



Records of Archæological Finds at Chester.

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THE series of papers which follows this brief introduction, has, for the most part, been laid before the Society, from time to time, in the form of reports. These, with two exceptions (Appendices, pp. 80, 140) deal exclusively with finds belonging to the period or periods of the Roman occupation of Deva.

It is now nearly forty years since I first began to keep records of Roman archæological finds from casual excavations in the City of Chester. Apart from this, one has also laboured with the spade on several small sites, always with most encouraging results. Many of the earlier discoveries have already been published in this *Journal*; others in the *Annals of Archæology and Anthropology* (Liverpool University Press). It was my desire that the main results of these and other earlier discoveries should be gathered together in one comprehensive report. This work, however, is not at the moment possible. But my colleague, Mr. P. H. Lawson, very cordially accepted the task of plotting in all the known architectural remains, and he is solely responsible for the production of the two plans (pls. xxvi, xxvii); one showing the general lines of the fortress and the fragments of buildings, etc., found within it; the other a key-plan, together with the find-spots of the extra-mural antiquities,

burial grounds, roads, etc. These plans illustrate all that we know at present regarding the geographical aspects of Deva. Mr. Lawson's site numbers, in Roman numerals, are given in the headings to these reports; and summaries of the more important finds, here recorded, are also included in his *Schedule*, p. 164.

In dating the pottery from the casual excavations, I have had to rely almost entirely on parallels found elsewhere within the Empire. Where I have ventured to give the approximate dates to certain special finds, more especially those from deliberate excavations, I trust that I have not made things look too definite and certain. One realises that there is a great deal to be learnt about both provenance and dating. Of the coarser kind of wares found at Chester, much of it seems to have come from the Roman kilns at Holt; but some at least appears to have been imported from potteries established elsewhere in Britain.

My indebtedness to those who have helped in any way is recorded here and there throughout the pages of these reports. But I should like here to particularise the assistance I have received at the hands of Mr. Harold Mattingly, of the British Museum, for his determination of several coins, and to Prof R. C. Bosanquet for reference to Cagnets' work, *Les deux Camps*.

I also owe much to the late Mr. A. G. K. Hayter. He was magnanimous to a degree; and his letters were stimulating and informative.



HUNTER STREET.

SITE IX.

(Plates i—vii).

(*Read March 7, 1922*).

THE site on which the Masonic Lodge now stands was excavated by the contractors in the summer of the year 1909. Nearly all the earth was then carted away, leaving the upper stratum of the sandstone rock more or less exposed. At the beginning of the excavations traces of buildings were found towards the frontage line of the street; but unfortunately these were carted away before any definite record could be made of them. This applies more particularly to site A (pl. vii) where many objects of interest were found, including a small hoard of iron work, representing, it may be, the stock-in-trade of a legionary metal worker. It consisted largely of pieces of scrap iron, bolts, bits of chain, and nails. In association with these was a padlock attached to a manacle, a plough-share, a shoemaker's anvil, a knife and a hammer (See pls. v. vi).

Later, instructions were given to leave any trace of buildings that might be found until such time as they could be plotted in on the general plan. For this generous act we are indebted to Alderman David L. Hewitt, and the contractors, Messrs. McLellan. A report on these finds was prepared by myself for the Society's meeting, held 15th March, 1910, but it was not read (*vide Jour. C. A. Soc.*, xvii, p. 146). In February, 1914, a trench, two feet wide and four feet deep, was cut in a continuous line from Upper Northgate Street, along Hunter Street to the new wing of the Chester Royal Infirmary, for the reception of a large water-main. Hopes were entertained that this excavation would reveal some traces of the western wall of the Roman fortress, but unfortunately no such structure was discoverable owing

clearly to the shallowness of the trench. But in the lower or western half of the street the excavations revealed, at slightly varying depths (1ft. 7in. to 2ft.) from the surface an undisturbed stratum containing Roman potsherds and animal remains. As this trench approached the crest of the higher ground the Roman level gradually disappeared beneath the more recent and thicker layer of made earth and road metalling. One almost complete olla (pl. ii, fig. 4) was found, standing in a vertical position, nearly opposite site D (plate vii). It is one of the characteristically early forms, and belongs to the closing years of the first or early years of the second century. In the summer of 1914, permission was granted for deliberate excavations to be made in the garden on the west side of the Masonic Lodge, where it was hoped that we might be able to trace the western portions of the buildings discovered in 1909. One labourer was employed, who together with myself devoted seven weeks to the exploration of this piece of ground. The war broke out before we had quite finished our task, and we worked overtime through sunshine and rain in order to complete the investigations and do the filling in. Though the cost of the labour was defrayed by myself, one feels amply rewarded in being able to place on record a much more coherent plan of the block of buildings than was revealed by the earlier excavations. The occurrence of a stone axe of excellent technique on this site is noteworthy. It is dealt with in the appendix to this report, p. 80.

BUILDINGS.

(Pl. vii).

From the general plan of the buildings, and also their geographical position within the lines of the fortress (pl. xxvii) it seems reasonable to infer that they may represent a section of a group of barrack-blocks, with their longer axis running east and west. Their orientation, moreover, is in alignment with the north wall of the fortress, and they have parallels occupying a similar position at Neuss (*Bonn. Jahrb.*, 1904)

and elsewhere. No trace of either post-stones or post-holes were found on the north side of the block, and there was no definite indication of road metalling beyond the line which the posts for the support of the verandah may have occupied. But if the metalling of the road consisted of broken sandstone and soil, as has recently been found to be the case in the Deanery Field, then it may have escaped detection.

That the main block was divided into a series of double rooms seems evident. Rooms 2 and 8 on the south side each measured 13ft. 9in. by 12ft. Of the smaller rooms on the north side the practically complete plan of No. 1 only was traced; this measured 9ft. by 12ft. Rooms 5 and 7 were separated by a narrow passage (6), 2ft. 6in. wide. In the north-east corner of room 7 was a massive square structure, measuring 5ft. by 4ft., formed of sandstone rubble and faced with carefully dressed stones; this platform may in all probability have supported a tank or some such structure. The floors all rested upon the soft upper stratum of rock; these were of cement in rooms 4 and 4a; the rest were of well beaten sand. There was a tiled hearth in room 2; one of the tiles bore the legionary stamp, pl. iii, fig. 2. All the tiles were discoloured and cracked by the action of fire. In the corner of the room by the hearth was a wine jar (p. 70), which may have been used as a storage vessel, and close by it two flat and two plano-convex discs of lead.

ROCK PITS.

Three shallow pits were found hewn in the sandstone rock, all of them well below the floor line of the rooms. The first was roughly square in outline, with the angles slightly rounded; it measured 3ft. in its longer axis, and had a short, lip-like, channel leading into it on the western side. No datable objects were found in it.

Pit 2, in room 3, was oval in outline, and measured 7ft. 3in. by 3ft. 4in., and 19in. deep. In it were found some early pieces of Samian ware, form 30 (*f.p.* 68) the bronze brooch (pl. iii, 7) and the knife handle of bronze (pl. iii, 10).

Pit 3. Broadly oval in outline, measuring 6ft. 6in. in its longer axis. This was slightly shallower than 2. In it was found a very badly corroded coin of Domitian, etc.

ROOFING TILES.

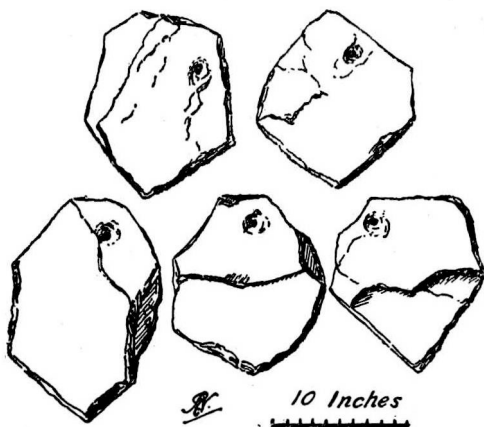


Fig. 1. Roofing slabs of micaceous sandstone.

The ordinary flanged roofers occurred freely over the whole area. One complete example was found near site B; the rest were in fragments only. An unusual number of legionary stamps were found during the earlier excavations (1909). Some of the stamps were purchased by the late Lord Lever-

hulme; and others also passed into private hands and are no longer available for study. The more interesting examples found during the dig in 1914 are figured on pl. iii.

Roofing-flags of thinly bedded, micaceous sandstone (text fig. 1) occurred in enormous quantities, especially so over the area covered by the rooms 3 and 4. They formed so compact a layer that they were removed with difficulty. Very few examples were perfect. Some were found with the nail for attachment to the rafters still more or less intact; the nail-hole in nearly all cases being placed unilaterally. They are exceedingly brittle, and it must have required great skill to trim them into shape and punch out the holes for the nails. Slate was rarely used for roofing purposes; and indeed stone roofing-flags have been very sparingly met with on other sites in Chester.

LEGIONARY STAMPS AND GRAFFITO ON TILES.

(Pl. iii, figs. 1—4).

1. $\frac{VA}{VN}$. Graffito in two lines on the outer surface of a small section of a ridge tile, broken at both ends; written with the finger-tip before baking. Three of the letters seem quite clear, but the second letter in the lower line is mutilated.

2. LEG XX ∇ V. *Leg[io] xx va[leria] v[ictrix]*. On a tile measuring 10in. by 10½in., from the hearth, room 2. This stamp with the inverted A (presumably V A ligatured) is peculiar and of a type apparently unrecorded.

3. $L\widehat{X}$ /. *L(egio) x (x)*. On a fragment of roofing tile. In this stamp, which is clearly incomplete, the initial letter in *Legio* only is given. There is a similar stamp on a tile in the Grosvenor Museum, but the type is rare.

4. ∇ NTO. Part of ANTO on a fragment of roofing tile. Four additional examples of this type of stamp, all incomplete, have been recorded from Chester. The type figured and described by F. H. Williams (*Synopsis*, p. 72, 1886) is clearly an exact parallel to the Hunter Street find; his excellent illustration leaves one in no doubt regarding this, the terminal and somewhat D-shaped O being strikingly characteristic. Simpson (*Walls of Chester*, p. 3, 1910) gives illustrations of the terminal portions of two similar stamps and quotes the readings given by Mr. Reginald Smith (Brit. Museum) and the late Prof. Haverfield, respectively. His example, fig. 3, broken away at the beginning and end, seems to have been made from the same matrix as Williams'; this has been read as ∇ XXANT/. The other stamp (Simpson's, fig. 2) is clearly ∇ ANTO. The last-named is a slight variant of the others, in having the relatively very small terminal o. In its complete form the legend would read LEG XX ANTO. *Anto* is given as an abbreviation of *Antoniniana*, and Reginald Smith (l.c) states that the title

“ was derived from the Emperor *Antoninus Pius* ”; and by Haverfield it is referred to *Severus* or his son *Caracalla*. I know not to which of the three Emperors it belongs; but the approximate dating seems obvious. Miss M. V. Taylor informs me that a stamp of this type was found at Holt, and that it is described, together with some examples from Chester in *Eph. Epigr.*, ix, Nos. 1272, 1273.

POTTERY.

Samian.

There was a remarkable paucity of Samian ware on the western half of the site which was excavated by myself. In all there were but 35 pieces. So far as one can judge, it was equally scarce on the other portion of the dig. But there was undoubtedly a leakage of small finds during the contractors' excavations, and many pieces of pottery may have been carried off at times when I was unavoidably absent from the excavations. Moreover, the few fragments which were handed over to the authorities of the Lodge for future study, got lost, and I have failed to find any trace of them.

To generalise on so small a number of finds is somewhat hazardous. The main point to emphasise is that the first and second century forms were about equally represented, all having come from the South and Mid Gaul potteries.

(Pl. i).

1. **CESORINI** (*Reversed*). Dull orange-red glaze. Height, 3.9in., diameter of rim, 7.8in. Thirteen pieces joined, representing two-thirds of bowl. Site C (= Site viii. of Hayter's *List*). Associated finds: Stamps of Cinnamus and Caratillus, and two coins of Hadrian (A.D. 117-138).

Decoration in metopes or panels divided by rows of beads with small terminal rosettes. Below ovolo border bead and reel. (1). Large medallion enclosing vine leaves on a nearly circular branch (similar to Déch. 1148), space to r. with small fern fronds or leaves; angles of panels, each with a single large ring. (2) Narrow panel enclosing nude figure (Déch. 326), standing on mask (Déch. 656); and to r. incised on a

label reading vertically downwards CESORINI (*reversed*). Double panel :—(3), Above festoon is a dolphin to r. (Déch. 1050); below (4) group as in Knorr (Cannstatt, p. 17, Taf. v, fig. 7), with reel ornament at upper angles. (5) Narrow panel, Apollo (Déch. 54a). (6) As in 1, but leaves and branch reversed. (7)=2 repeated. (8) Dolphin to l. (similar to Déch. 1051). 4, 5, 1 and 2 are repeated.

Déchelette (Vol. i, p. 260, fig. b) figures a precisely similar stamp of this Lezoux potter. Hayter (*List*, p. 10, 2) gives the period as Antonine 140-180 A.D., and quotes Curle's No. 23, this, however, is not retrograde.

(Pl. ii.)

2. /F. RVFIN. Inside on base of form 29. Two pieces which join at the base. Height, 3in., diameter of rim, 7in, approximately. Site a little south of A. (Pl. vii).

Decoration :—Upper frieze (two small pieces only) metopes; bird to l. looking back (Déch. 1036) in festoon, the tassel of which ends in a "sceptre-shaped leaf" (Atkinson, *J. R. S.*, 35 and R on fig. 4). (2) Two rows of very large arrow-heads. Middle wreath of peculiar dentate *motif*. Lower frieze: (1) Conventional plants, some with finely serrated leaves, similar to Walters M.365 (not Déch. 1151) above which are a pair of geese (Déch. 1017) confronted. (2), Lion to r. (Atkinson, *J. R. S.*, vii, 36), with suggestions of plants beneath, and tendril with bud above. (3) Plants and birds as in 1. On the other fragment is part of a lion to l. (Atkinson, l.c.) and plant with birds as in 3. Below the frieze two broad girth grooves. Rufinus was a South Gaulish potter (La Graufesenque).

For dating, etc. see Hayter (*List*, p. 12, No. 16). Bushe-Fox (*Richborough*, p. 77) states that the stamps of this potter "though found in Nero's reign, e.g., at Neuss legionary camp . . . and in the earlier stratum of Wiesbaden, are chiefly to be assigned to the Flavian period." And that "a probable limit to his activities, as in the case of Germanus and Patricius, may be fixed by Knorr's dating, 65-85 A.D. (*Ristissen-Festschrift*, 1912, p. 57)."

The fragments of decorated Samian described below are not figured:—

a. [CINNA]MI ŌF. (*Retro*). On form 37. With the stamp of Censorinus, etc. See No. 1, p. 66. Base with small portions of the decoration only. Panels divided by vertical rows of beads terminating below with annulet. (1) Lower portion of panel on l. with mask (Déch. 650); on r. part of large stamp of Cinnamus, reading vertically downwards as in Déchelette, i, p. 266, and Walters M.1604 and elsewhere. (2) Lion crouching to l. (not in Déch.). (3) Rabbit crouching to l. (Déch. 950a).

Cinnamus was a potter of Lezoux. For dating see Hayter (*List*, p. 10, No. 3). Bushe-Fox (*Wroxeter*, 1912, p. 42), states that "his period of greatest activity appears to have been about the middle of the second century, and he probably worked between about the years 120 or 130 to 160 or 170, A.D."

b. *Fragment of form 37*. Upper portion of figure of Perseus to front, holding head of Medusa in r. hand and short sword in l. (Déch. 146).

c. *Fragment of form 37*. Upper part of figure of Jupiter (Déch. 3).

d. *Fragment of form 37*; from a small, thin walled vessel. Below ovolo border wavy line; bird walking r. (Déch. 1046); and part of large lanceolate leaf with serrated edges (Déch. 1127).

e. *Fragment of form 37*. Panels divided by wavy lines with small rosettes at angles. (1) Large panel with Ithyphallic Satyre to r. blowing double trumpet, figure and drapery as in Déchelette 315. (4) Basal wreath similar to Walters No. 16.

f. *Two fragments of form 30*, joined. Room 3, in rock-pit. Decoration in panels divided by upright straight wreath (Oswald & Pryce ix, 3), and wavy lines. Part of cruciform ornament with central three-leafed *motif* (Atkinson, *J. R. S.*, fig. E), and large radial catkins separated by wavy lines terminating in large rosettes. Orange-red, mat glaze and excellent technique. Probably early Flavian.

g. Large fragments of form 30, joined. Glaze and technique poor. Cable below large ovolo. Large medallions divided by columns, the latter divided into three compartments by double mouldings, the interspaces with a cross-line; terminal, a large maple leaf. Medallions with two concentric rings, the outer one of cable pattern, the inner plain: (1) enclosing nude warrior, like Déch. 136, but with wreath-like object in r. hand instead of short sword; in space below r. arm portion of leaf as those forming terminals to columns. (2) Cupid (Déch. 264).

Lezoux. According to Déchelette's grouping this fits best in his second period.

h. Fragment of rim and side of form 67. Good dark glaze. Conventional plant (Déch. 1151) with hare or rabbit (Déch. 948) crouching l. in attitude of eating one of the lobe-shaped leaves. Probably La Graufesenque. From the rock-pit, room 3, in association with "f" and the bronze knife-handle.

STAMPS ON PLAIN SAMIAN.

3. **CARATILLI.** On form 31, Hayter, *List*, 29, p. 15. Caratillus is given as occurring on 33, May (*Silchester*, p. 210) and by Walters (*Cat. Brit. Mus.*) on M.1611, 1696-7. It occurs at Newstead (Curle, p. 233) A.D. 140-180; and at Pudding Pan Rock, A.D. 150-190.

4. **LITTERAF.** On form 18. Hayter, *List*, 68, p. 19. Room 1. Large, good glaze. Lettering large within a ring of hatched pattern. Last two letters not ligatured. Walters (*Cat. Brit. Mus.*) gives this on form 31: M.1972-3, from London and Ewell, Surrey. This seems to be of doubtful origin, but belongs probably to the first half of the second century.

5. **VICTORI M.** On form 31, small. Hayter, *List*, 130, p. 26. Room 1. Poor glaze, lettering crude, within hatched ring. Has occurred at Wroxeter, 1914 (Hayter l.c.). Walters (M.2343) gives VICTORINV (*Victorinu[s]*), but this may be a different potter.

Recorded only in Britain.

COARSE POTTERY.

This kind of ware was also somewhat scantily represented, and for the most part in a very fragmentary condition. Comparatively few of the pieces were found in clearly defined groups of contemporary objects; but one apparently unmixed series came from site C. Fifty-three types of vessels were represented, which, with the exception of two or three examples, have parallels elsewhere from other Romano-British sites.

Mortaria.

Of those forms described by Bushe-Fox (*Wroxeter*, 1912), the following were noted:—

Form No. 10 (one) and *14* (two). These are attributed to the late first century.

Form No. 74. This is coated with hæmatite, and has all the characteristics of the *Wroxeter* examples. Found in a deposit dated late first or early second century, thus confirming the date, 80-120 A.D., given by Bushe-Fox.

Form No. 198. Two examples in hard white clay. Belong “to about the end of the third or fourth century.”

Cooking Pots or Ollae.

Fragments of these were found all over the site, but none admits of reconstruction. The commonest types belonged to the late first and second centuries. There were very few pieces that could be assigned to the later period of the occupation.

Flagons.

There were five examples with ringed mouthpieces; all belonging to the late first or early second century. These included Bushe-Fox's types (*Wroxeter*, 1912) No. 1 (two) and No. 2 (one), dated 80-110 A.D.

Amphora.

Globular form. Pale grey-buff ware. Upper portion cut away at the shoulder and may have been used as a domestic utensil. All the pieces were found lying together, with the

base embedded in the sand floor of room 2, at the north-west corner, close by the tiled hearth. Height 17.7in.; diameter, 20.8in. Amphorae having the upper portion intentionally cut away were sometimes used as cinerary urns. Three such examples are preserved in the Guildhall Museum (*Catalogue*, p. 106, 14-15, pl. L, figs. 1-3).

Various Forms.

(Pl. ii).

3. Fragment of bowl with a broad band of four, more or less angular beads below the rim. Rim, beading and interior of vessel coated with bright hæmatite wash. Site C; with the stamps of Cinnamus, Caratillus, etc., and may therefore belong to the latter half of the second century. The late Mr. Arthur Acton gave me the rim and side fragments of a precisely similar vessel, obtained by him from the Roman kilns at Holt; it is such an exact parallel to the Chester found fragment, that one may safely infer that the two vessels were made by the same potter.

4. Cooking pot of fumed grey ware, with oblique rim. Lattice pattern at side faintly indicated, the lines are unusually widely separated, the spaces between them giving an average distance of 1.3in. In an undated deposit, but it is clearly an early type and belongs to the closing years of the first or the early years of the second century.

5. Samian cup, form 27 (restored). The stamp is missing.

6. Incense bowl (restored). Brick-red ware coated with very thin cream slip. Smoky patches inside due possibly to action of fire subsequent to baking. Rim angular, the edge frilled by pressing the clay with the finger-tip. Cordon at angle angular and also frilled, but the finger impressions are more widely separated and shallower than those on the rim. Pedestal hollow, the inner contour following that of the outer. Average height, 4.5in., diameter of rim, 7.4in., diameter of foot, 3.4in. May's type 165 (*Silchester*, p. 171, pl. lxxi) is a close parallel, but his example has a rouletted rim and cordon. Site C, with scale armour, bowl by Cinnamus, etc. Period: latter half of second century.

7. Incense bowl (restored). Fine red-buff clay; bottom of cup slightly smoky. Form similar to the preceding bowl; but smaller. The angular edge of the rim and the cordon at the angle deeply notched, producing, on the under-side of the rim, a distinctly frilled or crenulated appearance, not traceable in the photograph. Height, 3.1in., diameter of rim, 5.1in., diameter of foot, 2.3in. Found in association with No. 6.

Fragments representing three additional vessels of this type occurred in the same small deposit, one of which had a relatively large percentage of mica incorporated in the body of the vessel, but very little of this showed through the coating of cream slip. Here then we have representative remains of no less than five of these vessels, types of which seem to be rarely met with on many Romano British sites. Fragments have also been found elsewhere at Chester, notably in the Deanery Field. I have an almost complete example from Eastgate Street, and there is a good example preserved in the Grosvenor Museum.

Small Finds of Bronze, Iron and Stone.

(Pl. iii, figs. 5—12).

5. Penannular fibula of bronze. Cut ends transversely grooved and doubled back over the front. Found at a low level in room 4, and belongs apparently, to the early period of the occupation. Curle (pl. lxxxviii, fig. 1) figures a similar example, but does not give the period.

6. Fibula of bronze with trumpet shaped head, heavy collar moulding on middle of bow, and moulded foot. No loop for attachment of chain. Rock pit 3.

7. Fibula of bronze. La Tène, type iii. Bow flattened and in one piece with the pin; catch-plate solid; spring of two coils on each side, cord passing under the bow. There is no knob or other form of decoration at the end of the plate. Curle (p. 318) records an example from the lowest level of the Principia at Newstead, and states that "such fibulæ were common at Hofheim, abandoned about A.D. 60."

Atkinson (*Lowbury Hill*, 1916) figures and describes a series of fourteen examples of this type of brooch ("Class iii") of which his form No. 4 may be taken as a parallel to ours. He gives an interesting account of these brooches, and states (p. 32, l.c.) "It seems probable that if these brooches lasted on during the Roman period in Britain, that they were almost entirely confined to the less Romanised parts of the south of England, and never spread at all into the north, but I am inclined to think that most of them were already in use before 43 in view of the very small number which can be definitely assigned to the succeeding period, within which fall only the examples from Wroxeter, Newstead, Cirencester, Colchester and perhaps London, among those cited in the lists given or referred to above."

Find spot: Rock pit 2, in room 3.

8. Scale armour of iron (*Lorica squamata*). Two large pieces of this were found, viz:—

(a) This came from Site C. It was found in association with the potters' stamps Cinnamus, Caratillus, and Censorinus, together with two coins of Hadrian. It may, therefore, be dated as belonging to the latter half of the second century. This piece consists of three layers folded one over the other. The individual scales of which this piece is composed are roughly rectangular in outline, but square proximally and slightly rounded distally. Length 4.2—4.5 cm.; width of proximal end 2.5—2.9 cm., distal end 3.2 cm., thickness, 1—2 mm. Each scale has eight small holes, arranged in four pairs, through which pass the rings of iron wire, by means of which the scales were fastened together. Some of the wire rings are intact, though badly corroded. A photographic illustration of this is also given on pl. iv.

(b) The second example came from site B, and with it were found portions of the shallow dish, Drag. 18, and fragments of an early bowl, Drag. 30; it may therefore belong to the closing years of the first or the early years of the second century. The individual scales in this piece are slightly smaller than those in the example from the other

site, otherwise they are precisely similar. The measurements are : Length, 3.5—5 cm. ; width of proximal edge, 2 cm. ; of the distal edge 2—2.1 cm. ; thickness, 1—1.5mm.

The occurrence of scale armour of bronze or brass, has been recorded from several Roman sites in Britain and also on the continent of Europe. So far as one can discover, however, there are no published records of specimens of iron found elsewhere in Great Britain¹; and there seem to be no records of its occurrence either in Germany, France, or Italy. Extant specimens have turned up chiefly on Scythian territory, in which region scale armour of various kinds seems to have originated. Minns (*Scythians and Greeks*) mentions it again and again in the Roumanian finds. Haverfield (*Archæologia*, lv., p. 178) in discussing the armour found at Æsica, gives parallels found elsewhere, and adds : " The sepulchral reliefs of two Sertorii found at Verona, and probably dating from A.D. 69, show that such scale-armour was worn by the legionaries, and Dio (lxxviii, 37) tells us that the Emperor Macrinus abolished its use by the pretorians in A.D. 217. The scales appear to have been attached by wire, and fastened to a leather cuirass; there is some slight reason to think that the result was something more in the nature of a show-armour than the ordinary form of breast-plate."

9. Socketed spearhead. A short and somewhat stumpy form, with no trace of a mid rib. The socket is thick-walled, solid, and shows no trace of welding. Length 5-8in.; weight, 5¼oz.

Room No. 1, with padlock (pl. v, 14).

10. Knife handle of bronze. Length 3in. Corresponding in form to the example found at Vindonissa, and figured by Curle (p.280, fig. 40), but with two rectangular piercings instead of one. Found in the rock-pit, room 3, together with pieces of early Samian ware, both decorated and plain, including Déch. figs. 948, and 1151. It may therefore belong to the last quarter of the first century.

¹ Newstead also records examples from the Deanery Field (*Ann. Arch. Anthr.* XI.).

11. Knife with socketed handle of bone. The but end of the handle had originally been protected with bronze, though little of this was left but the green stain. Length 8.2in.

12. Knife of iron. Blade and handle in one piece, the latter flattened at the end and pierced for suspension. Length, 6.5in.

(Pl. v, figs. 1, 2).

1. Padlock and Manacles. *These were found attached together.* The lock consists of a rectangular box, inside which is a strong double barbed bolt, externally the latter is bent upwards at right angles, 1.4in. from the free ends of the barbs, and is then continued upwards for a distance of 2.7in., where it originally passed over the upper fixed bar. The key-hole at the opposite end of the lock is closed with a large hemispherical stud. The angles of the box, inside, are supported by slender angular rods, and there is also a similar support at the sides of the longer axis, midway between the angles.

Dimensions: Box, length, 3.1in; greatest width, 1.8in.; depth, 1.6in.; width of manacle from tip to tip, 4in.; height, 3.7in.; length of barbed bolt from outside angle, 3.7in.; diameter of coupling ring, 2.7in.; length of figure-of-8 links, 1.7in.

Hoard site A.

2. Padlock of iron. This consists of a long, narrow box, convex above and flat beneath, with a thick rod welded to it at the heel on the upper surface, and suddenly bent so that it passes over the box, projecting beyond the latter to a distance of three inches. The bolt is provided with two barbs, is bent upwards almost at right angles, and is pierced at the end so that it may slide along the upper fixed bar. The key hole, which seems of an unusual type, consists of two openings, placed transversely, immediately below the upper fixed bar, these holes are 0.6in. apart, the larger of the two being 4 mm. in diameter. A padlock of similar form and dimensions is preserved in the Museum at Cirencester.

Dimensions : Length of box, 4.5in. ; depth, 1.3in.

Site, close up to the outer face of the western wall of room 1.

(Pl. vi., 1, 2).

1. Ploughshare of iron. This implement has an open socket, proximally, for attachment to the woodwork. It is not unlike the modern share; but differs considerably in form from the example found at Silchester and now preserved in the Museum at Reading.

Length, 12.2in. ; width of proximal end of blade, 3.8in. ; length of socket, 3.7in., greatest width proximally, 2.2in. ; maximum thickness of blade, dorsally, 0.4in.

Hoard, site A.

2. Shoemaker's anvil or last. The bed of the anvil is somewhat broadly lanceolate in outline, with the heel widely rounded. Beneath the bed is a strong keel or ridge which merges into the long pointed shaft below. Length of bed, 5.6in., width at heel, 1.8in., width at toe, 0.7in. ; length of shaft, 10.2in. ; dimensions of shaft at the middle distance, 0.7 x 0.7in.

Hoard, site A.

Other small finds which may be grouped under this heading, are described below, but are not illustrated :—

Bell of bronze. This has two perforations for suspension. Surface polished and tooled in zones as if turned on a lathe. Height, 1.2in. ; diameter of lip, 1.2in. Very like Bushe-Fox's No. 13 (*Wroxeter*, 1912) but without the extension for attachment.

Hammer of iron. Form similar to that shown by Curle (pl. lxiii,1), but much smaller. This example was lost during its temporary storage with the authorities of the Lodge. Other pieces of iron work from the same hoard also disappeared at the same time.

Hoard, site A.

Nails of iron. A large number of these were found with the hoard, site A. These vary in length from 5.5—2.5ins.

Ingot of lead. Roughly cast, apparently in an earthen mould. Weight, 6lbs. 12ozs. Length, 5.7in.; greatest width, 3.5in. Site B.

Lamp of lead. No handle. Body in form of a small, shallow cup, with a pinched-in nozzle. Made of two separate pieces of sheet lead; the union of the side with the bottom of the vessel formed by folding the edges of the two parts together, one over the other. The rim is also formed by folding the edge over to the outside. Length, 3.1in.; height, 0.8in.

Saucer shaped object of lead. Intended it may be for use as the bottom of a vessel similar to that described above. Diameter, 2.4in.

Ballista balls. Three of these missiles were found on the site in 1909. They had all been made from the local sandstone; and weighed from 2—3lbs apiece. These are all lost. None was found on the extended dig in 1914.

Glass.

One or two pieces of window glass and many fragments of square-sided bottles were found. The only find, however, of exceptional interest was a fragment of a large flask of rich, dark, amber-coloured glass, having widely separated flutings.

Beads. A few examples all of the common melon-shaped type, and varying in size.

Games.

Counters. Twenty examples were found on the site in 1914. These for the most part had been chipped into shape, very few had been subsequently rubbed down at the edges. They varied in diameter from 8.5 —2.3 cm., and consisted of the following materials: Micaceous sandstone (4); slate (2); mudstones (2); roofing tiles (2); amphoræ (2); Mortarium (1); bottom of large samian bowl (1); bottom of small olla (1); rim of flagon (1); side of olla (1); and two of clay baked at a low temperature. The last named had their

edges and one flat surface coated with very fine glistening quartzite grit.

It seems generally accepted that these objects, so frequently found at Chester, were used in a game of skill or chance. Curle (*Newstead*, p. 338) referring to the smaller discs, says that "probably the game resembled draughts, and was played on a board divided into squares drawn at right angles." He also gives a figure of such a board found at Corbridge. In regard to the larger examples he adds "perhaps it is also a game that we should refer the circular pieces formed from the bottoms of vessels, from which the sides have been carefully chipped," and that these also were probably used to beguile the tedium of garrison life.

COINS.

Eight coins were found during the excavations in 1909, and six in 1914. These are divided as follows: Vespasian, 1; Domitian, 2; Nerva, 1; Trajan, 1; Hadrian, 3; Faustina Junior, 1; Commodus, 1; Victorinus, 1; Claudius II, 1; Constantine I, 1; and Constantius II, 1. The date of the last named piece was fixed by Mr. G. F. Hill, as between the years 345 and 350 A.D.

The eight pieces found in 1909 were purchased by the late Lord Leverhulme, and presented by him to the Grosvenor Museum. Of the later finds, one piece was given to the British Museum; the rest are in the local collections.

Davies and Longbottom (*Journal*, C.A. Soc., Vol. xxiv, p. 148), have given details of the earlier found series; their No. 8, however, must have got mixed with the others, as no pieces of Constantinopolis were in the collection when handed over to the Museum authorities.

The coin of Faustina Junior (141-75 A.D.), calls for special mention in this report, as Mr. G. F. Hill, who kindly determined it, informs me that it is a new piece:—

Obv. FAVSTINA AVG II AVG FIL. Bust to r.

Rev. HILARITAS. Faustina standing l. with child on either side. In field, s c.

ANIMAL REMAINS.**Mammals.**

Horse. Two molars and one incisor.

Ox. Plentiful on all parts of the site. The species represented seems to have been the common domestic ox, *Bos taurus var longifrons*.

Sheep or Goat. Lower jaws, horn-cores, etc.

Red Deer (*Cervus elephus*). Portions of three antlers, two of which exhibit saw-cuts and may represent the waste pieces from a workshop. Associated with these were portions of the scapula of the ox or horse, also showing clean saw-cuts, and one unfinished bone pin. Find spot: just outside room 2.

Pig or Wild Boar. The remains of this animal were almost as abundant as those of the domestic ox. Five lower jaws had been deliberately cut through with a chopper, roughly in a line with the distal molar. It may be interesting to note that pigs' jaws found elsewhere in Chester had been roughly trimmed in the same way. Perhaps it was customary to chop off the snout as a preliminary "dressing" for the table!

Birds.

I have to thank Professor E. J. Newton, F.R.S., for his kind assistance in determining the remains. The species represented are:—Domestic fowl; ? Pheasant; and Duck (*Anas boscas*).



APPENDIX 1. PREHISTORIC.

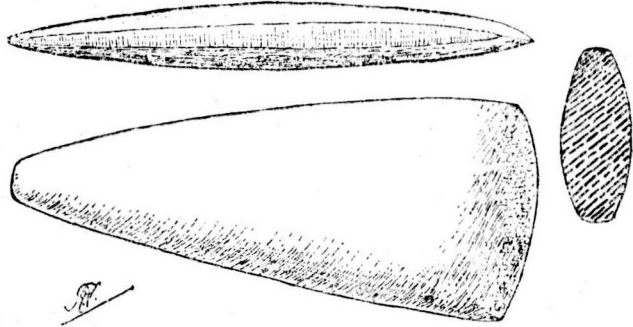


Fig. 2. Stone axe. Length, 13.3 cm.

A stone axe (fig. 2) was found a few feet south of room 4, at a low level, just above the rock. It is beautifully polished, and a very good example of the thin-butted type belonging to the New Stone Age. Its discovery, hereabouts, is particularly noteworthy, as it is the first of its kind found at Chester. In colour it is greyish to greyish buff, with slaty blue shadings and markings. The material, which is very hard, resembles felsite, and is suggestive of North Welsh ash. Unfortunately one side of the axe now bears a large iron-like stain but this was due to the action of some clove oil which had accidentally fallen on the wool in which it was wrapped, and was not detected until the damage was done.

“Anvil-stone.” One was found in the Roman occupation level, in 1914. It is evidently a boulder selected from the local drift; but one face has been so much hammered out as to leave a concave depression, 8 mm. deep, bearing a few large pits in the centre, and some quite definite cuts in many places. It weighs 11lbs. 2ozs., and in its composition it resembles the hard, grey mudstones so frequently met with in the glacial deposits of this district. I have placed it here, but it may belong to a much later period.

KING'S BUILDINGS.

SITE LXXXVI.

(Pls. viii, ix).

(*Read March 7, 1922*).

WE have to thank Colonel F. J. Bonnalie for his kindness in giving permission to carry out the excavations, in the garden at his residence, 6, King's Buildings; for defraying the cost of the labour, and also for presenting the relics which were found to the Grosvenor Museum.

The site lies just within the north west angle formed by the union of King's Street and St. Martin's Fields. The Roman burial ground, in the Infirmary Field (Site li, Key plan pl. xxvi), lies about three hundred feet away in a westerly direction, and the line of the west wall of the fortress passes, presumably within a few feet of the spot.

The excavations, which began on August 31st, 1921, were closed down ten days later. Two trenches, running north and south, were cut side by side, each at an average width of four feet, the total length combined being forty-six feet. The virgin soil was reached at a depth of six feet; it consisted largely of stiff loam with a free admixture of sand. Typical boulder clay was not reached.

The well defined and apparently undisturbed Roman stratum was reached at an average depth of nearly four feet and was found to be more or less continuous down to the six foot level. Two thin seams of burnt material passed through a portion of the deposit, containing much charcoal (chiefly oak) and many small bits of square sided glass bottles, distorted or cracked by heat. Southwards the layer thinned out and disappeared altogether; but seemed to continue northwards and eastwards under the footpaths towards the adjoining property.

The evidence of the decorated Samian points to the deposit having been formed during the last quarter of the first century. The decoration of all the fragments being distinctly transitional and Flavian in design.

The deposit was exceedingly rich in shards of coarse pottery, of which there were nearly five hundred pieces. They included a number of different types of vessels; but one only was sufficiently well represented to admit of complete reconstruction. A few present late Celtic features (Nos. 11, 29) and there are certainly a number of shapes of which I know no exact parallels. The occurrence of fragments of lead glazed ware (Nos. 1, 2) is noteworthy, and so also are the small bits of black polished ware decorated *en barbotine*. The late Mr. Arthur T. Acton, who made a critical examination of the pottery, declared, most emphatically, that, with the possible exception of the black glazed bits, he considered that the whole series was of Holt manufacture. As to the green or lead-glazed ware, he gave me to understand that he had found examples of this in all stages of manufacture. Since this report was read, I have had an opportunity of examining fragments of two of the green glazed vessels found by Acton at the Holt Kilns; although they were imperfect they seemed to differ, both in form and technique, from the fabric of either St. Rémy-en-Rollat or the malachite-green glazed vessels of Lezoux.

Portions of three additional vessels, coated with green or greenish-brown glaze have been found at Chester during recent years, including a wonderful bowl from the Deanery Field, belonging, apparently to the Domitian—Trajanic period. In the light of Acton's statement, one may regard all of these finds as of local origin and in some measure, at least, imitative of the fabric of the Allier district.

POTTERY.

Decorated Samian.

The four fragments of Dragendorff form 29 described below are not illustrated on the plates accompanying this

report :—

a. Above the lower frieze a row of beads. Below, part of winding scroll with heart-shaped leaf similar to Walters type 13, Rutenian.

b. Upper frieze with portion of winding scroll, space below filled with arrow-heads. Frieze at angle with moulding and bead-row above and below.

c. Angle with large chevron wreath, 10 mm. wide, with bead-row above and below, May (*Silchester* xiii, 54), dated about 80 A.D., or a little later. Lower wreath a pair of bifurcated stalks, evidently part of scroll.

d. Very small fragment of upper portion of frieze showing stalked scroll.

(Plate viii).

1. Shape 37. Two friezes divided by wavy line. Cuneiform leaf and stipule. Below roebuck running right with head turned back (*Déch.* 859).

2. Shape 37. Wavy line below *ovolo*. Upper portion of cruciform ornament, the central terminal *motif* near Atkinson, *J. R. S.*, type E.

3. On 37. Friezes divided by wavy lines. Wreath below *ovolo* similar to Walters type 3. Upper frieze with parts of two bunches of leaves, tied in the middle; near Curle's 2, p. 215; and Bushe-Fox (*Wroxeter*, 1912, xiii, 1), by the potter Cotous, and there dated between 75 and 85 A.D. Between the plants two animals facing each other: on the right a small bear, May (*Silchester*, xxv, 22); and Knorr, (*Rottenburg*, iii, 1-6). Lower frieze of festoons divided by cable-like *motif* terminating in rosette. In festoons pairs of birds facing each other and looking back to r. and l. (*Déch.* 1009) and plant ornament alternating. Below the frieze a narrow wreath, Walters, type 21.

The birds in the lower frieze were used by the La Graufesenque potters Medillus, Masclus, COSIRV (at Carlisle) and OF CRESTI. Dated 80-110 A.D. at Wroxeter; and 75-85 A.D. at Carlisle.

4. Shape 37. Style as in Atkinson (*J.R.S.*, xii, 60) by the potter Mommo. Panels divided by wavy lines: (1) part of medallion enclosing portion of Cupid (*Déch.* 268); dart shaped leaves attached to looped tendrils in spandrels hanging from rosette. (2) Panels with arrowheads arranged in pyramid form and wavy lines filling both upper angles. (3) Lower panels with dog to r. (Atkinson, *J.R.S.*, xii, 60).

5. Shape 37. *Ovolo* terminating with a large rosette. Wavy line below and the panels are divided by the same *motif* with rosettes at the angles. (1) Corner tendril; (2) part of dog to r.; (3) two horizontal rows of arrow heads.

6. Shape 37. Part of lower frieze with festoons; below a straight wreath as in Curle, p. 209, 6. Dated 80-110 A.D.

7. Shape 37. Decoration in metopes divided by wavy lines. Upper panel with dog to r.; lower with large arrow heads.

8. Shape 37. *Ovolo* border with tongue ending in rosette. Two friezes divided by wavy lines. Upper frieze: (1) *Bestiarius (bis)* (*Déch.* 630) but with spear point wanting; (2) wild boar charging l. as on a vase in applied relief (*Déch.* ii, p. 231, 140), not as in Curle xlili; beneath indications of grass plants. (3) Three "decorative uprights" Bushe-Fox (*Wroxeter*, xiii, 7) dated 80-110 A.D. Lower frieze large S-shaped ornament.

9. Shape 67. Five vertical rows of wavy lines, the first with a terminal rosette. To l. part of figure of Cupid (*Déch.* 280), cf. Atkinson, *J.R.S.*, xii, 60, dated 77-79 A.D. Curle (p. 205, 8), 80-110 A.D., May (*Silchester*, xii, 37).

10. Shape 78. Below *ovolo* border vertical and oblique wavy lines enclosing arrow heads. Oswald and Pryce (p. 126) states that "this small bowl had a short life and was especially characteristic of the Flavian period."

Plain Samian.

a. Shape 15. There were five pieces of this shallow dish with a quarter-round fillet and well-marked step inside, all

belonging to different vessels. They are precisely similar to Curles' type 2 (*Newstead*, first period), 80-110 A.D.

b. Shape 18. Pieces representing twenty-eight different vessels were found. Three side fragments exhibit a slight step at the base on the outside, and one bears part of the potter's stamp, OF . SA/ *O[fficina] Sa[bini]*. Probably the stamp of the La Graufesenque potter, who is chiefly Flavian. For site dating see Bushe-Fox, *Richborough*, p. 77.

c. Shape 27. Nineteen vessels were represented, all in small fragments; but no stamps occurred on any of the pieces.

Coarse Pottery.

(Pl. viii).

11. Small beaker with a deep sharp groove below the angular rim. Pale red, and rather hard, gritty clay. Possibly a variant of the Silchester beaker; cf. May, *Silchester*, lxiv, 121; but ours seems to be of late Celtic origin.

12. Beaker or small thin walled olla. Rim rounded and slightly oblique; two deep grooves immediately below it. Red gritty ware. Near May and Hope's type 169 (*Carlisle*, p. 55), but undated.

13. Small olla. Rim oblique and somewhat angular; two shallow grooves, one just below the rim, the other at the bulge. Fine, hard, greyish red ware, thinly coated externally with mica.

Cf. Curle (*Newstead*, p. 246, No. 1), which is similar, but has the outer surface strongly rugose.

14. Olla. Diameter of rim *c.* 5ins. Rim oblique and rather strongly undercut. Hard fumed grey, gritty ware.

15. Olla. Diameter of rim, *c.* 3.7ins. Rim suddenly truncate; girth groove at shoulder. Hard, fumed grey ware.

16. Beaker or small olla. Rim obliquely truncate; deep girth groove at shoulder. Hard fumed grey ware. This vessel possesses late Celtic features.

17. Large olla, Diameter of rim, 6ins. Hard fumed grey ware, groove at shoulder. This is a close variant of

the Corbridge types (*Report*, 1911) fig. 5, 14-6, not later than 100 A.D.

18. Olla. Diameter of rim, *c.* 4.1in. Rim oblique with a slight ridge at top, strongly defined step or ridge at collar, and girth groove at shoulder. Fine hard, buff-red ware; coated with pinkish-red (? hæmatite) inside and bearing traces of a slight varnish-like coating outside.

19. Olla. Diameter of rim *c.* 1.5in. Upper surface of rim with shallow groove or rabbet for reception of lid; girth groove just above bulge. Fumed grey ware.

20. Olla. Fragment only, this has a squat and deeply grooved rim. Hard gritty pale red clay, coated with cream-buff slip.

21. Similar to 20, but without the groove on the rim. Brick red clay, coated with dull red slip.

22. Olla. Diameter of rim, *c.* 5in. Rim oblique. Hard red gritty ware. Also two similar examples with broad groove just below rims.

23. Olla. Rim slightly oblique with two steps beneath. Fine, gritty, hard, orange-red ware, core paler.

24. Olla. Similar to 23, but the rim is stouter. Hard, fumed grey ware.

25. Olla with outcurved rim. Hard orange-red ware.

26. Olla. Diameter of rim, 4.8in. Girth line just below neck. Fumed grey ware.

27. Olla. Diameter of rim, *c.* 5.6 in. Rim grooved; and a well marked step just below it. Rather coarse, but hard, red ware. Coated with dull red slip (? hæmatite), which is brighter inside than out.

28. Small beaker or olla. Rim oblique; shoulder strongly constricted. Hard, light coloured, fumed grey ware. Exterior tooled to a point just below the constriction. Late Celtic.

29. Similar to 28, but with a groove at the much deeper constriction.

Cf. Bushe-Fox, *Wroxeter, Rep.* 1912, 28-30, p. 74. Dated 80—130 A.D. *Gellygaer*, xi, 8, evacuated under Hadrian, last coin dated 122 A.D.

30. Olla. Diameter of rim, *c.* 4.5in. Two fine grooves just above shoulder, and a single broad one at the shoulder. Sides with vertical rows of more or less confluent and narrowly ovoid ribs, *en barbotine*, applied apparently with the finger-tip. Hard fumed grey ware.

31a. Fragment of small bell-mouthed cup; strongly keeled at junction of base and side. Foot missing. Fine, hard, bright buff ware.

31b. Fragment of similar but smaller cup, and decorated with fine grooves at the side.

31c. Cup similar to the preceding, but almost complete. Bead rim small; body with three bands of fine grooves; strongly keeled at junction of foot with base. Foot-ring tall, hollow, decorated with fine raised lines, and with the lip finely moulded. Fine, hard, and very smooth buff ware. Height, 3.4in; diameter of rim 2.9in.; diameter of base, 3.1in.; diameter of foot-ring, 1.7in.

These three vessels are apparently all of one type of which 31a only came from the excavation at King's Buildings, and may be taken as contemporary with the other finds from this site, *i.e.*, last quarter of first century. 31b was found in an undated deposit, in Hunter Street. The example 31c came from the Co-operative Stores, Foregate Street (site lxix, key plan, pl. xxvi) where it was found with a mass of mixed material and could not be dated without parallels.

The two small cups found in the early cremation burials at Remagen (*Bonn. Jahr.*, 116; Gr. 66, 70, Taf. ii, 5; iii, 2) are very close parallels, especially the one belonging to the group from grave No. 70, which has almost exactly similar proportions, though the pedestal foot-ring seems to be less developed.

The beakers appear to be of Late Celtic design and recall the type described by May (*Silchester* lxxiii, 179, p. 175). They seem also to be reminiscent of the much earlier vessels found at Hengistbury Head, Bushe-Fox, *Report*, 1911-12, pl. xvi, 4, 6, 7; and at Casterley Camp (*Jour. Wilt. Arch.* xxxviii, pl. vii, 1, 2).

That the form persisted into the third century is well exemplified in the two silver cups (Coll. British Museum) forming part of the hoard found near Montcornet (Aisne), France, in 1883.

32. Upper portion of two-handled pot with the body strongly inbent immediately below the lower portion of the handle. Bright red ware. May (*Pottery, York Museum*, xix, fig. 12 p. 25) describes an apparently similar vessel, for which he says "no parallel has been traced."

Five side fragments of similar pots or slight variants of the form came from the same site.

33. Dish with curved side; offset or step inside at junction of base with side. Base beneath with two concentric grooves. Hard, light red ware. Diameter, 7.5in.; height, 1.6in. Similar to Bushe-Fox's type 23 (*Wroxeter*, 1912, p. 73) "not uncommon in the early periods, but does not appear to last far into the second century."

34. Side fragment of dish similar to 33, but without the offset inside. Fine, red ware.

35. Side fragment of dish with quarter round fillet, suggesting Samian form 15/17. Hard brick red ware.

36. Neck of storage jar or vase, with two deep grooves at commencement of shoulder. Hard fumed grey ware, core with particles of lime [?] incorporated. This piece seems to possess late Celtic features.

Glazed Ware.

1. Fragment of foot and side of jug or bowl, with a well marked foot-ring, similar in section to that of the jug found in the ditch of the early fort at Newstead (Curle, pl. xlvii, 33) dated 80-100 A.D. Very hard dark grey clay, glaze olivaceous brown to brown, with somewhat faint, greyish, vertical streaks.

2. Small fragment of rim of vessel, form undeterminable. Hard, buff-white clay; glaze pale greenish-yellow and strongly pitted.

Black Polished Ware.

(Belgic).

Two fragments from a bulbous beaker. Thin, hard, brownish-grey clay, with black and rather highly polished surface. Decorated *en barbotine*, with scroll and studs in self-coloured slip applied before glazing.

Vessels Decorated with Slip or Applied Relief.

Many fragments of ollæ with their sides covered with applied clay forming rugosities in high or low relief occurred in this deposit; such ware has also been found on other sites in Chester. Fragments with rows or squares of rough or circular studs also occurred, and there was one fragment of a hemispherical bowl, with two deep grooves below the rim, decorated with vertical stripes of white slip.

Mortaria.

The rims of two early forms were found. These are very similar in form and both belong to Bushe-Foxe's types, 22-26 (*Wroxeter*, 1912) there dated 80—120 A.D.

Carinated Bowls.

Fragments of these were common, but none admits of reconstruction. The rims of these vessels are as a rule well made and carefully finished. In several examples there is a well-defined groove just below the rim, and another at the side just above the angle. Those in hard, fumed, grey clay preponderated, the rest in plain red. Such vessels were common at the Fort of Newstead (Curle, p. 250, Nos. 1-13) and are there dated 80—100 A.D. Bushe-Fox (*Wroxeter*, 1, p. 70) describes a number of carinated bowls, but these are clearly of a much more ornate character than those found either at Newstead or Chester.

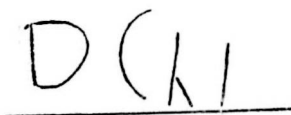
STAMPS AND GRAFFITO ON AMPHORÆ.

Fig. 3.

Graffito on outer surface of rim of amphora. Apparently the numerals DCLI (=651). Mr. A. G. K. Hayter, to whom I sent a rubbing of this graffito, informs me that the numerals on amphoræ are mostly far lower in amount, such as LXX and up to CC but adds "there is, however, one which I noted as being near yours: DC (reversed) in C.I.L. 10003, 142, Saalburg (now in Hamburg Museum). Capacity of this amphora, c. 79 litres."



Fig. 3a.

Stamped downwards on handle of large globular bodied amphora. (Letter A=1.35 cm. high). Hayter's *List*, 12, p. 39. Not apparently recorded from elsewhere in Britain; but has occurred at seven sites in Gaul.

GLASS.

There was a number of fragments of glass vessels, some of which were "crackled" or otherwise distorted by fire. There were also portions of the bases of three large examples decorated with concentric rings; bits of reeded handles; two pieces of window glass, and one piece of a pillar moulded bowl (blue). One of the most interesting finds was the rim and side fragment of a clear glass beaker, ornamented with oval facets, cut on a wheel.

Of beads there were three, all melon-shaped; one in dark blue glass, the others in blue frit.

SMALL OBJECTS IN METAL, ETC.

(Plate ix).

1. Cylinder of bone decorated with grooves and with dot and ring. Probably part of a dice box. The technique of this little relic is excellent.

2. Part of drop-handle of bronze, decorated on one side with deep flutings and transverse grooves.

3-8. Bronze fittings to a casket or box. So far as one could judge the framework of the box consisted of a thin wall of wood lined on the inside with a very thin sheet of iron, but it was so badly crushed by earth pressure and the iron and wood had almost completely decayed that it was impossible to ascertain either its dimensions or form. It seems, however, to have been fitted with two pairs of hinges: two of them with plain strap-shaped tangs (figs. 4, 4a), which were fastened together with small bronze rivets; the others (fig. 3) were of a much more substantial nature, of pleasing design, and excellent workmanship. Near one of the plain hinges is a large circular boss, with a deep concentric depression, and the margin broadly convex and transversely fluted. There is also a portion of another stud of similar design. These studs are made of very thin sheet bronze with a backing resembling gypsum. Seven double-headed studs (fig. 7) all similar in form were found attached to the framework, these have a flat head at one end and a rounded one at the other. Fig. 8 shows one of the larger studs detached from the iron and wood.

For hinges of the type shown at fig. 3, see *Bonn. Jahr.*, 112/113, xxx, 81, 82.

9-10. Bronze nails of two types.

11. Bronze stud with two links attached.

12. Stylus or writing instrument of bronze. In this example the eraser end is exceptionally narrow and unusual.

In addition to the foregoing there was a plain bronze ring; a bronze key; a fragment of a polished metal mirror; some bits of waste bronze; and a large quantity of vesicular iron, chiefly in the form of nodules.

COINS.

TITUS. 79—81 A.D.

1. *Obv.* T[C]AES IMP AVG F TR P COS VI [CEN]SOR.

Head laureate r.

Rev. VICTOR[IA] NAVALIS. S.C.

Victory holding wreath and palm, standing to r. on prow.

2 Æ. 77—78 A.D. (in Vespasian's lifetime).

DOMITIAN. 81—96 A.D.

2. *Obv.* IMP CAES DOMIT AVG GERM COS XII or XIII [CENS
PER] P P.

Bust laureate r.

Rev. VIRTVTI AVGVSTI.

Valour standing r. holding spear and parazonium. In
field s.c.

2Æ. 86 or 87 A.D.

Cohen 647 or 651.

Both pieces appear to have been in good condition when
lost.



**CO-OPERATIVE STORES,
FOREGATE STREET.
SITE LXIX.**

(Key plan, Plate xxvi).

THE plot of ground occupied by this block of buildings measures 130ft. by 60ft. approximately. Its longer axis is parallel to Foregate Street, and Love Street passes its western facade. The ground was excavated for the erection of the building, first in 1903, and again for the new extension in 1914. I had excellent opportunities afforded me in the first instance by the contractor, Alderman W. Vernon; but in those days one did not realise the importance of recording the essential details regarding the stratification of the finds, nor did one note the limits of the various deposits, and so missed more than half the story which the excavations might have revealed. However, one collected keenly enough, preserved as much as possible, kept a few notes, and fortunately a plan and section of the Roman ditch which was discovered there. When the excavations were carried out for the new extension in 1914, I had but few opportunities of examining the site but was able to make some observations regarding the nature of the deposit, and secured a great deal of material from the dumping ground. I have to thank Mr. T. A. Williams for having given me the opportunity of examining a mass of coarse pottery which passed into his hands.

The Roman level was reached on the eastern portion at a depth of from 5ft. to 6ft. below the level of the kerb in Foregate Street. It averaged about 2ft. 6in. thick. The sections which I saw contained much burnt wood and fine charcoal. At the lowest level there were large patches of comminuted mussel shells, and the boulder clay was reached at a depth of 8ft., approximately. As the excavations progressed, the remains of several oak stakes were found driven into

the solid clay, to a depth of several inches. These stakes had been roughly trimmed to a point, and all had been burnt level with the sub-soil; one of the examples measured 22in. long, was roughly rectangular in section, the cut faces at the burnt end measured 3in. by 3in. by $2\frac{1}{2}$ in. The timber was in excellent preservation, having been converted into typical bog-oak. One series of five was arranged in line running northwards and southwards. Unfortunately, I was not permitted to plot these in accurately, and their position on the plan is approximate only; but they were about 80ft. east beyond the ditch found in 1903. One naturally attaches great importance to the presence, hereabouts, of these stakes, more especially so in their relation to the wealth of Roman material found in association with them. Their presence suggests that an annex of wattle and daub huts existed here, from the beginning of the occupation, though its distance from the fortress seems to be rather unusual.

THE DITCH.

Another important discovery here was the presence of a large ditch or fosse, running northwards and southwards. A short section of this was excavated, but the bottom, unfortunately, was not reached. Traces of its western lip commenced at a point 32ft. from the Love Street frontage. Its width at the top was 17ft., the sides tapered inwards and were traced to a depth of 6ft., when the excavations were stopped. The distance from the centre of the section to Foregate Street frontage was 60ft. Some bits of Samian and coarse ware vessels came from it; but the most interesting finds were a series of six large netting needles, all found together, which Shone (*Prehistoric Man in Cheshire*, p. 53, fig. 19) says "are probably Prehistoric." That they are of Romano-British origin, however, seems quite clear, and having lifted some of the specimens with my own hands I can vouch for their association with other finds of undoubted Roman origin. The presence of a ditch hereabouts is somewhat remarkable, as it is distant from the East Gate

nearly a thousand feet. Another ditch, 185ft. long (Site LXX, Key plan pl. xxvi.) was found in this neighbourhood in 1899 on the site of the City Baths (Cf. R. Newstead, *Journal, C.A. Soc.*, N.S. viii, p. 93). It is just possible that these two ditches belong to the same system of defence. They seem to be separable by about 350ft., but whether they ran parallel to each other it is impossible to say, as the long line of trench on the site of the New Baths was not plotted in, and the section found here was much too short to determine its exact course in either directions.

POTTERY.

That there must have been an intensive occupation hereabouts was evidenced by the wealth of pottery of all kinds, which was found on this comparatively small patch of ground. It was richer in sherds of all kinds than any other site which I have seen explored at Chester within the last forty odd years. The preponderance of early forms in the Samian as well as the coarse wares should be noted, though one finds this to be generally the case elsewhere within the lines of the fortress.

Samian.

Nearly eight hundred fragments of Samian were found. It is not within practical politics, however, to give more than a summary of these finds. It would need a greater wealth of funds than is at the disposal of the Society to provide illustrations of all the decorative forms that were found here, and so I have limited myself to one or two text figures illustrative of the rarer pieces. The decorative types included fragments of twenty-four different bowls of form 29 none of which can be dated earlier than the middle of the Flavian period. There were over two hundred pieces of the hemispherical bowl, form 37, of which between sixty and seventy pieces can be attributed to the closing years of the first and early years of the second century. Of later types there were about a dozen bowls represented which, obviously, belong to the latter half of the second century. Pieces

which call for special attention are few. I have selected the following:—

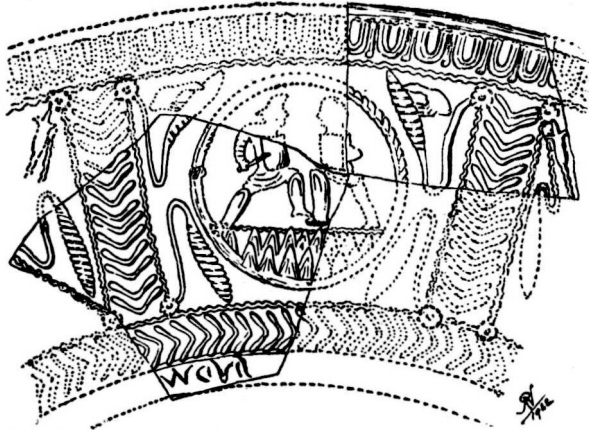


Fig. 4. Fragments of Samian bowl (37), with part of the potter's stamp [Me]moris in graffito below decoration. Diameter of medallion, 4.7 cm.

1. Two fragments (Fig.4) of the very rare first century bowl (37) by the potter Memoris who worked before the destruction of Pompeii. The signature in graffito, written on the mould, is upside down and retrograde, below the decoration. The first two letters are missing. Glaze dark and brilliant. Faint traces of wavy line and a broad groove above the *ovolo* border; tongue of latter appears faintly tridentate in one or two places. Field divided into metopes by wavy lines: (1) part of cruciform ornament; (2) medallion flanked by vertical chevron wreath, the former enclosing portions of two gladiators (Atkinson, *J.R.S.* 59), space beneath with two rows of arrowheads, angles with tendrils ending in catkins, the upper pair with bird (Déch. 1017); (3) cruciform ornament. The general design of this bowl is strikingly similar to that shown by Atkinson (*loc.*) who assigns the period of activity of this potter to the years 60—80 A.D., though he adds that "it may well have continued ten or even twenty years longer." He can only cite one similar example beside the two described by him from the hoard of Samian found at Pompeii.

2. There is also the fragment with the remarkable mask-ovolo, figured by Oswald and Pryce (Pl. xxix, 2), which came from this site ; it also bears a part of the figure of Diana with hind (Déch. 64), and belongs to the Hadrian-Antonine group of Lezoux potters.

3. Lower portion of bowl, form 37, by the potter Divixtus (not in Hayter's *List*). Glaze rather poor and mat-like. Design chiefly in large panels divided by bead-rows, with rosettes at the angles. (1) part of draped figure, possibly Venus beckoning (Déch. 188) ; (2) lower portion of Minerva (Déch. 77, Lezoux) ; (3) nude Satyre (Déch. 325, Lezoux) ; (4) Venus (Déch. 175, Lezoux) ; 5=1 and 6=2. Below the decoration part of the stamp DIV[IX—F], as in Déchelette, ii, 269, 3. Period, Hadrian-Antonine.

The graceful little cup form 78, was represented by fragments of two examples. One of these is clearly in the style of the Nero-Flavian potter Germanus, with his stag and tree. Of Déchelettes' small globular beaker (67), there were pieces of six different vessels. In one the decoration was divided by panels enclosing (1) cruciform ornament, and (2) medallion with cupid (Déch. 274). In another, there was a broad band of S-shaped ornament. The third is very like Oswald and Pryce's, xxi, ii, from the fort of Newstead (Curle, xxxix) and dated 80—110 A.D.

Fourteen distinct forms of plain Samian were represented of which a few bits were blackened by fire. These included some forms which had not hitherto been found at Chester ; one of these was part of a typical example of the early South Gaulish cup, with rouletted rim, and half round moulding (24) which one may date as before 80 A.D. The other plain forms are listed below. For a fuller dating of the potters' stamps, and the origin of the fabrics, see Hayter's *List*.

Form 15. Plate with quarter round fillet inside. Twenty pieces ; one dish almost complete with imperfect stamp, probably that of Rufinus.

Form 18. Two hundred and six pieces ; all apparently belonging to the typical early form. Two vessels admit

of almost complete reconstruction. The stamps on these vessels are by the following potters:—Albanus (35—85 A.D.); OF ALBI (80—110 A.D.); OF CALVI (90—110 A.D.); Doveccus (110—180 A.D.); Frontinus (80—120 A.D.); IVLINI (80—110 A.D.); [PAT]RICI M (Before 150 A.D.); Primus, three examples (80—90 A.D. *Wroxeter*) and SACRAPV (Late 1st Century).

Form 18/31. Forty-two pieces. There were no typical examples of 31, but this large dish seems to be quite uncommon at Chester. The potter's stamps are: CAN-TOM[ALLI], this is rare and belongs apparently to the first half of the second century; MALLVR[O F] (Antonine).

Form 32. One piece bearing the stamp [C]AVTI. Hayter gives "probably 2nd Century" and adds that it is the first example noted in Britain. This dish with its incurved rim is rare at Chester.

Form 27. Nearly two hundred fragments of this small cup were found. The stamps included the following:—OF ALBI (80—110 A.D. *Wroxeter*); DONTIOIIC=DONTIO FEC or DONTI(*onis*) OFFIC(*ina*), (1st Cent. A.D., Neuss, *Bonner Jahrb.*, 111/112, 340); OF FELIC= *Felicis*, twice, (before 90 A.D.); OFRO=O FRO(*ntini*) (80—120 A.D. *Wroxeter*); OF MOI, probably OF MODESTI, (1st Century at Neuss, *lc*); Paullus (69—79 A.D.); PONT=PONTI; Primus (80—90 A.D.); Rufinus (80—110 A.D.); [SA]CRAPO; [VES]PONI (1st half of 2nd Century). There are also two doubtful stamps, Cf. Hayter's *List*, 144, 155.

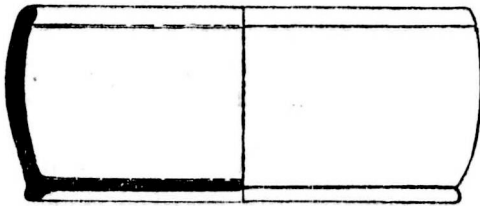


Fig 5.
Samian vessel. Variant of Dragendorff form 22.
Diameter of rim, 10cm.; height 4.4 c.m.

Form 22. One small section like that of Oswald and Pryce (L, 6), approximately late first century. Another example (fig. 5) is a somewhat remarkable variant of this

class of vessels. In its colour and technique it resembles the fabric of La Graufesenque. It appears to belong to the closing years of the first century.

Form 33. Not so plentiful as form 27, but there were just over thirty fragments. Four perfect stamps only were found, *viz.* :—OF FELIC = *Felic(is)* two (before 90 A.D.); E. ILLIXO (c. 140—180 A.D.); MV[XTVLLI] (2nd Century); and Priscus (probably Antonine).

Forms 35 and 36. Cups with the outwardly curved rim decorated *en barbotine*. Few pieces of this were found. The types represented were Oswald and Pryce's Nos. 9, 15 and 18 without handles.

Form 82. Bushe-Fox (*Wroxeter*, 1913, p. 43). Fragments of two vessels, one with the rim decorated *en barbotine* the other plain. Both may belong to the Domitian-Trajanic period.

Form 81. Walters (*Catalogue Rom. Pottery*, xlv, 81). Several fragments of one bowl.

Form 42. Eighteen fragments, all too small to admit of reconstruction.

Form 45. Wall-sided mortaria with *appliqué* lion-faced spout. Rim fragments of six examples; all probably late second century.

COARSE POTTERY.

Among a great mass of material there are a few forms which call for attention here, as they may help to throw some light on the dating of the site.

Mortaria.

Bushe-Fox's types (*Wroxeter*, 1912) only are dealt with.

Form 74. There are five examples, which are clearly slight variants of this type of mortarium, of which four have the characteristic hollow below the rim on the inside; but none has grooves on the rim. All, however, have a haematite wash as in the more typical example from Hunter Street (p. 70). Dated, 80—120 A.D.

Form 22. Three examples. One bears an imperfect stamp which Mr. Hayter has kindly examined, but found it to be illegible. Dated, 80—120 A.D.

Form 170. One example very near this, in hard white clay with pale buff wash. Dated, 270—330 A.D.

Form 178, 206. One of each form in hard white clay. End of third or fourth century.

Miscellaneous Forms.

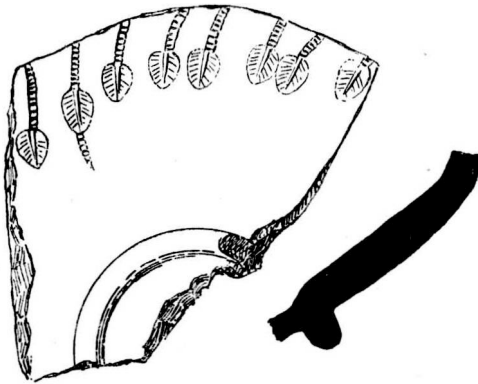


Fig. 6. Fragment of vessel of coarse ware with stamped decoration. Leaves, 2 cm. long.

1. Fragment of bowl (fig. 6) with well-formed foot-ring decorated with stamped leaves having rouletted stalks. Fine, hard, pale red ware; thinly coated outside with buff-pink wash, and inside with pale red wash. Possibly a

Holt fabric, though the late Mr. A. T. Acton had not, so he informed me, found an exact parallel there.

Red coated pottery rarely occurs at Chester, and this is the only stamped piece which I have seen. This is probably a late type, and seems to be characteristic of the group of vessels described by Bushe-Fox (*Richborough*, p. 89, xxix,xxx).

2. *Small globular beaker* (fig. 7). With short, obliquely everted rim, the body decorated with vertical stripes of white slip. Foot ring restored. Fine, hard fumed grey ware. This elegant little vessel, is clearly an imitation of the Samian beaker, Déchelette, form 67, and probably belongs to the closing years of the first or early second century. A fragment of a large olla, of fine, hard red

ware, with the body decorated in stripes of white slip also came from this site. It also belongs to the early period of the occupation of Deva.

The occurrence of portions of two bowls with wide, turned down rims may be noted. These belong to May's type 61 (*Silchester*, xlviii, p. 116). One is coated with mica, the other plain: the latter bears a blotch of brown glaze on the under surface of the rim. Both of fine pale red ware. Late first or early second century.



Fig 7.
Beaker of fumed grey ware.
Decoration in white slip.

Flagons.

Those with ringed mouthpieces, which can be attributed to Bushe-Fox's types (*Wroxeter*, 1912, p. 69) are:—

Form 1. With five rings. Hard, red clay, coated with light buff slip. One example. Dated 80—120 A.D.

Form 3. With four rings and two ribbed handle. Hard fumed grey outside, red inside. Yellow buff slip. Dated, 110—130 A.D.

Flagons of other types also occurred: One in red clay, with pinched-in spout and two-ribbed handle; the other with bulbous body and two plain handles. Cf. *Bonn, Jahrb.*, 111/112, xxvii., 2, 5.

GLASS.

Three large pieces of a blue pillar-moulded bowl, giving a diameter of 8 in. at the rim, were found. This is a first century type, but seems to be uncommon, and has rarely been found elsewhere at Chester. Another type of glass vessel which seems also to be rare is the large pentagonal bottle with concentric rings on the base: one fragment of this was found. Of square bottles with reeded handles two were represented. Bits of large thin-walled flasks were not

uncommon ; but of window glass there was only one small piece. One other item of interest was a short length of a spiral glass rod, similar to that shown by Bushe-Fox (*Wroxeter*, 1914, xxi, 9) but with the "threads" of the spiral arranged much more closely together.

GAMING PIECES.

There were several of these of which nine were made from decorated and plain Samian vessels.

OBJECTS OF BRONZE, COINS, ETC.

There was either a remarkable scarcity of small finds or a leakage through the hands of the workmen ; most probably the latter. The only coin I saw was a I Æ of Domitian (COS xiii). A large bronze key and a bone awl or rimer are the only other small finds to record. The latter can be conveniently gripped, and shows signs of constant use.



EDGAR'S FIELD, HANDBRIDGE.

SITE LXIII.

(Plates x, xxv.)

(*Read March 3, 1924. See also p. 146.*)

IN his interesting paper on "The Cult of Mithra in Deva" (*Journal*, C.A. Soc. xxiv, p. 114), Mr. W. J. Williams has advanced the hypothesis that the cave, with its contiguous figure of Minerva, cut in the face of the rock (pl. x, fig. 1), show some connection with the cult of Mithra. The idea that a Mithraic temple existed here was also taken up, very keenly, by other members of the Society; and the Council agreed to excavate the site, in the hope that some evidence might be brought to light in support of Mr. Williams' views.

Permission to carry out the work was given by the Mayor of Chester, Arthur Wall, Esq., and the City Authorities, to whom the Council express their sincere thanks.

I was appointed to take charge of the excavations; and the work, which lasted for one week, was commenced on Monday, April 23, 1923. Two men were employed, and they worked overtime on five days. Both men, for whose services we are indebted to Mr. George Haswell, F.S.A., had gained experience in similar work in the Deanery Field. I also dug as a volunteer for the whole of the time; and I had the kind assistance of Mr. W. J. Williams in raking over the excavated material.

GENERAL ACCOUNT OF THE EXCAVATION.

(SITE 1, PLATE X.)

A trench was cut, six feet wide, close up to the eastern face of the rock, commencing in front of the cave and extending as far as the north-east angle of the rock. This trench was carried down to a depth of 8ft. 3in. from the floor of the cave.

Immediately in front of the cave and at a depth of 1ft. 7in. below the level of the floor was a roughly paved bed of irregular blocks of sandstone, extending outwards for a distance of 2ft. This block of rubble gave an average thickness of ten inches. Associated with this and immediately beneath it were found six bits of coarse Roman pottery; but these potsherds were mixed up with others belonging to vessels dating from the 17th to the 19th century. Clearly, therefore, the blocks of sandstone must have been laid down in quite recent times, in all probability when the modern stone work was erected to protect the figure carved on the rock. Charcoal occurred abundantly throughout the whole of this section, both above and below the blocks of sandstone.

Below the disturbed stratum and commencing at an average depth of 2ft. 6in. was a layer of arenaceous earth, stiffened in places with a strongly arenaceous clay, and mixed with bits of soft sandstone. This gave an average thickness of nearly two feet. Fifteen Roman potsherds



Fig. 8.
Fragment of Samian bowl (37).
Full-size.

and one small piece of roofing tile were found in it. These finds included two small pieces of a Samian bowl, form 37, one of them (fig. 8) showing part of a medallion enclosing the upper portion of the figure of a female, resembling somewhat Déchelette's figure of Venus (179), but clearly from a different stamp. It is probably the work of a

Lezoux potter, and may be dated as belonging to the middle or latter half of the second century. The other sherds consisted of six pieces of fumed grey cooking pots without rims; two fragments of shallow dishes in fumed grey ware with plain rims, and with traces of burnished lines on the exterior; a small rim-fragment of a deep walled dish with thick overhanging rim; a fragment of an amphora and one

small bit of roofing tile. Again at a depth of 3ft. 8in. from the surface (4ft. 5in. from floor of cave) another roughly levelled stratum of unhewn blocks of sandstone was reached. This extended northwards, along the face of the rock to a distance of 9ft. 4in., and covered practically the whole width of the trench. This rough material was explored to the 7ft. 6in. level, below the existing surface of the land, when the excavations were discontinued. Amongst this waste material, apparently the results of quarrying operations, were three blocks which had been roughly dressed, one of them quite a nondescript; the others, however, were more carefully finished and may have been intended for building purposes as they were both roughly ashlar-faced. The most perfect of these gave a maximum measurement on the worked face of 16in. by 6in.

Resting on the surface of this bed of unhewn blocks of sandstone were two fragments of two different kinds of Roman pots, both too imperfect to enable one to determine the shapes to which they belong; and associated with these was a small piece of vesicular iron slag.

Lower down amongst the rough blocks of sandstone, all of them lying practically at the five foot level, were one piece of a fumed grey cooking pot, one piece of an orange-red vessel, one small piece of roofing tile, and an iron lynch pin. Charcoal and the charred remains of straw or grass occurred abundantly throughout the whole of this mass of loose rock, the exposed surfaces of some of the stones showing unmistakable signs of having been subject to the action of fire.

Near the bottom of the trench was a large slab of unhewn sandstone, lying over some vertically placed blocks of sandstone; the latter forming an irregular channel, giving an average width of 1ft. 10in. and a total length of 4 ft. (see section pl. x). On removing the pieces of rock and soil with which the channel was filled, the sublying material was found to be heavily charged with fine charcoal amongst which were found a few small bits of burnt brushwood (some of gorse) and marked traces of burnt grass or similar

graminaceous plants, and the molar tooth of a sheep or goat. The potsherds consisted of one side-fragment of a fumed grey cooking pot with burnished latticed lines, and marked traces of soot ; and one fragment belonging to a vessel of unknown shape in orange-red clay. Associated with these were portions of three shells of the common garden snail (*Helix aspersa*).

My colleague, Mr. W. J. Williams, suggested that this rough structure may have originally formed part of a drain ; but this does not seem to me to be within practical politics, as there was nothing but loose irregular bits of rock below the rough slabs forming sides of the channel. Moreover, some of the pieces forming the sides were resting on strongly arenaceous clay, six to eight inches thick, and were thus an equal distance out of alignment with the bases of the deeper pieces of rock (pl. x), so that if water had ever passed down the channel it would have carried away the earth, and the shorter stones bedded on soil would have fallen and rendered such a structure perfectly useless as a drain. On the contrary, there was abundant evidence to show that the channel had been used as a temporary hearth in the open, probably to support cooking pots or camp kettles, as evidenced by the abundance of charcoal forming a mass at the bottom of the channel.

(SITE 2, PLATE X.)

Here a trench was cut parallel to, and approximately 25ft. in advance of the face of the cave ; its total length being 23ft., its width 8ft. The depth of the trench varied between 7—8ft. below the surface, and averaged 13ft. below the floor of the cave.

Just beneath the surface of the turf were found two spent leaden bullets, an Irish halfpenny of George III, and a halfpenny of Victoria, besides plenty of Early English potsherds and others of quite recent date. The rim and side-fragments of a Roman flanged bowl (fig. 9a), in dark grey ware, was found at a depth of 12in. ; but this belongs to a type of vessel which does not admit of very close dating,

though it occurs at Chester and elsewhere chiefly in late deposits.² The rims of two mortaria were also found at depths of 24in. and 30in. respectively ; the first (fig. 9b) in

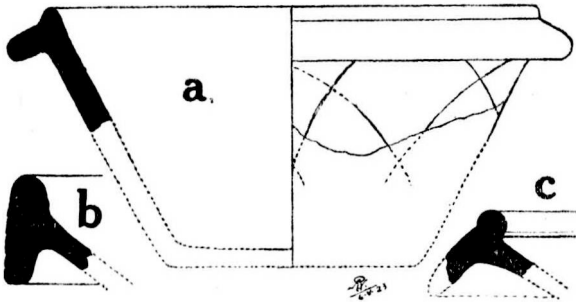


Fig. 9. Fragments of coarse pottery.
 a. Dish with straight sloping sides and flanged rim.
 b, c. Rims of mortaria.

hard white clay, with a vertical moulded rim, belongs to Bushe-Fox's types 230, 234, dated "about 360—400 A.D."; the other rim (fig. 9c), also in white clay, seems to belong to his type 114, "probably not earlier than the latter part of the second century." Nine additional bits of rough pottery also occurred at this level, including some belonging to grey cooking pots and amphoræ. One small bit of roofing tile was found at a depth of 1ft. 3in., another at the 5ft. 6in. level. Traces of nails or other small bits of iron were rarely found.

Not the least interesting of the finds from this site was a large flint core, weighing 11oz., from which many small flakes had been irregularly chipped on three sides. This occurred at a depth of 2ft. 6in. It is of a dark smoky colour with pale marblings, and the outer crust greyish white to buff white, suggestive of a chalk formation. There is no definite patina on the flaked surfaces; nor is it stained at all like the small cherty flints which occur in the drift deposits of this district. It may be a relic of Prehistoric times, but this needs confirmation at the hands of an expert in such

² Cf. Bushe-Fox, *Richborough*, xxix. (form 121), mid fourth century.

matters. It is just possible, however, that the Roman soldiers may have found the nodule near by and out of sheer curiosity may have battered it into its present form. Who knows !

CONCLUSIONS.

1. The sites on which the excavations were carried out revealed the presence of a sublying mass of loose rock, suggestive of chippings and tailings from the adjacent quarry.

2. The evidence afforded by the earliest datable pottery, found *above* the loose rock, points to the deposition of the material towards the close of the second century ; and the presence of the later pieces of mortaria suggest a continuous occupation of the site, at approximately the same level as the earlier pieces, well into the third and possibly the fourth century.

3. The presence, under the sheltering rock, on Site 1, of charcoal and burnt grass or straw, at all levels, may be taken as an indication of the presence of small camp fires, dating from the Roman occupation to quite recent times.⁸



⁸ For further information regarding the more recent finds from Edgar's Fields see page 146.

BRIDGE STREET, EAST.

SITE XLI.

(Text fig. 10.)

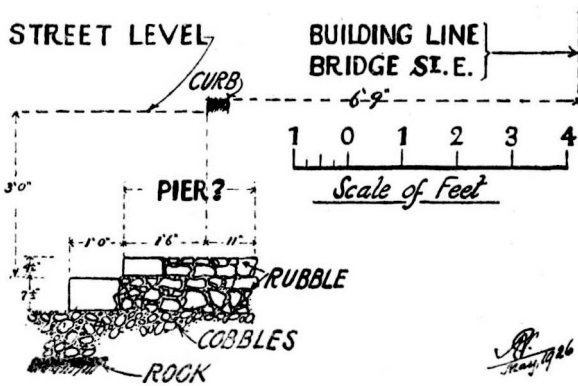


Fig. 10. Section of drain. Bridge Street.

A COMPARATIVELY small section of a rather massive structure, with the longer axis of the ashlar work running north and south, was discovered on the eastern side of Bridge Street, May, 1926, during excavations for laying the new electric cable.

The trench which was cut for the reception of the cable crossed the street, approximately, at right angles to the kerb. It measured 1ft. 5in. in width; but permission was given to undercut it bilaterally so as to expose a longer section of the structure. The western face of the structure consisted of two courses of ashlar work: the lower one, 7½ins. thick, formed an offset of 1ft. (fig. 10), and rested upon a cobble foundation, set in mortar, 11in. thick; the second measured 5in. from bed to bed, was resting upon and backed by rubble. The total width of the structure from the western face of the lower course was 3ft. 5in.; the width from the western face of the upper course, 2ft. 5in.

The eastern side of the structure presented a broken surface, and seemed to have been intentionally mutilated in recent years. The distance from the western face of the lower course of ashlar work to the western face of the building line of the shop (Melias') immediately opposite, measured 9ft. 3in. The distance from the centre of the structure to the southern face of the Tower of S. Michael's Church (Pepper Street), was 113ft. 5in. The structural details and general technique appeared to be of Roman origin: the cobble footings, the rubble filling, and the composition of the mortar being especially characteristic. The last named contained a few bits of Roman roofing tiles, and had the usual free admixture of river gravel and sand.

From the scanty remains found it is not possible to determine with certainty the actual use or purpose of this structure. But as it is, approximately, 10ft. out of alignment with the eastern facade of the Roman via (see pl. xxvii), it seems reasonable to infer that it formed one of the sides or piers and part of the floor of a large drain, which at this point seems to have required additional protection, and may have carried a supporting arch.

WATERGATE STREET: BATHS FOUND IN 1779.

SITE LII.

(Plate xxii.)

IN his *Roman Cheshire* (p. 152) Watkin refers to a Villa which was "discovered at the bottom of Watergate Street in 1778-9." He quotes *in extenso* the conflicting accounts of the find given by contemporary writers; and in his plan of Chester he has fixed the site of the building at the south-west corner of the street, by the Watergate. But he makes no reference to any portion of the villa having been left

in situ, and I can find no reference to its preservation in any publication known to me. But there is some evidence that either an additional portion of the "villa" was discovered in 1894, or that a section of the 1779 find was re-opened. Reference to this is given in the *Journal* (N.S., v, p. 324) quoted from the *Cheshire Observer*, January 27, 1894, of which the following is the text: "In connection with the old disused cellaring found last week in the widened portion of the City Walls roadway by the Watergate, the workmen have since come across further remains of the Roman Villa discovered at the time the houses on Watergate Flags were erected in 1779. This recent find consists of a small arched opening built of Chester district stone, and having a lower-floor of concrete which can be traced *in situ* for a distance of 12 feet. So far as at present can be seen, the upper covering consists of large tiles about 2 feet square."

Quite recently Mr. C. W. Rogers called attention to the existence of a small arch preserved in the cellar of his mother's house, 104, Watergate Street, which he had been informed was of Roman origin. The house in question is the corner one and forms the angle of Watergate Street and Walls Road. Mr. Rogers very willingly consented to have the structure examined, though there was no ready means of access to the cellar, as it had been permanently built up for many years. However, we were able to explore the place on March 21, 1927, and found the arch to which our attention had been directed, still intact, in an excellent state of preservation, and now serving as a ventilating shaft, leading into the cellar from the iron grating outside the building, in Walls Road. That it is of Roman origin there can be no doubt, as it is resting upon a solid cement floor, and carries above its crown three courses of Roman tiles and a thick bed of cement. Here then, it seems clear, we have re-discovered a portion of the Roman building which was found in 1779, and very probably the actual structure which Pennant (*Tour in Wales*, i, p. 153) describes as "a subterranean passage, possibly a drain," adjoining to which he adds was a "sudatory." Obviously, it is also the

structure described in the *Cheshire Observer* (*lc.*) as a small arched opening with its upper covering of tiles and concrete floor.

Here are the details of our find :—

The long axis of the arch is practically east to west. The western face, in Walls Road, has been cased over ; the other end in the cellar (pl. xxii, Section BB) is intact. Its length 4ft. 3in. ; height at west end 2ft. 2½in., at the east end, 2ft. 4½in. ; width throughout, 2ft. The whole structure is composed of local sandstone, and the blocks forming the *voussoir* 7—8in. deep. The cement floor upon which the arch rests is 9in. thick, and it extends into the cellar to a distance of 5ft. 5in., where it presents a broken face ; it is clearly part of a hypocaust floor, with the *pilæ* removed. The superstructure, passing over the crown of the arch, consists of three courses of tiles (7in. thick) under a bed of cement 6in. thick. The former are of three sizes : length of lowest, 17in. ; middle course, 10½ by 10½in. ; the upper ones, 22—24in., are pierced for keying to the cement.

We were unable to examine the upper surface of the cement, but it was probably tessellated, and may have formed part of the room which Pennant (*lc.*) describes as “ a large chamber of black, white, and red tiles, about an inch square.” Taking the remains as a whole we believe that they represent a typical Roman furnace arch leading into a hypocaust chamber. The construction and composition of both bits of flooring are an almost complete replica of the hypocaust now preserved in the “ Roman Bath ” in Bridge Street. For parallels to the furnace arch see Winbolts' *Roman Folkestone*, especially his fine illustration on pl. x, which, with its *pilæ* complete, gives us an excellent idea of what our structure may have been like before it was mutilated. Views as to the use which the building served may differ, as we have no details of its plan. But if one interprets the descriptions of the find given by the contemporary writers, there can be little doubt that it was the bath-house of the fortress ; and its use as such was accepted by all the earlier authorities.

GREY FRIARS.

SITE LV.

(Key plan, pl. xxvi.)

HERE, in the middle of the month of January, 1914, a section of a Roman cement floor was intersected by workmen when cutting a trench for a new drain. The latter extended from Wood's storehouse along the lane to Nun's Road by the City Walls.

The western end of the Roman floor commenced at a point 43ft. from the City Walls and appeared to be quite intact for a distance of 50ft. There was no break or division in its structure; but both ends presented a broken surface, and had evidently been mutilated. The average thickness was 12in., and it rested upon the natural soil about 6ft. below the existing earth level. It was composed of a bed of small bits of sandstone, the interstices of which were filled in with finely pounded material of the same kind; over this was a layer of concrete from 5—3in. thick, composed of finely broken tiles, small bits of rock and some river gravel. Its surface showed evident signs of wear, but there was no trace of tesserae. A large cube of galena was found attached to one portion of the floor; and one small area showed marked traces of having been coated with soft rock having a rich deposit of mica. And towards the east end a portion of the floor had been patched with bits of roofing tiles.

This site had evidently been used also as a burial ground during mediæval times. Disturbed human remains occurred all along the trench, but none was found below the Roman floor, though many bones were resting upon it. A few bits of encaustic floor tiles, belonging to the 14th or 15th centuries, occurred with the human remains, and it is perhaps to this period that the latter belong. Two typically early English burials were found in the yard a few feet north of the Roman floor, one of them enclosed in a stone coffin of typical 14th century form. Both burials had been disturbed, and bits of Roman roofers occurred a few inches below them. A sample of the Roman flooring and also the stone coffin are preserved in the Grosvenor Museum.

S. MICHAEL'S ROW AND STREET.

SITE XXXVII.

(Plates xi—xv, xviii.)

(Read 8th February, 1927.)

THIS paper deals with the remains of a Roman building,⁴ the major portion of which was discovered in 1863.

At various times since that date several important additions have been made, both east and west of the original finds. These are here considered to belong together and are plotted in on one general plan (pl. xviii), with the dates attached thereto.

The records of the history of the finds may be briefly considered in chronological sequence.

1863.

The late Dr. T. N. Brushfield (*Chester Journal*, O.S. iii, pp. 1—106) has given a full account of the finds. His paper is accompanied by a plan, prepared from details supplied by the Architect (T. M. Lockwood). He also gives most excellent drawings of the mosaics and other relics which were found.

The late Sir William Tite (*Archæologia*, XI, pt. ii, pp. 285—294) gives a plan of the building; but no details of the mosaic floors. He also omits the short wall with returns in opposite directions at the ends, which is shown in Brushfield's plan immediately E. of the S. line of columns. Whether it belongs to the building in question or to an earlier or later structure is not at all clear.

⁴ The so-called "Roman Bath," discovered about the year 1725, though included in the plan (Pl. xviii), may belong to another building. It is still standing, and open to the public on payment of a small fee. In our recent surveys of the site we have found that these remains are standing 6ft. further north than is given in the plans by Brushfield, Tite and Watkin.

Both authors refer to errors in each other's papers ; but one has failed to trace exactly what these may have been, as the details are not specified. One error which is, however, common to both contributions is in the setting out of their respective plans of the building. In both plans the distance between the north face of the main dividing wall and the centre line of the south row of column bases is shown as 18ft., whereas the correct distance, according to a copy of the original plan, supplied by the Architects, T. M. Lockwood & Sons, is clearly stated to be 20ft. So that both lines of columns were standing actually 2ft. further north than is shown by the authors in question. My colleague, Mr. Lawson, has made the necessary corrections in the general plan (pl. xviii) accompanying this report. Watkins' plan (*Roman Cheshire*, p. 134), evidently a copy of Brushfields', is also incorrect in the same way.

1909-10.

In the summer of 1909 some extensive additions to the building were found, both east and west of the original find of 1863. These consisted of another long section of the main dividing wall, a large room with mosaic floor, and a portion of the main west wall in Bridge Street.

In my preliminary note on these finds (*Chester Journal*, N.S. xvi, p. 115) I have referred to a " flue " which passed under the mosaic floor, this because I had found some bits of partly vitrified tiles lying over the sedimentary deposit. It was an error of judgment on my part, as further excavations proved that the structure was a drain (see p. 119) with an exit through the south wall of the building. Having submitted this brief report to the Council, I felt that my task had ended, as Mr. John Hewitt, of Messrs. Lockwood & Sons, the Architects, had expressed a wish to deal with the finds. His paper on the subject was read before the Society, 16th November, 1909 ; but the title, " Notes upon the Roman Remains exposed at Allen's Buildings, Bridge Street, Chester, 1909, compared with the discoveries made in 1863, with an attempt to prove the site to be that of a

Roman Basilica" (*Chester Journal*, N.S. xvii, p. 145), is all that was published.

I now append a description of the discoveries made in 1909-10 :—

Main Wall dividing the Rooms from the Colonnade.

This was traced, with the exception of one small gap, for a distance of 31ft. It began with a jagged end, about 10ft. in advance of the 1863 find. Its apparent union with the east wall was also traced in 1927. The average width was about 3ft. 6in. From three to six 4½in. courses of ashlar faced sandstone existed above the floor line (pl. xi). The core was of rubble, and the mortar very hard. Both faces had been plastered. That on the north side (pl. xi) with, apparently, one coat only, but most of this had flaked off, leaving the rough, unpointed mortar between the joints of the masonry only. On the south or inner face (pl. xiii) a great deal of the plaster remained. This consisted of three coats, measuring over all about 4in. The first and second renderings were of the characteristic "pink" kind; the outer one had a free admixture of quartzite crystals, and bore traces of a dark red colour-wash. A buttress (pl. xiv E.) was built against the plaster of the south face of the wall; it seemed not to have been bonded into it. The east end of this was mutilated, but the west and south faces respectively were coated with plaster. It was 7in. thick and 3ft. 6in. wide.

The results of quarrying operations were evident in many places, more especially so on the south side, into which large holes had evidently been cut through the plaster and into the joints of the masonry.

South Wall.

(D. on pl. xiv.)

The inner face of this was traced for a length of 14ft. It was standing, in places, to a height of 2ft. above the floor line. The masonry was of the same kind as that on the opposite side of the room, but there were vestiges of one

string course of tiles, 2in. thick. The plaster showed evident signs of having been repaired with white mortar, having comparatively few fragments of pounded tiles in its composition. It also bore traces of a dark red colour-wash.

West Wall.

This ran almost parallel with the Bridge Street frontage (pl. xviii). Here, at one point (stanchion for new building), it had an elevation of 8ft. 6in., inclusive of the footings of boulder-concrete; the latter, 1ft. 6in. thick, rested upon the natural rock, 10ft. 10in. below street level. The structure of the wall was like that of the others.

North Wall.

No trace of this has been found and owing to the existence of buildings over the site, deliberate excavations are impossible.

The Mosaic Floor.

The mosaic floor discovered in 1909 (pls. xi—xiv) covered an area measuring 37ft. by 26ft. approximately. The limits east and west were not traced, and no opportunity of exploring the ground in either direction was possible. The mosaic was badly mutilated, extensively patched with tiles of three types, and large slabs of slate, all of which showed evident signs of extensive wear. The floor consisted of a bed of concrete, 6—10in. thick, which rested on a layer of rubble. There were no *pilæ* beneath.

In cutting the trench for the foundations of the new building (S. Michael's Row), at the south-east corner of the room, a deep pocket was found in the rock, measuring 10ft. 10in. below the floor line. Here the Roman builders had evidently taken great precautions to prevent any settlement of the mosaic floor. The first filling, 7ft. 6in. thick, consisted of rubble, chiefly building material, including broken roofers and rough sandstone blocks. Then came a compact bed of squared sandstone blocks, 11in. thick, set

in mortar. The third in succession was another bed of rubble, 1ft. 7in. thick; and finally the bed of the floor, 10in. thick.

The tesserae were of two colours: pale to dark grey or blackish, and white. Both kinds had most probably come from the Lias formation. The paler kind being very like some of the Lias of Warwickshire and parts of Somersetshire. The surround on both sides of the longer axis of the room was black, with a rather free admixture of white tesserae, more especially so towards the walls. This surround was much wider on the south side of the room than on the north, the measurements being: north, 2ft. 2in.; south 6ft. The central area seems to have been defined by a rectangular border of white squares on a black background. Vestiges of these white squares were traced on three sides, the longest and most perfect series (pl. xiii, fig. 2) being on the south side of the room. Odd black tesserae were mixed with the white ones. Within the border of white squares were portions of two large dolphins (pl. xii, figs. 1, 2), on a white background; the outlines of both were of black, and each was decorated, centrally, with vertical white stripes. At the south-east corner were vestiges of another zoomorphic creature, whose specific form remains a puzzle. West of the central design was a continuation of the black surround. This passed transversely across the room, and was cut off from the rest of the design by a narrow band of white on each side. West of this was a panel of geometrical design, consisting of seven concentric squares of alternating black and white tesserae. Three of the central ones were set lozenge-wise, and the outer black one was tied at the corners forming triangles. There was a sprinkling of black cubes with the white and *vice versa*. This panel measured 3ft. 9in. square.

The Platform.

Immediately east of the mosaic floor, and facing its central design, were the remains of what appears to have been a rectangular platform (A on pl. xiv), which had been razed almost to the floor level. It consisted of a single

layer of large slabs of sandstone, bedded in mortar, and faced on three sides with wall plaster, 2in. thick on the west (?front), and 1½in. on the north and south sides respectively. The west front had a skirting consisting of three slabs of the following materials: Purbeck marble, slate and sandstone. They gave an average thickness of 2in., and a depth of 2ft. 6in.; their broken edges projected 4in. above the floor line. The outer face of the Purbeck marble had been roughly polished, the other roughly levelled. The edges of the slate exhibited saw-cuts.

The south face of the structure seemed also to have had a skirting of sandstone, but it was badly mutilated and bits of it only remained. The east face was so badly broken that the exact dimensions of the original structure could not be determined; but its width from north to south was 5ft. 7in.

Deliberate search was made between the buttress to the main dividing wall (north) and the platform; but no structures were discoverable. Search for the footings of a dividing wall in an easterly direction was, unfortunately, impossible.

Floor of South Colonnade.

A large patch of herringbone paving was found on the north side of the main dividing wall, from which it extended, in a northerly direction, to a distance of a little over 12ft. (pl. xi). It was patched with odd bits of Purbeck marble and a small tile. It rested upon a concrete bed, 6in. thick, below which was a layer of broken sandstone and clay. There were traces also of its presence extending both east and west, clearly a continuation of the floor described by Brushfield with the other finds of 1863.

The Drain.

This ran obliquely across the room (pl. xiv, CC). Two sections only were explored. On the south side (Text fig. 11a), close up to the retaining wall, it was 1ft. 7in. below the floor line. Here the interior was 1ft. 7in. deep and 1ft. 3in. wide; the lateral wall on the east side consisted of

three courses of sandstone ; that on the west also of three courses of sandstone and one of tiles, 3in. thick. The floor had a large slab of sandstone which had been gradually channelled out, reaching a maximum depth of 5in. as it passed under the south wall. It had evidently been roofed

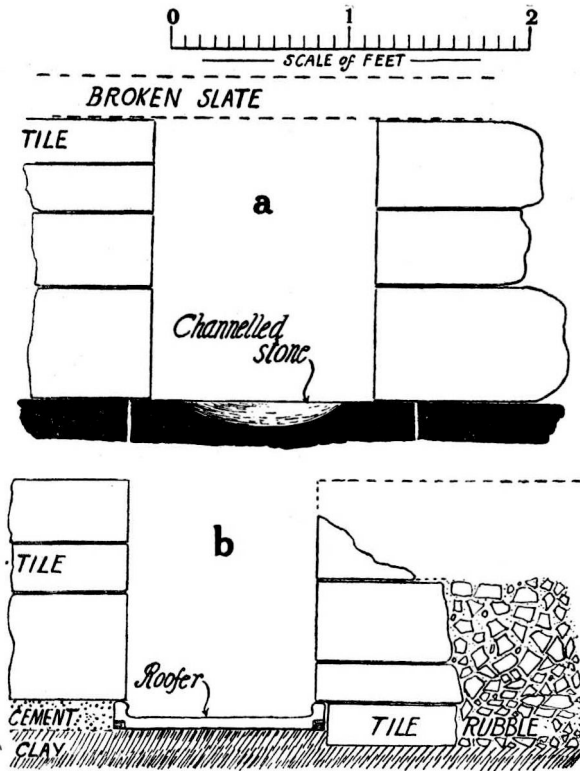


Fig. 11. Sections of drain. Site xxxvii.

over with a slab of slate, 3in. thick, but this had fallen in and was broken. Slightly north of this the covering consisted of complete roofing tiles, laid crosswise, over which was a bed of concrete and a stone slab, 10in. thick. Another section of the drain was excavated near the centre of the room (Text fig. 11b). At this point the roofing material had been destroyed ; but the sides and floor were intact.

Here the lateral walls had been reinforced by a backing of mortar and rubble, and the floor was formed of roofing tiles embedded in clay.

The floor, in both sections, was covered to a depth of about 8in. with a hard, tufa-like substance, stained ferruginous above and blackish below. Above this deposit, at the south end, were found the base of a fluted beaker, belonging it may be to a type similar to that figured by May (*Silchester*, lviii, 6), in hard buff clay, coated with a dark metallic glaze or slip. The interior was partly filled with hard mortar, containing river gravel.

The other objects obtained from the deposit which had evidently fallen into the drain when the roof gave way, was the base of a small, opaque white glass flask, decorated with blue and pale mauve, and some bits of burnt roofers.

SMALL FINDS.

There seemed to have been a great dearth of small objects on this site. My own small digs yielded nothing of importance, nor even a scrap of Samian ware.

The casual finds included a spindle whorl, cut from the side of a Samian bowl, form 37, belonging apparently to the latter half of the second century. Three bits of window glass and part of a Legionary stamp -/XXVV; and in addition the fragments of the two vessels found in disturbed material inside the drain.

1926-27.

The discoveries made during these years consisted mainly of two column bases and two sections of the east wall. All of these were found on the site of Messrs. Brown & Co.'s new extension and the approach thereto; both lying immediately east of S. Michael's Row, and also immediately east of the finds of 1909. A general account of the excavations carried out on this site is given in the report, on p. 126. But it has been thought best here to deal with those architectural remains which seem rightly to belong to the building under consideration.

Column Bases.

One of these (pl. xv) was exposed in part only. It bears the same characteristics and gives similar proportions to those which were found in 1863. Of the other the base only remained. Both were built on cobble-concrete footings resting upon solid rock. The distance from centre to centre was 11ft. 9in. The surface of their bases was 1ft. 7in. below the level of the kerb in Bridge Street. Both are in alignment with the northern series found in 1863, but there is a gap between them of nearly 60ft.

East Wall.

By deliberate excavations two short sections were discovered, one at the east end of the north line of column bases, the other at the east end of the dividing wall. In both cases the structures were laid bare to the foundations. It was found that a "chase" has been cut into the solid rock and that cobbles and very hard mortar (boulder-concrete) formed the footings. No clay was used. The ashlar work was like that of the main dividing wall; but the joints had been carefully pointed. The width varied between 3ft. 6in. and 3ft. 9in. There was a cavity between the rock-chase and the wall of about 1in., in the other it was wider. Sections of both structures are given on pl. xx. In the southernmost section we were able to trace the commencement of the return of the main dividing wall, shown at F, on pl. xviii.

No objects that could be dated were found in immediate association with these remains.

SUMMARY.

The evidence, accumulated during the last sixty odd years, of the existence of a large building on this site, has been briefly recorded in this report, and the principal finds have been plotted in on one general plan (pl. xviii). Its limits on three sides have been traced in part, but there are, unfortunately, many important gaps, and the northern limits still await discovery. It is clear, however, that it was a double colonnaded building with apparently an open

court, and seems to have been surrounded or flanked by a succession of quadrangular rooms, of which those on the south side only have been discovered. Exactly how many rooms there may have been on the long side is not clear. Three are clearly defined, and there seems to be space enough for seven or eight in all. The rooms discovered in 1863 all had hypocaust arrangements, with mosaic floors. The mosaic floor, towards the east end of the range, had no *pilæ* beneath; there was little of the mosaic left; and the tiles and slabs of slate, with which it had been patched, testified that it was in use for a very long time. The wall facing the colonnade had been plastered; and the floor of herringbone paving had survived at the eastern end, though it also had been patched up with odd materials. In his plan of the earlier finds Brushfield (*loc. cit.* p. 15) shows a rectangular excavation in the rock, which he labels U, says that it was of "post-Roman origin" and that "it contained mediæval pottery." This pit measures, according to his plan, 7ft. square. In the light of this evidence it seems hazardous to suggest that it may have served as an impluvium. But if such a structure existed in Roman times than clearly the court was an open one. That it was so in any case, however, seems highly probable.

Of similar buildings found in Roman fortresses elsewhere there are two:—

(1) *Novaesium* (Neuss, Germany). In his description of this fortress Koenen (*Bonner Jahrbücher* 111/112 (1902), pp. 173—175, B. 61, xi) gives details of a building which he calls a Schola in the text, and in his heading "Hall for Camp-service-instruction," meaning, one may suppose, a Drill-hall. This has a double row of columns arranged in the longer axis, with cross columns at the ends of both rows. No chambers are indicated on the long sides; but there are four small rooms at the eastern entrance, two of which Koenen suggests may have contained wooden stairs leading to a gallery. There was a large impluvium in the centre, the overflow from which was collected in a cistern. Part of the floor under the colonnade survived, this was of tiles

32 cm. square ($12\frac{1}{2}$ in. by $12\frac{1}{2}$ in.). Length 54.30m. ; breadth 33m. Its position in the fortress was slightly north of the east gate.

(2) *Lambæsis*, North Africa. The following details are taken from Cagnets' work (*Les deux Camps de la Legion iii, mem. de l'Acad. des Inscriptions*, xxxviii—1, 1903). In his plan of the fortress (*lc.* p. 61) the colonnaded building is shown to occupy a position at the north-west angle of the *præentura*. It measures 67m. long and 41m. broad ; its court has a double row of columns, each of 16, and two cross columns at the south end. Chambers or rooms surround the court ; there are six of these at the long sides, measuring 10 by 10m., or 10 by 8m.

The plan of this building is remarkably like ours, and although much smaller is of similar proportions.

The late Professor F. J. Haverfield (*Chester Journal*, N.S., xvi, p. 118) expressed his opinion about these discoveries at Chester. He "thought the finds of 1863 might be officers' quarters, or perhaps baths, or, indeed, baths attached to officers' quarters. The recent finds do not seem to me to require any serious alteration in this opinion. Their interest lies rather in their details, and, in particular, their mosaic pavements." Adding "as a matter of fact, examples of mosaics in Roman legionary fortresses are not at all common." His contention being that the views of the earlier writers, as to the use of the building as a Basilica, were wrong, on the grounds chiefly that Chester, so far as we know, was a fortress from first to last.

FRAGMENTS OF THE BUILDING LEFT *IN SITU*.

1. Two small fragments of the mosaic floor found in 1909 are preserved in the cellars to the shops in S. Michael's Row :—

- (a) The south-east corner of the square pattern, and
- (b) A portion of one of the dolphins.

Our thanks are due to His Grace the Duke of Westminster for the preservation of these. How it was that nearly the whole of "a" got destroyed is not known.

2. A good section of the east end of the wall dividing the rooms from the colonnade is preserved in the coal cellar of the Palatine Club. We have also to thank the Duke of Westminster for this.

3. The column base (pl. xv) is preserved, *in situ*, in the basement of Messrs. Brown & Co.'s new extension in S. Michaels' Street. For this our thanks are due to Councillor H. F. Brown.



S. MICHAEL'S STREET.
MESSRS. BROWN & CO.'S NEW EXTENSION,
1926-27.

SITES XXXVII, XXXVIII.

(Plates xv—xx.)

(Read February 8, 1927.)

THE site on which Messrs. Brown & Co.'s new extension is built (pl. xix) extends from the eastern entrance of S. Michael's Row to the western boundary wall of the Grosvenor Garage in S. Michael's Street, at which point it is 104ft. 9in. from Newgate Street front. Its longer axis (east to west) measures 121ft., and its greatest width nearly 100ft.

The excavations commenced early in the year 1926, the extent of which are shown on pl. xix. A continuous trench was cut to the surface of the rock, on three sides of the area (east, south and west). Shafts, four feet square, were also sunk to the rock-level at regular intervals over the whole area; those which yielded important finds are plotted in on plate xix. The earth was also completely excavated on the site east of stanchions Nos. 40 and 49. Deliberate digging, below the level of the cellar floor, south of stanchions 40 and 49 was also carried out. In January, 1927, more deliberate digging was carried out in the open space, forming the southern approach to Brown & Co.'s new extension. (F. on pl. xviii.)

Judging by an old map by Braun, dated 1581, preserved in the Public Library, Chester, the site, as shown by the Chartographer, was, in his day laid out in pleasant gardens or the like; and that the buildings and shops of that period formed a comparatively narrow belt along the lines of the main stretes. Be this as it may, the spade has proved, quite conclusively, that here, as elsewhere in Chester, during the 16th to the 18th century, or thereabouts, the whole of the area was studded with cesspools and refuse

pits—shafts running down, or even into the sublying rock, to a depth varying from thirteen to eleven feet. Smaller pockets of refuse, or kitchen middens, were also not infrequent. Indeed the conditions suggested that the place had formed a general dumping ground for refuse of all kinds. Such conditions must, in a very large measure, account for the enormous deposit of made earth above the Roman occupation levels. Building operations during the last two centuries seem also to have added materially to the deposit, and had, most unfortunately, destroyed much of the Roman work.

To follow the casual digging by a small army of workmen is a pleasant task for the archæologist. But it has its serious drawbacks. Everything is removed piecemeal, step by step, as the work progresses. The plotting in of architectural remains and the correct registration of other important finds, under such conditions, is, however, a difficult task. One must be constantly on the spot, and give liberal rewards for all the smaller finds, there being a ready market for all kinds of antiquities at Chester; and workmen engaged on excavations are often commissioned, or bribed, by outsiders who traffic in such things. There was a leakage of small finds from this site, including a few Roman coins and some bits of pottery; possibly also the remarkable glass bust of John Wesley (*Connoisseur*, Jan. 1927, p. 40). Nevertheless, the results as a whole were highly satisfactory, and the collection in its entirety illustrates, in chronological sequence, the nature of the deposit, from Roman times to the closing years of the 18th century. A description of the Mediæval and Early English finds is given in the Appendix to this report (p. 140). The subject matter which here follows pertains only to those finds which belong to the Roman period.

ROMAN BUILDINGS.

Three angles and one complete side of a small room measuring 13ft. by 12ft. (pl. xix) were found at the south-east angle of the site. Here the footings were relatively

shallow and consisted of sandstone rubble with a liberal admixture of mortar. Two courses of ashlar faced stones were left standing ; these gave an average depth, from bed to bed, of 6in. The thickness of the wall was 1ft. 6in. In the footings of the south wall was a small piece of Samian (Drag. 18), bearing the potters stamp. Unfortunately, the latter seems quite illegible, but, judging from the low convex interior, its thin wall, and excellent glaze, the date of its manufacture does not appear to be later than the closing years of the first century. The surface of the sand floor of this room was covered with charcoal to a depth of nearly three inches. It contained a fairly free admixture of oxidised bronze, and one small piece of a pillar-moulded bowl (1st century). The south-east corner only of this room was laid bare.

Six feet north of the above was a short section of a rather shallow drain, the floor and sides of which were formed of roofers and the top covered with a thick slab of slate, 1ft. 8in. wide. The tiles were all damaged and the sides had fallen in. Beyond this (north) were the section of a wall, a channel, and a row of stones set in mortar. The sandstones had their southern faces dressed and were backed by a compact layer of river gravel. The latter was traced as far as the north-east angle of the site, and westwards up to the shaft for stanchion No. 12 (pl. xix), at which point it ended abruptly. It had been intersected by a deeply laid modern drain, which crossed the site into S. Michael's Street. The layer of gravel may have formed the metalling of a road, or lane, or indeed the floor of another room. It varied in thickness from 12in. to 4in., appeared to have been thoroughly rammed, and was lying 8ft. 2in. below the level of the kerb in S. Michael's Street. Below the gravel was a stratum nearly 3ft. thick of broken rock, sand, gravel, and bits of roofing tiles, overlying the solid rock. Most fortunately some useful evidence was obtained from this deposit. A small collection of Samian sherds came from this site, including eight fragments of form 29, and four pieces of a small cup, Ritterling's form 8 (pl. xvi,

figs. 1 and 12). There were also fragments of grey cooking pots, including three pieces of "rustic" ware, heavily coated with rather greasy soot. The Samian forms belong to the last quarter of the first century.

There was no trace of gravel in shafts Nos. 6 and 11. Pieces of decorated Samian came from the former, including the fragment in the style of Cinnamus (pl. xvi, fig. 7), which belongs to the middle or latter half of the second century.

In shaft No. 13 was a thick layer of broken flue-tiles, nearly all of which were coated on the interior with soot. Mixed freely with these were bits of thick wall-plaster and broken roofers, but no pottery or coins. A similar deposit was found in the shaft 11ft. due west (not on plan). These deposits seem to have been the results of quarrying a large building near by, but at what period there was no evidence to show. Many broken roofers came from shaft No. 14, one of them bearing part of the legionary stamp, LEGXX[VV]. With them was a coin of Constantius II. From shaft No. 10 came some pieces of Samian including the basal portion of a bowl (Form 37), by the potter Butrio (pl. xvi, fig. 11), attributable to the first half of the second century.

In excavating for the subway and cellar, near the centre of the plot, traces of another building were discovered, between shafts 18 and 30 on the south, and 13—32 on the north. It was, however, but a relatively small detached section, and was slightly out of alignment with the room found at the south-east angle of the site. On the north side of the building were three large sandstone slabs, two of which were lying embedded in mortar and sand, close up to the footings of the wall; the other had evidently been displaced, and was lying upside down, 2ft. in advance of the building line. The floors of both apartments consisted of river gravel and sand, firmly rammed. No objects were found in either of the floors; but a coin of Vespasian (No. 1) was found near the westernmost slab, outside the building. The brooch (pl. xvii, fig. 2), the piece of decorated Samian

and the small mug with a single handle (pl. xvii, fig. 10) came from the stratum immediately above the floor line ; these objects may all belong to the same period, but the deposit in which they were found may have been disturbed.

The continuous trench which was cut all along the southern building line revealed little of interest. Isolated patches of the Roman occupation level occurred here and there ; but the ground, for the most part, had been badly disturbed by the erection of modern buildings, drains, etc., and nearly all traces of Roman work had been obliterated. On the other hand the trench cut on the western side of the plot revealed the massive column base shown on plate xv. By deliberately digging in the floor of the adjacent cellar, the base stone and footings of another column and also a fine section of a massive wall, 3ft. 9in. wide, were found. Cobble-concrete footings found in shafts Nos. 38 and 39, showed that the wall had extended in both directions. Unfortunately it was not possible to further explore the ground within the confines of the building. About 10ft. south of shaft 38, the line of the Roman wall was intersected by a modern well ; and south of the latter all trace of it seems also to have been destroyed. Our only hope of tracing any other portion of the wall was in the open approach on the south, which, at the time, was impossible. Nearly a year had passed before Mr. H. F. Brown had secured the tenancy of the site, when he very willingly arranged for further excavations, and generously defrayed the cost of the " dig." In this we were highly successful, and the added section of the wall (F on pl. xviii and sections pl. xx) gives, we believe, the final confirmation of the eastern limits of the large Roman building, found in part in 1863 and in part also in 1909-10, the extent of which had been laid down in theory for many years. The two column bases and both sections of the wall found on this site are plotted in on the general plan (pl. xviii), prepared by my colleague, Mr. P. H. Lawson, and his assistant, Mr. J. E. Sunter, to whom I am extremely indebted. A description of the architectural fragments are dealt with on page 121 of this issue.

POTTERY.**Decorated Samian.**

(Plate xvi.)

Comparatively few pieces of this kind of pottery were found. The more interesting of these finds are described below.


1. *Form 29.* Six fragments, all belonging to the same vessel, and representing portions of both friezes. Upper frieze of semi-circles enclosing dart-shaped buds and conventional leaves, similar to Walters (xxxviii, 4), May (*Silchester*, xi, 30), and Bush-Fox (*Richborough*, xviii, 10), and dated as late Flavian. Lower frieze with semi-cruciform motif, enclosed in space below running scroll.

2. *Form 29.* Fragment of upper frieze. Scroll with tendrils ending in rosettes and leaves.

3. *Form 29.* Dog chasing hare as in Atkinson (*Pompeii*), No. 9. Lower frieze with portions of lanceolate leaves arranged vertically.

4. *Form 37.* Decoration in two friezes divided by wavy line. Upper frieze, scroll with tendrills ending in dart-shaped buds and conventional leaves. Lower frieze, wreath near Walters, xxxiii, 10.

5. *Form 37.* Wavy line below ovolo border. Decoration in metopes and medallion, the former enclosing cruciform ornament.

6. *Form 37.*  Small fragment. In upper portion trifid wreath; lower portion part of lion r. and boar l. (Curle, *Newstead*, Nos. 28 and 31), dated 80-100 A.D.

All of the foregoing came from the deposit immediately below the stratum of gravel, extending eastwards from shaft No. 12 (pl. xix). All are probably of South Gaulish origin, and of the late Flavian period.

7. *Form 37.* Two side fragments conjoined. Bead-row below ovolo border. Part of continuous, winding-scroll, with large leaves and bird (Curle, *Newstead*, p. 225, fig. 7); concavity with medallion enclosing lion (Déch. 753), and deer at rest (Déch. 847), both imperfect. Below medallion

a spindle-shaped motif, and to left of this a large rosette within a cable-ring. Style of Cinnamus. Period middle to latter half of second century. Shaft No. 6.

8. *Form 37.* Portions of two circular vine branches, with leaves, small bunches of fruits, and tendrils; small bird at rest on inner face of circular branch. Upper space with larger bird. Lower space with small vine branch, and beneath it bead-row and part of wreath. The treatment of the vine branch with small bird resting upon it, very closely resembles the decoration on the bowl described by Bushe-Fox (*Wroxeter Report*, 1912, p. 38, fig. 12), who dates his piece about 90-110 or 120 A.D., and adds: "the decoration rather suggests a Germanic or East Gaulish origin."

Site, Shaft No. 10. Apparently in association with the stamp of Butrio (No. 11).

9. *Form 37.* Very elongated ovolo with two loops; no motif dividing it from the main decoration. Style, panels divided by cable lines of two types. Angles untied. Upper panels: (1) part of deer to l., possibly as in 3; (2) deer running r., with ill-formed trilobed motif above and below; (3) deer l. near Déch. 873. Lower panels small: (1) dog running l. (? Déch. 937); (2) rabbit running l.; (3) dog running l. Concentric rings below decoration. ? East Gaulish.

Site, just above the floor level, west of shaft No. 19, near the fibula (pl. xvii, fig. 2) and the single handled mug, fig. 10 (pl. xvii).

10. *Form 37.* Tongue of ovolo with spiral twist. Decoration in panels divided by cable-lines, tied at angles with large rosettes. Siren with double flute (Déch. 499).

Casual find.

11. *Form 37.* BV, \ in large raised letters, perpendicularly in the decoration. This, clearly, is part of the stamp BVTRIO. Style, metopes divided by bead-rows, with rosettes at the angles. (1) Part of draped figure to r.; (2) bearded mask to l.; (3) nude legs of figure to r.; (4) mask to r., below the stamp; (5) l repeated. A large X is

scratched within the foot-ring, in the centre of the latter is a large, low convex nipple within a concentric ring.

Period, first half of second century. (Cf. Hayter, *List*, p. 10).

Site, shaft No. 10.

Plain Samian.

(Plate xvi.)

12. $C\Lambda$ On Ritterling, form 8 (interior of base). This may be part of the stamp CASI F, but this is hazardous. There are four fragments conjoined, representing about one fourth of the vessel. It possesses all the characteristics of the example from Hofheim, dated to the Claudian period, Oswald & Pryce (fig. 7), but is smaller. This is the first authentic occurrence of this type of Samian cup at Chester. Oswald & Pryce (p. 185) state that in Britain it is found on southern sites, such as Colchester and London, and as far north as Margidunum. Occurring as it did in immediate association with the fragments of form 29 (No. 1), below the layer of gravel, it does not appear to be earlier than the closing years of the first century, possibly Domitian.

Other potters' stamps on plain wares are given below, but not illustrated.

$COSMI$ On form 27. Part of base only, the edges in places finely chipped and rubbed. Used probably as a counter. This is part of the stamp COSMINI M. It is recorded from Corbridge (on Drag. 38) by Oswald and Pryce (p. 213). Period, ? first half of second century. In a mixed deposit, above the Roman level.

$ILLIO$ Flake from the interior of a rather strongly concave base (? Drag. 32), badly discoloured by fire. This appears to be part of the stamp MASCELLIO (Lezoux). C.I.L. vii, 1336, 665, Cirencester. Site, in a mixed deposit above Roman level.

$PATR$ On form 18 with an almost flat base. Glaze good. The two letters OF are missing. For the dating of Patricius, cf. Hayter (*Chester List*, Nos. 93-95) and Atkinson (*Carlisle*, p. 76, footnote). Casual find.

Other stamps, on plain forms, found on this site, chiefly in 1914, are described by Hayter (*Chester List*, 1925). His numbers are here given in brackets, and his dating abbreviated.

(50) FELI·TE. cf. FELICEN TE. Mostly pre-Flavian.
 (63) IVNIVS. Probably 2nd century. (65) OF LABIO. Probably pre-Flavian. (82) MOM.=MOMMONIS. General date 50—80 A.D. (83) MONTAN.=MONTANI. 90—120 A.D. (133-135) VITALIS. Last quarter of 1st century. (150) Marduillus? Imperfect. Chiefly Flavian (69—96 A.D.).

Coarse Pottery.

(Plate xvii).

A fair amount of coarse pottery was represented, but two vessels only admitted of reconstruction. Early forms were more commonly met with than those which could, with some degree of certainty, be attributed to the third and fourth centuries. With the exception of some bits of cooking pots with "rustic" decoration and the rim of fig. 7, which came from the stratum below the layer of gravel, none was found in well stratified deposits. One small fragment of a beaker, decorated *en barbotine*, with brilliant metallic glaze, was found in shaft No. 13, below the layer of flue tiles; this kind of ware, rarely found in Chester, was made in the Rhine district, and belongs to the second and third centuries. Of the straight-sided, flanged bowls, two were represented both belonging to Bushe-Fox's forms 121, 122 (*Richborough*, 1926, xxxix), dated to the mid-fourth and fourth century respectively.

7. Storage jar. Hard brick-red clay; rim deeply fluted. Surface badly weathered, possibly by the action of frost. With Samian group (pl. xvi, 1-5). Late Flavian.

8. Jar, with an almost vertical neck. Lip with the lower half deeply notched. Neck with loop-like ornament in white slip. Shoulder with two fine grooves, and immediately below them a very narrow notched band. Fine, pale orange-red clay. The general technique of this vessel

seems to be of an early date ; but its form bears a striking resemblance to the third century jar from Margidunum (Oswald, *J.R.S.* xvi, v, 2).

9. Mortarium. Hard white clay. Flange decorated with floral scroll in orange-red slip. Rim tall, and separated from the flange by a deep groove. Upper (late) unstratified deposit. This seems to be very near to Bushe-Fox's form 98 (*Richborough Report* 1926), fourth century ; but our example may be earlier.

10. Mug with single handle, and deeply undercut rim. Hard fumed grey ware, and rather highly burnished. Badly broken, but almost all the fragments were found. Latter half of second century. Cf. Curle (*Newstead*, 256, fig. 31), and May and Hope (*Carlisle*, xii, 163, 164). An almost exact parallel was also found at Wroxeter in 1926, but this awaits description.

Found with the fragment of Samian, pl. xvi, 9, etc.

11. Dish with large half-round fillet and flange for lid. Hard brick-red clay. This vessel was found in an unstratified deposit during the excavations in 1914. It seems to be an early type, and belongs to the closing years of the first or early years of the second century.

12. Mortarium. Very hard orange-red clay with grey core. Near Bushe-Fox's form 102 (*Wroxeter*, 1912), dated late second or first half of third century.

Found with Samian mortarium, Drag. 45.

VARIOUS OBJECTS.

(Plate xvii.)

1. Sword-guard of bronze. Upper edge obliquely and bilaterally truncate, and faintly moulded ; lower edge moulded ; between the mouldings a narrow band of small godroons. Ends with a central boss and concentric ring. Greatest width of exterior, 5.2cm. ; greatest width of interior, 4cm. ; weight, slightly under 1½oz. This interesting relic was found during some alterations to Messrs. Brown & Co.'s premises in 1919, on part of the site included in plate xix. Mr. H. F. Brown kindly presented it to the

Grosvenor Museum shortly afterwards. The decoration of the lower portion of the guard closely resembles that of the example found at Hod Hill, Dorset, but the latter is of a different form, and it also bears a typical Celtic design.

In the absence of evidence regarding the nature of the deposit in which it was found, dating is hazardous ; and I have so far failed to trace an exact parallel.

2. Fibula of bronze. Harp-shaped type, with solid loop and hinged pin. Collar with two flat, reeded mouldings. Bow with a double row of oblique lines forming a chevron-like pattern.

Found with the grey mug (pl. xvii, 10) and the fragment of Samian ware (pl. xvi, 9) ; and, assuming that the deposit had not been disturbed, may belong to the latter half of the second century.

3. Lamp-holder of lead (two examples). Sides vertical, nozzle strongly produced. Handle flat, with the edges on the upper surface formed into roughly shaped mouldings. Total length 7in. Both examples were found together in the lower Roman stratum, slightly north of shafts 12 and 13.

4. T-shaped holdfast of iron ; butt end with nail *in situ*.

5. Graffito on fragment of roofing tile, XXI/, possibly part of official legionary stamp.

6. Graffito in two lines on fragment of roofing tile, written before baking. (1) /RINV/. (2) /TALIS. The first letter in this line is mutilated. It seems, however, to be a portion of T (?[VI]TALIS). The L, with its long limb bears a striking resemblance to those in the graffito on the tile from Holt, Denbighshire (Wheeler, *Rom. Occ. of Wales*, p. 103, fig. 42).

Other small finds not illustrated include the following :—

Counters. There were thirteen of these—six were made from side fragments of grey cooking pots ; four from Samian vessels ; one of thin micaceous sandstone ; and two from the heads of the femur of the ox. The last-named were not epiphysis from young animals, but had been broken away from mature bones.

Beads. Five examples, all of the melon-shaped type, and in blue frit.

Pin of bone. One imperfect example with spheroid head.

Iron ore. Some pieces of red hæmatite or kidney ore came from the lower stratum a little north-east of shaft No. 7. This may have been brought from the north-western districts of England.

Glass. There were two pieces of first century, pillar-moulded bowls—one in blue, the other clear glass. Portions of two small flasks or so-called lachrymatories were found together on the western portion of the site, in an unstratified deposit. Odd bits of square sided bottles and two bits of window glass complete the list of these finds.

COINS.

VESPASIAN. 69—79 A.D.

1. *Obv.* IMP CAESAR VESPASIAN AVG COS III. Head laureate r.
Rev. Eagle on globe, head r., wings displayed. In field, s.c.
Cohen 480. 2Æ (As.). 71 A.D.

ANTONINUS PIUS. 138—161 A.D.

2. *Obv.* ANT[ONI]NVS AVG PIVS P P. Head laureate r.
Rev. POT XIX. COS III. In field s.c. Concordia l., holding military standard in each hand.
Cohen 988. 1Æ. 155—156 A.D.

TETRICUS SENIOR. 268—273 A.D.

3. *Obv.* IMP C TE[TRICVS P F A]V[G]. Radiate and draped bust, r.
Rev. SPES [P]VBLICA. Spes, advancing l., holding flower in r. and catching up dress with left hand.
Cohen 158? 3Æ.

CARAUSIUS. 287—293 A.D.

4. *Obv.* IMP CARAVSIVS P [AVG]. Bust radiate and draped r.
Rev. PAX AVG. Pax standing l. holding branch and transverse sceptre. No mint mark.
3Æ.

CONSTANTINE I, MAGNUS. 306—337 A.D.

5. *Obv.* CONST[ANTINVS AVG]. Head diademed, r.
Rev. SARMATIA [DEVICTA]. Victory marching r.,
 holding trophy and palm: before her, a seated
 captive. Mint mark illegible.
 Cohen 487? 3Æ.
6. *Obv.* CONSTANTINVS MAX AVG. Bust diademed and
 draped, r.
Rev. GLORI[A EXERC]ITVS. Two soldiers facing, each
 holding spear and resting on shield; between
 them two standards.
 Mint mark, PLG Lyon.
 3Æ.

CONSTANTINE II. Caesar 317—337.
 Augustus 337—340 A.D.

7. *Obv.* [CONSTANTI]NVS IVN NC. Bust, laureate and
 cuirassed, r.
Rev. Legend cut off. Two soldiers facing; between
 them one standard. Mint mark, TRS. Trier.
 Minimus. In fair condition.
8. *Obv.* IMP CONSTANT[INVS] IVN . . . Bust diademed l.
Rev. [GL]OR[IA]E[XERCITVS].
 3Æ. In bad condition

CONSTANTINOPOLIS.

9. *Obv.* [C]ONSTAN[T]INOPOLIS. Bust of Constantinople,
 helmeted, l., with sceptre.
Rev. Victory l., holding spear and shield. Mint
 mark illegible.

CLAUDIUS GOTHICUS. 268—270 A.D.

10. *Obv.* [DIVO]CLAVDI[O]. Head radiate, r.
Rev. CONECRA[TIO]. Eagle with wings displayed,
 head r.
 Cohen 41? 3Æ. Posthumus struck by Quintillus.

CONSTANTINE I. AND CONTEMPORARIES.
(URBS ROMA.)

11. *Obv.* VRBS ROMA. Bust of Roma l., helmeted and wearing imperial mantle.
Rev. She-wolf, l., suckling Romulus and Remus. Above, two stars.
Mint mark, TRS. Trier.
Cohen 17—19. 3Æ. 330—335 A.D.

VALENS. 364—378 A.D.

12. *Obv.* D N VALENS P F AVG. Bust diademed and draped, r.
Rev. SECVRITAS REIPVBLICAE. Victory, l., holding wreath and palm branch.
Mint mark, P CON. Arles.
3Æ. In fair condition.

In their "Catalogue of the Coins in the Chester Museum" (*Chester Journal*, vol. XXIV, p. 162), Davies and Longbottom give a list of four pieces "found during the rebuilding of Messrs. Brown's premises in Eastgate Row, 1909—1914." These coins were all found either on or near the northern portion of the site (pl. xix), and represent the following Emperors:—

Vespasian (2), 69—79 A.D.

Nerva (1), 96—98 A.D.

Trajan (1), 98—117 A.D.



APPENDIX II.

S. MICHAEL'S STREET.

MESSRS. BROWN & CO.'S NEW EXTENSION,
1926-27.

FINDS OF THE MEDIÆVAL AND LATER PERIODS.

THIS appendix is a continuation of the report of the finds from this site; but it deals exclusively with the finds belonging to the mediæval and later periods.

POTTERY.

(Plate xxi.)

Large quantities of sherds of mediæval pottery came from shaft No. 18 (pl. xix), including many pieces of large green glazed pitchers with "slashed" decoration on handles and sides, and a thumbed down series of supports at the edge of the base. These appear to be characteristic of the early 14th century ware. Many sherds, including two small masks, may also belong to the same period or perhaps a little later; but the evidence for the dating of these is too uncertain.

Though of later date, the best finds came from shafts Nos. 7 and 22 (pl. xix). From these sites we secured two very interesting groups:—

Group I. All of these were found together in a cesspool (shaft No. 7, pl. xix). A section only of this pit was excavated. It was circular in outline, and had been cut completely through the floor of the Roman building into the solid rock. Its total depth below the level of S. Michael's Street was 13ft. At the bottom of the pit were one encaustic floor

tile (14th—15th century) and a bit of Roman roofing tile ; both objects may have fallen into the pit at the time when it was sunk. The pottery was lying just below the Roman level. Period, 17th or very early 18th century :—

1. Three-handled cup or tyg (restored, including all the handles). Pale red-brown clay, coated with dark brown to blackish glaze. Between the handles is a pattern in cream slip consisting of an arrow-like design with a large disc on either side of it. Height, 5.5in. ; diameter of rim, 4.6in. ; diameter of base 2.8in.

2. Three-handled cup or tyg (part of rim and one handle restored). Dark, slate coloured ware, coated with dark brown glaze. Between the handles a pair of roughly conical studs. Rather strongly ridged horizontally. Height, 5.2in. ; diameter of rim, 4.6in. ; base, 2.8in.

3. Large storage jar (partly restored). Brownish vitrified clay. Glaze brownish, patchy, and slightly metallic in places. Height, 9in. ; diameter of rim, 6.3in. ; base, 6.7.

4. Two-handled cup or tyg (partly restored). Red clay. Glaze brownish black and highly lustrous. Height, 4.6in. ; diameter of rim, 3.7in. (varies) ; base, 2.5in.

5. Tall, cylindrical jug (handle partly restored). Body strongly fluted horizontally. Clay and glaze brownish. Height, 6.8in.

Group II. The nine examples here illustrated (Nos. 6—14) all came from the cesspool, in the shaft for stanchion No. 22. This site was richer in broken pottery than all the others put together. Salt-glazed ware was particularly abundant, especially plates and dishes with basket work and pierced ornamentation, all belonging to the period of decadence in the manufacture of this fabric, corresponding to the years 1760—1780. One may safely assume, therefore, that the other pieces in this group belong to the closing years of the 18th century :—

6. Pot with two handles (imperfect). Hard buff-coloured ware, with streaky brown and yellowish glaze. Upper portion with a broad reeded band. Diameter of bulge, 6in., approximately.

7. Part of cylindrical mug with large handle, and two relatively narrow reeded bands. Clay and glaze similar to the preceding. Diameter of base, 3in.

8. Mug with single handle (restored). Dark buff clay, coated with brown and yellow, streaked glaze. Height, 5.5in. ; diameter, of rim 6.5in. ; diameter of base, 4.2in.

9. Mug with single handle, moulded rim and base. Brick red clay. Interior and upper portion of exterior, coated with yellow-brown glaze, with indefinite, horizontal streaks of reddish yellow showing through. Height, 3.5in. ; rim, 5.4in.

10. Dish of "variegated ware" (restored), resembling, somewhat, the grain of old Spanish mahogany. Flange broad, with three rouletted bands under a thin yellow slip. Glaze, brown, thick and brilliant. Diameter, 11in. ; rim, 1in. ; height, 1.9in.

11. Bowl of Delft ware, probably Dutch. Decorated with trees, birds, and plants ; in blue, greenish-blue, yellow and brown (ferruginous). Height, 3.7in. ; diameter of rim, 6.6in.

12. Plate or dish with crenulated or frilled edge (restored). Yellowish clay. Glaze thick, dark red-brown, shading to pitchy-brown in places. Diameter 8.6in.

13. Mustard pot and lids. Salt glaze.

14. Plate with basket work ornamentation. Salt glaze. 1760—1780.

The vessels described below were all casual finds :—

15. Stoneware bottle of graceful form (handle restored). Glaze pale brown, streaked horizontally and very closely pitted.

16. Stoneware bottle (handle restored). Glaze rich red-brown and finely vesicular in the region of the handle. One rouletted line just below the neck. Height, 8.4in.

17. Crucibles. Two imperfect. Probably 18th century.

18. Small ointment pot. Yellow glaze. 17th century.

19. Dish of marbled ware (restored). Edge notched ; interior of base with two small concentric beads. Fine pale red clay ; ground yellow, with pale brown and blackish-brown marblings. Diameter, 11in. Late 18th century.

GLASS.

(Plate xxi.)

20. Two bottles of blue glass. The taller example belongs, apparently, to the 17th or early 18th century ; the other, with square sides, seems to belong to a later date. In addition there were three large wine bottles, the forms of which agree with typical 17th century examples.

JEWELLERY.

Finger ring of brass or bronze, in the shape of a girdle with buckle attachment. This is inscribed within a moulded border :—:MATER.DEI.MEMENTO: The stops between the first and second words are in the form of quatrefoils.

COUNTERS.

There were five of these, all of them made from fragments of pottery belonging to late 18th century vessels. Two of combed ware ; two from a dish with red glaze, and cream slip decoration ; and one of Delft ware. Whether the game played with these pieces was one of chance or skill I do not know. But it seems to have been a favourite pastime in the late 18th century, as evidenced by the frequency with which the pieces have been found all over Chester.

TOBACCO PIPES.

Many examples occurred on various parts of the site. These include both early and late forms, ranging from the 17th to the 18th century. Two examples bear the City Arms with "Chester" in a scroll below, surrounded by a foliated design. Another is stamped "MAIRES & SON, CHESTER."

Other small finds include two small pieces of woollen-cloth forming the lining to a 14th century shoe. A thimble, and an early form of clasp-knife.

DEANERY FIELD.

SITE VII.

(Plate xxvii.)

THE first report on the excavations in the Deanery Field was published in the *Annals of Archaeology and Anthropology* (vol. XI, pp. 59—86) in 1924. Subsequently our excavations were continued in a more westerly direction, but owing chiefly to a lack of fencing we were obliged to close down early in the year 1926. Thanks to the Dean, however, we hope to renew our exploration of the field in the Spring of 1928. Pending this the Council agreed to defer the publication of a full report until the northern limits of the two blocks of buildings have been defined. Meanwhile, an interim report long since promised, will go to the *Liverpool Annals* for publication, early in the year 1928.

A short note is needed here to make the plan (pl. xxvii, site VII) intelligible. Briefly the architectural finds of 1924-26, consisted of a section of two barrack-blocks, running northwards from the wall in the Bishop's garden. These were divided by a road or lane 16ft. wide, on either side of which were a series of post-stones for the support of a verandah, the latter giving an average width of 8ft. The internal arrangement of the greater portion of the eastern block of barracks was very clearly revealed. In this the rooms or huts were divided into two unequal proportions as at Novaesium (*Bonn. Jahr.* 111/112), and elsewhere. The smaller rooms, next to the verandah, varied in length from 12ft. 6in. to 14ft. 10in.; the width 8ft. The inner rooms varied in length, corresponding to the smaller ones, their width averaging 14ft.

Hearths were found in five of the inner rooms of this block and two in those on the western side of the road.

The footings of the walls were for the most part intact and of a very solid nature, consisting of rock-rubble evenly

coursed with good mortar. In places where portions of the walls were left standing, these varied in thickness from 1ft. 6in. to 2ft. (see *Frontispiece*).

The entrances to the rooms were indicated in three instances, and in one case the stone in which the pivot to the door worked was left *in situ* in the cement floor.

The floors in nine of the rooms were of well beaten sand, and in three of cement. The former yielded a few interesting groups of pottery and many small finds of interest. Indeed, the sand floors seemed to have been used as convenient hiding places for meat bones and broken vessels, etc.

One of the most interesting finds was the inscribed marble tablet which came from the surface of the floor in one of the rooms of the western block of barracks. This reads as follows:—

GENIO . SIGN . .
 LEG . XX . VV
 T. FL. VALERIANVS
 COLLEGIS . D . D

“To the genius of the Standard-bearers of the Twentieth Legion ‘Valeria Victrix,’ presented to his colleagues by T. Flavius Valerianus.” Mr. R. G. Collingwood, to whom I am indebted for a transliteration of the legend, states that the inscription is cut in good rustic lettering of the second century.

In my first report on the excavations in this field (*Ann. Arch. and Anthr.* xi, p. 61) I stated that there was evidence that the earliest occupation dated to the beginning of the Flavian period (69 A.D.). In the light of more recent evidence one feels, perhaps, that one may have placed the date a little too early; be this as it may, we have now abundant evidence to show that the buildings could not have been erected later than the closing years of the first century, and that the lines of the north wall of the early fortress must follow, very closely, if not actually, the lines of the existing ones.

EDGAR'S FIELD AND THE ADJACENT ROADS.

SITE LXXVI.

(*Read November 15th, 1927.*)

EDGAR'S FIELD.

(Plates xxiii—xxv).

EARLY in October, 1927, excavations were commenced for laying the main pipe-line to take the sewage from the newly erected dwellings in the Brickfields. The trench was of a uniform width of 3ft. It passed in a continuous line obliquely across the field from a point close up to the roadway, bordering the River Dee (north-west), to within a few feet of the south-east corner of the field, where it intersected the main road leading through Handbridge. The depth of the trench at the north-west corner was 5ft. 7in., and at the other end, near the road through Handbridge, it reached a maximum depth of 11ft. The section, almost throughout its entire length, revealed three well-defined but clearly artificial deposits; two of transported soil and one of broken rock.

The first or upper layer was of quite recent formation. It consisted of dark coloured soil containing pottery belonging to the 18th and 19th centuries, cinders, coal, odd fragments of building material, etc. It varied in thickness from a few inches at the south-east end to 1ft. 6in. towards the north-west, and was decidedly patchy.

The second deposit may be sub-divided as follows :—

1. This for the most part consisted of excellent loamy soil, varying in depth from 5ft. to 3ft. It contained a fair amount of pottery, including many rims of mortaria, in hard white clay, the majority of which belong to the third and fourth centuries. This deposit gradually merged into

(2) Soil rather heavily charged with bits of rock, roofing slabs (at D. and E. of section), boulders, pebbles, and more late pottery. At its junction with the sub-lying broken rock in the section between D and E were a few pieces of decorated Samian which may be attributed to the latter half of the second century. There was, however, no definite line of demarkation between these sub-divisions, and moreover the deposit seemed to be somewhat confused towards the lower level of the cut.

The third or lowest deposit consisted almost entirely of broken sandstone rock, much of it in small fragments, or completely disintegrated. It was clean and bright, and free from the admixture of soil. There were two breaks in this deposit; one of about 25ft., at E (Pl. xxiv); the other of 55ft. at B. It was fairly evenly distributed over the central area, attaining a maximum thickness of 2ft. 6in. at D. South-eastwards, where the ground level rises rather abruptly, it reached a maximum thickness of 11ft., near the road through Handbridge where, in places, it was barely covered with soil. A few pieces of early pottery (Drag. form 18) were found in it at D; and several very small pockets of refuse occurred in the deeper deposit below the layer of gravel. These pockets contained meat bones (ox and sheep or goat), broken pottery, much charcoal and some fine silt. The first of these occurred at a depth of 8ft., and three at the bottom of the trench. The pottery consisted of large flagons, mortaria, dark grey cooking pots, Samian ware (forms 18, 27, 29 and 37), all characteristically early forms belonging to the closing years of the first century. Odd bits of imbrex tiles and roofers also occurred sparingly throughout the deposit.

Overlying the stratum of broken rock near the south-east end was a patch of coarse river-gravel (north-west of *F*, pl. xiv) 19ft. long, attaining a total thickness towards the centre of 1ft. 9in. Its south-east limit was 15ft. from the wall dividing the field from the road. This layer of gravel was rather heavily charged with charcoal, and from it there also came a good many pieces of pottery, including Samian forms

18-31 and 37; grey cooking pots heavily coated with soot, and amphorae. Three small flooring tiles, numerous bits of roofing slabs (p. 64), bits of pink mortar, and a good-sized chunk of iron slag. Many bones were also found in it, including those of the ox, the horn-core of a sheep or goat, and the basal portion of the skull of a horse.

The deposit of broken rock seems to have been the result of quarrying operations, hereabouts, during the closing years of the first century, as evidenced by the pottery found in it. And although the solid rock was not reached in the long trench, it was laid bare in the manhole at the North-west end at a depth of 8ft. 4in. That the legionaries got their building stone, at least in part, from this site seems quite clear, as close by they left the small quarry-faced bluff of rock with the figure of Minerva and the miniature cave, carved on its eastern face. In our deliberate excavations in front of this rock in 1923 (see p. 103) we also found a great mass of rough, broken sandstone which we traced to a depth of 8ft.

The thick deposit of soil over the rock tailings throughout the length of the cut is remarkable. That it had been placed there in part during the closing years of the second century, and in part also during the third and possibly also during the fourth century seems evident; but for what purpose it is not so clear. Judging, however, by the excellent nature of the soil, it may be taken as a fair inference that it was brought under cultivation. That a building or buildings existed in the immediate neighbourhood of the clump of hawthorns, was indicated by the presence of quantities of broken roofing slabs, and the inscribed tablet (pl. xxiv). Two roughly dressed blocks of sandstone also came from the lower levels of this deposit; and at one point (E in section I, pl. xxiv) were vestiges of what may have been the footings of a wall running obliquely across the trench, 6ft. 8in. below the surface. The sandstone blocks were arranged in two, quite definite, courses, but had not been bedded in mortar, though one bit of lime, about the size of a walnut, was found in the interstices of the structure. One cannot, however,

attach much importance to such flimsy evidence as this, and to follow up the structure was not possible.

HANDBRIDGE ROAD.

(Pl. xxv. Section 2).

This forms the South-east boundary to Edgar's Field, passes northwards over the Dee bridge and southwards to Eaton Road. Here the cut for the sewer extended South for a distance of about 80ft., then turned almost at right angles into Queen's Park Road. The natural rock was reached in this section at a depth of 2ft. 10in., and was continuous throughout the entire length of the cut. On its surface was a well-defined rut or channel giving an average depth of five inches, and approximately nine inches wide at the top (see cross section, pl. xxiv). It was perfectly smooth, and had no tool marks on its surface. Its northern end commenced 27ft. from the man-hole, from which point it extended in an unbroken line for 13ft. It was not quite parallel to the cut, being 1ft. 9in. from the east side at the north end, and 1ft. 4in. at the southern end. The presence of this rut on the surface of the rock is suggestive of an old cart track, used, it maybe, until the comparatively modern metalling was placed over it. Elsewhere, both north and south of the rut, the surface of the rock had been cut away for service pipes, drains and electric cables, which crossed the roads in many places. On the western side of the cut, and parallel to it, the rock had been excavated to a depth of 7ft. for the reception of a comparatively modern brick drain (see cross section, pl. xxiv).

QUEEN'S PARK ROAD.

(Pl. xxv. Section 3).

At the western end of this section, i.e., the Handbridge Road end, the rock was continuous only for a distance of about 13ft. It had, apparently, been quarried away, but to an unknown depth, as there was no trace of it at the bottom

of the cut, 8ft. 6in. below the surface of the road. Eastwards at a distance of about 50ft., the rock reappeared with a distinctly quarried face. It was exceptionally hard and difficult to quarry, having neither bedding-planes nor cleavage. Three feet only of the quarry faced section was exposed. From this point the rock sloped upwards rather sharply, and at a distance of about 24ft. it came very near the surface of the road.

The metalling, up to a point where the quarry faced rock commenced, gave an average thickness of 5ft. 6in. It consisted for the most part of rather poor material—broken rock, broken bricks, with a free admixture of soil and rubble. Below this were two well-marked deposits: (1), A large concave pocket or ditch filled with soft blackish earth, heavily charged with humus, much charcoal, coal, etc. It attained a maximum thickness of 3ft. 6in. at the western end, and was 15ft. wide at the top. Many fragments of pottery belonging to the 17th or the 18th century were found in it at the lower levels. (2) A bed of clean, broken rock or quarry tailings formed the eastern wall of the pocket or ditch. This extended as far as the quarry faced rock. No datable objects came from it.

The course of Watling Street between the Dee and Eaton Road has long been a matter of speculation. Archæologists in general have held that it passed in a more or less direct line from the South Gate of the fortress across Edgar's Field to Eaton Road. We had hopes therefore of discovering its exact course when the new cut was made. But no trace of a road was discoverable in any portion of the section, either in the form of metalling or of the usual sandstone slabs such as have been found elsewhere. In the light of our discoveries it seems quite clear, therefore, that we must look for its presence elsewhere, and possibly in a more easterly direction.

That Watling Street followed the line of a portion of Eaton Road has been clearly proved from time to time. Small sections in the allotments on the east side of the road which were explored this year, showed that its formation consisted of a layer of broken rock, bedded in well puddled clay, over

which were two layers of roughly hewn blocks of sandstone. As to its Roman origin there can be no doubt, as some bits of coarse pottery were found in and near it. What exactly ruled the course of Watling Street on the south side of the river must have been the lowest safe ford across the Dee, and a comparatively low gradient from its foreshore. One sees no difficulty in placing this a few feet east of Edgar's Field, where the ground has a decided dip or hollow, possibly in line with the existing bridge and the road leading south-east through Handbridge to Eaton Road. Moreover, the shallowest point of the Dee follows the line of the bridge which now crosses it, and could be easily forded when the tide is out, and little water is flowing over the bar.

If, as it has been recently suggested, the Romans built a bridge over the Dee, we must look for traces of its foundations either east or west of Edgar's Field, as wherever the road leading from it may have been, it seems quite clear, in the light of our recent excavations, that Watling Street did not cross the field at any rate during the last two centuries of the Roman occupation of Deva.

Inscribed Tablet.

(Pl. xxiv).

The lower left-hand corner of an inscribed tablet was found at a depth of about 4ft. 6in. below the surface at D in section 1 (Pl. xxiv). It is 9in. high, and $7\frac{3}{4}$ in. long, giving an average thickness of 1in. The inscription, within a moulded border, consists of four lines, of which the first three are more or less mutilated and incomplete. A fair amount of late pottery belonging to the third or the fourth century was found nearby, and the coins of Tetricus I and Tetricus II, a few feet away, in a south-east direction.

Mr. R. G. Collingwood, to whom a photograph of the find was sent, has kindly given the following details regarding the inscription :—

“ Line 1 seems to me to be *not* DE. I note that the letters of other lines are uniformly $\frac{3}{8}$ in. high : but the D, if it is a D,

is only $\frac{3}{4}$ in. high. It is therefore the lower half of a letter, and I think the letter in question is S. I therefore read

SE

IM

PATRE

. COS .

Clearly we have imperial titles. The last two lines cannot be a date in terms of consulships, because there is no consul's name beginning Patre . . . We have, rather, the phrase Patre Patriæ. Now the title *consul* regularly *precedes* the title *pater patriæ*; but in the 3rd century the title *proconsul* is often used by emperors, and is placed *after* *pater patriæ*. IM . . . clearly is not IM[P. CAES. etc.] but IM[P VII] or the like, *following* the emperor's name. And SE . . . cannot, I think, be explained except as SE[PTIMIVS] or SE[VERUS]. Severus Alexander is out of court because he was never saluted *Imperator*. Can we make the fragment fit *Septimius Severus*? We can; because he seems to be one of the latest emperors to use the formula IMP minus numeral at all freely in his title (this formula is exceptional after Caracalla), and on the other hand he seems to be the first to use the PRO COS title, which occurs on his Arch in Rome (. . . patri patriæ . . . tribunic. potest. xi. imp. xi. cos. iiiii. pro cos). Thus Severus fits all the indications of the fragment; and the whole inscription may have run somewhat thus:—

IMP CAES L SEPT

SEVERO TRIB POT ? ?

IMP ? ? COS ? ?

PATRE PATRIÆ PRO

. COS .

or, perhaps, it was altogether a longer inscription, the last lines running

PATRE PATRIÆ COS ? ? PRO

. COS .

and the other lines being longer to match. But one can't restore it with absolute precision because Severus's titles may vary so much in form and order of enumeration that one does not know in advance exactly how they will run."

THE POTTERY.**Samian (Terra Sigillata).**

(Pl. xxiii).

The number of fragments of Samian found in Edgar's Field was 138. These may be divided as follows:—

Form 29. One fragment only (Pl. xxiii, 25). Portion of lower frieze with a series of vertical, spiral godroons or the like. Above the frieze a row of beads. This fragment is from a relatively small thin walled vessel. In the stratum of broken rock 8ft. below surface, with pieces of the shallow dish, form 18 (small), etc.

Form 37. The fragments belonging to decorated hemispherical bowls numbered 35. All, with one exception, came from the lower levels of the stratum of earth, chiefly at E in section 1 (Pl. xxv). None belong to the Flavian period, and the majority do not appear to be earlier than mid-second century. Thus for example there was part of a bowl in the free style decoration, with animals, serpent on rock (Déch, 960, *bis*) etc. Cf. Oswald and Pryce, p. 103, xii, 1. Walters, *Cat. Brit. Mus.* M.62.

One fragment (Pl. xxiii, 26) possesses somewhat singular features. In this the decoration is in the form of arcades, the columns of which consist of composite motifs: at the base is a rosette of eight petals, and above it a winged siren supporting an astragalus from which a spiral arch arises. Below the arch (left) are two large concentric rings, the outer one formed of small pellets (Déch. 1182, Constancias, Illixo). Under the other arch is part of an indistinct motif. Arcading divided by panel of wavy lines terminating below with a rosette of pellets. Panel enclosing three rosettes of pellets, and above them part of two concentric rings as in arcade but with pellets within the inner ring. This piece came from the layer of gravel and was found in association with pieces of 18/31, 31, etc. Below the decoration is what appears to be part of a graffito in very faint relief. Period c. middle of second century.

Form 18. Ten fragments, all from the stratum of loose rock. There were no stamps.

Form 18/31. Thirteen pieces, including one stamp.

Form 31. Forty-two pieces. No stamps.

Form 27. Five pieces, all from the stratum of broken rock.

Form 33. Seventeen pieces, including two stamps.

Form 38. Four pieces. This bowl with its tall, collar-like rim and overhanging flange is usually very sparsely found at Chester. Not earlier than mid second century.

Form 43. Eleven fragments, including one lion-headed spout which had been chipped down and used, it maybe, as a counter or plaything. This piece is much worn, and the glaze pale orange red.

Form 72. One small fragment of this rare type was found quite recently by Mr. W. J. Williams.

Stamps on Samian.

1. **ATTI/**. On form 33. Apparently part of the stamp **ATTICI**. M. Walters (*Catalogue, B.M.*, M.79) figures a precisely similar stamp. Fabric of Motans. Cf. May, *Silchester*, p. 204.

2. **ALB/**. On 18/31. Within a large hatched ring, rather high cone. Glaze good. May be part of **ALBVCI**. Cf. Bushe-Fox, (*Wroxeter, Rep.*, 1912) and May (*Silchester*, p. 202).

At E in Section I. Not before mid second century.

3. On Form 33. This is imperfect and illegible.

Coarse Pottery.

(Pl. xxiii).

This all came from Edgar's Field. It occurred throughout the entire length of the cut, but was much more numerous in the stratum of soil between C and F (Pl. xxiv) than elsewhere. Leaving the bits of amphoræ out of count there were between six and seven hundred fragments. Of these one vessel only admitted of complete restoration (No. 17).

1. Flagon with wide and almost vertical neck. Rim flat above, but slightly outcurving. Handle with two ribs. Neck with two deep grooves. Hard, pale red clay, coated with buff-pink slip. In broken rock, 11ft. below surface, with the mortaria Nos. 3 and 4. Late first century.

2. Flagon with narrow neck, heavily moulded and deeply undercut rim, and three-ribbed handle. Hard, pale red clay thinly coated with cream slip. In stratum of broken rock at D. Late first century. Cf. Bushe-Fox *Richborough Report*, xxiii, 37, there dated mid or late first century.

3. Mortarium. Flange thick and obtusely rounded, inner edge angular with a rather deep, narrow groove immediately below it. White grit; some particles occur also in the matrix and on the flange. Hard, orange-red clay. In stratum of broken rock, 11ft. below surface, with flagon No. 1, etc. Late first century.

4. Mortarium. Similar to No. 3, but the flange is relatively thinner, and has more grit particles on it. In stratum of broken rock. Late first century.

For similar early forms Cf. Bushe-Fox, *Wroxeter Report*, 1912, Nos. 10-14.

5. Mortarium. Hard, pale, orange-red clay. Flange and concave portion of the interior coated with rather pale hæmatite wash. Brown and white grit. In stratum of broken rock, 8ft. below surface, with a piece of Drag. 18 (small). Late first century. This is a slight variant of Bushe-Fox's form 54, dated 80-110 A.D.

6. Mortarium with flange curved down and the bead rising slightly above it, there is also a very shallow but narrow groove on the inside just below the bead. Hard, pale red clay; flange and bead with hæmatite slip. Casual find.

Possibly a slight variant of Bushe-Fox's form 102, but the presence of a shallow groove inside (below the rim) and the hæmatite wash is suggestive of a slightly earlier period than late second or third century.

7. Mortarium of hard, white clay. Margin of flange rather strongly recurved and flat beneath. Grit particles

black and brown, few of them extending to bead and flange. Found with Nos. 9 and 13.

8. Mortarium of gritty, red clay. Near Bushe-Fox's type 118. In section south-east of E. Not earlier than mid third century.

9. Mortarium of hard white clay. Hammer-headed form. Grit particles extending to bead. Late third or the fourth century. Found with No. 7.

10. Mortarium of hard, white clay. Similar to last, but the flange is decorated with a zig-zag pattern in dull red slip.

11. Mortarium of hard, white clay, with reeded flange. Bushe-Fox's form 186, dated to about the end of the third or the fourth century (*Wroxeter Report*, 1912, p. 79). In all there were thirteen examples of this type of mortaria. All of them came from the stratum of transported soil, chiefly between C and E in section 1, pl. xxiv.

12. Flanged mortarium of hard, white clay. In stratum of soil south-east of E in section 1. Cf. Bushe-Fox, *Richborough Report*, p. 103, No. 102. There dated mid fourth century.

13. Mortarium of hard, white clay, with a faint median groove on surface of flange. This example was found in immediate association with Nos. 7 and 9, and also a typically hammer-headed form with reeded flange, similar to No. 11.

14. Fragment of bowl, form 37 or the like. Fine, hard, brick-red clay. Rim shallow. Decorated with a rather crudely executed ovolo border, without the tongue, done apparently with a pointed implement or stick. From the stratum of broken rock 11ft. below the surface. Late first century.

15. Small shallow, bell-mouthed cup of very fine orange-red clay. Foot-ring well formed. Stratum of broken rock 11ft. below surface. Late first century.

16. Shallow dish with outcurved sides, and heavy oblique foot-ring. Rather soft, red clay. Found in association with mortaria rims belonging to the late third or the fourth century.

17. Beaker with rather short, out-curving neck and simple rim; body broadly pyriform; foot-ring somewhat angular, base almost flat; two faint ridges at shoulder. Hard, fumed grey clay; core and part of interior ferruginous. Surface coated with an earthy patina, the sub-lying grey clay showing through in broken horizontal lines and bands.

This somewhat remarkable vessel is reminiscent of British ware and bears some resemblance to May's form 5 (*Silchester*, lxxv) but in our example the decoration is wanting. Found in the late deposit at B in section 1, pl. xxiv. It was the only vessel found which admitted of complete restoration.

18-20. Straight-sided, wide-rimmed bowls of fumed grey ware. The three vessels here illustrated were selected from fourteen examples. All are variants of the same form, and are decorated for the most part with latticed lines or hairpin loops often carelessly executed. All were found above the stratum of broken rock; but at various levels. A few were found with mid second century pottery, the rest clearly belong to a later period.

21-23. Straight-sided flanged bowls of fumed grey ware. Selected from a series of similar examples. No. 23 is evidently a transitional form between Nos. 20 and 21. Late third or the fourth century. Cf. Bushe-Fox, *Richborough Report*, xxix, 121, 122, there dated fourth century.

24. Fragment of beaker. Rim squat, almost flat at the top, and deeply undercut. Side well below the rim, finely rough cast. Fine, hard, pale red clay coated with smoky-buff slip. In stratum of broken rock, 8ft. level. Late first century. Bushe-Fox describes a close parallel from Wroxeter (*Report*, 1912, No. 36) which is dated 80-110 or 120 A.D.

Imitation Samian.—The rim of a flanged bowl, clearly of the mortaria class, coated with a soft dull vermilion wash was found in the late deposit at E in section 1. Two small fragments belonging to similar vessels also came from the same stratum. But this kind of ware seems to be rare at Chester.

Castor Ware. Three fragments of typical "hunt cups" occurred in the stratum of soil above the layer of broken rock, between D and E in section 1. They are the first of their kind recorded from Chester, though bits of plain undecorated ware resembling Castor are not uncommon, and seem to be of Holt manufacture. Our recent finds, decorated *en barbotine*, are:—

a. Part of large stag to 1. Gritty white clay, coated inside with slate coloured wash; outside with coffee-brown shading to dull orange-brown.

b. Part of dog to r. Clay and external wash as in a, inside orange-red.

c. Decoration: part of leaf ornament and rows of raised dots or studs. Colour wash as in a.

The first of these pieces was found at a slightly lower level than the inscribed tablet, and in close association with third or fourth century pottery. The other pieces occurred at low levels at or near E in section 1.

Cooking Pots.—Many fragments of these vessels were found. The majority are in fumed grey ware, three only being of brick red clay. A few of the rims are typical of late second century forms; there are six examples, however, with large hooked rims and heavily gritted clay, belonging apparently to the third or the fourth century.

Small Finds.

Four objects of bronze were found. A penannular brooch with "writhen knobs" (Cf. *B. M. Guide to Rom. Britain*, p. 56, fig. 64c.); two large studs, and a fragment of a polished metal mirror.

Stone Roofing Slabs.

Quantities of stone roofing slabs occurred in the section between D and E, and some also in the layer of gravel. Two of the more or less complete examples were of exceptionally small size. Here are the dimensions of one: Length from the nail-hole to the angular tip, 6.5in.; width 5.5 in. As the

fine rock from which these roofers were made was foreign to Chester, I submitted specimens to my colleague, Professor P. G. H. Boswell, and this is what he says about them: "I think there is very little doubt that the material comes from the cleaved Silurian (Ludlow) mudstones of the Clwydian Range. It may, of course, as in the case of similar samples you sent me once before, have been obtained at second hand from the Glacial Drift." Similar roofing slabs, of local sandstone, are illustrated on p. 64 text, fig. 1, but these are of the usual large, heavy type.

COINS.

Four pieces only were found, all of them in very bad condition. That of Marcus Aurelius must be considered a casual find, as it was taken from the field by the workman who found it, and was not handed over to me until some days later, then in a brightly polished condition, and almost ruined. Nos. 2-4 were found near E in section 1, pl. xxiv.

Mr. Harold Mattingly, of the British Museum, to whom I am indebted for the determination of Nos. 3 and 4, and also for his confirmation of the other coins, suspects that the barbarous radiates of Tetricus I were made locally, but examples in a better state of preservation are needed to show their exact style.

MARCUS AURELIUS (161-80 A.D.)

1. *Obv.* [IMP M ANTON]INVS [AVG TR P XXV]

Head laureate r.

Rev. In the field within a wreath

PRIMI/DEC[E]N/NA[LE]S/COS III/SC

Cohen 497. 1 Æ. 171-2 A.D.

TETRICUS I (268-73 A.D.)

Local imitations.

2. *Obv.* Legend cut off. Radiate crown r.

Rev. SALVS AVG or AVGG type.

3 Æ. c. 270-273 A.D.

Cf. Cohen 148.

3. Barbarous radiate probably Tetricus I.
Rev. Mattingly's type of LAETITIA AVG or AVGG.
Laetitia l. with wreath and anchor.
c. 270—73?

TETRICUS II (Cæsar and Augustus, 268—73 A.D.).

4. *Obv.* C PIV ESV TET[RICVS CAES]. Bust radiate and draped r.
Rev. [S]P̄E[S] [PVBLICA]
Cohen 97. 3 Æ.



**LIST OF AUTHORITIES AND BOOKS
REFERRED TO.**

- Atkinson, D.—*A Hoard of Samian Ware from Pompeii.*
Journal of Roman Studies. Vol. iv, pt. 2, pp. 27-64, pls.
ii-xvi. 1914.
- Atkinson, D.—*The Romano-British Site on Lowbury Hill in
Berkshire.* 1916.
Bonn. Jahr. = *Bonner Jahrbücher*, 111/112, 116.
- Bushe-Fox, J. P.—*Richborough. Report of the Research
Committee of the Society of Antiquaries of London.* 1926.
- Bushe-Fox, J. P. —*Wroxeter. Reports of the Research
Committee of the Society of Antiquaries of London.*
1912-13-14.
- Chester Journal.*—See *Journal C.A. Soc.*
- C.I.L.*—*Corpus Inscriptionum Latinarum.*
- Cohen, H.—*Monnaies frappées sous l'Empire romain.*
- Curle, J.—*A Roman Frontier Post and its People.—The Fort
of Newstead in the Parish of Melrose.* 1911.
- Déch.—Déchelette. *Les Vases céramiques ornés de la Gaule
Romaine.* Two vols., 1904.
- Guildhall Museum.*—*Catalogue of the Collection of London
Antiquities in the.* 1908.
- Hayter, A. G. K.—(“ List.”) *Report on Roman Potters'
Marks found in Chester. Journal of the Architectural,
Archæological and Historic Society, for the County and
City of Chester and North Wales.* N.S. Vol. xxvii. 1925.
- Haverfield, F.—*Archæologia.* Iv.
- Journal, C.A. Soc.*—*Journal of the Architectural, Archæo-
logical and Historic Society for the County and City of
Chester and North Wales.*
- Knorr. Cannstatt.—*Die verzierten Terra-Sigillata Gefässe
von C.* 1905.
- Knorr. Rottenburg.—*Die verzierten Terra-Sigillata Gefässe
von R.* 1900.

- May, T.—*The Pottery found at Silchester . . and deposited in Reading Museum.* 1906.
- May, T.—*The Roman Pottery in the York Museum.* Reprinted from *The Yorkshire Philosophical Society's Reports*, 1903, 1909, 1910, 1911.
- May, T., and Hope, L. E.—*Catalogue of the Roman Pottery in the Museum, Tullie House, Carlisle.* 1917.
- Newstead, R.—*Annals of Archæology and Anthropology.* Vol. xi. No. 2, pp. 59-86, pls. i-ix.
- Oswald, F. and Pryce, T. D.—*An Introduction to the Study of Terra Sigillata.* 1920.
- Walters, H. B.—*Catalogue of Roman Pottery in British Museum.* 1908.
- Williams, F. H.—*Synopsis of the Roman Inscriptions of Chester, the Deva of Antoninus.* 1886.

