

EXCAVATIONS AT BARN ROAD, NORWICH, 1954-55

By J. G. HURST, M.A., F.S.A.

*Ancient Monuments Inspectorate,
Ministry of Public Building and Works*

IN 1951 and 1953 excavations were carried out by the Ministry of Works on either side of St. Benedict's Gates, Norwich.¹ To the south of the gates the city bank had been removed, together with any Saxo-Norman occupation layer that may have been there, except for a small patch. Under the city wall itself the compacted foundation trench went right down to the natural gravel so that here too any early occupation layer had been removed. There were, however, fifty Thetford ware sherds in the foundation trench suggesting that there was Saxo-Norman occupation in the area.

To the north of the gates, the sections in front of the city wall, to investigate the development of the city bank, ditch and wall, showed that there was a thick Saxo-Norman occupation layer underneath the city bank first surviving in square 48, some seventy-five feet north of St. Benedict's Gates² and continuing with an average depth of nine inches at least one hundred and forty feet to the north, to the limit of excavation in square 75.³ In front of the bank the layer had been cut through and destroyed by the digging of the ditch but, behind the wall, the layer was preserved for a width of thirty feet by the medieval bank and a series of medieval and later roads. On the other side of the road the early levels were destroyed by eighteenth- and nineteenth-century cellars.

In view of the large quantities of late Saxon pottery found and the pit in square G.56⁴ it seemed worthwhile to strip an area to see if it was possible to obtain plans of any structures as so little is known about buildings of this period. As the area was to be redeveloped the Ministry of Works excavated an area 105 feet by 20 feet in 1954 (b to B.53 to 73) Pls. I-II, and a further smaller area 40 feet by 10 feet in 1955 (A to B.44 to 51).⁵ The 1953 sections⁶ had shown that the top eight feet consisted of late and post-medieval levels. As it would have taken too long to dig these by hand, the whole area was removed to a depth of eight feet by dragline, leaving only about six inches of deposit on top of the Saxo-Norman occupation level. It became apparent that some late medieval structures had been destroyed. If these had been investigated by hand, it would have been impossible to completely excavate the early levels. As the foundations of the wall were so insecurely based it was not possible to excavate to this great depth closer to the wall than ten feet. There remains, therefore, a strip of occupation fifteen feet wide under the city wall and bank which cannot be excavated. This is tantalising since several structures could not be elucidated as they continued into this area, and in the same way on the other side of the area excavated structures were cut by the later cellars, Fig. 1. Still it was

fortunate that this strip of occupation was preserved; in so many towns deposits of the late Saxon and early medieval periods are destroyed by later building activities and by pits.⁷ In the strip excavated it was found that, after the city bank was built in the thirteenth century, roads had been laid down in late medieval times and no further disturbance took place at the lower levels.

SUMMARY

The excavation showed that the dark occupation level, varying in thickness from six to twelve inches was continuous for a length of 140 feet, from square 48, where it tapered out against rising ground, as far north as was excavated in square 75. The features found may be divided into three periods by their association with this level, and into two later periods above.

There were stray Roman, Pagan and Middle Saxon finds, but no features in the area excavated were as early as this.

In *Period I* (850–1000) features were cut into the original ground surface while an occupation level was beginning to accumulate. These formed the foundations for a substantial timber building and several lesser structures which were datable to the late ninth and tenth centuries as only Saxo-Norman and early imported pottery was found at this level. The size of the building, and the large number of imported sherds, suggest that this was an important site in the tenth century and that there was a port and trading centre on a tributary of the River Wensum at Westwick upstream from Northwick and Conesford.

In *Period II* (1000–1150) features were visible at the top of the occupation layer or were partly cut into it. These were clearly where timber buildings had been but it was not possible to make a coherent plan out of them. This period is assigned to the eleventh and early twelfth century since both Saxo-Norman and Early Medieval pottery was found at this level. At this time there was a decrease in the importance of the site, though there must have been major buildings elsewhere since the continued presence of imported sherds suggests that there was still an important trading centre at Westwick, as does the presence of the Westwick mills. Large quantities of ironsmelting residues also show that there was an industrial site in the area.

In *Period III* (1150–c. 1200) features were built on the top of the occupation level. These were flimsy clay-lump huts sealed by the building of the city bank in the thirteenth century and associated with thirteenth-century type pottery. With the rising importance of Norwich, the Westwick mills and the building of various bridges in the twelfth century, which would prevent navigation by sea-going ships upstream to Westwick, the area seems to have degenerated into a series of small huts. The early thirteenth-century documentary references to Heigham Gates and a city ditch at Westwick still suggest that the junction of the Wensum and its tributary was important but, the Barn Road area at least became progressively less important after the merging of Westwick with the other Saxon settlements to form the city of Norwich.

Period IV (c. 1200–1300). The building of the city bank in the thirteenth century made necessary the clearance of this area. The thirteenth-century huts

were destroyed and the tributary widened and made into the city ditch. At the end of the thirteenth or early in the fourteenth century, the city wall was built and at the same time a small ditch was dug behind the bank but was quite soon filled in as it contained building debris from the city wall and a coin of c. 1300. Four gravel pits were dug either to supply materials for the city wall and its consolidated foundation, or they were the result of late thirteenth-century illicit gravel digging.

Period V (1300 onwards). In the fourteenth and fifteenth centuries several huts were built at random behind the city bank partly blocking the lane behind the city wall. About 1500 these squatters were cleared out and a properly metalled road constructed which survived until the blitz of 1942. This was built up to a depth of six feet and therefore sealed the earlier levels. Eighteenth- and nineteenth-century cellars had destroyed most of the late medieval houses but part of one remained together with a single rubbish pit of the fifteenth century. Two flint-lined wells were found one containing a group of late seventeenth-century pottery.

THE ORIGINS OF NORWICH

By R. R. CLARKE AND MISS BARBARA GREEN

The historical and archaeological evidence for the occupation of the site of Norwich during the Early Anglo-Saxon period up to 850 is scanty and the interpretation suggested here is likely to be modified by future discoveries.

It seems probable that the Late Saxon town of Norwich resulted from the union of several small independent settlements which grew up on the gravel terraces lying beside the meanders of the River Wensum. The earliest known documentary reference to Norwich is in the Anglo-Saxon Chronicle in 1004, but the name *Northwic* appears on coins of Aethelstan (925-940) and this mint may, on the evidence of the Morley St. Peter coin hoard, have been in operation about 920. The name *Northwic*, Dr. O. K. Schram would consider, on philological grounds, to have originated before 850, as also the names Westwick and Coslany, though the earliest documentary references to these are twelfth century (*Westwic* 1153-1168, *Coslania* 1146-1149). The name Conesford (Cunegesford 1166) is Danish in origin and can only be as early as about 900. It seems likely, however, that it replaced an earlier Anglo-Saxon name. Westwick can be approximately sited on the south bank of the Wensum in the Westwick Street—Barn Road area; Coslany on the opposite bank in the area of Colegate, and Conesford in the King Street—Ber Street area. The position of the original Anglo-Saxon settlements within these areas cannot be determined with certainty, nor are there any historical records to locate the settlement of *Northwic* before it gave its name to the whole town.

Archaeological evidence points to settlement in three areas before 850, associated with meanders of the Wensum. The earliest Anglo-Saxon site in the area is a cremation and inhumation cemetery at Eade Road on the hilltop outside St. Augustine's Gate, and pottery and a brooch from this attest its use during the fifth and sixth centuries.⁸ The location of the settlement whose dead lie here

is unknown but is likely to have been in the valley to the south, in or near to Coslany. Settlement from the sixth century in part of Westwick is indicated by a few sherds and the small-long brooch published in this report. There is at present only a single sherd of pagan Anglo-Saxon pottery from the northern margin of the Cathedral Close, but a large quantity of Ipswich ware proves considerable activity there between 650 and 850. We suggest that this latter site forms part of the settlement renamed Conesford by the Danes at the end of the ninth century and that Conesford or the King's Ford was on the site of Bishop Bridge. Here a Roman road from the east crossed the Wensum and coincides with the eastern stretch of Bishopgate known from at least as early as 1250, as *Holmstrete*. There is medieval documentary evidence for an area of pasture in Conesford abutting on to Holmstreet. The archaeological evidence shows that, by the sixth century there was some occupation in three areas, one on the north side of the Wensum and two on the south. The concentration of early Anglo-Saxon material on the north side of the Close, adjacent to a Roman road and an important crossing of the Wensum suggests that the settlement of Conesford may have originated in the area.

A common meaning of the place-name element—*wic* is a hamlet or subsidiary settlement. The combination of this with cardinal points suggests that the two settlements *Northwic* and *Westwic* should be found north and west of a primary settlement, i.e. Conesford. Westwick clearly lies west of the settlement in the Close, which we regard as part of Conesford, and *Northwic* should therefore be on the north side of the Wensum to occupy the correct position relative to Conesford. Coslany then should probably be regarded as a geographical feature in the district of *Northwic*.

It is suggested that the name *Northwic* became applied to the whole settlement, not necessarily because it was the most important or populous area, but because the coins issued here bore its name and so became well known.

We have ventured to publicise these somewhat heretical theories of the origins of Norwich in the hope that they will stimulate research in this field, which has been neglected for over half a century since the pioneer work of Hudson.

THE EXCAVATION—DETAILED DESCRIPTION OF PERIODS

THE ROMAN AND PAGAN SAXON FINDS

No features can be dated earlier than the middle of the ninth century but there were two Roman sherds (see p. 145) while, in gravel pit 1, were found a small-long bronze brooch and a sherd of handmade pottery datable to the sixth century (see pp. 145–146). It is not certain if these were domestic or funerary but there must anyway have been occupation not too far away. Also another Pagan Saxon sherd was found, as well as two sherds of Middle Saxon Ipswich ware (see p. 147). It is suggested that the banks of the small tributary of the Wensum, between the later sites of Heigham and St. Benedict's Gates, was an early focus of settlement for what later became the village of Westwick.

NORWICH BARN ROAD

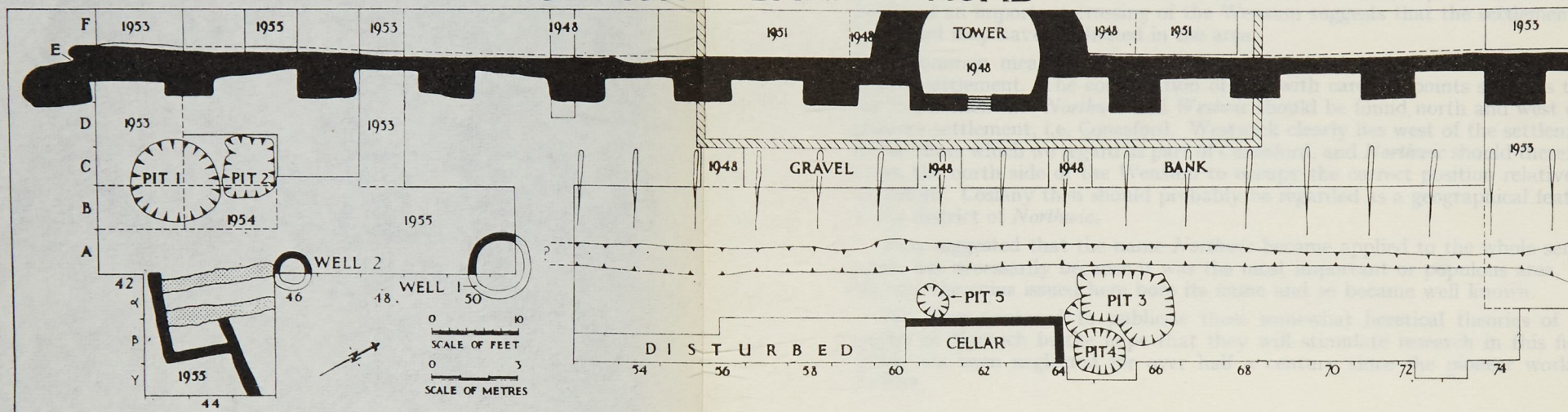
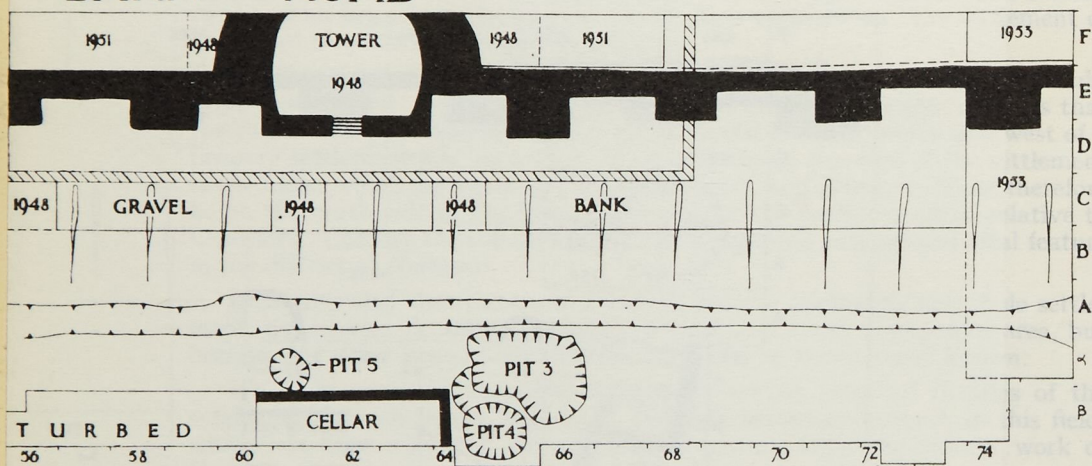


Fig. 1. The area of the 1954-5 excavation behind the city wall. The city wall with its arcades is shown in solid black. Earlier trenches are also marked. The features behind the wall belong to periods IV and V—see pp. 139-145.

BARN ROAD



its arcades is shown in solid black. Earlier trenches are also marked. The features behind the wall belong to ds IV and V—see pp. 139—145.

bury but
found a
the sixth
funerary
another
Ipswich
ry of the
g. was an
the

NORWICH BARN ROAD

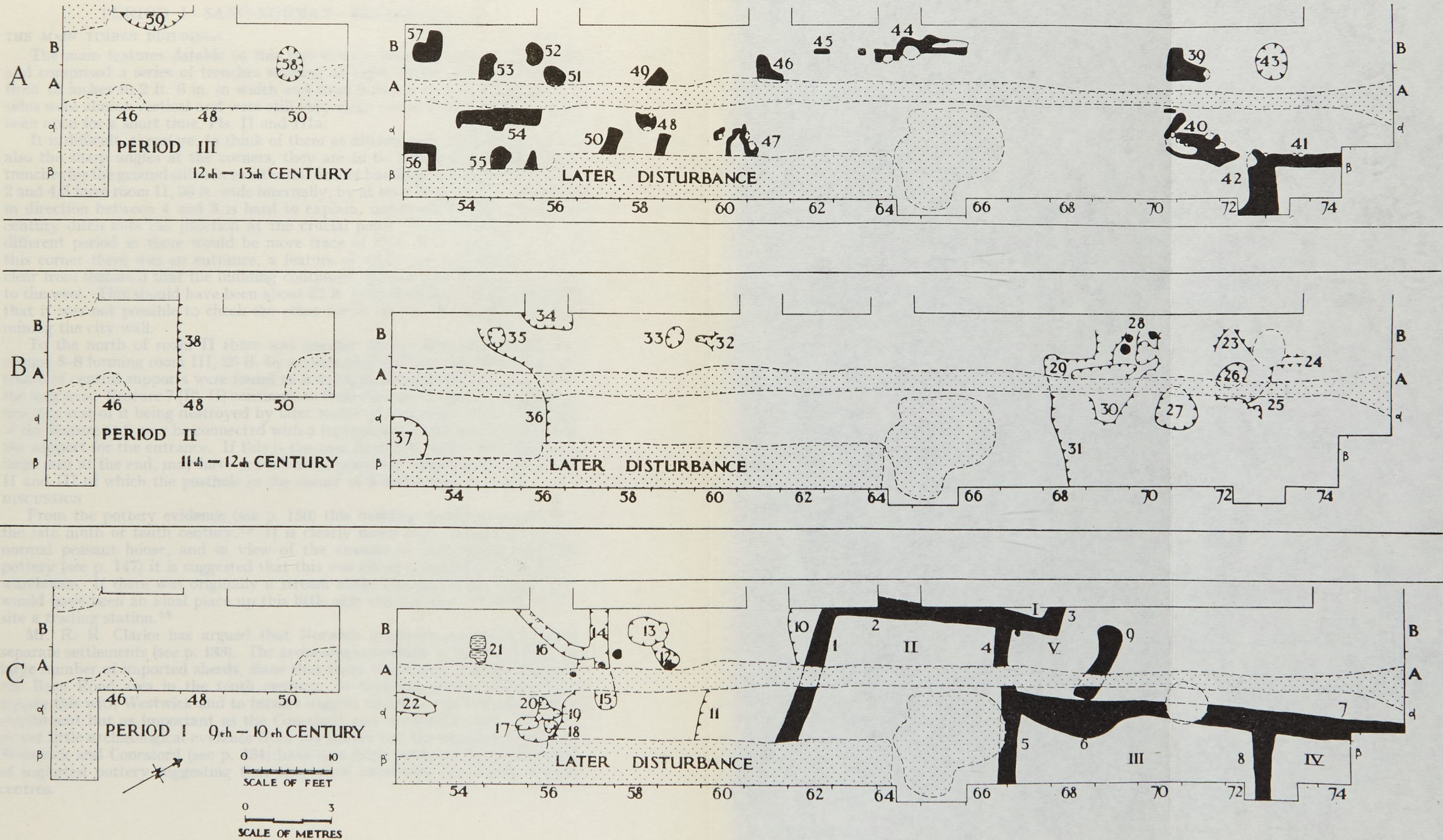


Fig. 2. The area behind the city wall excavated in 1954-5. C. Plan of period I features; B. Plan of period II features; A. Plan of period III features.

PERIOD I—SAXO-NORMAN—850-1000—FIG. 2c

THE MAIN TIMBER BUILDINGS

The main features datable to this period were found in squares b/B.53/73⁹ and comprised a series of trenches running at right angles, 1-8. These varied from 18 inches to 2 ft. 6 in. in width and from 9 inches to 1 ft. in depth. The sides were almost vertical and were still very clean cut as though they had only been open for a short time, Pls. II and IIIa.

It is difficult, therefore, to think of them as ditches and, taking into account also the sharp angles at the corners, they are to be interpreted as foundation trenches for the ground sills of a substantial timber building. Features 1 (Pl. IIIa), 2 and 4/5 form room II, 20 ft. wide internally, by at least 20 ft. long. The change in direction between 4 and 5 is hard to explain, unfortunately the thirteenth-century ditch cuts the junction at the crucial point. It is not likely to be a different period as there would be more trace of this. It is suggested that in this corner there was an entrance, a feature of which was the recess 4. It is clear from feature 3 that the building continued with at least another room (I) to the west. This should have been about 22 ft. wide internally. It is tantalising that it was not possible to check the other corner due to the danger of undermining the city wall.

To the north of room II there was another range comprising at least two rooms; 5-8 forming room III, 26 ft. by an unknown distance the other way. No traces of central supports were found so it is suggested that this may have been the long axis. Feature 7 (Pl. II) continues to form the side of room IV of unknown size, the rest of it being destroyed by later medieval buildings. The bulging out of the feature at 6 may be connected with a replacement of timbers or to provide the support for the entrance. If this is the case feature 9, with a widening for a large post at the end, may have provided the porch for entrances to both rooms II and III of which the posthole in the corner of 3 and 4 may be part.

DISCUSSION

From the pottery evidence (see p. 150) this building should be assigned to the late ninth or tenth century.¹⁰ It is clearly much more substantial than a normal peasant house, and in view of the amount of fine quality imported pottery (see p. 147) it is suggested that this was either a merchant's house or a warehouse. If there was originally a stream along the line of the ditch¹¹ this would have been an ideal place up this little side channel from the Wensum to site a trading station.¹²

Mr. R. R. Clarke has argued that Norwich originally consisted of three separate settlements (see p. 133). The archaeological evidence, and especially the large number of imported sherds, show that there was a most important site in the Barn Road area in the tenth century. It therefore seems reasonable to equate this with Westwick and to further suggest that this was not just another constituent but as important as the Conesford and Northwick parts. There is as yet little archaeological evidence from Northwick but the supposed centres of Westwick and Conesford (see p. 134) have now both produced large quantities of imported pottery suggesting that they were important late Saxon trading centres.

OTHER STRUCTURES

The natural gravel gradually slopes down from south to north towards the river¹³. At points 10 and 11 this had been scarped to provide a flatter surface for the timber building just described. Further south there was another series of features which was very difficult to interpret. 14 and 16 (Pl. IIIb) were straight sided and very similar to the features further north. On the other hand it is almost impossible to imagine a building with two walls at such an acute angle. 15 (Pl. IIIb) was a shallower continuation of 14 and it either had a posthole in it, or the three postholes in a row there were cut through later. 12 and 13 were two pits, one with a posthole in it. 17-20 (Pl. I) comprised either a series of posts or the replacement of the same post three times in a similar position. 22 was a little prominence on either side of which the gravel had been worn away or cut. It is likely that there may have been a post or some other structure on this as is suggested for similar features in period II.

There was no definite floor level in any of the rooms of the major timber building, only the black occupation level which stretched over the whole area and filled the features without visible change. In area 21, however, there was a hearth consisting of an area of charcoal on top of the original subsoil, underneath the occupation layer. This gives the only clue as to the floor level at this time. It is assumed that these structures were put on virgin ground in the later ninth or early tenth century and that the occupation level gradually built up after this. The main timber building cannot have had a very long life as there is little sign of repair so it is not possible to say if it was built early or late in the tenth century. The early sherds could well have been incorporated from earlier levels. It is difficult to make the other features (12-22) into a building and it is possible that they are not all the same date. Timber buildings of this period are often very nebulous and present a bewildering pattern of postholes and slots.¹⁴ For the pottery dating evidence see p. 151.

EXTENT OF OCCUPATION

Pit F/G.66/7 found in 1951¹⁵ shows that occupation continued well to the north-west under the city wall. In fact there was a concentration in this area as is shown by the large number of sherds (nearly 1800) found in 1951 in an area only 35 feet by 10 feet, much more than were found in the whole area excavated in 1954. This would be expected nearer to the water's edge. There was also occupation to the other side of the tributary as was shown by Mr. E. M. Jope from the find near the Regal Cinema.¹⁶ The thick occupation level ends to the south-west in square 48 where it fades out in rapidly rising ground¹⁷ but there was occupation to the south of St. Benedict's gates, although this had been almost completely destroyed by later interference, as is shown by the patch of occupation in square D.24¹⁸ and the fifty sherds of Thetford ware incorporated in the consolidated foundation for the city wall in this area.¹⁹ With the rising ground the natural was very much closer to the present surface to the south-west of St. Benedict's Gates so there was not so much chance of it surviving as it did under the deep road levels to the north-east. In 1953 it was thought possible that the occupation petered out in square 75²⁰ therefore

a larger area to the north-east was not stripped, but the main period I building certainly goes on and there may well be important Late Saxon levels nearer to the river, though not too close since the ground must have become very marshy and wet further down the slope.

PERIOD II—ELEVENTH—TWELFTH CENTURY, FIG. 2B

THE STRUCTURES

The remains of the structures consisted of a series of scarps giving the impression of where something, presumably timbers, had once stood while the ground round about was worn away. These ridges do not make a very clear pattern especially 23-25. 28 was a ridge for which there is more evidence that this was once the site of a timber wall as there were three actual postholes here. Further south, as the natural rises, the ridge becomes a terrace (29) turning a sharp corner to form a wall at right angles (31). This attempt to keep the line level is another confirmation that these terraces and ridges once held wooden sill beams.²¹

It is, therefore, possible to interpret these features as a building of which 28, 29 and 31 form the corner. 25 may give the width of this as about 23 ft. with 28 and 23 forming a room to the west and 24 another structure going further north. This end, however, does not really make sense. One odd feature is the pit 27 (Pl. II) which seems to be in the middle of this building. As it was 4 ft. wide it seemed too large for a central roof support. There was little rubbish in it so it may have been a storage pit, see also Period III, p. 139. It is not possible to guess the use of this building the flimsiness of which is in marked contrast to the Period I structure underneath. It may have been only used for storage or have been a peasant hut, though there is no sign of a hearth.

Further to the south there was little occupation of this period only depression 32 (which has no north end as it is dug into the sloping ground) and pit 33. Further south still was a deep slot 34 (Pl. IIIb) with straight sides, nearly 18 inches deep which was in line with 32 and 33 and might, therefore, be part of a structure going westwards into the unexcavated area. 36 is another scarp with the intention of levelling this area for some purpose and 35 a small pit or posthole (Pl. Va.) The only other feature of this period was a large pit in the corner of the excavation, 37.

There was no occupation further south either in Periods I or II. Pottery finds become scarce and the occupation level tapers out along line 48 as the natural gravel rises fairly sharply here and the black deposit ends just against this scarp. See p. 171 for evidence of ironworking which may have been carried out during this period.

DISCUSSION

After the abandonment of the Period I buildings the importance of the site seems to have sharply declined, although, as there is still good quality imported pottery (see p. 148), it may be that the main buildings were moved elsewhere; for only quite a small area of the possible extent of the Saxo-Norman occupation area has been cleared. On the northern part of the site there are clear traces

on the top of the occupation level that there was a timber building. This was, however, so flimsy that only three posts actually went into the ground.

There were three factors involved in this decline. First the absorption of Westwick and the other settlements of Conesford and Northwick into the city of Norwich at a date that must be before 1086 since Westwick does not appear in Domesday. Secondly the construction of the Westwick mills by the middle of the eleventh century must have reduced the possibilities of navigation by seagoing vessels as high up the Wensum as the Barn Road area,²² though it is significant that they were situated just above where the tributary would enter the river. Mr. R. R. Clarke has also pointed out to me that the present line of the River Wensum is along the Westwick (now New Mills) mill leet and that the original course of the river would have run closer to Barn Road so that the site would not be so far up the tributary as might appear. Thirdly the construction of bridges, many of which are first referred to in the twelfth century,²³ would prevent seagoing ships penetrating above Fyebridge and lead to the head of navigation being in the area of Quay Side and Fishergate just as, later in the Medieval period, the head of navigation was pushed further down river to the King Street area.²⁴ For the pottery dating evidence see p. 156.

PERIOD III—LATE TWELFTH CENTURY, FIG. 2A

THE CLAY FOUNDATIONS

In this period an extensive series of clay foundations formed a group of quite flimsy and primitive huts datable to the end of the twelfth century. 41 and 42 formed the corner of a more substantial structure than the rest and most of it was destroyed by later disturbance so that it was not possible to find its dimensions. The remains consisted of a line of clay, about three inches thick, which was either the foundation for a half-timbered building or the bottom of a clay lump wall.²⁵ If it was the base of a clay lump wall, however, a spread of collapsed clay would have been expected, but in fact only these thin foundations were found. There clearly was a timber superstructure, as is suggested by the gaps in the clay which showed, as circular or, on the edge, arc shaped holes. At the corner of walls 41-2 there was a massive corner post and along 41 there were three arc gaps on the outside (Pl. IVb). These seem to have been the holes from which timbers were extracted but it is not clear why these should be on the outside of the wall rather than the middle.

To the south there were either two more corners (39-40) or another room with a doorway in the centre; the remains were too flimsy to be sure. The construction is very similar, consisting of lines of clay with several clear gaps in which timber posts must have stood. It is hard to make structural sense of these for the corner of 40 has 6 inch posts very oddly spaced and others again are on the edge rather than the middle of the wall (Pl. Vb). This building seems to have been damaged by fire, though not completely burnt down, as the corner of 40 is reddened by heat and the postholes are filled with charcoal. Only the actual corner seems to have been affected, however, as the rest of the wall is not

discoloured, nor do the other holes contain charcoal. Pit 43, which was two feet deep with straight sides (Pl. IVa) again seems to occupy a central position to this building similar to that in Period II (see p. 137). It was four feet across and was possibly a timber-lined storage pit. This second room seems to have been at least 15 ft. wide and 24 ft. long.

Twenty-four feet to the south-west 44-45 formed the east wall of a structure which must have stretched under the unexcavated part. The clay peters out at each end and there are no traces of any return. The structure was the same as the others consisting of clay lines with postholes of varying sizes again placed on the edge of the wall rather than in the centre. The large posthole in the middle 18 inches across, was right on the outer edge while to the north were a whole row of burnt postholes apparently more central this time.

Further south there was another series of similar clay foundations (46-57), though few had any signs of postholes. It is difficult to make any of these into clear structures. 56 formed a good corner of a building, most of which was again destroyed by later cellars, while 54 was a straight stretch with two postholes on one side (Pl. Va). The other lumps of clay formed as confusing a mass as the earlier Period II features. It is very difficult to be certain about the form of building construction which seems to be unique but at this time there seemed to be on the site a whole series of flimsy huts, the purpose of which it is not possible to give any account. Further south in the 1955 area there was pit 58 and a much larger one (59) which it was only possible to section. Again these had straight sides and in view of the loose nature of the soil, as shown by the later gravel pits (see p. 142), it must have been a storage pit with revetted sides. For the pottery dating evidence see p. 158).

PERIOD IV—THIRTEENTH CENTURY—FIG. 1

THE CITY BANK

In the thirteenth century the whole character of the Barn Road area changed. Until this time there was an apparently open settlement which may be equated with the village of Westwick, later absorbed into Norwich, on the bank of a tributary of the River Wensum. In 1253, however, it is supposed that the defences of Norwich were constructed²⁶ and those parts of Westwick on the edge of the stream were levelled to make way for the new city bank. This was raised over many of the buildings but it was not possible to dig under the wall and bank to uncover these. The large numbers of sherds found, however, under the city bank and wall, especially round F/G.56/8 and 66/7, suggest an intense occupation on the stream edge. The structures which were excavated, therefore, are some 20 ft. or more back from the stream but all this area as well was cleared when the bank was built.

A reference, brought to my attention by Miss Barbara Green, refers to the city ditch in Westwick between the way going from Hecham to Norwich and north upon the river, between 1214 and 1229.²⁷ This, together with the 1221 reference to Heigham Gates,²⁸ strongly suggests that the city bank and ditch

in the Barn Road area was constructed well before 1253. This would mean dating the Period III buildings, and the hard ware cooking pots with their developed mouldings, to the late twelfth century. There is no real reason why this should not be so. Well developed rim forms, normally assigned to the later thirteenth century, are found for example at Kenilworth Castle, Warwickshire in contexts associated with King John²⁹ and are already seen to be starting at South Mimms, motte and bailey castle, Middlesex, as early as *c.* 1140.³⁰ There are also few glazed sherds from Period II and no highly decorated examples. On the other hand it is possible that there was the ditch, in the form of the tributary, and a check point at Heigham Gates but no bank. As we know that many pottery types have a long life³¹ it is not safe to be dogmatic about a late or early date for the pottery so further evidence is badly needed from other sectors of the city wall for the dating of the bank. The question should therefore be left open for the present as to whether this sector was built before 1253 or not.

At the end of the thirteenth century or early in the fourteenth century, the city wall was built³² on a consolidated foundation dug into the city bank and it is to this period that the long Medieval ditch and the four pits may be assigned.

THE SMALL MEDIEVAL DITCH

From A.53 to A.75 a small ditch was found running parallel with and 20 ft. behind, the city wall, just beyond the edge of the gravel bank. It was 3 ft. wide at the southern end but narrowed to 2 ft. in A.68 widening out sharply again to 4 ft. at the limit of excavation in A.75. It was 18 in. deep with almost straight sides (Pls. I, II-IIIa and IIIb and Fig. 3, No. C. It cut through various features of Periods I, II and III.

It might be thought to be a marking out ditch to define the back of the city bank or a drain behind the bank. It was, however, cleanly cut and filled with black occupation soil very similar to that found elsewhere. It does not seem to have been a watercourse but to have been filled in shortly after it was dug since no feature could stand open very long without erosion in the loose gravelly sand. It contained large quantities of mixed Saxo-Norman, early Medieval and thirteenth-century pottery. This was clearly incorporated from the occupation material of various dates lying all round. From the pottery evidence it could date to the period of the construction of the bank, but it also contained a coin of *c.* 1300 (see p. 170) and many fragments of bricks. Bricks do not seem to have been in use on the site during the middle of the thirteenth century and must have been waste from the building of the city wall at the end of the thirteenth century. The arches of the arcades were turned in brick. The ditch seems, therefore, to have been dug for some purpose connected with the building of the city wall and was refilled quite soon afterwards. Its length is not known; to the south-west it is destroyed by Well I and does not appear beyond this. To the north-east, it has not been excavated and it is tantalising to see it widening out and changing its character so much in square A.75 without knowing what happened to it beyond. Further excavation might also have thrown some light on its use. Unfortunately the coin does not help to define when within the period 1300-40 the wall was built as it could have been lost at any time during this period.

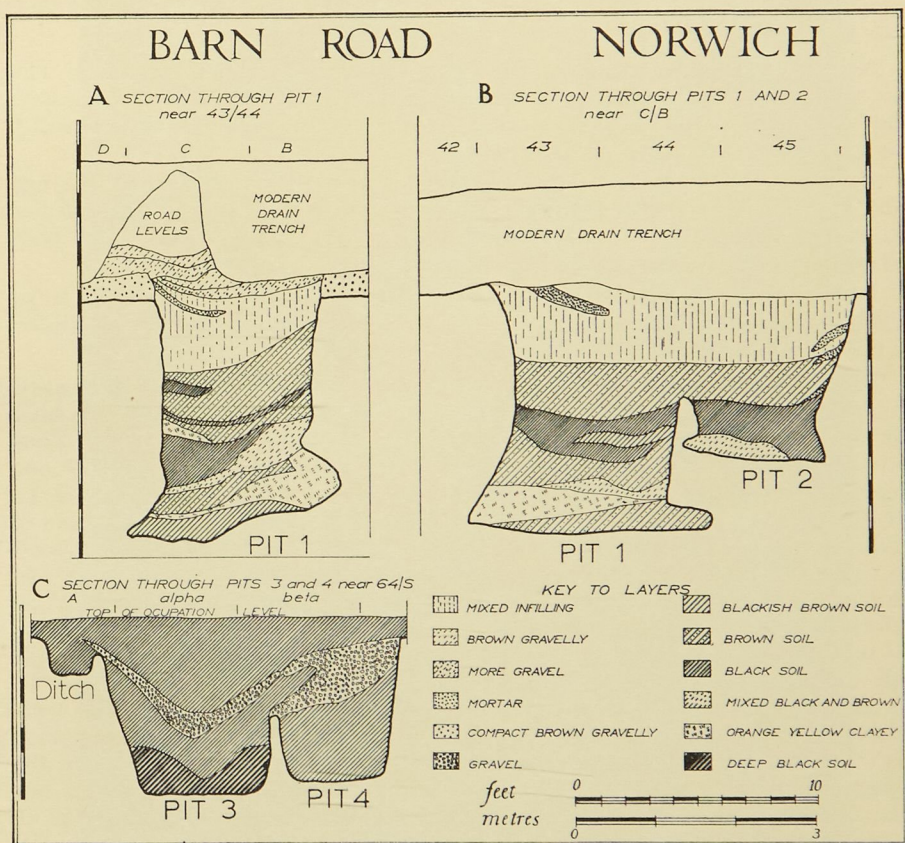


Fig. 3. A. Section across pit I (Period IV) from west to east. B. Section across pits 1 and 2 from south to north. The dotted lines on Fig. 1 show the positions of the sections. C. Section across the thirteenth-century ditch and pits 3 and 4 (Period IV) from west to east. See p. 142

THE GRAVEL PITS

Four other features date to about the period of the construction of the city wall. These are pits 1-4.

Pit 1 in B/C.43/4, was almost round, 10 ft. by 9 ft. and 10 ft. deep. It was cut with almost straight sides and was bell-shaped at the bottom. It was filled with banded layers of dark soil and cleaner gravels, Fig. 3, Nos. A-B.

Next to it, and only separated from pit 1 by a narrow baulk, was *Pit 2*. This was smaller and rectangular with rounded corners, 7 ft. by 6 ft. and 7 ft. deep. They were both cut into the city bank and sealed by the fifteenth-century road.³³ They also contained lenses of mortar.

Pit 3 was 90 ft. to the north in a/b.64/6, set further back behind the city bank and just beyond the ditch. This was square at one end and rounded and larger at the other (Pl. V). It was 11 ft. long and 6 ft. wide at the square part, 8 ft. wide at the rounded north end and 7 ft. deep.

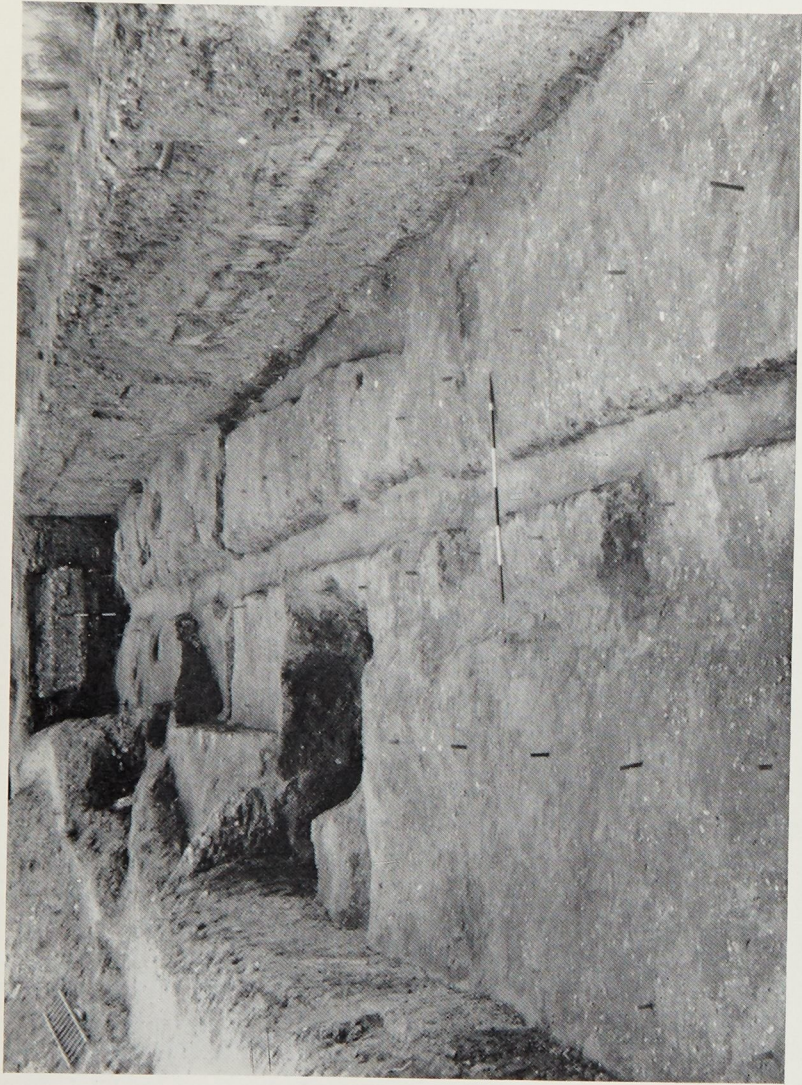
Pit 4 was very close to pit 3 as pit 2 was to pit 1. It was rectangular, 6 ft. by 5 ft. and 6 ft. deep (Pls. I, II and VIb). It was earlier than pit 3 as is shown by the section (Fig. 3C) and had a uniform dark fill (Pl. VIb).

These pits are clearly later than the thirteenth-century Period III occupation which they cut through. Pits 1 and 2 also cut through the city bank while pit 3 was dug after the construction of the long ditch. See section Fig. 3, No. C. They may, therefore, be assigned to the period of the building of the city wall and may be interpreted as gravel pits to obtain material for making the solid foundation for the city wall when the bank was removed and replaced by layers of firmly rammed sand and gravel with mortar layers between.³⁴ This supports the suggestion that there was a gap between the removal of the city bank and the construction of the wall.³⁵ The lenses of mortar also show that building activity was going on at the time they were filled in. Another possibility is that this was illicit gravel and sand digging as the *Leet Roll* for 1291 charges people with making a purpressure for gravel in the Westwick area.³⁶ The depth of the pits must have been due to the desire for certain types of gravel which were not available higher up. This is supported by the belling out of pit 1. It appears that they must have been dug and backfilled almost immediately since the belling out of the bottom could not possibly have survived more than a few hours in such loose material unless they were lined and there does not seem to be evidence for this. After the present excavation the sides, and especially the bell-shaped bottom, collapsed very soon after being dug out. The habit of digging small individual one-man holes is a typical Medieval method of quarrying as is the leaving of narrow baulks between them (Pl. VIb and Fig. 3, Nos. A-B. This is clearly seen in the remains of the Barnack stone quarries,³⁷ by the excavation of Dene Holes and the small individual chalk quarries with their baulks between at Wharram Percy in Yorkshire.³⁸ They contained some of the larger sherds of medieval pottery including face-ware jugs which are quite in order for a date of c. 1300, see p. 161. Pit 1 also contained the Pagan-Saxon brooch and sherd and the St. Edmund coin which must have been disturbed from some occupation nearby.

Plate I



7. General view of the 1954 excavation looking north-east. Across the middle and on the left can be seen the sleeper trenches of the large Period I building. In the left foreground features 14, 16 and 34. In the right foreground features 17-20 with 15 behind. The Period IV ditch runs up the centre and pits 3 and 4 are in the right middle distance.



2. General view of the 1954 excavation looking south-west. Across the middle distance, and on the right can be seen the Period I trenches. Feature 7 runs in the centre foreground with the period II feature 27 cutting into it. The section on the right shows at the bottom the dark occupation layer with the gravel city bank above. Over this are the late medieval road levels and the ends of Mr. E. M. Jope's 1948 trenches. The period IV ditch runs up the centre and pits 3 and 4 are on the left.

Plate III

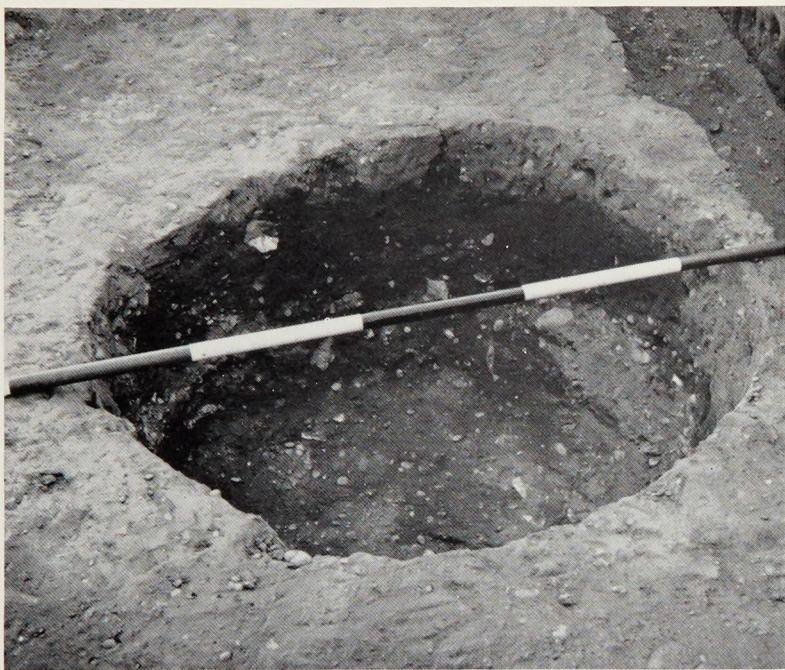


3a. Close up of the period I trenches looking north. Across from right foreground to left back is feature 1 with feature 2 turning right from it with its dark filling clearly visible under the city bank. The period IV ditch crosses from bottom left to top right.

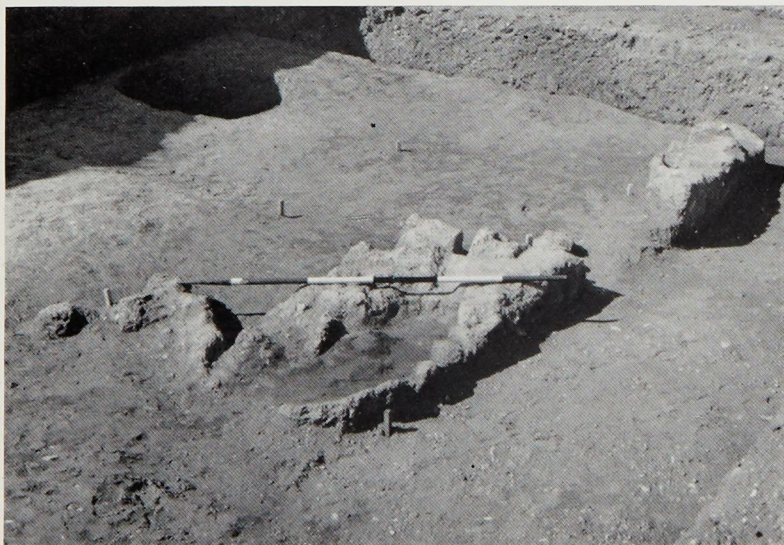


3b. On the right features 14 and 16, Period I with feature 34 behind looking north-west. The period IV ditch runs across the left. In the section can be seen city bank and road levels cut through by Mr. E. M. Jope's 1948 trench.

Plate IV



4a. Close up of Period III pit 43 in B.73 from the east. The surface round the pit is the top of the occupation level.



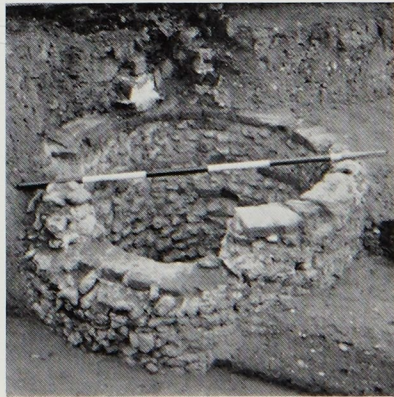
4b. Close up of Period III feature 40 from the south showing the clay foundations with the hollows left by posts. On the right feature 41. Feature 42 has already been taken away. In the background pit 43.



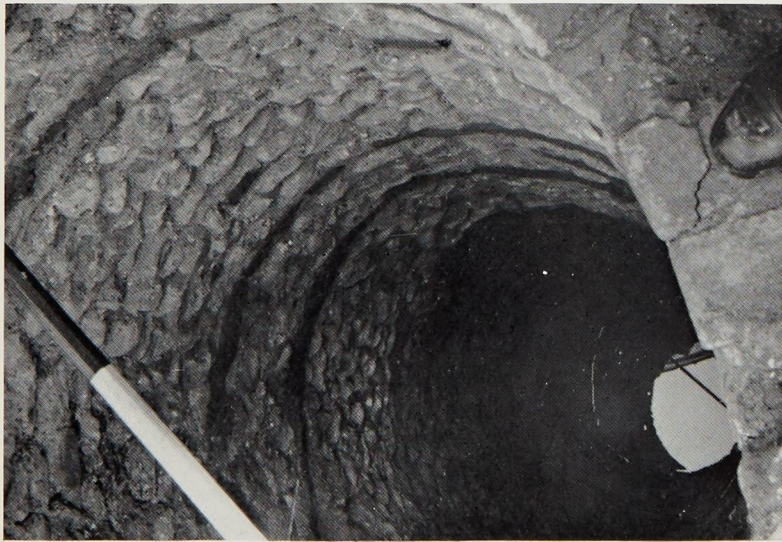
5a. The west part of the 1954 excavation from the north showing the Period III clay foundation 54 to the right of the ranging rod. Across the foreground features 51, 52, 35, 53 and 57. The general level is the top of the occupation level.



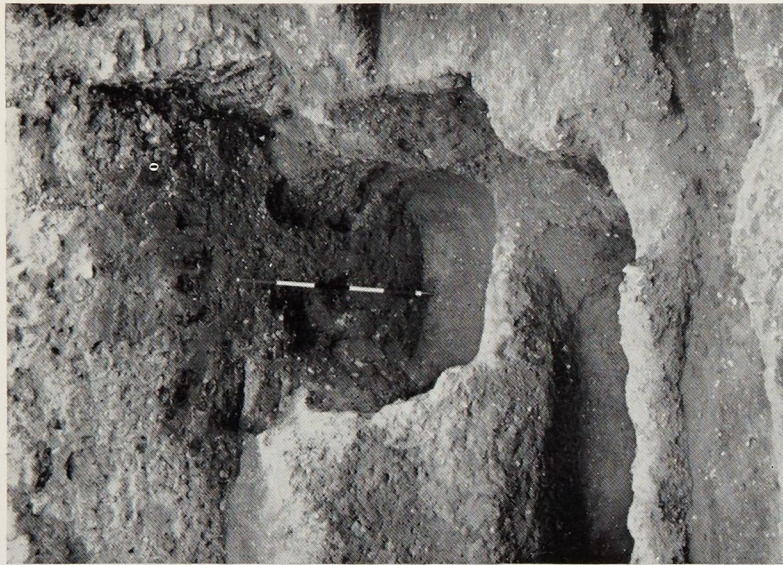
5b. Well I showing the arched brick covering to the top.



5c. Well I with the covering removed showing the construction of flint and layers of header bricks.



6a. Well I general view looking down to show the alternate courses of flint and brick.



6b. Period IV pits 3 and 4 showing the narrow bridge between the two, from the north-west. The ditch is in the foreground. Some of the filling is still in place at the back pit 4 to show the uniform dark filling.

THE CITY DITCH

In 1955 another section was dug in front of the wall in square 45 to supplement the evidence from the 1951 and 1953 excavations on the partial infilling of the city ditch to construct the city wall and St. Benedict's Gates. This produced the same infill with chalk lumps as was found both to the north and south of St. Benedict's Gates.³⁹ Hardly any dating evidence was obtained from the earlier sections but this produced a quite large quantity of late thirteenth-century pottery exactly comparable with that from the gravel pits which also date to the period of the construction of the city wall, see p. 158.

PERIOD V—FOURTEENTH-SEVENTEENTH CENTURY, FIG. 1

THE FOURTEENTH- AND FIFTEENTH-CENTURY HUTS

In the area excavated in 1954 and 1955 all the upper levels were bulldozed away. It was thought in 1953 that, after the construction of the city wall and bank, the area behind was an open track until about 1500 when a metalled road was constructed at the back of the city bank. This seemed to be the case from sections cut at each end of the site in squares 43⁴⁰ and 75⁴¹. During the bulldozing, however, signs were found underneath the roads, in various places, of clay structures similar to those of Period III. Unfortunately there was not time to dig these by hand and they had to be sacrificed to get at the early levels. This is another example of how dangerous it is to generalise from single sections on a medieval site. Only complete excavation layer by layer can reveal the whole story.

THE ROAD BEHIND THE CITY WALL

During the fourteenth century, therefore, scattered houses of very flimsy character seem to have grown up behind the city bank. There was no continuous line but rather a few huts dotted about. About 1500, from the evidence of the pottery found in the lowest road levels, these were cleared away and the proper metalled road laid. There is, however, documentary evidence for a lane behind the city walls very soon after the construction of the city wall in the early fourteenth century.⁴² No archæological trace was found of this and if it was an unmetalled track it must have been very sinuous winding between the huts or if it was clear in the fourteenth century it may have been encroached upon during the fifteenth century, the squatters being cleared away with the *c.* 1500 building of a proper road. Most towns decayed during late medieval times and it is quite possible that the original road was allowed to be built over but was cleared and surfaced by an energetic Tudor authority.

Then there followed a series of roads made up with various kinds of metalling and slag⁴³ (see p. 171) to a depth of 6 ft. to the level of the road surface at the time of the 1942 blitz. The large amount of late seventeenth-century pottery (see p. 165) clay pipes (see p. 167) and miscellaneous iron objects (see p. 168) recovered from the bulldozing of these levels suggests that there was a substantial infill at the end of the seventeenth century at the same time that the

city ditch to the south of St. Benedict's Gates was filled in. The ditch in front of this section of the city wall to the north of St. Benedict's Gates was not, however, filled in until c. 1740-50.⁴⁴

From c. 1500 until the blitz the 20 ft. behind the city wall was a road. This was sectioned in 1953 at each end in squares, 41, 42, 48⁴⁵ and 75⁴⁶ but the levels of build up could not be observed in 1954 as the whole area was bulldozed out. A long section along B/C showed a fairly uniform sequence of natural, occupation layer, gravel bank, quite thick at this point near to the wall, and the upper road levels. Part of this section may be seen in Pl. IIIb and more generally in Pls. I-II. The presence of this road is confirmed by sixteenth- and eighteenth-century maps and drawings.⁴⁷

At the same time the frontage along the b/g line was built up with a continuous line of houses as clearly shown in Tudor drawings. These were replaced until the Victorian houses were built which were destroyed in 1942. Most of these either had deep foundations or had cellars which destroyed everything before the nineteenth century. To the south the road narrowed in a series of steps. The street frontage advancing 5 ft. closer to the wall in b.64/53 and 10 ft. in a/b.51/42. It was for this reason that it was not possible to excavate further to the east since all the earlier levels were destroyed. It was only the presence of the city bank, and the roads behind it, which built up the general level and so sealed the Saxo-Norman and Early Medieval levels.

THE LATE MEDIEVAL HUT

Only in one place, squares a/g.43/5, were any of these late medieval buildings on the first street frontage preserved. An area 15 ft. square was excavated to uncover two parallel flint walls (stippled on the plan, Fig. 1) datable to the fifteenth century (see p. 161). Unfortunately only a very small area was preserved since there were more cellars to the south-east and south-west (the brick walls are marked in solid black on the plan). A mortar floor was found between the walls and between them and the cellar. The dating for this building is earlier than the roads which started c. 1500. This is supported by the fact that the building is not aligned to the road but set at an angle to it.

Pit 5. The only other feature of this period recovered was pit 5 in square a.61. This contained a fifteenth-century cooking pot and other late medieval sherds (see p. 161).

THE SEVENTEENTH-CENTURY WELLS

Only two features, dating between these fifteenth-century houses and the Victorian rebuilding, could be investigated, and these not fully. *Well 1* in a.51, a large flint-lined well was found. This was 6 ft. across and was cleared out to a depth of 25 ft. This was not the bottom but pumping difficulties prevented the completion of its clearance. This well produced a large group of seventeenth-century pottery which forms an important addition to our knowledge of local pottery in this period, see p. 161. The pottery is not closely datable but the finding of a type 5 clay pipe, dating to the end of the seventeenth century, helps

to confirm a date of *c.* 1700 for the filling in of the well. It was covered by a brick floor of one of the eighteenth-century houses so was clearly sealed at an early date.

Well 2 was 20 ft. to the south (a.46). It was much smaller being nearly 4 ft. across (Pl. Vc). It was built of flint with occasional courses of brick (Pl. VIa). This was cleared out to the water level at 15 ft. and, as only a little late pottery was being recovered, this was abandoned as the main purpose of the excavation was the study of the early stratified levels. It had an arched brick top (Pl. Vb) and is likely to have still been open until the nineteenth century and perhaps even until 1942 as the top fill was very rubbly.

THE FINDS

THE ROMAN POTTERY

By R. R. CLARKE

THE POTTERY

The rim sherd (Fig. 4, No. 1) is in light grey ware, originally burnished externally, but now worn. Jars with rims of this type and in this fabric occur at Caistor-by-Norwich, where examples have been published from pit 13, filled in during the early second century A.D.⁴⁸ The second sherd (Fig. 4, No. 2) is part of the flange of a bowl of pink paste originally bearing a red slip but now much worn. Flanged bowls of this type and finish are common in the fourth century.

The presence of these stray sherds on this site may indicate only casual passers-by on the line of St. Benedict's Street—Dereham Road, suspected of being a Roman road across the site of Norwich. A find at Barn Road in the 1948 excavations suggests, however, the possibility of a small Roman settlement somewhere in the vicinity. An upper quernstone of Hunsbury type⁴⁹ and probable Roman date was found re-used as building material in the footings of an eighteenth-century house over the City Ditch and owing to its bulky character, it is unlikely to have been transported far.

THE PAGAN-SAXON FINDS

By MISS BARBARA GREEN

THE SMALL-LONG BRONZE BROOCH

This bronze brooch came from gravel pit 1.

The overall length of the brooch (Fig. 4, No. 3) is 6 cm., the length of the bow and foot is 4.5 cm., and the width of the head-plate is 2.1 cm. The upper edge of the head-plate is slightly convex, while the two sides are straight. The brooch is somewhat corroded and a corner of an arm and a corner of the foot are missing. Slots at the two upper corners of the head-plate end in rounded notches. The lower edge of the head-plate is notched on either side of the bow, and the lower corners project below the junction of the bow and the head-plate. The head-plate appears to be undecorated. The bow is defined by two mouldings and is

further decorated by an I-shaped moulding. The foot is decorated by a zone of three horizontal grooves and two zones of horizontal mouldings, while its end is plain and slightly flared. The iron pin survives and is confined by the catch-pin, which extends only over the upper half of the foot.

The basal notches and the slits ending in rounded notches, defining the triangular arms of the head-plate, are distinguishing features of Leeds' *cross pattee* group of small-long brooches.⁵⁰ The brooch lacks, however, the raised panel in the middle of the head-plate. The brooches of this group cited by Leeds from Barrington B Cemetery and Linton Heath, Cambs., with a slot and notch intact, can be dated to the sixth century. The brooch from Wallingford, Berks.⁵¹ in which the notch in the upper part of the head-plate has closed, Leeds would consider a derivative of this type, as are others from South Cambridgeshire and Baginton, Warwicks. Though it is perhaps rash to theorise on the distribution of a few brooches, it would seem likely that this *cross pattee* type originated in eastern England, derived from a Schleswig type, a link borne out by the Anglian character of many of the cremation urns of the fifth and sixth centuries in East and Middle Anglia.

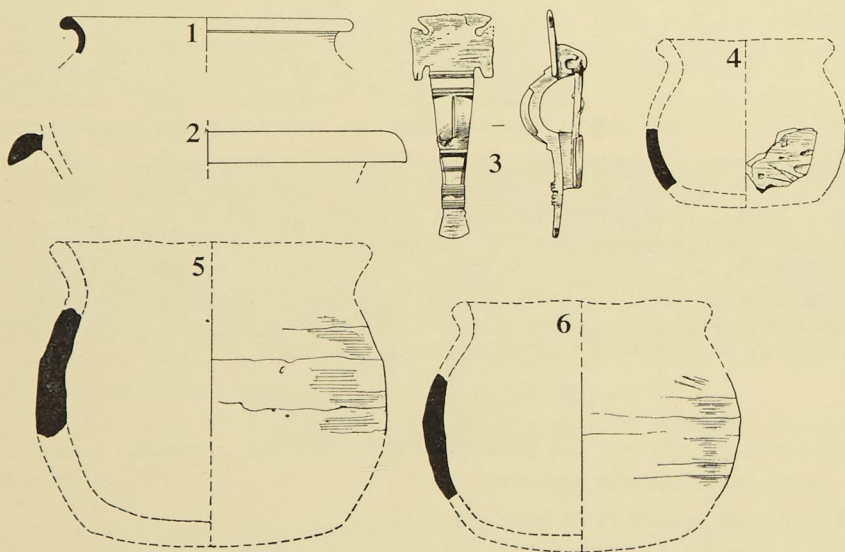


Fig. 4. Nos. 1 and 2 Roman pottery; No. 3 the Saxon brooch; No. 4 Pagan Saxon and Nos. 5 and 6 Middle Saxon pottery ($\frac{1}{4}$)

THE PAGAN-SAXON POTTERY

A small hand-made sherd was found close to the brooch in gravel pit 1 and was presumably disturbed at the same time. Unfortunately the sherd has been mislaid but it was in a rough black gritty ware with a burnished surface and was from the side of quite a large globular vessel.

Fig. 4, No. 4. From the consolidated foundation for the city wall to the south of St. Benedict's Gates (E.22), there was a rough hand-made sherd from the lower part of a small cooking pot of sandy ware with some large grits, some of which have fallen out leaving a pocked surface with roughly incised lines erratically on the outside.

MIDDLE SAXON IPSWICH WARE, 650-850

A careful search for Ipswich ware⁵² was made through the pottery found in the occupation layer. There were a number of large thick sandy sherds which might have been Ipswich ware but they had no distinctive features, such as the girth grooving, and there were no rims. Many Thetford vessels can be as thick near to the base so all these might be late Saxon.

A re-assessment of the material found in 1951 and 1953 (at this time Ipswich ware had not been recognised) has produced one certain Ipswich sherd (Fig. 4, No. 5) and another (Fig. 3, No. 6) which if is not Ipswich ware must be earlier. There is, therefore, clearly continuity with stray Roman, Pagan and Middle Saxon sherds suggesting that there was settlement in the Westwick area throughout the first millenium A.D.

Fig. 4, No. 5 was from the city bank (G.57), a thick sherd from the side of a typical Ipswich ware cooking pot with slight traces of the usual girth grooves, of gritty grey ware with a slightly pimply surface, made on a slow wheel.

Fig. 4, No. 6, was from the occupation layer under the city bank over pit G.56, a thick sherd from the side of a cooking pot. The ware is sandy and very roughly made but the thickness and the slight signs of girth grooving, which are so typical of Ipswich ware, make it almost certain that this is a sherd of Ipswich ware.

THE IMPORTED POTTERY

Fourteen sherds were found from the various levels. They may be divided into four main groups.⁵³

1. *Painted Bardorf ware early to mid-ninth century.*

Fig. 5, No. 1. From feature 7, Period I (a.73). A thick coarse grey sandy sherd with thin stripes of dark red paint. This is only the third find in England of this precursor of the red-painted Pingsdorf ware.⁵⁴ The other finds are from the Conesford area of Norwich (see below) and from Cox Lane, Ipswich.⁵⁵

2. *Pingsdorf or Dutch Limburg, dark red-painted, tenth-eleventh century.*

Period I. Fig. 5, No. 2. From feature 3 (B.67). Small sherd very hard fired grey ware with brown core and outer surfaces.

Fig. 5, No. 3. From feature 7 (a.71). Sherd the lower half of a large vessel, ware as No. 2.

Fig. 5, No. 4. From feature 14 (B.57). Fragment of frilled base from a large vessel. Very hard but brown ware with grey core.

Fig. 5, No. 5. From feature 17-20 (a.56). Shoulder fragment from a large pitcher with scar where the handle has broken away. Hard ware as Nos. 2 and 3, thin stripe and shorter lines of dark red paint.

Fig. 5, No. 6. From feature 21 (A.55). Small fragment from towards the base of a large vessel. Hard ware as Nos. 2, 3 and 5.

Period III. Fig. 5, No. 7. From by feature 55 but close to Period I, feature 17-20 (b.55). Small sherd from the upper part of a large vessel. Very hard ware as Nos. 2, 3, 5 and 6.

Period IV. Fig. 5, No. 8. From gravel pit 1 (C.44). Sherd from the shoulder of a large vessel. Very hard ware as Nos. 2, 3 and 5-7, dabs of dark brown paint.

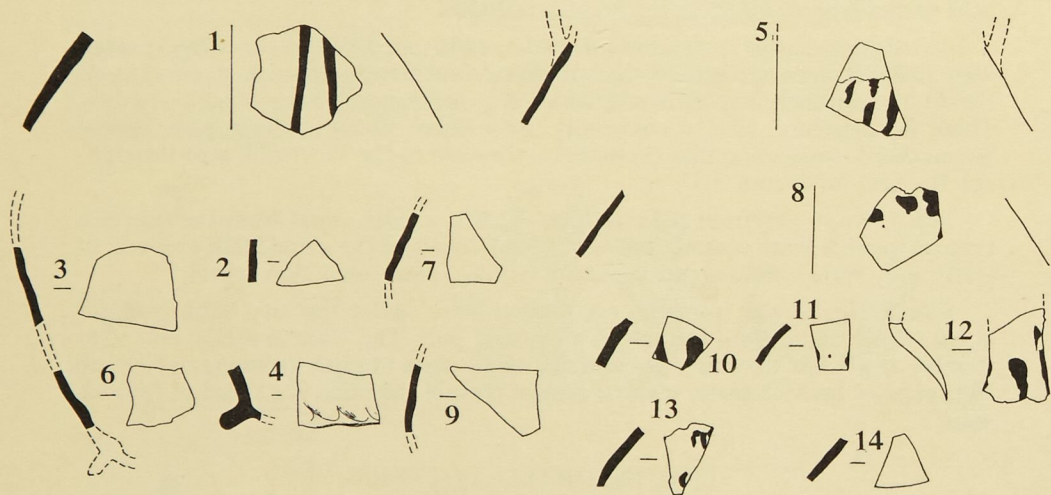


Fig. 5. Imported Badorf, Pingsdorf, Dutch and Norman pottery (4)

Fig. 5, No. 9. From gravel pit 3 (a.65). Sherd from the body of a large vessel. Hard ware as Nos. 2, 3 and 5-8.

All these eight sherds are very similar in ware and colour and the paint, where present, is dark. The sherds are too small to tell if they come from the same vessel. It is likely, however, that about four different pots are represented. All the sherds seem to come from fairly large wine amphorae or pitchers. The uneven body profile is typical.⁵⁶ All these sherds are likely to date to the tenth century since they were found in Period I contexts with only Thetford ware. Nos. 8 and 9 are clearly strays disturbed from earlier levels. It is therefore likely that they are all Pingsdorf.

3. *Dutch Limburg or Norman*, buff or pink with bright red paint.

Period II. Fig. 5, No. 10. From the occupation layer under the city bank (G.67). Pink sherd with buff surfaces and bright red painted decoration. This sherd was found in the 1951 excavation and was published in the first report.⁵⁷

Fig. 5, No. 11. By feature 25 (a.72). Small sherd from the shoulder of a vessel. Hand buff ware with grey core and light red-painted decoration.

Fig. 5, No. 12. On ridge 36 (A.55). Base of a strap handle. Hard, but rough pink ware with grey core. Light red-painted decoration.

Period III. Fig. 5, No. 13. Over feature 35 Period II (B.55). Small sherd from the upper half of a large vessel. Hard pink ware with buff surfaces. Dabs of light red paint.

Each one of these four sherds is dissimilar either in ware or colour and each is likely to be from a different pot. Again they are likely to be from amphorae or large pitchers. None of them are found sealed in tenth-century contexts and they should date to the eleventh or early twelfth century. They may therefore be either late Pingsdorf, early Dutch Limburg⁵⁸ or Norman. The ware is softer than the true Pingsdorf sherds. It is very difficult to tell without analysis. It is hoped that comparisons may be made for a further report on Norwich imports.

4. *Plain smooth Normandy ware.*

Fig. 5, No. 14. From by feature 49, Period III (A.58). Small sherd of fine buff ware from the shoulder of a vessel. This ware is much smoother in texture than the other imports and is almost certainly French.⁵⁹

DISCUSSION

In 1954 it was thought very surprising that there should be so many imported sherds at Barn Road while there were none from the centre of the city at the then supposed nucleus. But excavations under the King Edward VI School Science Block in 1956 produced four sherds. There was another painted Badorf sherd similar to those from Barn Road (Fig. 5, No. 1) and Coxlane Ipswich from pit XI with both Ipswich and Thetford wares suggesting a mid-ninth-century context. There was a Pingsdorf sherd from pit VIII unassociated, a red painted Dutch Limburg sherd from pit XII associated with Thetford and Early Medieval wares suggesting an eleventh-century context, and a plain light-toned Dutch sherd from pit XVIII. In December, 1962 further important excavations by the Norwich Castle Museum on the site of Calthorpe House, Palace Plain, produced numerous sherds of possibly French red-painted ware, possibly all from one or two vessels, and the first sherd of Relief-band amphorae to be found in Norwich.⁶⁰ These finds clearly confirm the importance of the Cathedral area in Saxo-Norman times. This is also the part of Norwich where most Ipswich, Middle Saxon sherds have been found though few of these seem to be earlier than ninth century in date. If the Barn Road area may be equated with Westwick this area should therefore be equated with Conesford as argued by Mr. R. R. Clarke (see p. 134). So far there are only pits in the Conesford area but the major building at Westwick confirms the importance and clearly both centres were competing for trade in the tenth century while Westwick declined later on. It is hoped to publish the Conesford finds in detail in a further report.

These two series of sherds from Conesford and more especially from Westwick are most remarkable since no other site outside London, with its odd finds and a remarkable group from Dow Street, which was presumably an unloading point,⁶¹

has produced more than odd sherds. Also the sherds range over a considerable period in time. Only a single sherd was found during the extensive excavations at the Saxon town of Thetford.⁶²

The finding of dark painted Pingsdorf ware in Period I contexts confirms its early date. The later examples (Fig. 5, No. 7-9) may be regarded as strays. Bright red-painted sherds are only found in Period II suggesting that they do not appear until the eleventh century. They are, however, likely to belong mainly to the first half of the century for, as has already been argued (see p. 138), Westwick cannot have survived as an important trading centre much longer than 1150.

THE SAXO-NORMAN POTTERY

The date of the Saxo-Norman pottery, and therefore that of the Period I buildings, is very difficult to determine. It is still not possible to distinguish early from late examples and it could fall any time within or throughout, the period A.D. 850-1150. There is a further complication that sherds found in Period II contexts, or simply in the occupation layer where their stratigraphy cannot be determined, could be either eleventh, early twelfth century or early strays. The large number found in Period III must have been disturbed from either Period I or II deposits. This residual material is a very serious problem on sites with a long continuous occupation and it sometimes outnumbers the sherds dating to the actual period of the occupation.⁶³ This has serious dangers when trying to assess the life of a particular ware or form.

The earliest date for Period I could be any time from the mid-ninth century onwards. The finding of a painted Badorf sherd shows earlier occupation in the ninth century but the lack of Ipswich ware suggests that this is a stray, like the earlier Pagan Saxon and Roman material, from some occupation not too far away. The Pingsdorf sherds from the large building suggest a date in the late ninth or tenth century and the coin of St. Edmund (although from the thirteenth-century gravel pit 1) tends to confirm that occupation was well under way by c. A.D. 900. The sherds figured in Fig. 6, Nos. 1-23 should therefore be ninth or tenth century, Nos. 24-34 possibly of this date or later in the eleventh century since the occupation level was turned over several times and there is also the factor of trampling in wet weather. Fig. 7, Nos. 35-55 could date any time between A.D. 850 and 1150. Of the Stamford ware only Nos. 1 and 2 are definitely ninth or tenth century. All the others could be later.

THE POTTERY—PERIOD I

All the local pottery from the features was Saxo-Norman consisting of Thetford,⁶⁴ St. Neots⁶⁵ or Stamford wares.⁶⁶ The details are summarised below:

The Main Building

Room 1

Feature 1

Fig. 6, No. 1. Typical small cooking pot with expanded rim hollowed inside. From square B.62.

Feature 2

Fig. 6, No. 2. Small lid with rough undersurface and upturned flange (A.64).

Fig. 6, No. 3. Cooking pot rim as Fig. 6, No. 1, but larger (B.65). Flat base of Thetford cooking pot.

Feature 4

Fig. 6, No. 4. Sherd from the body of a cooking pot or spouted pitcher with a band of rectangular notch rouletting. Dark black surfaces instead of the more usual grey (B.66).

Feature 5

Fig. 6, No. 5. Cooking pot with simple everted rounded rim (a.66).

Fig. 6, No. 6. Cooking pot with thin everted rim (b.66).

Fig. 6, No. 7. Cooking pot with everted rim bevelled outside. Girth grooves on the inside of the shoulder (B.67).

Fig. 6, No. 8. Cooking pot with everted expanded rim, hollowed inside (b.67).

Fig. 6, No. 9. Rim of spouted pitcher with the top part of a strap handle with three parallel shallow grooves. Handle fire-blackened underneath (a.66).

Three sherds Thetford ware.

*Room III**Feature 6*

Fig. 6, No. 10. Base of a plain ^{straps} ~~trap~~ handle, fire-blackened underneath as Fig. 6, No. 9. It was found very close to No. 9 and the similar fire-blackening underneath would suggest that it was from the same pitcher. The two handles are, however, of different shape and size so it is more likely that they come from different vessels (a.67).

Fig. 6, No. 11. Cooking pot with upright expanded rim undercut outside. Brown ware with dark grey surfaces. A few large grits, shown on the drawing, made the ware rather more coarse than the usual Thetford ware. The upright rim is also rare and may suggest a fairly late date in the tenth century (A.70).

One sherd Thetford ware.

Feature 7

Fig. 6, No. 12. Cooking pot with everted expanded rim (a.71).

Fig. 6, No. 13. St. Neots ware bowl with hammer-headed rim. These are usually late in the series but it was found with Thetford ware only (a.72).

Thetford flat base and three sherds.

Feature 9, Porch

Fig. 6, No. 14. Cooking pot with thin everted rim. Brown ware with black surfaces (A.69).

Feature 12

Fig. 6, No. 15. Cooking pot with simple rounded everted rim (B.59)

Thetford flat base and nine sherds.

Feature 13

Fig. 6, No. 16. Small cooking pot with everted expanded rim (B.58).

Another rim too small to draw, a base and twelve Thetford sherds.

OTHER STRUCTURES

Feature 14

Fig. 6, No. 17. Cooking pot with rounded everted rim, hollowed inside. Rough fingering inside. Grey ware with red brown surfaces (B.57).

Thetford flat base and twenty-five sherds.

Feature 15

Fig. 6, No. 18. Cooking pot with thin everted flange (A.57).

Twenty Thetford sherds.

Feature 16

No rims. Sixteen Thetford sherds.

Features 17-20

No rims. One base. One sherd Thetford ware.

Feature 21

Fig. 6, No. 19. Cooking pot with simple upturned rim thickened outside (B.54).

Fig. 6, No. 20. Small cooking pot with simple everted rim (B.54).

Fig. 6, No. 21. Cooking pot with simple rounded everted rim. Grey ware with brown surfaces (A.54).

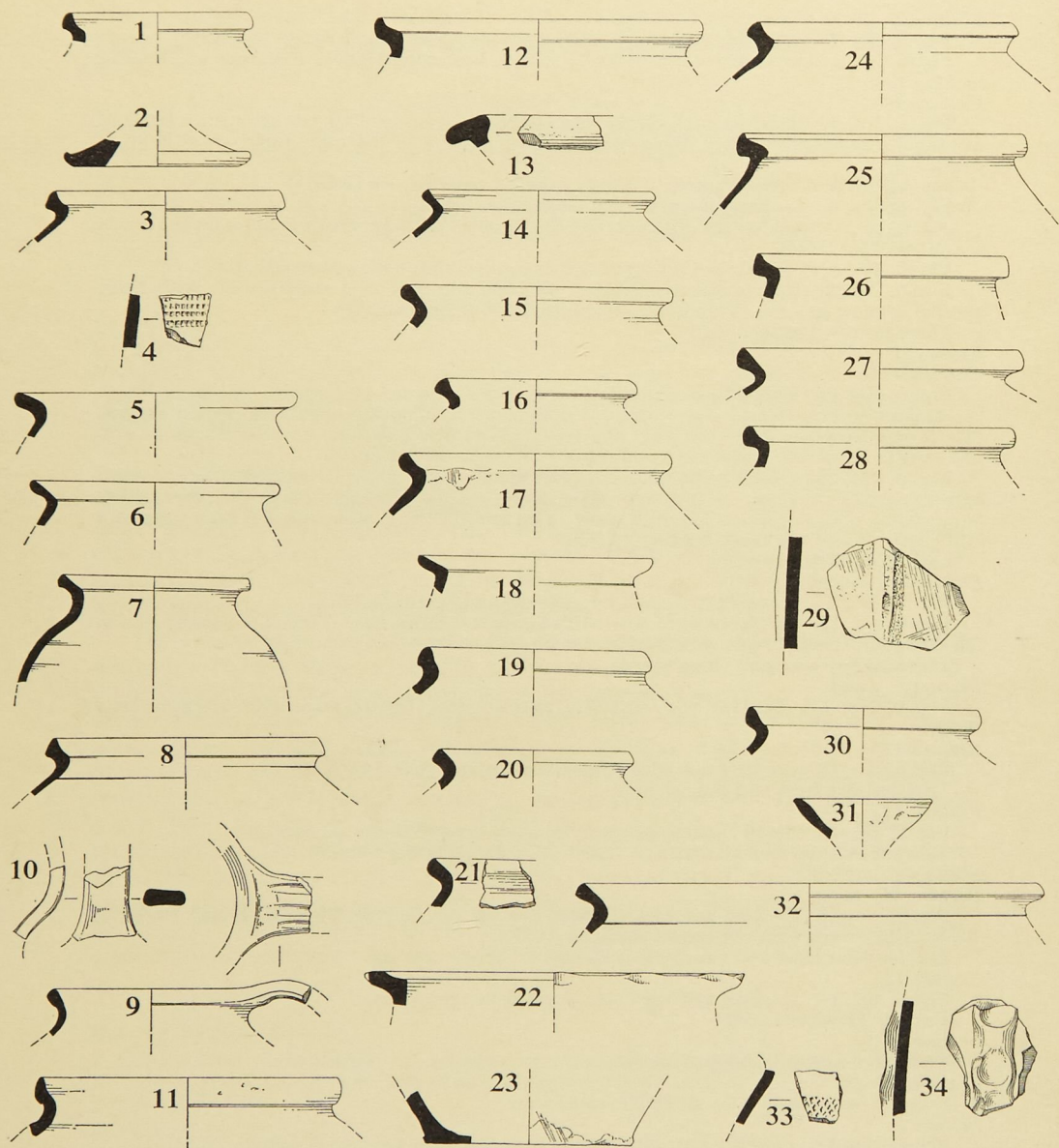


Fig. 6. Saxo-Norman pottery. Nos. 1-23 ninth or tenth century stratified from period I; Nos. 24-34 either from periods I or II ($\frac{1}{4}$)

Fig. 6, No. 22. Rim of a vessel with a thumbed outside flange. This is one of Gp. Capt. Knocker's crocks or deep bowls, of which there were large numbers found at Thetford (B.54).

Fig. 6, No. 23. Flat base of a cooking pot with roughly finished outer edge. Brown ware (B.54). Another similar, grey ware with brown surfaces, fire-blackened underneath.

Period I Occupation levels

Fig. 6, No. 24. From A.47 at the south-west limit of the grey layer. Cooking pot with everted rim hollowed inside and squared outside.

Fig. 6, No. 25. Cooking pot with developed everted rim and two sharp beadings inside (A.48).

Fig. 6, No. 26. Cooking pot with everted rim expanded at the top. Light grey ware (A.48).

Fig. 6, No. 27. From occupation level in trench F.48. Cooking pot with simple everted rim. Very hard fire ware.

Fig. 6, No. 28. Occupation layer in corner of structures I and III (B.70). Cooking pot with everted rim, hollowed inside and rounded outside.

Fig. 6, No. 29. Same from B.72. Sherd from a thick coarse storage vessel with applied triangular strip.

Fig. 6, No. 30. Occupation layer Trench F.75. Cooking pot with upturned everted rim hollowed inside. Black outer surface.

Fig. 6, No. 31. F.75. Rim of a cresset fire-blackened inside. This was possibly a spiked cresset but there is not enough of it to be sure.

Fig. 6, No. 32. E.75. Large cooking pot with simple everted rim and pronounced ridge on the shoulder. Light grey ware.

Fig. 6, No. 33. E.74. Sherd from the shoulder of a cooking pot with band of diamond notch rouletting. Brown ware.

Fig. 6, No. 34. E.75. Thick brown ware sherd with black surfaces from a storage vessel with wide applied thumbed strip.

Stray St. Neots ware

Fig. 7, No. 35. Cooking pot with everted rim rounded inside and thickened outside. From occupation level in Room III, Period I but not low enough to be definitely associated with the building (a.67).

Fig. 7, No. 36. Cooking pot with simple everted rim, fire-blackened surfaces. On top of the occupation layer (a.72).

Fig. 7, No. 37. Cooking pot with rim as No. 35 but more upright. From top of occupation level by Period III, feature 44 (B.65).

Fig. 7, No. 38. Sagging base from typical St. Neots cooking pot. From occupation level, A.73.

Fig. 7, No. 39. Small cooking pot with everted rounded rim thickened outside. From foundation trench for the City Wall, E.42.

Fig. 7, No. 40. Large cooking pot rim as No. 35. Over occupation later, a.66.

Fig. 7, No. 41. Similar cooking pot but smaller. From occupation layer, a.62.

Stray Thetford ware

Fig. 7, No. 42. Large cooking pot with wide everted rim hollowed inside and rounded outside. From top of occupation layer, A.71.

Fig. 7, No. 43. Small cooking pot with upright rim hollowed inside and rounded outside. From top of occupation layer, A.67.

Fig. 7, No. 44. Cooking pot with strongly everted rim. Usual sandy ware but some large grits. From top of occupation, A.71.

Fig. 7, No. 45. Cooking pot as No. 44 but thicker. From top of occupation layer, A.71.

Fig. 7, No. 46. Cooking pot with thickened everted rim. From under city bank, D.48.

Fig. 7, No. 47. Small cooking pot with everted rim hollowed inside, sharply cut outside. Black ware with some larger grits. From City Wall foundation trench, E.42.

Fig. 7, No. 48. Small cooking pot as No. 47 but sharply cut twice outside. From city wall foundation trench, D.42.

Fig. 7, No. 49. Cooking pot with thin everted rounded rim, thirteenth-century ditch, A.70.

Fig. 7, No. 50. Small cooking pot with upright rim as No. 43. Grey ware with brown surfaces. From thirteenth century-ditch, A.57.

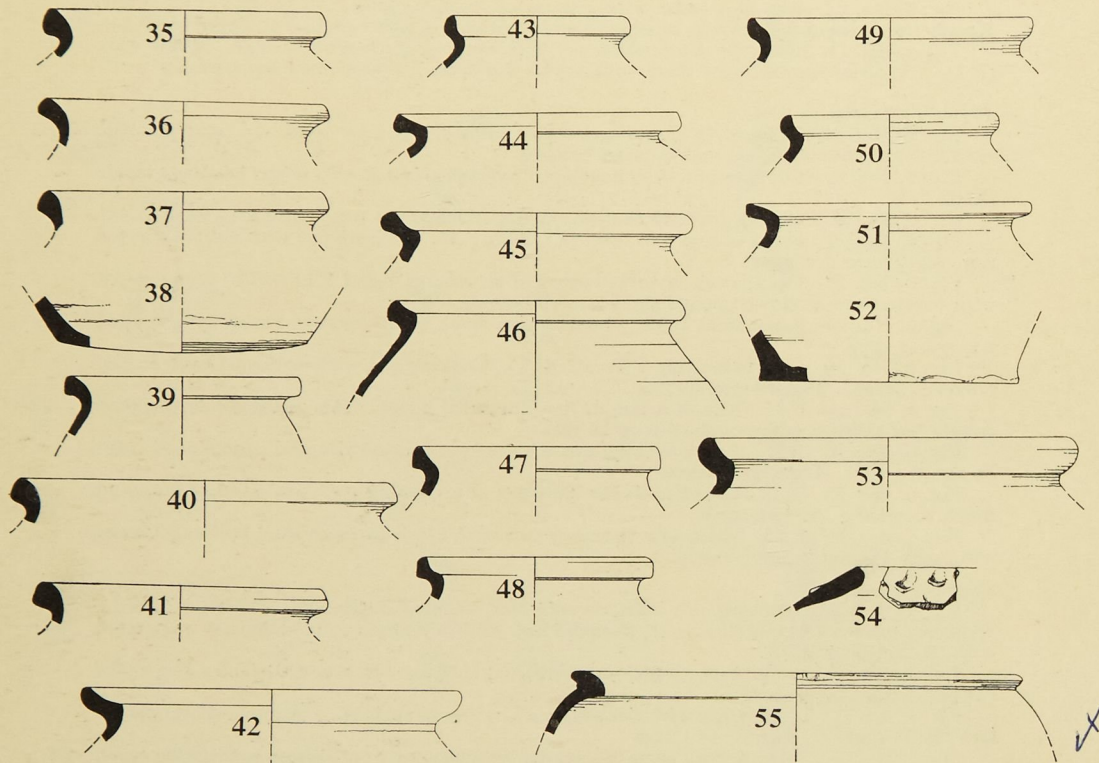


Fig. 7. Unstratified Saxo-Norman pottery. Nos. 35-41 St. Neots ware. Nos. 42-55 Thetford ware (4)

Fig. 7, No. 51. Cooking pot with simple strongly everted rim. Brown ware with black surfaces. From thirteenth-century ditch, A.54.

Fig. 7, No. 52. Flat base of a cooking pot, junction roughly finished off. Grey ware with brown surfaces, fire-blackened outside. From thirteenth-century ditch, A.55.

Fig. 7, No. 53. Large cooking pot with thick everted rim. Brown ware with black surfaces. From thirteenth-century ditch, A.64.

Fig. 7, No. 54. Ginger jar with simple inturned rim roughly fingered outside. From thirteenth-century ditch, A.56.

Fig. 7, No. 55. Large jar with inturned expanded rim. From thirteenth-century ditch, A.55

STAMFORD WARE

Four sherds were found in 1953 in the ten foot stretch of the site underneath the city bank then exposed.

From E. and F.75 two pink sherds with buff surface and orange glaze.

From F.75 pink sherd with orange glaze.

From F.74 pink sherd with buff surfaces and pale green glaze.

In 1951 four other sherds were found in the area on either side of the tower in front of the wall between G.56 and G.69.⁶⁷

By comparison only eight sherds were found in the whole 100 ft. by 20 ft. length of the 1954 excavations.

From Period I, Feature 21

1-2. Two thin red-pink ware sherds with patchy orange glaze. These are the only two stratified early sherds. These should certainly be pre-conquest and perhaps ninth or tenth century.

From Period I or II occupation

3. B.53. Sherd of rough pink ware with off-white surfaces and thick orange glaze. Applied vertical strip suggesting that this comes from a bowl.⁶⁸

4. B.58. Thick sherd as No. 3.

5. B.59. Thin sherd as Nos. 3 and 4.

Strays in ditch, Period IV

6. A.53. Thick roughish sherd as Nos. 3 and 4.

7. A.54. Thick sherd as Nos. 3, 4 and 6.

8. A.55. Sagging base in rough off-white ware with pink surfaces. Patches of orange and yellow glaze.

The sherds are too small to enable satisfactory drawings or reconstructions to be made but are all likely to be from pitchers or bowls.

Only Nos. 1 and 2 are stratified in Period I and are, therefore, early. All the others are either from the occupation or the thirteenth-century ditch and could be either Period I or II or even later, though this ware does not seem to last after about 1150.

Numbers 3-7 are very similar and could well come from the same vessel or exactly comparable ones. The ware is rougher than the usual Stamford ware and the thick orange glaze with some mottling is also not very typical. It is just possible that these sherds are Andennes ware from Belgium⁶⁹ but only analysis could determine this.

DEVELOPED STAMFORD WARE

Only a single sherd was found of this typical smooth off-white ware with a mottled green glossy glaze. This was from the thirteenth-century ditch in A.73. These vessels are datable to the period roughly from 1150-1250.⁷⁰

EARLY MEDIEVAL POTTERY

This type of pottery is now being increasingly recognised since its original identification by Mr. G. C. Dunning.⁷¹ The fabric is hard and sandy, like Thetford ware, but it is much thinner and has a tendency to have reddish or brown surfaces. The shapes are very definitely Medieval and not Saxon, the cooking pots being of wide squat baggy shapes quite different from the Roman type tall narrow olla forms of Saxo-Norman pottery. This pottery seems to run concurrently with Thetford ware for a period of 150 years from about 1000 to 1150. The reasons for this are obscure as are the reasons for the fact that these two wares seem to keep separate without much interaction of shape or rim form, only Fig. 8, No. 4 shows this. In the St. Neots area developed St. Neots ware tends to take on more Medieval forms in this same overlap period.⁷²

Early Medieval pottery is found from the latest levels at Thetford which are thought to be eleventh century, but there is no absolute dating.⁷³ It is found at North Elmham in contexts which should place it before the date of the removal of the Cathedral to Thetford in 1070.⁷⁴ It is stratified in quite a developed form⁷⁵ under the Castle mound at Norwich therefore dating before 1067. At Oxford the same type of pottery, usually in a much rougher fabric, is also stratified underneath the castle mound dating to before 1070.⁷⁶ It therefore seems reasonable to put the start of Early Medieval pottery in the early eleventh century.

There seem to be two main groups, the rough ware of the Oxford region which is largely hand-made only being partly trued up on a wheel, and a harder group, much more competently potted, as is shown by the thinness of the ware, but with the hand-finishing off round the neck which is so characteristic of this type. (Fig. 8, Nos. 1-2). This hard group is found, as already described, in East Anglia and north-westwards to Rutland,⁷⁷ Leicester⁷⁸ and Nottingham,⁷⁹ and later in the eleventh century at Oxford. There is not, however, any certain pre-conquest dating.⁸⁰ This is very much the area of distribution of Saxo-Norman pottery, excluding the St. Neots area where the shelly wares seem to predominate. It is, therefore, suggested that the Early Medieval pottery is a local resurgence of Saxon traditions which, in the Oxford region, appears in rough fabrics which had been common there in Saxon times, while in the Saxo-Norman area it appears in a harder paste copying the fabrics and the skills of these wheel-thrown wares, but only very rarely the forms. If the Saxo-Norman potters held a monopoly, as has been previously suggested to explain the static nature of the industry over three centuries,⁸¹ this would be a natural reaction against it by local potters.

This hard ware is also found in the south at Northolt, Middlesex and Winchester. The problems this raises have been discussed elsewhere.⁸²

Mr. E. M. Jope found two sherds in his Barn Road excavations⁸³ and published other Norwich examples from the Castle Well⁸⁴ and Fye Bridge in loose association with a coin of William I or more probably William II, but before the building of the bridge early in the twelfth century.⁸⁵

EARLY MEDIEVAL POTTERY—PERIOD II

From Feature 30

Fig. 8, No. 1. Small squat medieval cooking pot with simple everted rim and external beading. Rough hand finishing on the outside of the neck. The sagging base was found nearby and while not necessarily from the same cooking pot has been joined with the rim to show the suggested shape of these cooking pots (a.69).

From by Feature 29

Fig. 8, No. 2. Large cooking pot with simple everted rim. Rough hand finishing outside and a row of oblique cuts on the outside of the rim. Black ware with red outer surface (B.68).

From Feature 35

Fig. 8, No. 3. Small cooking pot with very thin everted rim (B.55).

From Top of Occupation by Feature 35

Fig. 8, No. 4. Small cooking pot with everted rim of Thetford type but in thin early medieval fabric. This is a most interesting hybrid between the two groups (A.54).

From under Feature 41, Period III

Fig. 8, No. 5. Small cooking pot with thin everted rim. Inside of the neck roughly finished off (a.71).

EARLY MEDIEVAL POTTERY IN LATER LEVELS

Fig. 8, No. 6. Upright rim with internal beading. Brown ware with black surfaces. Date uncertain but more likely to be early medieval than Thetford ware. From city wall foundation trench, E.48.

Fig. 8, No. 7. Cooking pot with everted rim thickened at the end and an external beading. Rough finishing both inside and outside. From the bottom of (a.65) gravel pit 3.

Fig. 8, No. 8. Similar cooking pot from the ditch behind the city bank, A.65.

Fig. 8, No. 9. A development from numbers 7 and 8. The thickening of the rim has now widened into a flange and the whole rim is more angular. The ware is still typically early medieval and is still roughly finished on the neck. This should be twelfth century in date. From ditch behind city bank, A.73.

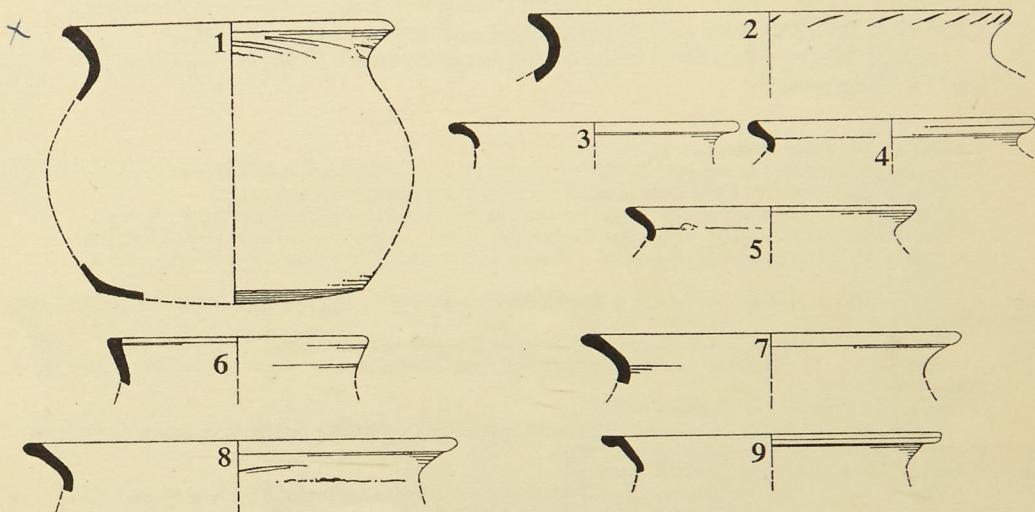


Fig. 8. Early Medieval pottery. Nos. 1-5 stratified from Period 11th or 12 century; Nos. 6-9 unstratified (4)

THE MEDIEVAL POTTERY

This group is in a hard, well fired, sandy ware very similar to the Early Medieval fabrics but usually much thicker. It is typified by sharply moulded rims of a form usual in the thirteenth century. That this is a development from the Early Medieval ware is clearly seen by the survival of the early trait of rough fingering of the neck (Fig. 10, No. 26). The occurrence of this pottery in the late thirteenth-century gravel pits shows that it was in use at this period but there were also sufficient sherds underneath the city bank in Period III levels, and in the bank itself, to show that this type was current in the late twelfth and early thirteenth century as well.

There seem to be no intermediate simple squared or expanded rims such as might be expected in the later twelfth century. It must, therefore, be argued that the heavily moulded rims started before 1200. The change over from the simple everted Early Medieval rims to the moulded later ones may, therefore, have occurred during the second half of the twelfth century. The long life of medieval pottery types is becoming increasingly recognised⁸⁶ and it is likely that the Early Medieval pottery lasted longer than might be expected and that the moulded rims should start earlier to fill the gap. Pottery from the second half of the twelfth century and the early thirteenth century is very imperfectly known and the reason must be because the length of the period of manufacture of rim forms and pot types has not been sufficiently recognised. It is unfortunate that our pottery dating is not more precise at this period since it does not help

to resolve the problem of whether the city bank was built in the early thirteenth century or in 1253. See p. 139 for further discussion of this problem.

Mr. E. M. Jope published other examples in Norwich from the Castle Well⁸⁷ and St. Stephens.⁸⁸

MEDIEVAL POTTERY—PERIODS III-IV

From Inside Building in Squares 70/74

Fig. 9, No. 1. Sherd with thin applied vertical strip sharply tooled (A.73).

Fig. 9, No. 2. Jug with an inturned rim and external cordon double thumbed at 90 degrees to the lip and handle which do not survive at this sherd. A finger has been pushed out from the inside as the cordon was thumbed. Brown sandy ware with green-brown glaze on the shoulder (A.72).

Fig. 9, No. 3. Large bowl with a thickened moulded rim with roughly incised wave on the top (a.71).

Fig. 9, No. 4. Large cooking pot with a large flanged moulded rim (A.73).

Fig. 9, No. 5. Cooking pot with thickened rim moulded and sloping outside. From feature 40 (A.73).

From Inside Building in Squares 61/65

Fig. 9, No. 6. Large bowl with expanded rim rounded outside and a thin flange inside roughly crinkled by thumbing (A.62).

From Inside Building in Squares 57/60

Fig. 9, No. 7. A more normal type of thirteenth-century cooking pot such as is found all over S.E. England. Rougher grey ware with simple flanged rim (A.58).

Fig. 9, No. 8. Cooking pot with expanded rim slightly sloping inside (A.57).

Fig. 9, No. 9. Sagging base with roughened slightly overhanging junction. The bottom part of the cooking pot bulges and then thins again just before the base. Fire blackened underneath (A.54).

From Feature 47

Fig. 9, No. 10. Unusual flanged rim apparently from a cooking pot (a.60).

From between Features 54-5

Fig. 9, No. 11. Cooking pot with flanged rim and internal beading (a.55).

From Pit 43

Fig. 9, No. 12. Cooking pot with upright rim hollowed on top, B.73.

From Feature 58

Fig. 9, No. 13. Large cooking pot with simple everted rim roughly finished outside. Sherd too small to give diameter (A.50).

From Ditch behind City Bank, Period IV

Fig. 9, No. 14. Cooking pot with everted rim hollowed on top (A.62).

Fig. 9, No. 15. Another more normal type of rougher grey ware cooking pot with squared rim (A.69).

Fig. 9, No. 16. Cooking pot with expanded rim sloping outside (A.64).

From the City Bank D.75

Fig. 9, No. 17. Small cooking pot with everted rim, slightly thickened with rough internal beading.

From Ditch filling for construction of St. Benedict's Gate (G.48) Period IV

Fig. 9, No. 18. Sherd from the side of a large jug similar to No. 2 grey gritty ware with red surfaces. Green-brown glaze. Alternate triangular sectioned and heavily thumbed applied strips. Where the bottom part of the thumbed strip has broken off it is interesting to see an incised groove underneath. This could have been used either for laying out the design or for keying on the strip.

Fig. 9, No. 19. Cooking pot with simple upright rim sharply moulded inside.

Period IV Pottery from the late thirteenth-century Gravel Pits

From Gravel Pit 1

Fig. 10, No. 20. Cooking pot with heavily flanged and moulded rim. Rim roughly pushed out to form a lip. This may mean that this is a bowl. This class of medieval pottery is very difficult to distinguish as the cooking pot and bowl rim forms are so similar (C.43).

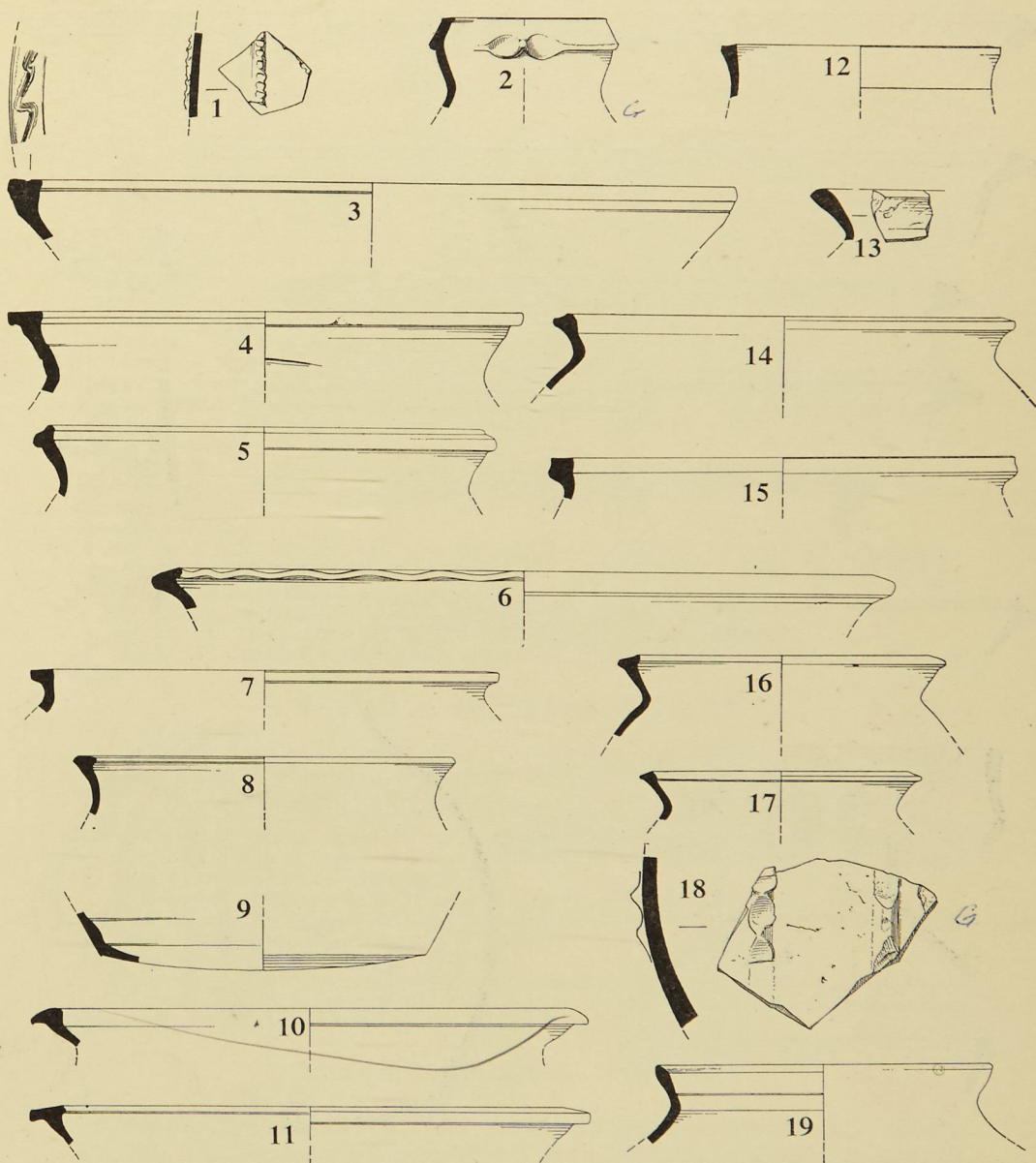


Fig. 9. Medieval pottery. Nos. 1-13 from Period III buildings, thirteenth century; Nos. 14-19 from Period IV late thirteenth century (4)

✓

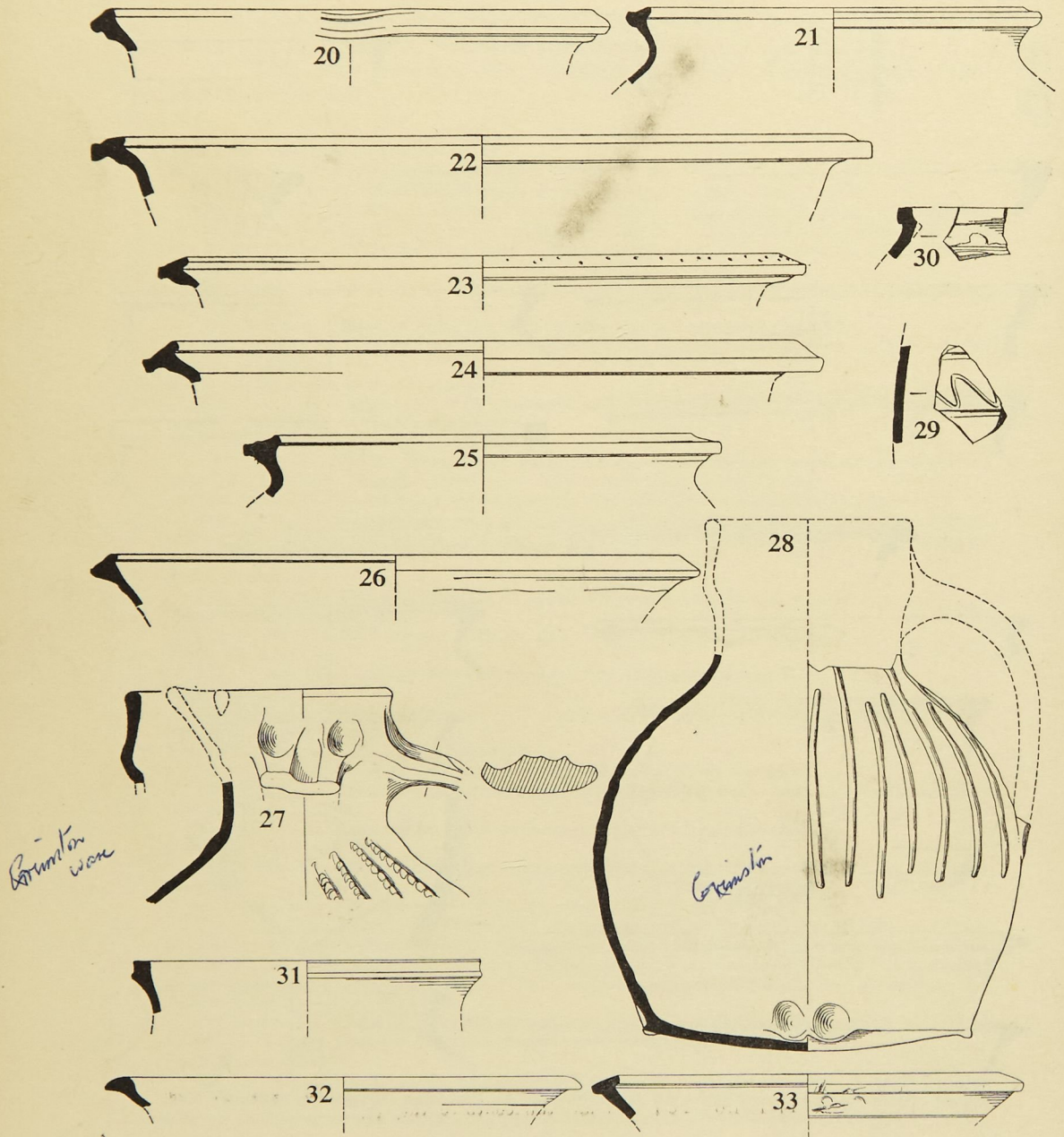


Fig. 10. Medieval pottery. Nos. 20-29 from pits 1 and 2; Nos. 30-33 from pit 3, period late thirteenth century ($\frac{1}{4}$)

Fig. 10, No. 21. Cooking pot with flanged moulded rim (C.44).

Fig. 10, No. 22. Large bowl with wide flanged and moulded rim (C.43).

From Gravel Pit 2

Fig. 10, No. 23. Bowl with flanged rim and erratically spaced stabs along the top of the flange (B.45).

Fig. 10, No. 24. Bowl similar to No. 22 but sloping more outside (B.45).

Fig. 10, No. 25. Cooking pot with large flanged rim similar to the bowls (C.45).

Fig. 10, No. 26. Bowl with hammer headed rim beaded inside. Outside of the neck still roughly finished showing the survival of this trait from early medieval times (B.45).

Fig. 10, No. 27. Top part of a jug in dark grey sandy ware. The three strap handles round the rim show the surviving tradition of the Saxo-Norman spouted pitcher.⁸⁹ On the shoulder vertical bands of applied scales in brown, rest of the vessel glazed dull green.

Fig. 10, No. 28. Lower half of a jug in similar ware. Sagging base with four groups of double thumbing on the side. Dull green glaze with vertical applied strips in brown.

Both these jugs are in a distinctive ware which is found at Norwich, Yarmouth and Cambridge. These jugs usually have faces on the sides⁹⁰ and there were also from this gravel pit numerous fragments of arms and applied fragments from a face jug but there was not enough to reconstruct it. This ware was first discussed in the report on the wells at Cherry Hinton, Cambs.⁹¹ It is now possible to suggest that the kiln where it was made was at Grimston, near King's Lynn, where wasters in this distinctive ware have been found by Miss S. Mottram.

Fig. 10, No. 29. Sherd from the side of a large globular jug. Light grey sandy ware with red inner surface. Mottled light green glaze outside with pattern of alternate incised grooves and waves (A.45).

From Gravel Pit 3

Fig. 10, No. 30. Small sherd from the rim of a cooking pot with squared upright rim. The internal angle is flaked off but the outside again shows the rough finishing usually associated with Early Medieval pottery (b.66).

Fig. 10, No. 31. Cooking pot with upright squared rim (b.66).

Fig. 10, No. 32. Cooking pot with unusual flanged rounded rim (a.66).

Fig. 10, No. 33. Bowl with hammer headed rim. The outside again shows rough finishing (b.66).

THE LATE MEDIEVAL POTTERY

From Pit 5 (a.61)

Fig. 13, No. 1. Very hard fired cooking pot with upright rim. Outer cordon and thickening inside with sharply undercut moulding, brick red ware with black surfaces and patches of brown glaze inside, splashed up from a green glazed base of which sherds were found.

The pit also contained other softer wares with typical green glaze so that the two main fifteenth-century fabrics found in the Norwich area were represented and shown to be contemporary. This was not certain before as most of the material in the Norwich Castle museum is from unstratified deposits.⁹²

An important sherd was a small fragment of unglazed Siegburg stoneware. These are now being increasingly recognised on fifteenth-century sites and evidence from Colchester and Hangleton, Sussex, has been discussed elsewhere.⁹³

From the Late Medieval House (a/b.42/3)

Under the chalk floor sherds of hard red fourteenth-century type glazed inside and out.

On the floor hard grey and red fifteenth-century sherds. It is not possible to give more than a general fifteenth-century date to these as they are quite small.

THE POST-MEDIEVAL POTTERY

WELL 1

Well 1 (a.51) contained a valuable associated group of late seventeenth-century pottery. The pottery itself suggests a date in the middle of the seventeenth century but the clay pipe (see p. 167) provides clear evidence that the deposit was sealed about 1700.

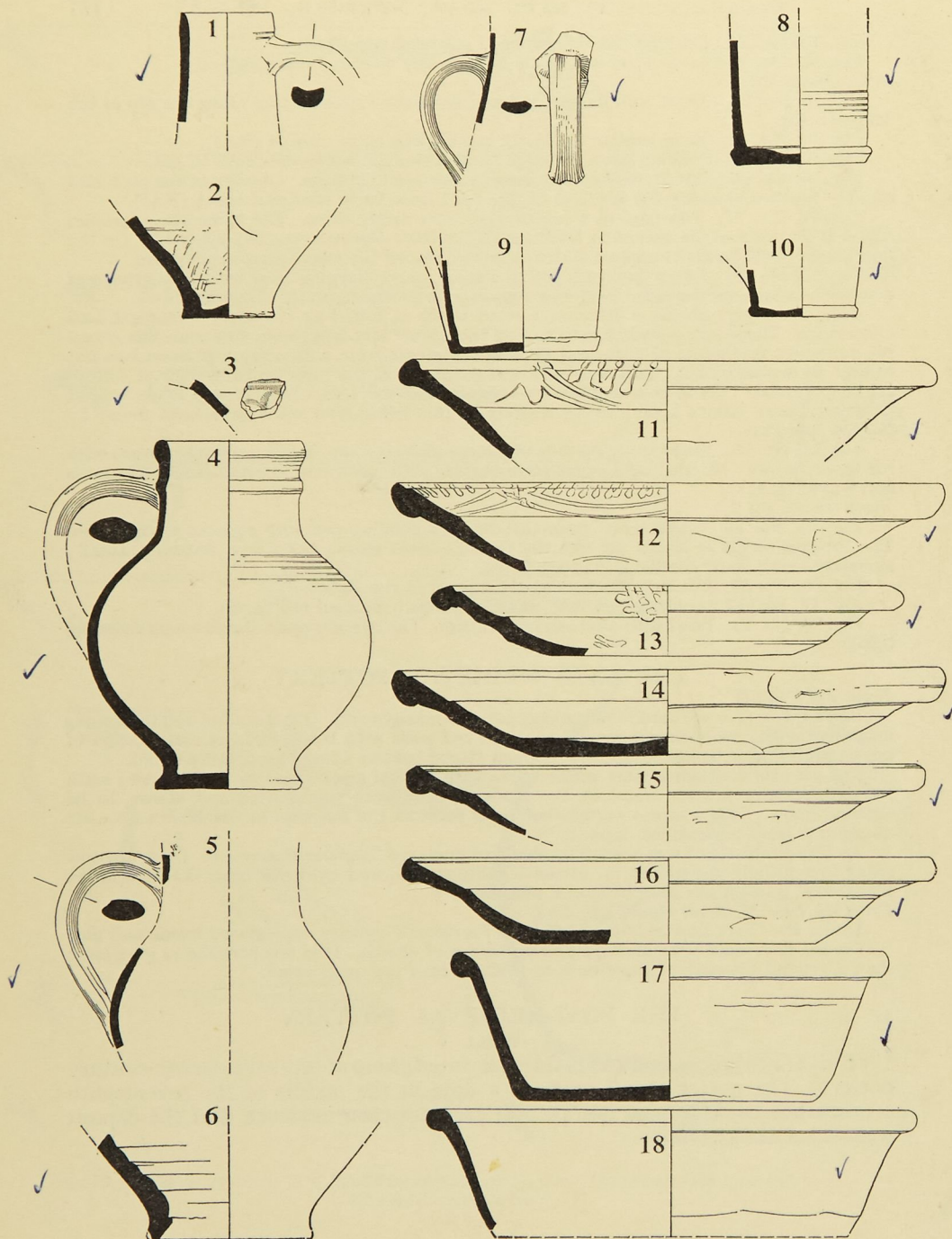


Fig. 11. Group of seventeenth-century pottery from well 1 (4)

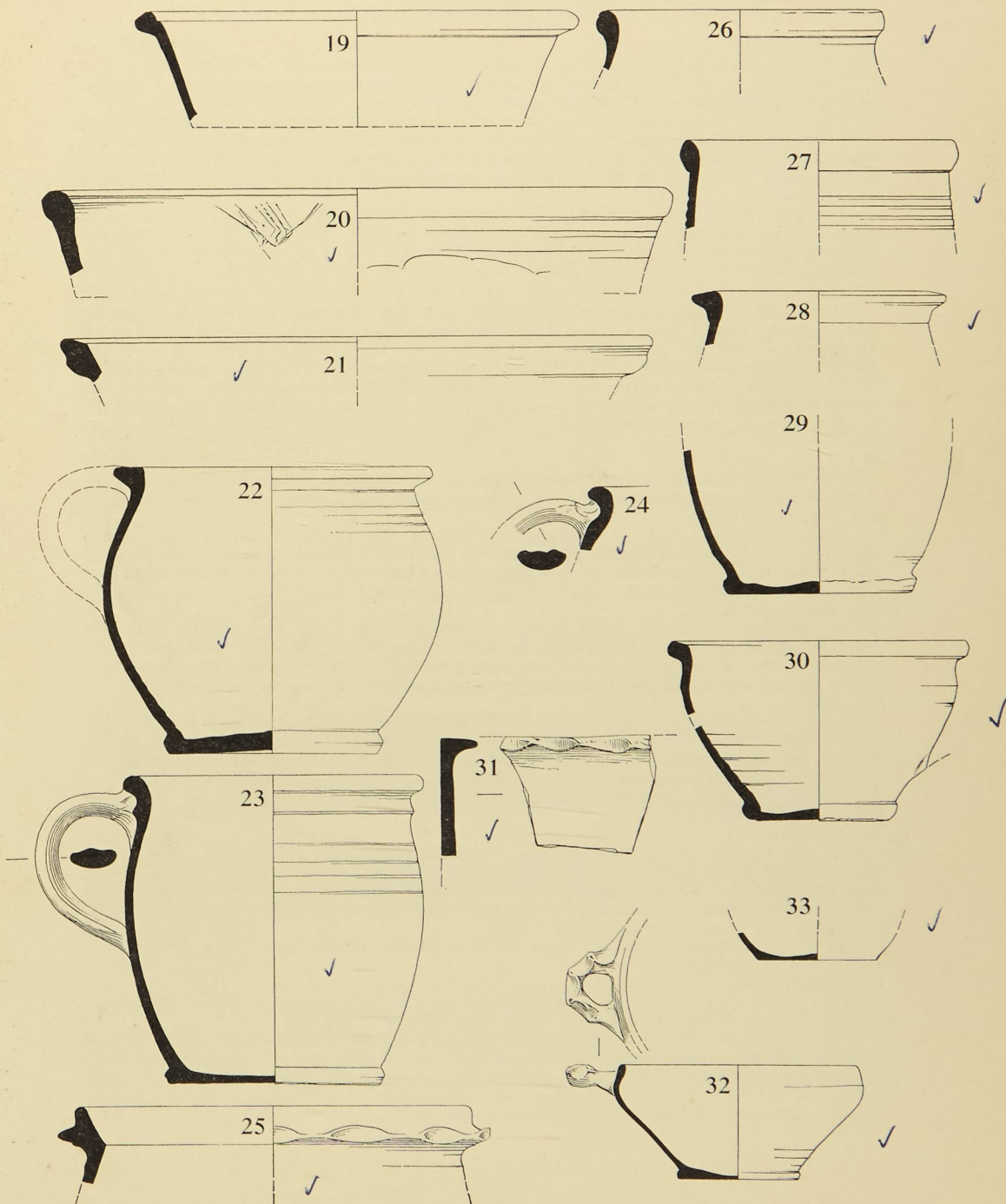


Fig. 12. Group of seventeenth-century pottery from well 1 (4)

*Imported Pottery**A. Frechen Stoneware*

Fig. 11, No. 1. Neck and part of the handle of Bellarmine jug, stoneware with a mottled brown glaze. The front of the neck, and therefore the mask, is missing.

Fig. 11, No. 2. Base of a Bellarmine jug. Stoneware with mottled brown-grey glaze

Without the masks or the complete profile it is difficult to date these jugs precisely, but the shape of the lower half of the jug does not suggest a very globular body, and therefore a date about the middle of the seventeenth century seems reasonable.⁹⁴

B. Dutch Delft

Fig. 11, No. 3. Small fragment from the side of a dish. The fragment is too small to determine the pattern of decoration and therefore its date; but from the fabric and the thinness of the sherd it should date to about the middle of the seventeenth century.⁹⁵

*Local Wares**A. Jugs*

Seventeenth-century jugs are not very common so it is of interest to have three examples in this group. Fig. 11, Nos. 4, 5 and 6 have globular bodies, upright necks and Nos. 4 and 6 an expanded foot, all typical of Rhenish stoneware. These therefore show the common tendency of the seventeenth-century jugs to copy these forms.⁹⁶ Jugs No. 4 and 5 are in red fabric with yellow-brown glaze. No. 6 is of a rougher thicker fabric with a brown glaze inside and patchy glaze outside at the bottom. Jug No. 7 of which only the handle and part of the body survive, is a much more slender jug; red fabric with a glossy manganese glaze, as on tygs.

B. Tygs

Fig. 11, Nos. 8, 9 and 10 are the bases of tygs of varying sizes. The straight sides and the bands of grooves are a late feature. All are in red ware with a glossy manganese glaze.

C. Slipware—Dishes

Fig. 11, Nos. 11, 12 and 13 are dishes in red ware. No. 11 and 12 have a glossy brown glaze inside and a similar slip decoration of contiguous arcs with a filling of dashes. No. 13 has a yellow-brown glaze with large dark green patches and portcullis decoration in yellow slip. The outside is sharply moulded and is much fire-blackened.

D. Plain Dishes

Fig. 11, Nos. 14, 15 and 16 are similar but undecorated. They are all of red ware with yellow-brown glaze inside and smudged spots of darker brown. Most of the dishes either plain or slipped, show extensive traces of knife trimming outside and above the base, a late Saxon feature which becomes increasingly common again in late medieval times.

E. Bowls

Fig. 11, Nos. 17, 18, and Fig. 12, Nos. 19, 20 are shallow straight-sided bowls with rounded and moulded rims. As with the dishes they show extensive knife trimming. They are all of red ware; Nos. 17 and 18 with yellow-brown glaze inside; Nos. 19 and 20 with glossy brown glaze inside. No. 20 has in addition a rough fan-shaped pattern of pencil thin slip.

Fig. 12, No. 21 is a moulded rim of a large bowl of uncertain depth in red ware with yellow-brown glaze inside.

F. Chamber Pots

Fig. 12, Nos. 22-24 are chamber pots. No. 22 is of the more usual squat shape with a globular body and a flanged rim with grooving on the neck, in red ware with darkish brown glossy glaze inside. No. 23 is taller with a more barrel-shaped body, a rounded rim with a cordon underneath and the grooves on the neck are more widely spaced than those on 22. Red ware with dark brown glossy glaze inside.

No. 24 is the rounded rim and strap handle of another similar vessel. Red ware with a dark greenish-brown glaze.

G. Storage Jars

Fig. 12, No. 25 is the rim of a large storage jar with everted rim and thumbled cordon outside. Red ware with brown glaze inside and patches on the rim.

Fig. 12, Nos. 26, 27 and 28 are rounded and flanged rims of similar but smaller vessels. No. 26 is red ware with greenish-brown glaze inside, No. 27 with deep grooves on the shoulder and yellow-brown glaze inside and out. No. 28 is in red ware with greenish-brown glaze inside and out. No. 29 is the base of one of these vessels; or possibly of a chamber pot as No. 23. Red ware with dark and light brown glaze inside.

H. Other Vessels

Fig. 12, No. 30 is a small, handled deep bowl, red ware with yellow-brown glaze inside. Heavily burnt outside.

Fig. 12, No. 31 is from a flat square or rectangular dish with very low thumbed rim. Red ware with yellow-brown interior glaze.

Fig. 12, Nos. 32 and 33 are small cups. No. 32 has an inturned rim and at least one horizontal thumb-impressed handle. Both are in buff ware with yellow crackled glaze inside and out.

OTHER SEVENTEENTH-CENTURY POTTERY

Large quantities of seventeenth-century pottery were recovered from the bulldozing of the road levels but as it was unstratified only a few outstanding pieces will be reported on. There is already a large body of more datable pottery from the city ditch⁹⁷ and the well 1 group described above gives another series. Most of the sherds were the normal types of brown, yellow-brown and brown-green glazed vessels typical of the area. The large number of type 5 clay pipes (see p. 167) dating to c. 1680-1720 suggest that a lot of this pottery comes from a substantial heightening of the road levels carried out at the same time as the filling in of the city ditch to the south of St. Benedict's Gates in the early eighteenth century.

The three imported sherds and four complete vessels described below are worth reporting on as vessels in their own right without knowing their context.

SOUTH NETHERLANDS MAIOLICA

Very few sherds of delftware were found in the road levels but one of these is of considerable importance. This is a fragment from the lower half of a maiolica albarello in a pinkish, fairly hard, ware, dull tin glaze with stylised floral decoration in lightish blue (black on drawing.) Two petals are present one, orange (stippled on drawing) and the other green (vertical lines on drawing) outlined in blue (Fig. 13, No. 2) from upper levels in a.45.

This decoration is typical of South Netherlands Maiolica and should date to the first half of the sixteenth century.⁹⁸ Similar decoration is present on flower vases found in England,⁹⁹ the most closely comparable being one from Coventry.¹⁰⁰ Although over fifty of these Netherlands vases have been found in England very few albarellos have been identified. These are examples from London, Southampton and Canterbury, but most of these are later in date.

NORTH NETHERLANDS MAIOLICA

The only other sherd of interest was a fragment of a maiolica dish with floral decoration in yellow, green and blue over blue and green bands, Fig. 13, No. 3. This is likely to be Netherlands dating to the first half of the seventeenth century. From upper levels in A.50.

SOUTHWARK DELFT

In the St. Benedict's Gates report the base and sherd of a delftware jug was published and it was suggested that this might be Netherlands.¹⁰¹ The shape is, however, quite wrong for one of the early South Netherlands flower vases and it is suggested that it may be the base of a Southwark jug dating to the first half of the seventeenth century.¹⁰² The ware, glaze and decoration all support this.

Wanfried Bowl

Hammer-headed rim and body sherd from a Wanfried bowl, Fig. 13, No. 4. Brick red ware with brown glaze inside. Pale green slip decoration with darker patches. Dash ornament on rim with parallel thick and thin lines below. Underneath curvilinear decoration in zones. The outside of the bowl has prominent girth grooves. From upper levels in A/B.74/5.

This ware should now be called Wanfried (not Hesse) since the former name could be confused with other Hesse wares such as that made at Marburg. There was one found in the earlier excavation¹⁰³ and examples are quite common on early seventeenth-century sites. The dating has been discussed elsewhere¹⁰⁴ but there are now known to be earlier examples and the full range must be c. 1575-1635. There is an example in the London Museum dated 1584 and one of 1592 from Leeuwarden, Holland.¹⁰⁵ Another in the Glaisher collection is dated 1590.¹⁰⁶ I am grateful to Mr. I. Noel-Hume for drawing my attention to a more recent publication on Wanfried ware and for suggesting that this should be its proper nomenclature.¹⁰⁷

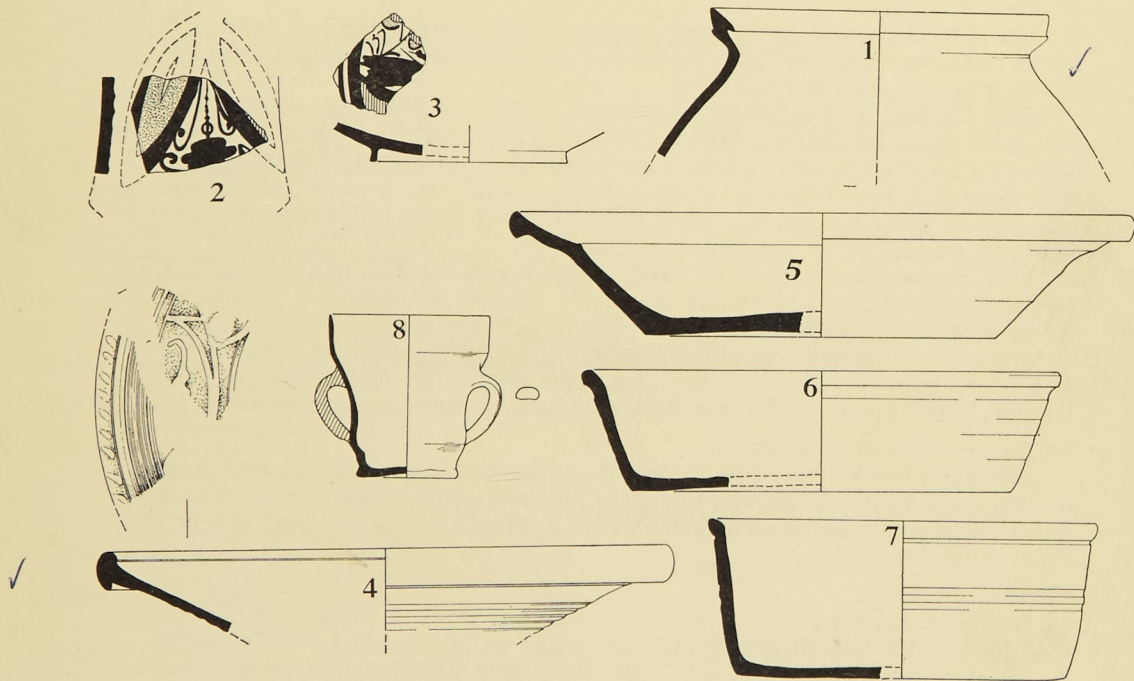


Fig. 13. No. 1. Late Medieval cooking pot from pit 5; Nos. 2-4 imported pottery. 2, South Netherlands Maiolica, 3, north Netherlands Maiolica, 4, Wanfried ware. Nos. 5-8 unstratified post-Medieval pottery (4)

Coarse Local Wares

Amongst the unstratified seventeenth-century finds three complete pots are worthy of illustration. They were all found in Square A.44.

Fig. 13, No. 5. Bowl with rounded thickened everted rim and slightly concave base. Red ware with brown-yellow glaze inside.

Fig. 13, No. 6. Shallow straight-sided bowl with thickened and rounded rim. Uneven incised grooves outside and brown-yellow glaze inside and outside.

Fig. 13, No. 7. Similar bowl but deeper and with vertical sides. Two incised grooves outside and brown glaze inside and outside.

Fig. 13, No. 8. Small two-handled cup, hard purple ware with iron oxide glaze, sixteenth century. From the 1954 bulldozing.

THE CLAY PIPES

Fifty-two clay pipe bowls, and numerous pipe stems, were nearly all found from the road levels. As many were recovered from the bulldozing they were not stratified but, as all except four were of type 5 (1670-90), this suggests that a considerable makeup was carried out at this period which was about the time that the city ditch in front of the city wall was being filled in to the south of the gates. These deposits also contained pottery and pipes of the late seventeenth century while the fill to the north had pipes up till 1740.¹⁰⁸ Much of the stray pottery recovered was also seventeenth century in date (see p. 165). Another pipe of type 5 provides the best evidence for dating the pottery from well 1 to the second half of the seventeenth century (see p. 161).

Mr. A. H. Oswald, F.S.A., has kindly supplied the following dating for the clay pipes:—

From Well 1:

Pipe of type 5, *c.* 1670-90,¹⁰⁹

From various unstratified road makeup levels:

47 pipes of type 5, *c.* 1670-90.

1 pipe of type 6, *c.* 1680-1710.

2 pipes of type 10 (before 1720) marked W.S. This was perhaps William Swain of London 1701, but could be William Spacie of York 1706-Bristol 1722, or William Scott of Bristol 1707¹¹⁰.

1 pipe of type 10, 1720-50.

STONE OBJECTS

Whetstones

Fig. 14, No. 1. From by Feature 39, Period III. Fragment of a large thin whetstone. As well as being broken each end this was also broken on the side so it is not possible to determine the full width.

Fig. 14, No. 2. From gravel pit 2, Period IV. Part of a smaller whetstone. One end is intact the other is broken off.

Miss Helen A. H. Macdonald of the Petrological Department of the Geological Survey and Museum reports that both are of micaceous schist and are erratics probably of Scottish or Scandinavian origin.

Mayen Lava Quern

Fragments of Lava querns are a common feature of Late Saxon and medieval sites¹¹¹ so it is surprising that only one fragment should be found, especially in view of the close contacts with the Rhineland shown by the imported pottery (see p. 147). This fragment was from the occupation layer under the city bank in E.74 (1953 excavation) and therefore dates to either Period I or II. It was a small fragment, flat on both sides, but with no edge or other clue as to its size. It was in fact very similar to the medieval examples from Northolt, Middlesex. The literature on these querns is further discussed there.¹¹²

THE IRON OBJECTS

There were no iron objects from any of the Saxon or early medieval levels (Periods I to III) except for two very corroded nails from the E. and F.75 occupation layer. The gravel pits contain the only stratified medieval objects datable to the end of the thirteenth century or earlier.

Descriptions by Mr. L. Biek after examination in the Ministry of Works Ancient Monuments Laboratory.

Gravel Pit I

Fig. 14, No. 3. Link fragment in the shape of a figure eight two inches long with a maximum width of $\frac{3}{4}$ inch.

Fig. 14, No. 4. Complete horseshoe with a maximum overall diameter of four inches with smooth outlines. There are five (of six?) square holes remaining. Two of them still have nails in them of square section.

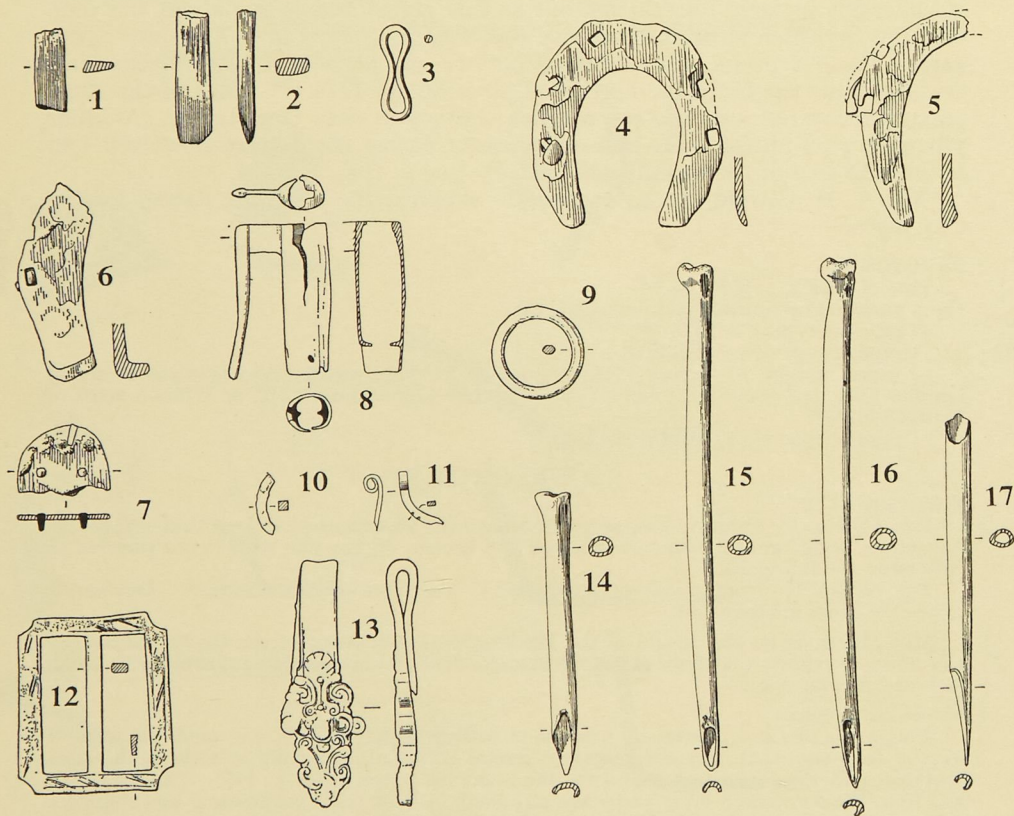


Fig. 14. Nos. 1-2 Whetstones; Nos. 3-7 Iron objects; Nos. 8-13 copper alloy objects; Nos. 14-17 bone objects. Nos. 1-7 ($\frac{1}{4}$) and Nos. 8-17 ($\frac{1}{2}$)

Gravel Pit 2

Fig. 14, No. 5. Half of a horseshoe with a maximum overall diameter of $4\frac{1}{2}$ inches and smooth outlines. There is a loose nail embedded in corrosion products beside an empty rectangular hole. The only other extant hole is square and empty.

Fig. 14, No. 6. Horseshoe fragment 4 inches long with a maximum width of $1\frac{1}{2}$ inches. There is one calkin and one rectangular hole with a nail *in situ*.

Gravel Pit 4

Fig. 14, No. 7. Approximately half of a thin studded plate 2 inches in diameter. The stumps of probable "studs," at right angles to the plane of the plate, are disposed roughly like the eyes and the mouth in a face but the mouth is on the opposite side and slightly longer. The fragment is reminiscent of certain pony shoe types with a grip but it is not possible to say more from the small fragment preserved. There was a similar object (unpublished) from the Hungate York, excavation but this was from an early eleventh-century level.¹¹³

Later Road levels

There were several iron objects from the road levels but, as these were not stratified, and might therefore be later than the seventeenth century, they are only briefly mentioned and are not illustrated.

From D.42. $2\frac{1}{2}$ inch long nail with tapering rectangular section and pronounced square sectioned head $\frac{1}{2}$ inch square. Another larger $3\frac{1}{2}$ inches long from B.55/6.

From D.42, hook and eye assembly 5 inches long and 1 inch wide.

From a.53/4, clamp screw $5\frac{1}{2}$ inches long with fiddle key head and screw thread at the other end. Mr. J. P. Saville (Iron & Steel Institute) suggests that this was part of a clamp from a carpenters' bench.

From a.63/4 and a.65/6, twelve nails ranging from 2 to 3 inches long, mostly rectangular but some square in section.

From B.55/6. Shank of key and lock plate fragment.

From a.64/5. Staple in the form of a figure 3, $3\frac{1}{4}$ inches long; the lower end passes through a collar.

From C.75. Horseshoe fragment with maximum overall diameter of $3\frac{1}{2}$ inches.

THE COPPER ALLOY OBJECTS

No copper alloy objects were found in the Saxon or early medieval levels.

Fig. 14, No. 8. From the city bank in C.48 part of a ward of a key which possibly had an iron shaft. Identified by Mr. C. C. Oman. The oval iron-shank would have fitted into the pipe end and the mortice would aid turning action by providing the necessary purchase.

Fig. 14, No. 9. From gravel pit 1, Period IV, late thirteenth century. A ring with hexagonal section. Possibly from horse harness.

Fig. 14, Nos. 10-11. From the ditch in A.57, Period IV, late thirteenth century. Two fragments of strips one with a square section and the other rectangular. No. 4 is looped over at one end and has a notched decoration. These strips are not gilded nor do they have the usual convex section of early medieval decorative strips, but they may be regarded as decorative strips from some article of furniture,¹¹⁴ of a different type current in the thirteenth century.

Fig. 14, No. 12. From lower road levels in B.45. A rectangular double buckle with notched corners, and rough incised decoration. In some places there are traces of white metal "plating" residue, possibly tin (alloy). Double buckles are usually regarded as being late medieval¹¹⁵ but one without notches was found at Rye in Sussex¹¹⁶ and another double buckle with moulded bars¹¹⁷ was found in a late fourteenth-century context at Northolt, Middlesex.¹¹⁸

Fig. 14, No. 13. From the upper road levels, unstratified. Mr. C. C. Oman reports that this is the scale from an early seventeenth-century knife-handle, probably Flemish.¹¹⁹

There would be one of these decorative plates attached to each side of the knife which would run the whole length of the scale and be of similar dimensions without a tang. The fragment has been drawn bent as found but it would originally have been straight.

Mr. L. Biek reports that it was not possible to straighten it in the laboratory without much damage. No rivets could be seen in the X-ray nor are there any indubitable rivet holes, although the two larger apparent perforations in the decoration, and possibly some of the smaller ones, might have been so used.

From pit 5 (a.63), fifteenth century, four fragments of folded sheet metal waste.

THE COINS AND JETTONS

By S. E. RIGOLD

THE COINS

From Gravel Pit 1, late thirteenth century

"St. Edmund Memorial" Penny

(Pierced, broken and nearly illegible), of the later and less neat type (c. 905-18); from an unlocated mint in East Anglia.¹²⁰

Obv.: Λ [v] C — Λ — — C I.

Rev.: + — — — Λ — D.

From seven inches down in the small medieval ditch, A.60

Edward I Penny

A very much corroded coin which it was not possible to clean but X-radiographic examination showed it up sufficiently to say that it was probably, in view of the form of the S and the late broad face, an Edward penny of London, class ID (1279). This could have been current until 1340, but a date of c. 1300 or at the time of the building of the city wall is quite possible.

Mr. Biek reports that "microscopic examination of the corroded surface revealed tiny embedded fragments of fibrous material. This was in part associated with some charred matter, also possibly fibrous in origin. It was thought that the coin might have been (? burnt) in a cloth purse, but the report below disproved both contentions."

Miss Cecily Malpas, of the *Shirley Institute* reports. "The fibre consists of vascular bundles with non-fibrous tissue (probably ground tissue) adhering. One piece had three bundles running parallel held together by the ground tissue. We are of the opinion that they are plant remains, probably of a monocotyledonous plant such as grasses or rushes, the bundles of which are similar both in appearance and dimensions.

"We regret we cannot identify your specimen any more accurately but we have only been able to examine and compare it under the microscope mounted in a clearing agent with other plants having similar fibre bundles. On the application of reagents the structure was found to disintegrate. We find no evidence of charring."

JETTONS

From the late and post-medieval road levels

1. *Tournai*, thin sort, diam. 26 mm. pierced.

"Chatel Tournais," lys on either side, lys and 2 annulets above/cross paty with lys in angles. Garbled Lombardic legents.¹²¹ Comparable obv. and rev. designs are found on Tournai jettons from Writtle, Essex (Destruction of Phase II, late fifteenth century, and possibly in upper layers of Phase II, early-mid-fifteenth century); rev. paralleled at New Romney, Kent (before 1481) with more usual Ihc obverse, mid or later fifteenth century.

2. *Nuremberg*, diam. 24 mm.

Usual types—3 crowns and 3 lys/Reichsapfel in trilobe.¹²² Garbled legends, but Roman lettering, lys stops. Mid-sixteenth century.

THE IRON SMELTING RESIDUES

Fragments of slag were found at most levels. The occupation layer contained so many fragments that, at the time of the excavation, it was thought that this really must be natural and not artificial. Only a few samples were saved but all these seem to be certainly artificial. There, therefore, must have been extensive ironworking either in Period I or Period II. No examples were found stratified in the Period I features so this might be the activity that went on in the flimsy Period II structures. Unfortunately no furnaces or fragments of furnace structure were found.

Two fragments of slag were found in gravel pit 1 and one in gravel pit 2. Two fragments were found in the A thirteenth-century ditch one in feature 58, and another in feature 59, Period III. All these could be residual from earlier Period II iron smelting but, as they had a consistent visual difference from the earlier samples in the occupation layer, it is suggested that iron smelting was taking place in this area also in the thirteenth century.

Twenty other samples were taken from the sixteenth- and seventeenth-century road levels from squares 42 as far north as 64. These could easily have been brought in from elsewhere for road makeup but it is interesting that these later slags seem very similar to the early medieval ones.

NOTES ON THE IRON SMELTING RESIDUES

By L. BIEK

Ancient Monuments Laboratory, Ministry of Public Building and Works

Altogether twenty-six specimens were supplied from stratified levels of all the periods represented, as well as fifteen samples of material which was reputedly "as common as the gravel" on the site, from the occupation layer.

All the material, including some lumps classified with the iron objects from which they were superficially indistinguishable, appears to be associated with iron smelting. Visual and X-radiographic comparative examination suggests that most of the types of residue normally found in such association are present, including "skull" or furnace bottom fragments, part-smelted cinder, well-fused glassy slag containing spherical pores, thoroughly molten slag solidified in characteristic "runs"; dense, highly crystalline slag rich in *fayalite*, almost completely reduced ore, and fragments of refractory clay lining from the furnace showing some slag fluxing and penetration of the "inner" surface.

The absence of a furnace unfortunately precludes firm comment. There seems little doubt, however, that the type and quantity of material must indicate considerable "domestic" iron smelting activity, at least, as well as showing clear continuity. As would be expected, the straight "bloomery" type of extraction shows little evidence of significant change over the 700 years concerned; however, it is useful to have this stratified series in a confined area.

To judge from the published data assembled by Tylecote¹²³ this would seem to be the first firm, properly excavated evidence of Saxon or medieval iron-smelting in East Anglia. Though normally regarded as relatively poor in raw material compared with the Weald and Forest of Dean, the area was clearly capable of supporting intensive Roman "domestic" ironsmelting activity, e.g. at Ashwicken.¹²⁴ Tylecote suggests that pits were dug down to beds of nodular ore, quoting Whitaker *et al.*¹²⁵ and Spurrell¹²⁶ in support.

There is, however, much unpublished evidence for iron working in the Norwich Castle Museum collections. There is much slag from the Pagan Saxon village site of Witton-by-North-Walsham,¹²⁷ from one of the other Saxon nuclei of Norwich in the Conesford area,¹²⁸ from the Saxon town of Thetford¹²⁹ and several medieval sites in the county.

It would thus appear, especially when similar finds from Wharram Percy on the Yorkshire Wolds are also taken into consideration that the *prima facie* "barren" Chalk country was exploited perhaps to a surprising degree.

THE CHARCOALS

By J. F. LEVY

Department of Botany, Imperial College of Science

From Period I, hearth 21, a diffuse porous hardwood resembling *Tilia sp.* (i.e. similar to lime).

From Period IV ditch (A.60) fragment of oak (*Quercus Sp.*) and another of *Pyrus* type.

THE BONE OBJECTS

Among the numerous important finds from pit 1 was the right radius of a Goose (*Anser Sp.*).¹³⁰ This was cut obliquely to make a pointed object, Fig. 14, No. 14. Three similar objects are in the Coventry Museum, Shelton collection, from unknown find spots in the city.¹³¹ All three are also the right radii of geese.¹³⁰ Two of them are complete (Fig. 14, Nos. 15-16) and are much longer than the Barn Road example. The third may have been as long but the top was broken off (Fig. 14, No. 17). The Norwich example is clearly closely comparable with the Coventry ones but was much more used and had been cut down to a much smaller size by constant sharpening. It has been suggested that they were pens but this now seems unlikely. Mr. L. Biek reports on them as follows:—

They were of different lengths (Fig. 14, Nos. 15-16) being about twice as long as the other two and presumably representing nearly the whole length of the original bone. Fig. 14, No. 17 like the other two from Coventry, had evidently been broken approximately in half but unlike them had lost the unworked half. The Norwich specimen Fig. 14, No. 14 was intact but clearly represented only about half the original bone—it had possibly been re-sharpened after such breakage as was suffered by the others.

All the worked ends have been cut in longitudinal taper section, in the manner of sharpening a wooden twig. A straight taper section would produce the observed result, provided the angle of taper were small, and in two cases

(both from Coventry) no more has been done. The other two are rather more elaborate, especially the third from Coventry (Fig. 14, No. 17) which shows a much longer and slightly curved cut. Though a fair point has been produced in every case no great care seems to have been taken over it; nor is the type of section uniform, although this variety may have been intentional. The Norwich specimen (Fig. 14, No. 14) and one from Coventry (Fig. 14, No. 15) have their taper plane cut down through the plane of the major diameter of the bone's ellipsoid section, giving a wide and shallow "scoop." Fig. 14, No. 17 has its taper plane almost at right angles, i.e. cut through the minor diameter, and thus yielding a narrow and "deep" channel. The remaining object shows a taper section in an intermediate position. No two of the openings are the same size Fig. 14, No. 15 being very small, Fig. 14, No. 14 (from Norwich) very broad and Fig. 14, No. 17 very long.

No trace of any kind of ink residue could be detected microscopically or X-radiographically on the Norwich object. On all three objects from Coventry there are more or less extensive and dark blue-black stains in and/or around the worked ends. In one case (Fig. 14, No. 16) the tip was microchemically tested (with sodium hypochlorite) and appeared to carry traces of iron tannate type ink; there were about this, however, several circumstances which suggested that the ink was likely to be recent, and this line of investigation was thus abandoned.

If the description of these objects as "pens" rests on these residues alone, therefore, it might well be misleading. Mr. E. M. Jope has in fact suggested that they could not have been used as pens and were more likely to have been employed, perhaps, for the mixing of ink. By analogy with quill pens, which are split at the end for resilience and possibly also to increase capillarity, these objects would indeed seem unusable as pens in the ordinary way.

The question remains—why was this particular bone selected, whatever the purpose? Clearly, if a firm, hollow object was required that could be given a pointed, "half-channel" end, it would be an obvious choice. It would be very simple and quick to make—either individually or in "mass-production". Possibly the choice was influenced by the need for a relatively unreactive material. Even in modern times, horn and bone spoons and spatulas were in common use for handling chemicals where metal was unsuitable.

The objects could conceivably have been used for drawing fairly thick and mainly straight lines with viscous inks, if held with the opening uppermost and almost horizontal. If used in the preparation of (especially iron tannate type) inks they could be used in scooping or even roughly measuring out the powdered oak galls into the water or solution in which these would be boiled, and for stirring (small quantities of) the boiling mixture—though other tools, from spoon to spatula would be equally suitable. The objects might perhaps be particularly useful in "boring" suitable portions out of the softened galls if these were boiled entire—indeed, functionally they would seem to be most suited to such a boring action, whatever the context. Finally, they might act as an "anti-bumping" device during boiling in the manner of the special glass

tube used to-day in analytical and preparative chemistry. As an all-round tool in this or a similar context, an object of this kind would seem to be of sufficient value to explain and warrant special preparation. Further progress in this investigation must await the reliable excavation of such an object with ink or other residues *in situ*.

I am grateful to Miss J. E. King and to Miss C. Grigson for helpful discussion.

Since this went to press another similar object has been found at Boston and it is hoped that examination of this may help to elucidate the problem.

THE FAUNA

By MISS J. E. KING (British Museum, Natural History)
AND MRS. CAROLINE BANKS (née Grigson) (then at British Museum,
Natural History)

All the usual domestic mammals are represented in this collection and dog, cat and oyster are also present. There are no wild animals except, perhaps some of the bird bones which have not been separated. The animals are not large, though there is the usual variation in size, based largely on estimations as most bones were broken so that only a few could be measured. The comparable measurements, given in brackets refer to New Forest Pony, Chillingham Ox and Scotch Ram, respectively.

l=length; w=width; d=distal end.

Period I-II bones come from the occupation level and date between 850 and 1150.

Period III bones date between 1150 and 1200.

The bones from the road build up levels (1954 and 1955) are likely to date mainly from the thick seventeenth-century makeup which produced much pottery (see p. 165) and clay pipes (see p. 167) of this date.

The group from well I is of the same late seventeenth-century date.

PERIODS I-II

Horse

1 molar
2 metacarpals (1 fragment and 1 complete:
 r 216 (190))
femur (1 proximal end and 2 distal ends)
tibia (1 proximal end and 2 distal ends:
 w. 66 and 56 (58))
phalange (1 fragment)

3 middle phalanges
2 terminal phalanges
pelvis (1 fragment)
femur (1 distal end, burnt)
tibia (2 distal ends)
2 astragali
1 calcaneum
metatarsal (5 fragments, 1 with *w.d.* 46 (59),
 and 1 juvenile)

Ox

5 horncores (4 of shorthorn type and 1
 longer)
mandible (2 fragments, 1 juvenile)
9 molars
scapula (3 fragments)
humerus (1 proximal end, 1 distal end: *w.* 80
 (74))
radius (1 fragment)
2 metacarpals (incomplete)
6 proximal phalanges

Goat
2 horncores

Sheep or goat

1 upper jaw fragment
7 mandibles
1 scapula
humerus (2 complete, 1 distal end)
1 radius (*l.* 168 (173))
pelvis (1 fragment)

PERIOD I-II—*continued*

metacarpal (1 distal end)
 1 proximal phalange
 1 femur (incomplete)
 2 tibiae (1 complete and 1 distal end)
 1 astragalus
 1 metatarsal: l. 118 (140)

Pig

Cranium (1 fragment)
 mandible (2 fragments)
 1 lower incisor
 1 metapodial

Dog

2 upper jaw fragments (large)
 2 mandibles (both left, 1 large and 1 small)
 2 tibiae (large)
 2 humeri (1 large and 1 small)
 metapodials (small)

Cat

1 ulna
 2 femora
 1 tibia

PERIOD III

Horse

mandible (anterior end)
 1 molar
 1 humerus (proximal epiphysis)
 1 radius (lacking distal end) and ulna
 1 metacarpal (distal end)

Ox

1 horncore (shorthorn type)
 horncore (1 other fragment)
 skull fragments
 mandible (1 complete, juvenile and 5 fragments)
 8 cheekteeth
 lumbar vertebra (1 lateral spine)
 rib fragments
 scapula (1 fragment)
 humerus (1 shaft with distal end, 1 distal end with epiphysis missing)
 radius (3 distal ends)
 3 ulnae
 1 proximal phalange
 pelvis (1 fragment)
 tibia (1 proximal epiphysis loose, small)
 metapodial (distal epiphysis)

Sheep or goat

Mandible (5 fragments)
 1 atlas
 4 rib fragments
 1 radius
 1 ulna
 3 tibiae
 1 calcaneum
 2 metatarsals
 metapodial (1 distal end)

Pig

mandible (2 fragments)
 1 humerus
 1 ulna
 1 femur

Dog

1 humerus (large)
 1 ulna (large)
 1 femur (smaller)

Bird

1 humerus

Oyster

1 valve

PERIOD V from the top five feet of well 1.

Ox

1 neural spine
 5 rib fragments
 humerus (1 proximal end, 1 proximal epiphysis, 1 distal end, 1 distal epiphysis)
 1 ulna (epiphysis missing)
 radius (1 proximal epiphysis, 1 distal end, 1 distal epiphysis)
 3 phalanges
 pelvis (1 fragment)

Sheep or goat

scapula (2 fragments)
 humerus (1 fragment)
 radius (1 fragment)
 1 metapodial

Bird

Skull, large part
 11 metapodials
 12 other long bones

PERIOD V—*continued*

From the road build-up levels b/B 53/73, 1954 excavation.

Horse

The following bones all appear to belong to the same individual. All the epiphyses are fused so it is more than 3½ years old. There are large canines, therefore it is male. It is larger than the New Forest Pony. (H.37 B.M.N.H.). Here, l.=left, r.=right.

Skull, many fragments, including complete set of upper molars, last upper premolar and 2 upper incisors.

Mandible, 2 nearly complete and matching rami with complete set of cheek teeth, 5 incisors and 1 canine

5 cervical vertebrae (including axis and atlas)

8 thoracic vertebrae

1 lumbar vertebra

many rib fragments

1 scapula (l.)

2 humeri (l. and r.)

radius and ulna (r.)

2 metacarpals (r. and l.)

pelvis (1 fragment)

1 femur (l.)

1 tibia (l.)

1 calcaneum (l.)

1 astragalus (l.)

1 navicular (l.)

1 lateral cuneiform (l.)

1 metapodial

1 proximal phalange

Horse

Another individual
femur (1 fragment)

Ox

22 horncores

4 cheek teeth

humerus (2 right distal ends)

1 femur

tibia (2 left distal ends, 1 with epiphysis missing, i.e. less than 2 years old)

1 navicular

Sheep or goat

upper jaw fragment (right, with 5 cheek teeth)

2 cheek teeth

humerus (1 shaft)

1 metacarpal

Pig

1 metapodial (epiphyses not fused)

Dog

pelvis (part, large)

Cat

1 tibia

From the road build-up levels A/B 46/51, 1955 excavation.

Ox

9 skull fragments

horn core (complete with part of frontal)—
larger than ordinary short horn type.

10 lower jaw fragments

4 cheekteeth

atlas (2 fragments)

atlas (3 fragments)

8 other vertebral fragments

22 rib fragments

1 lateral spine of vertebra

scapula (fragment)

ulna (distal epiphysis)—charred

radius (fragment of shaft and fragment of proximal end)

metapodial (distal epiphysis)—charred

2 calcanea

4 phalanges

pelvis (fragment)

Pig

humerus (proximal end, epiphysis missing)

Sheep or goat

3 right lower jaw rami

4 left lower jaw rami

2 skull fragments

tibia (distal end)

2 tibia (distal epiphysis missing)

radius (shaft)

pelvis (2 fragments)

Bird

metapodial

ACKNOWLEDGMENTS

The excavation was directed by Mrs. D. G. Hurst both in 1954 and 1955. It took place for nine weeks between 21 April to 19 June 1954 and for four weeks between 16 May and 11 June 1955. On each occasion six labourers were employed from the local labour exchange. The mechanical and other excavation equipment were arranged by Mr. T. A. Bailey and Mr. E. A. Bowen of the Ministry of Works. Permission for the excavation was readily given by the City Council, who owned the land, and thanks are due to the City Engineer and his staff for their help in various ways to enable the excavation to run smoothly.

We are particularly grateful to Mr. R. R. Clarke for his continued help and advice both while the excavation was in progress and during the writing of the report. Miss Barbara Green has produced important new historical information on the Westwick area and this, together with their important new interpretation of the origins of Norwich are incorporated in the text. Dr. O. K. Schram has contributed important place name evidence.

The photographs were taken by Mr. A. R. Solt. The plans (Figs. 1-2) were traced by the Ancient Monuments Drawing Office of the Ministry of Works. The sections (Fig. 3) were drawn by Mr. P. A. Rahtz. The pottery was drawn by Mr. P. Ewence (Figs. 6-12) and Mr. D. S. Neal (Figs. 4, 5, 13 and 14). Thanks are due to Mr. L. Biek for arranging the examination and treatment of the various finds and to the various specialists who have contributed sections of the report. The finds have been deposited by the City Council in the Castle Museum Norwich.

¹J. G. Hurst and J. Golson, "Excavations at St. Benedict's Gates, Norwich, 1951 and 1953," *Norf. Archaeol.*, XXXI, Pt. 1 (1955), 1-112. Hereafter referred to as *St. Benedict's Gates*.

²*Ibid.*, p. 11, fig. 1, square 48 and p. 19, fig. 4, section 19.

³*Ibid.*, p. 11, fig. 1, square 75 and p. 17, fig. 3, section 17.

⁴*Ibid.*, p. 11, fig. 1 and p. 16.

⁵*Ibid.*, p. 10. Due to other commitments the writer was only able to be present at the site for two to three days each week. The excavation was, therefore, supervised by Mrs. D. Gillian Hurst.

⁶*St. Benedict's Gates*, p. 17, sections 17 and 18, fig. 3, square 75 and p. 19, sections 19-21, squares 42, 43 and 48, fig. 4.

⁷In fact Mr. E. M. Jope thought that this would also apply to all sites in Norwich as a result of his 1948 excavations which were not on large enough a scale to locate the early sealed levels at Barn Road. *Norf. Archaeol.*, XXX (1952), 287-323.

⁸*V.C.H. Norfolk*, Vol. I (1901), 334; *Norf. Archaeol.*, XXVII (1940), 227 and E. T. Leeds, *A Corpus of Early Anglo-Saxon great square headed brooches* (1949), pl. 52.

⁹*cf. St. Benedict's Gates*, p. 11, fig. 1, for the relationship of the area excavated in 1954 and 1955 with the earlier excavations. The grid squares are the same.

¹⁰*Ibid.*, p. 56. The imported pottery, the coin of St. Edmund (c. 905-918) and the lack of Early Medieval pottery now enables this period to be put 100 years earlier than was previously thought possible.

¹¹*Ibid.*, pp. 47-8. For fifteenth-century references to a cockey.

¹²*Ibid.*, p. 8.

¹³*St. Benedict's Gates*, p. 19, fig. 4, sections 19-21.

¹⁴See a similar confusion at Northolt, Middlesex, *Med. Archaeol.*, V (1961), 224, fig. 57.

¹⁵*St. Benedict's Gates*, p. 16; p. 34, fig. 8, section 13 and pl. 1a.

¹⁶*Ibid.*, p. 18. Inturned Thetford Bowl with diamond notch rouletting from Regal car park in N.C.M. 202a 948.

¹⁷*Ibid.*, pp. 12 and 16; p. 19, fig. 4, section 19.

¹⁸*Ibid.*, p. 18.

¹⁹*Ibid.*, p. 30.

²⁰*Ibid.*, pp. 16 and 18.

²¹Similar evidence for ridges under the sites of walls is to be seen in the thirteenth-century house 3 excavated at Hangleton, Sussex, by Mr. E. W. Holden, where three of the flint walls were intact, but on the fourth side there was a rubble spread over just such a ridge which preserved the original line of the wall, the ground having been worn away on each side. *Sussex Arch. Coll.*, CI (1963), forthcoming.

²²The earliest references to the Westwick Mills are in the last quarter of the twelfth century (*Norf. Record Soc.*, II (1932), *Register of the Abbey of Holme*, p. 121, No. 219 Grant of land at Wykerefeld and half the mill at Westwick, c. 1175-86 and p. 152, No. 283 Grant of message near Westwick Mill c. 1186-1210) but there are mills in Norwich at Domesday and, as Westwick is not separately mentioned, it must have been included under the Norwich entry and there is not likely to have been a mill further downstream. I am indebted to Miss Barbara Green for these references.

- ²³Whitefriars bridge, *Norf. Record Soc.*, XI (1939), *The first Register of Norwich Cathedral Priory*, p. 44, Bridge of St. Martin given to Bishop Herbert who died in 1119; *Fyebridge, ibid.*, p. 64. Undated charter which from the witnesses must be c. 1146-53. Fyebridge is also mentioned at a similar date in the *Register of the Abbey of Holme, Norf. Record Soc.*, II (1932), p. 80, Grant to William of Hastings of the Abbey's land near Fyebridge, c. 1141-9. I am also indebted to Miss Barbara Green for these references.
- ²⁴I am indebted to Mr. R. R. Clarke for his suggestion of this gradual moving down the river of the head of navigation. Clay-lump building was a very common method of construction in East Anglia right up till the nineteenth century. Lt.-Col. S. E. Glendenning, "Local materials and craftsmanship in Norfolk buildings," *South-Eastern Naturalist and Antiquary*, LIII (1948), 15-25.
- ²⁵*St. Benedict's Gates*, p. 5.
- ²⁶Register of the Abbey of St. Benet of Holme. *Cott. MS. Galba E. ii.* Manuscript note by F. R. Beecher in the Norwich Castle Museum copy of *Kirkpatrick Streets and Lanes of Norwich*, p. 52.
- ²⁷*St. Benedict's Gates*, p. 7.
- ²⁸Information Mr. P. A. Rahtz.
- ²⁹Information Dr. J. P. C. Kent.
- ³⁰For discussion of the pitfalls of pottery dating see J. G. Hurst, "White Castle and the dating of Medieval Pottery," *Med. Archaeol.*, VII (1962-3), forthcoming.
- ³¹*St. Benedict's Gates*, pp. 5-6 and 12.
- ³²*St. Benedict's Gates*, p. 19, fig. 4, section 5-20 and p. 49.
- ³³*Ibid.*, pp. 25-6.
- ³⁴*Ibid.*, p. 28.
- ³⁵I am indebted to Miss Barbara Green for drawing this additional reference to my attention. Fitch, *Gates of Norwich* (1861), p. 17. Illicit digging was apparently common at this time and similar trouble was referred to in the Chapel Fields area in *St. Benedict's Gates*, p. 6.
- ³⁶M. W. Beresford and J. K. S. St. Joseph, *Medieval England* (1958), p. 232-4, fig. 97.
- ³⁷cf. *Med. Archaeol.*, IV (1960), 164, for interim report.
- ³⁸*St. Benedict's Gates*, p. 35, fig. 6, section 4; p. 25, fig. 8, section 15; p. 34 and pl. 14b.
- ³⁹*Ibid.*, p. 19, fig. 4, sections 19-20.
- ⁴⁰*Ibid.*, p. 17, fig. 3, sections 17-18.
- ⁴¹*Rotulus Cartarum*, 1313 and 1319, Kirkpatrick, *Streets and Lanes of the City of Norwich* (1889), p. 1.
- ⁴²*St. Benedict's Gates*, p. 15 and pp. 48-9.
- ⁴³For date of south fill see *St. Benedict's Gates*, p. 39 and 43 and Table III; for that to the north see *ibid.*, pp. 42-3 and Table V.
- ⁴⁴*Ibid.*, p. 19, fig. 4, sections 19-21.
- ⁴⁵*Ibid.*, p. 17, fig. 3, sections 17-18.
- ⁴⁶*Ibid.*, p. 49.
- ⁴⁷*Norf. Archaeol.*, XXVI (1936-38), 217—types S.12 and S.18.
- ⁴⁸Listed in *Trans. Leics. Archaeol. Soc.*, XXVI (1950) (table). Facing p. 80
- ⁴⁹*Archæologia*, XCI (1945), pp. 22-3, fig. 13, Nos. a and b.
- ⁵⁰*Ibid.*, fig. 13, No. 1.
- ⁵¹J. G. Hurst and S. E. West in "Saxo-Norman Pottery in East Anglia, Part II," *Proc. Camb. Antiq. Soc.*, L (1956), pp. 29-42.
- ⁵²I am greatly indebted to Mr. G. C. Dunning for his help in identifying the sources of these sherds. The descriptions are based on his notes.
- ⁵³W. Lung, "Zur Frage der Rotbemalten Badorfware," *Kolner Jahrbuch*, I (1955), p. 67.
- ⁵⁴*Med. Archaeol.*, III (1959), p. 57, fig. 28, Nos. 1-2.
- ⁵⁵*Med. Archaeol.*, III (1959), p. 57, fig. 28, Nos. 1-2.
- ⁵⁶*St. Benedict's Gates*, p. 60, fig. 13 and *Med. Archaeol.*, III (1959), p. 56, fig. 29, No. 2.
- ⁵⁷Brunssum, in *Berichten van de rijksdienst voor het oudheidkundig bodemonderzoek*, p. 9 (1959), 139-88. *Schinveld, ibid.*, p. 10-11 (1960-61).
- ⁵⁸*Med. Archaeol.*, III (1959), pp. 62-70 for discussion of these French wares.
- ⁵⁹*Med. Archaeol.*, III (1959), pp. 54-5.
- ⁶⁰*Ibid.*, pp. 55-6 and pp. 73-7.
- ⁶¹*Ibid.*, p. 56 and fig. 29, No. 4.
- ⁶²As at Northolt, Middlesex, *Med. Archaeol.*, V (1961), p. 276, Table 1.
- ⁶³For full discussion of Thetford ware see, J. G. Hurst's "Saxo-Norman pottery in East Anglia, Part II. Thetford Ware," *Proc. Camb. Antiq. Soc.*, L (1956), pp. 42-60.
- ⁶⁴For full discussion of St. Neots ware see, J. G. Hurst *ibid.* Part I, St. Neots ware, *ibid.*, XLIX (1955), pp. 43-70.
- ⁶⁵For full discussion of Stamford ware see J. G. Hurst, *ibid.*, Part III, Stamford Ware. *Ibid.*, LI (1957), pp. 37-65. The continental background is more fully discussed by G. C. Dunning in *Dark Age Britain; Studies presented to E. T. Leeds* (ed. D. B. Harden, 1956), pp. 218-233. While the evidence for Saxo-Norman pottery generally up to 1958 is summarised in "Anglo-Saxon Pottery: A symposium," *Med. Archaeol.*, III (1959), pp. 1-78. More recent evidence, especially for the now known wider distribution of Stamford ware is given in J. G. Hurst's "Late Saxon Pottery," Report of the Viking Congress at York, 1961, forthcoming.
- ⁶⁶*St. Benedict's Gates*, p. 59. The sherd from G.69 is clearly Medieval and not Stamford ware and is further evidence for the late construction of the bank after the twelfth century.
- ⁶⁷*Proc. Camb. Antiq. Soc.*, LI (1957), p. 43, fig. 1, No. 4.
- ⁶⁸*Med. Archaeol.*, III (1959), pp. 41-2.
- ⁶⁹*Proc. Camb. Antiq. Soc.*, LI (1957), pp. 54-57.
- ⁷⁰*Med. Archaeol.*, III (1959), pp. 44-8, Group 5.
- ⁷¹*Proc. Camb. Antiq. Soc.*, XLIX (1955), p. 59, fig. 4 and p. 66, fig. 7.
- ⁷²Information from Gp. Capt. G. M. Knocker.
- ⁷³Excavations by S. E. Rigold, *Med. Archaeol.*, VI (1962), forthcoming.
- ⁷⁴*Med. Archaeol.*, III (1959), p. 32, fig. 9, No. 9.
- ⁷⁵*Oxoniensia*, XVII-XVIII (1952-3), pp. 77-112.
- ⁷⁶*Antiq. J.*, XVI (1936), p. 408, fig. 3, No. 15. From Alstoe mount.
- ⁷⁷Excavations at the Jewry Wall site, Leicester," *Res. Rept. Soc. Antiq., London*, XV (1948), p. 224, fig. 59, No. 1.

- ⁷⁹*Trans. Thoroton Soc.*, LXV (1961), pp. 19-26.
- ⁸⁰The pottery from Bridlesmith Gate, Nottingham (incidentally much rougher than the usual) was not stratified in the pre-conquest burgh ditch as stated in *Med. Archaeol.*, III (1959), p. 44. But may still be dated late eleventh century rather than twelfth.
- ⁸¹*Proc. Camb. Antig. Soc.*, LI (1957), p. 61.
- ⁸²*Med. Archaeol.*, V (1961), pp. 259-63 and "The Cathedral Car Park, Winchester" Interim Report, *Archaeol. J.* CXIX (1962), forthcoming.
- ⁸³*Norf. Archaeol.*, XXX (1952), pp. 296-7, fig. 7, Nos. 6-7.
- ⁸⁴*Ibid.*, p. 314, fig. 11, No. 6.
- ⁸⁵*Ibid.*, p. 318 and p. 314, fig. 10, No. 8.
- ⁸⁶J. G. Hurst, "White Castle and the dating of Medieval Pottery," *Med. Archaeol.*, VI (1962), forthcoming.
- ⁸⁷*Norf. Archaeol.*, XXX (1952), p. 308, fig. 11, Nos. 7-8.
- ⁸⁸*Ibid.*, p. 310, fig. 12, Nos. 4-6.
- ⁸⁹*Med. Archaeol.*, III (1959), p. 37, fig. 13.
- ⁹⁰e.g. Fire Station, Norwich, Norwich Castle Museum, 137-933 and Earith, Hunts, Cambridge Museum of Archaeology and Ethnology, 05.297, and another jug from Cambridge in the British Museum, *Arch. J.*, LIX (1902), p. 9, fig. 16.
- ⁹¹*Proc. Camb. Antig. Soc.*, XLVI (1952), p. 28.
- ⁹²For other fifteenth-century pottery from the area see *St. Benedict's Gates*, pp. 60-2.
- ⁹³*Trans. Essex Archaeol. Soc.*, 3rd series, vol. I (1961), pp. 43-4.
- ⁹⁴*Antiq. J.*, XXXI (1951).
- ⁹⁵*St. Benedict's Gates*, pp. 66-9, for other Norwich examples.
- ⁹⁶*Proc. Somerset Archaeol. Soc.*, XCVIII (1953), p. 86 and *op cit.*, in note 94, p. 176.
- ⁹⁷*St. Benedict's Gates*, pp. 76-84.
- ⁹⁸J. G. Hurst, "South Netherlands Maiolica," *Ant. J.*, forthcoming.
- ⁹⁹C. H. De Jonge, *Oud-Nederlandsche Majolica en Delftsch Aardewerk* (Amsterdam, 1947), p. 45, fig. 16, where very similar decoration is seen on an early sixteenth-century flower vase.
- ¹⁰⁰In the Herbert Museum, Coventry. This is very similar but the petals are more rounded.
- ¹⁰¹*St. Benedict's Gates*, p. 64, fig. 15, Nos. 1-2.
- ¹⁰²H. Tait, "Southwark (alias Lambeth) Delftware and the potter, Christian Wilhelm I," *Connoisseur*, 146 (1960), pp. 36-42 and 147 (1961), pp. 22-29. Mr. Tait has seen the base and agrees with this identification.
- ¹⁰³*St. Benedict's Gates*, p. 68 and fig. 16, No. 8. Wanfried is no where near Bremen. This was an error due to a misreading of the foreign literature.
- ¹⁰⁴*Trans. Essex Archaeol. Soc.*, 3rd Series, Vol. I (1961), p. 45.
- ¹⁰⁵*Burlington Magazine*, XXXIII (1918), p. 190, "English Summary of Dutch Finds."
- ¹⁰⁶B. Rackham, *Catalogue Glaisher Collection* (1935), II, p. 234, pl. 138A.
- ¹⁰⁷Ernst Gronne, "Tongefasse in Bremen Seit Dem Mittelalter," *Jahresschrift Des Focke-Museums, Bremen* (1940), p. 54.
- ¹⁰⁸*St. Benedict's Gates*, p. 43 and p. 92.
- ¹⁰⁹For Mr. A. H. Oswald's classification of clay pipe types see "The Archaeology and Economic History of English Clay Tobacco Pipes," *J.B.A.A.*, XXIII (1960), pp. 40-102. Two earlier articles by Mr. Oswald give full-size drawings of the types which makes it easier to compare with actual examples. A. H. Oswald, "English clay tobacco pipes," *Archaeol. News Letter*, III (1951), pp. 153-9. Second edition, *ibid.*, V (1955), pp. 243-50.
- ¹¹⁰*St. Benedict's Gates*, p. 92 for another W.S. pipe.
- ¹¹¹A very large number of late Saxon and Medieval sites in Norfolk produce Mayen Lava Quern. Material in Norwich Castle Museum.
- ¹¹²*Med. Archaeol.*, V (1961), p. 279 and Note 171.
- ¹¹³Not illustrated but found in CL.47 with key and other objects, *Archaeol. J.*, LXVI (1959), p. 82, fig. 18, No. 13.
- ¹¹⁴*Ant. J.*, XXXIX (1959), pp. 267-8 and *Med. Archaeol.*, III (1959), pp. 136-7.
- ¹¹⁵*London Museum Med. Cat.* (1940), p. 248 and pl. LXXIX, No. 7.
- ¹¹⁶*Sussex Archaeol. Coll.*, LXXIV (1933), p. 57, pl. IX, No. 4.
- ¹¹⁷*As London Museum Med. Cat.* (1940), pl. LXXIX, No. 5.
- ¹¹⁸Period III c. 1350, *Med. Archaeol.*, V (1961), pp. 211-99. The buckle will be published in the second report.
- ¹¹⁹C. T. P. Bailey, *Knives and Forks* (1927), pl. XX.
- ¹²⁰For distribution see *British Numismatic Journal*, XXIX (1958), pp. 189-90.
- ¹²¹For *obv.* type cf. Barnard, *The Casting Counter and the Counting Board*, French, No. 28, but this is not Tournai.
- ¹²²For types, cf. Barnard, *op. cit.*, German, Nos. 82, 83.
- ¹²³R. F. Tylecote and E. Owles, *Norfolk Arch.*, XXXII, Part 3 (1960), pp. 265 and 270.
- ¹²⁴R. F. Tylecote and E. Owles, *Norfolk Arch.*, XXXII, Part 3 (1960), pp. 142-62.
- ¹²⁵W. Whitaker, *et al.*, *Memoir of the Geological Survey, Norfolk* (1893), p. 47.
- ¹²⁶F. C. J. Spurrell, *Archaeol. J.*, XL (1883), pp. 281-95.
- ¹²⁷Interim note on site in *Med. Archaeol.*, VI (1962), forthcoming.
- ¹²⁸From King Edward VI School, Science Block 1956 from one Middle Saxon and ten of the Late Saxon pits and from the Bishop's Palace Garden pits in Trench 1 and Trench 3. Material in Castle Museum, Norwich.
- ¹²⁹Information from Gp. Capt. G. M. Knocker.
- ¹³⁰Identified by Mrs. M. Jope.
- ¹³¹I am grateful to Mr. G. C. Dunning for drawing these to my attention, and to The Herbert Museum Coventry for allowing them to be published here.