

Malcolm Newton

It is with great sadness that I have to report that Malcolm Newton passed away on 12th November 1999. His funeral was held on the 27th November at Emstrey Crematorium with a large number of family and friends attending the service in the tiny Chapel to hear a very moving tribute to Malcolm from the Headmistress of the Shrewsbury Girls High School, where he served as Caretaker for a number of years

Malcolm was never one to 'blow his own trumpet', but it is fair to say that he was a very kind and generous person, who would bend over backwards to do things for people, and 'his' school. He would often remember chance remarks from several years previously to suddenly produce a painting on a special occasion like a birthday or wedding anniversary. Members of staff who were about to leave the High School would have a special cake made for them by Malcolm and decorated with something relevant to them.

Malcolm's involvement with the Shropshire Mining Club (as it was known then) goes back to 1966, when he first appeared on the famous trip to explore the Berwick Tunnel on 6th February, in company with Brian Shuker. He was back again a week later for the exploration of Erdington Tunnel, when he had his photograph taken for the Shropshire Star. After a surface trip to the Granville Colliery Methane plant on the 26th, he became a Full Member of the S.M.C. on 4th March 1966.

During the 1970's he worked for the



IGMT as a 'driver' and visited many Industrial Archaeology sites. During this time he produced a set of drawings of the Rock Fireclay Mine which were sold by the Museum. His artistic talents regarding mine buildings and sites received their first true recognition at a personal exhibition held at the Bear Steps, Shrewsbury in 1979 when a large number of his drawings and paintings were on show.

He wrote several articles on Shropshire Mining for the Shropshire Magazine and for other journals, all of which he illustrated with his sketches. His sketches have been published in various books and have featured regularly in Descent as well as

Club Publications (for which he freely donated his artwork). In later years he produced and presented a set of 30 drawings of Cornish mining scenes to the Trevithick Trust who use them on publicity literature, again kindly giving them full copyright as well.

Alongside his artistic talents he was also an amazing model builder, providing models for the IGMT's "Rock

continued ...

Malcolm descending Sheep Shaft, Snailbeach

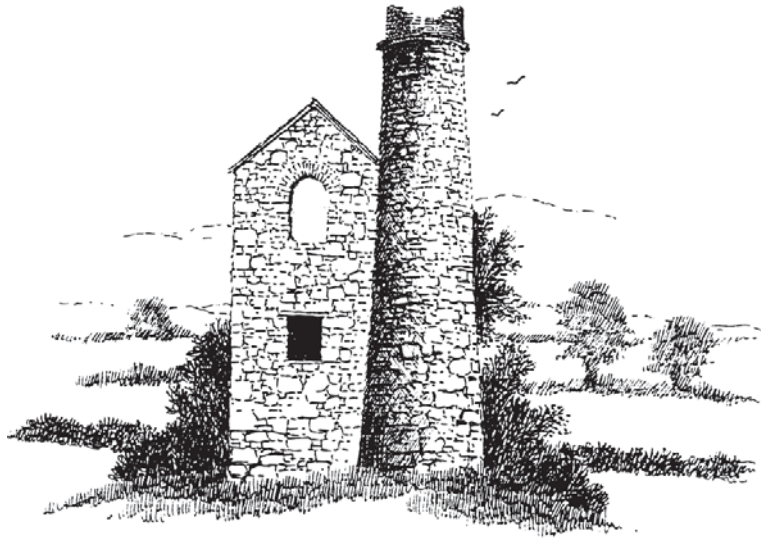


Malcolm Newton

Sandwich" gallery at Jackfield, amongst others. Those of you who remember the animated pithead scene model displayed by the Club at the BCRA, Harper Adams meeting, will appreciate the detail and effort that he put into his models and paintings.

Although his Club membership lapsed after a few years he rejoined the Club in the 1980's, becoming Vice Chairman in the early 1990's, then being voted an Honorary Member in recognition of his fund raising efforts for the Club.

Many of us have our own memories of times spent with him, both on trips or in the pub or camp site later, plus anecdotes like the trip to Cornwall when Malcolm and Mole turned up early at the Chip shop in Redruth to meet the rest of us straight from a trip, still dressed in their 'rough kit', they peered wistfully inside looking for us, while hovering by the door, only to have the proprietress come out of the shop to thrust two packets of chips into their hands saying "there you go loves, have some warm chips". Needless to say they ate the chips!



On other occasions Malcolm brought his 'artistic licence' to bear on Shropshire mining remains, Ivor Brown always found it impossible to photograph the third (derelict) pumping house at Pontesford Collieries because there was a large old tree in front of it. After discussing this with Malcolm, he then produced an excellent painting of the house with the tree 'moved' carefully to one side. This now has pride of place in Ivor's lounge.

We will miss him, and our thoughts are with his wife Sheila, sons Russell and Andrew and daughter Lindsey.

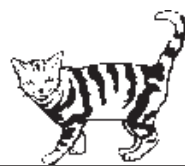
If you would like to make a donation in his memory, Sheila and the Family have asked for donations to be sent to his chosen Charities: the Cancer Relief Macmillan Fund (Shrewsbury) and the Cat Protection League.

Thanks to all the Club Members who have assisted in writing this.

Kelvin

We said goodbye to Malcolm on a cold day in November,
A large crowd were gathered, to give comfort and remember.
To sing a hymn and say a prayer, in the Chapel there,
By request, no flowers, no tears
He has left us now, but without any fears.
A brilliant artist, we have all seen his work, ask him for help, and he would not shirk.
Tributes were paid of good deeds he had done,
Now he's at peace, all pain is gone.
Do not despair, it is not the end,
One day in heaven we will meet our friend.

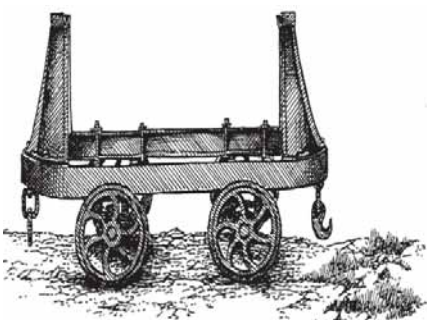
John Martin



Here is a quote from Malcolm's diary:

" I have no fear of death. If there is any fear it is for those I leave behind, my family, my school, my work-mates, my friends and my cats. My last prayer is that people will remember me with a smile, I like to think I left more smiles than tears in the eyes of the people I have known...."

*Malcolm Newton,
29th April 1999*



News Round-Up 1

by Ivor Brown

Snailbeach

In late August 1999, conservation work was seen to be continuing at Snailbeach Mine, the Halvans Engine House remains where in the process of being 'tidied up' as was the saw pit. A new headframe has been erected on Old Shaft (single pulley, post 1912 type, but pulley is set out-of-line with the engine house rope outlet?), miners dry has been roofed and a 'new' adit located next to the office steps. Where does it go?

What other surprises does Snailbeach hold for us?

Tankerville

The Cornish Engine House is still covered in scaffolding, this scaffolding gives an idea of the general enormity of this mine and the 1870's hopes for it.

Bog Centre

The Bog Centre was open during August as a visitor centre but surprisingly contained little of mining interest. It is a fine chapel-like building dated 1839, but a memorial stone inside seems to describe it as a "mission church". This makes sense when the recorded complaints of the 19th C. rector of Wentnor are considered; viz: that the "mission church" at the Bog was 6 miles door to door from his rectory!

New Brickworks

Shropshire has a new brickworks - an up-draught brick kiln of beehive shape has been built at Acton Scott Working farm. The bricks produced are of the 18th/19th C. rustic hand-made variety suitable for restoration work. Commercially, bricks 'fired from Shropshire clay' are still produced by Northcott Brick of Blockley near Chipping Camden who sponsored the building of the kiln at the farm.

Quarry Awards

Of the 7 large quarries winning national awards from the Quarry Products Association in its Health and Safety Competition, 3 were from Shropshire - Criggion (Hanson),

Bayston Hill (Tarmac) and Leaton (Johnsons). A fourth Shropshire quarry, Clee Hill (Hanson) won a Certificate of Merit.

Lilleshall Barracks

A planning application has been lodged with Telford Council which would involve the demolition of the Lilleshall Barracks (constructed in the late 18th Century to house limestone miners). These are the sole surviving examples of several similar 'barracks' for mineworkers built at that time in the area.

Wellington Journal

The 'Wellington Journal' in 1900 published many reports of mining-type accidents, including:

- (a) a fatal accident to a well-sinker near Shifnal, who was drilling for water at Harrington Waterworks for the Borough of Wenlock. He was 'struck' by machinery when making a drink of tea.
- (b) Hugh Williams was killed in a waterworks tunnel at Knowbury near Ludlow. The Inspector of Mines was informed but he decided to leave it with the coroner to sort out. [*I wonder if the tunnel was anything to do with the Elan Valley Aqueduct which passes through Knowbury? Kelvin*]

Maidens & Lloyds

With regard to the item in the last issue of 'Below' concerning the relationship between the Maidens and Browns. Mr. A. Maiden has confirmed that William and Richard Maiden were brothers, the item is therefore correct. Mr. Allen Maiden can trace his family line back to a William Maiden born to Humphrey and Alyce in 1594.

Coal Authority Report

The Coal Authority Report for 1998/99 says that there were 92 underground and 350 opencast licences in force on 31st March and in addition 14 coal-bed methane agreements, but as yet, no underground coal gasification agreements.

Shropshire Unfolded

In the July 1998 issue of this monthly historical journal there is an interesting article discussing the merits etc. of 'Mining in Shropshire' and 'Mines of Shropshire'.

It also includes some extracts from the diary of Wilfred Jones of Pontesbury. He was born in 1881 and in mid 1890's (before the disaster at Snailbeach Mine) being a schoolboy friend of the local mine captains Yelland and Job, he was given a trip down the mine.

First down by cage to the 750ft level then by 7 or 8 truly vertical ladders, each about 100ft. to the workings. It is interesting to note that he was taught the proper miner's way of climbing, 'grip the sides not the rungs' for the same reasons that a miner never crawls using flat hands but on knuckles.

You can find copies of this monthly journal in many local newsagents or you can contact the publishers direct of: 01743-891370.

Wenlock Copper

From Camden's "Britannia" 1586:

"Wenlock, now known for its lime but in King Richards time for a mine of copper there."

Anyone got any ideas of location?

Millennium Project Suggestions

To update the index produced in 1996 to include Journals 3 (1995), 4 (1996), 5 (1997) and 6 (1998), plus 9 issues of 'Below' - forty years of publication, 1960 to 1999.

Recent Publications

"Mineral Resource Information for Development Plans in Shropshire, Resources and Constraints". British Geological Survey Technical Report WF/98/6 Mineral Resource Series by A.J. Bloodworth et al. published 1998. Details are available from British Geological Survey. Tel: 0115-9363493





Armchair Musings by Stuart Walker



Rock Mine

Having got around to reading Journal No. 6, and even longer to get around to hitting the e-mail, I was interested to read Alan Robinson's short article on Rock Mine. I was the person who descended Rock shaft way back in the seventies. John Heathcote and Bob Savage were on the surface.

I remember the Private Water Supply notice, and sometimes when we visited the site an old chap coming out of the house nearby telling us to go away, or words to that effect! There was no evidence of water being extracted from the shaft top or any of the adits as far as we knew even then. I expect the old chap is dead now.

When John and I first visited the site we thought it probably was fairly uninteresting as the shaft was not very deep according to Dines bulletin 14. However by the usual lobbing a rock down the shaft it sounded open and rather deeper than documented. We returned later with I believe a piece of kit for checking the water level in boreholes, courtesy of East Anglian Water Authority, i.e. a long tape with some sort of sensor on the end which gave a signal at the top end when the other end touched water.

First Descent

This confirmed that the shaft was about twice as deep as documented. So later the aforementioned three went to explore the shaft. The two that stayed on the top I seem to remember complained of the cold. I remember that once over the lip of the shaft they couldn't hear anything from me which was somewhat disconcerting when I started to over take the safety line on my ascent. Apparently there was so much friction that even if they could have made out what I was shouting they couldn't have hauled any faster!

I do remember that from the top the water at the bottom of the shaft appeared to be running, but once at the bottom it was not. To be honest I can't actually remember getting off the ladder at the bottom, although I have the impression that I knew the levels were blocked, so

I assume I must have looked down them. I know I didn't get off at any of the intermediate levels/stopes. I reasoned that the shaft must have gone on down as obviously the water was draining to surface down one of the levels, so why would one want to pump water if it didn't go any lower?

The cast iron pipe looked like a rising main to me. There was also evidence of old levels on the other side, (Long Mynd) of the hill which may have connected and were at a lower elevation to the obvious ones on the west side. I don't think there was any evidence to show that Rock Mine connected underground with Boat Level.

Perkins Jaw Crusher

I can remember talking to Joe Roberts and his son George Roberts, again back in the seventies, and they telling me that the jaw crusher was bought by them, presumably second hand, for crushing the barytes, but was never actually used by them. The jig in its corrugated iron shed, with kibbles full of galena was still intact then as well.

The resident of the cottage opposite the level told me that the Roberts used an old Fordson tractor to drive it with a flat belt, presumably the one that is in the loco shed. He said he used to laugh at teachers telling their pupils that the thing was driven by a steam engine!

Titterstone Clec

The Limestone Mine at Titterstone Clec details are in Alf Jenkins book. There is, or was, a rather splendid display of cowslips in the spring by the lime kilns.

Stableford Footrid

There is reference to a footrid or tunnel at Stableford, for irrigation purposes, on p86 to 87 in the book "The Wandering Worfe" by D. H. Robinson. The write up refers to several other hounds going in and never been seen again!

Also no one living had traversed the tunnel, but a correction was added that someone as a child had gone right through in 1931. I checked this tunnel out a few years ago (with dog), and the tunnel is quite clear.

There is an airshaft approximately half way along. The tunnel must have been dug from each end as it doesn't quite match up in the middle. I assume the shaft must have been completed after the tunnel. The rock is red sandstone.

The tunnel cuts across a neck of a meander in the Worfe and so brings the water out at a higher level than the river and enabled the meadows to be flooded, i.e. water meadows. The tunnel was constructed about 1732, and is about 200 yds long.

Links to Mines and Minerals

Most members should be able to find something of interest at:

<http://dnr.state.il.us/mines/minelyn.htm>

which describes itself as:
18,000 Links to Mines and Minerals.

The LRD Mining Linkstation is provided for your surfing convenience by the Office of Mines and Minerals of the Illinois Department of Natural Resources.

It is an alphabetized collection of sites related to the earth sciences, with a particular emphasis on the mining and petroleum industries.

The list was generated on 03 September 1999, and currently contains:

10,000 Minerals Specimens from Argentina.

1000 Earth Science Links from the UK
102nd Annual CIM Meeting from cim.org

11,062 Abandoned Coal Mines from IDNR

11,900 Mineral Occurrences from BC
14 years of underground Mining from the UK

Zinc and Lead Mines from IDNR
Zinc nickel and titanium from Australia,

plus much, much more from around the world.



Adam Heslop, Steam Engine Builder by Kelvin Lake



In April 1790 the famous Shropshire Ironmaster William Reynolds wrote in a private letter "...it is an entire new engine which I think peculiarly adapted to the purpose (winding coal), as being, I believe less expensive in the erection, better calculated for removal from one place to another and one which will take less fuel to produce the same effect than any hither invented.... I believe it will supersede Boulton & Watts"¹

The engine he had such high hopes of, was one developed by Adam Heslop, who had come to Shropshire for "improvement and experience" as a protégé of William Reynolds at the Ketley Ironworks. Little is known about Adam Heslop's life, yet if you travel around Halesfield Industrial Estate in Telford, today you will see various Industrial 'zones' named after him.

He was the son of a Scottish blacksmith and had been living at Workington, (Cumberland) where he and his two brothers (Crosby and Thomas) were employed as smiths at the Seaton Ironworks (also known as the Barepots or Beer Pot Works).

In 1790, during his time at Ketley, Heslop patented his engine "for

lessening the consumption of steam and fuel in fire or steam engines, and gaining considerable effect in time and force"².

The engine was a twin cylinder beam engine with one cylinder behaving as a single-acting steam powered cylinder and the other as an atmospheric cylinder. How many engines were built at this time is unknown, but at least eight Heslop engines are known to have worked in and around the Coalbrookdale Coalfield, either at mines, canal incline planes or in 'factories'.

It is thought that he returned to the Seaton Ironworks, not long after inventing his engine, where he built a further two or three machines (one of his brothers was skilled at cannon boring - a very useful skill for making engine cylinders). Despite being up in Cumberland he must have still been doing some work for William Reynolds, as he was erecting new engines in the Madeley Wood Coalfield in 1797.

By 1799 he had founded the Lowca Ironworks, near Whitehaven, in partnership with his two brothers (Crosby and Thomas), William Stead (from Bolton), Mr Johnson (a whitehaven merchant), a lady called Ritson, and a Mr. Millward (who eventually ended up owning the whole works).

They operated the works as '**Heslops,**

Johnson, Millward and Company', and continued to build Heslop's engines. The engine was gradually improved first with the use of composite wood/iron beams, then later with cast iron beams, frames and supports. The last one built was a 10 horse power winding engine made in 1829 and erected at a mine near Distington.

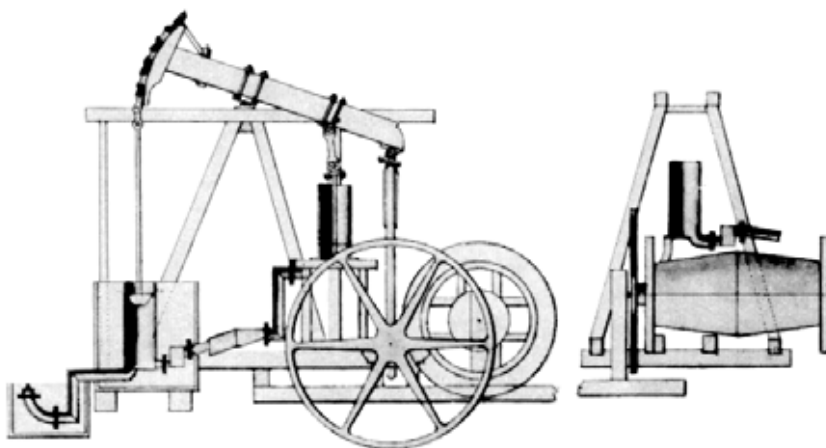
Adam held three-sixteenths of the partnership shares, Crosby two-sixteenths and his brother Thomas one-sixteenth. Thomas retired from the firm in 1803.

The partner William Stead was the younger brother of John Stead who patented the "*application of the crank to the steam engine*" in 1781, when he was working in Birmingham - much to the annoyance of James Watt, who had to develop his 'Sun and Planet' gear to circumvent this patent!

In the two mining areas where his engines were used, they were very highly thought of, proving to be both **economical** and **reliable**, in fact most of his machines operated for 80 years or more! Three of his Shropshire engines were still working for the Madeley Wood Company in the 1880's, with one working until at least 1912 at Blists Hill (as featured in 'Power' magazine, 23rd July 1912).

When Heslop invented his engine, the Boulton and Watt patents were still in force and were being **strongly** enforced, with legal action being taken, or threatened against anyone who developed a steam engine vaguely resembling a Bolton and Watt engine (for example: the Hornblowers who were developing very similar engines to Bolton & Watt were constant targets, and Ashworth - who patented a 3 cylinder engine in 1788). Watt's first patent did not expire until 1800 - having been extended by Act of Parliament in 1775 for a further 25 years.

Despite his engine being a successful competitor to Watts improved engine, and despite the attentions of both Bolton and Watt, Heslop does not appear to have been prosecuted. This may be due



Drawing of a Heslop colliery winding engine, based on drawing No.34 in William Reynolds's sketch book, 1793.



Adam Heslop, Steam Engine Builder continued...

to his connections with the Madeley Wood Company, who at the time manufactured a lot of engines and engine parts for Bolton and Watt.

The Early Engines

Heslop's early engine design (see *Figure 1*) shows the piston rods connected via chains and arch-heads to the beam. This was a common feature on many engines of this time, in an attempt to avoid Watt's patent on 'parallel motion'.

There is description of sorts on the patent drawing to explain the operation of the engine, but it is a little vague.

Basically there are two open-topped cylinders, one either side of the beam pivot. Heslop referred to them as the "receiving cylinder" and the "working cylinder" - taking care not to call it a condenser (Mr. Watt again!). In practice the cylinders were actually referred to as the 'hot cylinder' and the 'cold cylinder'.

How it works

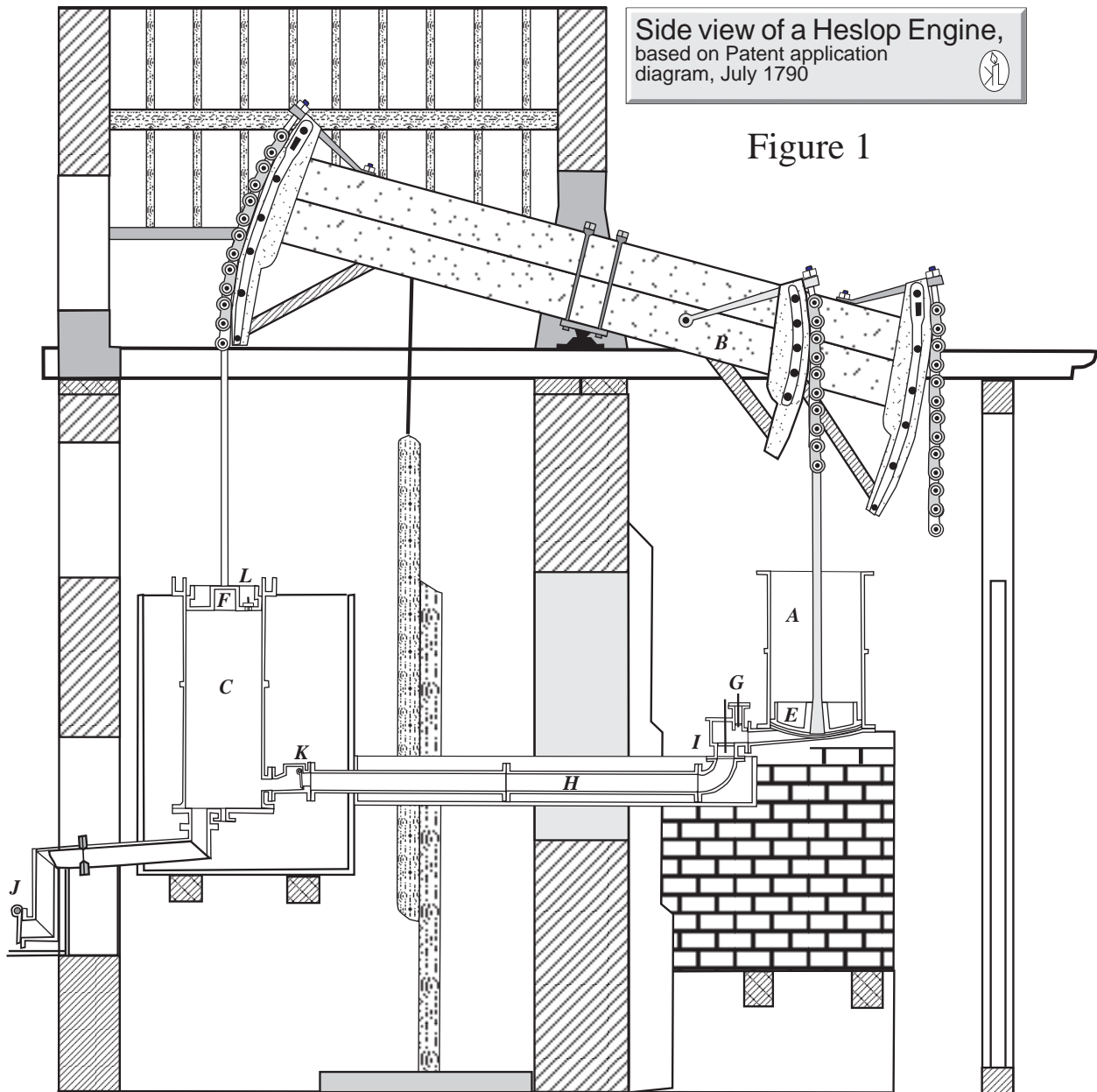
The letters in brackets refer to Figure 1:

Steam enters the 'hot cylinder' (A), from the boiler (D) through the steam valve (G). The steam being a few psi above atmospheric pressure, helps to lift the piston (E). The pressure was

typically a maximum of 3 to 5 psi as the boiler was usually of the haystack type.

When the piston in the 'hot cylinder' is at the top of its stroke, the steam valve is closed and the eduction valve (I) is opened, allowing steam to pass into the 'cold cylinder' (C) during the downstroke of the piston (E).

The interconnecting pipe (H) and the 'receiving' or 'cold cylinder' (C) are immersed in cold water. This cold water jacket reduces the steam pressure to atmospheric pressure by producing slight condensation as it enters the cylinder (C).



Side view of a Heslop Engine, based on Patent application diagram, July 1790

Figure 1



Adam Heslop, Steam Engine Builder continued...

When the 'cold cylinder' piston (F) reaches the top of its stroke, the injection valve (L) opens to allow a small jet of water to enter the 'cold cylinder', creating a vacuum. The injection water and condensate, leaves the via the drain pipe (J), when the piston (F) reaches the bottom of its stroke.

All the valves were operated by 'common gears'.

Points to Note

1. The 'hot cylinder' (A) is raised above the level of the 'cold cylinder' to prevent injection water passing back up the pipe (H).
2. The pistons have to have extra weights added to them to take advantage of the steam pressure due to the engine using chain connections between the piston rods and the beam (B). After all you cannot push chain, only pull it! Effectively the steam pressure supports the weight of piston (E), while the weighted piston (F) is pulled down by the vacuum underneath it.
3. The return stroke of the 'hot' piston (E) is caused by the weight of the pump rods pulling down that end of the beam. In a rotative engine, this return stroke is helped by extra weights being placed on the piston (E), or heavier chain links between the piston rod and beam, plus the weight of the connecting rod, crank and momentum of the flywheel.

It is claimed that Heslop's design, is an embryonic form of compounding, as the steam is used twice. However, what is obvious from the working of the engine, is that he would have had a machine that closely matched the performance of one with a separate condenser.

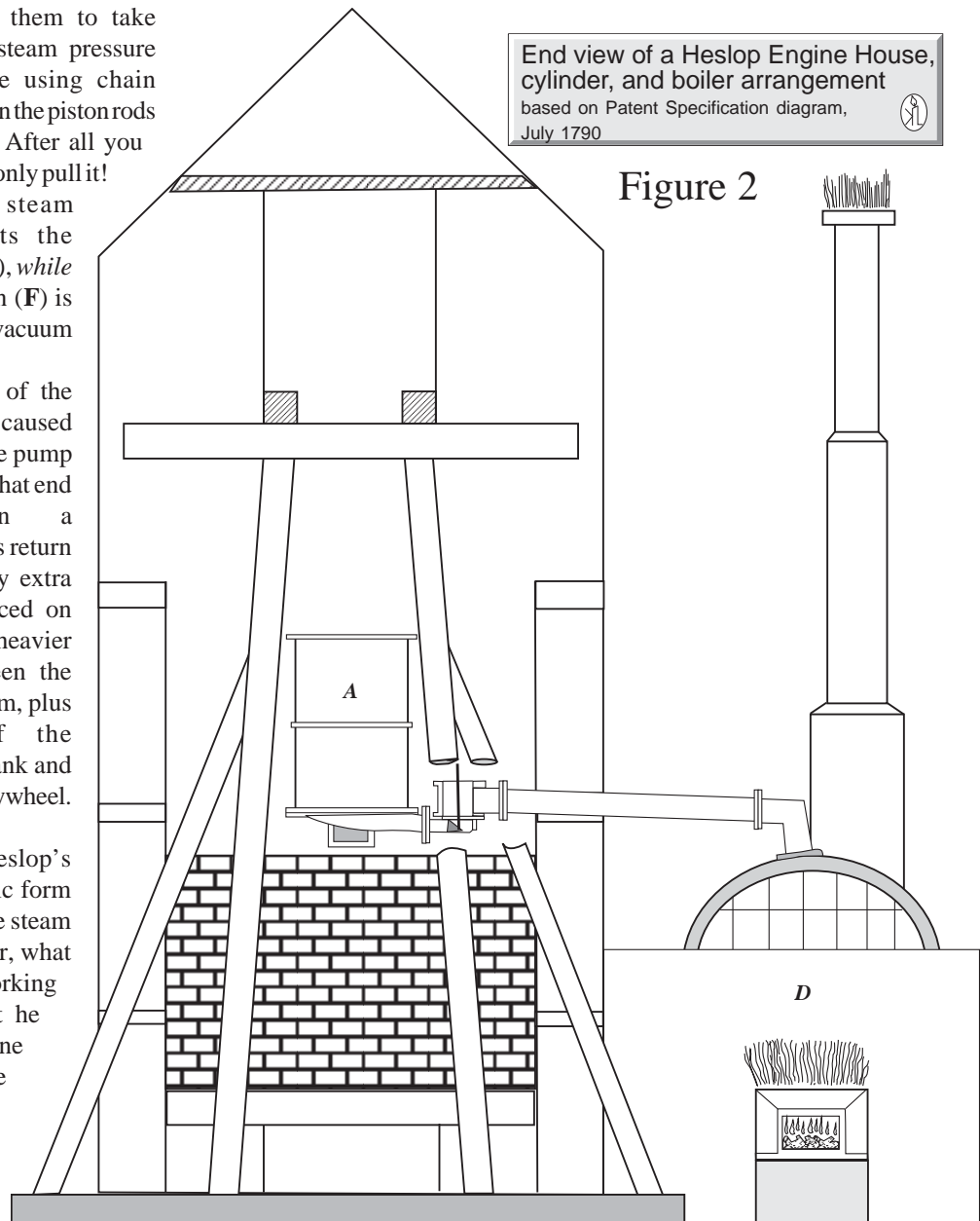
The Surviving Example

On the 24th of May, 1879 an article appeared in the "Times", stating that a very interesting old engine, the last of its kind which remained at work, had been donated to the Patent Museum (now the Science Museum) by the Earl of Lonsdale, where it had worked at several pits in the Whitehaven area.

On seeing this article, W.R.Anstice of the Madeley Wood Company, wrote to inform them that they still had three such engines at work, and that they still owned five, having once owned eight of them. When Mr.Anstice sent in an original drawing of his engine, it was found that it was an earlier engine than

the one donated to the Museum and matched the one for which the original Patent specification had been taken out.

On the preserved engine the 'hot cylinder' is 34 inches in diameter, with a 2ft. 10in stroke. The 'cold cylinder' is 25½ inches in diameter with a 3ft. 3in stroke. The piston rod of the 'cold cylinder' is connected to the beam by means of a parallel motion, while that of the 'hot cylinder' is connected via chain links, with guides for the crosshead, it is thought that these were added in 1837. The engine has also had a 12 inch air-pump added some time after construction. The wooden beam



End view of a Heslop Engine House, cylinder, and boiler arrangement based on Patent Specification diagram, July 1790

Figure 2



Adam Heslop, Steam Engine Builder continued...

has been frequently renewed, it would have originally been a parallel beam. The present hog-backed beam has been repaired with two pieces of boiler plate patched over the middle.

The engine was used for winding, with the winding gear on a second-motion shaft which is not parallel to the first and is driven from it by a bevel pinion on the flywheel shaft, working into an ordinary spur wheel with parallel teeth on the winding shaft. The bent connecting rod on this engine was a common feature of Helsop's rotative engines, he maintained that it gave it a certain amount of beneficial and desirable elasticity - but it really seems to be so that it could clear the 'hot cylinder'.

This engine was on show at the Science Museum until the late 1970's, but sadly it has been dismantled and is now in storage (which I discovered after making a special trip to see it in 1979!). This means it is the last we will ever see of it, unless the Science Museum can be persuaded to loan it to another museum, perhaps back in the Whitehaven area?

Heslop Engines in Shropshire

It is not known exactly how many engines Heslop built, however there are known to have been at least 15 in Cumberland - 14 at various mines, and one at the Lowca Ironworks, as well as 8 in Shropshire and possibly one in London at a brass works.

It is possible that all the Shropshire engines were owned by the Madeley Wood Company, although there is little information available.

Of the eight known Shropshire engines:

3 were at Blists Hill:

- 1 was the winding engine at Blists Hill Upper Mine (and was featured in a 1912 in Power Magazine, see below).
- 1 On a pit south of the Blists Hull Furnaces, either New Hill Pit or 'Cinderhill' pit (although the dates for the engine at this mine do not seem quite right).



Picture: IA Recordings, KL 215-85

Base of Haystack boiler at Blists Hill 'Upper' Mine, stoking area and grate were in the rectangular section at top middle of picture.

- 1 on the Hay Incline plane.
- 1 other engine was used on 'another' canal incline; either Ketley, Windmill Farm, or Wrockwardine Wood. This is mentioned in a letter to James Watt, Junior from Southern, where he talks about visiting the Coalbrookdale area and seeing "two engines of Helsop's invention" at the "incline planes".
- 2 engines were used at Coalbrookdale
- 1 other was used by the Madeley Wood Company at an unknown site - could this be the engine at the Brick-kiln Leasow mine, mentioned

elsewhere in this issue? Also could this engine be the one pictured in the 1912 Power Magazine article (the same picture appears in "The Steam Engine of Thomas Newcomen", p.118; by Rolt & Allen and "The Mines of Shropshire", p.28; by I.J.Brown)?

Evidence for where these engines were made is sadly missing. Two are mentioned in the Coalbrookdale Company records:

- " 1790 Heslop's engine
- 1791 Heslop's engine for Lord Lonsdale"³

Site of Heslop Engine at Blists Hill 'Upper' Mine, during 1980's excavations. View looking along engine bed area towards 2 haystack boiler mounts, stoking area is towards the rear right.



Picture: IA Recordings, KL 215-92



Adam Heslop, Steam Engine Builder continued...



Picture: IARecordings, KL 215-87

View of 1980's Heslop engine site excavations, looking towards the Blists Hill Shafts

Presumably the first one was for use in Shropshire.

The sites of two of the Shropshire Heslop engines still contain some remains of the engine supports: that at the Hay Incline plane and the one by the Blists Hill Upper Mine. The latter was excavated in the early 1980's (see photographs), when the bases of 2 haystack boilers and the site of the engine were uncovered. Unfortunately the drum pit had been obscured by a later 19th C. building. There is a picture and detailed description of the engine that worked on this site, in a 1912 edition of **Power**⁴.

The Blists Hill Upper Mine Engine

It had a 35 inch diameter 'hot cylinder' and 24 inch diameter 'cold cylinder'. The beam was 14ft long from the end to the connecting rod journal.

It had a 13ft diameter flywheel and the crankshaft was geared to a second-motion shaft with a speed reduction of 4 to 1. The winding chain reels were mounted on the second-motion shaft, and held triple linked wrought iron

'rattlechain' with wooden packing pieces. It is claimed that they could take loads of 18 to 20 cwt, with the engine raising material from 300ft.

Only one haystack boiler is described in the Power article, it was a cast iron boiler, 10 x 12 ft. made from 3/8 inch plates and single-riveted lap seams. It provided steam at 8 to 10 psi and consumed 16 cwt of 'slack' coal per day. The boiler had a 4 inch diameter

mushroom type safety valve.

It was claimed in the 1912 article that the engine was installed '105 years ago', which would put its date at 1806.

As well as engines with beams, Heslop also developed 'Beamless' engines, I hope to have a drawing of one ready for the next issue of 'Below'.

For references see next page..

Heslop engine bed site, with narrow area, presumably for flywheel



Picture: IARecordings, KL 215-84



Possible New Colliery for Shropshire

In the 1940's and 50's plans were being made for a new colliery near Sherrifhales - the following report appeared in the "Science and Art of Mining" Journal, Vol. 58 April 24 1948, p258:

“

Two new coal seams

Drilling on farmland at Crackley Bank near Shifnal, Shropshire have shown the existence of 2 seams of good bituminous coal, the NCB's West Midlands Division has announced. The seams which are 5ft and 2ft thick are more than 1,600ft down. They have been found by using the 'mud-flush' drilling system - a method which it is believed has not been used before for coal prospecting.

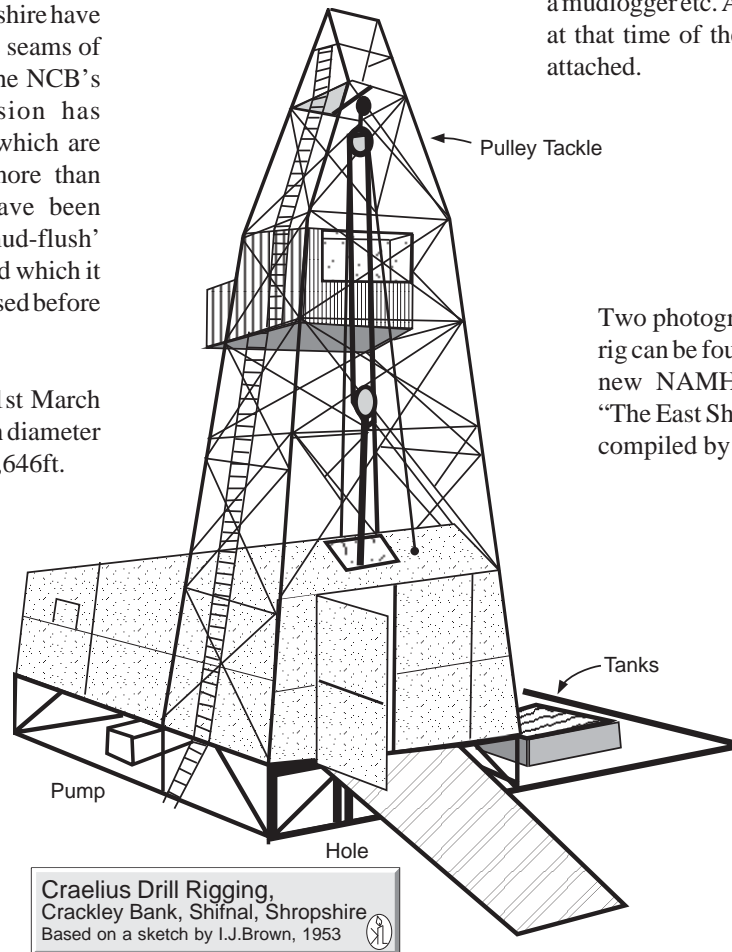
Drilling was started on 1st March and a borehole 8 inches in diameter has reached a depth of 1,646ft.

Under the 'mud-flush' system a solution is pumped down the borehole at a pressure of 400psi. Material taken from the bore gives a complete cross-section of the strata and the solution gives the borehole a strong wall which makes the use of steel lining tubes unnecessary.

Members of the Geographical (sic) Survey have assisted the NCB in identifying the various rocks which lie in the path of the shaft. Further drillings are being made in a 3-mile radius to establish the extent of the coal seams”

Five years later the writer spent some months working on these bore-holes as a mudlogger etc. A sketch made by him at that time of the equipment used is attached.

Ivor Brown



Two photographs of the drilling rig can be found on page 60, in the new NAMHO sponsored book "The East Shropshire Coalfields" compiled by Ivor Brown

Adam Heslop, Steam Engine Builder

References

Specific References

1. Rathbone MSS, misc. letters: William Reynolds to William Rathbone, 1st April 1790
2. Heslop's Patent Specification A.D. 1790, 17th July, No. 1760.
3. Raistrick, A.; Dynasty of Ironfounders
4. Leese, J.S.; Old English Power Plants, Power, New York, 23rd July 1912; Vol.36 No.4, p.108-109

General References

- Farey, J. A Treatise on the Steam Engine, Hist. Practical & Description, Vol. I, 1827, p.671
- Randall, J; History of Madeley, 1880, p.99
- Fletcher, H.A.; Proc. Inst. Mech Eng., 1879, p.85
- Catalogue of the Collections in the Science Museum, Stationary Engines, 1925, p.41

- Tann, J. (Ed.); Selected Papers of Bolton and Watt: Document 45 (letter from Matthew Bolton to Mr.Chippendale, 4/12/1790), p.114
- Document 72 (letter from James Watt, Senior to James Watt, Junior, 16/9/1790), p.182
- Dickinson, H.W. & Jenkins, R.; James Watt and the Steam Engine, 1927, p.316



Mines and Tunnels of the Ironbridge Gorge, Part 10

Brickkiln Leasow Mine, by Ivor Brown

Brickkiln Leasow Mine (Grid ref: SJ 6841 0423) was at Hill Top, near the junction of the roads called Madeley Hill and Lincoln Hill. The shafts were at near surface level about 475ft. aod but the top of the pitmounds exceeded 500ft. aod. The site is well known as the location of the Madeley Wood Company's worst recorded pit accident (on Tuesday 27th September 1864) which claimed 9 lives.

Name Confusion

There is some confusion about the name of this mine as local miners often

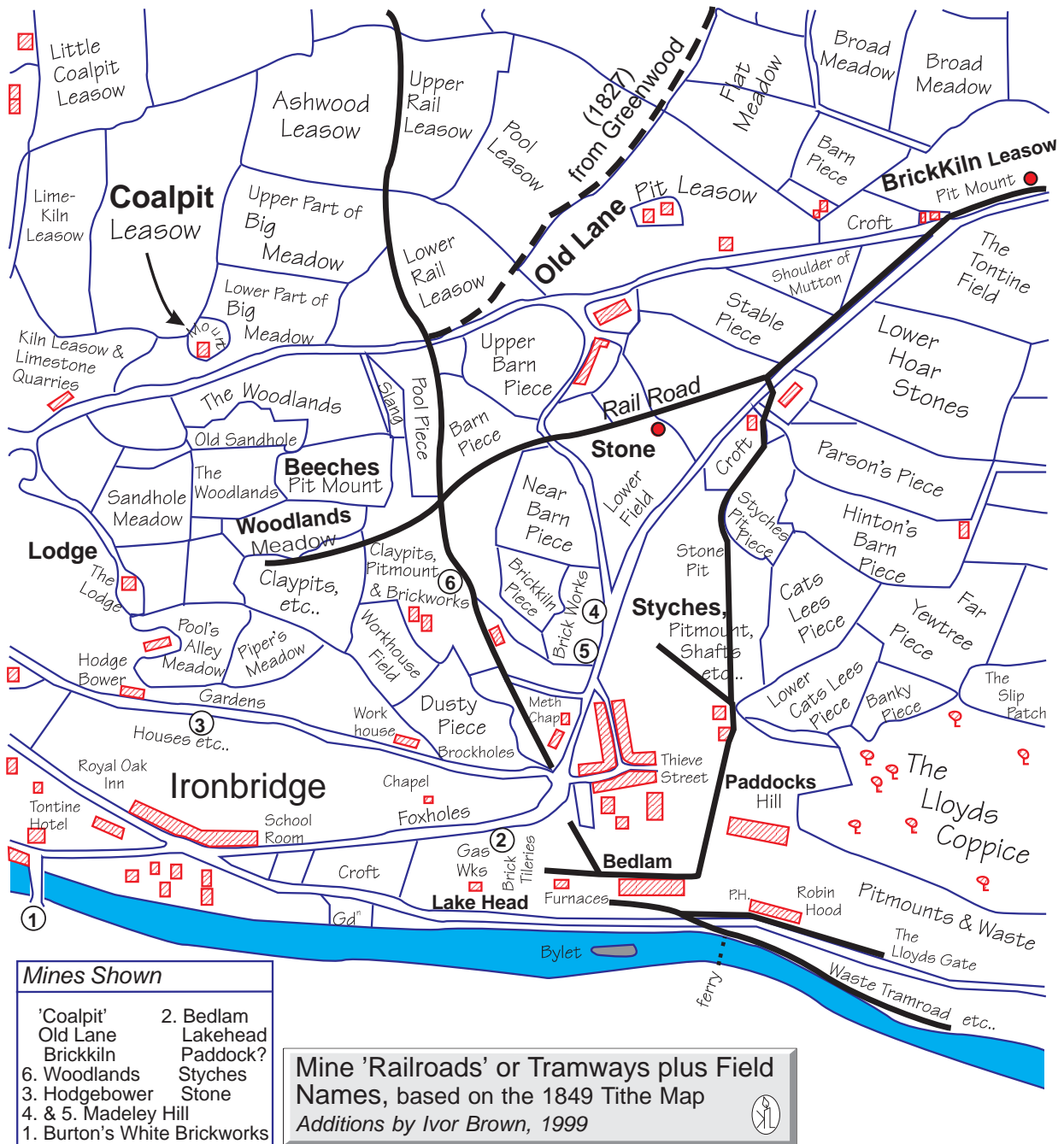
referred to it as the 'Lane Pit'. In his evidence to the Inquest into the 1864 disaster the mine manager, John Davies, said that "he managed the Lane Pit, the proper name of which was the Brickkiln Leasow Pit".

The original Lane Pit, mentioned in a previous article in this series, when quoting the details of its inventory in the 17th Century, was probably the pit in Old Lane Pit Field, a few hundred yards away as shown on the Tithe Map of 1849. There may well have been connections to this underground.

Sinking Date

The date of sinking of Brick-kiln Leasow Mine is unclear. Richard Reynolds is recorded as taking a lease of Brick-kiln Leasow in 1765, but this may not have been this site as other 'Brick-kiln Leasows' existed including one a short distance away near Castle Green. It is known however that there was a brick-kiln on this site but probably only at the time the pit was being sunk.

A clearer indication of its date is that surviving records of the Madeley Wood Company show that a steam engine



Mines and Tunnels of the Ironbridge Gorge, Part 10

Brickkiln Leasow Mine, by Ivor Brown

was built at Brick-kiln Leasow pit in 1794 and within three years a second also. The records indicate that most of the iron parts were cast at Madeley Wood Ironworks. This date is further indicated in the evidence given at the disaster Inquest by John Anstice for the owners. He said that the pit had been worked "for upward of 60 years". This would give a date near to the end of the 18th C. so 1794 could be the date of sinking. Elsewhere, in evidence, the engine driver gave the depth of the pit as '240 yards' or 720ft.

Table 1
Depth of seams at nearby Meadow Pit

Top Coal and Double Coal	168 yd.
Big Flint Coal	198 yd.
Pennystone Ironstone	205 yd.
Viger Coal	210 yd.
Best Coal	229 yd.
Clod & Randles Coal	232 yd (696 ft.)
Little Flint	239 yd. (717 ft.)
Crawstone Ironstone	?

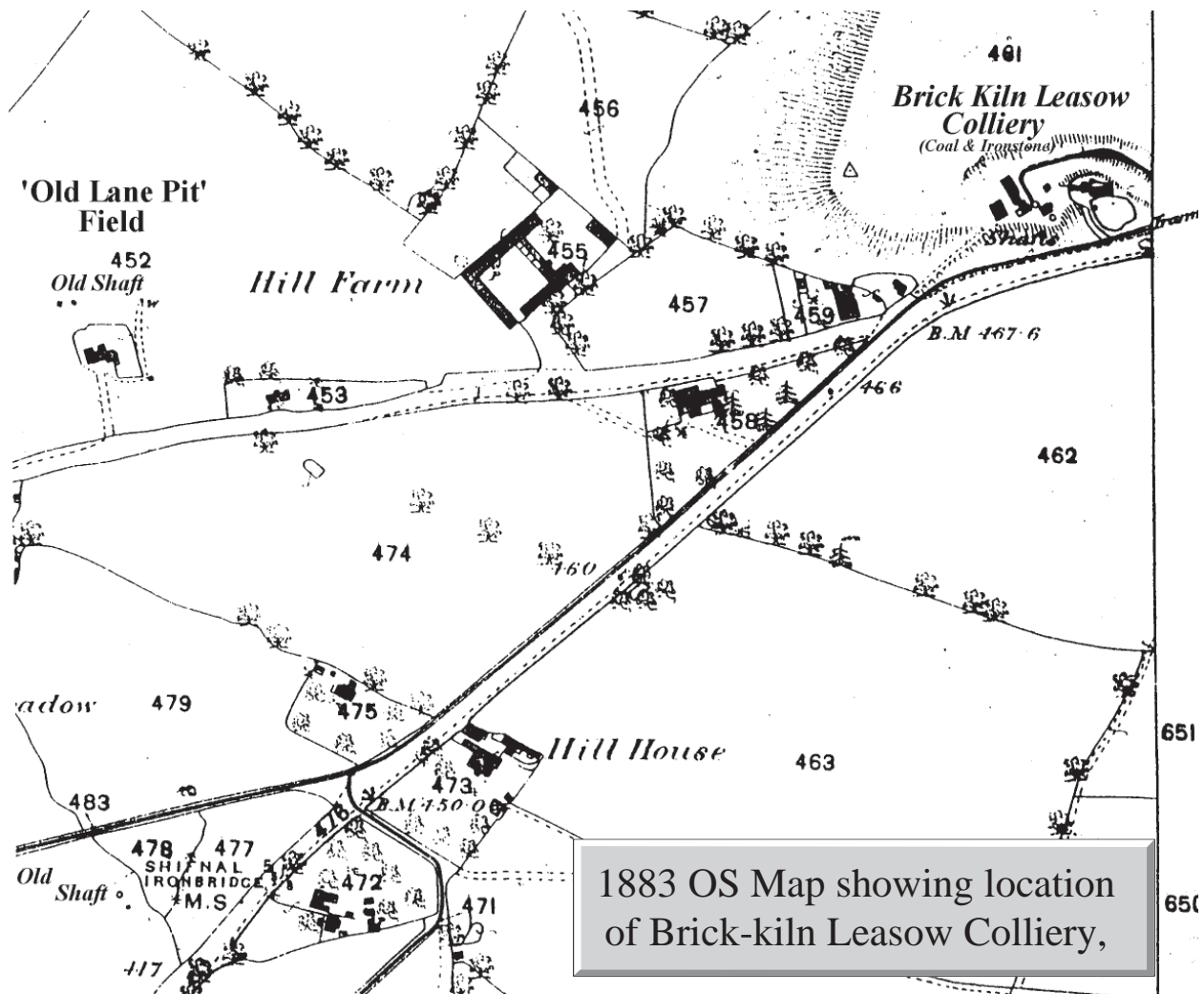
Little is so far known about the early years at this pit, it would have worked similar seams and similar depths to those at nearby Meadow Pit of which the shaft section survives (Table 1).

It was both an ironstone pit and coal pit and an alternative name for it was given on the memorial to the disaster as "Brickkiln Leasow Crawstone Pit".

'Crawstone Ironstone' presumably was the seam worked at the time, although a witness at the Inquest said that it was a "coal pit". One early recorded accident which was probably at this mine was in 1812 when Francis Lloyd was killed by a fall of rock at a mine at Madeley Wood which was 708ft. deep, and very similar to the depth given above.

Maps

The mine is first indicated on the earliest OS map of the 1830's, this shows a pitheap and the shaft positions with a tramway running past (there is also a tramway indicated on Greenwoods Map of 1826/7 but no mine). This tramway could have been the one referred to at the Old Lane Pit,



1883 OS Map showing location of Brick-kiln Leasow Colliery,



Mines and Tunnels of the Ironbridge Gorge, Part 10

Brickkiln Leasow Mine, by Ivor Brown

running from that pit to the River, and along the line the Meadow Pit tramway took after its sinking about 1808.

The mine is again shown on the 1849 Tithe Map at which time it had an appreciable spoilheap. It was both 'owned' and 'occupied' by the 'Madeley Wood Company'. By this date it is known to have had at least two shafts, an engine, boilers, a small reservoir and a connection to the above tramway, which ran alongside the adjoining highway. The spoilheap surrounded the mine on three sides, the mine being open from the roadside and unlike most other ironstone mines in the vicinity the shaft tops do not seem to have been raised to the level of the mound as it increased in height, but stayed at ground level. The spoil would have come from the waste remaining as the ironstone was picked at the surface after being tipped although ironstone from the Crawstone seam alone would not have required this treatment as it was not in nodular form.

1864 Disaster

The 1864 accident Inquest provides a great deal of information about the mine. The accident has been described in detail elsewhere¹ so that only the basic details are given here. Three men and six boys (ages 12 to 18) were being wound up the shaft on loops of chain (called 'the doubles') attached to the main winding chain by a hook in a 'ring'. The ring was on the end of the main chain (see Figure 1), when suddenly they all crashed to the bottom.

The resulting Inquest produced the conclusion that the hooker-on (who had been killed) must have put the hook on the rim of the ring rather than through it and some jolt during winding, caused it to slip off the rim.

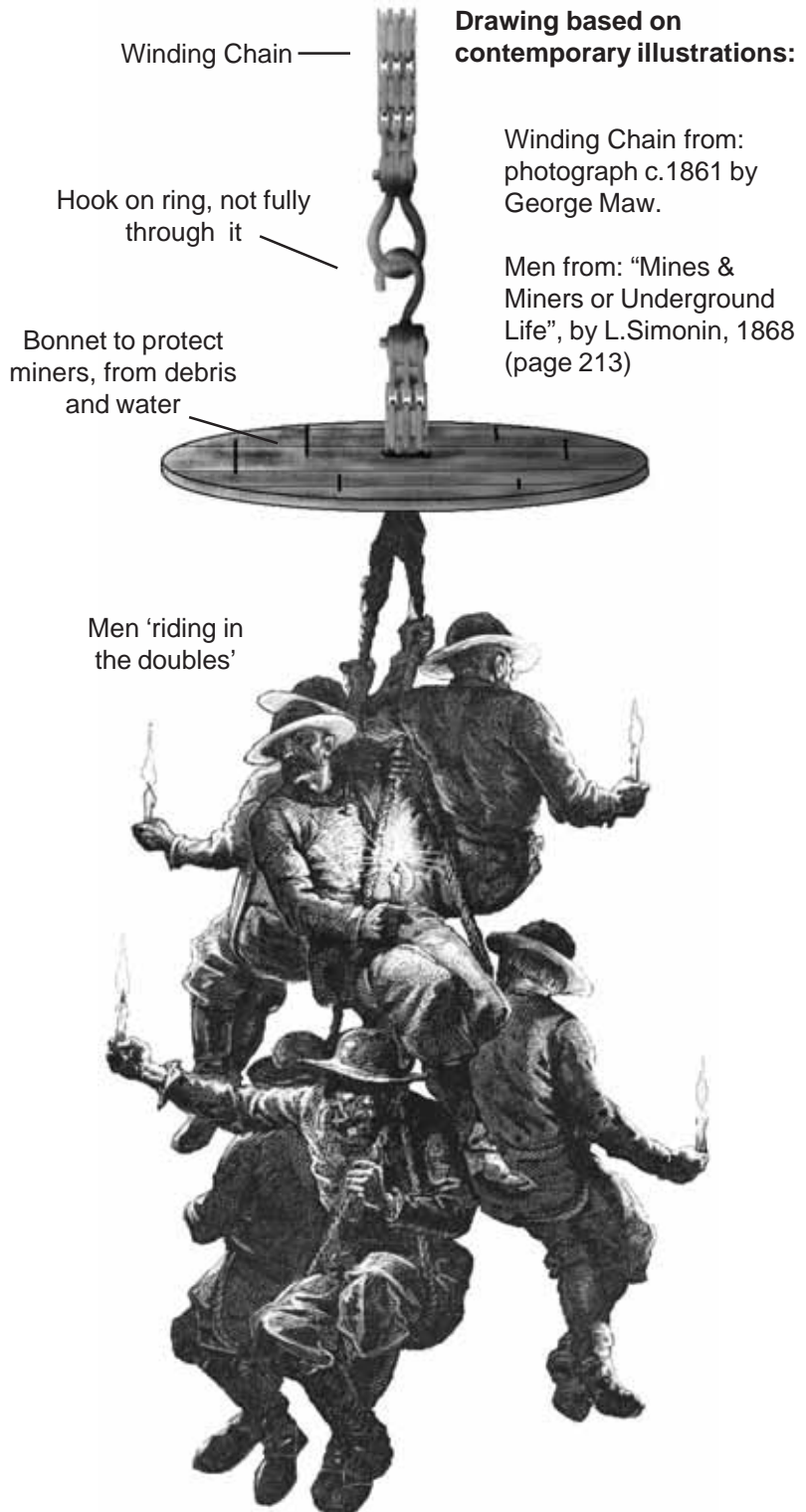
The doubles, which were suspended beneath a bonnet (presumably circular and of iron and wood) to protect the riders from falling bricks and water, crashed through the timber scaffold at the bottom with the bonnet and riders, into 12ft. of water in the shaft sump. The winding engine driver said the

weight went off the chain when they were halfway up, about 360ft.

At the Inquest it came out that the incident was not unique, it had happened at other local mines before,

but never killing so many persons. It also transpired that there should only have been 8 not 9 in the 'bond' or group being raised. One person must have been travelling on the lap of another, a not uncommon practice.

Figure 1: "Riding the Doubles"



Mines and Tunnels of the Ironbridge Gorge, Part 10

Brickkiln Leasow Mine, by Ivor Brown

The bodies were recovered from the sump by Joseph Morris of this pit and Benjamin Rogers from an adjoining pit, probably Meadow Pit or Styches Pit. They were then taken to the George and Dragon Public House at Madeley Wood. The Inquest was later held at the Police Station, Ironbridge.

At the Inquest brothers John Anstice and William Reynolds Anstice represented the owners and gave evidence as did Joseph Vaughan the engineman, William Wallett, the banksman (his father was one of the victims) and John Davies the manager. Mr. Wynne was Inspector of Mines and Mr. E.J. Bartlam was the Coroner.

The victims were: Edward Wallett (age 52) and John Tranter (37), both of whom were “responsible for the management of the underground workings”, Benjamin Davies (35), who was the ‘hooker on’, and the boys were William Onions (12), Francis Cookson (13), John Farr (14), William Jarratt (18), and Joseph Maiden (18) [See last issue of ‘Below’ about Maiden]. All the victims were buried in a common grave in Madeley Churchyard, the Inquest jury having returned a verdict of ‘accidental death’. It was estimated that 2,000 persons were present at the funeral.

The Change to Coal

As the ironstone industry started to decline the mine began to produce more coal and a ‘coal note’ still survives made out to Mr. T. Blockridge of Madeley giving the following details, August 10th 1878, coal 8s. 4d. per ton, loading 1s 9d and carriage 1s 9d. At this time the Madeley Wood Company had 3 Heslop-designed open-top steam engines at work and one of these was most likely at this mine. There are several photographs in existence of such an engine at ‘The Lane Pits’, which would have been Brick-kiln Leasow.

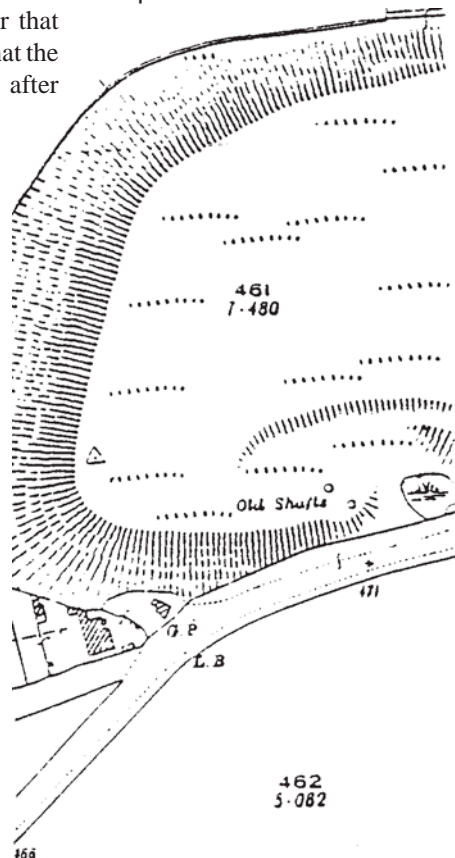
In 1883 the OS map shows the mine to be ‘Coal and Ironstone’ and there is a large spoilheap, two shafts, several buildings and a pond. The tramway still passed the site and was connected to the mine.

By 1891 the mine seems to have closed since it is not included in a comprehensive survey produced by the Mines Inspector for that year. Local tradition says that the mine never opened again after

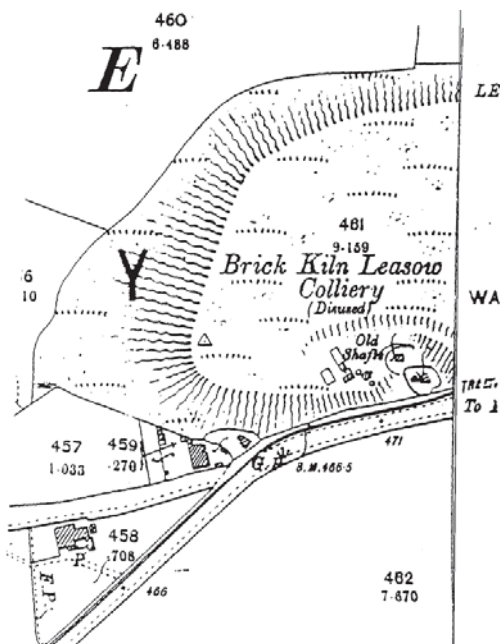


Above: Brick-kiln Leasow Colliery on 1883 OS Map.

Below: Colliery as shown on 1927 OS map



Below: Brick-kiln Leasow Colliery as shown on 1902 OS Map



Mines and Tunnels of the Ironbridge Gorge, Part 10

Brickkiln Leasow Mine, by Ivor Brown

this time but the engine (which apparently had been overhauled) remained on site until about 1900.

A brick 'bee-hive' was placed over the shaft, but about 1915 the shaft top area cratered, the noise being heard by the writers father and others in Park Lane, Madeley [about 1/2 a mile away].

The 1902 OS Map shows all the features as on the 1883 Map, but the mine is described as 'disused' and there is no connection with the passing tramway. The 1925 6 inch OS Map says 'Old

Shafts' only and no structures are indicated.

In more recent years trees have grown up all around the area of the mine, but a large iron retaining bolt can still be seen on site with a heap of brick rubble on what was probably the site of the boiler and chimney. Other depressions are present at about the position of the shafts, cylinder and pond. The more recently published geological map of the area provides a surprise regarding the mine. Under the mine heading (with an 'e' on Leasow) it records "4 shafts".

The location of these other two shafts is not known to the writer.

References to the Disaster

1. Lloyd A, "The Nine Men of Madeley" in Shropshire Magazine, October 1979,
2. Reports in Wellington Journal & Shrewsbury News, October 1st and 8th, 1864, Shrewsbury Chronicle, October 7th 1864 and The Colliery Guardian, October 8th 1864.

Note - Miners Grave

A small group of people in Madeley are planning to restore the now very derelict communal grave, in Madeley Churchyard, of the miners killed at Brick-kiln Leasow Colliery as a Millennium Project. Information can be obtained from Ms. M.Hickson at Madeley Library.

As indicated in the family tree ('Below 99.3', p5) one of the victims, Joseph Maiden, was brother to Mr.Allen's great, great grandfather and cousin to the present writers great-grandmothers first husband!

Ivor Brown

Shaft Riding

While checking the sources of illustrations for Ivor's article, I came across this picture (on the right) of miners riding a kibble or bowk in "Mines & Miners or Underground Life", by L.Simonin, 1868 (page 131).

What was interesting about the picture was that it shows a 'bonnet' above the miners to protect them from falling debris. In this drawing it appears to be wooden with possibly wood cross pieces to keep it together.

It is not easy to see how it was kept in place, presumably it was 'gravity' against a knot or lump of chain.

I have used this as the 'template' for the bonnet in the diagram on page 8.

Kelvin



Caphouse Colliery Area and Monckton Coking Plant, 17th November 1999

Fourteen enthusiasts, including 6 members of the SCMC, took part in this visit on a crisp sunny day, meeting first at the Museum (Caphouse Colliery) car park to commence a short walk around local mining sites. It was explained that most of the sites to be visited were situated on the two local railway networks, either the 18th Century system of tramways which went to the canal in a north-easterly direction, or the 19th Century standard gauge system which went to the canal and main railway lines in a south-easterly direction.

Caphouse Colliery

Walking up towards New Hall Lane, the surviving headframes on the Caphouse Sough, at Caphouse Colliery and Hope Pit were all pointed out as well as the old Inman Shaft Pumping Engine House. On New Hill Lane the old tramway routes, c1790, became obvious including the surviving shallow tunnel (a world first?), a 20 stone-arched tramway viaduct (another world first?), and the routes across the fields, some of which were followed.

New Hall Lane is part of the 19th C. standard gauge railway system which worked from the 1850's to the 1940's, it included four steam-powered inclines (some remains of engine house), two tunnels (and an aborted replacement Drift of the 1920's) and two zig-zags or back shunts on over 5 miles of track.

The long incline down to the closed (1980's) Denby Dale Colliery (now a sawmill and garden centre) passed the remains of the 18th C. pumping house, and was most impressive. The third incline and summit engine house position were also pointed out before a return to Caphouse was made in time for lunch.

After an excellent "home-made" lunch the party set off in convoy for the Coke Works at Royston, stopping enroute to inspect stone-sleeper blocks from the tramway now used for walling, then at a point near the eastern end of the Caphouse Railway, where some rails still remained and, a short distance away, there were remains of the staithe.

Wooley Moor Colliery

A final stop was then made at Woolley Moor Colliery (closed 1940's) where the concrete headframe had only recently been removed. Alongside this a conventional style "Prisoner of War" camp where some of the miners lived, was now used as a chicken farm.

Royston Coke Works

At Royston the party was met by staff of the Monckton Coke and Chemical Company Ltd. (now part of R.J.B. Mining). It was explained that this was now the only cokeworks of its type in England and that they were at present celebrating their 125th year of existence. (A good display of photographs, memorabilia and historic account books had been laid out - mainly for the visit of Richard Budge the following day - there were also plenty of 'wet-paint' notices around!).

This site with its associated colliery once employed over 4,000 men, the Monckton Colliery closed in the 1960's (although the Koepe Tower has only recently been demolished and some buildings still remain). The surviving Coke Works and its recently installed combined 'heat and power plant' employ about 150 men.

In the 1970's the Royston Drift Mine was opened on the adjacent site but this closed in 1989, now all coal for the works is brought in from Maltby Colliery. The modern buildings of this mine still remain.

The party were given a fascinating tour of both Coking and Electricity generation arrangements including climbing the towers and watching the ovens being drawn. The company was thanked for providing excellent guides, refreshments and everything necessary to make a most instructive visit.

Winterset Pumping Engine

After the afternoon visit some members moved on in fading light to visit the rather remote Winterset Pumping Engine House remains. The 50" Cornish Engine built by Harveys of

Cornwall in 1862 was brought to this site from Tremanheare Tin Mine in 1874, worked until about 1950 and was scrapped in 1960. There are however considerable remains surviving. The engine was used, altered from a low volume - high rise pump to a high volume - low rise pump here to raise water from a lower reservoir to a canal-level reservoir. This water was much needed since the coal-carrying canal had many locks in this hilly area.

One thing became very clear from this visit and that was that the considerable mining remains were fast being removed and very little was being done to record them, yet alone preserve them.

Ivor Brown

On the Rails

The Materials Science-based Research Group of the Department of Materials, University of Oxford have initiated a one-year research project in association with the National Railway Museum to characterise 19th century railway rails.

The project is something of a pilot in taking a wider look at the engineering materials of the Industrial Revolution and its aftermath. Rails offer a convenient source of well-dated examples of a basic product which can also be compared or contrasted with the contemporary technical literature.

From railway company records they hope to be able to identify the works which produced at least some of the rails that they examine. The first few samples they have examined have already been informative. For example suggestions that wrought iron of the mid-19th century was very slaggy have been confirmed. Some samples containing 10% by volume of slag.

They are looking for 19th C. rails they can sample, possible ironworks sites that might have supplied railway companies.

If you can offer any help or advice, contact:

Peter Northover

peter.northover@materials.ox.ac.uk



Research, Software and Help

Public Record Office

On the 9th July the Public Record Office, Kew, London updated their searchable database. There are 8,205,122 references to records. For the first time, it is now possible to search for the references to British registered mining companies without looking through ledgers for a company number and then looking that number up in another catalogue to find the repository box number. The database search function permits you to use three keywords to find specific items in categories and sub-categories or even the whole database.

The relevant categories for mining companies are:

BT41 - pre limited liability;

BT31 - registered limited liability companies;

BT34 Liquidators reports (late 19th and 20th centuries).

Other relevant categories include: COAL and MUN for the British Coal Industry and Ministry of Munitions (1st World War), respectively.

Other miscellaneous company references appear under Foreign Office etc. The BT (Board of Trade) records are incomplete as some files were selectively destroyed prior to the

collection being archived (government policy).

For the mining historian/railway historian/social historian etc. etc. there is now a considerable saving in time to be had. File reference numbers can be looked up prior to visiting the PRO.

Understandably there are some teething problems with the database. I have found for example that if you use an Internet Browser with frames, the database is slow. I get quick results using Netscape v1. Sometime using Netscape v4 some of the minor properties of the page do not load up and this seems to present speed problems when searching.

Since E-mailing the PRO on various points they have included a *<go to page>* function on the search tool bar which makes life a bit more bearable searching the 5,800 pages of the **BT31** files - This can be very useful if the company name has been spelt wrongly and you know roughly when the company was registered.

Access to the database is via:
www.pro.gov.uk

Happy and fruitful searching.

Rob Vernon

3D Modelling Software

The BCRA Surveying Group has a very good page on surveying software:

www.sat.dundee.ac.uk/~arb/surveying/software.html

This has gives the details of much of the software available plus links to their home sites. Generally you will find further links from there to other goodies.

There is a bewildering array of software available and the hardware and operating system requirements vary greatly. Typically you may be looking for software that meets the following conditions:

1. Its Free
2. It will run on a standard PC
3. It has a nice friendly windows interface.

Contenders are:

Compass

This is OK but it tends to find round about ways to do things and will only work on a Pentium class processor. It works on the same lines as GIS (Geographic Information System) and acts as a complex data base to which you can add pictures as well as integrating the underground survey with a digital elevation model.

Winkarst

This has a tendency to casue the computer to crash!

On-Station

This is the easiest to get to grips with but has limited output options at the moment. The best thing about On-Station is that it will run quite happily on an old 486-DX66.

They all accept standard compass and tape data so it is dead easy to build surveys from your old survey books. You will find though that you have to tinker with the data format a bit. What is really needed is a program which will accept the coordinate data which can be produced from paper plans. Failing that a method of converting coordinates into compass and tape data i.e. direction and bearing.

Help Wanted

Whilst doing my 'homework' for the Welsh Mines Society field meet in June of next year - see:

www.mike.munro.cwc.net/mining/wms/wmsoc_hp.htm

for details - I came across Oliver Lloyd, solicitor of Cardigan. Up to his death in about 1846 he was one of the lessees of minerals on part of the Bishop of St Davids' estate at Llanddewibrefi (NLW Lucas 1992 and 2118).

It's not the first time I had come across him. He was lessee at Llanfyrnach in the early 1840s. He or an associate evidently had some knowledge of the application of water power to mine drainage. He is credited with the

construction of the spectacular leat high above Cwmbrefi. Nine miles long, this fed the machinery via a pond above the Rhysgog Mine.

At Llanfyrnach his name is mentioned with reference to the erection of a powerful pumping waterwheel.

Has anyone come across Lloyd in connection with other mines in the 1840s or earlier?

Peter Cloughton

University of Exeter

Department of History School of Historical, Political and Sociological Studies

E-mail: P.F.Cloughton@exeter.ac.uk





Christmas Puzzles



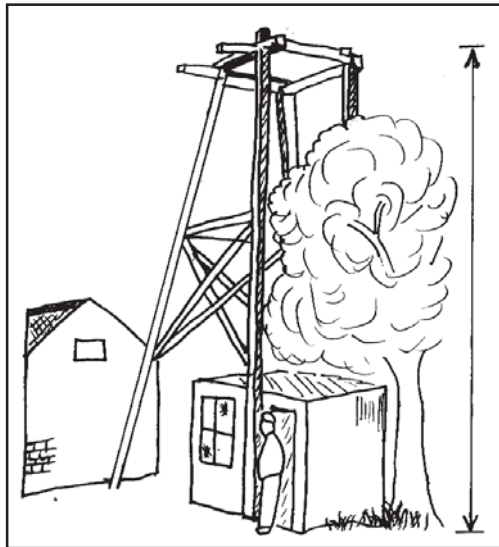
Word Search:

Hidden in the word square are 20 mine names or locations (or parts of names!) - all of which appear in this issue of 'Below'. Can you find them?

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B O A T L E V E L Q W A E F Y I P K N M
O H N L I K K C I R B P O Z J T F N X E
G K Y E E B C A P H O U S E A I O A P A
A M D A I R T U V R L C B N K T J B I D
K V R S E H C Y T S D W K P K T G Y K O
C U E O B S N A I L B E A C H E D E V W
C R A W S T O N E I R P N N N R S L X P
S A M O J B B T Y V Q O P Y T S A K C I
T I P E N A L V I Z M I N K L T U C D T
V A J L E V E L S N I K R E P O E A F A
R U P L W Q L O I R B P A M M N E R T G
S T A B L E F O R D Z Z C L E E Z C Y I
( @ )                               ( @ )
~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~

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There are 6 differences between the picture on the right and the one on the left, can you spot them?

Clues:

If you are really stuck on the word search you are looking for the following:

- 1. Boat Level, 2. Bog, 3. Tankerville
- 4. Perkins Level, 5. Stableford,
- 6. Snailbeach, 7. Rock, 8. Titterstone,
- 9. Clew, 10. Crackley Bank, 11. Carn,
- 12. Lane Pit, 13. Meadow Pit,
- 14. Brickett In, 15. Leasow, 16.
- Crawstone, 17. Styches, 18. Caphouse,
- 19. Maerdy, 20. Monkton





Christmas Puzzles



Here are 4 pictures, 3 taken on Club trips, plus one 'bonus' one from the archives (courtesy of Graham Isherwood).

Each picture has a clue caption, fit the answer into the spaces provided by the picture.

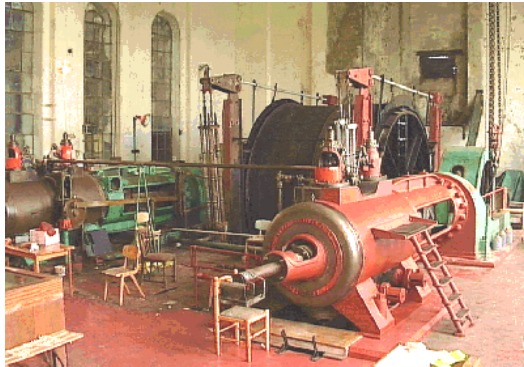
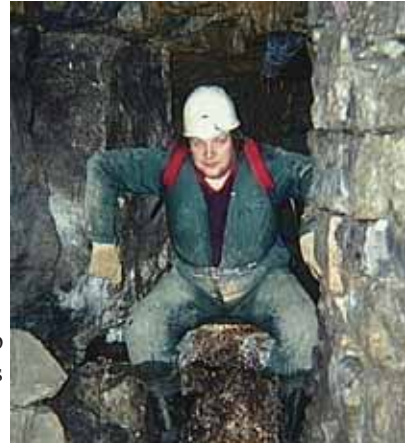
Then match the numbered slots against the final space for a message from the Editor!



1. Name the Club Member

$\bar{1}$ $\bar{2}$ $\bar{\quad}$ $\bar{4}$ $\bar{1}$ $\bar{5}$ $\bar{5}$ $\bar{6}$ $\bar{4}$

Not part of the quiz, but what is he sitting on, and where?



2. Taken on a Club trip 'up north', don't be vague, this is.....

$\bar{\quad}$ $\bar{7}$ $\bar{2}$ $\bar{8}$ Pit

3. Scene of a mechanised club dig, in someones garden in Coalbrookdale. It is the site of the:

$\bar{5}$ $\bar{9}$ $\bar{10}$ $\bar{11}$ $\bar{12}$ $\bar{13}$ $\bar{10}$



4. This is the hard one, taken at the (reputed) deepest pit in Lancashire, the engine was at Leigh in :

$\bar{\quad}$ $\bar{7}$ $\bar{6}$ $\bar{3}$ $\bar{5}$ $\bar{13}$ $\bar{7}$ $\bar{8}$ $\bar{4}$ Pit

(place where a Parson lives)

The engine is the only winding engine ever made by its famous boiler making builders, who were:

$\bar{8}$ $\bar{7}$ $\bar{9}$ $\bar{9}$ $\bar{5}$ $\bar{11}$ $\bar{7}$ $\bar{12}$ $\bar{3}$
 (place in Scotland and type of cow)

$\bar{3}$ $\bar{4}$ $\bar{7}$ $\bar{3}$ $\bar{5}$ $\bar{13}$ $\bar{3}$ $\bar{8}$ $\bar{6}$ $\bar{4}$ $\bar{4}$ $\bar{2}$ $\bar{13}$ $\bar{8}$ $\bar{3}$

$\bar{7}$ $\bar{13}$ $\bar{10}$ $\bar{7}$ $\bar{1}$ $\bar{4}$ $\bar{6}$ $\bar{6}$ $\bar{12}$

$\bar{13}$ $\bar{4}$ $\bar{11}$ $\bar{\quad}$ $\bar{1}$ $\bar{2}$ $\bar{9}$ $\bar{9}$ $\bar{4}$ $\bar{13}$ $\bar{2}$ $\bar{\quad}$ $\bar{1}$



News Round-up

Future still golden for Anglesey miners.

There has been an optimistic report on the prospects for Anglesey Mining despite the fall in the price of gold.

The company has been engaged in a drilling programme at Parys Mountain on Anglesey and near Dolaucothi in Carmarthenshire, resulting in losses of over £111,000 in the last financial year.

Western Mail Saturday 18 September 1999, p. 17.

For a more complete report and details of the 1999 Annual Report, visit the Anglesey Mining website:

www.angleseymining.co.uk

The reality is that unless Anglesey raises a large sum of money, nothing much more is likely to happen.

3rd International Symposium on Souterrains

This will take place in Croatia in the National Park Paklenica. The Symposium is planned to begin on 15th of September and to end on 19th of September 2000. If you are interested in being informed on details or you would like to participate in the Symposium please reply to the e-mail address below and you will be kept informed.

In case you are interested in participating please let me know by the end of February 2000.

If you have any questions please don't hesitate to ask. Looking forward to hearing from you.

Marko Andreis

e-mail: marko.andreis1@zg.tel.hr

David Coxhill Update

Would Members please note my new e-mail address is:

davidcoxill@netlineuk.net

Thanks,

David

BCRA and NCA "Joint Working Party for British Caving"

Following the open debate at the National Caving Conference in September, a Joint Working Party has now been established. After discussions at BCRA and NCA Council meetings, representatives of both organisations first met on the 17th October.

The meeting was chaired by Dr John Frankland, and there was an excellent spirit of co-operation and positive thinking throughout. The many and various activities of both organisations were looked at in some depth with a view to devising ways and means of consolidation.

It was accepted throughout that nothing should be taken away but rather that activities be put together and added to with the long term aim of providing a better deal for British Caving - hence the agreed title for the Working Party.

The group is working towards an agreed briefing paper, which will hopefully be put to both Councils early in the New Year. To this end was agreed to meet again late in November.

Historically, this has been a difficult area for British Caving. For this reason the group has agreed to release a brief press statement, like this one, after every meeting so that everything is fully in the open. It also seeks that apart from official fully agreed resolutions of either Council or Constituent Bodies that any other statement or written comment should be clearly issued and marked as a "personal view". This is purely to try to avoid mis-representation or confusion arising.

Constructive comments, views and opinions will be welcomed and should preferably be sent to one or both of the following:

Bob Mehew 8 Dunbar Road, Hillside, SOUTHPORT, PR8 4RH

e-mail: mehewrd@email.msn.com

David Judson Hurst Barn, Castlemorton, MALVERN, Worcs

WR13 6LS, e-mail: judson@tesco.net

A Christmas CD

A CD covering all the text of the Mining Journal, Mining Magazine and Mining Annual Review for the years 1981 to 1998 inclusive, is available for the bargain price of £295 plus VAT.

If you are interested in obtaining a copy further details can be found on the Mining Journal website:

www.mining-journal.com

The company has also recently introduced another new website:

www.mininginformation.com

" This new site is designed to provide a free and easy-to-use portal for access to mining information on the worldwide web. The site already contains mining news, job advertisements, metal prices, equipment reviews, an events diary, details of selected mining projects and companies, useful conversion tables and an online currency converter. The site also provides links to a number of other key sites on the web."

The Mining Projects section is interesting, although there are only 5 projects listed (none in the UK yet), the pages about each project provide quite a lot of background information and details about the operation concerned.

I have found the the currency and unit of measurement conversion section quite useful, providing links to a java based measurement 'chart', that allows you compare various units of measurement, only the currency converter is truly interactive.

Those members who visited Ireland recently, will be interested in reading the Company profile page on Outokumpu Mintec - part of the Finnish Outokumpu group and owners of one of the Zinc mines in Ireland. Outokumpu also have their own web site at:

www.outokumpu.com

Kelvin



News and Events

4th European Caving Expedition Symposium.

Within the **Union Belge de Speleologie** an "Exploration" commission has been set up. With lots of enthusiasm this commission has proposed to organise the 4th European congress on expedition speleology.

The latest discoveries concerning expedition speleology, in both temperate and tropical climates, and all related techniques will be accentuated.

The aim of organising this weekend is to exchange knowledge and experiences and to meet cavers from all countries.

This event will take place in an idyllic environment, in the heart of Walloon karst, and as expected from Belgian cavers in a pleasant and sociable atmosphere...

So we are expecting you the weekend of 1st May 2000 in Profondeville to get acquainted with other explo cavers in an extraordinary ambience. In anticipation:

Good Explorations!

Program

7 themes are proposed (dependent on the interest of the participants):

1. Expeditions per continent - Europe, S-E Asia, Middle East, America, Australasia... Permissions, organisation, safety, specificity, future perspectives.
2. Desobstruction - The electric drill and cartridges, what part do they play in exploration? Methodology, dangers and ethics.
3. Sump Diving and technical diving in resurgences - New techniques and topography
4. Rescue - Auto-rescue management in expeditions. Prevention, techniques and expedition medicine.
5. Expedition Cartography - topography, radio-localisation and use of GPS.
6. Science utilized by exploration (and vice versa) - quick measurements.

7. Protection and access - legislation and ethics in expeditions. Respect of places (nature, properties, populations)

Workshops

Each of these themes will, depend on the interest:

- a) Lectures - for those who want to present discoveries, results, ideas or suggestions,
- b). Round Tables - constructive, discussions about the subject,
- c). Workshops - comparison between different materials and techniques (those who use new material, do not hesitate to show us),
- d). Posters - for the timid on all kinds of topographies.

The FIESTA

The opening cocktail 'party' will be offered by the municipality of Profondeville. On Sunday a visit to the cave "**LA Merveilleuse**" will be organised as well, followed by a "drink of depths" offered by the municipality of Dinant (Deep Village).

In the evening an immense banquet will be arranged so that your ultimate experiences can be exchanged around the table and between pints of Belgian beer!

Price

The price of **65 Euro** covers everything except the handouts, namely:

1. The registration to the congress
2. Sleeping Accommodation in the castle from Friday Night till Monday Morning (bring sleeping bag).
3. Meals - breakfast, sandwiches at noon and a warm meal at night
4. The visit to the cave and banquet on Sunday

Registration before 20th April - 5 Euro reduction.

Registration for 1 day + sandwiches - 10 Euro.

Banquet - 15 Euro

Organisation/Contact

Exploration Commission of the USB
Supported by the FNBS (VVS-UBS)
Contact Address :

Comex; Explo2000,
Chaussee de Wavre, 300,
B-1390 GREZ-DOICEAU (Belgique)

Tel : +32(0)4 3426142

Fax +32(0)4 3421156

E-Mail : ubs@speleo.be

Web site: www.speleo.be/explo2000

Flemish I.A.

This is just to announce that the Flemish Association for Industrial Archaeology has placed a complete list of all Flemish museum of science, technology and industry on its website: bricks, beer, spirits, textiles, maritime, railroads, electricity, steam, tobacco, coffee, fishing, maritime, oldtimers, ... - and one mining museum (in the "green" province of Limburg).

In the list you will find the complete address, telephone and fax numbers - and the e-mail address and a link to a website if the museum has one.

The short descriptions are in four languages: Dutch (the language spoken in Flanders), English, French and German.

The layout of the list will be adapted in the next couple of weeks, and a thematic index is under construction. The lists are currently on a provincial basis.

See how rich the region is in industrial and technical heritage !

Have a look at:

www.conservare.be/vvia/

vviamusea.htm

Greetings !

A. Linters,

Scientific director Conservare nv

the European Heritage Forum

Vlamingstraat 4 B-8560

Wevelgem, Flanders-Belgium

tel. (+32)56.253373

fax (+32)56.417636



Bull Pot Farm

Headquarters of The Red Rose Cave & Pothole Club, Bull Pot Farm, High Casterton, Via Carnforth, Lancashire LA6 2JP

Bull Pot Farm is the hub of the Red Rose C.P.C. activities and you will find members there most weekends of the year. Visiting clubs and groups are welcome and the Farm facilities for visitors have recently been upgraded. We now have a new visitors and members self catering kitchens and dormitories with Alpine style bunks (sleeping bags required). The Club has upgraded the showers, toilets and changing facilities for cavers, a tackle and rope washing area and full central heating. The common room has also been refurbished with a new wood burning stove. Cooking is by butane gas and both kitchens have a fridge and microwave.

Club social events take place on some weekends in which guests are welcome to participate. Situated high on Casterton Fell at the gateway to the Ease Gill System, Britain's longest cave, it is an ideal base for exploring the many caves of Yorkshire Dales.

For clubs wishing to book accommodation at Bull Pot Farm please contact the me, the Hut Warden The cost to visitors for the use of the above facilities is £3.00 per person per night. £10 deposit and Stamp addressed envelope needed to confirm booking. A key will then be sent to you.

Andy Hall, ITSMAD,
I.T. Systems And Design
www.walton-le-dale.demon.co.uk

See Red Rose web site at:
www.redrosepc.demon.co.uk

Carn Brea Web Site

Carn Brea Mining Society now have a web page on:

[homepages.tesco.net/~phsaundry/
CBMS.html](http://homepages.tesco.net/~phsaundry/CBMS.html)

This is linked to the web pages for the Namho 2000 conference and a few other mining sites.

Mining in Cornwall, Vol. 1: The Central District

By J H Trounson and LJ Bullen, p/b 128pp although previously published the book includes lots of additional photographs from Bullen's collection, including, Great Flat Lode Mines, Great Condurrow, Dolcoath, Cooks Kitchen, Carn Brea, Tincort, South Crofty, East Pool and Agar £9.99

Vol. 2: The County Explored

By J H Trounson and LJ Bullen, p/b 128pp includes, St Just to Hayle, Marazion to Helston, North to Camborne, Redruth, St Day, etc £9.99

Both books published by: **Tempus Publishing Ltd.**

In the same series Maerdy Rhondda Valley

By David Owen, p/b 128pp. This book is essentially a social history of the area, however, although chapters are dedicated to Maerdy No1, No2, No3, and No4 collieries, there are excellent photographs and text describing the mines both surface and underground £9.99

By the same Publisher Forest Voices, Recollections of Local People

By Humphrey Phelps, p/b 128pp the book includes photo's of Crump Meadow Colliery, New Fancy Colliery, Waterloo Colliery, Lightmoor, the book is written in the style of individual memories. It also includes Iron Mining, Lime Burning and other trades. £9.99

If you are interested in all 6 books listed on these 2 pages and published by Tempus Publishing Ltd. then have a word with Mike Moore, he might be able to offer you a special Club Discount price.

Conference on Archive Resources in the North West

This is taking place at Edge Hill College of Higher Education 28th January 2000 Not just another Conference: do you use North Western archive sources for your own research?

How confident are you that you know what is available in the North West?

Do you want to influence the establishment of the Regional Archives Council?

A Regional Archives Council is being established under the aegis of the National Council on Archives as part of the Regional Cultural Consortium.

It is to represent the interests of users and custodians of archives and is intended to improve access and encourage lifelong learning. The History Department at Edge Hill is hosting this year's event and it hopes that all other History Departments, and departments from other subject areas with an interest in archive-based research, will send representatives to sample what is available and to participate in a discussion about the Regional Archives Council.

Jonathan Pepler of the Cheshire Record Office and Bruce Jackson of the Lancashire Record Office have organised a programme which is designed to encourage increased use of certain types of archive material, particularly for student dissertations. The session concludes with a discussion about future events and collaboration between users and managers of archives. We hope that this will be the first of a regular series of conferences.

Fees for the conference, which include lunch and refreshments will be: £18.00 per person inclusive of VAT.

For further details, please contact:
Tina Hadlow, History Department,
Edge Hill, St Helens Road,
ORMSKIRK, Lancs. L39 4QP
Email Hadlowt@edgehill.ac.uk



Books, Videos and Events

The East Shropshire Coalfields,

Compiled by Ivor Brown, p/b 128pp

Of the East Shropshire coalfields, Coalbrookdale was without doubt the most important. Shropshire coal has been worked since at least the Middle Ages, but it was Abraham Darby and his substitution of coke for charcoal as iron-smelting fuel that galvanized the area in the early 1700's.

Vital to the innovations of the time was the variety of minerals present, including ironstone, coal, fireclay, brick clays, limestone and natural bitumen. Soon, little more than a few museum exhibits and photographs will remain as reminders of the area's numerous shafts, miles of workings and the mining way of life.

The other two coalfields are not forgotten and over 20 photographs show clearly their rural setting, their remoteness and, in the case of Cleve Hills, their altitude - 'the highest pits in the Kingdom'.

Included are pithead and underground views alongside images of machinery, pumping engines and transport systems. The miners are here too, with illustrations of working conditions, houses, women workers, social activities and the effects of major strikes. The photographs are carefully annotated along with an index and bibliography to aid further research.

Sponsored by NAHMO, this book brings to light several new pictures, and some interesting facts, for those members who never managed to get a copy of Ivor's "Mines of Shropshire" book, then this is a must, even if you have a copy of the original book, then this is an ideal companion volume, concentrating as it does on the coal mining aspects of the area.

Published by: Tempus Publishing Ltd. The Mill, Brimscombe Port, Stroud, Gloucestershire, GL5 2QG.

Price: £ 9.99 from bookshops, or see Mike Moore at Club Meetings

Peak District Mining and Quarrying

Lynn Willies and Harry Parker, p/b 128pp neither author needs introduction, diagrams and photos on most pages with lots of informative text. Includes details on Millclose Lead mine, photographs of both modern and historical mine sites including the recently closed Sallett Fluorspar Mine.

There are quarrying photos including both Limestone and Gritstone, with chapters on Mining Law, Dressing and Smelting.

A well written book, **price: £9.99**, also available from Mike Moore

In the Shadow of the Mines

Joe and Seamus Walsh, p/b&h/b 217pp quarto, a very well written book on the Castlecomer Coal Mines in County Kilkenny, a Social and Economic historic of Deerpark Colliery which closed in 1969 Joe worked in the mine and kept a Journal which was continued by Seamus until the mine closed in 1969. It contains lots of photographs both surface and underground, plus a photo gallery of the miners themselves, and a couple of pages of mining poetry. This is a very impressive book, that will be *very* collectable, is well worth the money £11.00 p/b, £20.00 h/b



Mining Videos (available from the Club)



If you are interested in doing a bit of armchair mine exploration the following videos, produced by I.A. Recordings with help from Club members, may be of interest to you.

A Tour of Clive Copper Mine £14.95

A comprehensive guided tour of Clive, with Edwin Thorpe acting the 'experienced' expert and Kelvin Lake the 'novice'. The tour covers both the upper and lower levels, plus the Northern stope (the access to which is now a bit dodgy).

Clive Rescue Practice, £9.95

An action packed 'head banging' record of a Club rescue practice, featuring the 'infamous' maypole winze traverse!

Snailbeach, £14.95

The rise and fall of Snailbeach, once renowned as the "richest per acre of ground in Europe", is traced in this production through the use of historic photographs, animated plans and sections, and unique underground video footage.

Glengowla, £6.58

A tour around this amazing mineral rich lead mine in Ireland, complete with commentary and diagrams. [12 mins.]

Collections from the Archives

The following tapes contain almost all the footage recorded at the given mine, and are intended as a resource base, not a finished production:

C.15: Dudley Tunnel '88 to '89, £14.10

C.18: Donisthorpe Colliery, £11.75

C.20a: Snailbeach - Final Frontier, £9.87

C.23: Bagworth Colliery, £11.75

C.28: Morse's Level, £9.87

C.29: SCMC in Cornwall, £16.45

C.32: SCMC in Ireland, £14.10

C.37: Dudley Tunnel - Wrens Nest

East Mine. Local historians have often talked about 'Step Pit' an access shaft to the East Mine underground canal basin and caverns that was reputed to have a spiral staircase, recent stabilisation work has uncovered fragments of the staircase, plus allowed an interesting insight to the canal and mines in this area. £9.87

For more details about videos contact: 41: Hem Heath Winders, £9.87
I.A. Recordings, PO Box 476, Telford, TF8 7RH

e-mail: info@iarecordings.org or visit their web site at:
<http://www.iarecordings.org/>



Club Officers

President: Alan Taylor

Training Officer:
Steve Holding

Chairman: Neal Rushton

First Aid Officer:
Alan Moseley

Vice Chair: Tom West

Conservation Officer:
Nick Southwick

Bat Officer: Mike Worsfold

Secretary: John Priest
scmc.secretary@factree.org.uk

Assistant Secretary:
Eileen Bowen

Treasurer: Bob Taylor

Rescue Officer:
Role undertaken by the Rescue Wardens: Neal Rushton, Steve Holding, Alan Robinson, Andy Yapp

Tackle Officer: Andy Harris

'Below' Editor: Kelvin Lake
e-mail: scmc@factree.org.uk

Diary Dates

For organised Club trips please refer to the Monthly Meets lists.



*Happy Christmas
and a
Merry New Year*



2000

29th April to 1st May: 4th European Exploration Speleology Congress

14th-18th July: INTERNATIONAL NAMHO 2000, hosted by Carn Brea Mining Society and Cambourne School of Mines, based in Turo. Theme "Acquire, Record and Display".

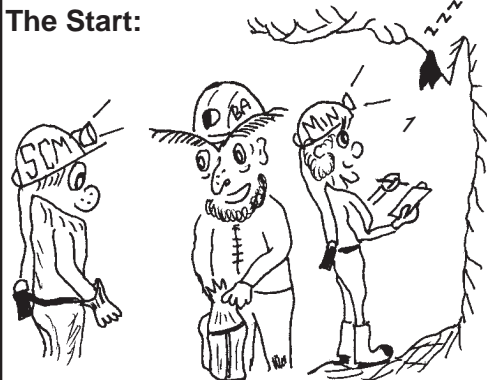
30th Aug.-7th Sept.: The International Committee for the Conservation of Industrial Heritage Millennium Congress, first 4 days in London, then a choice of tours to Cornwall, Wales or Scotland. Welsh and Cornish tours will have a significant mining bias.

13th-16th Sept.: International Mining History Congress, Milos Island, Greece

Smidgin: The Winter Bat Count

48

The Start:



*Now remember:
be very quiet,
do not disturb them,
or cause them to get agitated*



4 Hours later
*Only one!
and I counted it
twice!
Where are
the rest?*

