

Excavations in Bedford, 1967

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with contributions from G C Dunning, Elizabeth S Eames, Annie Grant, David Hill and Adrian Oswald

SUMMARY

Rescue excavations south of the River Ouse within the late Saxon Kingsditch produced no definitely pre-Conquest occupation evidence. Early mediaeval pits with pottery mainly in the St Neots tradition were found up to the present frontages of St John's and Cauldwell Streets. These were sealed by post mediaeval structures including an 18th century cellar and a cottage with a back-to-back hearth. Further away from St John's Street was an early 18th century pit containing an important pottery group. Finds of shell-filled early mediaeval chimney pot sherds, and a tile with relief decoration are both discussed in relation to other known finds. Clay pipes and animal bones are fully reported. The evidence for late Saxon urban development in Bedford is discussed.

INTRODUCTION

This report describes work on two adjacent redevelopment sites in Bedford, south of the River Ouse, during the last two weeks of the school summer term in July 1967. The areas fronted St John's Street, where Nos 7 and 9 had been demolished, and Cauldwell Street, where Nos 8 and 10 had last stood by the Bridewell Yard. (figs 1 and 2) (N G R TL/051493).

These sites were therefore placed centrally within the southern suburb of the town, near the main cross-roads formed by St Mary's and St John's Streets running north to south, and Cauldwell Street with Cardington Road (formerly Potter Street) running from west to east. This appears as the major junction on Speed's Map of 1611. In the Mediaeval period the square on the north of the crossroads had two churches facing each other, St Peter de Dunstable on the west, and St Mary's on the east; the former was pulled down in the 16th century.

This southern part of Bedford was bounded by the Kingsditch, a fortification whose construction is usually ascribed to Edward the Elder in 915 or

916. It enclosed an area as a fortress against Danish activity on the north bank. The original line of the Danelaw boundary had passed through Bedford. It may be appropriate to see the Kingsditch initially as a temporary military defence rather than as a deliberate piece of urban expansion: it enclosed an area as large as the northern half of the town, yet the houses shown by Speed in the early 17th century seem to have been almost entirely ribbon development along the two main roads. However the demographic patterns that would have dictated the settlement of mediaeval Bedford are obscure.

This excavation had several particular aims beyond the general one of examining an area to be rebuilt. The archaeology of Bedford is virtually an unexplored topic, and this was the first organised excavation to take place in the town. Commercial developments between the wars had produced material of unknown context now in Bedford Museum thanks to the efforts of F W Kuhlicke, and this accumulation has accelerated as urban redevelopments continue on a large scale today. Some of the pottery has been published¹ but its lack of context prevents the proposition of any overall scheme for this important centre. It was hoped to begin this task by recovering stratified pottery and pit groups. Trenches were therefore designed to test areas behind the main frontages as well as to locate any structures which had faced on to the road. Particular interest lay in ascertaining the earliest datable occupation on the site, to see if any connection appeared to exist between it and the late Saxon *burgh*. This and the problem of Bedford's contribution to the study of urban origins is discussed in a separate note by David Hill.

The area available for excavation was large on the surface, but in practice limited by stretches of concrete, modern cellars, extensive modern drainage arrangements and car parking requirements. Trial trenches 6 ft (1.8 m) wide were dug at right

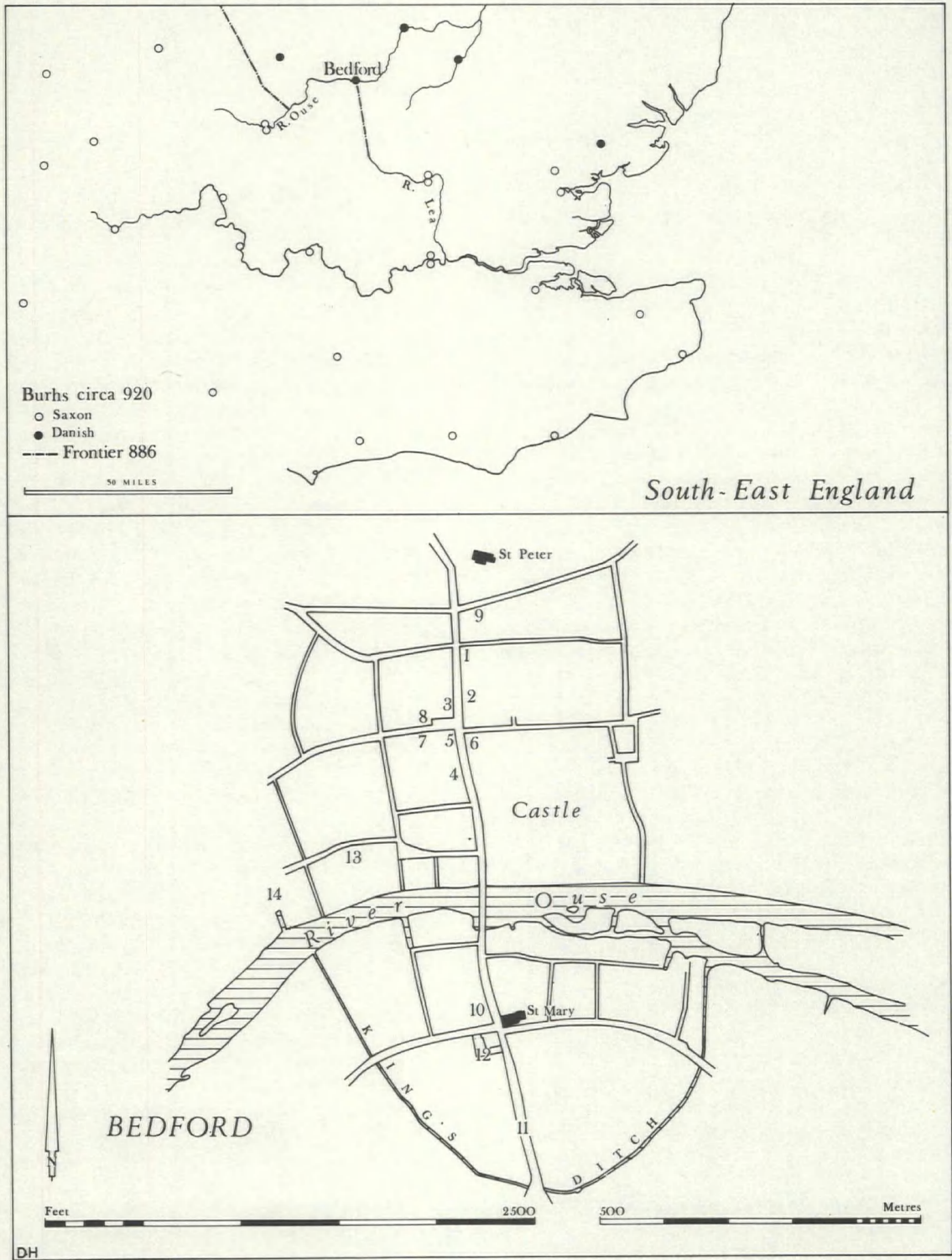


Fig 1. South east England in 920 showing Bedford with early mediaeval finds spots: this excavation is No. 12.

angles to the two main streets. On the St John's Street frontage, trenches totalled 75 ft (22.9 m) in length and were supplemented by three areas next to the modern road. The Cauldwell Street site trial was 35 ft (10.7 m) long with two small extensions at its north end and one at the south. Trenches were excavated to the natural subsoil of sandy clay and river gravels, which was cut by many pits of various dates. The site records and the finds, marked with the site code of *BSJ 67*, have been deposited in Bedford Museum.

THE EXCAVATIONS: CAULDWELL STREET SITE. (*Fig 2*)

The occupation evidence from Trench 6 can be summarised in sequence as:

- (i) pits cut into natural subsoil
- (ii) hearth, stone features and occupational layers
- (iii) 18th century cellar (*Fig 3, pl 7b*)
- (iv) 19th century brick and stone cess pit

(Pottery drawing numbers in brackets refer to sherds with closely similar characteristics to the item drawn and illustrated with that number).

(i) Undisturbed natural subsoil was relatively near modern ground surface on this part of the site, at a depth of about 2 ft (0.61 m). A large pit EE, partly excavated in the north of the trench, was the earliest feature detected here. It had a surface diameter of 18 ft (5.5 m) at the only measurable point, and at deepest was seen to be at least 6 ft (1.83 m) below the level of natural subsoil. It had been sealed by a yellow clay plug. The pottery content was consistent with a late 12th century date. (*Figs 6, 7: Nos 8, 15, (21), 26, 27, 30, (32), 33, 35, 36, 46, 47, 48, 49 and 50*). Pit DD, 3 ft 6 ins across (1.07 m) and 1 ft 10 ins (0.56 m) deep into natural subsoil, contained a mixture of pottery going towards the end of the 13th century. (*Figs 6, 7, 8: Nos 13, 31, 40 and 59*).

(ii) These pits EE and DD were sealed by a spread of sandy clay with some rubble. This was associated with two irregular stone features 13 and 22 which might have been simple footings. A small hearth 23 with a stone floor and sides rebuilt at least once had been placed over the filled pit EE. Thus an area previously used for rubbish pits may have been later occupied, though the mixed nature of the finds so near to the present

disturbed surface rendered structural identification and dating virtually impossible.

(iii) The northern part of this trench came almost directly over part of a cellar (*Fig 3, pl 7b*), whose loose fill forced an expansion of the trench out to three of its main walls and a partition. The cellar had been under the front of No 8 Cauldwell Street. Its existence had not been known prior to excavation since it had been filled during the last use of the site, and had not been detected by demolition workers. The varied building debris in the fill contained a 1928 half-penny. The deepest part of the cellar was 4 ft (1.22 m), from the surviving top of the eastern wall to the tiled floor.

The original cellar probably had had four walls of hand made bricks from the boulder clay measuring 9 in x 4.5 in x 2.5 in (22.9 cm x 11.4 cm x 6.4 cm) with yellow sandy mortar. The eastern side as excavated was a later partition butting up to the earlier sides which continued beyond it. The western side had been modified, mostly in stone, while the north and south sides showed original work. The north 3 ft 5 in (1.04 m) of the west wall consisted of five even steps, built with hand made bricks on edge, measuring 8 x 3.25 x 1.25 in (20.3 x 8.2 x 3.2 cm), showing little wear. A black slip-tiled floor was laid up to the north and south walls and to what survived of the west brick wall; it disappeared under the later east wall. These tiles were sealed together with white mortar and tar, and were laid on clay. The floor had a small ragged hole in it with burning, made at an unknown date.

Some modifications were carried out fairly soon after the initial construction. The west wall was mostly demolished, and a stone version replaced it. Its south end was placed within and up to the inturned south west brick corner; a narrow construction trench could be seen outside the stone, but not outside the earlier brick on the same side. Substantial shaped blocks of Totternhoe clunch were used as quoins. The tiled floor was destroyed in preparation for the stones except in one place where a stone lay on top of tiles still remaining underneath. The south wall and the new west wall were then damp proof coursed with 11 x 6 in (28 x 15.2 cm) roof tiles affixed upright to the lowest levels with an ash based mortar.

The type of bricks and floor tiles employed suggest a construction date in the early 18th century. It

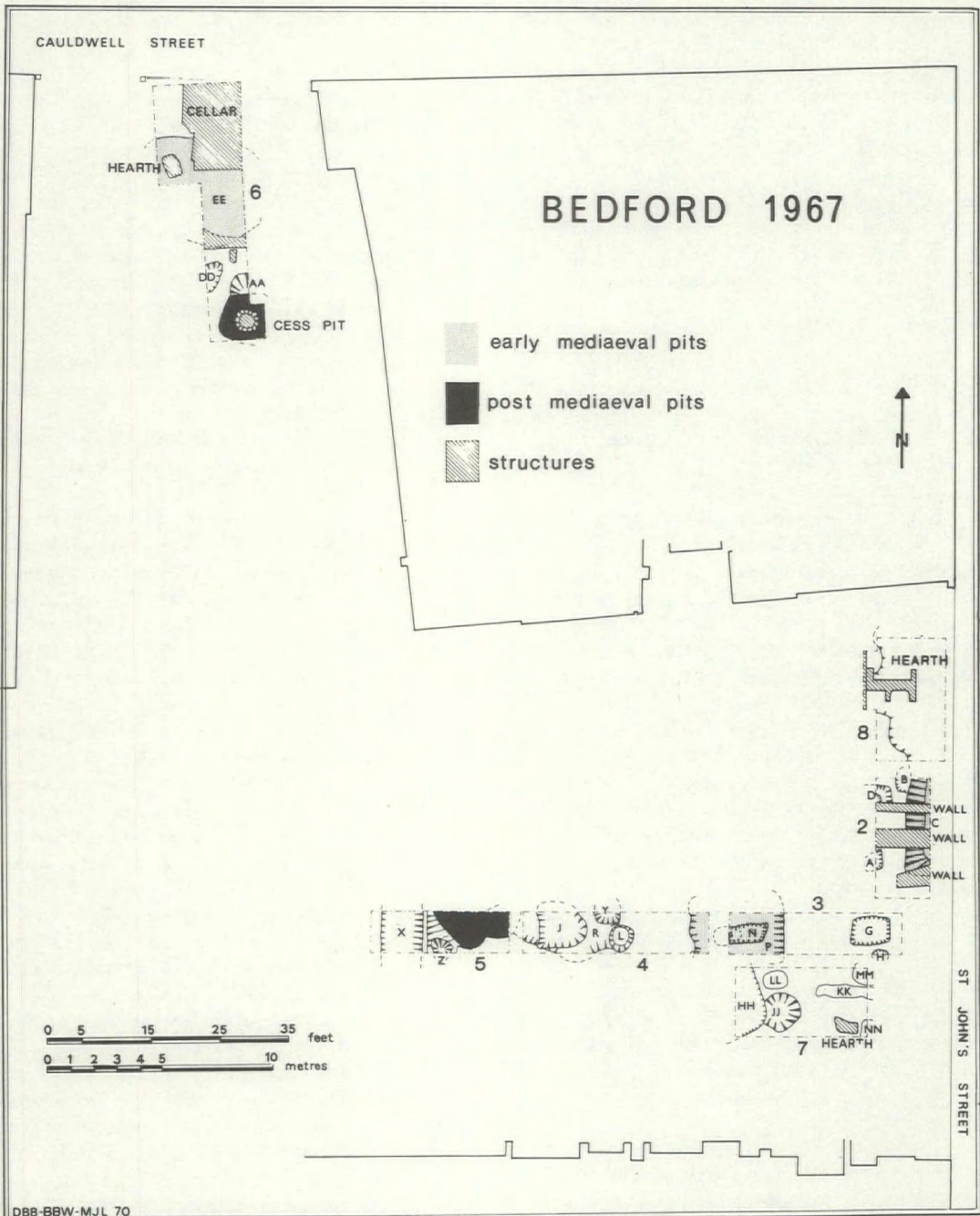


Fig 2. Main site plan.

is impossible to say on the available evidence how much time had elapsed between the first building and the first changes. Similarly the blocking of the steps cannot be closely dated beyond noting that hand-made bricks like those in the main walls were used. The worked clunch was presumably reused from another, unknown, site: the 16th century demolition of St Peter de Dunstable on the site opposite in Cauldwell Street should be mentioned here but no connection can be safely drawn. The purpose of the stone rebuilding was not evident; maybe a more substantial subterranean support was needed for a feature above the cellar.

The final set of modifications to the cellar probably date from the latter half of the last century, as suggested by the employment of machine made bricks measuring 9 x 4.5 x 2.75 in (22.8 x 11.4 x 7.0 cm). A rough, unmortared, honeycomb wall with 13 courses surviving was built to divide the cellar. The extent of the eastern part is still unknown. Two small brick pillars were built against the stone wall and seated on the tile floor; they were free-standing against it, and therefore unlikely to have been buttresses, so could more easily be interpreted as floor joist supports. This final change created a small space without any visible means of convenient entry and exit unless a floor trapdoor was employed. An understanding of the reasons for this, and of the general uses for the cellar must depend considerably upon a knowledge of the buildings standing on the site in the last 250 years. Unfortunately records are largely deficient in this matter: the Bridewell was in this area until 1802, when it was sold and cottages built eventually down the yard.²

(iv) A stone and brick cess pit was found in the south-east corner of Trench 6, sealed with brick rubble, and filled with debris similar to that in the cellar. Its internal diameter was irregular, averaging about 2½ ft (0.76 m), and its top as seen in excavation was nearly 2 ft (0.61 m) below the modern ground surface. The upper 7 ft (2.13 m) of the shaft was made of small irregular pieces of limestone. The shaft was not truly vertical, but deviated slightly to the north-east and had increased in diameter by about 9 ins (22.6 cm) before its bottom. Its filled construction pit extended a further 1 to 2 ft (30.5 to 61.0 cm) beyond the outer edge of the stonework. At a

depth of 7 ft (2.13 m) in the shaft the construction changed from irregular limestone pieces to half bricks belling out with further depth to form a cesspit chamber. The bricks were machine made and thus the whole construction would appear to date from the previous century. The size of the construction pit would have permitted the building of all that was seen in excavation. Reasons of safety and time prevented further investigation beyond the top of the brick.

DISCUSSION

Continuity of occupation on this part of the site cannot be demonstrated through structures, but the wide range of pottery from mixed layers might perhaps indicate it. It is hardly possible to discuss the early street from an examination of a 12 ft (3.66 m) width of frontage, most of which was taken up by a post-mediaeval cellar. However it may be significant that the first evidence in sequence is a pit which implies either that the contemporary frontage was further to the north, or that this was still then an open area. The rather slight stratigraphy over this pit EE might then signify either a deviation of Cauldwell Street bringing the house line further south, or the steady settlement of the area resulting in primary development of this site. Without further excavation, though, there is little here to provide any certainties on these issues. The thorough waterproofing of the floor in the cellar is noteworthy, either as an instance of good building technique, or as some comment on the dampness of the area at its time of construction.

THE EXCAVATIONS: ST JOHN'S STREET SITE

The occupation evidence here can be conveniently summarised as:

- (i) pits cuts into natural subsoil
- (ii) occupation and structural features over pits
- (iii) structures fronting St John's Street
- (iv) recent structures and disturbances

(i) A large number of pits were found in all trenches on this site. Undisturbed natural subsoil was again at about 2 ft (0.61 m) below the modern ground surface. Except at the east side of this trench complex, the layers above were seriously disturbed by recent building activity. Few pits had clear sealing layers, so dating has to rely

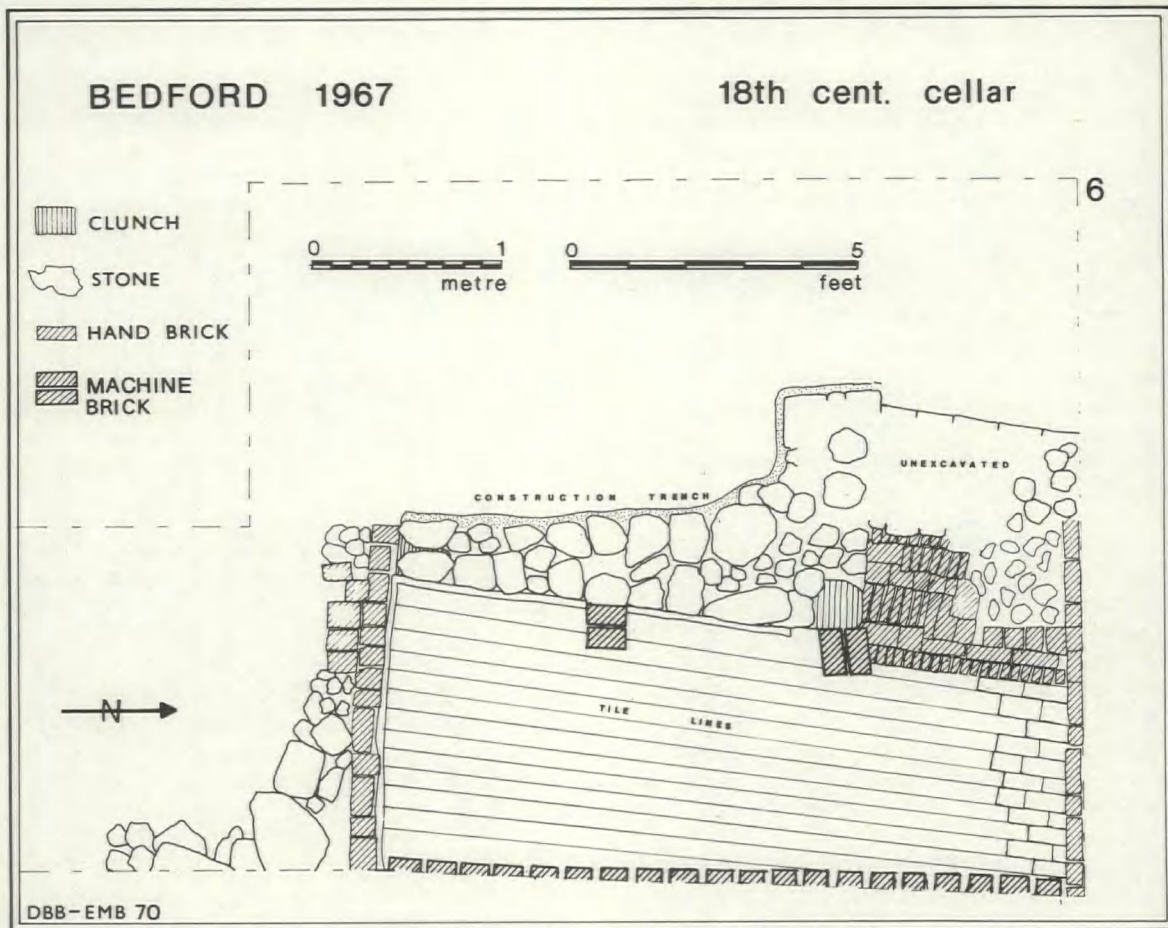


Fig 3 18th century cellar.

on pottery content. With the qualifications necessary in using such limited evidence, the description of pits can be conveniently tabulated as on table I opposite.

As a collection of pits of various dates, these were surprisingly featureless, lacking either lining or post-holes in the floors. Perhaps the identity of some as pits should be questioned when only seen in a 6 ft (1.83 m) wide trench. Pit X may be a ditch or some other linear feature. In the case of Pits M/Q, two pits had a similar fill and sherds of the same pot in each: a distinction demonstrating recutting was only seen fairly low down and in section.

(ii) Wall footings and occupation layers were

found overlying the early mediaeval pits in the trenches nearest to the St John's Street frontage. In Trench 2 a layer of dirty yellow clay 10 mixed with stones sealed Pit C. This had been cut into by a solid wall footing 18 from 2 ft 2 in (0.66 m) to 4 ft 9 in (1.45 m) below the modern surface. It was made of unshaped limestone pieces, was uncoursed, and ran east-west (Fig 5). Further south a hearth had been laid on a ground surface from which Pit HH in Trench 7 had been cut. It was made of clay tiles laid on edge and surrounded by broken packed stone. No relation to any other structural feature could be seen.

(iii) Two other later east-west wall footings were seen in Trench 2. Both were cut into a layer of

Table I Bedford: St John's Pits from Trenches 1-5, 7, 8

PIT	PLAN: PROFILE: FLOOR	DEPTH BELOW NATURAL	DATING AND PUBLISHED SHERDS
P	Large, rectangular ?; near vertical profile	3 ft 9 in at west 1.14 m at west	mid 11th—mid 12th century 3 (6) 17 18 20 25 32 39
C	Large, rectangular ?; recut ?; uneven floor	3—5 ft 0.92—1.52 m	mid 11th—mid 12 century. 16 (17), 23, (32), 37, 44 (46)
B	Rectangular; slightly sloping profile; flat floor	2 ft 6 in 0.76 m	earlier than C
N	Irregular rectangle; concave profile	2 ft 0.61 m	11th—12 century (20)
MM	Part of circumference seen only. Irregular profile	about 2 ft 0.61 m	11th—12th century
F	Rounded oblong; concave profile	about 1 ft 6 in about 0.46 m	early 12th century 21 (32)
HH	Two sides at right angles; vertical profile; flat floor.	5 ft 6 in 1.68 m	12th century. 2, (3) 6, 10, 11, (17), (18), (20), (21), 28, (30), (32), 34, (39), 45, 51
K	Long thin pit partly in trench; irregular sloping profile and uneven floor	about 2 ft about 0.61 m	late 13th—early 14th century. 53
R	Vertical sides	6 ft 3 in 1.91 m	late 13th century
X	Two parallel vertically profiled sides; sloping floor down to east	about 4 ft 9 in about 1.45 m	15—16th century 55
J	Irregularly circular; irreg. profile and narrow floor	5 ft 6 in 1.68 m	15th—16th century 52, 57, 58 60, 61, 72 ?
L	Circular; regular slightly sloping sides	about 4 ft 2 in about 1.27 m	17th century
M/Q	Irregular shape and profile; part only seen in trench; some recutting?	about 4 ft 9 in about 1.45 m	early 18th century 62-64, 66-71, 73-75, 76?, 77, 78
D	Irregular plan and profile; recut?	Deepest seen at 3 ft 9 in 1.14 m	Mixed sherds
G	Roughly rectangular; sloping profile	1 ft 2 in 0.36 m	No evidence

Table 1 (continued)

H	Irregular—corner only seen; sloping profile	11 in 0.28 m	No evidence
A	Rectangular plan; slightly sloping profile; flat floor	2 ft 6 in 0.76 m	No evidence
Y	Rectangular?; cut into R; fill not clearly distinct from it.		No evidence
Z	Circular; earlier than M/Q	about 4 ft 9 in about 1.45 m	No evidence
JJ	Roughly circular; irregular sloping profile	2 ft 6 in 0.76 m	No direct evidence but cut by HH
LL	Roughly circular; concave profile	about 1 ft 6 in about 0.46 m	No evidence
NN	Part of circular plan seen; irregular profile	about 1 ft about 30.5 cm	No evidence

black sticky earth 7 which contained a wide range of sherds including pipe clay fragments. The two footings were parallel, with the southern 5 about 2 ft (0.61 m) wide placed over the earlier footing 18 which had been cut into Pit C.

The trench to the north, which was incompletely excavated due to lack of time, produced the most substantial structure on this part of the site, a back-to-back double chimney hearth (*Fig 4*). On the south side, the hearth was semi-circular with a straight back, and lined with brick. On the north the hearth seemed of poorer quality, having three simple stone lined sides. There was some evidence that it lay over a less complex version, perhaps part of an earlier structure. On the west side, the central wall of the chimney hearth butted up to a north-south wall, whose east edge came just within the trench. There was no main east wall adjacent to the east side of the hearth, so this limit probably lay outside the trench.

The non-completion of this trench meant that little evidence was obtained to predate this structure. It overlaid layers, or the tops of pits, producing only mediaeval sherds from as far as they had been excavated. Mr Bernard West suggests that the use of stone may give an origin for the complex in the later 17th century, with the south

side reduced to a smaller brick-built grate about a century later. The north side may indicate footings for an angle-nook fireplace, with later modifications in brick. Both hearths would have been served by a common flue within one dwelling unit, in which these two rooms were probably connected by a passage between the east side of the hearths and the east wall of the house.

(iv) Recent disturbances were particularly obvious on this part of the site, where the trial trenches could only be excavated after a concrete surface had been removed. The positioning of trial trenches was similarly limited by solid brick and concrete platforms relating to the recently demolished structures. Drainage created many disturbances; five earthenware pipes ran through the site in various places, having deep construction trenches cut into the natural subsoil.

DISCUSSION

The earliest evidence on this site comes from pits which extended as far up to the modern road as trenching was possible. This may mean that there was no occupation fronting the road in the Saxo-Norman period, or alternatively that these pits were to the rear of structures obliterated or

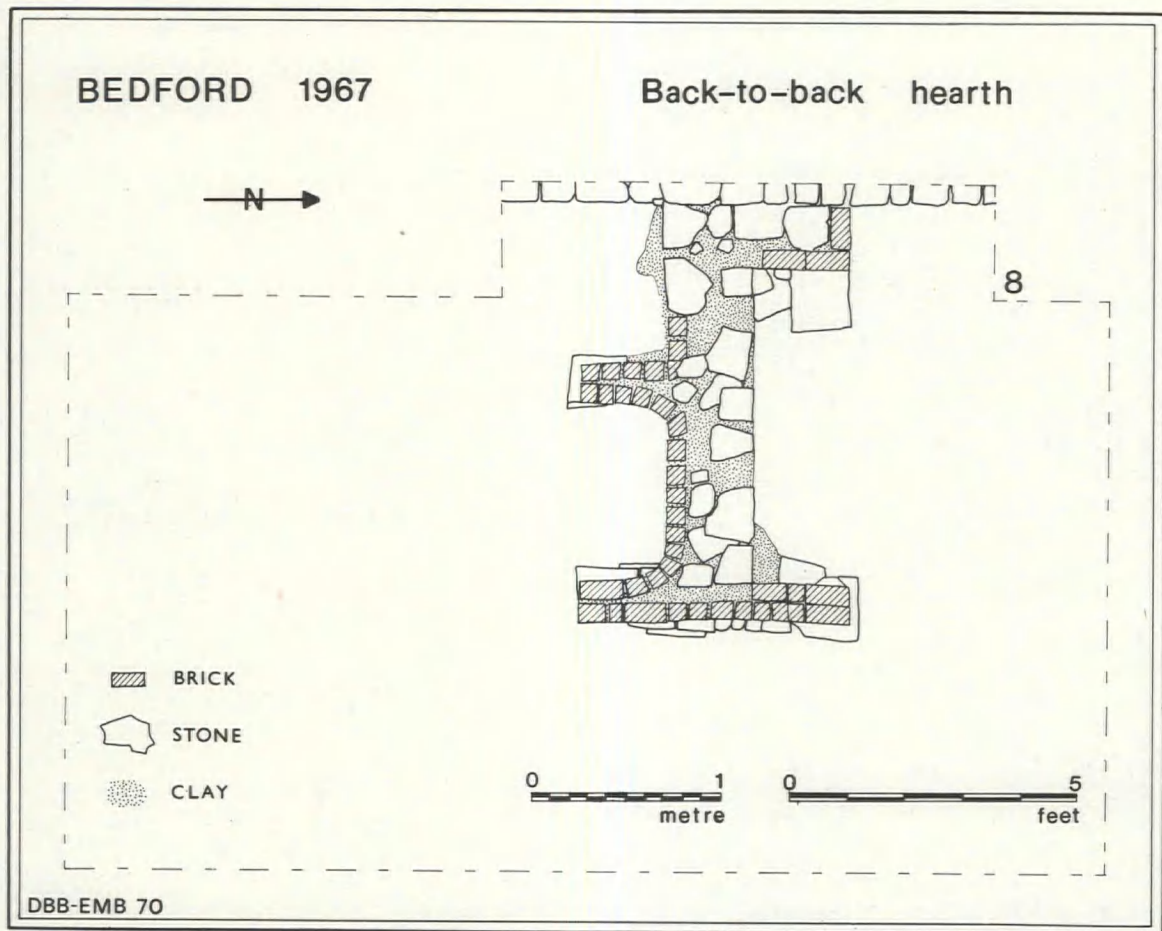


Fig 4. Back-to-back hearth.

sealed by the present St John's Street. The subsequent mediaeval occupation obviously relating to houses, and overlying the pits, is perhaps an argument in favour of earlier non-settlement. The arrangement of datable pits with Saxo-Norman occurring mainly in Trenches 2, 3, 7 and 8, 15-16th century in Trench 4 (pl 7c) and 18th century in Trench 5 may be a coincidence of positioning, or may show a development of building west from the street frontage, pushing the pits progressively west as the rear attachments to the dwellings moved out.

THE FINDS

THE POTTERY (Figs 6-9)

Much of the pottery came from layers disturbed by recent building activity; pits often contained small quantities of fairly mixed material, but several contained sealed deposits. The dating of pit groups has had to rely on the pottery alone, thus effectively basing it on material from outside the town. Knowledge of local products can be advanced when these are found in association with others securely dated from other sites, such

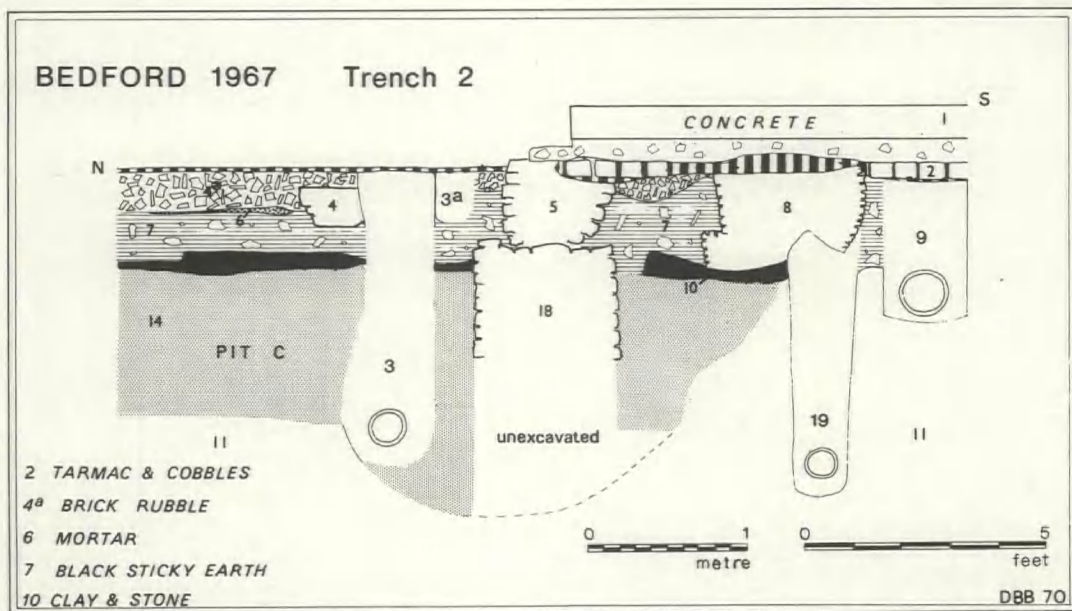


Fig 5 East section of Trench 2.

as the chamber pot No. 75 (Fig 9) with the early 18th century pottery from Pit M/Q. With groups of exclusively local material, however, like many of the Saxo-Norman groups, their chief interest at this stage may come from the internal associations they demonstrate.

Published sherds from Saxo-Norman pits therefore include major examples, either by illustration or reference, so that the groupings may be clearly shown. Sherds published from later pits are mainly those which provide their dates. In addition, some other noteworthy but unstratified examples are included as indicative of wares occurring in Bedford. It is hoped that the pottery from this writer's current excavations at Elstow Abbey and Bedford Castle will complement much of this material. Messrs J G Hurst and K J Barton have kindly given extensive advice on dating and parallels for this pottery.

The range of wares recovered was not evenly distributed in time, though this need not reflect more than the sampling of a limited area. In general the post-Conquest Saxo-Norman products were better represented than their later mediaeval successors. Sherds after the 15th-16th century were more numerous, but the proportion of post-mediaeval to mediaeval finds may have been distorted by the large Pit M/Q in Trench 5.

Certain absences were noteworthy. Only one or two residual Roman sherds occurred, and there was nothing post-Roman before the Saxo-Norman period. Better quality wares of the 13th and 14th century were scarce, particularly from the Oxford region, though known at Cauldwell Priory; imports from Lyveden in Northants, and Grimston in Norfolk occur at Elstow Abbey immediately to the south, but not on this site.

A. SAXO-NORMAN WARES (Figs 6, 7, Nos 1-51)

St Neots, Early Mediaeval and Stamford wares were represented here. On present evidence none of the pottery need be earlier than the middle of the 11th century, and much of it is likely to be 12th and early 13th century. Developed forms predominated.

Pottery in the St Neots tradition had the usual shell-filled fabrics. The smooth or soapy surface was more or less common to all, depending on the prominence of the shell-gritting. Developed examples, such as Nos 27, 30, 33 from Pit EE had a smoother surface appearance but a slightly more abrasive feel. Surface colour varied widely, from the usual purple-brown to a grey-brown buff. The core of the fabric was usually dark grey with many shelly flecks, but in more cases this

fabric was quite hard and often slightly harsh to the touch. Some variations from these standards may suggest a range of dates and local sources. The attempt to isolate fabric types is reserved until a larger volume of material is available. Bowls, dishes, many cooking pots and few jugs were found, as well as the chimney pots discussed below by Dr G C Dunning (*Figs 10, 11*).

The Early Mediaeval ware with its hard sand filled fabric occurred less than the shell filled St Neots tradition material. Bowls and cooking pots were found. The most important items found in this ware were a spout and body sherd with an applied thumbled ribbing strip which Mr J G Hurst suggests are parts of a firecover.

The lower part of a strap handle from a jug was the only notable example of the three Stamford ware sherds found.

Table 2 shows the proportions of these three wares in the dated pits, by sherds.

TABLE 2

PIT	DATE	SHELL	SAND	STAMFORD	PROPORT: SAND-SHELL
P	mid 11th—mid 12th	137	1	—	1: 137.0
C	mid 11th—mid 12th	45	13	—	1: 3.5
N	11th—12th	10	—	—	
MM	11th—12th	7	—	—	
F	early 12th	22	19	—	1: 1.2
HH	12th	132	19	2	1: 6.9
EE	late 12th	180	65	—	1: 2.8

Shell and sand filled fabrics coexist in the post-Conquest period up to the 13th century, with the former numerically dominant according to this table. The small amounts involved do not admit any general inference about changing quantitative relationships. It should be noted that similar forms occur in both fabrics, such as No 36 from Pit EE.

I. SHELL-FILLED WARES OF ST NEOTS TYPE

The fabric is dark grey, shell filled, and fairly hard unless an alternative description is given. Pit group sherds are mentioned.

1. Large thick walled bowl; rim sherd and upper part; slightly thickened and rounded simple rim. Light grey-brown surfaces.

2. Shallow dish with rounded profile and simple near upright rim; sagging base from moulded basal angle; grey-brown surfaces. Pit HH.

3. As 2 with external basal ridge more pronounced; light red-brown fabric with rough yellow-grey surfaces. Pit P. Similar example in Pit HH.

4. Bowl with rounded 'hammer-headed' rim. Pink-brown surfaces. Rim sherd only. See D H Kennett: 'St Neots Ware from Bedford', *Beds Arch J* 4 (1969) 22, fig 4, 11.

5. Bowl with rounded 'hammer-headed' rim. Internal flange more elongated than in 4 above. Rim sherd only. Fabric softer and slightly darker than normal; light grey-brown surfaces.

6. Small bowl with inturned flange rim and high sharply angled shoulder. Pink-brown surfaces with some external burning. Rim and part of side. Pit HH; similar example Pit P.

7. Large deep? straight-sided bowl with simple upright rim. Dark grey-red brown surfaces. Rim and part of side.

8. Bowl similar to 3 above, but with side at out-sloping angle. Red interior and dark burnt exterior. Pit EE.

9. Bowl with flat topped rim, making sharp external angle and small internal flange. Grey-purple surfaces. See Kennett *op. cit.* 23, fig 5, 26.

10. Bowl with simple inturned rim and pronounced external shoulder. Rim sherd; purple-brown surfaces with some external burning. Pit HH.

11. Bowl with near upright rim with slight external beading. Rim sherd. Grey-brown surfaces with some external burning. Pit HH.

12. Small bowl with slight internal flange on rim. Rim sherd. Black surfaces.

13. Bowl with squared rim and slight inturned flange. Purple-brown surfaces. Slight external burning. Pit DD.

14. Bowl with rounded 'hammer-headed' rim and raised upper edge on internal flange. Light brown-grey surface.

15. Small cooking pot with slight external flange on simple everted rim. Light grey-brown hard fabric. Grey-brown surfaces with external burning.

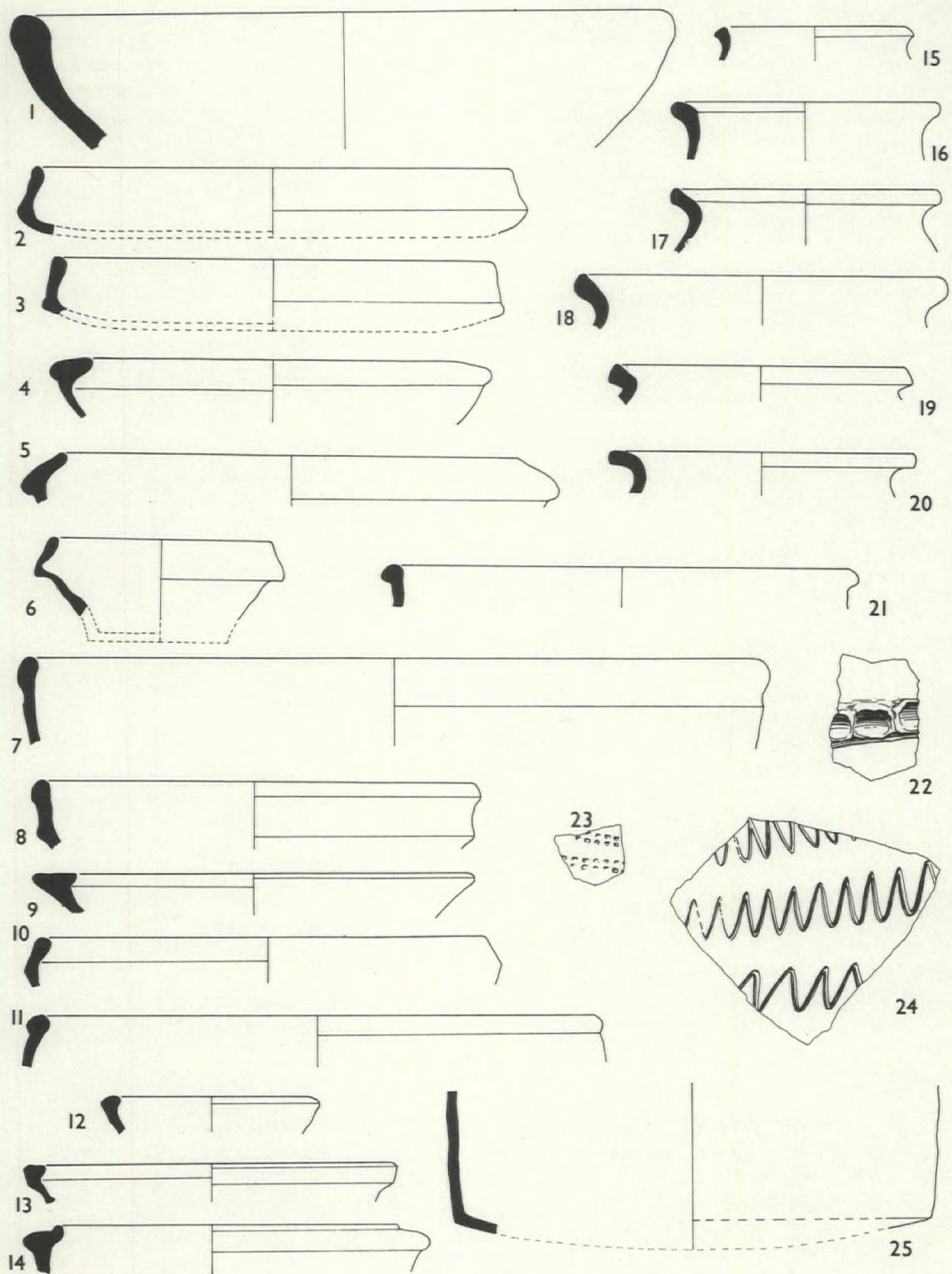


Fig 6 Pottery: shell-filled wares of St Neots type (scale $\frac{1}{4}$).

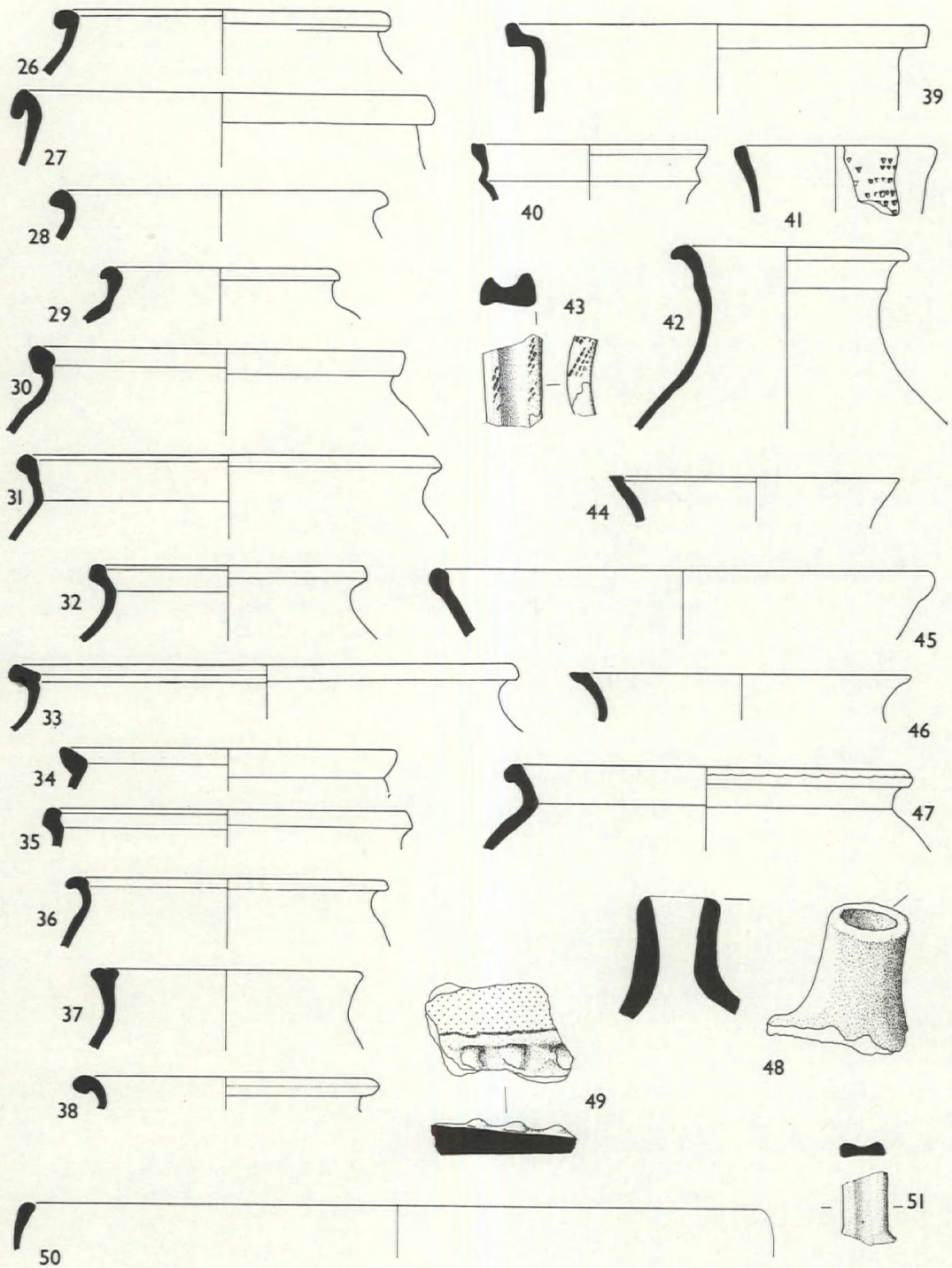


Fig 7 Pottery: shell-filled wares of St Neots type, Nos 26-42; Early Mediaeval ware, Nos 43-50; Stamford ware, No. 51. (Scale $\frac{1}{4}$).

Pit EE.

16. Cooking pot with slightly everted rim and small internal shoulder. Rim sherd. Pit C.
17. Cooking pot with everted squared off rim and slight internal hollowing. Light pink-brown surfaces. Pit P; similar examples Pit C, HH.
18. Cooking pot with everted rim and slight external bead. Light grey-brown surfaces. Rim sherd. Pit P; similar example Pit HH.
19. Cooking pot with small sharply everted squared-off rim and slight internal hollowing. Dark grey-light brown surfaces and external burning.
20. Cooking pot. Simple everted rim sherd squared off. Buff-grey surfaces with burning on exterior and top of rim Pit P; similar examples in Pits HH, N.
21. Cooking pot with upright rim and slight external bead. Dark grey surfaces. Rim sherd. Pit F; similar examples in Pits HH, EE.
22. Cooking pot body sherd with external applied finger pressed strip having slight underside underscoring. Grey-brown surfaces.
23. Body sherd with two double rows of square rouletting on outside. Thin sherd in hard dark grey fabric. Light red-brown surfaces. Pit C.
24. Storage jar body sherd with three rows of horizontal zig-zag decoration on exterior. Light red-brown surfaces. See E M Jope: 'Mediaeval and Saxon Finds from Felmersham, Beds.' *Antiqs J* 31 (1951) 48-9, fig 2. 4.
25. Sagging base and side (part of) cooking pot. Dark grey burnt external and light grey internal surfaces. Sharp external basal angle. Pit P.
26. Cooking pot rim sherd; large external bead rim and high internal shoulder; light grey-brown hard fabric with light pink-brown surfaces. Included within fabric of rim: piece of red iron ore, probably haematite, with small fossil, possibly Jurassic. (Information from Dr D P S Peacock).
27. Cooking pot rim sherd; external folded-over rim, slight internal hollowing to make pinched up rim with top cut flat. Hard fabric with light brown surfaces and external burning. Pit EE.
28. Cooking pot with thickened short everted rim. Rim sherd. Hard grey fabric with light grey-brown surfaces. Pit HH.
29. Cooking pot rim sherd with slightly turned-out rim and thinned neck. Pink-brown surfaces.
30. Cooking pot rim sherd; everted rim thickened to slight bead internally and externally. Light red-brown surfaces, hard fabric; some external burning. Pit EE; similar example Pit HH.
31. Cooking pot, thin walled rim sherd; slightly everted squared rim; light grey-brown surfaces much blackened. Pit DD.
32. Cooking pot rim sherd; everted squared rim and internal hollowing. Light grey-brown surfaces. Pit P; similar examples Pits HH, EE, F, C.
33. Cooking pot rim sherd; elongated everted rim with slight beads internally and externally. Hard fabric, light grey surfaces. Pit EE.
34. Cooking pot rim sherd; small slightly tapering everted rim; grey hard fabric grey-brown surfaces. Pit HH.
35. Cooking pot rim sherd; rim externally square, with pronounced hollow groove internally. Pink-brown surfaces and some external burning. Pit EE.
36. Cooking pot with pulled out everted rim and small internal bead. Pink-brown surfaces, some external burning. Pit EE; similar example in hard sandy fabric Pit EE.
37. Cooking pot rim sherd with upright thickened rim having hollowed top and slight internal bead. Hard fabric and dark grey surfaces with some external burning, Pit C.
38. Cooking pot rim sherd with curving everted rim. Hard fabric with pink-brown surfaces and some external burning.
39. Straight sided cooking pot with L shaped rim square externally and hollowed internally. Light brown-grey surfaces; more friable fabric. Pit P; similar examples Pit HH.
40. Jug rim sherd with hollowed top and one horizontal neck ridge. Hard fabric; purple brown surfaces.
41. Jug ?; rim sherd; simple rim with parts of 6 rows of irregular triangular rouletting on exterior; burning on exterior. Pit DD.
42. Jug, rim, neck and upper body sherd; everted and slightly pulled out rim. Orange-grey surfaces and hard fabric.

II. HARD SANDY WARES OF EARLY MEDIAEVAL TYPE

43. Strap handle with U shaped section, having rectangular rouletting on outside raised face and on one side, in diagonal rows. Grey fabric. Pit AA.
44. Cooking pot ? Long everted rim with flat top and slight internal bead. Grey fabric. Pit C.
45. Bowl. Rim sherd with slight thickening at top. Pink-grey fabric with dark grey surfaces.

Pit HH.

46. Cooking pot; outcurving rim sherd with flat top. Grey fabric. Pit EE. Similar example in Pit C.

47. Cooking pot with everted rim having external bead and slight finger impressions along rim outside just below top. Grey fabric with pink-brown surfaces, Pit EE.

48. Spout of firecover. Dark grey hard fabric with grey-brown surface having some burning. Spout slightly flared at mouth. Pit EE.

49. Body sherd, probably of 48, of similar composition. External applied ribbing strip. Pit EE.

50. Bowl with upright rim curving in slightly. Grey fabric with orange-brown surface and some external burning. Pit EE.

III. STAMFORD WARE

51. Strap handle, lower part; in hard buff-white fabric with pale yellow-green glaze having yellow blotches. Pit HH.

B 13TH-16TH CENTURY WARES (Fig 8, Nos. 52-61)

Finds from the earlier part of this period were few, and three examples are published (*Fig 8. 52-54*) for their individual interest. For the later centuries Pits J and X produced a quantity of 15th and 16th century material. The sherd with lug of a chafing dish (*No 55*) is notable. Local coarse wares (*Nos 57, 58*) demonstrate the 16th century transition from later mediaeval hard sandy wares to hard red fabrics. Tudor Green (*No 59*) occurred in Pits L and D; sherds representing two or three Raeren jugs came from Pits J and L; in Pit J were parts of three Cistercian ware cups (two illustrated *Nos 60, 61*)

52. Jug, body sherd. Hard light off-white fabric, with buff exterior and purple strip decoration; two triple rows of rouletting, along strip and parallel to it. This sherd appears to be in the Oxford tradition but lacks the characteristic fabric. Mid 13th-14th century. Pit J.

53. Fish dish or dripping pan. Hard grey sandy fabric with light orange-brown surfaces. Olive green mottled glaze on inside base. Sharp diagonal knife trimming at external basal angle. Top of the rim trimmed flat. Late 13th-early 14th century. Pit KK.

54. Large bowl; base and lower part of side. Hard grey sandy fabric with grey core and red

surface area. Rough brown glaze on external sides, olive green glaze inside. Spots of clear glaze on external base. 14th-15th century. Unassociated.

55. Chafing dish with small short flattened lug. Grey fabric with pink surface. Light green glaze with some salmon pink mottling on inside. Circular hole pierced near rim. A full reconstruction is not attempted here, though the dish may have four handles. Late 15th-early 16th century. Pit X.

56. Jar ?; Rim sherd with slight external bead and internal rim for lid just above shoulder. Hard grey sandy fabric with orange-brown surface. Worn spotty clear glaze on outside. Trench 3, over Pit F. 15th-16th century. For similar form see: David Sturdy: '13th century and later pottery ... from Oxford.' *Oxoniensa*. 24 (1959) 28, fig 12. 4, 8, 11.

57. Cooking pot, rim sherd. Hard sandy fabric in red-grey-red sandwich. Rim deeply hollowed on top. 16th century. Pit J.

58. Bowl? Rim sherd. Rim folded over to give external protruding ledge. Hard red fabric with grey core in rim only. Orange-brown surface with spots of clear glaze on top and inside. 16th century. Pit J.

59. Cup ?; Rim sherd. Light buff fabric, all over deep green glaze. Tudor Green. Pit D.

60. Small Cup, base and side up to top of shoulder, including lower handle attachment. Hard purple fabric with shiny black tin glaze inside and outside except base. Cistercian Ware. Pit J.

61. Small Cup, base and side including lower handle attachment. Hard purple fabric with shiny black tin glaze inside and outside except base. Cistercian ware. Pit J.

C. 17TH AND 18TH CENTURY WARES (Figs 8, 9)

Nearly all this material came from Pits M and Q, and consists mainly of fine wares. The small amount of material might suggest that deposition occurred over a short period, and concluded with the chamber pot (*No 75*) in view of its near completeness. The pit groups represent trading with London and Staffordshire; the presence as far inland as Bedford of a sherd possibly from the Western Mediterranean is noteworthy (*No 78*). In general the group includes the wares that might be associated in an early 18th century context, with the important addition of the more localised chamber pot (*No 75*). Drawn sherds are from Pits M and Q unless otherwise stated.

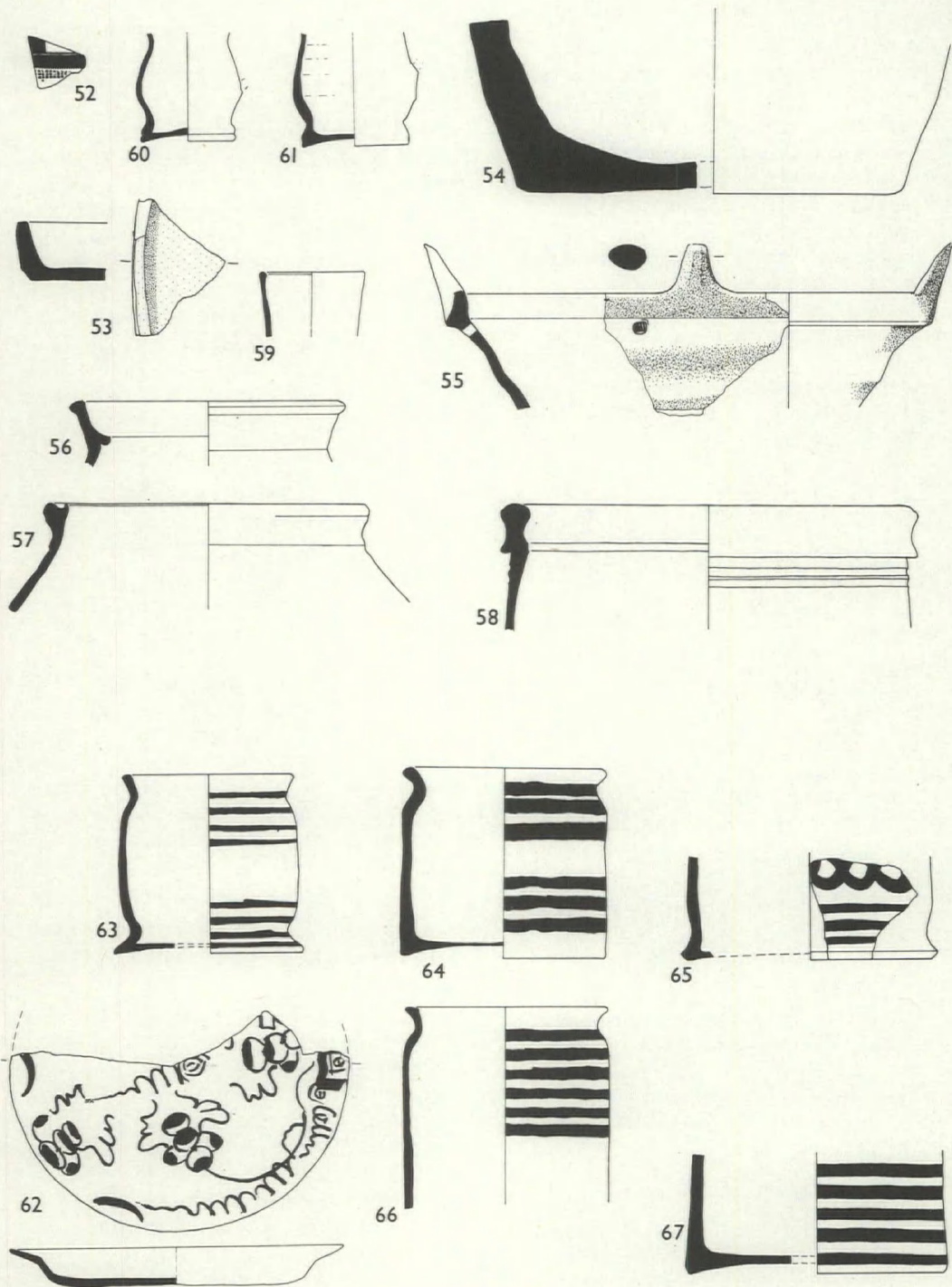


Fig 8 Pottery: 13th-16th century wares, Nos 52-61; early 18th century English Delft, Nos 62-67. (Scale ¼)

I. ENGLISH DELFT WHITE TIN GLAZED BUFF EARTHENWARE

62. Plate with irregular blue decoration influenced by Chinese style over entire upper surface. Mid-late 17th century.

Not Drawn: Plate base sherd with blue floral motif on blue-white glaze, early 18th century; Bowl body sherd with internal blue linear decoration, early 18th century.

63-67. *Lambeth Drug Jars.* This group may have been broken and discarded at one time, except for 65. Surviving bases had unglazed raised undersides. Late 17th-early 18th century.

63. Jar with slight shoulder and everted flat-topped rim; body narrows above flared foot-ring base. Two sets of four blue rings at top and bottom of exterior. Internal white glaze slightly pinkish.

64. Jar with slight shoulder and everted rim, straight-sided below. Two sets of three blue rings around exterior at top and bottom of jar. Blue-white glaze.

65. Jar, base and lower part of side. Three blue bands around base with interlocking pair of wavy bands above. Rubbish survival in 20th century fill of cellar in Trench 6.

66. Jar; rim and upper part of side with slight shoulder and everted rim with flat top. Six blue rings around upper part of exterior. Blue-white glaze.

67. Jar; base and lower side. At least five blue bands around base. Blue-white glaze.

Not Drawn: Parts of at least two other jars, including two base and two rim sherds.

68. Basin: plain white delft, with slight blue tinge. Handled? Simple flanged rim. Base below angled foot rim thinner than body above it. Early 18th century. See K J Barton: 'An 18th century Rubbish Pit in Trinity Street, Chester.' *Chester Arch Soc J* 44 (1957) 25, Fig 2, No. 14.

II. ENGLISH SALT-GLAZED STONEWARE

69-70: *White Salt-Glazed Stoneware*

69. Small saucer with squared foot ring and plain rim. Early 18th century.

70. Bowl: slightly outward flared rim; engine-turned grooves, single on outside of rim, double 3 cms. from top of rim, double at bottom of side. Short broad square footing and slightly sagging base. Early 18th century.

Not Drawn: Jar, rim and side, double groove around outside of upright rim 4 mm beneath it, early 18th century; globular tankard, part of

lower body with handle attachment, lower part of handle attachment has one finger wipe, engine turned grooves starting 42 mm above bottom of lower handle attachment.

71. *Other stonewares*

71. Half-pint tankard, base, Buff orange fabric, brown salt-glaze externally, brown slip internally, Six horizontal raised rings above basal angle with some knife trimming. Glaze poor on base. Nottingham, early 18th century.

Not Drawn: Tankard; sherd in grey stoneware. London or Bristol.

III. FINE YELLOW FABRICS FROM STAFFORDSHIRE AND BRISTOL

72. Rim of small cup. Fairly coarse cream coloured fabric. Yellow lead glaze and brown raised spots on top of rim. Mid 17th century. Pit J (stray?) see: K J. Barton: 'St Nicholas' Almshouses, Bristol' *Med Arch* 8 (1964) 202, Fig 67, No 21.

Not Drawn: Mug?; yellow slip ware, having part of applied black dot decoration with slight downward run. Late 17th-early 18th century. Staffordshire or Bristol. See: K J Barton: 'Some evidence for Two Types of Pottery Manufactured in Bristol in the early 18th century.' *T Bristol and Gos Arch Soc* 80 (1962) especially 165, fig 2 Nos 4, 5.

73. Yellow slip ware dish; buff yellow fabric, internal glaze, notched rim, trailed brown decorations on inside. Staffordshire.

Not Drawn: other examples with; pinkish fabric, plain rim, trailed brown decoration; buff yellow fabric, notched rim, feathered decoration; pinkish fabric, joggled brown decoration. Late 17th-early 18th century.

Not Drawn: Staffordshire mottled wares: Tankard handle with brown slip and buff fabric; handle and part of body as above with mottled brown slip. Early 18th century.

IV. RED OR ORANGE EARTHENWARE

74. Colander; orange fabric, clear internal glaze, external orange brown slip with splashes of glaze. Round holes pierced at slight angle in base, in lines radiating out from centre of base. 17th century; unassociated. Some similarity of form with Potterspurty products; see: Philip Mayes: 'A 17th century Kiln Site at Potterspurty Northants' *Post-Med Arch* 2 (1968) fig 28. 17-19.

75. Large bowl with handle; chamber pot. Hard

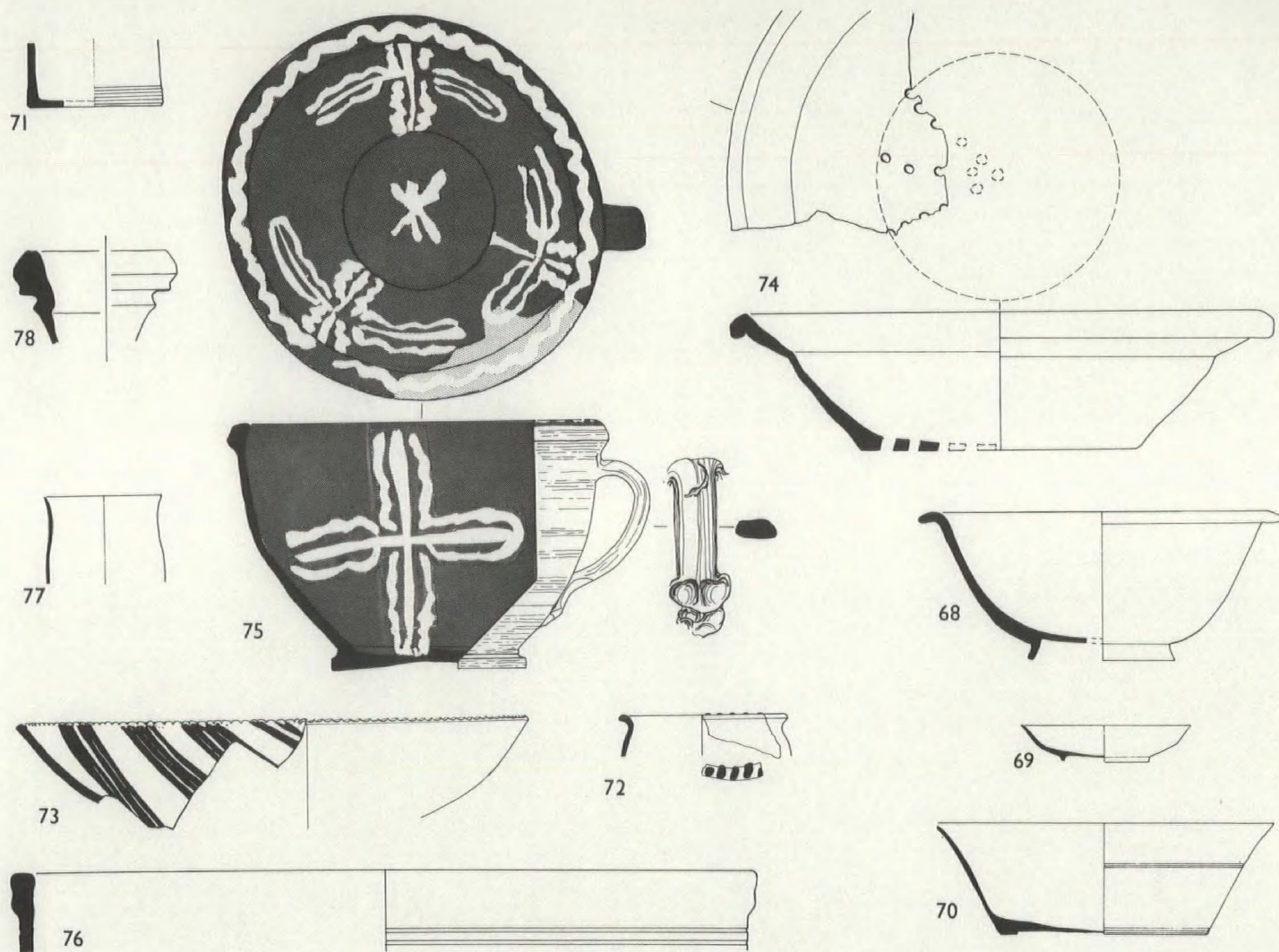


Fig 9 Pottery: 17th-18th century wares, Nos. 68-78. (Scale $\frac{1}{4}$)

thin brickred earthenware fired rapidly and hard in a reducing atmosphere, lying sideways on flange. Olive green and clear mottled glaze showing signs of flaring on inside. White slip decoration on rim and inside; three cross motives on inside and small star on inside base. Strap handle with top moulded into body just below rim, and bottom spread out and pressed against body two-thirds way down. Some glaze splashes on base underneath. First quarter of 18th century. This vessel is not paralleled by contemporary wares from Stoke-on-Trent; in form its character is similar to, but not the same as, vessels from Potterspurty; its decoration has some parallel with that on Metropolitan wares found at Harlow.

Not Drawn: Tall tygs, ten sherds including four bases all rising to some extent, red fabric with brown lead glaze, 17th century. see: K J Barton: '17th century pottery: Sites at Harlow, Essex,' *T Essex Arch Soc* 25 (1960) 364-8.

76. Bread crock, rim sherd. Hard fired coarse red fabric with heavily slipped interior. Iron slip overlain with near-black iron permeated glaze. Late 18th century. The existence of one small sherd of such a large vessel, out of step with the fairly tight chronology of the remainder of the group from Pit M/Q may indicate that it is a stray.

V. FINE RED WARE

77. Tankard, rim sherd. Red ware with black glaze. Trench 4, layer 4.

Not Drawn: Cup?; lower part of cranked handle adhering to body sherd, small projection with flattened end just below lower joint, red ware with black glaze, early 18th century.

VI IMPORTS

78. Large jar. Rim sherd in hard off-buff fabric evenly fired with small leached out inclusions. Top of rim slightly hollowed; deep broad horizontal internal groove 2.5 cm below top of rim with slight pulling out of fabric above and below. Thin-walled below rim. Smooth surface with small irregular pittings containing white powder. Its appearance suggests a final turning on a slow wheel allowing some irregularities to appear. Mr J G Hurst suggests a Western Mediterranean origin for this piece.

Not Drawn: Saucer, rim sherd. Hard paste Chinese porcelain. Internal light blue criss-cross band 2 mm in from rim. Second quarter 18th century,

possibly Ming type.

ROOF-FITTINGS IN POTTERY FROM ST JOHN'S, BEDFORD

by G C Dunning

Among the considerable amount of shell-filled late St Neots ware from St John's Bedford, are two exceptional pieces. These do not conform with any of the long series of domestic forms from this site, nor with other pottery of this type and fabric from sites elsewhere in Bedford.³ Neither, as yet, are parallels forthcoming for either form in the long series of St Neots ware pottery from Cambridge⁴ or elsewhere in East Anglia and the Midlands.⁵ In fabric both pots, though made of thicker ware than usual, are of hard grey ware with crushed white flakes of shell. The surfaces are smooth, almost soapy in feel, and light brown in colour with particles of the shell showing on both surfaces.

1. VENTILATOR-FINIAL

Fig 10: Ware as above. Thickness of side about 1 cm. The outside of the top is stained black, and inside is also stained black on the upper part and also at the lower end. The top is slightly domed and its edge is moulded, 16.3 cm in diameter. The side is incurved, with the profile again turning outwards at the lower part as present.

In the upper part of the side, about 4.8 cm below the summit, is a hole made before firing, with its margin burred over and smoothed on the inside. In shape the hole is an irregular oval, 2.65 cm by 2.1 cm. About one half of the circumference is present at this level, without another hole in the side, but in view of the analogies quoted below, it may be taken as certain that there was a second hole diametrically opposite to and about the same size as the one preserved.

Because of its shape, the perforation in the side, and the black staining of its surfaces, this object is identified as a finial attached to a ridge-tile. Moreover, the perforation shows that it was a functional ventilator, and the black staining of the surfaces has been noticed many times on such roof-fittings and explained as caused by deposit from the smoke escaping through the apertures in the side.

Analogies for the Bedford finial exist among two classes of roof-fittings in Southern England. First, the chimney-pots of Sussex type,⁶ discussed further below, are broadly similar in shape at the top,

though here pierced by a large central hole, and invariably these have a pair of holes in the side, at about two-thirds of the height of the chimney-pot, and secondly, ventilator-finials of the type attached to the ridge-tiles. These finials have the summit closed as on the Bedford example, and several of them have two or more holes through the side, so that they could act as ventilators.⁷ No precisely close parallels for the form of the Bedford ventilator can be quoted, but this is not surprising, since the shape and details vary considerably within the requirements of the dynamics of these structures.

The main interest of the Bedford ventilator-finial lies in the occurrence of such a structure in the Midlands, and in its relationship to the numerous roof-ventilators in pottery, of one type or another, now known from thirty or more sites in the southern counties. Taken in conjunction with the chimney-pot also found on the St John's site, the finial demonstrates that other forms of roof-fittings, both functional as ventilators and solely decorative, may be expected in the Midlands region.

In the drawing (Fig 10) the finial is illustrated in two views at right-angles, and it has been reconstructed as about 23 cm in height above the line of the ridge-tile. It may be added that attached roof-finials vary considerably in size; several from Hampshire and south Wiltshire are from 25 to 35 cm high above the tile; the record is held by a tall and slender finial from Portsmouth, which attains 41 cm high above the tile.

2. CHIMNEY-POT

Fig 11, 1. Ware as above. The thickness of the side is about 1.6 cm. The core is dark grey, with light reddish-brown monolayers on both sides and at the surface. The backing is mainly crushed shell, but there are a few stone grits. The inside is partly stained dark grey.

The profile slopes inwards from the base, and the outside surface is lightly ridged and grooved horizontally. The edge of the base is thickened and moulded on the outside, increasing the width to 2.6 cm. Round the lower part of the moulding is a sharply-defined girth groove; the inner side of the base is bevelled upwards and has a beading. The basal section is of the kind usual on chimney-pots of the Sussex type.⁸ From the diameter at the base, 21 cm, the height of the chimney-pot can be restored as about 25.5 cm.

The top would be pierced by a central hole, and there would be two holes in the side, diametrically opposite each other, at about two-thirds up the height of the pot; these structural features are shown in the drawing.

The scarcity of mediaeval chimney-pots away from the homeland of the type in Sussex, and in the peripheral counties to the south of the Thames, justifies the publication here of three others. One (Fig 11,2) was found in High Street, Bedford (in the Bedford Museum); and the second (Fig 11,3) at the cemetery at Fenny Stratford, Bucks. (on loan to the Aylesbury Museum No 453.67); and the third, kindly brought to my notice by Mr J M Steane, was found at Blakesley, Northants. (in Northampton Museum No 242).

Fig 11,2. Upper part of chimney-pot, made of grey ware with much crushed shell; both surfaces are light red. The inside shows broad rilling marks. The side is about 0.8 cm to 1 cm thick, increasing markedly inside up to the flat top, 2 to 2.3 cm wide. The outside diameter of the top is 13.6 cm, and diameter of the central hole in it is 8.4 cm. The profile of the pot is almost cylindrical, widening slightly at the lower part. Its side is decorated with vertical applied strips reaching up to the edge of the top, and indented by deep thumb-marks. The spacing allows for nine strips. Between each strip is a deeply incised groove, flat-bottomed in section, also running vertically from the top but slightly undulating. The top of the chimney-pot has a single row of stab-marks about 1 cm in depth, flat at the lower end, and so made by a blunt-ended tool. A single stab-mark is at the upper end of each strip and groove down the side of the pot.

In the shape this chimney-pot differs from the more or less conical form usual in Sussex. Cylindrical chimney-pots are, however, represented there and elsewhere; for instance, the upper parts of two found at Chichester, and a complete one from Cissbury (in the British Museum). This subtype also occurs in Hampshire, at Winchester and Dibden, near Fawley, and at Sible Hedingham, Essex. Most of these examples are plain, but that from Cissbury has four prominent applied strips extending from the top down to the base, all heavily thumb-pressed. The upper part of this pot is closely stab-marked, and similar stab-marks are in two concentric rows on the top. Chimney-pots with similar elaborate decoration are from the pottery kiln at Binsted, near Arundel, and that from Sible Hedingham, Essex, also has thumb-

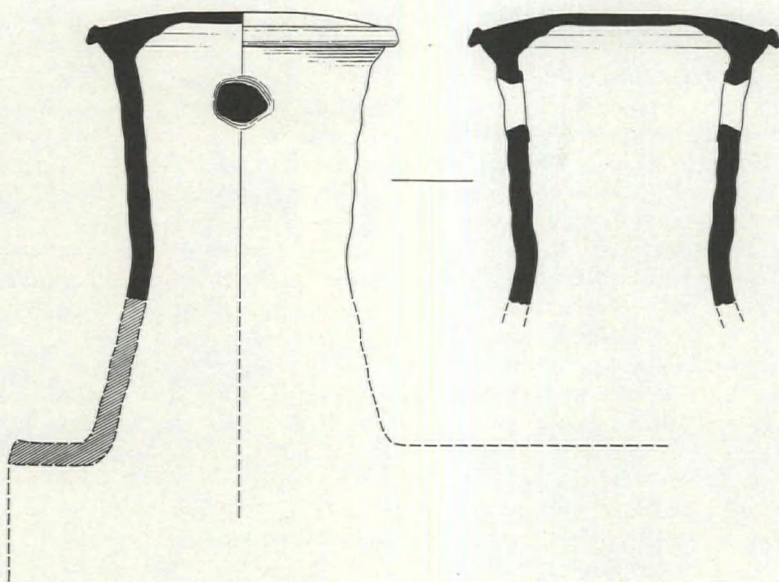
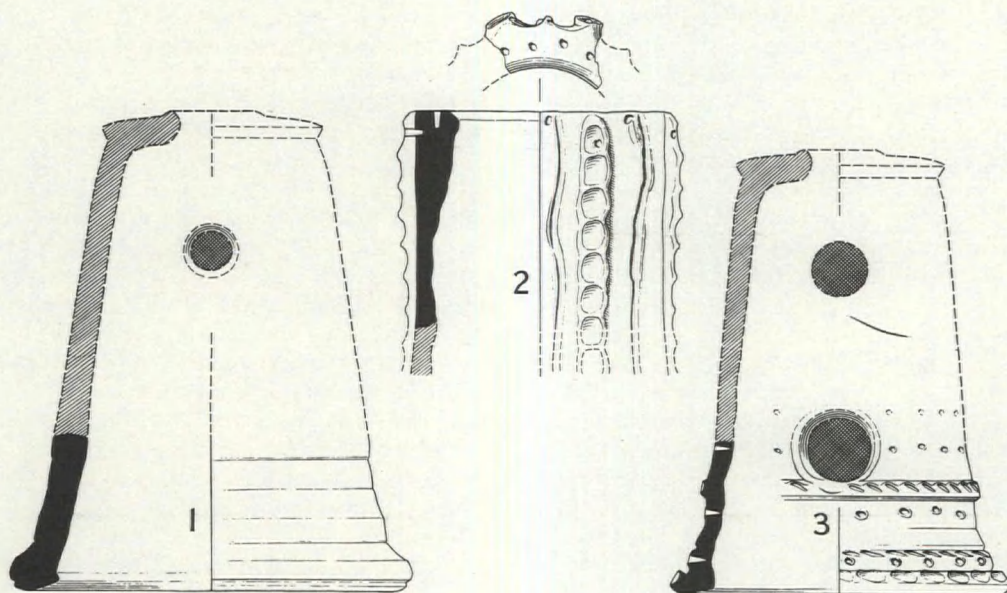


Fig 10 (above) Ventilator-finial, side view and section. St. John's, Bedford. (Scale ¼)

Fig 11 (below) Chimney pots. 1. St. John's Bedford; 2 High Street Bedford; 3 Fenny Stratford (Scale ¼)



pressed strips down the side.

The hole in the top of the Bedford chimney-pot is exceptionally large, but parallels for this feature are on pots from Bramber Castle and Pevensey Castle in Sussex, Dibden in Hampshire, and from Pleshey Castle and Sible Hedingham, Essex. For dynamical reasons because of the large hole in the top, it is likely that no holes were present in the side of the Bedford chimney-pot. Again, the absence of side holes is known elsewhere; it is certain for the Cissbury chimney-pot, and two of hour-glass shape from Pleshey Castle, Essex.

Fig 11,3. Lower part of chimney-pot, made of coarse grey ware with large flakes of crushed shell. The outside surface is light reddish-brown, with a large part dark grey nearer the base; the inside is light red. The profile slopes markedly inwards from the base, which is sharply moulded outside, and undercut on its upper side. The outer slope of the basal moulding is decorated with a row of closely-set finger-tip marks. The base is slightly bevelled on the inner side. The side of the pot for 4.8 cm above has three raised cordons, of which the topmost and lowest are angular in profile, and the middle one more rounded. The middle cordon is plain, and both the other two are decorated with sloping tool-cuts; in addition, the lowest cordon has deep conical stab-marks at intervals. The side of the pot below the topmost cordon also has a line of similar stab-marks. Moreover, the side of the pot above the cordons was also stab-marked, though only the lowermost line is present. Similar stab-marks are frequent in Sussex, sometimes covering the entire surface from top to base, so that probably the Fenny Stratford chimney-pot was profusely decorated in this way. At the height of 7.7 cm above the base the side is pierced by a large hole, irregularly circular in shape, about 3.3 cm in diameter. On both surfaces the margin of the hole is burred over and pressed against the side. From the basal diameter, 17.8 cm, the height of the chimney-pot is estimated at about 23.5 cm, as restored in the drawing.

In several respects the Fenny Stratford chimney-pot differs from the two found at Bedford, although all three are derived from the Sussex type and are to be dated 13th century, perhaps to the latter half rather than earlier. First, it is highly decorated in three techniques, namely, a wide zone of raised cordons above the base, in conjunction with incised patterns of two kinds,

tool-cuts and deep stab-marks. In the latter features it has numerous parallels on chimney-pots in Sussex, notably from Chichester, Cissbury, Saxon Down, Glynde, and Abbot's Wood, Arlington. Only three instances of raised cordons above the base can be quoted: at Tarring, Sussex, and towards the periphery of the distribution at Enborne, Berks, and Arkley, Herts. Stab-marks covering the whole surface of the chimney-pot are a regular feature in Sussex, and occur only sparingly elsewhere, as at Portchester Castle and Bentley, Hants. Secondly, the position of the hole in the side of the Fenny Stratford chimney-pot was at first puzzling, since it is only at about one-third of the height of the pot. However, on chimney pots from two sites in the south, the pottery kiln at Binstead, Sussex, and Portchester Castle, two holes are present, one vertically above the other. The Fenny Stratford pot has been restored accordingly, with another hole at about two-thirds of the height and above the larger hole nearer to the base. The rather splayed profile above the base of both the Bedford and Fenny Stratford chimney-pots has many parallels in Sussex, and also at Portchester Castle, Leatherhead, and Northolt manor-house, Middlesex.

Analysis of the features of the Bedford and Fenny Stratford chimney-pots thus shows that in all respects they have numerous and close analogies in the south, particularly in Sussex, and to a lesser extent elsewhere in the main area of the distribution of the Sussex type. The horizontal cordons on the Fenny Stratford pot are an atypical feature, known only once each in Sussex, Berkshire and Hertfordshire.

Fig 12a. Chimney-pot, 15.5 cm in height, complete except for a small part missing from the base. Grey ware with stone grits; light red on both surfaces, unglazed. The side is 1.1 to 1.2 cm thick, increasing towards the heavily moulded top, flat on the upper surface. The top, 11.7 cm in diameter, is decorated with a single row of seven large stab-marks, conical in section, which pass right through the moulding. The hole in the top is irregularly circular, about 3.4 by 3.7 cm., and appears to be an enlargement of a smaller, round hole. The side of the chimney-pot is slightly conical, with a bulge at mid-height. The base, 10.5 cm in diameter, is slightly everted and bevelled on the inner side. The side is decorated with sharply incised sloping lines which end, alternately, at the bulge and near the base. No

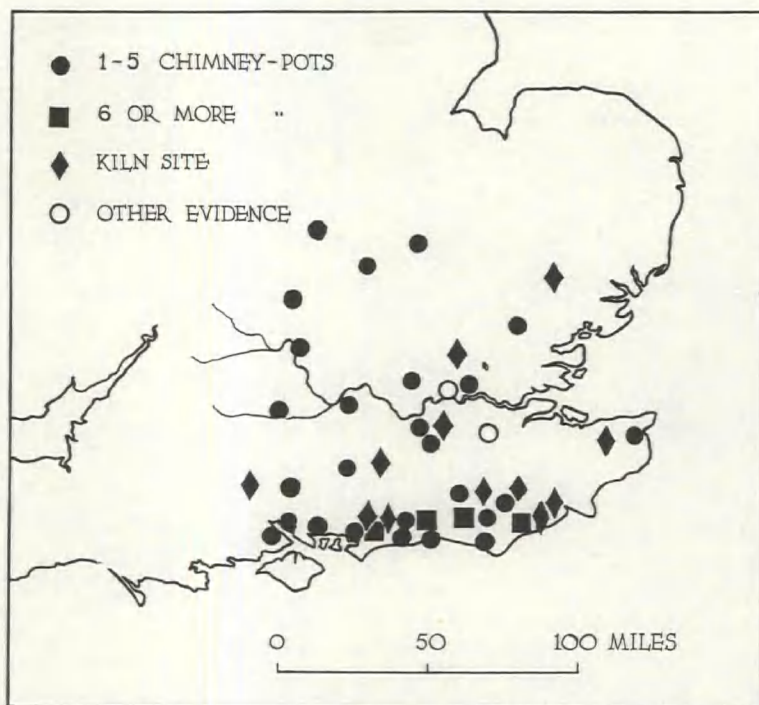
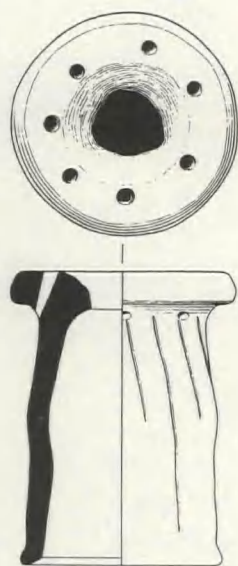


Fig 12a Chimney pot from Blakesley, near Towcester (Scale $\frac{1}{4}$)

Fig 12b Distribution map of mediaeval chimney pots.

holes are present in the side.

The Blakesley chimney-pot is remarkable in several respects. It is the smallest example known, the next in size, found at Chichester, being 18.5 cm in height. The top is massive for a chimney-pot of this size, and actually it is greater in diameter than the base. The circle of large stab-marks piercing the top has several analogies in Sussex, the closest being on a chimney-pot from Lewes. The incised lines on the side have partial analogies at Binsted and Chichester, on chimney-pots with decoration of applied finger-printed strips. It may be noted that both the incised lines and the applied strips are present on the chimney-pot from High Street, Bedford (Fig 11,2). The absence of holes through the side of the Blakesley pot appears to lack a definite parallel in the southern counties, though this may be due to the comparatively few complete chimney-pots in this region. However, holes in the side are certainly absent on the two chimney-pots found at Pleshey Castle, Essex, so that even this unusual feature has a parallel elsewhere. While, therefore, the Blakesley chimney-pot has many features showing its derivation from

the 'Sussex type', it also shows divergencies not at present known at the primary region of this type.

Since the initial publication on chimney-pots in 1961, a number of additional finds have been made, and this opportunity is taken to publish the list up to date and a distribution map (Fig 12b). The density of the find-spots in Sussex is still the dominant feature of the map, and justifies the label of 'Sussex type' for the majority of the chimney-pots as yet found in England. The chimney-pots have now been found at twelve pottery-kilns or kiln sites (as shown by wasters), of which six are situated in Sussex, four in adjacent counties south of the Thames, and the other two in counties north of the Thames. It is thus evident that the production of chimney-pots was carried on in all the regions covered by the distribution, though the source of the type and its major incidence remain in Sussex.

The additional finds confirm that the main period of the chimney-pots was throughout the 13th century. The initial date should now be extended back to the end of the 12th century, according to

evidence recently obtained by Mr Alec Down at Chichester.

As a key to the distribution map a complete list of chimney-pots follows, arranged in counties south of the Thames (primary region) and north of the Thames (secondary region). The sites new since 1961 are in *italics*.

LIST OF MEDIAEVAL CHIMNEY-POTS IN POTTERY

1. COUNTIES SOUTH OF THE THAMES

SUSSEX

Aldingbourne, Tote Copse Castle, *Sussex Arch Coll* 107 (1969) 172, fig 18, 2-3.

Arlington, Abbot's Wood. Kiln site.

Binsted, near Arundel. Pottery kiln, *Med Arch* 11 (1967) 316.

Bosham

Bramber Castle.

Chichester, East Pallant, etc.

Chichester, Orchard Street. Pottery kiln. Chichester Civic Society, Excavation Committee *Report for* 1968. 7

Cissbury.

Glynde, Saxon Down

Hamsey, near Lewes

Hastings, Bohemia. Pottery kilns, *Sussex Arch Coll* 12 (1860) 268.

Lewes

Pevensy Castle

Pevensy, quays, *Med Arch* 11 (1967) 299-31, fig 66.

Ringmer. Pottery kilns.

Rye. Pottery kilns.

Seaford.

Tarring, *Sussex Arch Coll* 102 (1964) 25, fig 6.22-23.

KENT

Canterbury, Darwin College, University of Kent. Pottery kiln, *Kent Arch Rev* 19 (1970) 26 and 21 (1970) 11. Information from Mr G A Crump. Stonar, near Sandwich.

SURREY

Ashtead. Kiln site, *P Leatherhead Local Hist Soc* 3 (1968) 59, fig left.

Leatherhead, *P Leatherhead Local Hist Soc* 2 (1961) 130

Packesham, manor-house.

HAMPSHIRE

Bentley. Pottery kiln.

Binsted.

Dibden, near Fawley

Portchester Castle

Southampton. Information from Dr Colin Platt. Winchester.

WILTSHIRE

Laverstock. Pottery kilns, *Archaeologia* 102 (1969) 142, fig 25. 202.

2. COUNTIES NORTH OF THE THAMES

BEDFORDSHIRE

Bedford, St John's site and High Street.

BERKSHIRE

Enborne.

Wargrave, Borough Farm.

BUCKINGHAMSHIRE

Fenny Stratford.

ESSEX

Pleshey Castle, P A Rahtz, *Pleshey Castle, Essex: First Interim Report* (1960) 31, fig 18. Since this publication the lower part of the same chimney-pot has been found, giving the complete profile of hour-glass shape, and the greater part of a smaller chimney-pot of the same type. Information from Mr Rahtz.

Sible Hedingham, Foxborough Hill. Pottery kiln. Information from Mrs J E Sellers.

HERTFORDSHIRE

Arkley. Kiln site, D F Renn *Potters and Kilns in Mediaeval Hertfordshire* (1964) 9.

LONDON

Watling Street

MIDDLESEX

Northolt, manor-house. Information from Mr J G Hurst.

NORTHAMPTONSHIRE

Blakesley, near Towcester.

OXFORDSHIRE

Deddington Castle.

Oxford

A PIECE OF TILE WITH RELIEF DECORATION FROM BEDFORD

by Elizabeth S Eames (fig 13a)

One broken, roughly triangular piece from the edge of a tile; 93 x 70 x 35 mm thick. The body is earthenware, mainly reduced and grey in colour, but with a thin skin of oxidised fabric on the unglazed surfaces. The top is covered with lead glaze applied directly to the body. The glaze contains some copper and looks a dull speckled green. There are no scooped keys or stabbed holes in the base. The remaining piece of the side is vertical and irregular and shows marks of sand. These features suggest that it was moulded and not cut off to form a bevelled edge as was the normal practice.

The tile is decorated with a pattern in relief on two planes only, flat at the top and bottom, and without any modelling to provide detail. The remaining piece shows part of a scroll with large solid looking terminals, some of which are probably parts of fleur-de-lys. A border along the edge of the tile consists of two raised lines, the inner about 5 mm and the outer about 10 mm wide.

This tile is most probably of thirteenth century date. Large tiles with relief decoration were made at that time.⁹ I cannot at present find an exact parallel to the scroll with which it is decorated but it is closely related to a scroll on a border tile from North Berwick, East Lothian,¹⁰ and the style of decoration is similar to that on other tiles from North Berwick, East Lothian,¹⁰ and the style Priory in Derbyshire and Revesby Abbey in Lincolnshire.¹¹ The uncut, vertical, sides, and the unusual thickness of the piece of tile from Bedford resemble the form of the sides and the thickness of the tiles from those sites and one may suppose that they are related by other factors besides their common style of decoration.¹²

A kiln for the manufacture of this type of tile has been found at North Berwick,¹³ and such tiles were found with other types in a kiln on the site of Repton Priory, in Derbyshire.¹⁴ It is generally considered that in the thirteenth century it was usual for tile makers to move from site to site rather than to establish a more permanent centre and to distribute their products from one place. It is possible that this piece of tile from Bedford marks a hitherto unknown stage in the southward migration of a band of tile makers, who may have begun to work at North Berwick and

may eventually have settled in East Anglia. At Butley Priory in Suffolk¹⁵ there are smaller tiles decorated in relief designs closely related to those at North Berwick and it is possible that a more centralised industry was established in East Anglia in the earlier part of the fourteenth century. It is known that a flourishing relief tile industry was established at Bawsey, King's Lynn, in the latter part of the fourteenth century.¹⁶

Large tiles decorated in relief are known from other sites widely scattered over England and Wales but most of them have no apparent connection with the series mentioned here. So far too few examples of any related types are known to provide a really clear picture of their origins and distribution.

[The current excavations at Elstow Abbey, about a mile to the south of this site, have produced two fragments of relief decorated tile in a context that may be thirteenth century and certainly must predate the middle of the fourteenth century. One of these resembles the fragment discussed above in most details. (D B)]

CLAY PIPES

by Adrian Oswald (fig 14)

Eighteen groups were submitted of which four had some stratigraphic significance. The numbers involved were not sufficient in the stratified groups to permit of useful stem-bore dating. The other groups (excluding a stem and bowl of mid 18th century date from the topsoil) numbered 157 fragments. These suggested a date of 1670–1700 on Harrington's formula and 1693 on Binford's.¹⁷ The bowls typologically would seem to be nearer the earlier than the later date. The sample is small and probably the typology of the bowls is a more reliable dating factor than the stem-bore tests.

The stratified groups have bowl shapes of c. 1670–90 and one stem mark.

Pit J has one bowl (*No 1*) poorly made of a white clay with badly cut off foot. In shape it is near Parsons type 9¹⁸ c. 1680–1720 with a probability towards the earlier date.

Pit M/Q has a similar bowl with a better finish (*No 2*). It also has a bowl of London type 12¹⁹ with a round base. The type occurs in Lincolnshire at Kettleby Thorpe c. 1670 and at Badby in Northants. (*No 3*). It is made of pinkish clay as also a stem of the same group. Pipes of pinkish brown clay c. 1640–70 occur at Stamford. The

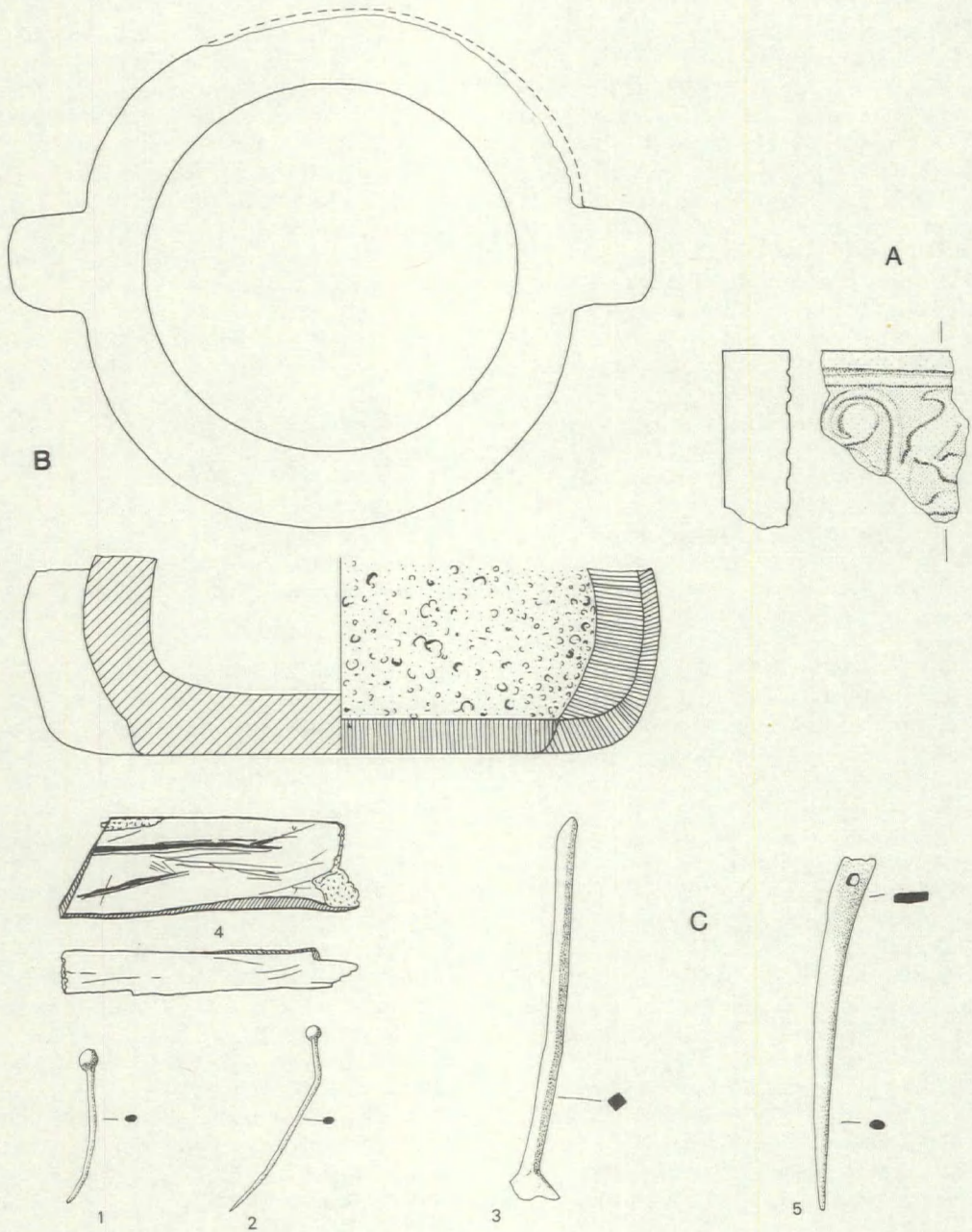


Fig 13a Tile with relief decoration. (Scale $\frac{1}{4}$) b Mortar. (Scale $\frac{1}{4}$) c Small finds of stone, metal and bone. (Scale $\frac{1}{2}$)

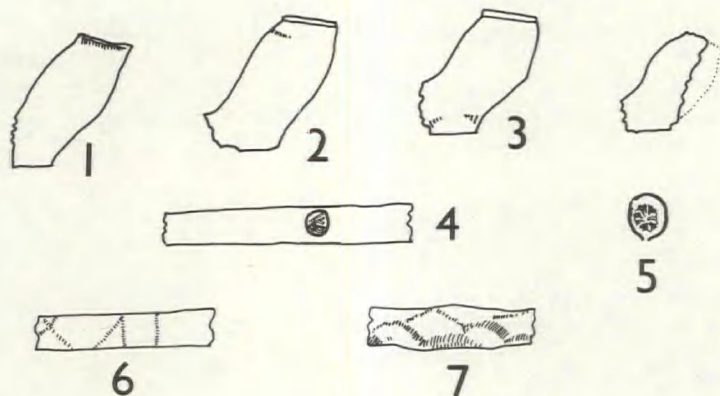


Fig 14 Clay pipes: (Scale ½)

1 Pit J. Type Parsons 9. c. 1680-1720; 2 Pit M/Q 1; 3 Pit M/Q. Type London 12. c. 1660-80; 4 Pit M/Q. Stem Mark WB in relief; 5 Trench 8 Layer 5. Type London 5. c. 1620-40; 6 Trench 5 Layer 3. Rouletted stem: late 17th century; 7 Trench 4 Layer 4. Pinched Stem. c. 1700.

stem mark WB (No 4) is very similar in style to a mark WP at Stoney Stratford. It is probably the mark of William Brown of Bedford who is recorded in the parish registers of St Cuthbert. 1720 is a date that might suit the mark. Stem marks of this type occur from c. 1690-1750.

Pit L has one stem which calls for no comment.

Among the unstratified groups is a marked bowl (No 5). Three similar pipes are in Guildhall Museum, London, two in the Bousfield Collection, British Museum, and one from the Thames at Battersea (Atkinson Collection). There are two stems, one with roulette decoration and one pinched in the Dutch manner, compare Plymouth Nos 35 and 36.²⁰

Much of the collection seems to be local in style (the pink clay fragments in particular). The shapes seem to be intermediate in type between London and Lincolnshire. There are no highly polished pipes.

TABLE 3

Stem Bore Test on unstratified fragments

9/64	8/64	7/64	6/64	5/64	Nos.
3	15	53	72	14	

Suggested date on Harrington analysis: 1670-1700
on Binford formula: 1693

STONE

based on geological notes by Dr Brian Daley, Chemistry and Geology Department, Portsmouth Polytechnic.

Mortar, complete base and part of side and lugs. Trench 4 Layer 6. (Fig 13b). A predominantly bioclastic limestone, probably obtained from the locally exposed Middle Jurassic rocks. The base is circular, about 22 cm in diameter and smooth apart from natural pitting or other irregular damage. The sides of the mortar survive up to 10.8 cm at the highest point. It is circular with a maximum diameter of 28 cm at a height of 7 cm from the base. It has two opposed lugs square in plan but with chamfered corners, protruding 4 cm from the external circumference. They are solid and run the full length of the surviving sides, being rounded at the bottom where they come down to the main base. The chamfering line on the lugs connects with the top of the base, where the curving side becomes straighter for its last 2 cms to the basal angle. Originally the mortar may have had one or two spouts at rim level. The external sides and handles are smoothed, but rather more pitted than the base. No obvious tooling is visible. The inside of the mortar shows much wear, with the centre slightly raised above the level of the more worn perimeter. It did not

come from a clearly stratified context and therefore little can be said about its date in the mediaeval period.

Whetstone, (Fig 13c4) Pit C Grey slate, a lithological type not found locally as bedrock, but which outcrops widely in North Wales and other western localities. Whilst it is possible that the slate was obtained directly from such areas it seems more likely to have been obtained locally from fragments found in the Drift, distributed by glaciers, during the Quaternary Ice Age.

Whetstone: Flat and rectangular in shape with grooves worn in main surfaces; considerable wear on sides; ends broken. Pit J.

METAL (Fig 13c)

Bronze token. Charles I Rose farthing token, minted at Bristol, after 1635 and before 1644. Information from Miss M Archibald. Not drawn.

Bronze pin with point missing. Circular section and rounded head. Pit AA (No. 1).

Bronze pin, about 5.5 cm long. Circular section and rounded head. Trench 2, Layer 7. (No 2)

Bronze spoon, handle and small part of bowl. Handle is of rectangular section, with a diagonally cut end, and is continuous with the start of the bowl, which is thin in section and angled to the handle. Trench 4, Layer 4. (No 3)

A group of bronze objects from Pit J, undergoing conservation at the time of writing, will be the subject of a short note in a forthcoming volume of this journal.

CARVED BONE (Fig 13c) (No 5)

Bone needle, 9.6 cm long, with point at one end. Head flatter and broader, with near circular hole cut in it. Trench 6, layer 19.

THE ANIMAL BONES

by Annie Grant

The pits exposed by the excavation of the St John's site at Bedford contained animal bones which are assumed to be domestic refuse. The bones contained in the undisturbed layers at the bottom of the pits were examined and are the basis of this report. They are dated to the period c. 1050 to c. 1200 from their pottery associations.

The proportions of species represented were calculated by counting the numbers of leg and jaw bones for each species. This was to try to avoid the distortion due to factors such as the presence

of horn cores in only cattle, sheep and goat, and the greater fragmentation of the vertebrae, ribs and skulls of the larger animals as compared with the same bones in the smaller animals. The results are shown in Table 4.

TABLE 4

Species	No	%
Cattle	184	39.7
Sheep*	179	38.8
Pig	68	14.7
Horse	6	1.3
Dog	3	0.6
Bird	23	4.9
Total	463	100.0

* Because of the difficulty in distinguishing between the closely related species of sheep and goat, especially from small fragments, the bones of both these animals were treated together. Where 'sheep' is used in this report, it should be taken to mean 'sheep and/or goat'.

The proportions of the main domestic animals were adjusted in order to take account of the differences in meat yield per animal. The carcass weights used are those given by D Phillipson *et al* (1965)—Cattle: 900 lb.; sheep; 125 lb.; pig: 200 lb. The results are shown in Table 5.

TABLE 5

Species	%	% after adjustment for meat yield
Cattle	42.7	82.2
Sheep	41.5	11.1
Pig	15.8	6.7

The figures indicate that beef formed the main bulk of the meat represented by these animal bones, followed by mutton then pork. The bird bones range in size from quite small birds to chicken size birds. At least some of these bones would probably be the remains of meals. One might assume that the horse bones and especially the dog bones do not represent a regular food source, but that they represent animals kept for riding and traction and as household pets.

What is perhaps surprising is the lack of any fish or deer bones. Both animals would almost certainly have been present in the locality. The site is very close to the River Ouse, which is certainly fished today, and there is no reason to assume that deer would not have been found in the forested

areas around Bedford. It is possible that since the area excavated was relatively small, bones of these species may have only by chance been absent from the particular pits excavated. Alternatively, venison and fish may not have been eaten by the people whose domestic refuse we are considering. Venison was a food commonly eaten by only the rich at this period. Fish bones are small and fragile and prone to decay and this might also account for their absence.

The percentages of some of the bones for each of the main species were also calculated. The results are shown in Table 6. In the main meat bones of the legs the proportions of different bones are similar for all three animals, with in each case more fore-limb than hind-limb bones. In all cases the meat of the tibia seems to have been preferred to that of the femur, while in the case of cattle and sheep both humerus and radius are well represented. In sheep, the scapula is also well represented, while in pig the humerus is the most common leg bone. In the case of the cattle bones the large number of horn core fragments is notable. This is not a meat bone, and may indicate the presence of some local or home industry using horn as a raw material.

The large number of skull fragments for cattle and pig contrasts with the small number for sheep. These figures should not be compared directly with the percentages of the other bones, because of the thin, friable nature of the bone of the skull. Another notable fact is the large number of pig and of sheep jaw bones even allowing for the fact that there are four per animal. The jaw bone yields very little meat, so it is difficult to account for their relatively large numbers. Because the sample is small, especially in the case of pig, it is difficult to be too dogmatic in one's conclusions about butchery techniques. What does seem indicated is that since some bones are very much more numerous than others, joints of meat rather than whole carcasses were generally bought and used. It is assumed that since this is a town site, the meat was bought in from farms outside the town, rather than reared by the townspeople themselves.

Evidence of chop marks is slight, partly because it is not always possible to be sure whether a bone has been chopped, or merely broken at a later date. However, some obvious chop marks were found on ribs, radii, tibiae and vertebrae: One cattle humerus was split down the centre, perhaps

TABLE 6

Bone	CATTLE		SHEEP		PIG	
	No.	%	No.	%	No	%
Horn core	52	16.3	1	0.5	—	—
Skull	83	26.0	11	5.8	34	33.3
Jaw	18	5.6	32	16.8	25	24.3
Scapula	12	3.8	23	12.0	4	4.0
Humerus	29	9.1	16	8.4	9	8.8
Radius	24	7.5	24	12.6	4	4.0
Ulna	9	2.8	6	3.1	6	5.8
Metacarpal	9	2.8	9	4.7	2	2.0
Pelvis	7	2.2	6	3.1	3	3.0
Femur	7	2.2	16	8.4	1	1.0
Tibia	31	9.9	40	20.9	8	7.8
Metatarsal	7	2.2	5	2.6	2	2.0
Calcaneum	8	2.5	1	0.5	—	—
Astragalus	8	2.5	1	0.5	1	1.0
Phalange 1	10	3.1	—	—	2	2.0
2	1	0.3	—	—	1	1.0
3	4	1.2	—	—	—	—
Totals	319		191		102	

for marrow, and the top of one horn core was cut off.

In one pit were found two horse bones, a radius and a metatarsal, and a cattle radius. On all these bones, one side of the bone had been rubbed down flat and smooth, and the epiphyses of the radii had been knocked off. There were also striations running parallel to the length of the bone, indicating that the bones had been rubbed on something. The bones could have been used in some process such as the rubbing down of leather, or they could have been used as skates. There are several examples of bones that have been rubbed down in this way for use as skates (as in the Science Museum, London), and I believe this custom still persists in some country areas.

The bones and teeth were also examined for evidence of age at death, using tooth eruption and bone fusion ages in accordance with Silver (1969). Where several alternatives are given for the ages of tooth eruption, those for ancient cattle rather than for modern improved breeds were used. Only a small percentage of bones excavated showed any ageing characteristics. The results are shown in Table 7. What seems indicated by these results is that the majority of cattle were killed when they were between two and four years of age, while sheep and pigs were killed off steadily from under two years to over three or four years. The danger in reading too much into these results lies in the distortion of the picture that might lie behind the 'Over 2-2½' and the 'Under 4' and 'Under 3' groups.

TABLE 7

Cattle	No	%
Under 2-2½	2	7.1
Over 2-2½	13	46.4
Under 4	11	39.3
Over 4	2	7.1
	28	
Pig	No	%
Under 2-2½	5	29.4
Over 2-2½	4	23.5
Under 3	4	23.5
Over 3	4	23.5
	17	
Sheep	No	%
Under 2-2½	9	23.7
Over 2-2½	10	26.3
Under 4	9	23.7
Over 4	10	26.3
	38	

The results of an analysis of such a small group of bones, covering as they do a 150 year period cannot hope to reveal any very precise information. The value of such a study would lie in its comparison with other sites in the same area and/or of similar date.

Acknowledgements

The work for this report was undertaken while the author was a student at Newnham College, Cambridge. Grateful thanks are due to Mr E S Higgs and Mr D Allen, and to Miss S Guzder, a fellow student who helped in the identification of the bones.

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- Phillipson, D, Carter, P L, with Higgs, E S, 1965 'The Iron Age Farmstead of Hawk's Hill, *Surrey Arch Coll*, 42 (1965) 40-42.
 Silver I A, 1969, 'The Ageing of Domestic Animals', in E S Higgs and D R Brothwell, *Science in Archaeology* (1969) 283-302.

LATE SAXON BEDFORD

by David Hill (fig 1)

The paper by David Baker in this journal marks the beginnings of scientific excavation in Bedford, though considerable information had been gained from the tireless fieldwork of F W Kuhlicke, without whose generous co-operation this note could not have been written.²¹ And this may perhaps be the moment to re-examine some problems of the origin of the town in the light of developments elsewhere.

Following its defeat by the West Saxons in 878, the Danish Army under Guthrum-Athelstan occupied East Anglia. A treaty defined the frontier between the new Kingdom and the lands dependent on Alfred the Great as "along the Lea to its source, then in a straight line to Bedford (*Bedanforda*) then up the Ouse to the Watling Street."²² The mention of Bedford does not necessarily imply more than a well known ford but the Ipswich Ware sherd (No 13 on Fig 1), the carved stone of possible early date re-used in the tower of St Peter, together with what weight can be given to the provenances of the coins of Archbishop Ethelheard²³ would seem to imply a settlement on at least a minor scale. It is noteworthy that the frontier is drawn in such a way that the Lea and the Upper Ouse are left open for navigation by both parties. The natural

trade entry to at least a part of the Danelaw, regulated by the same document, would be through Bedford.

The frontier was not respected for long and the Danish Settlement spread into north Buckinghamshire and southern Bedfordshire.²⁴ For a quarter of a century Bedford was the centre for a Danish army, the present county evolving from the lands occupied by the people looking for leadership and security to Bedford.²⁵

When Alfred's son, Edward the Elder, King of the West Saxons, embarked on his campaign of conquest of the Danelaw he consolidated his gains with fortified garrisoned *burhs*. As a result of the construction of the two *burhs* at Buckingham, "Earl Thurcetel came and accepted him as his lord, and so did all the earls and the principal men who belonged to Bedford."²⁶

The annal for the following year, 915, is central to any discussion of Late Saxon Bedford. "In this year King Edward went with his army to Bedford, before Martinmas, and obtained the borough (*burh*) and almost all the townfolk (*burgware*) who dwelt there before, submitted to him." And he stayed there four weeks, and before he went away ordered the borough on the South side of the river to be built (*atimbran*).²⁷

This clearly states that there was a pre-existing Danish fortification or *burh* with a population, and the annal for the previous year makes it clear that since the submission of the *burh* and people came without a direct attack, the result of Edward's visit was not large scale fighting. The length of time that the king of the West Saxons stayed at Bedford would seem important. At Buckingham he stayed four weeks and built two *burhs*; at Bedford he also stayed four weeks. The Danes of the area had already submitted, so why was the King and, more importantly, his army, in the *burh* for the four weeks? It would seem probable that the army was re-building the walls, laying out and building the town and occupying it. It is difficult to surmise whether the garrison was West Saxon or, as at Nottingham in 918 a mixture of Danes and Saxons. All the elements of this process can be clearly seen in the Chronicle accounts of the foundation of the string of *burhs* upon which the re-conquest of the Danelaw hinged.

When discussing what this would mean in terms of the topography of Bedford it would be best to start with the established evidence. It has long

been recognised that the "borough on the south side of the river" is that area of Bedford south of the Ouse contained within the artificial watercourse known as the King's Ditch. The name and purpose of this ditch is closely paralleled in Cambridge, and presumably pre-Conquest ditches with the same name are known from Hereford and Tamworth. Within this ditch one might expect the earth bank and palisade clearly shown by Kuhlicke Map 2.²⁸ The purpose of this southern earthwork should not however be misunderstood; it was not designed primarily to control the northern, Danish, *burh*. It would have been a curious tactic to keep the river between the two *burhs* and thus add an additional defence to the Danish *burh*; to control the northern *burh* it would have been wise to expel the alien element of the population as King Athelstan did at Exeter²⁹ or to adopt the Norman tactic of placing an enclave in one corner of the town.

The main purpose of the southern work was to provide a bridgehead or flank work to a fortified bridge blocking the Ouse at this point to Danish attacks from Huntingdon or Cambridge. The concept may have been borrowed from Frankish parallels or may be an independent Saxon answer to a common problem. Certainly there were several double *burhs* closing the rivers in this period; Buckingham, Hertford, Nottingham and Stamford are all recorded in the *Chronicle*. To this we might add London,³⁰ Cambridge, Wallingford³¹ and the temporary *burhs* on the Lea built to bottle up a Danish fleet in the Lea during their raid of 895; King Alfred "rode along the river and examined where it could be obstructed, so that they could not bring their ships out" but the work did not need completion, the Danes saw the situation, abandoned their boats and fled.³²

The use of a bridgehead where the bridge may be of secondary importance is to be seen at Lyng, Somerset, and perhaps at Hereford on the river Wye where the Rowe ditches enclose a southern earthwork.³³ Here it may be the Bridgework which is important but the site is far up the river Wye.

It is surprising that the minor *burh* of any pair, where they can be recognised, should be so large; at both Bedford and at Hereford the area is considerable. Southwark, the southern end of the Bridge at London, was a town in its own right, but it is the only other place apart from Bedford where permanent settlement in the suburb took

place in early mediaeval times.

Assuming then that Late Saxon Bedford has three main elements, the southern suburb, defined by the King's Ditch, the bridge and the northern *burh*, there remains a problem of interpretation over the last of these.

There are two lines of enquiry here perhaps that may offer us some insight to the topography of the main *burh* at Bedford; one is the location of the known Saxon and Saxo-Norman finds, plotted on Fig 1; the other, and more hopeful line, is the comparison of it with the other sites of Saxon England. Later evidence would lead us to believe the northern settlement was the major site, it must have been walled and contained an area equal to or greater than the southern *burh*. The scatter of finds shows the areas of occupation and these are important, although it must be realised that the Saxo-Norman pottery reflects a wide date-range, and there is no reason why, like Lewes, Winchester and Oxford, the town might not have spilled beyond its walls before the close of the period. It is also possible that the deposit of waste material outside the walls can distort the picture.

It would seem however that the ends of the wall of the southern *burh* must to some degree reflect the ends of the wall on the north of the river. It is also a feature of Norman castle building within towns that the castle is sited either in the corner of a town, or athwart the walls. This allowed the interior to be dominated and the inhabitants would have had no fortified line in the heart of the town to keep the Normans out; also it would have allowed free access to the countryside for the garrison.

Finally, the position of the pre-conquest churches is important. The church of St Peter's is firmly dated³⁴ with the period 950-1100. It must therefore have taken some account of the position of the *burh* wall. It may of course, represent a suburban church, but any line of wall near to the tower would be overlooked. The alternatives would seem to be for the church to be within the wall, or to form a strong point and additional strengthening to the wall by placing its tower and stone walls as a bastion or a flanking guard to the gate. There are many examples of the construction of Saxon churches in such a position; well-known are Wareham, Wallingford and Cricklade.

It is tempting to use the placenames within Bedford to bolster a tenuous argument but the

use of 'bury' names inside towns is a complex problem and usually are taken to represent town houses with their own fence or stockade, such as 'Erlesbyri' Exeter.³⁵

It is possible then to draw any number of lines around Bedford and call these the line of fortification, but the general area enclosed is clear. A line from the east of the Castle area curving round to pass close to St Peter's Church to the area of the junction of the Saffron Ditch (No 14 on Fig 1) would fit all the requirements. Detailed excavation and criticism can alter the particular but not the general implications of this fortification.

It is clear that the earliest known street plan, which can only be carried back to the thirteenth century by documentary means³⁶ but appears to have the castle as an insertion into it, is a regular, recti-linear one. These have recently been discussed in their relation to Late Saxon Towns³⁷, where it is suggested that these are the result of a planned laying out of the town, in keeping with the functions of defence, trade and settlement which were imposed on them. It is a feature to be found only up to *circa* 930. It would seem in agreement with this view to date the regular pattern of Bedford, together with its walls and bridge to the four weeks that Edward the Elder spent at Bedford.

EARLY MEDIAEVAL FINDS FROM BEDFORD FOR WHICH THE SITE IS KNOWN

Saxo-Norman Pottery

Site 1	High Street, Barclays Bank
2	High Street, Westminster Bank
3	High Street, Leonards
4	High Street, The Silver Grill
5	High Street, Rose's Extension 1936
6	High Street, Taylor Brawn Ltd.
7	Silver Street, Meakers Cellar
8	Silver Street, Old Jail Site
9	St Peter's Street, The Old House; Royal Insurance Company; Roger's Porter shop; Granada cinema.
10	St Mary Street

Sites 1-10 are partially summarised *Beds Arch J* 4 (1969) 84; partial publication of this material may be found *Beds Arch J* 3 (1966) 19-21; 4 (1969) 17-25. It is hoped to publish the more significant of the remaining St Neots ware material from Bedford in a future issue of *Beds Arch J*.

- 11 St John's and Cauldwell Street Excavations, see above.

Other Sites

- 12 Spindle whorl and threadpicker from road opposite St John's Hospital site found circa 1935. Information from F W Kuhlicke
- 13 Ipswich Ware sherd, Horne Lane, *Beds Arch J* 3 (1966) 58
- 14 2 Bone combs, off Horne Lane found in 1887, 10 feet from the surface in a thick deposit of mud, datable to c. 900-1100, Information from F W Kuhlicke.

St Peter's Church; Axial Tower and chancel datable to 950-1100 A.D., H M and Joan Taylor *Anglo-Saxon Architecture* (1965) 58; *Beds Arch J* 3 (1966) 8-9 and fig 3

St Mary's Church; South Transept, possibly Saxo-Norman, *VCH Beds* 1 (1904) 186; *Beds Arch J* 3 (1966) 9-11 and fig 5.

It is unclear if the present Church of St Paul's occupies its pre-Conquest position.

Acknowledgements

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FOOTNOTES

- 1 Most recently in: D H Kennett: St Neots Ware from Bedford: Jugs and Bowls. *Beds Arch J* 4 (1969) 17-25
- 2 Information from Bedfordshire County Record Office
- 3 *Beds Arch J* 4 (1969), 17-25
- 4 *P Camb Ant Soc* 58 (1965), 74-137
- 5 *P Camb Ant Soc* 49 (1956), 43-70; Eaton Socon Castle, Beds., *P C A S* 58 (1965), 38-73; Oakham Castle, Rutland, *T Leics A S* 34 (1958), 17-38; Humberstone, Leicester, *T Leics A S* 35 (1959), 1-32
- 6 G C Dunning, 'Mediaeval Chimney-pots,' in E M Jope (ed) *Studies in Building History* (1961), 78-93.
- 7 G C Dunning, 'A Mediaeval pottery Roof-Finial found at Portsmouth,' *P Hants F C* 25 (1969) 95-101.
- 8 G C Dunning, 1961, figs 2-3 and 5-6
- 9 J B Ward Perkins, 'English Mediaeval Embossed Tiles' *Arch J* 94 (1937) 128 ff.
- 10 J S Richardson, 'A Thirteenth-century Tile Kiln at North Berwick, East Lothian, and Scottish Mediaeval Ornamented Floor Tiles' *P S A Scot* 63 (1928-9), fig 18, 5.
- 11 J B Ward Perkins, 1937, and Elizabeth S Eames *Mediaeval Tiles, A Handbook* (British Museum 1968) 25-6 and pl XI.
- 12 The presence of tiles of this type from North Berwick, Repton and Revesby and of related tiles from Butley and St Albans in the British Museum has enabled the writer to compare size, fabric, glaze and other technical details.
- 13 Richardson (1928-29) 281-4.
- 14 Ward Perkins (1937) 144 and fig 7, 4.
- 15 J N L Myres 'Butley Priory, Suffolk' *Arch J* 90 (1933) 265-275, fig 5, and pls. VIII and IX
- 16 Elizabeth S Eames, 'The Products of a Mediaeval Tile Kiln at Bawsey, King's Lynn' *Antiqs J* 35 (1955) 162-181
- 17 I C Walker, 'Statistical Methods for Dating Clay Pipe Fragments,' *Post Med Arch* 1 (1967) 90-101
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- 22 D Whitelock *English Historical Documents*, 1 (1955) 380
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- 24 F M Stenton *Anglo-Saxon England* (1947) 258
- 25 *Ibid.* 334
- 26 Anglo-Saxon Chronicle *sub anno* 914, translated in Whitelock *E H D I* 195

- 27 Anglo-Saxon Chronicle *sub anno* 918, *recte* 915; *idem*
- 28 F W Kuhlicke 'The First Bedford' in *Bedford, A Survey* (1950) 3-7
- 29 Whitelock *E H D I* 386
- 30 The bridge is not mentioned specifically until 963 x 975 (Whitelock *E H D I* 519). But the form of the name Southwark, mentioned c. 919 in the Burghal Hidage, together with the action of the Danes who turned aside up the river Lea before reaching London in 895 (*E H D I*) would lead us to believe the bridge was constructed at least by Alfred.
- 31 I am indebted to Mr Nicholas Brooks for this observation.
- 32 Anglo-Saxon Chronicle *sub anno* 895; *E H D I* 188.
- 33 M D Lobel *Historic Towns* (1969) plan of Hereford 'Anglo-Saxon Burh and The Site'.
- 34 H M Taylor and Joan Taylor *Anglo-Saxon Architecture* (1965) 58; *Beds Arch J* 3 (1966) 8-9 and fig 3
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- 37 M Biddle and D Hill *The Late Saxon Planned Town Antiqs J* (forthcoming)

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