North East Derbyshire Industrial Archaeology Society



NEDIAS Newsletter No. 52 - November 2013 Price: £1.00 (Free to Members)



Rowsley Railway Walk

Pat Pick

ifteen members joined Glyn Waite for a look at the history of Rowsley and how it was changed by the coming of the railways. Glyn gave us a brief history of the railway and several of the members purchased a booklet (only £3) but contained plenty of old photos and packed full of information. The tour started at the original Manchester, Buxton, Matlock and Midland Junction Railway terminus which is now a listed building. It was the first building to open and 120 years later the last to close. It is now the centre piece of Peak Shopping village.





Here (Left) Glyn is explaining the course of the railway over

the River Derwent, from the rear of the Grouse and Claret pub, we were unable to go on the viaduct for heath and safety reasons.

Our walk then continued through the sidings, where you have to have the eye of faith to imagine what it would have looked like There had

been upwards of 10 track beds.

Steam engines need water and here we are *(right)* looking at the remains of the water

tower. The water came either down hill from a reservoir under Eastlodge or pumped up from the Derwent. We then had a look at Peak Rail's turntable and sheds. The tour finished with a train ride to Matlock and back.

Very many thanks to Glynn Waite for organising and leading us on this walk.



In this issue: What's On? ■ NEDIAS Visits ■ Photos from the NEDIAS visit to ECTON Copper Mine ■ Harry Brearley at Home (1871 - 1948) ■ Avenue Works ■ News & Notes ■ Chairman's Chat — and the next EMIAC ■ NEDIAS Journal Volume 5 ■ Adam Street, Charing Cross — a Derbyshire connection ■ And Finally Stanton Ironworks — hot off the press! ■

WHAT'S ON?

NEDIAS Lecture Programme

eetings 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, 9th December 2013	Christmas meeting. Hear about the Wingerworth dig; see some of the finds.
Monday, 13th January 2014	Richard Patilla: "Amber Mill, Shirland"
Monday, 10th February 2014	Trevor Griffin: "The Butterley Gangroad Project"
Monday, 10th March 2014	AGM
Monday, 14th April 2014	Godfrey Holmes: "Industrial Archaeology of Stoke-on-Trent"
Monday, 12th May 2014	DAVID WILMOT MEMORIAL LECTURE Martin Smith: "The Lancashire Derbyshire and East Coast Railway"

Other Diary Dates

Until mid-November	Exhibition to commemorate 100th Anniversary of the seminal invention of stainless steel, Kelham Island.
Thursday, 21st November 2013	Offbeat Lighting Effects – Geoff Proctor. Geoff demonstrates that there is more to railway photography than the traditional front three quarter view and uses different lighting situations to create a different, and often dramatic, picture. Barrow Hill Roundhouse Lecture Theatre commencing at 19:30.
Saturday, 23rd November 2013	South Yorkshire Archaeology Day – 10:30am-4:30pm, Showroom Cinema, Paternoster Row, Sheffield.
Saturday, 23rd November 2013	Talk at Sharpe's Pottery, Swadlincote, 10:00am – 12:00 noon. Richard Stone on "Robert Bakewell – Ironsmith" - the man who created the birdcage arbour at Melbourne Hall and his craft.
Friday, 29th November 2013	DAS Lecture. Chris Lester on "The Great Grimsby Ice Factory" . St Mary's Church Hall, Darley Lane, Derby at 7:30 pm.
Friday, 6th December 2013	RCHS Lecture: Brian Key on "The Ripley Rattlers" . Beeston Library. 7:00pm. Info 0115 922 7162
Monday, 9th December 2013	SYIHS Lecture: Colin Barnsley on "Five Generations of Knife Making on the Don". 7:30pm at Kelham Island.
Saturday, 11th January 2013	Derbyshire Archaeology Day, Pomegranate Theatre, Chesterfield

Co-ordinator: Brian Dick, 01246 205720

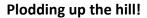
Pollowing the fascinating talk and question time about Good Luck Mine, a springtime visit has been arranged to the Good Luck Mine for Saturday, 3rd May, 2014 – 10:00 am on site.

Please add you names to the visit sheet at the next meeting, or advise Brian Dick. See the web site www.goodluckmine.org for more information

Photos from the NEDIAS visit to ECTON Copper Mine

ne of the highlights this summer was a visit by a dozen or so members organised by David Palmer to Ecton copper mine after the superb talk on the history of the site by John Barnatt to NEDIAS in April. Many thanks to David for the organisation for the trip; he has passed to me a few photos giving a little of the flavour of the visit, both below ground and above.







Deep underground



Half time - now for lunch



Our guide in full flow

Harry Brearley at Home (1871 - 1948)

Derek Grindell

In July 2011 Darrell Clark, in conversation with Robin Fielder, Museums Education Officer of the Sheffield Industrial Museums Trust, raised the question of Harry Brearley's affinity with Chesterfield. In a subsequent note to Darrell, Robin confirmed that hitherto he had been unaware of Brearley's connection with the town but later wrote ".....I shall certainly follow that up". Darrell, realising that this aspect of his domestic life was not widely known, set himself the task of tracing Brearley's Chesterfield addresses as a modest contribution to the celebrations marking the centenary of the discovery of stainless steel. His findings form the basis of this article, which would not have been possible without his assiduous research.

Harry Brearley was born in 1871, the eighth of nine children. His father was a steel melter and the family lived in Ramsden's Yard, Spital Street, which according to the census returns was in the Brightside Bierlow Ward at the very heart of industrial Sheffield (see Fig. 1 below). The Yard was so called because it contained eight houses, four on each of two opposite sides of a square. Of the two remaining sides, one was marked by a boundary wall separating it from the next lower yard on the hill side and the other by a high boundary wall, which defined the boundary of the adjoining yard higher up the hill. Abutting the higher wall was a

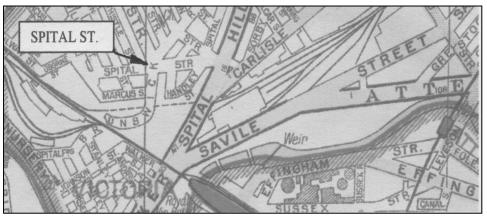


Fig.1 The Brearley family's home in Spital Street, due north of Sheffield's former Victoria Station, adjoined the city's industrial heartland to the north east.

square brick building, which housed a midden and two pairs conveniences, which Brearley himself claimed could not be classed as WCs. Almost in the middle of the yard was a communal water tap, which served twelve families and reminded Brearley of the temporary supply arrangement found on building sites. The yard itself was not paved but he recalled vividly that the exposed earth had been trampled on sufficiently to make it firm and the constant rain of soot particles emitted by local factories had turned it black. Such a level of pollution was inevitable

given the area's proximity to the heavy industrial 'corridor', which extended in a north easterly direction from the junction of Spital Hill and Savile Street for a distance of 3 miles. The location could hardly have been less salubrious but Brearley's birthplace and neighbouring properties had to wait until the 1960s before a slum clearance programme erased them from the map.

Harry Brearley married Helen Crank in 1895 and the 1901 Census confirms that they were living at Brook

Terrace, Mickley Lane, Totley with their son Leonard (Leo), then aged 4. As the name implies, the location was close by the Totley Brook at its confluence with the river Sheaf (both highlighted in Fig.2 above). The road had been part of a turnpike branch, which ioined the Sheffield - Baslow turnpike near a tollbar at Green Oak. The brick built properties (nos. 79-85) were deemed 'unfit for human habitation' and demolished in the mid-1950s but in late Victorian times they were a world removed from Ramsden

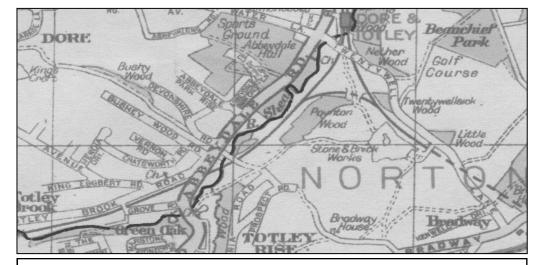


Fig. 2 Harry Brearley started married life in a modest property by the Totley Brook (shown in black line above) at the southern end of Abbeydale Rd.

Yard and years later, Brearley, in his autobiography, clearly relished the thought of what he termed 'living in a cottage on the edge of the Derbyshire moors' where the air quality was of a degree of purity he had never experienced in Brightside.

The 1911 Census reveals that the Brearleys, their son Leo, aged 14 and Annie Bennett, a Domestic Servant, were then living at Elmswood House, Old Whittington. This substantial stone built property was once the home of Charles Hughes May, who was originally from Cheadle but, in 1818 at the age of 21, he had married in Whittington. An amateur painter and caricaturist, he was a farmer and mine owner, enjoying the lifestyle of a country gentleman. He ran a pack of beagles for hunting and was a friend of George Stephenson, which may explain why his son secured an apprenticeship at the Stephenson Engineering Works and became a brassfounder.



Fig. 3 Elmwood House, Old Whittington has retained much of its early 19th C character despite the addition of a 20th C entrance porch.

Charles May's grandson, Phil May, one of a family of eight, achieved fame in both Australia and the U.K. as a renowned cartoonist. His reputation, has, if anything, been enhanced by the passage of time and examples of his oeuvres are held in permanent collections at the British Museum, the Victoria & Albert Museum. the Leeds City Gallery and in Australia. Noted for remarkable economy of line, he was a seminal influence on David Low, whose political cartoons made such an impact in the propaganda war against fascism in the 1930s and 40s, that he was placed on the Gestapo's 'Black List'.

Tragically, Phil May inherited his grandfather's artistic bent but not

his ability to accrue wealth. His father died in 1873 and he was forced into work at 13, living in poverty for much of his early life, at one stage being reduced to begging. Although he joined the staff of the magazine *Punch* in 1896 his years of heavy drinking took their toll; he developed a wasting disease and died of cirrhosis of the liver in 1903, aged 39.

Before the advent of the motor car, travellers entering Chesterfield along the Matlock Turnpike Road were

confronted with a steep rise before reaching the Toll Bar, which stood at what is now the southern end of Walton Road. This topographical feature, then known as Walton Ridge, straddled the main road, extending from beyond Walton Hall, which stood in splendid isolation and commanded a view over its 101 acres, to a series of fields on the opposite side of the road. These land holdings, as revealed by an auction notice of 1813, were once owned by the Hunloke family and, around 1919, Harry Brearley purchased a property adjoining Riggott's Plantation with a frontage onto the south side of Matlock Road. The house itself appears to have been built between 1909 and 1914.

The proximity of Brearley's Walton Ridge



Fig. 4 Old Whittington's sports field, which now incorporates a nature reserve, has long borne the Brearley name but, sadly, too few of those using the facility will know anything of the man or his achievements.

home to the Chesterfield Tube Works on Derby Road (A61) had enabled him to maintain contact with the Chairman and Managing Director, with whom he enjoyed a cordial relationship. He was a regular visitor and, in fact, Firth Brown had two directors on the Tube Works Board by virtue of their shareholding in the company and used the plant to manufacture stainless steel tubes. Brearley was appointed Consulting Metallurgist to the Tube Works and his ultimate decision, a decade later, to leave Walton Ridge and sever his local ties may well have been a tacit admission that full retirement was overdue.



Fig. 5 (Left)
Harry Brearley's farewell to
Chesterfield.
The property
was not sold at the auction but in the same year the
Brearleys left for South Africa and Australia, not returning to the U.K. until 1930.



Fig. 6 (Above)
The Brearleys passed their retirement at
Walton Cottage, Mead Road, Livermead,
Torquay.

Fig. 7 *(Below)* Harry Brearley (1871 -1948)

After their sojourn abroad the Brearleys settled in Torquay where Harry died on 14th July 1948 at the age of 77. A few months prior to the outbreak of WW2 he had received the Freedom of the City of Sheffield alongside Sir Robert Hadfield FRS. It must have been a source of great sadness to Harry that his son Leo predeceased him. Aged 18 at the start of WW1 Harry had joined the R. N. and was a member of a naval brigade that attempted to defend Antwerp. In retreat he reached Holland, was interned, but escaped as a stowaway back to England. Declared unfit for further service he travelled the world and emigrated to Australia where he became Engineer of Tests on the Victorian Railways. With deteriorating eyesight he retired in 1934 and died in 1945, leaving a wife and five children.

Bibliography

Steel-Makers and Knotted String by Harry Brearley, edited by P. R. Beeley and P.J. Beeley and published 1995 by The Institute of Materials.



Avenue Works Pat Pick

Pollowing the article in this year's NEDIAS Journal about the construction of Avenue Coking Works, readers may be interested in one or two of my own photos-showing blowing up of the enormous bunker during the demolition some years ago, and general "before" and "after demolition" views. Quite an amazing change to the horizon in this area!



Before



After





News & Notes

Sheepbridge - Thomas Ross, Chief Mechanical Engineer, 1860/70s

Cliff Lea

Graham Ross, now living in Gateshead, has just purchased NEDIAS Journal Vol 2, which contains the article by David Jenkins on the Sheepbridge Coal & Iron Co. It was at this site that Mr Ross's Great-Great-Great Grandfather was CME. He worked there as Chief Mechanical Engineer from 1872 until his death in December 1878 at the age of only 36. He lived in Dunston Villa, which is no longer there. If any member has pertinent information which might be of interest to him, please let me know, and I'll put you in touch.

Year-end Membership Renewal

It's that time of the year! Membership Renewal Form is enclosed with this Newsletter.

Chairman's Chat – and the next EMIAC

n 26th October, the Society for Lincolnshire History and Archaeology organised EMIAC 86, the latest in a long line of "East Midlands Industrial Archaeology Conferences". The subject of this day-long seminar and visit was the oil history of the East Midlands, particularly that in Derbyshire, Nottinghamshire and Lincolnshire. I may be biased, but of course I know Derbyshire played the most important part in the history of British oil production, not only because Tibshelf was the site of Britain's very first successful deep oil well, a "gusher" in 1919, but also because the refining technology for separating crude oil into its different fractions was actually first developed at Riddings in 1847, later used in just about every refinery around the world.

EMIAC 86 was a very successful and well-run meeting, attracting delegates not only from the midland counties, but from the north-west and particularly the south-east. All in all, it was great showcase and highly informative.

The next EMIAC, number 87 in this long line, is currently being organised by NEDIAS and will take place on Saturday 10th May 2014. It has an able organisation committee chaired by David Palmer, and members can see the full programme details and booking form on the NEDIAS website at http://nedias.co.uk/?page_id=300.

So what's the subject? Well, many members might recall that over 50 years ago, on entering Chesterfield along the arterial roads, travellers would be greeted by a sign reading "Chesterfield - The Centre of Industrial England". This reflected both the central location of the town within England and its important role in the development of many industries. This conference – the first to be organised by NEDIAS - will examine some of these early industries before considering the challenges and opportunities presented by the legacy of the town's industrial past, and the illustration on the Booking Form is of the Smith's Cannon Mill.



The full talks and visit programme will include:

- 08:30 Setting up bookstalls and displays
- 09:00 Registration and coffee
- 09:30 Welcome and introduction
- 09:40 Keynote address:

Industrial Chesterfield before rail Philip Riden

- 10:25 Fireproofing in early industrial buildings Pat Strange
- 10:50 Break
- 11:10 The Smiths of Chesterfield, 1775 to 1833 Peter Hawkins
- 11:55 The future development of the Walton Works site A representative of Chesterfield Borough Council

- 12:15 EMIAC business meeting
- 12:40 Lunch
- Guided historical walking tour of the Brampton area of Chesterfield, about 1½ miles on level ground with a shorter option available. The tour will include visits to significant early industrial buildings (subject to access restrictions at the time) which will involve some stairs. A torch will also be useful.

16:00 Tea and departure

The Conference will be highlighting the importance (and now continuing dereliction!) of two EH Grade II* mill buildings and their activities in the Brampton area, two buildings about which Richard Robinson had written in Volume 1 of NEDIAS Journal.

Throughout the twentieth century, the various works owned by Robinson and Sons Ltd along the line of the River Hipper in Walton and Brampton were well known landmarks, and the company was a major employer within Chesterfield. The vacation of theses sites during the early years of the 21st century brought two historic buildings into prominence: the Cannon Mill which had been listed Grade II* by English Heritage for some years, and Walton Bump Mill, only recently given a Grade II* listing. At the time Richard wrote his article in 2006, the two buildings were redundant, and awaiting a new future; we are now almost 8 years on, and these two buildings feature prominently on English Heritage "Buildings at Risk" register – so it's time we at NEDIAS highlighted them again.

In 2006 Richard wrote:

"Prior to 1775 at Wheatbridge, south of the River Somersall Brook (now called the Hipper), there was a foundry, and a furnace (the Old Griffin Foundry) with its own "Fire Engine". The Griffin Foundry, north of the river Hipper, was owned and presumably run by James Shemwell who also ran the mediaeval corn mill, Walton Nether Mill, south of the river but owned by his father Samuel. In the lease dated 3 June 1775 the foundry was let by James Shemwell to John Smith II and his two partners also from Sheffield. John's father, John Smith I, had been Master Cutler in Sheffield in1722. Also the Forge and Boring Mills, on what is now the Wickes' site, were leased at the same time from William



Robinson, then a pipe maker and Edward Wright a potter. (William Robinson was the grandfather of John Robinson, who founded the business of Robinson and Sons Ltd sixty four years later in 1839.)

"Later John Bale, an Ironmonger, joined John Smith as a partner in 1776. His house as manager of the Foundry was on the site of what is now the Unicorn Pub. The Corn Mill site, south of the river, consisted of 8,540 square yards. This was leased, nearly two years later, on 25 March 1777 to John Smith and his partners, at a rent of £85 /yr for 21 years.

"This was the site on which two new furnaces were built between 1788 and 1791 adjacent to the corn mill and initially using the same dam and wheel pit until a second dam was built. It also had a second "Fire Engine" dating from 1780 to pump water back from the river into what had been the corn mill dam. Presumably, the New Works, north of the river, with a fourth furnace, was built during this period.

"On the death of John Smith II in 1784 his two sons John Smith III and his younger brother Eberneezer ran the Griffin Foundry. Eberneezer had been a Dissenting Minister in London and was said to be a man of forceful character and deep religious convictions. However, because of the ill health of both his father and that of his other brother William he joined the family business.

"The "New Casting House, now called Cannon Mill, was erected between 1788 and 1791 as an additional fourth Casting House for the three furnaces south of the River Somersal Brook (Now the Hipper). Although in its later years Cannon Mill also cast a range of domestic stoves, fireplaces, cupboards, pots and pans its main output had originally been for armaments and munitions.

"According to the Derby Mercury of 19 Feb.1779 four cannons from Griffin Foundry were fired several times in Chesterfield Market Place to celebrate the acquittal of Admiral Keppel from court-martial following the escape of the French fleet at the battle of Ashanti (Ed: Were these the same 4 cannon that Richard Arkwright at Cromford is reported as having purchased in 1779, the source of these is still unknown to the Arkwright Society?). Starting a year earlier the firm would have been manufacturing cannons and cannon balls, which would have been in demand for the American Independence battles of 1778-1783. They would also have supplied munitions for the wars against France, Spain and Holland and later still the Napoleonic wars from 1793-1815"

"The foundry also supplied the cast iron pillars and beams for Strutt's "fireproof" West mill in 1794 at 11/10d per cwt. According Johnson and Skempton, (in 1793?) Smiths supplied 13 skewbacks and wedges weighing 64cwt-19 lbs @ 11s/6d /cwt costing £36-17s-1.1/4d and again in 1805 further pillars for their rebuilt North Mill and also 23 iron pillars for the Dale Abbey Mills in 1799 and also casement windows in 1793"



On Walton Mill, Richard Robinson went on to write:

"Cannon Mill also supplied iron pillars for the Walton Bump Mill in 1800, a major reason for the mill's English Heritage Listing as Grade II*.

"Walton "Bump" Mill is about a mile from the Wheatbridge site of Cannon Mill, further westward along the Hipper corridor. The mill was built in the 1790s by partners Hewitt, a linen & woollen draper, and Bunting, a mercer & draper and by 1862 a tallow chandler in Beetwell St.

"In the 1840s&1850s the firm was engaged in cotton spinning, doubling, candlewick manufacture and bleaching. Bleaching was carried out initially, off the leat from the River Hipper just below Somersall Park. This was accessed down Wash House Lane and then across Ryeflatt Field. The candlewick thread was then spread out in the open air to bleach on a paved area. The name "Bump" is derived from an early term for lower quality cotton goods.

"The stone based early section of the main building has a "fireproof" structure composed of cast iron pillars with supported by cast iron beams with a brick and plaster barrel roofing. The section at right angles is described as an American type "fireproofing" with similar pillars but with 3" - 4" thick flooring."

These two buildings and the associated history of the Brampton area will provide the central theme at EMIAC 87, and through guided walks during the afternoon, delegates will be able to explore what signs remain within the area, and to enter the two buildings and to see the reasons for their EH listings. The meeting will take place at our usual venue, St Thomas Centre. You can collect a copy of the Booking Form at NEDIAS meetings or directly from our web site.

The Hipper corridor has thrived throughout Chesterfield's long and proud industrial history, and it is important that the legacy of remaining noteworthy buildings are recognised – this meeting we hope will be a great showcase. See you there?

NEDIAS Journal Volume 5

he major theme of NEDIAS Journal Vol.5 covers the history and function of what is said to have been the largest coal coking plant ever built in Europe – The Avenue Plant at Wingerworth.

The site extended over 240 acres, took 760 people to build, and employed approx. 800 people. When operating at full capacity, the coking works carbonised 2,175 tons of coal a day, producing approximately 1,400 tons of smokeless fuel, 65 tons of Sulphuric Acid, 35 tons of Ammonium Sulphate, 20,000 gallons of crude Benzole and 250 tons of Tar. The trade name *Sunbrite* was once recognised across the nation and with the environmental clean-up of the site now well advanced, it is an opportune time to place on record the reason for its construction and the story of its short operational life for future generations.

Early in his career, David Jenkins was a Cost Research Officer in the NCB's HQ Finance Dept. When he heard that NEDIAS was about to publish a selection of photographs recording the construction of the Avenue Plant, he readily agreed to write an article on the project since he had been involved in monitoring expenditure from 'the turning of the first sod' to commissioning. His account throws light on previously unpublished details of the early planning stages, the phases of construction, the plant's productive life and its ultimate closure. To complement the coal coking theme, Derek Grindell has summarised key extracts from the 1927 *Adshead Report*, which reviewed the prospects for the mining industry within North East Derbyshire, as well as other industries of note; the contents of the *Adshead Report* are combined with much relevant information on industries, which were important to the local economy and listed in *Commercial Chesterfield*, a directory published by the Chesterfield Borough Corporation just four years later.

The paper by Richard Patilla relates the history of one of the area's cotton mills, the Amber Mill, which is located within the parish of Shirland. With the establishment of the Derwent Valley World Heritage Site a decade ago, the story of Amber Mill, just a few miles outside the valley has been somewhat neglected and forgotten. It is therefore most welcome that this current paper highlights its considerable importance within the area in the early 1800s.

Last but not least, the Journal contains a fascinating article by John Robinson giving much detail of the industrial activities carried out by the various Robinson family businesses in the area over the last 400 years, putting to paper a talk he gave to the Civic Society last year.

As members, you can purchase copies at the greatly reduced price of just £3, saving £5. Order forms are on the web site, or pick up a copy at the next meeting.

Adam Street, Charing Cross – a Derbyshire connection

Malcolm Calow

ometimes when I'm in London I lunch upstairs in the "Princess of Wales" in the Charing Cross area. For the first time, I spotted something which I had never spotted before as I walked up the stairway – it was a picture of Sir Richard Arkwright and a few lines of description! Apparently his London home had been at 6 Adam Street just around the corner. The whole area was part of the "Adelphi" complex designed by Robert Adam and his (also quite famous) Adam brothers, and I took a photo of Arkwright's house with its blue plaque.



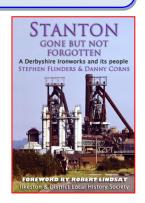




And finally ...

... Stanton Ironworks – hot off the press!

tephen Flinders will be talking to NEDIAS in the coming year on the history of Stanton Ironworks. His new book on this subject "Stanton – Gone but nor Forgotten. A story of a Derbyshire Ironworks and its people" by Stephen Flinders & Danny Corns is to be released on 23 November; 200 pages of history, memories and stories and over 150 b/w and colour photos. For more information contact email is Stephen Flinders [stephenflinders@sky.com, 17 Richmond Ave., Sandiacre, Derbyshire NG10 5GY] The book will sell at £10 (£13.50 inc p&p. Cheques payable to Ilkeston & District History Society)



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 Coordinator – Brian Dick; Committee Members – Diana Wilmot, David Hart, Les Mather, David Palmer, Doug Spencer.

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Editor: Cliff Lea, 15 Kelburn Avenue, Walton, Chesterfield, S40 3DG

1 01246 234 212

or e-mail: cliff@nedias.co.uk.

Assistant Editor: Doug Spencer

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