

**WHITBREAD FLOWERS BREWERY AND MALTHOUSE
(FORMERLY GARDNER'S BREWERY
AND LATER THE CHELTENHAM ORIGINAL BREWERY),
HENRIETTA STREET, CHELTENHAM**

Sheila Ely

Introduction and Summary

This paper is a shortened version of an illustrated report prepared as a result of the work on the brewery and malthouse when they were recorded by the Emergency Recording Section of the RCHME prior to the redevelopment of the buildings. The full text, illustrations and photographs taken are available at the National Monuments Record Centre, Kemble Drive, Swindon, NBR No 96955.

Flowers Brewery lies at the centre of Cheltenham close to the High Street. The Brewery was founded in 1760 and was known as Gardner's Brewery. By 1818 the business had become so large that the brewery was enlarged. Further extensions were made in 1834. In 1888 it was registered as the Cheltenham Original Brewery Company Ltd. The brewery was almost completely destroyed by fire on the 27th June 1897, but was rebuilt as a tower brewery in 1898 by Messrs William Bradford and Sons, brewery architects of London. The brewery buildings are constructed from red brick with stone dressings and are of fireproof construction, having concrete jack arching, fireproof floors and wrought-iron roof structures. The earliest extant building, which forms part of the present-day complex, is the malthouse. It is constructed from polychrome brick using pier and panel construction. It was probably built between 1864 and 1870. It was altered in the late 19th century when a pair of new malt kilns, with pyramidal roofs, were inserted at the centre of the southern end of the building. The kilns, and most of the internal floors, were removed in the mid 20th century, when malting ceased. The malthouse is of a rare plan form for the period with unusually wide growing floors. Whitbread acquired the company in 1963. The name 'Flowers' appears to have been borrowed for marketing purposes from Flowers and Sons Ltd, Stratford-on-Avon, which ceased brewing in 1969. Brewing at Cheltenham ceased in 1998.

The scope of this report has been limited. One half-day site visit was made and basic documentary research undertaken. The buildings on the northern side of St Margaret's Road, which are 20th century in date, were not surveyed. However, it is hoped that the principal points of importance have been established. The main facts, which remain unconfirmed, are the architect of the malthouse and the exact date of its construction.

The Malthouse

Location

The malthouse lies on the corner of Henrietta Street and St Margaret's Road. The malthouse was originally separated from the remainder of the brewery complex by a wall on the southern side of the building and a railing on the eastern side.

Documentary Evidence

No building is shown on the site of the present malthouse in 1864¹ however, a building does appear to be shown on Humphris' Map of Cheltenham of 1870². The malthouse may therefore have been built between 1864 and 1870.

An undated ink and wash drawing held by Whitbread shows the eastern elevation of the brewery buildings, which existed before the fire, and the existing malthouse. The drawing dates from between 1864 and 1870, and June 1888, when the brewery became known as The Cheltenham Original Brewery, as the carts in the drawing are clearly labelled 'Gardner's Brewery'. A large part of the southern and eastern elevations of the malthouse are also shown. The malthouse is shown with four parallel, pitched roofs with bull's-eye windows in the gable ends. The ridges of the central ranges rise up to form linear louvred ventilators which run almost the full length of the building.

The detailing of the elevations of two of the buildings shown within the brewery complex is very similar to that of the malthouse, suggesting that the malthouse could have been designed by the same person. The architect of the malthouse is not known, but it is possible that it was Messrs. William Bradford and Sons, who had a long association with the brewery both before and after the fire of 1897, and are known to have designed malthouses as well as breweries.³

A photograph of unknown date held by Whitbread, shows a similar view to the drawing discussed above. Rosette-shaped vents, similar to those that survive in the elevation fronting onto St Margaret's Road today, are shown in the gable end of the eastern range. Tantalisingly the central two gables appear to have circular date plaques rather than vents. The photograph is too indistinct to be able to read the date which certainly, the date '1868' appears to be the most likely interpretation. Other details in the photograph confirm that the ink and wash drawing is an accurate depiction.

The next illustration of the malthouse in *Cheltenham's Oldest Industry* comprises drawings, which accompany an account of a visit made to the brewery in 1896. Three of the drawings in the article show the malthouse. The first comprises a bird's-eye-view of the entire brewery complex, including the malthouse, from the south-east. The second drawing shows that two pyramidal-roofed kilns had been added at the centre of the southern end of the malthouse by 1896, and that a tall parapet wall containing windows had replaced the two central gables in front of the kilns. The same drawing also shows two timber-clad lucams projecting from the two outer gables. The third illustration shows a malting floor.

1 Plan of the Town of Cheltenham and its Vicinity 1864 Published by S.C. Harper.

2 GCRO MA79.

3 Messrs William Bradford and sons are known to have designed malthouses as well as breweries. One of the most notable examples being Tucker's Malthouse at Newton Abbott, Devon.

The next illustrations of the malthouse date from *c.*1960. These show that although buildings had been added to the eastern side of the malthouse and at the south-eastern corner, the building remained very much as it had done at the end of the 19th century. The pyramidal kiln roofs and the timber lucams at the southern end of the western range are shown *in situ*. A turret is shown projecting up through the roof behind the malt kilns.

The Development of the Malthouse

Phase I *c.*1870

The malthouse is the earliest surviving building on the site. It was constructed between 1864 and 1870. The malthouse is of three stories with a semi-basement. It is of thirteen bays north to south and was formerly divided into two equal halves running north to south internally. It has four roof ridges running north to south, which were originally covered in red tile. It was constructed from polychrome brick using the pier-and-panel construction with tie-rod strengthening. The tie rods appear to have the words '--- Butt, Gloucester' embossed in them. The piers rise up to form elliptical-headed arches.

The southern and eastern elevations of the malthouse were characterised by segmental-headed windows. Six original windows survive. They are of timber and comprise two eight-pane sections, which can be pivoted to a horizontal position. The illustration of the growing floor in *Cheltenham's Oldest Industry*, shows that the windows had single simple side-hung shutters internally.

The early illustrations show part of the southern and eastern elevations. A taking-in door is shown at first-floor level at the southern end of the eastern range, a timber-clad lucam lay immediately above this door. Part of a sweeping stair with a cast-iron railing is shown half-way along the eastern elevation. The stair appears to give access to a single-width doorway at first-floor level. There was a double-width entrance to the ground floor below the stair. The malthouse was separated from the rest of the brewery complex by a railing on the eastern side and a wall on the south. There was a gateway which gave access to the brewery complex at the south eastern corner.

Although no early illustrations of the northern or western elevations survive, the physical evidence shows that the western elevation was similar in form to the eastern elevation. There was what appears to have been a loading-in door, at second-floor level at the centre of the facade facing Henrietta Street. The semi-basement was lit by segmental-headed windows. There was a vehicular access to the site flanked by gate piers adjoining the south-western corner of the building.

The elevation fronting onto St Margaret's Road comprised four gables with parapets. There were rosette-like vents which still survive towards the apex of each gable. There were blind taking-in doors at the centre of each gable at first and second-floor level. To either side of these, and in the central gables there were segmental-headed windows. The semi-basement was lit by windows of the same form. A cast-iron railing with spear-headed stanchions ran along the front of this elevation. The railing was broken by a gateway close to the corner with Henrietta Street. The gateway gave access to a doorway to the semi-basement.

The illustration of the growing floor in *Cheltenham's Oldest Industry* shows that the building formerly had a single internal spine wall running north to south down the centre of the building, and that the floors were supported by cast-iron columns.

The positions of the barley storage, steep or kilns are not known at this date. It seems likely that barley was taken in via the lucam at the southern end of the western range of the building, and was stored in the attic space of that range. The kilns must have been under part of the ventilated sections of roofing. However their exact location is not known. The fact that all floors, have windows suggests that all floors, including the top floor, could have been used as growing floors, and that malt storage may have been in the brewery complex, as malt storage areas were rarely provided with natural lighting. The malt probably left the building leaving via the lucam at the southern end of the eastern range.

Phase II c.1890

The documentary evidence suggests that various alterations took place to the malthouse between c.1870 and 1896. Two hopper-bottomed steeps were probably installed at the northern end of the second floor at this time. Two kilns with pyramidal roofs were inserted, side by side, at the centre of the southern end of the building. The two gables in front of the kilns were replaced by a tall parapet wall containing blind windows. The windows, which formerly existed at second floor level, were blocked. The taking-in door close to the south-eastern corner, at first-floor level was also blocked. A suction tube was installed close to this point. The tube conveyed malt from the first floor of the eastern range to the brewery a distance of about 731 metres (about 800 yards). The plant for this machinery was situated in the brewery and was supplied by Messrs H.J.H. King of Nailsworth, Gloucestershire.⁴ A square turret, which probably accommodated a bucket elevator, which delivered green malt to the kiln floor, may have been inserted immediately to the north of the malt kilns at this date.

The semi-basement may have been linked to the brewery via a tunnel at the south-eastern corner of the basement at this date. The basement may have been used as a cellar for the brewery after this date. A tunnel also linked the basement of the malthouse with the brewery buildings on the northern side of St Margaret's Road.

The Malthouse Phase III Mid - 20th Century

The process of malting as it took place in the malthouse at the beginning of the 20th century is recorded in the Appendix to be found at the end of the paper. In the 1960s malting ceased and the kilns, some of the floors, and the majority of the eastern elevation were removed. The majority of the windows were also replaced.

The Malthouse in the Local and National Context

The malthouse is notable in the national context for the width of the growing floors at the date

4 *Industries of Gloucestershire (No 33) The Cheltenham Original Brewery Co. Ltd'*
Gloucestershire Chronicle August 18th 1923.

of construction. In spite of the removal of its internal features the building remains the largest extant malthouse in the Cheltenham, representing an industry which is known to have once flourished in the town from at least the 17th century.⁵

The Brewery

The Location

The brewery developed on a site between the High Street and St Margaret's Road beside the Fleece Hotel.

The Documentary Evidence

J.T. Agg-Gardner founded the brewery in the High Street in 1760⁶. No research into documents from the 18th century has been undertaken, as the present day buildings are of 19th and 20th-century date.

A drawing, which is probably of early 19th century date, shows a former entrance to the brewery from the High Street. The drawing shows an arched entrance at the centre of a four-storey building of early 19th century date. The building entrance was demolished in the 1960s.⁷ The next known illustration comprises the undated ink and wash drawing held by Whitbread. This shows the eastern elevation of the brewery and malthouse. The drawing must date from after the construction of the malthouse that is, between 1864 and 1870, and June 1887 when the brewery burnt down. The next illustrations of the brewery comprise drawings in the article describing a visit to the brewery in 1896 (*Cheltenham's Oldest Industry*). A comparison of the ink and wash drawing and the bird's-eye-view contained in the article of 1896, suggests that two substantial buildings, both with pyramidal roofs, had been added to the brewery complex towards the southern end of the site by 1896. However, the bird's-eye-view may not be a true representation of the buildings, but may show the intended appearance of the buildings once the alterations, which the author of the article of 1896 states were underway at the time of the visit, were completed. This is borne out by the fact that photographs of the brewery after the fire, appear to show buildings that are in the pen and wash drawing, rather than those in the bird's-eye-view of 1896 (see **RCHME photographs**). The only other explanation is that there were two major fires, the earlier of which pre-dated 1897. It seems unlikely that there was an earlier fire as no record of it has been found in the documentary sources used.

An account in the *Cheltenham Looker On* describes the fire that took place at the brewery on 27th June 1897:

'The fire which was on Sunday morning last caused the destruction of the greater portion of the buildings, stock and plant of the Original Brewery. It originated in the hop room, which with part of the malt stores, tun room, and other parts of the premises in which the different manufacturing processes

5 Hart 1981, 107.

6 Richmond and Turton 1990

7 This building is illustrated in *A Guide to the Industrial History of Gloucestershire* 1992, 11

were carried on were destroyed, together, of course, with the valuable machinery and other contents... The damage has been variously estimated at from fifty to sixty thousand pounds.⁸

The next known illustration comprises a perspective drawing by Messrs William Bradford and Sons, of the brewery as it was intended to be reconstructed after the fire of 1897 in the *Brewers' Journal* for November 1898. The illustration is accompanied by an account of the new building. The article emphasises the use of fire-proof construction. The principal elements described in the article can be identified in the illustration. From the south these comprise a two-storey copper house with a pyramidal roof; a brew house of five stories with a pyramidal roof; a cooler house, which also contained the mash tun stage, the fermenting tun stage, the brewer's room and a laboratory, with a hop store on the first floor and beer store on the ground floor; a fermenting house and the bottling department.

The next illustrations of the brewery dates from c.1960. An aerial photograph shows the former entrance to the brewery from the High Street, and the 19th-century office building shown in the ink and wash drawing. It shows that a substantial building, comprising three ranges running east to west, had been added to the north of the fermenting house by this date. A substantial flat-roofed building of concrete construction had also been built fronting onto Henrietta Street. This building linked back to the south-eastern corner of the malthouse.

The Development of the Brewery

Pre June 1897

The appearance of the brewery before the fire of 27th June 1897 is known from a pen and wash drawing and from photographs after the fire⁹. The only parts of the present building which may predate the fire are the part of the cellar which has brick-built piers and groined vaults, the remains of the circular brick-built base of a copper and the base of the circular chimney, The photographs of the aftermath of the fire show the fermenting house floors were supported by cast-iron columns and 'I'-section beams, but had a timber roof.

The Brewery 1898 - 1900

The hop room, malt stores, and tun room, were essentially destroyed in the fire of June 1897. The entire brewing complex, with the exception of the office building, was rebuilt by Messrs William Bradford and Sons using fire-proof construction, as previously described under documentary evidence. The new brewery comprised eight main elements, the pre-existing office building, a new two-storey copper house with a pyramidal roof with a square chimney to the rear; a new brewhouse of five stories with a pyramidal roof and glazed lantern; a new cooler house with a

ventilated lantern; a new tun house, which ran east to west with a long ventilated ridge lantern; a new bottling department which had a half-hipped roof and circular windows at first-floor level.

The new brewhouse was built of red brick with limestone dressings. It has a coved eaves

8 Illustration and description of the building in *The Brewers' Journal*, 1898 Nov. 15th.

9 See RCHME photographs Job No 98/01887.

cornice, which is interrupted, at intervals by windows and terracotta brackets. A hipped red-tile roof rises up to a glazed lantern with decorative ridge tiling with curved finials at each end. The roof had triangular-shaped dormers at this time. An ornate weathervane bearing the initials 'CB' (Cheltenham Brewery) stands on the ridge of the lantern. A round-headed entrance arch at the centre of the eastern elevation rises up through two storeys. A cast-iron tank occupies the upper part of the archway. The tank is open to the outside air. The windows were of cast-iron with a pivoting central section within segmental-headed surrounds. A hoist survives adjoining the north-eastern corner of the brewhouse, but is now clad in aluminium sheeting. An ornate timber-framed hoist is shown set forward from the position of the existing hoist in the illustration in *The Brewers' Journal*. An open stair with a 'x'-form balustrading rose up through the brewhouse. This staircase and some original windows remain *in situ*.

All the new brewery buildings were built with wrought-iron roof trusses, and the floors are constructed of jack-arched concrete supported by cast-iron columns, some of which have the maker's name 'W. Richards and Son Makers Leicester'.

The process of brewing is outlined in the appendix below. Although this describes the brewing process in 1923, the basic process would not have changed since 1898. The grist mills were probably housed in the roof space of the brewhouse, where they were situated at the time of survey. The mash tuns would have lain on the floor below. The coppers lay in the building adjoining to the south. The liquor from the coppers was probably pumped up to the refrigerating room or cooler house, to the north of the brewhouse. The cooler house has a mansard roof, rising to a louvered rectangular ventilation lantern. There was also a large ventilated section in the lower part of the roof slope. The liquor would then have passed to the adjoining fermenting or tun house. The tun house runs east to west and has a hipped roof rising to a long, partly-glazed lantern and triangular ventilation windows. The upper part of this building contains a lofty fermenting hall, which was open to the roof. To the north of the fermenting hall lay the bottling department, which was of two storeys and had a half-hipped roof. Elements of this building, including a circular window, survive.

To the north of the existing brewhouse lies an 'L'-shaped single-storey building with wrought-iron roof trusses. This building formerly had a continuous ridge vent, which is now boxed in. The base of a circular chimney, which is thought to predate the brewery buildings of 1898, is incorporated into its eastern wall. This building is said to have been a stable, but may have once housed the boilers, which powered the steam engine. The base of a circular chimney is incorporated into its eastern wall. The lower half of the chimney is of polychrome brick, but the upper part has been rebuilt in the 20th century.

The steam engine was probably housed in the tile-clad room at the base of a rectangular tower-like building of four storeys to the west of the room previously described. The upper part of the tower, may have housed hot and cold water tanks.¹⁰ Shaft-boxes, which supported line shafting powered by the steam engine, are visible in places throughout the building. The shaft boxes bear the makers name and date 'The Faringdon Works Ltd, Shoe Lane, London 1898'. The steam engine would have powered pumps and hoists and other moving machinery throughout the brewery.

10 The upper part of the tower was not accessible at the time of survey.

The cellars appear to have been extended to the north and south after the fire. The late 19th century cellars have cast-iron columns and concrete jack-arching. The cellars were linked to the malthouse via a tunnel. The tunnel also gave access to a number of wells, which are reputed to have served the site.

Single-storey building, Henrietta Street

A single-storey brick-built building, which appears to be of late 19th century date, stands immediately south of the gateway at the south-western corner of the malthouse. No building is shown on Sawyer's *Map of Cheltenham* of 1897. It seems probable that it may date from shortly after that date, when the brewery was undergoing reconstruction. The original use of the building is not known. An aerial photograph of the 1960s shows that the building formerly had a gable which faced Henrietta Street. The detailing of the gable appears to have been very similar to the gables of the malthouse. Three original segmental-headed cast-iron framed windows survive in the elevation facing Henrietta Street. The windows are set high up in the wall and are only two panes deep. The choice of a metal windows placed at a high level suggests that security may have been important, although it is possible that north-western elevation was constructed over an existing wall. The gable facing onto Henrietta Street was removed c.1960 and has been rendered.

The Brewery - The 20th Century

The brewing process is described in the Appendix. During the 20th century some of the brewery buildings were demolished and large extensions built. The majority of these extensions appear to have been built in or after c.1950. The late 19th century brewery as constructed by Messrs William Bradford and Sons still essentially survives, but is obscured these additions.

A two-storey brick-built extension was constructed in front of the cooler house using pier and panel construction. This building may have been open at ground-floor level and incorporated a cast-iron tank at first-floor level, which was used to contain recovered beer. The segmental-headed windows at first-floor level and moulded string course suggest that this extension may belong to the first quarter of the 20th century. The south-western wall on the ground floor was later in-filled and the building heightened. The site as it appeared c.1990 is shown in an aerial photograph.

After 1960 the former entrance to the brewery from the High Street was demolished, together with the 19th-century office building at the southern end of the site. A new access was created from Henrietta Street. The former copper house, to the south of the brewhouse was largely rebuilt and clad in aluminium sheeting, although the brick-built base of one of the coppers survives. The early 20th century extension in front of the cooler house was heightened in brick. A brick-built extension with a profiled pre-cast concrete slab roof was later built to the east of this. The flat-roofed building fronting onto Henrietta Street was extended to the north after 1960. The majority of the cast-iron windows were removed during this phase, although some survive. The triangular dormer windows were removed from the brewhouse roof.

The Brewery in the Local and National Context

The principal point of interest relating to the brewery is its fireproof construction. The degree to which fireproof construction is unusual for a brewery of this date is difficult to assess in the current state of knowledge. William Bradford (1845-1919) began his career in the north of England but had established a practice in London by 1879. The practice had become William Bradford and Sons by at least 1898, when the brewery at Cheltenham was rebuilt. William Bradford was a vociferous advocate of the architectural ornamentation of breweries. His Bridge Wharf Brewery in Lewes, built during 1881-2 for Harvey's is a fine example of his early style and is listed Grade II*. The later buildings designed by the practice are said to be less ornate and to be characterised by blind arcading, but to retain decorative ironwork and chimneys. The partnership continued until at least 1946, and over that period altered more than 70 maltings and breweries, mostly in the south east of England. At the time of the fire, the Cheltenham Original Brewery had one principal rival in Cheltenham, this was Stibbs and Co., Albion Steam Brewery in Albion Street, which it took over in 1898.

Further Investigation

Former workers from the malthouse may be able to reveal aspects relating to the internal workings and arrangement of the building during the latter part of the 20th century. Research into 16 boxes of uncatalogued material held by the Gloucestershire Records Office may reveal more about the both the brewery and malthouse¹¹.

The buildings were investigated by Sheila Ely and Amber Patrick in October 1998. Photography undertaken by Peter Williams and Mike Hesketh-Roberts. Photography was undertaken as follows: Large format RCHME photographs (26 Black and White, 3 Colour) Job No. 98/01887 Colour Enprints 290/N and 290/P.

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Appendix

A brief outline of the brewing and malting processes.

The Malting Process

1. Cleaning of the barley
2. Steeping the barley
3. Couching, prior to 1880 it was obligatory
4. Growing, the wetted barley
5. Kilning the malted barley
6. Cleaning the malt and the removal of the rootlets.

The Brewing Process

1. Malt milled to grist
2. Grist mixed with hot water in the mash tun
3. Water drained off and spent grain collected on false bottom - used for cattle food
4. Resulting liquid called wort is sprayed with water, this is called sparging
5. The resulting wort is mixed with hops and sometimes sugar and boiled in coppers
6. Hopped wort drained off - the spent hops used for fertilizer
7. The wort is then cooled
8. Wort transferred to the fermenting vessels and yeasted added and any surplus collects at the top and is removed
9. After fermentation the beer is run off to mature
10. Beer bottled or raked into casks as appropriate.

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