Excavations at Stert Street, Abingdon, Oxon

By Michael Parrington

SUMMARY

Excavations on this site produced evidence of successive stone structures fronting onto Stert Street, a small number of medieval pits, and a well. Post-medieval features consisting of a cellar and stone-lined cess pits were excavated. The environmental remains were of particular interest and the results are given of the analysis of animal bones from sieved and unsieved samples.[1]

INTRODUCTION

WHEN the Stert Street site became available in 1975, excavation was thought desirable well in advance of redevelopment, and a small trench was excavated by members of the Abingdon and District Archaeological Society. Work was carried out intermittently from Summer 1975 until Autumn 1976. The site is a vacant lot formerly occupied by numbers 38, 40, 42, and 44 Stert Street; the trench was laid out at right angles to the street, between two advertising hoardings which occupied most of the street frontage (FIG. 1).

HISTORICAL BACKGROUND

Stert Street is named after the River Stert, which flows underneath the street having been culverted in the eighteenth century.[2] An early reference to property on the Stert occurs in a deed of *c.* 1247,[3] but this property was probably on the east side of the stream. A reference in 1316 to the 'Street of Sterte'[4] may indicate that building had commenced on the west bank by this date. In 1554, when Amyce carried out his survey, there were 29 houses on the east side of the Stert, between the river and the abbey wall, but only 10 on the west bank.[5] The house, No. 40 Stert Street, which stood on the excavation site was thought by Spokes[6] to be seventeenth-century; it was known as Hathaway's Tea Room and Bakery, and was demolished in the 1960's. Until 1975 the site was used as a display area for gardening equipment.

[1] I am grateful to the owners of the site, Star Great Britain Managements Limited, for permission to excavate and to the members of the Abingdon Area Archaeological and Historical Society who worked on the excavation. I am also grateful to Alison Allden, Charlotte Harding, and Robin Spey, who drew the publication drawings, and to the writers of the specialist reports.

[2] A. E. Preston, *St. Nicholas Abingdon and other papers* (1929, reprinted 1971), 170.

[3] A. C. Baker, *Historic Streets of Abingdon* (1957), 24–5.

[4] Ibid.

[5] Roger Amyce, *Survey of Abingdon* (1554); P.R.O., L.R.Z./189, f. 211v.

[6] P. S. Spokes, 'Some Notes on the Domestic Architecture of Abingdon, Berks.', *Berks. Archaeological Jnl.*, lxiii (1960), 1–19.

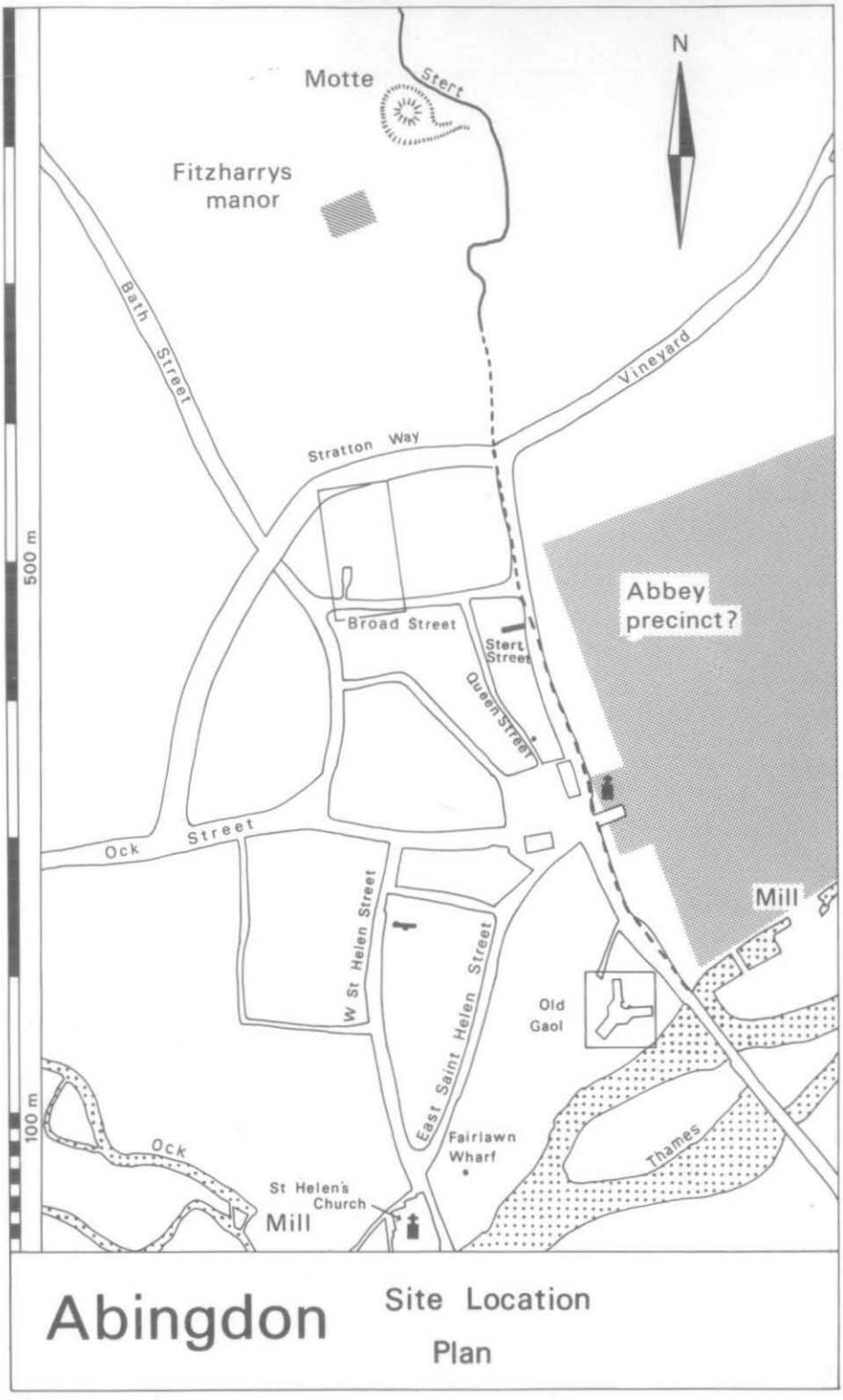

FIG. 1
Location plan also showing previous excavations in Abingdon.

THE EXCAVATION

Initially a trench 2 m. wide and 9 m. long was laid out; it was later extended to 4 m. by 15 m. Two main phases of activity, medieval and post-medieval, were recognised. The post-medieval features consisted of the brick and stone foundations of No. 40 Stert Street (F7 and F23), a stone-lined cellar with steps leading down (F26), two stone-lined pits (F8 and F27), a stone-lined well (F45), a robber trench (F35), and a stone wall (F75) at the west end of the trench (FIG. 2). These features were all within a layer of black loamy soil 40–50 cm. thick (layer 5) which was present throughout the trench (FIG. 3), except within the area defined by the foundations of No. 40 Stert Street where layer 10, a layer of yellow brown mortary rubble, was present. Many of the post-medieval features were disturbed by a modern drain trench (F9) which ran east to west through the trench and terminated by F27 (FIG. 2). All the post-medieval features were overlaid by layer 1 (FIG. 3) a layer *c.* 10 cm. thick of modern garden soil and rubble.

The medieval features examined comprised a number of pits (15, 24, 31, 32/34, 33, 44 and 72, FIGS. 2 and 3) which were recognised after the removal of layer 5, and which were cut into a similar layer of black loamy soil, *c.* 30–40 cm. thick (layer 11, layer 12 within the area defined by the foundations of No. 40 Stert Street). After the removal of this layer two other pits (65 and 66) were recognised, cut into a layer of greenish grey charcoally loam *c.* 30 cm. thick (layer 49) which was present throughout the trench (FIG. 3). Another pit (F43) was cut into a spread of gravelly loam (F43/1) which was below layer 11 and above layer 49 (FIG. 3). This spread of gravelly loam was confined to the north side of the trench, petered out *c.* 50 cm. from the edge of the trench, and was cut by pits 65 and 72.

Only pits 32/34 and 33 were completely within the trench and these were the only pits it was possible to excavate completely. By undermining the sections of pits 65 and 66 at the end of the excavation, most of the fill of these features was examined. Many of the pits were oval or round, and most had sloping sides and flat bases. Pits 65 and 66 were both long and narrow, and pit 43 was exceptionally large and shallow.

Most of the pits were filled with grey gravelly loam and many had layers of either greeny-grey soil or dark grey charcoally soil near the bottom. Pit 15 cut pit 24 which in turn cut pit 66; pit 32/34 cut pit 65, and pit 33 cut pit 43.

Pit 32/34 appeared to have had a timber lining supported on four posts, the remains of which were found at the bottom of the feature. In the half-section of this feature (FIG. 4) a central core *c.* 50 cm. wide (F34) composed of alternate layers of greenish-grey charcoally loam and layers of gravelly loam could be seen. At the edges of the core a brown stain *c.* 1 cm. thick indicated the former presence of wood. Outside the core, the feature was filled with homogeneous grey loamy soil (F32). The total width of the feature was *c.* 1·6 m. and it was *c.* 2 m. in depth. The bottom *c.* 50 cm. of the pit was waterlogged and the remains of four sharpened oak posts were preserved in the four post-holes.

Two adjacent post-holes were cut into layer 49 (F53 and F55, FIG. 2); 53 had the remains of packing stones, and both had a brown, sandy loam fill. They were both cut by the construction pit for well 45, and 55 cut pit 43. Within layer 11 was F22 (FIG. 2), a baby burial adjacent to wall 21. The burial was in a shallow pit with the

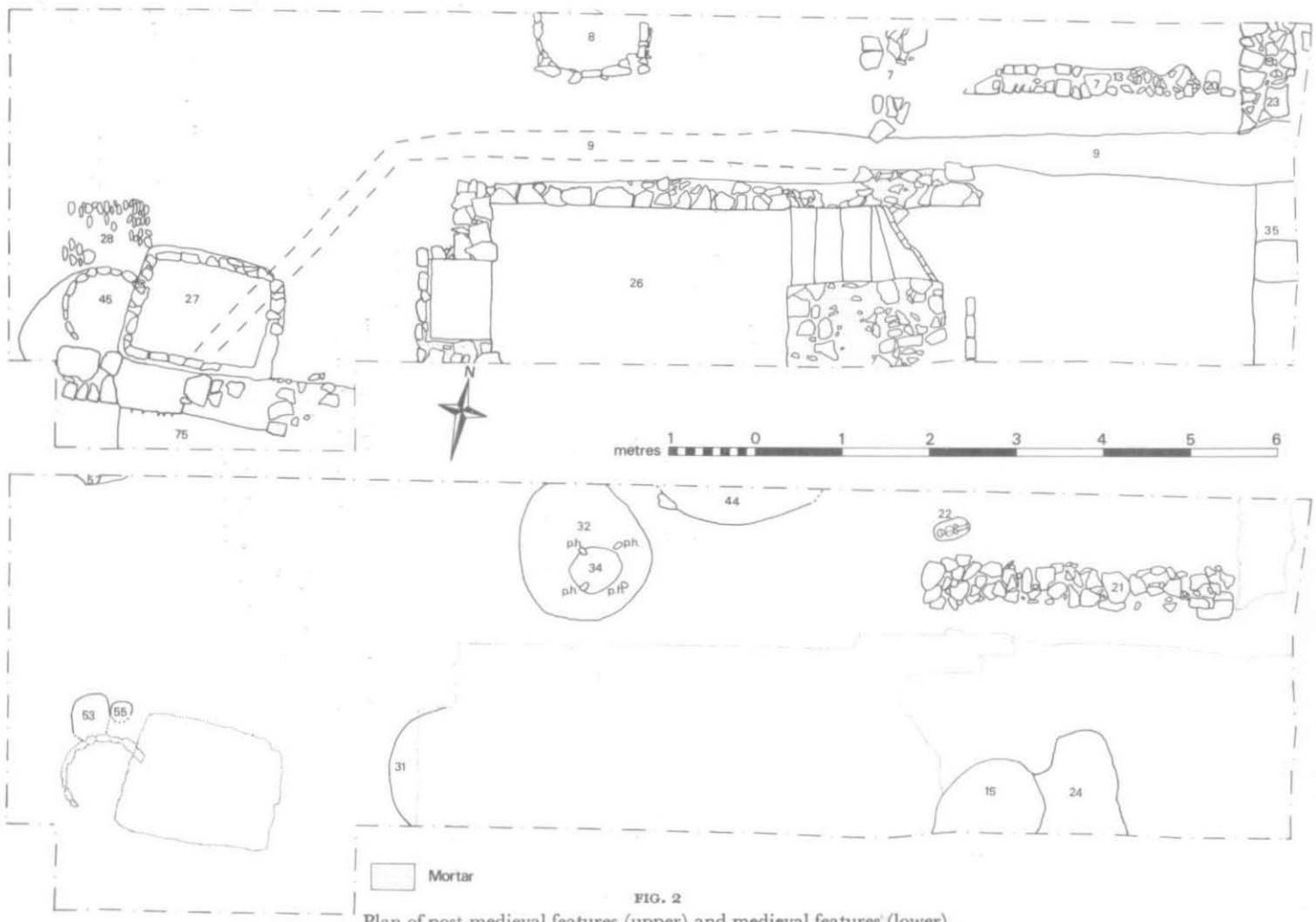

FIG. 2
Plan of post-medieval features (upper) and medieval features (lower).

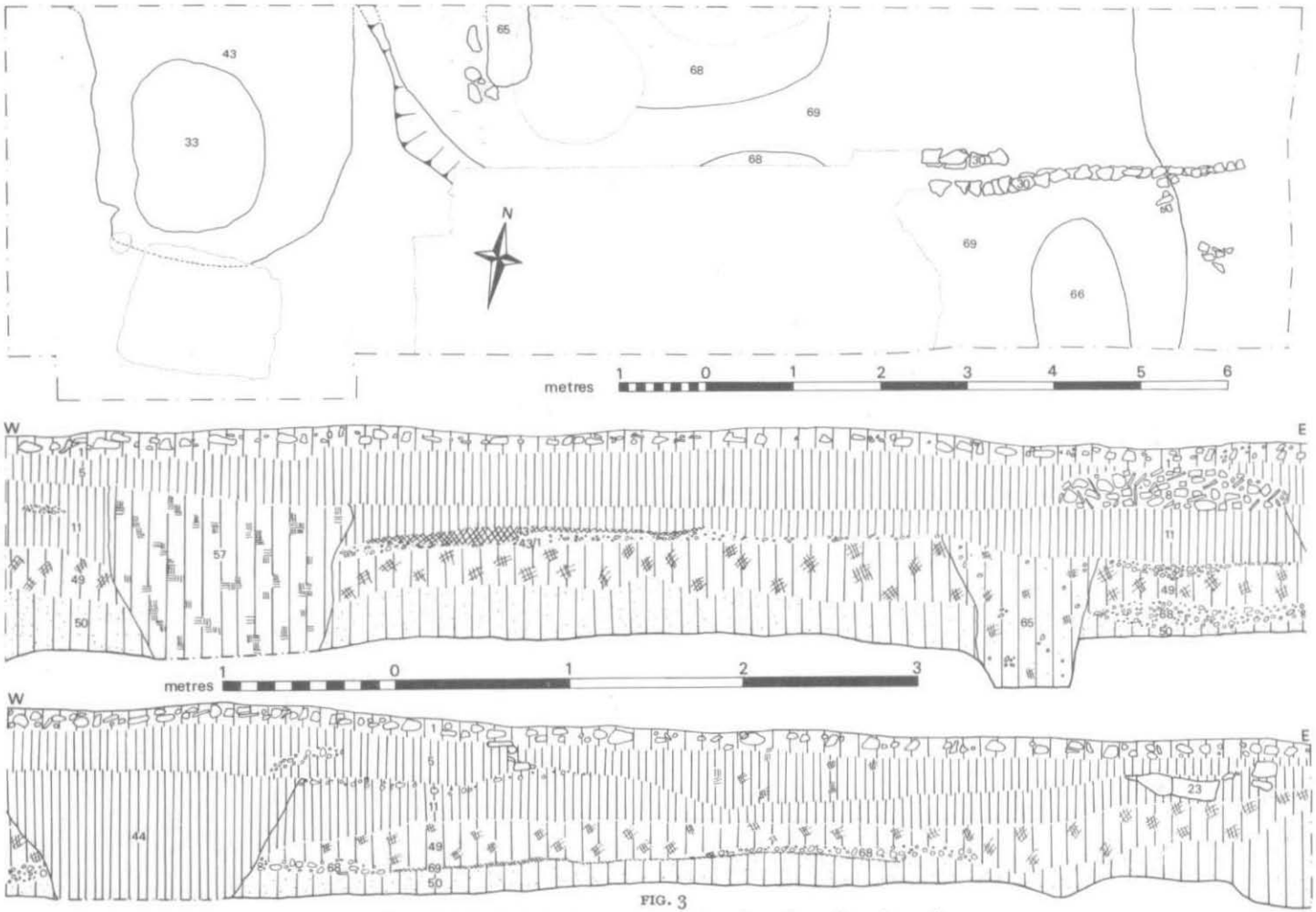

FIG. 3
Plan of early medieval features (upper) and north section of trench.

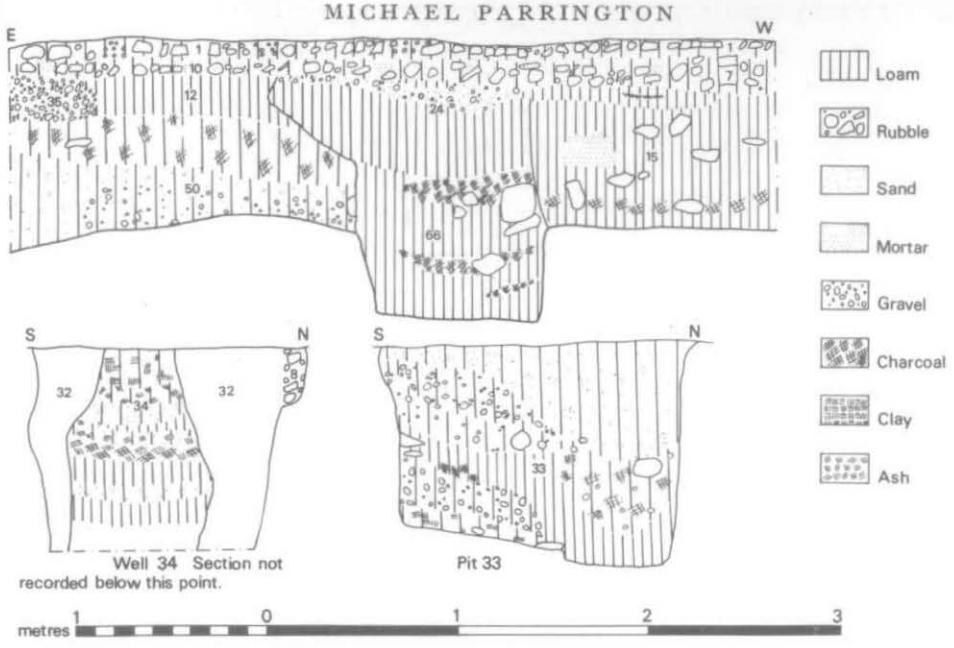

FIG. 4
Medieval pit sections and south section of trench.

head to the west; the east end was disturbed, probably by an animal burrow. The human remains from the burial are reported on below by Mary Harman.

Besides the post-medieval walls referred to above, the remains of two other stone structures were excavated. Wall 21 (FIG. 2) was composed of unmortared limestone fragments *c.* 20–25 cm. in size. The east end of the wall was cut by wall 23, and at the west end the wall terminated level with F22. The wall was below layer 5 and cut into layer 11. Wall 30 (FIG. 3) was south of wall 21 and consisted of two parallel lines of unmortared limestone fragments *c.* 20–25 cm. in size. The two lines of stones were each two courses in height and most of the most northerly line had been removed by the modern drain trench (F9). At the east end of the wall the stones had been removed by F35, and at the west end by the cellar wall, F26. Various other fragments of stone were found at the same level (FIG. 3), and may be associated. The wall was below layer 11 and cut into layer 49.

Below layer 49 was a layer of yellow/brown, sandy loam *c.* 30 cm. thick (layer 50, FIG. 3), which was present throughout the trench and above the natural gravel. Two layers were present above layer 50 and below layer 49. Layer 68 was a patch of gravel *c.* 5–10 cm. thick by the north side of the trench (FIG. 3). The gravel petered out *c.* 1·2 m. from the edge of the trench and was cut by pits 32/34 and 44. There was a small patch of the gravel by the edge of the cellar 30, which had cut it. Although the gravel petered out to the east of pit 44, evidence of it could be seen further east in the section, where it overlaid layer 69 (FIG. 3). Layer 69 was a discontinuous spread of black, very charcoally loam, between 1 cm. and 3 cm. thick, which petered out between 60 cm. and 1 m. from the east end of the trench, and petered out west of pit 65 where there was a rise in the level of layer 50 (FIG. 3).

After the removal of layer 50 various discolourations in the natural gravel were recognised. After excavation of some of these it was concluded that most were natural anomalies occurring in the gravel, although some did contain Roman pottery and seem likely to have been man-made. However, due to the restricted nature of the excavations and the proximity of the water-table at these levels, it was not possible to excavate these features in enough detail to define their function.

DISCUSSION

Roman

This small excavation produced further evidence of Roman activity on the site of Abingdon, although no structures or features of that date were found. The Roman finds consist of pottery and coins, much of the pottery and two of the coins coming from the earliest levels on the site. Another coin was associated with wall 30. This coin, probably of Theodosius I (see small finds report), is residual in context, but its late fourth-century date indicates that activity continued on the site of Abingdon late into the Roman period. A coin of Theodosian date was found on the Broad Street site,[7] and although too much should not be read into the presence of two late Roman coins, the evidence does seem to support the suggestion made by Dr. Myres that Roman activity continued on the site of Abingdon at the same time as the influx of Saxon settlers to the south of the town in the fifth century.[8]

Medieval

Most of the medieval features on the site were excavated during the very hot summer of 1976, when the extreme dryness of the ground made it very difficult to distinguish changes in soil colour and consistency. In retrospect it seems likely that the top fills of some of the medieval pits were removed with the general layers because of the difficulty of identifying them. Despite these difficulties, good groups of pottery were recovered from two of the pits which it was possible to excavate fully. To a certain extent the pottery from these pits contrasts with pottery from other Abingdon sites. On previous excavations much of the medieval pottery has consisted of small sherds, and it has seldom proved possible to reconstruct the profiles of pots. Pits 33 and 66 each contained the remains of several vessels which appeared to have been thrown in when they were comparatively whole.

The earliest stone structure on the site was F30 which was aligned at right angles to Stert Street and is tentatively interpreted as the wall of a building. It might, however, have been a drain, especially as it consisted of two parallel alignments of stones; as so little of the structure survived it is impossible to ascribe a precise function to it. The feature was cut into layer 49, which contained a few sherds of, probably intrusive, fourteenth-century pottery and may be fourteenth-century or later. Wall 21 was north of F30 and seems likely to be the precursor of No. 40 Stert Street, as its substantial foundations were partially overlaid by wall 7, the remains of that building. No dating evidence was recovered from wall 21, but it predates wall 7, which ought to be seventeenth-century.

The location of pits 66, 24 and 15 near the modern street frontage of the site

[7] M. Parrington and C. Balkwill, ' Excavations at Broad Street, Abingdon ', *Oxoniensia*, xl (1975), 46.

[8] M. Biddle *et al.*, ' The Early History of Abingdon, Berks. and its Abbey ', *Medieval Archaeology*, xii (1968), 41.

indicates that the nearby F30, if it was the wall of a building, is probably later than the fourteenth century, the date when pits 24 and 15 were filled in. Pit 15, however, contained wall plaster and large fragments of stone and tile, suggesting that a building had been demolished near the site in the fourteenth century. This would accord with the documentary evidence for fourteenth-century buildings on Stert Street. It is tempting to associate F30 with pit 32/34 which is interpreted as a well of fifteenth- or early sixteenth-century date. This feature could, however, equally well be associated with wall 21 from which no dating evidence was recovered.

In the upper part of the well the circular outline of a wooden lining could be seen, possibly indicating that it was lined with a wooden barrel.[9] Lower down, no evidence of the lining survived, and the four upright timbers in the bottom of the well presumably supported a wooden framework of some kind. A rich variety of environmental debris from this feature is described in later sections of the report.

Post-Medieval

The post-medieval remains provided little of archaeological interest, most of the finds being late nineteenth- or twentieth-century in date. With the exception of the cellar, very little of No. 40 Stert Street had survived the very thorough demolition of the building.

THE FINDS

POTTERY

As is usual on Abingdon sites, large amounts of medieval and post-medieval pottery were recovered and a smaller amount of Roman pottery. None of the Roman pottery was stratified, and apart from recording that local grey-wares, colour-coated Oxfordshire-wares, and Samian were present, it will not be discussed further. The stratified post-medieval pottery is all nineteenth-century or later in date and is also not discussed further. Three good groups of medieval pottery were excavated, and the more complete examples of these are described below and illustrated in FIGS. 5, 6 and 7.

All the pottery from the pits and the pottery from general layer 49 has been divided up into the type fabrics defined on the Broad Street site,[10] and the percentages and sherd numbers are shown in TABLE I (percentages in italics).

TABLE I

Feature No.	15		24		31		32/34		33		43		49		65		66		72	
A	*54*	14	*60*	36	*32*	27	*48*	141	*73*	412	*80*	47	*54*	134	*36*	48	*58*	457	*50*	1
B	—		*10*	6	*5*	4	*7*	19	*11*	64	*6*	4	*11*	27	*8*	10	*6*	52	—	
C	*38*	10	*20*	12	*18*	15	*11*	32	*10*	59	*10*	6	*25*	61	*56*	74	*36*	296	*50*	1
D	*4*	1	*10*	6	*40*	34	*13*	37	—		—		*3*	7	—		—		—	
E	—		—		*5*	4		1	—		—		—		—		—		—	
F	—		—		—		—		*1*	3	—		—		—		—		—	
G	—		—		—		—		—		—		*2*	4	—		—		—	
H	—		—		—		—		—		*2*	1	—		—		—		—	
J	—		—		—		*1*	2	*1*	6	—		*5*	12	—		—		—	
K	—		—		—		—		*4*	24	*2*	1		1	—		—		—	
L	*4*	1	—		—		*1*	2	—		—		—		—		—		—	
M	—		—		—		*19*	56	—		—		—		—		—		—	
Total sherds	26		60		84		290		568		59		246		132		805		2	
Approximate date	C13–C14		C13–C14		C13–C14		C15–C16		C13		C12–C13		C13–C14		C13		C13		—	

[9] A Saxon well lined with a barrel supported on four corner posts was recorded at Southampton. P. Holdsworth, ' Saxon Southampton; a New Review ', *Medieval Archaeology*, xx (1976), 43–5.

[10] Op. cit. note 5, 32–3.

The Illustrated Pottery

The following abbreviations are used in this section.

Broad Street	M. Parrington and C. Balkwill, ' Excavations at Broad Street, Abingdon ', *Oxoniensia*, XL (1975), 5–58.
Jope, 1947	E. M. Jope, ' Medieval Pottery in Berkshire ', *Berkshire Archaeological Journal*, L (1947), 49–76.
Old Gaol	M. Parrington, ' Excavations at the Old Gaol, Abingdon ', *Oxoniensia*, XL (1975), 59–78.
Seacourt	M. Biddle, ' The Deserted Medieval Village of Seacourt, Berkshire ', *Oxoniensia*, XXVI/XXVII (1961–2), 70–201.
Sturdy, 1959	D. Sturdy, ' Thirteenth Century and Later Pottery from the Clarendon Hotel and other sites in Oxford ', *Oxoniensia*, XXIV (1959), 22–36.
Tetsworth	M. Robinson, ' Excavations at Copt Hay, Tetsworth, Oxon. ', *Oxoniensia*, XXXVIII (1973), 41–115.

FIG. 5

1 Cooking pot with finger-tipping on rim, Fabric A. Knife-trimmed on widest part of body, Pit 33.
2 Cooking pot with finger-tipping on rim, Fabric C. Extensive lime deposit on inside, Pit 33.
3 Cooking pot, Fabric C. Pit 66.
4 Cooking pot, Fabric A. Lime deposit on inside of base, finely potted, Pit 66.
5 Cooking pot, Fabric C. Pit 66.
6 Cooking pot, Fabric C. Lime deposit on inside of base, Pit 66.

FIG. 6

7 Rim and handle of tripod pitcher, Fabric A. Applied strip with finger-impressed decoration on strip and each side of handle. Notched decoration on rim, green glaze (for handle decoration see Tetsworth, Fig. 15, No. 1 and Jope, 1947, Fig. 7, No. 4). Pit 33.
8 Body of tripod pitcher (probably of 7 above), Fabric A. Incised decoration consisting of combed horizontal and vertical lines, the horizontal lines being interspersed with wavy lines. The glaze varies from bright green to bright orange (*cf.* Old Gaol, Fig. 49, Nos. 4 and 5 for similar decoration). Pit 33.
9 Rim and handle of jug with pinched lip, Fabric A. Incised wavy-line decoration on body, finger-tip decoration on each side of handle, dark green glaze. Pit 66 (*cf.* Broad Street, Fig. 28, No. 57 for similar jug, *cf.* Tetsworth, Fig. 15, No. 4 for similar handle).
10 Rim and handle of large pitcher, Fabric C. Combed wavy-line decoration on body and neck and on handle. The rim has rouletted decoration and the handle is heavily finger-printed along each edge which is carried down onto the body to strengthen the join. Pit 65.
11 Dish, Fabric C (*cf.* Broad Street, Fig. 29, No. 62 and Seacourt Fig. 25, No. 16). Pit 66.

FIG. 7

12 Large pan, Fabric C. Combed wavy-line decoration on body and neck and on inside of neck and top of rim (*cf.* Jope, 1947, Fig. 6, No. 3). Pit 66.
13 Small jug, Fabric D. Very hard-fired fabric, patch of dark green glaze on body. Pit 32/34.
14 Large double-handled storage jar, Fabric D. The large strap-handle has a stabbed decoration and is luted to the body of the jar through a hole bored in the side. The excess clay is smoothed over the hole on the inside and is carried round the outside of the neck and decorated with finger-tipping. The rim of the jar has a seating for a lid,

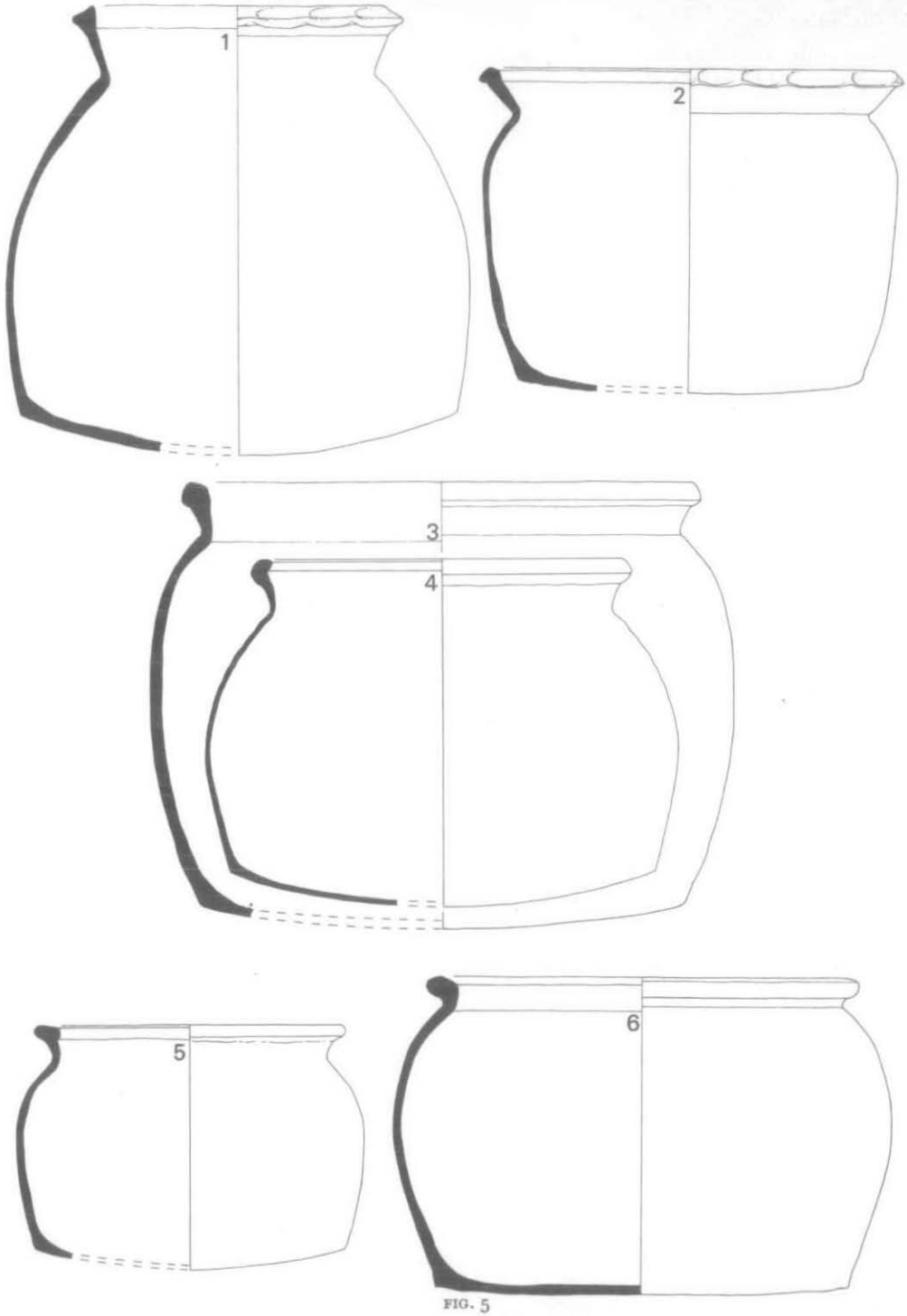

FIG. 5
Medieval pottery 1–6, scale $\frac{1}{4}$.

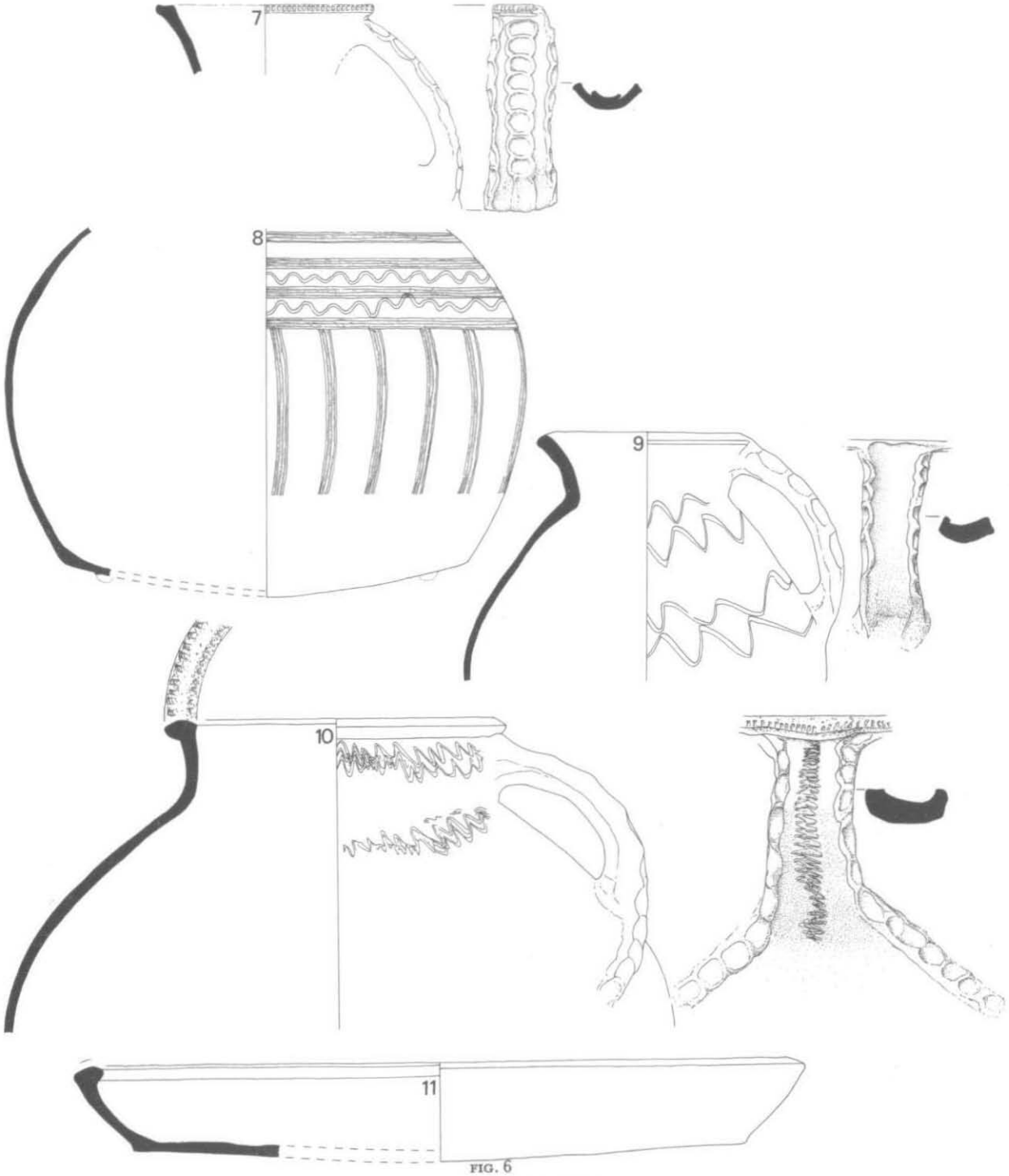

FIG. 6

Medieval pottery 7–11, scale ¼.

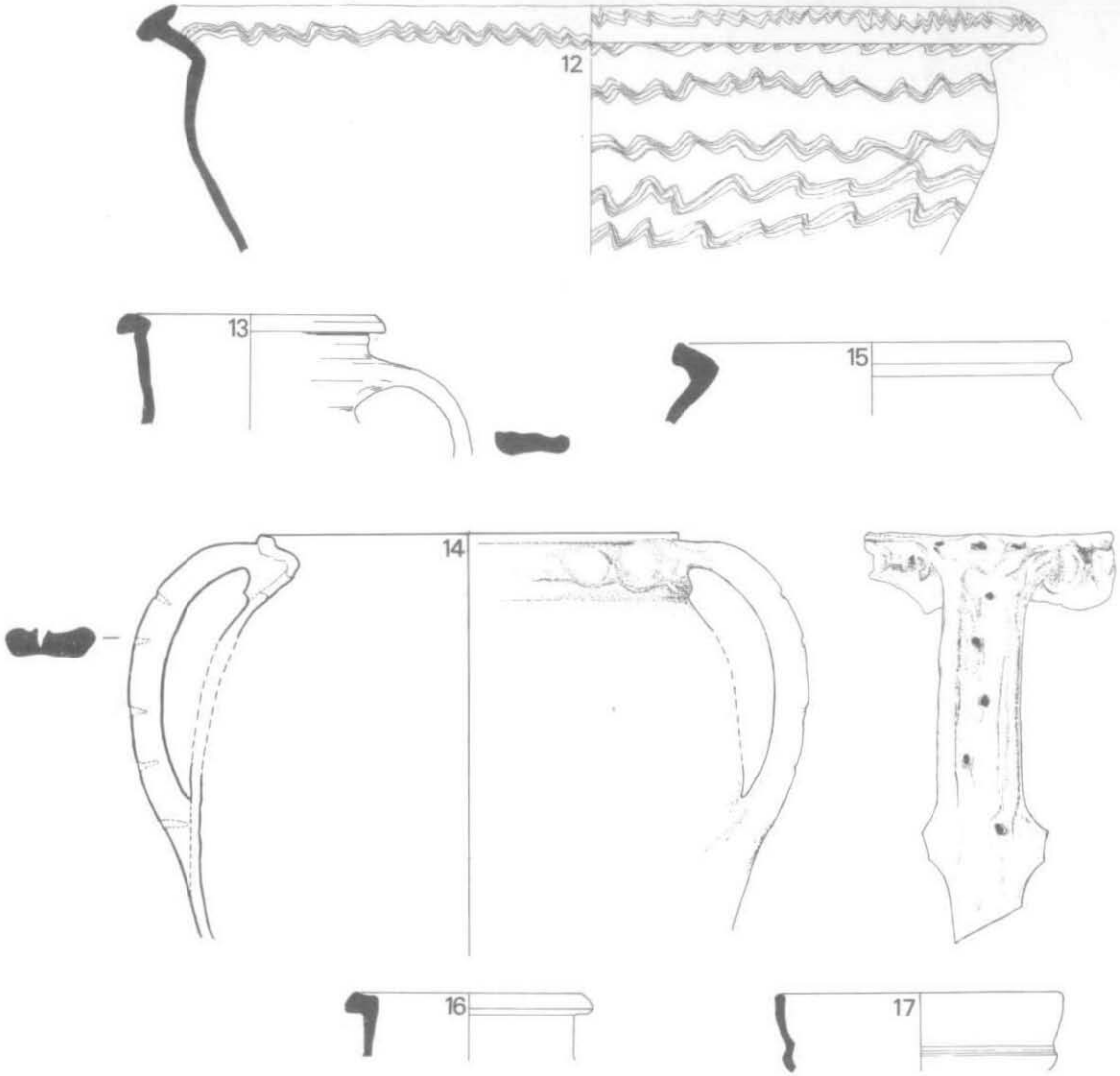

FIG. 7
Medieval pottery 12–17, scale ¼.

patchy green glaze (*cf.* Sturdy, 1959, Fig. 14, No. 3 for a similar type of large storage jar). Pit 32/34.
15 Jar, Fabric D. Patchy green glaze. Pit 32/34.
16 Small jug, Fabric D. Patch of clear glaze below rim. Pit 32/34.
17 Rim of lobed cup, Fabric M. Mottled green glaze (*cf.* Broad Street, Fig. 33, No. 126). Pit 32/43.

Discussion

The cooking pots and pitchers from pit 66 are thirteenth-century type, and so is the large dish number 12. The vessels from pit 33 also fit into a thirteenth-century context and

it seems likely that the two pits are contemporary. Only one vessel is illustrated from pit 65 (number 10). The fabric and decoration on this is similar to number 12, and pit 65 is probably thirteenth-century also. This dating is borne out by a cut penny from the bottom fill of pit 24 dated 1180–1247 (see small finds report below). Pit 24 cut the fill of pit 66, and from the position of the coin when found it seems likely that it was in the top of pit 66, although in the small finds report the original attribution is adhered to.

The other group of pottery from pit 32/34 is associated with two French type jettons (see small finds report below) which may be as late as the fifteenth-century, and the presence of the lobed cup, sherd 17, and the very hard-fired fabrics of the other illustrated sherds suggests that a late-fifteenth-century or even early-sixteenth-century date is appropriate for the feature. The other pits and F49 are tentatively dated at the bottom of TABLE I.

SMALL FINDS

FIG. 8

1 Bronze Nauheim-derivative brooch formed from one piece of bronze, four-coil spring, first-century B.C. to first-century A.D., from pit 33, length from spring to catch plate 42 mm.
2 Bronze openwork belt-chape with stylized animal decoration, from medieval pit 43, width of chape 30 mm.
3 Bronze lace-tag, from late medieval well 32/34, length 33 mm.
4 Bronze bolster or knife-fitting with hole for securing to the tang, faint traces of engraved zig-zag decoration, from medieval pit 33, width 20 mm.
5 Iron buckle with bronze plate; the plate has the remains of two rivets and rivet-holes where it was attached to the strap, from late medieval well 32/34, width of buckle 42 mm.
6 Iron door-stud, from medieval pit 66, diameter of stud 20 mm.
7 Iron strip with two pieces of bronze rivetted on one end; there are the remains of organic material (wood?) adhering to it, from medieval pit 15, length 58 mm.
8 Iron rowel spur, from pit 15, width 38 mm.
9 Stone spindle-whorl, from pit 66, diameter 33 mm.

FIG. 9

10 Bone implement, highly polished with one pointed end and one chisel-like end, use unknown (a similar object was found in an unstratified context on the site) from late medieval well 32/34, length 95 mm.
11 Bone knife-handle, highly polished, with three bands of incised ring-and-dot decoration, bored hole in one end for attachment to knife-tang, from medieval pit 66, length 78 mm.
12 Bone needle with bored 3 mm. eye, from general layer 59 (equivalent to layer 49) length to broken end 75 mm.
13 Bone skate made from the radius of a horse. The anterior surface of the bone is worn flat and polished. The proximal and distal ends of the bone have been trimmed to remove any projections that might cause undue friction, and the ulna has been partially removed to create a more secure foothold.[11]
14 Fragment of glazed floor-tile (not illustrated), Loyd Haberly type XXXI[12] from general layer 29 (equivalent to 11).
15 Cut down *Terra Sigillata* base stamped ACVRIOF (not illustrated) from general layer 49, diameter 52 mm.[13]

[11] The identification of objects such as No. 13 as skates has been queried in the past but a recent paper has demonstrated conclusively that this was their function: A. Macgregor, ' Wear Patterns: The Evidence from Bone Skates ', *Jnl. of Archaeological Science*, ii (1975), 385–90.
[12] Loyd Haberly, *Medieval English Paving Tiles* (1937).
[13] ACVRIO of Lezoux, Trajanic-Hadrianic. F. Oswald, *Index of Potters Stamps on Terra Sigillata* (1931).

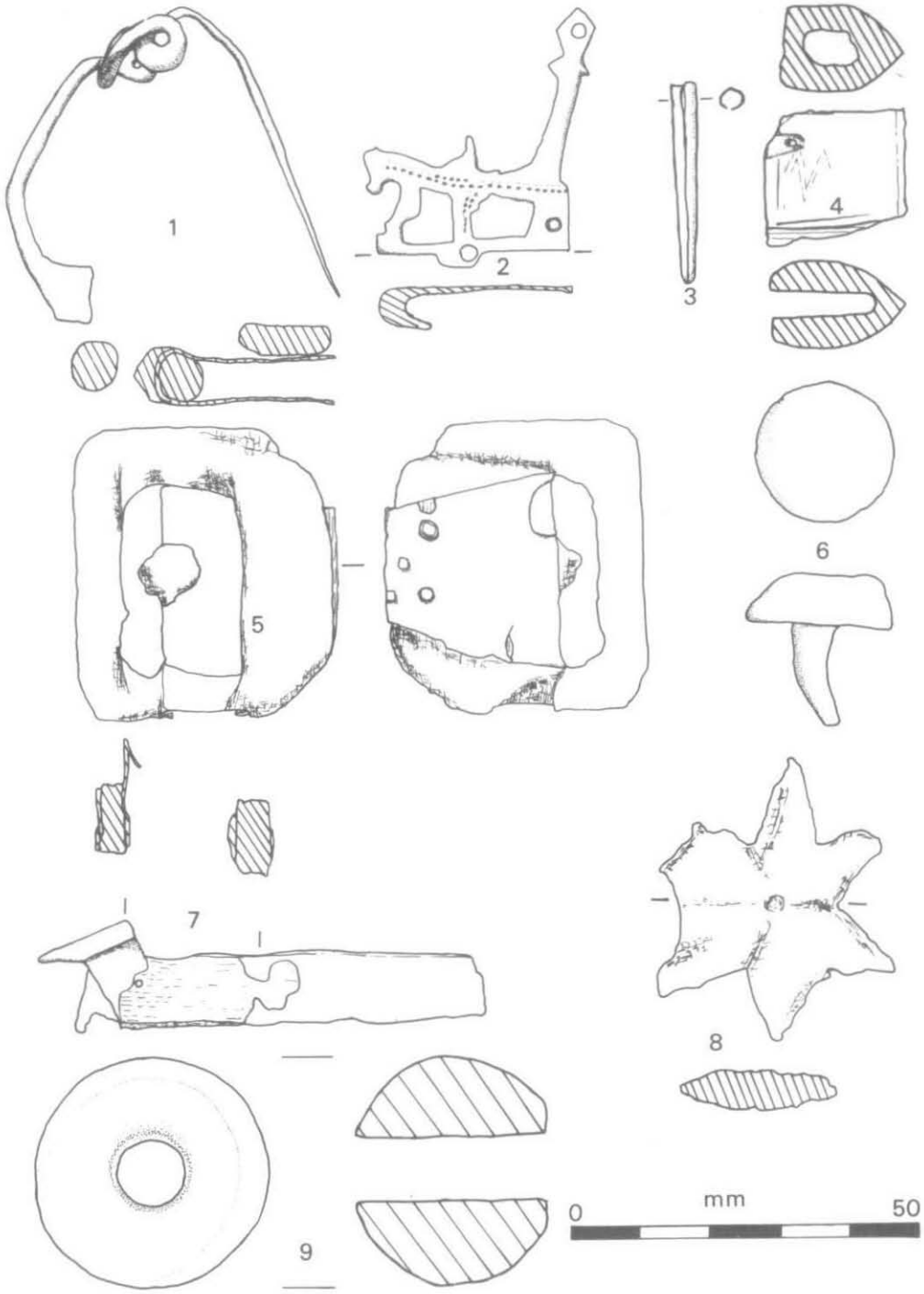

FIG. 8
Small finds 1–9, scale ½.

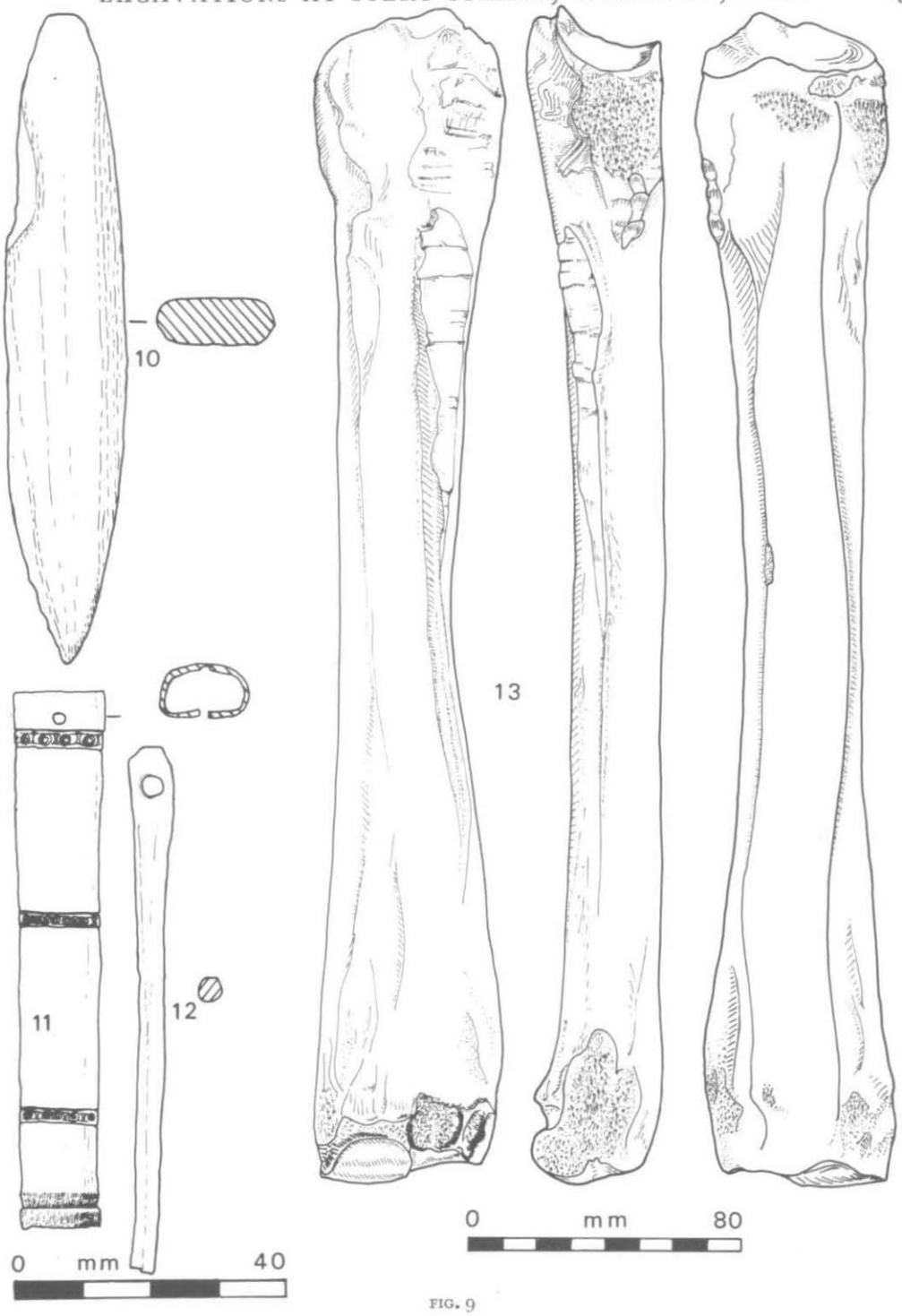

FIG. 9

Small finds 10–12, scale $\frac{1}{2}$, 13 scale 1 : 1.

THE COINS[14]

1 Dupondius of Vespasian, Roma seated on reverse A.D. 71?, from general layer 59/1 (equivalent to 49).
2 Roman bronze coin, obverse and reverse illegible, *c.* first- or second-century, from below level of layer 50.
3 Bronze coin of Theodosius I, reverse and obverse illegible, *c.* 379–395, from wall 30.
4 Cut silver short-cross penny, London mint *c.* 1180–1247 (moneyer's name missing), from pit 24.
5 French-type jetton, thirteenth- to fifteenth-century, from well 32/34.
6 French-type jetton, *c.* fourteenth- to fifteenth-century, from well 32/34.
7 Nuremburg jetton, late sixteenth-century (Krauwinkel), from pit 27.
8 Farthing, George II, dated 1775?, unstratified.
9 Penny, Queen Victoria, dated 1861, from layer 10.
10 Halfpenny, Victoria, dated 1861, from layer 26.
11 Halfpenny, Victoria, dated 1862, unstratified.
12 Sixpence, George V, dated 1914, from feature 9.

TEXTILE FRAGMENTS. By GWYN MILES

Several fragments of calcified textile were found in the late fifteenth- to sixteenth-century well 32/34. The largest of these was 12 mm. by 11 mm., the rest were less than 10 mm. square. The brittle nature of the fragments and the uniformity of structure suggest that they originally made up one piece approximately 40 mm. square. All the edges of the piece appear to have been cut. From its appearance the fabric could have been linen or wool; owing to its calcified condition fibre-identification is uncertain. The fibres are fairly evenly Z spun in both systems. The weave is a regular tabby, count 16/18 threads per cm.

It is unusual to find a wollen fabric of this date which has both systems Z spun with a simple tabby weave. There is, though, an example from West St. Helen Street, Abingdon,[15] which Elisabeth Crowfoot suggests may be a domestic product rather than commercially manufactured. The method of manufacture is one which is more appropriate to linen, and this alternative seems more likely in this case.

THE INFANT SKELETON. By MARY HARMAN

The remains consist of an infant skeleton, probably newly born, lacking most of the pelvis, the left humerus, and the left femur.

Bone Measurements	
humerus	66·4
radius	53·9
ulna	61·7
femur	75·0
tibia	69·5
fibula	—
clavicle	44·0
mandible	51·7

THE MAMMAL BONES AND OTHER ENVIRONMENTAL RECORDS. By BOB WILSON

Largely as a result of sieving soil samples, the environmental data from Stert Street form the most complete record yet obtained from a medieval site in Abingdon. Consequently the dietary evidence is less biased than that from other sites, particularly with regard to the consumption of fish.[16]

[14] The coins from the site were kindly identified by the staff of the Ashmolean Museum coin room.
[15] D. Miles, ' Excavations at West St. Helen Street, Abingdon ', *Oxoniensia*, xl (1975), 97.
[16] Thanks are due particularly to Dr. Wheeler and Mr. Bramwell for their complementary work on the vertebrate bones. I am grateful to G. S. Cowles, J. Coy and M. Robinson for their attention to identification problems, to R. Hallet for lease information, and to younger members of the Abingdon Archaeological and Historical Society for their help in sorting the sieving residues.

As well as bone and shell, which were collected normally, small quantities of feature deposits were sieved using 2·5 mm mesh. Data of bones from dated features have been classified in TABLES 2–5. The methodology generally follows that in previous reports.[17] The most frequent remains of species apart from fish are given in TABLE 2. The dating of features is: 12th–13th-century F43; 13th century F33, F65, and F66; 13th–14th-century

TABLE 2

ANIMAL BONE AND SHELL FREQUENCY AT STERT STREET

	Normal samples											
Feature number	43	33	65	66	15	24	31	49	32	34	45	Total
Cattle	5	32	9	109	9	5	10	55	11	10	98	333
Sheep	14	82	14	192	43*	3	8	111	18	30	140	655
Pig	5	33	4	18	22	1	5	44	9	5	25	171
Domestic fowl	7	26	6	44	9	1	1	18	16	22	5	155
Domestic goose	2	26	7	5	–	–	–	4	2	–	–	46
Oyster	–	2	–	–	1	1	–	5	5	60	10	84

	Sieved samples				
Feature number	33	66	32	34	Total
Cattle	–	1	–	–	1
Sheep	10	1	3	24*	38
Pig	1	–	1	71†	73
Domestic fowl	3	–	1	65	69
Domestic goose	1	–	–	–	1
Oyster	–	–	–	31	31
Domestic goose	1	–	–	–	1
Oyster	–	–	–	31	31

* excluding caudal vertebrae
† excluding sesamoids

F15, F24, F31, and F49; 15th–16th-century F32 and F34. F45 is dated as 19th-century (p. 3), but it is possible that this date is determined from upper level disturbance of a 16th-century well.[18] F34 is also a well, and the remaining features are pits. Other identified species (not included in the table) from unsieved samples include: horse, F34 (small find 10); 2 dog, F45; 5 cat, F33(4) and F49; 10 rabbit, F32/34(8) and F45(2); red deer antler fragment, F45; fallow deer, F66; roe deer, F33; house mouse, F34; 4 common mussel, F32/34(3) and F45; and a common periwinkle *Littorina littorea*,[19] F49. A nearly complete fallow deer antler occurred in F47 (medieval–post-medieval deposit), and a proximal metatarsal of the same species in the modern topsoil. Rat bones are difficult to specify but *c.* 19th-century bones in Features 11, 17, and 27 appear to represent both species, while a humerus from F33 is most similar in size to those of black rat.

The sieved remains were from samples of unequal size: 12 14-litre buckets of soil from F34, 2 from F32, *c.* 3 each from F66 and F33. Sample sizes were determined chiefly by an apparent abundance of remains in F34, and supplemented by residues from floated soil samples from F33 and F66. Cattle ribs were present, but my method excludes such elements. The results also exclude sesamoid bones (110 of pig in the sieved sample), and caudal vertebrae, almost certainly of sheep, in F34(21) and F15(40). Single elements of house mouse, mole, and watervole came from the sample from F33, and cat, dog, field vole, unspecifiable rat, and a cockle shell from F32. Common mussel shell fragments (13)

[17] R. Wilson, D. Bramwell, and A. Wheeler, 'Animal Bones from Broad St. and Old Gaol Sites', *Oxoniensia*, xl (1975), 105–20.
[18] Information from M. Mellor.
[19] Information from M. Robinson.

occurred in F32 and F34, and house mouse from F34(31) included a burnt bone, probably establishing it as a genuine record rather than an intrusive bone.

TABLE 3 compares the proportions of the bones of head (excluding vertebrae), foot (all metapodial bones including the associated joint bones), and body regions among the 12th–13th- and 13th–16th-century cattle and sheep remains, F66 and F49 respectively

TABLE 3

PERCENTAGES OF GROUPED SKELETAL ELEMENTS OF SHEEP AND CATTLE IN EARLY AND LATE-MEDIEVAL SAMPLES FROM ABINGDON

Cattle

	12th- to 13th-century					13th- to 16th-century	
	Stert Street	Broad Street	Market Place	Old Gaol	West St Helens 1971	Stert Street	Broad Street
Sample size (n)	155	152	97	65	60	100	135
% head	35	34	26	38	62	24	22
feet	37	29	25	31	15	34	22
body	28	37	49	31	33	42	53

Sheep

	12th- to 13th-century					13th- to 16th-century	
	Stert Street	Broad Street	Market Place	Old Gaol	West St Helens 1971	Stert Street	Broad Street
Sample size (n)	302	177	146	79	74	213	132
% head	39	44	8	30	47	28	27
feet	24	18	12	21	20	13	25
body	36	38	82	49	32	59	48

contributing the major portion to each sample. Head and foot elements are relatively common among the debris of cattle and sheep, notably 11 horn cores of immature sheep from F66 and 5 larger ones from F15. Not counted in TABLE 3 because of dating uncertainty is F45, which had a preponderance of cranial debris of sheep. TABLE 3 compares samples from other Abingdon sites that fit into the given periods.

Minimum numbers of individuals for samples of different periods are given in TABLE 4, following Chaplin,[20] except that the oyster determination is based on the maximum number of either of the two symmetries of the adductor muscle scar on the shells. Almost certainly this under-represents the relative abundance of oysters. Minimum numbers of other species are one each, except for two cats in the 12th–13th-century sample. Minimum numbers for the sieved samples were too low to table, but for F34 pig and domestic fowl (3 each) numbered more than sheep (1), or cattle (0). The dietary equivalent, however, may be only a small part of such ' individuals '.

TABLE 4

MINIMUM NUMBERS OF INDIVIDUALS (MNI)

Period	12th- to 13th-century		13th- to 14th-century		15th- to 16th-century	
	n (sample size)	MNI	n (sample size)	MNI	n (sample size)	MNI
Cattle	155	4	79	4	21	1
Sheep	302	9	165	7	48	2
Pig	60	3	72	4	14	2
Domestic fowl	67	6	21	4	38	4
Domestic goose	34	2	–	–	2	1
Oyster	2	1	7	3	65	33

[20] R. Chaplin, *The Study of Animal Bones from Archaeological Sites* (1971), 70–75.

Although the sieved samples were relatively small, it was thought useful to classify bones into mammal, bird, and fish categories, weigh these, and compare their proportions in sieved and unsieved samples (TABLE 5).

TABLE 5

PERCENTAGE BY WEIGHT OF ANIMAL BONE CLASSES

Feature	Unsieved samples				Sieved samples		
	33	66	32	34	66/33	32	34
Mammal	93	99	97	95	83	94	71
Bird	3	0·8	2·3	3	9	2	18
Fish	1	0·2	0·4	2	8	4	11
Weight (kg.)	2·98	5·28	0·69	1·18	0·29	0·07	0·67

The differences between sieved and unsieved samples are of major interest.[21] Unfortunately sample sizes are rather small to rely on the data at species or skeletal element level. Among the mammal remains, most of the 181 sesamoid and phalangeal bones from immature pigs would probably have been missed by ordinary recovery, and indeed only two were recovered normally. Sieving showed that house mouse bones were also present in quantity in F34. All these elements fall into the 0–2 cm. length class, where bones are not likely to be retrieved normally, but the recovery of scarcely larger caudal vertebrae seems quite good—perception of these lightly coloured vertebrae was probably better than that of the darker, pebble-like piglet bones.

In the sieved samples F32–4 only 14% of the mammal bones were identified to species level, while the identification level of normally collected bones from the corresponding normal feature samples was 31%. Fish and bird bones are more likely to be recovered by sieving than other vertebrate bones.[22] A few extra species of birds were found by sieving alone—namely the duck (similar to shelduck) and the hedgerow species difficult to identify. In contrast neither swan nor redwing were represented among the sieved material. Unfortunately fish identifications were not categorized as sieved or unsieved results, so that the extent of their recovery by sieving will not be appreciated readily. Nevertheless, the species list can be compared with the few sea fish bones from Broad Street, Abingdon[23] and St Aldates, Oxford,[24] the latter site with twice the number of larger mammal bones identified but only one freshwater fish bone. It is significant that at Stert Street not one of the hundreds of eel vertebrae was found by normal excavation. Fish/bird/mammal bone weight ratios need substantiation at other sites and relation of flesh/bone weight ratios also requires investigation,[25] but clearly sieving shows that fish were more important than most British archaeological evidence has shown previously.

In general the results in TABLE 3 seem to confirm differences between the early and late medieval samples at Broad Street.[26] The percentages of foot and head debris of cattle and sheep decreases while the variety of species eaten generally increases. These trends may be related to increasing affluence and to changing butchery, industrial, and rubbish deposition patterns over time, but they vary from one part of the town to another and may not be caused by sampling or other methodological problems. The meat diet of Stert Street consumers might be comparable to that elsewhere in Abingdon, although inferior to that of the Market Place consumers during the 12th–13th-century (report obtainable from Oxfordshire Archaeological Unit).

The sheep mandibles in F45 and the horn cores in F15 and F66 have sufficient in-

[21] S. Payne, ' Partial recovery and sample bias ', *Archaeological Studies* (1975), ed. A. T. Clason, 7 ff.; J. Watson, *Archaeometry*, xiv (2) (1975), 221–8.

[22] S. Payne. *op. cit.* 7 ff.

[23] Wilson, Bramwell, and Wheeler, *Oxoniensia*, xl, 112.

[24] B. Durham *et al.*, ' Archaeological Excavations in St. Aldates, Oxford ', *Oxoniensia*, xlii (1977), 166–7.

[25] R. W Casteel, ' Faunal assemblages and the ' wiegen methode ' or weight method ', *Jnl. of Field Archaeology*, v, 171–77.

[26] Wilson, Bramwell and Wheeler, *Oxoniensia*, xl, 110.

group similarities to suggest sheep bought and slaughtered in lots, but it is doubtful whether the 13th–16th-century remains indicate the presence of butchers on the site. In the 16th-century, and possibly earlier, Butcher Row and an associated slaughter house existed 0·1 km. distant from the site. This was confirmed by the discovery at the Old Gaol of a 16th-century pit containing a mass of sheep metapodial bones.[27] Possibly the cranial debris in F45 is related to a nearer slaughter house, which stood between Stert Street and Otwell Lane from at least 1634 to 1787,[28] on or adjacent to property at No. 22 Stert Street where a slaughter house and butcher's shop have stood from at least 1864 to the present day.

F34 is particularly interesting because of the wide range of organic material recovered from it. Preservation of cloth, seeds, and arthropods was apparently due to the replacement of organic tissues by calcium phosphate and some calcium carbonate (p. 23). The oyster shells were crumbly, so leaching and chemical redeposition within the feature is possible. Such processes may have occurred in the highly organic conditions of a cess pit such as the well could have become.

Physical deposition within the well was layered (p. 3) and uneven—*e.g.* the oysters occurring at one level—and suggestive of infilling or rubbish dumping in a number of stages. Ashy layers may be simply rubbish disposal, or perhaps deliberate attempts at quickliming. The presence of mice and woodlice may have been restricted by the water table to the later stages of deposition. However, some of the remains, *e.g.* the burnt mouse bone, are also suggestive of rubbish dumping, scavenging, and partial decay and burning elsewhere before deposition. It is possible that the fruit, redwing, fieldfare, and eel remains are indicative of diet in the autumn and winter, these being times of their availability or even relative abundance. Informative though this feature is, a careful sampling strategy would have allowed a more elaborate analysis of depositional factors. However, the aim of sieving was to demonstrate the abundance of small bones to be found in local medieval features.

THE BIRD BONES. By DON BRAMWELL and BOB WILSON

Results from sieved and unsieved samples in features 32–4 are included without distinction in TABLE 6.[29] Increased bone recovery from sieving produced an excess of vertebrae, mainly of domestic fowl, but not all were identified to species level.

TABLE 6

FRAGMENT FREQUENCY OF BIRD BONES

	12th- to 13th-century	13th- to 14th-century	15th- to 16th-century	16th- to 19th-century (F45)
Domestic fowl	85	29	103	5
Domestic goose	41	4	2	–
Domestic duck	4	1	4	–
Dove *cf.* domestic	3	–	19	2
Swan	–	–	14	–
Rook/crow	1	–	1	1
Starling	4	–	–	1
Fieldfare	–	–	21	–
Redwing	–	–	5	–
cf. Skylark	1	–	4	6
Other	Golden plover 3 Hedgerow sp. similar to finch 1 Snipe 1	Jackdaw 1 Snipe 1	Pygmy cormorant 2 Hedgerow sp. similar to finch 1 Duck similar to shelduck 1 Rook 1	Songthrush 1

[27] M. Parrington, ' Excavations at the Old Gaol, Abingdon ', *Oxoniensia*, xl (1975), 59.

[28] Berks. Record Office, Abingdon Mayor's Bk., 1634; Abingdon Museum, 2nd lease bk. (1662), borough leases 1684–1787.

[29] Results and notes largely supplied by Don Bramwell are synthesized in the following report.

A pair of carpometacarpals from F34 was the subject of hours of patient comparative search by Don Bramwell, Graham Cowles and his assistant, and Jennie Coy, and was finally identified as a pygmy cormorant (*Phalacrocorax pygmaeus*), a bird which ' has never been recorded in Britain, even as a rare vagrant. The species once ranged through Hungary, Yugoslavia, Turkey, Israel, Algeria and the Black and Caspian Sea areas but now, due to the draining of land, its range has become more and more restricted. Its nearest occurrence has been France and Germany and here it has been recorded as " accidental " '.[30]

Swan, golden plover, snipe, fieldfare, redwing, skylark, starling, jackdaw, and shelduck also have not been recorded previously in Abingdon in the 12th- to 16th-centuries.[31] Overall, the identified species are typical of water, meadow, arable and parkland environments. Fieldfare and redwing are thrushes which are often regarded as winter visitors to Britain from the Continent, although both species are now recorded as breeding in Northern Britain,[32] so these birds may have been captured and eaten in the winter. Some fragments of fieldfare in F34 and of songbirds in F45 are reminiscent of owl pellet material, so there is doubt as to whether all the birds were eaten by people, but fieldfare, songthrush, and skylark were recorded at Baynards Castle, London.[33]

The domestic fowl bones vary in size; many are of smaller varieties, but some approach modern fowl proportions. About 40% of the fowl appear to be juvenile birds, and the dove and swan bones are also immature.

FISH REMAINS. By ALWYNE WHEELER, Department of Zoology, British Museum (Natural History)

Fish remains from excavations at Stert Street were examined and identified by comparison with study material in the collection of the British Museum (Natural History). A detailed list of diagnostic elements is given in the site archive record. The overall results are summarized in TABLE 7. No distinction between sieved and unsieved bones is given, but the bulk of material is from sieved soil samples, the largest of these coming from F34. The bulk of the eel bones in this feature were vertebrae, but some five to nine individuals seem to be represented among these.

The fish recognised in these samples comprise both marine and freshwater species in both the thirteenth and the fifteenth–sixteenth century levels. Of the freshwater fishes by far the most numerous in terms of numbers of bones recognised is the eel, *Anguilla anguilla*, a species which has been found in other excavations at Abingdon (Barton Court Farm and East St. Helens Street). There is little doubt that the eel was the prime food fish at Abingdon, as it was elsewhere on the Thames. Other freshwater species occur in most of the samples. The pike, *Esox lucius*, is represented in the thirteenth, thirteenth–fourteenth-, and fifteenth–sixteenth-century periods, evidentally in small numbers, although occasionally by large specimens (up to 1·5 m. and a possible weight of 12 kg.). There is nothing inconsistent in all the freshwater fishes having been captured in the Thames or its backwaters; none are confined or particularly common in lentic habitats. Thus, the chub, *Leuciscus cephalus*, dace, *L. leuciscus*, bleak, *Alburnus alburnus*, barbel, *Barbus barbus*, and roach, *Rutilus rutilus*, are all common cyprinid fishes in the Thames today, although in a more natural river they would tend to occupy diverse ecological niches. The perch, *Perca fluviatilis*, the ruffe, *Gymnocephalus cernuus*, and the stickleback, *Gasterosteus aculeatus*, are likewise all common, although the last tends to live mainly in marginal weedbeds and in backwaters.

The eel is well-known as a catadromous migratory fish. Two other, but anadromous, migrants are represented in these samples, the salmon, *Salmo salar*, and the allis shad, *Alosa alosa*. Both fish are extinct now in the Thames, due to a number of circumstances connected with human interference with the river, and the discovery of remains of both is of considerable interest. However, it is noteworthy that the salmon is represented by bones

[30] G. Cowles, personal communication. See note in *Bulletin of British Ornithologists Club* 1979 (forthcoming).
[31] D. Bramwell, *Oxoniensia*, xl (1975), 101, 111–2, 120–1.
[32] J. T. R. Sharrock, ed., *The Atlas of Breeding Birds in Britain and Ireland* (1976), 332–4.
[33] D. Bramwell, *London Naturalist*, liv (1975), 15 ff.

TABLE 7

FISH BONE FRAGMENT FREQUENCY

	13th-century		13th/14th-century	15th/16th-century	
	33	66	49	32	34
Freshwater species					
Pike	8	2	1		1
Esox lucius					
Bleak				1	70
Alburnus alburnus					
Barbel					1
Barbus barbus					
Dace					1
Leuciscus leuciscus					
Chub	1				
L. cephalus					
Roach		1		1	
Rutilus rutilus					
Stickleback					2
Gasterosteus aculeatus					
Perch	1				3
Perca fluviatilus					
Ruffe	1				1
Gymnocephalus cernuus					
Migratory species					
Eel	16	3		22	ca 500
Anguilla anguilla					
Allis shad					4
Alosa ?alosa					
Salmon				1	8
Salmo salar					
Marine species					
Spurdog					2
Squalus acanthias					
Thornback ray					2
Raja clarata					
Elasmobranch					65
frag. vertebrae					
Conger		1			4
Conger conger					
Sprat	1				
Sprattus sprattus					
Haddock		2			
Melanogrammus aeglefinus					
'*Gadoid*' ?Haddock		2			
Whiting					21
Merlangius merlangus					
Mackerel	1	2			
Scomber scombrus					
Plaice					?1
Pleuronectes platessa					
Flatfish indet.				2	

only in the fifteenth–sixteenth-century deposits, and then only from probably three specimens at most. This comparative scarcity tends to confirm opinions derived from other evidence that the salmon was not a particularly abundant fish in the Thames.

The ten species of freshwater fish and the three migratory species represent a major part of the fauna of the Thames. However, on the grounds of size of specimen and habitat of the various species, they must have been captured by at least two different fishing methods. The eel is usually trapped either in special eel traps attached to the sluice of a mill water-wheel or in wicker baskets with a funnel-shaped entrance laid on the river bed. It can also be captured on hook and line. The salmon, while also capable of being caught on hook and line and of being caught in nets, were also often caught, while migrating upriver, in wicker

traps (bucks) fixed on weirs and at mills. Either of the last two methods would also catch the allis shad. Hooks or nets could be used to catch the larger predatory fishes such as pike and perch, but few of the other species would be caught by hook or in nets designed for these larger fishes. The occurrence of large numbers of very small bleak, as well as the stickleback (F34), strongly suggests that some form of fine-meshed net or trap was in use. The advantages of using the former for fishing in the river are doubtful, for a fine-meshed net is more time-consuming to make, more difficult to use, and less efficient for the capture of larger fish. It seems, therefore, more probable that these little fishes (and probably many of the other small freshwater species) were captured in finely-woven wicker traps, possibly as a by-catch of the eel fishery which was clearly important on the river.

Little can be said about the means of capture of the eight marine species, but they are clearly present as a result of trade connection with the sea. They represent a wide range of taxa and all are today well regarded as food fish. The spurdog, *Squalus acanthias*, and the roker or thornback ray, *Raja clavata*, are both cartilaginous fishes, and thus represented by sparce remains; the numerous vertebral centra in F34 could have originated from either species. The remaining species are sprat, *Sprattus sprattus*, conger, *Conger conger*, whiting, *Merlangius merlangus*, haddock, *Melanogrammus aeglefinus*, mackerel, *Scomber scombrus*, and plaice, *Pleuronectes platessa*.

Of these marine species only the sprat, conger, haddock, and the mackerel were identified in the 13th-century sample (F33 and F66), while in the 15th–16th-century samples (F32 and F34) five species were recognised (spurdog, ray, conger, whiting, and plaice). Whether this can be construed as an increase in reliance on marine fishes between the two periods is doubtful, because of the paucity of material. Presumably, these marine fish were preserved by salting or smoking, and it may be significant that three, at least, (sprat, haddock, and mackerel) are traditionally preserved by smoking. The sprat and the mackerel are both soft and oily-fleshed fish which quickly spoil as fresh fish, and the presence of their bones so far inland certainly implies preservation by one means or another. It would not be surprising if all the other marine species were similarly preserved—most likely by salting. It is, however, interesting that no bones of cod or ling were identified, as these two species seem to have been the major source of " stock-fish " (*i.e.* dried salt fish) and were mostly captured in the northern North Sea. Although absence of evidence cannot be used to support a hypothesis, the absence of these two species could imply a trade in dried fish with a fishing port in the Thames mouth, southern North Sea, or eastern English Channel, where all the species represented occur in abundance while cod and ling are more or less absent.

Whatever the source of the marine fishes, their occurrence at this site shows that as early as the 13th-century the local Thames fishery for food fish was being supplemented by marine fish imported to Abingdon.

CALCIFIED SEEDS AND ARTHROPODS. By MARK ROBINSON

The calcification of the following remains from F34 appears to be largely of calcium phosphate replacement with a little of calcium carbonate.

Arthropods

Porcellio dilatatas, Brant: woodlice 2

Indet. species of wood lice, 4

Diptera fly puparia: many, mostly Muscidae cf. *Fannia* e.g. *F. cunicularis* (L) the lesser house fly. Some puparia of *Sphaeroceridae*. Also Mollusca. Apex of *Helix aspersa* Müll: common snail.

Seeds

Vitis vinifera L: grape, many.

Malus sylvestris (L) Mill: apple, few.

Prunus spp: many. Some seeds represented by replaced kernels are almost certainly *P. domestica* L: plum.

Both the species of seeds and the type of mineralisation suggest that the well subsequently became a cess pit.

THE CARBONISED PLANT REMAINS. By MARTIN JONES

Carbonised material collected in recent years from sites in the Abingdon area has produced a substantial body of data related to the environment and economy of the prehistoric and Roman periods.[34] The medieval deposits at Stert Street presented the opportunity to see whether carbonised material of a similar nature occurred in these more recent deposits, and whether such material would lend itself to the kinds of analysis that have been applied to samples of an earlier date.

Approximately 30 litres of deposit was taken from a number of medieval and post-medieval layers and floated over tap water. The floating material was collected in a mesh of 500 μ aperture diameter, and sub samples scanned for plant material. The presence of carbonised plant remains, other than charred wood, is recorded in TABLES 8 and 9.

TABLE 9

SYNOPSIS OF CARBONISED PLANT MATERIAL OTHER THAN SEEDS

Species	Part of plant	13th-century F33	13th-century F66	14th-century F15/1	14th-century F24/1	15th–16th-century F32	Post-Med. F27
Avena fatua (wild oats)	Floret base					1	
Avena sativa (cultivated oats)			1				
Avena sp. (oats)	Awn			1			
Hordeum sp. (barley)	Internode fragment		1				
	Rhachilla			1			
Secale cereale (rye)	Internode fragment	1	13	65	5	28	
Triticum aestivum (bread wheat)	,,		4	58		27	
Triticum aestivocompactum (bread/club wheat)	,,	2	23		3		3
Triticum cf. *spelta* (spelt)	,,			5			
Triticum spelta (spelt)	Glume base	1			1		
Triticum sp. (wheat)	Internode fragment		1				
Volume of deposit fully analysed		20	10	10	25	20	10

Quantities are expressed as total numbers of fragments recovered from the volume of deposit analysed.

Each sample produced grains and chaff of a number of cereals, and seeds of a wide variety of other species. The cereals differ from those occurring in prehistoric and Roman samples in the following ways. The presence of rye is indicated, both by the grains themselves, and, more particularly, by the characteristic internode fragments. The presence of cultivated as well as wild oats is indicated by the floret bases of both types. Evidence can be found for the cultivation of both rye and oats as early as the Roman period, and rye has been found in Roman deposits from Oxfordshire at North Leigh and at Mount Farm, Dorchester-on-Thames.[35] However, the 13th-century samples from Stert Street are at present the earliest record for the Abingdon area. The shape of the wheat grains and the composition of wheat chaff indicate that bread wheat, *Triticum aestivum* was the main wheat and also the main cereal, as in modern Britain. The chaff of spelt wheat, *Triticum spelta*, the commonest wheat in Iron Age and Roman samples, is a minor component of three of the Stert Street samples. It is difficult to discern which barley is present at Stert Street. There is no sign of dorsal ridging even on the most well-preserved grains, suggesting that they are from a naked form of barley, instead of the hulled forms found in Iron Age and

[34] M. K. Jones in ' Excavations at Broad Street, Abingdon ', and ' Excavations at the Old Gaol, Abingdon ', *Oxoniensia*, xl (1975), and in *The Excavation of an Iron Age Settlement, Bronze Age Ring-Ditches, and Roman features at Ashville Trading Estate, Abingdon, Oxon*, ed. M. Parrington (CBA, 1978).

[35] H. Godwin, *History of the British Flora* (2nd edn.); M. E. S. Morrison, ' Carbonised Cereals from the Roman Villa of North Leigh, Oxon ', *Oxoniensia*, xxiv (1959); and M. K. Jones, unpublished.

TABLE 8

SYNOPSIS OF CARBONISED SEEDS

	13th-century F33	13th-century F66	14th-century F15/1	14th-century F24/1	15th–16th-century F32	Post-Med F27
Graminae (including cereals)						
Avena sp. (oats)	2·5	5·8	3·3	3·8	2·2	3·4
Bromus mollis/secalinus (chess, brome)	·4			·4	1·5	3·4
Festuca gigantea/pratensis (fescue)	·4		·2		·5	
Hordeum sp. (cultivated barley)	5·3	5·8	3·3	1·1	4·9	
Poa sp.					·2	
Secale cereale (rye)	1·4	2·7	3·1	·4	4·6	
Secale/Triticum (rye/wheat)		5·4				
Triticum sp. (wheat)	56·6	41·9	39·4	18·0	45·1	37·3
Vulpia sp.			·5			
Cereals N.F.I.	17·8	18·2	23·1	30·8	13·8	35·6
N.F.I.	1·4	1·6	1·3	1·5	2·7	1·7
Boraginaceae						
Lithospermum arvense (corn gromwell)		·4			·2	
Caryophyllaceae						
Agrostemma gigatho (corn cockle)	·4		1·8	·4	1·0	
Silene alba (white campion)					·2	
N.F.I.			·2	0·8		1·7
Chenopodiaceae						
Atriplex sp. (orache)				·4	·5	
Chenopodium album (fat hen)		·4				
C. urbicum			·4			
N.F.I.			·4		·2	
Compositae						
Anthemis cotula (stinking mayweed)	·4	1·2	4·3	3·8	3·9	1·7
Centaurea cyana/nigra (cornflower/knapweed)	·4		·5	·4		
Tripleurospermum maritimum (scentless mayweed)			·2			
N.F.I.			·2		·5	
Corylaceae						
Corylus avellana (hazel)		·4				
Cruciferae						
N.F.I.			·2			
Cyperaceae						
Carex sp. (sedge)			·2	7·5	·2	3·4
Eleocharis palustris (spike rush)	·4		·5	1·5		1·7
Fagaceae						
Quercus sp. (oak)			·2			
Hyperaceae						
Hypericum sp. (St John's wort)					·2	
Labiatae						
Mentha aquatica (water mint)			·2			
N.F.I.	·4					
Leguminosae						
Trifolium sp. (clover)		1·2	·4	·4	·7	1·7
Large legumes	7·5	8·9	4·2	16·9	2·2	5·1
Malvaceae						
cf. *Malva* sp. (mallow)					·5	
Polygonaceae						
Polygonum convolvulus (black bindweed)			·2			
Polygonum sp.			1·4		·2	
Rumex sp. (dock/sorrel)	·7	·4	2·5	0·8	1·7	1·7
Ranunculaceae						
Ranunculus acris/bulbous/repens (buttercup)			·2		·5	
Rosaceae						
N.F.I.					·2	
Rubiaceae						
Galium aparine	·4			·8		
Scrophulariaceae						
Euphrasia/Odontites sp (eyebright/bartsia)		1·6	·7		1·5	
Umbelliferae						
N.F.I.			·2		·7	
N.F.I.	3·9	4·3	6·8	10·5	9·2	1·7
Total number of seeds per litre of deposit	14·05	25·8	55·3	10·63	20·6	5·9
Volume of deposit fully analysed (litres)	20	10	10	25	20	10

Seed quantities are expressed as percentages of the total number of seeds counted. As it is impossible to tell what proportion of the *Avena* grains are cultivated rather than wild, the cultivated cereals and wild grasses are included together under Graminae. The large legumes may include such genera as *Vicia, Lathyrus, Pisum* and *Lens*, but in the absence of visible hilums, no secure identifications can be made.

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Roman contexts. The single internode fragment would have come from a relatively lax ear.

Of the remaining taxa, the large legumes, hazelnuts, and the acorn may have been collected for food, although the latter two could also have come in with the firewood. The majority of the large legumes have lost their hilums making identification difficult. The seed diameters range between 1·0 and 6·9 mm., with a mean diameter of 3·0 mm. These large legumes may include such genera as *Vicia* (vetch and tick bean), *Lathyrus* (vetchling), *Pisum* (pea) and *Lens* (lentil), but, in the absence of visible hilums, no secure identifications can be made.

The remaining species show very little qualitative variance from the Iron Age and Roman samples in the vicinity. The main components are the same, and a seed of *Hypericum sp.* (St John's Wort) is the only taxon identified from Stert Street that is absent from earlier assemblages. A number of species whose ecological requirements were particularly significant in the understanding of the Ashville site, in particular the species of damp ground such as *Eleocharis palustris* and *Anthemis cotula*, are also present in the Stert Street samples. The presence of a small quantity of charred cereal grain in the post-medieval layer 27 deserves comment. By this period, cereal grain would have been ground before it reached a house in Stert Street, which has the wrong location to serve an agricultural function. The most likely explanation of the presence of grain is that it had been redeposited from earlier layers. The problem of redeposition of charred material, which has been briefly considered in the reports of Barton Court Farm and the Ashville site,[36] will be more acute on urban sites such as Stert Street, where the area density of features and refuse within them is that much greater.

The types of data most subject to bias from redeposition are absolute frequencies of individual components, and the disappearance of particular components. For example, the presence of the chaff of spelt wheat *Triticum spelta* in 13th- and 14th-century deposits need not necessarily indicate that this more typically prehistoric and Roman crop was still in use in medieval Abingdon. It may instead be redeposited from Roman material. However, the cultivation of spelt in this country has been recorded as late as the 17th-century, so it need not be a spurious record. In contrast, redeposition will not mask the appearance of new species, such as cultivated oats and rye in the Stert Street samples. It has been argued that redeposition will not produce spurious unidirectional trends in time, but simply tend to mask trends that already exist.[37] However, any analysis of trends in time in the plant material from this site is best made in the context of the whole body of environmental data from Abingdon and its environs, and this aspect will therefore not be developed in the present report.

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[36] M. K. Jones in *The Excavation of an Iron Age Settlement, Bronze Age Ring Ditches, and Roman features at Ashville Trading Estate, Abingdon, Oxon*, ed. M. Parrington (CBA, 1978) and in *Excavations at Barton Court Farm, Abingdon, Oxon*, ed. D. Miles (forthcoming).

[37] Jones, *Excavation of an Iron Age Settlement*, ed. Parrington.