North East Derbyshire Industrial Archaeology Society

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The Ashover Light Railway

Martin Allen

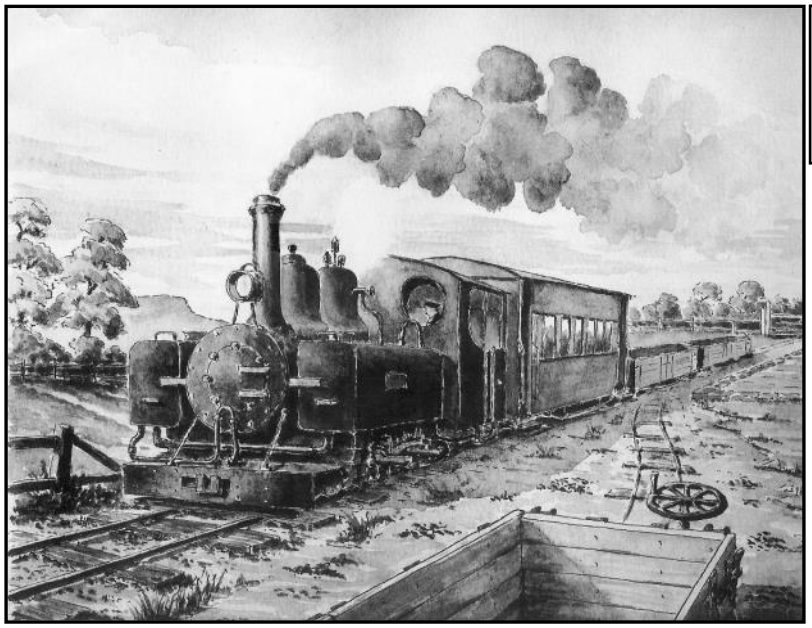
Introduction

The Ashover Light Railway was an unusual enterprise from the outset. Built to the track gauge of 2'-0" (600 mm), it was one of very few English narrow gauge railways. Railway enthusiasts in Derbyshire will be familiar with the line, but its existence (even in its heyday) was not widely well known. It was built by the Clay Cross Company as a private industrial railway, to primarily transport bulk materials from various limestone, barytes and fluorspar quarries in the Ashover area to the main works of the company at Clay Cross, a distance of 7.25 miles. Typically, commodities for distribution elsewhere would be dispatched to the transhipment sidings adjacent to the main line of the London Midland and Scottish Railway at Stretton station. The railway had a short but active existence, yet today some fragments of the original route can still be traced.

Early Beginnings

The ALR's origins lie with George Stephenson, who had surveyed an alignment for the construction of the North Midland Railway between Derby and Leeds in the 1830s. The route passed in a tunnel under Clay Cross where Stephenson, on realising it was passing through coal seams, saw the potential for the development of a colliery. He formed the George Stephenson & Company in 1837 and built a colliery and coke ovens nearby, which opened in 1840. The company passed to his son Robert Stephenson on George's death in 1848 and in 1852 Robert sold his shares, the business then passing to the Jackson family and becoming known as the Clay Cross Company. The company continued to develop it's quarrying and mining interests, purchasing in 1918 the Overton Estate at Ashover, with the aim of extracting the

"*Peggy*" with train of wagons crossing the "Pirelli" bridge over the A61 Chesterfield Road, the most significant item of infrastructure on the line. Courtesy of and © David Charlesworth.
ww.davidcharlesworthart.com – www.notions.co.uk



A typical mixed train comprising one of the Gloucester passenger carriages and a couple of the "Type D" ex-War department bogie open wagons. From a painting by the late Eric Leslie (with permission). www.drawnbysteam.com

underlying minerals. An order under the Light Railway Act 1914 was obtained with the intention to build a standard gauge railway between the Midland Railway station at Stretton and Ashover, with provisions for a separate narrow gauge rope-worked mineral railway serving Alton colliery, although the latter was not built. On 4th December 1919 the Minister of Transport confirmed the "Ashover Light Railway Order 1919", which authorised the building of a standard gauge (4'-8½") line from Ashover to Stretton. However, the railway was not built in this form, because the cost estimates were too high. In 1920 Colonel Holman F. Stephens, the consulting engineer for the line, proposed building the entire railway in narrow gauge throughout. This considerably reduced the cost of construction and the revised plan was approved by the Clay Cross Company.

Construction of the Line

Under the "Ashover Light Railway (Extension)" Parliamentary order of 13th November 1922, a change in the track gauge was authorised to be built as a 2'-0" gauge railway. There was also a proviso in the Act, that fare-paying passengers would be accommodated, in addition to the freight workings. Furthermore, an extension of the route from Stretton to Clay Cross Works was also granted. In fact, construction had already commenced somewhat prematurely, sometime in September 1922.

There were a total of 13 passenger stopping places, which from east to west were: Clay Cross and Egstow, (Station), Chesterfield Road (Station), Holmgate (Halt), Springfield (Halt), Clay Lane (Halt), Stretton (Station), Hurst Lane (Halt), Woolley (Halt), Dale Bank (Halt), Milltown (Halt), Fallgate (Station), Salter Lane (Halt) and Ashover Butts (Station).

In Service

The railway officially opened to goods traffic on the 6th April 1925 and the following day, it was opened to the public. It is recorded that 5,000 passengers were carried on that day. In its heyday, the railway regularly carried passengers and it was very popular, especially at weekends in an era when very few people owned a car. The line was built at the behest of the Jackson family (developers of the Clay Cross company) who had a reputation for economy, which was reflected in the ALR being constructed "in house" by Clay Cross employees, using second hand war surplus material such as track materials, locomotives and wagons. The trackbed re-used stone from the Clay Cross slag heaps, the bridges were designed to use girders already in stock and much of the maintenance used the principles of cannibalism.

Locomotives and Rolling Stock

The second hand ex-First World War steam locomotives on the line were the famous American-built 4-6-0 Baldwin tanks and had seen action behind the trenches of France and Belgium. Purchased for £500 each, they were named *Peggy, Joan, Bridget, Hummy* and *Guy*, after the names of the Jackson owner's children. Many of the older residents of the district still refer to the ALR as the "Peggy line". All the ALR locomotives eventually went for scrap when the line closed, although by the end of operations on the ALR there had been so much cannibalisation for spare parts, that it was difficult to decide which locomotive was which! The open wagons in use were originally ex-War Department "D" class, previously carrying munitions, stores and soldiers up to the front line trenches. The passenger coaches acquired for the initial public services were newly built in 1924 for the ALR by the Gloucester Railway Carriage & Wagon company, but the bodies were mounted on surplus ex War Department wagon bogies. An increase in passenger traffic followed in 1926 justifying the acquisition of more coaches, when eight were purchased second-hand. These had originated from the "Never Stop Railway", built to serve the British Empire Exhibition at Wembley, held in 1925-1926.

Demise and Closure

Competition from bus companies saw passenger numbers decline and as from 1931, public train services operated only in the summer months. Eventually, all regular passenger services were totally withdrawn as from 14th September 1936. The mineral traffic continued, but the railway began to decline through the 1940's. The very last passenger train ran on 24th August 1947, when the Birmingham Locomotive Club chartered an enthusiasts' rail tour. As the passenger carriages had already been withdrawn, some open wagons were temporarily fitted with bench seats. The BLC itself went on to become better known as the Locomotive Club of Great Britain. The Clay Cross Company had a long-standing contract with British Railways to supply crushed limestone, to be used as track ballast. This agreement had now ceased and consequently the main source of income was lost. In 1949, the railway's contract with Ashover Butts Quarry was terminated and the quarry itself finally closed in 1950. Total closure of the railway ultimately came on 31st March 1950, although most of the track remained in place for a time. On 23rd October of that year, a solemn inspection train constituted the final trip. The central section of the route was permanently severed, when Ogston reservoir was created in 1958 and permanently inundated that portion of the route. Fallgate fluorspar quarry stayed in production until 1969, using road transport for hauling the stone away.

The Line Today

What is left of the ALR today? The railway has now been closed for 71 years. It only operated commercially for 25 years and carried passengers for less than half of this time. Surely such an insignificant railway would by now have been long forgotten. Not so. The railway is now attracting much interest in Derbyshire and beyond, with the Ashover Light Railway Society (ALRS) working towards the possibility of re-opening part of the route, whilst they are simultaneously creating a tribute line in the near vicinity.

Much of the route can still be traced, although all of the bridges have now been demolished for safety reasons. Little of the remaining line is on public rights of way, but at least two substantial fragments of earthworks are well worth investigation. Firstly, between Ashover and Fallgate, the line was built on an embankment near the River Amber and adjacent to Hockley Lane. Here also are the partial remains of several lime kilns, but at present these are not readily accessible. Secondly, another section of embankment survives near the west side of Horsecar Brook and close to the surviving North Midland Railway former station house at Stretton.

At Fallgate near Ashover, the abandoned quarry still exists, together with the remains of a lime kiln. A short length of track is still embedded in the roadway nearby and these are authentic remnants of the ALR. The rails were part of a spur which came up off the main ALR line to serve the quarry and kilns. This section was too steep for loco hauling and relied on a horse called 'Tishy'. There are not any other original rails remaining in situ - there were others at Milltown itself, and some on a bridge at Butts, but these disappeared about 10 years ago.

Alongside the River Amber, the route stands on an embankment near to Hockley Lane. Here also are the partial remains of several lime kilns. Secondly, another section of embankment survives near the west side of Horsecar Brook and close to the surviving North Midland Railway former station house at Stretton. At Clay Cross, the ALR had it's workshops and here was the northern terminus of the line. Located next to the main line railway and the northern portal of the Clay Cross tunnel. Sadly, all the buildings including the original workshops have now been demolished to make way for a new housing development.

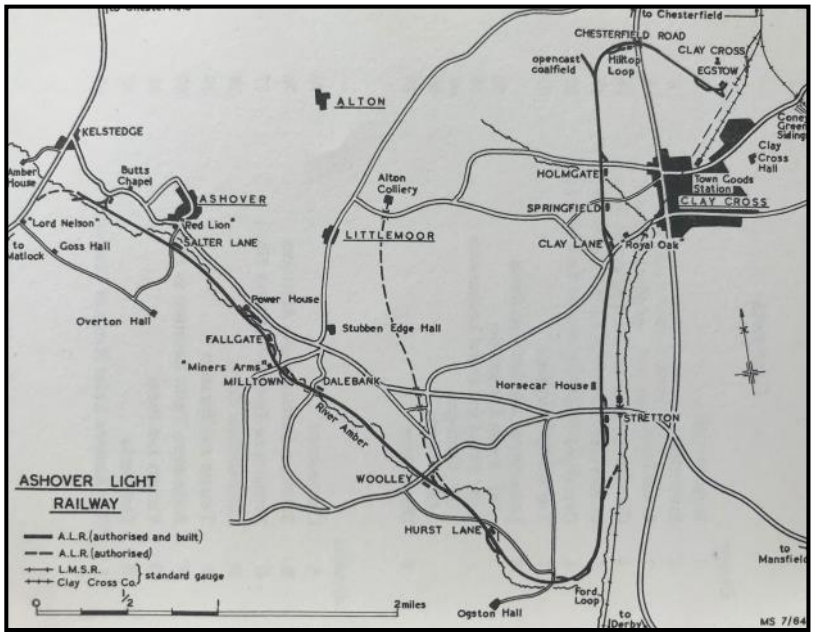
The original café structure from Ashover Butts is now in the possession of the ALRS, and other artefacts survive such as a cast iron 'Whistle' sign that was stumbled over just a couple of years ago. Peggy's nameplate and whistle are in the Talyllyn Railway museum in Wales and other nameplates exist in private collections. Tickets, timetables, postcards and other

This photo of *Joan* is from the Colonel Stephens Society archives, the photographer is unknown. Some members of the Birmingham Locomotive Club are seen enjoying a private rail tour in 1947.

ephemera surface regularly on eBay. The high prices achieved are an indication of the continuing interest in the ALR.

Three of the original Gloucester Coaches still survive elsewhere and two of which, whilst not in original condition, serve as passenger coaches on the Lincolnshire Coast Light Railway near Skegness. A third coach has been lovingly restored to as-built condition and is often in public use on the Golden Valley Light Railway at Butterley. On the demise of the ALR, this coach had been removed to the Clay Cross Company's staff sports ground, where it served as a pavilion for the bowling green. Volunteers from the GVLR rescued the coach and it was the last vehicle to survive at its original location.

Today, the Ashover Light Railway Society was originally set up by a group of Talyllyn Railway ALR enthusiasts and it is now a registered charitable company with a team of local trustees, a healthy membership, a range of merchandise and ambitious plans for the future. The ALRS has already acquired three diesel locomotives of 18" gauge, there is also a steam locomotive which currently exists as a kit of parts. After some research, it was assumed that all drawings for the original Wembley coaches had been destroyed. However, by good fortune, a set of these priceless drawings turned up in the archives of the National Railway Museum at York, which should make construction of replica coaches much simpler, especially as the ALRS already possesses an original set of bogies. The ALRS has created a workshop and sidings complex on Peak Rail's site at Rowsley, on the Midland Railway Centre museum. It has already acquired three diesel locomotives, a battery electric locomotive, together with a totally unique, vertically-boilered, steam locomotive which is currently under reconstruction from a large 'box of bits'.



Whilst the ALR Society has ambitious plans to develop a Butts lookalike tribute site there it still hopes to return onto the original site one day. Long may it flourish!

WHAT'S ON?

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, 13 September 2021	**"The Slow Road"** by Mike Ogden
Monday, 11 October 2021	**"Josias Jessop"** by Martyn Taylor-Cockaigne
Monday, 8 November 2021	**"A thread in the web of time": The archaeology of the 18thC cotton mills at Papplewick, Nottinghamshire** by Stephen Walker
Monday, 13 December 2021	**Christmas meeting**

IMPORTANT.

Attending NEDIAS Meetings this Autumn

Despite the high number of vaccinations and gradual improvement in spread of Covid in Derbyshire, to start off with as we open up again, we will need to exercise some caution.

For the first meeting in September we will place a maximum number of 40 to ensure that reasonable spacing, access and ventilation can be maintained and to keep all safe. Can you please note the following:

1. Maximum number 40 - please book in by email to Pat Pick at p.pick@sky.com or ☎ 01246 272181. If closer to the event, you cannot come, please email or phone again to allow for someone from the waiting list.
2. Bring face mask and wear during entry and exit, but once seated it can be removed during the talk if you wish
3. We will not have tea/coffee at the end (but I hope we can get back to this lovely social chat when Covid becomes history!)
4. Of course you should not attend if you or any of your direct contacts have coronavirus symptoms

Marvel's Mill – The World's First Water-powered Cotton Spinning Mill

The story of roller spinning before Richard Arkwright

Philip Parkin

When Richard Arkwright, a Lancastrian, arrived at Cromford in Derbyshire in 1771 he brought with him a roller spinning machine and a big idea – to use the unskilled, working in shifts, to mass-produce cotton yarn. He built his mill, which is now regarded as the birthplace of the world's factory system, and it was an enormous success. Arkwright and others went on to build many such mills and the cottage industry centred mostly upon Lancashire, which had previously been the producer of yarn, died in favour of mass production. Cromford Mill is the world's first successful water-powered cotton spinning mill. But what of those mills that came before Cromford which were not entirely unsuccessful?

Arkwright's roller spinning machine – which he patented in 1769 – was not his invention. He took the work of fellow Lancastrians Thomas Highs and John Kay, developed it, patented it and made a fortune from it. But in fact the original idea of using rollers to produce cotton thread without the use of human hands was born forty years before in the West Midlands not in Lancashire.

Paul and Wyatt

Lewis Paul was the son of a Hugenot refugee, Dr Paul, who was a druggist and physician working from the area of St Paul's Churchyard in London. Little is known of Lewis Paul's upbringing. He was clearly educated but as a young man led quite a dissolute life. A barber who was owed money by Paul had described him as : "*nothing but a common sharper and has been in most prisons about London…….a man as talks a great deal to set forth himself and will be buying anything of anybody that he can impose on. A slippery character.*" He mortgaged property left by his father in order to pay debts. He seems to have reformed his behaviour and then married a wealthy widow who died within a year of the marriage. He had an aptitude for invention though, had invented a machine for pinking crapes and had a successful business making shrouds. At some point around 1730 he left London and moved to the Birmingham area.

John Wyatt was the eldest son of a family of yeoman farmers from the parish of Weeford which is about four miles south of Lichfield in Staffordshire. He was educated at Lichfield Grammar School and became a master carpenter and inventor.

Paul and Wyatt were introduced to each other by Lichfield's most famous son Samuel Johnson. Johnson was related to Wyatt by marriage. Samuel Johnson was one of England's great polymaths.

As well as being a noted lexicographer, he was a literary critic, essayist, biographer, poet and playwright. He also had an interest in medicine and applied science. He became an extremely influential figure in the story of roller spinning for the next thirty years. Some of Johnson's correspondence shows that for nearly twenty years, from 1738 onwards, Johnson was advising, making arrangements and healing quarrels between Paul, Wyatt and their investors (many of whom were Johnson's friends) in connection with the "spinning rollers".

It is now fairly clear that the originator of the idea of using rollers to make yarn came from Lewis Paul. A number of authors disagree on this and there are still books and websites that declare John Wyatt to be inventor but in his own papers there is a note in his own hand which makes clear the origin of the machine: "*Thoughts originally Mr Paul's…..the calculation of the wheels, by which means the bobbin draws faster than those cylinders; this, I presume, was picked up somewhere before I knew him.*"

Paul employed Wyatt to build the roller spinning machine. There is little doubt that Wyatt's skills and mechanical aptitude contributed considerably to the completed machine. The work on the spinning machine was begun in an empty building in Sutton Coldfield - New Forge (Powells) Pool - sometime between 1730 and 1733. Wyatt, working at Sutton Coldfield, wrote to his brother that he was "*shut in a small building near Sutton Coldfield*" with his "*little machine*", spinning the first thread of cotton ever produced by solely mechanical means.

Johnson was living nearby when this took place.

The Cotton Spinning Mills

When the machine was complete Lewis Paul applied for a patent which was granted on 24th June 1738. The patent contained details of two methods of roller spinning:

The first used one pair of rollers and the sliver of fibres was drawn out to the required thickness by the action of the rotating bobbin which also inserted the twist. This seems to be the method they went with when constructing full size machines.

The second specification will be instantly recognisable to those who know the workings of Arkwright's machine patented thirty years later. Paul's patent said, "Put betwixt a pair of rowlers, cillinders, or cones, (and then through) a succession of other rowlers, cillinders or cones, moving proportionately faster than the first (so as to) draw the rope, thread, or sliver, into any degree of fineness which may be required."

As a result of this investors were sought and mills were established. There were six mills which used Paul and Wyatt's machine. Each machine had fifty spindles. An ongoing problem with these mills was that there was insufficient carded cotton to satisfy the machines. Carding (combing the fibres and forming them into a sliver) was being done by hand. This was slow and labour intensive. Paul wrote to Wyatt in 1740 about carding. He outlined the principle of the cylinder card which he later patented in 1748.

Timeline of the mills

Upper Priory Mill, Birmingham 1740/1 - 1744+

Red Lion Street, Spitalfields, London 1740 - unknown

Cave's factory, Holborn, London 1740 - unknown

Marvel's Mill, Northampton 1742 - 1761

Touchet's Mill, Fazely Street, Birmingham 1744 - 1756

Pinsley Mill, Leominster 1744 – 1754

Marvel's Mill and Pinsley Mill were water-powered.

Upper Priory was powered by two donkeys or asses. The Holborn factory was powered by hand.

The power sources of the others are not recorded though it seems likely that Touchet's Mill would have been water-powered.

Upper Priory Mill

A machine was taken from Sutton Coldfield to an empty warehouse in the Upper Priory area of Birmingham. The mill was powered by two donkeys or asses. Dr Johnson moved to a house next door to the warehouse at the same time which suggests he was intimately involved with the project. The investors in this were friends or acquaintances of Johnson, some of them associated with the Lunar Society. Thomas Warren,

a Birmingham bookseller and the publisher of Johnson's first book, and Edward Cave, the publisher of the Gentleman's Magazine for which Johnson wrote were the main investors along with others. A number of these investors subsequently lost considerable amounts of money. This mill only survived for around three years.

James Johnson's Spitalfields Mill

In 1739 licences for 150 spindles (three machines) were issued to James Johnson, a manufacturer of checks and stripes. He had a large trade with Africa and good, cheap yarn was essential for the cloth he produced.

The factory was set up in 1740 in Red Lion Street, Spitalfields. Wyatt put the machines into working order. The power source for this mill is unknown though may well have been hand powered.

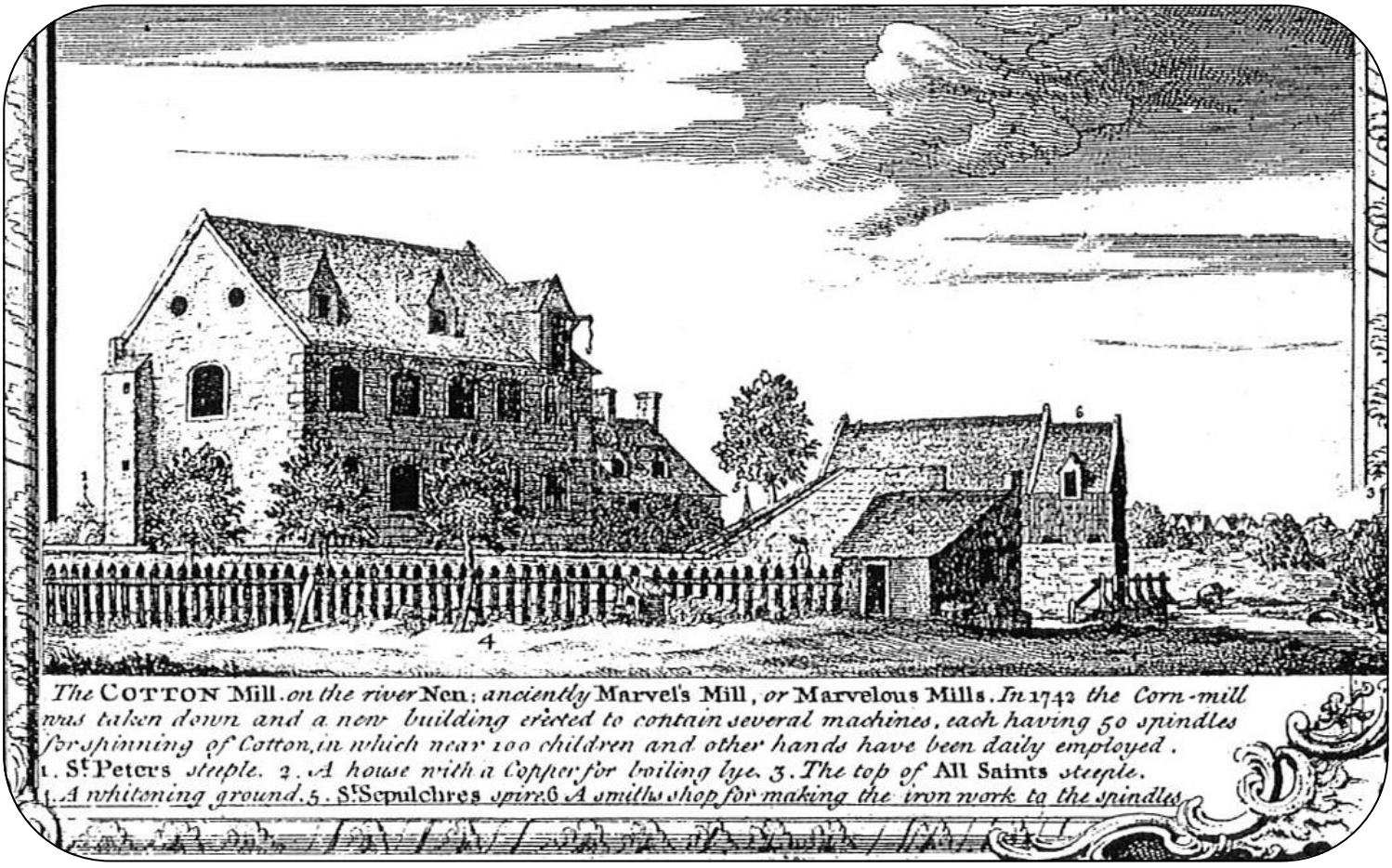
There was insufficient carded cotton to satisfy the machines. It is not known how long this mill survived.

Edward Cave's Holborn Mill.

By 1740 Edward Cave had invested in the roller spinning enterprise, initially at Upper Priory and then his own mill in London.

By the end of 1740 Cave had a large factory (hand powered) containing 250 spindles (five machines) at Holborn.

Cave was clearly an enthusiast for roller spinning. As Arkwright would do thirty years later he sought a suitable site for a water-powered mill. After looking at sites in Hampshire and Gloucester he settled on the site of an old corn mill on the River Nene in Northampton. The corn mill was demolished and the world's first purpose-built water-powered cotton spinning mill – Marvel's Mill -was built in 1742.



Marvel's Mill

Nearly 100 children and other hands were projected to be employed at the mill. There were 5 machines of 50 spindles each.

Outbuildings contained workshops for maintaining the machines and for boiling Lye for bleaching.

Three tiers or management were installed by Cave: an "Operator", a Manager and a Foreman (who had previously worked at Upper Priory.

Wyatt visited in 1743 and was not impressed "*The Cards and Carding, extremely ill maniged*" "*The Dirt and Cotton spread ab' the Rooms and the Pathways near the mill is surprising.*" "*The Superintendant seems a very indifferent Maniger.*"

He also noted that the prototype carding machine which had been built was not being used.

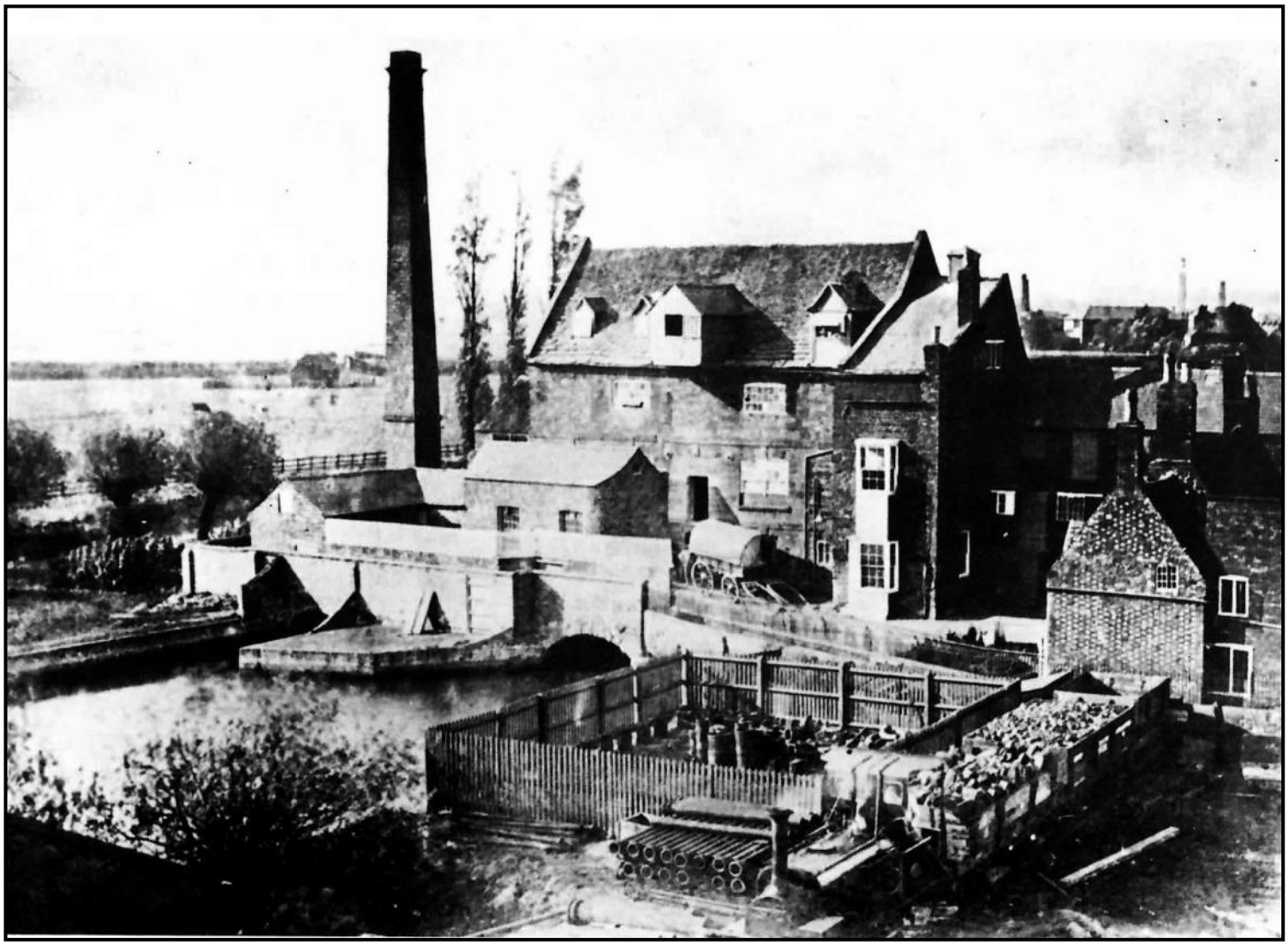
By October 1743 only fifty hands were working there and the annual profit was projected to be £119.

But Cave was writing very optimistically in 1745 and in 1746 the mill was described as fully-functioning.

Sadly, in 1754 – after 12 years of operation, Edward Cave died and the mill passed to his brother and was let out for short periods to Lewis Paul and to Samuel Touchet. Various attempts were made to sell the mill and the machinery and it appears to have finally ceased being a cotton mill in 1761 after nineteen years of mostly profitable operation.

It became a corn mill and briefly, between 1897 and 1806, after a steam engine was installed, a cotton mill again. It reverted to grinding corn and was used for other purposes later.

Northampton Corporation bought the mill in 1927 and it was demolished in the late 1920s.



Town Mill (previously Marvel's Mill) around 1877 - Demolished by Northampton Corporation in the late 1920s

Touchet's Mill

Samuel Touchet was born in Manchester, the son of a Lancashire cotton trader and manufacturer, he imported raw cotton from the Levant.

He was one of the major merchants of the pre-industrial Lancashire cotton industry.

Touchet, had licences to operate Paul's machinery from as early as 1742. By 1744 he had set up a second Birmingham mill, Touchet's Mill in Fazeley Street. This was a direct link with the Lancashire cotton industry.

Touchet made no profit from it and in 1756 the mill and its machinery was advertised for sale - though it must have been sufficiently encouraging for Touchet to have later secured a lease on the Northampton Mill around 1754. His control of Marvel's Mill lasted until 1755.

Pinsley Mill

Daniel Bourn was another native of Lancashire and a direct link to the Lancashire cotton industry. Along with Lancashire investors he licensed spindles and operated a mill in Leominster, Herefordshire. This was the only mill of the six which had no direct input from Paul and Wyatt.

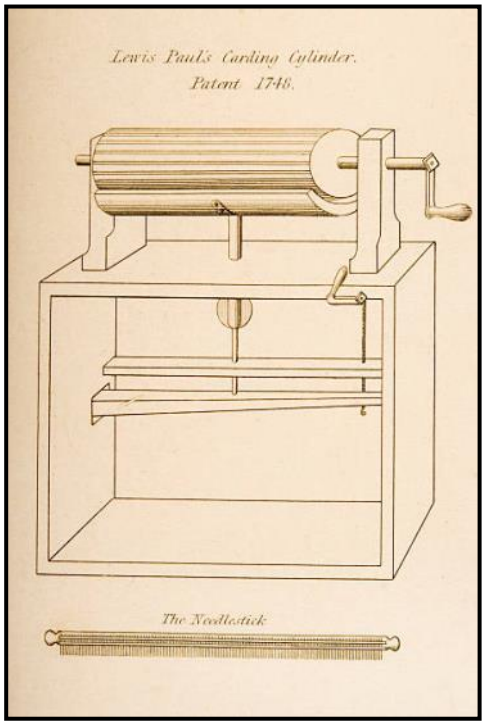
It opened in 1744 and would seem to have been profitable and successful. Unfortunately the whole place burnt down in 1754. Bourn alone (apart from the other investors) was said to have lost £1500 as a result of the fire. It was later rebuilt as a corn mill.

It would seem significant that these mills were built well away from Lancashire where they would likely not have been welcome as they threatened the cottage industry and its workers. There is little doubt though that given the involvement of Touchet and Bourn that the mills would have been known about in Lancashire.

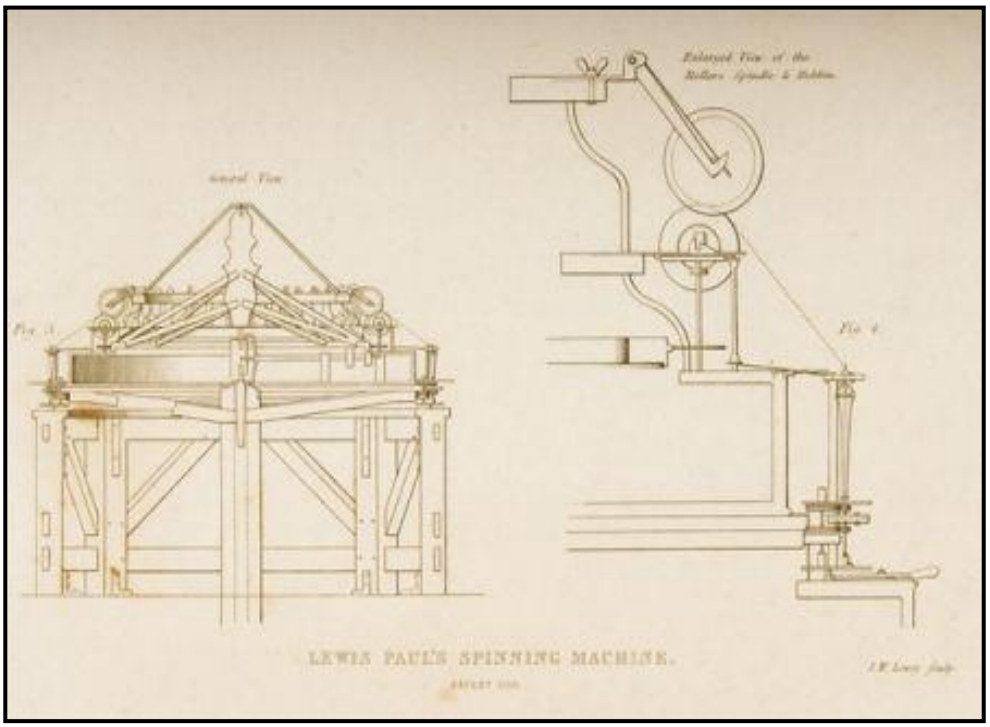
What happened next?

By 1746 John Wyatt had left roller spinning. He went to work for Matthew Boulton in Birmingham and had a number of very successful inventions including a weighbridge and a lightning conductor. He died in 1766 and Boulton and other Lunar Society members attended his funeral.

Lewis Paul continued to work cotton spinning. In 1748 both he and Daniel Bourn obtained patents for carding engines.



Lewis Paul's roller spinning machine as in his 1758 patent



Lewis Paul's carding cylinder as in the 1748 patent

1752	Marvel's, Touchet's and Pinsley Mill in operation.	Thomas Highs takes an interest in cotton spinning machinery.
1754	Pinsley Mill burns down.	
1756	Touchet's Mill closes. Marvel's Mill put up for sale .	
1758	Paul obtained a second patent for an improved machine.	
1761	Marvel's Mill closed and was broken up.	
1763	In the 1760s the Society of Arts of which Johnson was a leading member offered grants for the improvement of spinning machinery.	Thomas Highs employs John Kay and begins working on a roller spinning machine which was similar to Paul's.

1767		Kay ceases to work for Highs and builds a spinning machine for/with Arkwright.
1768	The Society of Arts historian declares roller spinning to have reached its zenith with Paul's machinery and no further improvement is possible.	
1769		Arkwright patents his roller spinning machinery.

Was there a direct link between Paul and Wyatt and Arkwright?

When Marvel's Mill was broken up the carding machine went to Lancashire but the rest of the machinery disappeared. One early historian wrote that :

"*What happened to the machinery from the mill is not known for certain though there are indications it was acquired or, at least, seen by Richard Arkwright*"

Charles Wyatt, the son of John, insisted his father was the inventor of roller spinning. It is known that he took the original model of his father's machine to Sir Richard Arkwright at Cromford. He "*thought Sir R A would be gratified by possessing the very model …….. my reception did not correspond with my expectations.*"

There were only ten years between the end of Marvel's Mill and the building of Arkwright's mill at Cromford. Paul and Wyatt's technology was known in the Lancashire cotton industry. Thomas Highs' work bridged the gap between the two. Is it simply coincidence that Highs mechanism was very similar to that of Paul and Wyatt or did he have knowledge of the earlier machine?

Why were the early water powered mills unsuccessful?

Marvel's Mill lasted for nineteen, mostly profitable, years which indicates it was not without success. The life of Pinsley Mill only ended when it burned down.

There is no doubt that there were technical issues with both spinning and carding which Paul and Wyatt did not solve. The major reasons for failure and lack of development were poor management and lack of investment. Could they have had Arkwright's success with more of both?

The Tarka Trail

Cliff Lea

When I visited family in Devon between lock-downs, my son persuaded me to take my bike – he wanted to show me some industrial archaeology! He had the Tarka Trail in mind, now a long distance foot and cycle-path which stretches round north Devon, that follow the route taken by the fictional Tarka the Otter in the book of that name.

The Tarka Trail, is like some of the brilliant cycle and footpath trails in Derbyshire such as the High Peak and Tissington trails: several sections of disused railway line to the East of Dartmoor have been used to create the trail. The paths also run across many former railway bridges and viaducts, and a number of railway buildings have been restored on the route, in particular the station buildings at Bideford and Torrington and the signal box at Instow.

Former railway sections include:

a) Ilfracombe Branch Line – between Braunton and Barnstaple

b) North Devon Railway (Torrington branch) – between Barnstaple, Bideford and Torrington

c) North Devon and Cornwall Junction Light Railway - between Torrington and Meeth Halt

Below Braunton, the path follows the western bank of the River Caen, which was straightened to become the Braunton Canal in the 1850s, before following the northern edge of Horsey Island, reclaimed from the estuary at the same time. The path then turns north along the eastern edge of Braunton Burrows, an extensive sand-dune system leased by the Ministry of Defence for army training.

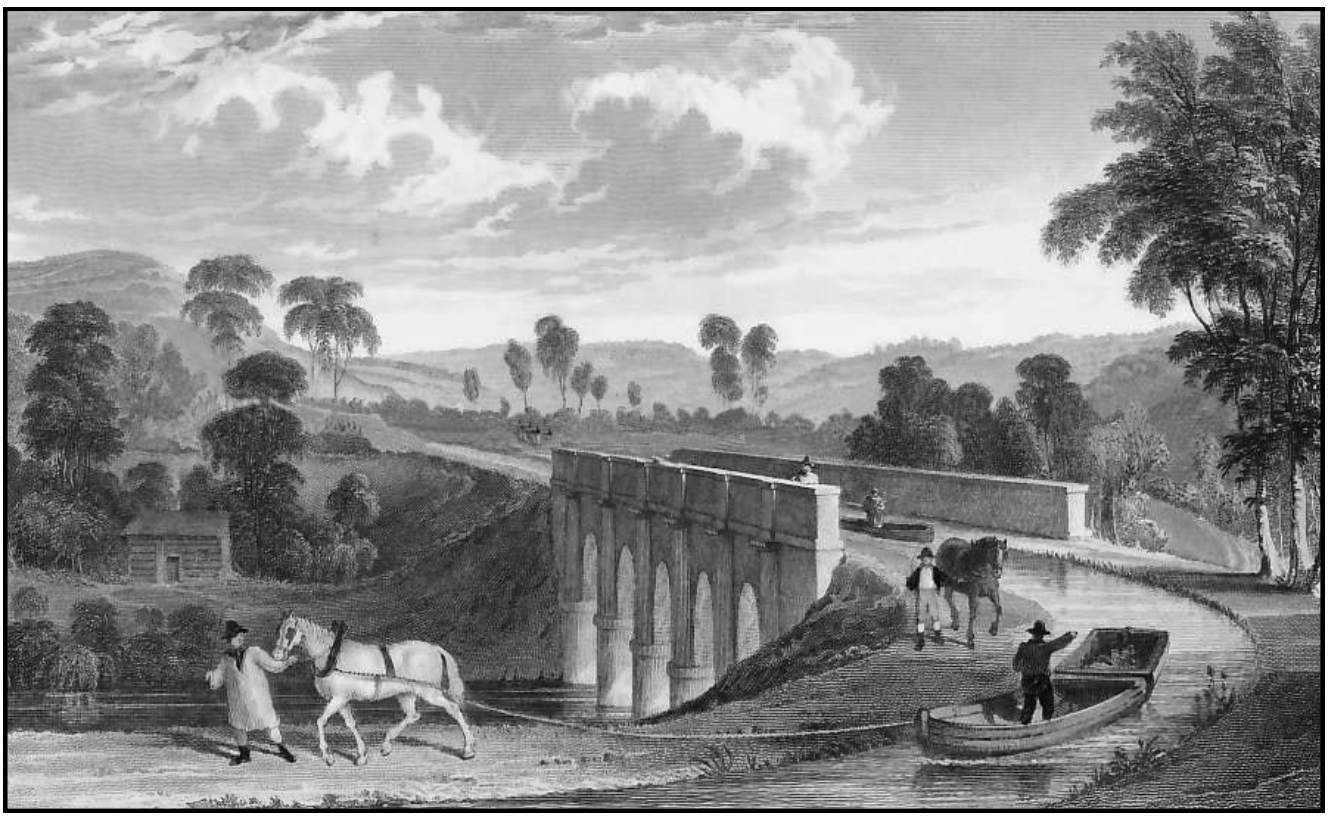
The stretch which I followed crossed (and of course this railway replaced) the route of the earlier Rolle

Canal. The Rolle Canal was built to serve lime kilns on John (Lord) Rolle's estate, and to link the industrial mills at Great Torrington to the port at Bideford near Barnstaple – James Green was lead engineer. John Rolle had the largest estates in Devon, having made his money from slave plantations in the Bahamas. Actually he is best remembered for falling on the steps of the throne at Queen Victoria's coronation.

One of the most photogenic engineering feats on the canal is the Beam Aqueduct (1824) across the River Torridge, at a height of 16.8m (*c*55 feet), 82 meters (*c*270 feet) long and 6.7 meters (*c*22 feet) wide; It has five semi-circular arch spans of 9.5m (*c*31 feet), with rises of 4.7m (*c*15.5 feet), springing from rectangular piers with rounded ends from which rise tapering engaged semi-circular columns. In 1871 the canal was closed and sold to the London and South Western Railway to form the trackway of the proposed new railway from Bideford to Torrington, but interestingly this section with the Beam Aqueduct is still owned by the Rolle family.

The Beam Aqueduct is referred to as the "canal bridge" in Henry Williamson's *Tarka the Otter*.

Views of the Rolle Aqueduct *Cliff Lea*



Etching by T Allom and from *Devonshire Illustrated*, 1829

Brief notes on Thomas Beighton

Philip Cousins

Following on from last month's lead article by David Hays on the Highley to Alveley bridge across the River Severn in which Thomas Beighton Ltd of Brimington were involved Philip Cousins has kindly provided the following information:

Source is obituary of T Beighton (junior), *DT*, 14 OCT 1949

Thomas Beighton (senior) founded firm of Messrs Thomas Beighton Ltd 'public works contractors' at Doe Lea '50 years ago'. Later business was carried on at Hepthorne Lane. Business transferred to Brimington in 1923. Limited company formed in 1934.

Thomas Beighton (junr) was chairman and managing dir of co. Other dirs. Miss Annie Beighton (sister and headmistress of Glapwell School); Mrs Ella Beighton (widow); Mr T Bonsell. Family lived at Linden Lea adjoining premises on Station Road. Thomas junr, was 49. He had 3 sons (eldest 13) and one daughter. His father Thomas snr and his mother had both died within a year, soon after the Second World War.

Co known throughout the Midlands 'many important contracts for local authorities'. Larger contracts have included Severn Bridge at Alveley (1936), pit-head baths in Warwickshire, Staffs and Derbs; Kenning's tyresole works and Remploy works in Chesterfield.

……..

Source is *Chesterfield Official Handbook*, 1933 advert p. 30

Other contracts listed in advert: Staveley sewerage works; Hathersage water works; Glapwell pit-head baths; Lockoford Lane bridge [this would be bridge over the Chesterfield Canal adjacent to the lock].

……..

Source is *DT* 26 March 1954 (opening of Arkwright Colliery pit-head baths)

Main contractor for pit-head baths Thos Beighton Ltd. 'a firm founded some 45 years ago by the late Mr Thomas Beighton.'

Various public works carried out, including sewerage schemes, reinforced concrete bridges, reservoirs 'and all types of reinforced concrete structures for industrial concerns'.

Arkwright baths sixteenth in country competed by Beightons. Another in progress at Oxcroft Colliery. Co. has worked in Hampshire, Buckinghamshire, Shropshire, Staffordshire, Lancashire, Warwickshire and Yorkshire.

……..

Source: personnel views and Auction details of property, 30 September 1971, (copy in Chesterfield Local Studies Library).

The firm continued to take on contracts. Locally one of their last contracts would have been the Littlewoods development in the Market Place in the late 1960/early 1970s. This later period of the company still needs some research. They went into liquidation shortly after the Littlewoods development was completed. Beighton's extensive yard and modern offices were for sale on behalf of the liquidators, fetching £25,000 at auction in September 1971. The office premises are currently used by NLT Training Services, whilst various commercial operations are resident in the rear yard.

……..

Further information regarding liquidation

Source *The London Gazette*, 27 May 1971, Supplement 45378, p. 5594

EGM of members of Thos. Beighton Ltd held 93 Queen St., Sheffield, Friday 30 April 1971, passed resolution that the 'Company cannot by reason of its liabilities continue its business…' should be wound up, John Herbert Priestly of 93 Queen Street, Sheffield be appointed Liquidator. Notice dated 30 April 1971 – W J Beighton, chairman.

IA News and Notes

Derby's new 'Museum of Making'

The Derby Industrial Museum has reopened as the 'Museum of Making' following a five-year, £17m redevelopment. The museum is housed in Derby Silk Mill, the site of what has been described as 'the oldest factory in the world', and forms part of the Derwent Valley Mills World Heritage Site. The original water-powered mill on this site was built in 1721 by John Lombe to exploit the technology of mechanised silk thread production which he had stolen from Italy. The original mill was destroyed by fires in 1891 and 1910, and rebuilt to the same height but with three floors instead of the original five. In the 1920s the building was used by the adjacent power station until that was demolished in 1970, with the mill building opening as a museum in 1974.

Derby's new Museum of Making.
Photo credit Derby Museums.

The triple-height entrance atrium features a Rolls-Royce Trent 1000 aircraft engine suspended overhead. The Gateway Gallery provides an introduction to the World Heritage Site while 'Railways Revealed' describes Derby's impact on the world through the railways with a much-loved model railway, built by volunteers. Other galleries, laid out like a museum store, present 30,000 objects arranged according to the materials from which they are made.

Read more about the Museum of Making here https://www.derbymuseums.org/museum-of-making/

AIA's new Community Engagement award

AIA's Young Members Board is delighted to be coordinating the Association's new Community Engagement Award, launched in 2021. The aim of this Award is to recognise successful community engagement in projects promoting, preserving or interpreting industrial heritage. The panel were thrilled to receive inspiring applications from a variety of groups across the country, ranging from archaeological excavations to building restorations. With some difficulty, the judges agreed that Barnsley Museums' 'Digging the Earl's Great Engine', the Elsecar Newcomen Engine Boiler House Project made a fantastic winner. The judges were particularly impressed by the team's commitment to involving local young people, and to helping them discover jobs and opportunities in industrial heritage. A second 'highly commended' Award is to be made to the Clipstone Colliery Regeneration Group for their 'Save Clipstone Headstocks and Power House' project.

Elsecar Newcomen engine.
Photo credit Barnsley Museums.

Read more about the Elsecar Digging the Great Engine project here:

https://barnsleymuseums.art.blog/2020/05/01/digging-the-earls-great-engine/ .

Industrial Revolutions: discover ingenuity, ambition and innovation

For the philatelists among us you may be interested in the Royal Mail's forthcoming new special stamp issue *Industrial Revolutions.*

Discover an era of ground-breaking innovation and unbridled ambition with a distinctive collection of Special Stamps and collectibles celebrating the early industrial age.

The *Industrial Revolutions* issue is a fact-packed extravaganza of superb souvenirs that celebrate the pioneering spirit behind the advances that transformed Britain into a major economic and technological hub. The Stamp Set artfully illustrates six of the finest innovations of the period - from lombe's Silk Mill in the early 1720s right through to the steel-producing Bessemer Process in 1856.

There will also be Special Stamps on a Miniature Sheet featuring highly-detailed illustrations of key inventions from the Electric Revolution, and a 24-page Prestige Stamp Book showcasing stunning insights from Barrie Trinder – a respected historian who's widely considered to be the supreme authority on the period.

Full details here:

https://shop.royalmail.com/special-stamp-issues/industrial-revolutions?cid=SC0821_IRD_EM_01

George Stephenson gives us Greenwich Mean Time *Ivor Leigh*

Pauline and I took a little jaunt to Bristol to attend the Christening of a Nephew's daughter as well as catch up with family and friends. We also spent some time looking at how the city had changed since we last had a good look around, whilst looking at all the new buildings and building work we also found some old and familiar landmarks, four brass pillars used for the exchange of money after a deal was struck, 'the nails' where the phrase 'paying on the nail' originates and the clock with two minute hands. This is the tenuous link to George Stephenson, the plaque that goes with the clock has the inscription, 'The clock on this building with an extra minute hand recalls the early Victorian days, when Bristol was in two minds about the correct time. Although today we take Greenwich Mean Time or British Summertime for granted before 1880 standard time existed in the British Isle. Every city had its own local time, reckoned by the sun and signed by church bells. Bristol lies 2 degrees, 36 minutes west of the Greenwich Meridian and so the sun reaches its noon nearly peak 11 minutes later than in Greenwich. Before the growth of the railways, most people expected to spend their lives close to home. Travel by stagecoach or ship was slow and uncomfortable. Timetables were vague. For Bristolians a change came in June 1841, when the first through train from London pulled into Temple Meads Station. Brunel's Great Western Railway began to tempt people to travel; now they could go to London in hours rather than days. The railways ran on London time (Greenwich Mean Time). If you wanted to catch a train at noon from Temple Meads you had to remember that it would pull out at 11:49 Bristol Time. To help Bristolians catch their trains, Bristol Corporation arranged for the main public clock on the

Corn Exchange to show both local time and Greenwich Mean Time (Railway Time) with two minutes hands. Other clocks in Bristol adopted the same compromise. In September 1852 Bristol adopted GMT and Bristol time became the same as London.'

So with the "Father of the Railways" being George Stephenson it's down to him that we all use GMT today.

Originally published in *In Touch*, the magazine of Holy Trinity and Christ Church, Chesterfield and used with permission.

Chairman's Chat — *Cliff Lea*

I'm always so impressed when local volunteers get together and things "happen". It often seems to me that it's railway activists who are the most effective, always seem to get things done efficiently and impressively, none more so than at Barrow Hill Roundhouse. The enthusiasm and vision from an initially small group has created the most attractive new museum in the County, and hopefully as we can escape Covid limitations, once again they will be attracting thousands to their special events. Rail Ale 2021 looks like it will be making a big splash in September.

The latest rail enthusiast group to be making great headway is the Friends of Bennerley Viaduct. Since the "Iron Giant" received recognition on the 2020 World Monuments Watch list, one of just 25 selected globally, a £1.4M restoration project is moving apace to convert this and see it preserved as part of the national footpath and cycle network. It's a survivor – during WW1 it survived a bombing raid by Zeppelins, and more recently after the last trains had passed over in the late 1960s, there had been half-hearted unsuccessful attempts to demolish before it was recognised and listed Grade 2* in 1974. It seems to me that hardly a month goes by without a mention in the national press.

By the time you read this Newsletter, two dozen NEDIAS members will have taken part in a visit and tour of Bennerley Viaduct with Kieren Lee and his team. I had my own pre-visit a month or so ago to see the extent of this half-mile long railway viaduct which stretches across the marshes of the Erewash Valley, and it really is awe inspiring.

Photographs by

Cliff Lea

And finally ....

.... an interesting railway bill that didn't succeed

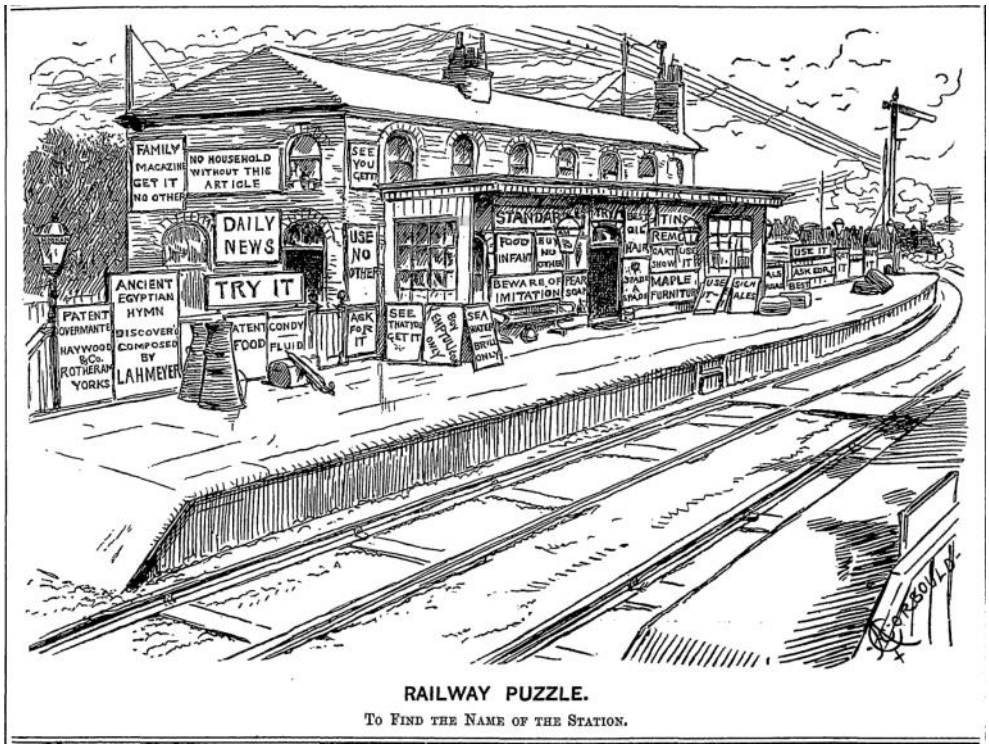
Dr David Turner

In 1889 the Conservative MPs Edmund Swetenham, William Burdett-Coutts and Frederick Seager Hunt introduced to Parliament the Railway Station (Names) Bill.

At this time it was felt that the profusion of commercial adverts made station name boards hard to read, a feeling reflected in the Punch cartoon shown, from 1883. The bill was a response to this.

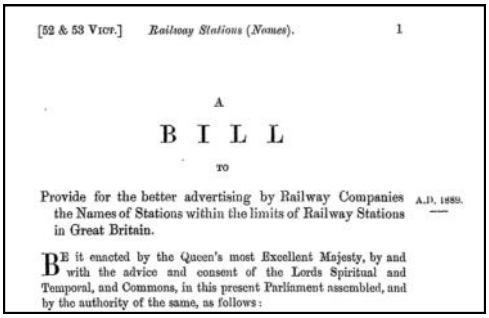
If passed, it would have mandated at least two name boards on each platform. These were to have plain letters equal in size to the largest in adverts displayed at the station. Commercial adverts also had to be 10ft from the station name boards. The fine for breaching this latter regulation was to be five pounds, and another 40 shillings for every day the offence continued.

The bill didn't pass; introduced in late June, it was withdrawn in early August, perhaps due to a lack of support.



RAILWAY PUZZLE.

To Find the Name of the Station.



[52 & 53 Vict.] *Railway Stations (Names).* 1

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B I L L

TO

Provide for the better advertising by Railway Companies the Names of Stations within the limits of Railway Stations in Great Britain. A.D. 1889.

BE it enacted by the Queen's most Excellent Majesty, by and with the advice and consent of the Lords Spiritual and Temporal, and Commons, in this present Parliament assembled, and by the authority of the same, as follows:

Messrs. Swetenham, Burdett-Coutts, and Seager Hunt will be entitled to the thanks of a great part of the community if they succeed in forcing the Railway Station Names Bill through the House of Commons. This little measure provides that at every station used for passenger traffic in Great Britain two signboards must be conspicuously displayed on both the up and down platforms, containing the name of the station in plain letters, equal in size to the largest letters used in any advertisement displayed within the station; and, further, that no advertisements are to be exhibited within ten feet of these signboards. At present the name of the station is frequently wedged in amongst a number of glaring posters in such a way as to be practically invisible.

Dr David Turner is a Railway Historian and his website at http://davidturnerrailway.wordpress.com/ is well worth a look.

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.

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NEDIAS Committee:

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