

# North East Derbyshire Industrial Archaeology Society

NEDIAS Newsletter No. 43 – August 2011

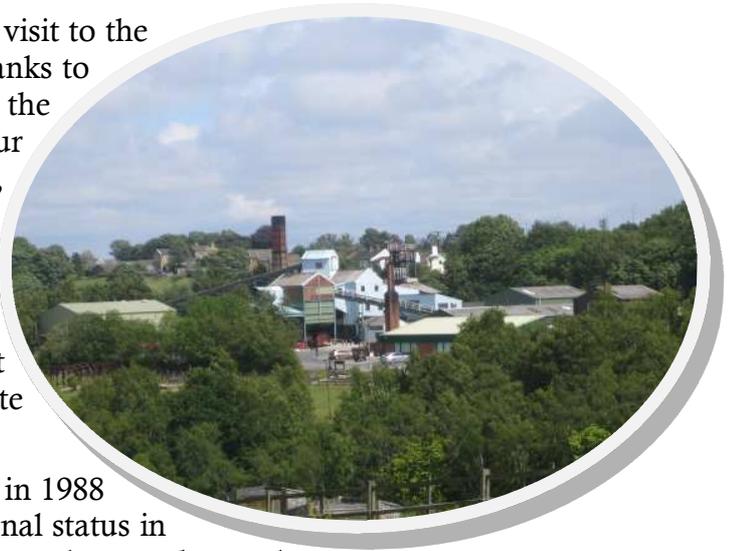
Price: £1.00 (Free to Members)



## 2011 - NEDIAS TENTH ANNIVERSARY YEAR!

### National Coal Mining Museum, Caphouse Colliery – visit of 25th June 2011

Earlier in the year NEDIAS had a really excellent visit to the National Coal Mining Museum – our special thanks to Brian Dick who drove us to the site in style in the Chesterfield community bus. We were given a tour underground by an extremely knowledgeable guide, Mick Green, who was a veritable “mine” of information on the history of coal mining. However, it turned out that he had learned the business as a fitter at Grimethorpe, and gave us a non-stop commentary of life underground; he had lived in the same street at Grimethorpe as portrayed as the home of Pete Postlethwaite in the film “Brassed Off”.



The National Coal Mining Museum for England opened in 1988 as the Yorkshire Mining Museum and was granted national status in 1995. This mine was worked from at least 1789 until the coal was exhausted in 1985. Following the UK Miners' Strike (1984-1985) work was started to convert it into a museum. The miners were transferred to Denby Grange Colliery at nearby Netherton.



Whilst the Museum is free of charge, we felt that we should send a donation from NEDIAS; this site is desperately short of money, and they do such sterling work in conservation and education of our mining heritage. You may be interested to see the following reply received...

*Dear Mr Lea,*

*DONATION TO THE NATIONAL COAL MINING  
MUSEUM FOR ENGLAND*

*Thank you so much for your letter dated 25 June and the enclosed donation to the Museum. I am so pleased to hear that you and your group had such an enjoyable visit. We all work hard to ensure that*

**Contents: National Coal Mining Museum, Caphouse Colliery ■ What's On? ■ NEDIAS Visits ■ James Watt's workshop at the Science Museum ■ James Watt – The Early Years ■ Derwent Valley Water Board, extracts from Engineer's Cuttings ■ IA News & Notes ■ Excavation at Wingerworth Stone Saw Mill**

our visitors have an enjoyable experience and it is so lovely when someone takes the time to write and tell us they have had a great visit. I have circulated your letter to everyone here.

The NEDIAS donation has been allocated to the Museum's Buy a Brick appeal which raises funds for our Making Sense of Mining project... which will extend and revitalise our unique underground tour and conserve our historic furnace shaft.

If you would be happy for us to recognise your donation in this way, please let me know --- I could then add the name of your Society, and a message onto the five bricks you have donated.

Your support is very much appreciated; we hope to welcome you all to the Museum again in the near future.

Liz Orme

Development Officer.

I have replied back on your behalf, and asked for the following message to be attached to the "virtual" bricks:

*"Congratulations to NCM staff and volunteers for their hard work and incredible determination in saving and demonstrating Britain's amazing coal heritage for the benefit and education of future generations. Best wishes for the future from the North East Derbyshire Industrial Archaeology Society. We will be back!"*

So, NEDIAS now has a few bricks in their wall, and we are preserved in stone!

Cliff Lea

## WHAT'S ON?

### NEDIAS Lecture Programme

**When:** Meetings are held on the second Monday of each month, starting at 7:30 pm.

**Where:** Friends' Meeting House, Ashgate Road (at junction with Brockwell Lane), Chesterfield.

Monday, 12 <sup>th</sup> September 2011	<b><i>NEDIAS 10<sup>th</sup> ANNIVERSARY LECTURE</i></b> Dr Dudley Fowkes: <i>Westhouses – Midland Railway Village.</i>
TUESDAY, 11 <sup>th</sup> October 2011 <b><i><u>YES – TUESDAY!!</u></i></b>	<b><i>JOINT MEETING WITH CHESTERFIELD CIVIC SOCIETY</i></b> David Siddon: <i>Brampton Pottery.</i> <b><i><u>VENUE- Chesterfield Library Theatre: NOTE DIFFERENT VENUE</u></i></b>
Monday, 14 <sup>th</sup> November 2011	Darrell Clark: <i>The Fall and Rise of Arkwright's Cromford Mill</i>
Monday, 12 <sup>th</sup> December 2011	<b><i>CHRISTMAS MEETING</i></b> Robin Fielder: <i>The History of Steelmaking in Sheffield.</i>
Monday, 9 <sup>th</sup> January 2012	Stephen Flinders: <i>Stanton at War</i>

### Other Diary Dates

Sunday, 11 <sup>th</sup> September 2011	<b>Classic Ford Day.</b> Crich Tramway Village, Crich, Matlock, Derbyshire, DE4 5DP – Tel: 01773 854321
Thursday, 15 <sup>th</sup> September 2011	<b>Steaming Through Britain</b> – A DVD presentation by <i>GB Productions</i> of preserved steam at work around Britain, both on the mainline and at Heritage Railways. Barrow Hill Roundhouse Lecture Theatre 7:30pm.

<b>Saturday &amp; Sunday 17<sup>th</sup> &amp; 18<sup>th</sup> September 2011</b>	<b>Model Rail Live Exhibition</b> , Barrow Hill Roundhouse. A1 Tornado and B1 Mayflower will both be at the Roundhouse to coincide with the exhibition.
<b>Tuesday, 20<sup>th</sup> September 2011</b>	<b>The Chesterfield Shopping Festivals 1910-1951</b> – David Howes. Chesterfield & District Local History Society in the upper schoolroom of Rose Hill United Reformed Church in Chesterfield 7:30pm.
<b>Sunday, 2<sup>nd</sup> October 2011</b>	<b>Steam Open Day</b> at Barrow Hill Roundhouse – B1 1306 Mayflower and the Peckett in steam hauling trains. A1 60163 Tornado on display. Contact 01246 472450 for further details.
<b>Tuesday, 4<sup>th</sup> October 2011</b>	<b>Lecture at Cromford Mill by Barry Joyce: “Understanding World Heritage.”</b> 7:00pm – booking required on 01629 825995
<b>Saturday, 15<sup>th</sup> October 2011</b>	<b>EMIAc 82 - Iron Ore Mining</b> , to be hosted by the Northamptonshire Industrial Archaeology Group. In Cogenhoe and Irchester. Booking form at <a href="http://www.northants-iag.org.uk/emiac.html">www.northants-iag.org.uk/emiac.html</a> , or via <a href="mailto:secretary@northants-iag.org.uk">secretary@northants-iag.org.uk</a>
<b>Tuesday, 18<sup>th</sup> October 2011</b>	<b>The Hospitaller Knights. The story of the Knights of the old order of St John of Jerusalem</b> – Dr Tony Bethel. Chesterfield & District Local History Society in the upper schoolroom of Rose Hill United Reformed Church in Chesterfield 7:30pm.
<b>Thursday, 20<sup>th</sup> October 2011</b>	<b>Diesels in the Peak District</b> – A show with views throughout the Peak District over a period of thirty-five years, 1975 – 2010 by Phil Lockwood & Enid Vincent. Barrow Hill Roundhouse Lecture Theatre 7:30pm.
<b>Friday, 4<sup>th</sup> November 2011</b>	<b>The Railways and Canal of Barnsley (Bob Illingworth).</b> Lecture at Beeston Library, 7.00pm
<b>Tuesday, 15<sup>th</sup> November 2011</b>	<b>Arkwrights - Spinners of Fortune The Arkwright family Sir Richard 1732-1792 through to the Arkwrights of the 20<sup>th</sup> century</b> – Darrell Clark. Chesterfield & District Local History Society in the upper schoolroom of Rose Hill United Reformed Church in Chesterfield 7:30pm.
<b>Thursday, 17<sup>th</sup> November 2011</b>	<b>The Yorkshire Engine Company</b> – An illustrated look at this well known company – Tony Vernon. Barrow Hill Roundhouse Lecture Theatre 7:30pm.
<b>Friday, 6<sup>th</sup> January 2012</b>	<b>Canals and Railways to Pinxton (David Amos)</b> – Lecture at Beeston Library, 7.00pm
<b>STEAM HERITAGE – LEAWOOD PUMPHOUSE:</b> Leawood Pump is situated on the Cromford Canal, a short walk from High Peak junction. It was built in 1849 to pump water from the River Derwent into Cromford Canal. Leawood Pump is now over 150 years old but remains in pristine condition thanks to the Middleton Top Engine and Leawood Pump Group for their dedication in maintaining and operating both beam engines. Experience the power of this great steam engine as it pumps four tons of water into the canal with each piston stroke. The only Steamings left this year are: 1 <sup>st</sup> October, 2 <sup>nd</sup> October, 29 <sup>th</sup> October and 30 <sup>th</sup> October (12:00 noon to 5:00pm). There is no charge.	

# James Watt's workshop at the Science Museum

If you're going down to London, you should make sure you include a visit to the Science Museum.

Watt's workshop is nothing less than a self-contained historical time capsule, representing a complete physical record of the working life and interests of James Watt. All the furniture, the floorboards and door, window and skylight, and 8,430 objects, have been preserved essentially as they were left upon Watt's death in 1819.

The workshop was in the attic of Watt's home, Heathfield Hall in Handsworth, Birmingham. Watt spent a lot of time in the workshop after his retirement in 1800, partly to escape his second wife. His main project in the workshop was copying sculpture, for which he developed the two large copy-mills which dominate the workshop space. Upon Watt's death the room was sealed and, bar a few VIP visits by intrigued VIP visitors in the 1860s, left untouched until 1924. In that year, Heathfield faced demolition, and the room was dismantled and carefully shipped to the Science Museum. Now open for all to see!



Photo: Science Museum

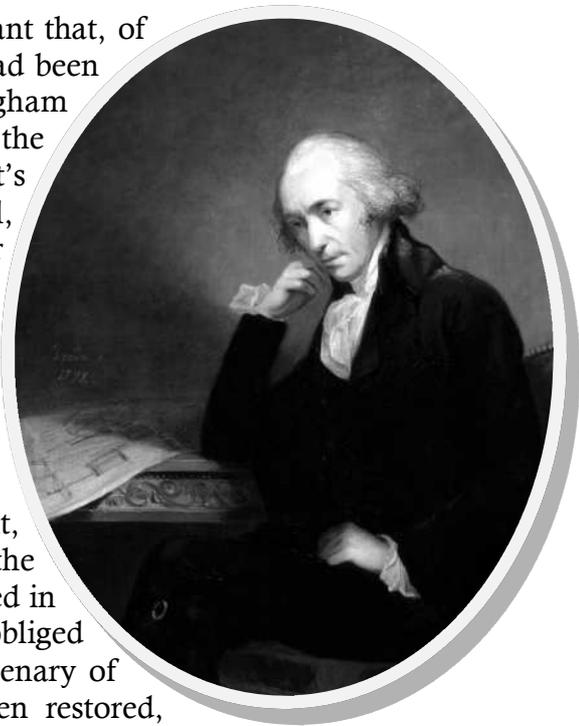
.... But, now, read on .... !

## James Watt – The Early Years *Derek Grindell*

James Watt was born in Greenock on January 19, 1736 and died in Birmingham on August 25, 1819. In 1914, on the eve of WW1, Conrad Matschoss, a German Professor of the History of Technology and Industries and the author of *Die Entwicklung der Dampfmaschine\** (Berlin, 1908) visited Britain. At every opportunity he reminded representatives of professional institutions, museums, learned societies and the press that the centenary of the great man's death was imminent and it would be an opportunity to '... remember that Watt was one of the greatest geniuses that ever lived.' He was particularly keen to see the entire collection of Watt's letters and manuscripts published and commented 'what more suitable memorial of their greatest engineer could the English give to the whole world than the publication of this material.'

A committee was formed in 1919 with the intention of marking the Watt centenary with a number of

commemorative events but the state of the post war economy meant that, of the £100,000 needed to fund the projects planned, only £14,034 had been raised by January 1921. It was decided to donate £5,000 to Birmingham University for a Fellowship but plans for a memorial building and the erection of a Watt engine in a public place were abandoned. Watt's descendant, Major Gibson Watt, had agreed to sell Heathfield Hall, Watt's home in Handsworth, to the City of Birmingham for £11,877 and to loan the contents of Watt's garret workshop but the offer met with conciliar opposition. To their eternal shame, certain engineering members of the Executive Committee for the Centenary, less impressed by Watt's achievements, could see no value in preserving his home as an international memorial and they refused to sanction any expenditure on its acquisition.



Fortunately, in 1924, Watt's workshop, including its door, skylight, floorboards and 8,434 items used or made by him, was saved for the nation and deposited in the Science Museum, where it was presented in such an ill conceived manner that visitors wishing to view it were obliged to peer through a window at its gloomy interior. With the bicentenary of Watt's death now only eight years away the workshop has been restored, reassembled and made accessible to the public on the ground floor of the Museum. *The Times* (Wednesday March 21) devoted half a page to the exhibit but there was no mention of an intriguing story that was printed in *New Scientist* magazine nine years ago and retailed in one daily paper under the headline 'Father of steam got cash from flutes'. It was reported that Michael Wright, then Curator of Mechanical Engineering at the Science Museum, had discovered a fake stamp, bearing the name of Thomas Lot III, among the personal effects of James Watt. Lot (1708-87) was descended from a line Normandy woodwind instrument makers and his Paris workshop produced the finest and most expensive flutes in the late 18th century, which were much prized by professional musicians. In contrast Watt made cheap boxwood flutes in his Glasgow workshop and although it is a matter of record that he was short of money to fund his experiments it is inconceivable that any true musician with any appreciation of flutes would have mistaken his product for the fine craftsmanship of Lot. Amateur musicians, however, may well have been taken in by the stamp and, as today, there may well have been others prepared to knowingly buy an instrument with a fake label so as to impress their friends. The circumstantial evidence does not favour Watt but it is interesting to note that, at a time when his workshop and its contents were being publicised, the fake Lot stamp does not merit a mention.

Heathfield Hall was eventually demolished but one project of the 1919 committee that did survive was the publication of a James Watt book, which would cover the key episodes in his life and the evolution of the steam engine during the previous century. Such a volume was written by H. W. Dickinson and Rhys Jenkins and published by the OUP in 1927. My copy was a 1989 reprint of the third edition, which was published in 1981. Most appropriately it was acquired at a book sale on board the Loch Lomond paddle steamer *Maid of the Loch*, which at the time was being renovated by volunteers, with a view to recommissioning.

Watt's father, also James, had married Agnes Muirhead in 1729 and they settled in Greenock where he functioned as a shipwright, ship's chandler, builder, ship-owner, and merchant. He subsequently became a junior magistrate or bailie of the town and, like his father, he was an elder of the church. Of the four sons and one daughter born to Agnes only James and his younger brother John survived to reach manhood but John was lost at sea in 1763. When not studying, James junior helped his father in the workshop where he had his own bench, tools and forge. He made a model of the first crane in Greenock, which his father had made and erected for the use of ships bringing tobacco from Virginia; he built a barrel organ; and hammered a punch-ladle from a silver coin. Significantly, his father's stock included compasses, quadrants, telescopes and other optical instruments, which greatly interested James. On the death of his mother in 1753 he moved to Glasgow where he stayed with her family until the following May. His intention was to learn the trade of instrument making but the optician he worked under was little more than a mechanic.

Although industrialisation had not yet taken root in Glasgow he gained access, through Professor George Muirhead, a relative of his mother, to the company of a circle of academics, who were members of the newly founded Literary Society of Glasgow and associated with Glasgow University. Prominent among their

number was Dr. Adam Smith, later to be immortalised by his tome *Wealth of Nations*; Joseph Black, at twenty eight the newly appointed Professor of Anatomy and Chemistry and an amateur flute player, who even then was working on his doctrine of latent heat, which would become the basis of modern thermal science; the mathematical philosopher John Robison, who had been a graduate at seventeen, a tutor and midshipman at twenty and a veteran of Wolfe's capture of Quebec; and Dr. Robert Dick, the recently appointed Professor of Natural Philosophy, who became a close friend. He persuaded Watt to move to London to gain experience as a mathematical instrument maker and gave him a letter of introduction to James Short, an optician with a workshop in Surrey Street, Strand. Short then introduced him to John Morgan, a mathematical instrument maker, based in Finch Lane, Cornhill, who agreed to provide one year's instruction for 20 guineas and his pupil's labour.

Working until 9 p.m. each day, save Saturdays, Watt lived under his master's roof, existing on eight shillings per week. He rarely left his lodging since the press gangs were very active. Had he been caught he would have been taken before the Lord Mayor, who would have had no sympathy with his plight, since it was against the law for any 'unfreemen' to work within the City boundaries. Watt returned to Glasgow in October 1756 and, on visiting the College, he was assigned quarters and recruited to clean and conserve a collection of fine astronomical instruments, which had been bequeathed by Alexander Macfarlane, a wealthy merchant and former alumnus. They had been used at an observatory in Jamaica and had been affected in transit by the salt air. Watt received £5 for his services and, despite a brief period in Greenock, was back in at the College in late 1757 as 'mathematical instrument maker to the University'. Dick's successor in the Chair of Natural Philosophy was John Anderson, who not only gave Watt the run of his library but employed him to maintain the Department's instruments, which included a model of Newcomen's 'fire engine'. Watt also assisted Dr. Black with his experiments and, given his friendship with a number of the University luminaries, it is not surprising that he was permitted to open a shop on the ground floor of an old house, which was a part of the College buildings. This arrangement helped Watt financially and avoided potential conflict with the incorporated trades, who like those in London, objected to 'intruders'. The stock he displayed included not only optical instruments but flutes, guitars, harps and barrel organs which he both repaired and made.

In 1759 Watt went into partnership with John Craig, from whom he had already borrowed money, and they set up a business in Glasgow, which suggests that the threat of sanctions against 'unfreemen' was not as great as supposed. He left his rooms at the College in 1763 but retained his workshop and he moved to an area on the west side of Glasgow where the Delftfield Pottery Co. was located. He was now employing a number of journeymen and apprentices and he developed a keen interest in the technology of pottery manufacturing. His acceptance by Glasgow's business community was signalled by his induction into the Lodge of Free and Accepted Masons of Glasgow. In 1764 he married Margaret. Miller and they set up home in Delftfield Lane.

In 1763 Professor Anderson asked Watt to repair a model of Newcomen's 'fire engine', which had been acquired by the Glasgow College. In restoring the model to working order Watt became familiar with every detail of its construction and its inherent inefficiency. At each stroke the cylinder and piston had to be heated to the temperature of boiling water and then cooled again. On learning of Dr. Black's discovery of latent heat Watt realised that this phenomenon, which he had noticed in the production of steam, was the key to improving Newcomen's engine. He was paid £5 -11s.- 0d. for his work on the model and he continued to experiment, supported both intellectually and financially by Dr. Black. After months spent turning the problem over in his mind a solution presented itself whilst walking on the north bank of the Clyde one Sunday afternoon in May 1765. Years later he related to an engineering friend, *...the idea came into my mind that as steam was an elastic body it would rush into a vacuum, and if a communication was made between the cylinder and an exhausted vessel, it would rush into it and might there be condensed without cooling the cylinder...I had not walked further than the Golf-house when the whole thing was arranged in my mind.*

Thus, whilst taking his exercise, Watt conceived the greatest single improvement in the steam engine. His next task was to produce a working model but his progress was hindered by his personal preoccupation with the pursuit of perfection, which led him to continually change the detail of his designs. Accustomed to working with scientific instruments in an academic environment he was naturally averse to entrusting the production of components to mere factory workers and an arrogant streak in his nature was not conducive to the promotion of what today is recognised as sound 'man management'. The winter of 1767/68, however, provided Watt with the opportunity to refine his steam engine design and by the spring of 1768 he had made a model, which impressed his friend Dr. Roebuck, a chemist, who in collaboration with others had set up an iron works on the river Carron, near Stirling. Roebuck, a former pupil of Dr. Black, was desperate for

improved pumping capacity so as to work flooded coal seams and, on the advice of his former teacher, he consulted Watt. In the hope of hastening the production of his engine he entered into a partnership with him, clearing a debt in excess of £1000, agreeing to meet the expenses involved in his patent application and encouraging him to proceed quickly to the production stage. On 9th August 1768 Watt took the oath on the patent in London and on the return journey he stopped off at Birmingham, meeting Matthew Boulton for the first time and enjoying his hospitality at Soho House for an entire fortnight. He was also a guest of that informal association of scientific thinkers, which was inaugurated in 1766 and later became known as the Lunar Society due to their meeting at 2:00pm on the Monday nearest the full moon. On touring Boulton's factory it occurred to Watt that his workshops, a great improvement on the Carron factory, would be the ideal location to build his engine. A new chapter in Watt's life was about to begin.

\* *The development of the steam engine*

## **Derwent Valley Water Board, extracts from Engineer's Cuttings** *Thelma Griffiths*

Derbyshire Record Office Ref D040 L/W1/24/1

*Following our quarry visit and talk from Thelma Griffiths earlier in the year, Thelma has sent to me some fascinating clippings from the Sheffield press dating back to the early 20th century. See photo of the rather wet weather we encountered on our visit – Ed.*

### **Sheffield Daily Telegraph, 28 January 1903 Workmen at Padley Quarries, Hathersage**

‘Sir, Considerable anxiety and perplexity has been caused in this village by the action of the officials of the Derwent Valley Water Board in dismissing about 50 working men, residents of Hathersage, from the Quarries at Padley, and in putting on strangers in their places. The prospects of the Hathersage men look decidedly gloomy at present. This abrupt dismissal, coming so soon after the closing of the local wire mills, must cause anxiety in many cottage homes in the village, and distress is likely to be felt among them, as there is now no work to be obtained in the locality other than on the waterworks. The officers, no doubt, have their reason for this summary treatment of the natives, but to others, at present, it is inexplicable. A SYMPATHISER’



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### **Sheffield Daily Telegraph – 24th March 1903 Strike at Padley Quarries**

‘The whole of the Quarrymen employed by the Derwent Valley Water Board, at the Bole Hill Quarries, Padley, came out on strike yesterday morning over a question of wages. The men consider themselves entitled to a penny per hour more than they are at present receiving, and the demand has been refused. Piece work was offered them on Friday, but the men declined the offer. The strike involved also a considerable number of masons and stone dressers at the same quarry. The men have been earning 7½d per hour.’

### **Sheffield Weekly Independent – 23rd March 1903**

.... ‘There has been some friction during the winter, caused by the dismissal of local men from the works.’

### **Sheffield Daily Telegraph – 27th March 1903 End of the Padley Strike**

‘The Quarrymen resumed work on Thursday on favourable terms at the Bole Hill Quarries, Padley. The best workmen are to receive 8½d per hour, and the others are to be paid according to the workmanship.’

## Sheffield Daily Telegraph – 13th February 1903

### Fatal Accident at Grindleford Bridge

Two distressing accidents occurred yesterday afternoon at the Padley Quarries involving loss of life and serious injuries to some workmen employed by the Derwent Valley Water Board. In the first case, John Schofield of Hathersage, an elderly man, and a youth named Christopher Youle of Bamford, were steady with a crowbar a huge stone suspended to a crane, and which was being drawn from the face of the quarry, when the couplers slipped, the stone being soft, and the crowbar becoming loose, flung the unfortunate men to the foot of the quarry, ten feet below. They were taken to their homes. Schofield was attended by Dr Lander, and was found to be cut on the head and his ribs crushed; Youle was not so badly injured.

A little later in the afternoon a young man named William Brewster (24) of Hathersage, was working at the foot of the new inclined railway, which joins the quarries to the Midland company's line at Grindleford, when three carriages broke loose from the couplings and, descending the incline at a terrific rate, struck the unfortunate man, inflicting such terrible injuries to his abdomen that he died almost immediately. His body lies at the Millstone Inn, awaiting an inquest.

## Sheffield Daily Telegraph – 16th February 1909

### The Fatal Accident at Grindleford Inquest at Hathersage at Station Hotel

Mr Sydney Taylor, Coroner on the body of William Brewster (29), labourer of Hathersage.

Also present:	Mr Sandeman	Chief Engineer, DVWB
	Mr Richards	Assistant Engineer
	Mr Hewitt Government	Inspector of Mines and Quarries
	Mr Stewart	Solicitor representing DBWB

'Andrew Brewster, postman, Hathersage, identified the body as that of his brother, and said the deceased was of weak intellect and deaf.

Dr Lander said in his opinion William Brewster died from shock to his system caused by compound fracture to his left leg, and probably rupture of one of his intestines.

William Jackson, foreman, said that on Thursday four wagons of earth were sent up the inclined railway, near to Grindleford Station. Three of them became detached when some distance up the incline, and dashed down at a great rate. He called to his men, turned and wedged the points and the carriages dashed down the right line of rails where Brewster was working. In his opinion Brewster had plenty of time to get clear.

Jackson was severely cross questioned by the Coroner and the Government Inspector about the couplings of the carriage. He said that all the trucks were doubly coupled with hooks, except between the first and second trucks, where the breakage occurred. Those were fastened with one hook and a safety chain. The couplings must have come undone, and the safety chain snapped. Jackson said he had coupled the trucks which separated himself.

H Freeman, rope-runner, said he was sure the trucks were properly coupled, but could not account for the coupling becoming unfastened.

Benjamin Bradley, manager, and Mr E P Richards also gave evidence, and models and plans were put in by them. Mr Bradley did not think the couplings could come undone, and the chain broken contained an old undiscovered fracture. Mr Richards, questioned by Mr Stewart, said the break was a 'crystalline fracture' and would be caused by a jerk.

The Coroner, in summing up, said if the jury were convinced that some persons had not properly coupled the wagons and were negligent, then they must give a verdict of manslaughter against those persons, but if, on the other hand, they believed the coupling to have been properly done, and that the coupling had become unfastened while travelling in some unknown manner, then they must give a verdict of accidental death.

The jury brought in a verdict of accidental death 'caused by the breaking away of three wagons.'

This is the first fatal accident at Padley and every possible means will be taken to prevent another. W Jackson was complimented for his courage in facing the rushing trucks, and closing and wedging the points to save his men.'

**Sheffield Daily Telegraph – 5th July 1904**  
**Shocking Death of a Boy Near Hathersage**

‘A boy named Charles Buller, of Eyam, was killed yesterday at the Bole Hill Quarry, Grindleford. The deceased was packing a crane, when a huge steel ball, several tons weight, used for balancing the crane, fell upon him, crushing his shoulders and smashing his arms. Death was instantaneous. Dr Lander of Hathersage and PC Upton were fetched, and the body carried to the Millstone Inn, where it lies awaiting the inquest. The boy’s father saw the accident and fainted at the dreadful sight.’

**Sheffield Daily Telegraph – 6th July 1904**  
**Inquest at Millstone Inn**

Mr Sydney Taylor – Coroner  
Boy aged 14

‘Joseph Dimmock, crane drive, gave evidence and explained that the deceased had no business under the weight.’

The weight was 8ft 5in long, 1ft 6in broad and 7in deep and weighed 35 cwt.

It was attached to the bottom of the tank of the crane by 5 pins, one inch in diameter. Height of weight off ground 2ft 2in.

‘Frederick Gardiner, fitter, said on Thursday he noticed a pin was missing and the weight was loose. He reported the defect to Mr Jeffcot, deputy manager. The pins were shown and the threads of two of them were worn away, and the other two were broken. The fifth pin was missing.’

The inquest was adjourned to allow the manufacturers of the crane to be questioned.

**Sheffield Daily Telegraph – 9th July 1904**  
**Adjourned Inquest**

‘Mr Sandeman and Mr Bradley were closely questioned about the keeping of the ‘machinery book’ and ‘danger book’.’

There was much discussion about procedure for reporting defects and whose responsibility it was to keep the book.

Mr Turner, Engineer for Thomas Smith & Sons, Rodney, Leeds, who supplied the crane was questioned.

The weight was attached to the underside of a water tank by 5 set screws. They were screwed in short of the length of the thread to prevent the tank leaking. If placed in full length, two would suffice.

**Verdict** ‘That Charles Henry Buller was killed by a weight accidentally falling upon him, and the jury are of the opinion that the evidence given by Dimmock, Gardiner and Bradley was not satisfactory, that Jeffcot (deputy manager) did not do his duty in seeing to the plate being secured or the crane stopped when the defect was first made known, and that Mr Sandemann did not do his duty in seeing that the special rules were carried out.’

## **I. A. News and Notes**

### **NEDIAS display at Pavements Shopping Centre, Chesterfield**

**O**ver the last few months, we have set up a display of NEDIAS activities and aims, using our exhibition boards with some of the very striking content collated by Jacky Currell and others. Do go along to see it – it is in an empty shop previously used by Thomson Holidays in the Pavements Centre. We have received quite a few positive compliments, and we are getting new contacts from potential members – what do you think, do you have any suggestions for additions to the display?

Do you have anything you’d like to see displayed here?

We have the use of the shop window display for an extended period of time, and if maybe you have something that could be added, please contact Cliff Lea.

The next edition of the NEDIAS Journal will shortly be published. This edition contains a major article by Lesley Philips on the history of the Pearson potteries, very much complementing our anniversary meeting when David Siddon is to talk on the Brampton potteries – so very much a pottery theme this autumn. This article is complemented by photographs of some of the pottery archives held by Chesterfield Museum, courtesy of Anne-Marie Knowles. The Journal will also contain articles by Cliff Williams on the 18th century Pentrich colliery, researched using much archive material from the Chatsworth Estates; Cliff reveals much previously unpublished information on conditions and working practices in 18th century collieries. The Journal also contains a paper by Paul Smith on local early woodland industrial archaeology, and on the Renishaw iron works. It is completed by an account from Philip Cousins on the Sheffield and Whittington Moor furniture company Waldo.

This is a real bumper edition, and we are pleased to acknowledge assistance in publishing received from the Midlands Cooperative Society.

### Midsomer Murders in 1839?

The web based Coal Mining History Resource Centre (<http://www.cmhrc.co.uk>) includes, amongst much else, a national data base of victims of accidents, official reports, photographs, etc.

Amongst their comprehensive lists of accidents and disasters they give a distribution by date range, and as you might expect, the sheer numbers are quite staggering – despite their pointing out that the list is far from complete. See the list of the numbers of the accidents they report:

Range	Total
1700-1750	93
1750-1800	267
1800-1850	3,486
1850-1900	59,580
1900-1950	84,331
1950-2000	16,599
<b>Grand Total</b>	<b>164,356</b>

One of the incidents which is listed (and which sounds like more than just an accident), gives quite horrific details of a problem at a pit in Midsomer Norton in Somerset in 1839 where 12 people ranging from the age of 12 were killed following failure of a winding rope:

*“ ... precipitating twelve people 756 feet to the bottom of a pit. The unthinkable was suspected for the rope nearly new after six months of being worked with 37 hundredweight had the appearance of being cut with a knife or chisel passed over the fibres. The rope must have been tampered with.”*

*“Thus saith the Lord, set thine house in order for thou shalt die and not live – so reads the inscription on their mass grave in Midsomer Norton churchyard.*

*“Four thousand people attended the funeral. Rain descended in torrents from the sky, its dark and murky character appeared to sympathise with the heartrending grief and agony*

*of the deceased's relatives.”*

There is much to be seen, particularly relating to more local accidents, but also the wealth of photographs which the site contains, and your editor spent a fascinating few hours flicking through the site.

### Sheffield Steel

The York Archaeological trust were recently involved with a developer-funded project to excavate sites on the River Don, and some of the results can be seen in a paper “The Don Steel Works and Saville Works: Charting the Growth of the Small Sheffield Steel Firm” by Ben Reeves, Field Officer for the Trust. The paper gives some very comprehensive information since little survives of the industrial buildings around Saville Street – for this reason, the archaeology is important in understanding the early stages of the development of Sheffield’s East End. (Industrial Archaeology Review Vol 33, No 1, p58-74. May 2011)

References from Derek Bayliss are quoted a number of times within the article, and members will be pleased to learn that Derek will be coming to talk to NEDIAS later in 2012, this time on the subject of Wortley Top Forge.

## Bricks

More than a few members collect bricks - and it's been suggested that we should draw together a list, maybe with photographs, of the accumulated wider collection within our membership. Some of you will have noted that some (kindly loaned by Brian Dick) are displayed in the Pavements Shopping Centre where NEDIAS have set up their exhibition. Darrell Clark suggests that maybe we should even have a central repository where members can view the accumulated collection. Do you think we should catalogue our joint collections? What do you think – please feed back your ideas.

## Trebor

The editor has received the attached enquiry, and if any member can suggest sources of assistance, please reply directly to the author. He is already aware of items in our Library and Museum.

**Subject:** Chesterfield Trebor Sharps factory

Dear Nedias

I am writing a history of the sweet company Trebor Sharps, which ran a factory in Chesterfield from 1941 until 2003. As part of my research, I wondered if your members might have any materials or information relevant to this factory.

Yours sincerely

Matthew Crampton

49c Roderick Road, London NW3 2NP. 020 7482 3401. matthewcrampton@aol.com

## Monsal Tunnels

Have you walked through the newly opened tunnels yet? The Railway and Canal Historical Society are organising just such an event on Thursday 15th September, for the 7 miles walk from Millers Dale to Bakewell through the recently opened tunnels on the Monsal Trail. Meet outside Chesterfield Railway Station for the service 66 bus departing at 10:30 to Millers Dale, arr 11:35. Light refreshments are available at Hassop Station. The walk should finish in time for buses departing Bakewell at 16:10 to Matlock, Derby and Nottingham, and at 16:15 to Chesterfield. Further details from Jeff Smith on 0115 973 1291.

## National Railway Museum, York

Maybe it's time for another visit to the NRM, following the opening of a new gallery there. The brand new purpose-built exhibition space has just opened and is hosting a programme of temporary exhibitions showcasing the Museum's unseen art collection alongside railway-inspired works of art from across the world. The National Railway Museum's vast art collection comprises of 11,222 Posters, 2,358 Prints and Drawings, 1052 Paintings and 1,500,000 Photographs, many of which have never been on public display.

Amongst the artwork which they hold, and maybe they might someday display, are four exhibition boards completed by the father-in-law of your editor. These were commissioned for the organisers of the Festival of Britain in 1951, and painted to depict the history of transport.



# Excavation at Wingerworth Stone Saw Mill

The excavation to reveal footings at the stone saw mill near Wingerworth continues now most Fridays, with findings on the ground, and in research results from archive records showing some intriguing turns. Whilst the group had known that the site had commenced with conventional water power, and were interested to find further details of the later steam engine, latest research suggests that a water turbine had been involved at a later date.

Meanwhile, the chimney hearth has now been unearthed, answering one of the early questions which we had. This is proving to be an intriguing project, the lumps and bumps in this wood now taking meaningful shape. If any members wish to see the progress, Les Mather and David Palmer would really welcome an extra pair of hands either for excavating or for drawing and recording the site. Do you have an hour or two to spare?

Quite a lot of information is now being revealed on the dig, and you will be able to hear details when the team give a talk to the membership on the night of our AGM in March; we hope a full account will appear in NEDIAS Journal No 5. In the meantime an increasing number of “findings” are now being unearthed; some of these defy explanation and your help in identification for one in particular would be welcome - see the item below. An intriguing mystery!



Chimney base, hearth and flue, with engine mountings seen centre left



The team involved at the saw mill have unearthed a strange object (*see photo right*), heavy in construction, maybe something to do with any of the steam engine or stone saw equipment which might have been on site. Heavy metal, but some decayed timber too, loosely referred to by us as the “Wingerworth Handbag”. We’d **welcome** any suggestions from the membership as to purpose. Contact Les Mather

## NEDIAS Committee:

**Chairman and publications** – Cliff Lea; **Vice-Chairman** – Derek Grindell; **Secretary** – Patricia Pick; **Treasurer** – Pamela Alton; **Membership Secretary** – Jean Heathcote; **Lecture Meetings and Visits Co-ordinator** – Brian Dick; **Archivist** – Pete Wilson; **Committee Members** – Diana Wilmot, David Hart, Les Mather, David Palmer, Doug Spencer.

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