V.—EXCAVATIONS AT BROUGH LAW AND INGRAM HILL

George Jobey

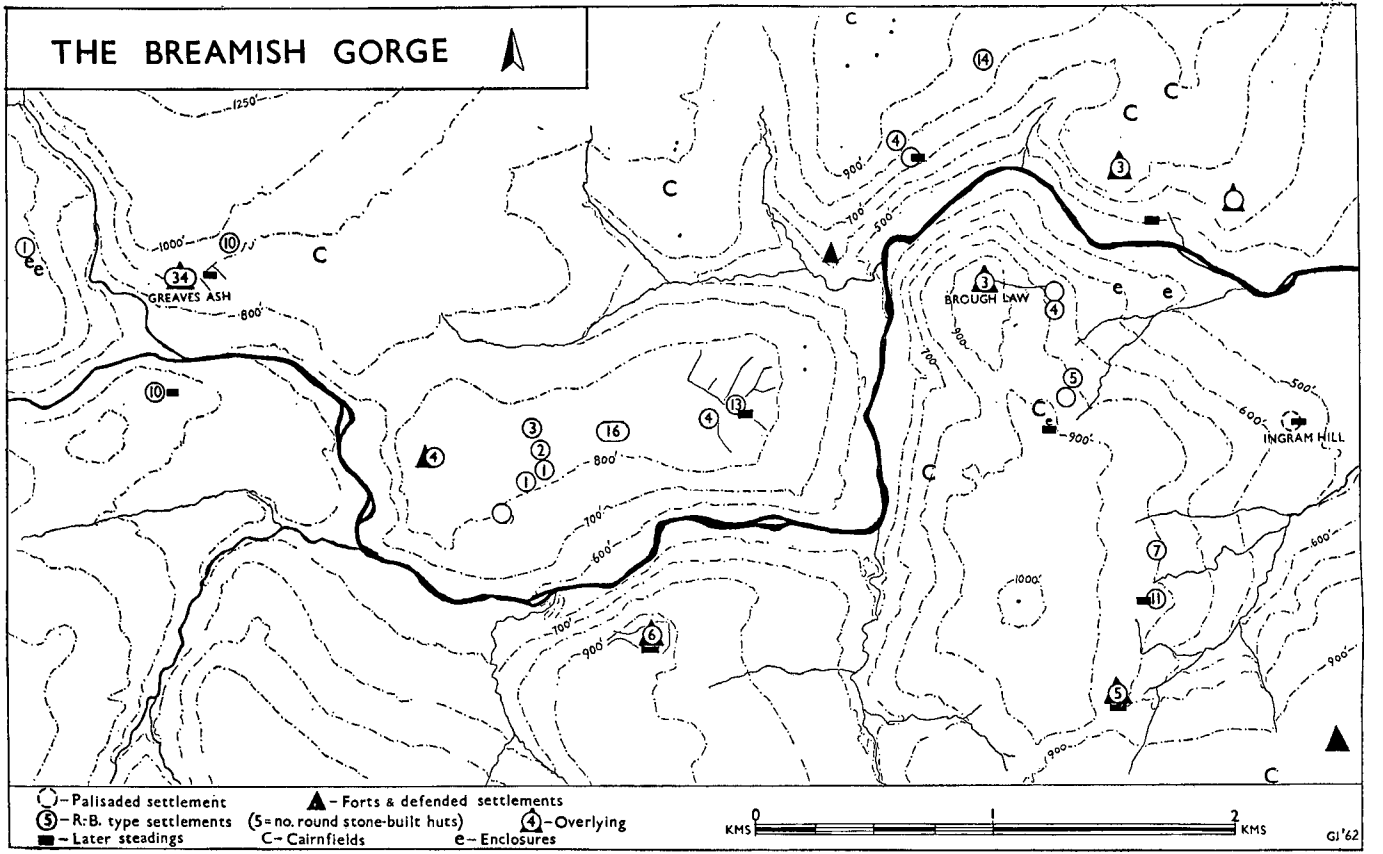
SUMMARY

Excavation on these sites, which lie on the same hill about 1 km. apart, was directed mainly towards obtaining material for radiocarbon assay. Brough Law hill-fort, bivallate and entirely stone-built, has a double outer face to the inner rampart. No earlier palisade was found. Material from beneath the rampart, possibly consistent with its construction, yielded a date of 245 B.C. ±90 (I-5315, half-life 5568). The settlement on Ingram Hill, a palisaded site followed by a slight ditch and bank with palisade, was suspected of being later than the normal *floruit* of palisaded sites. Material from the later bank gave a date of 220 B.C. ±90 (I-5316, half-life 5568).

Introduction

Excavation on these sites was limited both in scope and objective but forms part of a wider programme directed in the first instance towards contextual refinement of early settlement patterns within a restricted geographical area. In its range of field monuments this area is representative of many parts of the Border country and has the additional advantage of lying within the Northumberland National Park, where, with minimum effort and resources, it may be possible to preserve some reasonably complete archaeological "landscapes" of various periods. Both sites had been excavated in the past and in this instance, for reasons which will be given, attention was directed mainly towards obtaining material for a more absolute form of dating than the artefacts allowed.

I am indebted to students of the Department of Adult


THE BREAMISH GORGE
1250'
1000'
800'
900'
700'
500'
600'
GREAVES ASH
BROUGH LAW
INGRAM HILL
C
e
– Palisaded settlement
– Forts & defended settlements
– R:B. type settlements
(5 = no. round stone-built huts)
– Overlying
– Later steadings
C – Cairnfields
e – Enclosures
KMS
0
1
2
KMS
GJ'62

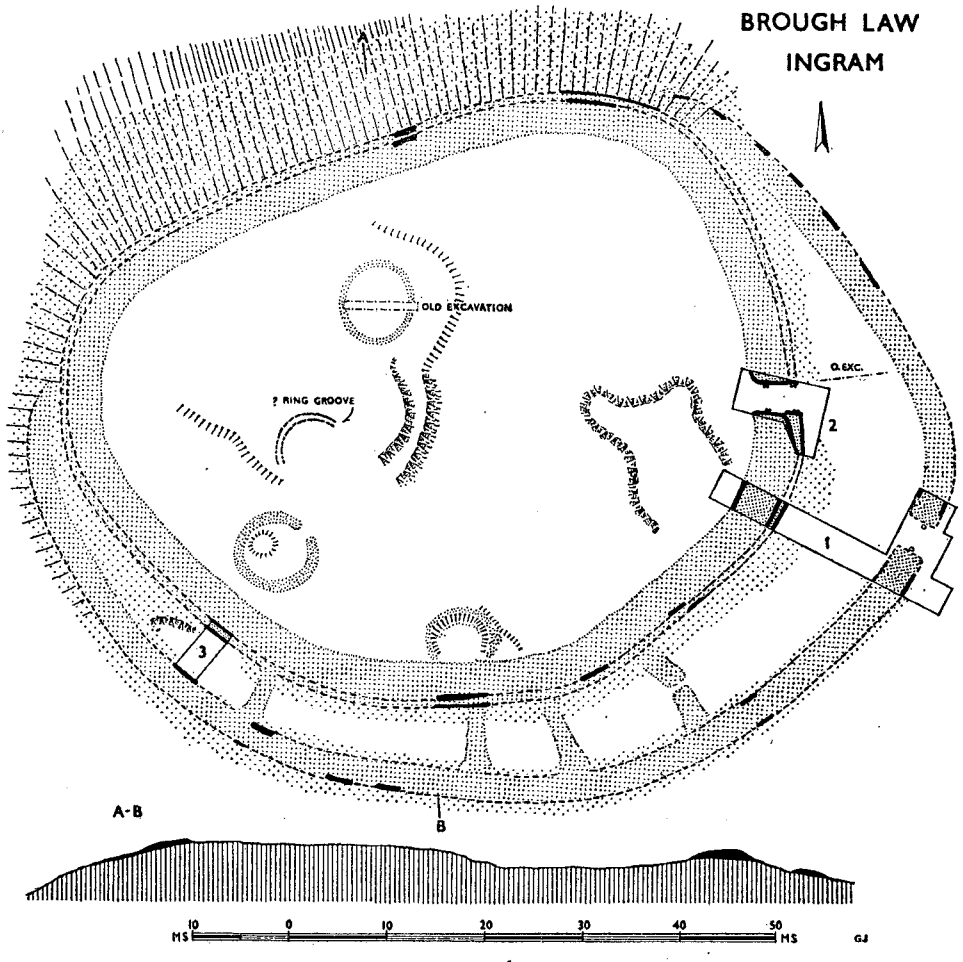

BROUGH LAW
INGRAM
A
OLD EXCAVATION
? RING GROOVE
O.EXC.
1
2
3
A-B
B
10
0
10
20
30
40
50
MS
MS
GJ

FIG. 1

Education, University of Newcastle upon Tyne, for their valued co-operation, to the Excavation Committee of the University for financial support, and finally to the Society of Antiquaries of Newcastle upon Tyne for defraying the cost of the radiocarbon assays.

BROUGH LAW HILL-FORT

The Site (NT: 998164)

This small bivallate hill-fort is situated above the Breamish gorge at an altitude of over 275 metres (map). Except on the south side the approach to the summit is arduous. Early settlements and burial cairns are prolific in the area and these have been described in earlier surveys.[1] More immediately, there are the remains of cairnfields a short distance along the ridge to the south and a number of stone-built settlements of presumed Romano-British context occupy the eastern flanks of the same hill. The site of the enclosure on Ingram Hill is clearly visible at a much lower altitude just over 1 kilometre to the east-south-east.

The fort on Brough Law was first excavated in 1861 by George Tate, a stalwart of the Berwickshire Naturalists, when that club embarked upon archaeological excavation for the first time, and chose the Breamish Valley for their initial investigations.[2] More recent comment upon the site has been made by the present writer in *Arch. Ael.* 4, XLIII (1965), where it was suggested that the stone-built huts visible in the interior of the fort were probably indicative of secondary occupation in the Roman period, a theory supported both by analogy from elsewhere in the area and finds from the earlier excavations now housed in Alnwick Castle Museum. Attention was also drawn to the construction of

[1] e.g. G. Jobey, *A.A.*[4], XLII (1964), 41*ff.*; XLIII (1965), 21*ff.*

[2] G. Tate, *B.N.F.C.*, IV (1856-62), 304*ff.* For early refs. *v.* also *Marks Survey* (1734) *in Inedited Contributions to the History of Northumberland*, 82; and H. McLaughlan, *Additional Notes* (1867), 52.

the main rampart, superficially reminiscent of *murus duplex*, as an infrequently recorded phenomenon in the hill-forts of the Border counties. This massive inner wall gave the fort an almost *dun-like* appearance and suggested that it might prove to be later rather than earlier in the increasingly longer chronology which is now afforded to hill-top settlements and defences. In any event, examination of the ramparts would also help towards establishing the incidence of earlier palisaded settlements in an area where clearly these may often be obscured by later defences.

The Excavations

(a) *The Inner Rampart (figs. 1 & 2, plates VIII & IX)*

A cutting 27 metres long and 3 metres wide was taken across the ramparts where they lay some 12 metres apart (*fig. 1, 1*), and this was subsequently extended at the south end to include the estimated position of the outer gateway. The whole cutting was eventually taken down to bed-rock but yielded no evidence of an earlier palisaded perimeter (*fig. 2*). A sample of carbonized wood was collected from the old surface beneath the inner rampart, from between the innermost of the two outer faces and the rear face. The fragments were distributed over the whole area and were mainly comprised of small twigs and branches of birch up to 15 mm. thick.[3] Clearly no structural timber was involved; rather the material had the appearance of kindling. A few minute fragments of bone and some small fragments of hand-built pottery were also present in the same level which extended over some of the stones used to level up the irregularities in the rock surface towards the back of the rampart. Perhaps the whole of this thin scatter can best be seen as the remains of squatting by the fort-builders on this sheltered part of the hill-top whilst work was in progress. The radiocarbon date provided by the sample, 245 B.C. $\pm$90 (I-5315) on the old or

[3] I am indebted to Mrs. H. Clark for identification (Appendix).

310 B.C. on the new half-life, at least indicates a *terminus post quem* for this construction.

The rampart, stone-built throughout, was 5 metres wide at this point. The sheer outside face was composed of roughly coursed blocks, carefully trigged into position by small chocking stones. Larger base stones were up to 1·0 metre in length, but above this the stones reduced somewhat in size, possibly for ease of handling as the structure gained in height. A second retaining face, almost as well constructed, was situated within the rampart at a face to face distance of only 1·0 to 1·2 metres from the first, the intervening space being filled with stone rubble. At least five courses still remained in position at the highest point of 1·5 metres. There was no visible batter on either face but, in any event, the thrust exerted subsequent to building could have caused some alterations in the angle. Nothing in the nature of this rampart, either here or elsewhere on the site, countered the idea of a unitary construction embodying two outer faces. Only two courses of the rear face of the rampart remained, and at one point this rested upon a raft of large rubble which had been used to level up the awkward rock formation. Large but easily handled stones made up the main core of the rampart. Although there were some more massive boulders at the bottom of this fill, they formed no regular pattern and most certainly there was no structural transverse walling such as Tate suggested might have been present in the rampart at Greaves Ash,[4] situated a short distance further up the same valley. At one level between the two outer faces and two levels in the main wall-core, noticeable spreads of angular rock-chippings were encountered, as if the waste from the rough shaping of facing stones or quarrying had been carefully tipped. Such a deliberate inclusion may perhaps indicate stages in the building of the rampart, whereby a few courses of facing-stones were placed in position at a time followed by an infilling of the core material. Construction may well have progressed by moving

[4] *op. cit.*, 295-6.

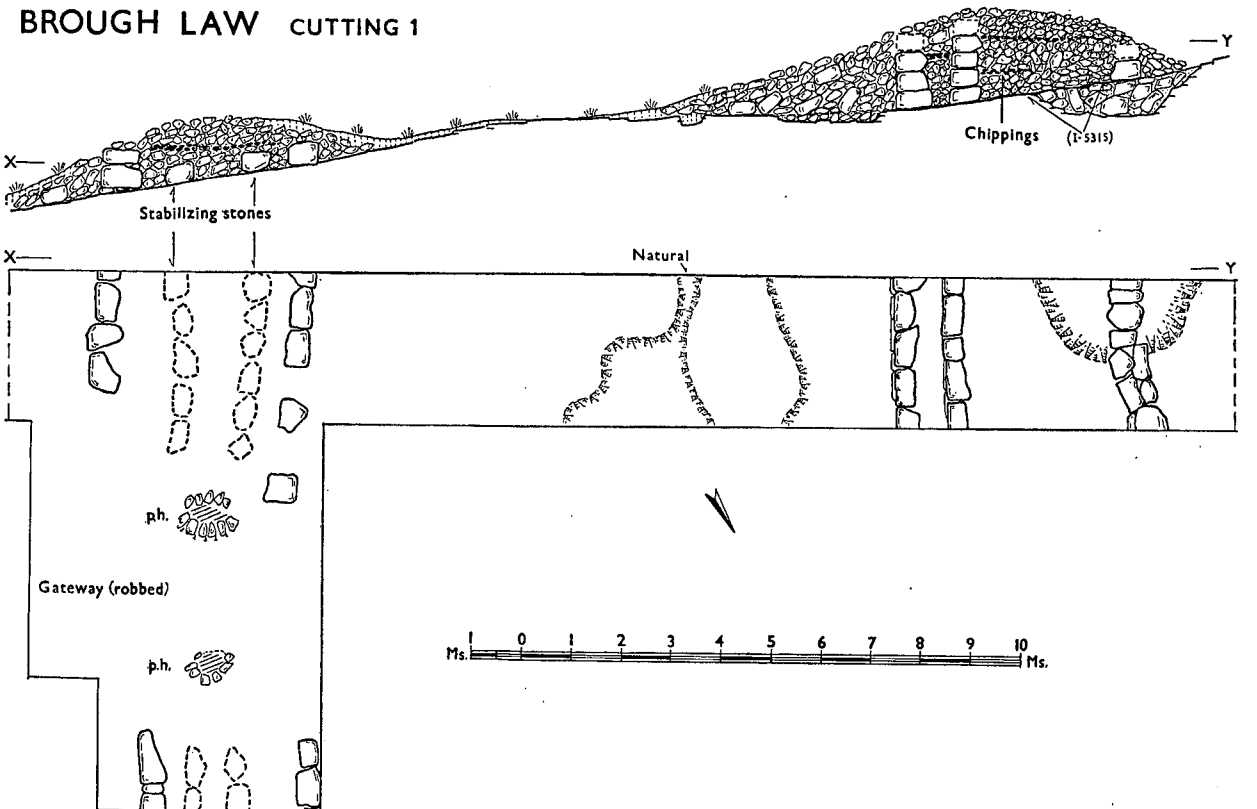

BROUGH LAW CUTTING 1
X
Y
Chippings
(1:5315)
Stabilizing stones
Natural
p.h.
Gateway (robbed)
p.h.
Ms.
0
1
2
3
4
5
6
7
8
9
10
Ms.

FIG. 2

the front facing-stones into position from the rear of the rampart, in which event the spread of smaller material would also have provided a better working platform, as became evident in the reverse process of excavation. These thin levels of chippings cannot have served in any way the same purpose as horizontal timber-lacing and, in such a rampart as this, it is difficult to envisage them as being the equivalent of spreads of branches sometimes recorded in earthen ramparts elsewhere and attributed to bonding material. The absence of beam-holes in wall-faces surviving to such a height makes it almost certain that timber-lacing had not been used in this rampart.

(b) *The Outer Rampart (figs. 1 & 2)*

This was 4·25 metres wide as it approached the outer entrance but, from surface observation, may be somewhat less than this at distances further removed from the gateway. It had been extensively robbed and at best only two courses of large stones survived in the front and rear faces. Although the sophisticated construction of the main rampart was lacking there were alignments of large boulders at the base of the rubble core. As the shape of these stones would not have permitted additional courses and smaller core material lay between and over the top of them, it must be assumed that they were no more than a stabilizing device to counter any tendency towards slip at the base of the rampart (*fig. 2*).

The line of the outer rampart clearly converges upon that of the inner above the fairly precipitous "Glidders" or screes on the north, where the defence apparently becomes univallate. A mass of tumbled stone had obscured the true course of the outer rampart when the site was surveyed some years ago, but this was clarified on the present occasion by exposing the top of the outer facing stones at intervals along the east side. Unfortunately, at the estimated point of junction between the two ramparts a wide section of the

outer rampart had been removed, perhaps by Tate a century ago. Nevertheless, the outer facing of the inner rampart could be seen to be continuous at this point, so that the outer rampart can only have butted on to it and must be assumed for the present to have been of secondary construction. In this event, the time interval, if indeed it was in any way appreciable, is unknown.

(c) *The Gateways (figs. 2 & 3)*

The oblique approach from the outer to the inner gateway is a feature of a number of bivallate and multivallate hill-forts in the area and has been commented upon elsewhere.[5]

The stonework of the outer gateway had been almost completely robbed away. All that remained to mark its position were two large post-holes placed 2·5 metres apart. Both were of sufficient girth to have supported more than one post if necessary, but, presumably because of the unyielding nature of the rock, were only *c.* 0·3 metres deep and the packing stones did not provide conclusive evidence on this score. The uneven rock surface of the gateway had been made good by packings of small stones but no successive levels could be observed in this material.

The inner gateway had suffered from more stone-robbing than the main rampart and, additionally, from one of Tate's exploratory trenches. At best only two courses of facing stones remained in position, but this was sufficient to establish that the dual outward faces of the rampart had ended at the entrance and did not continue within the passageway (*fig. 3*). The poor alignment of the facing-stones on the south side of the entrance which, in plan, suggests that the outer skin could have been a secondary construction, was in fact due to a subsequent displacement of the first two base-stones. A rectangular setting of four pairs of post-holes represented some form of timber-built gateway structure,

[5] *A.A.*[4], XLIII (1965), 42.

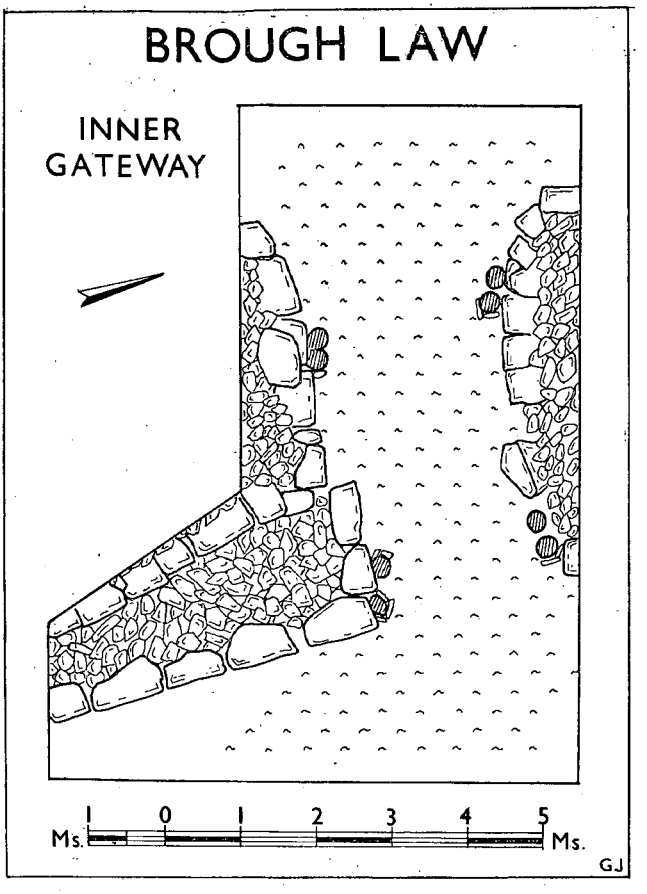


FIG. 3

2·3 metres wide and 4·0 metres deep. These post-holes were rock-cut and only 0·3 metres deep but, with packing stones, had supported posts of up to 0·2 metres in diameter. Whereas the replacement of timbers or a change in the position of the gate could have provided the reason for this duplication of post-holes, there was in fact no evidence to deny the use of all post-holes together in a unitary structure. At the one

point where two post-holes were in contact this problem could not be resolved.

As in the case of the outer gateway, the uneven rock surface had been made good by a spread of rammed stone, but at no stage did this impinge upon or cover any of the post-holes. It is conceivable, therefore, that such posts, braced across the top to give rigidity, could not only have taken the strain of a gate but may also have carried a timber-built walk over the entrance itself.

The subsequent history of this gateway must remain uncertain. When confronted with unyielding rock of this nature it would always have been easier to use existing post-holes for new timbers than to dig replacements, so that one means of chronological calculation is denied. Some time after the gateway had been dismantled or had collapsed, most but not all of the tumble was cleared away and a pathway of small stones put in over the remaining rubble and the occasionally displaced facing-stone. Whilst it would have provided a happy solution to associate this path with the later occupation of round stone-built houses, as was the case for example at Huckhoe,[6] Northumberland, no datable evidence was recovered in this instance.

(d) *Cross-Walls between the Ramparts* (*fig. 1*)

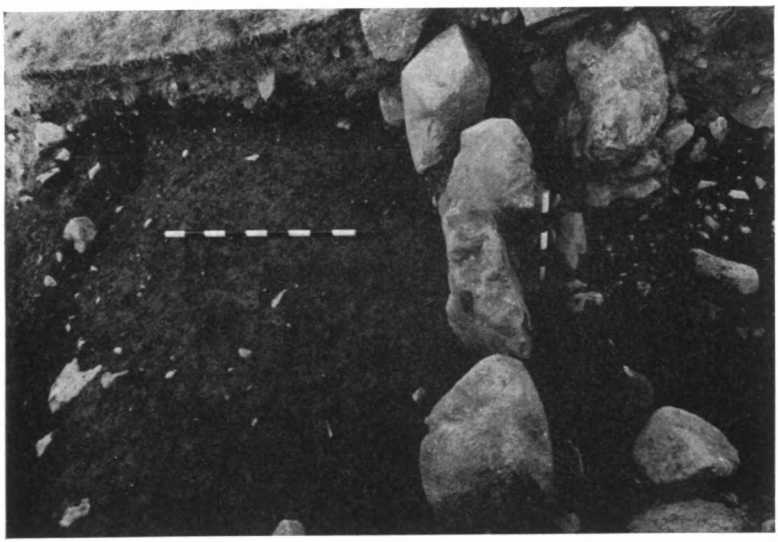
These had never been considered as certain contenders for contemporaneity with the hill-fort defences, although this claim was made by Tate for superficially similar walls at Greaves Ash. At Brough Law the westernmost cross-wall, which occurs where the ramparts are converging, could be examined with the minimum of effort (*fig. 1, 3*). Here the respective facing stones of both ramparts continued unbroken and the transverse "wall" itself had no facing. The impression given was that of it being no more than a rough attempt to create shelters for animals from the rampart tumble; this in more recent times but presumably well before 1861, the date of Tate's original observations.

[6] G. Jobey, *A.A.*[4], XXXVII (1959), 217*ff*.

Brough Law: Inner rampart

Brough Law: Inner rampart

Brough Law: Faces of inner rampart



Ingram Hill: Palisade trenches nos. 2 & 3
(some stones removed)

Finds

(a) Pottery (not illustrated)

Sixteen small sherds of coarse hand-built pottery were found; there were no base or rim fragments. These came from beneath the tumble and on the surface of the entrance-passage through the main rampart (4); from amongst the rubble used to level up the uneven rock surface beneath the rear face of the inner rampart (4); and from unstratified positions within the fort in cutting 1 (8).

The sherds are all from coil-built vessels of some stature, with walls up to 17 mm. thick and containing large grits. It is pottery which has been found on palisaded sites and hill-forts alike in the north and, at the moment, has no closely defined contextual value.

As sometimes happens, small stems of grass and sedge have left their impressions on the surfaces of the sherds and, in this instance, one sherd from beneath the inner face of the inner rampart shows the clear impression of a birch leaf (Appendix).

(b) Stone

A small, broken rubber with one worn face was found beneath the tumble from the inner rampart.

Discussion

The frequency with which palisaded settlements in this area would seem to precede more substantial defences on the same site makes it pertinent to enquire as to why no earlier timber-built settlement was found on Brough Law. By comparison with the location of the High Knowes palisaded sites,[7] which at some 4·5 kilometres distance to the south-west are the nearest known settlements of this order other than that at Ingram Hill, neither altitude nor general topography can be invoked to account for this absence at Brough Law. Even so, although both are located on Cheviot andesite, it is evident that the hard rock outcrops which break the surface at Brough Law, and which may well have formed more prominent tors before the hill-fort was constructed, are not present at Alnham, where there was a

[7] *A.A.*[4], XLIV (1966), 5*ff*.

thicker cover of soil and brash in excavation. It could well be that the combination of a rocky terrain and the difficulty of cutting long runs of palisade trench would have outweighed the superior protective advantages of the Brough Law site, if indeed defence had then been a major consideration.

The labour involved in the construction of the hill-fort would have been great for the small habitable area that was enclosed and perhaps contains elements of prestige building in addition to those of defence. Material would nevertheless be to hand, either by surface quarrying from rock outcrops, which would seem to have been undertaken, or by use of the extensive screes on the steep slopes falling down to the river. Smaller stones for the wall-cores in particular could have been brought to the summit by human chain, a method which would have much to recommend it in a practical sense, and for which there are some surviving traditions elsewhere.[8] The stone used in the ramparts consisted both of andesite which forms the summit of the hill and ash and agglomerate which outcrops lower down the slopes. The absence of ditches is not surprising in an area where it is possible to demonstrate a correlation between drift and solid geology and their employment. This point is worth making when a contextual significance is sometimes attributed to the form of the defences.

Perhaps the chief interest in this instance lies in the form of the inner rampart. The highest surviving height of the outer face is 1·6 metres and, with allowances for subsequent robbing as well as the remaining tumble and facing blocks, it would not be unreasonable to envisage a height of 3 metres for the original structure. Its outside face would not appear to have been stepped as, say, in the case of Rainsborough,[9] Northants., to take only a recently excavated example; in which event, the twin revetment must be seen as rising to the top of the rampart which is itself of unitary construction.

[8] A. Young, *P.S.A.S.*, XCV (1961-2), 198.
[9] M. Avery *et al.*, *P.P.S.*, XXXIII (1967), plate XXa *opp.* 224.

Although no timber-lacing was found, this form of revetment in effect must have performed some of the functions of such strapping, both in giving extra stability and preventing collapse should the outside facing stones have tumbled or been pulled away. Whether or not this same double revetment can be taken as indicative of a parapet of stone rising above the rampart walk remains problematical. The width of this rampart, at 5 metres, is sufficient to have allowed a series of inward steps from the rear, although it must be emphasised that no such step was found, nor can it be seen *in situ* elsewhere on the site. A convenient point for such a reduction would have occurred at the level of the upper interior spread of small angular chippings. And, if a timber-built walk is allowable at the gateway, it should be noted that the distance between the front and rear settings of post-holes could be taken to indicate a width of no more than 3·5 metres for the rampart in its uppermost stages.

All told, the evidence is hardly sufficient at this moment to enter into questions of the place of this rampart in an evolutionary series of stepped ramparts based upon continental, Irish or Cornish examples as proposed tentatively elsewhere.[10] Indeed, the outer double revetment rising from ground level may have no more significance than that of a local attempt to deal with a specific problem, less ambitiously met by the lines of stabilizing stones in the outer rampart. In the northern area, the main rampart at Brough Law is not easy to parallel. Outer skins to ramparts at Eddisbury[11] and Maiden Castle,[12] Cheshire, for example, are probably only superficially similar in that they represent the final form achieved by ramparts of more than one period. There is the possibility of a double face at Greaves Ash, Northumberland, but this again can be no more than tentative and other reasons could be found for its recorded

[10] e.g. J. Hamilton in *The Iron Age in Northern Britain* (ed. Rivet, 1966), 114.

[11] J. Varley, *rans. Hist. Soc. L. & C.*, CII (1950), 1*ff.*

[12] *Annals Arch. & Anth. Liverpool* XXII (1935), 97*ff.*; XXIII (1936), 101*ff.* J. Forde-Johnson, *Trans. L. & C. Ant. Soc.*, 72 (1962), 9*ff.*

presence at only one point on the perimeter. An apparently similar double line of facing stones has been recorded at the hill-fort on Rink Hill,[13] Selkirkshire, but the distance between these is substantially wider than at Brough Law and it may represent a secondary widening as in the case of the phase 2 rampart at Kaimes Hill,[14] Midlothian. The feature may prove to be more common amongst the duns and small forts of the west[15] but one must await developments here as well as from closer inspection of further stone-built ramparts in the Border country.

Only a small scatter of radiocarbon dates are available for even tentative comparison in the region. On the old half-life central date of 245 B.C. the construction of Brough Law fort on its virgin site would be significantly later, possibly by as much as a century and a half, than the walled settlement which follows the palisades at Huckhoe,[16] Northumberland, or the rampart at Burnswark[17] in Dumfriesshire. On the other hand, there is no significant difference between this date and that of the material from the phase 2, stone-built rampart at Kaimes Hill[18] which follows on at some stage from the first timber-laced rampart.

The length of time during which the ramparts at Brough Law remained in use remains unknown. But it is as well to remember that apparent absence of evidence for reconstruction in walls of this order or, for that matter, the lack of many replacements of the gateway post-holes when they have to be cut in solid rock, need not be indicative of a short life. Indeed, the outer face of the inner rampart has been built up in places in more recent times, with no great difference showing except for the absence or presence of lichen growth.

[13] R.C.A.M. *Selkirkshire* no. 122.
[14] D. Simpson, *Glasgow Arch. J.*, I (1969), 7*ff*.
[15] I am grateful to R.C.A.M. Scotland for advance information on possible parallels at Kildalloig dun and Ranachan fort, Kintyre, and Gallanach Castle dun, Lorn, *v.* also perhaps An Caisteal, Mull (*P.S.A.S.* XCV (1961-2), 199*ff*).
[16] 510±40 B.C. (old half-life) *v. A.A.*[4], XLVI (1968), 293*ff*.
[17] 500±90 B.C. & 525±90 B.C. (old half-life), forthcoming.
[18] 278±90 B.C. (old half-life).

APPENDIX A

Report on sample of charred wood

Mrs. H. H. Clark, M.Sc., Dept. of Plant Science, University of Newcastle upon Tyne

The sample provided for examination consisted of about 20 pieces of carbonized wood of which none was longer than 20 mm. All were sections or segments of small twigs which, from the curvature and the number of annual rings, seem to have had a diameter of 10-15 mm. and a growth period of 3-5 years. With the exception of one fragment of alder (*Alnus glutinosa*) all were birch (*Betula alba agg.*).

Alder (*Alnus glutinosa*). The single piece of alder was easily recognizable by the diffuse porous structure of the wood and the presence of numerous simple medullary rays interspersed with occasional broader aggregate rays. Five distinct annual rings could be counted.

Birch (*Betula alba agg.*). The birch samples had all been derived from young twigs in which not more than four growth rings could be distinguished. In the carbonized material, these were brought into prominence by the presence of light-reflecting bands of soft (parenchymatous) tissue which delimit the annual zones. The annual rings would otherwise be difficult to detect for there is very little difference between the diffuse porous wood produced in the spring and that formed later in the year. Even under magnification, the very fine medullary rays were extremely difficult to see.

In addition, there was the impression of a birch leaf on one sherd of pottery.

INGRAM HILL SETTLEMENT

The Site (NUO11158)

This small settlement is situated on a slight ridge at an altitude of *c.* 170 metres, in what is essentially a non-defensive position, just over 1 kilometre to the east-south-east of Brough Law. It was excavated in 1939 and again in 1948 by A. H. A. Hogg, the reports and site plans being published in *Arch Ael.* 4, XX (1942) and XXXIV (1956).

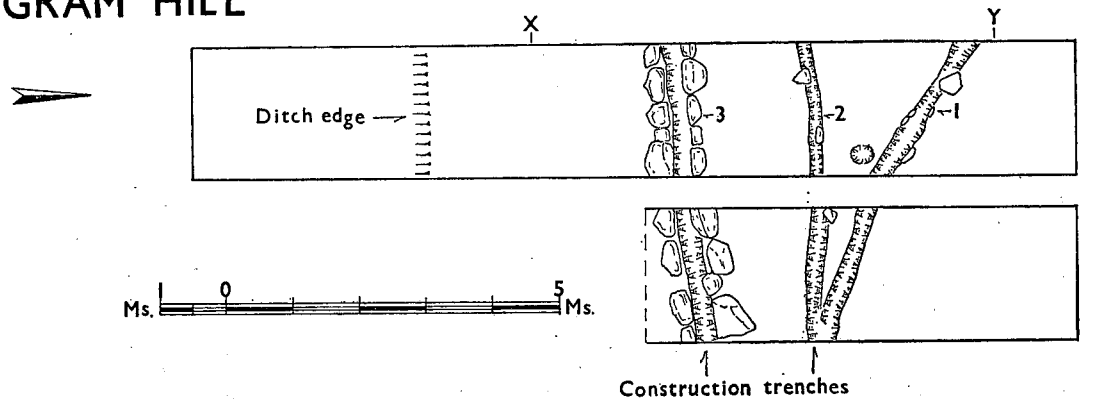
Briefly, the small circular enclosure some 46 metres in diameter was considered to have had an internal, free-standing, single palisade, used in conjunction with an outer wall and ditch some 2 to 3 metres beyond. This had served as a perimeter for a settlement consisting of round timber-built huts. At a much later stage, and certainly well after the abandonment of this settlement, rectangular stone-constructed buildings had been inserted into the earlier perimeter. Subsequent to the publication of these reports, with increasing knowledge of the nature of early palisaded sites, it was possible to suggest two structural phases in the early settlement, whereby the palisade formed the initial enclosure and was succeeded by a perimeter comprising a ditch and stone-revetted bank. Detailed examination of the earlier plans also indicated the possibility of more than one palisade phase or at least a twin rather than a single palisaded enclosure. This apart, in the present circumstances where a few sixth and seventh century radiocarbon dates are being obtained from northern palisaded settlements[19] and an initial context in the Late Bronze Age proposed for at least some of these sites, the chief chronological interest in the Ingram settlement lay in the fact that a lump of iron-slag was reported as having been used as packing in the palisade-trench. If this were so, then such a palisaded settlement might be later in context, thus providing an indication of the span of time during which such settlements were in vogue. Mention of charcoal in the earlier reports also indicated that a radiocarbon assay might be feasible.

The Excavation (fig. 4, plate IX)

This was confined to one cutting, 4·5 metres wide by 13·5 metres in length, sited across the perimeter of the enclosure to the east of the late rectangular stone building

[19] e.g. E. Mackie, *Antiquity*, XLIII (1963), 21 (*n.b.* here the better half-life of 5730 has been used).

INGRAM HILL



SECTION X-Y

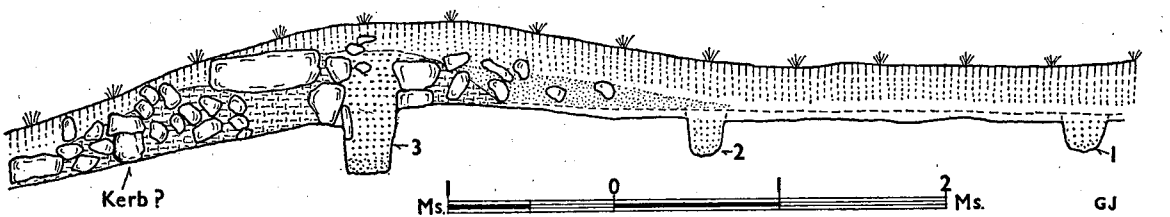


FIG. 4

no. 7, and away from earlier recorded cuttings (Hogg's grid 105E:2ON).

Three early construction trenches were uncovered. Numbers 1 and 2 (fig. 4) were situated clear of the line of the embanked perimeter, and as found were only just over 0·3 metres wide and deep with few packing stones left in position. Originally these may well have been somewhat more substantial trenches since, as was suggested in the earlier reports, the depth and nature of the overlying soil was consistent with the interior of the site having been dug over or cultivated at some time. Although it was evident that the trenches were not contemporary, it proved impossible to determine a sequence at the point of junction. Trench 3, lying beneath the remains of the bank, was more substantial and was bounded by two lines of large stones resting on the old surface level. These were positioned so that their best vertical faces fronted onto the trench and, as there was no difference in the fill between them and that of the trench, it would appear that both rows had served as additional supports for a timber palisade. In the excavated area the bank itself was of slight proportions, a fact also commented upon in earlier reports. It was composed of a mixture of earth, brash and some land-stones, the whole being retained by a possible frontal kerb as marked in the section (fig. 4). No time was available to empty the ditch, but from earlier sections it may be assumed that this was shallow and equally unimpressive. All told, it was difficult to escape the conclusion that this palisade had been used in conjunction with the bank, either as some form of rear revetment or as a fence rising above the top of the bank. In either case, the timbers and additional supporting stones would seem to have been placed in position before the ditch was dug and the bank thrown up. Such a solution does not preclude the initial use of the trench no. 3 for a free-standing fence, either as a single line or as part of a twin palisaded enclosure in conjunction with trench no. 2. If this were the case then the sections gave no indication of any interval of time having

elapsed between the disuse of the earlier perimeter and the creation of the second.

Small fragments of iron-slag and a few wall-sherds of coarse pottery came from low down in the mixed earth and brash of the bank. Fragments of carbonized wood recovered from its base yielded a radiocarbon date of 200±90 B.C. (I 5316) on the old or 285 B.C. on the better half-life. With the usual reservations and mindful of the fact that it is only a single reading this assay would give a *terminus post quem* for the construction of this particular perimeter, which in all probability marked the latest phase of this early settlement.

Discussion

Although the purpose of the exercise was limited to obtaining material for a more absolute form of dating than the artefacts allowed, a number of structural questions have been raised. A study of the original reports will illustrate the difficulty of making precise correlations with the structural interpretations arrived at from the present excavation. However, some tentative suggestions may be offered as a basis for any future work of less limited character.

The single palisade trench of the earlier excavation, depicted as forming a circular perimeter at a distance of from 1 to 3 metres within the line of the inner edge of the embanked enclosure, would best correspond in position with the present trench no. 2. However, it is evident from the plan of the previous excavations in the area of the entrance to the enclosure, here reproduced as fig. 5, that a short stretch of a second palisade trench was also found, lying beneath or towards the rear of the enclosure bank. Although the course of this trench was not then pursued, since it underlay the wall of one of the later rectangular buildings, it is conceivable that it continued further and perhaps started again on the far side of the entrance. In this event, the large post-hole and line of large stones shown to the north side of

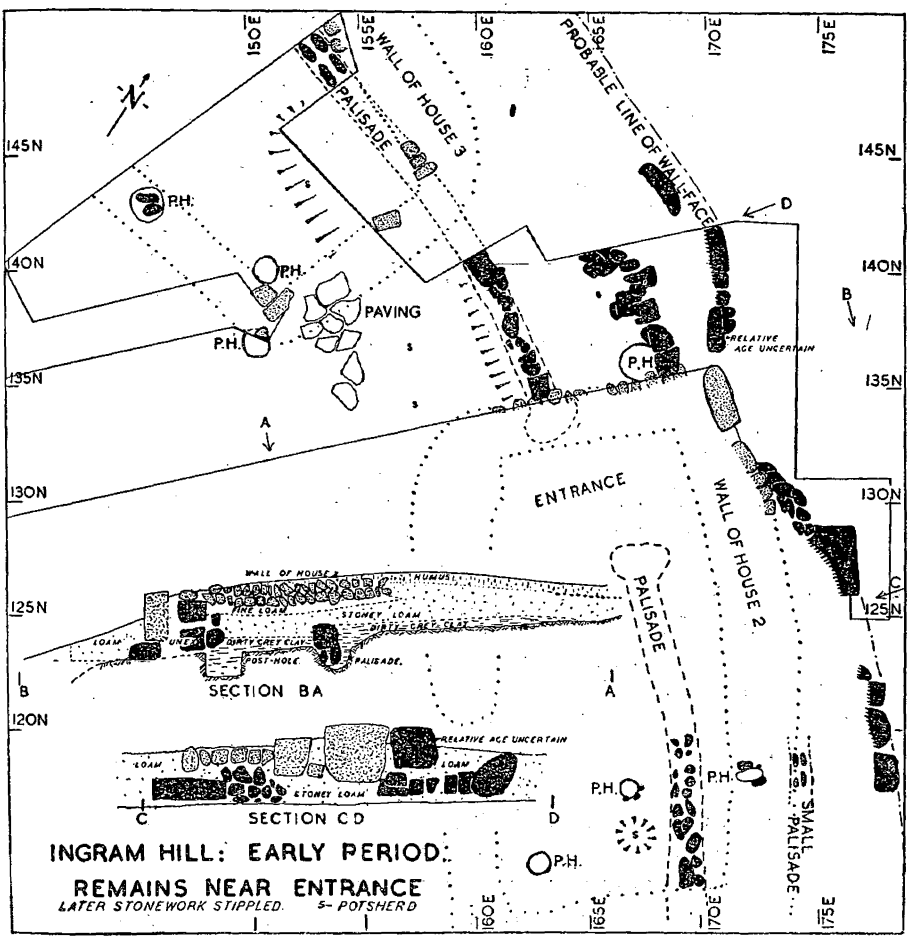


FIG. 5 ENTRANCE PLAN; A. H. A. Hogg (1948)

the entrance could mark its position. As a continuous feature this palisade trench would then possibly correspond with the present trench no. 3. Whether or not, given such an interpretation, the original enclosure had consisted of a twin rather than a single palisade, the outer trench of which was reused for a fence in conjunction with the later bank,

cannot be determined from the available evidence. One factor which would militate against the twin palisade would be the somewhat different width between the two trenches in the present excavation and that in the entrance excavation. Likewise, the function of the present trench no. 1 is also problematical. It could hardly have served as a wall-trench for a timber-built hut contemporary with either enclosure and, short of area excavation, it will not be known if yet another perimeter is present. A third unsolved problem is presented by the occasional post-holes found well within the line of the bank itself. Although the possibility of a range of internal structures built against the embanked enclosure is a worthy consideration, the pattern of known post-holes makes this unlikely at the moment.

As to context, if there was no break in occupation between the two phases that are clearly discernible, the radiocarbon date with all its accepted limitations might suggest an occupation in the late fourth century B.C. for the timber-built phase and a third century date for the embanked phase. With some northern palisaded sites dated to the sixth and seventh centuries this may seem to be a low context. However, in the present state of knowledge nothing is certain about the overall period during which sites were current and, while the main *floruit* of palisaded settlements may be earlier, it is perhaps salutary to have this suggestion of something later. It seems not unreasonable to anticipate settlements comparable to the second phase at Ingram existing alongside more pretentious hill-forts such as Brough Law. Such settlements may differ somewhat in form and structural detail and, in this respect, attention might be drawn to the small site at McNaughton in Dumfriesshire, with its radiocarbon date not significantly different from that at Ingram.[20] However, the nearest though not identical structural parallels to this second phase would perhaps lie with a type of settlement widespread in the Border area

[20] 280 ± 100 B.C. (old half-life). J. Scott Elliott *et al.*, *Trans. D. & G. Nat. Hist. & Ant. Soc.*, XLIII (1966), 73.

where palisades are set in a slight bank. The excavated sites at Harehope[21] in Peebleshire provide the best known examples and similar sites are present in Northumberland. It has been observed that these and related sites often lie on indefensible slopes or inconsiderable ridges. Furthermore it has been suggested that they may have had a later context than the palisaded site proper. The evidence for this is slight and mainly drawn from field observation rather than artefacts, although it is significant that a rotary quern came from one of the huts at Harehope itself. Even so, the argument could also find some support in the Ingram radiocarbon date. Whilst the pottery from the earlier excavation at Ingram may show a more developed form in its incurving rim than that from some other palisaded sites, close comparison of sherds shows that this pottery at the moment cannot provide a reliable chronological indicator, whatever its value may be in the cultural sense.

By and large, the evidence for iron-working on sites of this order throughout the area is small and confusion may exist between slag from forging and that from smelting. But the occurrence of iron-slag at Ingram in an early structural context brings to mind, as examples only, the "slag" from beneath the phase 2 wall at Hownam Rings[22] and the bowl-furnaces probably of phase 2 at West Brandon.[23]

The fact that the hill-fort on Brough Law and the settlement at Ingram could in some measure be contemporary, yet situated at no great distance from each other on the same hill, may eventually raise questions of social and political relationships. At the moment any inferences could only be drawn from differences in stature and position, since the available artefacts from the two sites show no real distinction. Come the Roman period, which presumably saw the establishment of so many non-defensive stone-built settlements on the same hill-slopes, was it again the lingering

[21] R. W. Feachem, *P.S.A.S.*, XCIII (1959-60), 174*ff*.
[22] C M. Piggott, *P.S.A.S.*, LXXXII (1947-8), 204.
[23] G. Jobey, *A.A.*[4], XL (1962), 19*ff*.

prestige of the Brough Law site that decided the establishment of the settlement of stone-built huts within its perimeter rather than on the more hospitable site at Ingram? Or were there reasons much more mundane, such as the vast quantity of readily available stone on the former site?