Medieval Pottery Kilns at Stanion

by B Bellamy

The earliest recorded evidence of pottery kilns at Stanion was an article in the *Kettering Leader* of May 19th 1933, where the unearthing of a 'Roman kiln' and 'ancient glazed pottery with patterns in green and yellow' was reported. An accompanying photograph showed a quantity of what is now recognized as Medieval pottery.

Since the 1930s, building work in the NW of the village has produced abundant evidence that an extensive pottery industry existed here in the Middle Ages (RCHM 1980, Stanion 10). The industry appears to have been centred on an area to the north of the parish church between Grid References SP 91428715 and 91428700, along the

line of what may have been a toft boundary bank which ran along the bottom of the house plots in Little Lane. A small section of this bank still survived in 1981 in the garden of No 17 Little Lane (information from Mr J Fox). Isolated kilns have also been found at Manor Farm, Grid Reference SP 91508701, and 60m north of the church at 91468695 (Northampton Museum records and Northamptonshire Archaeol, 15, 1980, 173) (FIG 1).

The wide array of Jurassic clays outcropping in and around Stanion together with the close proximity of extensive Medieval woodland as a source of fuel must have made Stanion an



Fig 1 Stanion: site location maps

attractive situation for a pottery. Its position at the junction of the roads between Stamford and Northampton, Uppingham and Thrapston assured the potters of access to a wide market for their wares.

THE PARALLEL FLUE KILN

In 1979, soil being dumped on a new factory site at Corby was found to contain quantities of green glazed pottery. Investigation of the source led to the discovery of a parallel flue pottery kiln at Stanion, Grid Reference SP 91468695. The kiln was sited on a small elevated plot recently excavated to form a level platform for house foundations. The levelled area, approximately 100 sq m, had formerly sloped steeply away to the High Street on the east and slightly to the south. Levelling had removed a maximum of 1m of soil and Lincolnshire Limestone from the NW corner of the site falling to around 0.5m on the east side. The kiln, aligned on an E-W axis, was on the eastern edge of this area. Approximately 0.3m of soil and rubble had been removed from over the kiln site but levelling had stopped at the surface of the bedrock at this point, leaving the kiln intact.

DESCRIPTION OF THE KILN (FIG 2)

The kiln was constructed within a sub-oval, vertical sided hole, measuring $3.4m \times 2.3m$ cut 0.6m into the limestone bedrock, the sides forming the kiln walls.

The pedestal, which was of oval plan with a slightly flattened north side, survived to a height of 0.6m and measured $1.6m \times 1.16m$. This was built of limestone blocks with a rubble and earth core. 0.3m in front of the pedestal, the central flue arch support stood to a height of 0.5m. This was 760mm wide and 550mm in length and of similar construction to the pedestal. The north flue was 0.5m wide at its mouth and the south 0.55m.

Prior to the initial firing of the kiln the north wall of the furnace was narrowed by the addition of an extremely neatly laid facing of dry stone walling which reduced the width of the flue by 110mm. This may have been necessary to even up the unequal flue widths caused by the flattened side of the pedestal.

After a period of firings, during which the pedestal and furnace wall stone work became heat reddened to a depth of 20mm, the lower half of the furnace walls was lined around the whole circumference with limestone slabs of 50-60mm thickness. These were laid against the walls at an angle that reduced the width at the base from 450mm to 250-320mm. Above these slabs the walls were lined with clay and limestone up to the level of the pedestal top. Sometime after these additions were made the ash layers were allowed to build up in the furnace to a depth of 300mm. At this point the remaining furnace wall area was further restricted by the addition of limestone slabs resting on the ash layer. This reduced the furnace to something like one third of its original volume.

The latest modification to the kiln was the construction of the flue arch support as found in its final form. Beneath this and sealed by a layer of black ash was the base of an earlier support of a different form. This consisted of three large slabs of limestone 120mm thick, laid end to end and tapering from 560mm to 450mm at the stoke pit end, with a total length of 1.06m.

Because of the depth of top soil the stoke pit was only partly excavated for a distance of 1.75m from the flue mouth. It was found to contain a layer of black ash 180mm thick with an infill of pot, stone and soil 280mm to the ground surface. The complete stoke pit appears to have been 4m in diameter.

Within the kiln the furnace was completely filled with ash to the height of the pedestal from the rear of the kiln to a point 1.2m from the flue mouth. This deposit sloped down to the stoke pit and consisted of at least 27 separate layers of black, red, grey and white ash.

The following layers were noted in a section across the south flue mouth:

- (i) Red ash, burnt clay and stones, 200mm
- (ii) Black ash, 20mm
- (iii) Burnt, clayey, 70mm
- (iv) Black ash, 50mm
- (v) Burnt clay and stone, 80mm
- (vi) Black ashy, 70mm

DISCUSSION

The discovery of a Medieval parallel flue kiln at Stanion should cause no surprise, as this is only 4 miles west of the deserted village of Lyveden where kilns of almost identical plan were found in 1968 (Bryant and Steane 1969) and 1970-3 (Bryant and Steane 1975). These were classified by Musty (Evison, Hodges and Hurst 1974) as type 4a (ii), a variation of the Sussex type 4a, parallel flue



Fig 2 Stanion: parallel flue kiln

kilns, defined later (Bryant and Steane 1975) as possessing a certain set of features, namely, (1) being built on the ground surface; (2) fired through parallel flues; (3) apsidal ended with central pedestal; (4) employing kiln bars; (5) having no stoke pits. The Stanion kiln is therefore an oddity in that it differs from the Lyveden kilns on three of these points: (a) being built partly below the ground surface; (b) completely lacking in kiln bars, although admittedly this is not evidence that none were used; (c) a considerable stoke pit existed. On this criteria alone it appears that a further sub division may be necessary.

Possibly the most interesting aspect of the kiln was the ash deposit; this, at least in the later firings, was allowed to accumulate in the kiln and it is plain that as the ash level was nearing the level of the pedestal top the use of kiln bars, if indeed they were ever used, would be made unnecessary. The kiln load would then be stacked on the pedestal and the ash deposit.

THE POTTERY

A total of 2067 sherds were collected from the excavation, 902 of which came from within the kiln and 1165 from the stoke pit. These ranged in size from 170mm to 20mm although the average size was 60mm. Fifty three per cent of the sherds from the kiln were glazed and 11.7% were roof tile fragments, which on the whole were larger than the pottery fragments.

Much of the material had been overfired with glazes pitted and blistered while many fragments had the harsh, dry appearance typical of underfiring. As all of the material from the kiln was sealed within the ash layers it must be assumed that these types were being produced in the kiln, although the use of a temporary kiln dome of potsherds as postulated by G F Bryant (Evison, Hodges and Hurst 1974) may lead to contamination by extraneous material. The pottery from the stoke pit included all of the types found in the kiln but with a greater number of large fragments.

The fabrics can be divided into two main groups:

- A. Buff/pink or grey with oolitic inclusions, often with light to dark grey core.
- B. Pink/buff with ooliths as in A, but in lesser quantity and with fragments of ironstone up

to 10mm in diam. A very coarse fabric. Both of these fabrics are within the Northampton T2 range of fabrics (Williams 1979). Other fabrics included are a hard, white, iron free fabric often carrying a bright green glaze, and a shelly fabric similar to Lyveden Ware.

Jugs (FIG 3, 1-28)

The jugs, which made up the greater part of the excavated material, were both coil built and wheel made. Rims varied between 85-120mm in diameter. A wide variety of decoration is used, the most common being white painted slip bands or white applied strips and pads with grid stamps. Rouletting (FIG 3, 19), simple comb applied decoration (1, 14, 20, 21), applied thumbed strips (17), and incised lines (13, 15, 18, 22), are also in evidence. Bases plain or thumbed. Handles are plain or fluted rod type with stabbing, only one rope twist type was found. Jugs are in both A and B fabrics, and 15, 19, 21 and 23 are in iron free fabric. No 18 is in a hard, dark grey sandy fabric with a red core and although found in the flue ash layers, is completely untypical. Most jugs carried an olive green lead glaze with the exception of the buff fabrics which were in pale apple green, mottled green or bright Tudor Green.

Dishes/skillets (29, 30, 31, 32)

Crudely made oval spouted dishes, knife trimmed with internal olive glaze. Plain, pulled handles.

Bowls (FIG 4, 33-37)

Flanged or plain rims 200-350mm in diameter. No 33 has concave band with finger nail impressions and knife trimmed band below, 35 has band of finger impressions. The plain rounded rim of 36 has 7 small notches cut on top. 34, 35, 37 have internal glaze.

Jars (38-46)

Wheel made with well formed rims 110-230mm diameter with the exception of 44, which is a particularly crude hand made example. No 46 has white slip and comb impressed decoration with bright green glaze. Nos 38 and 39 have olive glaze on the outside. Nos 38, 39 and 42 are in a shelly fabric with the shell erupting on the surface. No 45 may be a cistern.





Ridge tiles (47-50)

The ridge tiles are in both A and B fabrics with olive green glaze on outer surface. Most are perforated and some carry plain crests (49 and 50). The cross section of the break on 47 suggests this may be a ridge tile finial.

Floor tiles (51, 52)

Four floor tile fragments were found in a pink/red fabric containing ooliths.

No 51 from the lower ash layers within the kiln is 15mm thick and has an applied white slip pad with a stamped rosette design. The upper surface carries a dark green mottled glaze. The underside is heavily stabbed.

No 52 is 20mm thick and has a white slip design with olive green glaze. Reverse stabbed and gouged for keying.

Not illustrated: triangular tile with olive glaze heavily blistered and overfired. The underside has three large holes gouged with a knife.

Not illustrated: plain tile with traces of yellow/ green glaze. Stab marks on underside.

DISCUSSION

Although no independent dating evidence was found during the excavation, most of the pottery forms have been dated by association elsewhere in Northamptonshire and can be placed in the late 13th and early 14th centuries. The most distinctive element of this kiln group is the pellet and grid stamp decorated jugs. This form of decoration throughout Northamptonshire occurs on excavations of this period and as far as Leicester (example in Jewry Wall Museum from Cank Street) and Cambridgeshire (Waterbeach Abbey). Manufacture of this decorative style has long been suspected in the Stanion/Lyveden area but previous evidence has been lacking.

LATER MEDIEVAL POTTERY FROM STANION

In November 1972 part of a kiln stoke hole and flue was excavated at 14 Corby Road, Stanion (SP 914871) by Mr J R Fox (see *Northamptonshire Archaeol* 10, 1975, 170). Building work had exposed extensive deposits of kiln ash and Medieval pottery spanning a wide date range. Information from the excavator suggests that at least two kilns existed in the immediate area but conditions at the time did not permit complete excavation of these features. A limited excavation of part of a stoke hole and flue with associated ash layers was carried out but no details as to the nature of the kiln were forthcoming.

This report describes the pottery from the excavation.

The writer is grateful to Mr J R Fox for permission to write this report and for his help and guidance. Also to the Northampton Museum for making available the pottery upon which this report is based.

THE POTTERY (FIGS 5-6)

The pottery from the site falls into two distinct groups; (a) hard, wheel made later Medieval wares; (b) coarse, hand made 'Stanion wares', glazed but without the applied white strips typical of Stanion pottery. Only group (a) will be discussed here. The group (a) pottery, which consists of 446 sherds rescued from the stoke hole and flue, includes jars, bung hole cisterns, dishes, and three sizes of jugs. All are thin walled wheel made vessels, showing a fair degree of skill.

Fabrics

- (A) Fine, hard, red/orange. Often with dark grey core, particularly within any thickening of the vessel wall. Surface reduction usually dark brown. No visible inclusions other than a few ooliths and specks of ironstone. These may be natural or introduced accidentally as such small quantities would be of little benefit as a tempering medium. This fabric is similar to the oxidised counterpart of the 'East Midlands late Medieval reduced ware' (fabric W29 in Williams 1979).
- (B) Red/orange, less hard than (1) with plentiful ooliths. This fabric is usually unglazed but often reduced on the outer surfaces.
- (C) Hard, cream/buff. A very dense fabric with sparse ooliths and fragments of ironstone. Reduces to shades of grey/fawn.
- (D) Hard, white, sandy. Thicker sections often having a dark grey or pink core. Frequent ooliths and ironstone with fine white estuarine sand.



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Fig 6 Stanion: later Medieval pottery (1/4)

Illustrated pieces

- 1. Brown/buff with overfired green glaze on outside, strap handle with stab marks. Fabric C.
- 2. Reduced surfaces with splashes of slip and glaze on outside. Handle as above. Fabric A.
- 3. Plain jug neck, orange/pink with white slip and speckled green glaze. Fabric B.
- 4. Jug with small pinched spout. Pale orange with white slip and speckled green glaze. Fabrics A, C and D.
- 5. Red with black core, olive green glaze on outside. Fabric B.
- 6. Grey/brown, reduced outer surface, plain strap handle with stabbing. Fabric A.
- 7. Pedestal base, buff with grey surface and black core. Fabric C.
- 8. Handle, partly reduced with traces of green glaze. Stab marks penetrate right through handle. Fabric A.
- 9. Handle with knife cuts, pale orange/buff with black core. Splashes of speckled green glaze. Fabric D, also in C.
- Small rod handle, hard, off white with splashes of apple green glaze. Fabric D.
- 11. Thumbed handle junction. Fabric C.
- 12. Bifid rim, extremely hard. Dark grey surface with orange/red core. Reduced fabric A, similar to East Midlands reduced ware.
- 13. Inturned rim with lid seating, patches of white slip and pale green glaze. Fabric A.
- 14. Everted rim with internal lid seating. Buff with dark grey reduced surface, patchy green glaze. Fabric C.
- 15. Everted rim with internal lid seating. Purplish inner surface with olive green glaze on lid seat. Ash adhering to glaze. Fabric A.
- 16. Bright red with speckled green glaze over white slip on outside. Fabric A.
- 17. Jar rim, grey/brown reduced surfaces. Fabric A.
- 18. Jar with internal throwing ridges. Fabric B.
- 19. Jar rim with white slip and speckled green glaze on outside. Fabric B, also in A.
- 20. Jar rim in hard bright orange fabric with traces of glaze on rim.

- 21. Bunghole jar fragment with olive glaze on inner surface. Fabric A.
- 22. Bunghole. Fabric A.
- 23. Bowl rim with band of white slip on inner surface and clear glaze. Fabric A.
- 24. Bowl rim. Fabric C.

CONCLUSION

The inter-relationship of the pottery and the ash layers suggests they are contemporary with the kiln structure, and while the pottery from the stoke hole may be partly infilling, forms and fabrics are consistent with the material from the ash layers. Unlike the earlier Stanion pottery, which appears to have travelled throughout Northamptonshire, parallels for the later fabrics and indeed many of the forms, are lacking. However, the overall similarity with Potterspury types, the hardness of the fabrics and the absence of any earlier Stanion coarse wares favours a late Medieval date c 1450-1550. The presence of ooliths, in greater or lesser quantities, in Stanion products should make recognition of these wares little of a problem.

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