

North East Derbyshire Industrial Archaeology Society



NEDIAS Newsletter No. 93 – February 2024
Price: £3.00



The Mills at Pleasley Vale and the story of Viyella *Cliff Lea*

In 1784 a partnership of five people including Henry Hollins purchased 15 acres of land at Pleasley Vale on the Derbyshire/Notts border at the site where George Sitwell of Renishaw had developed iron forges. There were said to be two forges and a corn mill in the area. The River Meden cut steeply down through the valley offering many opportunities for water power.

The Hollins partnership was to build Pleasley Vale Mills, the Upper Mill (on the old corn mill site) started spinning by 1785 and the much bigger Lower Mill by the 1790s, The workers' housing was built by 1792 and steam power introduced in 1830s.

The Pleasley Vale Mills were just two of the hundreds of cotton spinning mills which sprang to life very quickly after Arkwright's cotton spinning technology had opened the market up. The Hollins family ran these mills for many years from the early 1800s. Later in the century they were mopping up the competition, purchasing Charles Hill's quite successful cotton company which operated out of Via Gellia Mill, but had not only been renting Arkwright's second mill at Cromford, but part of the Strutt's Milford Mill.

At the time Hill had also been spinning merino wool. Much later between 1889-1891 William Hollins & Company's James Sissons was experimenting in production of a new yarn, invented in 1893 and later finalised as 55% merino and 45% cotton. When the merino/cotton thread was woven with a soft twill weave it was christened as "Viyella" – a name springing from the contraction of the Via Gellia" road, a name itself coined much earlier by Philip Gell. Viyella was registered as a brand name in the early 1890s – said to have been the very first textile in the world to be known by a brand name.

The business became a household name, and after mergers in the 1960s, Viyella became one of the



<https://www.facebook.com/nediaschesterfield/?fref=ts>

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most successful textile companies in Britain with over 40 factories across the country. Do you remember the later trade names, Coats Viyella, Carrington Viyella?

But the Pleasley Vale Mills which spun Viyella as well as the company’s other factories here in Britain were closed down by the end of the 1990s, with production moving to the far east - a familiar story. At Pleasley Vale the first workers housing of 1792 had been demolished by 1961, to be followed by the school, the baths and the Mechanics Institute, and of course the mills had closed. It was the destruction of a community. The site is now a business park, for many workshops and offices.

It’s just as well that for the 100 or so years before the emergence of 21st century, coal mining had become King in the Pleasley area. But Pleasley Colliery itself was closed in the 1980s, 40 years ago. I think it’s magnificent that the community has managed to rescue the two steam winders on the surface and the magnificent brick chimney and their museum is on the local tourist track.

I’m in awe! Where would we be without community minded volunteers? They have my hearty congratulations.



Photos: Cliff Lea. Pleasley Vale in November 2023, now a rather picturesque business park.

Dates for your diary



NEDIAS Lecture Programme

Meetings are held at: St Thomas’ Centre, Chatsworth Road, Brampton (opposite Vauxhall/ Bristol St Motors) S40 3AW. There’s plenty of parking in their own car park, including disabled spaces, as well as on-road parking in front of the Church. All meetings commence at 7:30pm.

Monday 12 February 2024	Hugh Potter: “The Cromford Canal – new perspectives from the photo archive.”
Monday 11 March 2024	Dr Stephen Walker: “History and operation of the historic Papplewick Cotton Mills “
Monday 8 April 2024	Dave Mullen: “Copper Mining at Alderley Edge”
Monday 13 May 2024	DAVID WILMOT MEMORIAL LECTURE Nick Wheat: “The Glory days of Steam”

Other Diary Dates

Monday 19 February 2024	<p>The Newcomen Society, South Yorkshire, Kelham Island Industrial Museum, Alma Street, Sheffield S3 8RY. 6:30pm.</p> <p>Michael Bailey: Progress in Design and Manufacture: The Steam Locomotive 1825-1830</p> <p>Eventbrite: Free Online Admission—Booking essential for the online talk – Tickets available from 1/12/2023</p>
Thursday 22 February 2024	<p>Brimington & Tapton Local History Group, Brimington Community Centre, High Street, Brimington, S43 1DB. 7:30pm.</p> <p>John Knowles and the Brimington Moor Ironworks. – Philip Cousins</p> <p>Brimington Moor Ironworks, etc. Some people will know about the former blast furnace on Manor Road, based around the aptly named Furnace Farm. But when did it operate and how large was it? In this talk Philip will examine its history and that of its operator - John Knowles - a now forgotten north Derbyshire railway contractor.</p>
Sunday 17 March 2024	<p>Derbyshire Historic Buildings Trust – Barry Joyce MBE FSA will lead a tour of historic Wirksworth, linking places in the town associated with some of the individuals who played a role in the burst of innovative activity we call The Industrial Revolution. 2:00pm St Mary's Church, Wirksworth.</p> <p>https://www.eventbrite.co.uk/e/tour-of-historic-wirksworth-tickets-827135934847</p>
Sunday 24 March 2024	<p>If you've yet to attend a tour of Wingfield Station following the completion of the restoration project, book a free place now. Still space available on Sunday 24th March 11am/1pm and Sunday 21st April 11am/1pm.</p> <p>https://www.eventbrite.co.uk/e/wingfield-station-timed-tours-tickets-757236132657</p>
Tuesday 26 March 2024	<p>The Newcomen Society, South Yorkshire, Kelham Island Industrial Museum, Alma Street, Sheffield S3 8RY. 6:30pm.</p> <p>The Ken Barraclough Memorial Lecture - Viktor Macha – The Beauty of Steel Project.</p> <p>This is a joint meeting with the Sheffield Metallurgical and Engineering Association and the South Yorkshire Industrial History Society. Zoom link - https://us02web.zoom.us/j/82824786912 – Zoom webinar ID 828 2478 6912</p>
Wednesday 27 March 2024	<p>A collaborative event between the Arkwright Society and Belper North Mill. Solidarity: Working Class Organisation in the Derwent Valley 1800- 1850.</p> <p>Roger Tanner will tell us about his latest research into the lives of the working people of Belper and Cromford.</p> <p>Location: Gothic Warehouse, Mill Lane, Cromford.</p> <p>Doors open at 7:00pm with refreshments available, (talks start at 7:30pm).</p> <p>Tickets are £5 per person – https://www.cromfordmills.org.uk/highlighting-heritage/</p>
Sunday 21 April 2024	<p>If you've yet to attend a tour of Wingfield Station following the completion of the restoration project, book a free place now. Still space available on Sunday 21st April 11am/1pm.</p> <p>https://www.eventbrite.co.uk/e/wingfield-station-timed-tours-tickets-757236132657</p>
Monday 22 April 2024	<p>The Newcomen Society, South Yorkshire, Kelham Island Industrial Museum, Alma Street, Sheffield S3 8RY. 6:30pm.</p> <p>Phil Judkins – You'll Believe a Man can Fly</p> <p>Zoom link - https://us02web.zoom.us/j/82989814572</p> <p>– Zoom meeting ID: 829 8981 4572</p>
Thursday 25 April 2024	<p>A collaborative event between the Arkwright Society and Belper North Mill. History and Restoration of Wingfield Station</p> <p>Peter Milner, Project Manager for the restoration of this historic building will talk about why it is so important and how it was restored.</p> <p>Location: Number 28 Market Place, Belper</p> <p>Doors open at 7:00pm with refreshments available, (talks start at 7:30pm).</p> <p>Tickets are £5 per person – https://www.cromfordmills.org.uk/highlighting-heritage/</p>

NEDIAS VISITS

Behind the scenes at Chesterfield Local Studies Library - Wednesday 5 June, 10:00-11:30am

Many of us are doing our own research at the Local Studies Library, but do you sometimes feel as frustrated as me with the changes that have taken place over the last ten years. The staff however are always so helpful, and I've arranged with the Local Studies Librarian, Catherine Moorcroft, to show us what's new, where to find things. During an hour or so visit she will outline:

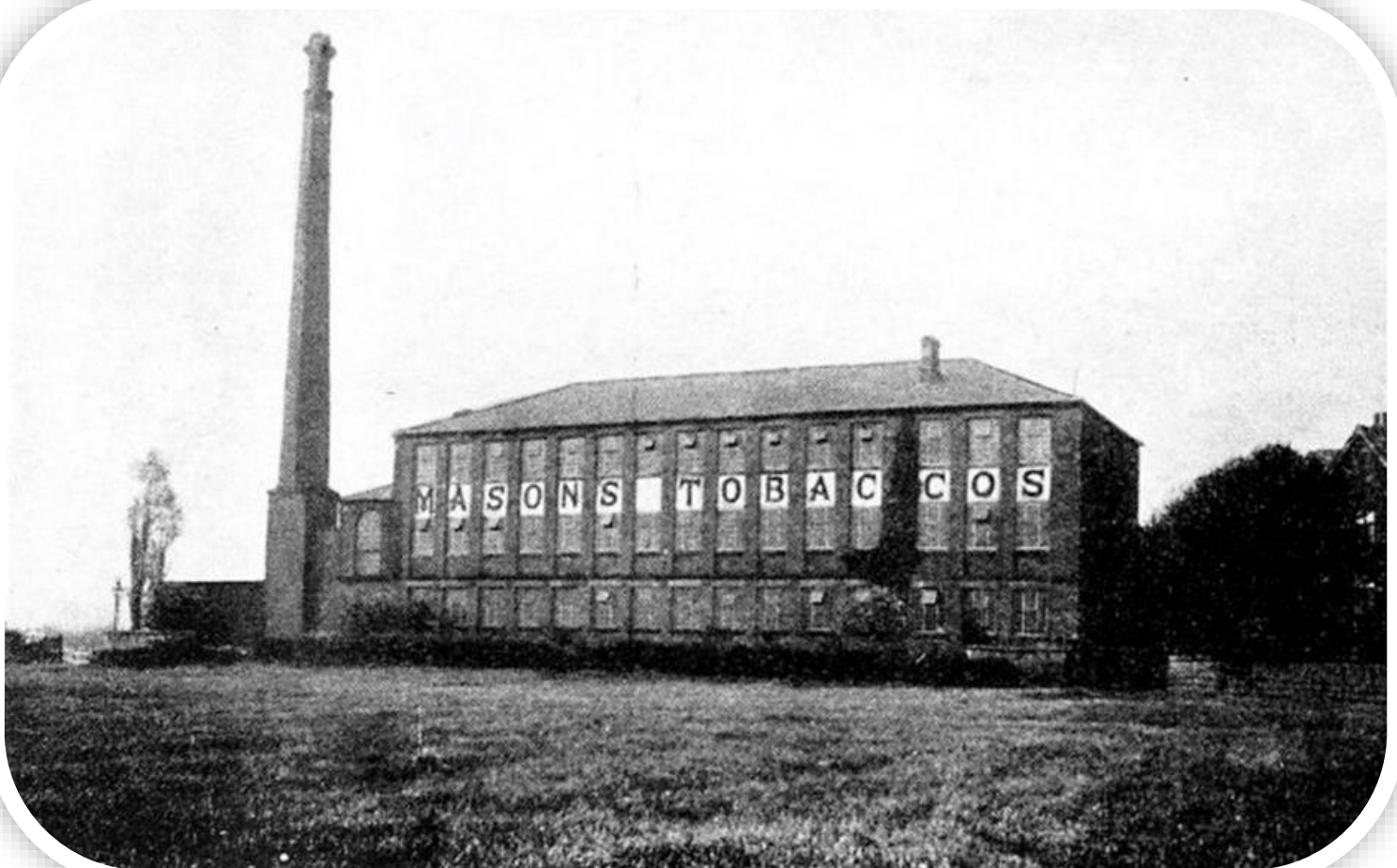
- How the local studies section has changed, and how local studies library links into the County Archives at Matlock
- Where things/subjects are to be found
- What local papers/magazines/journals/periodicals they have that would interest NEDIAS, how and where they are indexed and accessed
- How do we access Library stock references at home
- How easy is it to obtain copies and photocopies

Interested? Numbers limited, sign up on the visit sheet at next meeting to book your place

Spital Mills History – part 2

Derbyshire Victoria County History

This is part two of our history of 'Spital Mills' – more recently known as the premises of Spital Tile. This time we look at the mill as a centre of tobacco manufacturing.



*Spital Mill as pictured in the c. 1899 'An illustrated guide to Chesterfield'.
By this time it is occupied by Mason's tobacco factory.*

In the early 19th century George Mason, born at Cutthorpe (in Brampton) in about 1794, was a tobacco manufacturer in Chesterfield, with premises at 45–47 and 49–51 Low Pavement (either side of Wheeldon Lane). Here he had a works powered by a horse-gin, making cigars and twist tobacco. He was employing six men in 1851.

Mason died in 1854, leaving personal estate of £4,000, when the business, henceforth known as George Mason & Son, passed to his second son Edwin, born about 1829. He was living with his wife and family in Mason's Yard, behind Low Pavement, in 1861, when he had 15 men, ten girls and two boys working for him.

A few years later, as the business grew rapidly, Mason moved to the former lace mill on Spital Lane – our Spital Mills and bought Spital House as a residence. By 1871 he had 116 employees at the tobacco works.

Edwin Mason died in 1887, leaving personal estate of £44,030. He was the sole owner of George Mason & Son, which was described as one of the largest tobacco manufacturers in England. He concentrated on business rather than engaging in public affairs, and was 'retiring and unambitious'. In the 1880s the company was said to employ more young women than any other concern in the town.

MASON'S TOBACCOS ARE THE BEST.

MASON'S GOLDEN VIRGINIA FLAKE
Manufactured from the Finest Bright Tobacco grown in Virginia, is sweet, mild, and cool smoking.

MASON'S SMOKING MIXTURE.
Is blended with great care and judgment, and as a well-flavored Tobacco is unexcelled.

MASON'S BIRD'S EYE.
Put up in tin and tin. Lends a fine Tobacco, sweet and mild, delicious flavor, equally good for Pipe or Cigarettes.

The above Tobaccos may be obtained at 4d. per oz., of all dealers in the County.

Wholesale of GEORGE MASON & SON, CHESTERFIELD.
Who will forward Show Cards and Price Lists to the Trade on application.

One of a short series of half-page advertisements in the Derbyshire Courier – this one from the edition of 28 June 1887.

Edwin's two sons, Oscar Edwin and Charles Leonard, succeeded to the business just as tastes were changing and the demand for twist tobacco was falling. They tried to move into cigarette making, advertising repeatedly over two years in 1892–4 for 'up to 40 respectable young girls' to learn the 'clean and light work' involved. They also, immediately after their father's death, rather extravagantly took a half page advertisement in the Derbyshire Courier for several weeks to promote the company. Their final undoing was the creation of a tobacco combine by the larger British firms, in an attempt to meet American competition. Masons were not included and found their old markets closed to them.

WANTED a few respectable GIRLS, age between 14 and 15 years, to learn Cigarette Making.—
Apply to Messrs. GEORGE MASON & SON, Spital Mills, Chesterfield. 2834.

Advertisement in the Derbyshire Times, 6 February 1892.

Another reason for the decline of what was clearly a very successful company in their father's day appears to be loss of interest on the part of his sons. Oscar initially lived at Spital House but, after the estate was sold to the Lancashire, Derbyshire & East Coast Railway in the early 1890s, moved to Dunston Hall (in Newbold), where in 1901 he was employing a governess and eight servants, several more than his father ever had.

Oscar remained at Dunston Hall until he died, aged only 45, in 1903, when he left a modest £1,283. An obituary made no reference to his business career, but described him as an enthusiastic sportsman.

Oscar died after returning home early from a race meeting at Doncaster; he and his family were then staying at Bridlington (Yorks.). Many years later it was said that he had 'always been largely interested in racing and sport'. His widow Mary Ann died at Frimley (Surrey) in 1936.

The business came to an end soon after Oscar died. In 1901 both he and his brother Charles, who was then living with his family, a governess and three servants in a house in The Crescent, Scarborough (Yorks.), gave their occupation as tobacco manufacturer, but Charles was a 'late tobacco manufacturer' in 1911, when the family were living in rooms in Cheltenham (Gloucs.) with no servants.

Charles later lived at various places on the South Coast and died at Portsmouth (Hants.) in 1935, leaving personal estate of just £20.24.

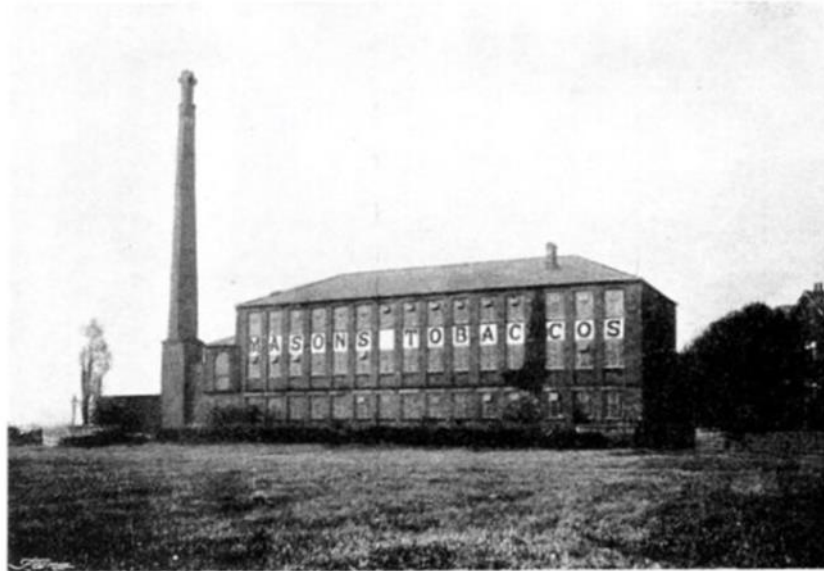
This brings to a close the tobacco manufacturing story of Spital Mills – but there is more to come in our next post.

Messrs. George Mason & Son,

TOBACCO MANUFACTURERS,

SPITAL MILLS, CHESTERFIELD.

To the almost universal consumers of tobacco in one or other of its various forms of manufacture, few names have a wider celebrity than that of Messrs. George Mason and Son, whose specialities and proprietary brands have one of the largest circulation in the Midlands, and are quite as favourably known to smokers of every degree in most of the counties of England and Wales. This important local industry was first established in Chesterfield early in the century now drawing to its close by the late Mr. George Mason, grandfather of the present proprietors, and has since been steadily and progressively developed until it ranks among the largest tobacco manufactories in the kingdom. The handsome and imposing block of buildings, standing in grounds of over two acres in extent, is a



prominent feature as seen from the Midland, Great Central, and Lancashire, Derbyshire, and East Coast Railways, and in point of arrangement and perfect equipment form a model establishment for the purposes of a large and continuously increasing business. Large additions have been made to the premises from time to time, while the firm have consistently kept pace with the latest improvements in plant and appliances, which are constantly augmented by the introduction of new labour-saving machinery whenever opportunity arises. Messrs. Mason and Co. import the leaf direct from the chief producing centres of the United States, of which they hold immense stocks in the bonded warehouses and duty paid in their own stores, the amount thus contributed to the national revenue forming a very large item in the annual returns. One of the earliest specialities introduced by the firm, and for which they have been noted for over half a century, is their hard tobacco in the form of Irish roll and pigtail, these articles still commanding a large sale in the country. Among the first to recognise the future importance and volume of trade to be done in the packet tobaccos, Messrs. Mason and Son have since popularised a great number of brands, of which their hand-cut Virginia, smoking mixture, golden Virginia flake, gold flake, honey dew, and bright Virginia flaked honey dew are as familiar as they are widely appreciated by the public, and in a more recently-established department cigarettes are manufactured literally by the million, and packeted in qualities and blends to suit the taste of every smoker, in the favourite Virginia hand-made "Golden Days" and "Standard Gold" varieties. An extensive range of attractive and artistic labels has been designed as the registered trade marks of their numerous brands of tobaccos and cigarettes, giving a distinctive and effective advertisement of these popular and very widely disseminated specialities.

ABOVE: The full entry for the tobacco factory from the c. 1899 book
'An illustrated guide to Chesterfield'.

This text is a slightly edited version of that appearing in Derbyshire Victoria County History's book 'History of Hasland', which is now of print, but you can find copies in Chesterfield Local Studies Library. All sources are fully referenced in their book.

Have you heard of Fanny Kemble, aka Mrs Robert Arkwright, of Stoke Hall, Calver, and Sutton Scarsdale Hall?

(Robert A was one of Sir Richard A’s grandsons).

RIGHT: This sketch of her was commissioned by the 6th Duke of Devonshire from artist Sir George Hayter – he used it in a tribute to her after her death in the late 1840s.

Frances was born in Edinburgh into one of the most well-known families of theatrical impresarios, theatre managers, actors and musicians in Georgian and early Victorian times, a family whose theatrical talents stretched over 4 generations. You may have heard of the great actress Sarah Siddons, she was Frances’ aunt.

And in the painting below by George Hayter you can see a scene from Shakespeare’s “Henry VIII” , staged at Covent Garden in a theatre managed by Frances’ father and where 4 members of the Kemble family take the prime roles, including the great Sarah Siddons as Queen Catherine (of Aragon) and Frances’ father as Henry.

Frances came to live in our area because she married Robert Arkwright (1783-1859), one of Sir Richard Arkwright’s grandsons. So how and where did Robert meet an actress?



Robert Arkwright (1783-1859) like most of the later Arkwright boys in this now-fabulously rich family was educated at Eton, followed to Trinity College Cambridge and often became officers in one of the Guards regiments, the 11th Hussars. At age 21 in 1805 Captain Arkwright was detailed to take a Militia up to the north-east coast, in readiness for a potential but unlikely invasion on that coast by the French. It's likely there was little to do, and it's said that with a fellow officer boredom was broken by visits to productions in theatres in Newcastle and Durham. It's equally clear that he became besotted by one of the actresses, Frances Kemble who at the time lived in the area - her father whom you can see in the Henry VIII production, was now manager of the Theatre Royal, Newcastle.

In those days, all classes of society went to the often bawdy theatre, not just the chattering-classes. Actors and actresses were the stars and celebrities of the day, just as loved and talked about as today's TV, movie and pop stars. They were written about in the cheap fly-sheets, and news of their activities spread to a highly interested public by travellers – news of their activities eagerly welcomed.

Very quickly, news spread to the Arkwright family at Willersley Castle, Cromford, that Robert had married an ACTRESS - great heavens above!! His older brother was sent up north to suss out the reality, but he was too late.

Frances' niece in her own autobiography a few decades later gave us a brief snapshot of Frances' character in her later teens. She wrote of an instance when the young Frances and a cousin were returning home, galloping along on the top of a poste-chaise after performances in Newcastle. On the long journey she was entertaining travellers they overtook and in villages they passed. She was dressed in one of the costume props, a soldier's uniform and with her cousin acting out a humorous tale of them as runaways, running away from home to be wed; one can imagine the dialogue, and delight from the public, most would have known her or known of her. It must have been just a year or so after this that Frances and Robert were to wed in secret.

Robert returned to Derbyshire with his new bride, initially to live in Stoke Hall at Calver, later moving to Sutton Scarsdale Hall, both having been purchased by Robert's father. (His father had acquired many great estates around England as he moved much of his textile money into bricks-and-mortar in the early 1800s)

So what of the early shame in the Arkwright family? As the family were to discover, Frances, was an incredible catch, a superb hostess, musician, composer and conversationalist. She was to capture the hearts of the Arkwright family. She was developing friendships with other musicians at the time, but also with poets and writers, setting their ballads and poems to music, the ballad much welcomed then in theatres– and she was working with Sir Walter Scott, Wordsworth, Shelley and others. Sir Walter Scott described her as *'the most beautiful composer and delightful singer I ever heard without exception'*.

The Creation of The Clay Cross Company

Martin Allen

It was a lucky day for George Stephenson on 2nd February 1837, when the excavation of Clay Cross railway tunnel commenced. He was the Engineer as well as the Contractor, engaged in building the North Midland Railway from Derby to Leeds and therefore he was entitled to possess any minerals or other materials encountered along the way.

The first steps in building the tunnel were to excavate six vertical shafts, sunk along the alignment of the tunnel. From these, twelve horizontal headings were begun towards both portals, where two more headings were in progress. The traditional method of assuring the correct alignment of a tunnel was to lower heavy plumb bobs, one down each shaft. Then, within the adjoining headings, three labourers with hand-held "ranging rods" (wooden staves) would position the rods vertically to be aligned by sight with each other, together with the plumb bobs, thus indicating the correct orientation of the tunnel. The minimum working width of the headings at this stage, only needed to be sufficient to allow two wheelbarrows to pass each other. Any serious errors in the alignment could then be easily corrected when the headings were subsequently widened out to the full double track width. The vertical shafts could be permanently lined with bricks or stone blocks and in due course, become perfect ventilators to disperse the smoke from the locomotives.

It was quickly discovered that below ground a rich seam of coal existed, together with an outcrop of good

quality iron ore. The grade of coal in particular was found to be very suitable for the production of coke. This indispensable mineral was used exclusively in the steam locomotives of the day, as well as being a vital ingredient in iron ore production. The length of the tunnel at Clay Cross was 1,784 yards (1.63km) and it took nearly two years to build. Although the completion of the railway in its entirety was more than three years away, its financial success was already assured based on the potential traffic that these minerals would generate. Henceforth, the tunnel symbolised the coming of the railway and thus a lifeline to the success of the district. The North Midland route was initially completed as far as Masborough and opened on 11th May 1840, where the line met the Sheffield and Rotherham Railway. The stone carved portals of the tunnel are especially elegant and today, are “listed” as Grade Two.



The northern portal of Clay Cross Tunnel (Wikipedia)

Coal was already being mined in the area in a small scale, prior to the arrival of the railway. Packhorses were used to transport the coal on a turnpike road that had been opened in 1756, to serve nearby Sheffield and Derby. However, supplying the demand for coal from further away by such means was simply not feasible. What was needed was the generation of employment for local workers to exploit the minerals and better communication, which the new railway was to provide. From the early days, the district centring on Clay Lane held the monopoly in local coal supplies, as competition from the neighbouring South Yorkshire coalfield was not to be fully developed for another twenty years. With the completion of the railway, there followed the development of local industry and consequently the growth of the town that was to become known as Clay Cross, had begun.

When established in 1839, the founding company was named George Stephenson and Co., with the principal aim to develop the local mineral wealth, especially coal, iron ore and limestone. The members of the board of directors were, George and his son Robert Stephenson, George Carr Glyn (Lord Wolverton) as Chairman, Sir William Jackson J.P. and Sir Joshua Walmsley, the Member of Parliament for Leicester. Stephenson’s son-in-law Charles Binns (who was also Stephenson’s private secretary), became the works manager. George Hudson the “Railway King”, William Jackson and Joseph Sanders were the financial backers, with Samuel Morton Peto MP and Edward Betts as construction advisors. The last two named were also partners in the firm of Peto, Brassey and Betts, a well-known railway contracting company of the day.

George Stephenson had also approached the owner of Cliff limestone quarry, close to the village of Crich and therefore a convenient source of track ballast. It was agreed that Stephenson would be granted a 50-year lease on the quarry, with the intention of extracting the limestone. It was served by a narrow gauge “plateway” of 3’6” (1067mm) gauge, with cast iron edge rails of 3’0” length (915mm), set onto stone blocks as sleepers. The total length of the route was one mile 440 yards (2.011km) long and included a steep incline down to the basin on the Cromford Canal at Hag Farm, near Bullbridge. The wagons were moved in rakes by horsepower but upon reaching the top of the incline, the horses were unharnessed, and the wagons simply released. Some skill was required in controlling the descent of the wagons, with brakemen either running alongside and thrusting “sprags” (wooden brake sticks) between the spokes of the wheels to slow the descent, or riding on the wagons and applying lever brakes. The local newspapers of the day often recorded tragic events in graphic detail when fatal accidents had occurred. After unloading, the empty wagons were hauled back up the incline by horses at a more leisurely pace, up to the quarry.

By agreement, this plateway was completely reconstructed and extended under Stephenson’s direction. The original meanderings of the first plateway alignment largely followed the natural contours of the land. The route was improved by straightening out the curves, which involved building new cuttings and embankments with stone faced retaining walls. The iron edge rails were replaced with lightweight bullhead rolled steel rails

and at the same time, the track gauge was altered to 3'10½" (1180mm). The line was then operating with steam locomotives with the incline portion using cable haulage. The incline itself was double track, operating with two loaded and two empty wagons on adjacent tracks which were connected to each other by the hauling cable via. a large diameter horizontal pulley wheel and thus counterbalanced, with the descending loaded wagons pulling up the empty ones. No evidence of the trackwork remains in situ today, although much of the route is largely still discernible on the ground. Following closure, the bullhead rails were all sold and lifted for re-use by the Talylyn Railway Preservation Society and removed to North Wales. The most notable surviving feature is Fritchley Tunnel, however for safety reasons the portals are now blocked off. Famous for being officially the world's first railway tunnel, it has been previously debated in Vignoles number 34. After the ballast extraction for building the North Midland Railway had been achieved, the quarry served a bank of 20 lime kilns next to the Cromford Canal at Ambergate, which were in operation from 1841. By necessity, limestone then had to be found from further away, such as the quarries in the Matlock district served by the canal. The Ambergate kilns finally closed in 1966 and today, the quarry at Crich is now home to the National Tramway Museum.

The Company had built homes in and around the village then named as Clay Lane, initially for the tunnel navvies and later, as they sank the new colliery workings, for the miners and their families. Nearly four hundred houses were initially built, and they were praised at the time for each having four rooms instead of the more usual two. The company produced all their own bricks, when the first brickworks was installed within the main works. Later, this was replaced by a larger brickworks next to the railway, using modern kilns with a capacity of five million bricks per year. The rapidly expanding town was provided by the Company with all its needs for gas supplies and later, electricity generation. The larger properties included Hill House, built in 1833 and acquired by the North Midland Railway in 1837, to become the office of their Resident Engineer, Fredrick Swanwick. In 1840, the Company built Eldon House as its main office headquarters. The largest house in the town was named Clay Cross Hall, which was built in 1845 for the company's General Manager, Charles Binns. It later became the home of the Jackson family, when Sir William took over the running of the Company from 1871 until 1974. By 1846 the population of the area had reached almost 1,500. As the company prospered, the population of the town grew so by 1857, there were 2,278 inhabitants recorded. Apart from domestic housing, a school, two churches, shops, a Mechanics Institute and a doctor's clinic were established. Springfield House was built in 1866 as the residence of William Howe, the Company engineer. The colliery manager Thomas Houldsworth had Alma House built for his family in 1875 to the west of the town, which stood in its own extensive parklands. The house was named for the Battle of Alma which occurred in 1854, being the first victory in the Crimea Wars. During these early days of development, the growing town was virtually governed directly by the Company. A Local Board took over the administration in 1878 and by 1894 Clay Cross Urban District Council was established. Many of the earliest Navvies houses were demolished in the 1920's. However, the houses occupied by the works foremen and pit deputies in Egstow Terrace (also locally known as "Gaffers Row") have survived today.

On 12th August 1848 George Stephenson died at his home, Tapton House in Chesterfield and on his death his son Robert succeeded to his father's position. Robert later sold his shares in the company in 1852 to Peto, Walmsley and Jackson, three directors of the original company. The Stephenson Company then became known as the Clay Cross Company, taking its name from the developing township of Clay Cross. Sir William Jackson having previously purchased all of the company's remaining interests and became the sole proprietor of the Clay Cross Company, transferring the business into a limited company in 1913.

The Clay Cross Company was now concentrating on the production of pig iron ingots and brick making since 1846. The price per ton of coal had fallen drastically, as a result there was a glut of coal on the market. Fortunately, the initial four collieries owned by the Company remained open, principally to supply the coking ovens. From 1839, there were up to 280 beehive type coking ovens in operation, which were supplying fuel for steam locomotives and the nearby blast furnaces. The Company started sending finished iron work to the London market by the North Midland Railway as early as 1849. By 1870, the demand for coal had thankfully returned, with one tenth of all the coal reaching London being sent from Clay Cross, totalling 385,632 tons. Coal was supplied far and wide, via. the Midland Railway and later, the London and North Western Railway. In particular, most Derbyshire railway stations had a permanent Clay Cross coal depot. There were also ten such depots in London with two more in Northamptonshire. Coal was regularly supplied on a contract basis as far away as Bristol, Southampton, Portsmouth and Norwich. The original coking ovens referred to above were replaced in 1903 by more efficient and much larger "Simplex" type

ovens. Unlike the beehive ovens, these had airtight doors and effectively baked the coal to extract the gases.

At the outbreak of World War One in 1914, the company operated a brickworks, three blast furnaces, an iron foundry, coke ovens and seven collieries. At Ladmanlow on the Cromford & High Peak Railway, Grin limestone quarries had been purchased from the Buxton Lime Firms Ltd. The Clay Cross Company then managed the quarry, which produced crushed limestone and slaked lime from the kilns. Near Matlock, two more lime kilns were established. In 1925 the company built the narrow gauge Ashover Light Railway to provide a rail connection to reach additional limestone deposits. The line was notable for using war surplus American-built steam locomotives, previously used in France during World War One. The route ran from the Clay Cross main works to Ashover Butts, a distance of 7.25 miles (11.7km). The railway was eventually closed on 31st March 1950, when Butts limestone quarry was exhausted.

Gas producing plants also existed at Crich, Fritchley, Ambergate and at Clay Cross itself. Further collieries were purchased to ensure continuous productivity, including Wingfield Manor colliery near Alfreton in 1920 and Bonds Main colliery at Temple Normanton was purchased from the Staveley Company in 1924. At the peak of coal production, the Company eventually owned and operated ten collieries. After Nationalisation of the coal industry in 1947 to form the National Coal Board, the company concentrated on brick making and the quarrying of limestone. Due to the changes in manufacturing processes and the lack of demand for pig-iron, the original blast furnaces were demolished in 1959. This created much needed space for expansion and two modern hot-blast cupolas were built. This enabled the Company to embark on a new venture with the design of a flow line for the manufacture of ductile iron spun pipes, a product for which the Clay Cross Company became especially famous internationally.

Heritage of Industry

Journeys into the Industrial Past

City Safari | Amsterdam | 11th - 14th April 2024 | Led by Sue Constable

Amsterdam is a busy and vibrant city which has always been a major port and point of access to the Netherlands and the rest of Europe. Our Safari will be looking mainly at the 19th and 20th century development of the city though a number of earlier sites will be included. The city promoted planned development in the early 20th century and we will be looking at some of the housing schemes built at that time. We will also be exploring the development of the port and the transport links connected to that. The city has an extensive tram network and we will be using that to travel round the city.

Book now: <https://www.heritageofindustry.co.uk/citysafaris/2024/Amsterdam/Amsterdam2.html>

AIA Spring Tour | Flanders | 13th - 19th May 2024

We long ago had an invitation from the VVIA (the Flemish Industrial Archaeology Society) to visit Flanders. They have contacts at many sites and will send a board member with us to act as a guide.

5 days of visits; 6 nights; Coach from London; All inclusive.

Full details and booking: https://www.heritageofindustry.co.uk/Longer%20Tours/2024/Flanders/Flanders2024_2.html



AIA Summer Tour | North East England | 4th - 7th July 2024

In designing the tour we decided, this time, to look at the North-East and started out choosing sites which have been the recipients of AIA Restoration Grants in the past but we weren't able to fill up the programme with those so we've have added some others to the mix to make what we hope will be an attractive event. On the Thursday evening we will have a talk by Michael Bailey on the Stockton & Darlington Railway's 'Locomotion No 1'.

Then we are considering the following visits:

Newcastle bridges walk, Cragend Farm & Cragside, Beamish Open Air Museum, Derwentcote Furnace, Tanfield Railway & Causey Arch, Ryhope Pumping Engines, Shildon Museum, Tees Cottage Pumping Station.

In summary:

3 nights, 3 days of visits; All inclusive; Members will make their own way to and from Newcastle

More details will follow as soon as possible but register interest now if you have not done so already:

https://www.heritageofindustry.co.uk/Longer%20Tours/2024_NorthEast/NorthEast2024.html



City Safari | Manchester | 19th - 22nd September 2024 | Led by Sue Constable

Once known as Cottonopolis and still having many examples of surviving industrial, civic, retail and domestic buildings, canals, trams and more this will make a great City Safari. Register interest now, if you have not done so already, to get the latest news as soon as it is available:

<https://www.heritageofindustry.co.uk/citysafaris/2024/Manchester/Manchester.html>



IA News and Notes

Cromford Mills

Hot off the Press! 2024 Highlighting Heritage Talks have been announced! Online Bookings Coming Soon!

Highlighting Heritage talks are a series of collaborative events between the **Arkwright Society** and **Belper North Mill**, looking to reveal interesting aspects of local heritage. Six evening talks, from March through to October, will alternate between venues in Cromford and Belper.

Doors open at 7:00pm with refreshments available, (talks start at 7:30pm).

Tickets are £5 per person – Find out more and save the date <https://www.cromfordmills.org.uk/highlighting-heritage/>

Highlighting Heritage Talks 2024 Evening Talk Series

March 27th

Solidarity: Working Class Organisation in the Derwent Valley 1800-1850

April 25th

Solidarity: History and Restoration of Wingfield Station

May 30th

Margaret Outram: wife of Benjamin Outram, canal engineer and founder of the Butterley Company.

Online tickets coming soon

THE DERBY MUSEUM OF MAKING HAS RE-OPENED

DERBY MUSEUMS IS PLEASED TO ANNOUNCE THAT THE MUSEUM OF MAKING Re-opened its doors at 10:00am on Friday 26th January after flooding forced its closure back in October 2023.

The Museum of Making was forced to temporarily close due to significant flood damage caused by the severe weather conditions of Storm Babet in late October. Whilst the building was designed to withstand an element of flooding and staff worked tirelessly to move as much as possible off the ground floor, water levels reached 3.58m – the highest level since records began – which left Derby Museums with no option but to close its doors immediately. Over the past couple of months, museum staff and professionals have been working alongside insurers to repair the damage caused, with work including a professional deep clean of the entire ground floor, new and repaired equipment in the kitchen and workshops and upgrades to display furniture. Due to the design of the building, which sees the majority of collections housed on upper floors and moveable displays on the ground floor, and the foresight of staff, no objects from the museums' collections were damaged during the flood.



The Derby Museums team have been overwhelmed by the ongoing support, generous donations and kind offers of help received from the local community and businesses since the flood, with an appeal in the early days of the closure receiving over 300 donations. The generosity of the public and business community has enabled Derby Museums to mitigate a substantial amount of costs unrecoverable under the insurance policy.

Following the reopening, visitors will once more be able to engage with the 30,000 objects on display, including the striking Rolls-Royce Trent 1000 engine and 'exploded' Toyota Corolla car suspended in the Civic Hall. In addition, the much-anticipated exhibition of a giant scale LEGO® model of the Lake District will open to the public. The model has been created by local artist Jon Tordoff, who in 2020, became inspired by his lifelong interest in LEGO® and his love of the Lake District to begin creating one of England's most famous landscapes out of LEGO® bricks, he still hasn't stopped!

Visitors on opening weekend can expect to see some changes in the museum. The Old Shop gallery has been rehung with new flatworks, a particular highlight being a painting of the Acropolis of Athens, formerly hung in the now closed Acropolis café – Derby's oldest café at the time of its closure last July. Families will notice brand new on-gallery making activities, free for all to enjoy, a LEGO® Minifigure trail and drop-in activities taking place over the opening weekend. Curators and volunteers will also be on gallery with object handling, allowing visitors to get hands-on with Derby's history.

Tony Butler, Executive Director of Derby Museums says: *"I am delighted that the Museum of Making is reopening, our team has worked hard to get back up and running as soon as possible. It has been heart-warming for our team to see just how much the museum means to the city and how much our community have missed us. I'd like to thank our fantastic supporters, both individuals and the local business community; for your support during this difficult time."*

The team at Derby Museums are hopeful the reopening will once more attract new visitors to the city. In the last financial year, the Museum of Making attracted over 122,000 visitors, proving itself to be an attractive and invaluable heritage asset for Derby. In a recent economic impact report, Derby Museums was estimated to support Derby's hospitality, leisure and tourism offer by generating an estimated £7m of tourism spend in the local economy, with £4m coming from the Museum of Making alone.

The Museum of Making will reopened its doors at 10:00am on Friday 26 January. Find out more about what's on at the Museum of Making here: <https://derbymuseums.org/museum-of-making/whats-on/>.

Header image: The Museum of Making at Derby Silk Mill © Pictoria Pictures/ Derby Museums

Yorkshire Watermill Museum faces closure

Thwaite Watermill Museum, in Leeds, is threatened with closure. This museum of Leeds' milling industry is on an island in the River Aire owned by the Canal and River Trust, but is run by Leeds City Council Museums and Galleries. The lease on the site is currently due to end in 2030, but as part of proposed budget cuts Leeds City Council is considering terminating the lease in 2025. The CRT confirmed that if the lease ends, it would not be able to afford to take over the running of the museum. The AIA understands that the proposal (part of a raft of cost-cutting proposals being explored by the council) is still subject to consultation.

Read more about the possible closure of Thwaites Mill at <https://www.yorkshireeveningpost.co.uk/news/people/owner-confirms-thwaite-watermill-museum-to-permanently-close-if-lease-ended-by-leeds-city-council-4439898> (Yorkshire Post article - opens in new tab).



Thwaite's Mill, Leeds
(photo courtesy Leeds City Council Museums and Galleries)

Update on controversial railway bridge in-filling

Previous editions of this bulletin have reported the controversy surrounding attempts by the UK Government agency National Highways to infill a number of railway bridges in England. We are delighted to report that in recent months there has been more positive news, after a sustained campaign by the HRE Group and others. In Cumbria, Great Musgrave Bridge re-opened in October, without any weight restrictions, after retrospective planning consent for the infilling was refused, and over 1,000 tonnes of concrete were removed by National Highways. Graeme Bickerdike, of the HRE Group, which campaigns for the retention of the historical railway estate, said: 'It's a breath-taking turnaround by National Highways. For the past two years, they've told anyone who'll listen that the bridge was weak and infilling was necessary for safety reasons, but this was contradicted by all the available engineering evidence.'

Meanwhile National Highways have been ordered to remove the concrete infill from beneath a 100-year-old bridge in Congham in Norfolk after its retrospective planning application was unanimously rejected by the local borough council. A narrow and little-used country lane crosses the structure. According to National Highways' consultants, Jacobs, the girders supporting its parapets and verges had a reduced capacity of 7.5 tonnes, but a 2003 assessment by Norfolk County Council found that the carriageway could carry 40 tonnes.

Find out more about the HRE Group and their ongoing campaign at [The HRE Group](#) (opens in new tab).



Great Musgrave Bridge after removal of concrete infilling
(photo courtesy New Civil Engineer)

Event recordings available on AIA YouTube

AIA's YouTube Channel has been updated to include some recent events, including:

- 5th East/West Workshop, on the subject of the Architecture of Industry

- 2023 AIA Conference Seminar, which explored pathways for young people to engage with industrial archaeology
- Other sessions from the 2023 AIA Conference, including presentations on major European industrial heritage sites and a celebration of the life and work of Angus and Brenda Buchanan

Catch up with these and other recent events on the AIA YouTube channel at [Association for Industrial Archaeology - YouTube](#) (opens in new tab)

DHBT - Save the Date - 50th Anniversary Year & 2024 Events Launch

The new year has got off to a flying start for us, and we have some exciting news to share with you.

* As many of you know, 2024 is our 50th anniversary year. To celebrate this, we are hosting a special dinner at Chatsworth on the 21st June to mark the opening of our exhibition there. The exhibition will showcase 50 years of the incredible conservation work that the DHBT has achieved.

We'll also take this opportunity to celebrate Her Grace, the late Deborah Devonshire, Duchess of Devonshire (at the time); our former Chair and an active supporter of the Trust. Her conservation work in wider Derbyshire has been relatively unnoticed. Through our archives, the exhibition will give credit to her work and dedication to saving so many of Derbyshire's beautiful historic buildings. If you would like to register your interest email events@derbyshirehistoricbuildingtrust.org.uk to be a part of this special event or to find out more.

* We're busy putting the finishing touches to our 2024 DHBT Visits Programme - but our February and March events are now live - book your place now:

Sunday 18th Feb 2pm - Tour of W.W.Winter's Photography Studio, Derby

<https://www.eventbrite.co.uk/e/visit-to-ww-winters-photography-studio-midland-road-derby-tickets-824366491367>

Sunday 17th March 2pm - Barry Joyce MBE FSA will lead a tour of historic Wirksworth, linking places in the town associated with some of the individuals who played a role in the burst of innovative activity we call The Industrial Revolution.

<https://www.eventbrite.co.uk/e/tour-of-historic-wirksworth-tickets-827135934847>

* If you've yet to attend a tour of Wingfield Station following the completion of the restoration project, book a free place now. Still space available on Sunday 18th Feb (only 2 at 1pm - so be quick!), Sunday 24th March 11am/1pm and Sunday 21st April 11am/1pm.

<https://www.eventbrite.co.uk/e/wingfield-station-timed-tours-tickets-757236132657>

* Finally, thanks to funding from The National Lottery Heritage Fund (more on this to follow soon), we have two exciting new employee positions available as part of our 'Saving our Heritage for Everyone' project, which will be starting in March.

For full details on both roles and information about how to apply (deadline - 5pm, 26th Feb) see here:

<https://www.derbyshirehistoricbuildingtrust.org.uk/soh-opportunities>

Arkwright Town – Family History Fair / Local Heritage Day

Saturday 18th May 2024.

10:00am~4:00pm.

at the Arkwright Centre

Hardwick Drive, Arkwright Town,
Chesterfield, S44 5BS

The theme this year is “**Everything Arkwright**”

There will be stands from all our local heritage groups - do you have a couple of hours to spare helping with the NEDIAS stand? Please mail me. cliff.lea@btinternet.com

And finally George Bidder

Cliff Lea

Most of us have never heard of George Bidder, but those folk who are avid railway historians will be well aware of the man. His fame as a railway engineer spread not just in the UK but around the world in those years leading up to the “railway frenzy” of the mid 1800s. The son of a stone mason born and brought up in Devon, from age 14 he studied maths at University in Edinburgh, a city where he first met up with Robert Stephenson and many influential people of that time. He was first employed as surveyor with Ordnance Survey and moving into early railways. I don’t know whether anyone has calculated how many railways he had an involvement with, but his quick brain made him a great “calculator”, and with quick scan of engineering plans, it’s said he could point out mistakes and rapidly calculate how sound those plans were.

He’s probably best known as a partner in Robert Stephenson’s businesses, and had great influence on railway engineering not just in the UK but Belgium, India, Norway and Denmark. However there was no branch of engineering in which he didn’t take an interest, and he was elected President of the Institution of Civil Engineers in 1860.



Unveiling the memorial to George Bidder in Moretonhampstead, Devon
(*The Moorlander*, 7 Aug 2021)

Master G. Bidder,

A NATIVE OF DEVONSHIRE,

ONLY TEN YEARS OF AGE,

Will exhibit his amazing Powers of MENTAL CALCULATION, without the aid of Figures (of which he has no knowledge), at

A ROOM AT THE CROSS INN,
IN THE CORN-MARKET,

On MONDAY, MARCH 10th, and a few following Days,

From Eleven o'clock till Four in the Afternoon.

But finally ... did you know that as a young child he was recognised as a mathematical prodigy, the “Calculating Boy”. His father had hawked him around the local fairs from age 6, showing off his great powers of mental calculation.

LEFT: Poster advertising Bidder’s appearances in Oxford, March 1817

Contributions, no matter how short (maybe about a visit you have made), and preferably by email to editor@nedias.co.uk, for inclusion in future editions of this newsletter are most welcome.

COPY DEADLINE FOR THE NEXT EDITION: 2 April 2024

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Published by: North East Derbyshire Industrial Archaeology Society.

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