North East Derbyshire Industrial Archaeology Society

NEDIAS Newsletter No. 74 – May 2019

Price: £2.00 (Free to Members)

His Majesty's Factory Langwith

Pat Pick

The Ministry of Munitions of War (Explosive Department) was set up in spring 1915, after it was discovered there was a chronic lack of explosives needed by the army and navy. There was an immediate demand for ammonium perchlorate. This chemical when added to explosives enhanced their explosive power. Sweden was the main manufacturing country before the war, and had the formula for making this chemical. As Sweden was neutral but willing to give us the formula, a secret mission was undertaken to obtain the formula from Sweden.

Ammonium Perchlorate is known to be an extremely powerful oxidising agent – that is, it can actually make fires burn with greater ferocity because it generates oxygen – but its production here was as an additive to explosives. As an additive, it can greatly increase the explosive power of bombs, and particularly for the manufacture of sea mines which could be laid in the waters around Britain to deter U-Boats. Very necessary during the war.

Ammonia was one of the raw materials, and since ammonia was a by-product of coal coking, Langwith Bye Products, partly owned by the Sheepbridge Company, close to Langwith Colliery was developed as a suitable site to build the factory. The manufacturing process also needed massive amounts of electrical energy, because the first part of the process involved the electrolysis of salt. Such were the demands for electricity that the Power Gas Company was approached and with the National Gas Company started making generators and other equipment. Soldiers were conscripted to increase the workforce to over 500 to build the factory.

The six storey factory, called His Majesty's Factory Langwith, covered 27 acres, with a 78ft high tower block. The ancillary services included a power house, water softening house, pumping station, and reservoir. The water came from the nearby River Poulter. It had offices and laboratories covering 13 acres.

"Grinding House Girls" amongst the many female workers at Langwith (www.mylearning.org)

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The chemical was finally ground down to become a white powder and taken by train to an explosive factory in Wales.

Production started in June 1917 with full production reached in July, 1918. The factory had a staff of over 800, and all needed to sign the Official Secrets Act. The site had special trains laid on from local towns to bring in the workers, most of whom were women, and they also had their own police force.

The factory had two serious explosions six men and six women were killed – when dealing with a strong oxidising agent like Perchlorate, sparks and matches were particularly deadly. Also it was known that cross-contamination from small bits of oily rag, wood, paper etc., could cause it to auto-combust. On 20 November 1917 there was a fire in the grinding/milling house. One of the three workers who were killed had loose matches in his pocket. Just weeks later, in March 1918 there was another explosion. No evidence could be found for the cause and at first it was suspected that a spy had attempted sabotage.

Such accidents in production of Ammonium Perchlorate (AP) were not uncommon. The most well known fairly recent example was the "PEPCON" disaster of 1988. The PEPCON plant, located in Nevada, 10 miles from Las Vegas, was one of only two American producers of AP. In 1988, a conflagration followed by several explosions occurred at the Pacific Engineering and Production Company. The disaster caused two fatalities, 372 injured, and an estimated $100 million USD of damage. A large portion of the Las Vegas Valley within a 10-mile radius of the plant was affected – were you in Las Vegas 30 years ago, and maybe felt the earth shake?

Getting back to Langwith, production there gradually decreased at the end of the war to finally finish by the end of 1920. In 1927 the site was put up for auction It was bought by Sheepbridge Co. who pulled it down. The factory is now covered in pit soil and is part of the Poulter Country Park.

Ammonium perchlorate was later used in the development of rockets as a fuel additive in the Second World War and beyond.

Ref: *"A History of Langwith, Nether Langwith and Whaley Thorns"* by Tony Warrener. 2008.

LEFT: Site of deadly explosion at Langwith which decreased production in grinding house whilst rebuilding (www.mylearning.org)

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, 9 September 2019	Peter Kennet: **"Ecton Copper Mine – from 18th Century riches to 21st Century robots"**
Monday, 14 October 2019	Michael Parkin: **"The Disgrace of Peterloo"**
Monday, 11 November 2019	Tony Hill: **"Strutts North Mill – why are Belper and the Strutts so important to the World Heritage Site"**
Monday, 9 December 2019	**Christmas Meeting**. Talks from members, accompanied as usual by mince pies.

Other Diary Dates

Tuesday 21 May 2019	Robin Fielder: **"Harry Brearley"**. Chesterfield & district Local History Society, Rose Hill United Reform Church, 7:30pm
Tuesday, 21 May 2019	Ian Jackson: **"Water Power in the Derwent Valley"**. Cromford Mill – Arkwright Society evening talk. Cheese & Wine from 7:00pm included. 7:00 for 7:30pm at the Gothic Warehouse on the canal wharf. Booking 01629 823256
Tuesday 18 June 2019	Dave Darwin: **"My Life in Steam"**. Chesterfield & district Local History Society, Rose Hill United Reform Church, 7:30pm
Tuesday 18 June 2019	Maxwell Craven: **"John Whitehurst -- Innovator, Scientist, Horologist and Geologist"**. Cromford Mill – Arkwright Society evening talk. Cheese & Wine from 7:00pm included. 7:00 for 7:30pm at the Gothic Warehouse on the canal wharf. Booking 01629 823256
Thursday 20 June 2019	Peter Skelton: **Monochrome to Fujichrome**. A wide range of images from BR steam days through to the modern era. 7:30pm Barrow Hill Roundhouse. http://www.barrowhill.org/lectures.html
Thursday 18 July 2019	Andy Barclay: **Peter Fox Collection – Part 6**. Andy returns to show more images from the late Peter Fox Collection. A general mix of images from the sixties onwards. 7:30pm Barrow Hill Roundhouse. http://www.barrowhill.org/lectures.html
Thursday 15 August 2019	Eric Moy: **Mick Fowler's Railway Travels**. The late Mick Fowler was a well-known photographer from Doncaster who travelled far and wide in pursuit of his transport interests. His collection is now in the hands of Eric Moy who has made available a selection of images from the late 50s and 60s. 7:30pm Barrow Hill Roundhouse. http://www.barrowhill.org/lectures.html
Tuesday 20 August 2019	Michael Parkin: **"The Pentrich Revolution"**. Chesterfield & district Local History Society, Rose Hill United Reform Church, 7:30pm

NEDIAS VISITS

Monday 10 June 2019 – Visit to Portland Works

We visit the famous Portland Works, now a listed building. The Portland Works, Randall Street, Sheffield, S2 4SJ, just off Bramall Lane, is often referred to as the birthplace of stainless steel manufacturing. In 1914, through collaboration between Harry Brearley, Ernest Stuart and R. F. Mosley, this became the first place in the world to manufacture stainless steel cutlery.

Our visit begins on-site at 10:30, coffee on arrival, followed by a talk on the history of the site. We will be able to tour some of the small workshops, even have a roof-top visit. We follow with buffet lunch, time to chat and departure after lunch. Anticipated cost approx. £15 including lunch. If you'd like to join us, please add your name and email address to list at the meeting, or email Brian Dick on briandick34@hotmail.com or ☎ 01246 205720

Derbyshire Archaeology Day, January 2019

Once again, Derbyshire Archaeology Day on Saturday 12 January at the Pomegranate Theatre proved to be a tremendous draw. The theatre was full, and many were unable to book. It kept us all up-to-date with happenings over the last year, some ground-breaking (in more ways than one) although with 8 topics some stood out more than others, and this sort of conference can teach us all the difference between a good speaker and the not so good. The talks included:

Excavations at Derventio, led by Trent & Peak Archaeology. A dig during excavations for the flood relief scheme at the Derventio Roman fort/Little Chester near Darley Abbey just on the north side of and Derby. The site is known to show occupation from a foundation in 1st century AD, replacing an earlier fort at Strutts Park west of the river. Large late 1st century ditches have now been discovered now suggest an early fort of up to 6ha/14 acres.

Excavations at Hanging Banks, Derby Road, Wingerworth also by TPA. A Romano British enclosure/ perhaps fortlet discovered in advance of housing development on the site may indicate a close relationship with the Roman fort at Chesterfield. The site showed some rectangular enclosures with early bronze age pottery, and a roundhouse with late iron age Romano British pottery. Overlaying were a trackway , furrows and fieldworks, maybe medieval date. The south of the site shows a large rectangular enclosure, ca 100m x 66m, with large timber built aisle structures, with possible corn drying kilns and bread ovens, suggested 1st-2nd century AD. An interesting find was a rare enamelled bronze altar stand = hopefully this can be displayed in a museum locally.

"Brindley Gates" at Cromford Canal. When Brindley built his first canal, the Bridgwater, it was fitted with a number of automatic stop gates, which float up to halt any sudden loss of water due to breach of banks. These are generally now termed "Brindley Gates". Interestingly one has now been located on the Cromford Canal at Whatstandwell, ARS was commissioned to investigate and interpret when the canal was drained for maintenance last year. The gates lie at the bottom of the canal, floating up by pressure of sudden water flow to cut off one or other end of the pound. There must be quite a number of others still to be found on the Cromford.

Lumford Mill, Bakewell. Lumford was Richard Arkwright's third water powered cotton spinning mill, built in 1777 (started the same year as his Haarlem Mill at Wirksworth and Birkacre Mill in Chorley). The mill was 4 storeys high with a mill pond behind supplying a waterwheel within the building itself. The site has been redeveloped a number of times since then, and last year provided opportunity to see whether any of RA's original mill survives. Trial trenching by ARS came up trumps, revealing early sandstone walls and flooring which are thought to be the well preserved remains of Arkwright's third mill. NEDIAS had a talk some years ago from Jan Stetka of Bakewell History Society about this mill, and if you have been round Bakewell Museum, you will know that the museum is housed in cottages actually used by Arkwright for some of the 500 mill workers.

An Interesting Connection *Darrell Clark*

There is an interesting connection between Williamthorpe Colliery's use of Fowler 0-6-0 (Jinties) and a company that manufactured mining equipment in Derby under the name of Davis Derby

Davis Derby was a family business established in Leeds in 1779 by Gabriel Davis, as a manufacturer of optical, surveying and mathematical instruments. The business was established during the reign of King George III and when William Pitt was Prime Minister.

In the early 1830s John Davis travelled regularly between Liverpool, Cheltenham and Derby selling the company's products. John continued to visit Derby and in 1843 took up residence there with his family. He bought the freehold of the 16th Century Meynell house in Irongate, Derby.

Around 1840 John Davis began to manufacture mining equipment such as safety lamps based on the designs invented in 1815 by Sir Humphrey Davy, the production of which continued for more than 100 years. The Company continued to manufacture the Hedley Mining Dial until around 1960.

Under the leadership of Henry Davis the business expanded, moving to new premises in November 1875 at All Saints Works, close to the Cathedral. Early in the 20th Century, John Davis of Derby's product range included many types of miners' lamps, anemometers, air powered lamps, hand lamps, a range of shot-firing explosives, in addition to the traditional Theodolites and Mining Dials. Davis Derby was to remain in the Davis family until 1962, a total of 148 years!

Williamthorpe Colliery Chesterfield was probably the last user of steam locomotives in the North Midlands. British Rail provided steam locomotives to the NCB, for working the coal wagons over NCB metals between Williamthorpe Colliery and the LMS main line near North Wingfield, in the form of Fowler 0-6-0 (Jinties).

Colin Wright, the full time artist employed by Davis (Derby) Ltd. has captured the essence of this operation in his painting of 47383.

What is not generally known is that this painting was transferred to the face of carriage clocks, given as presents to customers of Davis (Derby) Ltd.

Davis Derby are firmly established as a global supplier of sophisticated telemetry, computer based control and monitoring systems, and the locomotive in the painting 48383 has also survived into the 21st Century.

Two of the 0-6-0s were on duty at the colliery seven days per week, with others held in reserve at Westhouses Locomotive Shed coded 16G.

I believe the locomotives used were as follows: 47383, 47289, 47313, 47534, and 47629. All of these were some of the very last steam locomotives withdrawn by BR in the area. Three of them, 47383, 47289 and 47629, were not withdrawn from use until October 1967. Records show that no other locomotives of this class of 0-6-0 survived in BR service after 1966.

However, ten of the class have survived into preservation including the locomotive featured in Wright's painting of 47383. It was originally withdrawn in 1966, but was refurbished and returned to service until October 1967 and now lives on The Severn Valley Railway.

List of preserved Jinties: 47279, 47298, 47324, 47327, 47357, 47383, 47406, 47448, 47493, 47564.

Chairman's Chat — *Cliff Lea*

I always look out for local and national milestones in the field of industrial history, and 16th August this year marks a really significant bicentenary – it is 200 years since the infamous *"Peterloo Massacre"* of 1819. Maybe you have been to Manchester to view the blood Red Plaque (yes, Red, not Blue) on the wall in Peter Street, close to the old Free Trade Hall.

Peterloo is often mooted as one of the most important milestones leading to improved workers' rights. My own view is that despite the high profile of the event, little was to change for the downtrodden man in the street for many years afterwards. This disgraceful example of inept use of the military in civil affairs highlights a combination of ignorant political appraisal, appalling military management, the role of alcohol on both

George Cruikshank's "Peterloo Massacre"

officers and men, and miserable lack of communication on the part of the authorities. By comparison there was almost exemplary behaviour from the protestors and their organisers. In short, the event turned out to be the worst sort of atrocity.

We are marking the occasion with a talk in October titled: *"The Disgrace of Peterloo"* given by Michael Parkin whom you may recall talked to us a few years ago about the bicentenary then of the more local *"Pentrich Revolution"*. This should be an interesting evening.

One of the other talks this Autumn concerns the importance of Strutt's Belper mills. Do please let me know if you think we should have a visit to Belper by NEDIAS to have a guided tour – it is some years since we did so, and a lot more is now known. So shall we visit again?

More on the Brampton Branch Line — *Darrell Clark*

To complete my article on the Brampton Branch Line in the last NEDIAS Newsletters, the following are the businesses which were served by this line:

Pearson's Pottery
Plowright Brothers, mining equipment and winding gear
4 Coal Offices in the Brampton Goods Yard
Stone Saw Mill, no name
Corporation Electric Light Works
Morgan Crossley & Co., Lampwick Works
Tyson & Bradley Chemical Works
Robinsons Wheatbridge Mills
Corporation Gas Works
Brampton Brewery Co
Wheatbridge Potteries
Park Road Gas Works (GC Railway)
Hipper St. Gas Works (Midland Railway)
Townrow & Sons Corn Mill
Hipper Works

As an Addendum: Barry Richardson some 8-years ago, passed to NEDIAS some photos he'd taken of the last remaining section of track still in situ (at that time) of the Brampton Branch on a bridge over the A61 at Lordsmill Street.

Editor's note:

This bridge is now, of course, part of the new walking and cycling route from Chesterfield Rail Station to Queens Park.

The Industrial Village of Akroydon

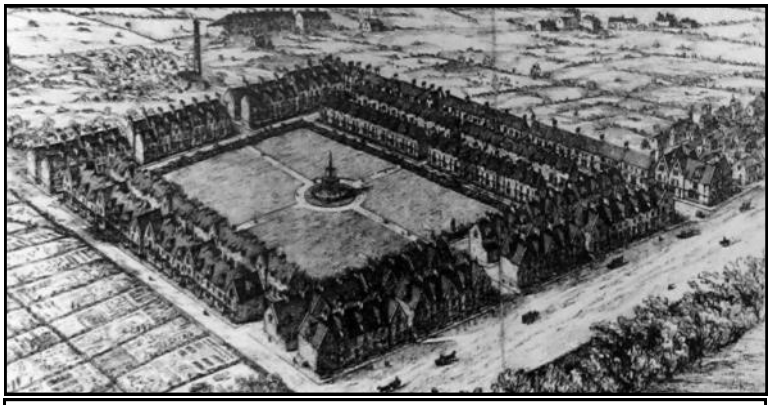
Cliff Lea

We can all name industrial housing schemes built during the industrial revolution, and the villages that readily spring to mind include Cromford (North Street is the world's first housing built specifically to serve the factory system), Belper, Bolsover model village, Port Sunlight, Styal, etc. But have you come across Akroydon which was built at a similar time as Saltaire?

If you visit the Bankfield Museum close to the centre of Halifax, this is the area where Akroydon was built by the Akroyd family. In 1855 the Akroyd family bought the thousands of acres of land on which the houses were to be built, close to their wool worsted mills.

Of course, living and working conditions generally in the Yorkshire mill towns in the mid-1800s was dreadful. A letter to the *Leeds Mercury* in 1830 accused the Bradford mills of being *"magazines of infantile slavery"*, and it was stated that conditions in Halifax mills were even worse. Indeed, in one area of Halifax in 1850, there was just one privy for 221 people – disease was rife in the town, and the average life expectancy in Halifax was just 26 years and 10 months! It was just some industrialists who realised that "something had to be done" to improve conditions Salt was one who developed Saltaire at this time but Edward Akroyd was another.

Edward Akroyd, grandson of James Akroyd who had started the family business, felt that not only should good housing be built, but that he should enable his workers to take out mortgages and become owners of their own property. It was to be a model village not only in the architectural sense but also in a social sense as well. The houses were built in various sizes for people from all economic classes, who were offered low cost mortgages to buy them.



Sir George Gilbert Scott's design for Akroydon

This was to be good quality housing, it was designed in the Gothic style by Sir George Gilbert Scott in 1859. Scott's plan was for a quadrangle of 350 houses, although only 90 were actually built. There was to be a working men's college for self-improvement and allotments. Akroyd himself paid for the roads – each named after great Gothic cathedrals, Beverley, York, Ripon, etc. He funded the church, All Souls, which has the tallest steeple in Halifax, at 240 ft., and he developed Square Park. In the middle of the Square, Edward Akroyd had a monument, the Victoria Cross built in 1875 and dedicated to Queen Victoria.

The Akroydon Building Association was set up in cooperation with the Halifax Permanent Benefit Building Society. Members could pay for their homes on easy terms. No deposit was needed and the loan spread over 15 years. Edward Akroyd himself guaranteed the first three years payments for workers of good character.

Akroyd wrote: *"the houses were created not merely for the purpose of aggregating a sufficient number of operatives for the supply of labour, but also with an eye to the improvement of their social conditions, fitting up their homes with every requisite comfort and convenience."* Labour he certainly needed – he employed some 7,500 in the 1850s!

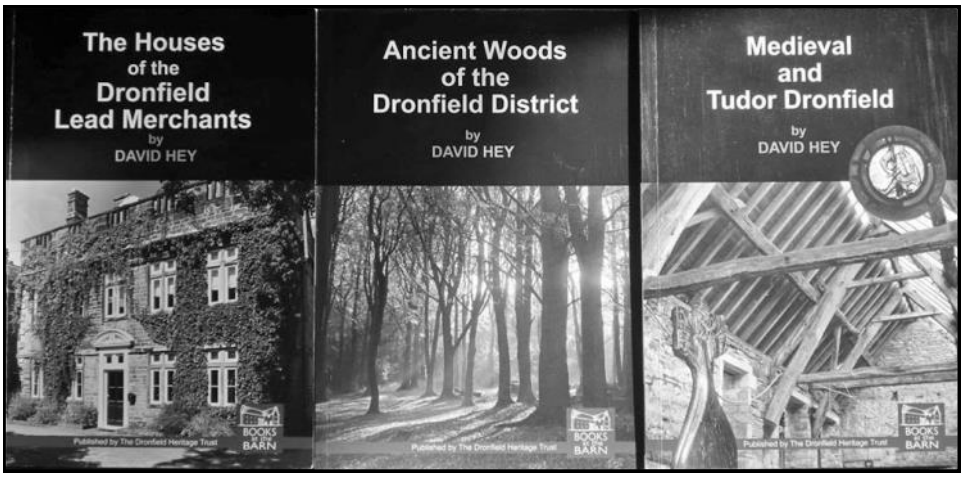
If you go to Halifax, do go to Bankfield Museum, Bankfield being the main Akroyd family residence until 1887 when it was sold to Halifax Corporation who converted it into their main Museum and Art Gallery. But you will probably also visit the famous Piece Hall of 1779, a real "must" now that it has had such great restoration. By the way, the Akroyds had bought one of the rooms in the Piece Hall for sale of their own worsted cloth.

The Victoria Monument

Remembering the Late Professor David Hey

Derek Grindell

The late David Hey, Emeritus Professor of Local and Family History and a Honorary Doctor of Letters at Sheffield University, was a good friend of NEDIAS. Never regarding his work as a chore, he maintained that 'his job was his hobby', a conviction echoed by his wife Pat in her personal tribute in para 2. Typically, Professor Hey donated his interest in the books illustrated below to The Dronfield Heritage Trust and they will be a fitting memorial to a dedicated and approachable local historian, who was highly regarded for both his professional scholarship and his loyalty to his 'home turf' as typified by his involvement with the Dronfield Hall Barn Project.



Replete with the fruits of Professor Hey's assiduous research, the three publications alongside are a fitting testimony to his keen eye for the nuances of landscapes and the stories they tell. As confirmed by his wife Pat, in her Preface to his last publication, *the Ancient Woods of the Dronfield District, 'David had an interest in landscape history and the history of local communities, place names, surnames and family history. He loved walking in the countryside, whether it was on the moors, along country lanes, along the coast, on the hills or just strolling in his local area'.....'He never thought of his work as a chore; he said that his job was his hobby'.*

As a measure of Professor Hey's standing within academia, he was authorised by The National Archives, a body created in 2003 when the Public Record Office was merged with the Historical Manuscripts Commission, to produce a comprehensive official guide to the research of family history. The result, in 2004, was *Journeys In Family History*. The three publications will surely endure as highly accessible works of local history for both academics and amateurs wishing to learn more about Dronfield and its place in local history.

Today, it would strain the credulity of casual visitors to Dronfield to convince them that the oldest houses in the town and surrounding countryside were financed from the profits of the lead trade. Lead was mined in what is now called the White Peak, located some miles to the west and the ore was transported by packhorse over the moors for smelting in the wooded valleys between Chesterfield and Sheffield. The river Derwent and lesser streams provided the power and the finished pigs of lead were transported on either oxen-drawn wains or horse-drawn carts to Bawtry, which then was a gateway to Kingston upon Hull via the rivers Idle, Trent and Humber.

Such was the demand for lead in the second half of the 16thC that Derbyshire became Europe's leading supplier. In the early 1540s the Peak District's lead mines had produced a mere 3,000 loads of ore p.a. but by the end of the century annual output had reached 34,000 loads. By the 1640s, however, annual output had increased to 120,000 loads. Lead (Pb), Element No.82, Atomic Weight 207.2, Density 11.340, Atomic Radius 154pm, is the preferred metal for bullets since it has a density, which enables a high proportion of mass to be confined within a minimum of space thereby reducing air resistance. Another valuable characteristic is its inherent softness which allows it to fit tightly in a gun barrel without interfering with the integrity of the barrel or becoming lodged. For more than two millennia, lead was the metal of choice for directing water. What better recommendation for lead can there be than the simple fact that the same lead pipes have served the City of Rome since the time of Roman Empire?.

The Late Professor David Hey

Lead, with its ability to withstand being beaten into sheets, welded into tubes and hammered together, has a melting point low enough to be transformed into a liquid

over a wood fire. In mediaeval times the latter characteristic was deployed to horrifying effect in the defence of castles. Would be raiders could repelled by defenders pouring molten lead from the battlements onto their heads.

The flourishing market for the ore transformed the lives of the families who had invested in its smelting and marketing. The huge financial gains they made were reflected in the substantial houses they were able to build such as those in and around Dronfield and outlying districts. The most successful were the Burtons of the Manor House and the Rotherhams of the Hall.

In the mediaeval period, lead was smelted on high ground and exposed to the elements, which facilitated the dispersal of toxic smoke. There is today, for example, a Bolehill postal address located off Derbyshire Lane, Sheffield and another Bolehill on the south side of Cromford. A bole was a rectangular or circular stone structure that was exposed on the side facing the south-westerly winds so as to maintain a fire under the lead ore. The molten lead was directed on the other side into a casting pit since the slag contained a large portion of lead.

The lead smelted in the Peak District was reputed to be the purest in England. The ancient parish of Dronfield had at least three such sites and another was located on high ground near the northern end of Brown Edge to the west of Totley. A third site, on the top of Hewetts Bank between Ramsley Moor and Fox Lane, with smelting ovens and troughs in the valley below, remains the only site for which documentary evidence is available.

The court rolls of the manor of Holmesfield record that in 1505 Roger Eyre of Holme, Esq. and his brother John, gentleman, created two boles with smelting ovens and washing troughs on a hill named Hewood. A geochemical survey has identified soils heavily contaminated by lead, and the site of the ovens and troughs has been identified from remnants of broken lead slag and earthwork mounds within an area between a goit and the stream that flows down to the Millthorpe Brook. During the 1570s and 1580s mediaeval smelting sites on Bole Hills such as these were replaced by new smelting methods. George the 6th Earl of Shrewsbury, brought eleven workmen from the Mendips to Chatsworth to build and work an ore hearth powered by foot operated bellows. Within a few years water powered bellows replaced the majority of the footblasts. One exception was John Moore's smelting house on what was then the edge of the moor at Holmesfield Lidgate. In 1598 Moore supplied lead to a London merchant and, following his death some seven years later, the site was managed by Adam Eyre of Bradway. The smelter at Lidgate was still processing ore in 1621.

The first water-powered bellows in Derbyshire were those installed at Beauchief and Cromford between 1569 -70. The advantages of the new modus operandi was quickly acknowledged. Coppiced wood that had been charred into a fuel was known as white coal to avoid confusion with the dark charcoal that was used by the ironmasters. White coal was fired to a high temperature by water-powered bellows in smelting mills sited by fast-flowing streams so as to produce a pig of lead. The reliance on weather conditions gave cause to the custom of recognising the specific weather 'window' favourable for smelting as 11 November (Martinmas) to 25 March (Lady Day). This period was only in common usage until the middle period of the 18thC when coal powered cupolas were adopted.

Following the death of George, sixth Earl of Shrewsbury in 1590, the Derbyshire lead trade attracted investment from the county's aristocrats and gentry of which the Cavendish, Manners, Eyre and Gell families were prominent members. In ensuing decades their success persuaded those lower on the social scale to become involved in the trade as smelters and lead merchants. Of this milieu were the men who built the impressive stone houses that are characteristic of Dronfield. Their affluence and new social standing accounts for the exceptional halls such as those at Cartledge, Holmesfield and Hallowes. Dronfield Manor House, Dronfield Hall, Chiverton House and Rose Hill, which were built in the 17th and early 18th centuries. Despite Derbyshire's smelting mills not having survived, 59 sites have been identified both in and around the Peak District by David Crossley and David Kiernan. Since smelting mills required neither a complex of buildings nor the large ponds associated with iron production they were frequently sited on the upper reaches of streams close to the woods that supplied their fuel.

There were smelting mills at Dore, Totley and Holmesfield, all within the parish of Dronfield. The lead ore was carried from source by groups of packhorses guided by a man known as a jagger, a name which survives in the names of lanes in Ashover, Hathersage and Darley Dale. The name jagger remains in the vocabulary of the north country as a reference to the man in charge of packhorses. The name itself was derived from the breed of ponies used as packhorses, which were imported from Germany. Jagger is a corruption of jaeger, the German for hunter.

/ To be continued

IA News and Notes

Portland Works

The Portland Works, Randall Street, Sheffield, just off Bramall Lane is often referred to as the birthplace of stainless steel manufacturing. In 1914, through collaboration between Harry Brearley, Ernest Stuart and R. F. Mosley at Portland Works, this became the first place in the world to manufacture stainless steel cutlery. It was built in 1879 and is now one of the last remaining working examples of a purpose built metal trades factory. Following a half-century of neglect, the building was purchased in 2013 by a social enterprise comprising more than 500 community shareholders who, having saved it from residential conversion, are now undertaking an extensive renovation.

The grade 2* listed building has been reborn as a centre for small manufacturing, independent artists and craftspeople, with more than 30 small businesses located within the 2600 square metre floor space. These include knife makers, an engraver and several engineers; cabinetmakers and joiners; jewellers and silver platers; artists; rug and guitar makers; photographers and a Yorkshire based gin distillery. Even high-tech CNC manufacturing is happening at Portland Works.

Listen out for details of NEDIAS visit to the Portland Works, organised for Monday 10 June.

Photos courtesy of Friends of Portland Works

New Website for Aerial Photos of Britain

Historic England have announced an interesting web site which hosts aerial shots of Britain portraying areas in the period of between the 1920s and 1950s, https://www.britainfromabove.org.uk. Could be useful for members researching industrial sites this period.

Illustrated is one of the aerial shots titled *"The Market Place and Market Hall, Chesterfield, 1928".*

Dema Glass

During our recent evening about local glass manufacturers, one of our visitors was Geoffrey Weatherall. He told me that in the late sixties and early seventies he had been a delivery driver's mate for Dema Glass – his driver was Edward Brunt. He said their first lorry had been a Leyland Comet, but this was replaced by Foden 5198NU. He said this was later retired, to be replaced by a Scania to cope with the growing palletisation of loads.

Whilst he now knows that there is now no record of the Foden at DVLA under registration 5198 NU , he wonders whether anyone can add anything about the eventual fate of this Foden, and indeed whether it may have been registered or in private collection – or indeed, any other news of this truck which must have become a regular sight in Chesterfield. Please pass any news to Cliff at cliff@nedias.co.uk or 01246 234212 for onward transmission to Geoff Weatherall.

LEFT: Dema Glass' Foden 5918 NU – what happened to it?
ABOVE: Dema's earlier Leyland Comet

200 years of the Sheffield and Tinsley Canal

In 1815, the Sheffield Canal Company was formed by Act of Parliament in order to construct a canal to transport goods from the Upper Don area in Sheffield to the navigable part of the Don which stretched down-river from Tinsley onwards, to the Ouse and Humber. The Duke of Norfolk and Earl Fitzwilliam were the major subscribers to the cost of this "missing link" in navigation.

William Chapman surveyed the route and became Engineer for the project. Chapman (1749-1832), son of a sea Captain, was a Whitby born man, who became associated with many land drainage and dock projects, including at Beverley, Scarborough, Seaham, Hull, London, Dublin etc. His work on canals included the Kildare and Grand Canal in Ireland.

The Sheffield and Tinsley Canal finally opened on 22 February 1819 – just 200 years ago this year. A general holiday was called in Sheffield and it's said there were 60,000 spectators gathered to watch a flotilla of 10 boats arrive the 4 miles from Tinsley. Shortly regular services would run from the city, including a regular "fly boat" to transport Sheffield people by fast boat all the way through to connect with Hull and London services.

On 22 February this year once again crowds flocked to Victoria Quays to celebrate the bicentenary of this missing link which finally took navigation right into Sheffield, making possible wharf to wharf transportation of the city's many goods.

Did any of our members attend the bicentenary, and does anyone have any photos to share?

And finally ....
.... the great chunk of coal from Staveley which was exhibited at the 1851 Great Exhibition

At NEDIAS' March meeting, Glynn Wilton showed a photo of a really giant piece of coal which had been on display at the Great Exhibition of 1851; the exhibition catalogue advised that it was from Richard Barrow's **Speedwell** colliery at Staveley, found at a depth of 459 feet. The report went on to say that this block of coal weighed no less than 24 tons.

Subsequent to the meeting, Ron Presswood has found a contemporary press account in the ***Morning Chronicle***, **Thursday May 15, 1851, page 2, column 4**, that the above block was 17.5 ft. long, 6ft wide and 4ft thick which Ron calculates to be 420 cubic feet in volume. Certainly quite an enormous bit of nutty slack! Since the density of this coal would have been no more than 57 lbs/cu.ft., Ron has calculated its weight would have been around 10.7 tons maximum, dispelling the 24 ton myth – but nevertheless still making it of quite extraordinary size.

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

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Editor: Cliff Lea
☎ 01246 234 212
or e-mail: cliff@nedias.co.uk
Assistant Editor: Doug Spencer

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