## BRICK MAKING IN THE MIDLANDS AREA

### Introduction

For many hundreds of years, bricks have been the main building unit for building construction over large parts of the world. Before industrial methods were introduced, bricks were made in a laborious hand-made process. In Britain the clay was dug from pits during the summer and spread to expose it to frosts in the winter to break the lumps. In the spring water would be added and then mixed, often by trampling by oxen. Small quantities of the clay would be rolled in sand to form a clot that was then pressed into a mould on the moulding table with more sand being used to prevent the clay sticking to the mould. Excess material was removed by pushing a wet stick across the top of the mould, the surplus material being returned to the clot maker. The raw bricks would then be removed from the mould and spread over an area to allow the water to evaporate, a process that could take two weeks or more depending on the weather. For this reason, in Britain, brick making was often restricted to the summer period.

To fire the raw or 'green' bricks, beehive kilns built with walls of previously fired bricks were filled with stacks of the raw bricks. Temporary walls were built inside the kiln so that when fires were lit in the fire holes around the sides of the kiln, the hot gases would rise up towards the domed top before being drawn down through the brick stacks by under floor ducting leading to a chimney. Initially the temperature was kept low for one to two days to drive off any remaining moisture from the bricks before being increased to about 1,000 degrees Centigrade to fuse the raw brick material into a fired brick. After that, the fire holes around the kiln would be bricked over and the kiln allowed to cool for up to another week before the fire holes were opened and the fired bricks removed.



Photograph of the derelict Shenstone 'beehive' kiln showing access and fire holes.

The chimney had already been demolished.

In the first half of the 19<sup>th</sup> Century, industrial processes began to be used in the brick making industry, initially using steam power but later replaced by electrically powered machinery. The clay was obtained from pits or mines and transported to the processing works where it was crushed, sieved and blended with other ingredients in large drums with sufficient water to produce a semi-stiff product. This was then extruded into moulds and compressed to produce a raw brick slightly larger than the finished brick to allow for shrinkage during drying and firing. By fitting an imprint plate into the bottom of the mould, the required details could be imprinted onto the raw brick when it was compressed to the required thickness. The raw brick was then ejected from the mould and transported to a drying area before being transferred to the kiln for firing. Many coal mines required large quantities of bricks and established their own brick works to supply their needs. While mining for coal, seams of shale could be extracted and, after crushing and grinding to a fine state, be used as a clay substitute for brick making.

As the brick making industry increased, to fire the larger quantities of bricks being produced, beehive kilns were often replaced or supplemented by larger 'Hoffmann' rectangular kilns that had many sections that could be used in turn. The hot gases from the burning zone were drawn over raw bricks in other sections to dry them before they were fired. Brick making could then become a continuous process instead of the batch process when beehive kilns were used.

Because of the weight of bricks, in early times bricks were often made on or close to the site where they were required. Transport by horse and cart was very limited by the weight that could be moved and it was only later when canals were constructed that bricks could be made 'off-site' and transported to the building site. Later the railways and roads became more important for brick carriage but in the present age, almost all bricks are transported by road from the large brick makers. It is obvious that towns and cities, with many brick buildings, required enormous quantities of bricks for their construction. The main requirements were readily available supplies of the raw materials of clay and coal. This resulted in many brickworks being created in areas where large numbers of bricks were required in order to reduce transport costs. As an example, the Digbeth and Bordesley areas of Central Birmingham once contained many brickyards producing bricks with the readily available clay and coal brought by canal or rail from Midland mines.

All the bricks that are displayed in the Cart Shed at the mill during Open Days have some details imprinted in the brick, usually in the 'frog', a depression in the brick surface produced by the imprint plate. These details may include the makers name or company, the location of manufacture or a trademark. The remainder of this article gives examples of the information included in the imprint with photographs of example bricks and brief details of the brick manufacturers. All the displayed bricks were produced within an area limited to about 30 miles from the centre of Birmingham, extending into the Black Country and the western and eastern parts of the Midlands.

#### Name and Location





## Lloyd & Son / Sutton

Lloyd & Son were first recorded as brick and tile makers in 1872, with similar records up to 1886. The record for 1892 changes to Mark Lloyd, a son born about 1848, with the last record being in 1930. Kelly's Trade Directory for 1908 records Lloyds Brickworks Ltd as being located at the Sutton Old Yard and Wheatmoor brick works. An O.S. map of 1889 names an area between Bedford Road and Whitehouse Common Road as the Sutton Old Yard Brickworks. This includes three clay pits and four rectangles marked as kilns. A later map of 1903 also names the Wheatmoor Brick and Tile Works, approximately half a mile away at Lindridge Road, that shows a clay pit, a building and four circles, probably beehive kilns. Bricks imprinted "Lloyd & Son" were used in the construction of the Sutton Park and Sutton Town stations on the Midland Railway line that opened in 1879. Charles Lloyd died about 1890 but the son, Mark Lloyd, continued the business until about 1930. After closure the pits were filled with the Old Yard area later used for housing (Vincent Road) and the Wheatmoor site reverting back to agriculture.

# J. King & Co / Stourbridge

Joseph King & Co, Stourbridge at Chapel Terra Cotta Works, Park Lane, Cradley, Halesowen. West Midlands. Recorded in Kelly's Trade Directories from 1870 to 1888. The business seems to have closed between 1908 and 1912. Note the 'N' of King and 'S' of Stourbridge are reversed, two letters that can often get reversed.

#### Name





#### **Newbould & Carman**

Believed to have been made in the Willenhall area. The 1881 census lists Roger Newbould as the manager of a brickyard and publican, living at 33 Doctor's Piece, Willenhall. No information has been found regarding the Carman involvement in

the works. Bricks from the Willenhall area tend to more orange coloured than the redder bricks of the Birmingham area, the colour depending on the type of clay. The brick was found at house renovations in Thornhill Road, Streetley.

#### T Jones

This brick was found on the demolition site of a building in Marsh Lane, Walsall after fire damage on 11<sup>th</sup> June 2019 and was the first record for this brickmaker. Kelly's directories recorded Thomas Jones at Gorsebrook Mills, Wolverhampton and Alma Brick Works, Heath Town, Wolverhampton from 1908 to 1921. There was no entry for 1924 then it changes to Gorsebrook Mills, Bushbury, Wolverhampton for 1928 to 1940, the last year of Kelly's Trade Directories.

## Location





#### **Shenstone**

The Shenstone Brick & Pipeworks started in 1926 with the company being listed in Kelly's 1936 & 40 editions. The brickworks closed in 1967 but the site continued as a builders merchant. The kilns were still present in 1986 but today nothing is left on the site that was at the junction of Watling Street and the A5127, just north of the A5 Wall Island junction. The area has now been developed as a business park.

### NCB / Hamstead

The Hamstead Colliery Company was formed in April 1875 but the first coal was not extracted until 1878 because of technical difficulties and the depth of the shaft, at 1,836 ft. once the deepest in the world. The exact date when the brickworks were established is unknown but probably soon after the colliery to provide bricks for colliery purposes. The colliery was situated between the Old Walsall Road and the Tame Valley Canal with an aerial ropeway to transport shale and coal from the pithead to the brickworks on the eastern side of the Old Walsall Road. Special equipment was installed to crush the shale to enable it to be used for brick making. In 1929, £25,000 was spent on the brickworks with a new continuous kiln built having 20 burning chambers each holding 20,000 bricks and capable of producing 250,000 bricks per week. The bricks initially had a single Hamstead imprint but after nationalisation of coalmines in 1947, the imprint changed to NCB / Hamstead. The colliery closed in 1965 with the brickworks recorded as derelict by June 1968. Some of the bricks have a reversed 'C' in NCB as shown in the photograph of a brick found at some derelict garages in Erdington.

# **Company name and Location**





# Parkfield Brick / Co Saltley / Birmingham

The Parkfield Brickworks was located just south of Adderley Park railway station on Bordesley Green Road. It opened in the 1880's operating as the Parkfield Brick Co. in the name of Clare P. Bond, the wife of the real owner John Bond, himself a well-known brick maker. The company is listed in Kelly's 1890 to 1905 editions, later being listed as the Parkfield & National Brick Co. in the 1908 edition before closure in 1908. The brick was donated by Peter Try who found it in his garden.

#### S C Co / Bloxwich

An elusive brick, the name not being recorded in either Kelly's directories or in the London Gazette. Finally traced from a List of Mines 1880 to Station Colliery Co. located to west of Bloxwich. The mine had already closed by 1880 but the 1885 map shows a brick works with a building and four rectangular kilns located near to a wharf on the Wyrley and Essington canal. A later map of 1903 shows the works had expanded with a larger marl hole with a truck track. By 1913, all the buildings had been demolished and a map only indicates an Old Clay Pit. The brick is a single brick found at the Cawarden Reclamation Yard.

# **Company Name**





### Castle

The Castle Brick Works was in Birchills, Walsall, just off Upper Green Lane, and first appears on the 1902 OS map with five rectangular kilns. The listing in Kelly's 1900 to 1908 editions reads Castle Brick Works, Birchills, Walsall, changing to Castle Brick Co. Upper Green Lane, Birchills, Walsall in the 1928 to 1940 editions. The works seems to have closed by the early 1950s. The brick was obtained from house renovations near Four Oaks Train Station.

#### HW

The letters H W were a mark of the Haunchwood Brick & Tile Co. Ltd. based at Stockingford, Nuneaton although bricks also exist with a full Haunchwood imprint. The No. 1 works opened about 1870 and closed in January 1971. Clay was first mined using shafts until the last one was abandoned in 1905 after which it was obtained from open quarries with a rope hauled wagon system. Works 2 and 3 opened later but were closed by 1939 and 1960. The works were connected to the railway system on the Birmingham to Leicester line with sidings that could deliver coal and remove the bricks until the late 1960's. This double bull-nose brick was found at the Clifton Road Postal Depot, Sutton Coalfield during renovations where it had capped a small safety wall beside steps leading up to the loading bays.

# **Commemorative bricks**





Over the years, many events have been celebrated by the production of special bricks. Two examples are shown but others exist for King Edward VII, the Charles and Diana wedding and for various commemorations of Queen Elizabeth II. Both bricks were probably made by Barnett & Beddows Ltd. at Aldridge.

#### 1837 - 1897 / Diamond Jubilee

This brick is only 2" thick and was made to be used as a paving brick. Donated by a person employed in demolition work.

# King George V / 1910

A number of these bricks were found among discarded bricks from the renovation of a house built many years later than 1910 at Willmott Road, Sutton Coldfield. The bricks were intended for creating windowsills with a sloping top and a drip grove on the underside but three courses of these bricks had been used upside-down to support a bay window in an otherwise flat wall. The builder probably discovered some old stock that suited the intended task. One brick was cleaned and returned to the house owner and has been built into a new wall with the imprint visible. Historians beware!

## **Trademarks**





Bricks with a trademark imprint can be difficult to identify unless examples of the trademark can be found associated with other material from the brickworks or company such as advertisements for bricks.

#### **Pressard**

Pressard is a trademark of the Aldridge Brick & Tile Company. This bull-nose brick was intended as a windowsill brick as seen by the drip grove under the rounded end. A row of these would be built into a wall to create the sill for an inset window with the drip groove stopping water from the window running under the sill and down the wall beneath the window. The brick shown was found at Willmott Road, Sutton Coldield, from a house renovation where they had been combined with some rectangular bricks to construct a round cornered chimney.

#### **Ellistown**

Ellistown Colliery & Brickworks was started by Joseph Joel Ellis in 1874. Building terrace houses for his miners, the area grew with the expansion of the company and soon became known as Ellistown, near to Coalville in Leicestershire, The colliery and brickworks were separated into two companies in 1936, with the brickworks closing at the start of WW2. The identification of the origin of these bricks was made easier by some being found with both an imprint of Ellistown and the trademark of the beaker marked with an 'E' on the same brick. This brick, together with one with the full name, were found at Cawarden Reclamation Yard.

#### **Durex**





In the early 1900's, Stanley Bros of Nuneaton opened a new works using clay extracted from the Newdigate Estate in the Bermuda area of Nuneaton.

It had only one function and that was to produce Blue Building Bricks and Paving Bricks. After becoming an important yard for the company, producing bricks 'well known for their excellence of colour, shape and durability', Reginald Stanley and the Company decided they needed a registered trademark that could be applied to their products to create a distinctive brand.

Although the exact explanation for the trademark is unknown, it is generally accepted that the Stanley Bros. catalogues provide the answer with the qualities of the bricks including both the words DURability and EXcellence. The 'Durex' trademark was accepted and approved by the Office for Patents, Designs and Trade Marks in London with the Certificate of Registration, No. 251663, being issued on 4th April 1903. Initially valid for 14 years from 22nd January 1903, later extensions kept it valid until about 1967.

The London Rubber Company later registered a similarly named trademark in 1929. This was permitted as the trademark was for a different class of items.

The grey brick, with one side white glazed for easy cleaning, was recovered from demolished toilets situated on the old market place on Newgate Street, Worksop, Nottinghamshire. The blue brick was found at Armthorpe, Doncaster, South Yorkshire.

# **Accidental Imprints**



Not all brick imprints are quite as intended. Handprints of the workers can be left in a soft brick when it was transferred to a drying area or boot marks where somebody has walked over soft bricks. Footprints of animals can be found on bricks, especially those of dogs that are often seen in photographs of groups of brickyard workers.

The photograph shows the footmarks of a deer that had walked over the soft brick before it was fired. The brick is only 60 mm thick and is probably a hand made Victorian brick. However, the bricklayer was not going to waste the brick but fortunately used it with the imprint side down that prevented the imprint getting filled with mortar.