

## BRICKS AND BELLS

The Society's first open meeting of 2023 was held in the Town Hall on 15<sup>th</sup> March. The topic of this illustrated talk was 'Wokingham's bricks and bells' – the history of two traditional local industries. Those present were treated to the wide-ranging knowledge, meticulous research and a plethora of visual images that John Harrison has assembled into his collection over the decades since he moved to Wokingham in 1967.

Chairman of the Wokingham Society, Peter Must, introduced a packed town hall to the Speaker. John is described on his website as a photographer, fell-walker, engineer, author, ergonomist, bellringer and more .... His website (<https://jaharrison.me.uk/>) is a fascinating and engaging source of reference information and photographs, which is commended for your further interest and use.

Brick making thrived in Wokingham during the 19th and early 20th centuries, with some brick works producing millions of bricks every year. The last of these brickworks closed in 1957.

Bricks are made from a mixture of clay and sand which is mixed with water to create the correct consistency. The clay mixture is then formed in moulds to the desired specification ready to be dried then burnt in the kiln. The properties and quality of bricks depend on the type of clay used. In this area, the clay was derived from the Bagshot and Bracklesham beds which overlay the London clay.

Permanent kilns were introduced as gradually more investment was made into the plant and so brick making became a more efficient process and the wasted heat was minimised. Hoffman (continuous) kilns were present in both Binfield and Warfield.

There were 33 brickworks in our local area. Five of these were known to be in Wokingham – one even included an advert on its roof which enabled it to be viewed by passing aircraft – such was the importance of brickmaking as a craft and business.

Several things influenced the size of bricks - the ability to carry them in one hand (so as not to be too heavy or awkward) as much as the ability to carry a large volume of them over the period of a working shift. There was a need to balance these two factors with the requirement to apply mortar with a trowel held in the other hand. The brick size needed to optimise the number of bricks required with the laying time and volume of mortar. If the bricks were too small a wall would need more of them together with more mortar which would take more time to lay it. This equation was further complicated in 1784 when the government imposed a brick tax. The tax was levied per brick, and brick makers responded by making much larger bricks, so fewer were needed for a given size wall and the tax was correspondingly less.

Brick work has been influenced by the changing needs of society, advances in technology and by fashions and fads throughout history of construction.

Thomas Lawrence of Bracknell (TLB) was the largest brickmaker in the area in the late 19th and early 20th centuries. He founded what became a huge and diverse business; He was a draper in Binfield in 1847, then he became a tailor and later a hatter. In 1861 he had a grocery and drapery businesses in Bracknell. By 1877 he was an agent for a bank and a wine & spirit merchant. He then added printing, fancy stationers, home furnishing, ironmongery, earthenware, china and glass to his interests. His empire grew further with a builders merchant, timber merchant and sawmills. In 1907 Lawrence's Stores had 200 assistants, 3 acres of floor space and branches in Ascot, Yorktown and Camberley, with Wokingham & Crowthorne added before 1911.

His company began making bricks in the 1860s and by 1893 had works at Swinley, Easthampstead, Warfield and Pinewood producing 12 million bricks a year between them. His bricks were identified by the distinctive TLB mark (which he also copyrighted) and marked with a shape code. Thomas Lawrence bricks were used by Madame Tussauds and Harrow College. As well as hand pressed bricks marked TLB the company produced machine made bricks. They were made at his biggest works at East Heath, off Molly Millar's Lane, Wokingham.



Before mechanisation, brickmaking was a seasonal activity. This enabled those that practiced it to also pursue other lines of work – this included the huge range of activities that occupied Thomas Lawrence that are listed above.

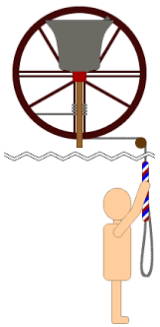
The way the bricks fit together in a wall is called the bond. It is this that creates the visible pattern on the surface of the wall. The Flemish bond is more common in England than in mainland Europe and the so called English bond is more common in mainland Europe than in England. During the transition between solid brick walls and the introduction of cavity walls, several hollow wall bonds were developed. These bonds were called 'rat trap' (because a rat could get into the spaces)!

John was able to illustrate how, with an interest in the observation of brickwork, you can find out what the shapes and patterns are called, learn why they are as they are and subsequently 'read' the stories that are written in the buildings all around us.

**Bells** - Church bells were cast in Wokingham between the middle of the 1300s until 1620. Although the Wokingham foundry is now long gone, some of the bells cast there are still in use. Bell-founding methods used today can be traced back to the way medieval founders worked. The principle of casting bells has remained essentially the same since the 12th century. Bells are cast mouth down, in a two-part mould consisting of the core and a mantle or cope that is placed over it. Molten bronze is poured into the mould. The mould is shaped for the bell's intended musical pitch. Further fine tuning is then carried out using a lathe to shave metal from the bell to produce a distinctive bell tone by sounding the correct harmonics. There is great skill in the ability to tune a bell.

People may not realise that behind the familiar sound of English style bell ringing there is a special way of hanging bells so that they can swing full circle (through 360 degrees).

Perhaps the best known Wokingham bell founder was Roger Landen. - Landen Close and Landen Grove being two streets named after him. The foundry used various marks (or inscriptions) over the years on its bells – including the lion's head. The foundry was not in fact on Bell Foundry Lane – it was almost certainly in the town centre - remains of foundry slag were found during excavating for the redevelopment of the area between Broad Street and the Waitrose supermarket. Bell Foundry Lane was previously called Bell Foundry Farm Lane – assumed to be the site of a farm owned the founders at some time.



While the physics of a swinging bell are relatively simple, to create a precision musical instrument that responds sensitively to the needs of the bellringer represents a considerable engineering challenge. This is made more obvious when one realises that the 'instrument' may weigh a ton or more.

The phrase 'ringing the changes' derives from bell ringing. Each pattern of the order of striking the bells is called a change. In order to 'ring the changes' all the variations of striking pattern are rung, bringing the ring back to its starting point.

Those who were present for this talk were treated to an insight into aspects of local history, traditional industries as well as a science lesson. A multi-faceted evening that all we all enjoyed. All those present were inspired by the immense amount of research that our speaker has undertaken and documented over the course of many years.