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THE MALTHOUSE AND THE BREWHOUSE, THE OLD BREWERY, BROCKHAMPTON, GLOUCESTERSHIRE

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Introduction

This article is based on a report prepared by the Author on behalf of the Ancient Monuments Society and GSIA when a Listed Building Consent Application was made in March 1994 in respect of both the malthouse and the brewhouse. This article is not intended to provide a full description of the site and the buildings on it, that has been done by the former Royal Commission on Historical Monuments (England) (RCHME) and their reports are in the National Monuments Record at Swindon (1). However, that record did not include the kiln furnace because it did not form part of the application. In this article it is possible to include a brief description of the kiln furnace, and to discuss the importance of the site both locally and nationally.

Two site visits were made. The first was on 25th March 1994 which was in connection with the Listed Building Consent Application, and the second was on 30th January 1995 with staff from the former Royal Commission on Historical Monuments (England). Both visits were made with the permission of the then owner, Mrs Lanfear who also supplied additional information on the history of the site and how it was worked.

The Site and its History

The malthouse and brewery are part of the site referred to as The Old Brewery (SP 035222). The malthouse is attached to the house, and the brewhouse is situated to the west, on the opposite side of the driveway from the malthouse (Figure 1). The whole site is located at the south western corner of Brockhampton village, and just to the west of the Craven Arms pub.

Little is known of the history of the buildings. The Malthouse has a date stone on it of 1769 and the name I. Wood carved on it. The brewery (and malthouse) was acquired by the Combes (Watney Combe Reid) from the Woods in 1846. It has been suggested that Mr Combe won it at cards!

The brewhouse closed in 1928 when the business was acquired by a Birmingham brewing firm, Showell's Brewery, however, the malthouse continued to produce malt, much of which went to a Tewkesbury brewer/maltfactor until the beginning of the Second World War. Then, during the War the kiln was used for drying water-damaged grain and other seed.

The Malthouse

As one approaches the site, from the village and therefore from the east, the first building one sees is the malthouse and the bulk of its north wall (Figure 2). Round the corner is the west elevation which forms a double gable. (The south elevation is attached to the brewery residence.) The east elevation is partly hidden by neighbouring buildings.

Exterior The malthouse has three floors and is constructed of limestone blocks. The roof is a mixture of modern concrete tiles and some original stone tiles. The north and east elevations have hipped roofs, but the western elevation has two plain gables, with the south one being slightly set back.

The bottom part of the walls and the corners of the building are of coursed and dressed stone blocks. The upper parts of the walls are constructed of coursed rubble. The east elevation has windows on all three floors, but they are irregularly spaced. The north elevation which fronts on to the road has small windows to the middle and top floors only. As already indicated, the bottom floor presents a blank mass. The west elevation has a door at ground floor level in each gable wall. The north gable has a window to the top floor but the south gable has doors at both the middle and top floor levels. The date stone (1769) is above the door of the north gable. It would appear that the southern gable was a later in-fill.

Interior The double gable has resulted in the malthouse having two parts. At bottom floor level both of these have a cement screed surface. The steep, only remains of which survive, was located in the south gable block immediately north of the entrance door. The south wall of the steep has been dismantled, but the remains of the north and east walls survive and indicate that the whole steep was of a substantial stone construction. It should be noted that the north wall of the steep was probably the original external wall of the malthouse. There was a window in this wall, and in the short east wall. There are no evident remains of a couch frame. This was not surprising since the maltings had ceased operation in 1940 and had been used for general storage since then. There were two cast iron columns apparently randomly located. One was in the northern side of the malthouse and was positioned on a quarry tile. The other just rested on the floor. There was vertical stair access to the middle floor, as well as a hatch.

The middle floor is of timber boards positioned at a level below that of the kiln drying floor from which there was hatch access. There were a number of features worthy of note. Again there is a cast iron column, and several timber verticals with grooves in them so that wooden planks could be slotted into them to form bins. These bins help confirm that this middle floor was used for barley and malt storage. There is a modern barley crusher in the south gable range. A nice feature is the internal wooden shutters to the windows. Access to the top floor was by a vertical iron ladder in the south gable range and almost vertical wooden stairs against the central wall in the north gable range, and again there was hoist access via a floor hatch at the western end in the south gable side.

The top floor has a cement screed surface (2). The main beams supporting this floor are cross braced on the underside to give extra strength. This feature is often to be found in malthouses, although usually larger ones than this. The floor is positioned at a higher level than the kiln drying floor to which there was hatch access. The door was a simple timber board one. It is an open uncluttered area with horizontal slit windows, two in the north elevation and one in the east elevation. The roof structure is in part collar support type, curved up to the centre. Some of the original structure had been replaced.

The kiln The kiln is at the south end of the eastern side of the malthouse and originally it was probably the only link between the house and the malthouse. Now it is hidden behind a modern single storey garage and therefore is not a noticeable feature of the malting. The furnace is approached from either the malthouse or from the garage, which would originally have been an external access. The furnace is a centrally located brick-built shaft in an otherwise stone-built and limewashed room. The shaft rises up and forms squat arches to the walls of the room. The furnace faced west, that is towards the garage. It has five iron fire bars which rested on an iron bar 2 inches (5 cm) in depth. The fire bars are approximately 2 inches (5 cm) in width, and 1 to 1½ inches (2.5 to 4 cm) in depth (Figure 3). There are no doors to

either the upper or lower furnace chambers, the bottom of which is slightly below floor level. The furnace aperture has a brick surround rather like a fireplace.

Above the furnace is the perforated tile drying floor, which was not investigated.

The Brewhouse

The brewery is built of coursed dressed limestone blocks and is probably of two periods. The roof is of red tiles on the southern three-storey wing and of concrete tiles on the northern two-storey wing. On the west elevation of the three-storey section was a dominant red brick chimney, a later 19th century addition. The bottom two thirds were in relatively good condition, but the top two thirds were very weathered. The top was decorated. The ground floor of the north wing was not inspected at either visit.

Exterior In the east elevation of the north wing of the brewhouse there were two nice stone mullioned windows, one above the other, and to the north of them, at ground floor level, two unattractive modern doors of garage size. The southern wing east elevation has access via double doors which have a substantial timber lintel over. At middle floor level are two windows again with substantial timber lintels over, and on the top floor there is hoist door access and minimal remains of a hoist. There is a ball finial on this east gable. The south elevation is blank except for two buttresses. The west elevation has the chimney and at ground floor level a window to the north of it, and at middle floor level one on either side, and in the north wing one centrally located window at ground floor level. The north elevation (north wing) has a window at ground and top floor level.

Interior Much of the interior was just empty space, but the upper floor levels survive as does the stair access to them but all the brewing vessels have gone. There was some modern brick work and a modern RSJ in the southern wing. In particular there was brickwork in the back, western elevation, adjacent to the chimney. The ground floor of the south wing had a central drain running across it. There was no access from the south wing to the north wing at ground floor level. The upper floor was accessible from the south wing. It had two levels.

The Development of the Site

A detailed report on the site is given in the RCHME reports on the malthouse and brewery, but it is appropriate here to mention briefly the development of the site since it is essential to the understanding of the processes within the buildings.

The date stone of 1769 on the malthouse indicates that it is of 18th century origin, and likewise part of the brewery building was probably of an 18th century date. Both buildings have been altered, probably mainly in the 19th century but at least some of the repairs and alterations are of a 20th century date.

The malthouse when built in the 18th century was probably an L shaped building, and this is partly confirmed by the substantial internal walls around the steep. It would seem that the second southern gable which now contains the steep was a later, probably 19th century addition, constructed to provide increased malting capacity. Although the stone work is similar, the robust nature of the north wall extends to the north gable, whereas the south gable walls are of a slightly lighter build.

The kiln furnace appears to be original, but this simple type of kiln was in use for a long time. There were no apparent alterations in the furnace room. The kiln floor was not inspected and

therefore it was not possible to determine what type of tiles were used, and therefore whether the floor was original.

Part of the northern wing of the brewhouse, the section with the mullioned windows, is indicative of an 18th century date. The three storey southern wing is almost certainly 19th century as is the brick chimney. It is likely that the whole building was extended sometime during that century by adding the three story wing. It is also possible that the north wing of the brewhouse was not built for that purpose, and that the addition of the southern wing was due to brewing taking place on the site. Internally there have been a number of alterations to the floors. New floors at levels different from the original ones were inserted in the 20th century after brewing ceased. This has made it difficult to interpret the brewing process.

Working the Malthouse and the Brewhouse

As rather more of the interior features of the malthouse have survived than in the brewhouse, and as malting is a less complicated process than brewing, it is easier to determine how the malthouse worked than how the brewhouse worked (3).

Malt is artificially germinated barley, and over the centuries the basic process has not changed, but inevitably there have been improvements, and the whole process has gradually become shorter. In the 18th century it took the better part of four weeks to produce malt, whereas by the later 19th century the whole process took three weeks.

In the 18th century, barley was usually stored on the farm in ricks, with perhaps just sufficient for each steep being stored in the malthouse. By the end of the 19th and in the 20th century it was usual to store the barley in the malthouse. Here, with the steep next to the door it would have been easy to bring the barley in and just tip it into the steep. Once in the steep the barley was wetted for approximately 60 to 72 hours. It was recommended that the water was at a level of 4 to 6 inches (10 to 15 cm) above the barley. In the 18th century it is unlikely that the water was changed, but the barley was allowed to rest between 12 and 16 hours after the water was drained off. Even by the mid 19th century, the water was not always changed during steeping, but by the end of this malthouse's working life in 1939, the steep water would have been changed at regular intervals and the barley allowed to rest between each wetting.

Once steeped, the next stage prior to the repeal of the Malt Tax in 1880 was couching. The couch was a rectangular frame in which the soaked barley was put in order that the excise men could measure its volume. The barley stayed in the couch for twenty four hours. Couching was still practised after the repeal of Malt Tax but it did not have to be undertaken in a frame nor did it have to be for a set number of hours. There was no indication of the couch frame at Brockhampton, but it could not have been to the immediate south of the steep as it would have been in the way of the door. The grain could have been thrown through either of the windows on the north or south sides.

Once couched, the barley was spread out to grow. The batch of barley being malted is referred to as the piece. The length of time it took to grow depended upon the quality of the barley and the weather. In the 18th century it might take as long as 3 weeks but by the later 19th and 20th centuries the growing time had reduced to 14 days. During cold weather the piece would be fairly thick, perhaps as much as 8 inches (20 cm) deep, but during warm weather it would be much thinner, perhaps only 4 inches (10 cm). The piece had to be turned during growing to prevent the rootlets from matting together. As the barley sprouted, the piece was moved around the growing floor so that when it was more or less half way through the growing it could be moved from the bottom growing floor to the top growing floor. As the location of

the couch is not known it is not possible to be certain which way the barley was moved round the bottom floor and it is quite possible that the working of it changed over the years. However, at the end of its working life the hoist was by the door in the south gable, and so when the piece was ready to be moved it would have been in the south gable wing. The partly grown barley was moved between floors in baskets. Originally the winch was hand operated but later an electric hoist was installed.

The top floor has a fine screed surface and again the piece would have been moved around so that when growing was complete and the piece was ready to be moved on to the kiln it was adjacent to the hatchway. It was common to wither the green malt for 36 hours immediately prior to kilning. Once withered the green malt was simply shovelled through the doorway down on to the perforated kiln drying floor.

When this kiln was first in use, the kilning time was probably just short of two days, and would have increased slightly during the 19th century. The depth on the floor was usually about 4 inches (10 cm). When the malt had been cured to the required extent and the moisture content reduced, then kilning was complete and it was ready to be removed from the kiln floor.

The kilned malt was simply shovelled down again to the storage floor and cleaned of its rootlets which could have been used as fodder for farm animals. The malt would then have been stored in wooden bins until needed in the brewhouse opposite or by other brewers. Malt had to be stored for four weeks before it could be used for brewing.

The fuel used in the kiln was coke. The fire was made to draw by holding an iron sheet in front of the top section of the furnace, rather like a domestic fire! (4). The ash which had fallen through the fire bars was used to damp down the fire at night or indeed at any other time.

It is likely that brewing originally only took place in the more modern south wing of the brewhouse. It is probable that the north wing was only used in the building's later life as a brewhouse.

The malt, before it could be used in the brewing process, had to be ground to grist. As there was no evidence for a malt mill in the malthouse, it is reasonable to assume it would have been located in the brewhouse. In which case the malt in store on the middle floor of the malthouse could have been hoisted out of the middle floor, moved across to the brewhouse and then hoisted up to the top floor where it would have been ground in a small malt mill. The water tank was on the top floor (5). Then the water heated to a temperature of not less than 160F (71C) in the early 19th century was mixed with the gristed malt. The mixture stood for about two hours. The spent grains were then removed and could be used as cattle feed. The resultant wort from mashing would then have been transferred to the copper for boiling for an hour or two with the hops. The copper was probably located in the south west corner, and would have had its own brickwork and wooden staging around it. After boiling, the spent hops were removed and the resultant liquor was cooled as quickly as possible to a temperature of around 70F (22C). This was usually done in large shallow open trays, and these, because of their size, could, in later years, have been located on the upper floor of the north wing. However, it is worth noting that none of the windows had louvres which are a common feature of this part of the brewing process. Finally the cooled wort was run into a fermenting vessel where it was mixed with yeast. The fermentation process may take from two to eight

days, after which it can be barrelled or bottled for drinking. The barrels were stored on the ground floor of the north wing.

The Importance of the Site

Gloucestershire was not a malting county in the way that the East Anglian counties were, nor did it have the massive breweries which developed in Burton-on-Trent. Even so in the 19th century there were many malthouses and breweries of sizes varying from the minute to the substantial (6). Malthouses, although often associated with breweries, were also built and worked in their own right, and might be found on farms or on the banks of the river Severn. Others developed in towns on burgage plots. Equally, brewhouses were often built unassociated with malthouses. Over the years both malthouses and breweries have closed and there are now no traditional floor maltings working in the county, although brewing is still carried on. In consequence it is rare to find both a small malthouse and a small brewhouse on the same site.

A number of early (18th or early 19th century) complete malthouses and some kilns survive both in Gloucestershire and outside the county. Comparative kilns are to be found at Chipping Campden, Frampton on Severn, and Woodmancote, Dursley in the county, and at Topsham and Coryton in Devonshire, Chetnole, Dorset, and at Alton, Staffordshire, outside the county. All are slightly different but all are primitive, with either no or just one door to the kiln furnace. All the above three malthouses in the county have bottom and top growing floors on the Newark pattern like Brockhampton, as do a number of other small malthouses, for example Wightfield Manor, in Deerhurst, and Uley. The difference between them and this malthouse at Brockhampton is its double range and the stark base of the north elevation. This is similar to a converted malthouse at Eastcourt in Wiltshire.

Small early brewhouses with which this example can be compared are at Ashleworth Quay in the county, off Ashbourne Road, Derby (behind the Gallant Hussar pub), Sarah Hughes in the West Midlands, and Marnhull, Dorset outside the county (7). Only at Marnhull was there a malthouse associated with the brewery, and like Brockhampton, the brewhouse forms a distinctive feature in the rural landscape.

Individually, neither the malthouse nor the brewhouse at Brockhampton is outstanding, but together they form an interesting group rarely found on such a diminutive scale whether in a village or elsewhere. In consequence the site is of importance whether considered from a local or national point of view.

Postscript

The brewery residence known as the Old Brewery, together with the malthouse were sold in 2002 at which time the malthouse was still unconverted. The brewhouse has now been converted into residential accommodation.

Notes

(1) The NBR number for the Malt House is 93502, and for the Brewhouse it is 90967. Both can be found in the National Monuments Record Centre at Swindon.

(2) It has been assumed that this floor was cement screed, but its content has not been analysed, and it should be noted that the apparently cement screed upper floor at Chipping Campden was in fact gypsum.

(3) Unfortunately I am not so familiar with early brewing as with early malting, so the brewing section is not so detailed.

(4) Information supplied by Mrs Lanfear who remembered the kiln being worked in this way.
(5) Information supplied by Mrs Lanfear.
(6) An example of a minute malthouse is to be found at Little Barrington and a large example at Merchants Road, Gloucester.
(7) For other examples see Peaty, I. P. (1997), pages 122 to 184. Some of the oral history of Brockhampton is also included in this book.

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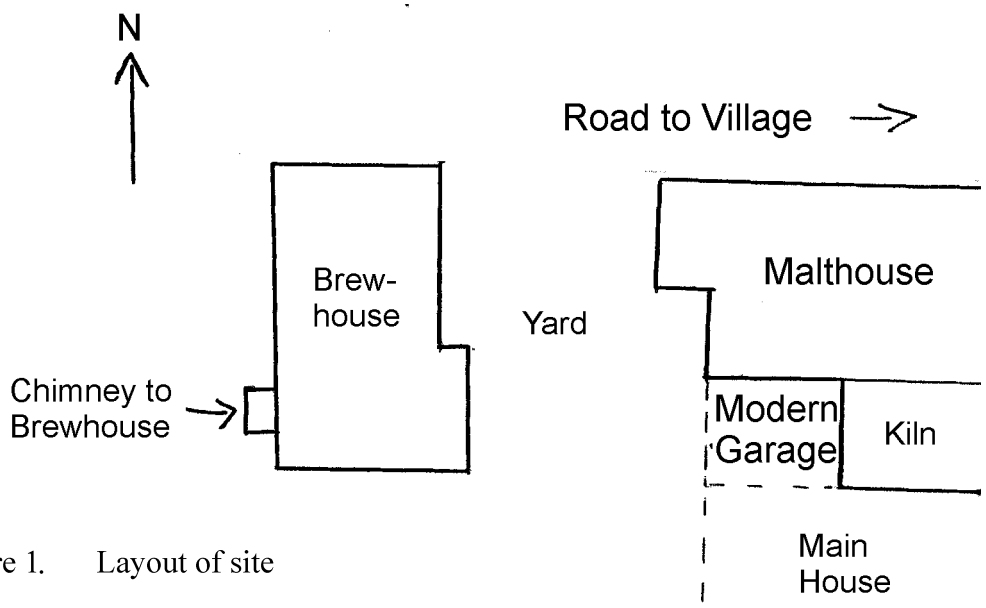

Figure 1. Layout of site

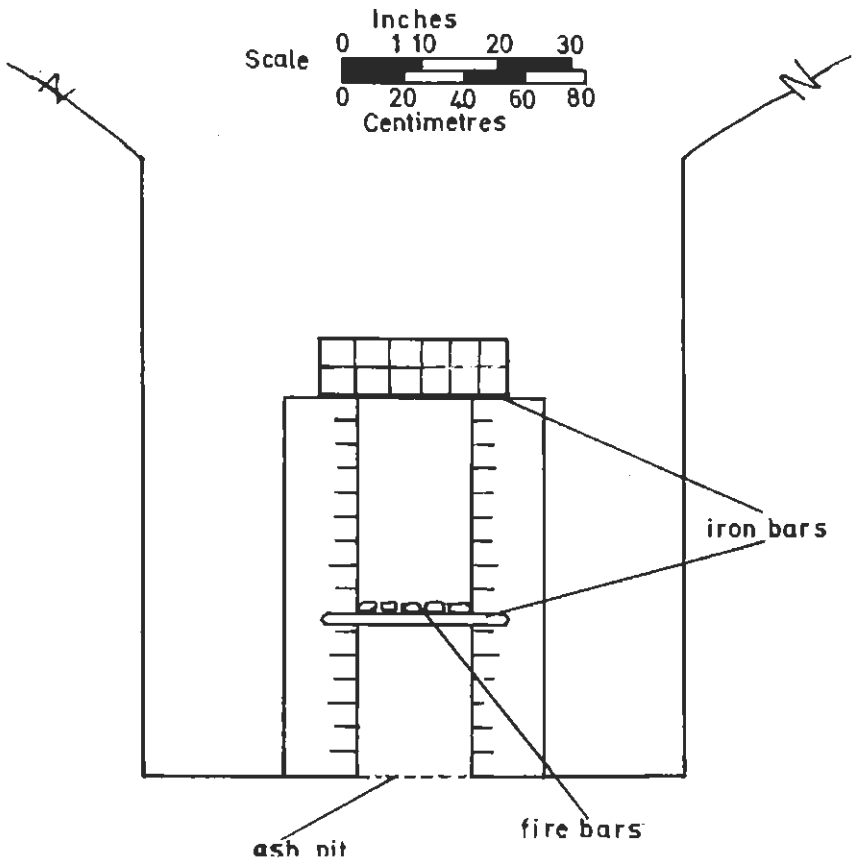

Figure 2. West Eelevation of Kiln Furnace, the Malthouse at The Old Brewery Brockhampton Glos. Surveyed 30/01/1995

Figure 3. North Eelevation of the Malthouse [R. Wilson]