Excavations at West Mains of Ethie, Angus

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The fortified promontory at West Mains of Ethie (NO 693460) lies on the coast of Angus about four and a half miles N of Arbroath and a quarter of a mile SE of the farmhouse of West Mains of Ethie. It appears to have no local name, and Mr Stirling, the owner of the land was not aware of the existence of the ramparts and ditches.

The West Mains site is one of six similar fortified promontories between Arbroath and Lunan Bay. All the others have distinctive names. The site nearest Arbroath, Maiden Castle, is at the S end of Carlingheugh Bay and is defended on the landward side by a single massive rampart and a single deep ditch. The ditch may have been deepened for use as a cart-track to the beach. The only apparent entrance is at the southern end where there is a gap between the edge of the promontory and the end of the rampart. The next promontory, Lud Castle, about 1 mile N of Maiden Castle, is an elongated promontory, divided from the land by a natural neck of land which forms a causeway from which the main part of the promontory rises steeply obviating the need for a ditch. At the top of the steep slope is a single, much denuded rampart and, as at Maiden Castle the only entrance appears to be at the southern end between the end of the rampart and the edge of the promontory. About $\frac{1}{2}$ mile further N, overlooking the village and harbour of Auchmithie is Castle Rock. This promontory is defended on the landward side by three ramparts and ditches, the ditch nearest the mainland is now partly filled in. A causeway cuts across all three ramparts and ditches to provide an entrance. The site at West Mains lies about 1½ miles further N and about ½ mile still further N lies Prail Castle – a spectacular promontory with traces of three ramparts and ditches on the southern side. There appears to have been a landslide on the northern side and it is now impossible to know whether the ramparts continued to the N of the causeway. The last of the six fortified promontories is at the Red Head, the highest point on this part of the coast at 81.5 m above sea level. The point of the promontory is defended by a wide ditch and a single rampart. During the 1914-18 war the site was used as an observation post and a trench was dug along the centre of the rampart. This unorthodox excavation makes it evident that the rampart is built of stone. A causeway crosses the ditch, but only excavation can show whether this is original.

The promontory at West Mains of Ethie is just under 45 m above sea level, projects eastwards from the land for some 61 m and is some 67 m across on the landward side, tapering to a blunt point. On the landward side the promontory is protected by three ramparts and ditches which are crossed by a central causeway. The site has been extensively robbed and a great deal of stone must have been removed – no doubt to provide material for the drystone dykes which surround the adjacent fields. It was first noticed by us and recorded by us and the Ordnance Survey, and excavation by the Archaeological Section of the Abertay Historical Society was begun in 1962 and continued until 1971 (fig 1).

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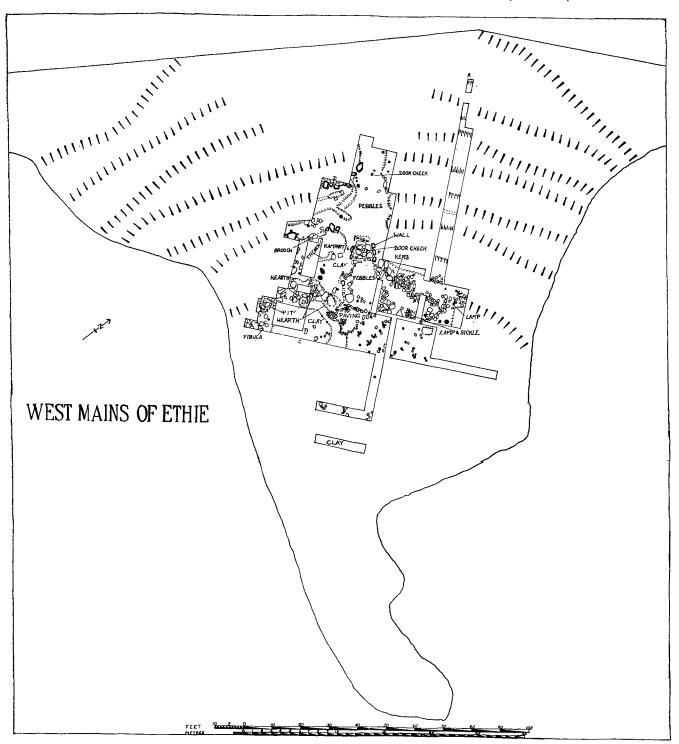


Fig 1 General plan showing excavated areas

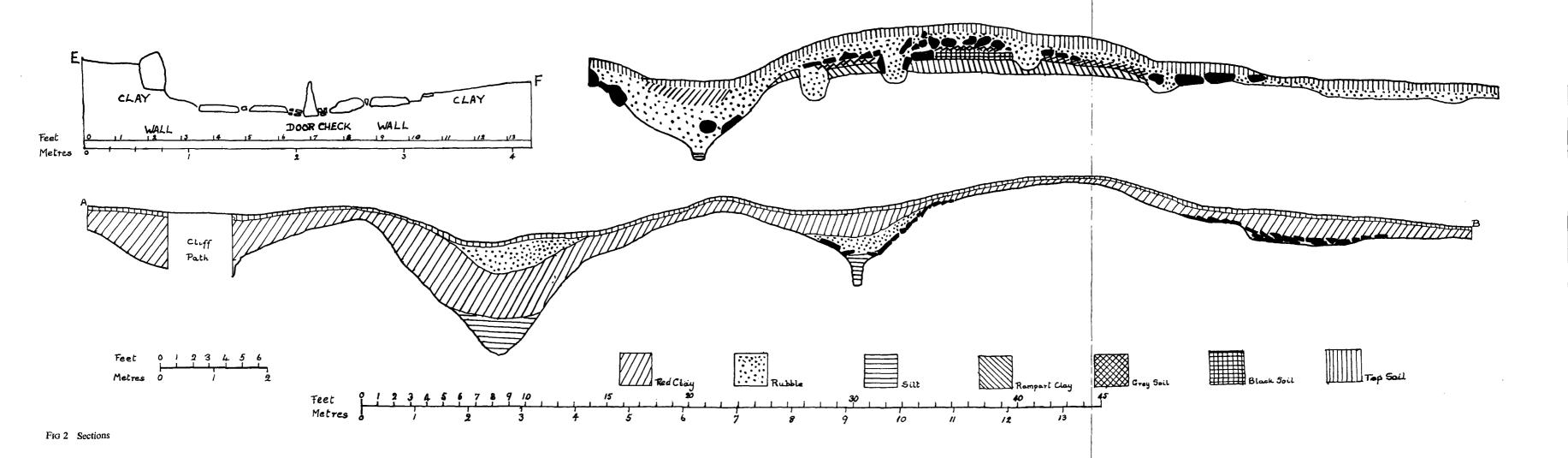
EXCAVATION

The first trench to the N of the causeway (fig 2: section A-B) was carried across all three ramparts and ditches and showed that the ramparts at this point were carved out of undisturbed clay and decayed rock. There was some little evidence of a stone rampart above the clay of the inmost rampart. The amount of tumbled stone both on the inner side of this rampart and in the ditch on the outer side suggested collapsed walling. At this point the clay bank was flat on the top and some 3.6 m (12 ft) broad. No post-holes were found on the rampart in this section although some small post-holes appeared close to the inside edge. The middle bank was not so wide, about 1.2 m (4 ft) at the curved top, and did not appear to have so much walling above the clay, while the third, outer bank was much lower and rose to a ridge with no apparent stonework. This section demonstrated that what appeared as ramparts at the present ground level were in fact the divisions between the ditches. A second section was cut across the inmost rampart S of the causeway (fig 2: section C-D). Here the rampart was in a better state of preservation, and was composed of a bank of undisturbed clay and turf topped by a rough wall of boulders of irregular size and shape. The wall was approximately 2.4 m (8 ft) wide with larger boulders forming an inner and outer skin while the centre was filled with smaller stones and earth. At no point were regular courses found but a row of irregularly spaced post-holes and a trench 2 m (6 ft 6 in) long on the outer side of the rampart suggest a timber revetment, while in places exceptionally large boulders were used to give extra support. The trench was 45 cm (1 ft 6 in) wide and 45 cm (1 ft 6 in) deep with some packing-stones remaining, leaving a space which would have taken timbers about 30 cm (1 ft) across. This trench had however been filled in with tightly packed stones amongst which was a circular polished stone 'palette' which formed one of the packing-stones. Beneath one of the largest boulders of the filling a small penannular brooch was found embedded in the clay at the bottom of the trench. On the inner side of the rampart a shallow trench 75 mm (3 in) deep, extended for about 1.8 m (6 ft) in a position corresponding to the trench on the outer side. This shallow trench curved in and was covered by the stone rampart. The function of this trench is not clear, nor is that of a line of three large post-holes at right angles to the inner face of the rampart. These post-holes, like the trench on the outer side had also been filled with stones. At this point the rampart was composed of a natural clay bank artificially shaped with an old turfline topped with humus and a stone rampart above.

The ditches were dug out of the clay and soft sandstone of the cliff to a depth of 1.5 m (5 ft) to 1.8 m (6 ft) and between 2.4 m (8 ft) and 3.6 m (12 ft) wide, broadening out and growing deeper towards the cliff edge on either side. The inmost ditch had a squared 'slot' 23 cm (9 in) wide and 15 cm (6 in) deep at the bottom, the other ditches were U-shaped. In all cases the slope of the ditch was steeper on the inner side. The ditches ended in a curve on each side of the causeway which showed no signs of having been built up artificially. The outermost clay bank finished level with the causeway. At the middle rampart the causeway was cut through the clay about 30 cm (1 ft) below the level of the rampart. On the S side a large amount of stone remained on the rampart and the entrance end was finished with a large boulder. On the N side the stone rampart had largely disappeared but a row of post-holes was found in the clay foundation. There were further post-holes along the edge of the causeway which was cobbled from the outer side of the middle rampart to the entrance through the inmost rampart, with two distinct layers of cobbling. A small buff glass bead and a section of a buff and blue glass armlet were found between the two layers at the foot of the large boulder at the entrance through the middle rampart. There was a central doorcheck in this entrance. A few stones in alignment on the N side suggest that there may have been a wall on this side to correspond with the boulder on the other side.

WEST MAINS OF ETHIE

SECTIONS



The entrance through the inmost rampart (pl 8a) was cut through the clay bank and sloped down to the interior of the site. It was well paved with large paving stones packed with small stones and formed shallow steps. Half way down this slope there was a central doorcheck (fig 2: section E-F). On the S side where the rampart remained to some height, two courses of a wall, composed of large stones, remained, and a fallen upright stone was found at the inner end. On the N side where the stone rampart was missing the lowest course of the retaining wall only remained. There were indications that the paving may have been carried on into the interior, where packing and isolated paving stones remained. At the top of the slope where the entrance paving joined the causeway a depression, 1·37 m (4 ft 6 in) long, 45 cm (1 ft 6 in) wide and 15 cm (6 in) deep was found. It was edged with upright stones and paved with small stones. This may have been the bed of a paving stone, since removed, but its exact function is doubtful.

Occupation in the interior of the fortified area appears to have been confined to the part of the promontory nearest to the ramparts. Excavation in the area nearest the point of the peninsula showed no signs of occupation. The occupied area had been covered with a scatter of small stones and pebbles. Irregularities in the level had been filled with clay and covered with a 'cobbling' of pebbles. The exception was a circular area on the S side which had a clay floor and was surrounded by a clay bank. This is assumed to be a hut circle, but scarcity of post-holes surrounding it makes one wonder how it would have been roofed. To the N, a complicated pattern of post-holes indicated another hut, possibly with interior roof supports. A further pattern of post-holes appeared in the most northerly section of the excavation close to the rampart, indicating a building against the rampart. Along the base of the rampart was an area of paving composed of large, well laid, slabs which had been laid over the pebbled surface. The presence of earth and clay between the two levels suggests a reconstruction. No paving was found immediately inside the entrance, but packing stones still in position indicated that this area had also been paved. To the N of the entrance a low kerb divided the paving. An area of rougher paving set in clay filled the space between the two hut sites.

Two hearths were found against the rampart on the S side of the entrance. The earlier of the two was in a hollow of the clay bank without any apparent hearthstone, but a considerable amount of burnt material and charcoal was covered over by the later paving. The later hearth was at the base of the clay bank on a level with the huts. There was a large amount of burnt material on the pebbled floor and the back of the hearth was formed by a slab of sandstone which showed considerable signs of burning (pl 8b). This stone was held firmly in place by boulders set into the edge of the clay bank, and beside the hearthstone, projecting from this wall, about 30 cm (1 ft) above ground level, was a small block of stone hollowed out to form a cup, $12 \text{ cm } (4\frac{1}{2} \text{ in})$ in diameter and $2 \text{ cm } (\frac{3}{4} \text{ in})$ deep. The hollow is considerably worn and similar to a mortar although it is difficult to see how a mortar could have been used so close to the fire. It may rather have been used as a socket stone to hold a wooden swey. Neither hearth was inside a hut but post-holes near the later hearth may indicate a canopy over it.

In the paving which ran at the base of the rampart to the S of the entrance were two storage pits. They were dug into the clay, roughly circular and lined and paved with stones. The smaller of the two was 1.07 m (3 ft 6 in) in diameter and 45 cm (1 ft 6 in) deep, and the larger 1.2 m (4 ft) in diameter and 50 cm (1 ft 8 in) deep. They were both filled with debris from the rampart and when this was removed some fragments of carbonised wood were found near the bottom of the pits. They filled with water after heavy rain and may have been used for water storage, or food storage, but there was no evidence of any other possible use.

FINDS

Small finds were few and far between and it was only towards the end of the excavation that datable material was found in a stratified context. One stone lamp in two pieces and part of another (nos 8 and 9) were found in association with the post-holes of the huts to the N of the entrance. These are both of sandstone and similar to those found in souterrains in Angus. A small sherd of crucible and an iron sickle (nos 7 and 5) were found in the same area between the paving stones. In a depression in the paving on the S side of the site was found a bronze fibula (no 1) of 1st to 2nd-century AD date, and the same or rather later dating can be applied to a bronze penannular brooch (no 2) found beneath a boulder at the bottom of the outer palisade trench. This brooch was surrounded by some unidentified matter which was at first thought to be a container of some sort. However it was examined by Dr McKerrell of the National Museum of Antiquities, who reported that it appeared to be 'a mixture of soil and vegetable matter'. This would indicate that the palisade trench had contained vegetable matter before it was filled up in the alteration of the rampart. A section of a blue and buff glass armlet and a very small bead of buff glass (nos 3 and 4) were found on the lower level of the causeway through the middle rampart. These finds also belong to an early 2nd-century AD date.

A small sherd of burned samian ware was found in the tumble of the inmost rampart (no 6). Other unstratified finds were parts of two rotary querns (nos 15 and 16) and a polished rectangular palette of sandstone (no 10). A circular palette (no 11) was found in the packing of the palisade trench, this was also of polished sandstone. Two stone sinkers or loom-weights (nos 13 and 14) were found amongst the cobbling of the interior of the huts, obviously re-used as cobbles. Several parts of sandstone mortars were found scattered among the debris of the rampart. The most remarkable of the unstratified finds was a block of sandstone (no 12) on which was a design consisting of a cup-mark with slight signs of a ring round it and four straight incised lines. The decoration was evidently made to fit the shape of the stone. It is remarkable that no pottery other than the small sherd of samian ware and the piece of crucible was found on the site. Nor were there any fragments of bone. The lack of bone may be explained by the acidity of the soil, the exposed nature of the site which was probably scavenged by sea birds, and the fact that garbage could easily be thrown into the sea.

CONCLUSION

The datable finds from this site indicate a date in the early part of the 2nd-century AD but many of the stone objects cannot be accurately dated and may belong to an earlier period. The filled-in palisade trench and the paving along the inside of the ramparts suggest a reconstruction or perhaps an earlier occupation of the site. Unfortunately the remains were not sufficient to provide a clear indication. The site was evidently that of a small settlement, but one may wonder what circumstances required such an elaborate system of defences. The early second century was the period of the Roman occupation of Scotland and the place may well have been fortified as a place of refuge. The fact that there are six similar sites between Arbroath and Lunan Bay suggests that this series may represent a number of bridgeheads for refugees from south of the Forth.

FINDS (figs 3-4)

Bronze trumpet fibula, lacking the pin and greatly corroded, 66 mm in length. Type R (ii) (Collingwood & Richmond 1969, 296-7).

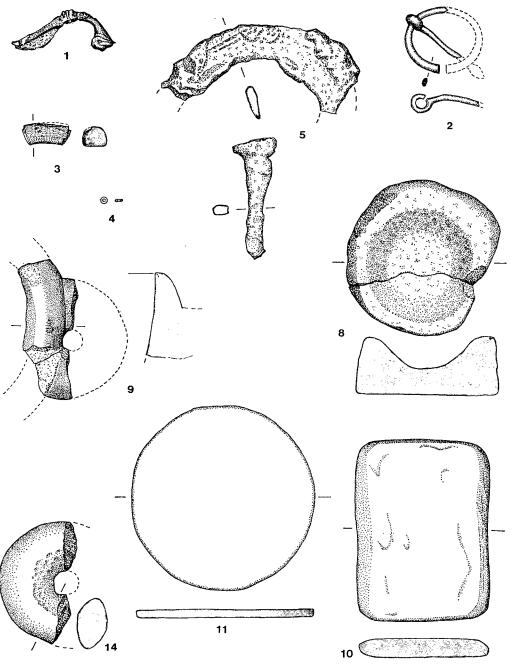


Fig 3 Finds

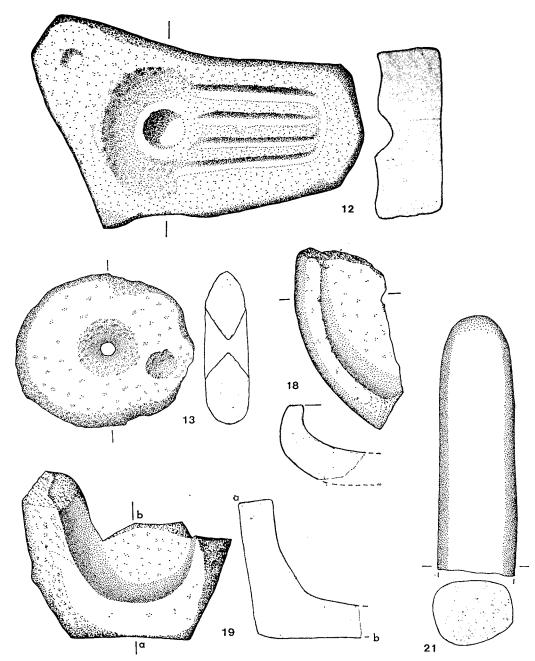


Fig 4 Finds

- 2. Half a bronze penannular brooch, the ring a flat D-section, plain square terminals, the pin having an expanded spade-shaped end when found. Oval in shape, 40 mm by 34 mm approx. Similar examples are recorded from Newstead and Traprain and, in silver, from Waulkmill, Aberdeenshire but the nearest parallel seems to be one of the small iron brooches found at Lochend, Dunbar (Longworth 1966, 180—1).
- 3. Segment of glass bracelet, both ends rebated; the core of sea-green bottle glass, inlay of yellow and ultramarine; a yellow band at the inner edge of each side, wide slanting bands of yellow and blue across curved outer surface. Type 1 (Stevenson 1976).
- 4. Yellow glass bead, 4 mm in diameter.
- 5. Pieces of blade and tang of an iron sickle, much corroded.
- Sherd of samian ware (not illustrated); very much worn and subjected to burning. 6.
- 7. Fragment of crucible. (Not illustrated.)
- 8. Stone lamp of micaceous sandstone, much worn and broken in two. Internal diameter 55 mm, depth 18 mm.
- Fragment of a lamp of fine sandstone, part of the rim and the base of the perforated handle 9. surviving; estimated internal diameter 100 mm.
- 10. Rectangular palette of fine micaceous sandstone, worn smooth, both faces having areas of high gloss. 95 mm by 70 mm.
- Round palette of fine sandstone, worn smooth. 98 mm in diameter. 11.
- Piece of rather coarse pinkish sandstone; the edges, though rough, do not appear to be broken. 12. On one face a pecked design consisting of a detached cup-mark, a deeper cup-mark combined with four parallel grooves and a crescent-shaped hollow. The depth of the larger cup is 23 mm and 45 mm in diameter, the depth of the grooves 10-15 mm and their length 110-130 mm. On the opposite face, one conical hollow, 14 mm deep and 20 mm in diameter, not quite back to back with the larger cup-mark.
- 13. Perforated piece of sandstone, the perforation pecked with hollow worn smooth immediately around the hole, a pecked hollow on one face. Length of oval 95 mm, width 80 mm.
- 14. Half a pebble, Pecked perforation, the hole smoothed by transverse wear.
- 15. Fragment of a rotary guern. (Not illustrated.)
- 16. Fragment of a rotary quern. (Not illustrated.)
- Large flat sandstone pebble with pecked hollow, 120 mm in diameter and 20 mm deep, 200 mm by 17. 140 mm overall. (Not illustrated.)
- Fragment of a shallow sandstone basin, estimated external diameter 350 mm, pecked surface with 18. smooth rim.
- 19. Nearly half a deep sandstone basin, the finely pecked interior oval in plan, the rim smooth, the outer surface irregular with coarse pecking. Estimated diameter 100 mm.
- 20. Half a rough mortar. (Not illustrated.)
- 21. Whetstone of sandstone, broken at one end. Length 137 mm.
- Part of similar whetstone. (Not illustrated.) 22.
- 23. Fragment of lead. (Not illustrated.)
- 24. Burnt flint flake. (Not illustrated.)

ACKNOWLEDGMENTS

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a Entrance through inner rampart



b Hearth