NEWSLETTER NO. 58 LATE SPRING 2003

EDITORIAL

Another successful lecture programme has been completed and I am now looking forward to the lighter nights and warmer days. I have received a couple of positive comments about receiving an extra newsletter earlier in the year, so keep those news items coming in so that I can continue to fill the pages. The Section AGM was held in the afternoon of 5 April; with 9 members present, attendance was slightly down on the previous year. David George has been preparing an index to previous issues of the newsletter and pointed out that the AGM was often held in the afternoon in April in the past, we shall see how this works for next year before making another change, but members' comments will be welcome. Incidentally, I hope to publish David's index in a future Newsletter.

Back to the AGM – the officers were re-elected unopposed, but David George reminded the meeting that he wished to stand down as Lecture Secretary at the 2004 AGM. David has already arranged the 2003/4 programme and has a number of contacts that can be passed on to his successor so please start thinking about this now. Membership of the Section has dropped by three to 111 and members were asked again to make use of the membership leaflet and encourage new members. There was some discussion about joining forces with the Local History Section who were facing the possibility of their Section closing due to a lack of active members. On balance it was felt that the aims of the two Sections were sufficiently different to remain separate, but we would continue to give support by arranging a couple of joint lectures as now. David Cant reported that he had been appointed joint convenor of the North East Industrial Archaeology Panel, which although was set up by the Council for British Archaeology, did not receive any financial support from the CBA. The meeting agreed that the NEIA Panel was carrying out useful work and agreed to support the administration of the twice yearly meetings by providing up to £30 a year from Section funds. There were no volunteers to arrange a Section excursion over the summer months, but some members had signed up for the main Society walk around the Luddenden Valley being led by David Cant on May 11. David agreed to consider leading a walk next year in the same area but with a greater concentration on industrial history.

We were pleased to welcome Peter Addyman, the President of the main Society to the meeting. Peter spoke in support of the major scheme to refurbish and expand the facilities at Claremont and bring the Yorkshire Archaeological & Historical Society into the 21st century. The new Claremont will have, for example, better standards of storage and security for the archive collection, a new well-equipped 125 seat lecture theatre and increased physical accessibility to ensure compliance with the Disability Discrimination Act. Needless to say, the proposals will cost a lot to achieve. $\pounds 60,000$ is needed to turn the proposals into plans to obtain planning permission and if passed, the cost of the building is estimated at $\pounds 1.5$ million. An application has been lodged with the Heritage Lottery Fund but the Society needs to demonstrate that people are committed to the idea as well as finding a level of match funding. To show its support of the

work the AGM passed the following motion "The Industrial History Society supports the project 100,000 Years of Yorkshire History under One Roof and looks forward to its rapid and successful conclusion". There were also proposals to make a Section donation to the project funds, sums of £150 and £500 were suggested, however it was felt that a higher number of members should be present to discuss this use of Section money. Consequently there will be a brief Emergency General Meeting before the first lecture on 4 October 2003 to discuss this. Please put the date in your diary now. Information about how you can make a personal donation is given below.

No new members have joined since the Early Spring Newsletter and I have included a reminder to those few who have not yet paid their Section only subscriptions for 2003. I hope that you will have just forgotten and will still continue to support the Section since there appear to be exciting times ahead. Finally my usual request for items for the nest Newsletter to be sent to me by 29 August. Enjoy your summer.

Margaret Tylee

NEWS FROM CLAREMONT

As mentioned above the plans to improve the facilities at Claremont are progressing. The project is now called 100,000 Years of Yorkshire History Under One Roof and has identified the following nine outcomes:

The conservation of an important Grade II listed building with consequent enhancement of the Little Woodhouse Conservation Area

Better standards of maintenance for Yorkshire's best archaeological and local history library, increased accessibility for users and better conditions for study and research

Better standards of maintenance and increased security for the Society's archives and better accessibility for users

A new high quality, well-equipped 125 seat lecture theatre available for use by the Society, its sections and associated and affiliated societies, and by other organisations and the general public.

An atrium which will provide access and a small exhibition area, enabling the Society to mount public displays from its holdings

Increased physical accessibility, including measures to ensure compliance with the Disability Discrimination Act 1995, thus opening up the Society's holdings to an extended audience

Increased space and facilities enabling the Society to widen the scope of its activities and welcome increasing numbers of users

Enhanced information technology to extend the usefulness of the Society's resources, allow remote consultation and facilitate a range of developments in the educational field

Provision for a modest increase in staff needed to carry out the Society's charitable mission in the future

All donations, however small, will help the completion of this project. The Section will discuss whether it wishes to make a contribution from Section funds at the first meeting of the lecture season on 4 October, but individual members might also like to make their own donation. Cheques should be made payable to the Yorkshire Archaeological & Historical Society Development Account and sent to Mr D Flear c/o Claremont 23 Clarendon Road, Leeds, LS2 9NZ.

NEWS ITEMS

Section member Gill Cookson has sent me details of a new book that she has coedited. It is called Maudsley and the Pioneers of the Machine Age edited by John Cantrell and Gillian Cookson published by Tempus at £16.99. No direct Yorkshire connection but it does cover many of Maudsley's associates who spent their later careers in the north.

Outside Yorkshire but may be of interest to members in the north, the Durham Victoria County History website contains a lot of information about industries in Darlington including iron, engineering, textiles, leather and brick making. See www.durhampast.net for more information. For more general information about the Victoria County History Series including progress on the North and East Riding of Yorkshire volumes, the web address is www.englandpast.net.

Two textile mills in West Yorkshire have been recently listed as grade II. Upper Carr Mills in Liversedge was a specialist steam powered woollen weaving and worsted spinning mill of c1875. It has an impressive façade and retains internal iron framing and evidence of its power transmission. Parkwood Mill, Golcar is a complete example of a mid to late 19th century integrated room and power woollen mill. It was built got the firm of John Broadbent & Sons.

The Victorian Society has objected to the proposed demolition of the grade II listed Hennebique Building in Hull. Francois Hennebique was a pioneer of the use of reinforced concrete in buildings and the building in Hull was built in 1900, making it one of the very earliest Hennibique constructions in this country. The building is currently empty and the Victorian Society has recommended that it should be secured until a future use can be found.

English Heritage have launched a new internet image library called ViewFinder. This allows access to the National Monuments Record's archive including images of industry dating from 1800. There are several images from Yorkshire including Marshall's Mill, Wortley Top Forge and several South Yorkshire collieries. The web address is www.english-heritage.org.uk/viewfinder.

Still on the electronic theme, Calderdale Council has launched a new website illustrating the history of Halifax and the surrounding area. It is called From Weaver to Web and contains over 20,000 digital images covering all aspects of the area's history but with the textile industry as one of its main themes. The website has been developed with a grant of £106,000 from the New Opportunities Fund which provides lottery derived money to assist in projects for education, health and the environment. The site can be found at www.calderdale.gov.uk/wtw.

The National Trust owned Gibson Mill at Hardcastle Crags near Hebden Bridge is being developed into a centre for community events, information and education. The mill was built in 1800 by local landowner Abraham Gibson using the water power of Hebden Water. The scheme will use sustainable technology with the mill generating its own power and heat and dispose of its own waste. The cost will be £1.6 million with most of the funding coming from the Heritage Lottery Fund.

In advance of the lecture on the Wensleydale Railway to be given on 8 November in the 2003/4 season, some current information on progress to reopen the line. The railway was closed to passengers in 1954 and although freight traffic continued between the limestone quarries at Redmire and blast furnaces on Teeside until 1992, the line has been mothballed since then. In October 2000, Wensleydale Railway plc was formed with the purpose of owning and operating the railway. In November 2002 a 99year lease was signed transferring the control of the railway between Northallerton and Redmire to the Wensleydale Railway and share issues have exceeded £1 million. Work is progressing to run passenger services between Leeming Bar and Leyburn later this year. The railway is still looking for investors and for volunteers to help in the project. More information can be obtained from Wensleydale Railway plc, Northallerton, North Yorkshire DL7 9BR or from their website www.wensleydalerailway.com.

The Barnsley, Dearne & Dove Canals Trust is looking for new members to help them in their aim of reinstating these two canals to form the link between the Aire and Calder and the Sheffield and South Yorkshire Navigations. Large stretches of both the Barnsley and Dearne & Dove Canals have been filled in, built over or are generally in a bad state of repair. However the Trust has been inspired by what has been achieved with the Huddersfield Narrow and Rochdale Canals and are in active talks with Barnsley Council for applications for various forms of funding for the restoration work. If you want to get involved or to know more contact the Trust's Membership Secretary at 39 Hill Street, Elsecar, Barnsley, South Yorkshire, S74 8EN. ? 01226 743383 or visit the website at www.barnsleydearnedovecanals.org.uk

FUTURE EVENTS

10 May

Drax Merry-go-round. Railway Ramblers 8 miles linear walk. Meet at Selby Station at 9.31 for bus to the start at Drax Post Office at 10.30am. Walk ends at Selby. Details from Jane Ellis ? 0113 249 4644

17 May

EMIAC 65: 400 years of Rayles in Nottingham. 65th East Midlands IA Conference on the theme of railway developments. Includes lectures on early railways and street tramways. Held at New College, Nottingham. Sae for details to EMIAC 65 141 Allestree Lane, Allestree, Derby DE22 2PG

7 June

The Salt Museum, pumping station, docks and Weaver Navigation in Northwich.

Manchester Region IA Society visit. For details contact Steve Stockley ? 0161 718 1527.

14 June

Aspects of Stone & Slate in the Lake Counties. A dayschool from 9.30am –4pm at Fylde College, Lancaster University. £15 incl. tea/coffee but not lunch. Bookings/enquiries to Christine Wilkinson, Fylde College, Lancaster University, Lancaster, LA1 4YF. Email: christime.wilkinson@lancaster.ac.uk

17 June

LNWR Leeds New Line. Railway Ramblers 4 mile linear evening walk to the eastern end of Gildersome Tunnel. Meet 6.16pm Cottingley Station (Leeds). Bring torch for optional walk into the tunnel – this is likely to be knee deep wet, so change of clothes/footwear are recommended. Details from Jane Ellis as above.

17 June

Walk to see the remains of mills at Cold Edge, Wainstalls near Halifax organised by the Halifax Antiquarian Society Industrial Heritage Group. Meet 7.15pm at the Moorcock Inn, Wainstalls (SE 045 292).

3-7 July

Manchester Region IA Society Summer Study weekend at Van Mildert College, University of Durham. Details and booking from Jill Champness, 108 Woburn Drive, Hale, Altrincham, Cheshire, WA15 8NF. ? 0161 980 7612. E-mail: bernard.jill.champness@tinyworld.co.uk.

10 July

Wetherby Triangle & Stations. Railway Ramblers 4 mile evening circular walk. Meet at 6.30pm in the free car park on North Street, Wetherby, opposite the Royal Mail sorting office, next to Fox Saddlers. Details from Jane Ellis as above

13-16 July

Lead and the Levels: exploring industrial archaeology from Roman to Victorian Times. Course at Dillington House, Somerset combining lectures and field trips. Details from Dillington House, Ilminster, Somerset, TA19 9DT ? 01460 52427.

6-11 Sept

AIA Annual Conference South East Wales. University of Wales Institute, Cardiff. Details of main conference and associated programme of visits and lectures available from Margaret Tylee.

4 Oct

Transport in the Calder Valley. Dayschool organised by the Halifax Antiquarian Society at the Salem Methodist Centre. 10.30am –4pm. Two lectures in the morning, trips on the Rochdale Canal and in a vintage bus in the afternoon. Fee £15 (HAS members £12) includes tea/coffee and buffet lunch. For tickets send cheque payable to Halifax Antiquarian society and SAE to Mrs M Perks, 34 Manor Heath Road, Halifax, HX3 0BE. A reminder of the dates and provisional titles for the section's 2003/4 lecture programme as follows. All lectures start at 11am except for the AGM which starts at 2.30pm.

4 Oct 2003 Market Halls – David Perrett 8 Nov 2003 The Wensleydale Railway – Ruth Annison 13 Dec 2003 IA and the work of the West Yorkshire Archaeology Service- Helen Gomersall 10 Jan 2004 History of Castle Carr – David Cant & Clive Lloyd 7 Feb 2004 160 Years in the Colne Valley – D Beaumont 13 Mar 2004 Thwaite Mills – Neil Bowland 17 April 2004 AGM

FOR YOUR BOOKSHELF Limestone Industries of the Yorkshire Dales, by David Johnson. Published by Tempus. 2002. 192pp. 16.99. ISBN 0-7524-2394-0

This book provides an account of the limestone and lime industries in and around the Yorkshire Dales National Park. In the author's opinion the lime industry and the quarrying of limestone have been the Cinderella of industrial archaeology compared to the studies of coal, iron, steel, lead mining and textiles and the book goes some way to redressing the balance. The initial chapters cover the beginnings of lime usage and the development of the industry from the 16th to 19th centuries. These are followed by chapters on the uses of lime, the design of pre-industrial lime kilns and the growth of the industry into the 20th century. In addition to a general history, the author also examines the history of individual companies including the Craven Lime Company, PW Spencer Ltd and John Delaney Ltd. There is a separate chapter on the history and development of the Hoffman Continuous Kiln as well as a gazetteer of North Yorkshire quarries.

The book brings the story of lime and limestone quarrying up to date in describing the six quarries fully operational across the Yorkshire Dales owned by three companies: Anglo-American (who own Tarmac and Tilcon), Hanson and RMC. There is also a list of recorded accidents in limestone quarries in Craven, the latest being February 1983 at the Skipton Rock quarry. The book is well illustrated with both black and white and colour photographs as well as line drawings. A must for anyone interested in the history of the limestone industry as well as those who are familiar with the Yorkshire Dales countryside and have often wondered about all those disused lime kilns and quarry sites.

Pennine Dreams: the story of the Huddersfield Narrow Canal by Keith Gibson. Published by Tempus. 2002. 160pp. £16.99. ISBN 0-7524-2751-2

Having been an inactive member of the Huddersfield Canal Society for many years, I was pleased to buy a copy of this book written by Keith Gibson who has been a very active member and on the Council of the HCS since 1982. The title reflects two dreams, that of the original builders of the canal and the dedicated band of enthusiasts who ensured its restoration. The first chapters of the book describe the building and operation of the canal. It is 20 miles long and has the longest and deepest canal tunnel in the British Isles. It took 30 years before it paid a dividend and prospered for only a short time before trade was lost to the railways and was finally abandoned in 1944.

The second part describes the dream and reality of the HCS for the canal's restoration. The Society was formed in 1972 and faced a daunting task of restoring a canal that had been partly filled in. In all 74 locks had to be restored, one and a half miles of canal had to be completely rebuilt and all the bridges along the canal had to be reinstated. The book describes in detail how all this was achieved with the support of the local councils who had the vision to see the long term economic benefits from tourism and visitors – both boaters and walkers. The whole project cost several millions of pounds but was finally achieved and the canal was opened officially by Prince Charles on 3 September 2001. The book is a credit to the dedication and hard work of the HCS and although I admit to being biased, it is well worth reading.

The Heritage Atlas No.4 Manchester – Archetype City of the Industrial Revolution. A Proposed World Heritage Site. Edited by Robina McNeil and David George. Published by the University of Manchester Field Archaeology Centre. 2002. 44pp. ISBN 0-95278130-3

The University of Manchester Field Archaeology Centre publishes the Heritage Atlas to promote the understanding and appreciation of the historical and archaeological heritage of the region. The previous volume examined the history and use of warehouses in Greater Manchester and this volume investigates Manchester and Salford as a proposed World Heritage Site. The volume consists of a series of papers, the first three giving the background to World Heritage Sites; details of the UK Tentative List and the benefits of World Heritage status to a site such as Blaenavon in South Wales. Part two looks in detail at the case for Manchester and Salford to be considered, with papers on Manchester's rise as an industrial city; Castlefield's transport history; the development of Ancoats as an industrial suburb with its steam powered textile mills; the Rochdale Canal; the Mersey Irwell Navigation and the Worsley and Bridgewater canals. Section member David George is the one of the series editors and contributed to the papers. The volume is well illustrated with black and white photographs and gives a good overview of the industrial development of the area as well as information about World Heritage sites.

REPORTS OF LECTURES/VISITS Reports from 2002/3 Lecture Programme

Textiles in the Sedbergh Area and Fairfield Mill – Maureen Lamb 12 October 2002

Maureen Lamb is the secretary of the Sedbergh and District Buildings Preservation Trust. She did not profess to be a textile expert but became interested in the subject as a result of her involvement in saving the buildings of Fairfield Mill, situated just outside Sedbergh.

The area around Sedbergh had been producing wool since medieval times, but the first mill was built in 1792. In 1835, Joseph Dover built Fairfield Mill, it was 4 storeys high with 9 bays, being rebuilt after a fire in 1909. Originally powered by a water wheel, this was replaced by a water turbine in 1895 which also produced electricity. Its most famous product was horse blankets and it was worked as a family business until 1936. Maureen circulated a sketch plan of the buildings as they would have been in 1918-20 showing how the site had expanded with the addition of weaving sheds, steam engine house, warehouses and manager's house. The buildings were all of stone with the exception of the store for chemicals which was made of brick. The steam engine and chimney were added in 1910. She described the workings of the mill through access to archive records of the company and mentioned William Stainton who died in 1923 after having worked at the mill for 81 years. In the 1930s trade dropped and the mill was sold. In the 2nd World War it was requisitioned by the War Office and made Armstrong Whitley engines. After the war it returned to wool, being used as storage for Bradford wool merchants. In 1970 it was occupied by Pennine Tweed who moved from Kendal, ending up as a one man business operating 3 Dobcross looms made in the 1930s until eventually in 1992 even this activity stopped.

Maureen was instrumental in setting up the Trust to rescue the buildings and machinery. Over several years 20,000 sq.ft of building spread over four floors has been renovated and it is now a craft and design centre. The Dobcross looms have been moved to the ground floor where they are still used to weave woollen cloth; above are 14 craft studios and the top floor is still to be developed. There is also a café on site (see Adrian Bailey's report in the last Newsletter). There are plans to employ two full time weavers who will produce rugs and wall hangings using local wool from the Howgill Fells. The talk concluded with the circulation of material made in the mill together with photographs of the restoration. Details regarding opening hours and events can be obtained from the mill's website www.fairfieldmill.org or ? 015396 21958.

A fascinating talk demonstrating what can be achieved through determination and hard work.

History of Corduroy Manufacture in Hebden Bridge "Fustianopolis" – Mike Crabtree 9 November 2002

Mike Crabtree is Chairman of the Trustees of the Colour Museum in Bradford. He retired after spending 49 years in the family corduroy manufacturing business which was started in 1913 by his grandfather. He gave a brief history of the development of corduroy manufacture in Hebden Bridge. Corduroy or fustian manufacture was first mentioned in 1790, Baines' Directory of 1822 mentions a fustian manufacturer and by 1830, trade directories are referring to Hebden Bridge being the centre of corduroy manufacture in the UK and the world with 30 firms engaged in the trade. The 1851 census gave 13 men described as fustian workers and 47as fustian cutters in Hebden Bridge. In the 1890s there were 22 firms listed as fustian manufacturers. Mr Crabtree described the development of fustian cutting machines, by the late 1890s the use of machines such as the Netherwood 4 knife cutting machine had displaced the hand cutters. In 1870 a group of fustian cutters formed a Co-operative and later bought the Nutclough Estate which included a small water powered mill. This was extended and by 1886, the Fustian Manufacturing Co-operative Society was operating Nutclough Mill as a fully integrated process from weaving, dyeing and finishing of corduroy garments.

In 1900, several firms formed the English Fustian Manufacturing Company and later introduced a circular knife cutting machine. Hebden Bridge was now more involved in the finishing rather than the weaving trade. During the 1920s and 30s the trade declined partly due to popularity of overalls rather corduroy trousers for working clothes. By 1937 half the firms had closed. However in the late 1940s corduroy became a fashion cloth and Brisbane Moss at Todmorden are still producing corduroy cloth.

There were a number of questions at the end of the talk about the details of corduroy manufacture including the dyeing processes, which illustrated Mr Crabtree's in depth knowledge of the trade. He also passed round interesting photographs of the machinery used and examples of corduroy cloth. He recommended anyone interested in finding out more about the history of dyeing and textile printing to visit the Colour Museum in Bradford. The Museum is located in Providence Street in the centre of Bradford and is open Tuesday to Saturday 10am–4pm, ? 01274 390955. There is a small admission charge.

The Luddenden Valley: Industry, Architecture & Landscape – David Cant 14 December 2002

David Cant gave us an overview of industry and its effects on the countryside and buildings in the Luddenden Valley. His research sources included: works by local authors, photographers and the Halifax Antiquarian Society; wills that contain inventories of houses and property; business papers eg the Murgatroyds of Oats Royd Mill; Census results from 1851 onwards; trade directories; field work.

In the 18th and 19th centuries the Valley's population increased but this reversed in the 20th with industrial decline so that there were 1500 people less in 1991 than in 1851. Visible features of settlement are the buildings, and stone walls that are up to 300 years old; prior to that there were fences or hedges. The local economy was a mixture of farming and industry, which David illustrated by slides of the visual evidence. Farming provided only subsistence income and additional sources of income were needed. The area was best suited to cattle breeding. The poor soil and climate meant the only viable crop was oats, which gave rise to the first mills. Warley Mill was the manorial mill at Luddenden. In the 1500s land holdings were broken up and farmsteads developed. Land was cleared – the place name suffix "royd" = clearing. Settlements developed from the 17th century onwards. A typical laithe house of 1700 included a barn ("laithe" = barn) house. By the end of the 18th century there were more cattle and hay growing expanded. Milk was produced for both local and wider use.

Quarries developed in the Valley. Originally they provided stone for houses and in the 16th and 17th centuries they were near settlements. In 18th and 19th centuries, with the canal and expansion of towns such as Halifax, guarries opened up further afield. At their peak they employed 100s of people. The earliest evidence of metalworking is in 1349. Domestic textiles developed, linked to farming. There were fast streams, producing waterpower for mills, first for fulling. Later, as worsteds were introduced they were used for spinning and carding. Wool was available locally, though much was brought in. David showed slides of a stretcher gate, where yarn was sized and the warp was stretched prior to spinning, and loom shops on the upper floors of houses. Cotton manufacture developed later. Industry thrived in the absence of the strict controls imposed in towns by guilds, and by the 16th and 17th centuries there were prosperous groups of people, who built substantial houses. Their businesses were built on borrowing for investment, with property as security. At this period settlements were built on the spring line not in the marshy valley bottom. This changed in the 19th century with land drainage.

Luddenden was at a transport crossroads between Yorkshire and Lancashire. There was a good network of paths in the Luddenden Valley between the settlements. Transport improved in the 19th century with the opening of the Rochdale Canal to Manchester in 1804, and the Manchester & Leeds Railway in the late 1830s. Branwell Bronte was clerk in charge of Luddenden Foot station in 1841. Oats Royd Mill, a significant 19th century development by the Murgatroyds, became the biggest mill in the Valley,. It started as spinning mill and was developed for integrated production, and was expanded considerably between 1847 – 1885/7. It is extant. Peel House Mill developed from the late 16th century, though little remains. Luddendenfoot Mills are still in production, with British Furtex, making vehicle seat covers. Service industries, related to farm produce, developed and there were a wide range of shops and craftsmen. Kershaw house, owned by the Murgatroyd family, had a tannery. Although there is little evidence, there were probably more tanneries. Such industries gradually declined in the 20th century and the last shop in the Valley closed in 1999.

David's well-llustrated talk generated a number of questions, and those wishing to see the area for themselves could join the YAHS walk in the Luddenden Valley led by David on 11 May.

Robert Vickers

So Versatile a Stone: Notes on the History of the Yorkshire Limestone Industry – John Goodchild 18 January 2003 (joint with the Local History Section)

We almost didn't hear this lecture due to confusion over dates, but fortunately John was able to rearrange his commitments to attend. A good attendance heard John give an excellent overview of the importance of limestone to Yorkshire's industry. He started by listing the historical uses of limestone: as a flux for melting other minerals; as lime for the manufacture of soap, tanning and dyeing; in agriculture for treating acidic moorland soils; as a road foundation; as a building material for mortar, cement and plaster. Its production also helped the economic viability of other industries for example the slack coal used to make lime from limestone enabled small collieries to exist and coal carrying waterways also carried limestone and burnt lime. Limestone is still used for road making, in cement manufacture, in glassmaking, as a flux in smelting and for agricultural purposes. John then turned to examining the history of the limestone industry focussing on examples from the magnesium limestone ridge from Tickhill to the Tees. Many guarries and lime kilns still exist in this area. The limestone was taken to collieries to be burnt with slack coal to produce lime for agricultural purposes, much of these being transported to Lincolnshire. It was also used extensively for building, York Minster, its walls and Selby Abbey were all built from magnesium limestone. He drew attention to the fact that details of the limestone industry in the Yorkshire Dales have been covered by David Johnson's recent publication (reviewed on pages 4-5 of this Newsletter).

John referred to his studies of the account books and business papers of quarries in the Fairburn, Knottingley and Brotherton area. Quarries at Brotherton were worked by the Haxby family and were linked by railway and private canal to the Aire and Calder. The canal link dates from 1815/16. The railway had two tunnels to take it through the ridge that carries the present A1 and used 3 foot wagon rails supplied by the Low Moor Ironworks (who also owned a quarry at Brotherton). As well as quarries the Haxby family also owned the boats and lime kilns at Brotherton. The account books showed that the limestone was shipped to several Yorkshire locations. The Haxby quarries closed in 1829 when the company went bankrupt. However other quarries in the area continued but by 1858 the stone was all burnt as lime and by 1877 there were no references to quarries in the trade directories. Other quarries in the area were situated at Upton, Badsworth, Great Preston near Swillington and those at Houghton supported the near by developing glass industry. John then turned to examine the Don Gorge where quarries still operate. Their output was used to build Doncaster Parish Church, Liverpool Lime Street Station and various warehouse and buildings in Manchester and Sheffield. Quarries are also still operating in the Skipton area. The Leeds and Liverpool Canal opened a short arm to connect with the wagon way from a quarry and the canal account books show that the carriage of limestone was an important cargo raising 25% of the total dues in its early days and 14% in 1816 - still a significant proportion considering the overall amounts of total cargo were much higher. The passing of the Quarries Act 1894 meant that quarry companies had to list details of such things as the number of employees, examination of this information gave the largest quarry in Yorkshire employed 158.

Once again John Goodchild was able to keep his audience interested without the use of visual aids but with numerous documents and photographs from his archive.

The Thackray Medical Museum and its Ceramics – Alan Humphries 15 February 2003 (joint with Local History Section)

Alan Humphries is the curator of the Thackray Medical Museum, although he began his talk by informing us that the Museum is now called the Thackray Museum. The first part of the talk covered the history of the Museum which has a 25,000 sq.ft display area in what was the old Leeds Union Workhouse of 1858-61 situated next to St James' Hospital. At its height the Workhouse had 800 inmates. Charles Thackray trained as a pharmacist and opened a chemist shop in George Street opposite the Leeds Infirmary. However by 1908 he had developed into a specialist instrument repair business, buying and selling instruments and sterilised dressings. By the 1930s the company was exporting across the Empire, its main product being a hip replacement. The firm was family run until 1990 when it was taken over by an American company. Paul Thackray had been collecting medical instruments of all types with the intention of setting up a Medical Museum. He was offered a redundant building by St James' Hospital that had previously been a geriatric ward and after a complete refurbishment, the Museum moved to occupy the building in 1996. The Museum holds around 35,000 objects including a collection of 8,000 trade catalogues for surgical instruments as well as other publications that illustrate medical instruments, some dating from 1598. Currently there are about 2,000 items on display but others can be viewed on request.

Most of Mr Humphries lecture described the Wilkinson Collection of pharmaceutical ceramics. This is a collection of over 600 earthenware drug jars once a familiar sight in chemists and apothecaries' shops from the 16th century onwards. They were designed to hold a variety of ingredients, medicines and pills and had been collected by Dr John Wilkinson, a world renowned haematologist. The museum acquired the collection when Dr Wilkinson died in 1998 and it is displayed in a special gallery. The jars were made from clay with a high calcium carbonate content found in East Anglia, Kent and Northern Ireland. The jars were biscuit fired with a lead glaze and tin oxide, this produced a white coating on which the design was painted and then the jars received their final firing. There were different designs for dry drugs, syrups, oils and pills and some examples in the collection are very rare. Mr Humphries was working on the identification and recording of the jars and which potteries had produced them, this involved analysis of the clay they were made from as well as the design of the jar. So far the origin of 1.790 jars and 154 pill containers had been identified. Use of earthenware jars died out from 1800 onwards to be replaced by glass and other materials.

The lecture was well illustrated by numerous examples of the jars showing the detail of the different designs and shapes and it was clearly a labour of love on the part of Mr Humphries to research the origins of each one.

The History of Domestic Electrical Appliances – Colin Hill 8 March 2003

Colin Hill was well qualified to present his subject, having worked in the electricity supply industry, and become interested in old appliances and the history of domestic electricity. The 20th century was one of introduction and development for electricity supply and appliances. The design of appliances is now fashion driven; they are made mainly in China, are not repairable and have moulded plastic exteriors. In 1900, appliances were made, by bolting and bending, from copper, brass, steel and wood. Style was traditional or art nouveau. In the 1930s chrome plate, art deco styling, batch production and plastics were introduced, but only brown or black. Mass production developed in the 1940s and colours were introduced in the 1950s.

In the second half of the 19th century electric power and light developed. Michael Faraday, 1791-1867, was the father of electricity generation. Joseph Swan, in the UK, and Thomas Edison, in the US, developed electric light bulbs simultaneously in 1879. However, for a while gas was cheaper and brighter for lighting especially after the invention of the Welsbach mantle in 1896 by Carl Welsbach, the Austrian chemist. But at the same time electric domestic appliances – irons, kettles, coffee heaters were developing, and demand for electricity began to grow.

In the 1880s steam powered supply generation was for individual, or a small group of, buildings. Supply was DC (direct current). By the 1900s supply was provided to the centres of the forward-looking towns, factories and large houses. Leeds began power supply generation at the end of the 19th century, and an early power station was built in Whitehall Road in 1903. Gas engines were introduced to power the generators, and increased demand was met by adding more engines. Householders had to pay for the installation of electricity supply, and there were many ways of charging for use, including rateable value, until metering developed. By the 1920s supply had extended to the suburbs in many towns, but DC supply not easy to extend. Construction of the National Grid started in 1926. Until this period different areas had their own supply, voltages and frequencies. Although some local variations persisted until the 1960s, by the 1930s a national network at 230 volts and 50 cycles AC (alternating current) had been established virtually nation-wide.

At this time electricity was used mostly for lighting and some domestic appliances. Initially, power was supplied only dawn-to-dusk and not all day. Only when trams were electrified, and domestic and municipal supplies were combined, was power supplied 24 hours a day. At first Leeds kept them separate, before combining them to provide a successful service. Electric irons, with wooden handles and no controls, were introduced in the 1890s, as were electric fires, with elements - Dowsing tubes - based on light bulbs. In 1906 a heating element made of chrome/nickel was invented in the US. Able to burn in the open air without oxidising, it changed electric fires over night. Belling introduced such fires in the UK and made the first practical electric cooker around 1910. Electricity became fashionable – even electric corsets enjoyed a brief vogue!

Around 1910 the electric cinema was introduced and motor driven appliances began to be developed. The first vacuum cleaners were large and companies brought their machines to houses to clean them. Later they became smaller, and "Hoover" was a household name. Washing machines, followed by electric food mixers in the 1920s, were introduced, first in the USA and later in the UK. Electricity was still mainly for the urban rich, being promoted to provide the servant-less house, in response to social change after WW1. People wanted electricity in their homes, and build-your-own appliances were advertised. As Colin illustrated, they looked lethal! By the 1930s the National Grid had been established, with large power stations near the major coal supplies. The small, rural, power stations were closed. Trolley buses replaced trams in many towns. With properly controlled current frequency electric clocks were viable.

Houses had few electric sockets, and there was no standard design. Often, appliances were plugged into the electric light supply. Generating companies hired out larger appliances such as cookers. From 1910 to 1940 the design of electric kettles hardly changed. Plastic, in the form of Bakelite, facilitated more fashionable styling. The Hoover Dustette, introduced in 1930s, continued with little change until 1970s. The Anglepoise lamp became a design classic. As mass production was introduced in the 1940s, the cost of appliances reduced. Armaments manufacture during WW2 brought new materials and methods that could be applied to manufacture. After the war generating capacity had to be increased as demand grew. As supply went up costs came down. Bigger power stations were built in the 1960s and the super-grid at 400 KV (kilovolts) was created.

In addition to showing slides of items in his fascinating personal collection, Colin had brought some of the smaller items to show us. It was interesting to see that the basic shape of some appliances, such as irons, has changed remarkably little in over 100 years.

Robert Vickers

Yorkshire Industrial History at the Museum of Science and Industry in Manchester

The museum has a library (reference only); a large archive of local firms throughout Greater Manchester; the Manchester Region Industrial Archaeology Society's collection of survey reports, excavation reports, record photographs and research files on long term loan; a search room and a collections centre for objects not on display labelled and housed in cabinets. There is also a periodicals reading room and four filing cabinets of Museum Information complied by curatorial staff and Friends of the Museum. Amongst the latter is a Yorkshire Industrial History file that contains the following:

Sowerby Bridge 1780-1800: the rise of industry. Paper by Dr G Bayliss Thwaite Mills – article from the Leeds Civic Trust Newsletter c 1980 Matthew Murray- man of iron. West Yorkshire Archaeology Journal 2001 UK Textile Industry in the Interwar Years J.I.H. 3.1 (2000)

A Potted History of the Steam Engine Sara at Providence Mill, Dewsbury. Cutting on the Isaacson Radial Engine Co.

The Textile Industry in 19th century Skipton. Yorkshire History Quarterly 4.2 (1998)

Bradford Industrial Museum Steam Engine Survey List 1973

Articles from various issues of Country Life 1979-1983 including Yeoman Clothiers, Carpets, Abbeydale Mills, Satanic Mills, Lead Mines and Leeds-Liverpool Canal

Raindale Mill at the Castle Museum, York

Foster Beck Mill, Pateley Bridge

Restoration of Worsborough Mill, near Barnsley, by R Shoreland-Ball Pennine Agriculture (Papers from Shibden Hall)

Various Sheffield City Museums Information Sheets

The Museum Library and Archives are open to enquirers on Tuesdays and Thursdays and at other times by appointment. For more information ? 0161 832 2244

David George Hon Archivist MRIAS October 2002
