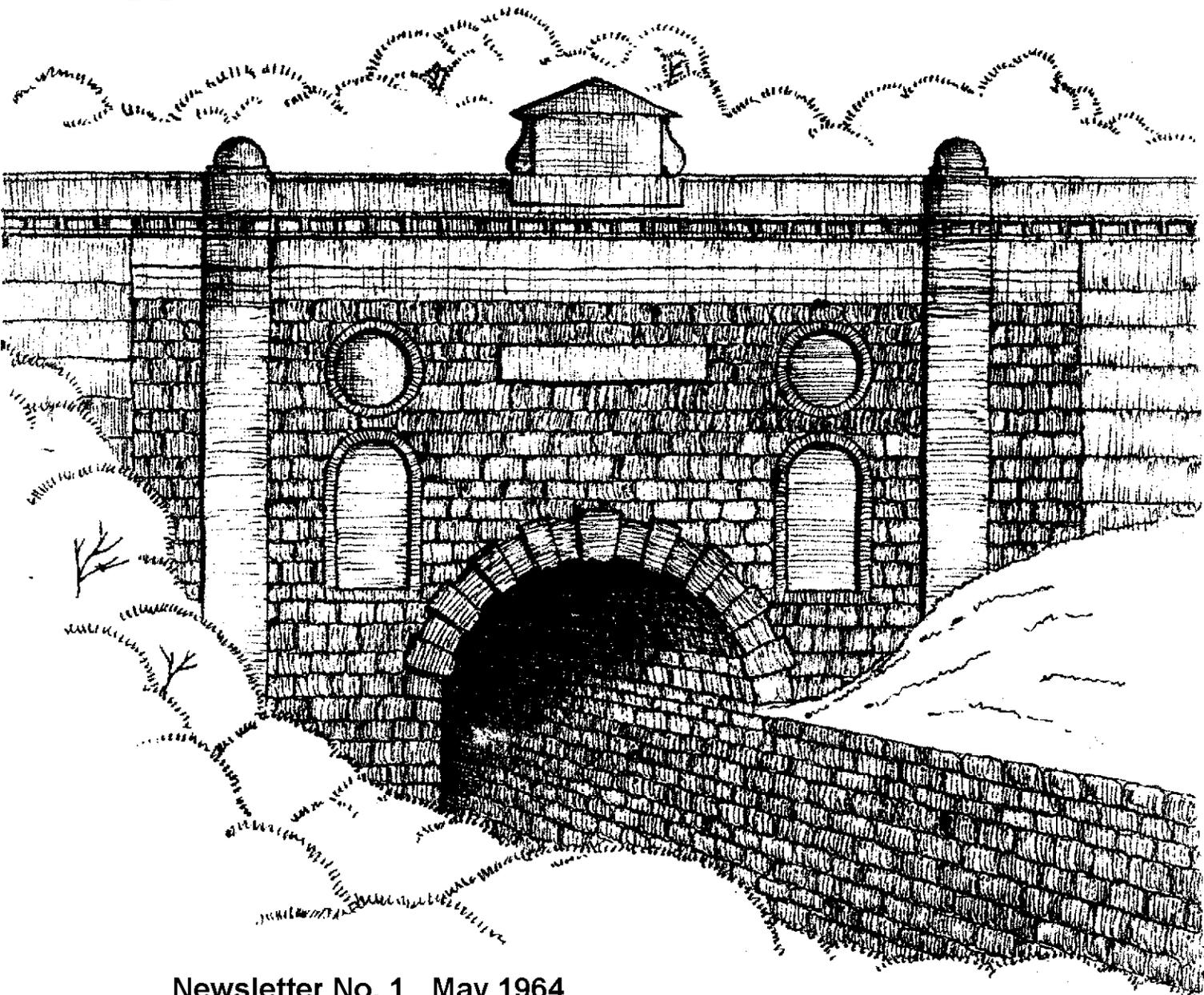


THE NEWSLETTER OF
THE GLOUCESTERSHIRE
SOCIETY FOR
INDUSTRIAL ARCHAEOLOGY



Newsletter No. 1 May 1964

EDITORIAL

May I first of all welcome readers of the Society's first Newsletter and hope that with your cooperation it will eventually expand into a more permanent record of your research work. At present our object is to give you information on past research, news of what is being carried out at present and also the future activities of your Society and others interested in Industrial Archaeology. No doubt you will sometimes have information to add to the articles published and sometimes disagree with views expressed; your letters will be therefore most welcome.

The difficulty of preserving the larger movable items of interest has often been expressed, particularly by museum curators with their already overcrowded buildings, and it is also noted in Kenneth Hudson's book "Industrial Archaeology" page 31. However, there is an ever increasing number of large houses open to the public, many of them owned by the National Trust which has now expressed interest in the preservation of industrial monuments (National Trust News Letter, Spring 1964). This is in contrast to remarks in Mr. A. Stowers' lecture in 1953 on "The Preservation of Historic Machinery and its Problems" when he criticised the Trust for removing mill machinery whilst converting the buildings into residences or hostels (The Newcomen Society Transactions Vol. 28 1952/53).

Often the National Trust has found it difficult to furnish these houses and there are nearly always large stables and other outbuildings available for the display of interesting large items relating to Industrial Archaeology. If possible, the display should be associated with the house's history or connected with one of its owners. I saw an example of the latter at Easter when visiting Penrhyn Castle, a mansion of some two hundred rooms, near Bangor, North Wales. Here they already have a working model of the slate quarry and six narrow and standard gauge locomotives under cover in the stables.

Alternatively, the owner of the buildings may have taken an interest in some aspect of industrial history as a hobby. Examples of this which come to mind are Sir Arthur Elton's fine collection of railway drawings, prints and paintings at Clevedon Court, Somerset; the mixed collection including spinning and weaving tools, cycles and model farm wagons formed by Mr. Charles Wade at Snowhill Manor and, of course, there is Lord Montague's vast collection of cars and cycles at Beaulieu.

Then again, a building, or part of it, may have been used for industrial purposes, such as Charlecote Park in Warwickshire, where there is a magnificent eighteenth-century brew-house. This could be expanded to show other aspects of the history of the brewery industry.

It is a known fact that some industrialists do not like establishing company museums, fearing that they will be accused of being backward-looking. Would they still object to financing industrial history displays at these houses? In a car-owning democracy I do not feel that museums and smaller displays should necessarily be established on expensive sites in the centres of cities and towns.

Postcards and Photographs

Perhaps you have an old photograph showing Aunt Ethel setting off on a Sunday School outing in one of those early char-a-bancs or even Uncle Jack standing by a water-wheel long since broken up?

A collection has been started on behalf of the Society by a member of the Committee, Mr. J.M. Strange, 48 Stratford Road, Stroud. Any suitable postcards and photographs will be most welcome.

Summer School

The University of Keele, Staffordshire, is holding a Summer School from the 22nd to 29th August, called

"The Potteries & N. Staffordshire. Portrait of an area."

Newport Transporter Bridge and Sudbrook Pumping Station

The Society's visit on May 9th to the transporter bridge pumping station for the Severn Tunnel in the Forest of Dean, will be described in the next issue of the Newsletter.

LOCAL RESEARCH

Individual activities in the area include the following subjects upon which research has already started :-

Milestones of the Stroud Area	}	Mr. C. Cox
Turnpike Houses of the Stroud Area		
Bibliography of Local Railways	}	Mr. J. Strange
A Survey of Local Halts & Stations		
History of Railways in Gloucestershire		Mr. C.H A. Townley
The Stonehouse - Dudbridge - Nailsworth - Stroud Line		Mr. F. Bosworth
Local Clothiers and their Pedigrees		Mr. F.T. Hammond
Distribution of Tumbling Weirs near Stroud		Mr. & Mrs. J.W. Davis
Bibliography on the Canals		Mrs. A. Tucker
Dickinsons Star Sauce Factory)	Mr. A. Peacey
The Cranham Potteries		
Quarrying Machinery around Minchinhampton		Mr. & Mrs. Woods Miss E.T. Reinhold
Documentary Records of all Industries		Mr. I. Gray
A History of Lightpill Mill		Mr. R. Rose

A 'Nuisance' at Stroud, 1850

Paul Hawkins Fisher (1780-1874) is best known as the author of "Notes & Recollections of Stroud", published when he was over 90 years of age. He was by profession a lawyer, and practised for many years in Stroud. Among papers deposited by his descendant Major C.A. Fisher in the County Records Office, there is a draft case for opinion of counsel concerning the noise caused by P.H. Fisher's neighbour, a boiler-maker. Fisher evidently consulted a barrister named Julius Partridge, from whom there is, in the same collection, a letter which gave him little encouragement to pursue his case. "Mere noise", says Partridge, after quoting the case of a man who had six dogs and kept his neighbours awake, "does not seem restrainable by law, and still less, I presume, is noise from a workshop, as it would be in restraint of trade". So it seems that Fisher had no more redress than our contemporaries who have the misfortune to live near an airport.

However, the following extracts from his draft case may be of some interest for the glimpses they give of an early industrialist in Stroud - a mill-wright developing into an engineer. They show how legal records may often be of value for the history of trade and industry.

Irvine Gray
County Records Officer.

"About the year 1807 Mr. Fisher became the proprietor of a house called The Castle in a street near the upper part of the town of Stroud. The Castle is a valuable and handsome house with grounds attached to it, enlarged by Mr. Fisher at the cost of several thousand pounds.

A Mr. Buck is the owner of a house, smith's shop, yard and other premises situated close to the same street, but opposite to Mr. Fisher's house and to the road which leads to it from the Street.

Stroud is the centre of a manufacturing district for cloth but none of the business is carried on in the town, the mills being in the neighbouring villages. Mr. Buck is a millwright and engineer, carrying on his business on his premises situated as above, part of which was many years ago occupied by a millwright and engineer and the other part by a blacksmith. Mr. Buck's premises have been somewhat enlarged from time to time to meet the wants of his increasing trade.

Up to 1847 Mr. Buck's business (and the business of the former occupier) was only about the manufacture and repairs of woodwork, such as wheels, stocks, etc., and the necessary iron work for them was done in the smithy without any inconvenience to Mr. Fisher, either by noise or otherwise. Boilers and other iron work of such steam engines, wheels, etc. as were made of iron, and set up in any of the mills (since the introduction of steam engines into this district) have been made at the iron foundries in the North and brought thence whole and ready made, to be put up in the Mills. But in the autumn of 1847 Mr. Buck for the first time began to work on taking to pieces and remaking two large iron

boilers for a steam engine, which work continued for several months. In the operation of separating the iron plates of an old boiler (which are fastened together with large iron rivets) and in the operation of punching holes for and reuniting the plates by new rivets very great noise is necessarily made by the workmen ... (who) keep up a long continued and loud clattering of hammers on the rivets. Generally the sound is so great as to be heard more than a mile off ... Fires were kept up in the yard for heating the rivets when this was going on, and horses are likely to be frightened by the fire and the noise (which is sometimes sudden and very loud) ...

Mr. Buck has now begun the same kind of work, fastening together large plates of iron for a dyer's furnaces and it is said will proceed to make some new steam-engine boilers ... Your opinion is requested ... what steps can be taken at law or in equity to get rid of or to restrain this nuisance."

Mr. Fisher's house "The Castle" still exists, hidden behind a high stone wall (which includes a crenelated tower) and not revealed until one walks down the short cul-de-sac. Of Mr. Buck's smithy no sign remains and the open yard adjoining is now a garden.

Editor.

Brimscombe Boat-Weighing Machine

Amongst the small collection of canal relics in the Gloucester Folk Museum is a model of a boat-weighing machine. This model is of some interest to the student of industrial archaeology, for it was made in 1843 as a pattern for the machine subsequently installed at Brimscombe Port. The need for a boat-weighing machine at this point on the Thames and Severn Canal arose from the practice of transshipping cargoes between the broad beamed Severn barges which could not pass beyond Brimscombe, and the narrow boats which plied the upper reaches of the canal. Brimscombe was a busy little canal port in the early years of the 19th Century, and the transshipment operations afforded ample opportunity for unscrupulous boatmen to avoid the payment of the proper tolls and dues on their cargo. It was in an attempt to correct this state of affairs that the local agent of the Canal Company had the idea of setting up a boat-weighing machine. He had seen a machine of this sort in use on the Somerset Coal Canal at Midford, for the evasion of tolls was not a problem unique to the Thames and Severn, and the Somerset Company had installed their machine some years previously.

The model weighbridge was shown to the Committee of the Thames and Severn, and it was agreed that the machine should be installed at its estimated cost of £1,062 15s 11d. A small dry dock was constructed at the side of the canal basin, and a series of overhead gantries

supported the iron base upon which the boat came to rest after the water had been run off from the dock. The weights which were used to balance the boat are surprisingly small, and some of these, together with wooden patterns, are also preserved in the Folk Museum.

When the weighbridge was ready for operation, the Agent was given authority to weigh any boat of which he was suspicious, and such was the success of the machine that in the first year it more than covered its initial cost, for a sum amounting to £1,154 accrued to the Company from extra tolls detected by its use.

Subsequently a number of other canal authorities installed similar machines, and one of them, from the Glamorganshire Canal at Cardiff, has been preserved by the Transport Executive.

With the passing of the Thames and Severn Canal, Brimscombe's era of canal prosperity waned. The waterways buildings were converted for other purposes, and the weighing machine demolished. Fortunately the model survived as a unique record of this type of canal installation, and ultimately reached the Museum through the good offices of the Governors of the Brimscombe Polytechnic.

R.D. Abbott
Curator, Gloucester Folk Museum.

Gloucestershire Technical Information Service.

The Gloucestershire Technical Information Service was inaugurated in September 1963. It is intended to provide a comprehensive service to industry, education and the general public from the North Gloucestershire Technical College for which a new Library is being planned.

Libraries are developing in each of the five Technical College in the County, which together with the Library of the Gloucestershire College of Art, are integrated into the scheme. Mechanised cataloguing is being contemplated and a union catalogue is in the process of construction at the North Gloucestershire Technical College.

The Gloucestershire Technical Information Service, as it will be known, works in conjunction with the Gloucestershire County Library and all technical requests are seen by the County Technical Librarian.

Bulletins giving details of periodical articles in mechanical and production engineering are being issued monthly. It is hoped to increase this service to cover other subjects. Several displays are at present touring the County and book lists on Astronomy, Programmed Learning and Teaching Machines, and Liberal Studies in Technical Education have, so far, been issued to supplement these displays.

The County Technical Library at the North Gloucestershire Technical College has already a rudimentary stock of books on the history of Science and Technology. It is intended that this collection should be greatly extended and subscriptions have been arranged for journals in this field.

Every member of the Society is invited to make full use of this service either by communicating directly with the County Technical Librarian at the above address or by making application to any County Branch Library. Members are reminded that through the various interloan schemes which are now in existence the greater part of the resources of the Libraries of Great Britain are available.

I. Rogerson A.L.A.
County Technical Librarian

BOOK REVIEWS

"GONE WITH REGRET" by George Behrend. pp 193. 83 illus. Lambarde Press, April 1964. 25/-

"This book", writes the author, "is not political, but if I had a vote, it would not be for Labour, because they destroyed the G.W.R., which largely helped to bring the railways into their present mess. They should have confined their nationalisation to those other lines ...". This opening challenge is followed by a eulogy of God's Wonderful Railway, and anyone who appreciates why Gloucester is spelt GLOucester throughout the book will find it fascinating. It is written in the form of a travelogue, each line described as it was at the time when the author made a memorable trip on it, but with asides on history and future development. The 83 photo illustrations, which are all new, are excellent, and well reproduced. There are six appendices listing Museums, Running Shed Codes, G.W.R locomotive numbering system with notes on class characteristics, a list of G.W.R. lorry makes and types with very full details of bus services and allocations, a list of named trains including goods, and the G.W.R. wagon code. There is a good, and very up to date bibliography, but, regrettably, no index.

In addition to this tabulated information, the narrative part of the book is crammed with anecdotes, facts, prejudices and scraps of personal history. There is a splendid account of John Betjeman leading his family up the garden path (to be precise he was taking them to Paris via the Newbury Weymouth line), and a deserved record for posterity for the Welsh porter who carefully marked the change to Nationalisation by heading his chalked-up notices "B. Railways".

It is almost impossible to stuff sentences with factual detail for pages on end and remain readable, and I found some of the later chapters less well written and, as a result, less interesting, but the book is full of good things, a great pleasure to dip into, and well worth the 25/-.

"INDUSTRY AND TECHNOLOGY" by W.H. Chaloner & A.E. Musson. 238 illus with detailed captions and 66 pp of text. Vista Books (Visual History of Modern Britain series) 1963. 30/-

A picture book covering the central interests of Industrial Archaeology (except Transport - which has a volume of its own in the series), and one which everyone should see. The illustrations are chosen throughout with knowledge and imagination, and they are reproduced with splendid clarity, well set out, with a long descriptive caption to each. The approach is historical, with sections on Iron & Steel, Power, Engineering, Building & Woodwork etc. Contemporary illustrations are given of every main process or method of work in each trade dealt with, ranging from crude woodcuts and manuscript illustrations through the engravings of the 18th Century engineering inventions to photographs of present-day assembly lines. All kinds of information can be gleaned from most of these - down to such things as tools lying about on the floor in drawings of workshops. Not least interesting is the dress of the various workmen - until recent times almost everyone wore a hat while working, though a Victorian photograph of match heading at Bryant & May's shows boys, with caps on, but barefoot on a brick floor. The introductory text admirably supports the illustrations, there is one of the best bibliographies available on the subject, and an index. I should add that the term "picture book" should not lead anyone to suppose that the book is unscholarly or elementary. Most Industrial Archaeologists are interested in objects - remains, buildings and machines - first, and the history only in so far as it relates to them, but of course without some background historical knowledge objects become meaningless, and this book is going to prove invaluable as an aid to fitting one's personal observations into the pattern of Industrial discovery and development in this country.

A. J. Tucker.

F O U N D

Ladies brown umbrella left behind after lecture at Stroud on 13th March.

Owner please apply to Mr. W. Marsh before 20th May.

Gloucestershire Society for
Industrial Archaeology
Newsletter No. 1 May 1964

Society Visit to Stanley & Ebley Mills, near Stroud,

Saturday, 11th April, 1964.

Through the courtesy of the Directors of Messrs. Marling and Evans, a party of eighteen from the Society spent an interesting Saturday morning in both Stanley and Ebley Woollen Mills.

In the office of Stanley Mill a collection of drawings, documents and photographs was on view and useful historical notes were distributed, many of the notes being included in this article. A description of a building in Domesday Book is thought to refer to this site and in 1660 the mill is described as comprising warping room, shear shop, three fulling stocks, gig mill, dyehouse and grist mill with a four-acre rack close. This was known as Giles Mill and was owned by the Clutterbuck family. John Hawker bought this mill in 1783 for £4,340 and about 1839 Nathaniel Marling acquired it for £27,000.

At the time of our visit there was on display a copy of "The Functional Tradition in Early Industrial Building" by J M Richards. It is through the photographs of Eric de Mare in this book that Stanley Mill has achieved nation-wide fame. Measured drawings were shown and sets of drawings were made in 1959 by Messrs. B. Jordan and Wheatley of Manchester University, and in 1962 by Mr. M Gardner of Gloucester.

From the forecourt, the party admired the fine Georgian brick elevations with their Venetian windows, stone quoins (unusual in the district) and string courses, begun in 1812 and completed the following year. This was two years after the Luddites and two years before Waterloo; a two storey wing by the entrance, dated 1815, is thought to have been built in fact by French prisoners. Yet another block has windows more typical of the Stroud valleys with their curved lintels and timber mullions.

The newly erected dyehouses, wool lofts, wool stores, workshops, cloth rooms, counting houses etc. were sold in February 1813 to Harris and Maclean for £8,655. The delivery of stone, bricks, timber, iron and slates is recorded in canal accounts; timber and some stone coming from the Forest of Dean.

Internally on the ground floor we saw the intricate cast-iron columns and beams with the words "LEVEL NEAR DUDLEY" inscribed on one beam, the ironwork being made by Benjamin Gibbons, occupier of the Earl of Dudley's Level New Furnace at Brierley Hill between Stourbridge & Dudley. Situated in Level Street it is on the opposite side of the Dudley Canal to the Round Oak Ironworks and was built in 1802 - 3, continuing to operate until August 1954. The furnaces were built against a huge slag wall which enclosed a plateau level with the furnace charging platforms (Newcomen Society Volume 28 1952 p.p. 153 - 161 - "The Earl of Dudley's Level New Furnaces" by T.M Hoskison M.A.).

On this floor we saw four different types of columns which are well-illustrated by photographs in "The Architectural Review" of 1943 pp 53-54. Nearby and dated 1813 were two fine cast-iron nose fanlight windows over doorways.

Upstairs we saw the internal appearance of the fine Venetian windows with their columns on either side and also the forest of smaller cast-iron columns, double the number erected for the ground floor construction. The total effect is very fine and, according to Messrs. Skepton and Johnson in their article in "The Architectural Review" of March 1962, the ironwork is far more elaborate than anything else to be seen in the Midlands or the North. An interesting sidelight is that holes were left in the scrollwork which are still used for shafting. Mr. Michael Rix in his lecture to the Society on "The Metal Framed Building" in December 1963, stated that Stanley Mill is the twelfth oldest cast-iron mill known in this country but several of those built earlier have been destroyed.

As well as observing the modern nap shearing machines, we saw the spiral cropping machine invented in 1815 by Mr. G Lewis of the Phoenix Iron Works at Brimscombe, which was later adapted by Mr E Budding about 1830 when inventing the first lawn mower. Incidentally, Mr. Budding was an engineer employed at a textile factory owned by Mr. Lister, father of the founder of the engineering firm.

Outside again we walked across to the weaving shed, in front of the main building, and watched the intricate Swiss looms weaving many types of cloth. When the old heavier looms were in the main block we were told that the building swayed considerably with the vibration.

The first reference to a steam engine is 1824 and the horse power was gradually increased from 40 h.p. in 1834 to 50 h.p. in 1839. In 1868 a turbine of 80 h.p. was added.

After a thorough inspection of Kings Stanley Mill the party adjourned to nearby Ebley Mill, a range of stone buildings with different types of fenestration, the oldest building having a date stone engraved "W.S. 1697", referring to the grandson of William Selwyn, who later became governor of Jamaica. There is, however, reference to a fulling mill in 1426, and in 1799 a fulling mill, stable barn, watergrist mill and mansion house were mentioned. The present mill was built in 1818, but the tower and adjoining square building were designed by the architect Bodley and built about 1862 after a fire. This tower has a steep pitched roof similar to that of Selsley Church which was copied from the church in the Austrian village of Marling. To fit in larger windows, Bodley introduced into the extension different floor levels to those of the main block and this has proved a source of embarrassment to the firm ever since.

Inside the main building we were interested spectators of the carding machinery which produces the thread and also of the mules marching backwards and forwards on the top floor, giving the thread strength.

We arrived outside by the river sluice gates, some of which have now been demolished to prevent flooding, and saw the inlets for the former water-wheels, five of them with a six foot fall, totalling 80 h.p. in 1834. One of these wheels was scrapped about 1862 and a beam engine coupled up in its place. This engine was broken up in 1938.

The mill was bought about 1830 by John Marling and by 1839 had 71 hand looms. Now, however, all the weaving is carried out at Stanley Mill.

This marked the end of our visit and our thanks are due to the three Directors who spent all morning taking our party round the two mills.

G. N. Crawford.

Monks Mill, Alderley, nr. Wotton-under-Edge.

Most members will recall that during the winter a party led by Mr. I.F.J. Walrond, surveyed the remains of Monks Mill at Alderley. The survey has been drawn out on two large sheets by Mr. I M Parsons and these tracings are now deposited in the Stroud Museum on permanent loan. In addition, photographs are available showing the present state of the mill and also one of the building when still complete.

History Hunt

The Bath and Camerton Archaeological Society has decided to record everything connected with the early stages of industrial development in North Somerset.

MEMBERSHIP

Will readers please note that in future this Newsletter, which it is hoped to publish approximately every two months, will only be sent to allied societies and those who have paid their annual membership fee of 10/6d, (Junior Members under 16 years of age - 2/6d.).

Subscriptions should be sent to Mr. R.H. Pullan, Greenacres, Painswick Road, Brockworth, Gloucester. Please state if you have any specialised interest in Industrial Archaeology and whether keen to assist in group activities in the field.

If you are not a paid-up member, you will find a loose enrolment form enclosed with this Newsletter.

FUTURE ACTIVITIES OF THE SOCIETY

1964

- 6th June - Bradford-on-Avon and South Wraxall Court, Wiltshire, led by Mr. K.G. Ponting of Trowbridge.
- 4th July - Forest of Dean coal mine and tour of places of Industrial interest in the Forest, led by Mr. Baty.
- 5th September - Visit to the Thames & Severn Canal, led by Mr. H.G.W. Household of Folkestone.

1964/65

- Winter - Two series of lectures are at present being planned for Stroud and Brockworth.