

WARWICKSHIRE

Industrial Archaeology Society

NUMBER 90 October 2026

PUBLISHED QUARTERLY

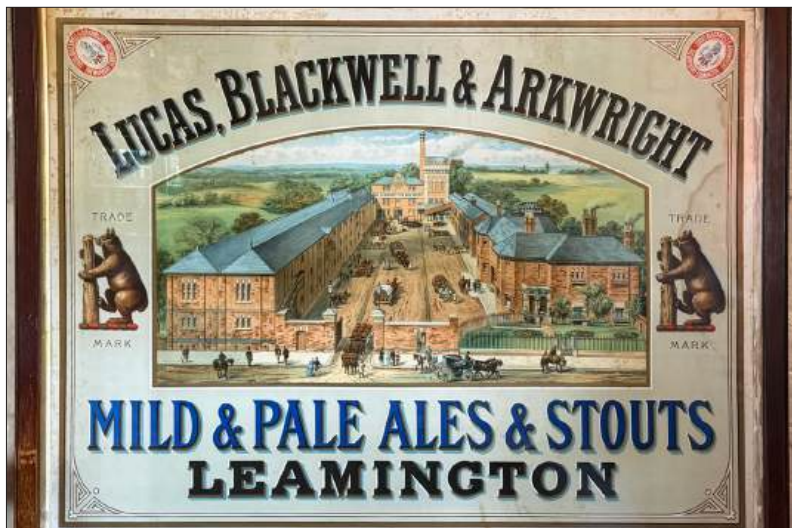
FROM THE CHAIRMAN

I thought I would take a break from discussions of the state of the industrial heritage movement, and the challenges that it faces, and reflect on some of the simple pleasures that the subject can give, sometimes in the unlikelyst of locations.

Over the many years of my involvement with the subject, I have always enjoyed the process of discovering all those nooks and crannies that might have some (occasionally dubious!) attachment to the industrial heritage of Warwickshire.

The unlikely venue for such a discovery was the Fry Gallery in Saffron Walden, home to the North West Essex Collection of paintings, prints, books and ceramics by artists who had lived in and around Great Bardfield and Saffron Walden, mainly in the inter-war years. Well known artists such as Edward Bawden feature strongly, but my eye was caught by the cabinets containing ceramics and other items designed by the artists. A Wedgwood mug designed by Eric Ravilious marking the movement of Wedgwood business to Barlaston; beer labels designed by Bawden for several northern breweries (including Warrington's Peter Walker 'Tenpenny Beer'); and the fullest information and illustration of labels designed by John Aldridge (*below, top*) for Flowers Brewery in Stratford upon Avon. With additional material on other designs it gave some insight into the painstaking effort taken to produce an illustration that customers might give only a passing glance. WIAS, in fact, have never had a talk on Flowers Brewery in Stratford, a gap probably that needs to be filled.

With so many breweries now no longer with us, some of that heritage is only retained via the thriving market for 'breweriana'. It is rare to find much original material in pubs but one notable exception in 'The Case is Altered' at Haseley, Warwick, providing not only the opportunity to sample a fine range of cask ales but some interesting memorabilia (*below, bottom*) from former Warwickshire breweries. Well worth a visit!



PROGRAMME

10 September (live/hybrid)

AGM and Twenty's Plenty.

8 October (live/hybrid): Roger Cragg

The Stratford & Moreton Tramway.

12 November (live/hybrid): Clifford Hill

The Life Story of a Spitfire: MJ627.

10 December (zoom): Maurice East

Detroit on Thames: The origins of car-making in Oxford and the rise of Cowley factory.

14 January 2027 (zoom): Dr. Malcolm Dick OBE

The Black Country in the Industrial Revolution.

11 February (zoom): Dr. Neil Dickinson
Arsenic: Its former uses and production in Cornwall & Devon.

11 March (live/hybrid): Members
Concrete Evidence: The Surprising Story of Winget in Warwick. A talk by WIAS Members based on the Research of Gordon and Anne Higlett.

8 April (live/hybrid): Tony Merrygold
Three Extraordinary Women in the History of Jaguar and Daimler.

13 May (live/hybrid): James Davies,
Lead Photographer, Historic England
Now the Dust has Settled - Recording Britain's Coal-mining Heritage.

3 June (live/hybrid): British Motor Museum

From Field to Factory: A Presentation by the British Motor Museum on the Development of the Gaydon Site.

NEWSLETTER

Meeting Reports

May 2026 (live/hybrid): Quintin Watt

The Rise and Demise of the Bromsgrove Guild - An Illustrated History of the Celebrated Metalworkers to HM The King.

Quintin began by challenging the audience as to whether they knew anything at all about the Guild - there was silence.

The Bromsgrove Local History Group got together in 1999 to research the Guild and this led to the publication of an illustrated history of which Quintin was the editor. However, they soon discovered that there was very little paperwork surviving. Apparently, after the firm went into liquidation, the last managing director had spent several weeks burning all the records. All that was left were photographs of their products now in the local museum.

Their best known products were the gates of Buckingham Palace and the Liver birds atop the clock towers of the Royal Liver Building in Liverpool. But there were many other important public items, such as the bronze doors to the Hall of Memory in Birmingham.

In the 1890s Walter Gilbert was appointed to teach at the Bromsgrove School of Art and, as well, to operate a commercial business making items for sale. Gilbert trained a staff of artists in sculpture, metalwork, wood and stone, stained glass, jewellery and plasterwork.

The inspirations for Walter Gilbert were John Ruskin, William Morris and Quintin's own teacher, Benjamin Creswick, all part of the late Victorian, Arts and Crafts movement. In his book *Bygone Bromsgrove*, Robert Pancheri wrote, "Looking back in hindsight on the story of the Guild, one can see that the brochure of 1907 marked the apogee of its rocket-like ascent, and from there on we see a scintillating decline." Perhaps it is more correct to say that the beginning of the 1914 war marked the watershed of the Guild's spectacular rise, with success funded by wealthy patrons. From 1945, post-war austerity and changing fashions led to its ultimate oblivion.

Quintin's own explanation included that the young men of Bromsgrove were not inclined to serve an apprenticeship in the crafts when close by the Austin car works were paying much more and it was clearly the future.

The Paris Exhibition of 1900 was the first time the Guild became known to the public. The British contribution was a replica of a Jacobean mansion. This was decried by the French as being hardly the cutting edge of 1900s design. However, the Bromsgrove Guild were given the job of furnishing and decorating one bedroom. This one room with its Arts and Crafts look was an exception and received a lot of praise. The furnishings were all bought by the Art Museum of Vienna, which the Guild were not slow in noting in their advertisements.

Although the Guild began by creating work in many forms including, for example, embroidery. They soon concentrated on stained glass and heavy metalwork. An early handbill with a list of workers had listed sixteen different media from Stencil Work to Sundials. The workers listed were mostly free-lance artists who Walter Gilbert called in for particular projects. It was a form of workers co-operative.

Gilbert managed to recruit craftsmen from abroad; a photograph showed eight of them including Celestino Pancheri, a particularly talented woodcarver. Another

picture showed William Leslie McCandish who joined the Guild to handle their financial affairs; he was known for assiduously travelling to wherever work was in progress to ensure standards were being met. He was also responsible, in 1906, for acquiring a substantial plot of land across the road from their limited site in central Bromsgrove. Sadly, there are few photographs of the inside of the workshops but one from c.1910 showed some 20 workers crowded in behind workbenches. It is thought that in its heyday the Guild might have employed as many as 150.

The most important project undertaken by the Guild were the magnificent gates for Buckingham Palace. Another slide showed Quintin's favorite, the Great Gates of Canada, further down The Mall at the entrance to Green Park. On a smaller scale the Guild made hundreds of figures of Joan of Arc after she was beatified by the Pope in 1909.

Another famous commission from 1910 were the two Liver Birds that sit on the clock towers of the Royal Liver Assurance Building in Liverpool. A slide showed them in the workshop and they are huge, at least twenty feet high. When in 1946 the fastenings holding them in place needed work, a letter was sent to the Guild asking them to send someone to repair them, the reply was that all the workers at the Guild were either too old or not brave enough to do the job.

A regular product of the Bromsgrove Guild were lead garden figures, planters and fountains. A fine example is at Morton Morrell. They also did work for the big passenger liners of the 1900s including plaster work and iron railings for the lifts.

In 1921 the Bromsgrove Guild became a limited company, Walter Gilbert left and William McCandish took his place. A new name was George Whewell who was in charge when the firm closed in 1966 and it was he who was responsible for burning all the records.

As the market for bespoke work diminished the firm turned to more mundane products such as fire places and grates. There was still a market for statues; for instance a six foot model of 'Hygiea' was priced at £150 in lead and £50 in granite stucco. An example is at Chequers. An unclothed figure of 'Terpsicore' was made for the Fortune Theatre in London in 1924. This caused a scandal as the building next door is the Church of Scotland.

Quintin showed many more examples of metalwork produced by the guild including very impressive doors for the ICI building and he apologised for having said little about their stained glass work. This he said could be the subject of another book. The chief Stained Glass Artist was A J Davies, as he said this was the place where the closest connection with the pre-Raphaelites was to be found.

By the 1930s the firm was struggling; their most notable commission of that time was the bronze railings etc. of the Twickenham Bridge over the Thames. After the Second World War there was very little business. One of the last commissions was the W G Grace Memorial at the Gloucester Cricket Ground in 1948.

Quintin had certainly kept us enthralled describing a highly skilled business that we had no idea about.

June 2026 (live/hybrid): Gary Wragg

The Making of Milestones. Hampshire's Living History Museum, from Conception to Completion.

Milestones began some fifty years ago when Hampshire Galleries Museum Service acquired a large number of traction engines and agricultural machinery from Taskers of Andover, a company well known for its steam rollers and traction engines that ended up producing lorry trailers but which had got into financial problems and put their whole museum collection up for sale. A trust was formed that managed to save twelve of the traction engines and steam rollers which were stored at the Hampshire headquarters. As more vehicles and other equipment including military hardware was acquired the store filled up.

At that time the museum service ran three museums, in Andover, Basingstoke and Christchurch, but none of these were suitable for the new acquisitions. However, a new site was found in Basingstoke and following the example of the York Castle Museum which had been set up in 1936, plans were developed. The concept for Hampshire was ambitious. A slide showed a plan of the proposed museum, with streets and shops recreated within a huge building. The original intention was to show three eras, 1800 to 1850, 1850 to 1918 and 1918 to 1945. Sadly, the cost of this was too high and the earliest period was abandoned.

Preparations included acquisition of all the materials to construct the replica buildings. The tram depot at Reading was being demolished and much of the material needed was acquired from there. To reconstruct the streets a huge number of granite sets were needed. These came from the redundant Reading gasworks and had to be cleaned before relaying. Tram tracks were found in Blackpool and a railway truck was restored. A team of volunteers was recruited to work on the restoration of the various engines. A slide showed a handsome restored 1908 Taskers engine.

To be able to restore the exhibits equipment was needed beyond the minimal already possessed by the museum service. For instance, a 12 1/2 ton lathe was obtained to machine the wheels as well as the flywheels of the traction engines.

Another vehicle that Gary showed was a 1903 Thornycroft car made in Basingstoke. It had been acquired at auction after returning from America in poor condition. One of its two cylinders was cracked, and the radiator was wrecked. The body had to be rebuilt, and Gary himself reconstructed the gearbox. It completed the Brighton run before being put on display.

The variety of items to be reconstructed was amazing. A squashed gramophone horn was shown 'before and after' – impressive. They wanted to create an ironmonger's shop; they had lots of small things but not enough. However, in Dolgellau they discovered a shop closing down; it was a treasure trove. Over three floors it had everything from antique locks to Rippingales paraffin cooking stoves still in their cardboard boxes. The problem was solved.

The Trust were given an 1880s hand operated fire pump but it needed total restoration. They acquired a brewer's dray from a lady who rang up and explained that she didn't know much about it but it was under a tin barn in her yard. Apparently, it had been used after WWI for a family to

live in while they built their house on the two acre plot they had been granted. It had been covered in a simple tin shed because the local authority would not allow caravans. Much of it was rotten and had to be replaced; the wheels had to go to a specialist wheelwright.

For the replica buildings in the streets the museum employed two joiners who made some 200 items - windows, doors and frames, including mahogany doors for the fire station. To complete the atmosphere, they called in the natural history people. A slide showed a model pigeon being carefully placed on the top of a wall. Elsewhere there was a snake and even slugs and snails.

On a different scale some items, besides the steam rollers and traction engines, there was a 12 cylinder Thornycroft marine engine. A slide showed this being reassembled. Another slide showed the score or so of mannequins that were needed to 'staff' the shops and workplaces. The Thornycroft works, before being dismantled provided a massive gantry crane.

The site of the new museum was part of the leisure park and if the new building was to have been just a giant shed it would have been an eyesore so the architects proposed making the new floor level 21 feet below ground level. This was very expensive but it made the whole scheme acceptable. 340 piles were needed to surround the site before the ground, which was solid chalk, could be excavated. The building has a single span curved roof covering some 7000 square metres, this was constructed and then rolled into position. The overall cost was £11.3m, of which £6.2m came from the lottery, the remainder from local funds.

Inside the replica buildings are timber framed and brick skinned, copying the various bonds and details of the buildings they were reproducing a total of 250 thousand bricks were needed. Most came from Reading gasworks. Finding wooden road blocks caused them some difficulty but suitable ones were obtained from Aldershot barracks. Lampposts came from Kent and kerb stones from Aberdeen. Buildings include a saddler's shop, a jewellers, a hairdresser and tobacconist, a railway station (GWR of course) all looking very convincing. The pub is genuine; it has beer for sale.

The lampposts caused a problem as the floor of the building has a membrane which could not be pierced so the normal bottom three feet of the post had to be cut off and the post fitted to a flat plate. The two main Hampshire builders of steam engines, Taskers and Wallis & Stevens are represented by machines as if they were at an agricultural show.

In the 1930s section amongst many more there is a sweet shop, a cycle shop and an electrical wholesaler. The roads are tarmacked. A typical 1930s building houses a car saleroom, a gramophone and record shop and a photographic shop. The building has Crittall windows.

The whole fit out took just nine months and it was opened by Prince Phillip in December 2000.

It had been a fascinating account of a prodigious project by the man who had been the prime mover of the whole scheme.

September 2026 (live/hybrid): Members

AGM followed by 20s Plenty: *The History of the Sewing Machine, Railway Engineer William Alexander and Coir and the Silk Road.*

This evening was a three barrelled event, **Pam Neave** opened with '*the History of the Sewing Machine*'.

Pam began by explaining the two basic stitches used by sewing machines. Chain Stitch uses one single continuous thread but has the disadvantage of coming undone easily. Lock Stitch uses two threads, the threads lock in the middle of the fabric and the stitch looks the same on both sides, which is more secure. This was developed between 1845 and 1855.

Thomas Saint developed a chain stitch for leather in 1790 and Barthelemy Thimonnier devised a treadle version in 1830 which the Parisian tailors revolted against. Walter Hunt, a prodigious inventor, produced, but did not patent, the first lock stitch machine in 1834. A chain stitch machine produced by Charles Judkins in 1851 was the only British made machine at the Great Exhibition. This could sew 500 stitches per minute. In the same year Issac Merrit Singer produced his first design, thought by many to be the first practical machine.

Grover and Baker produced a double chain stitch machine in 1851 and an improved version in 1871. Half a million of these were sold. James Wilcox saw an advertisement for this machine in 1855 and, in partnership with the Gibbs brothers, made a lightweight version which became very popular.

Meanwhile Singer was concentrating on the domestic market and in 1856, his partner, introduced 'hire purchase' to make his machines more affordable. His design of 1858 sold four million machines over 20 years.

A slide of a handsome Howe machine of 1888 typifies the decoration common at the end of the 19th century. The sewing machine has affected the economy of the whole world. It is said to be the most widely used equipment ever and, after the clock, the most complex.

The basic design did not change much until the 1960's when the introduction of man-made fibres necessitated a more flexible machine such as zigzag or swing needle machines to cope with stretch fabrics. A final slide showed a Pfaff machine which, among many other talents has 873 built in embroidery designs and costs £15,000.

Roger Cragg followed with '*An introduction to William Mackenzie, Railway Builder*'.

Roger began by saying that this was indeed just an introduction as to do the man justice would need a whole evening. Except for the bare list of what he did very little was known about the man until, in 1990, a hitherto unknown collection of papers including 1000 drawings and several diaries was bequeathed to the Institution of Civil Engineers by his great niece. These had been stored away in outhouses and sheds since he died in 1851 and much of it was in poor condition. However, the diaries from 1840 to 1850 were recoverable and they were published by the ICE in 2000 followed by a biography by David Brooke.

Born in 1894 in Lancashire, the eldest of eleven, he began by working for Thomas Telford on the completion of the Gloucester and Berkely Canal. He was then appointed Resident Engineer on Telford's Mythe Bridge at Tewkesbury. Next, he worked on Telford's Birmingham Canal's Main Line which included, probably, the largest earthworks in the world at that time.

Following this, Mackenzie contracted for the 2,230 yard tunnel extending the Liverpool and Manchester Railway from Edge Hill to Lime Street in 1835. Other railways followed and in 1840 Joseph Lock invited him to tender for the Paris to Rouen railway. This he did, in partnership with Thomas Brassey, and this arrangement with Brassey continued almost to the end of Mackenzie's life. David Brooke's biography of Mackenzie sees him as the senior partner and indeed he was older and had much more experience. A map showed other railways built by the partnership in France including Orleans to Bordeaux, Rouen to Havre and Rouen to Dieppe, all very profitable.

There were some problems, the best known being the collapse of the Barentin viaduct in January 1846. However, the partnership immediately rebuilt the structure without quibble, all at their own expense, taking just nine months.

Back in Britain, he continued his partnership with Brassey building parts of the Cheshire and Holyhead railway, the Great Northern Railway and the Caledonian Railway. His last project was the Barcelona and Navarra Railway.

Roger finished his talk by noting that this had been a very brief account of an extremely important railway engineer about whom, until recently, very little was known.

Dave Daniels concluded with '*Coir and the Silk Road*'.

His first slide showed the family on a canal, part of extensive waterways that run behind the coast in Kerala in Southwest India. In the background were coconut trees and bales of coir, the fibre between the skin and the coconut itself.

Much of the coir is twisted into rope used locally for all sorts of things. White coir comes from unripe coconuts. The outer husk is removed and the fibre is 'retted' by leaving it in salt water for up to a year. This leaves only the useable fibre which can be extracted by beating with mallets. Modern factory processes can reduce the retting to just a week. Next, they grade the fibres into short and long lengths and dry them before weaving the rope.

Ripened coconuts produce brown coir which is rougher and more brittle and is further processed to make mats or as compost.

Kerala produces 40% of world coir exports and 60% of white coir amounting to 6-800,000 tons annually, employing some 700,000 workers. It has been a major export of India since the middle of the 19th century.

Coir floats and is highly resistant to sea water making it ideal for fishing nets. There is a long history of its use in boatbuilding where the planks are sewn together using coir rope. Arab dhows were built this way and a slide showed a large dhow under construction. This would last some 80 years, twice as long as a modern steel version.

India has been exporting spices possibly as early as 3,000 BCE. The Indians of the Malabar coast had the ships and the knowledge to navigate them.

Dave contended that the sea route was much more important than the better known land 'silk road' for the export of goods from Asia to Europe. This was illustrated by the Belitung shipwreck. Discovered in 1998, she had sunk in the Java Sea about 630 AD. She contained about 60,000 objects, largely Chinese ceramics but also gold and silver. She was a dhow, 60 feet long, built in India, with planks stitched with coir.