Excavations at Logic Lane, Oxford
The prehistoric and early medieval finds
By Fabian Radcliffe, O.P., M.A.

In July and August 1960 a rescue-excavation was carried out for the Oxford Excavations Committee on ground which was shortly to be built over by University College. The site lies to the east of Logic Lane between Merton Street and High Street (fig. 1). The turn in the lane marks the point where it is crossed by the lines of Kybald Street, closed in 1447.¹

The first objective of the excavation was to locate the street and to find when it was laid out. The discovery of traces of late Saxon occupation similar to those found in 1876 on the adjacent site of the Angel Inn,² was a second objective.

Cutting A (fig. 2) was dug across the estimated line of the street. But on the second day of the excavation a Victorian wine-vault was discovered. This had completed the destruction of the street levels which had been begun at this point by the 16th and 17th century pits, A9 and A11. A large area was therefore opened in search of late Saxon and medieval features. Cutting B was planned so that it could eventually be extended beyond the north wall of the vault to locate any street levels that might survive there. Some remains of the surfaces of Kybald Street were found in cutting B and its extension, cutting C. A late Saxon pit was found on the line of the street. The irregular line of the cuttings was caused by the vault, the brick and concrete ground surface and an underground petrol tank between cuttings A and B.

Finally, during the building operations, from October 1960 to January 1961, a number of foundation squares were dug by the contractors and examined archaeologically.

Abbreviations used in the footnotes are:

¹ H.S.J., 200-2.
² Archaeologia Oxoniensia (1892-5), 7-14.
Undisturbed gravel was found between 4 and 5 ft. from ground level. A greater accumulation had been expected. The surface of the gravel showed ancient pits and other features, which are listed below and described in their appropriate sections.

**Cutting A.** Pits A2-7 (12th to 14th century). A9, A11 (16th to 17th century); beam-slot A8 (12th century).

**Cutting B.** Ditch 2 (Prehistoric); pits B4 (late Saxon), B1-3, B5, B7-10 (12th to 15th century); beam-slot B13 and post-hole B14 (probably late Saxon); walls 1-4 (13th century).

**Cutting C.** Ditches 1, 2 (Prehistoric); pits C1, C2 (late Saxon), C4 (14th to 15th century); sump C5 (14th to 15th century); beam-slot C3 (12th century).

Except for small areas of the surface of Kybald Street and short lengths of walling, the superficial material was thoroughly disturbed, generally containing late Medieval sherds at all levels. However, loamy gravel 9 in. thick lying over undisturbed gravel in the south of cutting A contained only 11th to 13th century pottery, and was cut by pits A2 and A3. A small area of the ancient red loamy topsoil was found in situ in the north-west corner of cutting B; below, a natural pipe extended into gravel (FIG. 4b).

**PREHISTORIC FINDS**

**THE DITCHES (FIGS. 2, 4a)**

The section across the two ditches (FIG. 4a) cut each at an oblique angle. Ditch 1 was 2 ft. 10 in. in width, the sides were almost vertical, and the bottom was a rounded U-shape, cut some 2 ft. 7 in. into undisturbed gravel. Ditch 2 was 7 ft. 1 in. from lip to lip, the sides were sloping and the bottom was slightly rounded and 2 ft. 5 in. below the surface of undisturbed gravel. Both ditches were found filled with fine red loam. In the lower part of the filling this loam was mixed with a little gravel, and there were lenses of lighter sandy gravel and some blackened loamy lenses down the sides and at the bottom. Above this layer was a layer of concreted gravel and red loam. Above this again came another layer of red loam, which in ditch 2 contained a run of gravel. Minute specks of charcoal were generally found in this layer.

It was not possible to determine which ditch was dug first or whether they had been dug simultaneously. But the slope of the concreted gravel suggested that ditch 1 was filled in first. In each case the length of ditch

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3 Undisturbed gravel has been observed in Commarket at a depth of 8 ft., Clarendon Hotel, 8-9, and at 11 ft. on the site of Marks & Spencers. Recent observations have shown a depth of over 6 ft. in Alfred Street and Brasenose Lane.
uncovered was too small to show with certainty whether the ditch was straight or curved. Both appeared to be straight; but during the building operations ditch 1 was cut through at a point 7 ft. east of cutting C, making it clear that it was curved (FIG. 2), and therefore probably part of a ring-ditch. The line of ditch 2 remains uncertain. Large later pits occupied the area of the contractors’ excavations G15 and G16. Other sections of similar ditches were found in the contractors’ excavations H2 and J15.

The filling and shape of ditches 1 and 2 are typical of those of ring-ditches which have been found frequently in groups near Oxford on Summertown-Radley terrace-gravel, as here at Logic Lane; many may have been the ploughed-down remains of barrows. Such ditches are not prolific of finds, but it is generally assumed that they date to the Bronze Age, although their
General plan of site. The section across ditches 1 and 2 was revealed by the removal of the N. wall of the vault, on the S. side of cutting C. (See FIG. 4A.)
normal red filling is no definite indication of date. The occurrence of a sherd of a collared urn in ditch 2 however strengthens the suggestion we have here the vestiges of a Bronze Age barrow-cemetery.

POTTERY, ANTLER AND FLINT (FIG. 5)
The report on the potsherd is kindly submitted by Professor R. J. C. Atkinson and that on the antler and flints by Mr. H. J. Case.

A sherd (no. 1) was found in ditch 2. The fabric is pure clay with no admixture of sand, shell or grit, and the surfaces are smooth and soapy to the touch. In the fracture the clay appears roughly mixed and lumpy. In colour it is black except for the outside surface, which is light brown. Decoration consists of two rows of vertical incisions, made either with a thumb nail or, more probably, with the broken-off end of a small round stick or bone.

\* Ant. J., xxxvi (1936), 14, note 1. The late Saxon soil throughout Oxford is similarly red.
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With such a small piece it is impossible to form any certain conclusions. Although the decoration seems to be more characteristic of late Neolithic Peterborough ware, the fabric is not, lacking the shell and grit filling and the purplish colour. It seems most probable that the piece is from an early Bronze Age collared urn, probably from the bottom of the collar; or, if the piece were inverted, from the side of the urn immediately below the collar.

**Antler.** A fragmentary pick of red-deer antler was found in ditch 1. It consists of about 5½ in. of fractured beam with coronet, burr and brow-tine complete, and fractured bez-tine. The brow-tine shows blunting and abrasion by ancient use.

A poorly preserved tine of red-deer antler, possibly a ‘point on top’ was found in ditch 2. It shows smoothing at the tip indicative of ancient use as a polisher.

**Struck flints.** A number were found in medieval pits and other late contexts. The majority are indeterminate, but the following are noteworthy:

Single-ended unifacial microlithic core (no. 2), and an end-scraper or long-flake with roughly parallel facets (no. 3). A few other flakes showed similar facets. Similar cores occur sporadically and similar flakes more numerously in Neolithic industries, such as at Abingdon, Berks., but both are commonplace in Mesolithic industries. They provide an interesting additional suggestion of Mesolithic settlement of the Summertown-Radley terrace-gravel, as nearby at Iffley.

Barbed and tanged arrowhead (no. 4) with one developed and one rudimentary barb. Similar small or uneven specimens are typical of Oxfordshire, distant from the chalk escarpment. Its context could be Beaker-Culture, but it could as readily have belonged to the Bronze Age, like the potsherd of a collared urn.

**ROMANO-BRITISH FINDS**

A few sherds were found but no structures. Only the following is noteworthy:

Rim-sherd (FIG. 7, no. 1) from the late Saxon pit B4. The vessel was a small shallow bowl of hard brown fine sandy ware with red slip. Similar colour-coated bowls, in imitation of Samian ware, were produced by 4th century kilns at Sandford and Dorchester, Oxon.

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6 *Archaeologia*, lxxii (1921-2), 228, FIG. 1.6, Ashmolean Museum 1886.1585.
7 *Oxonieia*, 1 (1936), 88, FIG. 15-10, 11, 12.
FIG. 4

A. Section across ditches 1 and 2: p. 39, and FIG. 2.
B. Section across original line of N.W. corner of cutting B (see FIG. 3).
C. Section across E. face of cutting C.
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MEDIEVAL FINDS: 11th and 12th centuries

LATE SAXON PITS, B4, C1 AND C2 (FIGS 3, 4b and c)

These pits were all oval in plan with vertical sides. Pit C2 was cut through C1. Their depths below the undisturbed gravel surface were: B4, 4 ft.; C1, 7 ft. 1 in.; C2, 4 ft. 3 in. In B4 and C2 the bottom was slightly rounded. In C1 the bottom 3 in. of the sides were slightly undercut, and there was a layer of greenish black loam across the bottom. The filling of all three pits was of dark brown loam with gravel: there were some darker patches, especially towards the bottom of C1, and some patches of light gravel, and B4 had a thick burnt layer at the top. There was no trace of lining in any of the pits, nor of post-holes or other structures around them.

The nature of the filling, the lack of distinct layers and the uniformity of the pottery all suggest that these were rubbish-pits which were filled within a fairly short time. The greater depth of C1 and the dark layer at the bottom which may have been a decomposed wooden floor, suggest that it may have been prepared as a storage pit or well; but in the event it was clearly put to the same use as the others.

The position of B4 on the line of Kybald Street confirms that the street was opened up at a later date. The pits contained a large quantity of pottery (see below, pp. 53-8) and much animal bone (see below, pp. 64-7). From B4 came a bone implement (see below, p. 63) and iron objects (see below, p. 62), from C2 fragments of iron slag.

BEAM-SLOT BI3 AND POST-HOLE BI4

The beam-slot appeared in section on the east face of trench B (FIG. 6), and again on the west face of the trench (FIG. 4b). No trace of the slot running

FIG. 5
No. 1 collared urn sherd from ditch 2: p. 42. Nos. 2-4 Struck flints from Ag (2): from the superficial levels of cutting B (3); and from the lower level of A5 (4): p. 43. Scale: \frac{1}{4}.
across the trench was recognized during excavation, and perhaps the two depressions on the sections were post-holes. B14 was a post-hole 2 1/2 in. deep, just out of alignment with B13, 9 in. in from the east face of the trench. Hence B13 and B14 may be part of a row of post-holes: or, they may represent two beam-slots with a post-hole between them. They seem to mark a boundary fence. (See below, p. 68.) They were clearly covered by the street levels (FIG. 6), and are probably 11th century.

KYBALD STREET

Three distinct surfaces of Kybald Street were visible in section above the filling of the prehistoric ditches (FIG. 4a). Each surface was composed of well-packed light yellow gravel. Between were layers of dark brown gravelly loam. The edge of the street-surfaces was found some 3 ft. north of the section line (FIG. 3). Further traces of the street-surfaces showed in section in cutting B (FIG. 6) and in two of the contractors’ excavations in Logic Lane, where three similar gravel surfaces lay under more than 2 ft. of later deposit (FIG. 3).

A few sherds of pottery were found in the levels in cutting C, mainly of St. Neots ware, but a small fragment of a tripod pitcher found beneath the lowest surface of the street in the layer termed 12th century make-up in FIG. 4a dates the street to after about 1120, the earliest date yet known for this type of pot.8

8 Clarendon Hotel, 54.
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FIG. 7
Romano-British, late Saxon and imported pottery. 1. Romano-British sherd from B4: p. 43. 2-8, 10. Late Saxon wares other than St. Neots: p. 58. 9. Imported spouted pitcher from B4: p. 58. Scale: 1.

BEAM-SLOTS A8 AND C3 (FIG. 3, 4C)

A8 was a trench 2 ft. 4 in. wide at the top, with gently sloping sides and a flat bottom, cutting 10 in. into undisturbed gravel. It was filled with brown loam mixed with gravel, and contained some pottery and bone. All the pottery was 11th and early 12th century. There were no tripod pitcher sherds and two fragments only of late Saxon glazed ware (see below, p. 60). The pottery indicates that A8 was filled by the mid-12th century.

Immediately to the north of A8 and parallel to it were traces of the foundations of a stone wall. It was 1 ft. 7 in. wide and continued along the whole length of A8, and into cutting B. It was made of small undressed
stones laid without mortar, and was very fragmentary, especially in the centre of the trench. It probably represents a rebuilding in stone of the timber structure standing in the beam-slot, encroaching slightly on the street. The beam-slot and the wall foundation beside it represent the line of a house- or boundary-wall fronting Kybald Street.

C3 was a smaller trench than A8, 9 in. wide and cut 3 in. into undisturbed gravel. The filling, of reddish gravelly loam, contained some pottery, all St. Neots ware or 11th to 12th century shelly and gritty wares. C3 appears to be the foundations of a fence on the north side of Kybald Street.

The evidence from the beam-slots together with the presence of sherds of tripod pitchers beneath the lowest street level, fixes the date of the street within quite narrow limits. The two slots are not exactly parallel with one another, but they clearly indicate the street-frontage. When Kybald Street was closed in 1447 it was 19 ft. 1½ in. wide at its western end, 8 ft. 3 in. wide at its eastern end, and 12 ft. wide in the centre.9 This would give a width of some 17 ft. 10 in. at the point opposite the eastern end of A8. The width between the two slots at this point is 20 ft., or 18 ft. 5 in. measuring from the stone wall in front of A8. The street would not have been earlier than c. 1120; and the pottery evidence from the beam-slots shows that these

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9 H.S.J., 201-2.
slots must have been disused by the mid-12th century. Allowing a certain time for the fences to be standing, we can say that the street was laid down about 1130.

THE MEDIEVAL PITS (FIG 3)

The depths of the pits are taken from the surface of the undisturbed gravel.

A2 was the bottom of a circular pit 3 in. deep, filled with loam and gravel containing a little 12th and early 13th century pottery, none of it glazed.

A3. The filling was of dark brown loam with streaks of gravel and sand and with a layer of ash near the bottom. It contained 12th and early 13th century pottery, but with five later medieval sherds.

A4 (Pottery, FIG. 13) was a large rectangular pit with almost vertical sides filled with an homogeneous light gravelly loam, with a thin streak of yellowish-green loam across the top. The pit was found by augering to be 8 ft.
deep. The pottery, including an almost complete baluster jug found in the contractors’ excavations was of late 13th or early 14th century date.

A5 (Pottery, FIG. 13, flint arrowhead, p. 43, FIG. 5) was the bottom of a circular pit 4 in. deep, filled with brown gravelly loam above a black filling. The flint arrowhead was found in the black filling and some 11th and early 12th century pottery in both layers.

A6 (Pottery, p. 62, FIGS. 9, and 11-14) was a roughly square pit with straight sides sloping slightly to a flat bottom about 4 ft. 6 in. square. The filling was of gravelly loam with darker streaks of loam and ash, with a thick burnt layer near the top composed of two spreads of reddened gravel, separated by flat stones and thick streaks of charcoal and ash. Fire had discoloured the gravel to a depth of 6 in. The pit was filled in the 12th century.

A7 (Pottery, FIG. 13, bronze clasp, p. 63, FIG. 15) was an oval pit with vertical sides, 5 ft. deep, as determined by augering. It was filled with red loam with a little gravel, containing 11th and early 12th century sherds, none glazed, and small bronze clasp.

B1 (Pottery, pp. 60, 62, FIGS. 11, 14) was the bottom of a circular pit 11 in. deep, filled with a brown loam over a black filling with much charcoal. The pit was filled in the 12th century.

B2 (Pottery, FIG. 9) was a circular pit with sides curving inwards. The pit appeared to be 13th century but had been much disturbed. A lace-making spindle and two fragments of wall plaster were among the finds.

B3 (Section, FIG. 6) was a circular pit with vertical sides dug, perhaps as a well, from above the levels of Kybald Street. It was filled with brown gravelly loam, darker generally towards the bottom. Near the bottom were many large stones. The pottery was of late 15th century date, with many sherds of 11th to 13th century date.

B5 (Section, FIG. 6, pottery, FIGS. 9, 13, bone draughtsman, p. 63, FIG. 15). It was a very large pit, dug perhaps as a gravel pit, and filled with gravelly loam and stones, containing early 14th century pottery with many earlier sherds and a bone draughtsman, perhaps of 12th century date.

B7 (Pottery, pp. 60, 62, FIGS. 11, 14) was the bottom of a shallow circular pit, filled with gravelly loam in the 12th century.

B8 (Pottery, FIGS. 9, 10) was the bottom of a circular pit 1 ft. 2 in. deep; the filling was gravelly loam with 14th century and earlier sherds including St. Neots ware.

B9 (Pottery, pp. 60, 62, FIGS. 11, 14, bone draughtsman, p. 63, FIG. 15) was an oval pit, cut through by pits B5 and B8. The pit was filled in the 12th century; with the pottery was a bone draughtsman.

B10 was an oval pit 7 ft. 6 in. deep as determined by augering, filled
Straight sided cooking pots, shallow dishes and a small bowl of St. Neots ware: p. 56. From B4 (1-3, 7, 9, 11-13, 16, 20); Ct (6, 14, 17-19); C2 (5, 15); Ag (8); B8 (10); and the superficial layers of cutting B (4). Scale: \( \frac{1}{4} \).
with red loam with a little gravel. It had been cut into by the 12th century pit A6 and contained 11th and 12th century sherds, including three of tripod pitchers.

$C_4$, a shallow pit with 15th century and earlier pottery.

$C_5$ was square in plan, dug into the undisturbed gravel, filled with loam into which was set a smaller square of large unshaped stones, the centre
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being filled with smaller stones. The stones, loam and surrounding gravel as well as the pottery found in and around the area, were all stained green, probably indicating a drainage-sump. The pottery was 13th to 15th century in date.

WALLS (FIG. 3; PL. 1)

The walls were built of limestone, the facing being of large, roughly shaped blocks, with a rubble core. There were four distinct sections of wall, none of which satisfactorily aligned with any of the others. Wall 1 was a wide, roughly built footing, with a narrower, more carefully constructed footing (Wall 2) laid on it. These two footings were not on quite the same line. It is possible that they were of the same construction, but Wall 2 may have been a later phase of Wall 1. Neither of these aligned with Wall 3. Between Wall 3 and Wall 4 was a straight joint. The ends of all the walls had been cut through, and there were no traces of corners.

Wall 1 overlay the beam-slot A8 and the pit B10. A piece of red tile was built into its foundation on the east side. This tile was being produced from the late 12th century onwards; Wall 1 may therefore be dated to the early 13th century at the earliest. Wall 4 overlay pit B2, and was therefore probably not constructed before the mid-13th century. Two pieces of shaped building stone were found in superficial deposit, immediately to the west of Wall 1. One had smoothed off surfaces but was not rectangular. The other was a section of moulded door-post, with the hinge pin still in position (PL. 1).

It is impossible to relate these walls to structures. Walls 1 and 2 could have been the foundations of the side wall of a house aligned to Kybald Street: but it is hard to see on which side of the wall any house could have stood. Although most of the pits near the walls were sealed by the early 13th century, A4 and B5 were evidently in use during the 14th century. By the mid-15th century this area was a garden,\textsuperscript{10} when one would not expect a substantial building to be still standing. It is equally difficult to interpret Walls 1 and 2 as a single boundary wall, for its position would not correspond to any known medieval boundary,\textsuperscript{11} and one would not expect so large a structure for such a purpose.

LATE SAXON POTTERY

Four pits, filled probably before the mid-11th century, produced a large quantity of pottery. Much came from pits B4 and C1. Small quantities were excavated from pit C2 and recovered from another pit in the contractor’s excavation G13. The pottery from the pits forms an homogeneous group of St. Neots ware. Pits B4 and C1 also contained small quantities of other wares (see below, p. 58).

\textsuperscript{10} H.S.J., 250.
\textsuperscript{11} H.S.J., Plans II and III.
However, hardly any specimens were found of the sandy wares associated with St. Neats ware in other late Saxon levels in Oxford. Nor did the pits contain Stamford ware, sherds of which were found derived in later levels here at Logic Lane and which was represented by pitchers at the adjacent site of the Angel Inn demolished during the building of the Examination Schools.

THE ST. NEATS WARE

St. Neats ware is generally considered to have been in production by the 9th century and to have been first into the Oxford region from the Cambridge region during the 11th century or before. The assemblage from Logic Lane compared with others found in Oxford is unusual both in size and composition. A similar
12th-century shelly and gritty wares: p. 60. From A4 (10); upper filling of A5 (19); lower filling of A5 (7); upper filling of A6 (11); A7 (6); A8 (14); A9 (2); B5 (8); G8 (17); G9 (1, 16, 18); the superficial levels of cutting A (3, 5, 12, 13), and of cutting B (4, 9, 15). Scale: 1/2.
group from Paxton, Hunts., probably of mid-11th century date, also lacks the developed forms found on later sites in East Anglia. FABIAN RADCLIFFE

Four types of vessel from 97 examples are represented in this group; Round cooking pots, 60 vessels. Straight-sided cooking pots, 8 vessels. Shallow dishes, 28 vessels. Small round bowls, 1 vessel.

The list above and the distribution-diagram (FIG. 8) show at a glance the range of St. Neots ware used in some late Saxon households in Oxford. Of pits which contained the ware as a contemporary deposit, C1 and G13 were earlier than B4 and C2. The later assemblages showed a decided trend towards smaller vessels. Pit B4 also showed deviations from the total assemblage, alone containing sherds of straight-sided cooking pots in any marked frequency, with proportionately fewer rounded specimens, the vessels also showing minor variations in rim form. (In the two later pits, pig bones are seen to be rarer than in the earlier ones. See below, p. 64.)

The fabric is fine and even, with a grey core mixed with a good quantity of finely crushed shell particles which tend to lie parallel to the surfaces. The surfaces are smooth and ‘soapy’ to the touch, varying in colour from a pale red-brown to dark purplish-brown or black. Sometimes there is a light red-brown surface layer up to 1 mm. thick, which has a tendency to flake off. This has the appearance of a thick slip, but is probably caused in the firing. St. Neots ware is generally finely made, but the fabric is soft and tends to crumble or laminate. It was turned on a fast wheel, and there is often deep finger-rilling on the inside of the cooking pots, especially under the shoulder and around the basal angle. The outside is smooth, sometimes finished off by hand, but seldom shows signs of tooling. There is no decoration except for an occasional slight ridge around the necks of cooking pots. The cooking pots of both forms are usually blackened by fire on the exterior. Occasional blackening is also found on the shallow bowls. The ware is capable of bearing direct heat from a fire.

Round cooking pots of St. Neots ware

Round cooking pots form almost two-thirds of the group. The rim-sherds show diameters ranging from 4 to 9 in. : all but 7 were between 5 and 7 in. in diameter.

The only complete profile was of a pot smaller and rounder than the common tall form. The rims are all of the usual rolled everted form. Of the 54 rims, half were of the simplest form (FIG. 9, nos. 1, 6, 12) with minor variations (FIG. 9, nos. 2, 7-8, 13-14). A further 15 showed a slight hollow on the top of their rim formed by the thumb in finishing off the pot (FIG. 9, nos. 3, 9, 15). These types were found in all four pits. Another 12 examples, 9 of them from pit B4 had the outside edge of the rim brought to a sharp ridge (FIG. 9, nos. 4-5, 11, 17).

Straight-sided cooking pots of St. Neots ware

The straight-sided cooking pots, less than a tenth of the group, have more variety of rim form : but on most the top of the rim is flat or tilted slightly outwards. All have a large internal flange and a small external one.


The method of analysis here was devised and carried out by Mr. H. J. Case and Mr. D. Sturdy.
12th-century sandy wares: p. 62. From the lower filling of A6 (1-10); B1 (21-24); B7 (11-13, 15); B9 (16-20). 14 is a piece of imported ware from Normandy; p. 60. Scale: $\frac{1}{4}$.
Two examples, one from pit B4, were found with the internal flange greatly exaggerated (FIG. 10, no. 4). The only complete profile is given by a pot, whose rim was closely matched by another from pit B4. A closely similar pot with a spout has been found in Bedford. 

Shallow dishes of St. Neots ware

Shallow dishes form almost a third of the group. They were between 7 and 14 in. in diameter, but the great majority 11 to 12 in. They show the greatest variety of rim-form with large flanges to support the larger size of these vessels. There is generally a large internal flange, flat-topped on 12 of the 28 examples (FIG. 10, nos. 10, 11, 15, 17, 18) and upturned in (FIG. 10, nos. 7-9, 14, 16, 19). Two vessels with more developed forms came from pit B4 (FIG. 10, nos. 12-13).

Small bowl of St. Neots ware

A small sherd was also found in pit B4 of a small bowl (FIG. 10, no. 20).

Late Saxon pottery other than St. Neots ware

The few sherds of other wares from the four pits discussed above formed hardly 4% of the pottery. In pit C1, 511 sherds of St. Neots ware were found and 14 of other wares. A slightly higher proportion was found in pit B4. Most of these sherds were of coarse hard grey-brown to black ware with red to black surface filled with small pebbles and grit (FIG. 7, no. 5) with powdered shell (FIG. 7, nos. 2, 3) and also crushed flint ware (FIG. 7, nos. 6, 7). Examples were found of round cooking pots (FIG. 7, nos. 2, 3, 5) of a small straight-sided cooking pot (FIG. 7, no. 6) and of a shallow dish with indented rim (FIG. 7, no. 7), of a form known at Chichester. These vessels were probably made locally.

In pit B4 was also the spout and part of the shoulder of a pitcher (FIG. 7, no. 9) of hard pale grey-brown fabric tempered with a quantity of coarse sand, rather uneven and harsh to the touch. Its surfaces are dark grey to black, with paler buff patches. The spout was formed separately, pressed into a prepared hole on the shoulder and flared round inside, and more clay moulded into the external angle by hand. Beneath the spout there is a small boss pressed out by one finger inside and two outside. There is a slight ridge at the top of the shoulder running above the spout. This piece has no local parallels. Spouted pitchers of somewhat similar form but in shell and grit-filled fabrics have been found in late Saxon contexts at Winchester and Southampton. A larger pitcher in red-brown hard gritty fabric was found in a 12th century context at Chichester. In fabric, form and decoration, however, the piece has close parallels from Normandy. The fabric agrees closely with an imported pitcher from London, the boss-motive is found on pitchers in Normandy and Southampton, and the spout form is identical with that on the imported Lewes pitcher. There can be no doubt therefore that this
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Metal and bone objects: pp. 62-3. 1-3, 5-10 from B4; 4 from A7; 11 from B5; 12 from B9. Scale: 4, \( \frac{1}{4} \); the rest, \( \frac{1}{8} \).
piece is an import from Normandy, brought into England by the pre-Conquest wine trade from Rouen. That this trade extended as far as Oxford at this date is shown by the imported red-painted sherd from under the Oxford Castle Mound. This imported sandy ware is also represented by the rim and shoulder of a small round pot from B7 (FIG. 14, no. 14), in identical fabric. Simple upright slightly everted rim form; knife-trimming on shoulder up to just below neck. These two sherd have been examined by Mr. G. C. Dunning, who has kindly allowed his comments to be quoted here.

Part of the base of a round cooking pot (FIG. 7, no. 4) was found with sherd of St. Neots ware in the layer of red loamy topsoil north of pit B4. It was of very hard fine sandy ware, light-brown with a reddish tinge on the inside surface layer: fire-blackened on base and around basal angle. Deep finger marks inside, and knife trimming outside around basal angle.

At the base of the superficial layers in cutting A with 11th and 12th century sherd was found the top part of a bulbous spouted pitcher (FIG. 7, no. 10) in hard black fabric filled with large smooth sand grains which give the black surfaces a granular texture. The side has been trimmed with a knife up to just above the waist. The shoulder has irregular slanting lines of rouletting decoration, lightly applied. Sherds of similar fabric and decoration have been found, also probably imported into Oxford.

STAMFORD WARE

A few fragments were found of glazed pitchers of hard fine buff ware as found on other sites in Oxford. In the early 12th century pit A8 was a small body-sherd 4 to 5 mm. thick with thin fine glaze of pale watery-green colour, minutely crackled all over. A sherd 7 mm. thick with bright yellowish-green glaze was found in the 14th century pit B5. The 17th century rubbish-pit A9 also contained a spout (FIG. 7, no. 8), of fine hard buff fabric with a reddish tinge at places in the fracture. The top of the spout was joined to the pitcher rim. Brownish-yellow glaze, with a few speckles of brown from undissolved colouring matter, had been spread unevenly on the outside surface, running down in places on the inside of spout and rim. The spout was roughly made, and the clay strip strengthening the join to the pitcher body was not smoothed in. In form the spout is close to that on the Stamford ware pitcher from the adjacent site of the Angel Inn, though larger and with a richer yellow glaze: it is exactly paralleled by one from Cambridge.

12TH CENTURY SHELLY AND GRRITTY WARES

A selection of the 12th century wares derived from St. Neots ware is illustrated from various contexts on the site.

From the superficial levels in cutting B came a sherd (FIG. 13, no. 15) from a simple curved everted rim, of brown fabric filled with small smooth pebble and coarsely crushed shell, some fragments up to 4 mm. across. It has a light red-

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25a Castle Mound, 90-2.
26 Castle Mound, 86, FIG. 34-34, Clarendon Hotel, 41, FIG. 12, C2C.3.
27 Castle Mound, 96, Clarendon Hotel, 51.
28 Ossoniensia, v (1940), 48, FIG. 8.3.
brown surface layer up to 3 mm. thick, slightly fire-blackened, and with a smooth surface. The piece is roughly and unevenly made, but slight horizontal striations on the outside surface probably indicate that it was turned on a slow wheel. The form and fabric are paralleled by sherds from Oxford,\(^3\) which have affinities with the Saxon material from Old Windsor, Old Sarum, Winchester, Pevensey and Southampton.

The remaining vessels illustrated, some of them (FIG. 11, nos. 1-12) found in pits containing also the hard sandy ware described below (p. 62), have a fairly hard grey or grey-brown fabric containing some crushed shell and grit and often small pebbles and sometimes crushed flint. The surface varies in colour from pale reddish-brown to black. On one vessel the whole fabric is black (FIG. 12, no. 6), on one black with light red-brown surface (FIG. 11, no. 8), on one red-brown throughout (FIG. 11, no. 11). Various simple ornament is impressed with the finger-tip (FIG. 13, nos. 10, 11, FIG. 11, no. 10), a pointed stick (FIGS. 13, nos. 5, 9, 12 : 11, nos. 2, 12), a narrow comb (FIG. 13, nos. 1, 3, 8)\(^3\) or a rosette stamp (FIG. 13, nos. 6-7).\(^3\)

A strip of clay is occasionally applied (FIGS. 11, no. 12). Hints of the potter's technique are given by a pot (FIG. 12, no. 2) with knuckle marks on the inside, made presumably when the pot was being held on the back of the hand while


\(^{32}\) Cf. Oxoniensia, XV (1950), 51, FIG. 17-4.

the outside was smoothed off. This was done with a tool which left scratch marks and irregular scraps of clay under the rim flange.

The standard forms are the tall pitcher (FIG. 13, nos. 1-2); the round cooking pot (FIGS. 13, nos. 9-19: 11, nos. 1-4, 10), often much larger than in the 11th century, and continuing in this ware into the 13th century (FIG. 13, nos. 17-18); the straight-sided cooking-pot (FIG. 12, no. 1), less bowl-shaped than the cooking-pots of St. Neots ware, and with more varied rim-forms (FIG. 12, nos. 3-4): shallow dishes (FIGS. 12, nos. 5-10: 11, nos. 5-9, 11) also larger than the late Saxon examples. A single large storage jar was also found (FIG. 11, no. 12).

12TH CENTURY SANDY WARES

Four pits, A6 (lower levels), B1, B7 and B9, contained equal quantities of hard shelly and gritty wares (FIG. 11), and of hard sandy wares (FIG. 14), the latter mostly cooking pots with a few sherds of glazed tripod pitchers. The fabric is normal in Oxford from the 12th to the 14th century, hard and well fired, sometimes slightly friable, mixed with a good quantity of fine sand but with no shell and only rarely larger grits and pebbles. The colour varies from pale brown to dark grey. Often there is a pale or reddish brown surface layer given by the firing. The actual surfaces are rough to the touch, and range from a pale slightly reddish brown, through grey to a dark black-brown. The outside surface has often been blackened by fire. Apart from the tripod pitcher sherds (FIG. 14, nos. 1, 2, 11), only one is glazed (FIG. 14, no. 3); this has some very small spots of greenish-yellow glaze on the outside of the rim.

This sandy fabric was in use in Oxford in the 11th century, and early in the 12th century it began to replace the softer shell and grit filled wares. It was used for the first local glazed pottery, the tripod pitchers, produced from c. 1120. The pits from which this group came contained no other glazed wares apart from tripod pitchers. It seems probably that they were filled in the mid-12th century, though the forms from B1 and B9 seem less developed than those from A6 and B7. The material from them compares closely with that from two mid-12th century wells on the Clarendon Hotel site, Oxford.

METAL OBJECTS (FIG. 15, nos. 1-9)

Two knife blades (nos. 1 and 2), much corroded, came from the late Saxon pit B4. The blades are wedge-shaped in section, and in each case the handle-tag has been partly broken off. These knives are alike in form, and may have been a pair for domestic use. A buckle (no. 3) also came from B4. It is formed from a round-sectioned iron strip bent into an oval, with a long rectangular iron plate passed through and

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35 Clarendon Hotel, 71.
37 Cf. ib., 255, FIG. 14.
38 Clarendon Hotel, 54-6.
39 Clarendon Hotel, 46, 7; FIGS. 16, 17.
40 Cf. Clarendon Hotel, 70, FIG. 244, Archaeologia, xcvi (1959), 73, FIG. 7 and Arch. J. , cxvii (1959), 82, FIG. 18.
EXCAVATIONS AT LOGIC LANE

folded over on itself. In addition, the filling from B4 contained about 25 nails of various sizes, small iron clamps for joining planks of wood, a large hook (nos. 5-9) and fragments of what appear to be a small trowel.

A small metal buckle or clip, or perhaps the clamp from a book cover (no. 4), came from A7, an early 12th century pit. It consists of a copper plate of fleur-de-lis design, to which a thinner strip of copper was joined and bent round underneath, the two being held together by two rivets.

STONE (FIG. 16, nos. 1-4)

Various kinds of stone were found in the late Saxon pit B4, including fragments of:

- Coral rag, similar to that at the Headington quarries and used in St. Michael's Church tower
- Grey shelly limestone, perhaps forest marble
- Very sandy limestone, perhaps Jurassic, probably local
- Grey shelly oolite limestone:
- Weathered oolitic limestone, with one flat surface, evidently a building fragment.

Four fragments of stones were found in various contexts. A piece of brownish-grey flagged silt stone, \( \frac{3}{4} \) in. thick (no. 1). Irregular shape due to breaking: overall measurements \( 3 \frac{1}{2} \) by \( 3 \) in. Both flat surfaces partially smoothed: one edge extremely smooth with gently undulating surface. From the late Saxon pit B4.

Brownish-grey, fine-to medium-grained hard quartz paleozoic sandstone (no. 2), from B8, a 14th century pit: \( 1 \frac{1}{2} \) by \( 1 \frac{3}{8} \) in. Thickness \( 1 \) in., tapering to \( \frac{3}{4} \) in.

Yellowish-brown medium to coarse-grained slightly felspathic calcareous sandstone, with fine-grained matrix of similar material: possibly Millstone Grit (no. 3), from level superficial cutting B, perhaps of 11th or 12th century date. Overall measurements; \( 2 \frac{3}{4} \) by \( 1 \frac{3}{8} \) in. Thickness \( 1 \) in. tapering to \( \frac{3}{4} \) in. Deep incision diagonally across one smoothed surface.

Small piece of yellowish-brown micaceous sandstone, probably paleozoic, and perhaps Millstone Grit (no. 4) measuring \( 1 \frac{1}{2} \) by \( 1 \frac{1}{2} \) in. Thickness \( \frac{3}{4} \) in., tapering to \( \frac{3}{8} \) in. All surfaces smoothed with use. From same level as no. 3.

BONE OBJECTS (FIG. 15, nos. 10-12)

From pit B4 came a bone implement (no. 10). One end is pointed, and the other has a slight concave hollowing on both sides. The surfaces are highly polished, and the incised decoration covers both sides. This tool is of a type found occasionally in Saxon contexts of all periods and was perhaps used for leather-working.43

Two bone draughtsmen were found in the filling of pits B5 and B9 (nos. 11, 12). That from B9 is datable to the 12th century. Both are much the same in design, and are probably of the same date.44

44 Cf. London and the Vikings (1927), fig. 26.4, 6. S. Grieg, Middelalderske Byfund (1933), 259, figs. 228-235.
FABIAN RADCLIFFE

THE ANIMAL REMAINS

By J. W. BANKS

The animal bones from the late Saxon pits were entirely from domesticated animals, except for one bone which may be from a wild duck.

In all the pits, sheep or goat outnumbered ox by more than 2:1. This agrees with the findings from the pits under the Castle Mound, but contrasts with the Saxon levels at the Clarendon Hotel where the position was reversed. In pit C1 pigs were as common as at the latter site, but in pits B4 and C2 they were rare. In contrast to these other two sites, the Logic Lane pits contained far more domestic fowl. On all three sites there was a complete absence of deer or fish bones, but a small amount of oyster shell was found.

All bones were, on the average, smaller than their present-day counterparts. The horse in B4 was approximately 13 hands high, the size of a pony. The mandibles of sheep or goats ranged from those of a small lamb upwards, but the majority were full grown. The remains of oxen indicated that some calves and half grown beasts had been slaughtered.

Most of the bones showed signs of butchery, although none of the horse bones had been cut. There was an almost complete absence of shafts of long bones: these had been cut into fragments too small for certain identification. Many bones had been gnawed, presumably by dogs.

One ox digit and one of the human femora from pit C1 showed signs of osteoarthritis: but apart from these, the bones were in good condition and free from signs of injury or disease.

CONCLUSIONS

The prehistoric finds are not surprising since the area of Summertown-Radley terrace-gravel at Oxford would have been as attractive in ancient times as those at Abingdon, Radley, Standlake, or Stanton Harcourt. The finds from Logic Lane include, however, the first of the Bronze Age to have been made within the bounds of the medieval city.

Further prehistoric finds may come to light in future excavations in the city (see above, p. 33), but their survival on this site is probably due to the area having been largely given over to gardens from the early 15th to the mid-19th century, and never so intensively built on as many other parts of the city. Enthusiastic digging in College gardens may produce unexpected results.

The few sherds of Romano-British pottery can possibly be connected with the finds of coins around the Church of St. Mary the Virgin to indicate a small farmstead typical of the local gravels.

Much pottery, animal bone, and other finds that will help to throw light

44 Archaeologia Oxoniensis (1892-3), 51, 295.
## Table I. Animal bones from pit B4.

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<th>Ox</th>
<th>Horse</th>
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| Number of bones | 35 | 24 | 75 | 5 | 52 | 2 | 28 | 1 |
| Approximate no. of animals | 4 | 1 | 14 | 2 | 1 | 1 | 5 | 1 |

1. Due to their often fragmentary condition, metacarpals and metatarsals of ox and sheep or goat are listed as metapodials.
2. Ribs and vertebrae of ox, sheep or goat and pig have been ignored in calculation.
# TABLE 2. Animal bones from pit C1.

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* Mollusca: Ostrea edulis, 1
EXCAVATIONS AT LOGIC LANE

Table 3. Animal bones from pit C2.

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<th>Horse L</th>
<th>Horse R</th>
<th>Sheep or Goat L</th>
<th>Sheep or Goat R</th>
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<th>Pig R</th>
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<td>(fused lumbar) I</td>
<td>(fused lumbar)</td>
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</tbody>
</table>

Number of bones: 19, 1, 28, 4, 19, 1
Approx. number of animals: 2, 1, 2, 1

Mollusca: Ostrea edulis, 1

67
on life in the early days of the town, were recovered from late Saxon pits. The pottery forms an important sequence.

The information obtained from the 12th century finds is also of importance for the early history of Oxford. It has long been held that the regular grid-plan of the streets with churches at corner-sites points to deliberate planning of the town at its foundation, about 900 A.D., when the position of the town wall and the shape of the tenements were also established.\textsuperscript{45} Cornmarket,\textsuperscript{46} Queen Street\textsuperscript{47} and probably High Street,\textsuperscript{48} three of the four main streets that meet at Carfax, are flanked by late Saxon house-remains and may have been planned about 900 A.D. (FIG. 1).

But many major changes took place soon after the Norman Conquest. Grandpont\textsuperscript{49} which extends St. Aldate's, and the Castle\textsuperscript{50} which lies across the west end of the town, were built. Other important alterations were made early in the 12th century, when Cornmarket was realigned and many of the minor streets laid out.\textsuperscript{51} Kybald Street has been shown by this excavation to have been laid out probably about 1130, perhaps along the line of the former boundary between the properties facing Merton Street and High Street (see above, p. 46). Logic Lane too is of the same date or later, as it crosses Kybald Street with a kink.

The laying out of these streets involved extensive subdivision of the existing properties, many being truncated to form tenements (see above, p. 46) fronting the new street.\textsuperscript{52} From these tenements in the 12th century survive many pits (see above, p. 49) and the line of the street-fronts (see above, p. 48). Some stretches of wall—perhaps of a house—were built of stone in the 13th century, but few pits were dug in the later Middle Ages. Kybald Street was closed in 1447 as part of an abortive plan to build Magdalen College in this area, which had lain derelict behind the High Street houses since the Black Death a century before. The whole area remained open as gardens until modern times.

ACKNOWLEDGEMENTS

Grateful thanks are due, first, to the Master and Fellows of University College for permission to dig, and to the contractors, Messrs. Laing, for allowing observation of the site during the building operations, to Mr. R. W. Hamilton, Keeper of

\textsuperscript{45} H.S.J., 483-90.
\textsuperscript{46} Clarendon Hotel, 4, FIG. 1. 13-17 Cornmarket; below p. 338.
\textsuperscript{47} 23-25, 38, Queen Street, Oxoniensis, xxv (1960), 135.
\textsuperscript{48} Brasenose College, Oxoniensis, xxv (1960), 134. Examination Schools, Archaeologia Oxoniensis (1892-5), 7-14.
\textsuperscript{49} Dark Age Britain, ed. D. B. Harden, (1956), 238.
\textsuperscript{50} Castle Mound, 79.
\textsuperscript{51} St. Frideswide's Lane, below pp. 30-1. Brasenose Lane, below p. 32.
\textsuperscript{52} Compare H.S.J., Plan II.
EXCAVATIONS AT LOGIC LANE

Antiquities at the Ashmolean Museum, for giving full use of the facilities of the Department during the excavation and the writing of the report. Many people have given their encouragement and advice. I am especially grateful to Professor R. J. C. Atkinson for examining the prehistoric sherd and allowing me to quote his comments on it: to Mr. G. C. Dunning for reporting on the two imported sherds from Normandy: to Mr. E. M. Jope for constant help with the late Saxon and mediaeval finds: to Mr. H. J. Case for reporting on the antler and flints and for advice in the preparation of the report: to Mr. J. W. Banks for his report on the animal bones from the late Saxon pits: and to Mr. J. M. Edmonds and Mr. N. J. Morris of the Geological Department of the University Museum for their examination of the stone samples. The excavation was carried on largely with the help of volunteers from local schools, too many to be named: but I am especially grateful to Miss Patricia Dorrell, who also gave great assistance in the writing of the report, and to Miss Elizabeth Stone and Miss Rachel Toynbee. Above all I have an especial debt of gratitude to Mr. David Sturdy of the Ashmolean Museum, who not only gave unstintingly of his time and assistance during the excavation and the preparation of the report, but also undertook the entire responsibility of observing the site during the building operations, from October 1960 to January 1961. Without his constant help, so generously and patiently given, neither the excavation nor the report could have been completed. The Ministry of Works has made a substantial contribution towards the cost of publication.
A. Cutting B, Walls 1-4, from the North (p. 53). On the left can be seen 3 stones forming part of a false vault, carrying Wall 4 over pit B2.

B. Cutting B, Walls 1 and 2, from the South. On the extreme left is the fragment of moulded doorpost (p. 53).

OXONIENSIA, VOLS. XXVI/XXVII (1962) RADCLIFFE, EXCAVATIONS AT LOGIC LANE, OXFORD