

ROCHESTER CASTLE, 1976

COLIN FLIGHT, M.A. AND A. C. HARRISON, B.A., F.S.A.

The structural history of Rochester Castle (Fig. 1) was first worked out by Canon G. M. Livett in 1895,¹ and his account has been followed in general by subsequent writers. For the most part he seems to have described the evidence accurately and interpreted it correctly, in the light of the information available from documentary evidence;² but there are a few points which need to be reconsidered. One problem which Livett failed to solve concerns the site of the earliest castle at Rochester. A solution for this problem occurred to us as a result of observations made during the 1960s and has now been confirmed by excavation. The main purpose of this article, therefore, is to present the evidence in favour of our solution. We also correct a number of other mistakes into which Livett was led by his failure to identify the site of the earliest castle.

The earliest reference to a castle in Rochester occurs in 1086, when it was recorded in Domesday that the Bishop of Rochester had been given land in Aylesford 'in exchange for the land on which the castle stands'.³ A little later, during the rebellion of 1088, a castle at Rochester was held against William II by the supporters of his brother, Duke Robert, but besieged and taken. At about the same time, though the sequence of events is not entirely clear, Bishop Gundulf agreed to fortify the castle 'for the king in stone at his own expense', in return for

¹ *Arch. Cant.* xxi (1895), 21–38. The keep had already been described in detail by G. T. Clark, *Arch. Journ.*, xxxii (1875), 210–23. Some further information on both the keep and the outer defences was supplied by G. Payne, *Arch. Cant.*, xxvii (1905), 177–92.

² For the documentary evidence Livett relied on a paper by C. H. Hartshorne, *Arch. Journ.*, xx (1863), 205–23. This is now superseded by the contribution from Professor R. A. Brown, in R. A. Brown, H. M. Colvin and A. J. Taylor (eds.), *The History of the King's Works*, ii (London, 1963), 806–14. Also by Professor Brown is the official guidebook, *Rochester Castle*, (London, 1969).

³ *V.C.H.*, Kent, iii (London, 1932), 209.

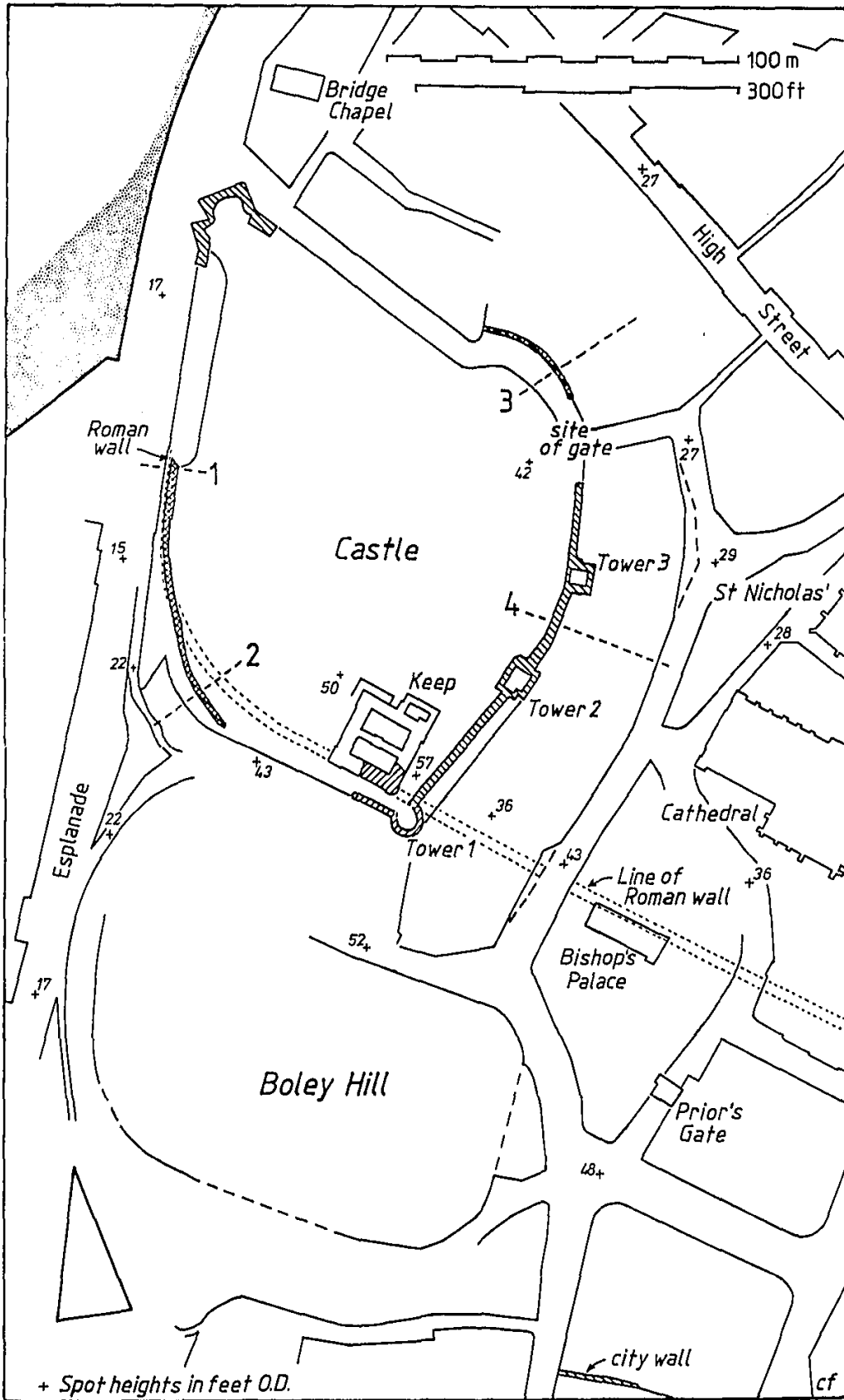


Fig. 1. Rochester Castle and Boley Hill, based on the Plan by Livett (*Arch. Cant.*, xxi (1895). (For key to hatchings, see Fig. 2.)

the confirmation of a grant of land in Buckinghamshire.⁴ The wording here clearly implies the existence of an earlier castle not constructed in masonry.

Livett's problem was that he could not find archaeological evidence for any fortification of the castle site earlier than the parts of the curtain-wall which he identified—no doubt correctly—as the work of Bishop Gundulf. In an attempt to resolve this apparent contradiction between the archaeological and documentary evidence, he suggested that the '*castellum*' mentioned in accounts of the rebellion of 1088 was not a castle in the medieval sense at all, but rather the city itself, surrounded by its Roman wall.⁵

Understandably dissatisfied with this solution but still faced with the same difficulty, Canon S. W. Wheatley put forward the idea that the earliest castle at Rochester was on a different site from Gundulf's—on Boley Hill, to the south of the existing castle and outside the line of the Roman wall, where a mutilated earthwork still survives. Formerly thought to be a Danish siege-castle of the ninth century,⁶ Boley Hill was now identified as an eleventh-century 'motte and bailey'; and this identification,⁷ in spite of its inherent improbability, has been accepted *faute de mieux* by subsequent writers. No attempt has been made to confirm the hypothesis, except for an inconclusive excavation in 1960.⁸

It can be fairly said that the only argument in favour of an eleventh-century date for Boley Hill has been the alleged absence of pre-Gundulfian defences on the castle site itself: but even this argument can now be shown to be wrong. In fact there is ample evidence to prove that the castle site was already surrounded by large-scale earthworks before the Gundulfian wall was built. Some of this evidence was not accessible in Livett's time, some of it he missed and some of it he misinterpreted—though he came close to the right answer when he noted that the north curtain-wall was built upon the gravel upcast from the ditch.⁹

⁴ *Textus Roffensis* (ed. Hearne, 1720), 145–8. The exact date of the agreement is unknown, except that it must fall between the accession of William II in November 1087 and the death of Archbishop Lanfranc in May 1089. The siege of 1088 took place in May, according to Ordericus Vitalis: *King's Works*, i, 28–9.

⁵ *Arch. Cant.*, xxi (1895), 22.

⁶ This was the view taken by local antiquaries in the eighteenth century and also by Livett, *Arch. Cant.*, xxi (1895), 30.

⁷ S. W. Wheatley, *Arch. Cant.*, xxxix (1927), 159–64; xli (1929), 127–41.

⁸ A. J. F. Dullea, *Arch. Cant.*, lxxiv (1960), 197–8.

⁹ *Arch. Cant.*, xxi (1895), 28.

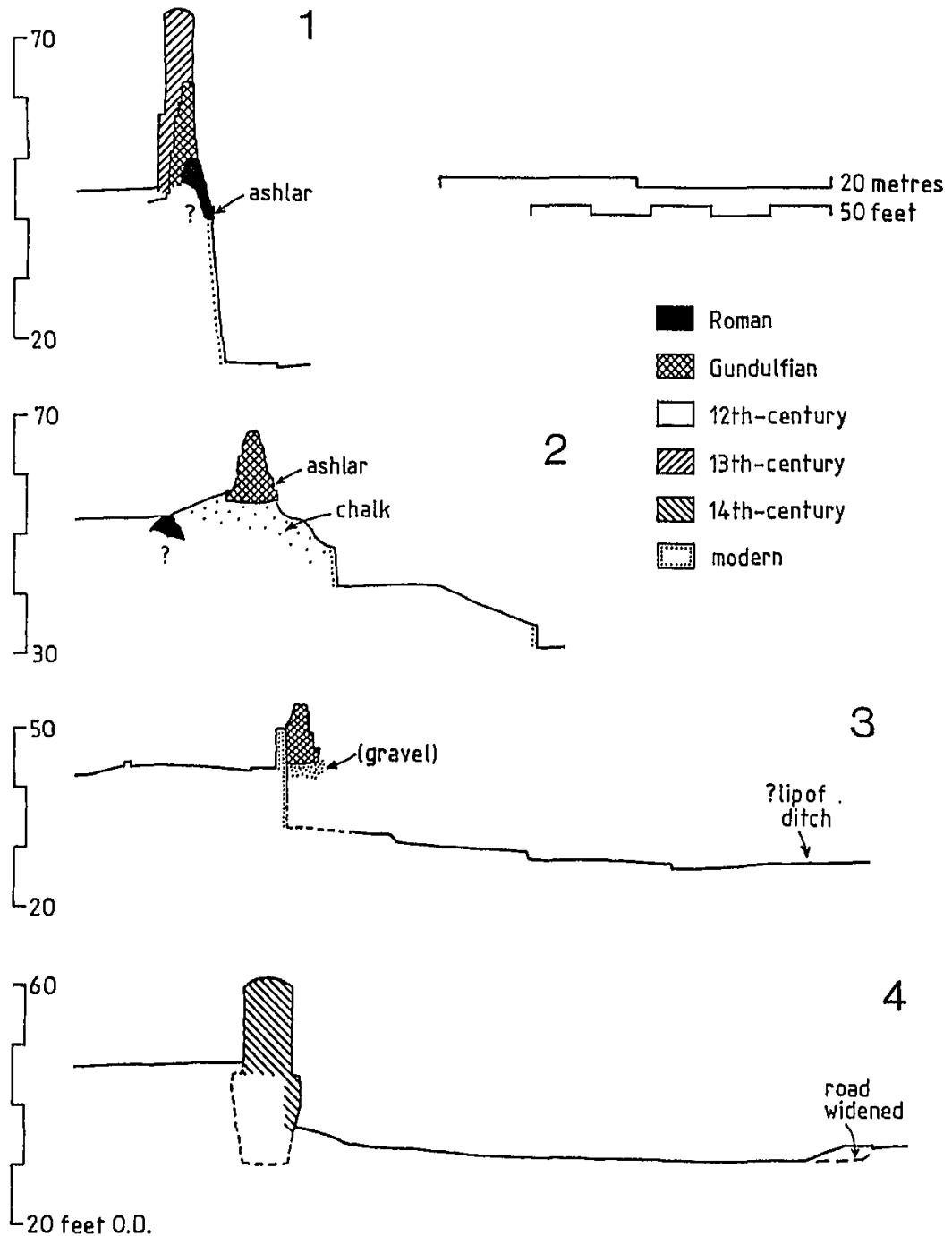


Fig. 2. Rochester Castle: Profiles through the Defences.

THE PRIMARY EARTHWORKS

The primary earthworks can be identified on all sides of the castle except on the west, where the Gundulfian wall is built partly up against and partly on top of the Roman town wall. Profile 1 (Fig. 2), based on

a section drawn by Livett,¹⁰ shows both these walls, and also the wall of a thirteenth-century building abutting them. Of the Roman wall, best viewed from the Esplanade, three courses of the ashlar facing survive. Livett was told by the clerk of the works in charge of the underpinning carried out in 1870–2 that these three courses extended inwards beneath the wall, forming its foundation;¹¹ but this is doubtful, particularly as his suggestion of a similar foundation at the south-eastern angle of the Roman town¹² has been disproved by a recent excavation.¹³

Further south the Roman and medieval walls part company. Profile 2 shows the Gundulfian wall built in a shallow trench on top of a bank of chalk rubble. This bank has been cut back externally into a nearly vertical face about 15 ft. high, perhaps when the ditch was filled in and the area landscaped during the eighteenth century. Livett mistook the chalk for 'solid rock'.¹⁴ Until 1970, when the whole slope was faced with stone, it was in fact quite evident that the wall stood on made ground composed of chalk rubble, with a few broken flints embedded in it. In any case, the chalk cannot possibly be bedrock, because the Roman wall runs inside the Gundulfian wall, at a much lower level. George Payne found that the stones forming the edge of a modern path here had been 'bonded into' the top of the Roman core.¹⁵ There is thus no doubt that a bank of chalk rubble was piled up against the outer face of the Roman wall, burying it completely, and that later the Gundulfian wall was built along the crest of this bank. These facts suggest very strongly that the chalk bank does not belong to the same structural phase as the Gundulfian curtain-wall. Clearly whoever threw up the bank was not intending to build a wall as well; and clearly the bank had had time to consolidate before the Gundulfian wall was built upon it.

What looks like a relieving arch can be seen on the inner face of the Gundulfian wall at about the point where this breaks away from the outer face of the Roman wall and climbs up onto the chalk bank.¹⁶ This seems to illustrate the problems posed for Gundulf by the existence of the primary earthworks.

¹⁰ *Arch. Cant.*, xxi (1895), Pl. I, No. 7. Livett's figure of 38 ft. for the difference in level between the Castle Gardens and the Esplanade is incorrect.

¹¹ *Arch. Cant.*, xxi (1895), 27.

¹² *Arch. Cant.*, xxi (1895), 27, note.

¹³ A. C. Harrison and C. Flight, *Arch. Cant.*, lxxxiii (1968), 59, Fig. 4.

¹⁴ *Arch. Cant.*, xxi (1895), 25.

¹⁵ *Arch. Cant.*, xxvii (1905), 189.

¹⁶ This feature was not noticed by Livett. It is mentioned by Brown, *Rochester Castle*, 27, but not identified as a relieving arch.

On the opposite northern side of the castle the curtain-wall can again be shown to follow the line of an earlier earthwork. The bank here is of gravel, not chalk, a fact easily explained by reference to the topography of the site. Like Boley Hill, the south side of the castle occupies a low ridge of chalk, but the northern part, like most of the rest of the ancient city, was built on brick earth and gravel.¹⁷

Of the north curtain-wall all that survives is a stretch of the Gundulfian wall, much dilapidated and pierced through at intervals by doorways giving access to the gardens behind High Street. In the garden of 34–36 High Street, where Profile 3 was drawn, the side of the ditch has been dug away and the ditch itself filled in. Subsidence affecting an outhouse behind the shop may possibly mark the position of its outer lip, about 82 ft. from the wall. Gravel underlying the Gundulfian wall, though not exposed in this garden, was observed by Livett further to the west.¹⁸ The bank appears to have been about 15 ft. high.

The east curtain is known from documentary evidence to have been rebuilt almost entirely during the fourteenth century, between 1367 and 1370. The side of the ditch has been dug away along much of its length, so that the foundations are exposed to a depth of about 10 ft. in the little graveyard opposite the cathedral, between towers 2 and 3, and of as much as 15½ ft. north of tower 3. They consist of massive wedge-shaped piers of masonry linked together by crude pointed arches¹⁹—exactly the same construction that was used in the east wall of the city, where this was carried across a filled-in ditch.²⁰ Until they were blocked with stone some years ago the four arches south of tower 3 could be seen to be filled with roughly horizontal layers of sand and gravel. The four arches north of tower 3 have been emptied out, but patches of gravel can be observed adhering to the exposed surfaces. It is clear, therefore, that the fourteenth-century foundations were sunk into a bank of gravel, as shown in Profile 4. A recent excavation has provided valuable evidence confirming this interpretation (see below).

TOWER 2

Unlike tower 3, which is all of one build, tower 2 is set upon an earlier foundation. This feature needs to be described in some detail, partly

¹⁷ The deepest and most informative section geologically is that recorded in the Deanery Garden: *Arch. Cant.*, lxxxiii (1968), 66, Fig. 9.

¹⁸ *Arch. Cant.*, xxi (1895), 27–8, Pl. II.

¹⁹ *Arch. Cant.*, xxi (1895), 35–6, Pl. V. Livett's interpretation is utterly unconvincing. See also A. A. Arnold, *Arch. Cant.*, xviii (1889), 197–8, Pls. I–II.

²⁰ *Arch. Cant.*, lxxxiii (1968), 67–8, Pl. IIA.

ROCHESTER CASTLE, 1976

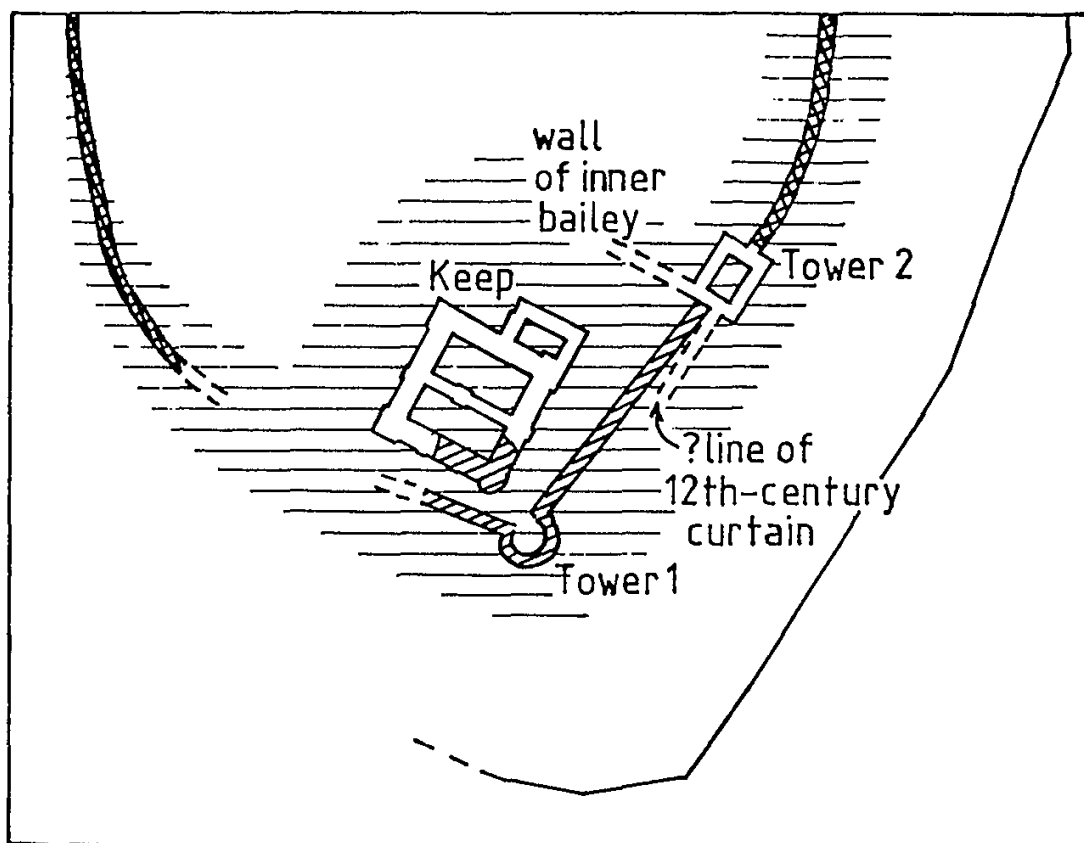


Fig. 3. Rochester Castle: Conjectural Diagram showing the south-east Corner of the Castle before the fourteenth-century Reconstruction.

because Livett's account is grossly inaccurate,²¹ and partly because it has now been obscured by underpinning. The north face was exposed to a depth of about 7 ft., when the side of the ditch was dug away; some years ago the east face was also cleared to a depth of 2 to 2½ ft. The foundation does not consist of gravel, as stated by Livett, but of mortared rubble. In the east face is a crack, which starts near the north-east corner and passes obliquely downwards to the south; that part of the foundation lying below the crack has shifted outwards by up to 6 in., so as to produce a jagged, slanting offset. Tower 2 itself is not affected, and therefore has to be later. On the north face is an overhanging footing, thought by Livett to be secondary, but in fact of one build with the rest of the foundation. The north face returns into a short projection on the line of the curtain-wall, proving that the original tower was inserted into a still earlier wall. This projection is separated from the fourteenth-century foundations by a narrow vertical gap, filled with gravel. For reasons which are explained most easily by means of a diagram (Fig. 3), it seems likely that this

²¹ *Arch Cant.*, xxi (1895), 29.

foundation is of twelfth-century date,²² and that the curtain-wall to the south of it was re-aligned in the thirteenth century before being rebuilt in the fourteenth.

Before the foundation was faced with modern masonry, patches of gravel could be seen adhering to the exposed surfaces. It was even possible to distinguish tip lines sloping downwards to the north and west. In a streak of dark earth sandwiched between layers of gravel was found a single sherd of medieval pottery, thin and black, shell-tempered, and with a simply beaded rim.

THE EXCAVATION

In the autumn of 1976 permission was given by Medway Borough Council for the excavation, in advance of landscaping the area, of a narrow strip of ground lying to the east of the curtain-wall and north of tower 3. This strip was only 17 ft. in width, owing to a modern disturbance to the east and effectively about 40 ft. long as further to the north and ancient levels had been increasingly disturbed by the foundations of the recently demolished 'Castle Hall', destruction being complete after 55 ft. (Fig. 4). In section A-B, Fig. 4, it was possible to extend the trench for a distance of 7 ft. into the arch beneath the fourteenth-century wall. It should perhaps be noted that this vital area was only partly excavated, more than half of it being left for any future investigation that may be thought necessary.

Stratification

Section A-B (Fig. 5, Plates I and II). Directly under the modern floor of concrete a layer of the reddish gravel, which, as mentioned above, originally filled the whole arch, survived undisturbed for a depth of 2 ft. 3 in. with a rather more stony layer at its eastern end, which perhaps represents the remains of a marking-out bank. From the gravel were recovered scraps of Romano-British pottery and a coin of King Alfred (*d.* 899), which, though of great interest on itself (p. 55), must be regarded as a 'stray'. Beneath the gravel was a layer of fine black soil varying in depth from 1 ft. to 6 in. and containing pottery not necessarily later than the eleventh century (p. 41). Below this was

²² Square mural towers are typical of the twelfth century, for example on Henry II's inner curtain-wall at Dover built *c.* 1180. While tower 2 might be as early as William de Corbeil's work of *c.* 1127 it is equally possible that it is connected with the repairs and strengthening of the defences carried out in 1166-1170, 1173-4 or 1191-1202 (see D. Renn, *Norman Castles in Britain*, 303, quoting the Pipe Rolls for those periods). After 1215 round towers had become fashionable, as in the south-eastern bastion and the rebuilt turret of the Keep *c.* 1221.

ROCHESTER CASTLE, 1976

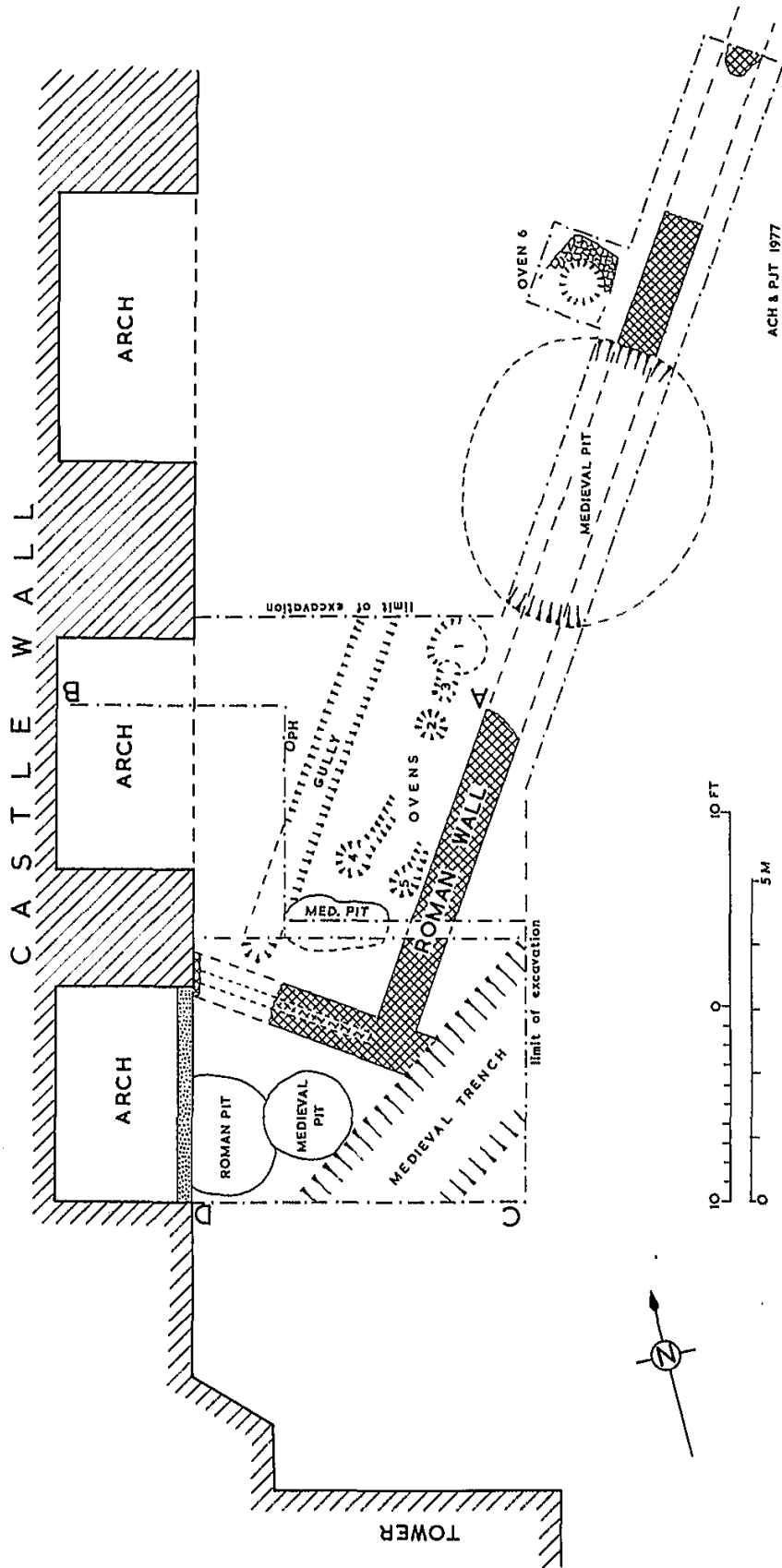


Fig. 4. Rochester Castle: Site Plan.

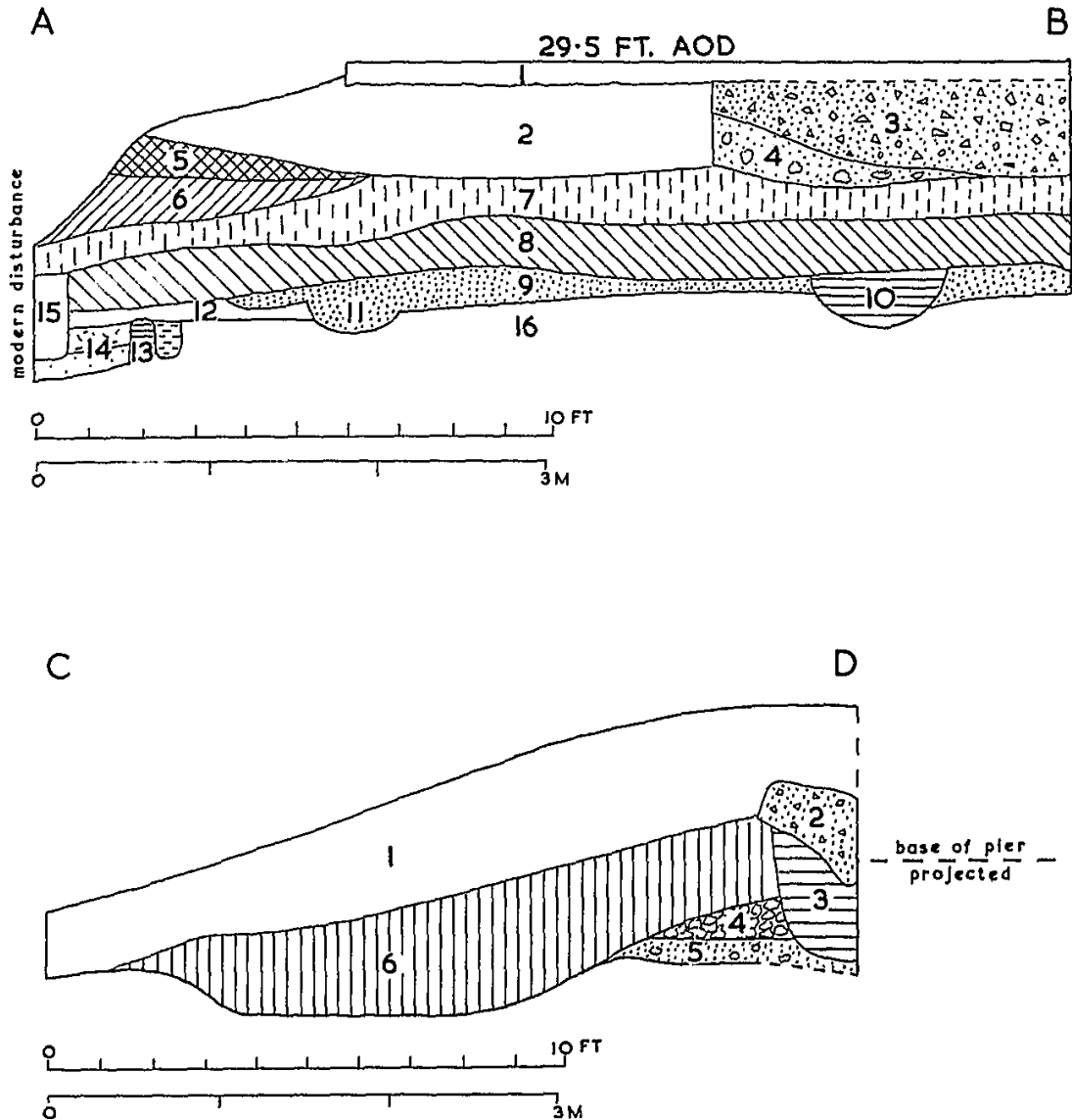


Fig. 5. (Upper) Section A—B. 1. Modern Concrete; 2. Modern Disturbance; 3. Reddish Gravel; 4. Soil with Flints; 5. Black Earth with Flints; 6. Brown Earth with Flints; 7. Black Soil; 8. Soil containing numerous late-Roman Coins; 9. Dirty Brickearth; 10. Pit; 11. Gully; 12. Fallen Plaster; 13. Burnt Clay; 14. Débris of Oven; 15. Wall Trench; 16. Orange Gravel (Natural Subsoil). (Lower) Section C—D. 1. Modern Disturbance; 2. Dirty Gravel; 3. Filling of Pit; 4. Flint Cobbles; 5. Dirty Brickearth and Flints; 6. Brown Earth filling wide, flat-bottomed medieval Trench.

a layer of black soil of a similar depth but of a denser and stickier consistency and with many fragments of Roman tile and flints. This yielded a considerable quantity of late Romano-British pottery and numerous late Roman coins (p. 44). At the eastern end of the section an oven or kiln had been cut into the gravel subsoil and this, in its turn, had been cut by the trench of a Roman wall which extended diagonally across the site. This wall had been rendered on its western side and a

thin layer of plaster débris lay across the remains of the oven or kiln, which, like the others subsequently found further south, had been truncated when the site was levelled for the construction of the wall. A fairly well worn coin of Allectus in the fill of oven A suggests that this may have been early in the fourth century. The earliest feature was the shallow gully which extended N—S across the site and contained pottery not later than c. A.D. 200.

The stratification over the rest of the site was broadly similar though the upper levels were more disturbed. It has, however, been thought worth while to give the most southerly section C—D (Fig. 5) to show a medieval feature tentatively identified as the bottom of a siege-trench or tunnel. This feature had been cut through the Roman levels and into the sub-soil and consisted of a flat-bottomed trench approximately 4 ft. in width approaching the castle wall at an oblique angle. There had been no silting and the trench had been filled immediately with brown earth containing pottery identifiable as being late-twelfth or early thirteenth-century in date.

The Ovens. Remains of the six ovens or kilns, varying in size and shape (Fig. 4, and Plate III) were found. These were of a very simple construction consisting of holes dug into the sub-soil and lined with clay with slight traces of a flue-trench in two cases. The best preserved (oven F) had been reinforced with lumps of chalk (Plate IV). No wasters or slag suggestive of potting or smelting were found and this fact, together with their small size, suggests that they were for domestic rather than industrial use, though it is curious that they should be so numerous.

The Roman Wall. This was well constructed of layers of coursed flints 2 ft. thick and survived to a height of 1 ft. 3 in. (Plate V). It was traced for 55 ft. in the direction of the High Street to which it was approximately at right-angles. At the other end had been a T-junction and in the arm of this nearer to the castle wall was a well defined slot for a wooden cill (Plate VI). This wall enclosed an area of black humus-rich soil containing late Romano-British pottery and some 750 coins ranging from Claudius II to Honorius, which are discussed below (p. 53). This high concentration of low denomination coins suggests chance losses in a locality where they were in constant use and makes it likely that this wall formed part of the site of a market or was closely adjacent to it.²³ It is noteworthy also that activity evidently continued on the site right up to the end of the Roman period.

²³ The concentration of fourth-century coins in the area of the theatre at Verulamium is a possible parallel.

Medieval Pit. In addition to pottery of the late-eleventh or early twelfth-century (p. 43) this contained five complete loom-weights and several fragments. These are in every way similar to those found at East Gate in 1969,²⁴ associated with pottery of the same date.

'*Siege-trench.*' This trench, 4 ft. wide and with steeply sloping sides was traced for a distance of 18 ft. While its identification as a siege-trench can only be tentative, it should be noted that its bottom is approximately 20 ft. below the base of the fourteenth-century wall and 4 ft. below the bottom of the piers that formed its foundations and must therefore have been well situated to undermine that wall's predecessor. Of the two thirteenth-century sieges the pottery would suggest King John's in 1215 rather than Simon de Montfort's in 1264.

CONCLUSION

The evidence of this paper suffices to show that the castle site is surrounded on all sides except towards the river by earthworks of considerable size. In addition, these earthworks are demonstrably earlier than the curtain-wall which is agreed to be Gundulfian; and Norman pottery has been recovered from a sealed context beneath the rampart. We therefore propose to identify the primary earthworks as the pre-Gundulfian castle which Livett failed to find, and which Wheatley sought to locate on a site outside the Roman wall.

We suggest that the earliest castle at Rochester was built—probably soon after 1066—in the south-west corner of the Roman town. On the landward sides it was defended by massive earthworks, the rampart being composed of chalk rubble on the south and of gravel on the east and north. The depth of the ditch has only been recorded once: a cess-pit dug through the filling near tower 1 reached chalk at a depth of 20 ft.²⁵ On the west, overlooking the river, the Roman wall was incorporated into the defences of the castle. In digging the ditch, on the other hand, two stretches of the Roman wall would have had to be demolished. There are slight indications of a motte on the site of the existing keep; but this corner of the castle would seem to have been altered considerably when the keep was built, and again during the thirteenth century, so that the original plan is difficult to reconstruct.

Bishop Gundulf, in or after 1088, built a curtain-wall of stone to replace the original stockade. The keep was built by Archbishop William de Corbeil after 1127, and the foundation which underlies tower 2 may also be of twelfth-century date. After the siege of 1215, repairs and alterations to the keep and curtain-wall were carried out

²⁴ *Arch. Cant.*, lxxxvii (1972), Plate I and Fig. 20, No. 12 and pp. 155–6.

²⁵ G. Payne, *Arch. Cant.*, xxix (1911), p. lxxxiv.

during the first twenty years of the reign of Henry III. Since Boley Hill can no longer be dated to the eleventh century, some other interpretation will have to be found; and, perhaps, it may be identified as King John's siege-works or as a thirteenth-century out-work designed to reinforce the defences on the side which had been proved vulnerable in 1215. If the latter, it has a counterpart at Dover Castle in the earthworks surrounding the church and *pharos*.

A thorough reconstruction of the east curtain was undertaken by Prior John of Hartlip, on behalf of Edward III, between 1367 and 1370. His clerk of works was clearly apprehensive about building a wall on top of a bank of gravel—and the cracked condition of the foundation beneath tower 2 suggests that he was right to feel uneasy.²⁶ He therefore decided to sink a series of massive stone piers linked by arches through the gravel until he reached solid ground. Later, when the front of the bank was dug away and thrown back into the ditch, this produced the appearance of gravel-filled arches which baffled even the perspicacious eye of Canon Livett.

If this reconstruction of events can be accepted, a number of difficulties disappear, for example those connected with the construction of the Norman curtain-wall and of the fourteenth-century east curtain, but, above all, it obviates the improbable expedient of placing the earliest castle upon the Boley Hill site outside the Roman walls in a manner entirely contrary to Norman practice.²⁷ 'Entities are not to be multiplied without necessity', said William of Occam, and this paper has endeavoured to show that his principle is also valid for the sites of castles.

THE FINDS

I. POTTERY

(i) *Romano-British*²⁸

In view of the abundant dating evidence from coins it was not thought necessary to illustrate any of the Romano-British pottery. From the main layer of black soil (Fig. 5, layer 8) besides much residual earlier material there were late colour-coated wares, stamped wares,

²⁶ The necessity of rebuilding Gundulf's curtain-wall in the fourteenth-century was no doubt due to the settlement of the gravel bank over a long period with slipping of the bank material into the moat.

²⁷ E.g. London, Canterbury, Colchester, Portchester, Pevensey etc.

²⁸ Mr. A. P. Detsicas, M.A., F.S.A., kindly provided the information contained in this note.

C. FLIGHT AND A. C. HARRISON

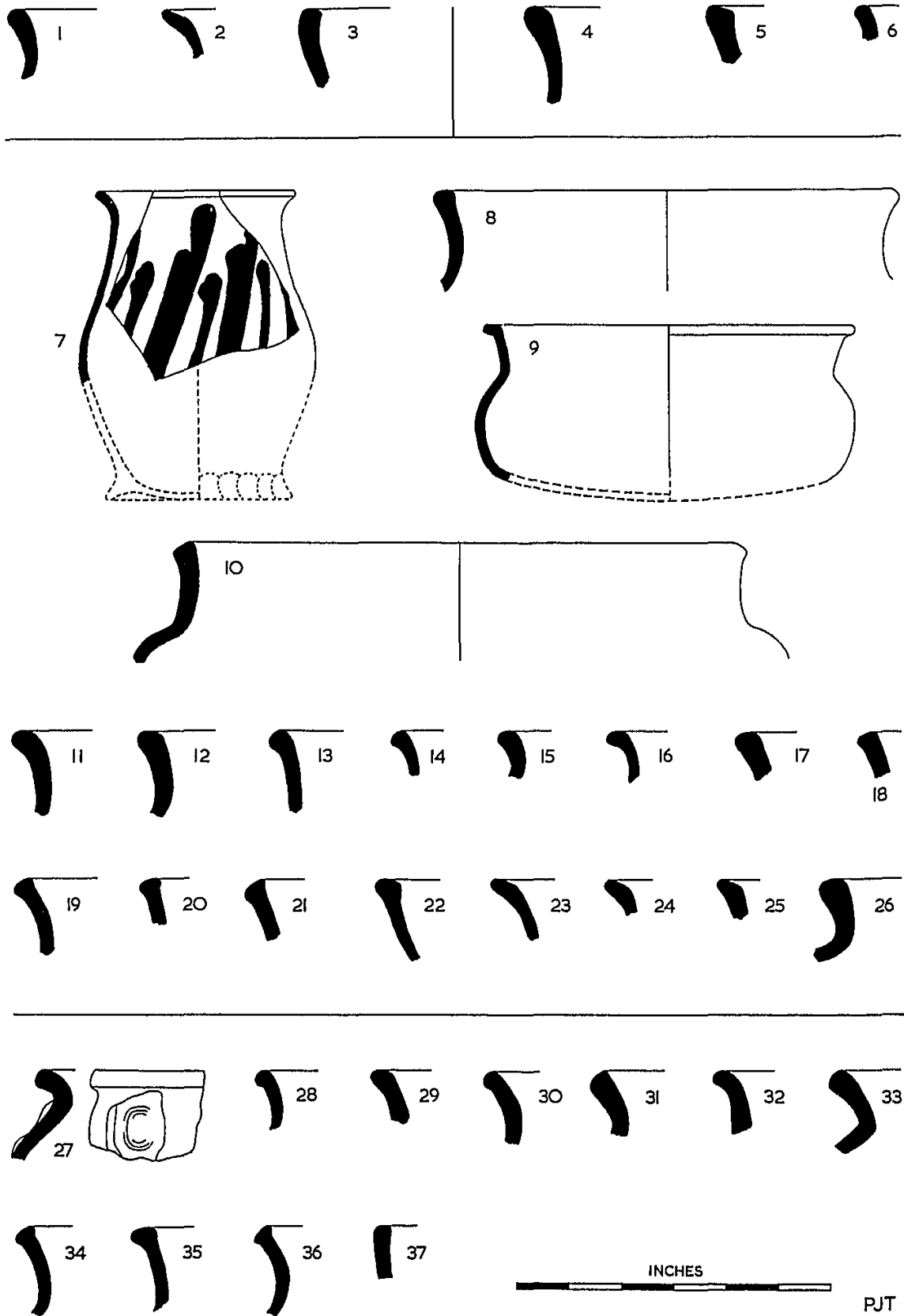


Fig. 6. Medieval Pottery (Scale: $\frac{1}{4}$).

Oxfordshire wares and white-slipped wares, all well established types of the third and fourth centuries. From the shallow gully (layer 11) came pottery of the late second or early third century including samian Forms 37 and 31R, the latter with the potter's stamp SINTVRV·F. Pottery from the fill of the ovens and the plaster layer was scanty, but suggested a date not earlier than the second half of the third century, and the pit in the south-western corner of the excavation was very late second or third century.

(ii) *Medieval* (Fig. 6)

P. J. Tester, F.S.A.

Group I (Nos. 1–3)

This group is mainly composed of body sherds from layer 7 (Fig. 5, Section a–b) observed to run under the red gravel known to underlay Bishop Gundulf's curtain-wall began between A.D. 1087 and 1089. This is strong evidence for dating the pottery before that period although the three rims figured were not actually sealed by the gravel. Half the total assemblage is grey sandy ware and the rest contains varying amounts of crushed shell. No. 1 is sandy with only slight shell admixture.

Group II (Nos. 4–6)

Pottery from pit containing loom-weights. Of the 48 sherds recovered a third are granulated grey ware and the rest shelly; the rims numbered 5 and 6 are in the former category. There is no independent evidence for dating these sherds but they are probably twelfth-century or perhaps a little earlier.

Group III (Nos. 7–26)

Sherds from the large medieval pit dug through part of the Roman wall. There are 96 fragments, mainly shelly cooking-pots. Also included are 8 body sherds of a grey sandy vessel, insufficient for illustration, with finger-impressed strip decoration—probably part of a pitcher.

One vessel is of particular interest: no. 7 is part of a red-painted beaker of imported Pingsdorf ware or one of its derivatives. Light-buff ware with fine sand, wheel-turned and well fired. The dark-red decoration resembles that on vessels from Normandy and the Ile de France belonging to the Pingsdorf group and dating from the eleventh

and twelfth centuries (cf. *Medieval Archaeology*, iii (1959), no. 13, and 63, nos. 4–8). Pingsdorf wares and their derivatives occur in England at sites along or near the south and east coasts, and the occurrence of this example at Rochester near the Medway estuary is within this pattern of distribution based on water-borne trade. It is remarkable that hitherto Rochester has produced comparatively little imported medieval pottery despite the considerable amount of excavation that has taken place in recent years.

This group fits comfortably into the range of wares and rim forms judged on other Kentish sites to belong to the twelfth century.

Group IV (Nos. 27–37)

Pottery from the filling of the medieval trench. About 60 sherds, nearly all coarse shelly ware. The general characteristics are twelfth-century, perhaps extending slightly into the thirteenth in some cases, e.g. no. 35. It is probable that the material in the back-filling or silting of this trench would contain a high proportion of sherds, to some extent earlier than its excavation and abandonment. This is compatible with the excavator's suggestion that the trench was related to the siege of the castle in 1215. There is no trace of vessels with flat-topped flanges characteristic of the late thirteenth century. No. 27 is part of a sandy grey pitcher with strip decoration similar to an example mentioned previously from Group III.

II. SMALL FINDS (Fig. 7)

Roman period

1. Bronze penannular brooch, with turned-over terminals, cf. R. G. Collingwood and I. A. Richmond, *The Archaeology of Roman Britain*, Fig. 106, no. 115, and *Richborough*, I, Pl. XV, no. 26. This is a first-century type and must therefore be regarded as out of context.

2. Bronze toilet set, consisting of tweezers, nail cleaner and ear-scoop, cf. *London Museum Catalogue No. 3*, Pl. XXXIX.

3. Bronze harness fitting.

4, 5 and 6. Bronze terminals from furniture, cf. *London Museum Catalogue No. 3*, Pl. XLVII A.

7 and 8. Bone spindles, cf. *London Museum Catalogue No. 3*, Pl. XLVI.

9 and 10. Bone hair-pins.

11. Bone casing for wooden box or casket, decorated with incised geometric pattern executed with a compass, cf. *Richborough*, IV, Pl. LVII.

ROCHESTER CASTLE, 1976

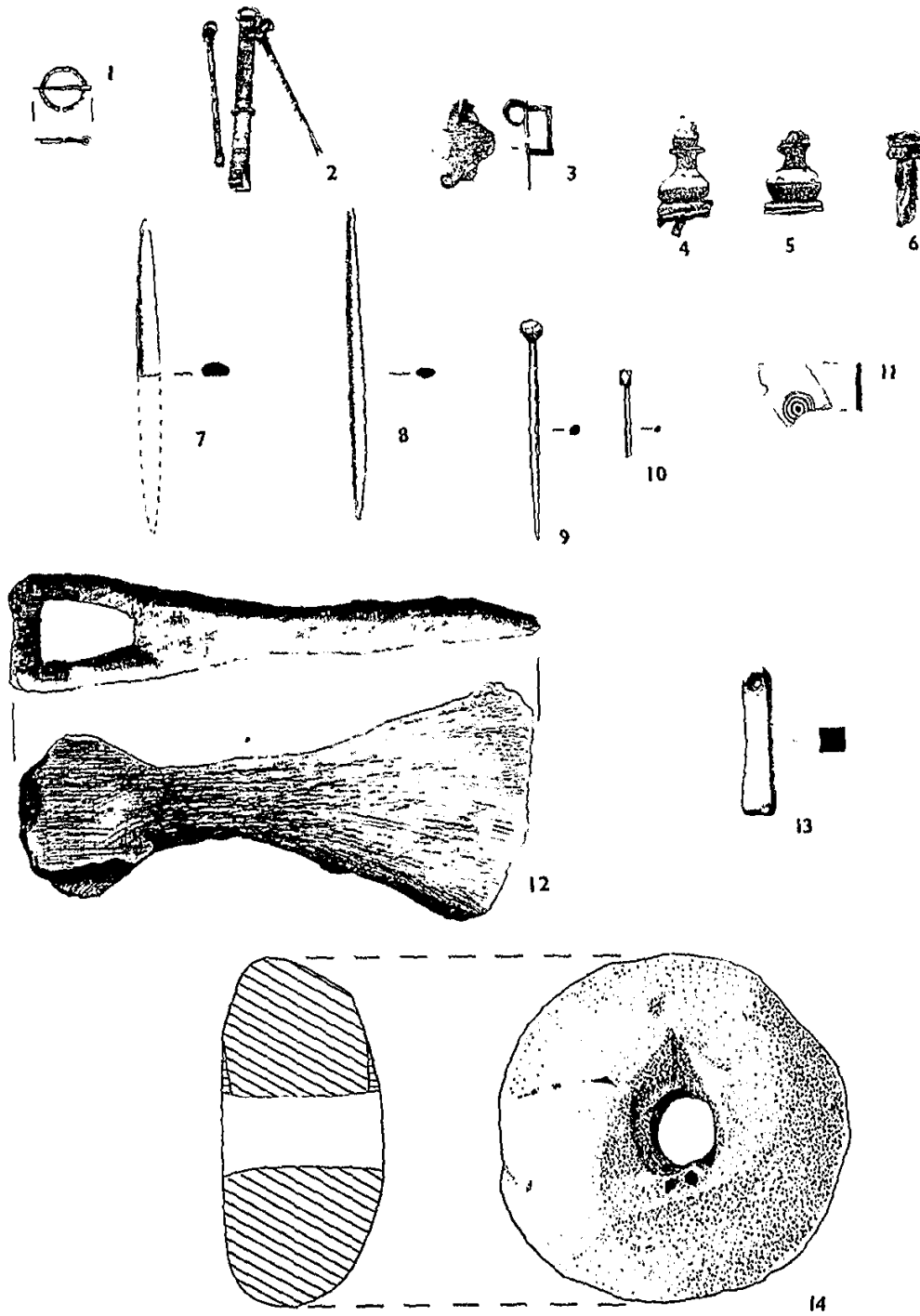


Fig. 7. Small Finds (Scale: $\frac{1}{4}$).

Viking period

12. Iron axe head. This is a symmetrical axe with a moderately expanded blade and spur projections above and below the socket. It corresponds exactly with type IV, as listed in *London Museum Catalogue No. 1*, 25, and Fig. 10, no. 1, which is described as the characteristic form of the tenth century.

Medieval period

13. Small whetstone of grey micaceous schist, pierced with a hole for suspension from a belt. These hones are thought to have been derived from Brittany and have been found in a number of sites of the Norman period in south-east England, cf. *London Museum Medieval Catalogue*, Pl. XCIV.

14. Loom weight. An example of the bun-shaped weight in common use from the ninth to the twelfth century. This weight is $5\frac{1}{2}$ in. in diameter with a central hole $1\frac{1}{4}$ in. in diameter. It weighs $3\frac{1}{2}$ lb.

III. COINS

A. Roman. Reported by E. H. Redfern

The condition of the coins varied considerably; a few being well preserved and easily readable, but the majority were corroded—many so badly as to obliterate the design and legend. Of the 355 coins listed as obverse and reverse not distinguishable many showed some indication of being VICTORIA or SALVS types of the late fourth century. It is possible that the proportion of barbarous coins is higher than shown in the list. Many of the coins were so corroded that even die-axis checks were impossible and only coins showing clearly barbarous features have been so listed.


The list indicates that the coins were chance losses, the small coins and large issues being generally well represented with very few of the larger, more valuable coins. The mint marks, where these can be distinguished, show the expected preponderance of north-western mints. Apart from the Antoninus Pius outliers the coins cover the period A.D. 269 to a date after A.D. 392.

The coins of Antoninus Pius showed very different amounts of wear. The *sestertius* was very worn and like many second century *sestertii* may have been in circulation up to the third quarter of the third century. The *as* was only slightly worn, indicating either that it was lost after a comparatively short time in circulation or that it had for some reason been hoarded.

ROCHESTER CASTLE, 1976

COIN LIST

Reference: LRBC ——— R. A. G. Carson, P. V. Hill and J. P. C. Kent, *Late Roman Bronze Coinage*.

Coin No.	Flan diam. mm.	Mint marks	Type
<i>Antoninus Pius:</i>			
1	Ae 31	(ANTONIN)VS AVG PIVS PP T ——— Fortuna stg. l. sacrificing at altar, rudder in l. hand	
2	Ae 25	(ANTONINVS AV)G PIUS PP TRP COS. III ANNONA AVG S C Annona holding cornucopia and ears of corn over modius.	
<i>Claudius II:</i>			
3	Ae 18	(IMP C CLAV)DIVS AVG GEN Genius stg. 1.	RIC 48 type
4	Ae 17	——— IVS ——— Radiate head of Claudius r.	
5	Ae 19	IMP CL ——— Radiate head of Claudius r.	
6	Ae 15	Radiate head of Claudius r. CONSECR(ATIO) Altar	RIC 261 type
7	Ae 18	Radiate head of Claudius r. (C)O(N)S(E)C(RATIO) Altar	RIC 261 type
8	Ae 14	Radiate head of Claudius r. Spread eagle.	RIC 266 type
<i>Victorinus:</i>			
9	Ae 17	—— ICTORI ——— Radiate head of Victorinus r.  Pax (?) stg. l. holding branch and sceptre	RIC 118 type
<i>Tetricus I</i>			
10	Ae 20	(IMP) C TETRICVS PF A(VG) LAET(ITIA AVGG)	RIC 87
11	Ae 18	(IM)P C TETRIC(VS PF AVG) PA(X A)VG	RIC 100
12	Ae 20	IMP C TETRI(CVS PF AVG)	
<i>Tetricus II:</i>			
13	Ae 21	C PIV(ESV TETRICVS) CAES S(PES) AVGG	RIC 270
14	Ae 21	C PIV ESV T(ETRICVS CAES) S(PES P)VBLICA	RIC 272
15	Ae 19	Radiate bust of Tetricus II r. Sacrificial implements (?)	

C. FLIGHT AND A. C. HARRISON

<i>Carausius:</i>				
16	Ae 23	IMP CARAVSIVS PF AVG PAX AVG	———— ML	RIC 101
17	Ae 21	IMP CARAVSIVS PF AVG		
18	Ae 21	Radiate bust of Carausius r. Animal stg. r.	———— RSR	
<i>Allectus:</i>				
19	Ae 20	IMP C ALLECTVS PF AVG VIRTVS AVG	———— QC	RIC 128
<i>Barbarous Radiate copies:</i>				
20	Ae 13	Radiate head r. Altar		
21	Ae 14	IMP T ———		
22	Ae 16	————ICVS AVG		
23	Ae 15	———— RICVS P ———		
24	Ae 14	— TETRO —————		
25	Ae 13	} Radiate bust r. Reverse not distinguishable		
to	to			
29	Ae 17			
<i>Radiate, unattributable:</i>				
30	Ae 18	Radiate bust r. ———— CONS AVG Animal advg. 1.		
31	Ae 14	Radiate bust r. Spread eagle		
32	Ae 20	Radiate bust r., SPES AVGG		
33	Ae 20	Radiate bust r. ———— PVBL———— Spes (?) advg. 1.		
34	Ae 14	} Radiate head or bust r. Reverse not distinguishable		
to	to			
41	Ae 20			
<i>Constantine I:</i>				
42	Ae 24	IMP CONSTA(NTINVS PF AVG) SOLI INVICTO COMITI	———— PTR	
43	Ae 23	(IMP) CONSTA(NTINVS PF AVG) (SOLI INVIC)TO(COMI)TI	———— T	
44	Ae 19	CONSTANTINVS AVG SOLI IN VICTO	———— (P)TR	
45	Ae 20	CONSTAN TINVS AVG PROVIDEN TIAE AVGG	———— PT(R)	
46	Ae 17	CONSTANTI NVS MAX AVG GLOR IAEXERC ITVS (2 standards)	———— TRS·	
47	Ae 18	CONSTANTI NVS MAX AVG GLOR IA EXERC ITVS (2 standards)	———— TR·S	

ROCHESTER CASTLE, 1976

48	Ae 16	DN CONSTAN TINVS PF AVG Gloria Exercitus, 2 standards type	
<i>Constantine II:</i>			
49	Ae 17	CONSTANTINVS IVN NOB C GLOR IA EXERC ITVS (2 standards)	_____ ·PLG
50	Ae 17	(CO)NSTANTINVS IVN (NOB C) (GLOR) IA EXERC (ITVS) (1 standard)	
<i>Constans:</i>			
51	Ae 16	CONSTANS PF AVG GLORI A EXER CITVS (1 standard)	_____ (TMP)?
52	Ae 14	CONSTAN (S PF AVG) Gloria Exercitus, 1 standard type	
53	Ae 17	CONSTANS PF AVG VICTORIAE DD AVGGQ NN	
54	Ae 16	(CONSTAN) S PF AVG (VICTORIAE DD) AVGGQ NN	_____ TRS
55 } to } 58 }	Ae 16	CONSTAN S PF AVG VICTORIAE DD AVGGQ NN	
59	Ae 17	DN CONSTA N(S PF AVG) FEL TEMP REPARATIO (Fallen horseman)	_____ (PLG)?
60	Ae 16	(DN CO)NSTA NS (PF AVG)	
<i>Constantius II:</i>			
61	Ae 16	FL IVL CONSTANT(IVS AVG) GLOR (IA EXERC) ITVS (1 standard)	_____ ·TR(S)?
<i>Constantinian:</i>			
62	Ae 20	CON _____	
63	Ae 14	CONST _____ Diad. bust l.	
<i>Decentius:</i>			
64	Ae 15	(DN DECENT)IVS NOB CAES Victoriae DD NN AVG ET CAE (LRBC Type 1 – but HI/IN in shield)	_____ (AMB)?
<i>Valentinian I:</i>			
65	Ae 17	DN VALENTIN(I ANVS PF AVG) GLORIA ROMANORVM (LRBC Type 8)	<u>O F.I</u> LVGS
66	Ae 17	DN VALEN _____ Valentinian I, diad. r. Securitas Reipublicae type	
67	Ae 16	DN VA _____ Valentinian I, diad. r.	
<i>Valens:</i>			
68	Ae 16	DN VALEN (S PF AVG) GLORIA RO (MANORVM) (LRBC Type 8)	_____ CO—
<i>Gratian:</i>			
69 } 70 }	Ae 18 } Ae 20 }	DN GRATIANVS AVGG AVG GLORIA NO VI SAECVLI	_____ PCON

C. FLIGHT AND A. C. HARRISON

71	Ae 19	DN GRATIANVS AVGG AVG GLORIA NO VI SAECVLI	<u>CON</u>
72	Ae 16	DN GRATIA NVS PF AVG VOT/XV/MVLT/XX in wreath	<u>SISC</u>
<i>Valentinian II:</i>			
73	Ae 14	(DN)VALENTINI (ANVS PF AVG) SALVS REI PUBLICAE	<u>f </u> AQP
74	Ae 14	DN VAL(ENTINI ANVS PF AVG) (SALVS REI PUBL)ICAE	<u>f </u> (A)QS
75	Ae 14	DN VALENTINI (ANVS PF AVG) SALVS REI PUBL(ICAE)	<u>f </u>
76	Ae 13	DN VALENTI (NIANVS PF AVG) VICTOR IA AVGGG	<u>LVGP</u>
77	Ae 14		
78	Ae 15	(DN VALENT)IN IANVS PF AVG VICTOR IA AVGGG	<u>PCON</u>
79	Ae 14	DN VALENTINI ANVS PF AVG (VICTOR I)A AVGGG	
81	Ae 13		
82	Ae 15	DN VALENTIN ——— VOT/X/MVLT/XX in wreath	<u>SMAQS</u>
83	Ae 13	DN VALENTIN ——— Valentinian II, diad. r.	
84	Ae 14		
<i>Theodosius I:</i>			
85	Ae 14	DN THEODO (SIVS PF AVG) VICTOR IA AVGGG (LRBC Type 1)	<u>SCON</u>
86	Ae 14	DN THEODO SIVS PF AVG VICTOR IA AVGGG (LRBC Type 1)	
87			
88	Ae 13	DN THEODO (SIVS PF AVG) VICTOR IA AVGGG (LRBC Type 2)	
89			
90	Ae 14	DN THEO(DO SIVS PF AVG) SALVS REI (PVBLICAE)	<u>f </u> AQP
91	Ae 14	DN THEODO SIVS PF AVG SA(LVS REI PVB)LICAE	<u>f </u> AQS
92	Ae 13	DN THEODO SIVS PF AVG SALVS REI PVBLICAE	<u>f </u>
to	to		
95	Ae 14		
96	Ae 14	DN THEODO SIVS PF AVG Victory advg. l. holding wreath	
97	Ae 12	DN THEODO SIVS PF AVG Reverse not distinguishable	
to	to		
105	Ae 15		
<i>Magnus Maximus:</i>			
106	Ae 13	DN MAG MAXIMVS PF AVG SPES RO MA NORVM (LRBC Type 1)	
to	to		
109	Ae 15		

ROCHESTER CASTLE, 1976

110	Ae 14	Diad. bust r. VO/TIS/V in wreath	
<i>Arcadius:</i>			
111 } to 113 }	Ae 14	DN ARCA ——— VICTOR IA AVGGG (LRBC Type 1)	<u>LVGP</u>
114 } to 116 }	Ae 13 } to Ae 15 }	DN ARCADIVS PF AVG VICTOR IA AVGGG (LRBC Type 1)	<u>PCON</u>
117 } to 119 }	Ae 14	DN ARCAD ——— VIC(TOR IA)AVGGG (LRBC Type 1)	
120 } to 127 }	Ae 14 } to Ae 15 }	DN ARCAD ——— VICTOR IA AVG ——— Victory l. bearing wreath	
128 } to 131 }	Ae 12 } to Ae 15 }	DN ARCAD I VS PF AVG SALVS REI PVBLICAE (LRBC Type 2)	<u>fl</u>
132 } to 142 }	Ae 10 } to Ae 15 }	DN ARCAD ——— Reverse not distinguishable	
<i>Honorius:</i>			
143	Ae 13	DN HONORI VS PF AVG VICTOR (IA AVGG) (LRBC Type 1)	<u>TR</u>
144 } 145 }	Ae 14 } Ae 12 }	DN HONORIV ——— VICT ——— Victory l. bearing wreath	
146	Ae 13	DN HON ——— SALVS(REI PV)BLICAE	
147 } 148 }	Ae 15 } Ae 13 }	DN HON ——— ——VBLICAE	
149	Ae 14	DN HONORIVS P(F AVG) Reverse not distinguishable	
EMPEROR NOT DISTINGUISHABLE			
<i>Gloria Exercitus, 2 standards:</i>			
150 } 151 }	Ae 18	Diad. bust r. GLOR (IA EXERC) ITVS	
<i>Gloria Exercitus, 1 standard:</i>			
152	Ae 15	FL IVL CONS ——— 2 soldiers, 1 standard	<u>(T)RS*</u>
153	Ae 14	CONSTA ——— (GLOR IA)EXERC ITVS	<u>(P)LG</u>
154	Ae 17	FL IV ——— GLOR IA EX(ERC ITVS)	<u>—CONS</u>

C. FLIGHT AND A. C. HARRISON

155	Ae 14	} Diad. bust r. GLOR (IA EXERC ITVS)	
to	to		
157	Ae 16		
<i>Urbs Roma:</i>			
158	Ae 13	} VRBS ROMA Wolf and twins, 2 stars above	
to	to		
162	Ae 17		
<i>Constantinopolis:</i>			
163	Ae 14	} Helmeted head l. Constantinopolis stg. 1. on prow	
to	to		
167	Ae 16		
<i>Star in Wreath:</i>			
168	Ae 14	Diad. head l. Star/CONSS in wreath	
<i>Victoriae DD Augg Q NN:</i>			
169	Ae 15	(CON)STAN ——— PFAVG VICTORIAE DD AVGG(QNN) (LRBC Type 1)	<u> </u> TRS
170	} Ae 15	CONSTAN ——— VICTORIAE DD AVGG Q NN (LRBC Type 2)	
to			
172			
173	Ae 14	} Diad. bust r. (VICTORIAE D)D AVGGQ NN (LRBC Type 2)	
to	to		
175	Ae 16		
176	} Ae 15	Diad. bust r. (VICTO)RIAE DD A(VGGQ NN) (Type uncertain)	
177			
<i>Fel. Temp. Reparatio:</i>			
178	Ae 15	Diad. bust r. FEL TEM(P REPARATIO) Fallen horseman type	<u> </u> PCON
179	Ae 20	DN CON ——— VS PF AVG (FEL TEMP REP)ARATIO Fallen horseman type	
180	Ae 14	Diad. bust r. Fallen horseman type	
<i>Gloria Romanorum:</i>			
181	Ae 16	Diad. bust r. Gloria Romanorum LRBC Type 8	<u>O F(A)?</u> <u>(L)VG —</u>
182	Ae 19	} Diad. bust r. G ——— M (LRBC Type 8)	<u>O F —</u>
183	Ae 15		
<i>Securitas Reipublicae:</i>			
184	Ae 17	Diad. bust r. SECVRITAS REIPVB(LICAE)	<u>OF I</u> <u>LVG —</u>

ROCHESTER CASTLE, 1976

185	Ae 17	Diad. bust r. SECVRITAS REIPVBLICAE	<u>SMAQ</u>
186	Ae 18	Diad. bust r. SECVRITAS REIPVBLICAE	<u>— CON</u>
187	Ae 18	DN VALEN ——— SPF AVG (SECV)RITAS REIPVBLI(CAE)	
<i>Victoria Auggg (LRBC Type 1):</i>			
188	Ae 14	———— ANVS PF AVG (VICTOR) IA AVGGG	<u>(L)VGP</u>
189	Ae 14	Diad. bust r. VICTOR IA AVGGG	<u>PCON</u>
190	Ae 13		
191	Ae 13	Diad. bust r. VICTOR IA AVGGG	<u>SCON</u>
192	Ae 14	Diad. bust r. VICTOR IA AVGGG	<u>— CON</u>
193	Ae 12	Diad. bust r. VICTOR IA AVGGG	
to	to		
202	Ae 16		
<i>Victoria Augg (LRBC Type 1):</i>			
203	Ae 14	Diad. bust r. (VICTOR IA A)VGG	<u>PCON</u>
204	Ae 13	Diad. bust r. (VICTOR IA)AVGG	
<i>Victoria Types:</i>			
205	Ae 15	Diad. bust r. VICTOR ———	<u>PCON</u>
206	Ae 13	Diad. bust r. Reverse lettering: fragments of VICTORIA AVGGG (where visible) Victory advg. l. holding wreath	
to	to		
225	Ae 15		
<i>Salus Reipublicae:</i>			
226	Ae 13	Diad. bust r. SALVS R(EI PVBLICAE)	<u>f </u> AQS
227	Ae 12		
228	Ae 12	Diad. bust r. (SALVS)REI PVBLIC(AE)	<u>f </u>
to	to		
234	Ae 14		
235	Ae 12	Diad. bust r. SALVS REI (PVBLICAE)	<u>f </u>
to	to		
247	Ae 14		
248	Ae 14	Diad. bust r. (SALVS REI P)VBLICAE	<u>SM(RP?)</u>
249	Ae 13	Diad. bust r. (SALVS)REI PVBL(ICA)E	
to	to		
254	Ae 14		

C. FLIGHT AND A. C. HARRISON

<i>Vota Coins:</i>			
255	Ae 13	Diad. bust r. VOT/V/MVLT/X in wreath	— TRP
256	Ae 15	—— (RATIA?) —— VOT/XV/MVLT/XX in wreath	
257	Ae 14	Diad. bust r. VOT/X/MVLT/XX in wreath	
<i>Diademed bust, right. Reverse not distinguishable:</i>			
259	Ae 12	} Mintmarks distinguishable	{ — TRP LVGP PCON
to	to		
362	Ae 18		
BARBAROUS COPIES			
<i>Barbarous, Constantius II:</i>			
363	Ae 16	CONSTANTIUS AVG Gloria Exercitus, 1 standard type	
<i>Barbarous, Valentinian II:</i>			
364	Ae 14	DN VALENTINI ANVS(PF AVG) (VICTOR) IA AVGGG (LRBC Type 1)	
<i>Barbarous, Theodosius I:</i>			
365	Ae 13	DN THEO —— VICT —————	
<i>Barbarous, Magnus Maximus:</i>			
366	Ae 14	DN MAG MA (XIMUS PF AVG) (SPES RO MA) NORVM	—— — CON
<i>Barbarous, Arcadius:</i>			
367	Ae 15	(DN A)RCADI VS PF (AVG) VI(CTOR IA) AVGGG	—— LVGP
368	Ae 13	DN AR —— VICTOR —— Victory advg. 1.	
<i>Barbarous, Gloria Exercitus (1 standard):</i>			
• 369	Ae 13	} CONSTAN —— (GLORI) AEXERC ITVS	
to	to		
371	Ae 15		
<i>Barbarous, Urbs Roma:</i>			
372	Ae 12	VRB(S) ROMA Wolf and twins	
<i>Barbarous, Fel Temp Reparatio:</i>			
373	Ae 20	CONS —— FEL TEMP REPARATIO (Fallen horseman)	—— AMB
374	Ae 16	Diad. bust r. Fallen horseman type	—— AQS
375	Ae 12	} Diad. bust r. Fallen horseman type	
to	to		
377	Ae 14		

ROCHESTER CASTLE, 1976

Barbarous, Victoria Types:

378	Ae 13	Diad. bust r. VICTOR IA AVGGG (LRBC Type 2)	
379	Ae 13	Diad. bust r. VICTO(RIA AVGG) (LRBC Type 5)	<u>f </u>
380	Ae 12	Diad. bust r. Various fragments of VICTORIA AVGGG	
to	to		
384	Ae 14		

Barbarous, Salus Reipublicae:

385	Ae 12	Diad. bust r. As LRBC, Type 2	<u>f </u>
386	Ae 13		
387	Ae 10	Helmeted head r. Extremely barbarous figure, possibly Victory	

Barbarous, Diademed Bust r.:

388	Ae 9	Diad. bust r. No reverse types or mintmarks distinguishable	
to	to		
398	Ae 15		

A further 355 coins (Ae 10 to Ae 20) were so corroded that neither obverse nor reverse could be distinguished.

The technique developed by A. Ravetz (*Numismatic Chronicle*, 1964) and extended by J. Casey (*British Archaeological Reports*, No. 4, 1974) has been applied to the 175 coins which can be dated with sufficient precision. Starting from A.D. 260 the coins are grouped into periods of political and numismatic significance and the results are shown on a graph (see Fig. 8).

Each column represents the coins of a period according to the expression:

$$\frac{\text{Coins of Period}}{\text{Length of Period}} \times \frac{1,000}{\text{Total Datable Coins}}$$

The dark portions of the columns represent barbarous copies.

The figures along the horizontal axis show the beginning and end of each period (A.D.).

This method of representation gives a clear indication of the comparative rates of loss of coins in the various periods. The picture is of continued site activity from the middle of the third century to at least the end of the fourth century. The peaks (periods A.D. 260–273, A.D. 330–346, and A.D. 388–402) correspond with issues of large numbers of small or ‘inflated’ coins and do not necessarily indicate large surges of activity at the site. It is notable that the troubled period

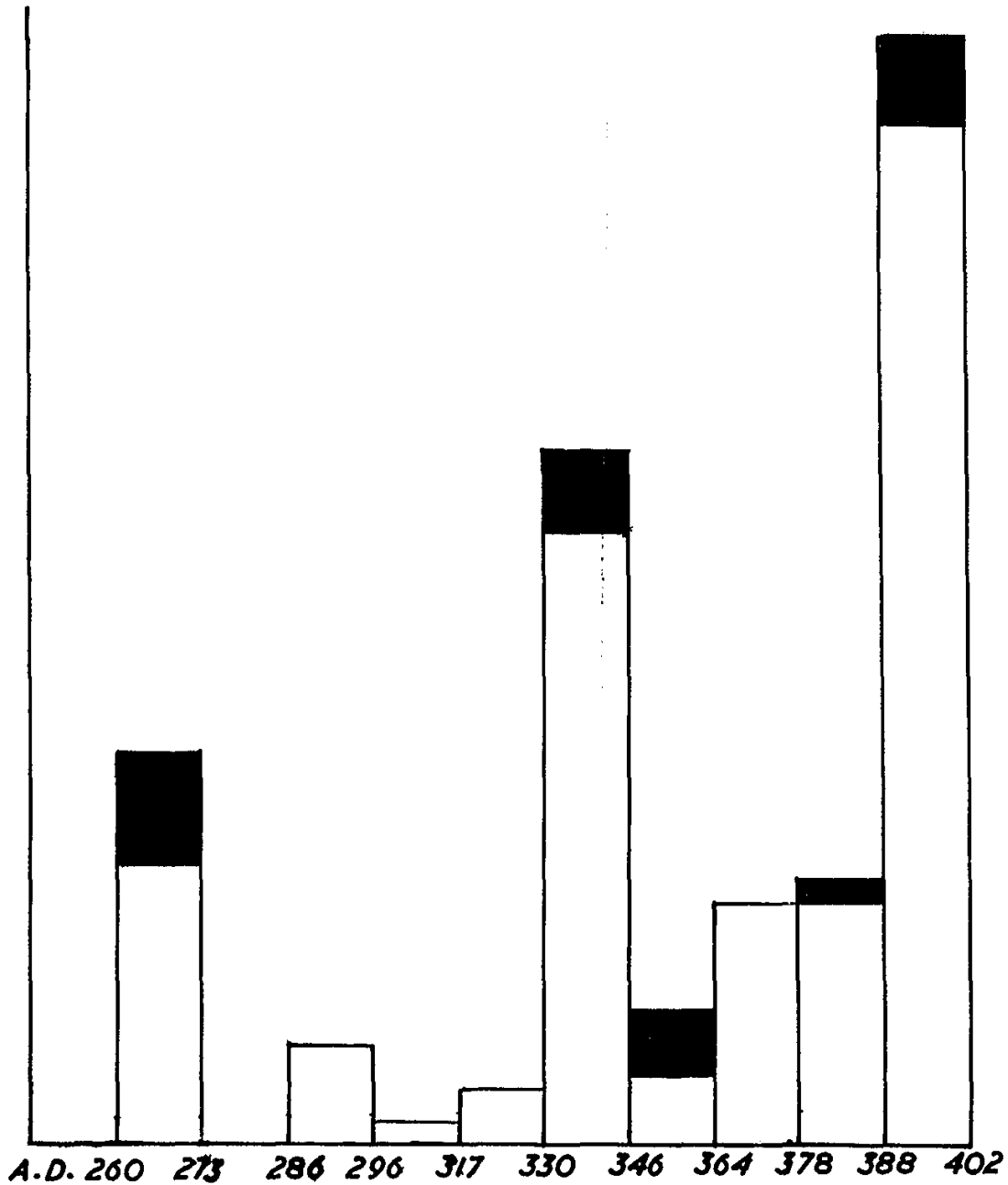


Fig. 8. Histogram illustrating Coin Distribution.

A.D. 378-388 is comparatively well represented and the period A.D. 388-402 shows the highest rate of coin loss. Even allowing for rapid inflation, considerable activity must have continued after A.D. 392 at this site. Due to the long periods over which VICTORIA and SALVS reverse types were issued it is not possible to give a date for the latest coins other than 'after A.D. 392' - except for one coin which appears to be a barbarous copy of a coin struck in A.D. 410 or later.

ROCHESTER CASTLE, 1976

AN ALFRED PENNY FROM ROCHESTER

M. M. ARCHIBALD, M.A., F.S.A., F.M.A.

The Anglo-Saxon coin which is the subject of this note was found during excavations at Rochester Castle in July 1976, and I am grateful to the director, Mr. A. C. Harrison, B.A., F.S.A., for his kind invitation to publish it here.

The coin was in very corroded and fragile condition but careful cleaning and conservation by Mr. K. A. Howes, of the Department of Coins and Medals at the British Museum, confirmed it to be a silver penny of Alfred the Great, 871–899, of BMC type V. The coin is illustrated twice natural size on Pl. VII, 1 and natural size on Pl. VII, 4. The obverse bears a profile, diademed, head-and-shoulders effigy facing towards the right which breaks the legend reading ÆLFRE DRE +. The effigy is not an authentic portrait of the king but a stylised representation derived from the busts of Roman emperors on fourth-century coins which, in Saxon times as now, must have been common finds in southern England. The reverse type is a cross within a lozenge from the four corners of which cross-lines extend to the edge of the coin with a short stroke where they meet the points of the central lozenge; there is a small irregularly-shaped pellet in each angle outside the lozenge. The reverse legend is broken by the main cross-lines of the type and reads CIOL VLF MON ETA, Ciolwulf moneyer. The moneyer so named was not the operative who actually struck the coins but was a person of considerable standing who was responsible to the king for their being of the correct weight and fineness. In its present fragmentary and incomplete condition the coin weighs 0.55 grammes or 8.5 grains and its die-axis is *c.* 150°.

The moneyer Ciolwulf is already known in the type from another coin of similar obverse style but with a different, and at present unique, variety of the reverse type which has the limb of a cross moline at each side of the central lozenge: BMC 188 which weighs 1.34 grammes or 20.7 grains, Pl. VII, 5.

The great Cuerdale, Lancs., hoard¹ which was the source of this coin, and indeed of the majority of the type extant today,² also included two fragments which may have been by the same moneyer. The first, Pl. VII, 2, is from a different obverse die from the Rochester example but the form of the drapery on the king's shoulder is very

¹ Edward Hawkins, *An Account of Coins and Treasure found in Cuerdale*, *Numismatic Chronicle*, v (1842–3), 1–104.

² Of the nineteen coins of Alfred type V listed by Hawkins seventeen were identified in modern collections by C. E. Blunt and R. H. M. Dolley in *Hoard Evidence for the Coins of Alfred*, *British Numismatic Journal*, xxix (1958–9), 239–40.

similar. The reverse is a further variety of the type with no pellets or other ornaments in the angles. The surviving letters of the reverse legend, LVV, would fit only Ciolwulf, at least among the moneyers known from the coins in modern cabinets. This, along with the identity of obverse style, suggests that the attribution to Ciolwulf is secure. The moneyer of the second coin, Pl. VII, 3, is less certain. The obverse is rather different in style from the other known Ciolwulfs and is more akin to that of the coin of Torhtmund, Pl. VII, 10. The reverse is yet another variety of the type with crosses at each side of the central lozenge. While the letters LF which is all of the moneyer's name visible on the flan would also fit Ciolwulf, they could equally well be the final letters of the name of several other moneyers recorded in the type. The identification of the different mints and their styles in the type as a whole is not yet at a stage where positive attributions can be made on grounds of style alone.³ Coins struck by a moneyer called Ciolwulf are also known in the first issue of Alfred, BMC type I (also known as the 'Lunette' type) where the name is in the Kentish form Cialwulf and also, much later, for Guthrum/Aethelstan and for Edward the Elder. In view of the time-span involved, it seems unlikely that one person could have been responsible for all four issues, but it would be reasonable to assume at least that the same moneyer had struck both types for Alfred.

In the mid- and later ninth century the same types were often employed concurrently on coins struck for the kings of Wessex and Mercia and for the contemporary Archbishops of Canterbury. The same basic type as the present coin was also used for Archbishop Aethered, 870–889,⁴ Pl. VII, 7 and for Ceolwulf II of Mercia, 874 – sometime between 877 and 883,⁵ Pl. VII, 6, and indeed the issue as a whole is sometimes called the 'Ceolwulf type'. One clearly identifiable group within the type has rather large flans with reverses where the usual cross-and-lozenge varieties are enclosed within a quatrefoil or second circle inside the normal outer circle. Coins of this variety were struck in the name of Alfred, Pl. VII, 11, and Archbishop Aethered, Pl. VII, 7, and the associations of both their styles and their moneyers are with the Canterbury mint. Although Ceolwulf's coins are very rare and it is therefore necessary to be cautious in basing any hypothesis on the absence of particular varieties, it seems unlikely that he participated

³ The author is making a detailed study of the mint attributions of this type and would welcome news of any further specimens.

⁴ All the known coins of Ceolwulf II of Mercia are listed in R. H. M. Dolley, *An unpublished hoard-Provenance for a Penny of Ceolwulf II of Mercia*, *British Numismatic Journal*, xxxiii (1963), 88–90.

⁵ C. E. Blunt, *The Coinage of Aethelred, Archbishop of Canterbury, 870–89*, *British Numismatic Journal*, xxxi (1962), 43–4.

	<i>Issuer</i>	<i>Moneyer</i>	<i>Mint</i>	<i>Weight</i>	<i>Find-spot</i>	<i>Location and Reference</i>
1 & 4	Alfred	Ciolwulf	uncertain	0.55/8.5	Rochester	On loan to British Museum
2	Alfred (fragment)	Ciolwulf	uncertain	0.32/4.9	Cuerdale	British Museum, BMC 186
3	Alfred (fragment)	-----If	uncertain	0.81/12.5	Cuerdale	British Museum, BMC 185
5	Alfred	Ciolwulf	uncertain	1.34/20.7	Cuerdale	British Museum, BMC 188
6	Ceolwulf II	Liafwald	uncertain	1.21/18.7	Cuerdale	British Museum, BMA 154
7	Archbishop Aethelred	Ethelmund	Canterbury	1.33/20.5	uncertain	Maidstone Museum
8	Alfred	Eadelm	? in Wessex	1.33/20.5	Cuerdale	British Museum, 1955-7-8-32
9	Alfred	Luceman	? in Wessex	1.37/21.2	Washington, Sussex	British Museum, BMA 480
10	Alfred	Torhtmund	? Canterbury	1.11/17.0	Cuerdale	British Museum, BMC 184
11	Alfred	Ethelred	? Canterbury	1.16/17.9	uncertain	British Museum, 1960-5-5-5

Notes

In the weights column the weights are given first in grammes and then, using for conversion G. F. Hill, *Grains and Grammes*, London 1920, in grains. Coins in the British Museum are cited by their appropriate number for the reign concerned in BMC, i.e. *A Catalogue of English Coins in the British Museum, Anglo-Saxon Series*, i, London, 1887 and ii, London, 1893. Coins cited by BMA numbers were published in G. C. Brooke, *Anglo-Saxon Acquisitions of the British Museum*, London, no date, reprinted from *Numismatic Chronicle* 1922-26. British Museum acquisitions since 1926 are cited by their registration numbers of which the first part gives the date of acquisition.

List of coins on Pl. VII

in this group of the coinage since all eight of his known specimens of this type are of the basic variety with no pellets in the angles, Pl. VII, 6. This variety would seem logically to stand at the head of the regular series and is also found on coins of Alfred, Pl. VII, 2, but is not known for the Archbishop. Since however only two coins of the type are extant for the latter, it is possible that others of the variant types may yet turn up for him. That these varieties of the regular series are indeed sequential is shown by the fact that nearly all of them are found for several different moneyers at what are likely to be different mints. As a demonstration of this, three more coins of the same variety to which the Rochester coin belongs – that with the pellet in each angle – are illustrated on Pl. VII, 8–10. The associations of coin no. 10 by the moneyer Torhtmund who is known to have struck a coin in the type for the Archbishop, suggests that this coin could also have been struck at the Canterbury mint. (It remains possible however that the die-cutter could have prepared dies for and/or the moneyer have struck coins at a different mint in the same general area.) The coins of Eadhelm, no. 8 and Luceman,⁶ no. 9 have the king's Saxon title in the obverse legend and their associations appear to be with Wessex so they were probably struck at as yet unidentified mints in that part of Alfred's kingdom.

How long type V continued to be issued for Alfred is difficult to say. There are no hoards of any size buried during the middle years of Alfred's reign when the type was at the height of its currency which would allow some estimate to be made of the volume and duration at issue of the type. Only thirty-one coins of Alfred type V are known today and at least seventeen, and probably more, derive from the Cuerdale hoard which was buried in the first decade of the tenth century, some thirty years after the first of them were struck. The fact that among them twenty-one moneyers are recorded and that there is no die-duplication whatsoever among the thirty examples of which photographs are to hand suggests a fairly substantial volume of coinage in ninth-century terms although this could be explained by a period of intensive coinage over a relatively short period rather than lower output over a longer period. The problems in the chronology of Alfred's coinage, especially in the middle period are highly complex so suffice it here to say that it is generally a mistake to see coinage at this time as a continuous activity; it is likely to be much closer to the truth to view it as a series of sporadic issues produced at irregular intervals with higher or lower output as the supply of bullion and political, economic or personal exigencies demanded. The Rochester coin was therefore likely to have been struck within the period *c.* 875–80 and

⁶ The source of this coin was a small hoard of four coins, three of Alfred and one of Ceolwulf II, of this cross-and-lozenge type found at Washington, Sussex, in the spring of 1904. C. E. Blunt and R. H. M. Dolley, and also R. H. M. Dolley, *op. cit.*

probably earlier rather than later within that bracket. While at least nineteen coins⁷ of type V survived into the tenth century to be included in the Cuerdale hoard, they represented a tiny fraction of the total of some 1,100 Anglo-Saxon coins recorded as having come from that find. The proportion of type V present in the currency must have declined sharply when the large issues produced after 887 made their presence felt in circulation. Although therefore a later survival cannot be ruled out, the Rochester coin is likely to have been lost before the end of Alfred's reign and most probably between *c.* 875 and *c.* 885.

The pence of type V in common with most of Alfred's coins do not bear the name of the mint at which they were struck. Further, since some of Alfred's mint-signed coins are represented today by single specimens, there is a high probability that mints other than those named on extant coins were working at this period. One of the notable absentees is Rochester which is known to have struck coins for kings of Wessex both before and after Alfred. Since mint-signed coins of the Anglo-Saxon period discovered as isolated site-finds show a marked bias in favour of the issues of the local mint or mints, the discovery of a coin of this anonymous issue most of which came from a hoard well outside the confines of Alfred's kingdom is an event of great numismatic importance. It is however cautionary to recall that the provenance of one of the two known coins of Archbishop Aethred of this type which was undoubtedly struck at Canterbury was found at Tetney, Glos. While, for the Rochester coin, London and especially Canterbury which was probably the principal mint of the type are candidates for the place of issue, Rochester itself remains at least a possibility. The style of the Ciolwulf coins is similar to some of those from Canterbury but not identical with any of them. In the Lunette type his coins have been attributed to Canterbury but the mint attributions in that coinage are also by no means finally established. It may be however that more coins of type V would prove that the style of the Ciolwulf coins is just another mutation of the Canterbury styles and therefore until more evidence becomes available the minting place of the Rochester coin must remain open.

ACKNOWLEDGEMENTS

The excavation was carried out by members of the Thameside Archaeological Group and other volunteers of whom the following deserve special mention for their sustained support: Mrs. H. Hurst, Mrs. E. W. Pender, Mrs. V. Smith, Mrs. M. J. Stevenson, Miss N.

⁷ Work by Mr C. E. Blunt suggests that several important coins were abstracted from the Cuerdale hoard before it reached Hawkins and so it is possible that some of the coins of this type with no known find-spot or hoard-provenance originally came from this find.

C. FLIGHT AND A. C. HARRISON

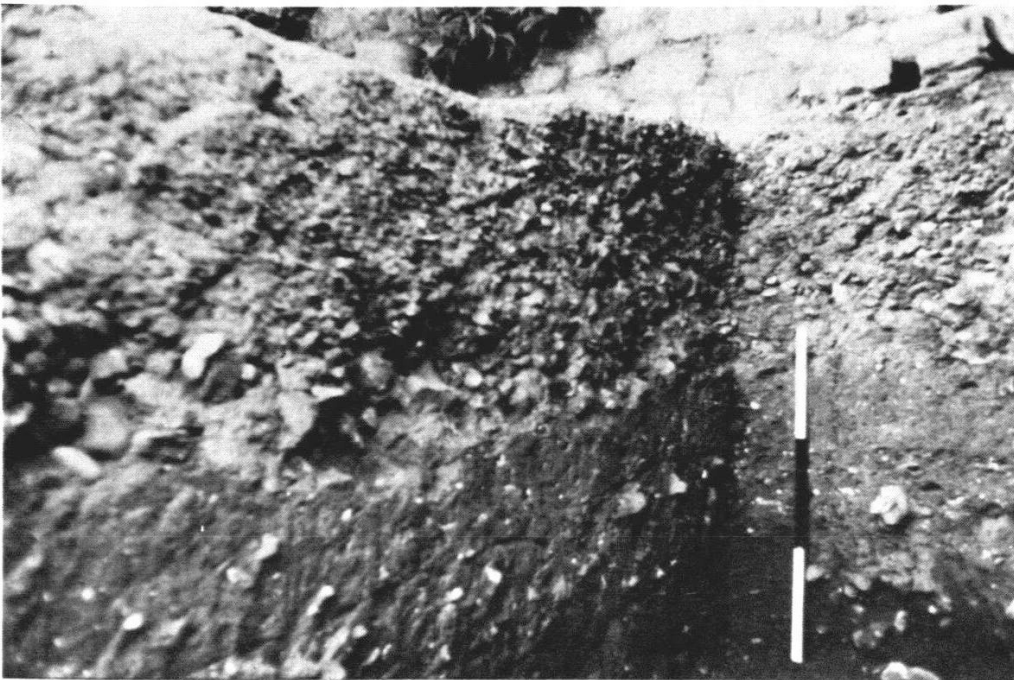
Egan, Miss F. Raymond, Messrs. R. J. Cruse, J. Dryden, T. Ithell, R. Mills, K. Pender, P. Relf, D. Rouch, T. Tasker, D. Thompson, P. Thornhill, and D. Williams. We are also most grateful to Miss M. Archibald, M.A., F.S.A., for reporting on the King Alfred coin, to Mr. J. D. Brand for advice on the coins, to Mr. A. P. Detsicas, M.A., F.S.A., for advice on the Romano-British pottery, to Mr. T. Ithell, for help in surveying the profiles through the defences, to Mr. R. Mills, for undertaking the photography and to Mr. E. H. Redfern, for undertaking the formidable task of reporting on the Roman coins. Above all, and by no means for the first time, our thanks are due to Mr. P. J. Tester, F.S.A., who has not only drawn the excavation plans and reported on the medieval pottery, but has advised and assisted us throughout the investigation.

PLATE I.



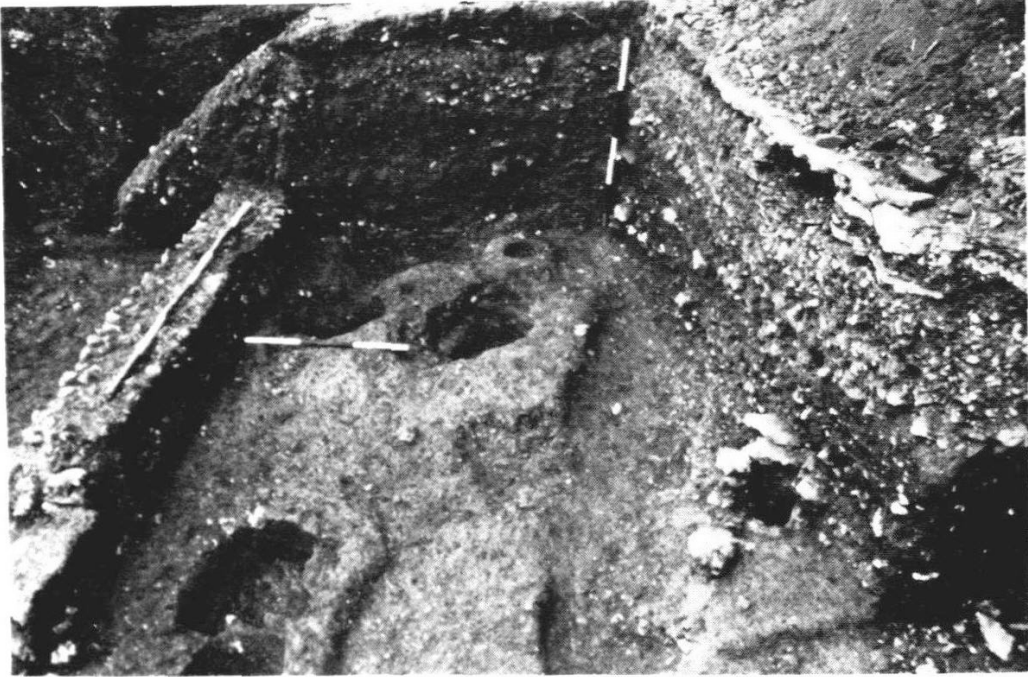
Section A-B (*Photo. R. J. Mills*).

PLATE II.



Section A-B, Detail (*Photo. R. J. Mills*).

PLATE III.

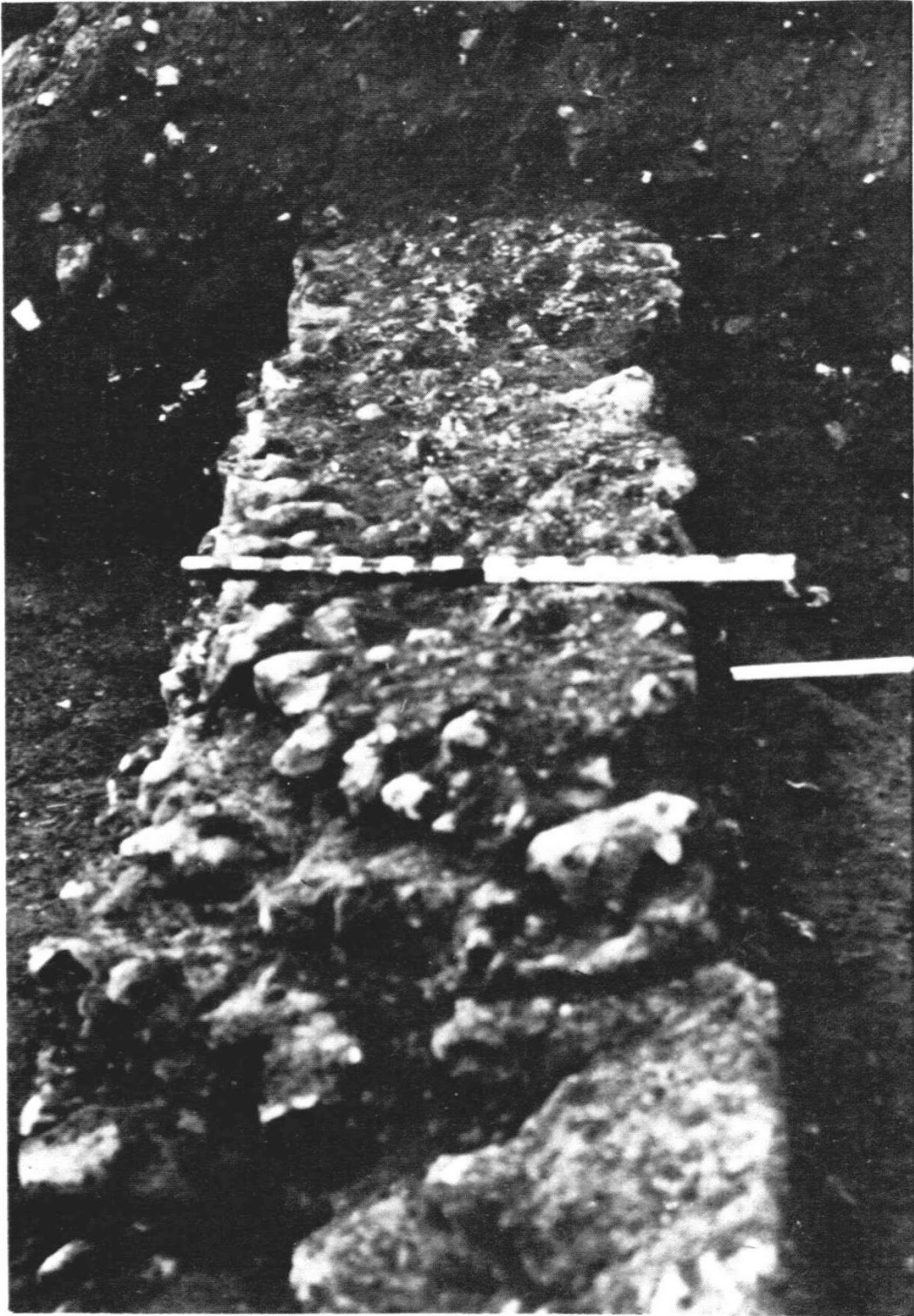


Roman Wall and Ovens (*Photo. R. J. Mills*).

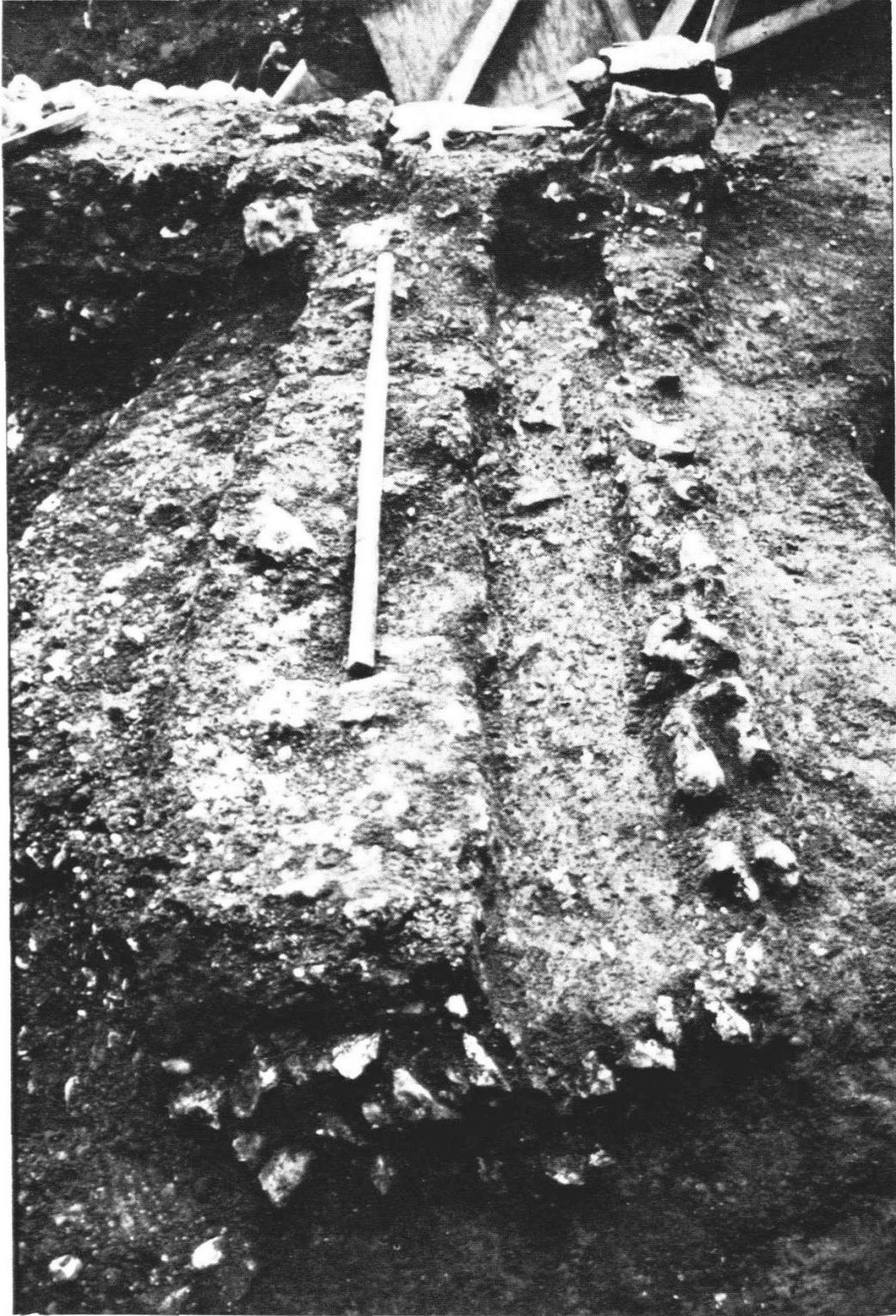
PLATE IV.



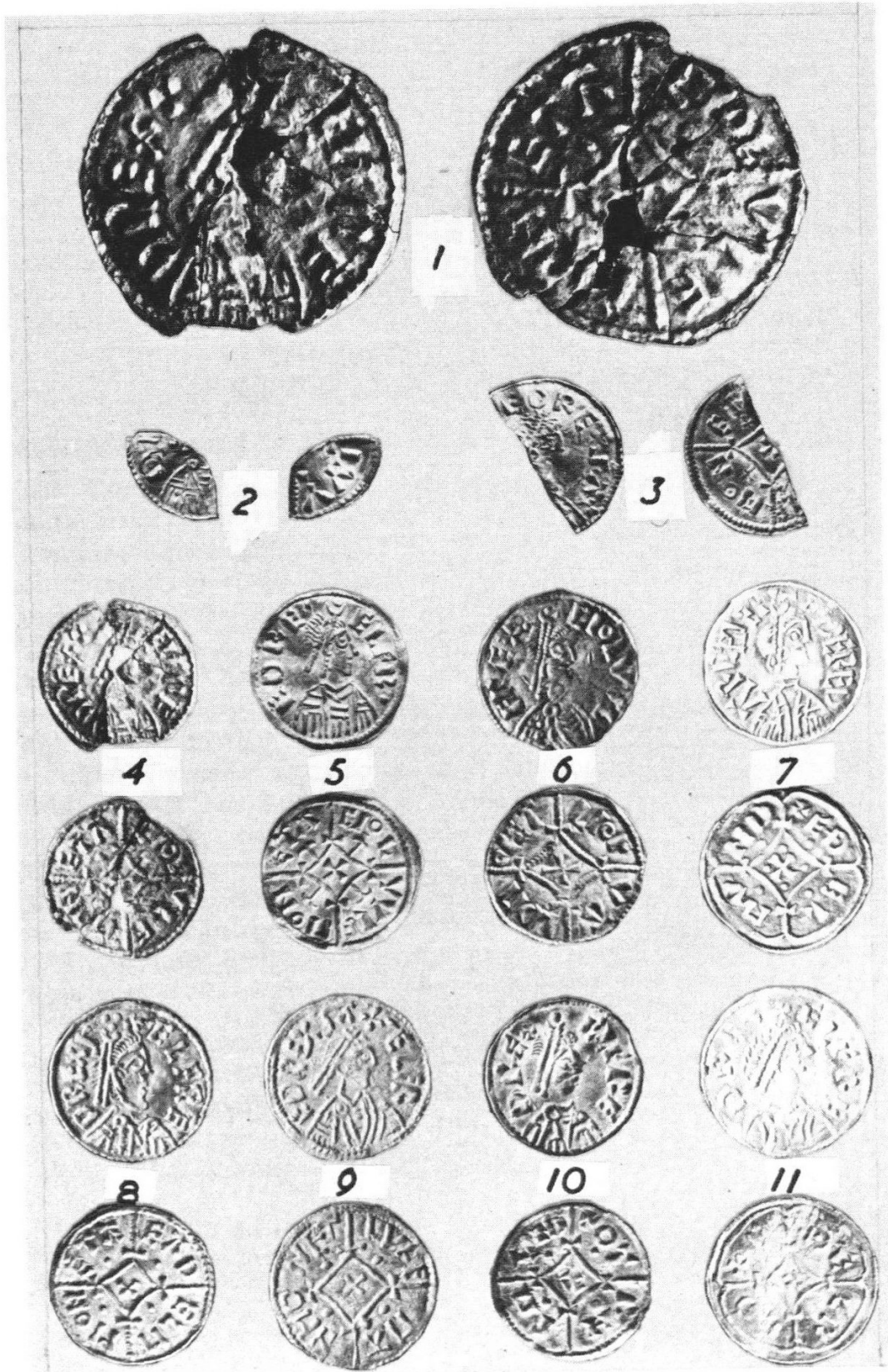
Oven F (*Photo. R. J. Mills*).



Roman Wall (*Photo. R. J. Mills*).



Roman Wall, Slot for Cill (*Photo. R. J. Mills*).



King Alfred Coins. (Scale: 1 = $\frac{2}{1}$; 2-11 = $\frac{1}{1}$)