per cm. The uppers are made from one piece of leather, joining at the inside instep. This join is sewn for 2.5 cm. above the sole with a blind seam, 3 stitches per cm. Above this,

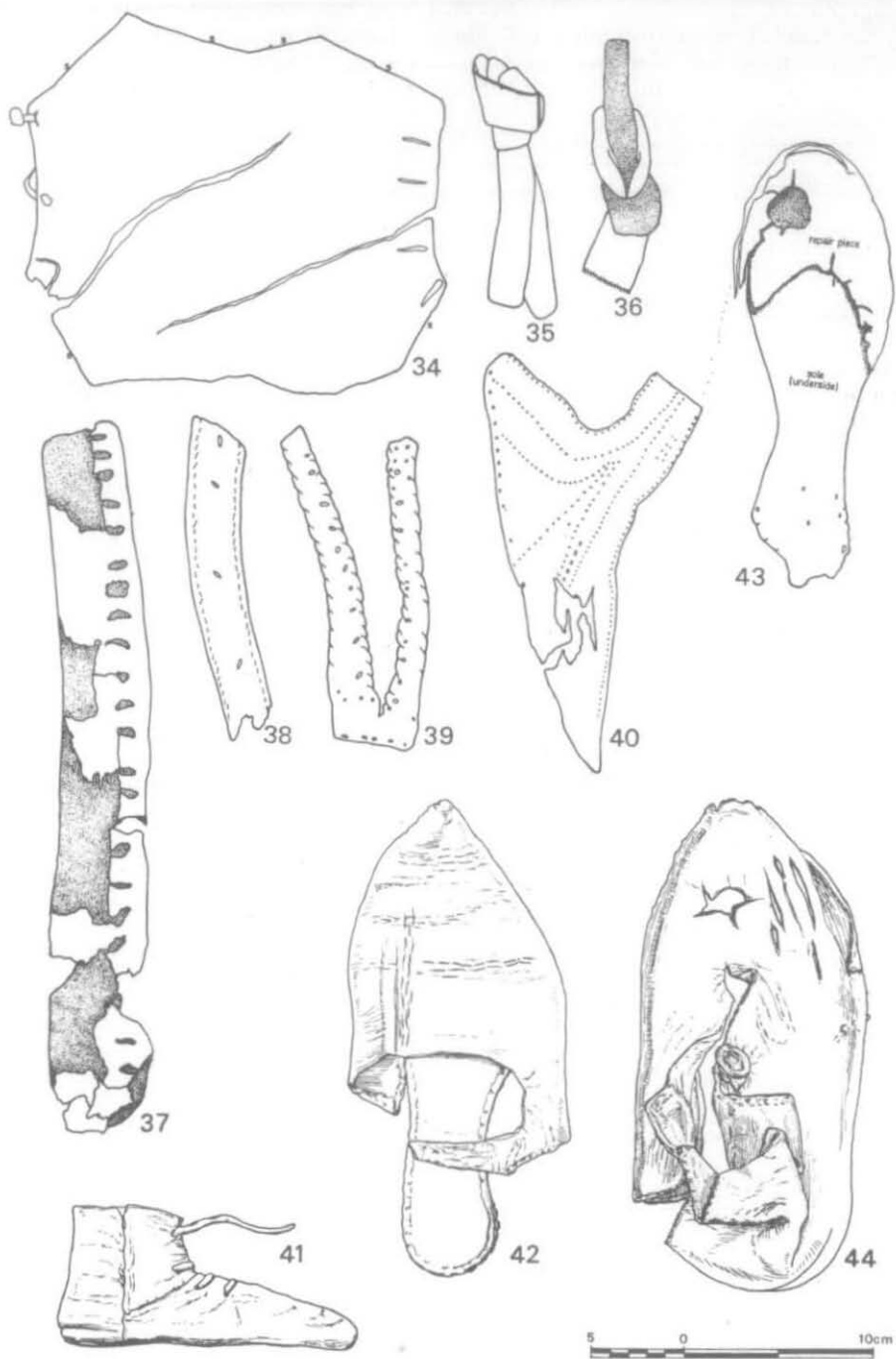


FIG. 20

Leather from the Barbican Ditch, WF5, thirteenth to fifteenth centuries. Scale  $\frac{1}{2}$ .

a small rectangular flap has been added, probably because of the limiting size of the available skin. The bootee has a centre front opening, to within 5 cm. of the toe. This opening was fastened by means of thongs and holes, all of which are intact. There are 4 roundish holes, c. 7 mm. diameter along one edge of the opening, and opposite are 2 leather thongs, each threaded through 2 slits in the leather. The piece has no welt (sf 105).

42 Complete right foot turnshoe sole, plus half of accompanying uppers. The sole is very pointed and worn at the inside toe and outside heel edges. The narrow shape suggests a woman's shoe. Sole is 25 cm. long; 8 cm. at A; 3.9 cm. at B; 4 mm. thick; 3 stitches per 2 cm. The surviving upper extends as far as the waist of the sole. The front is long, plain and pointed and there is a single strap across the waist. This has a couple of small holes, but they may be due to damage. A further layer of leather may have been added under this strap, onto which the buckle, if any, was fastened: there are 2 rows of converging stitch holes on the underside of the strap, where it adjoins the side of the upper. The surviving upper extends to the quarters seam on each side, these having 3 stitches per cm. A reasonably elegant shoe, though still strongly made. The front is 13.8 cm. long to the instep edge; 1.5 mm. thick (sf 107).

43 Round-toed left foot turnshoe sole, heel missing, with front repair piece still adhering. A hole worn under the ball of the foot has been repaired by adding a half sole in a very neat and thorough fashion. The repair piece has edge/flesh stitches around its edge like the sole itself. The shoe uppers must have been removed to attach this repair, and then sewn back through both layers. Traces of nail or tack marks are to be seen on the surviving heel area, suggesting a more conventional repair. Remaining sole 23 cm. long; 7.3 cm. at A; 3.5 cm. at B; 4 mm. thick; 3 stitches per 2 cm. Repair piece 12 cm. long; 5 mm. thick (sf 110).

44 Uppers of right foot turnshoe, constructed in one piece, joining at the inside instep. The front has a number of haphazardly placed slashes which were probably not original. They could have been made after the shoe was discarded, or possibly they represent a crude attempt to make the shoe fit more comfortably on a foot plagued by corns or bunions. A round buckle is still in place on the top edge of the shoe's outside instep. The piece has a round/pointed toe, and a central front opening, but the presumed strap is missing. 27 cm. long (opened out); 2 mm. thick; sole seam 3 stitches per 2 cm.; uppers seam 3 stitches per cm. (sf 155).

#### *Shoes, Belts, Clothing Fragments and Accessories from the Castle Moat (F12)*

This leather dates broadly from the 13th or 14th century to the 17th and possibly into the 18th. This wide date range is consistent with the nature of an open moat.

The early material consists of ordinary turnshoes of round or pointed sole shape, very similar to the material from the Barbican Ditch. However, there is a larger quantity of later shoes, constructed with insoles and welts. The sole shapes of these range through the broad toes, and 'eared' toes with square-toed insoles, of the early 16th century, to the pointed and square toes of the early 17th century. The soles with the long, square toes, like FIG. 23, No. 32, belong to the middle to late 17th century. These latter soles have criss-cross indentations on their upper sides, perhaps caused by a bracing thread used in the manufacturing process, either to hold down the edge of the upper or to last it, as explained by Mr. J. Thornton.<sup>143</sup>

The evidence for later material consists of a few shoe backs with a central seam, such as FIG. 22, 23, which could be early 18th century by analogy with a shoe found in a well in Bishops Waltham, which contained mainly 18th-century material.<sup>144</sup> Also, FIG. 24, 48, a front upper with a large square tongue is possibly of this date, but could equally belong to the mid-17th century.

While the soles show a wide range of shapes, the comparatively few uppers are quite conservative. The turnshoe type is best represented, like FIG. 24, 50, which was probably

<sup>143</sup> J. Thornton, 'The Shoes' in 'Excavations in Low Petergate, York', *Yorks. Archaeol. J.*, XLIV (1972), 97. See particularly Fig. 23, 1.

<sup>144</sup> K. Barton, 'An Eighteenth-Century Well at Bishops Waltham', *Post-Medieval Archaeol.*, 3 (1969), 187.

fitted to a one-piece back. FIG. 22, 19 shows an upper made up of more than two pieces. More unusual is the child's shoe upper, FIG. 24, 51. In general, there were less examples of the ankle bootie upper, common in the Barbican Ditch assemblage.

There is quite a good range of damaged bags, such as FIG. 21, 4 and 11, though none is nearly complete. The range of material is altogether greater than from the Barbican Ditch, though there were perhaps more straps and belts from the latter.

Besides the turnshoe method of construction, explained and illustrated in the Barbican Ditch report, the two other principal methods used among the material from the Castle are illustrated in FIG. 23, 43 and 44. Both employ welts. The first has an insole with edge/flesh stitch holes, and a sole with vertical stitch holes. The welt has two rows of stitch holes. The welt is attached to the insole by means of its inner row of stitch holes, the stitch margin of the upper being included between the insole and the welt. The outer row of stitch holes on the welt attaches it to the sole, which is slightly wider than the insole. The second method is similar: the sole again has vertical stitch holes, which attach to the welt through its outer row of stitch holes. The insole, however, has two rows of stitch holes on its underside, the stitches passing horizontally between the two rows. This produces a small ridge, which is further pronounced by a thin slice of the insole being cut away on each side of the ridge. The upper is attached to the welt with the insole, both being sewn to the welt's inner row of stitch holes. Thus, the welt is the most important part of the shoe construction, since the upper and sole are only fastened together *via* the welt.<sup>145</sup> There are many variations on this method, such as that described in FIG. 24, 51.

The top edges of the uppers have decorative stitching to discourage splitting, as in the Barbican Ditch material. Most of the soles show repairs, the exceptions again being the children's soles, many of which are complete, e.g. FIG. 23, 38.

There are very few parallels for this material. The early shoes, once more, can be compared with the leather from the Swedish site of Lund,<sup>146</sup> and also with the material from the Customs House site, London.<sup>147</sup> But there are few parallels for the later material. The 18th-century shoe from Bishops Waltham has already been mentioned. An 'eared' shoe, such as FIG. 23, 29, from St. Neot's, has been described and illustrated.<sup>148</sup> This report also shows on p. 96 a late 15th-century broad-toed shoe, which is comparable to FIG. 23, 31.

The Castle Moat deposit seems to represent casual or accidental disposal of articles over a very long period and does not, from the small quantity of scraps and off-cuts, seem to be connected with systematic dumping of waste material by manufacturers or cobblers.

#### Catalogue

See Barbican Ditch Catalogue, above, for terms used.

#### FIG. 21

1 Front part of a wooden patten or clog. The wood remains almost to the waist, though it is rather worn and split, the underside being very uneven. The upper, which probably extended as far as the instep, exists now only on the right side. The instep edge of the leather upper is intact on the right side, but has been cut away over the toe area. The leather is attached to the wood by large nails, irregularly spaced, c. 2.7 cm. long, with a head of 7-8 mm. diameter. The clog was probably quite small when complete, and appears to have had a rounded toe. Wooden part is 12.2 cm. long, maximum 5.9 cm. wide; leather is 5.3 cm. long; 2 mm. thick (sf 95).

2 Very thick off-cut with stamped monogram. This could possibly be a sort of branding mark, since this is an off-cut, but the small size and complexity of the monogram makes this unlikely. The letters have been stamped on, are very intertwined, and seem to read 'AA'

<sup>145</sup> J. Thornton, *Textbook of Footwear Manufacture* (1970), 21-37.

<sup>146</sup> R. Blomquist, 'Medeltida skor i Lund', *Kulturen* (1938), 189.

<sup>147</sup> Jones, *op. cit.* note 40.

<sup>148</sup> J. Thornton, 'The Shoes' in 'Post-Medieval Finds from St. Neots', *Post-Medieval Archaeol.*, 6 (1972), 94.

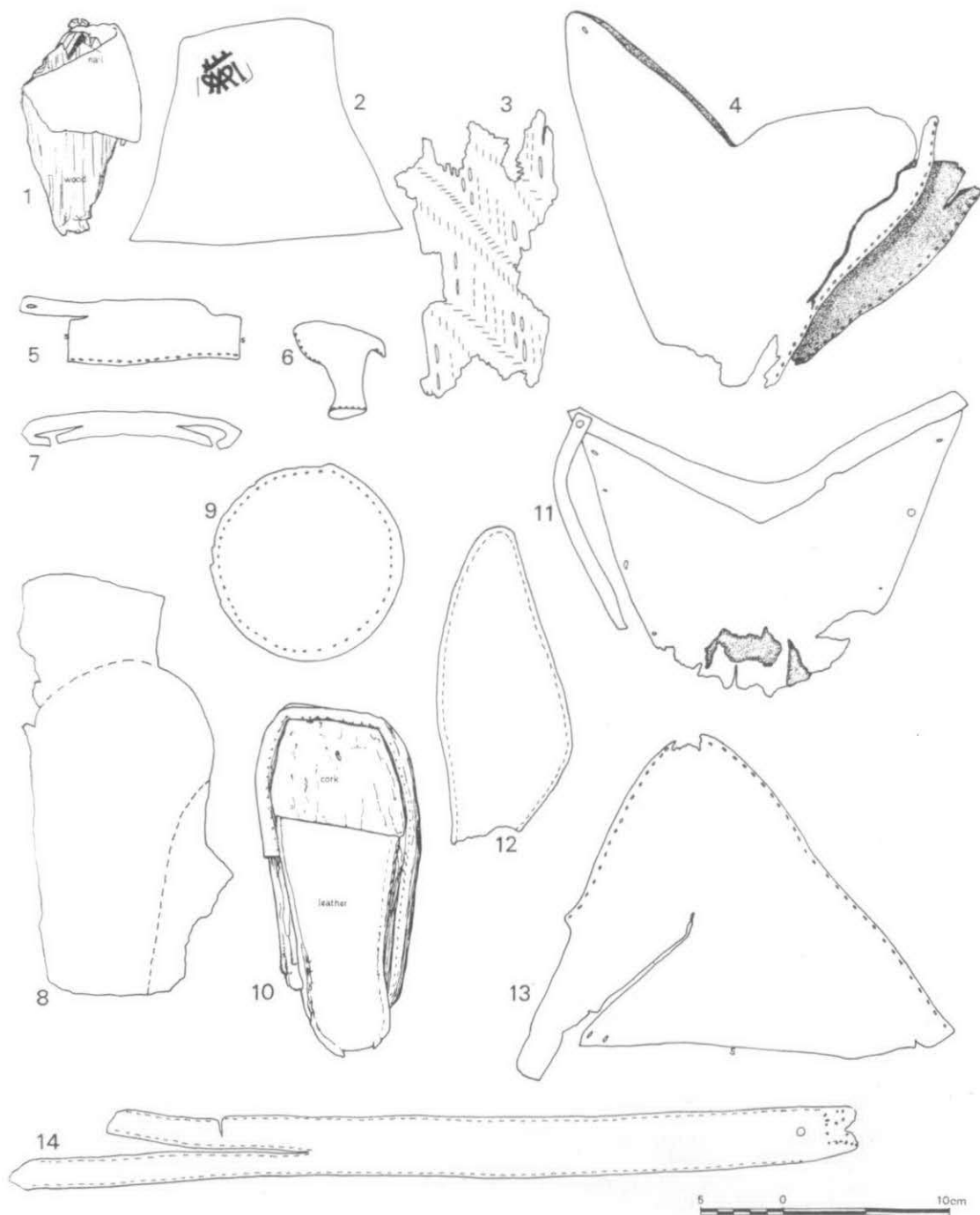


FIG. 21  
Leather from the Castle Moat, F12. Scale  $\frac{1}{4}$ .

or possibly 'AAI'. Off-cut 12.7 cm. long; 16 cm. wide maximum; 4-6 mm. thick (sf 99).

3 Piece of thin leather with neatly executed design in the form of small slits and cut-out oval shapes. All the edges of the piece are damaged. Possibly part of a glove, though somewhat fragile. No indication as to use. 16.1 cm. long; 8.2 cm. wide maximum; 1 mm. thick (sf 98).

4 Part of a bag or purse. Originally probably triangular, with a seam joining the two halves, which are cut from one piece of leather. The seam was probably strengthened with an edging strip. The top edge curves downwards in the centre and also has edge/flesh stitch holes; these may be decorative, or could indicate that a fringe or other trimming was added. The top right side and bottom edges are missing. A small, round hole is punched through both thicknesses at the top left hand corner. Possibly this was for a thong, for belt attachment. 20.6 cm. long; 21.5 cm. wide; 2 mm. thick; 2 stitches per cm. (sf 102).

5 Back portion of upper from child's welted shoe. Top edge straight. To quarters seam on each side, the left side having integral strap with a buttonhole, above the quarters seam. 3.7 cm. long; 10.1 cm. wide; 2 mm. thick; sole seam 2 stitches per cm.; quarters seam 3 stitches per cm. (sf 114).

6 Part of leather covering for lady's shoe heel. One side and half the base is present. The covering was sewn together in two halves, which were probably moulded around the heel, and then the base was sewn on. The heel itself was probably wooden. The piece is sewn with the flesh side of the leather outwards and the top edge has been cut off, so the full height is not known. 6.1 cm. long; 5.6 cm. wide at top; 3 cm. wide at bottom; 2 mm. thick; 2 stitches per cm. (sf 116).

7 Small spur strap, with a long button-hole at each end for attachment to the spur. 13 cm. long; 1.4 cm. wide; 2 mm. thick; buttonholes 3 cm. long (sf 115).

8 Piece of leather with marked out, partly cut outline of a sole. 25.1 cm. long; 10.5 cm. wide; 5 mm. thick (sf 130).

9 Circular base of bottle or jug. Stitch margin slightly turned up, with 2 rows of vertical stitching, top row 3 stitches per 2 cm.; lower row 1 stitch per cm.; 11.5 cm. diameter; 5 mm. thick (sf 153).

10 Part of a square-toed, right foot clog. Heel and inside edge are damaged. A unit of cork, 1.8 cm. thick, is edged with leather 2 mm. thick, which extends for some 2 cm. under the cork layer, where it is slightly pleated at the toe to take in the extra fullness. Beneath the cork layer is another thin complete layer of leather. The edging strip around the cork and this thin leather layer are fastened together by pairs of tunnelled stitches. Below the leather is a further unit of cork, *c.* 1 cm. thick, with a possible very thin wooden veneer below it, which would be more hard-wearing than plain cork. This second layer of cork and wood is presumably attached to the leather layer by some sort of glue, no other fastening method being visible. On the very top of the clog is part of an insole, *c.* 2 mm. thick, covering the middle and heel area. The front part is missing, the line of stitch holes existing along its cut-off edge suggesting a 2 part insole or a repair. The stitch margin of this insole turns downwards and is stitched round the top of the leather edging of the first cork layer. The extent of the uppers is unknown. 19-20 cm. long; 8.8 cm. at A; *c.* 6.5 cm. at B; insole stitches 2 per cm. The identification of the cork and wood/cork layers was kindly done by Pamela Pratt of the Conservation Department, Institute of Archaeology, London. (sf 154).

11 Half of a bag or pouch. The two sides of the piece were probably fastened together by studs: a number of widely spaced holes remain down the edges—4 on the left and 3 on the right. Only one side of the bag remains. The lower right side and the bottom edge are damaged. The bottom edge of the bag, which is rounded, was probably sewn—the leather being slightly pleated here. The top edge is curved downwards, and a strip of leather, maximum 2.2 cm. wide, 1.5 mm. thick, is attached to it by over stitching. The lower edge of this strip comes to a point in the middle of the bag. Attached to the left side top edge of the piece, by means of a stud passing also through the added strip, is a fragment

of strap 7 mm. wide and 2 mm. thick. Three prong holes remain on this strap. The bag is 12 cm. long in the middle ; 20.5 cm. wide maximum ; 2 mm. thick ; over stitching 2 per cm. (sf 184).

12 Front part, to just above waist, of right foot pointed turnshoe sole. 19.2 cm. long ; 7.4 cm. at A ; 4 mm. thick ; 2 stitches per cm. (sf 280).

13 Front section of round-toed turnshoe upper. The instep edge is straight and incorporates the right side quarters seam, though the left side is damaged at that point. The opening begins in the centre of the vamp, 7.5 cm. from the instep edge, but is angled towards the left until it meets the instep edge. Two small round lace holes exist on the right side of the opening, at the instep edge. The opening has stitch holes all the way round it, but this is probably decorative. 19 cm. long ; 23.1 cm. wide at the instep ; 2 mm. thick ; sole seam 2 stitches per cm. ; quarters seam 3 stitches per cm. (sf 281).

14 Length of belt or strap. At one end is a largish hole and a number of small nail marks, indicating either a repair or the attachment of a buckle. The other end is split down the middle for 18.6 cm. This split is an original part of the piece as the tiny, probably decorative stitch holes, 4 per cm., which run down the edges of the piece, 1.5 mm. from each edge, follow round the course of the split. One part of the 2 split ends is damaged, the other tapers to a 'V' shape. If the marks at the other end of the piece are taken to indicate the attachment of a buckle, then it is almost complete. However, since there were obviously 2 narrow straps created by the split, there ought to be indications of there having been 2 buckles at the other end. 50.4 cm. long ; 3.5 cm. wide ; 4 mm. thick (sf 283).

#### FIG. 22

15 Length of thin, supple belt or strap. Small, diagonal decorative stitch holes down its length, 1 mm. from each edge. 27.5 cm. long ; 1.3 cm. wide ; 1 mm. thick ; stitch holes 6 per cm. (sf 284).

16 Belt end or tassel. Made up of 2 lengths of strap, placed flesh sides together. These are 20.3 cm. and 18.7 cm. long respectively, both are 1.4 cm. wide and 3 mm. thick. Rows of tiny, punched square holes, 6 per cm., run down their lengths, 2 mm. from each edge. 4.3 cm. from the bottom, a thong c. 5 mm. wide, is tightly plaited into a Turk's Head knot. Below this knot, both pieces of leather have been split into 4 strips, making a tassel. The piece is not complete (sf 285).

17 Length of plain belt or strap the tapered end of which is fastened inside a large loop of leather by 2 studs with probable round heads, though they are corroded. The loop is damaged. It has 3 round holes punched in a line through both thicknesses and a further 3 punched through the longer side of the loop in a rough triangle. These 6 holes all have very narrow flattened rims around them, as though studs were originally attached there. All the holes also have tiny stitch holes around them at 7 mm.-1.5 cm. distance. On the inner side of the loop 'rays' are to be seen around the holes, corresponding with the stitch holes—these are presumably the marks left by whatever was used for the stitching. The marks of the thread are also to be seen inside some of the holes. This stitching was probably decorative. Strap 21.8 cm. long ; 3 cm. wide ; 2 mm. thick ; loop 11 cm. long as folded ; 4.9 cm. wide ; 2 mm. thick. Possibly part of an arrangement for attaching a knife or other object to the belt (sf 291).

18 Half the back portion of an upper with a central back seam. To quarters seam, the piece also having an integral strap with stitch holes and possible small nail marks at its base, indicating the attachment of something at this point. This being the side with the strap, it cannot be the buckle, but could be some sort of decorative metal ornament. The strap end is rounded. Evidence of a long, narrow stiffener having been sewn to the inside of the piece. 6.6 cm. long ; 13.5 cm. wide ; 1 mm. thick ; sole seam 3 stitches per 2 cm. ; quarters seam 9 stitches per 2 cm. (sf 295).

19 Damaged front and half of back portion, the toe of the front part being missing. The vamp has a 6 cm. long slit from the instep edge, where there are three small thong holes on the right side. The back originally had a central back seam and there is evidence of a heel



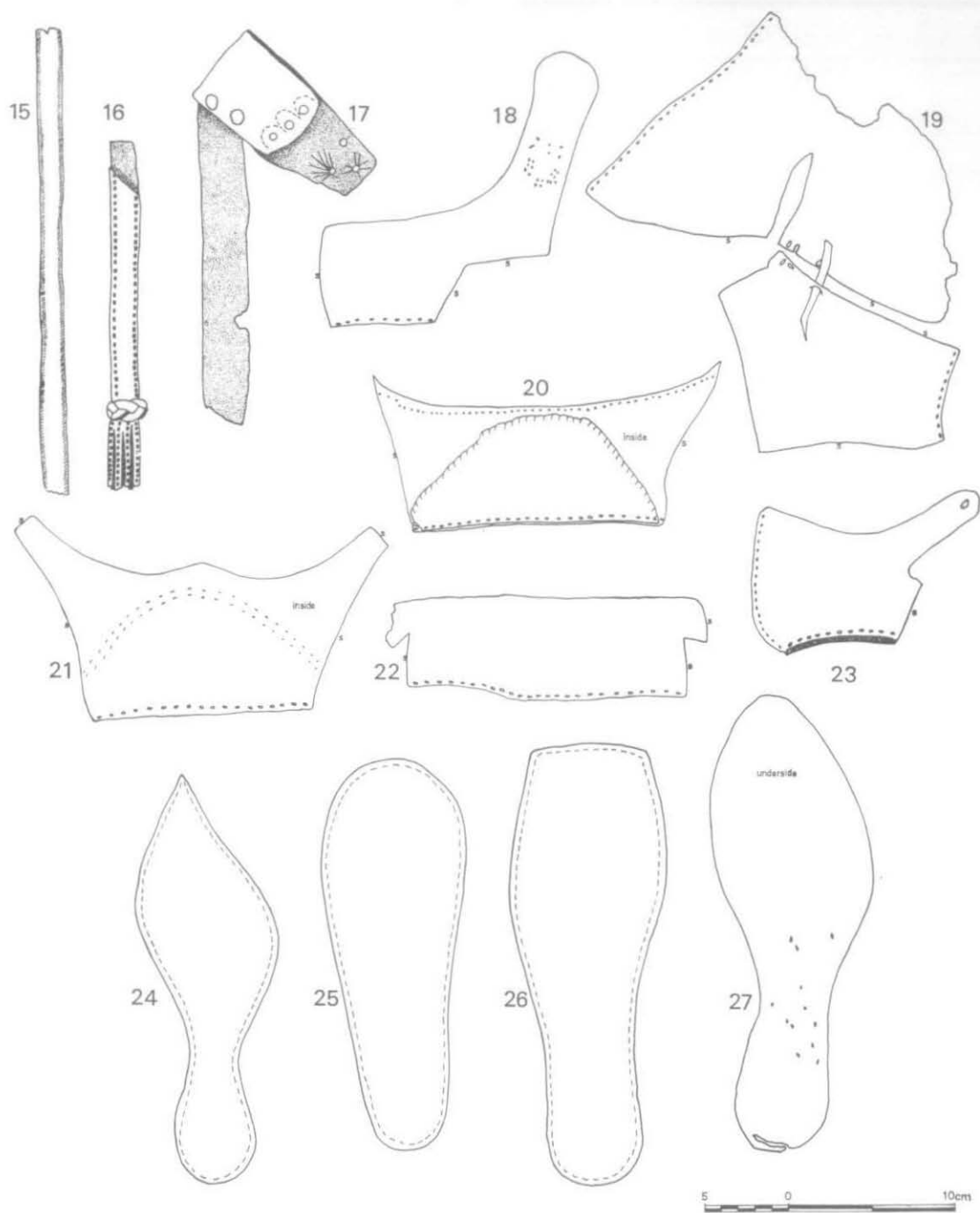


FIG. 22  
Leather from the Castle Moat, F12. Scale  $\frac{1}{4}$ .

stiffener on the inside. The front and back join at the quarters seam, although the stitch margin is missing from the front part. The back has three small thong holes at the top of this join, corresponding with those on the front. Front 14 cm. long; 21.4 cm. wide at instep; 2 mm. thick; sole seam 2 stitches per cm. Back 11.3 cm. long; 12 cm. wide; 2 mm. thick; quarters seam 4 stitches per cm. Probably of welted construction (sf 297).

20 Back portion of welted upper, to quarters seam on each side. The top edge is straight and the quarters seams are angled inwards especially on the right side. The almost rectangular stiffener is still in place, originally overstitched to the back. Inside the back itself is a row of small stitch holes, *c.* 4 mm. from the top edge, perhaps for the attachment of a trimming or edging. 7.6 cm. long; 19.1 cm. wide; 1 mm. thick; sole seam 3 stitches per 2 cm.; quarters seam 4 stitches per cm. Stiffener 1 mm. thick; overstitching 2 stitches per cm. (sf 300).

21 Back portion of upper, with curved top edge. To quarters seam on each side. The piece has a vestigial strap on each side, above the quarters seam, with stitch holes at the ends for the attachment of the rest of the strap. Evidence of a heel stiffener on the inside. The top edge was originally overstitched. Welted construction. 9.2 cm. long; 16.6 cm. wide, 2.5 mm. thick; sole seam 3 stitches per 2 cm.; quarters seam 3 stitches per cm. (sf 298).

22 Back portion of welted upper, to quarters seam on each side. There is a small flap with a downward-facing point at the top of each quarters seam. This overlapped the front of the upper. The top edge is straight. 6.3 cm. long; 18.6 cm. wide; 2 mm. thick; sole seam 2 stitches per cm.; quarters seam 3 stitches per cm. (sf 302).

23 Half of back portion of welted upper with central back seam, which slightly overlapped its adjoining half. A strap is incorporated with a round thong hole at the end. The back, which is quite small, had a curved top edge when complete. 8.7 cm. long; 10 cm. wide; 3 mm. thick; sole seam 3 stitches per 2 cm.; quarters seam 3 stitches per cm. (sf 303).

24 Complete, very pointed right foot turnshoe sole. 24 cm. long; 8 cm. at A; 3 cm. at B; 3 mm. thick; 2 stitches per cm. (sf 304).

25 Round-toed, unwaisted turnshoe sole. 23.2 cm. long; 8.3 cm. at A; 6.3 cm. at B; 2.5 mm. thick; 3 stitches per cm. (sf 305).

26 Square-toed, left foot insole, with edge/flesh stitching. 26 cm. long; 9 cm. at A; 5.8 cm. at B; 4 mm. thick; 1 stitch per cm. (sf 312).

27 Round/pointed toed left foot turnshoe sole, slightly worn at inside heel edge. Some tack marks on the underside across the top of the heel suggest a repair. 27 cm. long; 9 cm. at A; 4 cm. at B; 5 mm. thick; 2 stitches per cm. (sf 308).

#### FIG. 23

28 Pointed toed insole with 2 rows of tunnelled stitch holes on the underside, 4 mm. and 9 mm. from the edge. These are now only visible on the heel part, but since there are no other stitch holes on the front part there were presumably tunnelled stitch holes there as well. Tiny hole in the middle of the front, 2 cm. below the point, is probably a lasting hole. 22.2 cm. long; 6.9 cm. at A; 5.5 cm. at B; 1.5 mm. thick; 3 stitches per 2 cm. (sf 313).

29 Left foot eared sole, damaged at toe and inside heel edge. Vertical stitching. Two lasting holes 2.5 cm. and 12.5 cm. from the top edge. 24 cm. long; 8.1 cm. at A; 5.8 cm. at B; 3 mm. thick; 3 stitches per cm. (sf 314).

30 Possibly round/pointed toed right foot composite sole. Toe damaged. The insole has 2 rows of tunnelled stitch holes on the underside, 5 mm. and 9 mm. from the edge. The main sole is in 2 sections joined at the waist by 2 nails passing horizontally from the front into the heel part. There is a further sole layer on the front part, fastened by 3 nails driven in from underneath. The heel part has 7 layers including the main sole. Most are very worn. The top, second and fourth layers cover the whole heel area; the third and fifth layers dovetail with 2 small pieces inserted from the back to form complete layers. Layers

- six and seven are fragmentary. These layers are joined by 13 nails driven in from below. A number of these nails are also now visible on the insole. Two further nails have been driven in from the top to secure the 2 front sole layers. The 2 main sole layers have vertical stitch holes and were stitched to a welt placed beneath the insole. Insole 24 cm. long ; 8.4 cm. at A ; 6 cm. at B ; 1.5 mm. thick ; 3 stitches per 2 cm. (sf 316).
- 31 Wide round/square toed left foot turnshoe sole, to the waist. On the underside, some indentations across the waist suggest a repair. 22.3 cm. long ; 10 cm. at A ; 3.6 cm. at B ; 3 mm. thick ; 2 stitches per cm. (sf 318).
- 32 Left foot insole with long square toe and edge/flesh stitching. A number of nail marks in the mid-heel area suggest an extra layer. There is a criss-cross indented pattern on the front area of the upper side. 24 cm. long ; 7.2 cm. at A ; 3.8 cm. at B ; 4 mm. thick ; 3 stitches per 2 cm. (sf 319).
- 33 Broad, round-toed front repair piece. Pairs of tunnelled stitch holes 1 cm. long and 1 cm. apart run around the edge, for attachment to the sole. 19.7 cm. long ; 10.5 cm. at A ; 7.2 cm. at B ; 2 mm. thick (sf 320).
- 34 Very delicate round/pointed toed left foot turnshoe sole. A tiny lasting hole in the middle of the waist. 21.4 cm. long ; 5.8 cm. at A ; 1.4 cm. at B ; 3 mm. thick ; 2 stitches per cm. (sf 328).
- 35 Round-toed, left foot insole. On the underside are 2 rows of tunnelled stitches, 5 mm. and 1 cm. from the edge, and also an incised line just inside the second row of stitches. Tack marks on the heel suggest repairs. Two tiny lasting marks, 11.6 cm. and 15.6 cm. from the toe. Two nicks in the leather mark the upper limit of the heel area, though the heel is no wider than the rest of the insole. 26.2 cm. long ; 8.3 cm. at A ; 6.5 cm. at B ; 2 mm. thick ; 2 stitches per cm. (sf 329).
- 36 Round/pointed toed right foot sole with vertical stitching. Quite extensive lamination on the underside. Slight indentation, c. 1 cm. wide around the edge, especially apparent round the heel. 23.1 cm. long ; 7.3 cm. at A ; 2.8 cm. at B ; 2 mm. thick ; 3 stitches per cm. (sf 330).
- 37 Middle and heel sections of an insole with edge/flesh stitch holes, possibly from a pantoufle. The piece has a very narrow waist and a wide, round heel. The front part is missing and a line of stitch holes along the cut edge indicates a probable 2 part insole. 17.2 cm. long ; 7.6 cm. wide at top edge ; 1.5 cm. at B ; 3 mm. thick ; 2 stitches per cm. (sf 336).
- 38 Round-toed child's left foot sole. Outside heel edge worn. Vertical stitch holes 4 mm. from the edge, which lie in an incised groove on the underside. 12.9 cm. long ; 5 cm. at A ; 3.5 cm. at B ; 4 mm. thick ; 2 stitches per cm. (sf 337).
- 39 Square-toed child's sole with very rounded heel. Vertical stitching lying in incised groove, as in No. 38. Four lasting holes 1.5 cm., 2.8 cm., 8.2 cm. and 11.5 cm. from the toe. 13.6 cm. long ; 4.3 cm. at A ; 3.9 cm. at B ; 5 mm. thick ; 3 stitches per 2 cm. (sf 338).
- 40 Child's right foot sole with wide, square toe and very little waist. Outside heel edge worn. Slightly flattened area around the edge, outside the vertical stitch holes. 14.9 cm. long ; 6.3 cm. at A ; 4.4 cm. at B ; 2.5 mm. thick ; 2 stitches per cm. (sf 339).
- 41 Round-toed child's left foot insole. On the underside are 2 rows of tunnelled stitch holes 4 mm. and 1 cm. from the edge. The inner row lies in an incised line. Three lasting holes 2 cm., 6 cm. and 12.5 cm. from the toe. The heel area is 2 mm. wider on each side. 14.9 cm. long ; 5.5 cm. at A ; 4 cm. at B ; 3 mm. thick ; 2 stitches per cm. (sf 340).
- 42 Round/pointed toed front of welted upper. The stitch margin round the toe has been slightly pleated to take in extra fullness. To quarters seam on each side. The instep edge and along towards the quarters seam has been cut. 17.4 cm. long ; 17.7 cm. wide, maximum ; 2 mm. thick ; sole seam 3 stitches per 2 cm. ; quarters seam 3 stitches per cm. (sf 344).
- 45 Scrap or off-cut with monogram stamp reading 'SIE', though it is not quite clear, as the stamp seems to have slipped a little. 6.2 cm. long ; 4.9 cm. wide ; 4.5 mm. thick (sf 343).

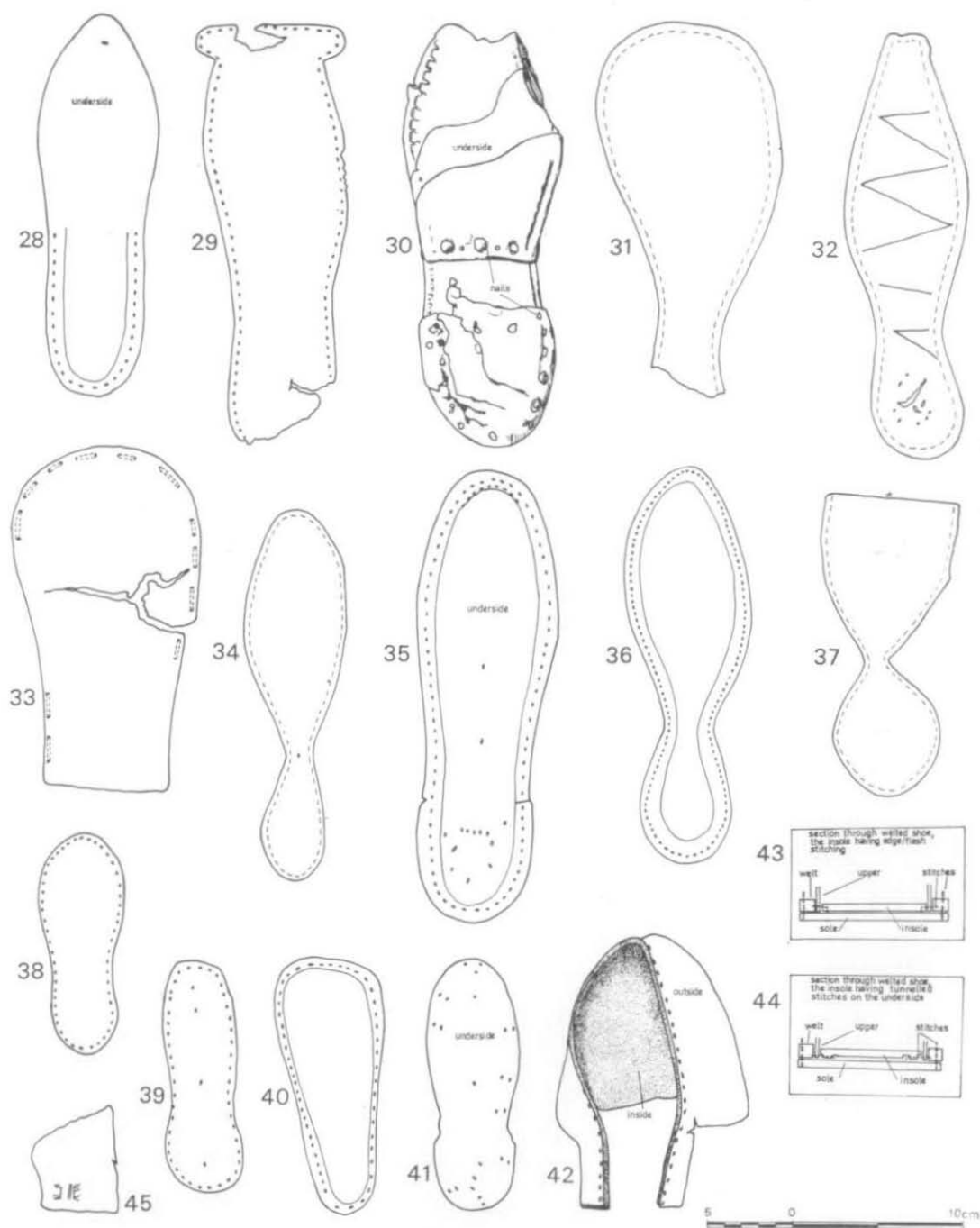


FIG. 23

Leather from the Castle Moat, F12. Scale  $\frac{1}{2}$ .

## FIG. 24

46 Probably part of the left front of a jerkin. The narrow top edge has stitch holes and this is presumably the shoulder seam. The right side is shaped as if for an armhole and has stitch holes 1.5 cm.-3 cm. from the edge, where an edging strip was added. Below the shaped armhole, this side is damaged and no seam is visible. The left side is angled to a slight point in the centre. This edge has stitch holes all the way down, presumably where the rest of the front was added. The left edge curves sharply inwards towards the bottom. The bottom edge is cut into a rough fringe. All the edges are rather damaged. 50.5 cm. long, maximum; 22 cm. wide, maximum; 1 mm. thick; 3 stitches per cm. (sf 71).

47 Child's damaged turnshoe upper. Probably of one piece construction, joining at the inside instep, but the front part of the seam is missing. Evidence of a large heel stiffener on the inside, coming almost to the top of the shoe back. A small round buckle and prong are still in place at the top, outside instep edge. The buckle is attached by means of a thong threaded through the upper and buckle and back through the upper. On the inside, a slit is made through one of the loose ends of the thong and the other is threaded through and pulled tight. 23.8 cm. long (opened out); 2 mm. thick; sole seam 2 stitches per cm.; instep seam 3 stitches per cm. (sf 346).

48 Squarish toed front of welted upper. Square tongue at the instep, with the quarters seams on each side of it. Rather split and damaged. Sewn with the flesh side of the leather outwards. Two round thong holes on the vamp at the base of the tongue. 18.8 cm. long; 19.6 cm. wide at instep; 2.5 mm. thick; sole seam 3 stitches per 2 cm.; quarters seam 3 stitches per cm. (sf 348).

49 Small piece of decorative edging. Only one original edge remains, this being scalloped, probably with a knife, and then the edge was rounded and finished off. 9.3 cm. long; 6.1 cm. wide at bottom edge; 2.5 mm. thick (sf 354).

50 Broad, round-toed front of turnshoe upper, to quarters seam each side. Two thong holes and remains of a thong just above the quarters seam on the right side. Long, fairly narrow rounded piece cut from the vamp. Small slit 2 cm. long in mid-front of vamp. The slit and edge of the vamp have decorative stitch holes all the way round. 18.3 cm. long; 17.5 cm. wide above vamp shaping; 3 mm. thick; sole seam 3 stitches per 2 cm.; quarters seam 5 stitches per 2 cm. (sf 350).

51 Child's welted shoe upper, complete except for strap. Made in one piece, joining at the outside instep. The shoe has a wide, squarish toe and the top edges of the upper are cut low and overstitched. A fragment of the strap is attached to the inside instep edge. The stitch margin turns outwards and the welt was probably placed on top of it. This type of upper would fit a sole shaped like No. 40. 15.8 cm. long (joined up); 2.5 mm. thick; sole seam 2 stitches per cm.; joining seam 5 stitches per 2 cm. (sf 353).

52 Possibly part of the back of a glove, of very thin leather, all edges damaged. A number of small tucks run up the piece. 12.5 cm. long; 9.6 cm. wide, maximum; less than 0.5 mm. thick (sf 355).

53 Damaged front of round-toed, left foot welted shoe, approximately to waist. Consists of an insole with edge/flesh stitching joined to the inner row of stitch holes on the welt, with the stitch margin of the upper fitted between insole and welt. The sole is c. 1 cm. wider than the insole and attached to the outer row of welt stitch holes with vertical stitching. Both the sole and insole have an oval hole cut through them. The upper remains to the instep, where it has been cut off. It is pleated slightly at the toe to take in extra fullness. The sole has nail marks on its underside suggesting a toe repair. Sole 17.2 cm. long; 9.7 cm. at A; 3 mm. thick; 5 stitches per 2 cm. Upper 7 cm. long; 3 mm. thick; 3 stitches per 2 cm. Welt is 1 cm. wide (sf 362).

54 Roughly rectangular piece, 3 edges of which have been cut. The bottom edge is cut into a rough 'fringe' 1 cm.-1.5 cm. deep. There are a few edge/flesh stitches on the right side, 3 per cm. There are a number of other cuts and slits in the body of the piece. On the underside is a small rectangle of stitch holes 0.5 cm. by 2.5 cm. on the left side. Of unknown use. 20.6 cm. long; 10.3 cm. wide; 2.5 mm. thick (sf 363).

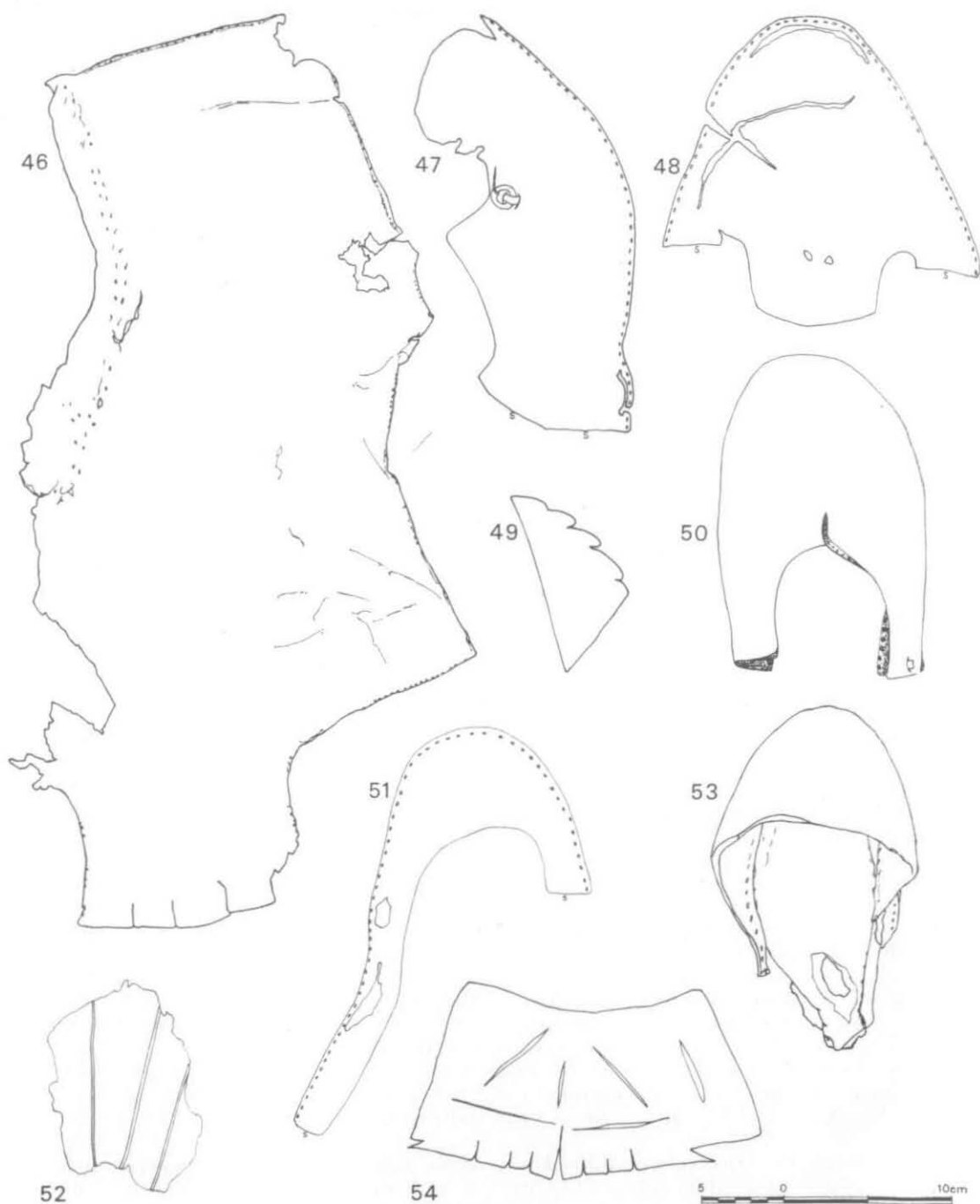


FIG. 24  
Leather from the Castle Moat, F12. Scale  $\frac{1}{2}$ .

## KNIFE-SHEATHS AND DECORATED LEATHER. By MARTIN HENIG

Abbreviations used in this section :

<i>L.M. Med. Cat.</i>	London Museum Catalogue No. 7 ; Medieval Catalogue (London, 1940).
<i>Chatwin 1934</i>	P. B. Chatwin, 'Recent Finds in Coventry', <i>Trans. Birmingham Arch. Soc.</i> , LVIII (1934), 56-62.
<i>Guildhall Museum Richardson 1959</i>	Guildhall Museum Catalogue of London Antiquities (1908). K. M. Richardson, 'Excavations in Hungate, York', <i>Arch. Journ.</i> , CXVI (1959), 51-114.
<i>Tatton-Brown 1974</i>	T. Tatton-Brown, 'Excavations at the Custom House Site, City of London 1973', <i>Trans. London and Middx. Arch. Soc.</i> , xxv (1974), 117-216.
<i>Waterer 1968</i>	J. W. Waterer, <i>Leather Craftsmanship</i> (London).

*The Barbican Ditch* (WF5) (FIG. 25, 1-10)

1 Knife-sheath with stamped decoration. Front face, upper panel : *fleurs-de-lis* within lozenge design ; body of sheath : lions rampant within running scroll. Back, upper panel : simple zig-zag design ; below : *fleurs-de-lis* within lozenges. Length 24.0 cm. ; maximum width c. 4.0 cm. For the *fleurs-de-lis* cf. *L.M. Med. Cat.*, 191, No. A 3666 and Pl. xlii, 1 ; also No. A 3683, Pl. 1, 1. For lions rampant, *Ibid.* No. A 3682, Pl. 1, 3 and Tatton-Brown 1974, 199 and Fig. 41, No. 234. Although the technique has been taken as diagnostic of the 15th century the stratigraphical evidence at the Custom House site, London, indicated that work of this sort might have been executed in the 14th century. It may be noted that the shape of this sheath is very similar to that of No. 4, and both would have contained blades of typical 'Scramasax' form (sf 100).

2 Large plain sheath, for knife-dagger. Note the broad-bladed baselard-knife, *L.M. Med. Cat.*, 54, No. A 4953 and Pl. xli, 1. Length 30 cm. ; maximum width c. 6.7 cm. For a sheath of similar shape, *Ibid.*, 191, No. A 3666 and Pl. xlii, 1 (Westminster, ascribed to the 15th century) (sf 101).

3 Knife-sheath with decoration produced by outlining with a blunt tool. The upper part is widened to take the knife-handle and contains a trefoil device. On the part guarding the blade is a St. Andrew's cross and a bird with a large bill, somewhat schematically engraved. Length 16.5 cm. ; maximum width c. 5.0 cm. For similar sheaths which include a zoomorphic element, cf. Richardson 1959, 103 f and Pl. vii, No. 3 ; Tatton-Brown 1974, 199 and Fig. 41, No. 232 ; and Waterer 1968, Pl. x. 14th century (sf 102).

4 Knife-sheath with decoration produced by outlining with a blunt tool. On the front a rectangular panel containing a crudely engraved fish ; below a running scroll partially encloses roundels containing representations of a goose, an ape, a trefoil plant and a cross. On the back the upper panel contains a group of lines, and below is a simple motif of trilobate arcades. Length 24.5 cm. ; maximum width c. 4.0 cm. There are close parallels from Westminster (*L.M. Med. Cat.*, 190, No. A 3760 and Pl. xl, 3) and Coventry (Chatwin 1934, 61 f. Nos. 9 and 10, ill.). A sheath from York (Richardson 1959, 102 ff. and Pl. vii, 1) also has a front containing an acanthus scroll. The back is almost identical to our sheath, which might likewise be ascribed to the 13th century (sf 103).

5 Knife-sheath with incised design of simple fern-fronds on the front and zig-zags down the back. Length 19.0 cm. ; maximum width 2.2 cm. For the type, *L.M. Med. Cat.*, 191, No. A 451 and Fig. 61, 1 ; No. A 2251 and Fig. 61, 2 ; Chatwin 1934, 60, No. 6 ill. (sf 104).

6 Knife-sheath. Decoration outlined with blunt tool. On the front, above, a shield ; below, a running scroll including a 'harpy' (or bird with a human head) and some other device. The back displays an upper panel of grouped lines and a lower schema of trilobate arcades. Length 13.7 cm. (tip of sheath missing) ; maximum width c. 4.0 cm. In general the sheath may be compared with No. 2 (*supra*) ; for shields, probably also with bogus heraldry, Chatwin 1934, 59-62, Nos. 1, 2 and 4 (sf 105).

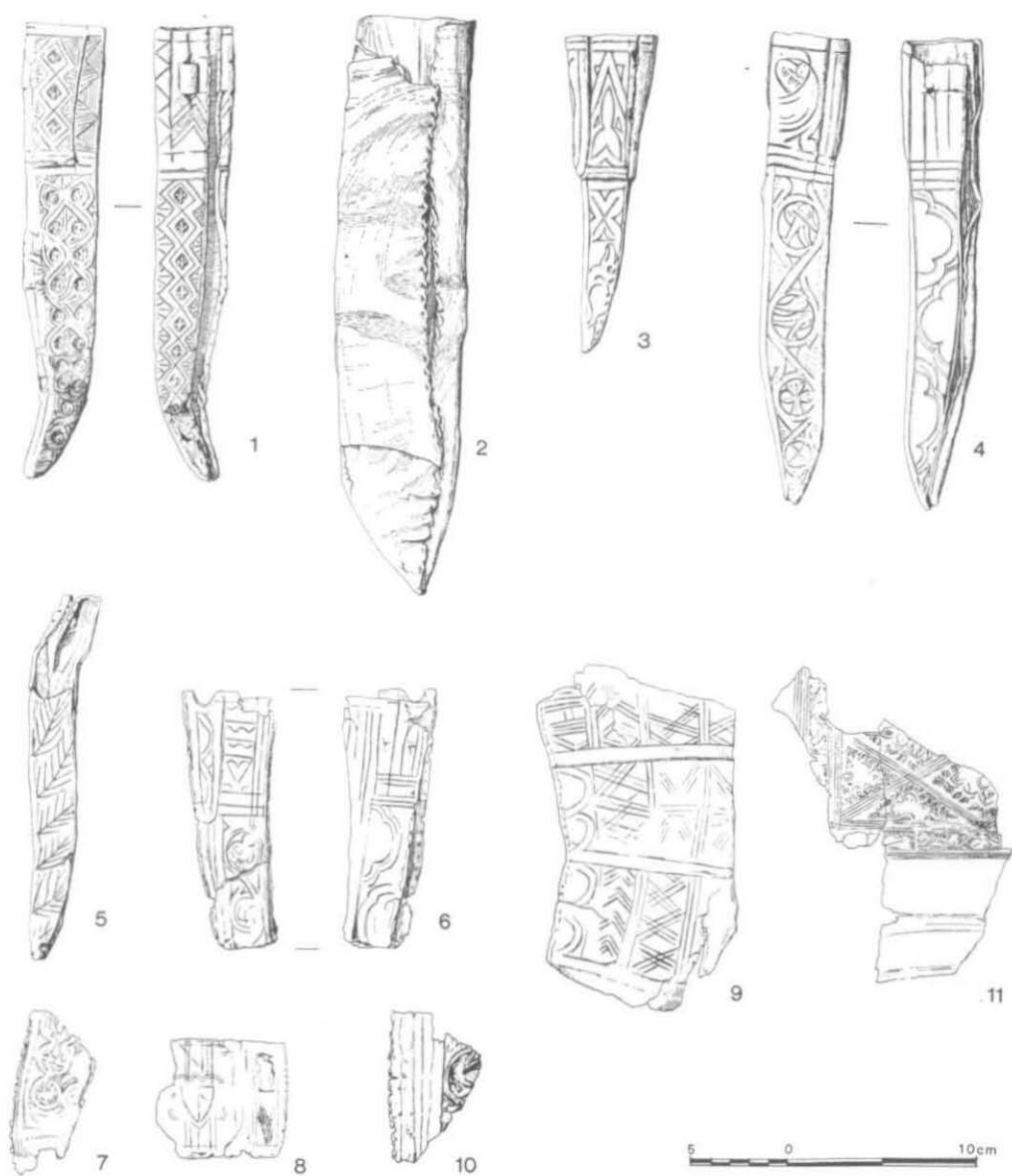


FIG. 25

Knife sheaths and decorated leather. 1-10 from the Barbican Ditch, WF5, 11 (No. 16) from the Castle Moat, F12. Scale  $\frac{1}{4}$ .



7 Upper part of knife-sheath, with relief decoration produced by outlining with blunt tool. On the front, three linked oval frames, the lowest of which can be seen to contain a griffin. The back has a simpler motif, in the form of a pointed arch. Length 8.6 cm.; width c. 4.0 cm. For the type of design, cf. Richardson 1959, 103 f. and Fig. 29, No. 4 (sf 236).

8 Piece of leather, perhaps part of a belt to which sheath was attached ornamented with a shield within a quatrefoil, thinly pricked out on the surface. Surviving length 6.7 cm.; width 6.0 cm. For the quatrefoil device, S. Moorhouse, 'Finds from Excavations in the Refectory at the Dominican Friary, Boston', *Lincolnshire Archaeology*, VII (1972), 21-48 especially 44, and Fig. 81 dated to the late 13th century (sf 237).

9 Large leather object ornamented with groups of incised lines, including arcs, lozenges and zig-zags. Length 18.0 cm.; width 9.5 cm. Purpose not known, but cf. *L.M. Med. Cat.*, 199 and Pl. xlvii for another large leather object (differently decorated) probably part of a saddle (sf 238).

10 Piece of leather with the foreparts of a wyvern or dragon, with its head turned within a roundel or scroll, in relief but with additional pricked or incised patterning on the body. Length 7.8 cm.; width 4.6 cm. Possibly from a sheath, or from a book-cover, *L.M. Med. Cat.*, 198, Fig. 64, No. A 27347 (sf 239).

11 Not illustrated. Upper part of sword sheath, with incised designs. On the front a very fragmentary, possibly floral, design around a central rectangle now missing. On the back a simple herring-bone design. Surviving length 10.0 cm.; width 6.0 cm. (sf 240).

*The Castle Moat* (F12). Only No. 16 illustrated (FIG. 25, 11)

12 Plain sword scabbard. Length 16.8 cm. Probably post-medieval. For the type *Guildhall Museum*, 371, No. 250, Pl. lxxxiv, 2; No. 252, Pl. lxxxiv, 1 attributed to the 16th century (sf 69).

13 Part of a knife sheath. Front face has two pairs of lines incised on it; back is plain. Incomplete surviving length 13.0 cm.; width 2.5 cm. Type as above (sf 85).

14 Top part of knife-sheath. On the front three diagonal lines are incised running from left to right; below them three horizontal lines. On the back are a pair of vertical lines. Incomplete, surviving length 10.5 cm.; maximum width 3.7 cm. Type as above (sf 86).

15 Knife-sheaths, ornamented with light linear designs. On the front this consists of a band towards the neck, and a narrow pair of lines running down one side. On the back, faint notches run across the seam. Length 19.0 cm.; maximum width 4.0 cm. (sf 87).

16 (FIG. 25, 11). Fragment from a leather object with an engraved and stamped ornamentation, including a running scroll and a triangle containing a vegetal design. *L.M. Med. Cat.*, 195, Pl. xlv, 2 and Fig. 61, 4. 15th century (sf 89).

17 Knife-sheath with one pair of lightly incised lines on the front and two pairs (one on each side of the seam) on the back. Incomplete, surviving length 10.7 cm.; maximum width 3.0 cm. For the type *Guildhall Museum*, 371, No. 250 (Pl. lxxxiv, 2); No. 252 (Pl. lxxxiv, 1) attributed to the 16th century (sf 96).

18 Part of knife-sheath, plain. Incomplete; surviving length 15.0 cm.; width 4.0 cm. (sf 260).

#### BONE OBJECTS. By MARTIN HENIG

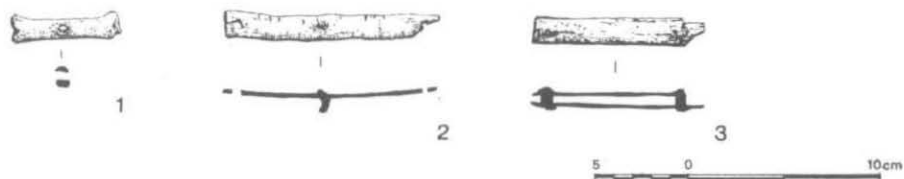
1 Toggle or bobbin from under Castle Mound IV (FIG. 26, 1). Bone pierced in centre; piercing 4 mm. (sf 3).<sup>149</sup>

2 Plate from a single-sided comb from pre-Bailey Bank pit 28A (FIG. 26, 2). Lines cut along top edge. Three perforations for iron rivets. 110 mm. (sf 7).<sup>150</sup>

<sup>149</sup> M. Robinson, 'Excavations at Copt Hay, Tetsworth, Oxon.', *Oxoniensia*, xxxviii (1973), 107 and Fig. 26, No. 28. There is a similar unpublished toggle from 79-80 St. Aldate's, Oxford, small find 401.

<sup>150</sup> For the type, typically late Saxon, see E. M. Jope and W. A. Pantin, 'The Clarendon Hotel, Oxford', *Oxoniensia*, xxiii (1958), 70 and 73, Fig. 25a; and D. M. Waterman, 'Late Saxon, Viking and Early Medieval Finds from York', *Archaeologia*, xcvi (1959), 87-90, Fig. 16, Pl. XVIII, 1-6.

## BONE



## METALWORK

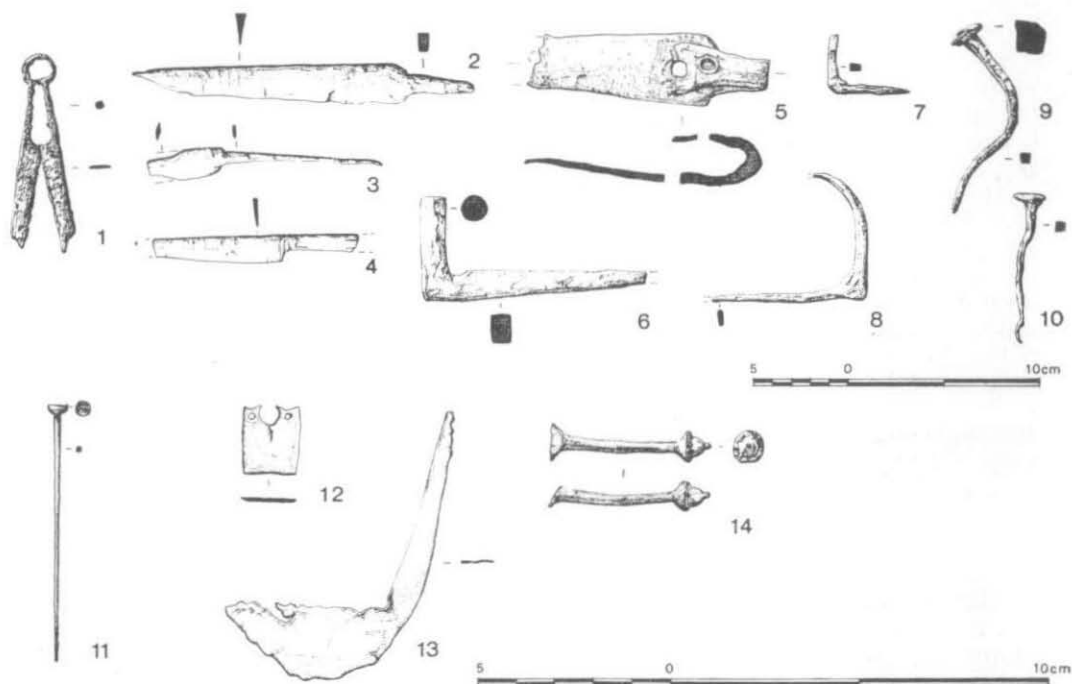


FIG. 26

Bone : 1. Toggle ; 2. Single-sided comb ; 3. Comb case ; Late Saxon. Scale  $\frac{1}{4}$ .  
 Metalwork : 1-10 Iron objects from the Barbican Ditch, WF5. Scale  $\frac{1}{4}$ . 11-13 Copper Alloy, and 14 Pewter.  
 Scale  $\frac{1}{2}$ .

- 3 Probable comb case from pre-Bailey Bank pit 28A (FIG. 26, 3). Two plates riveted at each end with an iron rivet (sf 105).<sup>151</sup>
- 4 Knife handle from Castle Ditch. Rounded end, hollow and slightly tapering. Post-medieval (sf 48).
- 5 Knife handle from Castle Ditch. Rectangular section with two mouldings running lengthways along the wider sides. Iron tang still survives. 76 mm. (sf 75).

## METALWORK. By IAN H. GOODALL

*Barbican Ditch, WF5 (FIG. 26)*

Close dating of the small group of metalwork from the Barbican Ditch is not possible, but nothing conflicts with the late medieval date range suggested by the other finds, and the spoon, 14, is of a type principally of 15th-century date.<sup>152</sup>

The iron objects, all of which were X-rayed, comprise a pair of shears, 1, three knives, 2-4, a strap hinge fragment and two hinge pivots, 5-7, a wallhook, 8, and ten nails of which 9 and 10 are examples. Knife 4 has shoulder plates brazed in position and non-ferrous metal (brazing fluid) along part of the top and bottom edges of the tang, but no rivet holes.<sup>153</sup> The pin with decorated head, belt end plate and sheet off-cut, 11-13, are of copper alloy, the spoon handle with diamond knob, 14, of pewter.

*Castle Moat, F12 (FIGS. 27-30)*

The metalwork from the Castle Moat has a wide date and type range, although the knives are the only individually numerous group. There is, a little surprisingly, only one key, and the items of horse furniture only slightly outnumber the groups of tools, of structural ironwork and of strapping. Two purse-frame fragments are of interest, but the personal equipment is not otherwise outstanding, for of five buckles only two are of copper alloy, and the remaining objects comprise only a few pins, lace-ends and a thimble.

The knives date from the 13th to 14th centuries through to the 18th century, but the majority are of the 16th century and earlier. Only five have the bolster between blade and tang, a hafting innovation of the 16th century, and two of these have variously preserved angled-backed scimitar blades of the 18th century.<sup>154</sup> The spurs also have a wide date range from the 15th to 17th centuries. A 19th-century spur from the Castle Mound has also been included. The four pewter spoons are also reasonably datable. Two have diamond knobs, which are a principally 15th-century feature, one has a horned head-dress knob of the first half of the 15th century, and the other is a spoon 'slipped in the stalk', a type popular from the early 16th century until the mid 17th century.<sup>155</sup>

*Iron*

Knives (FIG. 27) form the largest group of ironwork, most of which has been X-rayed, and the variety of their features reflects their wide date range. 15-27, 45, 47-8 have whittle tangs for insertion in a handle, but 28-44 and 46 have riveted scale tangs. 49 is a scale tang fragment, 50-2 are incomplete blades. 29, 32, 41 and 47-8 retain all or part of their wooden handles, and 44-5 their bone handles. Knives with scale tangs often had shaped handles, as did several of those from the Castle Moat, and the copper alloy end-caps of 29-31, double-hoof end of 41, and writhen iron knob of 44 are of particular note. 32 and 42 have nibbed ends on which end-caps were formerly impaled. Scale tang knives also often had applied non-ferrous shoulder plates immediately in front of their handles, and 32,

<sup>151</sup> D. M. Waterman, *op cit.* note 150, 90 and Pl. XIX.

<sup>152</sup> F. G. Hilton Price, *Old Base Metal Spoons* (1908), 23-5, Pl. III-IV, 2, 3.

<sup>153</sup> Ian H. Goodall in Guy Beresford, *The Medieval Clay-Land Village: Excavations at Goltho and Barton Blount* (1975), 79-81, Fig. 37, 35.

<sup>154</sup> J. F. Hayward, *English Cutlery* (1957), 5, 11.

<sup>155</sup> Hilton Price, *op. cit.* in note 152, 23-6, 38-41.

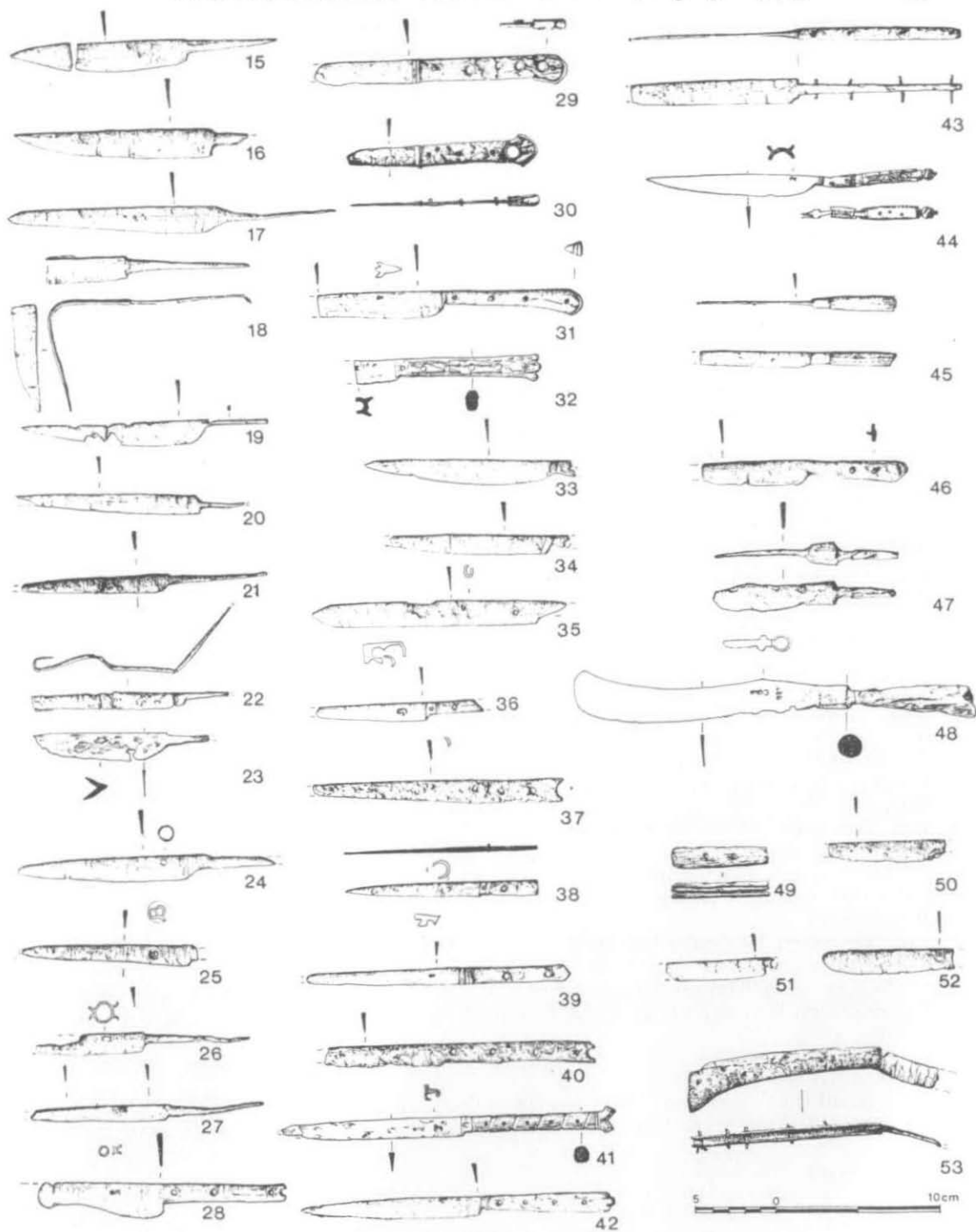


FIG. 27  
Iron knives from the Castle Moat, F12. Scale  $\frac{1}{2}$ .

36, 38 and 41 retain one or both of these riveted in place, 29-31, 33-5, 39 and 42 theirs brazed in place. These plates, however, were eventually supplanted during the 16th century by a bolster cut from a single piece of iron and forged in one with the blade and tang. The practice of stamping cutler's marks on the blade and inlaying them with non-ferrous metal was of medieval origin, but it is generally thought that inlaying ceased during the 16th century.<sup>156</sup> Knives 31-2 and 41 have inlaid marks, but those on 23-8, 35-9, 44-5 and 48 are not inlaid. The swage, or bevel, along part of the back of 27 is unusual, as is the finding of a clasp knife, 53, which must be of post-medieval date.

Three of the four pairs of scissors, 54-7, have similarly off-set finger loops, the other pair's handles being formed by returning the stems. Key 58 is incomplete, but lock 59 retains its complete mechanism within a case with corner attachment holes. Door and window fittings are few, but include latch rests 60 and 61, a small pivot 62, and one leaf of a pinned butterfly hinge, 63. Lengths of strapping of various sizes, some with terminals, are 64-9. Structural ironwork includes a series of nails and a bolt, 70-4, two angle ties, 75-6, a staple, 77, two incomplete chain links, 78-9 and a spiked hook, 80. Tools are smaller in number, but not in range, and comprise awls 81-2, a bodkin, 83, large pricker, 84, spoon bit, 85, wedges, 86-7, a hammer-head, 88 and balance arm 89. Objects of a more personal character are buckles 90-2, purse frames 93-4 and a possible bar, 95, and a heel-iron, 96. Items of horse furniture (FIG. 29) are horseshoes 97-8, snaffle bit 99 and two tanged curry-comb handles, 100-1.

(The balance arm, 89, has been wrongly drawn on Fig. 28. A correct drawing will appear in a subsequent *Oxoniensia*.)

*The Spurs.* By BLANCHE ELLIS (FIG. 29)

102 Iron long-necked spur. One side and the rowel missing. The remaining side, a flattened D section, projects downwards under the ankle, where its forward end curves upwards to the "figure 8" terminal. An incised line runs horizontally below the top edge from behind the heel to the curve. There is no crest but the rounded neck projects from below the incised line. Empty rowel box now compressed; projecting conical rowel bosses. Traces of non ferrous plating (? tin or silver). Also considerable encrustation of copper alloy on the neck, which might have come from an adjacent object although numerous traces on both surfaces of the side look like plating. Second half of the 15th century. Gilded spurs of similar form appear on the Monforte alterpiece: 'Adoration of the Kings', which Hugo van der Goes painted, probably between 1467 and 1474, now in Berlin.<sup>157</sup>

103 Iron spur. Sides flanged about 18 mm. deep behind the wearer's heel, then forward reduced to about 6 mm. deep to curve under the ankle. Sides twisted and too damaged to ascertain terminal type. Low set straight neck, the end of the rowel box and rowel missing. Outer surfaces appear to show traces of plating, probably tin,<sup>158</sup> 16th century.

104 Exceptionally slender iron spur. Straight D section sides, with a group of diagonal incised lines decorating each beside the junction with the neck. Single ring terminals, one broken. Small buckle, now detached. Rowel originally of 6 sharp points, one broken. Traces of non ferrous plating, probably tinned(?).<sup>159</sup> Probably second half of the 16th century.

105 Fragment of an iron spur. Straight (D section) sides, badly corroded. Second half of the 16th century.

106 Small iron rowel spur. Straight (D section) sides, "figure 8" terminal. One stud attachment for the lower leather remains. Slight traces of non ferrous decoration (?).

<sup>156</sup> Hayward, *op. cit.* in note 154, 5.

<sup>157</sup> Colin Thompson and Lorne Campbell, *Hugo van der Goes and the Trinity Panels in Edinburgh* (Trustees of the National Galleries of Scotland, 1974).

<sup>158</sup> E. M. Jope, 'The Tinning of Iron Spurs: A Continuous Practice from the Tenth to the Seventeenth Century', *Oxoniensia*, XXI (1956), 35-42.

<sup>159</sup> *Ibid.*

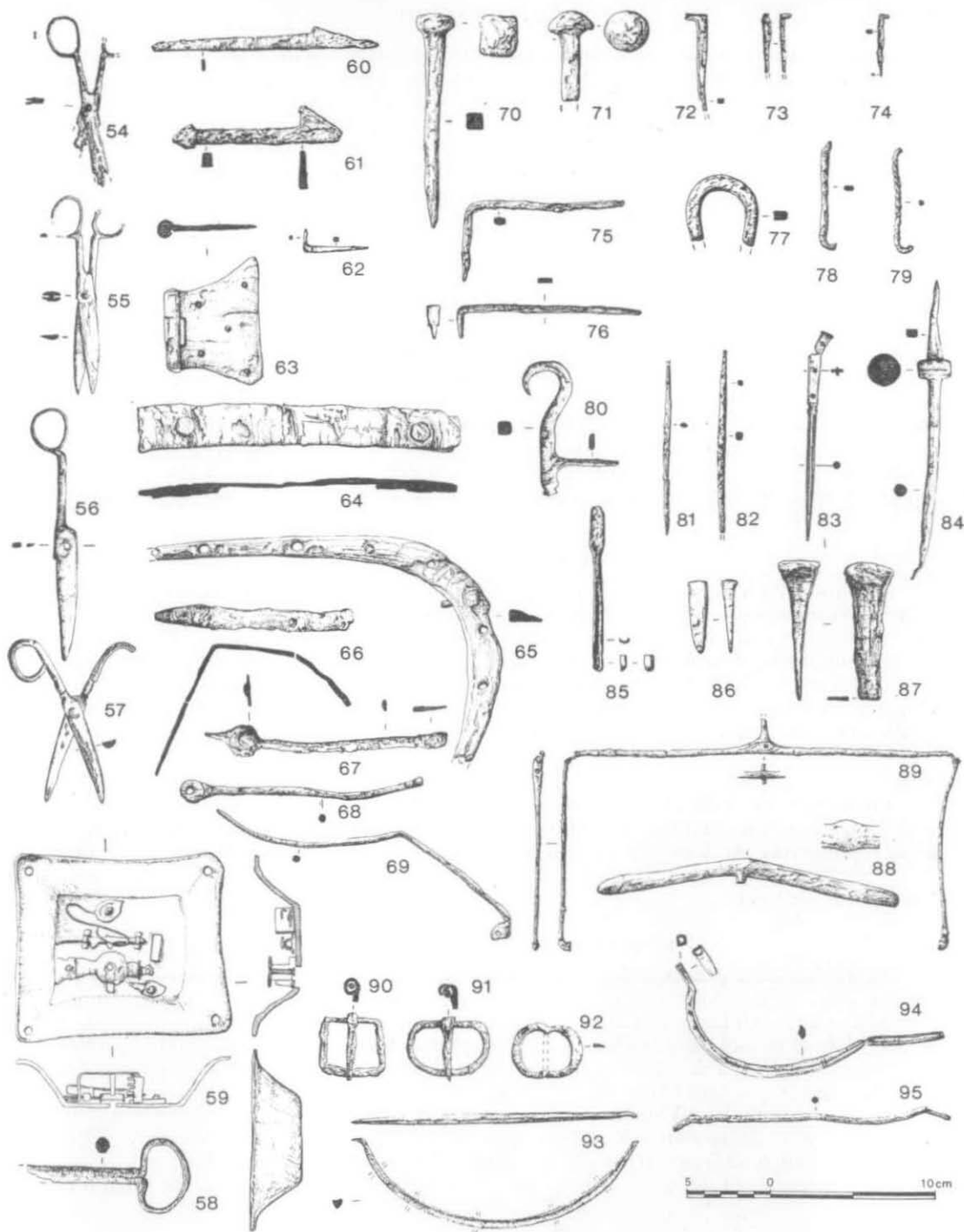


FIG. 28

Iron objects from the Castle Moat, F12 : 54-7, Scissors ; 58-9, Key and lock ; 60-9, Door fittings, hinges, strapping ; 70-80, Structural ironwork ; 81-9, Tools ; 90-5, Personal objects. Scale  $\frac{1}{4}$ . (No. 89 has been incorrectly drawn).

Spurs of this type and date were often encrusted with silver. This type of small spur was in common use in the second half of the 17th century.

107 Small iron spur similar to 106 above but with an exceptionally short neck. The buckle position indicates use on the left foot. There appear to be traces of non ferrous plating, perhaps silver encrustation. Second half of the 17th century.

108 Fragment of an iron spur, similar to 106 and 107 above. Slender, tapered, D section sides now distorted and one terminal missing; the slight even curve of the most complete side may be original. The remaining evenly set "figure 8" terminal retains a scrap of an attachment for a leather. Some faint traces of incised lines on the badly corroded surfaces may indicate decoration or roughening for plating, but could be rust texture. Second half of the 17th century.

109 Iron spur for the right foot. D section sides. One "figure 8" terminal retains a buckle and a disc shaped hook attachment for the lower leather. Buckles were worn to the outside. Traces of non ferrous plating, probably tin.<sup>160</sup> This is a strong, functional spur for use with stout riding boots by a cavalryman or traveller of the 17th century.

110 Iron spur. Straight sides of flat section increasing slightly in depth towards their squared-off forward ends,<sup>161</sup> each of which is pierced with a round hole for a screw. These screws attached the spur permanently to the boot heel. Probably military. First quarter of the 19th century. From Castle Mound, unstratified. Spurs of this type attached to boot heels were the immediate predecessors of the box spur<sup>162</sup> which was invented by Henry Maxwell c. 1820.

#### *Copper alloy* (FIG. 30)

The most interesting object is the off-cut from the rim of a moulded dish, 111, but other objects are a possible knife handle, 112, patch, 113, buckle frames 114-5, a thimble, 116, chain, 117 and end-cap from a knife handle, 118. One of three needles, 119-121, has a triangular tip, and a fragment of a fourth resembles 121. Numerous pins were found, one with a single spiral-twist wire head, 122, 23 with double spiral-twist heads, of which 123 is typical, and one with a flattened, spherical head, 124. 125 is a length of wire similar to another piece with split ends, and 126 is one of three lace-ends.

#### *Pewter* (FIG. 30)

Of four spoons, 127-8 have diamond knobs and identical maker's marks or touches on their bowls. 127 is complete, its slender stem and fig-shaped bowl distorted. 129 has a knob representing the bust of a woman with a horned head-dress, whilst 130, also broken across the bowl, has a slant-cut end and is of the type known in wills and inventories as 'Slipped in the Stalk'.

#### THE ANIMAL BONES. By BRIAN MARPLES

In the following consideration of the bones, no distinction between those of Sheep and Goat is attempted, with the single exception of a large horn-core which is undoubtedly that of a Goat. All bones or parts of bones were counted with no attempt being made to attribute them to individual skeletons. Taking the collection as a whole, the bones of Ox and Sheep were much the most numerous, 249 and 382 respectively, while there were only 55 of Pig, the proportions being 36%, 55% and 8%. Only 17 bones of Horse were found. The smaller mammals and birds were present in very small numbers and the only unusual occurrences were a fragment of Red Deer antler and a single vertebra of a Porpoise. There were also included 58 Oyster (*Ostraea*) shells and a single Mussel (*Mytilus*) shell.

Measurements of the bones were made where this was possible and the record of these

<sup>160</sup> *Ibid.*

<sup>161</sup> Figure 29 side view: the forward end of the side illustrated is rounded by corrosion, the side not shown clearly shows the squared-off shape of the ends.

<sup>162</sup> The box spur has a prong which fits into a box in the boot heel, where it is retained by an internal spring fitting.

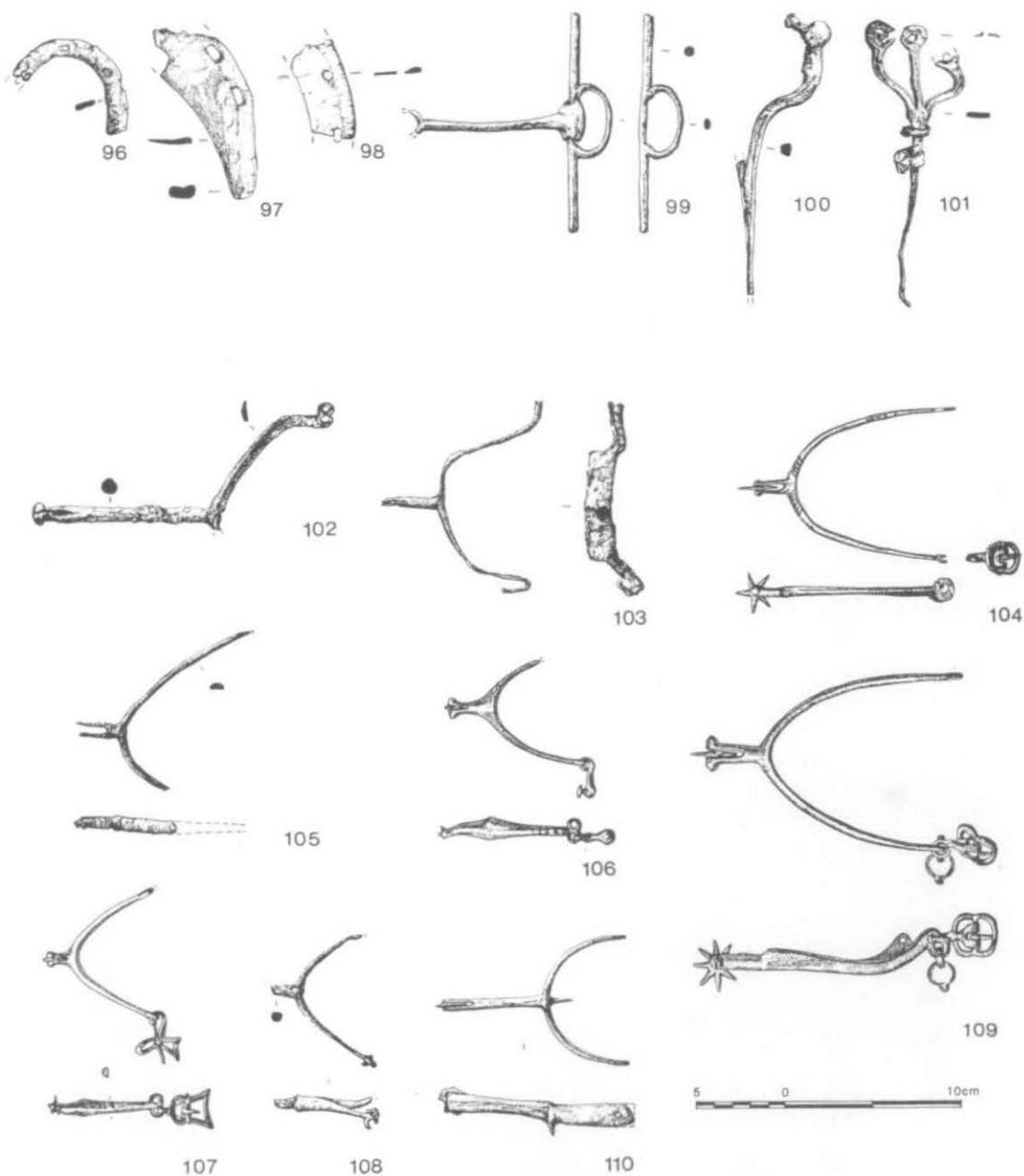


FIG. 29

Iron objects from the Castle Moat, F12 : 96-101, Horse furniture ; 102-110, Spurs. Scale  $\frac{1}{4}$ .



is available from the Oxford Archaeological Excavation Committee. A record was made of any bones showing cuts or with signs of having been chewed by dogs, but these figures do not seem worth reporting. The number charred, seven only, suggests that roasting was not a common method of cooking.

Eight groups of bones are distinguished archaeologically and the bones from these are considered separately. Three of the groups consisted of only negligible numbers.

*Group 1.* Pre-Mound, before *c.* 1071

Out of 69 identifiable bones 20% were of Ox, 71% of Sheep and 8% of Pig. 3 of the Sheep and 2 of the Pig bones were immature.<sup>163</sup> 3 Oyster shells were present.

*Group 2.* Post-Mound, after *c.* 1071

Negligible numbers. Only 2 Sheep, 2 Pig and 1 fragment probably of a Duck were present.

*Group 3.* Pre-Bailey Bank, *c.* 1071

This provided the largest collection of all the layers. With 489 bones of the food mammals the proportions were Ox 28%, Sheep 52% and Pig 19%. All parts of the skeleton were present including parts of the skull and jaw and of the feet. Immature bones were not common, 15% of Ox and 8% of Sheep, but 28% of Pig. The Sheep seem to have had horns, and the presence of Goats was shown by a large horn-core. This is broken from the skull and lacks the tip. It is convex on both faces and has a sharp anterior border whose present length is 230 mm. When complete it must have been at least 300 mm. long, and its dimensions at the base are 73 mm. by 40 mm. An unusually large radius, which has exostoses at the proximal end, may also belong to a Goat. Apart from the food mammals there were 11 bones of Horse, 2 of Cat (humerus length 81.0 mm.) and part of the skeleton of a Dog (femur length 197.5 mm.). This group had 29 Fowl bones, the only other group to have any being No. 4, which had 3. They varied considerably in size, 2 bones of Goose and 5 fragments of unidentified birds being also present. There were 32 Oyster shells.

*Group 4.* Pits outside the Castle Ditch. Late 11th to 12th century.

There were 48 bones, 29% Ox, 52% Sheep and 18% Pig. 3 bones of Fowl were also present.

*Group 5a.* Pre-Barbican. Later 11th to 12th century

29 bones, 34% Ox, 62% Sheep and 3% Pig. There were also 6 bones of an individual bird, at present unidentified, and 1 Oyster shell.

*Group 5b.* Barbican Ditch. 13th to mid-15th century

This group had 126 bones, 53% Ox, 23% Sheep and 22% Pig. It will be noticed that between Groups 1 and 5b the percentage of Ox increased steadily from 20% to 53% while the proportion of Sheep declined. 7 of the 68 Ox bones and 12 of the 28 Pig bones were immature. There were 4 Horse bones and part of a shed antler of a Red Deer, the beam cut leaving the base and part of the brow tine. Most surprising was the vertebra of a Porpoise. This lacks the epiphyses, transverse processes and neural spine. The depth of the centrum is 52.5 mm. There were 14 bones of Dog, 5 of which belonged to an old individual with exostoses round the joints (humerus length 124.0 mm., femur lengths 137.5 mm., 167.0 mm., 175.0 mm.) and 4 of Cat (femur length 96.5 mm.). Of the birds there were 1 Pigeon, 4 Goose, 1 probably Duck and 1 fragment. Oysters, 25 shells and a single one of Mussel (*Mytilus*).

*Group 5c.* Barbican. Later than mid-13th century

4 bones only, 3 of Ox and 1 of Horse.

*Group 6.* Post-Medieval

3 bones only, 2 of Sheep and 1 of Horse.

<sup>163</sup> Preliminary identifications were made by Mr. L. Colvin.

EXCAVATIONS AT OXFORD CASTLE, 1965-1973

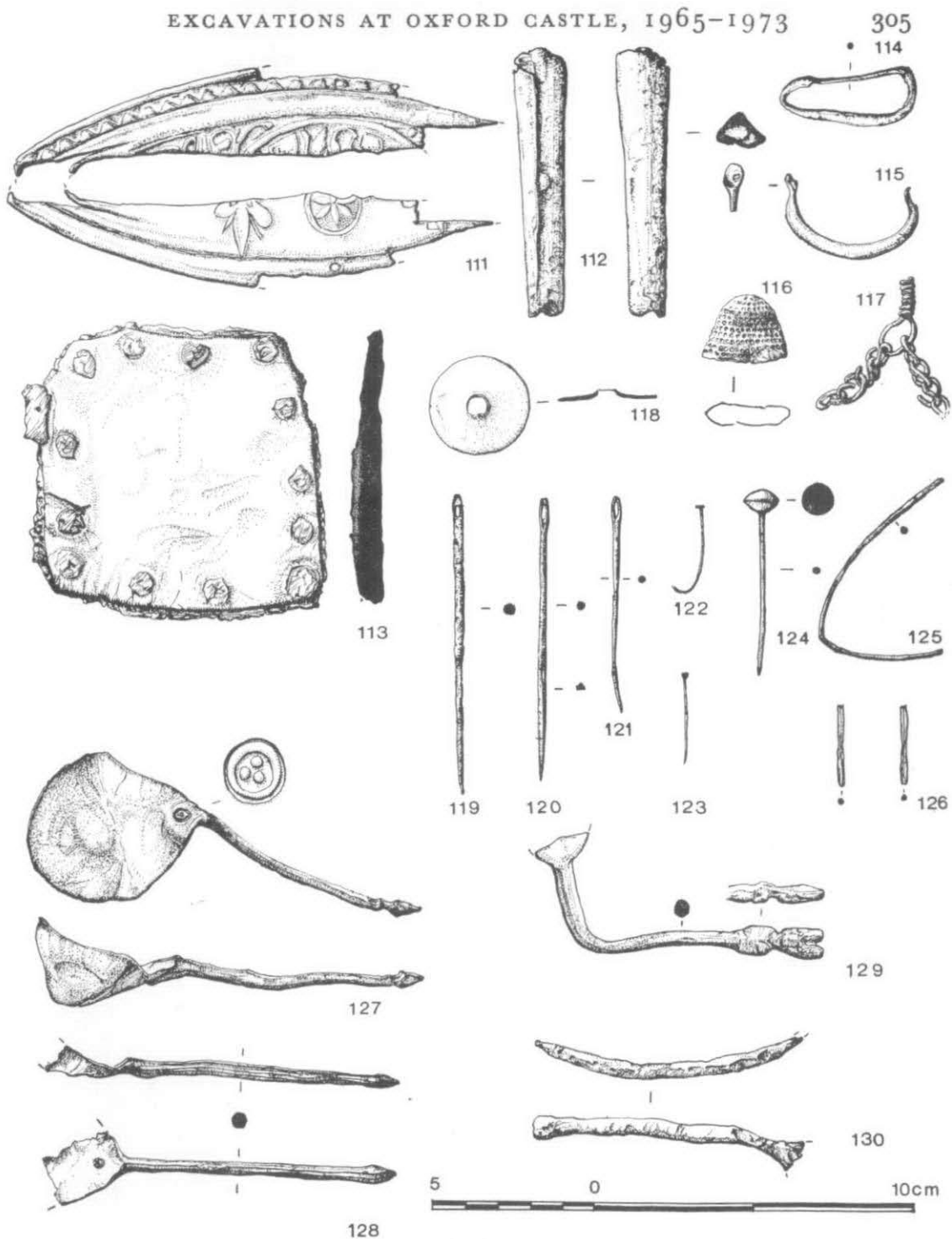


FIG. 30

Castle Moat, F12 : 111-26, Objects of copper alloy ; 127-30, Objects of pewter. Scale  $\frac{1}{2}$ .

## THE HUMAN REMAINS. By MARY HARMAN

Beneath the Castle Mound there were an incomplete skull, two vertebrae, one thoracic and one lumbar, a rib fragment and the distal end and shaft of a right humerus. It may reasonably be assumed that these bones are derived from one individual. As none of the teeth were found no estimation of the age can be made, but the skull was that of an adult, probably female, and the rest of the bones are not inconsistent with this. None shows any signs of extreme old age.

In addition to these bones, the distal end of a right humerus diaphysis was found, from a child aged between seven and ten years. There is considerable periostitis on the lower part of the diaphysis, especially just above the distal fossae, but the area adjacent to the junction with the epiphysis is not affected.

From St. Budoc, in the stone coffin, WF74, the skeleton unfortunately had the facial area, all the vertebrae except the last lumbar and the sacrum, the ribs, and the lower arms, hands and feet missing, although otherwise it was in good condition. Both the calotte and the pelvic girdle indicate that this was a female skeleton and there was no indication of extreme age. The height, calculated from the lengths of the humerus, tibia and femur, using the formula of Trotter and Gleser, was 5 ft. 2½ in. (159.1 cm.).<sup>164</sup> Bones from at least three people, one a child, were found in a group associated with the graveyard area of St. Budoc's, WF76.

Human bones from the Barbican Ditch, WF5, were almost exclusively from the head and the legs. In the circumstances the larger and more obvious bones would have been the most likely to have been retrieved, but there were some quite small ones in the group, so that the peculiar distribution of the parts of the body represented is unlikely to be due to the collection system during excavation. The bones found represent a minimum of 23 individuals: 18 adults, including 4 females and 1 male, represented by the pelvis, and 5 juveniles aged about 7 years, 8-12 years, 10-12 years, and 2 of 17-20 years.

## INSECT REMAINS. By G. C. VARLEY

Three species of fly were present among the puparia found with the skeleton in the coffin at St. Budoc's, WF74, one of which could not be positively identified. The other pupae were *Muscina stabulans*, well known from corpses and probably *Hydrothea dentipes*, which is often associated with carrion. Puparia of the house fly *Musca domestica* were found in the Barbican Ditch, WF5.

## APPENDIX

## THE CHURCH OF ST. GEORGE IN THE CASTLE. By JANET COOPER

The collegiate church of St. George in Oxford Castle<sup>165</sup> was said in the 12th and 13th centuries to have been founded in 1074 by Robert d'Oilly and Roger d'Ivri,<sup>166</sup> but there are reasons for suggesting that there was a pre-Conquest church on the site. The strongest argument for the existence of such a church is that St. George's was a parish church from an early date. The western suburb of Oxford, later St. Thomas' parish, was called St. George's parish (*parochia*) in 1224 and 1282,<sup>167</sup> in 1151 the church had an area of jurisdiction (*iure suo*) both within and without the walls,<sup>168</sup> and in 1192 the parishioners of Walton and Twentyacre (near the site of the modern Jericho) and their tithes were found to pertain to St. George's.<sup>169</sup> The church seems to have had burial rights, for a large number of

<sup>164</sup> M. Trotter and G. C. Gleser, 'A re-evaluation of estimation of stature based on measurements of stature taken during life and long bones after death', *Amer. J. Phys. Anthropol.*, 16 (1958), 79-123.

<sup>165</sup> The research on which this note is based was done in connection with work on the *Victoria History of Oxfordshire*.

<sup>166</sup> *Annales Monastici* (Rolls Ser.), IV (1869), 10; *Oseney Cart.* IV (Oxf. Hist. Soc. xcvi, 1933), 28.

<sup>167</sup> *Oseney Cart.* II (Oxf. Hist. Soc. xc, 1928), 350; *Sandford Cart.* (Oxf. Rec. Soc. xix, 1938; xxii, 1941), 104.

<sup>168</sup> *Oseney Cart.* IV, 56-7.

<sup>169</sup> *Ibid.*, 91-2; *Godstow Eng. Reg.* I (E.E.T.S. cxlii, 1911), 365.

skeletons, apparently from the graveyard, were found in association with its ruins during the building of the prison on the site in 1794.<sup>170</sup>

In six other towns parish churches within castles seem to have ante-dated the castle. St. Mary's in the Castle, Dover, can be dated to the late tenth century on architectural grounds.<sup>171</sup> The collegiate church of St. Guthlac, Hereford, was well-endowed by 1066;<sup>172</sup> in 1143 its endowments were transferred to the newly-founded St. Guthlac's priory on the outskirts of the town, and the old church fell into disuse.<sup>173</sup> At Leicester the parish of the collegiate church of St. Mary de Castro, founded by Robert de Beaumont Count of Meulan in 1107, comprised a small area within the walls and the south field outside them,<sup>174</sup> and the church, which stood in the castle bailey, was traditionally said to have been founded before the Conquest and re-founded by Count Roger.<sup>175</sup> It and its endowments were given in 1143 to the new Augustinian abbey of Leicester.<sup>176</sup> All Saints' church in Warwick Castle, built by Henry de Beaumont before 1119 and removed out of the castle on the instructions of the bishop of Worcester in 1127 or 1128, was also said to be an ancient foundation. The legendary St. Dubricius was said to have fixed his episcopal seat there, and by the early 12th century All Saints' was a parish church in possession of burial rights, tithes, and oblations.<sup>177</sup> It was united with St. Mary's College in 1128.<sup>178</sup> The collegiate church of St. Mary's in the Castle, Hastings, was said in a petition of c. 1299 to have belonged to, or been associated with, a brother of Edward the Confessor,<sup>179</sup> and may have been built, probably early in the Confessor's reign, as a memorial to the atheling Alfred (killed in 1037), or perhaps in expiation of his murder. A building which appears to be a stylized church is shown on the Bayeux tapestry beside the half completed motte at Hastings, and the architectural evidence of the ruins of the church is not inconsistent with an early 11th-century date.<sup>180</sup> The chapel in Pevensey Castle served parishioners outside the castle in the mid 13th century when permission was obtained to move it to a more convenient site in the town. The footings of a church with a long narrow nave, small square chancel and walls less than 2 ft. 6 ins. thick with massive quoins, survive within the castle; both the plan and the style of the walls would be consistent with a pre-Conquest date.<sup>181</sup> The chapel of Colchester castle may also have had parochial functions, for the tithes of 207 acres of land pertained to it until Eudo Dapifer granted them to St. John's monastery in 1102,<sup>182</sup> but there is no evidence that the chapel had existed before the building of the castle.

It seems from this evidence that a parish church set within a castle may ante-date the castle. The site of St. George's possibly by the Anglo-Saxon west gate of Oxford and in an area of the town known to have been settled by the late 10th century,<sup>183</sup> is a likely one for a pre-Conquest church. The dedication to St. George is unusual for any 11th-century church and would be still more unusual, although not impossible, for a pre-Conquest foundation,<sup>184</sup> but the dedication may have been changed in 1074 or later. The surviving tower and crypt, both of early Norman date,<sup>185</sup> are not aligned with each other, nor were they before the re-construction of the crypt in 1794.<sup>186</sup> This difference in alignment

<sup>170</sup> E. King, *Vestiges of Oxford Castle* (London, 1796), 17.

<sup>171</sup> H. M. and J. Taylor, *Anglo-Saxon Architecture*, I, (1965), 214-16.

<sup>172</sup> *V.C.H. Herefs.* I, 325.

<sup>173</sup> M. D. Lobel, ed., *Historic Towns*, I (1969), 'Hereford', 6.

<sup>174</sup> *V.C.H. Leics.* IV, 369, 376.

<sup>175</sup> *Chron. Hen. Knighton* (Rolls Ser.) ed. J. R. Lumby, I (1889), 62; Leland, *Itineraries*, ed. Toulmin Smith, I (1906), 15; Dugdale, *Monasticon*, VI (3), 1456.

<sup>176</sup> *V.C.H. Leics.*, II, 45.

<sup>177</sup> *V.C.H. Warw.*, VIII, 455, 522, 532; Dugdale, *Monasticon*, VI, 602.

<sup>178</sup> *V.C.H. Warw.*, VIII, 532.

<sup>179</sup> A. J. Taylor, 'Origin of the Chapels in Hastings and Pevensey Castles', *Chateau Gaillard*, III (1969), 145.

<sup>180</sup> *Ibid.*, 145-9.

<sup>181</sup> *Ibid.*, 149-51.

<sup>182</sup> J. H. Round, *History and Antiquities of Colchester Castle* (1882), 134-6.

<sup>183</sup> E. M. Jope, 'Late Saxon pits under Oxford Castle Mound', *Oxoniensia*, XVII-XVIII (1952/3), 77.

<sup>184</sup> F. Arnold-Forster, *Studies in Church Dedications*, II (1899), 471-2.

<sup>185</sup> Royal Commission on Historical Monuments, *Oxford* (1939), 156-7.

<sup>186</sup> King, *op. cit.* note 170, 18-19.

suggests that the two buildings, or at least their foundations, are of different dates, unless there was some compelling military reason for the position of the tower; any earlier building dictating the alignment would have to have been pre-Conquest.

The later history of St. George's is similar to that of the other castle churches quoted above. The college of secular canons founded in 1074 remained in the families of d'Oilly and d'Ivri until 1149 when Henry d'Oilly and John de St. John (the successor of Roger d'Ivri) granted it to Osney Abbey, with all its possessions including the church of St. Mary Magdalen in Oxford and land and tithes in many parishes in Oxfordshire and Buckinghamshire.<sup>187</sup> St. George's continued as a parish church, but the bailey of the castle proved an inconvenient site, and c. 1190 Osney built the chapel of St. Thomas the Martyr, which during the 13th century took over most of the parochial functions of the older church.<sup>188</sup> St. George's continued in use, however, served by canons of Osney until at the end of the 15th century the abbey founded a small college there whose chaplains were to minister to the parishioners within the Castle.<sup>189</sup> At the dissolution of Osney in 1539 St. George's, its college defunct, passed to Christ Church which retained the site until 1785 when it was taken into the prison.<sup>190</sup> The area around the Castle was called St. George's parish in 1542 and 1570, and an Easter communion in the church was recorded in 1570,<sup>191</sup> but by 1611 the church was disused.<sup>192</sup>

*The Society thanks the Department of the Environment for a publication grant for this paper.*

<sup>187</sup> *Osney Cart.* IV, 6-8, 27-8.

<sup>188</sup> *Ibid.*, II, 432-5.

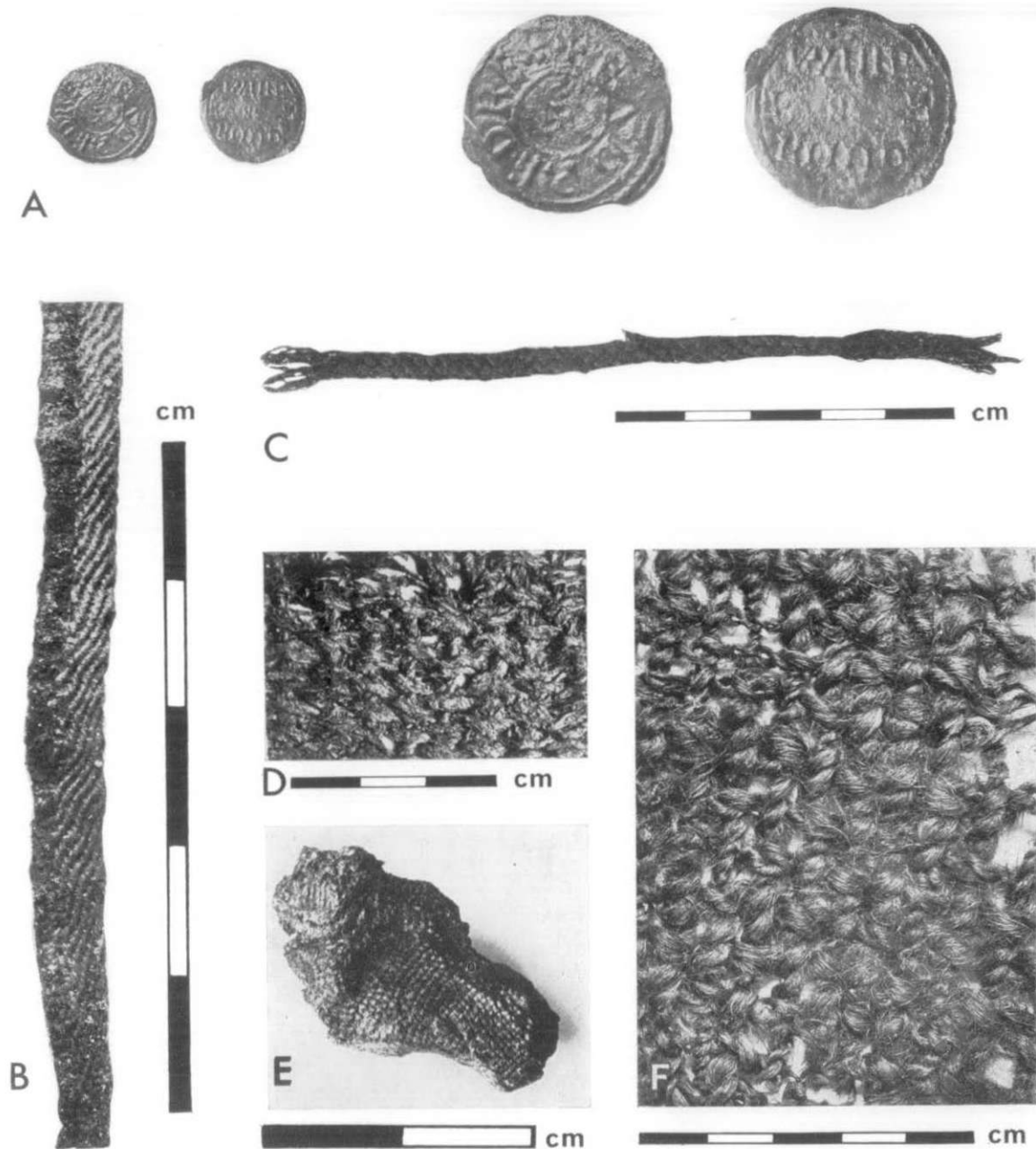
<sup>189</sup> *Ibid.*, IV, 37; 'Parl. Petitions relating to Oxford', *Collectanea III* (Oxf. Hist. Soc., xxxii, 1896), 94; *Cal. Liberate Rolls*, 1260-7, 213; Bodl. MS. Rawl. Statutes 34, f. 25v; *V.C.H. Oxon.* II, 160-1.

<sup>190</sup> Christ Church Arch., MSS. XX c. 3, 193; XX c. 11, f. 105; XX c. 13, f. 4; XX c. 19, f. 132; Chapter Act Bk. 1776-99, 497.

<sup>191</sup> Bodl. MS. Oxf. Dioc. c. 21, ff. 57, 105v; *Letters and Papers of Henry VIII*, XVII, 490.

<sup>192</sup> Christ Church Arch. MS. XX c. 3, 193.

PLATE VIII



A. Round halfpenny or farthing of King Eadred (946-55) of the Oxford Mint. Natural size and enlarged  $\times 2$ .

*Phh.: Ashmolean Museum*

B. Hat brim, with fine twill or ribbon of bast fibre. WF5, 13th-15th cent.

C. Part of a braided shoe lace. WF5, 13th-15th cent.

D. Coarse textile possibly from a girth. WF5, 13th-15th cent.

E. Carbonised silk or flax. Pit WF28, 13th-15th cent.

F. Textile, ? hair shirt. Church of St. Budoc WF74, 12th cent.

*Phh.: David Carpenter*