

*Acknowledgements*

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## NOTES

<sup>1</sup> Funding was provided by the Manpower Services Commission. The site was made available by the Midlands Electricity Board.

<sup>2</sup> H. Hurst, 'Excavations at Gloucester, 1968-1971', *Antiq. J.*, LII (1972), 24-69; H. Hurst, 'Excavations at Gloucester, 1971-1973', *Antiq. J.*, LIV (1974), 8-52; H. Hurst, P. Garrod, *et al.* 'The Archaeology of Gloucester Castle', *Trans. Bristol Gloucestershire Archaeol. Soc.* (forthcoming).

<sup>3</sup> Cf. R. C. Bell, *Board and Table Games from many Civilisations*, 1 (London, 1969), 34-37; R. C. Bell, *The Boardgame Book* (London, 1983), 90-91; R. Midgley (ed.), *The Way to Play* (London and New York, 1975), 22-25.

<sup>4</sup> *Ibid.*

<sup>5</sup> The lifting of the remains was undertaken by Miss Gill Juleff, D.o.E. Conservator for the South-West, who is based at Bristol City Museum and Art Gallery. Miss Juleff is currently working on the conservation of the pieces. The authors wish to thank her and her colleagues in the D.o.E. Ancient Monuments Laboratory and Bristol Museums, and the South-West Area Museums Council, for their rapid response and assistance.

<sup>6</sup> Bell, *op. cit.* in note 3, 91, shows a 13th-century German manuscript illumination depicting a tables board and pieces. The points are uniformly coloured, while the tablemen are black and white.

<sup>7</sup> V. B. Mann, 'Mythological Subjects on Northern French Tablemen', *Gesta*, xx/1 (1981), 161-71, at 161.

<sup>8</sup> *Judges*, 14:6.

<sup>9</sup> Mann, *op. cit.* in note 7, 165, no. 2, fig. 7a.

<sup>10</sup> H. Swarzenski, *Monuments of Romanesque Art* (London, 1974), 81, pl. 217, fig. 510.

<sup>11</sup> *Ibid.*, 48, pl. 60, fig. 133; 64, pl. 145, fig. 323; 76, pl. 196, figs. 450, 452.

<sup>12</sup> *Ibid.*, 55, pl. 93, fig. 216.

<sup>13</sup> *Ibid.*, 48, pl. 60, fig. 134; 82, pl. 218, fig. 513; 85, pls. 236-37, figs. 554, 556.

<sup>14</sup> *Ibid.*, 82-83, pl. 222, fig. 525.

<sup>15</sup> *Ibid.*, 82-83, pl. 222, figs. 522-26.

<sup>16</sup> V. B. Mann, 'Romanesque Ivory Tablemen' (PhD. dissertation, New York University, Institute of Fine Arts, 1977).

<sup>17</sup> G. Zarnecki, *English Romanesque Sculpture, 1066-1140* (London, 1951), 31 and fig. 36.

<sup>18</sup> M. H. Longhurst, *English Ivories* (London, 1926), 31, no. xxxiii; H. Swarzenski, *op. cit.* in note 10, 60, pl. 121, fig. 277.

<sup>19</sup> For a discussion of this image, and incidentally the Samson and lion scene, see M. Shapiro, *Late Antique, Early Christian and Mediaeval Art* (London, 1980), 151-95.

<sup>20</sup> C. M. Kauffmann, *Romanesque Manuscripts 1066-1190* (London, 1975), 16, and ill. 11; Swarzenski, *op. cit.* in note 10, pl. 126, fig. 288.

<sup>21</sup> H. Focillon, *The Art of the West, 1: Romanesque* (Oxford, 1980), 143, pl. 154.

## A 15TH-CENTURY CORN-DRYING KILN FROM COLLFRYN, LLANSANTFFRAID DEUDDWR, POWYS (Fig. 7; Pl. xvi)

The medieval corn-drying kiln described in this note was discovered in 1982 during the excavation of the Iron Age and Romano-British hill-slope enclosure at Collfryn, Llansantffraid Deuddwr, in northern Powys (SJ 222173).<sup>1</sup>

It was orientated N.-S. (with the stokehole towards the N.), and was sited on the line of the innermost defences of the earlier enclosure (see Fig. 7 and Pl. xvi). The stokehole was constructed in the hollow left by the partially infilled inner ditch (3829),<sup>2</sup> and although none of the inner bank had survived, the drying chamber had probably been set into the remnant of the earlier bank.

The structure remained essentially intact at the end of the excavations and was reburied.

*Description*

The stone-built oven and flue was about 4.5 m long, up to 2.3 m wide, and survived to a maximum height of 0.6 m. It was set into a construction pit up to 0.4 m wide dug into the

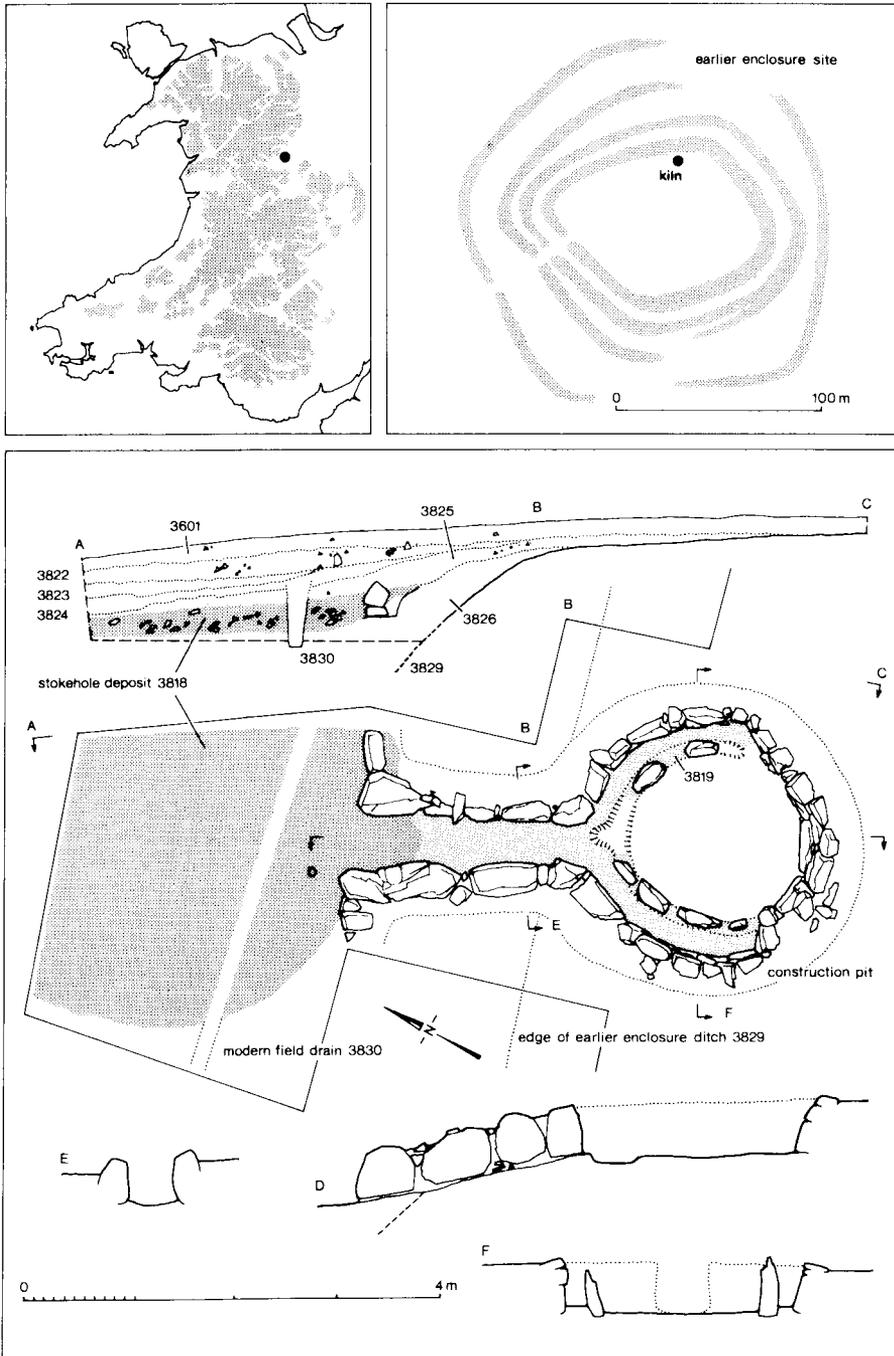


FIG. 7

Corn-drying kiln from Collfryn, Llansantffraid Deuddwr, Powys

natural boulder clay, and was itself filled with clay. The upper surviving stones on the S. side lay only just below the level of the modern ploughsoil (3601).

The flue was 2.4 m long; it tapered from 0.6 to 0.4 m in width along its length, and survived to a height of about 0.5 m. It led to a chamber about 2 m by 2.5 m across and 0.6 m high, there being an overall drop in height of 0.5 m from the floor of the chamber down to the stokehole.

All the stones which had been used to construct the kiln were either large glacially-rounded local siltstone boulders, or were large slabs split from them. None showed any indication of more than superficial dressing.

The flue was of orthostatic build, and constructed of boulders up to 1.2 m long and 0.5 m thick, four on the E. and three on the W. The outermost boulder on each side had been shattered by heat, and the floor here (formed partly of earlier layers of ditch silting and partly of the surface of the natural clay) was reddened by heat for a distance of 1.2 m from the mouth of the flue. The outer ends of the flue were joined on both the E. and W. sides to a coarse wall of one or two layers of stone. This retained the edge of an artificial scarp which had been cut into the southern edge of the earlier enclosure ditch.

The outer walls of the chamber were fairly vertical, and were partly built of single blocks of stone up to 0.4 m high and 0.3 m across, and partly of up to three courses of rough dry-stone walling. On the E. and W. sides the outer walls formed the outer sides of a pair of flues about 0.2 m wide, baffled at their S. ends by slight off-sets in the line of the wall.

An inner chamber about 1.8 m in diameter was separated from the side flues by a penannular setting of six free-standing orthostats. These appeared to have acted both as a baffle for hot air, and as supports for the roofing of the side flues. These stones were founded in a shallow trench 0.2 m wide and 0.05 m deep, the shape of which suggested that a further two or three stones were missing, including one which may have pointed down the main flue. All the stones of the setting were reddened by heat, and most had become severely fractured by it. Two remained more or less intact, however, each being about 0.57 m high, 0.4 m across, and 0.18 m thick.

The drying chamber, side flues and main flue were filled with a layer of loam and jumbled stone rubble up to 0.65 m thick, possibly deriving from the collapse or demolition of part of the original structure. Removal of this revealed a slight drop in height of 0.05 m from the surface of a soil layer (3819) within the side flues, down to the deeper natural clay surface within the centre. This soil layer was formed of compact greyish brown silty loam, between about 0.01 and 0.05 m thick, with a slight charcoal content. The floor of the oven itself was of clean boulder clay.

The stokehole deposit (3818, and slight subsidiary layers 3827, 3828) consisted of a layer of black charcoally loam up to 0.35 m thick, which extended at least 3 m northwards from the mouth of the flue. It lay partly upon earlier layers of ditch filling (3826), and partly within the slight terrace that had been dug into the southern edge of the earlier ditch.

Deposits within the stokehole had subsequently been overlain by the uppermost layers of ditch infilling, some of which may have been the result of quite recent levelling of the inner bank. These were as follows: 3822, light olive brown silty clay (? recently levelled bank material); 3823, dark greyish brown silty loam (buried soil horizon within the upper filling of the enclosure ditch); 3824, greyish brown to light olive brown silty clay (? levelled bank material); 3825, dark greyish brown silty loam (a further buried soil horizon within the upper filling of the enclosure ditch).

A radiocarbon date of c. a.d. 1470<sup>3</sup> was obtained from charcoal within the stokehole,<sup>4</sup> the only other dating evidence from contexts associated with or stratigraphically related to the kiln being residual sherds of samian ware from the stokehole (3818).

#### *Charred Plant Remains.* By GLYNIS JONES and ANNIE MILLES<sup>5</sup>

Charred remains from both the stokehole (3818) and the inner chamber (3819) of the corn-drying kiln were recovered by flotation (using 1 mm and 250 micron mesh sieves) and subsequent wet-sieving (using a 1 mm sieve) of the residue from the relatively small soil samples submitted for examination.<sup>6</sup> The plant remains from the stokehole included cereal grains, mixed with large quantities of wood charcoal.<sup>7</sup> The cereals represented are oats (*Avena* sp.), bread/club wheat (*Triticum aestivum*), and emmer/spelt (*Triticum dicoccum/spelta*). Oats predominate, but it is not possible to determine whether they are a wild or cultivated species, and it is therefore difficult to say whether they are part of a crop that was being dried, or whether they represent fuel used to fire the oven. Oats have been commonly found in post-Roman corn-driers,<sup>8</sup> where they have been interpreted as part of a crop being dried. The

location of these particular grains, mostly in the stokehole rather than the drying chamber, may suggest that they represent fuel.

*Some Literary Evidence from Wales.* By EURWYN WILIAM<sup>9</sup>

Evidence of medieval corn-drying kilns in Wales is fairly scant, but there is some oral and literary evidence of the type in post-medieval contexts that may be relevant to earlier periods. Field kilns of the type found at Collfryn must once have been common in Wales, as elsewhere, their former presence now being indicated by a field name such as *Cae'r olyn* (kiln field), for example. Although kilns are occasionally found as part of a farmstead,<sup>10</sup> this is fairly uncommon, and they are usually of a late date. Much of the crop was clearly being dried in field kilns.

A good description of such a structure at Llansawel, Carmarthenshire, is provided by Price.<sup>11</sup>

Our forefathers prepared corn by means of the *brenau* (quern) and *odyn grasu* (drying kiln). At first the mills had no drying-kilns attached to them, all the corn being dried at home. The last *odyn grasu* in use in this parish . . . was worked as late as 1845 . . . The shape and the build of this ancient apparatus was certainly primitive. On gently-sloping ground a hollow, three yards long, two yards wide, and two deep, was cut similar in shape to a *cladd tato* [i.e. potato clamp]. Two planks were placed at right-angles to each other, their ends resting on the surface outside the hollow. These served to support the sticks which were placed regularly over the kiln until it was covered. Over the whole clean straw was laid, upon which the corn was placed to be dried. Underneath all this and at the lower end of the kiln, the fire was placed, so that the heat and smoke went under the straw contrivance above. One man looked after the fire, which was generally of furze and brushwood. He always kept by him a tub of water, and a straw-wisp or a mop, to regulate the force of the fire. He kept moving the corn continually to obtain even drying, with a short-toothed wooden rake, and when ready it was raked off the straw into a large canvas, and was then fit for the mill. Instead of straw some covered the kiln with what was called *Carthen rawn*, *carthen olyn* (kiln cloth or hair cloth). It is said by the old people that the corn dried after the old fashion makes sweeter bread than that dried in the modern brick-kilns at the mill.

The existence of the 'kiln-cloth' mentioned by Jones is amply attested in the literature; the beam which supported it was called the *marchbren olyn*, at least in Dyfed.<sup>12</sup>

*Discussion*

It seems likely that the main and side flues were originally covered and sealed by stone slabs, earth and clay. There were at least some displaced stones which would have been large enough to accomplish this, but others must have been removed when the kiln was abandoned. Siting the kiln on a slope and sinking it into the ground would have made it draw efficiently.

The Welsh literary evidence makes a distinction between the permanent parts of the kiln, and the drying platform — which may only have been put in place when needed. This seasonal form of field kiln differs from roofed ones known from excavated medieval settlements, and from the Irish literature.<sup>13</sup> These are more likely to have been used for a variety of different functions. The absence of any carbonized remains on the floor of the drying chamber at Collfryn certainly suggests that this was the only part of the structure which was sufficiently open to have been periodically cleaned out. When in use, a platform of planks, covered by sticks, straw or cloth would probably have been built across the chamber.

Little can be said about the proximity of the kiln to contemporary settlement, or its relationship with contemporary land boundaries. Medieval and post-medieval pottery of 13th- and 14th-century date onwards was found during the excavation of the earlier enclosure site; this notably includes a distinctive and fairly consistent assemblage of 15th- and 16th-century date, but which like the remainder of this late material was unassociated with any other structures.<sup>14</sup>

## NOTES

<sup>1</sup> Excavations funded by the Ancient Monuments Branch of the Welsh Office and the Manpower Services Commission. Report forthcoming.

<sup>2</sup> Context numbers from the site archive are shown in brackets.

<sup>3</sup> Radiocarbon date supplied by Dr P. Q. Dresser, Department of Plant Science, University College, Cardiff. CAR-565,  $480 \pm 55$  b.p., c. a.d. 1470. Dr Dresser notes that using calibration data given in R. M. Clark, 'A Calibration Curve for Radiocarbon Dates', *Antiquity*, 49 (1975), 251-66, provides a mean date of A.D. 1428, with a +2 sigma value of A.D. 1380, and a -2 sigma value of A.D. 1485. This is close to the recalibration derived from data published more recently in M. Stuiver, 'High Precision Calibration of the AD Radiocarbon Time Scale', *Radiocarbon*, 24, no. 1 (1982), 1-26, which provides a mean date of A.D. 1430, a +1 sigma value of A.D. 1410 and a -1 sigma value of A.D. 1445.

<sup>4</sup> The dated sample, no. C135 was not itself identified, but a further charcoal sample, C157, from the same layer (3818), was examined by Mr Graham Morgan, Department of Archaeology, University of Leicester. It consisted of hazel, oak, ash and hawthorn, which are estimated to have been 15 to 25 years old. A fuller report on these identifications is housed with the site archive.

<sup>5</sup> Department of Archaeology, University of Cambridge, and Department of Archaeology, University College, Cardiff, respectively.

<sup>6</sup> A full species list is housed with the site archive. Thirty-one cereal grains and one rachis internode were recovered from the two litres of soil floated.

<sup>7</sup> See footnote 4.

<sup>8</sup> Cf. M. A. Monk, 'Post-Roman Drying Kilns and the Problem of Function: a Preliminary Statement', 216-30 in D. Ó Corráin (ed.), *Irish Antiquity* (Cork, 1983).

<sup>9</sup> The Welsh Folk Museum, St Fagans, Cardiff.

<sup>10</sup> Cf. E. Wiliam, *Melin Bompren Corn Mill* (The National Museum of Wales, Cardiff, 1977).

<sup>11</sup> F. S. Price, *History of Llansawel* (1898).

<sup>12</sup> Edward Lhuyd's correspondent for Llanboidy in 1696 noted it thus: '*marchpren odyn*: a kil beam' (F. V. Emery, 'A new reply to Lhuyd's *Queries* (1696): Llanboidy, Carmarthenshire', *Archaeol. Cambrensis*, 124 (1975), 105), while D. Parry Jones (*My Own Folk* (1972), 20), from the same general area, describes it as 'across the middle of this was placed a pole (called the *March*) on which rested the ends of the stakes . . .'

<sup>13</sup> E.g. G. Beresford, 'Three Deserted Medieval Settlements on Dartmoor', *Medieval Archaeol.*, 23 (1979), 140-42; E. E. Evans, *Irish Folkways* (London, 1957), 121-23.

<sup>14</sup> The material has been examined by Mr Jeremy Knight, Ancient Monuments Branch, Welsh Office, and will be considered in greater detail in the publication of the remainder of the site.

<sup>15</sup> The Clwyd-Powys Archaeological Trust, 7a Church Street, Welshpool, Powys. Prepared with assistance from Jenny Britnell.

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## LATE MEDIEVAL POTTERY PLANT-HOLDERS FROM EASTERN YORKSHIRE (Figs. 8-10; Pl. xvii)

This note describes and discusses four late medieval pottery plant-holders from eastern Yorkshire.

### *Descriptions*

*Beverley* (Fig. 8, no. 1). The Beverley vessel came from excavations in Dyer Lane in 1982, where several sherds from the upper part of a large open-mouthed vessel were recovered from late medieval garden soil to the rear of a medieval tenement fronting Walkergate.<sup>1</sup>

The fabric of the Beverley vessel is fine and sandy with the surface dull pink where unglazed. The core is oxidized on the lower part but reduced to a uniform dark grey colour in the bowl. Internally the bowl is glazed a glossy deep khaki green and covered externally with a glossy deep purple glaze. The vessel is made in two parts. The bowl was thrown separately and then luted on to the lower part while this was still on the wheel. The junction between the two parts has been blended together and is only evident where sherds have broken along it. As it was necessary to form the pot in two parts, it is possible that the lower part was considerably deeper than as reconstructed. Four equally spaced handles, of which the scars of two survive, divide the pot into zones. Between the handles lay apparently repeated applied faces flanked on either side by punched bosses. The only surviving face is hand moulded with a pinched nose and cheeks which are smoothed into the body of the pot. The eyes are formed by the same implement which made the depressions in the flanking bosses. The mouth is a single horizontal incised line beneath the nose and the hairs on the free-standing beard are made by similar vertical parallel