

Linenhall Street, Chester: general plan of area excavated 1961-2, with indication of Roman structures. Fig. 1.

## Excavations at Linenhall Street, Chester, 1961-2

By F. H. THOMPSON

Introduction

During 1961 it became clear that Chester Corporation would shortly be undertaking the first stages of construction associated with the Central Redevelopment Area scheme and the building of the Inner Ring Road. The area affected lay immediately north of Holy Trinity Church (fig. 1) between Linenhall Street and Trinity Street, and occupied a space approximately 300 ft. from north to south by 120 ft. from east to west. For long used as an open car-park, the site was intended to hold a two-storey car-park placed by and serving the Inner Ring Road; both features are now a part of the Chester scene and to that extent the location plan (fig. 1) is no longer accurate, but the church and Watergate Street remain as constant features in the changing landscape.

The archaeological potential of the site was clear enough since the western defences of the Roman legionary were known to run through it from south to north, with the fortress wall forming an axial feature; a physical indication of the presence of the rampart existed in the sudden change to a higher level immediately west of Trinity Street, Already, in 1949, Dr. Graham Webster had cut a section across the wall and rampart approximately in the centre of the site (figs. 1 and 2), at the same time locating an oven behind the rampart.1 This, in conjunction with an earlier section across the defences farther north, undertaken in 1945 by Professor R. Newstead and W. F. Grimes,<sup>2</sup> had firmly established the general line of the defences on this side, with important results for the planning of the interior of the fortress.3 These various factors influenced the plan of excavation in 1961; it was felt that the full width of the site should be sectioned first, at the risk of some repetition of earlier work, and that efforts should then be concentrated along and behind the line of the defences with the aim of locating such likely features as an interval tower, more ovens, rampart building, etc.

Excavation took place between October 1961 and April 1962 with the aid of grants from the Ministry of Works (now Public Building and Works) and Chester Corporation. The site was also the property of Chester Corporation and thanks are due to the City Engineer and Surveyor, Mr. A. H. F. Jiggens, for his co-operation in allowing a systematic exploration of valuable parking space and arranging for the provision of men and material and the backfilling of the trenches. The writer was much assisted in the supervision and recording of the excavation, and later in the treatment of the finds, by Mrs.

<sup>2</sup> J.R.S. xxxvi (1946), 136 and fig. 12.

<sup>&</sup>lt;sup>1</sup> C.A.S. xl (1953), 1 ff., figs. 1 and 2, pl. Ia, b.

<sup>&</sup>lt;sup>3</sup> e.g. in establishing the width of the principia; cf. C.A.S. xxxviii (1951), 15 and fig. 1.

Sybil Rutland (née McNamee) and Mr. J. B. Whitwell, archaeological assistants at the Grosvenor Museum, while Mr. P. Devlin was, as always, a most reliable foreman. Thanks too are due to Mr. D. F. Petch, F.S.A., who later recorded various features on the site during the work of construction and very kindly made them known to the writer.

Summary of results (figs. 1-3)

The long section across the site (trenches 1 and 2) revealed the following features in succession from west to east:

- (i) an extra-mural road, c.20 ft. wide and bounded on the west by a stone drain.4
- (ii) the V-shaped fortress ditch, originally 25 ft. wide and 10 ft. deep, but perhaps recut later (c.A.D.300) on a smaller scale. A fragment of a Roman tombstone was recovered from the upper filling.
- (iii) the berm, of uncertain width, since this space was used in the middle ages for a furnace-like structure, possibly a lime-kiln.
- (iv) the fortress-wall, partly cut away by the same kiln, but still 8 ft. wide overall. The surviving width of the rampart (see (v) below) and later observation<sup>5</sup> indicated a two-period wall, increased from an original width of c.5 ft. (Trajanic) to one of c.11 ft. (Constantian) by cutting back the rampart front.
- (v) the Agricolan rampart, extending to a width of 14 ft.; this compares with a normal width of c.20 ft. and leads to the conclusion expressed in (iv).
- (vi) a circular pit (Pit 1), 6 ft. in diameter and 4 ft. deep, cut into the rampart and with two post-holes in the western edge; it was of medieval date.
- (vii) behind the rampart and extending for a total distance of 24 ft. the sandstone floor and ash-pit of a legionary oven.

Trenches 3-25 were sited on and behind the rampart along the full length of the site from south to north. The features encountered can be classed broadly under two heads, Roman and post-Roman.

Roman structures comprised an oven (trenches 10 and 11) which, with those found in trench 2 and in 1949, suggests that the whole of this area was devoted to cook-houses (perhaps serving the first cohort, if this occupied the dextral position), but no later than c.A.D.120 on the pottery evidence; a stone rampart building (trenches 14, 16 and 20–22) of standard dimensions (70 ft. by 24 ft.), perhaps surviving until the end of the second century; and an interval tower (trench 12), but this only as the result of observation of the site by Mr. D. F. Petch during its mechanical levelling.

The post-Roman structures, in addition to the pit at the east end of the trench 1, formed two groups: at the south end of the site (trenches 3-10), a mass of sandstone masonry, apparently rectangular on plan, was associated

<sup>&</sup>lt;sup>4</sup> Confirming the suggestion made as a result of the 1945 section (J.R.S. xxxvi, 138).

<sup>&</sup>lt;sup>8</sup> By Mr. D. F. Petch during construction of the car-park (cf. C.A.S. lii (1965), 50-1).

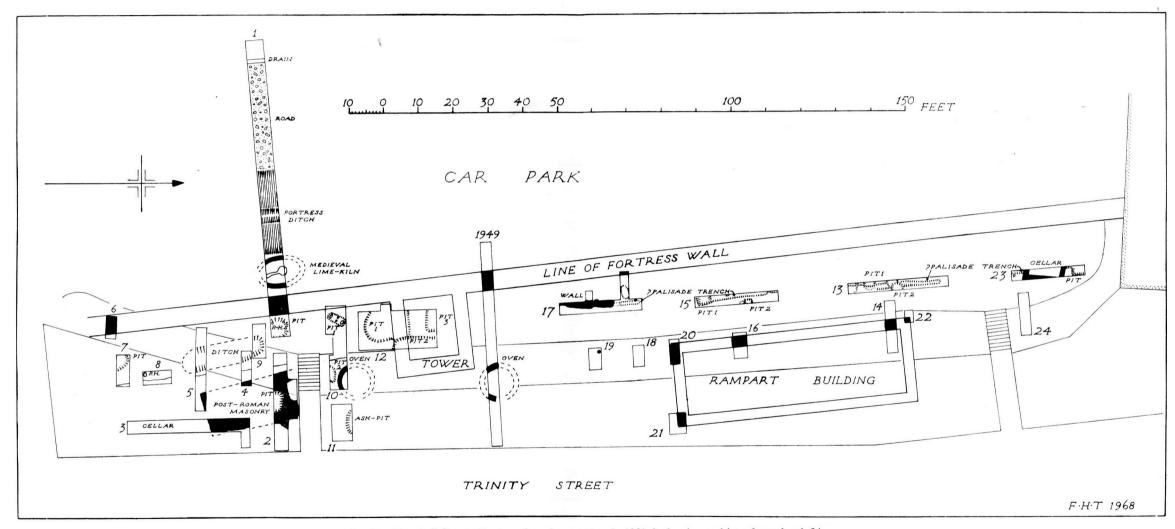


Fig. 2. Linenhall Street, Chester: plan of excavations in 1961-2, showing position of trenches 1-24.

with a length of flat-bottomed ditch cut into the rampart; everywhere it lay at a higher level than the latest Roman structures and was itself covered by undifferentiated black soil containing pottery ranging from the thirteenth to the seventeenth century. It may however be significant that two late Saxon rims were recovered from a small pit cut into the masonry in the south edge of trench 2, while two more late Saxon rims came from an unstratified position in trench 1. At the north end of the site, trenches 13, 15, 17 and 23 revealed a more or less continuous narrow gully cut into the solid surface of the rampart and interrupted at intervals by deep square-cut pits. As with the ditch and pits to the south, the black fill of the gully and pits was relatively sterile and merged imperceptibly into the overlying undifferentiated soil with its medieval and post-medieval content. Absolute proof is lacking but, as a working hypothesis, it is suggested that we may have here some trace of the refortification of Chester undertaken in 907 by the Mercian queen Aethelflaed; 6 this may have taken the form of a palisade with massive timber uprights at intervals set on the top of the Roman rampart a few feet behind the line of the Roman wall which, after five centuries, must have been much reduced in height by robbing and collapse; the masonry and ditch at the south end of the site may perhaps be interpreted as part of a stone gate, where a more permanent form of structure was envisaged than elsewhere on the defences. Curiously enough, it had been claimed that the 1945 section had revealed traces of post-Roman defences7 but it would appear (from observations by Mr. Petch) that the trench had fortuitously crossed the rear wall of a Roman interval tower, here surviving only as a robber trench.

Detailed description of the excavation

Trenches 1 and 2 (figs. 2 and 3 and pls. I–VI): trench 1, 85 ft. long and 5 ft. wide, crossed the southern part of the site on the level area of the car-park; while trench 2, 28 ft. long and 4 ft. wide, with an extension on the north side, continued the section in an easterly direction into the bank bounding the eastern side of the site. There was an interval of  $4\frac{1}{2}$  ft. between the ends of the two trenches but they can otherwise be regarded as a continuous section through the defences. The description deals with post-medieval, medieval and Roman features in that order, and runs from west to east.

Post-medieval: the asphalt surface of the car-park, laid on a bed of hard-core, covered a thick layer of black soil (1) along almost the entire length of trench 1 and represented, on the evidence of the contained pottery, post-medieval accumulation; the same layer re-appeared in trench 2. At a distance of  $46\frac{1}{2}$  ft. from the west end of trench 1, a rectangular setting of sandstone, 4 ft. wide internally and with an ashy fill, was interpreted as a furnace, dated by the associated pottery to the seventeenth-eighteenth century. 57 ft. from the west end a nineteenth-century brick floor extended for 11 ft. in the upper

<sup>&</sup>lt;sup>6</sup> Anglo-Saxon Chronicle, s.a. 907.

<sup>&</sup>lt;sup>7</sup> J.R.S. xxxvi (1946), 138.

surface of layer 1. Earlier pottery appeared in this layer as rubbish survivals, notably two rims of Chester ware, probably of tenth-century date (fig. 7, 5 and 6), and a medieval jug-spout of characteristic Chester type, of thirteenth-century date (fig. 5, 1)

Medieval: beneath layer 1 a continuous layer of brown stony soil (3) produced a few sherds of pottery, two of which were medieval, and over the fortress ditch, the lower part of an uninscribed Roman tombstone (pl. Ib); pits 2, 3 and 4 appeared in this level and are also presumably medieval on stratigraphical grounds. 14 ft. from the east end of trench 1 appeared the eastern side of an interesting structure which demands a detailed description. It post-dates layer 3, which had been cut by its construction, while the pottery from the filling (the various layers are grouped together as (2)) confirms that it was in fact a medieval feature.

Its essential features were two sandstone walls set in clay and showing a pronounced batter; the east wall was better preserved and still stood to a height of 3 ft. (pl. IVa). On plan (fig. 3,A), both walls curved as if to suggest an elliptical structure with maximum internal dimensions of 15–16 ft. in length and 8 ft. in width. The line of the walls was continued downwards for a further 15 in. into the natural sand as far as the rock. In the soft surface of the rock had been cut a narrow channel which opened to the north into a small circular pit, 3 ft. in diameter, lined with sandstone slabs set in clay (pl. Va). The latter still stood two courses high and gave an impression of slight corbelling on the north side, as if originally they had formed a domed covering.

From the top downwards, the filling of the structure (2) could be distinguished as the following layers: a clay seal with a pronounced ash layer beneath it on the west side; black soil and stone containing medieval pottery, clay and stone, black soil again with more medieval pottery and a fragment of Purbeck marble shaft, more clay, and finally in the small circular pit dirty sand with a fragment of worked Purbeck slab and a medieval jug-handle. The floor of the small channel running into the pit was covered with a thin layer of lime. The whole filling can be regarded as a single deposit placed in the feature after it had fallen into disuse and the contained pottery (fig. 7, 8-10) is of late thirteenth- or early fourteenth-century date. Its function remains problematical, except that it was probably a furnace of some kind; as a working hypothesis it is suggested that the structure may have been a lime kiln8 on the evidence of the thin layer of lime in the bottom of the channel or flue leading into the circular pit or hearth. Some support for this interpretation is given by the presence of Purbeck marble fragments (fig. 6, 6 and 7) in the fill, perhaps the unroasted remains of a load of limestone.

At the east end of trench 1 the legionary rampart survived to within one foot of the car-park surface. In it had been cut a roughly circular pit (pl. IVb)

<sup>&</sup>lt;sup>8</sup> For a more permanent example of a medieval lime-kiln, compare that from Ogmore Castle, Glamorgan, published by O. E. Craster (*Arch. Camb.* ci (1951), 72).

with an estimated diameter of 6 ft. and a depth of 4 ft. On the west side were two clear post-holes, 4 ft. apart and with diameters of 9 in. (N) and 6 in. (S) respectively. The filling of the pit was a uniformly black soil containing a small number of potsherds, mostly Romano-British but with two or three medieval (the latest perhaps thirteenth century), nails, a few animal bones, and a sawn fragment of a tine from a deer-antler. The paucity of finds and the nature of the filling suggest that it was not a rubbish- or cess-pit, while the post-holes suggest something structural. But the precise function remains uncertain and the most that can be said is that it was out of use by the thirteenth century.

In trench 2 a mass of sandstone rubble set in stiff clay is assigned to the medieval period on the grounds of its intermediate position between Roman levels and post-Roman accumulation. The latter was a layer, 4 ft. thick, of black soil beneath the topsoil containing pottery ranging from medieval to seventeenth century. Beneath it appeared the masonry in question with a maximum thickness of  $2\frac{1}{2}$  ft. and resting in turn on banded sand and ash layers, 3 ft. thick in all, which had accumulated on the floor of a legionary oven almost 10 ft. below the present surface. These Roman layers contained no pottery later than c.A.D.120 and on these grounds it might be argued that the sandstone was a later Roman structure. But a layer of brown soil which had formed against the west face of the masonry and to the east produced medieval as well as Romano-British sherds, and two late Saxon rims of Chester ware (fig. 7, 11 and 12) may be significant.

To the west the masonry presented a rough but recognizable face while to the east it showed a better constructed curved face. On the north, three internal faces were observed, forming a rectangular plan and enclosing a slabbed floor (pl. VIa); this was partly explored by means of an extension to the trench, but could not be completely planned because of the presence of a flight of modern concrete steps. To the south a pit had been cut into the masonry, containing cess-like fill in the lowest level; it produced a small quantity of pottery of which one sherd was medieval (not earlier than the thirteenth century).

Roman: at the west end of trench 1, the clearest feature was the sandstone drain running from north to south, almost one foot in width (pl. Ia). The road which it drained extended for 20 ft. to the east as a metalled surface, and although pits 2 and 3 had interrupted the stratification between them, it would appear that both road and drain displayed two periods of construction: the road had two well-defined layers of metalling (fig. 3, 1 and 2) separated by a layer of sand and pebbles, while the original sandstone drain (1) was sealed by a clay-lined gully (2) probably linked with the second period road. Unfortunately no pottery was obtained from a stratified context to assist in dating. West of the drain there appeared to have been a metalled pavement to the road.

This extra-mural road can now be linked with the road found in the 1945 section, 150 yards further north, to indicate that it was a continuous feature

<sup>9</sup> cf. n.1, p. 2.

outside this stretch of the western defences. There is some evidence that a well-used road ran down to the harbour area (the present Roodee) from the porta praetoria dextra (approximately Holy Trinity Church)<sup>10</sup> with which the present road must be linked (perhaps extending south also along the line of Nicholas Street) as a service road to extra-mural buildings between the harbour and the western defences.

Between the road and the outer lip of the fortress ditch was a space of about 10 feet. Two post-holes, in no particular alignment, may indicate that a fence intervened between road and ditch.

The full width of the fortress ditch cannot be given with certainty since the inner lip probably coincided with the west wall of the medieval kiln, but it may be conjectured as c.26 ft., and the depth as  $10\frac{1}{2}$  ft. (the dimensions in the 1945 trench were 27 ft. and 10 ft. respectively). It had been dug successively through clay, sand and 6 ft. of rock (pl. IIa, b) and as it penetrated into the harder sandstone, the ditch assumed a steeper angle and the faces became quite convex in profile. The very bottom of the ditch was a mere 6 in. slot (pl. IIIa, b) and the whole thing must have presented a formidable obstacle.

From the bottom of the ditch upwards, the following layers could be distinguished: 8, rapid silt, dark and clavey in consistency; 7, a clean sandy silt; 6, a thick layer of dark brown loam which appeared to have been cut away on the east side as if to form a ditch of a later period; 5, a massive rubble fill merging into 4, a brown pebbly soil. Finds from these layers were rare but a small quantity of pottery was recovered. From 7 a fragment of a flagon neck in a pink ware with cream slip (not illustrated, but probably from a ring-neck flagon of Flavian/Trajanic date); from 6, a samian bowl (F.31) of Antonine date, and a black-burnished dish (form Gillam 329) of third-century date (figs. 6, 2 and 7, 1); from 4/5, more black-burnished ware of Antonine to thirdcentury date (fig. 7, 2-4). The evidence is slender, but it would appear that 6 was accumulating in the original fortress ditch from the late second century through the third century, and re-cutting may well have taken place at the conventionally held date of c.A.D.300 for re-fortification at Chester; the similar date of the pottery from the fill of the re-cut ditch need not conflict with this interpretation.

The east wall of the medieval kiln had cut through the front face of the fortress wall, while later robbing had left only scanty traces of the original masonry (pl. Vb). However, two separate elements could be detected: to the west a width of  $2\frac{1}{2}$  ft. of masonry remained as far as the east wall of the kiln and had been set into the natural sand; between this and the front of the rampart there would appear to have been a further width of  $5\frac{1}{2}$  ft. of masonry set into the natural clay but standing a foot or so higher. This arrangement proved difficult to interpret and originally it was thought that the western element might be a masonry 'apron' or part of a metalled berm, but Mr.

<sup>&</sup>lt;sup>10</sup> C.A.S. lii (1965), 4 and figs. 1-3; xlvi (1959), 38 and fig. 1.

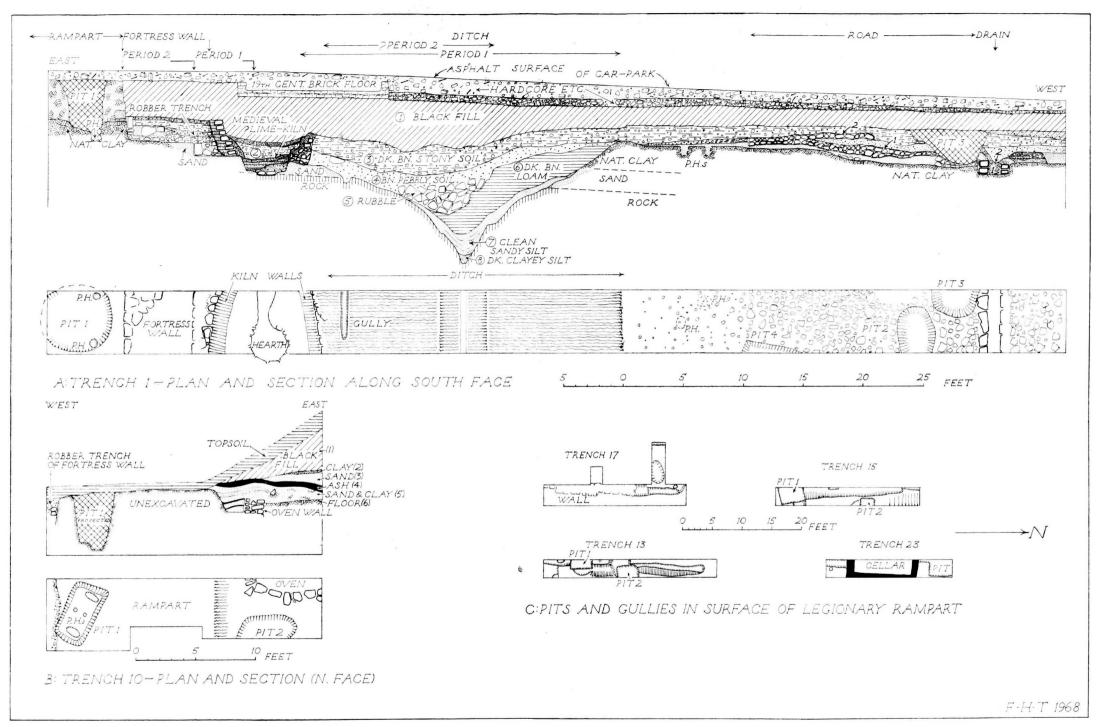


Fig. 3. Linenhall Street, Chester: plans and sections of trenches 1, 10, 13, 15, 17 and 23.

		9		
*				

Petch's later observations showed that this was the original Trajanic wall, and the eastern portion an addition of possibly Constantian date. This thickening was achieved by cutting back the front of the rampart, and this explains why only 14 ft. of the original rampart width survives in trenches 1 and 2.

Of the rampart itself there is little to say, except that it was composed of the customary banded grey and black stiff loam; it survived to a height of  $3\frac{1}{2}$  ft. above natural in trench 1 and  $5\frac{1}{2}$  ft. in trench 2, where it had been protected by the bank. In trench 2, natural lay at depth of 10 ft. and was a sandy clay with a trampled black surface. Immediately above this was the sand and sandstone make-up for the clay floor of an oven; it began 2 ft, from the rear of the rampart and extended 10 ft. to the east. 6 ft. further east a pit, 6 ft. wide from west to east, had been cut nearly 2 ft. into natural, presumably as an ash-pit to take the rakings from the oven. On the oven floor had accumulated nearly 3 ft. of alternating layers of sand and ash as far as the bottom of the clay and sandstone structure described above (p. 5). From these layers and from the ash-pit filling a large quantity of pottery was recovered, both Samian and coarse ware; none is illustrated, since somewhat similar stratification held for trench 10 and the relevant pottery is shown (fig. 7, 13-22), but the pottery from trench 2 was predominantly Flavian and none was later than Trajanic, c.A.D.120. Roman finds from upper layers in trenches 1 and 2 included a coin of the house of Constantine (trench 1, layer 1), a coin of Magnentius (trench 2, layer 1) and an enamelled disc brooch from trench 2, layer 2 (fig. 5, 4). There is thus a suggestion of fourth-century activity in the area.

Trenches 3-12 (figs. 2 and 3, B)

This group of trenches, lying to the south of the 1949 trench, are again described under the headings of post-medieval, medieval and Roman in that order.

Post-medieval: the only feature to be attributed to this period was Pit 3 in the north-west corner of trench 12 which produced a mass of pottery of c.1700, combed Staffordshire slip-ware, Delft, brown glazed wares, etc., as well as glass from sack-bottles.

Medieval: in trenches 3, 4 and 5 an attempt was made to recover something of the plan of the possibly post-Roman masonry first encountered in trench 2. The west face appeared clearly and in 5 a well-defined angle (pl. VIIb), giving an overall length on the west of at least 25 ft. It was hoped that trench 3 might yield another angle to link with the east face found in 2, but a deep cellar in the southern part of 3 had effectively removed all traces, except for an indication of the east face at the north end. However, in trenches 4, 5 and 9 there appeared another feature, possibly connected with the masonry and, if so, confirming its post-Roman date. This was a length of flat-bottomed ditch with near vertical sides cut into the legionary rampart: it was best seen in trench 5 (pl. VIIIb), where it was found to have a width of 8ft. at the top, narrowing slightly to 7 ft. at the bottom, and a total depth of 7 ft. The east face was

found in trench 4, and the rounded end in trench 9 (pl. VIIIa); the other end was not actually located but it did not appear in trench 8, so the total length may be conjectured at c.25 ft. The filling was relatively uninformative and devoid of pottery; in trench 5 there was some black soil and ash in the lower fill, but a thickness of 4 ft. of clean sand in the upper levels, while in trench 9 there were animal bones and mussel shells in the black soil. But it would be difficult to suggest that this feature was an outsize rubbish-pit, and it seems preferable to interpret it as a defensive ditch connected with the masonry.

The pit found in the west end of trench 7 was more certainly a rubbishpit. The full plan was not obtained, but its sides were vertical and it ran down 41 ft. into the rampart; the fill was black ashy soil, containing a fair quantity of animal bone and pottery of late medieval to immediately post-medieval date (not illustrated, but including vessels with internal and external green glaze, early stonewares, etc., probably late fifteenth to early sixteenth century). Also medieval, on the basis of the contained pottery, was Pit 1 in trench 12, and Pit 2, which cuts it, of the same, or post-medieval date. Finally, a pit cut into the rampart at the west end of trench 10 (Pit 1) was completely excavated (fig. 3, B and pl. VIb); it was rectangular, 5 ft. by 2 ft. 9 in. at the surface, with near vertical sides and 4 ft. deep. At the bottom there were two oval ?postholes, 15 in. by 8 in. and 7 in. deep, at either end, and two small ?stake-holes in the centre. The filling was dark soil but relatively sterile as far as finds were concerned; however, there were a few sherds of pottery, mostly Romano-British, but also the rim of a cooking-pot of twelfth-century date (fig. 7, 23) and a base, possibly from the same vessel. Once again, a rubbish-pit seems unlikely on the evidence and a structural interpretation, as for the nearby Pit 1 in trench 1, a possibility.

Roman: the legionary rampart appeared in trenches 4–10 and it was possible to define its rear face with certainty, while the robber trench of the fortress wall was noted at the west end of trenches 6 and 10. The rampart was also clearly seen in trench 12 and Pits 1-3 were in fact cut into its surface. But the most useful addition to knowledge was the discovery of the curving sandstone wall of an oven in trench 10 (fig. 3,B and pl. VIIa) and its associated ash-pit in trench 11. The excavation was taken no lower than the burnt clay floor of the oven and no doubt the remains of a predecessor might well have been found at a lower level. However, the oven actually exposed does not appear to have remained in use later than c.A.D.120. Layers 2-5 which had accumulated on the clay floor (6) produced two Flavian coins and pottery, samian and coarse ware, of a Flavian/Trajanic complexion (figs. 6, 4 and 5, and 7, 13-22) and, in fact, some pieces joined between layers, e.g. sherds between 3 and 5. Layer 4 also produced a brooch of Camulodunum Type VII (fig. 5,8) of Flavian date. The overlying black soil (1) produced a mixture of Romano-British survivals, medieval and post-medieval sherds down to c.1700. Pit 2, south of the oven, appeared to be of Roman date, again producing Flavian/Trajanic pottery, some sherds of which joined those from layers 2-5.

Trenches 13, 15, 17, 23 (figs. 2 and 3, C).

These four trenches explored the surface of the legionary rampart in a straight line from south to north over a distance of 150 ft. The aim was partly to locate the interval tower which, as explained earlier, was ultimately found in the area of trench 12 (p. 2), and partly to see if more features of a possibly defensive nature were to be found cut into the rampart surface. The second intention was fully realised and traces found of what seemed to be a consistent defensive pattern of post-Roman date. Briefly, this appeared to take the form of a gully varying from 1 to 2 ft. in depth, accompanied or interrupted by square-cut pits 2-4 ft. in depth and 4 ft. along the sides. The occasional presence of post-holes against or in the gulley makes it likely that the latter is to be interpreted as a palisade-trench, in which case the square pits were presumably the emplacements for massive timber uprights. The filling of pits and palisade-trench was a dark loamy soil in which it proved impossible to detect actual post-holes and which merged almost imperceptibly into the black soil immediately below the car-park surface. The latter contained late medieval to seventeenth-eighteenth-century pottery, but the palisade-trench and postpits were virtually sterile with the exception of a few medieval sherds from the pits in trench 15, one of which came from an early thirteenth-century French import (fig. 7, 28).

In greater detail, the trenches yielded the following features (the description runs from south to north). In trench 17, the southern part of the trench was occupied by a later stone wall, but the palisade trench emerged at the northern end over a distance of 8 ft., with a probable post-hole. Trench 15 began 15 ft. farther north: at the south end was a 4 ft. square pit cut 3 ft. into the rampart (pl. Xb) after which the remainder of the trench contained the palisade trench for another 10 ft. (pl. IXb), with a possible post-pit,  $2\frac{1}{2}$  ft. square and 3 ft. into the rampart, 9 ft. to the north of the first (pl. Xa); a probable post-hole was also observed in the palisade-trench. Trench 13 began 20 ft. farther north: the palisade-trench was continuous for 27 ft. of the 29 ft. long trench except for the interruption of two post-pits, 4 ft. apart (pl. IXa); each was nearly 4 ft. square and extended 2 ft. and 3 ft. into the rampart respectively. Finally, trench 23, separated from trench 13 by a gap of 18 ft., had a short length (3½ ft.) of palisade-trench at the south end, which was interrupted by a recent cellar for a distance of 24 ft. before it resumed briefly for 2 ft. at the north end and then ran into a post-pit, perhaps 4 ft. square and extending 3 ft. into the rampart.

#### Trenches 14, 16, 18–22, 24, 25 (fig. 2)

These trenches were primarily concerned with locating Roman structures behind the rampart. 18 and 19 were blank, but 14, 16, 20–22 recovered the plan of a characteristic stone-built rampart building: three corners were located in trenches 20–22 (pl. XI), making it possible to define the overall dimensions as 69 ft. by 24 ft., while the west wall was sectioned in

trenches 14 and 16 (pl. XII), showing that this had the standard width of 3 ft. 3 in. above 3 in. offsets. In trench 16 there was an indication of a stone-slabbed floor, level with the internal offset, and on this was an accumulation of dirty brown sand, 9 in. thick, containing tile, stone and pottery. The same layer was present in trench 14, east of the wall, and must be regarded as an occupation layer, the pottery from which (figs. 6, 1 and 7, 24–6) has a Hadrianic/Antonine complexion. Thus it would seem that the occupation of this building persisted until the second half of the second century, when it may have been abandoned.

Trenches 24 and 25 (the latter strictly beyond the limits of the site) were not particularly informative, except insofar as they indicated the proximity of ovens on the evidence of bands of sand and ash, but it was left to Mr. D. F. Petch in the following years, as work on the Inner Ring Road progressed, to record various features such as towers, ovens and rampart buildings behind the western defences between the site described here and the north-west angle. These have added considerably to our knowledge of this side of the fortress, for instance in the sequence of timber and stone rampart buildings on the same site, and the published reports are eagerly awaited. Meanwhile it can be said that there is now reasonably complete knowledge of the whole length of the western defences from the south-west to the north-west angles, of structures immediately inside them, and to some extent of the internal plan on this side.<sup>11</sup>

#### Discussion

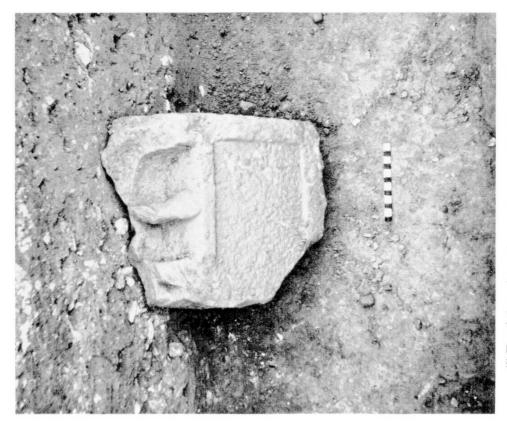
For the Roman period, the historical conclusions which emerge from this excavation may be summarised as follows:

(i) in the defences, it would appear that there are two distinct periods for the stone wall, the first being presumably the early Trajanic addition to the front of the Agricolan rampart, and the second being a thickening of this wall to the rear, by cutting back the earth rampart for nearly 6 ft. Unhappily, the ruinous state of the wall in both periods precludes any close dating of the rebuild; but the possible recutting of the fortress ditch late in the third century (p. 6) may have been a simultaneous defensive measure, so that the new wall may have been of the same date as the rebuilt north wall, i.e. c.A.D.300.<sup>12</sup> Here, the fragmentary tombstone from trench 1, (p. 4, above) may not be without significance, as too the fragment found in the eastern stretch of the medieval wall on the Woolworth site in 1959,<sup>13</sup> suggesting that Roman tombstones may well have been used for rebuilding on other parts of the fortress perimeter apart from the north wall.

<sup>&</sup>lt;sup>11</sup> For the western defences and related features in the *intervallum*, cf. J.R.S. xxxvi (1946), 136–40 and fig. 12; C.A.S. xl (1953), 1; xlii (1955), 45; xlix (1961), 5; J.R.S. liv (1964), 156; lv (1965), 204; lvi (1966), 200. For buildings on this side of the fortress, cf. C.A.S. xl (1953), 6; xlvi (1959), 33; J.R.S. liv–lvi (as above).

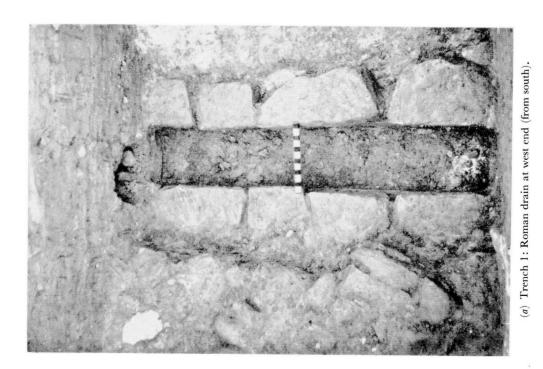
<sup>12</sup> C.A.S. xxxviii (1951), 20.

<sup>13</sup> C.A.S. liv (1967), 14 and pl. IV.



(b) Trench 1: tombstone fragment from upper fill of fortress ditch.



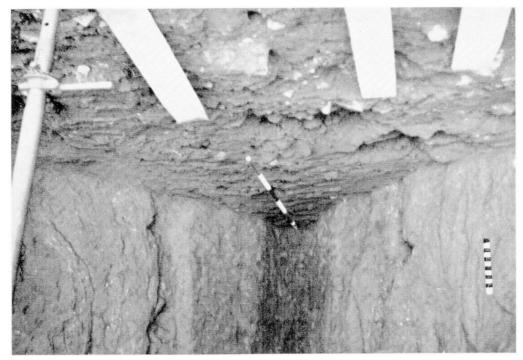


(b) Trench 1: fortress ditch (from east).



(a) Trench 1: fortress ditch (from west).

Linenhall Street



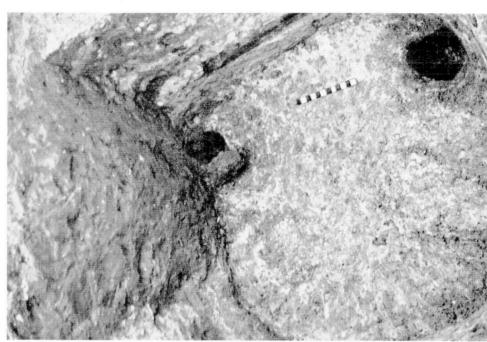
(a) Trench 1: fortress ditch (from above).



(b) Trench 1: base of fortress ditch.

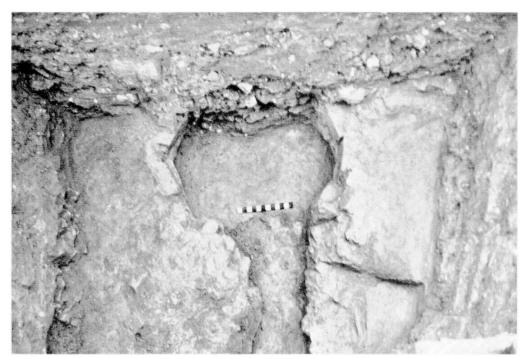
Linenhall Street

(a) Trench 1: medieval kiln (from east).



(b) Trench 1: Pit 1, with post-holes (from north).

Linenhall Street

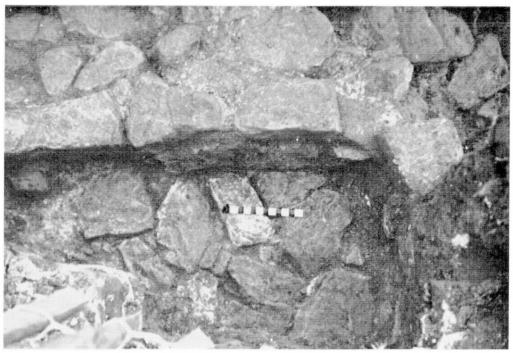


(a) Trench 1: hearth of medieval kiln (from above).



 $(b) \quad \hbox{Trench 1: base of for$  $tress wall (from south).}$ 

Linenhall Street

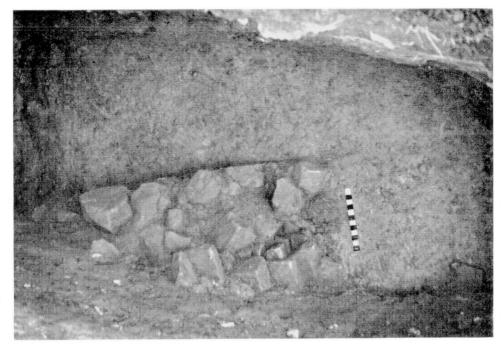


(a) Trench 2: post-Roman masonry structure (from north).

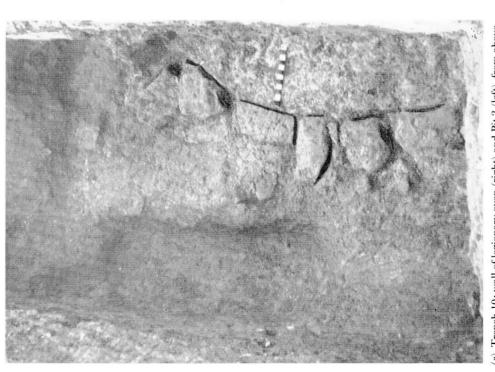


(b) Trench 10: Pit 1, with impressions of posts (from above).

Linenhall Street

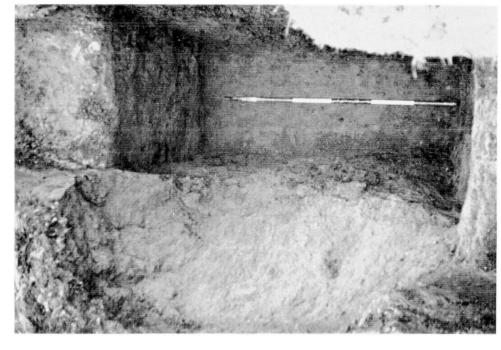


(b) Trench 5: angle of post-Roman masonry structure (from above).

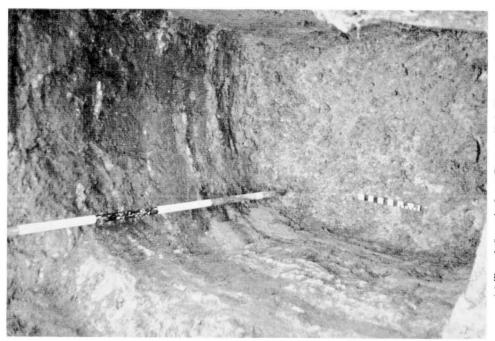


(a) Trench 10: wall of legionary oven (right) and Pit 2 (left), from above.

Linenhall Street



(b) Trench 5: post-Roman ditch (from west).



(a) Trench 9: end of post-Roman ditch (from west).

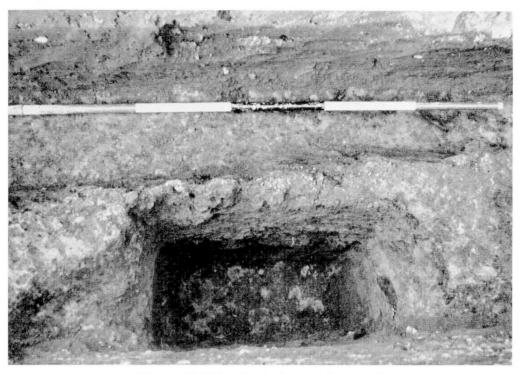
Linenhall Street

(b) Trench 15: palisade trench and pits (from north).

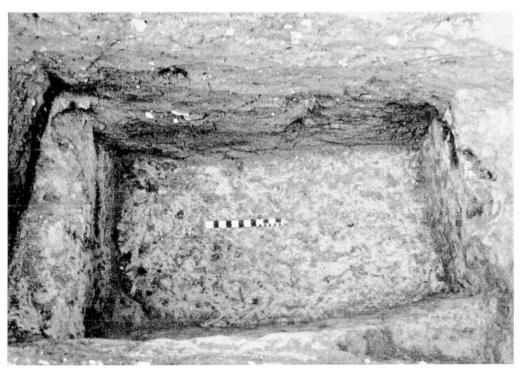


(a) Trench 13: palisade trench and pits (from north).

Linenhall Street



(a) Trench 15: Pit 2 and palisade trench (from above).

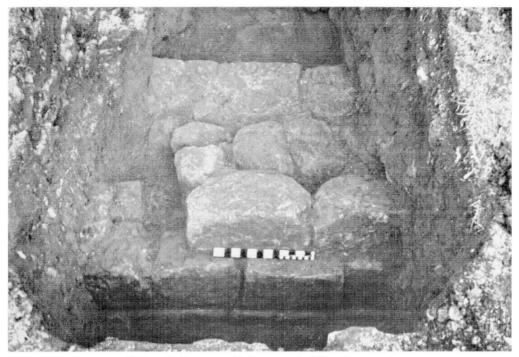




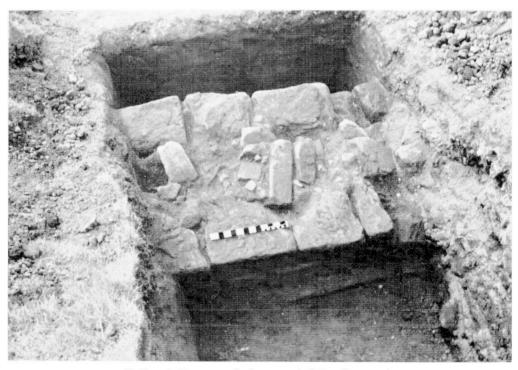
(b) Trench 20: south-west corner of rampart building (from west).

(a) Trench 21: south-east corner of rampart building (from above).

# Linenhall Street



(a) Trench 14: west wall of rampart building (from west).



(b) Trench 16: west wall of rampart building (from east).

Linenhall Street

(ii) of the structures immediately inside the defences, the ovens were found not to persist later than c.A.D.120, whereas the rampart building continued well into the second century. These conclusions are in line with previous findings, but their precise significance remains in doubt. Ovens are so intimately connected with the presence of troops that their abandonment might suggest the departure of part of the garrison, whereas the store-buildings behind the rampart might well remain in use. But the disuse of ovens might also be interpreted as a switch to some other form of communal cooking, as happened at Caerleon.<sup>14</sup>

For the post-Roman period, the greatest interest attaches to the supposed defences imposed on and behind the Roman rampart: the masonry and associated length of ditch found in trenches 2-5 and 9, and the palisade-trench and post-pits in trenches 13, 15, 17 and 23. The latter can presumably be interpreted as the standard defensive arrangement, whereas the former may imply some special feature, e.g. a gate, with the entrance running through to the south of the ditch and stone ?tower. It must be emphasized that there is no clear evidence for the precise date of these various features; the filling of the ditch, post-pits, etc. was relatively sterile (in itself perhaps not without significance), although a post-pit in trench 15 produced part of an early thirteenth-century jug. And if Pit 1 in trench 10 can be regarded as structural, the filling here produced a twelfth-century cooking-pot rim. On the other hand, there are the four rims of late Saxon 'Chester' ware, of tenthand eleventh-century date from trenches 1 and 2 which, although not closely stratified, indicate earlier activity in the area. If, as a working hypothesis, it is suggested that the ruined Roman defences were adapted in the tenth century and remained in commission until c.1200, it becomes desirable to fix the date at which the present west wall, overlooking the Roodee, was constructed, and here a mixture of excavation and documentary research may help. 15

The historical context for the refortification of Chester is well known. It is attributed to the Mercian queen Aethelflaed, daughter of Alfred, who restored its defences in 907 as protection probably against an Irish-Norse colony planted in the Wirral. Between 910 and 915 she strengthened the borders of Mercia against the Danish armies by building ten fortresses, to such good effect that she was then able to carry the war into the enemy camp by capturing Derby in 917 and occupying Leicester in 918. She died in 918 after a brief but eventful and successful reign. 17

<sup>&</sup>lt;sup>14</sup> Arch. Camb. lxxxv (1930), 155, 174 ff.; lxxxvi (1931), 115 ff.

<sup>&</sup>lt;sup>15</sup> See now J. McN. Dodgson. 'Place-names and Street-names at Chester' (*C.A.S.* lv (1968), 29–61), where the interesting suggestion is made that the Roman defences (and, by inference, the late Saxon replacement on the west) were dismantled by or in the twelfth century (pp. 48–9).

<sup>&</sup>lt;sup>16</sup> The event is recorded in the fragmentary Mercian chronicle known as the 'Mercian Register', later incorporated into other versions of the Anglo-Saxon Chronicle (cf. Plummer and Earle, *Two of the Saxon Chronicles Parallel* (Oxford, 1892), i, p. 94, ii, pp. 116, 118). For the Norwegian colony in the Wirral, cf. F. T. Wainwright, 'Ingimund's Invasion' (English Historical Review, lxiii (1948), 145–69).

<sup>&</sup>lt;sup>17</sup> F. M. Stenton, Anglo-Saxon England (2nd ed. 1947), pp. 322-3; F. T. Wainwright, 'Aethelflaed Lady of the Mercians' (P. Clemoes (ed.), The Anglo-Saxons (1959), pp. 53-69).

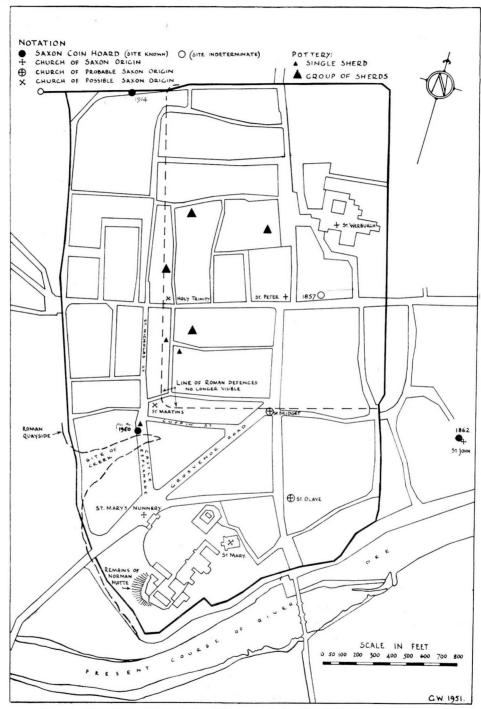


Fig. 4. Late Saxon Chester (after Webster in Antiq. Journ. xxxiii, with additions).

So much for the documentary background. The archaeological, and particularly the numismatic, evidence supports an early tenth-century reoccupation of Chester. The last decade of the reign of Edward the Elder (899–924) saw the setting-up of a mint at Chester, with perhaps as many as sixteen moneyers at work, a number which rose to twenty-eight in the reign of his successor, Aethelstan (924-939); even though not all of them were striking at the same time, it has been held that Chester was for some years the most important mint in England, and the cosmopolitan flavour of the moneyers' names emphasizes the importance of the town from the commercial standpoint in addition to its strategic value. 18 The further evidence for tenth-century activity—coin-hoards, church-dedications, sculpture—was reviewed by Dr. Graham Webster in a paper<sup>19</sup> which lamented our failure to recognize any pottery of the period from Chester.<sup>20</sup> Almost immediately, by one of those curious quirks of archaeology, the coin-hoard of c.970 was found in Castle Esplanade together with its pottery container and Dr. Webster played a leading part in rescuing both coins and pot. 21 In 1954 a group of pottery of the period was found by Mr. D. F. Petch during the excavation of the legionary granaries in Commonhall Street; the sherds came from trenches immediately west of the granaries and little more than a hundred feet from the line of the western defences.<sup>22</sup> Single sherds with typical roller-stamped decoration were subsequently recovered in 1956 from trench 1, Weaver Street<sup>23</sup> and in 1957 against the north wall of the interval tower in Nicholas Street.<sup>24</sup> To these can be added the four rims recovered from trenches 1 and 2 of the excavations described in this paper (pp. 4, 5, above), some sherds from Crook Street (1964) and others from recent excavation on the Old Market Hall site; at this last site, the pottery was apparently stratified in two instances and in one case may represent squatter occupation of a ruined Roman building.<sup>25</sup> Thus a picture emerges (fig. 4) of a thin scatter of pottery (itself the strongest evidence for occupation) over a distance of c.300 yards from north to south, just inside the line of the Roman west defences and in the vicinity of the Roman west gate leading to the harbour, and also of some occupation in what was originally the central area of the Roman fortress. 26 The cumulative effect of the documentary, numismatic and ceramic evidence strengthens the hypothesis

<sup>&</sup>lt;sup>18</sup> For the numismatic evidence cf. R. H. M. Dolley, 'The Mint of Chester' (C.A.S. xlii (1955), 1–20, and especially 6–8, 12, 13).

<sup>19 &#</sup>x27;Chester in the Dark Ages' (C.A.S. xxxviii (1951), 39-48).

<sup>20</sup> Ibid., 46.

<sup>&</sup>lt;sup>21</sup> Antiq. Journ. xxxiii (1953), 22-32.

<sup>&</sup>lt;sup>22</sup> C.A.S. xlvi (1959) 58-60, figs. 1, 2 and 14.

<sup>23</sup> Ibid., 72.

<sup>&</sup>lt;sup>24</sup> C.A.S. xlix (1962), 8 and fig. 1.

<sup>&</sup>lt;sup>25</sup> I am much indebted to Mr. Petch for providing me with the information about the last two sites and allowing me to include them on the plan.

<sup>&</sup>lt;sup>26</sup> The 1950 hoard bears some relation to this putative occupation (*Antiq. Journ.* xxxiii (1953), 25 and fig. 1) but probably in the sense that it was concealed outside the Saxon defences.

for late Saxon refortification of the earlier Roman west defences, suggested above, even though the overall plan still remains undefined.

This is perhaps the moment to recall that archaeology had already detected the presence of another of Aethelflaed's fortresses in Cheshire, at Eddisbury, fortified in 914. Here the pre-war excavations by Dr. W. J. Varley<sup>27</sup> disclosed a later reconstruction of the original Iron Age outer rampart;<sup>28</sup> it is true that nothing was found to date the rebuilt rampart, but on stratigraphical grounds the excavator was satisfied to date it to the late Saxon period. Since then, of course, a second example of the late Saxon refortification of an Iron Age hill-fort has been recorded in the current excavations at South Cadbury Castle, Somerset,<sup>29</sup> where an earth bank was faced with a mortared stone wall, tentatively identified as the defences of the *burh* of Aethelred II, or *Cadanbyrig* as it appears as the mint-mark on coins struck there *c*.1010–20.

Finally, the patient archaeological pursuit by F. T. Wainwright, before his untimely death, of the Mercian burhs of Aethelflaed has been vindicated by the discovery at Hereford in 1968 of a timber-revetted rampart; on the collapsed rear of the rampart appeared sherds of 'Chester' ware of, say, the second half of the tenth century (on the basis of the date of c.970 assigned to the Chester hoard of 970), suggesting that these defences could well have been Aethelflaedan.<sup>30</sup> Thus, there would be nothing extraordinary in supposing the post-Roman refortification at Chester to be of the same period.

#### Description of Finds

#### A. Coins. 31

- 1. Trench 1, layer 1 (above latest fill of fortress ditch). Constantine I, VRBS ROMA (c.A.D.330-7)
- 2. Trench 2, layer 1 (black ashy soil below topsoil)
  Magnentius, A.D.351-2 (*LRBC* 12)
  VICTORIAE DD NN AVG ET CAE

AMB\* (mint of Amiens).

3. Trench 4 (sandy fill between rear of rampart and face of post-Roman masonry).

A plated forgery of a denarius, muling an early obverse of Vespasian with a reverse of Titus

4. Trench 5 (between rampart and stone face). An illegible radiate of c.A.D. 265-75

<sup>27</sup> L.C.H.S. cii (1951), 1-68.

<sup>&</sup>lt;sup>28</sup> Ibid., 23–28, fig. 9, pl. 8, and 59–63.

<sup>&</sup>lt;sup>29</sup> Antiq. Journ. xlvii (1967), 70-6; xlviii (1968), 6-17; xlix (1969), 39.

<sup>&</sup>lt;sup>30</sup> Current Archaeology 9 (July 1968), 242-6. See now Trans. Woolhope Nat. Fd. Club xxxix (1967), Pt. 1, 55-6, 59 and fig. 4.

<sup>31</sup> I am much indebted to Dr. J. P. C. Kent F.S.A., for reporting on these.

- (5, 6) Trench 10, layer 2.
- 5. A puzzling coin with an obverse of Vespasian but a reverse which is not compatible—probably a contemporary forgery.
- 6. As of Domitian, A.D.81–96 COS XII MONETA AVGVSTI (BMC 389)

#### B. Metal (fig. 5)

#### Trench 1.

- 2. Disc of thin bronze sheet with three perforations (layer 2)
- 3. Small iron knife with tang (Pit 1)

#### Trench 2.

- 4. Bronze disc brooch (Roman) with red (heavy stipple) and green (light stipple) enamel decoration (layer 2=brown soil against face of ?late Saxon stone structure—see p. 5).
- 5. Bronze ferrule with traces of wood internally (layer 4=oven layer below ?late Saxon structure).

#### Trench 9.

6. Fragment of Roman bronze bolt for tumbler lock (fill of post-Roman ditch),

#### Trench 10.

- 7. Bronze stud (from fill of pit south of oven)
- 8. Bronze brooch of Camulodunum Type VII;<sup>32</sup> pre-Flavian to early Flavian (layer 4—ash above oven floor).

#### Trench 11.

10. End of lower part of bronze handle (layer 1=black soil below topsoil).

#### Trench 15.

11. Bronze figurine of dog, resembling dachshund breed (layer 2=dark brown fill of gully).

#### Unstratified.

12. Sheet bronze disc with central perforation (from spoil heap).

#### C. Stone.

Trench 1-fill of medieval ?lime-kiln.

- Fig. 6, 6. Fragment of Purbeck marble shaft.
  - 7. Fragment of Purbeck marble slab with rounded edge.

<sup>32</sup> C. F. C. Hawkes and M. R. Hull, Camulodunum, pl. xcii, 56, 57 and p. 312.

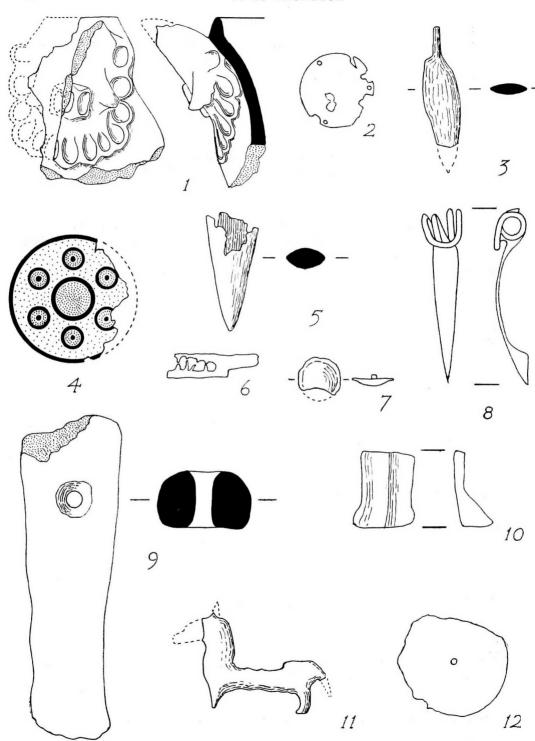


Fig. 5. Linenhall Street, Chester: finds of pottery, metal and stone (scales:  $\frac{1}{2}$ , except 4, 8,  $11-\frac{1}{1}$ ).

Trench 11.

Fig. 5, 9. Perforated whetstone in fine-grained grey ?mica schist; probably medieval (from fill of ash-pit).

### D. Pottery.<sup>33</sup> Trench 1.

- Fig. 6, 2. Form 31R, Central Gaulish. A typical example of the developed form with continuous internal curve broken only by a ridge. These do not appear before the middle of the second century and are normally, perhaps always, to be dated c.A.D.160-200.
- Fig. 7, 1. Black-burnished dish, Gillam<sup>34</sup> 329; third century. Both from layer 6.
  - 2. Black-burnished bowl, Gillam 225; A.D.190-240.
  - 3. Black-burnished dish Gillam 309; A.D.160–200.
  - 4. Black-burnished cooking-pot, perhaps Gillam 138; A.D.180-250.

These three came from layers 4 and 5 (the fill of the ?re-cut ditch).

- 5, 6. Rims of jars in hard pinkish-brown sandy 'Chester' ware; tenth-eleventh century (layer 1).
- 7. Medieval jug-handle with pronounced mid-rib; hard white fabric, pale olive-green glaze; late thirteenth or early fourteenth century (hearth of medieval ?lime-kiln).
- 8. Rim of medieval bowl in grey ware with pink surface and pale olive-green glaze.
- 9, 10. Medieval jug-handles in buff and grey ware, with dark green glaze.

8-10 came from the filling of the medieval kiln.

- Fig. 6, 3. Form 27, Central Gaulish, with part of a rosette stamp. Such stamps were in common use at Lezoux in the mid and late second century, but they are notoriously difficult to match, since slight differences in the depth of impression are critical. This particular one, however, does seem to be from the same die as examples recorded in an early Antonine group at the Ligonne workshops at Lezoux. In any event, the form involved suggests a date of manufacture before A.D.160. Rosette stamps are unusual on form 27 and tend to be confined to less common forms such as 46, Curle 15 and Curle 21 (fill of Pit 1).
- Fig. 5, 1. Spout of medieval jug in grey ware with pink surface and green glaze; the frilling is characteristic of Cheshire<sup>35</sup> (layer 1).

<sup>34</sup> Arch. Aeliana, 4th series, xxxv, 1-72 (J. P. Gillam, 'Types of Roman Coarse Pottery Vessels in Northern Britain').

35 C.A.S. lii (1965), 20 and fig. 11, 6.

<sup>&</sup>lt;sup>32</sup> I am indebted to Mr. B. R. Hartley, F.S.A. for reporting on the samian ware and to Mr. J. G. Hurst, F.S.A., for comments on the medieval pottery.

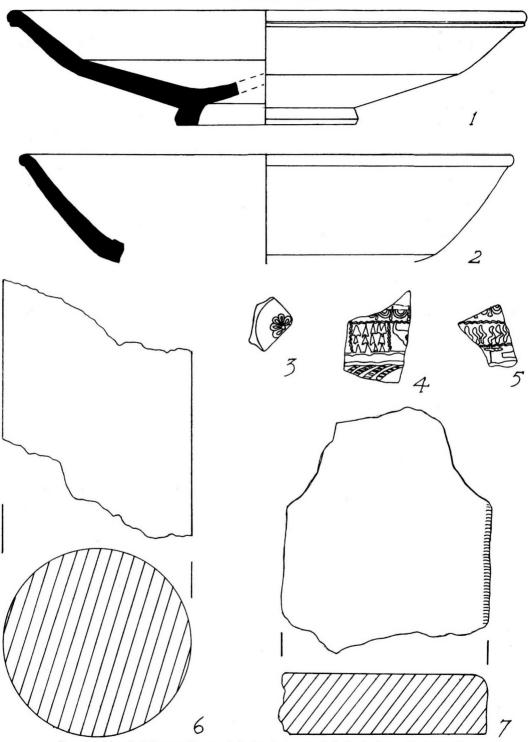


Fig. 6. Linenhall Street, Chester: 1-5, Samian ware; 6, 7, Purbeck marble (scale ½).

#### Trench 2.

Fig. 7, 11, 12. Rims of jars in hard sandy pinkish-brown 'Chester' ware; tenth-eleventh century (layer 2= brown soil against face of ?late Saxon stone structure).

#### Trench 10.

- Fig. 7, 13. Upper part of rustic ware jar in hard dark grey ware.
  - 14. Narrow-necked jar in pink ware.
  - 15. Two-handled jar in pink ware.
  - 16. Everted rim jar in grey ware.
  - 13-16 from layer 5= sand and clay above oven floor.
    - 17. Everted rim jar in pink ware (from layer 4, ash).
    - 18. Carinated bowl in pink ware.
    - 19. Narrow-necked jar with recurved rim in pink ware.
    - 20. Rim of carinated bowl in pink ware.
    - 21. Dish with curved wall in pink ware.
    - 22. Mortarium of pink ware.
  - 18-22 from layer 3=sand, accompanied by scraps of S. Gaulish samian (not illustrated).
- Fig. 6, 4, 5. Fragments from two Flavian, South Gaulish bowls of form 37, both with excellent glaze. Bowls of this period are rarely stamped and so it is not usually possible to name the mouldmakers. In contrast firm evidence of date is forthcoming. The first piece has one of the large rosetted tongues to the ovolo which are common in the Pompeii hoard of A.D.79 (JRS IV. pls. VII-x). This ovolo also turns up particularly frequently on bowls from Agricolan sites in Scotland, including Inchtuthil. The second sherd too has general affinities with pieces in the Pompeii hoard, and a close parallel, with the same ovolo, unmasked panel junctions, panel of leaf-tips and the same wreath, was found at Inchtuthil in the stocks smashed at the time of the evacuation. Both sherds may, therefore, be dated to c.A.D.75-90 (from pit immediately south of oven).

The character of all the pottery from trench 10 described above is entirely Flavian/Trajanic, indicating that the oven and its filling, sealed by layer 2 (clay), did not persist later than  $\epsilon$ .A.D.120; from layer 1 came a mixture of Romano-British, medieval and later sherds, down to the seventeenth century.

Fig. 7, 23. Rim of medieval cooking-pot in grey ware with buff surface; this type of West Midlands rim with an internal fold probably belongs to the second half of the twelfth century<sup>36</sup> (from the rectangular Pit 1 at the west end of the trench).

<sup>&</sup>lt;sup>36</sup> cf. Antiq. Journ. xi (1931), 246-51, 255, fig. 6 and pl. xxxiv, 2.

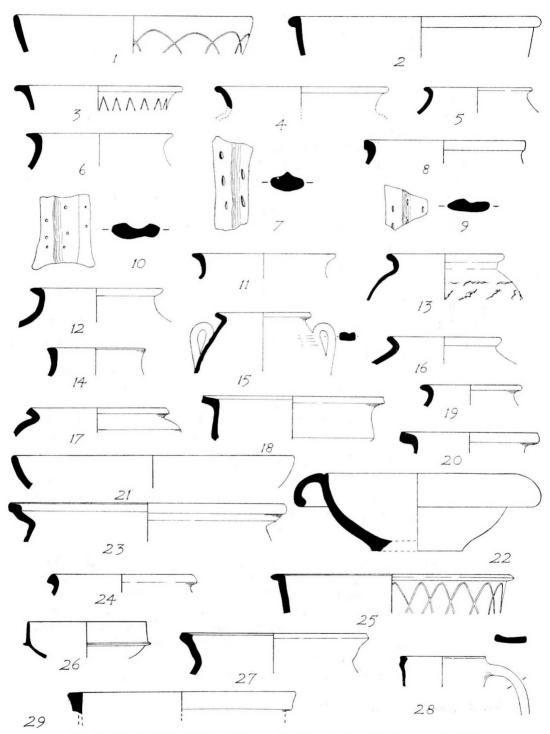


Fig. 7. Linenhall Street, Chester: Roman, late Saxon and medieval pottery (scale  $\frac{1}{4}$ ).

Trench 14.

- Fig. 6, 1. Form 18/31R, Central Gaulish. This form first appears in a dated context in the latter part of Hadrian's reign (CW<sup>2</sup> xxx, 185, no. 3 from the Birdoswald Alley); it continued to be made in the early Antonine period by such potters as Patricius of Lezoux and had been superseded by form 31R by A.D.160. c.A.D.130–160.
- Fig. 7, 24. Expanded rim in grey ware.
  - 25. Dish in black-burnished ware.
  - 26. Bowl in smooth thin pinkish-brown ware with slight flange. This small group came from layer 2, brown soil above the stone floor of the rampart building; the generally Antonine date indicates an occupation persisting to c.A.D.180.

Trench 15.

- Fig. 7, 27. Rim of medieval bowl in pink ware with green glaze internally and on rim bevel.
  - 28. Rim and strap handle of jug in thin smooth cream ware with trickle of pale green glaze down the handle. This comes from an imported French jug (?south-west France) of the early thirteenth century.
  - 29. Squared rim of medieval bowl in pink ware with external green glaze.

27 and 29 came from the fill of the gully, whereas 28 came from the fill of Pit 1, and is more securely stratified.

This paper was published with the aid of a grant from the Department of the Environment.