North East Derbyshire Industrial Archaeology Society

NEDIAS Newsletter No. 88 – November 2022

Price: £3.00

Barrow Hill 150+2 Gala

Philip Cousins

Barrow Hill Roundhouse celebrated its 150th anniversary over the August bank holiday. Delayed by two years due to Covid, the event was billed as a return to the 1970s and 1980s open days - a familiar event at the then British Rail Eastern Region event. It was consequently dubbed the '150+2 gala'.

It's thought around 2,000 people attend the event which was held over four days, starting on Friday 26 August.

There was a good selection of locomotives available, with the familiar trips up the Speedwell Branch. These were 'top and tailed' trips with a class 03 class diesel shunting locomotive providing one end of the motive power, a stream locomotive the other. This was a throw-back to the BR open days when a particular treat was a short run up and down the yard in a coach attached to one of the depot's own allocated 03s. Brake van rides were also available.

/continued overleaf

ABOVE LEFT: Johnson designed steam locomotive 'Compound' number 1000 of 1902 and Kirtley designed 158A of 1866 now share an adjacent road in the roundhouse. Both were built at Derby.
ABOVE RIGHT: During the Saturday afternoon GB Railfreight's mainline locomotive 69003 was named *The Railway Observer*.

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In this issue:

On the Saturday afternoon recently converted GB Railfreight's (GBRf) mainline locomotive 69003 was named *The Railway Observer*, marking the work carried out be the Railway Correspondence and Travel Society. This locomotive, in an earlier guise as 56018, had been allocated to Barrow Hill when operated by British Rail.

GBRf also supplied another locomotive, with other current operators – DB Cargo, Colas Rail, DC Rail, Hanson & Hall and Rail Operations Group – supporting the event with locomotives. East Midlands Railway supplied a multiple unit. The Deltic Preservation Society depot, on the site, was opened and a large number of preserved steam, diesel and electric locomotives were also on display.

BELOW: General view of the yard end, 27 August 2022.

All photographs © Philip Cousins

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 14 November 2022	**"The Ecclesbourne Valley Railway - a remarkable story" by Eric Boultbee**
Monday 14 December 2022	**Our seasonal meeting with mince pies – and a light hearted look at "How come the Arkwrights became so rich?" from Cliff Lea**
Monday 9 January 2023	**"Bolsterstone Glass" by Dennis Pinder of Stocksbridge LHS**
Monday 13 February 2023	**"Memories of a lost valley – the story of the Ladybower Reservoir" by Frank Parker**
Monday 13 March 2023	**"The life and times of Warney Mill, Darley Dale" by Tony Bonson of the Midland Mills Group**
Monday 8 May 2023	**DAVID WILMOT MEMORIAL LECTURE: "The Great Little Trains of Wales" by Alastair Clark**

NEDIAS Outside Visits

Date to be confirmed	After our great lead mining visit to Winster of last month, Tony Wood will be guiding us on an amble around the lead mining remains of that beautiful Peak District village of Alport at the confluence of the Rivers Bradford and Lathkill - probably late March.
Saturday 29 April 2023	**<u>Dene Quarry Walk</u>** Since pre Roman times the geology of the Wirksworth and Cromford area has been exploited for its mineral wealth by mining and quarrying. This important heritage will substantially come to an end within the next few years with the closing of Dene Quarry, the largest ever local quarry. Our walk will take us on a circuit around the edge of the quarry and will describe its history in context with other, often much older quarrying and mining activities in the surrounding area. The route will continue onwards past Slinter Quarry to the Via Gellia and return through Slinter Wood passing the Slinter Mill (originally a lead slag mill) and the old corn mill on the edge of Cromford. The four-mile walk involves a long steep climb to the top edge of Dene Quarry and walkers should be aware of tree roots and low hanging branches on the path through Slinter Wood.

Industrialisation in Dronfield *Pat Pick*

Industrialisation in Dronfield reached its zenith in 1873 with the arrival of Wilson, Cammell and Co, who built the largest steelworks in Europe, manufacturing railway lines, on Callywhite Lane and for ten years the town enjoyed boom conditions. The population rapidly increased, new areas of housing were built, and many shops were opened.

The coal and the steel industries both suffered a decline in the 1880s and by 1883 the manufacturing plant had been removed to Workington Cumberland in an operation which astonished the commercial world.

The economic slump and the Wilson, Cammell and Co removal left Dronfield a stricken town with hundreds of empty houses and it was many years before there was a return to relative prosperity.

By 1811 Samuel Lucas, steel refiner, had set up a foundry exploiting his patent for malleable iron at the ancient dyeworks site and by 1822 his brother Edward, had bought the works and continued a family association with Dronfield lasting 160 years.

What was made in the Lucas foundry in the beginning is not precisely known, although one product is reputed to have been cannon balls during the Napoleonic Wars; certainly by 1828 the firm was making spindles and fliers for the machinery of the fast-expanding cotton, jute and linen trades in Lancashire, Dundee and Northern Ireland. Lucas's also made spades, shovels, files and railway wheels, steel spokes and plates of malleable iron at the whole pre 1870 mill dam site with its ancillary workshops and grinding shops.

There was another spindle and flier manufacturing concern at the Damstead Works of Ward, Camm and Siddall on Mill Lane and many smaller firms making sickles, reaping hooks, scythes and heavy edge tools.

Period advertisement, courtesy of Grace's Guide (https://www.gracesguide.co.uk/Edward_Lucas_and_Son)

The Ticknall Tramroad

Martin Allen

Early land transportation in the British Isles developed as a means for the efficient conveyance of commodities and progressed in parallel with technical innovations in construction. Firstly, there was the Turnpike or Wagonway, which used pack horses or carts for short distances by roads. However, the horses had to be exchanged frequently for fresh ones over longer distances.

From the beginning of the 16th century, the earliest horse-drawn tramroads or plateways came into existence. The first one to be accurately recorded was at Wollaton Hall in Nottinghamshire, where Lord Middleton owned a colliery. Manuscripts surviving from 1597 refer to coal haulage as being "On our rails and bridges by ourselves, as the cartway is so fowl (sic) as few carriages can pass". At this date however, the rails referred to would have been hardwood timber battens, as the first cast iron rails did not evolve until around 1767. This leap in innovation was at Coalbrookdale where the local iron foundry had its own internal tramroad, whose timber rails were being constantly worn out. Having the means to successfully produce cast iron rails on their own premises, they were found to be suitable and then offered commercially. The Nunnery Colliery in Sheffield also had similar tramroads, both underground and on the surface as from 1776. The site of this colliery is now occupied by the depot and headquarters of the Sheffield Supertram system, nicely maintaining the traditions of the earlier tramroads. By 1788, Joseph Butler had established an ironworks at Wingerworth, near Chesterfield and he was also offering cast iron tramroad plates.

The Ashby Canal was first advocated in 1792. The route was proposed to start from Moira Colliery, just south of Burton on Trent and then reach as far south as Nuneaton. Here, there would be a physical connection with the existing Coventry Canal. The Harpur-Crewe family were the rightful land owners and they developed the mineral rights of the area around Ticknall and acquired Calke Abbey together with the adjoining lands in 1760. The site has its origins as an Augustine priory in the 12th century and the present building dates from the 18th century. The Ashby Canal Company recognised the minerals potential of the area and had previously investigated a direct feeder canal to serve Ticknall. However, this was discounted owing to the high cost, mainly due to the flights of locks that would be required because of the terrain and the difficulty in obtaining the necessary water supplies. The legal provisions for building a tramroad were provided for within the Act of Parliament granted for the canal construction on 25th May 1794.

Benjamin Outram (1764-1805) had extensive experience as an engineer and a contractor of both canals and tramroads. He was engaged as an advisor by the managing committee of the Ashby Canal Company and the route was surveyed during January 1799. However, probably due to cash flow issues, it was not until 1st April 1799 that the project was approved by the committee. At this time, the estimated cost for the tramroad was stated to be £29,500 and the proposed completion date was given as 1st May 1801.

The iron rails used at Ticknall were only 3'-0" long (915mm) and weighed on average 38 pounds (17.3kg) each. They were pegged into roughly hewn square stone blocks weighing approximately 150 pounds (68.2kg) placed at each rail joint. The blocks had holes in the centre for wooden dowels, through which iron spikes were driven to retain the rails. Unfortunately, cast iron is very brittle by its nature and breakages of the rails were frequent. Keeping the two rails to the correct gauge also proved to be problematic, as there were no sleepers or tie rods provided to maintain the rails at the correct gauge width. This was because there was a risk of the horses tripping and falling and becoming injured. Each stone block had a pocket dug into the ground with a bedding of shingle added to allow for minor adjustment. Reliance was placed on the weight of the stone blocks to hold the rails in stable alignment, providing that the shingle bedding was well packed. The rails themselves were cast integrally with upstand flanges forming an "L" shaped cross section and the wagon wheels were flangeless with flat treads. This allowed the wagons to be hauled by road as part of their journey, if necessary. In reality, when operating off the tramroad, the very narrow wheel treads on the wagons badly damaged the road surface and consequently this practice of transhipment was not ideal. The rail breakages mainly occurred where adjoining roads crossed over the tracks and wagons were manhandled on and off the tram road. To mitigate the breakages, bylaws instructed that "No loaded wagon driven off any of the said railways shall be suffered to return thereon over the flanches (sic) of the rails, without the same being first unladen". In some of these locations where tramroad met highway, the original rails were replaced by ones having two strengthening ribs cast on the underside for added reinforcement, but breakages still persisted.

It was demanded by the landowner, Sir Henry Harpur, that the tramroad should not spoil the view from the windows of Calke Abbey and must therefore pass under the main driveway of the abbey in a tunnel. Construction of the tunnel under the road was by the "cut and cover" method, in which a broad trench would firstly be dug out. The tunnel lining itself would then be built in brick and once sufficiently hardened was covered over again, using some of the soil which had been set aside from the earlier excavation. This allowed the view of the landscape to revert to its former state and thus the land owner was appeased. The added advantage is that this method of construction would be cheaper (and probably quicker) than building a deep V-shaped open cutting with sloping earthwork on each side. The finished tunnel at Calke Abbey was 138 yards (126m) long. Four metal grilles were provided in the crown of the tunnel for natural light and ventilation. The grilles are still visible today in the grass above. The route also included a brick arched bridge of typical canal engineering style, taking the tramroad over the public highway at Main Road (now the A514) in Ticknall. Now, this bridge is a Grade 2 Listed structure and is considered to be one of the oldest surviving rail bridges in the world. There were two other tunnels on the line, a short one named Basfords Hill which lies to the south of Ticknall and is 51 yards (47m) long. At Ashby Old Parks is the longest tunnel, at 447 yards (409m). In 1951, Charles E. Lee the noted railway historian, accurately measured the inside bore of the Calke Abbey tunnel. He found it to vary in places from 7'-1" (2.2m) to 12'-1" (3.7m) wide and 6'-9" (2.05m) to 7'-8" (2.3m) high.

An order was placed in April 1799 with the Butterley Ironworks to supply the first batch of cast iron rails, sufficient for five miles of track and having a total weight of 700 tons, with delivery to be during the following July. The tramway committee had prevaricated over a start date for the construction, due primarily to a lack of funds, but finally instructed that the construction should proceed as from 6th August 1799. The committee however, neglected to sign any contractual agreement with Outram and this serious omission was soon to cause significant delays in the completion of the works. By 13th September, it was however agreed that Outram should firstly commence work along the Ticknall branch, as earthworks including deep cuttings at Old Parks and the tunnel under the Calke Abbey driveway would both be time consuming projects. Notwithstanding this enthusiasm to proceed, Outram was still insisting on 3rd December that his contract must firstly be signed and there were frequent complaints about the delays in receiving regular payments for work done. Finally, the tramroad was operational by 1802, subject to some repairs and adjustments. Outram was eventually paid a total of £31,164 by March 1805, which was in excess of the original budget but included some additional works that were instructed by the management committee. Regrettably, Outram had little time left for him to enjoy his success, as he died aged 41, on 22nd May 1805. His widow was later to receive the final payment of £450 long overdue to him.

The tramroad was worked by teams of horses and the chosen track gauge was unusually set at 4'-2" (1270mm). Tramroads previously built by Outram had all been to 3'-6" (1066mm) gauge, but it was reasoned that the increased width allowed for more efficient payloads. The Butterley Iron Company built the wagons or "tubs" to their own standard design, having a wooden body with an end door hinged at the top, for discharging the load by tipping. The tramroad reached the Ashby Canal at Willesley Basin near Blackfordby in neighbouring Leicestershire, where the cargoes were transhipped into canal boats. Two horses were required to haul each rake of wagons on the level sections in the south west. This was supplemented by a third horse on the steep uphill section in the north east, where the load was limited to two wagons. This horse was then led back down the hill by a boy, in order to be ready for the uphill run of the following wagons. In busy times, the average working pattern was two trains in the morning and another two in the afternoon. Altogether, four men and one boy were required for each shift, controlling nine horses between them. Typically, a rake of loaded wagons totalled forty tons when loaded with limestone on a downhill run. Some of the hand brakes on the wagons would have to be pinned down on the descents to prevent runaways. On the return journeys, twelve tons of coal or other commodities could be hauled uphill.

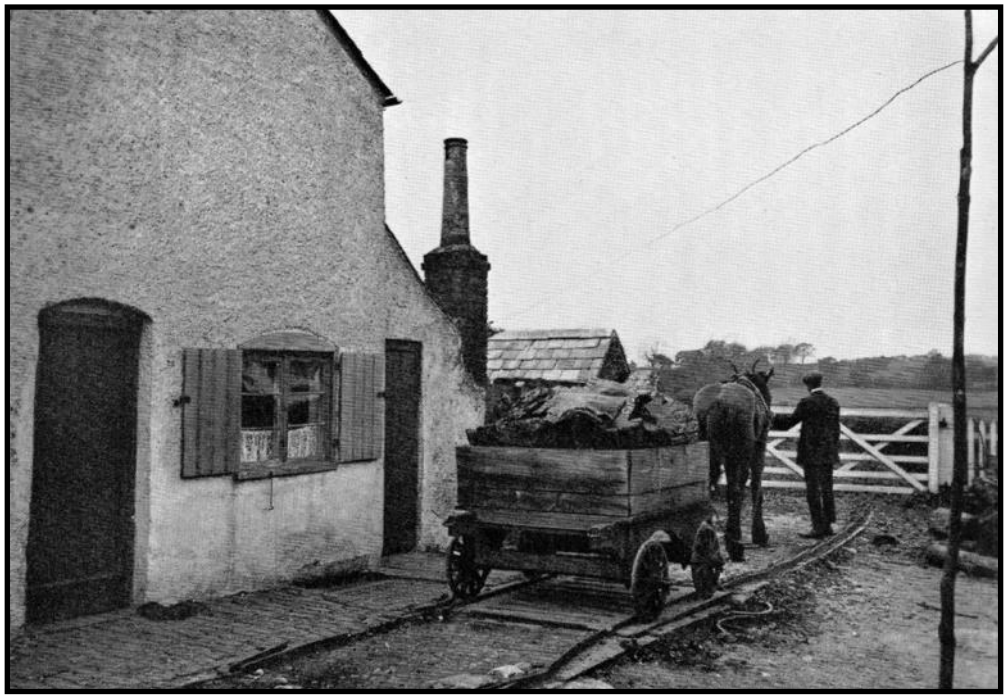
The route of the tramway was of a "Y" shaped configuration, with the main trunk having double track and the two principal branches were single track. The convergence point was at Ashby Old Parks, near to the village of Smisby. The two branches were north of Ashby and each served lime pits, to the west at Calke Abbey and to the east at Cloud Hill, near the village of Breedon. No doubt the single track branches were built as such to effect economies, but it was later found necessary to insert no less than 12 passing loops in both branches. The total length of the running lines amounted to 12 miles 43 chains 13 yards (20.65km). A detailed map has survived which shows the locations of the problematic road crossings, of which there were at least 15 and this was where the majority of the rail breakages occurred.

Commercial business on the combined canal and tramroad appears to have improved considerably in the

period from about 1823 to at least 1830. Surviving books of accounts however do not differentiate between receipts from the respective undertakings. Overall profits were therefore reflected in the number of improvements then being funded on the tramroad. Firstly, a public loading wharf was provided at Ticknall in 1823 for general merchandise. A three mile tramroad from the canal at Moria northwards towards Swadlincote was opened on 21st July 1827 at a cost of £4,262 to serve collieries and potteries in the district. This line was isolated from the main tramroad and employed a different type of cast iron rail. In 1829, two additional lines off the Ticknall branch were built to serve another lime pit at Dimminsdale. In the following year, a lime works at Staunton Harold was also provided with a tramroad connection.

The Midland Railway under its Chairman George Hudson, obtained an Act of Parliament on 16th July 1846 in order to acquire the interests of the Ashby Canal Co. and with it, the tramroad for £110,000. The Midland intended to lift part of the tramroad and in the process, convert it to a conventional standard gauge railway. This required the original tunnel at Ashby Old Parks to be opened out to suit the increased loading gauge and the length at the south end was reduced by 139 yards (128m). This tunnel was always troublesome, owing to it being built under a pond which constantly leaked into the tunnel. A further extension of the standard gauge beyond Cloud Hill continued eastward, to ultimately reach the towns of Worthington and Melbourne. The route of the tramroad from Ticknall was thus cut back at Old Parks Junction. Here, a transhipment wharf was provided near the northern approach to Ashby Old Parks tunnel, to exchange commodities between the two undertakings. On 5th July 1865, another Parliamentary Act was obtained to extend the Midland line westwards, beyond the tunnel towards the town of Ashby De-la-Zouch. This enabled a new junction to be provided to connect with the existing Burton to Leicester railway and this was opened on 1st January 1874. Part of the Midland line became a section of the Melbourne Military Railway during World War Two. From 19th November 1939 to 31st December 1944, it was requisitioned from the LMS for use of the Royal Engineers as a training school. This included experimental railway bridge building and teaching railway operating personnel.

The tramroad became largely disused by 1913 and the last revenue-earning journey was on 20th May in that year. However, a single wagon was run empty in a return trip once every six months in order to keep the route viable. Ultimately, it was finally abandoned in September 1915 when the local industries fell into disuse, partly because the quarries were becoming worked out and the constraints of the First World War had curtailed much of the local trade. Additionally, the prevailing necessities of war and the need for scrap metal demanded the removal of the redundant rails for melting down. Despite the technology having been overtaken by more efficient methods of design and operation elsewhere in the country, the tramroad never the less continued to operate successfully as originally intended for at least 110 years.



The Ticknall Tramway, with a wagon passing through a weighbridge, circa 1913. The photograph was taken during the period when the line was not in revenue service. However, it was operated once every six months in order to retain it as a legal right of way.

Today, Calke Abbey is a National Trust property. The tunnel near the Abbey was restored by the Trust in 1995 and the public can now walk through it. Much of the original route of the line can be readily identified today, especially as some of the original stone setts still survive in situ. Most of the route was converted into a public cycle way in 2014. Fortunately, a significant length of the original earthwork embankment also survives intact between Bryan's Coppice and South Wood. Two of the original limestone pits and an adjoining lime kiln can still be discerned, although overgrown in places and have now become a wildlife

A view of the arched bridge over the A514 road in Ticknall. Built in c.1799, it is a contender for being the oldest surviving rail-served bridge in the world.
Photo by permission of *Ticknall Life Community Magazine*, courtesy of Bryan Smith (https://www.ticknalllife.co.uk/wp-content/uploads/2019/08/arch-800.jpg)

reserve with the status of a "Site of Special Scientific Interest". The Transport Trust has designated the line as a Transport Heritage Site. In acknowledgement of the history of the line, one of the Trust's "red wheels" commemorative plaques is mounted on the abutment of the tramroad bridge over the A514 road. In addition, several stone blocks from the trackbed are preserved in Leicester at the Newarke Houses Museum.

How did these two Antique garden benches come to be in the Deep South West of France?

Graham Clarke Baldwin

When the old Chesterfield Royal Hospital closed in 1976 every piece of metal taken out of the building was bought and removed by Thompson's Scrap Metal merchants of Winsick. Amongst the scrap were some cast iron Garden bench ends. I managed to buy two sets for £25 per pair and then had to reconstruct them by Sandblasting, painting, obtaining and cutting to size and staining the Mahogany wood , making steel centre supports and assembling. This took quite a while but the result was well worth the effort. I then contacted the archives at Chesterfield Town Hall and a very helpful person eventually discovered that the original benches had been bought off Wicks Iron Founders in Northampton around 1880 when they were then placed in the grounds of the Hospital where they remained until its closure.

I had them in our garden in Hasland and then, when we moved, took them to Brassington near Ashbourne, next onto our new home in Brittany and then finally when we moved 500 miles South to the Marciac area of S/W of France where we now live.

Not exactly Industrial Architecture but nevertheless historical.

Does anyone have memories of using these seats at the old Hospital?

Graham C Baldwin. France. g.baldwin@orange.fr

IA News and Notes

Belper North Mill Museum Closure *Philip Cousins*

Belper North Mill Museum closed on and from Friday 30 September. The museum which has been run from a small part of the North Mill complex had its £47,600 yearly grant from Amber Valley Borough Council withdrawn. The trust which ran the museum decided that it would then be unstainable to keep the facility open.

The last day was marked by an afternoon tour round the exterior of the mill followed by a visit to the museum inside it. The normal bookable tours were also still available.

Over a number of years, the Belper North Mill Trust had built up a nice collection of textile mill machinery, memorabilia and interpretative material. This is now being dispersed with some of the artifacts going to Cromford Mill. It is most unlikely that the museum will ever open again – a sad loss to the industrial archaeological heritage of Derbyshire and to the Derwent Valley Mills World Heritage Site, in which Belper sits.

The Trust will continue to offer guided walks including, it is hoped, access to the North Mill basement. Details of other activities can be found on their website, particularly at https://www.belpernorthmill.org.uk/our-future/position-statement-september-2022/

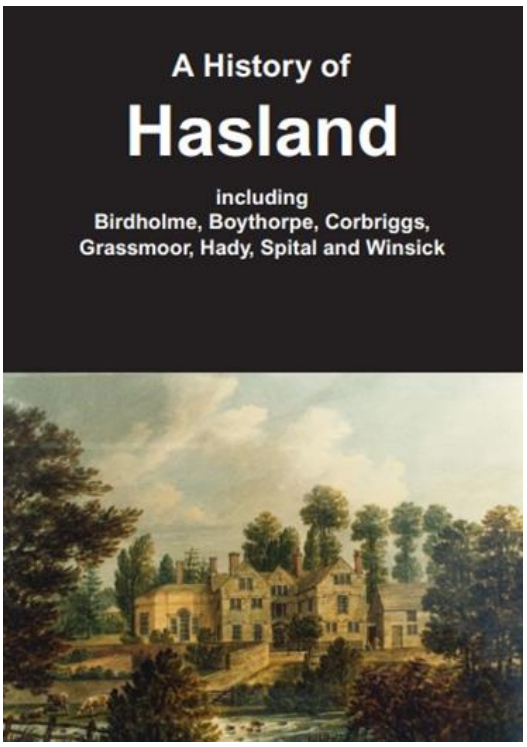
This of course, demonstrates just how vulnerable museums and heritage attractions are to withdrawal of funding, loss of footfall and other income.

ABOVE LEFT: The impressive basement at Belper North Mill, which might still be accessible under plans being developed by the Belper North Mill Trust.

ABOVE RIGHT: A corner of the museum and its exhibits - now sadly closed and dispersed. Pictured on the last day of opening, 30 September 2022.

Photographs courtesy Philip Cousins

Hasland book nearly sold out



The History of Hasland book, published on behalf of the Derbyshire Victoria County History Trust has, apparently, been a great success. We understand that copies of the 400 print-run may soon be sold out. The Trust has effectively no copies left in stock, so we would encourage anyone who is contemplating purchasing this book at either Waterstones in Chesterfield or the Visitor Information Centre, to do so fairly quickly. It costs £20 for just over 206 pages, A4 size, including maps and plates – some in colour. It's fully indexed with references.

The book also covers Birdholme, Boythorpe, Corbriggs, Grassmoor, Hady, Spital and Winsick, so includes much industrial history.

For example, the Broad Oaks or Derby Road Ironwork's history is covered, along with local and now disappeared collieries and the tube works on Derby Road.

The VCH Trust publishes a regular blog, which has been looking at some Hasland industries, including the Broad Oaks Ironworks. Visit the trust's website at www.derbyshirevch.org to read the these posts.

More protection for England's department stores?

Following on from the recent controversy over plans to demolish Marks & Spencer's iconic store in London's Oxford Street, AIA is also pleased to hear that Historic England has announced plans for a thematic study of department stores, which may lead to more examples being listed. One which has recently received Grade II listing is the John Lewis (formerly Coles) store in Sheffield, built in 1963.

The plans emerged as the 1960s Cole Brothers department store in Sheffield, designed by Yorke, Rosenberg & Mardall, was awarded grade II listed status by the Department for Digital, Culture, Media and Sport, on the recommendation of Historic England. The now-empty store faces grade II* listed Sheffield City Hall.

Cole Brothers 1960s department store in Sheffield

(picture credit Ian Johnson/Twentieth Century Society)

The government heritage adviser said the store, which was home to a branch of John Lewis until last year, was "a rare example of a post-war department store – designed by a leading mid-C20 firm of architects – with clean, crisp Modernist lines and a sophisticated layout for shoppers".

https://www.bdonline.co.uk/news/historic-england-set-for-review-of-department-store-heritage/5118838.article

Chairman's Chat — Cliff Lea

With the onset of Winter, it's unlikely we'll have any more visits until early Spring, but one of the first is likely to be a walk to view the mining remains around that beautiful village of Alport near Youlgreave on the Lathkill; Tony Wood who gave us such a great trip around the lead mining remains at Winster will take us around on the Alport trip. I'll let you know the date for that soon.

Concerning visits and sightseeing trips, it's often through the writings of affluent Georgians and Victorians who are not only doing the "European Tour" but also travelling around Britain that we get a picture of the early industrial revolution. I was deciphering an interesting letter of about 1790 this week. It was from Charles Mordaunt (later to assume the title Sir Charles Mordaunt, 8th Baronet) writing to his mother Lady Mordaunt at Walton Hall near Stratford-on-Avon. Charles was on an extended visit through Derbyshire and on into Manchester etc. At each place on route his party had introductions to the local nobility and large landowners. They clearly were out to view not just the countryside, but particularly to see the wonders of industry that was then rapidly expanding. On arrival in Cromford he writes:

> *My dear Mother, …..from Ashbourne we went to Matlock and stayed overnight . A new house is finishing by Sir Richard Arkwright opposite Cromford. We were greatly annoyed by this gentleman. Thinking it the most civil way, we waited on him ourselves, sent in our names and compliments and desired leave to see the cotton mills. The answer sent out was: he knew none of us and had not time to talk. We sent him a note from the Inn; that we supposed we had used an improper way for obtaining his leave, but that we really thought it most civil that he sent word we might see the Mills in the evening. But as our horses were ready and the day fine we proceeded to Chatsworth, saw the wonders and slept there comfortably and the next day to Castleton on our way to Buxton. In the cave we were saluted with what they call a blast when we were about half way back some gunpowder was let off at the farther end and I thought the echoes of the explosion would never end….*

Mordaunt had no such problems of rudeness as he had with Arkwright at Cromford when getting to see the Duke of Bridgewater's industrial assets, he writes:

> *A very fine ride to Manchester. An immense place, dirtiest of all Inns…We arrived at Manchester on Thursday evening. The next morning we set out …. we had letters to the Duke of Bridgewater's works at Worsley about 6 miles. The Canal from Manchester to Liverpool with several others belong to him; but at Worsley are the principal coal mines.*
>
> *Here we set out on a subterranean voyage of two miles to the principal coal mines. The length of the canals underground is only 3 miles, but by reckoning all the tunnels which go to different mines they compute eleven miles of water. Arched over entirely with brick about 8 feet wide or more, but in places where the tunnels meet, double the width. They tell you there is more brick in this work than in all the town of Manchester … the inhabitants are computed at the number of 50,000.*
>
> *To return to our voyage. In a long narrow boat lighted on each side with candles, with a man who pulls on the boat by means of iron rings fixed in the arch, we proceeded by some inferior mines until we arrived at the principal one where we disembarked to survey it.*
>
> *It is like a cellar with arches not high enough to stand upright, in which arches the men form by working their way through and prop them with timber. When they find no more coal they remove the props and let the earth in after them. The miners get down ladders from the surface. The mine is above 200ft from the top. The stratum of coal is about 8 feet deep. We returned the same way we entered. The air in parts of the mine is very bad, our candles burnt very dim, but the air in the canals is good but very cold.*

Charles was about 20 years of age at this time, and quite amazing that he was not only brave enough to take one of those narrow boats right into Bridgewater's mines at Worsley and actually saw the coal cutting on quite a thick seam; he also later rode a "kibble" down into the salt mines at Northwich. In the same letter he wrote:

> *"We have this morning made our third subterranean expedition into the salt rocks at Northwich. This was a very different and much more terrible journey than our 2 others. To go down 70 yards perpendicular sounds dreadful and the first sight of our conveyance a little staggered us. There are two buckets at the ends of a rope, while one is winding up, the other goes down. The wheel at the top is turned by a horse. The bucket comes up full of water from a pit made for the purpose. Into the bucket you put one foot, and the man who goes with you one of his; with your hands you grasp the rope. After a fine easy journey you are set down in an immense*

cathedral of rock salt which is lighted up and glitters very finely. After having sufficiently surveyed this and the manner of working which is by cutting downwards and leaving large pillars, the same conveyance takes you back up again."

I'm glad we don't have to do that on NEDIAS trips! see you soon.

Cliff

LEFT: "Sir Charles Mordaunt's Walton Hall, Wellesbourne, Warwickshire, now a hotel" - https://en.wikipedia.org/wiki/Walton_Hall,_Warwickshire
RIGHT: "The sort of Kibble used in salt mines for centuries" - https://www.saltscape.co.uk/explore-your-archives-salt-history-in-the-making/

NEDIAS Outing to Wingfield Station 2022

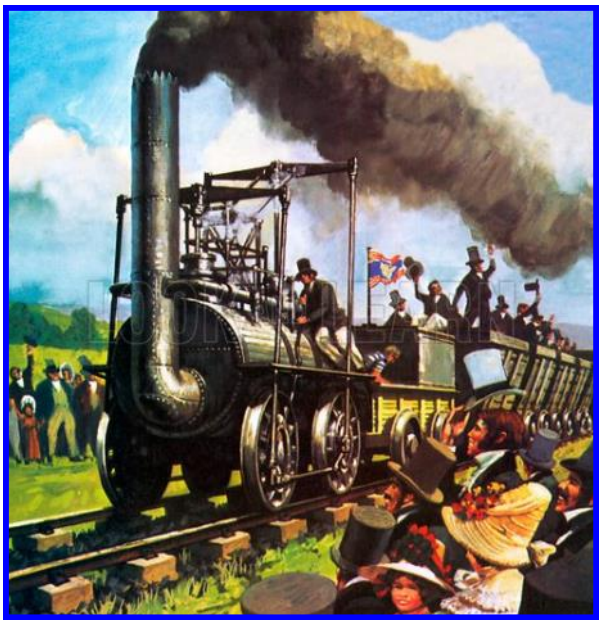
And finally ….

…. The Horror of Locomotives

Cliff Lea

At a recent visit to Bedale and Bedale Hall, I came across an interesting quotation in a letter from Marianne Peirse of Bedale Hall to her cousin dated 2 August 1828:

> *"I have heard rumours that the railway is to come to Northallerton. Only recently a railway line has been opened between Darlington and Stockton, these infernal machines hissing smoke and making an abominable noise which you can hear from miles around, rush up and down the line. I stood and watched one of these machines at Darlington and I thought my end was nigh, the ground shook, the horses were startled and this huge monster came puffing into the station. Surely such a contraption cannot take the place of the packhorse and coach and horses. What will happen to all the horses and the coaching inns which rely on the coaches for their living? My brother in law John insists that the railway engine is a marvellous invention and that it will revolutionise the transportation of England. But you will never get me on one of these contraptions. I will keep my post-chaise and horses for my form of transport, although the roads around this town leave a lot to be desired. If you travel out into the country in inclement weather, the ruts in the track can have you stuck in the mud for hours."*



George Stephenson's successful Locomotive *Locomotion No 1* carrying passengers on the inaugural run on the Stockton and Darlington railway, 1825. [English School (20th century) © *Look and Learn*]

Bedale where Marianne Peirse lived sprang up as an important and rich town because three busy coaching roads converged there in North Yorkshire. After rail was to transform Britain, this town and its many inns settled back to become a quiet backwater.

What images of 200 years ago her words convey!

THE NEDIAS NEWSLETTER ARCHIVE

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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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