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SOME DESTROYED SITES AT SHANNON AIRPORT, COUNTY CLARE

BY ETIENNE RYNNE

Plates XLV-XLVIII

(Communicated by J. J. RAFTERY, M.R.I.A.)

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While a new runway and landing-strip were being laid down at Shannon Airport in 1959, it was found necessary to level some ancient sites. These were a double-banked ringfort on "Thady's Hill" in the townland of Ballycally and a smaller, single-banked one in the townland of Garrynamona, situated about 650 metres south of "Thady's Hill." The writer conducted rescue excavations on these sites for the National Museum during the spring of 1959. Regrettably, the time available for excavation at both these sites was severely limited, only eight working days being possible at "Thady's Fort" and eleven at Garrynamona ringfort; however, all the areas opened were excavated to sub-soil. Two minor earthworks and an ancient trackway about 300 metres south of Garrynamona ringfort had been levelled at an earlier stage of the same work. These earthworks were in the townland of Rineanna North and the trackway in that of Rineanna South; they were inspected by the National Museum in 1941. All the above sites were in the parish of Kilconry and barony of Bunratty Lower (Fig. 1, sites A-E respectively).¹

"Thady's Fort"

This ringfort lay near the summit of the southern slope of "Thady's Hill," locally called "Cnoc Thaidhg" (Fig. 1, site A).² It consisted of two encircling banks with a wide fosse between them and the entrance facing directly south. Before excavation it appeared likely that there was an outer fosse on the north-west of the site but a cutting here showed no trace of one. The only other feature visible before excavation was a rectangular enclosure inside the bank in the south-western sector of the fort. This, on excavation, proved to be the lower levels of a stone house. The south-western corner of this house had been badly disturbed about 1940 by the erection over it of a gun-emplacement. The overall dimensions of the ringfort were 57 m. North-South and 61 m. East-West. The interior averaged about 30 m. in diameter (Pl. XLV).

STRUCTURE

The natural stratification on the site consisted of a brownish-yellow layer of soil, about 40 cm. thick, overlying a sticky, grey clay (locally called "daub" or "dobe") with, in some places, a layer of reddish earth or clay separating them. This stratification was reflected in the construction of the banks, both of which

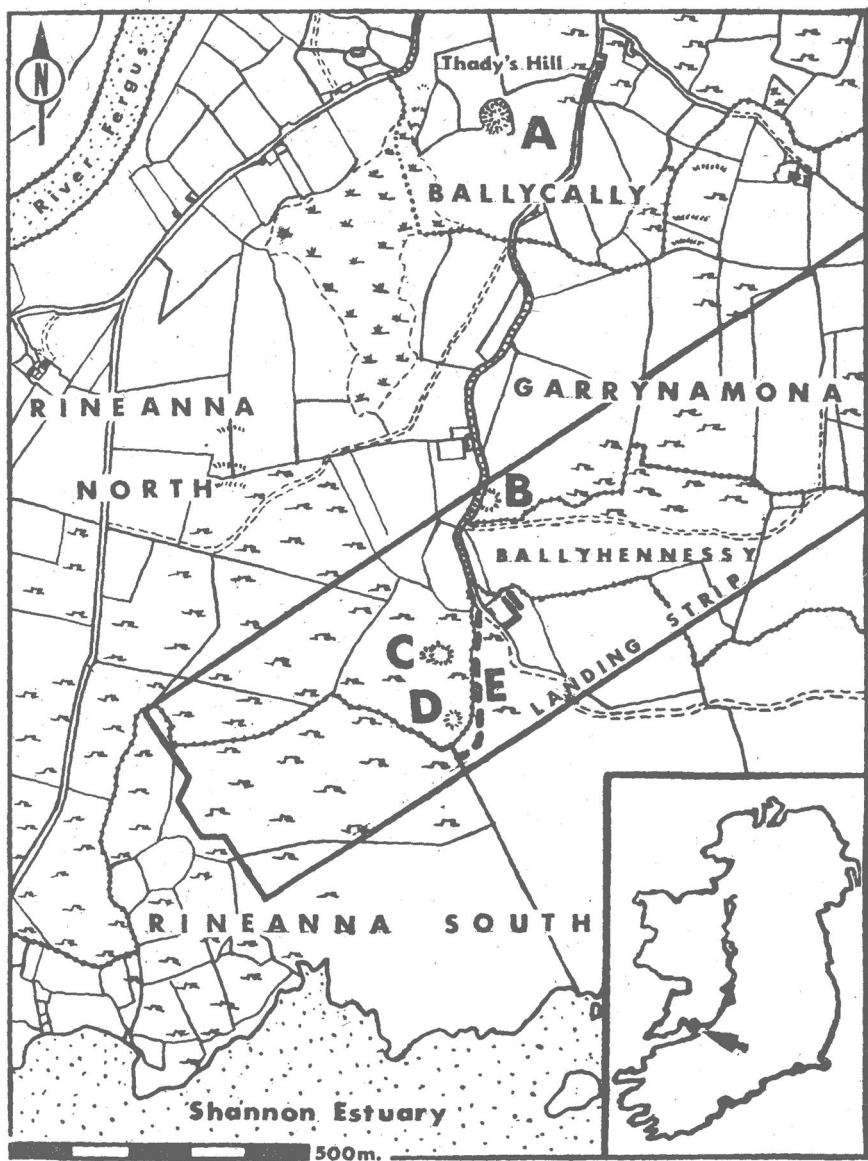


FIG. 1. General map of the area showing the relative positions of the various sites
(Based on the Ordnance Survey, by permission of the Minister for Finance.)

had been built mainly from the material from the fosse but which had been further raised by layers of earth, mainly brownish top-soil, apparently obtained elsewhere (Pl. XLVI).

For most of its length the inner face of the inner bank had been strengthened by a stone revetment wall, generally two courses high. Where this stone revetment was absent in the north of the fort, its place was taken by a wooden palisade (see below, p. 250). It was also missing in the SW quadrant of the ringfort, undoubtedly due to the presence of the house there. The revetment wall continued along the eastern face of the entrance to the fort. Owing to overgrowth and the disturbance caused by the erection of the gun-emplacement, the western face of the entrance was not excavated but some stones uncovered near it suggest that it also had been similarly revetted. The entrance would appear to have played from about 2 m. in width on the inside to about 3 m. on the outside (Fig. 3).

The end of the fosse at the east of the entrance was completely filled. It was found to extend to the end of the inner bank and to terminate in a steep face. The material in it was a stony brown fill, presumably mainly slip from the bank; the lowermost 10-20 cm. was stoneless and more compact than in the higher levels. Although round-bottomed at this point, the fosse, as could be seen in the cutting made in the north, was flat-bottomed for some of its length at least. Near the surface at the end of the fosse at the east of the entrance were several large flat stones, possibly part of a rough paving laid down when the fosse at this point had filled up. Lying partly underneath the largest of these flat stones was a spread of ash and charcoal⁸ (Fig. 3).

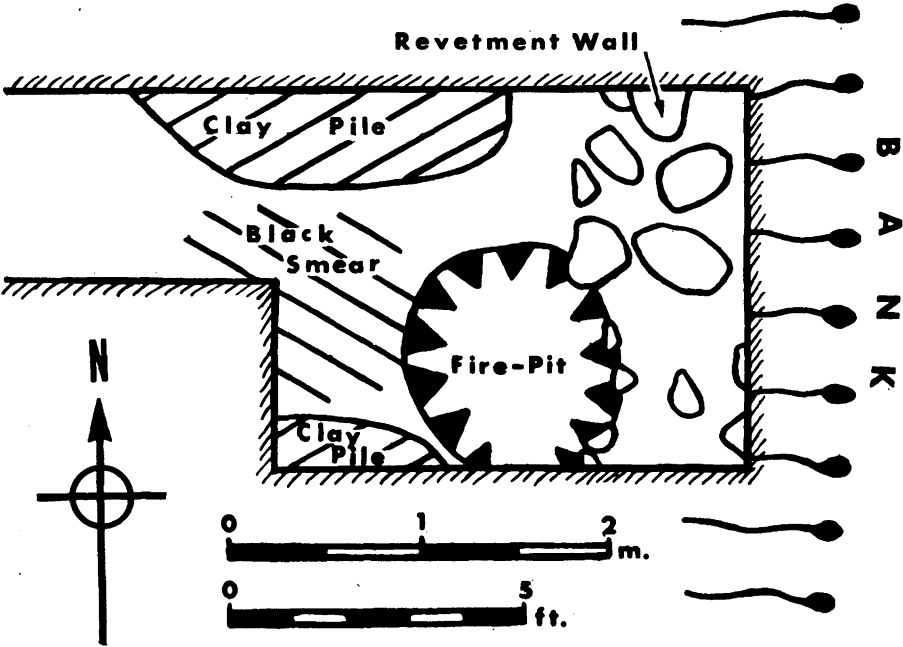


FIG. 2. "Thady's Fort": Detail plan of area immediately inside inner bank at east.

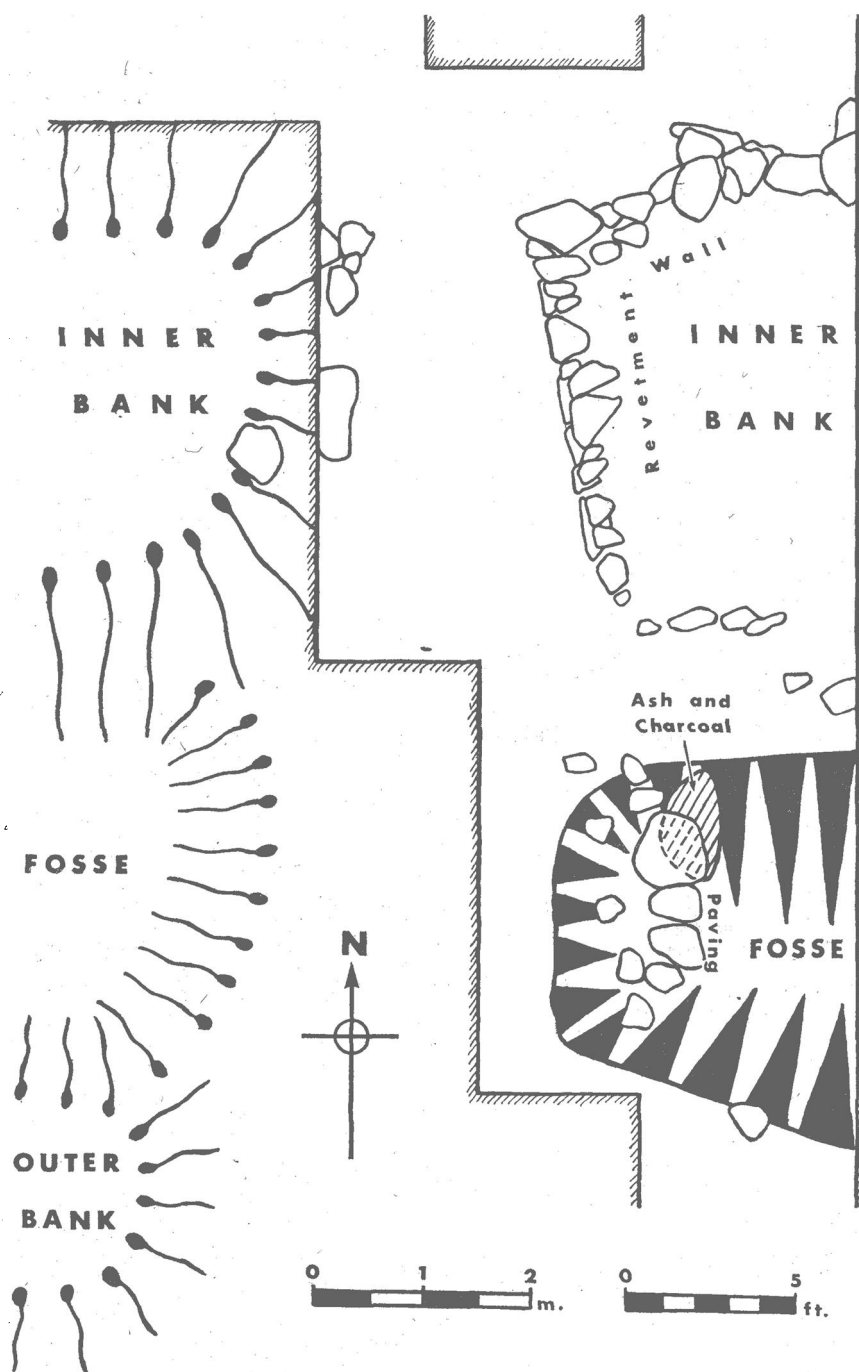


FIG. 3. "Thady's Fort": Detail plan of entrance.

The only feature of interest uncovered during the limited excavation in the eastern half of the ringfort was a shallow pit, about 20 cm. deep, full of blackish burnt material. This was just inside the revetment wall in the most eastern part of the fort and was dug into the reddish clay which overlay the sticky grey clay in this area. Portions of two small mounds of this reddish clay, about 15 cm. high, were uncovered next to this fire-pit and probably represented throw-up from digging the pit. The space between the two piles of clay was smeared a black colour, perhaps from raking out the embers preparatory to re-use of the fire-pit (Fig. 2).

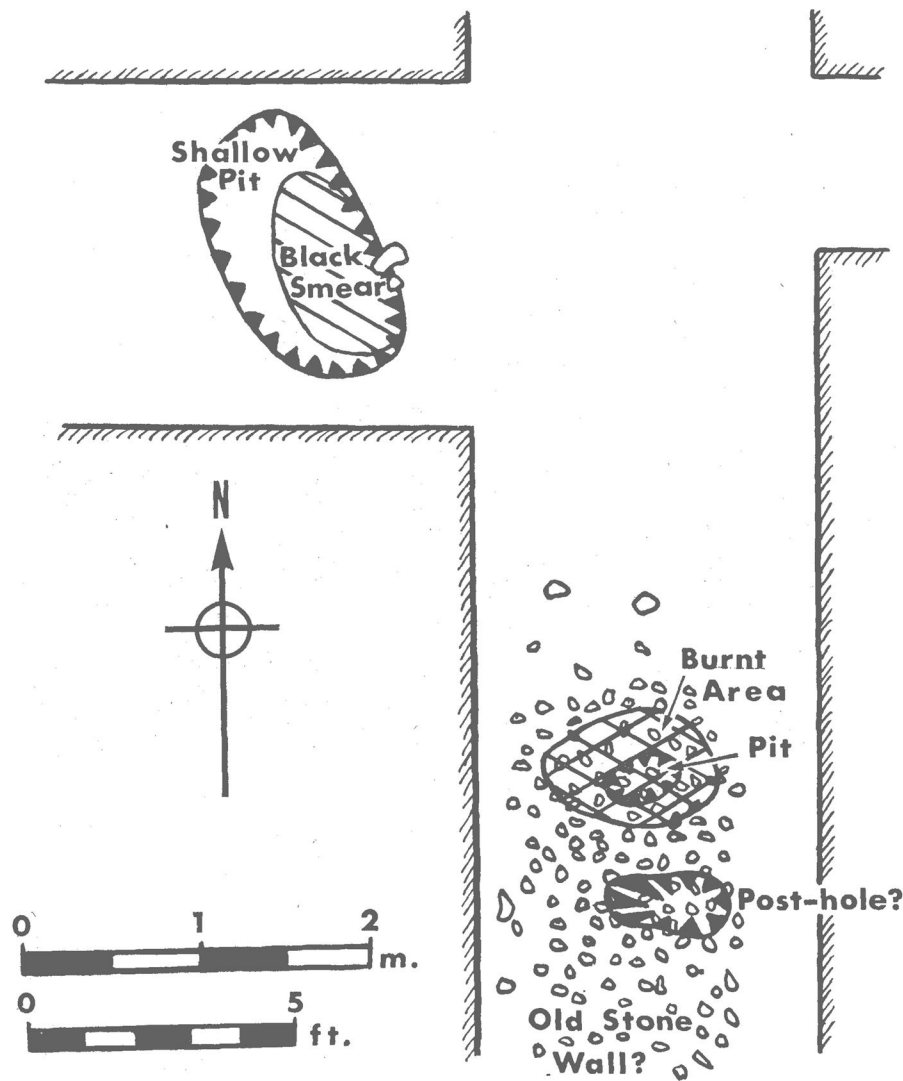


FIG. 4. "Thady's Fort": Detail plan of central area.

Near the centre of the ringfort were two other fire-pits. One of these, averaging about 10 cm. in depth, contained only a smear of charcoal⁴ in its deepest (15 cm.) part. The other was a small and irregular pit, about 20 cm. deep, and burnt material from it covered an area about three times its size. Immediately south of this pit was an oval depression, 25 cm. deep but shallower at its western end, which may have been a post-hole.⁵ Both the latter fire-pit and the possible post-hole were dug into the old ground level (the sticky grey clay) and underlay the northern end of a thick layer of stones which in turn lay just beneath the sod (Fig. 4). This stone layer extended southwards almost as far as the bank at the entrance and may, perhaps, have been the last remains of an old stone wall.

Where the revetment wall along the inner face of the inner bank was absent in the northern part of the fort was a flat-bottomed trench, 3·70 m. long, 60 cm. wide and 30 cm. deep. This was full of dark loose material and had a continuous band of charcoal⁶ running its length, nearer its northern than its southern edge. This band was of irregular width, suggesting that it was a burnt down palisade, the wider, blacker patches representing the upright stakes (Fig. 5).

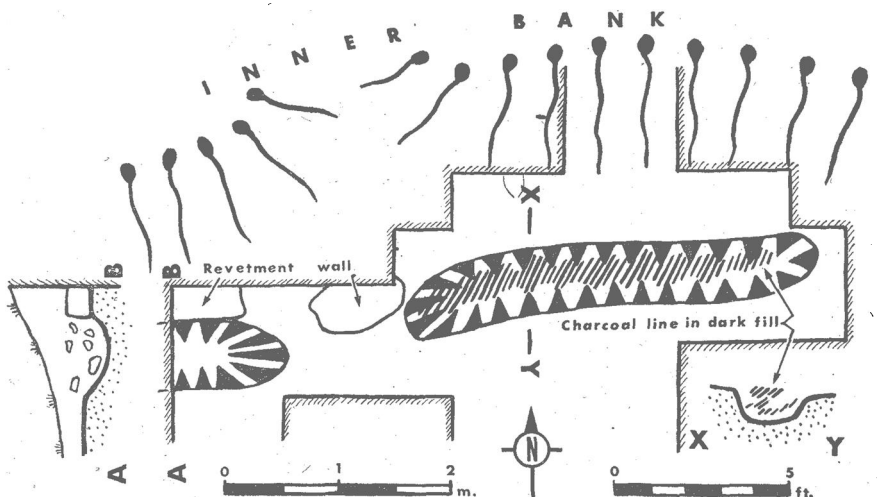


FIG. 5. "Thady's Fort": Detail plan and section of probable palisade trench.

Another trench, about 25-30 cm. deep, which began 1 m. west of the palisade trench and was visible in three other cuttings, appeared to run around most of the NW quadrant. For most of its length it ran immediately inside the revetment wall but as it continued southwards it turned gently inwards, away from the bank. A small cutting farther to the south failed to prove whether or not it linked up with the shallow end of a trench, 10 cm. deep, discovered just outside the corner of the house in the SW quadrant (Pl. XLV).

The SW quadrant was almost completely taken up with the foundations of a rectangular stone house, 13·40 m. long by 6·20 m. wide externally, the long axis being NW-SE (Fig. 6). These foundation-walls remained to an average

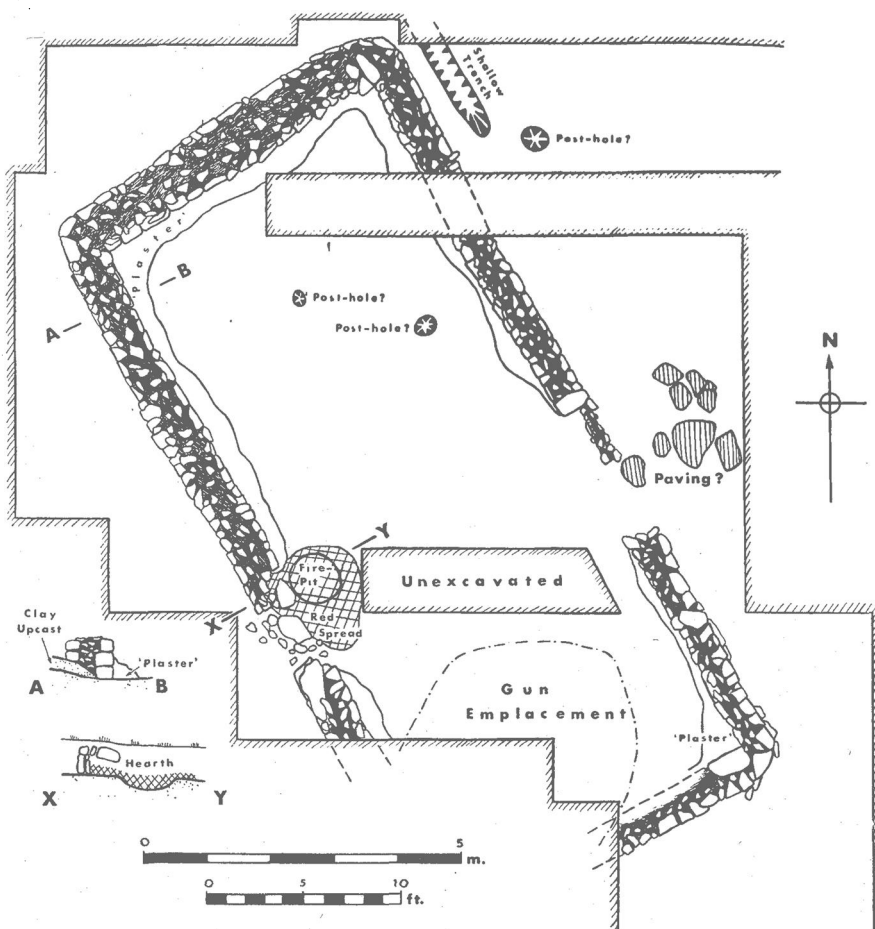


FIG. 6. "Thady's Fort": Detail plan and sections of house.

height of about 60 cm. and averaged about 75 cm. in thickness. They were built of large, generally rectangular, dressed stones on the outside and inside, with smaller, irregular stones between them; the largest and best-shaped stones were those of the lowest course. The area outside and, to a lesser extent, inside the house was covered with stones obviously slipped from the walls, although the quantity was not sufficient to suggest that the stone foundations of the house-walls were ever more than about 80 cm. high. The interstices between the stones in the wall were full of loose earth, suggesting that the upper part of the house-walls may have been built of sods. The angles of the corners of the house were not quite right-angles. The wide entrance was slightly to the south of the centre of the north-eastern wall and faced towards the centre of the ringfort. In the south-western wall, directly opposite the entrance to the house, there was a gap, 1.80 m. wide, which narrowed in steps to a width of 1 m. and which was partly blocked by displaced stones. Inside the house at this part a shallow pit, 20 cm.

deep and 80 cm. in diameter, full of red burnt material,⁷ was discovered. The burnt material spread over a larger area than that of the fire-pit and appeared to thicken and rise slightly as it approached the gap in the wall (Section X-Y, Fig. 6). This gap appears, therefore, to have been the remains of some form of chimney. A continuous strip of yellowish mortar,⁸ averaging about 30 cm. in width and 15 cm. in thickness, was found immediately inside the house-walls. This mortar appears to have been used to plaster the inside of the house. Under the fallen wall-stones outside the entrance to the house were some large flat flags. These were probably contemporary with the house itself and may have served as a paving before the entrance, although not found in a regular pattern. Outside the northern corner of the house, running parallel to the north-eastern wall, was the shallow end of the trench already mentioned above. Also found were three doubtful post-holes, one outside near the end of this trench and two inside the northern half of the house. These were respectively 40 cm., 30 cm. and 20 cm. in diameter, and 20 cm., 15 cm. and 15 cm. deep.

The western corner of the house was partly built on the lowest levels (i.e., on the hard grey clay upcast) of the inner bank (Section A-B, Fig. 6). The same would appear to have probably been the case at the southern corner but it was impossible to verify this owing to the disturbance caused during the erection of the gun-emplacement. Apart from these two corners the south-western wall of the house appeared to have been built on old ground level, with the slip from the inner bank piling up against it.

FINDS (Fig. 7)⁹

Pottery (1-7)

During the excavation seven sherds of medieval pottery were found, two of which, one (7) from old ground level at the centre and the other (6) from near the surface, also at the centre of the ringfort, join together. Three were found among the fallen wall-stones of the house, one (2) inside and the others (3 and 4) outside the north-eastern wall. Portion of a pot-handle (1) was found among the stones at the northern end of the putative old stone wall which runs from the centre almost to the entrance of the fort. A small sherd (5), decorated with two very lightly scored vertical lines, was found near the surface in the S E quadrant.

Iron (8-16 and 28)

Knife with bone handle (8). Found among the stones at the northern end of the possible old wall in the southern half of the fort. The blade is single-edged of triangular cross-section; it is now missing its pointed end. At the back of the blade, between it and the tang, is a flat iron disc which appears to be of one piece with it and not a separate unit. The round-sectioned bone handle swells slightly towards the end farthest from the blade. It is closed at this end by the insertion of a bone plug which has a nipple-like projection at its centre. Overall present length, 12.1 cm.; handle 7.6 cm. long, 1 cm. in diameter near the blade and swelling to 1.2 cm. in diameter at the other end; blade 1.4 cm. in maximum width and 2 mm. in maximum thickness.

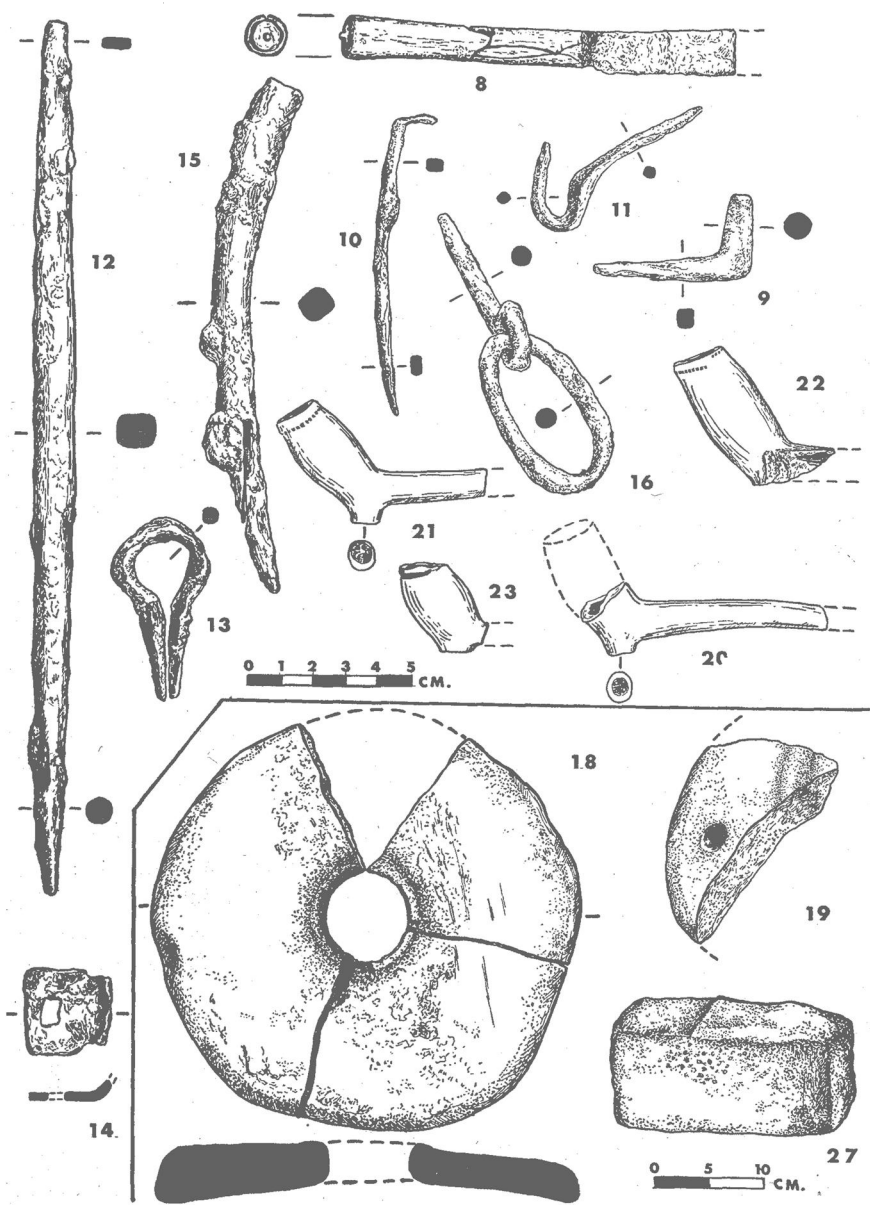


FIG. 7. "Thady's Fort": Principal finds from various parts of the site.

Hinge-pivot (9). Found among the stones near 8. Small, with roughly round-sectioned pivot and square-sectioned tang. The pivot is 2.5 cm. long of which 1.9 cm. would have been effective, and the tang is 4.9 cm. long. This type of object is locally called a "puchán."

Bent Rod (10). Found among the stones near 8. Much corroded rod which is bent at right angles at one of its ends. Roughly round in cross-section except towards the straight end where it narrows and flattens, thus coming to a flat, blunt point rectangular in cross-section. 9.4 cm. long; bent portion 1.3 cm. long.

Hook (11). Found among the stones near 8. Tanged; for insertion into wood? Roughly lozenge-shaped in cross-section although becoming rounded towards the end of the tang. 5.1 cm. from the end of the hook to the end of the 4.5 cm. long tang.

Spike (12). Found on the top of the wall-foundations of the house, near the "chimney." Roughly square-sectioned except towards its ends, one of which is bluntly pointed, the other flattened and slightly narrowed. 27 cm. long and 9.5 mm. in maximum thickness.

Jew's Harp (13). Found among the fallen wall-stones outside the entrance to the house. Made from a rod of lozenge-shaped cross-section and with bluntly pointed ends. The stang is now missing. 5.7 cm. long; the bow averages 1.7 cm. in internal diameter; prongs 3 cm. long.

Mounting? (14). Found among stones near 13. This object may, possibly, be a fragment of a mounting or binding-strip of some sort. One end widens into a rectangular shape which has a rectangular opening through its centre. The broken part is slightly bent, but whether this is intentional or due to bending before breaking is not apparent. 2.5 cm. long; 2 cm. wide at the break and 2.5 cm. in maximum width; 2.5 mm. thick; opening, 9 mm. by 6.5 mm.

Pointed Rod (15). Found among the stones of the lower courses of the inner face of the north-western foundation-wall of the house. Slightly curved. Of roughly square cross-section, tapering to a point at one end. 15.7 cm. long; 1.3 cm. in maximum thickness.

Link with attachment (16). Found on the top of the south-eastern foundation-wall of the house, immediately below the disturbed area. Ovoid link which has a short rod looped around it. Both the link and its attachment are round-sectioned. The link is worn thinner at both ends of its long axis, at one place by the attached rod and at the other probably by another link which is now missing. The link is 5.5 cm. by 3.2 cm. externally and the attachment is 5.4 cm. long.

Slag (28). Found near old ground level in the western half of the ringfort. 6.6 cm. by 2.5 cm. by 1.8 cm. in maximum dimensions.

Bronze (17)

Among the stones at the southern end of the possible old wall in the southern half of the ringfort a piece of sheet-bronze which had been cut irregularly into a strip 9.5 cm. long and 1.1 cm. in greatest width was found.

Stone (18, 19 and 27)

Three Fragments of Quernstone (18).¹⁰ The two smaller fragments were found together among the fallen wall-stones outside the entrance to the house, the third fragment among the fallen wall-stones inside the northern corner of the house. The three fragments join to form the almost complete upper stone of a rotary quern measuring about 41 cm. in diameter. The central perforation is cylindrical and is 8.4 cm. in diameter. Its upper edge is encircled by a very low ridge 1.3 cm. wide. This quernstone is 5.3 cm. in maximum thickness at its outer edge but, as the underside is concave, it is appreciably less at its centre. The upper surfaces of all three fragments, but particularly of the largest, show signs of the secondary use of the fragments as whetstones.

Quernstone Fragment (19). Found on old ground level in the SE quadrant. Portion of the upperstone of a rotary quern which was about 36 cm. in diameter. The central perforation was cylindrical and its upper edge was encircled by two pocked-out circles. 6 cm. from the outer edge of the quernstone is an asymmetrical hole for the handle which is 4.2 cm. by 3.6 cm. at its mouth and 2 cm. deep.

Whetstone (27).¹¹ Found among the fallen wall-stones of the house. Shaped like a rectangular block. Three of the large faces are polished from rubbing and one of them is pock-marked as if from hammering with a pointed object. 21.5 cm. by 9.3 cm. by 7.8 cm. in maximum dimensions.

Clay Pipes (20-26).

Three bowl-fragments (20-22) and three stem-fragments (24-26) were found among the fallen wall-stones of the house, both inside and outside. A smaller type of bowl (23) was found under the largest of the paving-stones outside the entrance of the house.

"Plaster" (29)

A sample of the mortar used to plaster the inside of the house was also preserved.

DATING

From surface indications everything pointed to "Thady's Fort" being, most probably, a ringfort of the Early Christian Period with a rectangular dwelling, perhaps a secondary feature, within its banks. Its excavation, however, suggests a different story.

Two periods, at least, of building are evident from the structure of the site, the second of minor importance. Evidence for the second period consisted of the paving over the end of the fosse at the entrance and the old stone wall (?) in the southern half of the interior. Whether the house in the SW quadrant was a secondary feature or not is uncertain. Because the slip from the inner bank of the fort was *against* the outer face of the south-western wall of the house and not *under* it, and because the western corner of the house was partly built on the lowest levels of the bank—not on slip—it would appear that the house and ring-

fort may well have been built contemporaneously. The house, with its chimney in the centre of the wall opposite the doorway and its plastered interior, does not appear to date earlier than Late Medieval times.¹² It is also, perhaps, worthy of mention that the method of constructing the foundation-walls of the house appears to have been identical with that of the medieval houses excavated at Caherguillamore, Co. Limerick.¹³

No study of Irish clay pipes has recently been undertaken and, until a good series has been found in clearly stratified deposits, we must rely on comparisons with fairly well dated English parallels for the dating of Irish specimens. The small bowl (23) found under the paving at the entrance to the house compares most closely with Type 4a of the most recent study on English clay pipes,¹⁴ a type dated to about the period 1620-1650. The three other bowls (20-22), all of which were found among the fallen wall-stones of the house, are all of the same general type and compare most closely with English bowls of Type 6a which are dated to about 1650-1690. If the stratigraphy of these clay pipe bowls has any significance, one might suggest that the small bowl could perhaps be used as dating evidence for the building of the house, or at least for an early stage in its occupation, and that the three others could be taken as giving an indication of the date of its abandonment. On these grounds one might suggest about 1620 and 1700 as outside dates for the occupation of the house.

An examination of the other finds from the site seems to support the argument in favour of a late dating for the fort. One or two, the bent iron rod (10) and perhaps also the hinge-pivot (9), could perhaps be from a pre-Early Medieval period while everything else found appears to be Late Medieval in date.

A close parallel for the above-mentioned bent iron rod was found during the excavation of a large settlement-site in the sandhills at Dooey, Co. Donegal, which dates for the most part from the Early Christian Period, but which also included a Late Medieval phase.¹⁵ Unfortunately, however, this object was found in a much-disturbed area of that site and cannot, therefore, be used to date closely the specimen from "Thady's Fort."

Another close parallel for this object was found in a Roman villa at Morton, Isle of Wight, most of the finds from which date from the third century A.D.¹⁶ It has recently been suggested that the bent iron rod¹⁷ which was found there may be a small iron file of much the same type as a Roman one from London,¹⁸ but the comparison is rather far-fetched and the purpose of these iron objects remains unexplained.

Also at Morton were found some small iron hinge-pivots¹⁹ some of which are similar to that from "Thady's Fort." Hinge-pivots have not changed greatly in form over the years, however, and relatively modern examples often closely resemble early ones, although they are generally somewhat larger; difference in size, however, is not necessarily indicative of a difference in age.

Taking everything into consideration, a pre-Norman dating for either the bent iron rod or the hinge-pivot can by no means be taken as proven and their finding among the stones of the definitely secondary stone structure in the southern half of the fort must remain the overriding factor in any discussion of their date.

The iron knife with bone handle (8) is of a type which appears to be securely dated to the late sixteenth and seventeenth centuries, many related types found in England being closely dated to that period by the cutlers' marks on their blades.²⁰ It can, therefore, be taken as proving a late date for the stone wall (?) in the southern half of the fort and, consequently, for the other finds from it.

The iron jew's harp (13) is, unfortunately, not closely datable, but it also appears to belong to the same late period as the finds already discussed. Jew's harps are known from a very early date and several bronze examples dating from early Saxon times are known from England.²¹ There is at least one similar bronze example in the National Museum of Ireland, but no details of its provenance are known. There are several iron examples from Ireland, however, and these resemble the "Thady's Fort" specimen closely. Only one of these seems to have been found during an excavation, at Site J, Knockadoon, Co. Limerick, a house-site dated by the excavators to the early seventeenth century.²² The other examples come from such sites as the cities of Dublin and Limerick. The writer can find no evidence for a pre-Norman dating for iron jew's harps in Ireland or elsewhere. There are several mentions in the Late Medieval and more recent literature of the jew's harp as a very popular musical instrument in Ireland from at least the late sixteenth century onwards, one visitor to the country going so far as to write, in 1837, that the jew's harp "may be said to be now the only musical instrument of the Irish peasant, and it exemplifies in a striking manner the degradation of his country."²³

None of the stone objects found helps to date the site closely as related or similar types of whetstones and quernstones are known, apparently, from Early Christian times onwards. It is well known that rotary hand-querns were used in places in Ireland, as elsewhere, even until the beginning of the present century.²⁴

Little can be said about the potsherds from the site, except that they all probably date from some time after the late sixteenth century; one (3) appears to be comparatively modern.²⁵ The finding of a sherd (7) on old ground level which joins with one (6) from near the surface argues against clearly distinct periods of occupation at "Thady's Fort."

The small quantity of bones found, totalling roughly three stones in weight, does not suggest a long occupation of the ringfort at any period. Only the bones from the fire-site within the house can be connected definitely with a particular phase of the fort's occupation. These included bones of an ox, a horse, a sheep, and the bone of a large goose probably of domestic type. Scattered over various other parts of the ringfort were the bones of at least two horses and one pony, of a domestic type of bird, of rabbit, and the antlers and bones of one red deer. Also present was one human femur. The shells of edible shell-fish found at the site include the mussel, *Mytilus edulis* (Linné) and *Circe minima* Mont.²⁶

Taking all the evidence from the structure and the finds into consideration, it may, perhaps, be argued that "Thady's Fort" was constructed about 1600 A.D., but because of the necessarily limited nature of the excavation certainty on this point could not be achieved. It seems certain, however, that the site was occupied during the first half of the seventeenth century, thenceforth lying abandoned and reputedly haunted by the fairies, until its use as a site for a gun-emplacement about 1940.

Garrynamona Ringfort

Before excavation this site appeared to be a platform-type ringfort with low single bank and no apparent fosse, built in low-lying land and surrounded on the north, east and south by marshy land and on the west by gently rising rocky ground (Fig. 1, site B).²⁷ Originally roughly circular, its western part had been destroyed by an old road cut through it there. Before excavation started at this site the eastern bank and ditch of this roadway had been bulldozed outwards, thus further reducing the undisturbed area of the ringfort. The only unusual feature connected with this ringfort apparent prior to excavation, was a small, very low, sub-rectangular enclosure immediately inside and to the east of the ringfort's entrance which was in the south-west. Originally the site must have averaged about 32 m. in diameter, with the interior about 24 m. in diameter (Pl. XLVII). It might here be pointed out that, although definitely in the ringfort tradition, this site, as revealed by excavation (see below) was by no means as clearly a ringfort in the full sense as was "Thady's Fort" and as is the average Irish rath.

STRUCTURE

Excavation revealed that the ringfort's high interior was not due to artificial raising but to its siting on a rock outcrop which extended, from the rising ground to the west of the roadway, eastwards into the marshy area. The surface of the rock was at an average depth of about 60-70 cm., although in places as little as 35 cm., below the surface of the interior of the ringfort (Pl. XLVIII). The rock sloped away rather steeply in the southern part of the fort and here it was overlain by a sticky, hard, grey clay ("daub" or "dobe"); a smaller quantity of this grey clay was also noticed on the rock outside the bank in the east. The rock surface was at a slightly higher level in the western half of the interior, thus creating a slight, irregular ledge running more or less across it from the bank in the north to near the entrance. In places there were flat stones laid, apparently intentionally, along this ledge. The irregularities in the limestone surface were levelled out by an almost continuous layer of compact yellow or dirty yellow clay which was a natural feature found everywhere in the general area. This layer did not, however, everywhere eliminate the slight ledge across the western half of the ringfort.

In the eastern half of the ringfort and also near the entrance, in the south-west, there were shallow pits or trenches, averaging about 20-30 cm. in depth, which were dug into the clay layer. These were filled with a darker material containing small flecks of charcoal and some animal bones. One trench²⁸ was long and narrow, averaging about 1 m. in width, and ran in a N-S direction, going partly under the bank in the north-east of the fort. This trench was deepest at its centre, getting gradually shallower towards either end. Alongside most of its western edge ran a single-course setting of stones about 25 cm. high. Also running in a N-S direction under the bank, but in this case directly east of the centre of the ringfort, was a wide and relatively shallow trench, about 2-80 m. in maximum width and about 30 cm. in depth. This was dug through the

yellow clay and into the sticky grey clay which appeared at this point. It was filled with a mixture of yellow and grey clay and contained charcoal flecks and bone fragments. Another trench directly east of the centre of the fort was deeper and blacker at its southern end,²⁹ near which there was a scatter of large stones. Just south of this stone scatter was an irregularly oval pile of loose stones in dark, stony earth, about 30 cm. high and orientated NW-SE; on the top of this pile, at its centre, some larger stones were scattered, apparently haphazardly. In its north-western end a pit, about 1.75 m. in maximum diameter, was dug to a depth of about 30 cm. through the yellow clay and partly into the rock. This pit was filled with black material containing charcoal³⁰ and at its bottom a fine, decorated, bone comb was found. The trench in the south-west of the ringfort ran in an E-W direction across the entrance; only its eastern end could be excavated. It was dug to a depth of about 30 cm. through the yellow clay and partly into the rock, and was filled with dark stony material, its deeper parts being blackish and containing charcoal lumps.³¹

A fire-pit and what looked like a post-hole were also found, dug into the yellow clay. Both were east of the centre of the ringfort, the former north-west of and the latter just west of the stone scatter mentioned above. The fire-pit was about 25 cm. deep and averaged about 50 cm. in diameter. It contained a few large stones and was filled with red, burnt material and charcoal.³² Two very large, flat-headed, iron nails and portion of a bronze binding-strip were found in it. The small pit nearby averaged about 40 cm. in diameter and about 20 cm. in depth. It was filled with blackish material containing charcoal; the charcoal, on examination,³³ proved to be of different varieties which argues against this pit having been a post-hole.

Also, either directly on the yellow clay or partly dug into it, were five small black patches about 5-10 cm. thick (Pl. XLVII, A-E). Only one of these, A, contained more than one piece of charcoal.³⁴

The greater part of the interior of the ringfort was covered with a habitation layer of rather sticky earth which was slightly darker than the humus above it and which contained minute charcoal flecks,³⁵ but few bones. The building of the bank and a stone setting at the entrance can be associated with this habitation layer. This stone setting consisted of a low, short, straight wall of stones demarcating the eastern side of the entrance. Many of its stones had fallen inwards on to the entrance-way and only two courses still remained in position. A group of scattered stones was uncovered which may, perhaps, represent the limit of stones fallen from a similar setting at the western side of the entrance (owing to the bulldozed material there, it could not be further excavated).

The very low bank of the ringfort seems to have been built, in part at least, with material from an external fosse which was dug in places around the natural rock platform. At the south of the ringfort this fosse had been dug through the dirty yellow clay and steeply into the underlying sticky grey clay. This stratification was reflected in the structure of the bank at this point: there was a pile of dirty yellow clay upcast, containing some charcoal flecks and animal bones, with a thick layer of sticky grey clay upcast on it and behind it, and over all a

layer of humus. The fosse here was partly filled with sticky grey clay which had slipped from the outer surface of the pile of dirty yellow upcast, and also with a rather stony grey slip which may have come from the top of the bank after the supporting outer facing had slipped away (the stones would, perhaps, be portions of the shaly limestone which the fosse-diggers doubtlessly encountered under the hard grey clay before finishing the fosse). Waterlogging in the low-lying marshland prevented a complete section from being excavated through the fosse at this point. Inside the bank, on the surface of the sticky grey clay upcast, there was a small patch of reddish burnt material, but without charcoal, possibly the remains of a fire.

Although the cutting excavated in the east of the ringfort was continued well beyond the bank (until hindered by excessive waterlogging), no trace of a fosse was noticed; it is probable that the ringfort-builders found this area too waterlogged to dig a fosse there and thus contented themselves with a bank alone. The bank at this point appeared to have been made of piled-up humus which had probably been collected from the interior of the ringfort or from the higher ground to the west; this material hardly differed in texture or colour from the superficial humus.

The fosse also appeared outside the bank in the north of the ringfort. Here it was shallow, dug through the yellow clay and into the shaly limestone. It was partly filled with stony greyish slip, probably from the original top of the bank. The bank at this point consisted of humus covering reddish-brown upcast. The latter was probably a mixture of the yellow clay and humus upcast from the fosse and around it.

Inside the bank at the south of the fort, one large and two small areas of mussel shells were found near the surface. These were above the habitation layer and are, therefore, clear evidence of a late use of the site. Also undoubtedly late is a low, small, sub-rectangular enclosure in the same region. This was roughly 3 m. by 4 m. internally, the enclosing ridge being about 15 cm. high and about 1 m. wide, except where it combined with the ringfort's bank at its southern side to complete the structure. This enclosure was only evident on the surface, not appearing as a separate feature in the section faces.

FINDS (Figs. 8-10)³⁶

Bone (1-3)

Comb (1). Found in the deepest part of the pit in the SE quadrant. In several fragments, but these, except the vast majority of the teeth, can be re-assembled. It is made of six flat plaques fledged with teeth on two opposing edges; these are held in position by two rectangular, plano-convex, side-plates, and all are fastened together by three iron rivets and three bone pegs. The four central sections had teeth of uniform length and thickness, while the teeth of the two outer sections diminish in length as they approach the outer ends of the comb. These outer ends bifurcate and are decorated in a manner somewhat resembling butterfly wings. There is a circular perforation through each of these "wings," around which two compass-drawn pointed ovals are lightly, and rather

crudely, scored. From three to six small dots are scattered rather haphazardly around the perforations and within the pointed ovals. To judge by the compass-drawn arcs it is clear that this decoration was executed before the "wings" were finally shaped since the marks made by the anchor point of the compass when scoring some of the shorter arcs can be clearly seen, but not those made when setting out the longer arcs. The two side-plates are decorated with deeply scored linear ornament and along their upper and lower edges there are pronounced vertical nicks at intervals which correspond to the spacing of the teeth, showing that the whole comb was assembled before the teeth were cut. 13.1 cm. long and 5.1 cm. wide; side-plates, 8.6 cm. long and 1.9 cm. wide.

Notched Bone (2). Found near the surface in the NW quadrant. Portion of the radius of a large sheep which has three notches cut into one of its side-edges. The present length of the bone is 11.4 cm.

Point (3). Found at the northern end of the dark-filled trench in the NE quadrant, east of the centre of the ringfort. Now lacking about 8 mm. of its pointed end. Roughly D-shaped in cross-section, this object has been whittled and polished to such an extent that it is not now possible to identify the type of bone with certainty. At present 11.2 cm. long and 1.3 cm. by 9 mm. in maximum width and thickness respectively.

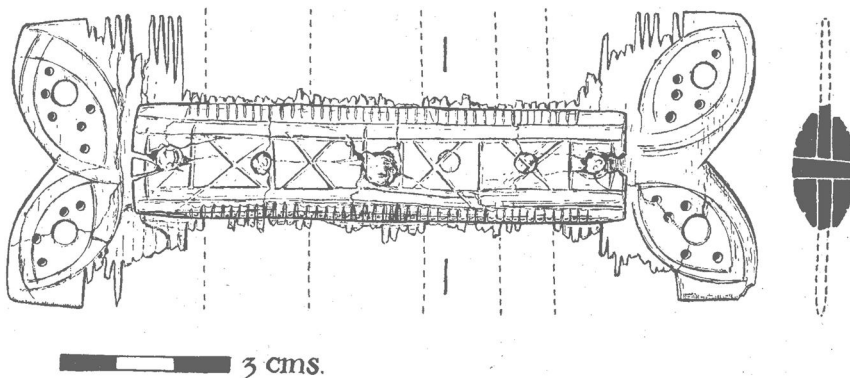


FIG. 8. Garrynamona Ringfort: Decorated bone comb from the pit in the SE quadrant.

Flint (4)

Near the surface in the NE quadrant a small artifact of reddish-brown flint was found. It has steep secondary working around one end giving it the appearance of an end-scraper of Neolithic type. However, the sharp edge of the secondary chipping is broken irregularly as if from being struck. This, and its presence in such a late context (for dating of site see pp. 265-7), suggest that it is, in fact, a tinderbox flint. 2.4 cm. by 2.1 cm. by 1.4 cm. in maximum dimensions.

Pottery (5-27)

During the excavation twenty-one sherds, many of them multi-coloured, very highly glazed, and of a relatively modern appearance, were found. One of these multi-coloured, highly glazed sherds (27) was found among the fallen wall-stones at the entrance to the ringfort; five sherds (20-24), three of which (20-22) join to form portion of a wide, shallow vessel with vertical walls, were found about 20-30 cm. below the surface in the SW quadrant; fifteen sherds were found near the surface, including four sherds of slip ware (11-14) in the NW quadrant, a rimsherd of bluish stoneware or delftware (25)³⁷ in the SE quadrant and a sherd of brownish stoneware (26) in the NE quadrant.

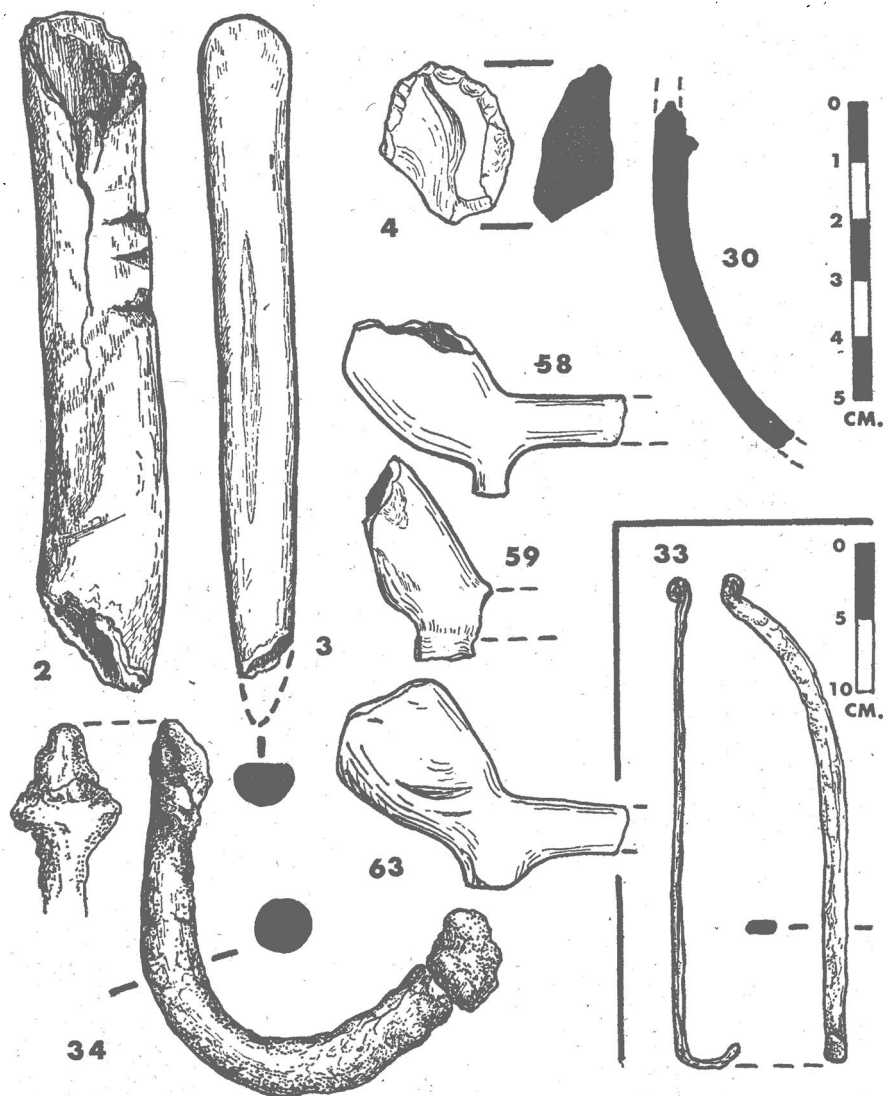


FIG. 9. Garrynamona Ringfort: Principal finds from various parts of the site.

Glass (28-31)

Four fragments of bottle-green glass were found during the excavation, three from the SE quadrant, close by and at the same level as the large spread of mussel shells near the surface. One of these (30) is portion of a vessel with short neck and bulbous, globular body. The fourth piece of glass (31) was found about 15 cm. above old ground level in the SW quadrant.

Iron (32-41)

Donkey Shoe (32). Found under the sod in the NW quadrant. This object is now very corroded but it clearly had no clips or calkins. It is, apparently, fullered all around but is too corroded to be able to distinguish the nails or nail-holes. U-shaped centre. 9 cm. long and 6.8 cm. in maximum breadth; web, 2.1 cm. and 6 mm. in maximum width and thickness respectively.

Pot-hooks (33). Found near the surface in the NW quadrant. Only one of the hooks remains. Made of a curved rod of rectangular cross-section, one end of which is hooked and the other end of which is looped back on itself to make a link to join it with its other half. 25 cm. long.

Hook (34). Found between 20 and 30 cm. deep in the SW quadrant. There are short projections, one at either side, 1.6 cm. from one end. Rounded cross-section, 9 mm. thick. The chord between the two ends is 6.4 cm. long.

Rod (35). Found between 20 and 30 cm. deep in the SW quadrant. Slightly curved and of round cross-section. Broken at one end. At present 23.5 cm. long and 6 mm. thick.

Hooked Strip (36). Found in the black-filled trench near the entrance. Bent into a hooked shape, but perhaps not intentionally. Rectangular cross-section. If extended it would be 10.5 cm. long; cross-section 7 mm. by 3 mm. in width and thickness respectively.

L-shaped Object (37). Found in the blackish fill of the long trench going under the bank in the NE quadrant. Rounded cross-section. The arms are 3.1 cm. and 2.7 cm. long, measuring from their ends to the back of the bend; 5 mm. in average thickness.

Slag (38-39). Found near old ground level in the SW quadrant. 7.8 cm. by 5 cm. by 2.6 cm. and 4.8 cm. by 3.6 cm. by 2.4 cm. in maximum dimensions respectively.

Nails (40-41). Found with 42 in the bottom of the fire-pit in the NE quadrant. Both are large with flat circular heads and thick round-sectioned stems. One of these nails (40) now lacks its point, but it probably never was much longer. At present 9.8 cm. and 8.1 cm. long, with heads 3.2 cm. and 2.6 cm. in diameter respectively.

Bronze (42)

Portion of a binding-strip was found in the fire-pit with 40 and 41. Of U-shaped cross-section and curved as if for the rim of a vessel about 16 cm. in diameter. The chord between the two ends is 9.8 cm. long; the metal is 0.5 mm. thick.

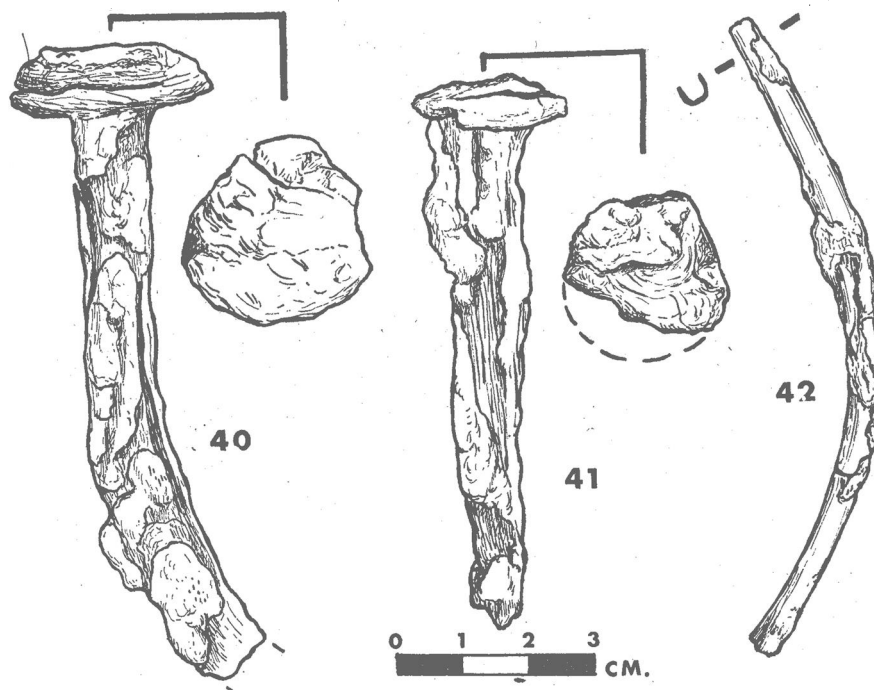


FIG. 10. Garrynamona Ringfort: Two iron nails and bronze binding-strip from the fire-pit in the N E quadrant.

Copper (43-44)

Two coins,³⁸ one (43) of which is a George III halfpenny struck in Ireland between 1766 and 1783, but probably dating from before 1780. It was found between 20 and 30 cm. deep in the NE quadrant. The other coin (44) is too corroded to identify with certainty, but it probably is of similar type. It was found about 5-10 cm. above old ground level at the entrance to the ringfort.

Stone (45-48)

*Two Fragments of Quernstone (45-46).*³⁹ Both found almost on old ground level near the entrance, but not very near one another. They join to form about one-third of the upper stone of a rotary quern which would have been about 48 cm. in diameter and would have had a central perforation about 9 cm. in diameter and a concave grinding surface. Of irregular thickness, the minimum and maximum thicknesses at the outer edge differing by as much as 2.5 cm.

*Quernstone Fragment (47).*⁴⁰ Found almost on old ground level near the entrance. Portion of the upper stone of a rotary quern, perhaps another fragment of the same quernstone as 45 and 46.

*Quernstone Fragment (48).*⁴¹ Found among the fallen wall-stones at the entrance to the ringfort. A small fragment of the upper stone of a rotary quern which would have been about 50 cm. in diameter and have had a concave grinding surface.

Clay Pipes (49-64)

Nine stem-fragments (49-57) and three bowl-fragments (58-60) were found near the surface, mostly in the southern half of the ringfort. A stem-fragment (61) was found at a depth of 40 cm. in the SE quadrant and another (62) at a depth of 60 cm. under the northern wall of the low sub-rectangular enclosure east of the entrance to the ringfort. A bowl (63) and a stem-fragment (64) were found under the fallen wall-stones at the entrance.

DATING

There appear to have been at least two main periods of habitation on this site, the first when the shallow trenches and the pit were dug and filled, and the second when the low surrounding bank was constructed, converting it into a ringfort. The site appears to have been used (rather than inhabited) at a later period also, but only very temporarily.

Although it cannot be proved, the trenches and pit, because of their similarity to one another, all appear to date from the same period. As one of the trenches was entirely under the bank in the east of the ringfort, another, with a stone setting alongside it, was partly under the bank in the north-east (the broken-down nature of the bank at this point was due to modern disturbance), and yet another was across the entrance to the ringfort, to all appearances dug there before the entrance was made, they can all probably be dated to pre-fort times. The decorated bone comb found in the pit in the SE quadrant is, apparently, of an earlier date (see below) than the period of construction and inhabitation of the ringfort and, therefore, shows that this pit is also of pre-fort date. None of the other finds from the dark-filled trenches is closely datable, although the polished bone point, from the trench near the stone scatter in the NE quadrant, is more likely to belong to the pre-fort period. The fire-pit in the NE quadrant probably dates from the same phase of occupation as the dark-filled trenches and pit, although the two iron nails and the bronze binding-strip are not, in themselves, closely datable to any particular period.

The decorated bone comb, with "winged" ends, is of a type not previously recorded from Ireland. Related types have, occasionally, been found in Britain. One of these, with concave (but not "winged") ends, was found at Walbrook, London, and a mid-fifteenth century date has been implied for it by comparison with a somewhat similar comb illustrated on folio 70 of the Luttrell Psalter, dated to about 1435-40.⁴² Two combs similar to the Walbrook specimen were found in Dublin (see below) and a few in northern Scotland, notably at Jarlshof, Shetland. Combs with "butterfly-winged" ends are known also from Scotland, probably the best example being one from Orkney (National Museum of Antiquities of Scotland, Reg. No. GA 42); it has dot-and-circle ornament on each "wing" and is, in every respect, unmistakably Norwegian in type (see below). At Jarlshof, a bone comb with "butterfly-winged" ends was found in the upper levels of House I.⁴³ The excavator compares this comb with thirteenth and fourteenth-century Scandinavian examples,⁴⁴ adding, however, that the type survived in Norway until the sixteenth century.⁴⁵ The "winged" type of end is

relatively common on Norwegian combs of Early Medieval times⁴⁶ and at least two such combs from the medieval site of "Bryggen," in Bergen, probably "belong to the later part of the Middle Ages."⁴⁷ However, although almost certainly closely related, neither the Scandinavian nor the British combs are identical in type with the Garrynamona specimen. None has similar decoration, dot-and-circle being the most common motif used. Nor do they have purely ornamental perforations through each "wing," although many have perforations through both "wings" of one end only, apparently for utilitarian (attachment ?) rather than decorative purposes. Their side-plates generally have strengthening ribs along their length giving them a ridged cross-section rather than the convex cross-section of the Irish example, and they are generally fixed in position with one or two rows of numerous iron or bronze rivets. It is an almost invariable rule with the Scandinavian and British combs of this type that they have fewer and thicker teeth on one edge than on the other, while those of the Garrynamona comb are of the same thickness and spacing on both edges. Indeed, combs with differently sized teeth on either edge or with ridged side-plates are virtually unknown from Ireland at any period, although two with the former feature and with very slightly concave ends were found during the last century in street-cuttings in Cook Street, Dublin.⁴⁸ It would appear probable, therefore, that the Garrynamona comb may be the result of an Irish comb-maker working from an intrusive Medieval Scandinavian model which perhaps arrived along the old Viking route via northern Scotland.

The construction of the bank and the main period of inhabitation of the ringfort date, to all appearances, to a very late period. None of the potsherds can be dated earlier than the sixteenth century and all of them could easily be found in a late seventeenth or early eighteenth-century context. The clay pipe bowls all appear to date from the first half of the eighteenth century and the quernstones, also, may well date from the same period (see above, p. 257).

The comparatively modern character of some of the finds from near the surface, the spreads of mussel shells in the southern part of the ringfort and the low, sub-rectangular enclosure in the same area (possibly a place for erecting a haystack ?) suggest that the ringfort was used, although probably not inhabited, at a still later period. The two late eighteenth-century copper coins probably belong to this later phase, as would the glass fragments, one of which (30) is portion of the neck of a bottle of mid- or late eighteenth-century type. With this late use of the site in mind, it is perhaps significant that local tradition knew this site only as a place formerly used for breaking horses in to the use of the reins and not as a fort or other such ancient monument.

The small quantity of bones found during the excavation suggests that none of the various phases of occupation was of long duration. Oxen of two different sizes, sheep, pig, and horse were represented. Many of the bones had, apparently, been split for the extraction of the marrow.

Summing up the evidence from the finds and excavation it would appear probable that the site was first inhabited for a short period during or between the fourteenth and sixteenth centuries and that, possibly as late as about 1700

but probably somewhat earlier, a low ringfort was constructed there. This appears to have been occupied briefly and the site then abandoned. The abandoned ringfort appears to have been used, probably during the late eighteenth and nineteenth centuries, as a site for temporary encampments (by tinkers?) before its final abandonment and use as a place for breaking in horses.

Minor Earthworks and Trackway

During the Spring of 1941 several medieval objects were found during construction work at Shannon Airport. Unfortunately, owing to war conditions, only a brief inspection of the find-spots was possible. This inspection was carried out by the National Museum of Ireland.

The sites concerned consisted of two ringforts and an ancient trackway, all the finds coming from the latter. Both ringforts were about 30 metres to the west of the trackway and at a somewhat higher level.

The more northern of the two ringforts (Fig. 1, site C)⁴⁹ consisted of a very low, roughly circular enclosure about 30 m. in average diameter with a triangular annexe at its western side, giving it a maximum overall measurement of about 40 m. An indentation in the bank at the north-east of the ringfort probably represented the entrance.

The second ringfort (Fig. 1, site D)⁵⁰ was about 130 metres to the south of the first and was a circular enclosure consisting of a bank about 1.25 m. wide and about 45 cm. high. When inspected it had already been to a great extent destroyed and in its remaining western half no signs of an entrance or of a fosse were discernible. Owing to the disturbance it was possible to note that the general stratification was very similar to that noticed in Garrynamona ringfort, that is, a layer of yellow clay on the bed-rock, a dark layer containing animal bones and large quantities of shells above it, and the humus.

The ancient trackway (Fig. 1, site E) is really a southward extension of the old road which ran by the west side of Garrynamona ringfort. At its northern end, near where it joins with the road, it runs along the eastern side of the townland boundary between Rineanna North and Rineanna South, and for its southern half it follows the 50 ft. contour just east of the townland boundary. This trackway was used as a right of way up to the time of its destruction.

The trackway averaged about 1.70 m. in width and was built on the limestone bed-rock. The crevices of the bed-rock were, apparently, artificially filled with earth and stones, and the whole covered with a thin layer, about 3 cm. thick, of dark soil into which small stones and pebbles were set, thus giving the surface the appearance of cobbling. Along the western edge of the northern half of the trackway was a thin wall of dry-built stones which marked the townland boundary, but which did not appear to be as old as the trackway.

Alongside the eastern edge of the trackway, at a point about midway between where it meets the road at its northern end and where it peters out at its southern end, a burial was discovered. This is said to have consisted of a human skeleton buried in a crevice about 1.10 m. (3½ ft.) deep, reported to have been "resting with its back against one side of the pit, facing east." There were no finds associated with this burial.

Another extended skeleton was reported to have been found about 10 metres to the west of the trackway, but there are no further details of it.

All the finds came from the length of the trackway near where the burial in the crevice was discovered,⁵¹ but were in no apparent stratification or significant order.

FINDS (Fig. 11)⁵²

Iron (31, 36-37, 40-48)

Blade (40). Fragment of a double-edged blade of plano-convex cross-section. Narrow and tapering to a point. Possibly portion of a knife- or small dagger-blade. At present 8.2 cm. long, 1.3 cm. wide and 3mm. thick.

Knives (31, 41-44). All single-edged and all, except 31, of the same type. The latter is the most complete and has a slender, slightly curved, blade. It is 14.5 cm. long, the blade being 10.4 cm. in length and 1.2 cm. wide where it joins the tang. The other four knives are now missing most or all of their blades which were probably straight-backed and slender. Each has a thick portion of lozenge-shaped cross-section between the blade and the tang which would have served as a continuation of the handle (of bone, antler, or wood). The most complete specimen is 41 which is, at present, 10.9 cm. long; the remaining portion of the blade is 1.3 cm. in width.

Keys (36-37). Both have similar, though not identical, bits. The bow of one (36) is in the form of a flat ring and of the other (37) almost kidney- or heart-shaped. Below the bow on the former is a rectangular-sectioned collar while there is a baluster moulding on the shank of the latter. 5.4 cm. and 7.9 cm. in length respectively.

Nails (45-47). Two (45-46) have long, thin, rectangular-sectioned stems and flat heads. The third (47) has a short, square-sectioned stem and a solid, block-like, head. 5.5 cm., 6.9 cm. (as if straightened), and 5.1 cm. in length respectively.

Flake (48). Possibly from a blade.

Silver (30)

An English sixpence of Queen Elizabeth I, dated 1586. In fairly good condition.

Copper (50)

An Irish penny of George IV, dated 1826 (last digit very uncertain).

Bronze (38-39)

Spoon (38). Large fig-shaped bowl of a spoon now missing its handle. At present 6 cm. long, 4.6 cm. wide, and 1 cm. deep.

Harp-peg (39). Round in cross-section, except at its thicker end where it is rectangular. There is a small perforation through its thinner end. 7.4 cm. long.

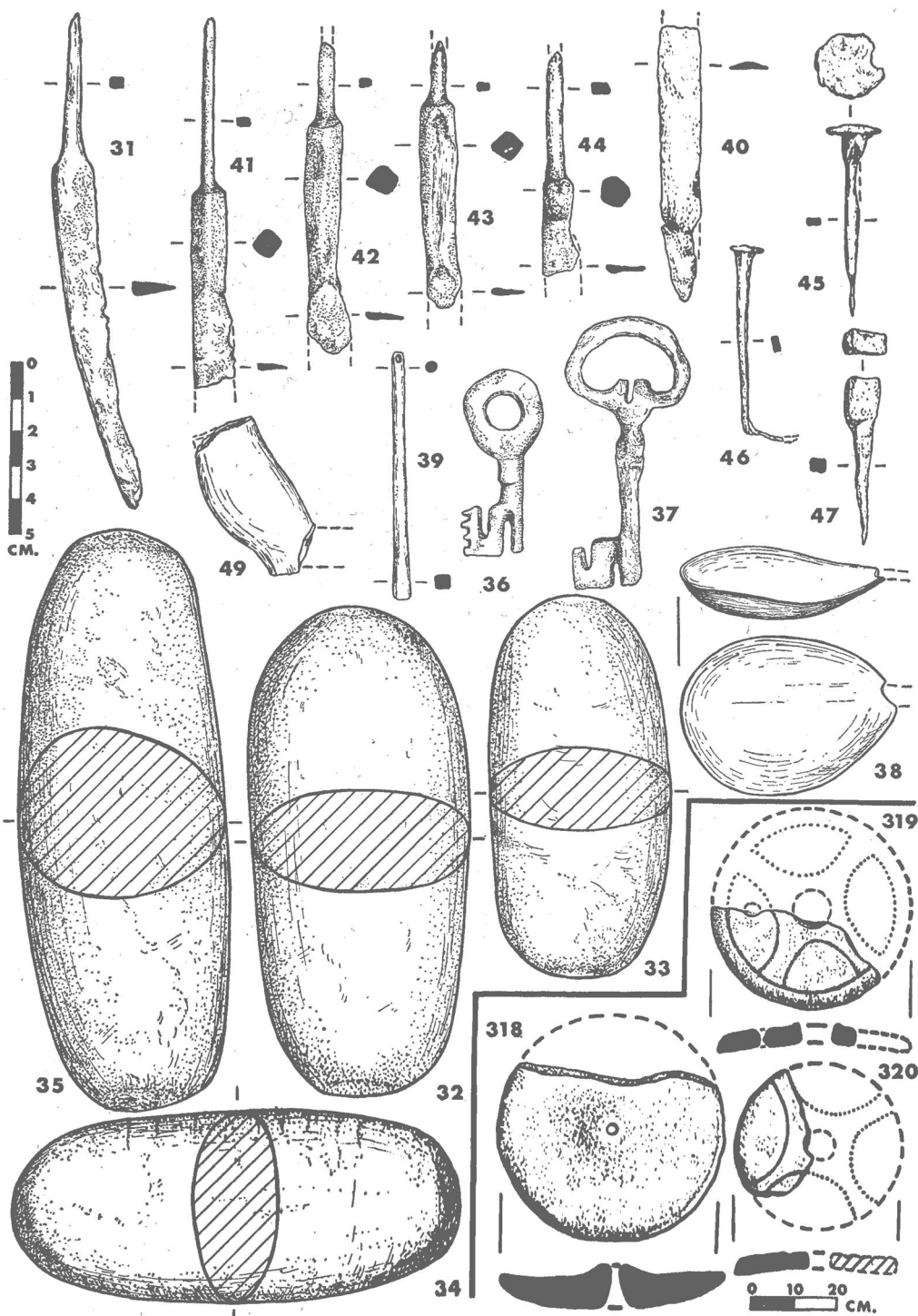


FIG. 11. Rineanna South: Principal finds from the trackway.

Clay Pipe (49)

A rather large bowl with a flat foot; stem now missing.

Stone (32-35, 318-320)

Hammerstones (32-35).⁵³ All are long and appear to be water-rolled pebbles. Three (32-34) have flattish cross-sections and only show very slight signs of abrasion at both ends. The fourth (35) is the largest and has a thick, more D-shaped than round, cross-section. It shows more definite signs of abrasion at both ends. 14.1 cm., 11.3 cm., 13 cm., and 16.8 cm. in length, respectively.

Quernstone (318).⁵⁴ Large lower stone of a rotary quern which averages about 55 cm. in diameter and which is now missing a portion off one of its sides. Slightly convex on the underside and flattish on the upper surface except where it rises to a small, low, cone at the centre. Through the centre is a funnel-shaped perforation, 6.5 cm. in diameter at the bottom and 2.6 cm. in diameter at the top. 5 cm. and 10.5 cm. in average thickness at the edge and centre, respectively.

Quernstone Fragment (319).⁵⁵ Almost half of the upper stone of a rotary quern which would originally have been about 40 cm. in diameter and would have had a central perforation about 8.5 cm. in diameter. The underside is slightly concave and the upper surface is flat. There is a 1.8 cm. wide and 5 mm. high ridge around the top of the central perforation. 6.2 cm. in minimum distance from the outer edge is an hour-glass type perforation for a handle. The upper surface is decorated with pocket-out curved lines suggesting that the entire design was a ringed cross. 5.9 cm. and 4.9 cm. in maximum thickness at the edge and centre, respectively.

Quernstone Fragment (320).⁵⁶ About one quarter of the upper stone of a rotary quern which would originally have been about 40 cm. in diameter and would have had a central perforation about 7.5 cm. in diameter. The underside would have been very slightly concave and the upper surface flat. There appears to have been a slight ridge around the top of the central perforation but this is now much damaged. The upper surface is decorated with a pocket-out curved line and portion of another, suggesting that the entire design may have been cruciform. 5.7 cm. and 4.5 cm. in maximum thickness at the edge and centre, respectively.

Animal Teeth (51-56)

Five of these are of pig and the sixth (56) of ox.

DATING

Owing to the complete absence of finds from the two ringforts it is impossible to suggest a date for them. Not so, however, for the trackway which appears to have been Late Medieval in date, although objects found upon a trackway are, strictly speaking, more indicative of its period of use than of the date of its construction.

Several of the objects found along this trackway can be dated with reasonable accuracy. The four similar iron knives (41-44) are of a type which is, in Lon-

don at least, closely dated to the late sixteenth and seventeenth centuries by cutlers' marks and which is related to the bone-handled iron knife from "Thady's Fort" (see p. 252). The other iron knife and the double-edged blade are, unfortunately, undatable.

The two iron keys are both of Ward-Perkins' Type IV, a type which does not appear to be closely datable but which is generally post-thirteenth century.⁵⁷

The bowl of the bronze spoon is fig-shaped, a type which had a very long life, variations of it being found from Roman times until about 1700. The present example probably dates to the seventeenth century.⁵⁸

Excepting the coins, the only other object found which can be reasonably well dated is the bowl of the clay pipe. This bowl compares most closely with English bowls of Type 8b, a type dated to about the period 1680-1720.

Although the iron nails, bronze harp-peg, and stone objects are not, in themselves, closely datable there is every reason to believe that they, also, date to a very late period.

It would appear, therefore, most probable that the trackway, or at least its *main* period of use, dated from the seventeenth century, despite the evidence of later use provided by the George IV penny.

General Discussion

Despite the fact that the great period of ringfort construction and use in Ireland seems to date to the Early Christian Period, there need be no surprise at the late date tentatively attributed to the sites reported on in this paper. It has always been known that some earthen and stone ringforts had been inhabited during medieval times and long suspected that some of these sites may well have been actually built during that period.

In several papers on Irish ringforts Thomas J. Westropp discussed the problem of their latest date, on one occasion writing: "... while in the same primitive district of the Burren, the forts of Ballyganner and Caheranardurrish were inhabited, at any rate, till 1840, and the caher of Balliny, not far away, is inhabited, and likely to continue so even in the twentieth century."⁵⁹ Westropp also informs us in another paper that Cahermacnaghten, also in Co. Clare, was inhabited by the O'Davoren family and their law school during the late seventeenth century.⁶⁰ At a later date, still discussing the same problem, Westropp wrote: "We have not only reliable record of an earthen ring-fort with circles, being made before 1242, and completed and strengthened by King Conor O'Brien (1242-1269), but during the revolution of the autumn and winter (of 1317), after the battle of the Abbey, 'the people of Clare kept quiet, chiefs abiding in their strongholds, . . . ollaves in their raths, . . . and every layman in his liss.' That they were made much later we cannot doubt."⁶¹

Lest it should be suspected that late occupation of ringforts was purely a Co. Clare practice, it should be pointed out that there is plenty of evidence that such was also the case elsewhere. Richard Barthelet, a cartographer who apparently accompanied the viceroy, Lord Mountjoy, in the last campaigns of Hugh O'Neill's war made several important maps, mainly of Ulster. These

date from about 1602. Map no. 8 clearly shows Tullaghoge, Co. Tyrone, the traditional inaugural place of The O'Neills, as a single-banked earthen ringfort on a hill-top, containing two thatched, whitewashed houses, one large and one small, within its bank.⁶² Another interesting example is a large single-banked ringfort known as "Dunrally," near Monasterevin, in the townland of Vicars-town, Co. Laois.⁶³ Within the bank of this site is an inhabited house which has been there since 1841 at least (date of the first edition of the Ordnance Survey map of the area) and which may be even older.

In an Elizabethan *fiant* dated the 26th of October, 1590, there is an important reference which suggests that ringforts were the common habitation of the Irish at that period. It reads: "... the town of Lurgho, containing 12 cottages built after the Irish fashion, within great ditches. ..."⁶⁴ Although this reference does not specifically mention the building of the "great ditches," there can be little doubt that some of them, at least, must have been erected about that time.

Stone forts of the *caiseal* or *cathair* type are often grouped in the same category as earthen ringforts, and it would appear certain that they were erected for the same purpose. Promontory forts, whether their fortifications be built of earth or of stone, can also be considered as being closely related structures. Although excavation of stone forts and promontory forts has been limited to very few examples, the results obtained do, perhaps, support a late date for the construction of some forts in Ireland.

At Dooneendermotmore, Co. Cork, excavation of a promontory fort has shown that it had two periods of construction and occupation. The first of these could not, unfortunately, be dated, but the second was clearly dated to the late seventeenth century.⁶⁵ The fortification of the first period had been restricted to the minimum and consisted of a deep, wide fosse without accompanying rampart. Construction during the second period was of a considerably more impressive nature, consisting of a lot of well-built stonework.

The seventeenth-century building at Dooneendermotmore promontory fort was a re-adaptation rather than a reconstruction and as such it proves that the Irish were, at this period, still thinking in much the same terms as their ancestors and that they were still quite capable of building large stone ramparts as fortifications. This is important as the stone ramparts of many of the stone forts are of much the same type and there is, therefore, every reason to believe that some of the latter may date from medieval times.

The excavators of the large stone fort, Leacanabuaile, near Caherciveen, Co. Kerry, have suggested that the few finds discovered there indicate a date during the Early Christian Period for the site, and they have tentatively suggested a ninth- or tenth-century A.D. date for it.⁶⁶ A re-examination of the finds with a fresh outlook seems to suggest another answer.

The finds from Leacanabuaile are not, unfortunately, of closely datable types, but it should be noted that, in the light of modern research, none of them would be out of place in an Early Medieval context, while some can hardly be dated before that time. A good example of this is the small iron arrowhead found there.⁶⁷ This is of the very popular Early Medieval type with triangular

blade and rounded socket. Although this arrowhead resembles a type known on the Continent from La Tène times onwards, it seems to have been unknown in Ireland until the coming of the Anglo-Normans in 1169 A.D. The excavators appear to have fully appreciated this difficulty as they suggested that, although to all appearances an arrowhead, it could perhaps have been "a barb from a barbed implement, such as a fish-spear," that is, eel-spears of the type known as sunspears.⁶⁸

Other probably early medieval finds from this site include the fragments of two narrow, straight, single-edged, bone combs with short, very fine teeth.⁶⁹ Although a proper study of Irish bone combs has yet to be undertaken, it would appear to the writer, from a preliminary examination of the combs in the National Collections, that this type of comb is most probably of medieval date. It is not a common type, but there are some examples from street-cuttings made in Dublin City during the last century.⁷⁰ Although it is not an absolute rule, it is only very rarely that any finds from these street-cuttings can be dated to pre-Norman times.

From the excavation of Leacanabuaile it is clear that there was more than one period of construction there and it could, therefore, be argued that only the secondary features might date from Early Medieval times. However, there is one very important find which might well be used to suggest that the earliest period of construction at the site might also date from a late period. This is the very large quernstone, about 70 cm. in diameter,⁷¹ which was found "under the wall of the round house that preceded House B," or in other words, in a position showing that it pre-dated the earliest period of construction. The excavators wrote, regarding it, that it "might be used as an argument for a late date but that such querns were used early in the Christian Period in this country is shown by the finding of one in the large fort at Garranes, Co. Cork, the occupation of which is dated to about 500 A.D."⁷² This does not appear to be perfectly correct, however, as the only quernstone found at Garranes was, though relatively large compared to the average Irish quern, only 54 cm. in diameter,⁷³ a difference of about 16 cm. which is considerable. It is worth pointing out also that though the forty-three quernstones found at Lagore Crannog, Co. Meath, varied in diameter between 28 and 58 cm., most of them were between 40 and 48 cm. and none of them approached the size of the Leacanabuaile specimen in question.⁷⁴ The same story is reflected at Cush and Carraig Aille, both in Co. Limerick, where large numbers of quernstones were discovered, and also at other Early Christian excavated sites, too numerous to mention here. Although there is, as yet, no proof that very large querns are medieval or later in date, it would appear to be a distinct possibility and it is, therefore, perhaps permissible to suggest that Leacanabuaile may well be of post-Norman rather than pre-Norman construction.

Earthen ringforts so far excavated have all tended to date to pre-Norman times, although there is ample evidence for secondary rebuilding during the Early Medieval Period in some of them, for instance, at sites such as Ballyfounder Rath, Co. Down.⁷⁵ Medieval material has also come from most other excavated ringforts, but apparently always the result of secondary use of the sites.

To sum up, it should not appear surprising to find that ringforts or caiseals were being constructed as late as the sixteenth and seventeenth centuries. There is historical, and some archæological, evidence for the continued erection of such structures into Late Medieval times and, therefore, there is nothing extravagant in suggesting that the two examples excavated near Shannon Airport date towards the end of the series. The low, single bank of Garrynamona Ringfort can be looked on as merely an enclosing feature around a habitation, while the apparently more defensive "Thady's Fort" may, perhaps, be regarded as a native version of the fortified mansions of the same period. There can be no doubt but that other late examples will be recognized as such in time, as more ringforts are scientifically excavated.

ACKNOWLEDGMENTS

The National Museum wishes to thank the Department of Transport and Power for giving it the opportunity to carry out excavations at the two ringforts and for financing that work.

My thanks are due to Dr. Joseph Raftery, Keeper of Irish Antiquities, National Museum of Ireland, for help with preparing the reports, particularly with regard to the sites which he inspected in 1941.

I would also like to thank most gratefully all those who have helped me, either during the excavations or in preparing the reports.

REFERENCES

- ¹ "A man-made cave" was reported in the *Sunday Independent*, 19th June, 1960, as having been discovered at Shannon Airport, but enquiries showed this to be a natural feature, the course of an old underground stream.
- ² O.S. 6-inch sheet 61 (12.9 cm. from W. and 3.5 cm. from N.); on the 50 ft. contour; marked on both the 1842 and 1922 editions.
- ³ Of five pieces examined, three were of willow-poplar (*Salix-Populus*) and one of holly (*Ilex*). All identifications of charcoal in this paper are by Miss M. J. P. Scannell, B.Sc., Natural History Division, National Museum of Ireland.
- ⁴ The two pieces examined were of willow-poplar (*Salix-Populus*).
- ⁵ There was no charcoal from the second fire-pit; of the two pieces examined from the possible post-hole, one was of yew (*Taxus*) and the other, which was very friable, may have been of hazel (*Corylus*).
- ⁶ Of eight pieces examined, five were of oak (*Quercus*), two of willow-poplar (*Salix-Populus*) and one of hazel (*Corylus*).
- ⁷ Of nine pieces of charcoal examined, four were of oak (*Quercus*), four of hazel (*Corylus*) and one of willow-poplar (*Salix-Populus*).
- ⁸ A sample was examined by Dr. J. S. Jackson, Keeper, Natural History Division, National Museum of Ireland, who comments: "Mortar, typically extremely calcareous with small uncalcined limestone fragments (ca. 3 mm. max. length) and marine shells. Fragments of comminuted shells include gastropod columella, cardinal areas, and umbonal 'beaks' of lamellibranchs, etc. Complete valves include those of *Tellina* spp. Ochreous brown patches represent burnt clay fortuitously added."
- ⁹ The finds from this excavation are registered in the National Museum as E32:1-29. In the text and in Fig. 7 of this report the number of the excavation (E32) is omitted and the object number only used.
- ¹⁰ The material of both this quernstone and of (19) was identified as "Micaceous medium-grained non-calcareous grit of Millstone Grit facies. Possibly Namurian of Co. Clare." All identifications of stone in this paper are by Dr. Jackson. No thin-sections or polished surfaces were prepared and many of the identifications are, therefore, tentative.
- ¹¹ Of the same material as the quernstones, "but appears to have been subjected to fire."
- ¹² I am grateful to Dr. A. T. Lucas, Director, National Museum of Ireland, and Captaen C. Ó Danachair, Coimisiún Béaloidéasa Éireann, for helpful discussion concerning the probable dating of this structure.
- ¹³ S. P. Ó Riordáin and J. Hunt, *J. Roy. Soc. Antiq. Ire.*, 72 (1942), 61; fig. 3.
- ¹⁴ A. Oswald, *Archaeological News Letter*, 7 (1961), 55-62.
- ¹⁵ For a preliminary note on this site see A. B. Ó Riordáin and E. Rynne, *J. Roy. Soc. Antiq. Ire.*, 91 (1961), 58-64.
- ¹⁶ H. F. Cleere, *Bull. Inst. Archæ.*, 1 (1958), 55-74.
- ¹⁷ *Ibid.*, p. 70; fig. 13, e.
- ¹⁸ R. E. M. Wheeler, *London in Roman Times*, (1930), 77; pl. XXXIII, no. 5.
- ¹⁹ H. F. Cleere, *op. cit.*, p. 59; fig. 4.
- ²⁰ For related types found in Ireland see S. P. Ó Riordáin and J. Hunt, *op. cit.*, p. 52; fig. 5. For some English parallels see *Cat. Guildhall Museum*, 2nd edit. (1908), pls. LXXXII and LXXXIV.
- ²¹ F. C. Elliston-Erwood, *Archæologia Cantiana*, 56 (1943), 34-40. I am grateful to Mr. D. M. Wilson, Assistant-Keeper in the Department of British and Medieval Antiquities, The British Museum, London, for drawing my attention to this publication.
- ²² S. P. Ó Riordáin and C. Ó Danachair, *J. Roy. Soc. Antiq. Ire.*, 77 (1947), 49; fig. 4, no. 3.
- ²³ L. Ritchie, *Ireland, picturesque and romantic* (London, 1937), 63.
- ²⁴ G. Coffey, *Guide to the Celtic Antiquities of the Christian Period*, 2nd edit. (1910), 83; fig. 95.
- ²⁵ I am grateful to Mr. Liam de Paor, M.A., for kindly examining the potsherds from both ringforts.
- ²⁶ All identifications of bones and shells in this paper are by Miss G. Roche, M.Sc., Natural History Division, National Museum.
- ²⁷ O.S. 6-inch sheet 61 (12.7 cm. from W. and 10 cm. from N.); on about the 40 ft. contour; marked on the 1922 edition, but not on that of 1842.

²⁸ Of seven pieces of charcoal examined from this trench, four were of willow-poplar (*Salix-Populus*), two of hazel (*Corylus*) and one of ash (*Fraxinus*). Also found in this trench were the humus of an ox with cut-marks on it from an axe or large knife and a sheep-bone which had, apparently, been split for marrow.

²⁹ Of twenty-nine pieces of charcoal examined from this part of the trench, twelve were of willow-poplar (*Salix-Populus*), seven of holly (*Ilex*), five of oak (*Quercus*), three of hazel (*Corylus*) and two of ash (*Fraxinus*).

³⁰ Of four pieces examined, two were of willow-poplar (*Salix-Populus*) and two of ash (*Fraxinus*).

³¹ All five pieces examined were of ash (*Fraxinus*).

³² Of seventeen pieces examined, fourteen were of hazel (*Corylus*) and three of ash (*Fraxinus*).

³³ Of three pieces examined, one was of ash (*Fraxinus*), one of oak (*Quercus*) and one of hazel (*Corylus*).

³⁴ A: of eleven pieces examined, eight were of oak (*Quercus*), two of ash (*Fraxinus*) and one of willow-poplar (*Salix-Populus*).

B: the one piece examined was of hazel (*Corylus*).

C: no charcoal found.

D: the one piece examined was of hazel (*Corylus*).

E: no charcoal found.

³⁵ Of twenty-three pieces of charcoal collected from all over the site, eight were of willow-poplar (*Salix-Populus*), six of ash (*Fraxinus*), five of hazel (*Corylus*), two of yew (*Taxus*) and one each of oak (*Quercus*) and pine (*Pinus*).

³⁶ The finds from this site are registered in the National Museum as E34:1-64. See also footnote 9.

³⁷ An almost identical sherd was found in an unstratified area during the excavations in Dublin Castle yard, December, 1961 (I am grateful to Mr. Marcus Ó hEochaidhe, B.A., Assistant-Inspector of National Monuments, for permission to examine the pottery from Dublin Castle).

³⁸ All coin identifications in this paper are by Dr. W. O'Sullivan, Keeper, Art and Industrial Division, National Museum of Ireland.

³⁹ Of "Micaceous medium-grained non-calcareous grit of Millstone Grit facies. Possibly Namurian of Co. Clare."

⁴⁰ Of the same material as 45-46, "but ferruginous."

⁴¹ Of the same material as 47, "but with appreciable limonite staining."

⁴² J. B. Ward-Perkins, *London Mus. Medieval Cat.*, (1940), 291; pl. LXXXVII, no. 2.

⁴³ J. C. R. Hamilton, *Excavations at Jarlshof, Shetland*, (1956), 179; fig. 82. I am grateful to Mr. R. B. K. Stevenson, Keeper, National Museum of Antiquities of Scotland, Edinburgh, for drawing my attention to the Jarlshof combs.

⁴⁴ *Ibid.*, p. 189.

⁴⁵ *Ibid.*, p. 179.

⁴⁶ R. Blomqvist, *Kulturen*, (1942), 133 ff.

⁴⁷ I am grateful to Miss Irmelin Martens, Universitets Oldsaksamling, Oslo, for considerable help with the Norwegian material, and to the excavator of "Bryggen," Mr. A. Herteig (through Mr. Aage Andersen, of Denmark), for information on the two related combs (FF 9605, BR 4039 and FF 4135, BR 2224) from that site.

⁴⁸ Ray Collection, National Museum of Ireland; unpublished.

⁴⁹ O.S. 6-inch sheet 61 (12 cm. from W. and 12.5 cm. from N.); on about the 60 ft. contour; not marked on any edition.

⁵⁰ O.S. 6-inch sheet 61 (12.2 cm. from W. and 13.6 cm. from N.); on about the 60 ft. contour; not marked on any edition.

⁵¹ O.S. 6-inch sheet 61 (12.6 cm. from W. and 13.4 cm. from N.); on the 50 ft. contour; the trackway is not marked on any edition.

⁵² The finds from this site are registered in the National Museum as 1941:30-56 and 1941:318-320. See also footnote 9.

⁵³ 32-34 are of "Dark grit (? Carbonaceous Millstone Grit)" and 35 is of "Basalt?"

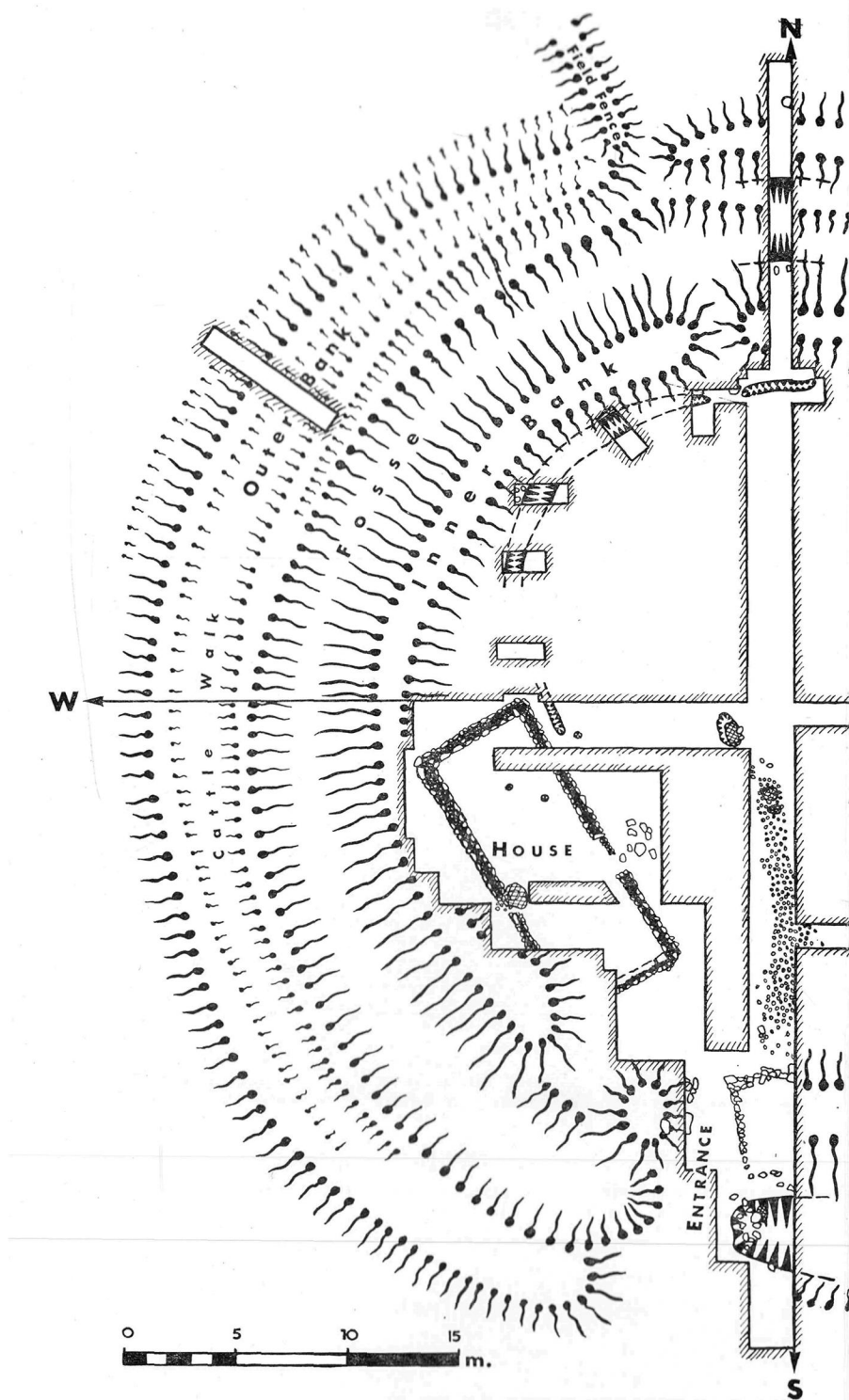
⁵⁴ Of "Coarse grit."

⁵⁵ Of "Very coarse, slightly arkosic grit."

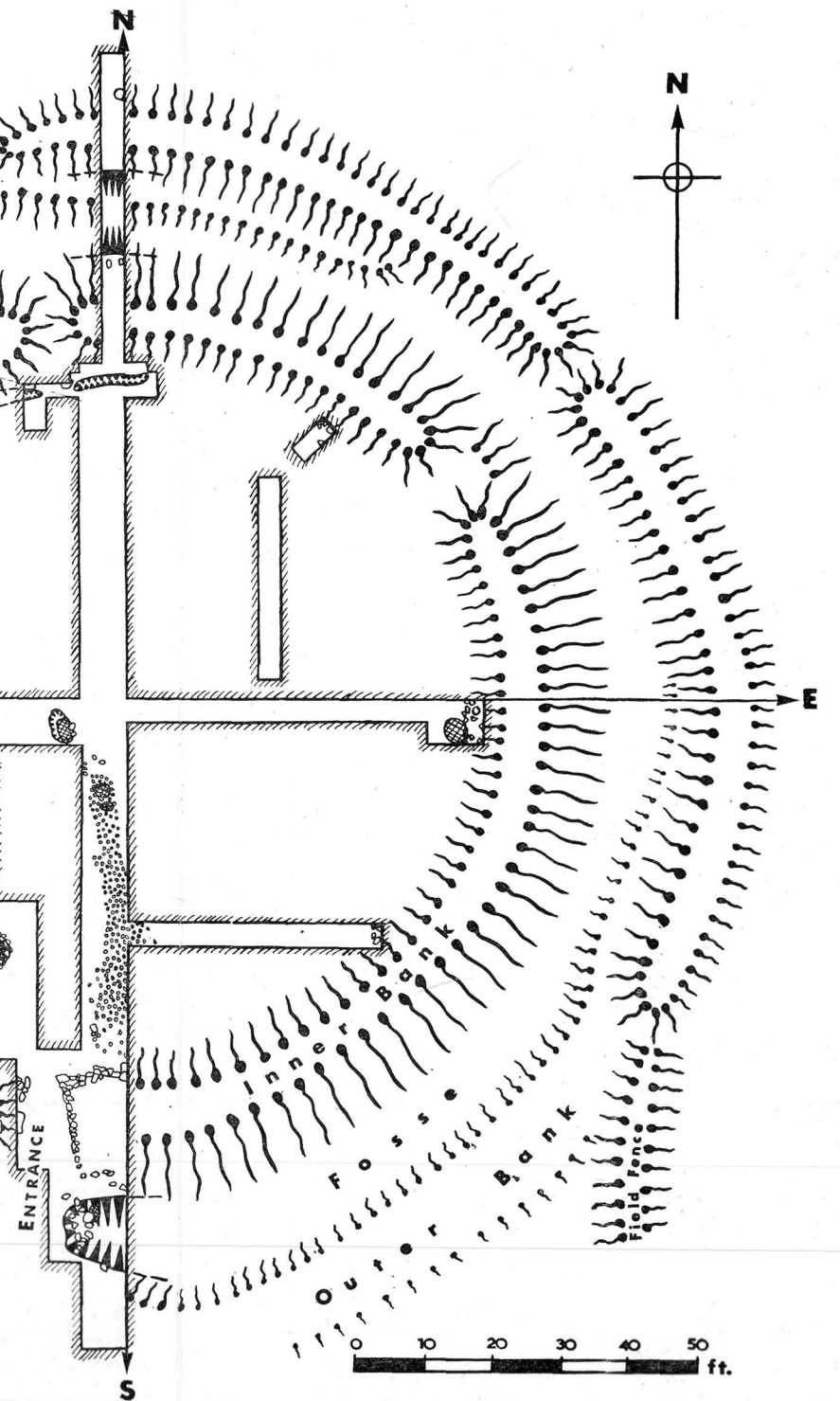
⁵⁶ Of "Coarse quartzose grit with scattered large pebbles up to about 2 cm. in diameter."

⁵⁷ J. B. Ward-Perkins, *op. cit.*, pp. 138-9; for a fairly close parallel to 36 see pl. XXX, no. 33.

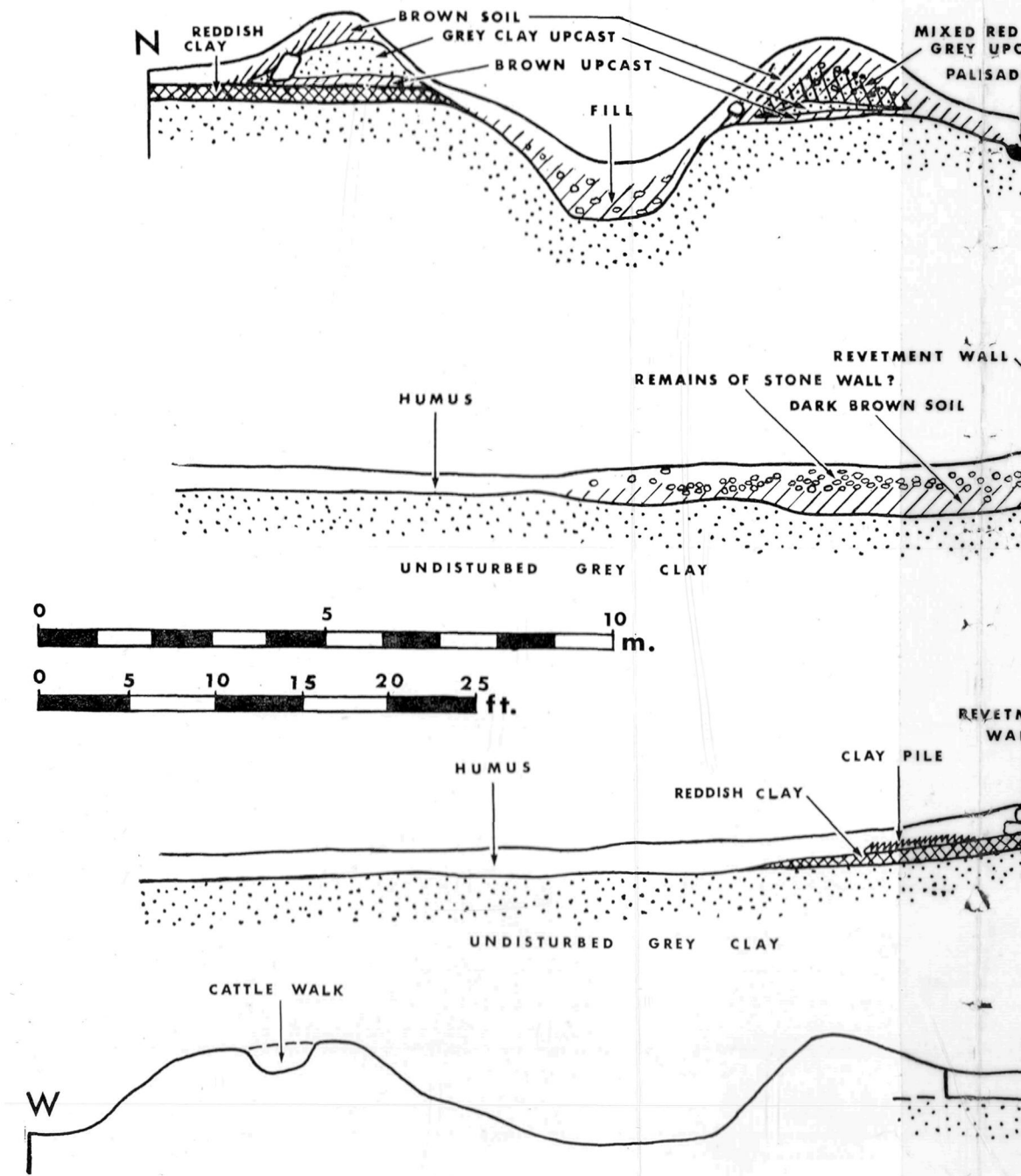
- ⁵⁸ I am grateful to Dr. O'Sullivan for this opinion.
- ⁵⁹ *Trans. Roy. Ir. Acad.*, 31 (1902), 632.
- ⁶⁰ *J. Roy. Soc. Antiq. Ire.*, 27 (1897), 120-1.
- ⁶¹ *J. Roy. Soc. Antiq. Ire.*, 38 (1908), 352-3.
- ⁶² In the National Library of Ireland, MS. 2656. See G. A. Hayes-McCoy (edit.), *Ulster and Other Irish Maps, c. 1602*, a forthcoming publication of the Irish Manuscripts Commission, for more detailed accounts of ringforts re-adapted and inhabited about this period.
- ⁶³ O.S. 6-inch sheet 14 (4.5 cm. from N. and 4.8 cm. from W.). I am grateful to Mr. Peter Danaher, M.A., Irish Antiquities Division, National Museum of Ireland, for drawing my attention to this site.
- ⁶⁴ Fiant No. 5472 in the *Sixteenth Report of the Deputy Keeper of Public Records in Ireland*, p. 136. I am grateful to Mrs. Eamonn de hÓir for drawing my attention to this reference. (Lurgho in the above quotation is the present town of Lorrha, Co. Tipperary.)
- ⁶⁵ M. J. O'Kelly, *Proc. Roy. Ir. Acad.*, 55C (1952), 53.
- ⁶⁶ S. P. Ó Ríordáin and J. B. Foy, *J. Cork Hist. and Archæ. Soc.*, 46 (1941), 96.
- ⁶⁷ *Ibid.*, p. 92; fig. 1, exc. no. 4.
- ⁶⁸ A. E. J. Went, *J. Roy. Soc. Antiq. Ire.*, 82 (1952), 114-6; fig. 4, A-J; pl. XX, a-c.
- ⁶⁹ S. P. Ó Ríordáin and J. B. Foy, *op. cit.*, p. 93; fig. 1, exc. nos. 14 and 18.
- ⁷⁰ Ray Collection, National Museum of Ireland; unpublished.
- ⁷¹ S. P. Ó Ríordáin and J. B. Foy, *op. cit.*, p. 95.
- ⁷² *Ibid.*, p. 96.
- ⁷³ S. P. Ó Ríordáin, *Proc. Roy. Ir. Acad.*, 47C (1942), 114; pl. XXIII, 2.
- ⁷⁴ H. Hencken, *Proc. Roy. Ir. Acad.*, 53C (1950), 174.
- ⁷⁵ D. M. Waterman, *Ulster J. Archæ.*, 21 (1958), 39-61.



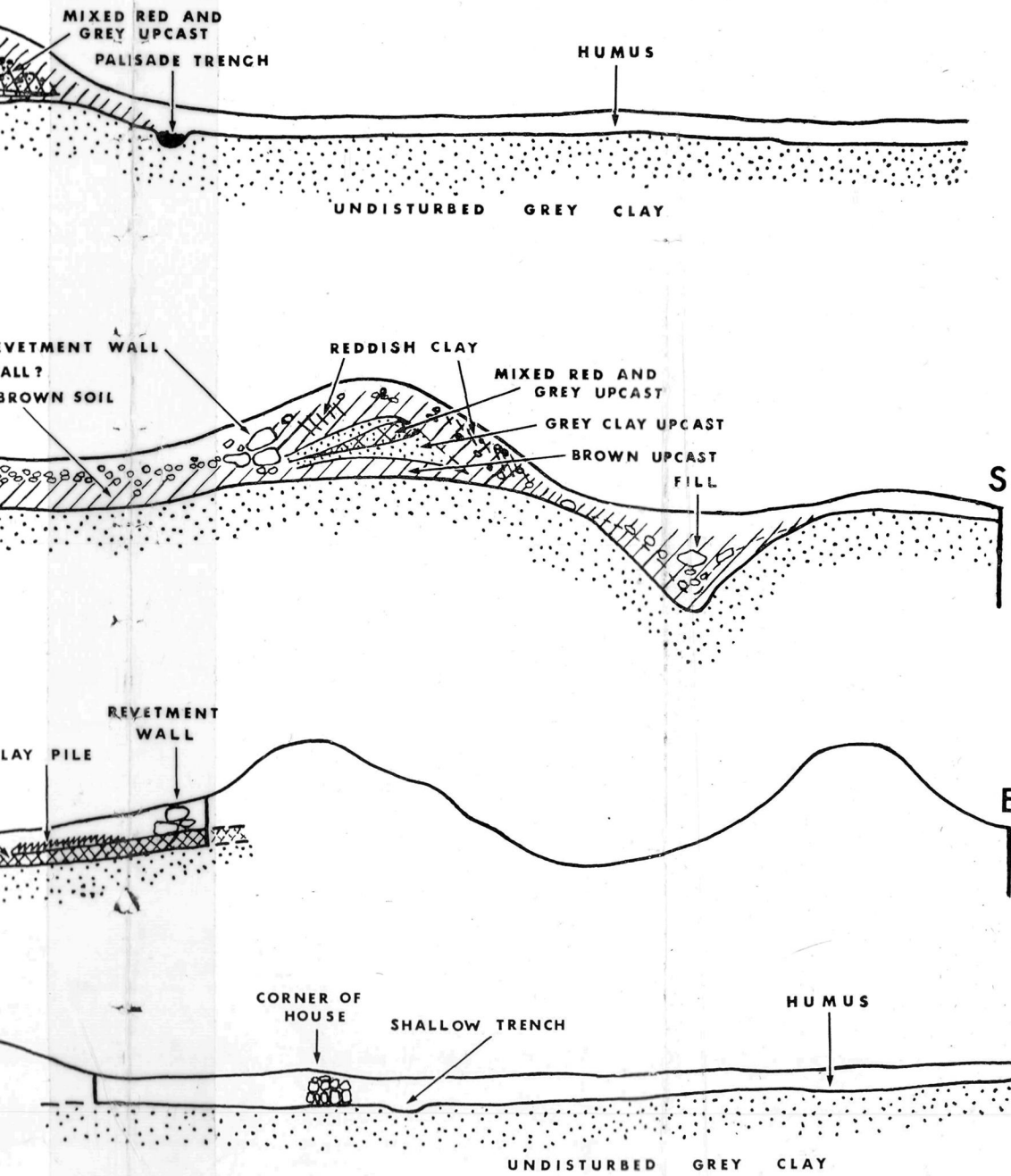
"Thady's Fort": General



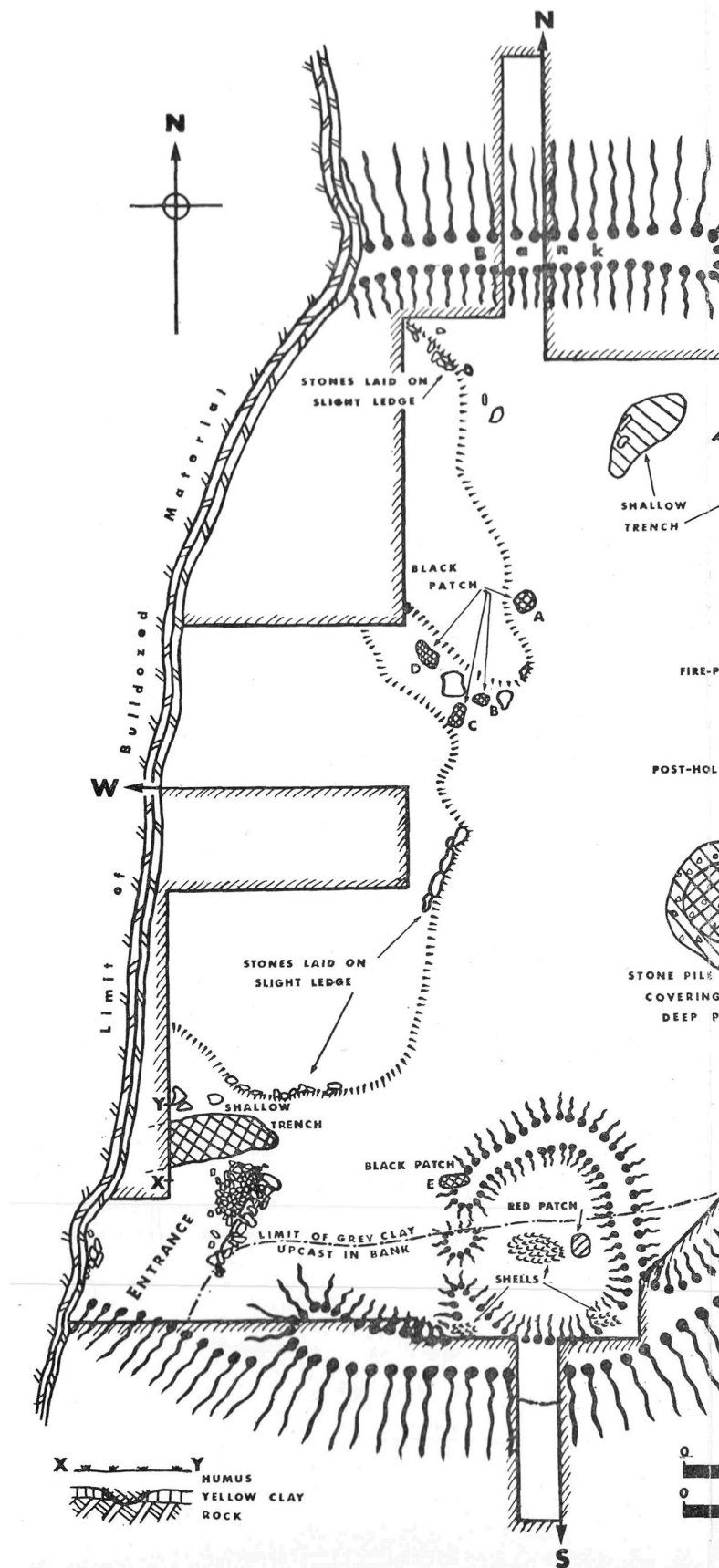
Fort Mifflin: General plan



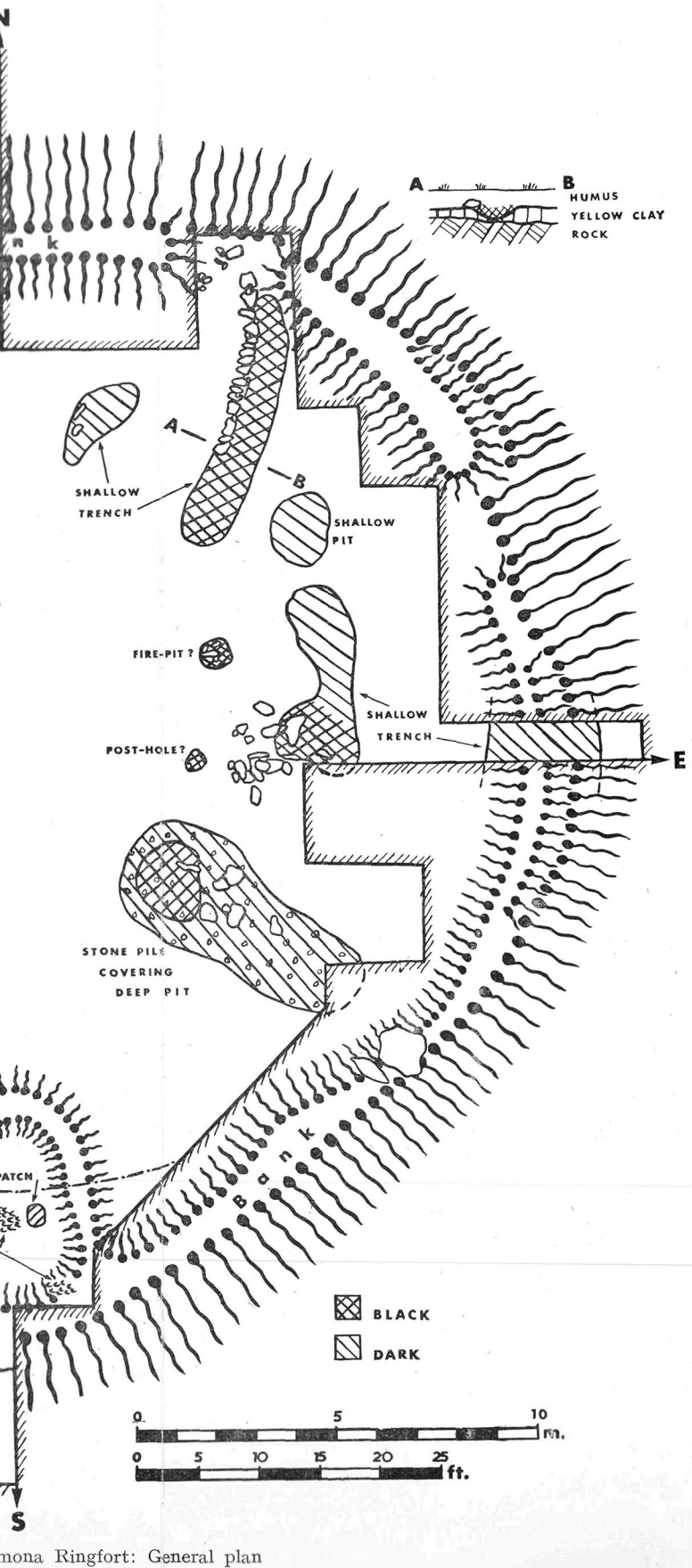
"Thady's Fort": Sec



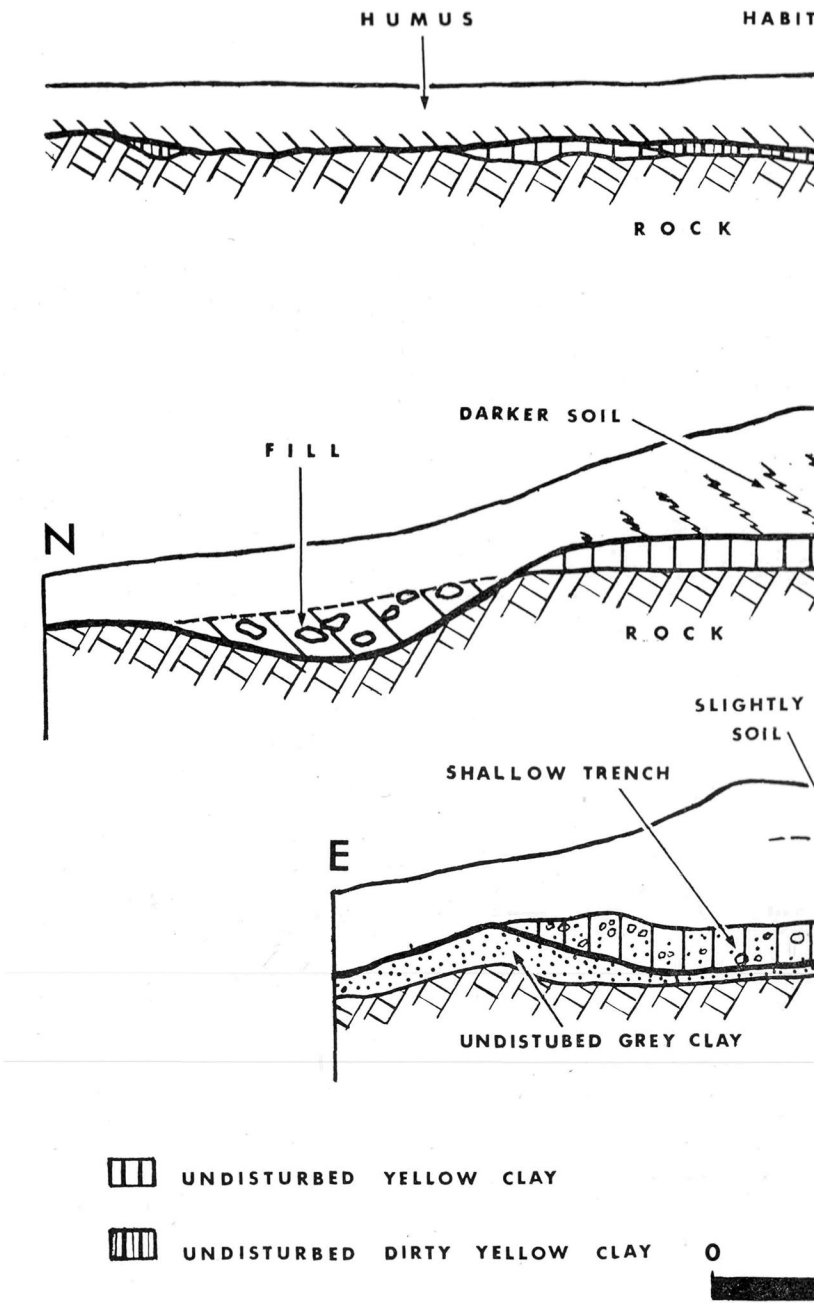
hady's Fort": Sections

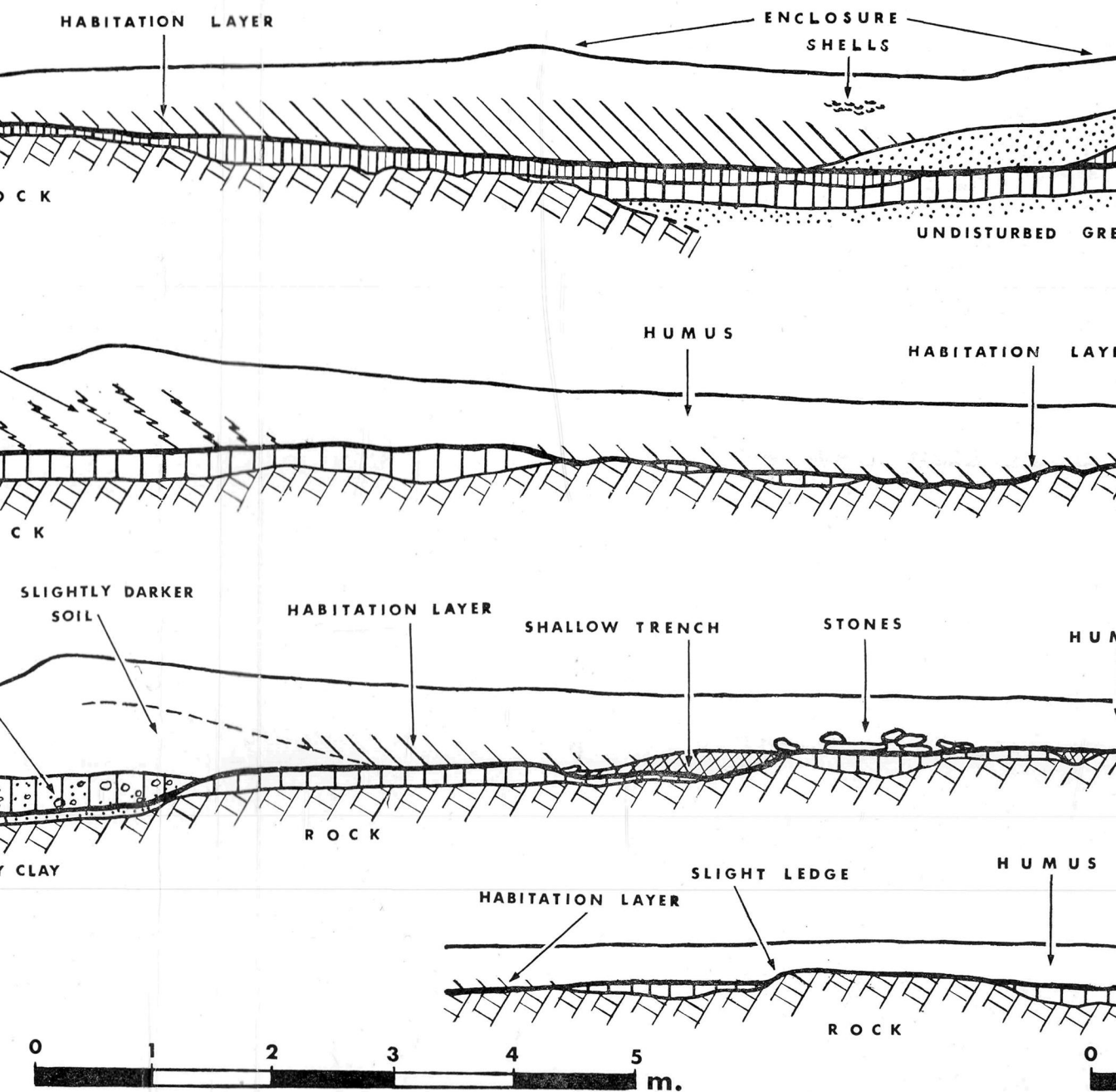


Garrynamona Ringfort: Ge



mona Ringfort: General plan





Garrynamona Ringfort: Sections

