ART. II.—*Excavations at Old Carlisle, 1956*. By R. L. BELLHOUSE, B.Sc.

Read at Penrith, September 14th, 1956.

I. INTRODUCTION.

THIS interesting site, comprising a large permanent Roman fort and its attendant *vicus,* is set in green open country a mile and a half south of Wigton and is traversed by the great Roman highway from Carlisle to Papcastle and beyond (CW2 lvi 37-61). While the fort itself captures the eye — and the imagination — by reason of its imposing rampart and ditch, the tumbled remains of buildings covering the unploughed land near by are no less interesting. Mr Birley's very full account in CW2 li 16-39, "The Roman fort and settlement at Old Carlisle", should be read in conjunction with this report, and especially p. 34, where the need for information about the *vicus* is stressed, both for students of Roman Britain and those who are absorbed in the study of the Dark Age in Cumbria. The excavations carried out in 1956 were intended as a preliminary to further larger-scale work, partly to assess the problems likely to be encountered and partly to gain some knowledge of the earliest and latest material in the *vicus*.

The decision to dig was made after the examination of one of Dr St. Joseph's air photographs which I had obtained to illustrate my paper on the Roman road from Carlisle to Papcastle. This showed clear outlines of rectangular buildings on the outskirts of the town in a grass field to the south of the modern road (O.S. field no. 771, Westward parish). Mr Birley thought that the north-east corner of this field would be the best place for an excavation as the buildings in it might be compara-

tively late and the stratification relatively simple. Proportionate scaling of the photograph suggested that the visible features were contained in a rectangle 100 ft. by 75 ft. and that they would be revealed in suitably placed 10 ft. squares laid out on a 100 ft. grid (as at Burrow Walls). The advantages of area excavation by this method are obvious; apart from the ease with which further squares can be opened in subsequent seasons, the work, which must of necessity be limited in time, is limited in space also, and with everything under control, there is no temptation to open haphazard trenches in an attempt to follow walls and recover plans of buildings. The work was planned in two phases, and I enjoyed the very competent assistance of Mr Brian Blake throughout, both on site organisation and as official photographer. The first phase, planned for 9-14 April 1956, was to be a thorough sampling of two limited areas as speedily and economically as possible. The results from phase I are recorded in some detail in this report, together with an assessment of the problems met and which remained unsolved because of our limited knowledge. Phase II followed in October 1956, as a disciplined area-excavation. One skilled man only was hired for turf-cutting and removing plough-soil, and the rest of the clearance was done by volunteers (through the C.B.A. Calendar) from afar and young people from Brookfield school. Members of the Carlisle Regional Group helped when other duties allowed them, and a number of local people freely offered their services. At one time no less than 16 enthusiastic and remarkably skilled volunteers were all hard at work. My special thanks are due to Mr Wilfred Dodds and Mr Peter Salway for their personal services and to the D.U.E.C. which allowed them to come over, to Mr Peel of Orton Rigg who allowed us to dig in his field, and to the Carlisle Regional Group which voted me up to £15 for expenses. The Council of the Society also granted £25 towards the cost of this work and further work on Roman

sites on the Cumberland coast. Mr Richardson and Mr Mackley deserve special mention for their sectioning of the pit F 3/G 3 under very trying conditions.

II. PRELIMINARY SURVEY.

The field chosen is in permanent pasture and has not been ploughed for more than 30 years; there are some slight humps to be seen and a wide area is very solid under the plough-soil when probed. The edge of the old quarry to the west shows much building-stone, no doubt dumped there after being ploughed up after the enclosure of the field. The large field to the east has been much ploughed and during the April dig was being worked up for potatoes. Very little stone was turned up by the plough but Roman pottery was everywhere to be seen, and also patches of burnt clay. The field immediately north (on the other side of the modern road) has never been ploughed, and in it the grass-grown mounds of ruined buildings cover the ground. The three fields clearly represent three stages in the reduction of a ruined town to arable land, and in the middle field we could expect to find late buildings, much ploughed down, but nevertheless with sufficient structural detail surviving to account for the marks on the air photograph.

III. THE EXCAVATIONS. PHASE I.

After setting out the squares and lining up the balks for turf-cutting, the control pit, 3 ft. by 3 ft., was opened clear of the site and taken down to the boulder clay, which was reached at 4 ft. This gave us our first glimpse of exciting possibilities; the first 24 in. of plough-soil and mixed material yielded many pieces of Roman pottery. A second mixed layer over 12 in. thick, containing nodules of burnt clay, puddled clay and charcoal, rested on a 3 in. band of compact burnt clay, bright red in colour. Below this was a thin black line resting on a grey pasty clay merging into red boulder clay. A second

series of pottery came from just above the burnt layer.

The grey layer is the upper horizon of a much trodden fossil soil; no sign of turf could be seen above it and the black line noticed above appeared to consist of crumbled charcoal. It is reasonable to expect the turf to be worn away near dwellings, particularly on the outskirts of towns.

Turf and plough-soil was quickly removed from nine squares (A 3, A 4, A 5, A 6, and F 10, G 10, H 10, I 10,

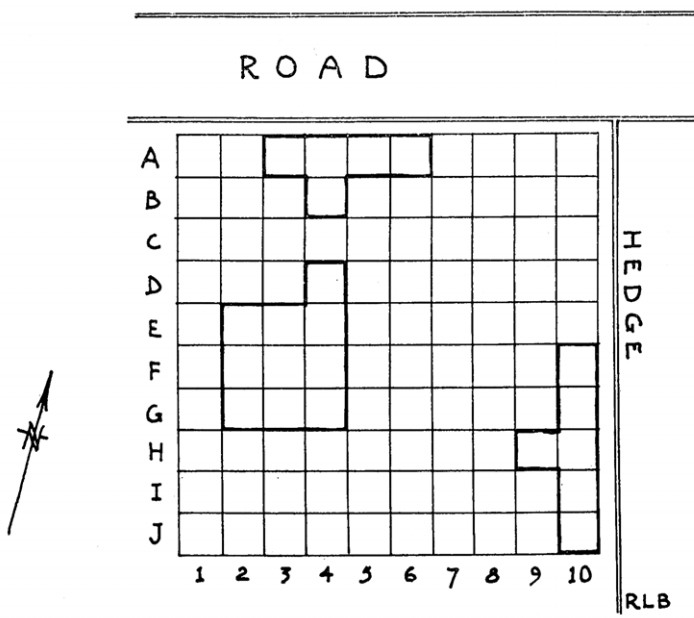


FIG. 1.

and J 10), and at once Roman pottery was found in every square. Below plough-soil in A 6 there was much broken thin sandstone. This was later satisfactorily identified as broken roofing slabs, and some pieces of blue-grey slate soon appeared in adjoining squares. All squares contained masonry debris immediately below plough-level, and our hopes of finding late buildings (as suggested by

the air photograph) reasonably intact were quickly dashed. Traces of walls and paved floors were revealed in squares A 4, A 5, A 6 and G 10, all very much disturbed by the plough. Slabs in G 10 showed plough-scars. The finds above the floors included small fragments of window-glass and some nails. Considerable quantities of fallen stone mixed with soil were found in squares A 3, A 4, F 10 and G 10, while H 10 produced a solitary large sandstone roof-slab with nail-hole.

Square J 10 contained some cobbles in soil just below plough depth, and below this a distinct mottled clay surface containing red nodules of burnt clay, charcoal and soil. Twelve inches of this material was removed over half the square; its lower levels contained much pottery, and a compact burnt surface was exposed. This layer was exactly like that in the control pit. It was 6 in. thick and consisted of nodules of clay burnt to brick interspersed with charcoal. I preserved some nodules from this level which showed the parallel grooves left by the burnt-away wattling. The heat of destruction had been intense enough to fuse a piece of Roman glass and to form clinker.

Part of this layer was next removed and the grey natural surface was found below, separated from it by a thin streak of charcoal and burnt rushes, and below the grey the red boulder clay was proved in the N.W. corner. During removal of the compact burnt layer a large thin slab was found with its surface level with the top of the layer; we left this in position as we could not tell how far it was embedded in the balk. On either side of this stone, in the N. side of the square, appeared the beginning of a layer of puddled clay nearly 4 in. thick. This divided the upper mixed burnt layer from the lower compact burnt layer.

A feature visible in the floor of the square running N. and S. on the centre-line looked like a typical sleeper-trench. This had already been observed in the adjoining square I 10, where further investigation proved it to be

the trench for a modern tile-drain. This square (I 10) did not promise much; the two burnt layers were found, interrupted at the N. side by a wide deep trench filled with large cobbles and soil, possibly foundations for a later building (thus explaining a further mark on the air photograph); a similar cobble feature was seen in square G 10, but associated with a very great deal of masonry debris and soil. The intervening square (A 10) was likewise full of fallen stone and soil, below a thin layer showing scattered pieces of burnt clay; several large slabs at the centre of the square were sharply tilted and overlaid by a band of puddled clay.

Workers were withdrawn from these last three squares in order to concentrate our forces elsewhere, particularly in an additional square, now opened (H 9), where part of a worn flagged floor had already been exposed. Part of this was taken up and found to be resting on 2 in. of soil below which another solid burnt clay layer appeared, separated from a layer of puddled clay by a thin streak of charcoal. It looked as if the features beginning in square J 10 would be more fully revealed here, and this proved to be so. The puddled clay, 5 in. thick, lay over a rough stone pavement resting on soil. Shrinkage of soil had taken place and one large flagstone had been broken over an underlying stone, causing the layers above to curve over it. A lower burnt layer divided from the natural clay by a thin line of charcoal came next and completed the sequence.

Considering squares J 10 and H 9, we could now make an attempt to interpret revealed features, assuming that the destroyed buildings were of wattle and daub with puddled clay floors. Burnt clay on puddled clay represented *wall fallen inwards,* burnt clay on boulder clay *wall fallen outwards*; while material scattered some distance from the centre of destruction would be less compact, thus the mixed upper burnt level in J 10 might be scattered material from the upper compact level in H 9,

while the lower compact layers on the boulder clay in both squares would be the same feature. The fallen stone overlaid by puddled clay in square H 10 appears to be of the same period as the lower pavement in H 9 and suggests that substantial stone buildings existed side by side with clay hovels.

Further light on this problem came from square F 10, where the removal of tumbled masonry revealed a thin red and black level resting on a gravel spread. Below this large blocks of fallen stone and cobbles lying in soil lay directly on 6 in. of the puddled clay, seen elsewhere, which itself lay on the natural clay. The stone and soil capped by a gravel spread were undoubtedly preparation for rebuilding, and the compactness of some of the burnt wattle, particularly when overlaid by clay floors, suggest the same conclusion. The remaining squares (A 3-6) and the additional one (B 4) showed lower levels entirely different from those already described. There were no clearly defined burnt layers, although scattered lumps of burnt clay appeared below the remains of the latest buildings. Square A 5 revealed one course of a wall and part of a flagged floor set on 2 in. of soil. Beneath the wall were traces of turf and beneath all a mixed level containing burnt clay lumps, charcoal, soil, a lenticel of puddled clay and some building stone. In this were embedded some large pieces of amphora. At a depth of 3 ft. part of a second paved floor was exposed, sloping slightly downwards to the E., overlying a dark mixed occupation layer 12 in. thick. At bottom we found the natural surface with a few thin sandstone flags on it at a depth of 4 ft.

The adjoining square (A 4) showed similar features; part of a flagged floor, much fallen stone in soil, roofing stone and slate and traces of burnt clay, all lay on a more definite burnt layer than the comparable one in A 5. 2 ft. from the surface thin broken roofing-slabs divided this level from the underlying occupation debris which

showed no feature until natural clay was found at 4 ft. This thickness of just over 2 ft comprised a featureless mixture of soil, pebbles, burnt clay and charcoal and diffuse patches of reddish clay.

Square A 3 was perhaps even less informative. Nearly 2 ft. of tumbled stone in soil had to be removed before any feature was seen. Under this encumbrance was a bed of small cobbles set in soil, occupying two-thirds of the square and 18 in. thick; this rested on a bed of larger cobbles of unknown thickness, the whole bounded on the W. by a roughly built stone drain, later proved to be modern. Beyond the drain the square contained fallen stone in soil.

Square A 6 did not receive as much attention, as time was running out. We removed 3 ft. of mixed soil and fallen stone before abandoning it, but it showed, under the balk between it and square A 5, a deep trench packed with cobbles roughly in a line parallel with the wall in A 5.

Finally square B 4 was investigated. Removal of turf and plough-soil revealed a level of tumbled stone in soil showing traces of burning. A clutter of roof slates in the S.W. corner was noted and preserved for further examination. One piece had a nail hole in it with an aureole of iron staining, interesting proof of the method of attachment. At 2 ft. from the surface a flagged floor was encountered, which seemed to correspond with the floors in squares A 4 and A 5 and to be dipping at the same small angle. When the first flags were taken up more were revealed below, all so closely fitted together that it looked like a natural formation. However, work with hammer and chisel proved three closely set courses of heavy flagstones lying on 18 in. of grey occupation-debris; the natural clay was found at 4 ft. The floors must once have been level and their present slope is readily explained by unequal shrinkage of the made ground below.

IV. SUMMARY OF PHASE I.

The most significant fact emerging from Phase I is the complete absence of Dark Age and medieval pottery. We found not one solitary fragment between the samian cup and the Victorian tea-pot. Likewise, we cannot report the finding of any Crambeck or Huntcliff ware. As a matter of interest on this point, I asked all on the site to make a circular tour of the adjoining ploughed field and to pick up all pottery they saw; the result was a bucketful of Roman sherds.[1] This material has been preserved so that the assemblage can be compared with the assemblages from the different levels examined. The plough-soil also showed isolated patches of burnt clay and the finds were in nearly every case found near such patches.

The available air photographs clearly show ribbon development along both sides of the main Roman road and of the approach roads to the E. gate of the fort; the faint marks which may represent side streets do not suggest any degree of town-planning. While our finds indicate two types of buildings at the same periods, the substantial stone ones with flagged floors and stone and slate roofs front on the roads and are backed by wattle-and-daub houses with clay floors. After two clear periods of destruction, rebuilding seems to have taken place on exactly the same pattern as before. Squares A 3-6 show traces of late buildings on great quantities of masonry debris and soil overlying a thick accumulation of fairly typical "back door" humus. The diffuse levels of burnt clay noted in these squares might well be scattered material from coeval clay houses.

The two clearly defined burnt levels in squares H 9/10, I 10 and J 10, present a problem because in the east side of H 9 they are clearly separated by a puddled clay floor on stone and soil. The rough pavement does not extend very far in any direction, and indeed, was proved to end near the halfway line (N. to S.) in square H 9, where the

[1] One piece showed the graffito TARUTI (JRS xlvii 233).

associated soil layer also thins out and the upper and lower burnt layers are as in square J 10.

Provisional assessment of the pottery indicated occupation in this area during the second and third centuries. Widespread destruction by fire of clay and wattle buildings, evident in the layers of fired clay, must be related to the historic disasters, but all the sherds above the burnt levels must strictly be labelled "unstratified". Caution on this point was proved to be justified as the work proceeded under Phase II.

V. PHASE II. FURTHER EXCAVATIONS.

Digestion of the results obtained made it desirable for more work to be done as soon as possible. An area excavation was arranged for October 1956, but this time we were forearmed by our previous experiences. It was clear that we could not hope to find walls or undisturbed floors of the latest buildings, and also that we would have to throw out a substantial quantity of fallen stone and soil before we could examine the earlier structures below. We laid out twelve further squares on the same 100 ft. grid as before and began work; however only ten of them were opened, and only eight were finally cleared to the natural.

Removal of turf and plough-soil quickly revealed the all too familiar jumble of broken sandstone and soil, but in D 4, E 4, F 4 and G 4 we found the substantial cobble foundation of a late building; facing-stones roughly aligned, but plough disturbed, remained in F 4 to indicate the top of the foundations and by inference the ground-level at the time of construction. We sacrificed E 4 in order to section the foundation and get some idea of the associated levels; our choice was fortunate in that we found no structure to slow our progress, only a thickness of stone and soil, a burnt layer and then the natural clay. We confirmed that this late building stood ankle-deep in the debris of its precursors; its foundation-trenches

penetrated almost to the natural, and this fact at once meant that we must expect early pottery at the surface. Scattered nodules of burnt daub in the upper levels may likewise have come from the lowest levels when the trench was dug.

The lenticels of puddled clay in the stone and soil level, noted in Phase I and found again, may have come from lower levels in the same way, but as they are not definitely associated with burnt clay, I do not think this is likely. The clay may be fallen stuff when the walls were being built and daubed, in which case it serves as a useful indication of relative ground-level.[2]

Square D 4 was abandoned when we found a modern drain running across it; reference to our records confirmed that it was a continuation of the drain in A 3. I shall not describe the progress in detail in each square, but refer the reader to the sections and plates. We concentrated on six squares, and found the burnt level in E 3, F 3 and G 3 lying on puddled clay floors; F 3 showed a possible post-hole above the red and a roughly paved floor below, which extended into the next square, F 2.

In G 3 we found a stump of burnt clay wall when we removed the burnt layer and puddled floor; in G 2, nothing but tumbled stone and soil on the natural. As time was getting short we concentrated our effort in two directions, first the preparation of sections and second the examination of the two areas where the levels showed considerable subsidence. As the sections show, subsidence was due to the presence of pits whose filling had shrunk. I had hoped they would prove to be rubbish-pits but I was disappointed; very little pottery came from them and it was all late. The pit in the S.W. corner of E 3 contained pasty grey coarse silt, burnt animal and bird bones and ash. There must have been much organic matter as well at one time and its gradual disappearance would account

[2] In square E 3 scattered roof-slates lay flat just above the clay level, as if they had slipped from a roof — another indication of a ground surface.

for the subsidence. The pit under the balk between F 3 and G 3 had been systematically filled with burnt house debris. At bottom, at a depth of 6 ft. 6 in., were two thin layers of peaty humus and small twigs separated by bands of fine clay. The pit sides were very steep and seemingly quite freshly cut, and I think they are simply early clay pits.[3] It is very unsatisfactory to record that no early pottery was found in either of them, but we have now the explanation of the sloping floors noted before.

One other point needs mention, namely the extremely clean state of the clay floor in F 3 and G 3 as compared with the filth on the flagged floor in E 3. The section along the E. sides of these squares suggests the addition of two extra rooms to an existing building, and the destruction of the whole range before the additions could be used.

The surface on which the clay floor rested in square G 3 was examined with some care. This grey level is of course the natural soil and its surface was covered with tiny fragments of charcoal and finely crushed calcined bones. The grey colour, pasty nature and occurrence of bleached mineral grains make this material exactly like the soil in farm gateways, and other places, where there is much treading and kneading of the ground in all weathers.

The filling in of the pits and the thickness of trodden soil clearly illustrate the expansion of the built-up area southwards, away from the main road, no doubt after the ribbon-development had reached and been arrested by the steep slope down to the Wiza. Clay for houses adjoining the road was dug from pits behind the building plots. As these were lengthened by the addition of further rooms, the pits were filled with burnt material, but before any great degree of natural silting had taken place. The area of trodden earth beyond the filled pits was itself soon overlaid by house floors.

[3] Experiments with mottled boulder clay freshly dug from the side of this pit produced a material indistinguishable from the puddled clay of the Roman floors.

VI. THE SECTIONS.

Three important sections have been drawn and they illustrate both our findings and our difficulties.

Section I, E. to W. along the S. sides of squares G 4, G 3 and G 2, is comparatively simple and differs little from Section II which is parallel to it along squares E 4, E 3 and E 2. Both show the great depth of Roman soil below the new clay floors, and the late foundations penetrating all levels. To the right of each section there is a considerable thickness of stone and soil resting on the Roman surface. This is debris piled up in Roman times, almost indistinguishable from the modern stone-robbers' traces, subsequently levelled off by ploughing. The modern plough-soil is quite distinct in all sections.

Section III shows the same floors, some on the original surface some on filled ground. The clay-pit under the balk (F 3/G 3) has been systematically filled and capped by flagstones. Cross walls can be inferred, which would divide the house into three adjoining rooms. Above the burnt levels can be seen the great thickness of stone and soil, and here it seems possible to divide this into two, the lower representing a period when the area was levelled off ready for rebuilding, and the upper resulting from modern stone-robbing. The boundary between the two is marked by lenticels of puddled clay and broken roof-slabs lying flat.

APPENDICES.

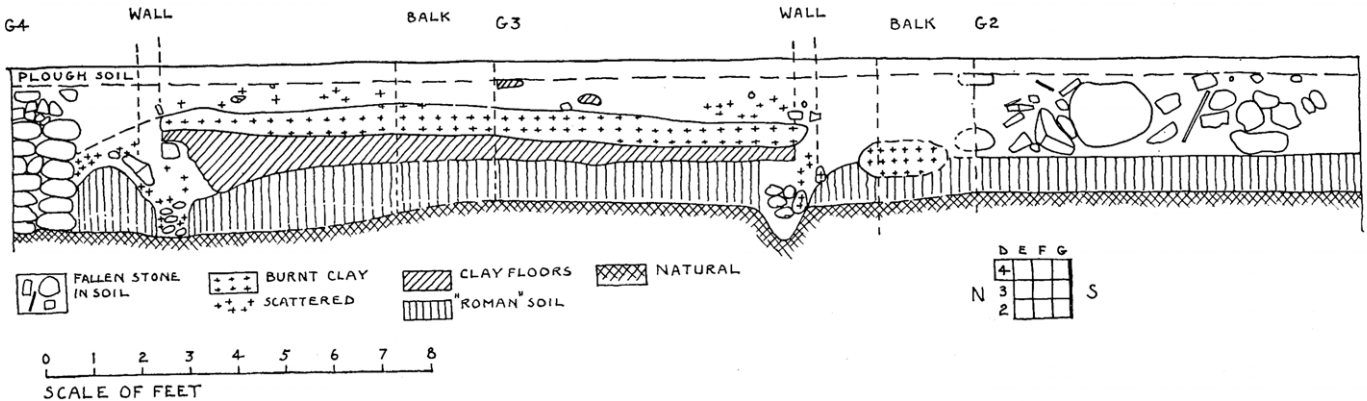
I. *Coins.*

One copper and one silver coin were found. The copper was too worn to be identified; the silver one was very well preserved, a denarius of Vespasian.

Issue date: A.D. 72-3.

Obv.	IMP CAES VESP AUG PM COS IIII. Bust right.
Rev.	TRI POT across field, Vesta seated to left holding simpulum.
Mint.	Rome.
Refs.	RIC 49. BMC 70.

SECTION I.



SECTION II

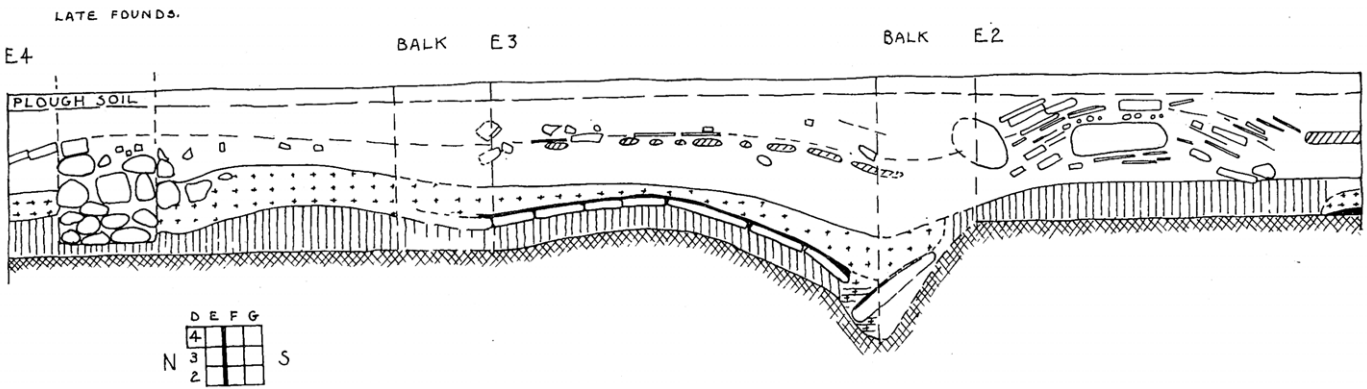


FIG. 2

SECTION III.

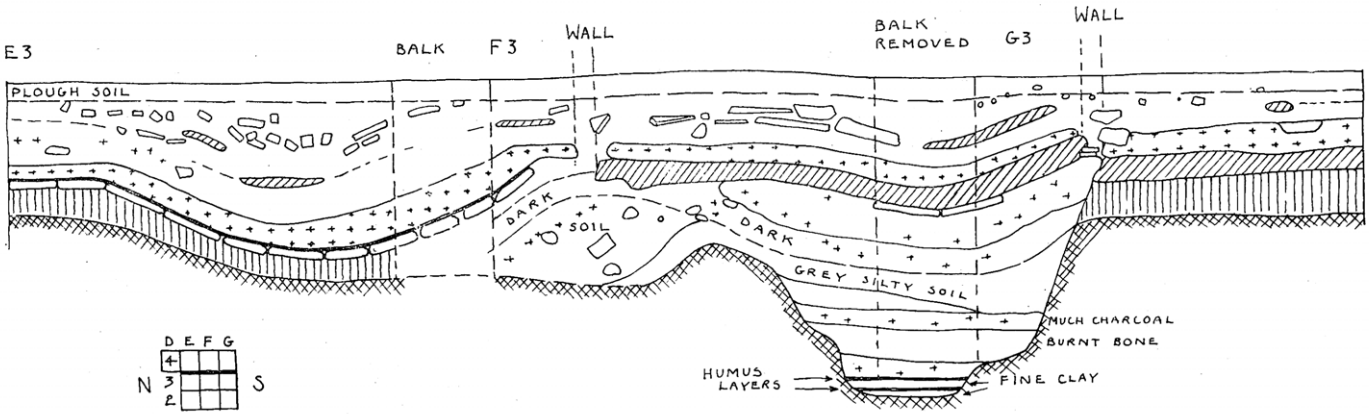


FIG. 3.

II.

The slate was examined by Mr T. R. Stewart who identified it as coming from Borrowdale. (An oval slate with two peg holes found in 1958 on the site of the fort at Beckfoot had been fashioned from Skiddaw Shale.)

III. *Miscellaneous.*

(a) Only a few small pieces of glass were found, readily identifiable as either window glass, or fragments of bottles and bowls.

(b) Nails of many sizes occurred in the later levels, and some corroded masses of iron which defied identification.

(c) A whetstone, unworn, of grey sandstone, 3 in. long, 1½ in. wide, and ⅝ in. thick.

(d) Pipeclay. Two pieces, the head and feet of a "VENUS", apparently not from the same statuette, similar to that on view in Tullie House. (Cf. CW1 xv 504 f., description with photograph.)

(e) Copper. A heavy ring, badly corroded, overall diameter 1¼ in., thickness of metal ¼ in.

(f) Lead. A small block 2 in. by 1 in. and ⅜ in. thick.

IV. *Metal objects from Old Carlisle.* By Robert Hogg.

(a) *Steelyard weight.*

Bronze hollow casting with leaden filling. In the form of a head with loop suspension. The loop shows considerable wear from the long use of the object. Length 1¾ in. Weight 140 grammes.

The modelling of the head is in native style, a special feature of which is the treatment of the hair which is carefully arranged in symmetrical folds about the face. The subject is probably a representation of a native deity very difficult to identify because of the absence of attributes, but the lentoid-shaped eyes, the thick pursed lips, the long drooping moustache, beard and side-whiskers suggest that the portrait was inspired by a native model.

(b) *Silver P-shaped fibula — in very fragmentary condition.* (Fig. 4 is a restoration of it.)

Length about 3 in. R. G. Collingwood (*Arch. Roman Britain* 255) dates the type which is the precursor of the cross-bow to the early 3rd century.

The specimen is of delicate and exquisite workmanship. The cross-bar is hexagonal in X-section and carries through its centre

FIG. V.—Steelyard weight, Old Carlisle, 1936.

facing p. 30.

an iron spindle on which hinges in the centre of the bar slotted for this purpose, the iron pin. The bow of the brooch is a flat strip of metal 7/16 in. wide ornamented with applied strips of metal attached in pairs to the edges of the bow. A large knob

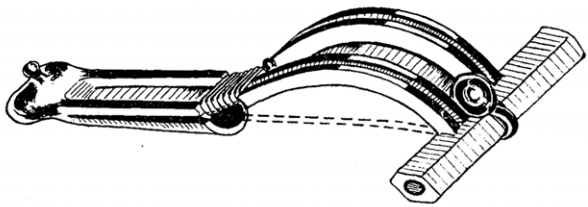


FIG. 4.—P-shaped fibula, Old Carlisle, 1906.

of metal ornaments the top of the bow and serves to strengthen the attachment of the bow to the cross-bar. There is a much smaller knob on a pedicel ornamenting the lower part of the bow but whether there have been others between this and the upper knob cannot be detected. Between the bow and the lower part of the brooch there is a restriction which is strengthened by a wrapping of silver wire. The lower leg is 5/16 in. wide and some 1¼ in. long and consists of a flat strip of metal ornamented with single strips attached to the edges and carrying on the rear face the metal clasp for the pin. The brooch terminates in a swelling ornamented with a knob and pedicel similar to that on the bow.

Although as a class the P-shaped brooch occurs frequently in northern Britain (e.g. Corbridge, AA3 ii 184) a precise parallel to the Old Carlisle example cannot be traced.

The good standard of workmanship of both the steelyard weight and fibula is in the best tradition of native craft. The two pieces are important additions to the record.

(c) *Bronze bolt-head from the type of bolt used to secure locks* (v. Newstead: Plate LXXVIII, fig. 10).