

AN EXCAVATION IN THE CITADEL, AYR

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& Natural History Society**

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INTRODUCTION

In 1976 the Royal Commission on Historic Buildings and Ancient Monuments for Scotland decided that any surviving medieval features in the major Burghs should be recorded before they disappeared completely. Mr. Robert Gourlay, then of the Department of Archaeology of the University of Glasgow, was seconded to the Commission and Ayr was the first Burgh to be visited.

Within the NW bastion of the Cromwellian Citadel, where its wall forms part of South Harbour Street, Mr. Gourlay found sherds of medieval pottery, pieces of bone and charcoal in an earth bank at the bottom of the escarpment which runs down from the houses in Montgomery Terrace. Two or three squared stones were also visible in the base of the bank. This area is close to the putative site of the first castle of Ayr and clearly needed investigation. The time allowed for the Commission's survey of Ayr was insufficient for Mr. Gourlay to do this and it was therefore left to members of the Ayrshire Archaeological and Natural History Society.

THE SITE

Fig. 1A shows the industrial buildings within the NW bastion of the Citadel (see the Ordnance Survey 1:1250 map of 1960). It can be seen that the ground is shown as rising to the south immediately beyond the buildings but by 1976 the Mill Yard had been considerably enlarged, the land beyond rising gradually at first then in a steep bank. The point at which the squared stones were noted was in this bank at the east end of the excavation site in Fig. 1.

On the ground a datum post was fixed there to which all subsequent measurements were related.

THE EXCAVATION

Removal of the stones revealed the broken top of a buried wall running in a westerly direction in the bank. The ground rose gradually to the west and at 6-8 m. from the datum post in the loose top soil at

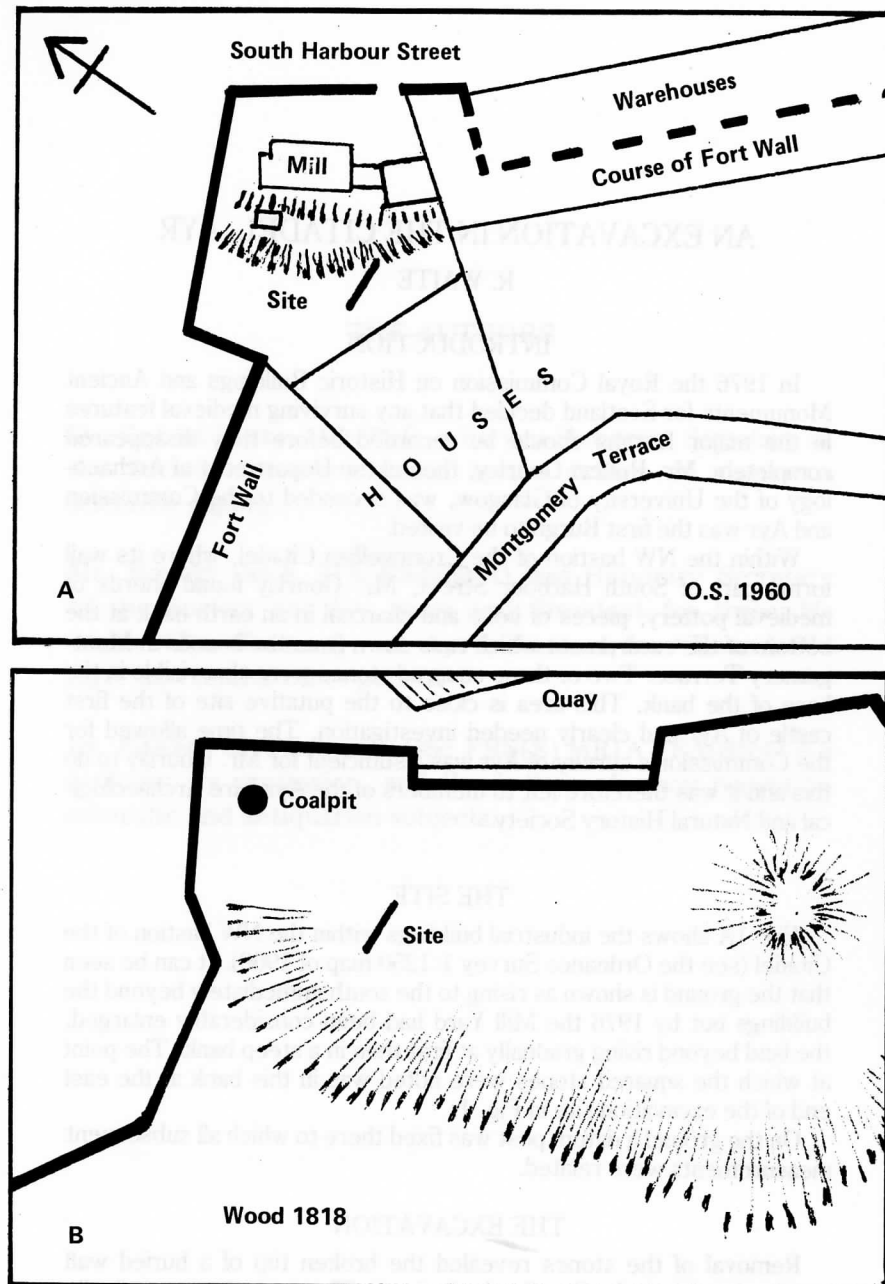


Fig 1: Citadel, NW Bastion and Site

the edge of the scarp, modern building debris, corrugated asbestos, bricks and glass could be seen. The line of the buried wall was established and the bank between this line and the edge of the scarp excavated (Trench A). As the direction of the wall was more westerly than that of the edge of the scarp, the width of the excavated area widened to the west. The spatial location of finds was measured as the distance from, and height below or above, the datum post and the distance from the line of the wall.

The structure of the ground in Trench A was well defined and will be described with reference to Fig. 2, which shows the profile at the end of the excavation at a distance of 5.5 m. to the west of the datum post. Despite the clear layering of the soil it soon became evident that there was no equivalent stratification of the pottery, sherds from a single pot appearing in more than one level, often at some distances from each other, or sherds from pots made a century or more apart lying close together.

In short, the site had suffered considerable disturbance. The finds, mainly of medieval pottery, will therefore be mentioned briefly and discussion of their significance dealt with later; in all, 685 sherds were recovered from Trench A.

LEVEL 1 (Fig. 2)

About 30 cm. depth of loose black soil containing only modern building debris which was probably deposited about 1973, according to the owner of the Mill.

LEVEL 2

About 20-30 cm. depth of unconsolidated sandy soil which contained 12 sherds of medieval pottery. This level appeared to have been deposited in fairly recent times, probably when the Mill Yard was enlarged sometime after 1960.

LEVEL 3

About 60-80 cm. in depth. There was a marked change in the structure of the soil in this level, the soil being much more compact, still mainly sandy but marked with irregular pockets of darker material. It contained 137 sherds of medieval pottery, numerous animal bones, including parts of the skulls of three ponies or small horses (with four sherds lying in a skull cavity), iron nails, mussel shells, charcoal and a small area of burning. The profile showed faint slip lines running downwards at an angle from the line of the wall, the top courses of which appeared in this level.

LEVEL 4

About 40-50 cm. in depth. Here the ground had two distinct

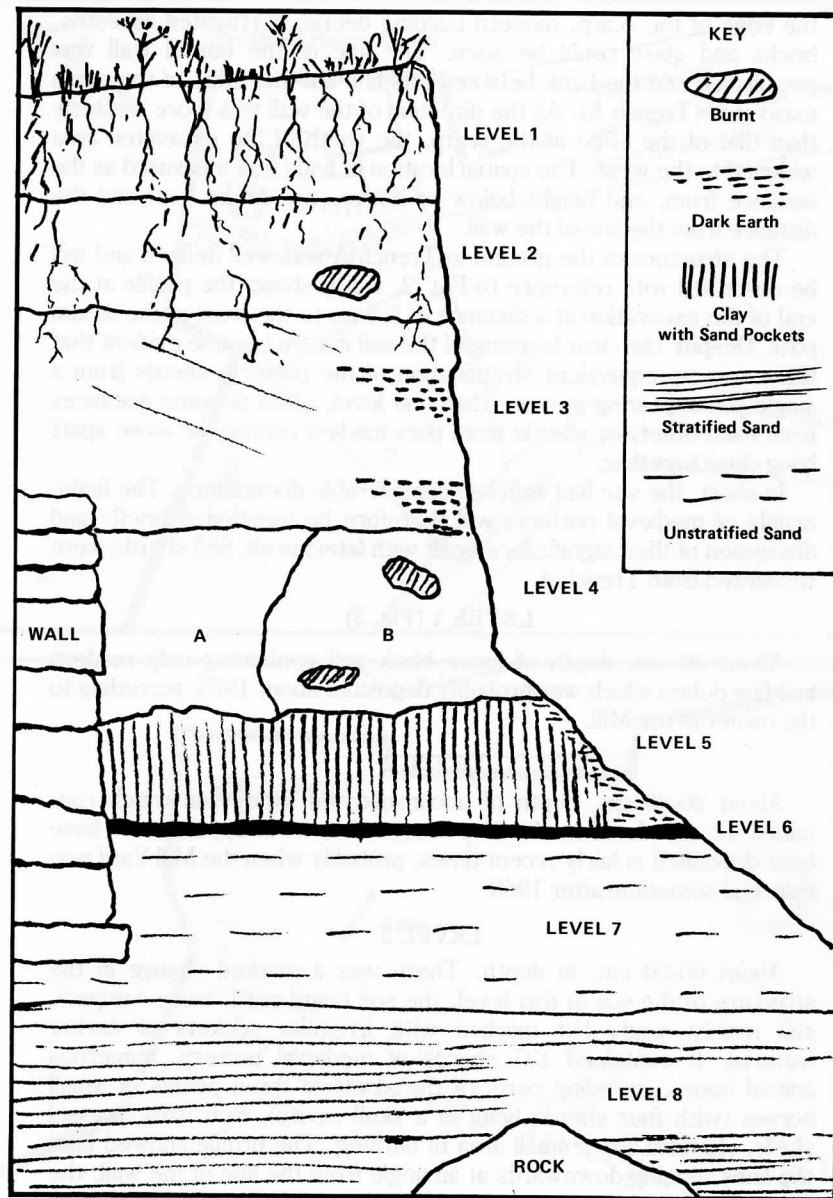


Fig 2: Section of Trench A

components, unstratified sand next to the wall and dense, dark soil continuing to the edge of the trench. Where the trench was narrow, for 2-2.5 m. from the datum post, the dark soil was absent, the sand being faced with thin, loose soil carrying straggly grass and weeds. Enlargement of the Mill Yard had clearly cut into the bank at an angle to the wall and beyond about 5 m. from the datum post where the bank widened, the amount of black area decreased.

The sand portion of level 4 contained 29 sherds of medieval pottery, animal bones, pieces of bright coal, a lump of flint (180 g), two unworked flakes of flint and a number of small pockets of grey clay. The black earth contained many sherds, animal bones, a small patch of mussel shells, ironware, coal, charcoal, three flint flakes and several small clumps of burnt earth, the last probably scatterings of a larger burnt area.

The density of sherds was high in this earth, particularly where it widened in the area 4 to 5 m. from the datum post and 30 to 90 cm. in front of the wall. It contained 301 sherds, 44% of all found in Trench A including the only large piece found in the excavation, the rim, handle and part body of a large jug. (Fig 3).

LEVEL 5

About 20-30 cm. in depth. In this level the nature of the ground changed abruptly to a stiff grey clay with pockets of sand, stretching, for the most part, from the wall to the edge of the bank but near the datum post, a small amount of sand, contiguous with that in Level 4 above, lay between the wall and the clay. The clay reached its greatest width, 1 m., between 4.5-5 m. from the datum post and at about 8 m. became a mixture of clay pockets in sand. In some parts the clay occurred in large lumps of a size suggestive of spadefuls. The clay and sand pockets contained a large number (130) of sherds of medieval pottery, small pieces of fossilised shell and an ironstone lens.

LEVEL 6

This was a thin, 2 cm. thick layer composed of sand, finely divided charcoal and small pieces of charcoal. Several samples of this layer were sieved and yielded carbonized grain, grass seeds and hazel nut shells suggesting a previous ground surface.

LEVEL 7

About 45 cm. unstratified sand which contained pottery sherds (45), animal bones and ironware.

LEVEL 8

Stratified sand, no finds, natural rock at about the level of the Mill Yard, some 1 m. below the foundation course of the wall.

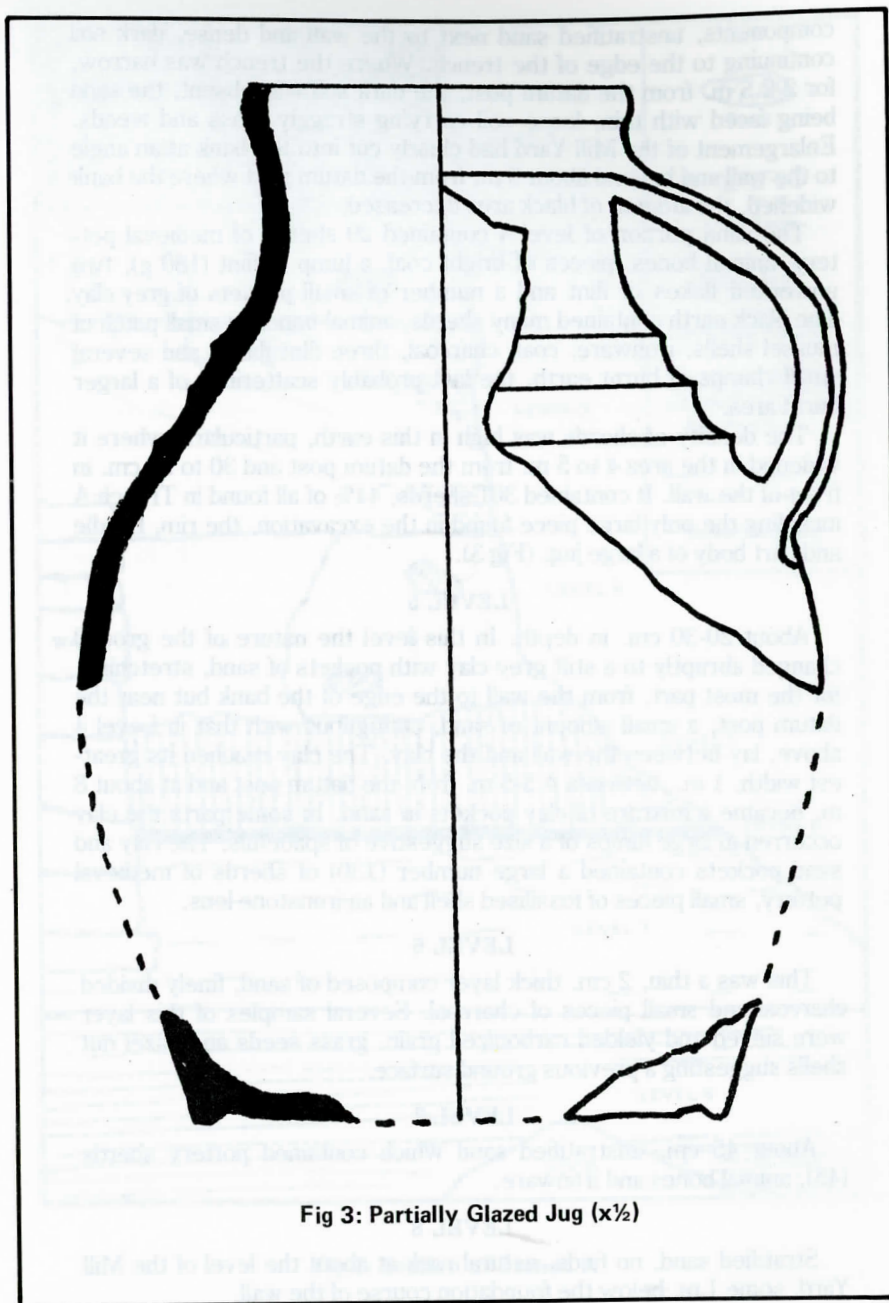


Fig 3: Partially Glazed Jug (x½)

Although pottery sherds were found in all parts of Trench A, those lying between 4 and 5 m. from the datum post in Levels 3, 4 and 5 accounted for 63% of all found in the trench. To determine whether a similar concentration existed on the other (south) side of the wall a small trench (B, 2 x 1 m.) was excavated at right angles to the wall between 4 and 5 m. from the datum post.

TRENCH B

The ground surface, bearing grass and weeds, was about level with the top of Level 2, Fig. 2. Excavation showed that a shallow (50 cm.), V-shaped depression running parallel to the line of the wall had existed and subsequently filled with dark earth.

Abutting the sides of the depression and below it there was unstratified sand which, with occasional pockets of earth, continued to the final depth of the trench, 1 m. Thus the ground structure was quite different from that on the other side of the line of the wall. Nevertheless, from a depth of 15 to 70 cm., 37 sherds of pottery were found, mostly at a depth of 30 cm. below surface level, i.e. in the dark earth of the depression, which, it was subsequently learned, might have come from the Mill Yard enlargement. Certainly in the surface layer there was modern industrial debris.

TRENCH C

To make a second examination of the ground structure behind the wall a small trench (2 x 1 m.) was excavated 90 cm. from the datum post along the back face of the wall. Below 25-30 cm. of topsoil the ground was entirely unstratified sand, which continued to the final depth of the trench (1 m.). 16 pottery sherds were found in the upper half of the sand, equivalent to the Level 4 on the other side of the wall. Thus the very different structure of the ground behind the wall compared with that in front was confirmed, although, again, sherds of medieval pottery were present there in small numbers.

THE WALL

As the excavation of Trench A progressed the wall could be seen to be built of igneous random rubble, the larger stones roughly squared, and originally bonded with limestone mortar, most of which had decayed.

The face of the wall was considerably broken but at one point reached a height of 1.4 m. in 10 courses; for most of the excavated length however it varied between 0.8 and 1.2 m. The absence of any finished or coping stones suggested that at some time the wall had stood higher. Along Trench C the width of the wall was 60-70 cm., with an infill of sand and small stones. It was set directly on clean sand without any foundation other than the bottom course of squared stone

projecting at the front 5 cm. beyond those above.

Two dissimilar sherds (cooking pot and green glazed) were found lying on the surface of the sand immediately beneath the wall when one of the stones of the foundation course was removed. As the excavation of Trench A stopped just below the foundation course, these finds prompted an examination of the ground below that level, running at right angles from the wall to the edge of the Mill Yard at a point 50 cm. from the datum post (Trench D).

TRENCH D

Under a grass and weed cover there was 25-30 cm. of sandy soil containing modern debris. Below this was 16-20 cm. of unstratified sand, thereafter stratified sand and at 80 cm. below the wall foundation course and level with the Mill Yard, the top of an igneous rock. 21 sherds were found in the unstratified sand and 1 in the stratified.

DISCUSSION

The object of the excavation was to try to determine the function of the buried wall and to examine the sherds of medieval pottery. No firm conclusion has been arrived at concerning the wall but most of the pottery would appear to be of local manufacture of 14th-16th century with a relatively small amount of imported material, although this contained a few sherds of fine ware known to have been manufactured in the Bordeaux area in the late 13th to early 14th century and was most probably associated with the wine trade. Most of the pottery was glazed in various shades of olive-green and derived from large jugs, while the unglazed sherds came mainly from cooking pots. A detailed description of the pottery is given in Appendix A.

The area of the excavation lies within the NW bastion of the Cromwellian Citadel (built 1652-4) which has, rather surprisingly, contained a small coal pit, shown on Wood's 1818 map of Ayr (Fig. 1B). In 1611, according to Lyon's history of Ayr, 'the opening of coal heughs was promoted by the Magistrates and Town Council and one was at the seasyd and watter syd', which may have referred to that later enclosed within the NW bastion. The relevance of the coal pit lies in finding grey clay, coal, fossilized shells and an ironstone lens abutting the buried wall, which is built of igneous rock with iron staining on it. The geology of this area consists of topsoil and sand over a stratum of igneous rock lying above a stratum of mudstone/sandstone, which contains a band of fossilized sea shells (the Musselband), below which is the coal seam. (*Economic Geology of Ayrshire Coalfield*). Mudstone when exposed to the weather becomes clay. It would appear either that the wall was free standing at the time the coal pit was dug and some of the spoil came to rest against it, or that the wall was built later than the pit of rock excavated during the opening of the pit, and some

clay was used to support the foundations.

It is known from a letter in Mercurius Politicus, 11 August 1652, (mentioned in *Scotland and the Protectorate 1899*), referring to the Citadel of Ayr that building difficulties were encountered. 'Our fortification here goes on fast. After we get the foundation laid, we are very much troubled with water, and have no earth but a shattering sand, that as we dig in one place another place falls upon us'. As the sandy land falls sharply from the escarpment it seems possible that the excavated wall at its base was built as a retaining wall.

On the 17th century plan of the Citadel a thin wall is shown in the NW bastion at approximately the position of the excavated wall but their directions differ somewhat; that on the plan lies at 263 degrees whereas our wall runs at 270 degrees, so that considerable doubt remains.

An attractive possibility is that the excavated wall is the remains of the bailey of the castle of Ayr founded by William the Lion about 1200. The exact location of the castle is not known but it has long been associated with what was once a hillock at the eastern end of the escarpment, the western end of which terminates some 110 m. away near the NW area of the Citadel. A bailey wall might have enclosed the escarpment. However, as the excavated wall had a very simple foundation laid directly on sand, was only 70 cm. wide at base and was sited at the bottom of a steep slope it seems unlikely that it was part of the bailey. Add to this that sherds of medieval pottery were found directly beneath a foundation stone and, although sherds can be washed through sand, it would appear that the wall was built later than the 13th-16th century. It seems more probable that the wall is Cromwellian, or a little later, when the Citadel became the Barony of Montgomeriestoun.

The ground behind the wall consisted of a thin top soil over unstratified sand (Trenches B and C). This indicates that the soil comprising Trench A above Level 6, a possible former land surface, had been put there at various times during operations within the bastion. The clay of Level 5 is clearly associated with the opening of a coal pit and the well-compacted Level 4, with its high density of sherds and patches of burning, probably arrived fairly soon after as ground was cleared for the pit operations.

Level 3 may represent spoil from clearance when the Mill was built in the early 19th century, the spoil having been thrown up the slope, as suggested by the faint slip lines in Level 3. Level 2, and later Level 1, represent further enlargement of the Mill yard when the function of the building changed in recent times and a bigger turning circle in the yard was required.

If this interpretation is correct it implies that the land surface

before the pit was opened, which would have been adjacent to the river bank, carried numerous sherds of medieval pottery and animal bones. In his study of the urban growth of Ayr, Dodd (1972) does not show any domestic dwellings in this area during the periods in question and the likely source is the castle. How the sherds made the 110m. journey is far from clear. From the wide spread of dates for the pottery, they may have been washed from a long-used midden by river flood water and deposited on the flooded bank nearer the sea.

APPENDIX A—THE POTTERY

The pottery assemblage consisted of 918 sherds (9.2 kg), mainly small, with only one fairly large piece, part of a large jug of which most of the rim, handle and part of the body had survived (Fig. 3). A number of the sherds could be assembled into larger, but still incomplete, pieces which gave some idea of shape and size of the original vessels. In addition, there were 25 pieces (1.6 kg) of strap handles (Fig. 5) from large jugs, 52 small pieces (0.6 kg) of rims (Fig. 4) and 38 sherds (0.6 kg) containing a small piece of base. There were three times as many glazed as unglazed sherds. The glazed sherds appeared to be derived almost entirely from jugs, while most of the unglazed sherds, some with carbon encrustation, came from cooking pots. The glaze of a few jugs did not completely cover the vessel, stopping 6-8 cm. above the base. The bottoms of the vessels would appear to have been substantially flat although most sherds containing any base were small and contiguous with the wall, making judgement difficult. Applied decoration was present on 31 sherds (Fig. 6). A small quantity of the 13th-14th century Saintonge ware (80 g.) from the Bordeaux area of France was found, consisting of 5 very small pieces of polychrome, 1 piece of green monochrome and 23 pieces of green-speckled white ware which included a piece of flat handle. In all, the whole assemblage probably originated in about 90 vessels.

A search was made for a kiln site and at Potter Hill (NS 391209) some 6 km. from Ayr a number of green-glazed pottery sherds were found in the recently dug garden of a new house. Similar sherds had been found in a field of a neighbouring farm. There was no evidence of a kiln.

TERMS USED

'Oxidized', where an abundant supply of air to the kiln had oxidized away the carbon particles in the clay. In cross-section the colour of the sherd is uniform, often light coloured. Where the temperature of the kiln or length of firing had not completely oxidized the carbon a thin greyish-coloured middle band can be seen indicating 'semi-oxidation'.

'Reduced', where the supply of air to the kiln was limited. Carbon monoxide would be present which would prevent oxidation of the

carbon in the clay so producing pots with a grey or almost black body.

'Secondary oxidation'. If reduced firing was followed by a period of oxidation, either as part of the process, as in glazing, or when the hot kiln was opened, the inner surface of glazed pots could develop a thin skin of reddish colour over the dark body derived from the oxidized iron in the clay.

EXAMINATION

The sherds were first separated into three broad groups, glazed reduced, glazed oxidized, and unglazed. Sherds apparently originating from the same vessel were grouped and a representative sample of the assemblage (190 sherds) examined for fabric constituents.

This was done by viewing a freshly broken section of the sherd under a low-power binocular microscope (x20) fitted with micrometer eyepiece and recording the average number, size and shape of the quartz particles seen in a field 5 x 4 mm (2-3 fields per sherd), together with an estimate of the number of particles of red and black iron oxide inclusions.

Classification of the quartz content was as follows:

	Quantity per field
Abundant	More than 20 particles
Moderate	10-20 particles
Sparse	Less than 10 particles
	Size
Coarse	Greater than 0.5 mm.
Medium	0.25 to 0.5 mm.
Fine	Less than 0.25 mm.

Oxide inclusions ranged from abundant (5-7 per field) to sparse (0-1 per field). Mica was present in all sherds, excepting the Saintonge ware, usually sparse in quantity and very fine (less than 0.1 mm) in size. The colours of the glazes varied considerably but, except for a few sherds with a brown or yellow glaze, were different shades of olive-green. These have been described subjectively because of the number of adventitious factors which may affect glaze colour even on a single vessel.

Because the site had been disturbed on more than one occasion there was no stratigraphy or other artefacts to suggest the dates of the sherds. However, two recent excavations in the centre of Ayr by the Scottish Urban Archaeological Trust have found similar pottery of 13th to 16th century origin.

Comparison with reports of these sherds and of previously published accounts of pottery excavated in SW Scotland have been used to suggest dating in the present report.

FABRIC 1 - GREEN GLAZED REDUCED WARE

211 sherds; 2570 g.; c. 28 vessels. Glazed reduced sherds with a dark grey body and inner surface form the largest group in the collection, accounting for 28% (by weight) of all sherds or 34% if handles are excluded. They are likely to represent local manufacture of 14th-16th century and, with few exceptions, appear to come from large jugs. The group contains the only large piece found intact, the handle, part-body and rim of a thin-walled (3-4 mm) jug bearing a patchy, light olive-green glaze and distinct broad rills; the handle was set on slightly skew with its base applied by unequal trefoil thumbing (Fig. 3). Part of the body of a large, thin-walled, well-made jug was assembled which has a glossy, mid olive-green all over glaze and broad rilling. The presence of a small piece of stone in the wall of the latter suggests that this piece was made on a slower wheel.

The fabric of this group is fairly compact, dark grey in colour and contains sparse amounts of medium, occasionally coarse sized quartz which is well-sorted and sub-angular.

A few sherds possess either abundant or moderate amounts of quartz but otherwise appear to belong to the main group. Oxide inclusions are sparse and medium in size. The thickness varies but is mostly 4-6 mm. The fabric is mainly fairly hard, but there are some softer sherds; it has a fairly smooth inner surface and breaks regularly; coarse quartz crystals are occasionally visible in the glazes which are generally mid olive-green in colour. The glaze is mainly thin and below it, in section, a light grey layer in about half the sherds is very thin or, in 12 sherds from one jug, absent.

Sherds from thicker ware (7-10 mm) have a more pronounced light grey layer, probably the result of longer firing or higher temperatures. In 16 sherds the colour of the inner surface is light grey and the surface hard, possibly caused by slight secondary oxidation. The large piece of body and handle belongs to this sub-group. The small basal sherds are flat and show finger pinching or, in thicker pieces, a small, pinched foot.

Sherds of this reduced fabric when re-fired experimentally in oxidizing conditions at c.900° C became brick red throughout.

The sherds from Potter Hill (240 g.) belong to this group of reduced ware, some forming part of the body of a large, thick-walled (10 mm) jug. The dark grey matrix of these sherds contains sparse, fine to medium quartz and sparse oxide inclusions; the glaze is light olive-green over a very thin grey layer.

Two other sherds (320 g., 13-20 mm thick) probably from a large storage vessel with a slightly everted, flat rim are glazed in mid olive-green on both sides, with darker speckles on the inner surface.

FABRIC 2 - GREEN GLAZED WARE WITH SECONDARY OXIDATION

144 sherds, 1.5 kg, c. 21 vessels. The fabric of this group, the second largest, is characterised by a reduced, fairly compact dark grey body with an inner surface coloured by a thin layer of secondary oxidation, the colour of which varies from brick-red through browns to almost cream. They are probably of local manufacture of the 14th-15th century. The matrix contains sparse to medium amounts of quartz of medium size, fairly well sorted, of sub-angular shape, and sparse to moderate amounts of black and red oxide of medium size.

Sub-group (a) 36 sherds, 380 g., c. 6 vessels.

A dark grey, almost black body with a fairly smooth, brick-red inner surface. Thickness 5-9 mm, the thicker sherds being flat basal pieces which exhibit finger pinching and one a small pinched foot. One sherd carries broad rills. The glazes are glossy, mid to dark olive-green all over except on basal pieces.

Sub-group (b) 38 sherds, 360 g., c. 6 vessels.

A dark grey body with a thin, fairly smooth brownish-red inner surface. Thickness 3-6 mm. An assembled piece of the shoulder of a medium-sized jug carries narrow rills. Finger pinching is present on a flat basal sherd.

The glaze is glossy, mid or dark olive-green. Included in this sub-group, although possibly from a different source, are a number of small sherds on which the dull, light-olive green glaze is patterned with darker green spots.

Sub-group (c) 42 sherds, 410 g., c. 5 vessels.

The matrix is dark grey with a thin mid-brown fairly smooth inner surface. The glaze is mid to dark olive-green. The assembled piece of the shoulder of a large jug carries shallow, broad rills. 12 sherds from one vessel have carbon blackening on both surfaces.

Sub-group (d) 35 sherds, 450 g., c. 4 vessels.

In these sherds there is a grey layer under the glaze, indicating a higher temperature of firing, a dark grey body and a thicker oxidized inner layer of light brown to cream colour. Thickness 5-7 mm. On an assembled piece of the lower wall and base of a large jug, the glaze stops 7-8 cm. above the base.

FABRIC 3 - GREEN GLAZED OXIDIZED OR SEMI-OXIDIZED WARE

56 sherds, 700 g., c. 5 vessels. Probably non-local of 14th-15th century. This oxidized, or semi-oxidized, fabric is fairly soft, breaking irregularly, with a slightly rough buff-coloured inner surface. The thickness of most of the sherds is 5-8 mm., the matrix containing

sparse to moderate amount of medium to coarse quartz with a moderate amount of oxide inclusions medium to coarse in size.

In section, below the glaze there are two or three layers, coloured light grey, darker grey and buff, or the darker grey layer is missing. The glaze is all-over, glossy, mid olive-green in colour. The group contains an assembled piece of a large jug, probably about 30 cm. high originally, the shoulder carrying prominent narrow rills. Another assembled piece of the same fabric is part of the base and wall of a large vessel, 4-6 mm. thick, unglazed except for small spots with a markedly sagged base but without any carbon encrustation.

Sherds from smaller vessels include six on which the dull glaze shows a random pattern of dark green patches on a yellowish-green background and four in which coarse particles of quartz stand white through a very glossy, dark green glaze.

FABRIC 4 - GLAZED OXIDIZED WARE

54 sherds, 440 g., c. 13 vessels. This small group of sherds, probably of 14th-15th century manufacture from several non-local sources have the common characteristic of a fully oxidized, single coloured compact matrix containing abundant fine quartz and moderate quantities of fine oxide inclusions.

Sub-group (a) 25 sherds, 340 g., c. 7 vessels, thickness 3-5 mm. The glaze is all-over light olive-green, yellow or brown, a piece of base and wall is finger pinched and a piece of rim and handle has a cream coloured fabric and a partial yellow glaze.

Sub-group (b) 30 sherds, 110 g., c. 6 vessels, 3-5 mm thick. Brown glazes, very much abraded over light-coloured matrices.

Sub-group (c) 7 sherds, 20 g., 1 small jug, thickness 2 mm. A fairly smooth, buff-coloured body with a patchy brown glaze, narrow rilling.

Included in this oxidized group is one small sherd resembling Scottish East Coast gritty ware.

FABRIC 5 - UNGLAZED WARE

140 sherds, 1130 g., c. 21 vessels. Most of these sherds come from cooking pots, the outer surfaces carrying traces or encrustations of carbon, the remainder may have come from storage pots or from the lower walls of only partially glazed jugs. Most sherds have both inner and outer oxidized surfaces, the inner probably resulting from secondary oxidation; only 14% have a reduced, dark grey inner surface. The sherds fall into three sub-groups of similar fabrics to those of the glazed wares.

Sub-group (a) 50 sherds, 130 g., c. 8 vessels. Thin-walled (2-4 mm) oxidized sherds with abundant, fine to medium quartz with moderate oxide inclusions. The fabric is fairly soft with a smooth inner surface and a single colour through the sherd, reddish-brown or buff except where usage has caused some darkening of the outer surface. This sub-group contains two assembled pieces of a small cooking pot with narrow rills on the shoulder. It is non-local of 13th-14th century (Fig. 7).

Sub-group (b) 82 sherds, 850 g., c. 12 vessels. Possibly local of 13th-14th century. This is the major sub-group of the unglazed wares and has a fabric similar to that of glazed Fabric 2, i.e. sparse to moderate quartz and oxide inclusions. The inner and outer surfaces are red or buff coloured, fairly smooth, with a grey layer between. In the thicker sherds (4-7 mm) this inner layer is dark grey and the inner oxidized surface very thin, whereas in thinner sherds (2-4 mm) the sandwiched layer is light grey and in some parts disappears. This group contains two assembled pieces, one of the base and walls of a medium-sized, thin-walled cooking pot with a sagged base and the other a large piece of wall and base of a thicker cooking pot which also has a sagged base. The latter has a 1 cm. wide piece of striated stone protruding from the outer wall, indicating the manufacture on a relatively slow wheel. There are eighteen small pieces of wall and base, only the two largest of which have a sagged base, the rest are clearly flat although most are carboned on the outer surface. Four small sherds carry a thin, white inner slip.

Sub-group (c) 18 sherds, 150 g., c. 3 vessels. The reduced fabric of this small sub-group is similar to that of Glazed Fabric 1, i.e. sparse to moderate quartz and oxide inclusions with dark grey body and fairly smooth grey inner surfaces. It contains two small flat basal pieces and a piece of finger-pinched wall. Possibly local 14th-15th century.

RIMS

There were 53 small pieces of rim, 625 g., most of them accounting for only c. 12% of a complete rim; 32 pieces were from jugs and, judging by the carbon encrustation, 21 from cooking pots. The diameters of the complete rims would have ranged from 5-23 cm. but most would have been in the 6-15 cm. range, (mean 10 cm). Most of the larger rim sherds originated in cooking pots but a number from rims of c. 10 cm. diameter, which is small for cooking vessels, also bore carbon encrustation. The shape of a selection of the rims is shown in Fig. 4 where it will be seen that they fall into four main patterns.

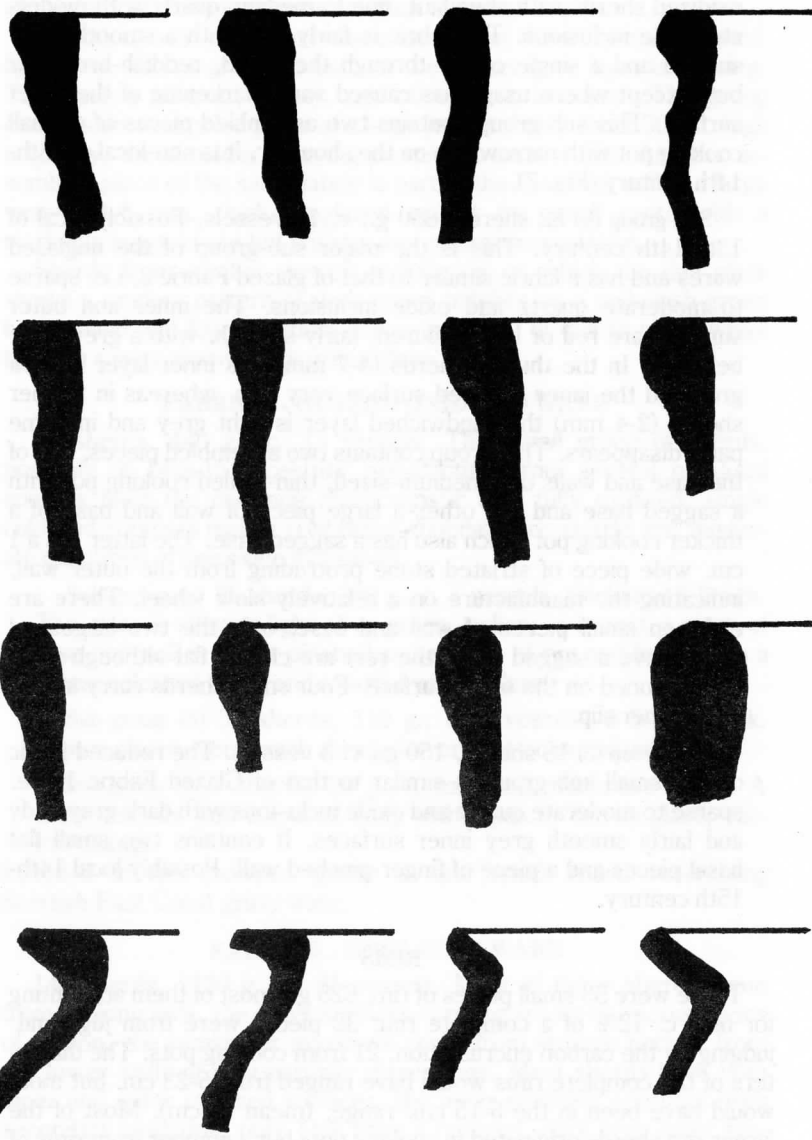


Fig 4: Rim Forms of Jugs and (bottom line) Cooking Pots

- (a) flat top and rounded outer surface—28 sherds
- (b) flat top and almost vertical outer surface—13 sherds
- (c) both inner and outer surfaces rounded—7 sherds
- (d) everted rims—5 sherds.

The inner and outer surfaces of all sherds were oxidized to a dark buff or reddish-brown colour with the cores dark-grey, similar in type to Fabric 2. A splash or spread of olive-green glaze was present on 44 sherds.

Only two rim sherds exhibited any part of a spout, both poorly formed.

HANDLES

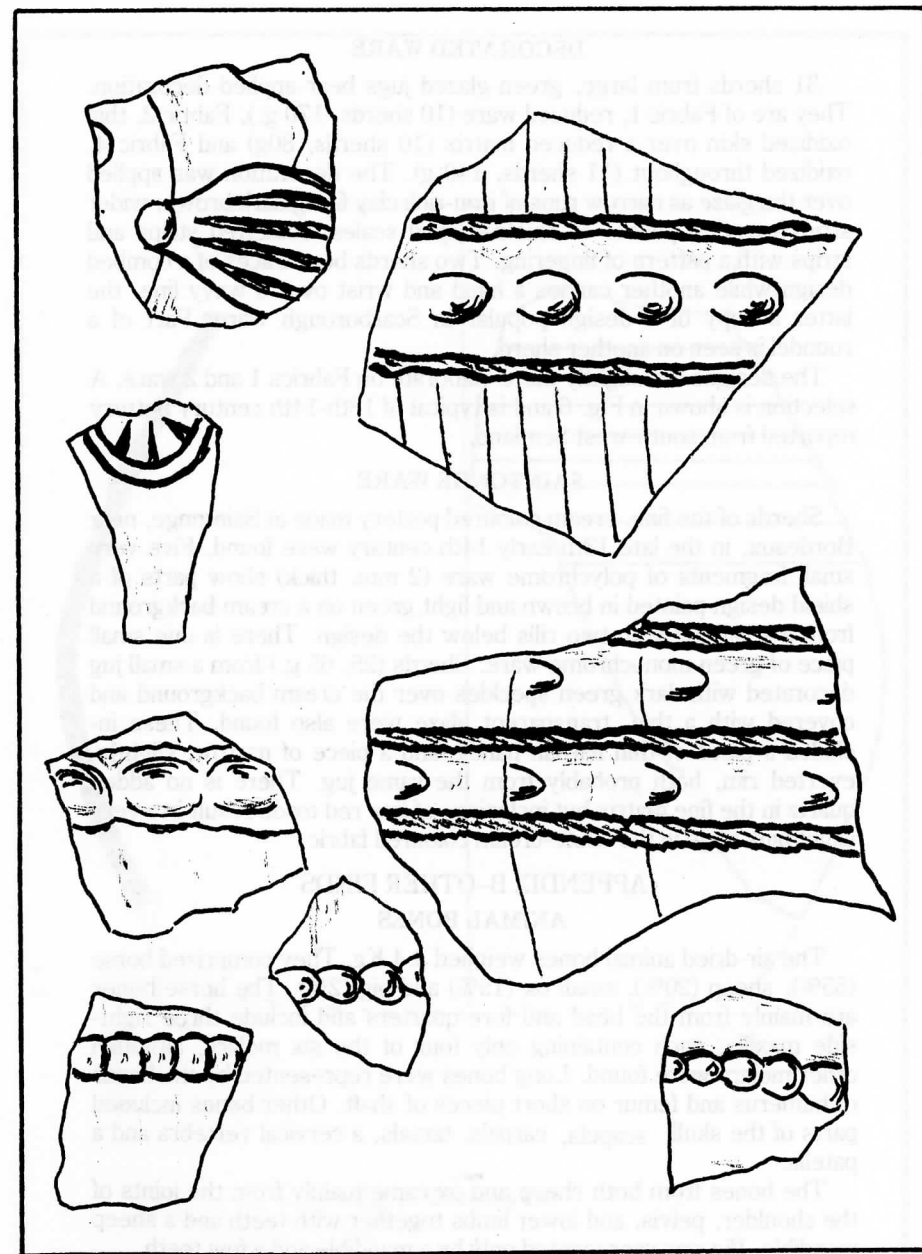
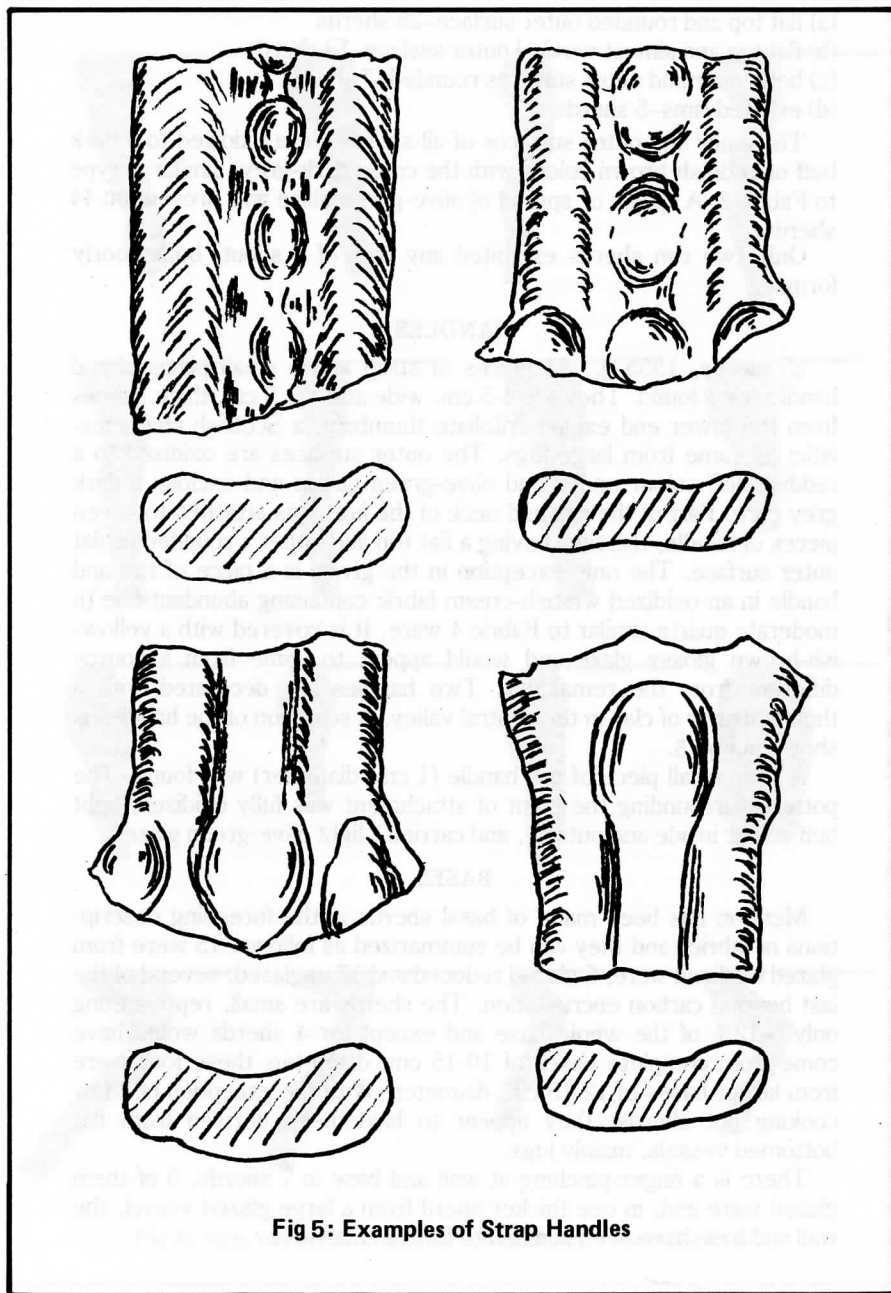
25 pieces, 1555 g., 24 pieces of strap and 1 small piece of rod handle were found. They are 4-5 cm. wide and 1-1.5 cm. thick, pieces from the lower end exhibit trifoliate thumbing, a Scottish characteristic; all came from large jugs. The outer surfaces are oxidized to a reddish-buff colour under mid olive-green glazes and enclose a dark grey core. Part of the rim and neck of the jugs was attached to seven pieces of handle, the rims having a flat top and either a rounded or flat outer surface. The only exception in the group is a piece of rim and handle in an oxidized whitish-cream fabric containing abundant fine to moderate quartz similar to Fabric 4 ware. It is covered with a yellowish-brown glossy glaze and would appear to come from a source different from the remainder. Two handles are decorated with a thumbled strip of clay in the central valley. A selection of the handles is shown in Fig. 5.

A very small piece of rod handle (1 cm. diameter) was found. The pottery surrounding the point of attachment was fully oxidized, light buff colour inside and outside, and carried a light olive-green glaze.

BASES

Mention has been made of basal sherds in the foregoing descriptions of fabrics and they can be summarized as follows: 15 were from glazed oxidized ware, 6 glazed reduced and 17 unglazed, several of the last bearing carbon encrustation. The sherds are small, representing only 6-12% of the whole base and except for 4 sherds would have come from complete bases of 10-15 cm. diameter; these four were from larger bases of 12-15 cm. diameter. With the exception of a few cooking pot sherds, they appear to have been derived from flat bottomed vessels, mainly jugs.

There is a finger-pinching at wall and base in 7 sherds, 5 of them glazed ware and, in one thicker sherd from a large glazed vessel, the wall and base have been pinched to form a small foot.



DECORATED WARE

31 sherds from large, green-glazed jugs bear applied decoration. They are of Fabric 1, reduced ware (10 sherds, 170 g.), Fabric 2, thin oxidized skin over a reduced matrix (10 sherds, 80g) and Fabric 4, oxidized throughout (11 sherds, 140 g). The decoration was applied over the glaze as narrow runs of iron-rich clay firing dark brown; wider strips carrying pellets or shield-shaped scales; rouletted strips and strips with a pattern of fingering. Two sherds bear traces of a combed design while another carries a hand and wrist over a wavy line, the latter a copy of a design popular in Scarborough ware. Part of a roundel is seen on another sherd.

The designs are slightly more elaborate on Fabrics 1 and 2 ware. A selection is shown in Fig. 6 and is typical of 13th-14th century pottery reported from south-west Scotland.

SAINTONGE WARE

Sherds of the fine, cream coloured pottery made at Saintonge, near Bordeaux, in the late 13th-early 14th century were found. Five very small fragments of polychrome ware (2 mm. thick) show parts of a shield design painted in brown and light green on a cream background from a small jug with two rills below the design. There is one small piece of green monochrome ware. Sherds (25, 65 g.) from a small jug decorated with dark green speckles over the cream background and covered with a thin, transparent glaze were also found. These included a piece of thin flattish handle and a piece of narrow, slightly everted rim, both probably from the same jug. There is no added quartz in the fine matrix but inclusions of fine red oxide result in a very slight pink tinge in the white-cream coloured fabric.

APPENDIX B—OTHER FINDS

ANIMAL BONES

The air-dried animal bones weighed 3.4 Kg. They comprised horse (55%), sheep (20%), small ox (15%) and pig (2%). The horse bones are mainly from the head and fore-quarters and include three right-side maxilla, each containing only four of the six molars, although other molars were found. Long bones were represented by the heads of humerus and femur on short pieces of shaft. Other bones included parts of the skull, scapula, carpals, tarsals, a cervical vertebra and a patella.

The bones from both sheep and ox came mainly from the joints of the shoulder, pelvis, and lower limbs together with teeth and a sheep mandible. Pig was represented only by a mandible and a few teeth.

The horse and ox bones appear to have come from animals rather smaller than those of today. The bones were found widely dispersed,

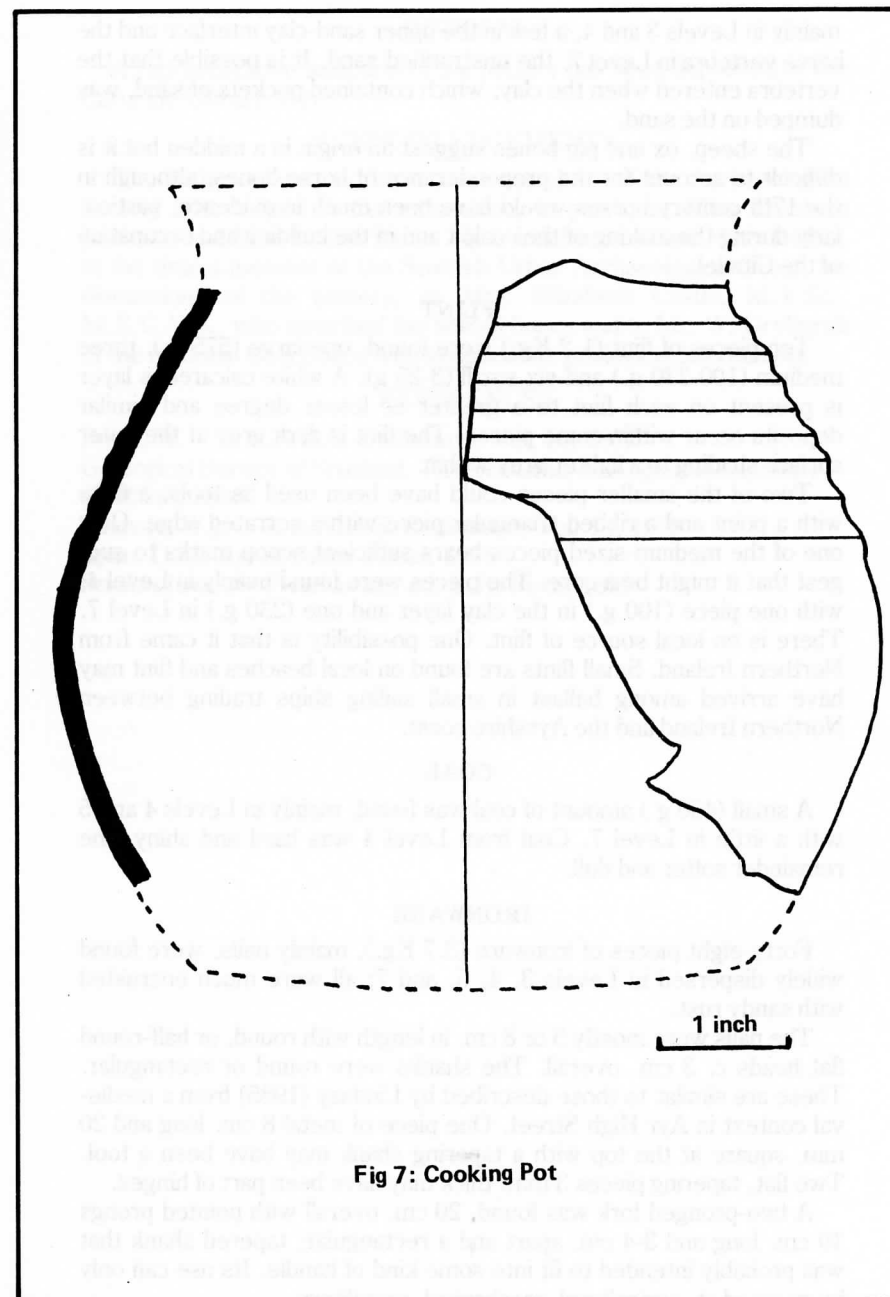


Fig 7: Cooking Pot

mainly in Levels 3 and 4, a few in the upper sand-clay interface and the horse vertebra in Level 7, the unstratified sand. It is possible that the vertebra entered when the clay, which contained pockets of sand, was dumped on the sand.

The sheep, ox and pig bones suggest an origin in a midden but it is difficult to account for the preponderance of horse bones, although in the 17th century horses would have been much in evidence, particularly during the making of the coalpit and in the building and occupation of the Citadel.

FLINT

Ten pieces of flint (1.2 Kg.) were found, one large (575 g.), three medium (100-230 g.) and six small (3-25 g.). A white calcareous layer is present on each flint to a greater or lesser degree and similar deposits occur within some pieces. The flint is dark grey at the outer surface shading to a lighter grey within.

Two of the smaller pieces could have been used as tools, a flake with a point and a ribbed triangular piece with a serrated edge. Only one of the medium-sized pieces bears sufficient scoop marks to suggest that it might be a core. The pieces were found mainly in Level 4, with one piece (100 g.) in the clay layer and one (230 g.) in Level 7. There is no local source of flint. One possibility is that it came from Northern Ireland. Small flints are found on local beaches and flint may have arrived among ballast in small sailing ships trading between Northern Ireland and the Ayrshire coast.

COAL

A small (450 g.) amount of coal was found, mainly in Levels 4 and 5 with a little in Level 7. Coal from Level 4 was hard and shiny, the remainder softer and dull.

IRONWARE

Forty-eight pieces of ironware (3.7 Kg.), mainly nails, were found widely dispersed in Levels 3, 4, 5, and 7; all were much encrusted with sandy rust.

The nails were mostly 5 or 8 cm. in length with round, or half-round flat heads c. 3 cm. overall. The shanks were round or rectangular. These are similar to those described by Lindsay (1985) from a medieval context in Ayr High Street. One piece of metal 8 cm. long and 20 mm. square at the top with a tapering shank may have been a tool. Two flat, tapering pieces 3 mm. thick may have been part of hinges.

A two-pronged fork was found, 20 cm. overall with pointed prongs 10 cm. long and 3-4 cm. apart and a rectangular, tapered shank that was probably intended to fit into some kind of handle. Its use can only be guessed at, agricultural, mechanical, or military.

DISPOSAL

A representative selection of the pottery has been deposited at the Carnegie Library, Ayr.

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