

THE RAMPARTS OF TRAPRAIN LAW: EXCAVATIONS IN
1939. By STEWART H. CRUDEN, F.S.A.Scot.

Traprain Law, East Lothian, was scheduled in 1923 under the Ancient Monuments Acts, 1913-31. Shortly after this event, the First Commissioner of His Majesty's Works agreed to entertain certain limitations of the powers acquired under the Act whereby a section of the hill, lying to the north-east, was leased by the owner to the County Council for quarrying purposes. Provision was made for the investigation and recording of archæological features, and all important relics recovered were to be presented to the National Museum of Antiquities.

The boundary of the quarry was extended by the County Council with the consent of the owner, Lord Traprain, in 1938, involving an area containing within its southern limit part of the ramparts of the Iron Age oppidum, viz. the innermost on the north-east shoulder of the hill. The Commissioners then reiterated the earlier conditions and the County Council lent the necessary labour for excavations. The Office of Works entrusted me with the archæological supervision under the direction of Mr J. S.

Richardson, H.M. Inspector of Ancient Monuments, acting in consultation with a Committee of the Council of the Society of Antiquaries of Scotland.

The history and geography of Traprain have been fully described by Dr Curle in these *Proceedings*. It suffices therefore to recall here that the hill is in shape a pointed oval lying east and west longitudinally, 360 feet high from base to summit, which is 710 feet above sea-level. It is the north side and the east and west ends that are protected by ramparts; the south side is sheer cliff and requires no fortification.

There are at least two defensive systems on Traprain Law, both simple in conception and presenting to-day a generally unimposing appearance. Surface examination shows the two defences to be characterised by ramparts of different profiles, suggesting that they had been constructed upon different architectural principles and represented two distinct periods of building activity.

The slope of the hill is very steep all round and the two ramparts belonging to the older system are a considerable distance apart, the upper member (rampart 2) being 100 feet higher than the lower (rampart 1); both emerge from the quarry at the east end of the hill, where 100 yards of their eastern ends have been blasted away. The upper runs along the face in an irregular zigzag manner, due, perhaps, to the desire of the builders to utilise rock outcrops or to provide sally-points, bastions and fields of fire for the sling. But, about half-way along the north side, it swings uphill. At this change of direction it is crossed by the later defensive system of one rampart (3), which has been running parallel to it and 10 feet behind it. This later rampart does not zigzag as much as 2. After crossing 2 it continues westwards for 50 yards, then turns through a right angle, diving downhill until it meets and merges with the lower member of the earlier system. Thereafter it resumes its westward course, swings round the west end, where it is interrupted by two pairs of entrances, and eventually runs into the cliff face on the south side.

Rampart 2 does not reappear on the surface inside 3, and there is no evidence in the nature of heaped turf to suggest that it ever did—or, in fact, that it was ever anything else but a branch of 3. However, excavation at the point of intersection proved a distinction. This will be fully described in due course. Where 1 went to at the western end cannot be determined without further excavation. It may, like its fellow, (2), have swung uphill and suffered complete demolition, or it may have originally occupied the path now followed by 3. In two places rampart 2 bifurcates, once to form a loop, and once to form a branch rampart, 2A, which runs downhill as a trackway to rampart 1.

The main excavation was on the eastern shoulder of the hill. The shoulder is a flat terrace at the present highest point of the quarry face.

It is 50 feet wide at its widest, and extends from the rampart 3, which runs across the brow of the quarry face to the rock which rises steeply to the summit of the hill. The rampart tapers out into this rock at the east end of the hill. A few yards from its termination it is interrupted by an entrance connected with a trackway from the bottom of the hill (fig. 1).

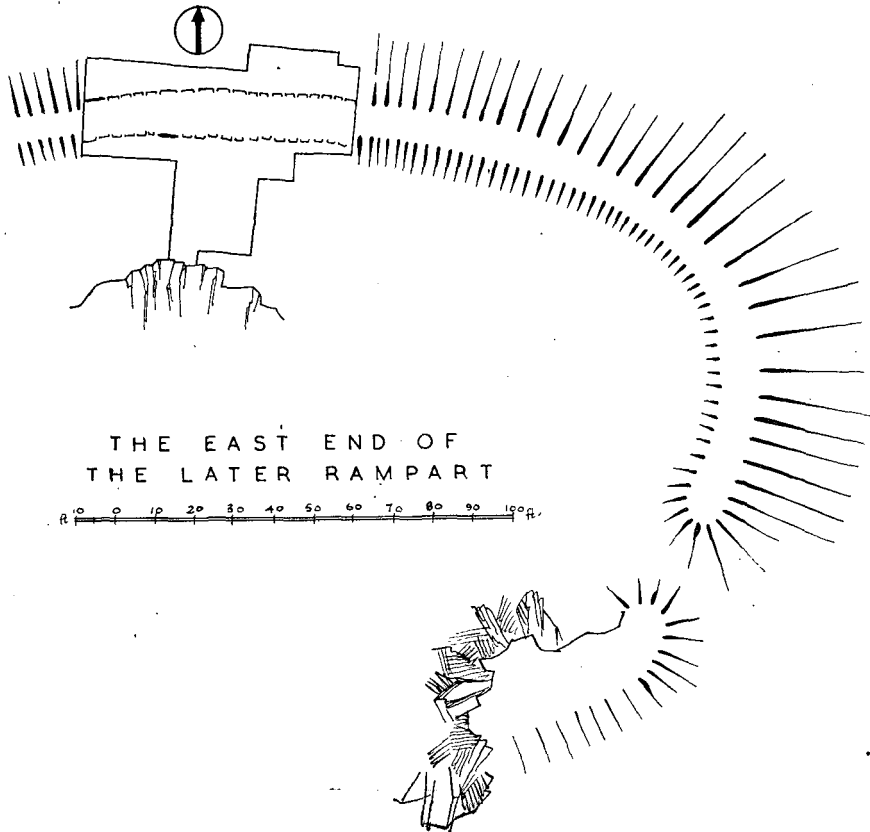


Fig. 1. East end of Rampart 3 showing area excavated.

This stretch of rampart across the quarry top was standing about 6 feet high from foot to crest, and we excavated a length of 60 feet, and extended the excavation inwards across the terrace to the rock, uncovering an area of 750 square feet (22 by 34 feet) (fig. 2, and Pl. IX, 1).

The rampart (figs. 3 and 4) is constructed of a core of turfs laid in layers, and faced on either side with a dry-built wall of flat slabs of local whinstone laid in courses. The overall width is 12 feet and the average height of the facing walls is 3 feet. Estimating by the number of courses that had appar-

ently slipped forward, the original height would be about 6 feet. The disintegration of the turf core and the subsidence caused thereby have resulted in the facing stones tilting inwards. This inward inclination of the facing

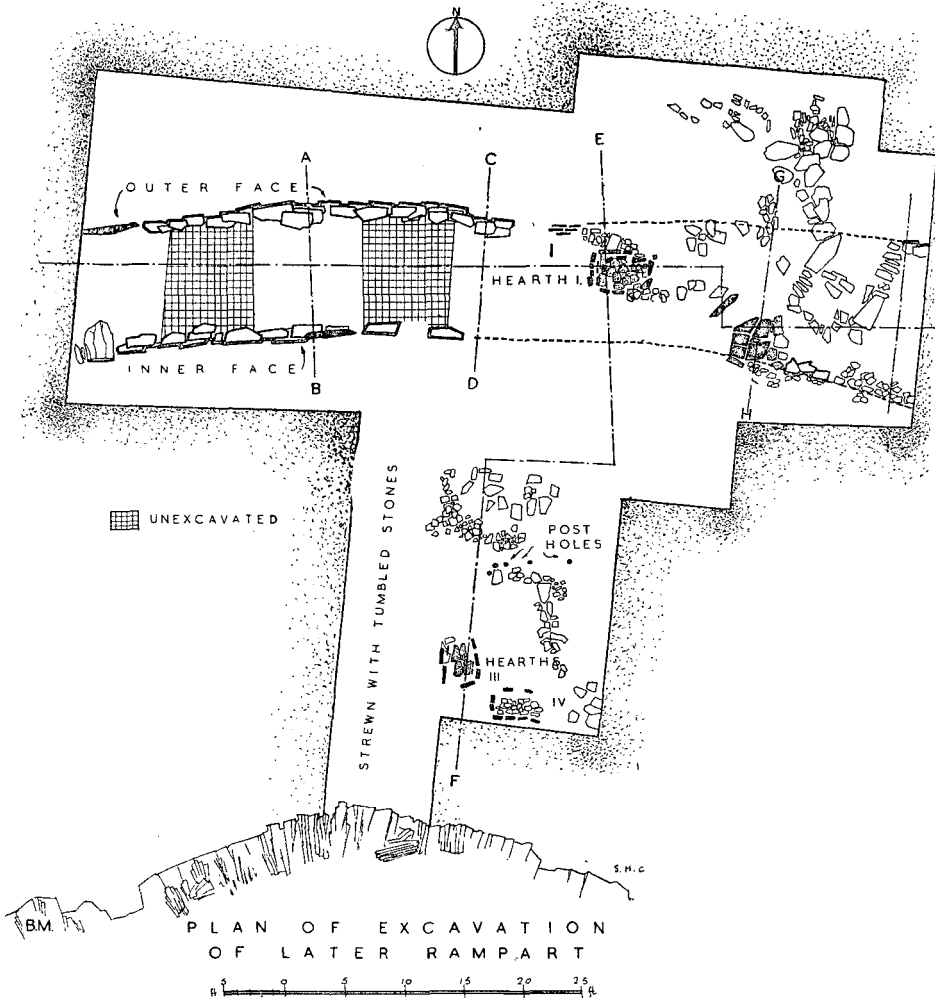


Fig. 2. Excavated area.

stones, sometimes to an acute degree, according to the severity of the subsidence, is the characteristic feature of the rampart ruins. In some places the originally horizontal stones are standing vertical. Occasionally slab-stones are placed vertically, but not in such a way or to such an extent as to deserve classification as a regular feature of the construction. There

were two such stones within the length excavated—one a substitute for the horizontal courses, the other lying against them and serving no functional

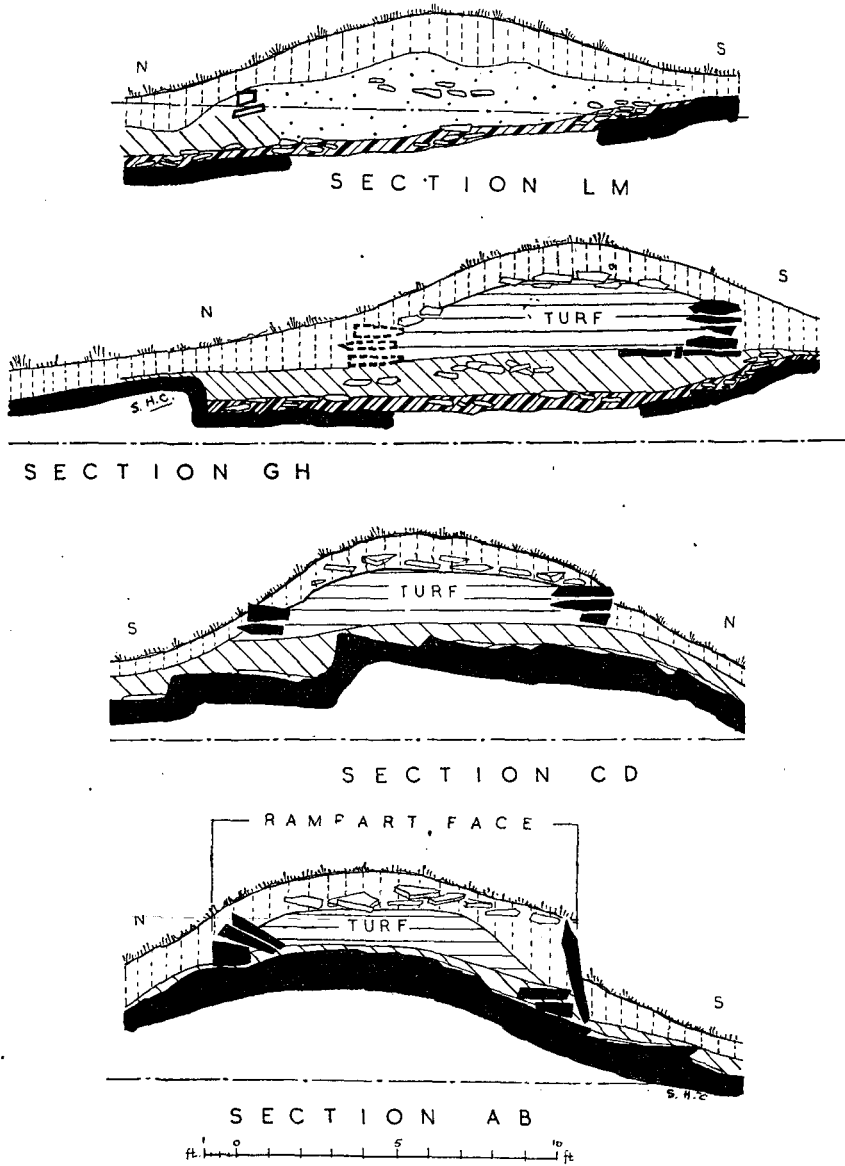


Fig. 3. Sections through Rampart.

purpose. The rock slopes downhill from the outside face and there is no ditch (Pl. X, 1).

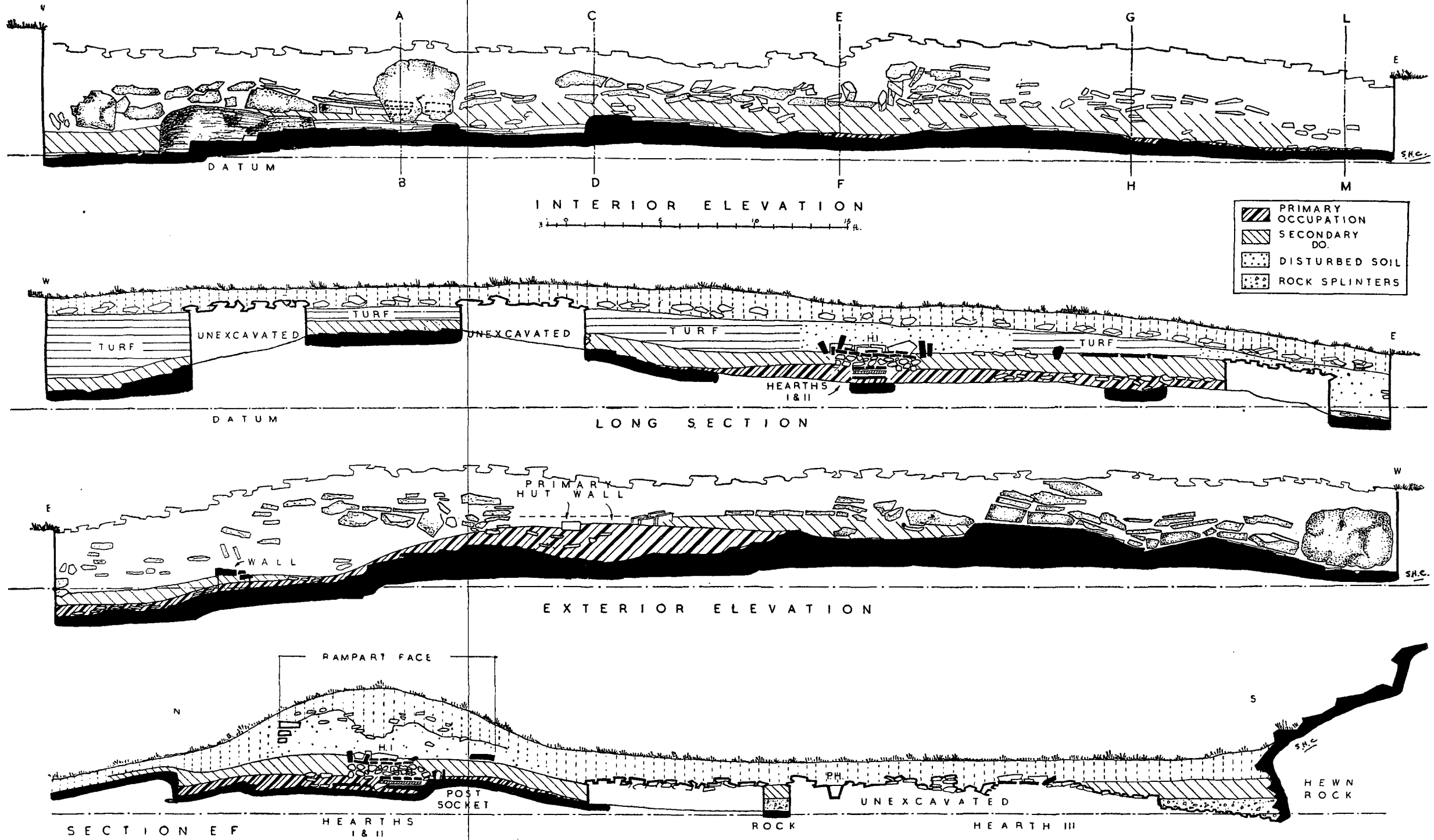


Fig. 4. Elevations of and sections through Rampart.

STEWART H. CRUDEN.

[To face page 53.]

In two places the turf stratification disappeared for a length of 10 feet, and the rampart core was made up of disturbed soil, similar in appearance and texture to the top soil, save that it dried a lighter powdery colour (long section, fig. 4). Each of these breaks in the core coincided with external evidence of disturbance—the outside and inside faces were either

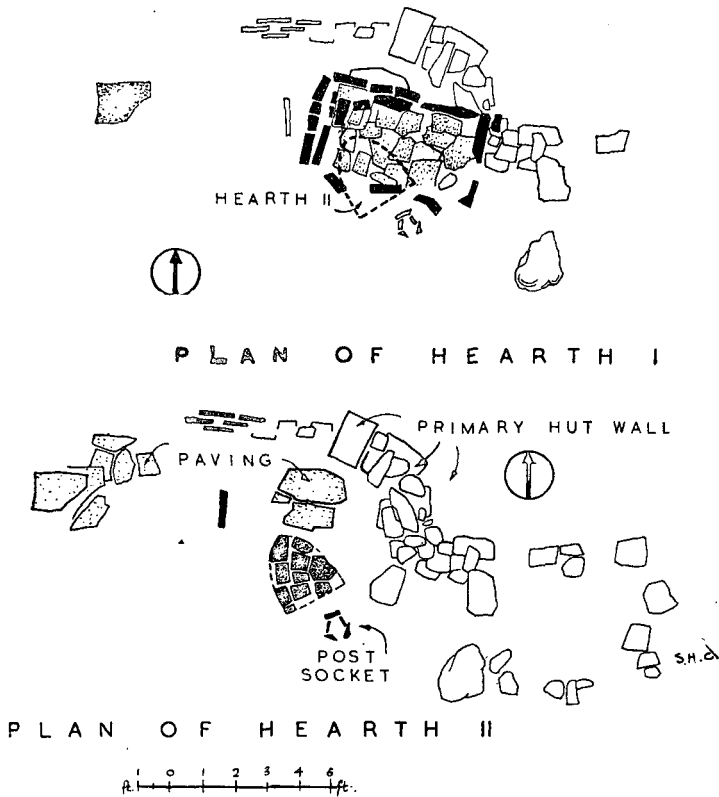


Fig. 5. Hearths under Rampart.

hidden behind a mass of débris or had been pulled down, and the scatter of stones along the rampart crest had at these breaks an appearance of being heaped, unlike the general distribution obtaining elsewhere.

In the middle of the rampart, 3 feet below the top of the core, lay a well-made hearth, and this lay upon another (fig. 5 and Pls. XI, XII). The lower or primary hearth lay in a deposit of sticky black soil which was not found over the whole area of the excavation, but mainly beneath the eastern end of the rampart. The deposit varied in depth according to the dips and crevices in the rock upon which it spread. Its average depth was 9 inches, and it died out upon the sloping rock a few feet

beyond the inside and outside faces. In one of the crevices was a pocket of about 50 pieces of carbonised twigs neatly cut into small sections. Almost all the pieces were hazel (see the charcoal analysis appended). The approximate depth from the top of the core to the primary hearth is 4 feet. This hearth (hearth II in figure) is the shape of a flat-iron on plan, 2 feet 6 inches by 1 foot 8 inches in area. It has no kerb and is skilfully built with shaped sandstone blocks upon a 3-layer foundation of sticky black soil overlaid by blue soil, with sandy soil above. Each of these layers is 1 inch thick. The bottom layer contains packing stones carefully laid across hollows in the rock, for additional stability. At the apex of the hearth two thin stones, lying flat and close together, suggested paving. They rested upon less than 2 inches of soil. Six inches behind the straight side of the hearth was a post-socket. It consisted of five thin small stones standing upright and firmly embedded in the sticky earth. They were so placed, corner to corner, that they formed a roughly circular socket, 7 inches in diameter and 9 inches deep. About the hearth curved the stone foundations of a hut wall, built upon the rock. The wall described the N.E. quadrant of a circle of radius 4 feet round the hearth, and lay wholly beneath the rampart, the N. end of the curve being tangential to the outer face (Pl. XI, 2). The wall was built of small stones, 6 by 6 by 2 inches, and stood 1 foot 6 inches high and 2 feet wide. One large stone, 2 feet by 1 foot 6 inches by 9 inches, ran through from outside to inside as a binder. At the south end of the curve the wall diverged into another curve, but only 2 feet of this was traceable. At the N. end there were three rows of thin slabs, 12 by 6 by 1 inch, placed end to end. The rows were half an inch apart, and the stones were upstanding and stood 2 inches above the secondary floor. The longest row consisted of three stones. The hearth was wholly circumscribed by the curve of the wall and was 1 foot 6 inches within it.

The upper hearth, hearth I, covered part of the wall, and was therefore built after its demolition. The upper hearth is separated from the lower by a heap of small stones (Pl. XI, 2), 9 inches deep, deposited, no doubt, to make up a level bed where the secondary floor was laid. It is rectangular, 5 by 3 feet in size, bounded by a double kerb and paved with thin sandstone slabs, 12 inches square and frequently overlapping. Small, thin sandstone blocks were wedged between the whinstone kerbstones for packing. Immediately beneath this hearth lay a piece of bead-rim *terra sigillata*, type 18/31, which provided a second-century *terminus post quem* for the building of the rampart. Several lumps of white powdery clay lay nearby.

The soil around both hearths was strewn with charcoal and unburnt bones of domestic oxen. The rampart core which overlay the hearths was not of turf, but of the made-up disturbed soil previously referred to.

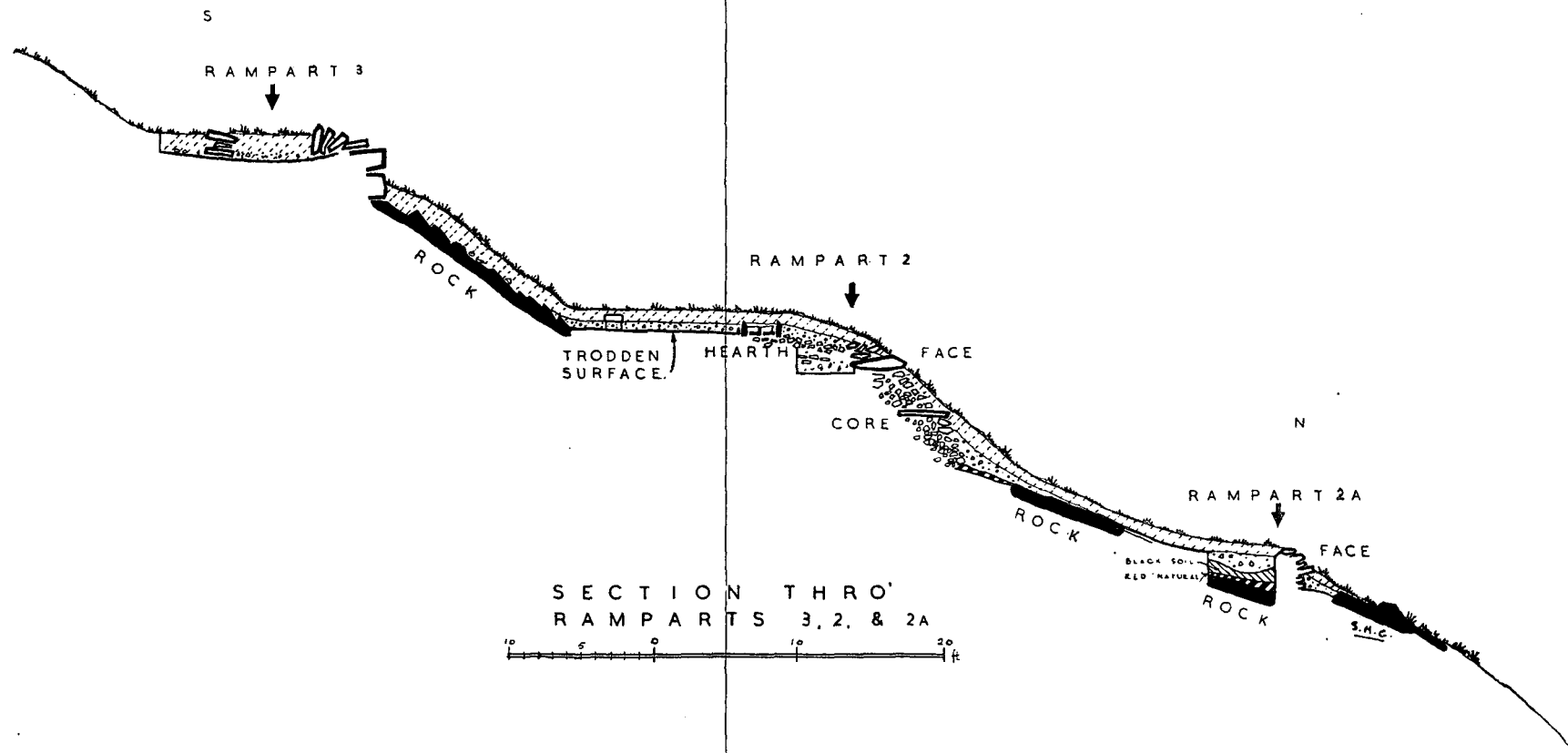


Fig. 6. Sections through Ramparts.

STEWART H. CRUDEN.

[To face page 55.]

The secondary occupation deposit, of moist brown earth, extended over the whole area exposed (fig. 4 and Pl. IX, 2), and was covered with fallen stones, which had no distinct architectural plan. Nothing of note was disclosed at the west end of the rampart, but beneath the east end was hearth I, and 8 feet east of that a platform of five large well-laid flat slabs, 3 feet square over all, which has been interpreted as the remains of another hearth. Near this platform, between it and hearth I, was a pocket of earth, about 12 inches in diameter and 9 inches deep, burnt bright orange and yellow.

We followed this deposit across the terrace to the rising rock, which was undercut at the occupation level as though to accommodate a shelter (section E F, fig. 4). The horizon of scattered stones lay 12 inches below the turf. It was impossible to define a beaten floor among the stones, and in only one place was it possible to distinguish between fall and foundation of huts. Two hearths (III and IV), both similar to hearth I, were discovered 8 feet and 12 feet out from the rock face, and 2 feet apart. They differed from hearth I in that they were bounded by one kerb, not two.

Six feet north of hearth III was a line of five post-holes, 12 inches deep and 9 inches in diameter, the first three being 12 inches apart, the other two about 2 feet 6 inches, and the total length of the row 7 feet 6 inches.

The secondary occupation deposit averaged 9 inches in depth and lay upon either the natural rock or the accumulations of rock splinters which filled the hollows, sometimes to a depth of 2 feet.

The finds are listed at the end of this paper.

An excavation was conducted farther west, on the north side of the hill, to determine the construction of ramparts 2 and 2A and their relationship with 3. Accordingly, an 8-foot trench was cut downhill through those ramparts (fig. 6).

The outside face of rampart 3 stands upon the rock, which slopes away from it downhill at an angle of 45 degrees to the terrace of rampart 2, and which is hewn in sharp ridges to discomfit attackers. Upon this terrace was a hearth, 6 by 2 feet in area, rectangular at one end and rounded at the other, and bounded by a kerb rising 6 inches above the floor. There was an obvious difference in the construction of the two ends. The rectangular end was well laid with whinstone flag paving and the kerb stones were soundly embedded and properly shaped. The rounded end was paved and kerbed with small rounded stones. Beneath the floor of this end there was dug earth and similar small stones. The rounded end gave the impression of being a distinct hearth, but no proof of this was obtained by excavation; two sherds of native pottery came from this hearth. A trodden surface, containing charcoal, extended from the hearth inwards towards the rock, dying out beneath three large stones lying flat, in a line

parallel to the rock face, as though they were the foundations of a wall of a hut or enclosure to which, perhaps, the hearth belonged.

A superficial scrutiny reveals that the outer facing stones of rampart 2 tilt inwards, like those of 3. However, in this instance, there is no inner face. The inward tilting stones project from the edge of the terrace as though they were the face of a revetment. The section taken through this rampart did not reach the rock face behind the revetment, but penetrated a core of small stones of 6 inches in diameter to a depth of 3 feet. Interspaced in the core, extending from the face to three feet within it, were several large stones lying flat and situated about 2 feet apart. At the top, where the rampart lay upon the terrace, the face stones have slid inwards on to a spread of small stones which may have been the original backing. At any rate, the face stones above the lip of the terrace must have been backed at one time by a core now gone, which had no inside face, as the turf-cored rampart had. The spread of stones extended inwards to the hearth and petered out beneath it. This suggests that the hearth was constructed after the fall of the rampart, but there is no stratigraphy to prove this. The beaten surface on the other side of the hearth does not spread over the face of small stones, so it is questionable whether the small stones under the hearth are a continuation of those outside or a separate bottoming heaped up for the hearth to lie upon.

Rampart 2A is similar to the above, but very much smaller. The vertical height of 3 is 13 feet from the terrace to the topmost horizontal facing course. The height of 2 is 10 feet, and of 2A 3 feet.

The intersection of ramparts 3 and 2, 60 feet west of this trench, was investigated. As we have said, there was no surface evidence to indicate that 2 did continue inside 3 or that it was ever anything else but a branch of 3, except for the difference in profile and its appearance of running, not into it, but under it. Excavation proved that 2 did indeed run under 3.

Across the hill, a hundred yards away and much higher up the slope, there is another isolated stretch of rampart identical in surface features with 2, and, likewise, running along the brow of a natural terrace and in the line that 2 would have taken had it continued. Half-way between this stretch and the point where 2 disappeared beneath 3, an 8-foot trench was dug across this terrace, on the presumed line of the rampart. A mass of tumbled stones was revealed, scattered down the slope of the terrace in a manner that suggested the demolition of a structure. No stones were in position, but, undoubtedly, walling had been constructed here at some time. The isolated stretch of rampart guards the roadway which leads uphill from one of the entrances at the west end. Thereby justifying its existence, it escaped the demolition which destroyed that portion of 2 rendered useless by the building of 3.



1. General view of Excavation.



2. Details of Rampart's inner face, upon secondary deposit.

STEWART H. CRUDEN.

[To face page 56.]



1. Outer face of Rampart.



2. Turf core of Rampart.



1. Hearth I.



2. Stones beneath hearth I and hut wall encircling them.



1. Hearth I.



2. Intersection of Ramparts 2 and 3.

The excavation at the intersection was simple. It was already revealed that rampart 3 crossed 2 as a distinct construction. This is shown in Plate XII, 2. There is no evidence of bonding one rampart into the other. The turf core of 3 had disintegrated and the earth was honeycombed with rabbit holes.

THE FINDS.

*The Quarry Site.**Primary occupation deposit (fig. 7, a) :*

- a. Native ware. Including buff-slipped sherds with oblique line of fracture. Most of the ware is very coarse, and large grits protrude on the surface.
- b. What appears to be the rim of a stone vessel. Mr Eckford, of the Geological Survey of Scotland, states that the ridges running across the piece are not natural lines of fracture. Unfortunately the top of the piece has been broken off.

Secondary occupation deposit (fig. 7, b) :

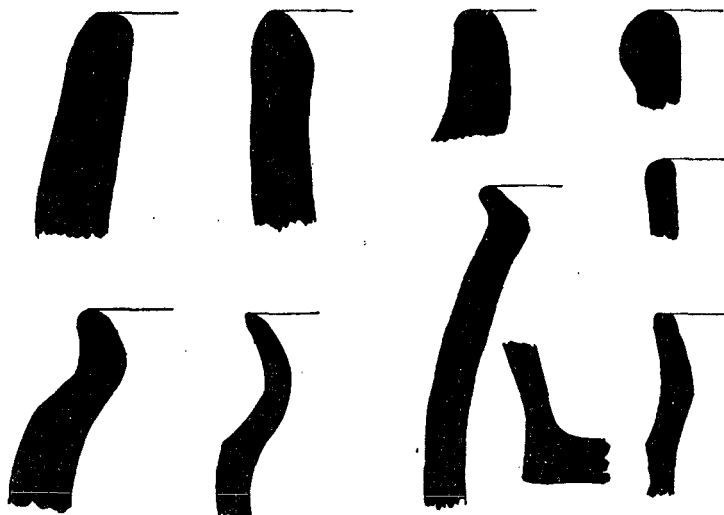
- a. Native ware, coarse, flat base.
- b. Roman ware:
 1. *Terra sigillata* rim 18/31. Beneath hearth, second century.
 2. Thin grey ware with lattice pattern, second to third century.
 3. Rim, thin grey ware, no lattice pattern.
 4. Fragment of flat-bottomed bowl or pie-dish of Roman fumed ware. Antonine date. Very common in Scottish forts of this date; never found in the first century. (I am indebted to Miss Anne Robertson of the Hunterian Museum, Glasgow, for this information.)
 5. Sherd of thin red ware with black slip.
- c. Three Silver Coins:

Roman Republican. (L. Valerius Acisculus, c. 45 B.C.). *Obv.* Head of Apollo or Sol, r. radiate; behind ACISC[VLUS]. *Rev.* Diana in galloping biga on r.: in ex., L.VAL[ERIVS]. (*B.M.C.*, i. p. 536, No. 4110 ff.)

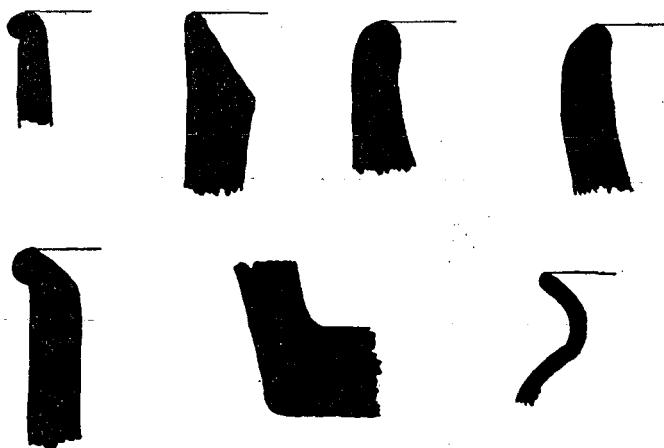
Vespasian. *Obv.* IMPCAESAR [VESPASIANVSAVG] Head of Vespasian r. laur. *Rev.* Pax seated l., bare to waist, holding branch in r. and having l. in her lap; around PON MAX[TR P COSVI] 75 A.D.

The third coin was too much corroded to admit of certain identification, but it may have been a Hadrian.
- d. Terret ring of iron; undecorated, with slot in middle of curve.
- e. Fragments of copper—thin narrow strips folded up, $\frac{1}{8}$ inch long.
- f. Cast ring pin-head of silver, shouldered variety with bosses.

- g.* Lumps of iron, doubtful nail-heads, etc.
h. Fragment of white opaque glass armlet (Kilbride-Jones type 3A.
Proc. Soc. Ant. Scot., vol. lxii. p. 377).



(a) Primary occupation deposit.



(b) Secondary occupation deposit.

Fig. 7. Rims and bases of pottery.

- i.* Amber bead, red, translucent, segmental, perforated, $\frac{1}{2}$ inch diameter.
j. Fragment of bead, golden, opaque, circular, perforated.
k. Two worked flints:
 1. Flint knife with blunted back, thin flake of single-wing shape, longer side being working edge; good condition, unpatinated

and with sharp edge. Flaked one side only. Primary flaking on working edge; secondary flaking on blunted back.

2. Micro-blade, sharp edges.

- l. Sandstone spindle-whorl.
- m. Fragment, colourless glass rod with pointed end, $\frac{1}{2}$ inch long.
- n. Miscellaneous stones, whetstones, pounders, rubbers, etc.

The turf core :

- a. Thin grey sherds, one of Roman and two of native ware.
- b. Fragments, iron and bronze.
- c. Two small flint scrapers.

The disturbed soil above hearth I :

- a. Fragment translucent glass armlet, pale green with white linear decoration.
- b. Sherd native ware base.
- c. *Terra sigillata* rim.
- d. Piece of iron.

The trench through ramparts 3, 2, and 2A :

- a. From the hearth—two sherds native ware.
- b. From the foot of the face of 2—polished stone axe-head, badly chipped and worn: native sherds.
- c. From the top soil—thin amber-coloured glazed ware, mediæval.

REPORTS ON CHARCOAL, STONE, AND BONE.

I wish to thank the following for their readiness to oblige and promptitude in sending me results:—

Mr M. Y. Orr, of the Royal Botanic Garden, examined the charcoal samples and provided the following information:—

The charcoal from the primary deposit at the quarry site is in the proportion, hazel, 59; willow, 8; oak, 3. (The samples for this analysis were taken from a crevice in the rock floor.)

Mr Eckford, of the Geological Survey of Scotland, analysed the specimens of stone and stated that none had necessarily been imported from a distant source. The stones were local whin, sandstone, and quartzite. The flint is obtainable from the rivers of the Lammermoors.

Miss Margery I. Platt, of the Royal Scottish Museum, states that the bones collected were wholly of domestic oxen.

I also wish to thank Sir George Macdonald, for describing the coins; and, in conclusion, to Professor Gordon Childe, who recommended me to the Office of Works for the supervision of the excavations, I desire to acknowledge my debt and express my appreciation.