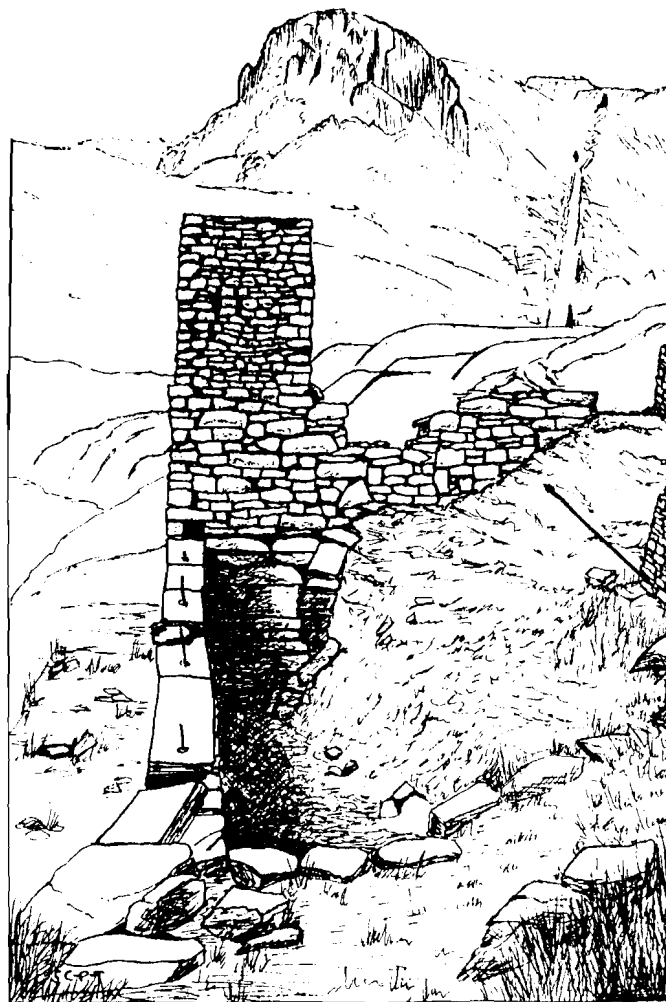




The Bouse Team

No 41

January 1995



The Newsletter of
the Cumbria Amenity Trust Mining History Society

Cover Picture:- Red Dell Laundry Tower and Wheel Pit - Coniston

By Sheila C.P. Thomas.

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Articles to come :- Reminiscences of an Iron Ore Miner .
(A Tape transcription by A.C.P.Thomas)
The Mines of Slater Bob (Arranged by P.Sandbach)
CATMHS Library Contents List .(A.C.P.T./M.W.T.S.)

My thanks to all contributors and for Dave Bridge for proof reading.
Keep them coming. Mark Simpson

The Chairmans Award was given to Sheila Barker and Don Borthwick



CHAIRMAN'S REPORT FOR 1994

So ends another busy year for CATMHS with a wide range of projects underway.

The joint dig at Lucy Tongue is at last looking promising and is draughting strongly. Because of the head of water extra care is being taken to secure the ground before breaking through which is making a heavy demand on materials.

The Greenside Appeal is still open and contributions are appreciated.

In Furness steady progress has been made with CIHS on the restoration of Newland Furnace though there is still much work to be done. The survey of mining relics in the Furness iron-field has continued throughout the summer, now aided by a generous grant from the County Council. This meticulous compilation of photographs and measurements will in future years be seen as a valuable record of a fast disappearing legacy. Also in Furness we now have the use of a commodious mine building at Roanhead for storing timber etc. Unfortunately conservation work on the 50 foot chimney at Woodbine mine is now at a halt until a source of scaffolding can be found.

At Coniston, more work has been done on Mandall's slate office. At the mine itself the problem of consolidating the Old Engine Shaft launder tower, which has been literally hanging over us for some years, has now been taken off our hands by the LDSPB. But other jobs have gone ahead such as conservation work on the wheel pit and further work to secure the pump rods. And those who get a buzz from MAG's Catwalk should try the recently completed through route from Triddle shaft to Taylor's level portal.

The latest venture - opening the Horse Level at Hudgillburn Mine in the Nent valley - has proved a popular venue for the 1994 meets and is likely to continue for some time into the future, but it must be stressed that ALL the on-going projects require support and too

often the effort is spread too thinly amongst a small band of keen workers.

Other meets have included a visit to Tarmac Quarry at Ingleton, which turned out to be one of the highlights, and another trip to Wales in April when we were blessed with ideal weather. Several CAT members attended the NAMHO field meet in the Forest of Dean in August and earlier in the year CAT was represented both in the audience and on the platform at the "Mining Before Powder" Conference which was organised by PDHMS and the Historical Metallurgy Society in honour of Agricola's 500th birthday, and whose delegates we hosted on a Coniston field trip. Another notable entry in the diary was the second Easter exhibition in Coniston village which again proved popular amongst the locals.

Again literature sales have proved to be an important source of revenue and in due course it is hoped that CAT's list of publications will include Alastair's next work "Coniston Slate", following on the heels of the CAT Journal which, having seen the presentation, I'm sure you will agree was well worth waiting for.

Amongst these many activities one person whose company and contribution is now sadly missed is Dave Blundell, and I would like to record our gratitude to Kathy for the donation of his mine plans and caving equipment to the society. Indeed the mine plans and books acquired during 1994 has, according to our archivist, tripled the value of the CAT library for research purposes.

Finally we must thank those willing hands who have been active on projects throughout the year, and also our hard working committee who I'm sure will join with me in conveying to all members our very best wishes for 1995!

Society Notes

Mark Simpson

My computer as you can see is up and running and life is now a lot easier, though not without a good deal of expense on hard and software. Newsletter 40 was not as good as one would have liked but as reported at the time there were difficulties .

One resolution for the new year, to use the spell checker (and a proof reader) and - yes - to get folks' names right. However, I as your newsletter editor am well aware that I stand on the shoulders of the contributing membership and hope to do justice to your efforts, and thank you for all the articles that are sent in.

If, you gentle reader, are not one of them, well what can one say, but extractus digitum, which is bad latin but I think the point (no pun intended) is made.

Just one small thing, for those sending in their efforts on disk, please save as a 'text' file. This is a file with a DOC or TXT extension and do not have the formatting characters of dedicated document files and makes easier importing into my DTP.

A note for discussion on publication policy (and these are my thoughts). As you know, our regular publications consist of :-

- a) The Newsheet - Editor Alisair Cameron issued quarterly
- b) The Newsletter - Editor Mark Simpson issued quarterly, warts and all.
- c) The Journal - Editor Don Borthwick published from time to time. Then there are various pamphlets and books produced by individual members and published by CATMHS. The next one will be Alastair Cameron's 'Slate From Coniston'. (Also not forgetting committee minutes, agenda etc put out by our hard working secretary).

The Newsheet, as people may remember, was started by Alastair during that dark period when there was rarely any newsletter, after

Ann Danson decided that enough was enough. Alastair has decided to continue with it as it serves a useful purpose, but to avoid confusion it will in future be called the 'Bulletin'.

The Newsletter ('The Bouse Team') is designed to expand on items in the above and to contain short articles of interest in the industrial archeological field but with priority to mining history in Cumbria. The design size is in the region of 25 pages of A4, and will be produced 4 times a year regardless how few pages are in it at the time. The committee has spoken.

The Journal is intended to contain articles in greater depth and may be likened to a Society 'Transactions'. The latest issue (Volume 4) is a splendid effort and great credit to the Society and to all those who had a hand in producing it. The size and format (100 pages of A5) seems to meet with general approval. An important reason for publishing a Journal is to raise money, because, at the end of the day, CATMHS cannot 'run on bobbins' as there are projects we wish to carry out and other publications to finance. No one wants to go back to the early days when members had to do all manner of things just to keep our financial head above water, and, with John Helme's guidance we shall not return there. So if you haven't helped to sell a Journal or two, volunteer now. IT MATTERS. Considering the long lead time required, journal contributors should be preparing their efforts now and sending them in to Don as soon as possible. Copy Date is set for end of January 1996 with a publication date of January 1997.

Which reminds me, the editor has decided not to write Meet Leaders reports for them, so if he does not get them, well that is very sad. As you know, there used to be a log book kept by the Society in which ML's and any one else

wrote up the meets and other thoughts in. This practice has now stopped and meets are written up in the Newsletter, this being the only detailed record of Society activities, so it is important that ML's should produce a report for the Newsletter even if it is only a short one, just for the record.

Happy new Year!! Mark Simpson.

New Members -- Salet!!

Nichola Bisset	Appleby
Kirsten Crowther (aliasTheMolett)	Majoriebanks
William Nicholas	Bardsey
Tim Oulton & Celia Hancock	Mold
Mary Parsons	Howtown
Tony Rawlins	Garn Dolbenmaen
Dave & John Sargent	Norwich
John Scott	Kendal
Nils Wilkes	Pershore
Mr C.R.Rogers	Warcop

Old Members!!! Have you paid your subs yet? they are now due, John Helme is yearning for them. This edition of the newsletter will be your last if you do not pay up.

Your new Membership Secretary is David Parsons who can be contacted at:-

Ivy Cottage
Howtown
Penrith
Cumbria
Tel 017684 86441
or :-
3 Sharrow Cottages
The Green
Froggatt
Sheffield
Tel 01433 631225

Library Report 1994 - 95

Anton.C.P.Thomas

The library continues to develop though this year has been exceptional in its rate of growth. In the main this has been due to the generous donation by Cathy Blundell of many mining books and documents, following the sad loss of her late husband David.

Furthermore, many of David's books were put up for sale at the Yorkshire Dales Railway. Having a more or less first refusal on these, and considering that this would in many respects be a one off opportunity to acquire certain works, the C.A.T. committee judiciously elected to exceed the allotted annual budget. Accordingly many invaluable works were purchased. Together with Cathy Blundell's donation already mentioned, and the personal donations of contributors listed below, this has lifted the total of inventoried items from 280 on index during 1993-94, to somewhere approaching 600 for 1994-95.

While this has doubled the index content of our library in terms of numbers, or bulk, due to the discerning nature of the material acquired this has probably something like tripled the academic and reference content of the archive.

There is a phase during any developing collection where before a certain point is reached the thing is really not worth going out of your way to see. Our library has now matured beyond that point and I believe it is beginning to become a worthwhile port of call for researchers.

One of the main problems so far has been the lack of published information regarding the actual contents of the library. Earlier this year I acquired a home P.C. and have since indexed the library on a computer database. A copy of this index is available to anyone who cares to send me a disc to copy it

onto. Furthermore Mark Simpson has kindly offered to transpose this index into a word processable document and expects to publish it to the membership early next year. From that point forth we may expect to see an increasing demand for library loans.

Various individuals continue to donate items to the library, and I would like to thank the following;

Cathy Blundell; for items too numerous to mention specifically.

Ray Seaton; for "A History Of Lead Mining in The Pennines", and for Gwynfynedd mine plans and information.

Peter Sandbach; for "Building Barrow", and "Men and Mining In Warwickshire".

Sheila Thomas; for Evening Mail "Bygones".

Dave Bridge; for photocopies of various British Mining Memoirs, and for Nenthead mine plans.

Peter Fleming; for British Steel Fluorspar Division safety pamphlets, for Swiss show mine leaflets, and for Dalton Mines Auction document.

Mark Simpson; for preparation and submission of index to CAT Newsletters.

Chris Jones; for audio tape of Reminiscences of a Mining Engineer, and for Mine leader assessment documents.

Baron Westwood; for photocopies of mine plan of Ratgoed slatemine section.

Garreth R.Jones; of Plas Tan-Y-Bwlch, for documents concerning slate rock cannons.

Andrew Sibbald; for "Surveying and Levelling".

Angela Wilson; for Cumberland Geological Society Proceedings.

Mike Moore; for "The St Ives Mining District". Donated in memory of D.Blundell.

J.Knowles; For copy of Croesor Mine plan.

A. C-P-Thomas, Archivist January 1995.

Please Note:- The library index and list of newsletter contents will be published in a future newsletter when space permits. Also when the technology has been sorted out it is intended to start publishing photographs, in 'art gallery' form, that are in our archive and those in members collections. These will be scanned at 300dpi and saved as PCX images together with their credits. Mark Simpson.

Diary Dates

5th February	Coniston Levers Water Mine to Top Level Through Trip	ML Ian Matheson
19th February	Hudgill Meet	ML Sheila Barker
28th February	Newlands Furnace	
4 & 5th March	Manchester	ML Jon Knowles
13th March	Meets Meeting at Coniston	
19th March	Knockmurton Mine	ML Dave Bridge
26th March	Tilberthwaite SRT Training	ML Jon Knowles
2nd April	Caudale Slate Mine	ML Peter Fleming
14th--17th April	Wales Weekend	ML Jon Knowles

NAMHO Conference 1995

This will be on the weekend of the 15th--16th July and is to be hosted by the Shropshire Caving and Mining Club. The venue will be based at Lilleshall, Shropshire (The National Sports Centre)

Meets News

Please note the following changes and additional information regarding the meets list. The changes have been primarily caused by the Government changing the date of the Mayday Bank Holiday.

4th & 5th March - Manchester The details for this trip have now been finalised and will consist of a trip to the Wet Earth Colliery on Saturday (see newsletter for details). This will be an easy trip requiring only caplamp wellies and helmet - there is no crawling !. On Sunday morning a visit will be made to the Greater Manchester Museum of Science and Industry whilst the afternoon will be spent at the Astley Green Colliery Museum where the largest ever steam winding engine is being restored together with other objects from local mines including a 110' headgear. If there is sufficient time a visit may also be made to the Lancashire Mining Museum. Total cost for admissions is £5. For Wet Earth we need to advise numbers so please let the Meets Secretary know **ASAP** if you are attending. He will then send you a map of how to find these places. Generally, this should be a pleasant easy going weekend.

The Wales Weekend which was on 28-30th April is now from 14-17th April. This four day meet is based in the Corris Slate District.

Friday 14th April - A Mine in the Gwydr Forest. Since we will be approaching Wales from the North it seems convenient to spend a day in the Gwydr on the way down. Access is an ongoing problem in this area but it is proposed to visit an interesting mine (Grade D, SRT) which is of particular interest to the Mineralogist. For those not vertically minded much can be seen without descending, or there are numerous good surface walks around the many extant remains in this area. Meet at the lay-by on B5106 between Bettws-y-coed and Trefriw at 798580 at 10.30 am.

Saturday 15th April - Bryn Eglwys Slate Mine. This medium sized slate mine was worked until 1946 when a sudden collapse made the working chambers inaccessible. These chambers can now only be accessed by SRT techniques. The day will involve a general look around the site (Grade E) and a descent from floor 10C to floor 15C which is approximately 120' (Grade D, SRT). This descent is very pleasant since it is both dry, safe and down a very steeply sloping smooth slate face. For those not wishing to make the

descent the wet lefel fawr (waist deep at start) is worth exploring. Meet in centre of Abergynolwyn 677069 at 10.00 am.

Sunday 16th April - Ratgoed Slate Mine. A walk of approximately one mile up Cwm Ratgoed brings you to the Ratgoed Mine. The site offers the possibility of a number of trips ranging from E through to EXP. Although most of the workings can be walked into a short SRT descent of approximately 40' brings you into further workings with interesting artefacts. The EXP part of the day will involve a descent down a chamber in floor 7 in an attempt to access a working level, shown on the plan between floors 7 and 8. Meet at the Forestry Commission car park at 769093, between Corris and Aberllefenni, at 10.00 am.

Monday 17th April - Minllyn Slate Quarry. A steepish track leads up to this mine which whilst not very large is still interesting. Grade E with short optional EXP. Meet on the verge of A470 at Dinas Mawddwy at 859144 at 10.00 am.

The Diamond Pit meet which was on 7th May will now take place on 30th April.

The Coniston Exhibition will take place over the Bank Holiday Weekend 6-8th May.

Cornwall 1995 At the AGM the idea of a group trip to Cornwall was put forward and warmly received. The plan is to have a week in the Summer with a programme of varied meets (tourist mines to rope dangling) to suit all tastes. People could come for a few days and then go to the beach or mix and match to suit themselves. It is hoped that this format, in a popular holiday area, will appeal to families as well as individuals. I suggest that we are based in the St. Ives / Penzance area. The proposed week is 2nd - 9th September. Will those who are definitely interested in coming and particularly those interested in renting a house please let me know before mid March (say the 15th) so that arrangements can be made and a detailed programme published in the next newsletter.

If there are any queries on any of the above please contact Jon Knowles on 0274 871012.

DR DESCENDER

Dear Doctor

I am currently the object of derision from my friends and associates. They seem to find merriment when I attend mine meets in Bugs Bunny Wellington boots, yet who can deny their rugged construction and quality. They scoff at my bugs bunny pyjamas when I sleep in the bunkhouse on railway workmeets at Portmadoc, yet they are the warmest and snuggest nightwear I have slept in. Visitors to my home mock my Bugs Bunny slippers, yet who could resist their cosy feel and fluffiness. Why am I subjected to such scorn, are they all envious of my practical, taste ?.

Anon. Liversedge

Unfortunately the good Doctor was away when this query was received but Locum Leg Loop replies :-

It is clear to my practised eye that that taken together these symptoms represent a classic case of mild schizophrenia where one half of the psyche peels off and attempts to justify the outrageous behaviour of the inner emotional ego. The only real cure will prove to be time. Meanwhile, if your eyes begin to puff up and you find yourself drawn to bright lights, seek urgent and immediate treatment for mixamatoxis.

In this season when medical complaints are common I thought it would be helpful to give a pocket size "symptom and remedy" guide to common complaints :-

SYMPTOM	PROBLEM	SOLUTION
Rocks are descending all around you.	Mark is digging.	Run like hell.
You feel a metallic tapping on your head.	You are using your head for drilling a bolt.	Buy a bolting hammer.
You are being chased at 90mph down the M6 by a loony in an Astravan.	A typical journey back from Nenthead	Drive like hell.
You meet someone driving towards you on the wrong side of the road (note that surprisingly this is not connected with the above).	Your not overtaking !	Put the wipers on and press the loud peddle.
You are being chased at 90mph down the M6 by a loony in an Escort Van.	A typical journey back from Nenthead	Drive like hell.
The world is dark but the windows rattle and a noise like a pneumatic drill permeates the air.	You are sharing a room with someone from Preston.	Answers on a postcard please to :- Ref. M.M. P.O. Box 1 Staveley
You get confusion attacks every year at your club AGM.	You have constipatedconstitutionitis	Seek specialist advice now ! before its too late.

Baffled ?, confused ?, completely lost ?, if Dr Descender makes no sense you've missed a few meets.

SRT Training

On 26th March there is a meet at Tilberthwaite to provide SRT training. With this in mind it is probably beneficial to put this in context and explain how the club help you acquire the necessary skills to be safe and proficient at Single Rope Technique, which is now the standard method of vertical mine exploration. The main steps in becoming SRT competent are as follows :-

- 1) Borrow some kit and have a go - to see whether this is for you
- 2) Decide you want to do it, buy some kit and get it adjusted to suit you
- 3) Practice basic manoeuvres
- 4) Use these techniques underground and build up confidence and speed

Note that underground is deliberately only mentioned once above, the best way to learn is where both you and your tutor can see what your doing, I.E. on the surface.

CAT can help with points 1,3 and 4 above. 1 and 3 can be undertaken at Tilberthwaite or by arrangement with Anton on 0229 835951. Practising basic manoeuvres such as descent, ascent, changing from ascent to descent, and passing a re-belay can be practised anywhere such as from a tree in the park. It cannot be over stressed that spending a few hours practising this at your own speed with no external pressures is extremely advantageous. Point 4 can be undertaken on meets but it is best to telephone the meet leader beforehand to check that the meet is suitable for this.

Good books to read on the subject are, /SRT by Dave Elliot and /Vertical by Alan Warild. Elliot is a good beginners book whilst Warild covers all aspects with plenty of detailed information.

Jon Knowles

Heroes Wanted + Support

Jon Knowles and two other unmentionables wish to add oak leaves to their iron balls by another Croesor through trip. Does anyone else wish to join them and provide backup? Jon would like to get matters underway as soon as possible, especially as Rhosydd may be rendered inaccessible by new working . See news items.

Peter Fleming has roused himself and intends to do some more exploration at Coniston. (I think Maypoles were mentioned). This exercise means more detailed survey work with the intention of filling in the last gaps our knowledge of certain areas of the Copper Mines. Let him know if you are willing and able and he will phone you when this will take place.

MEETS REPORTS

TAYLORS LEVEL MEET OCTOBER 16TH 1994.

Ian Matheson

There was a small turnout for this meet, as the previous day some fifteen members had been involved in a fruitless search for a missing person in the Weardale area.

For many years Taylors Level was only accessible by abseiling or laddering down from Flemings Level or from the Red Dell Stopes. The adit was first reopened on Boxing Day 1983, when the entrance close beside Red Dell Beck was dug open. Two internal collapses were dug and secured by setting oil drums in place, and in due course a through trip down the Red Dell Stopes and out to day was possible.

However there seemed to be no way of connecting this new ground to the rest of this considerable level, and exciting discoveries at Paddy End diverted the attention of mine explorers elsewhere.

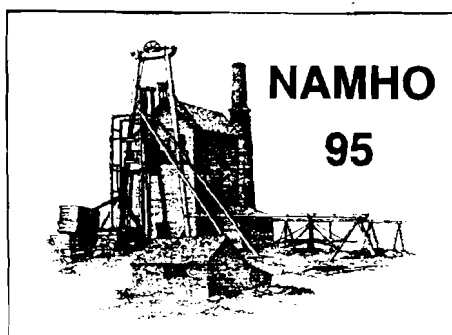
It was not until September 1991 that an attempt was made to find out just how big was the gap between the known parts of the level, and to make a connection across it. Contact was made between two parties, one at each side of the gap, and after some bolting and traversing it was possible to throw a rope across so that work could begin on a stempleway. This was not completed, and two more years elapsed before the workforce

returned in December 1993 to finish the job, in anticipation of a big through trip down Triddle Shaft and out to day through the full length of Taylors Level.

This took place on January 16th 1994, but at that time it was discovered that much of the floor of Taylors Level on the outbye side of the stempleway had dropped away into the depths, and that the traverse line which protected it was in a very unsound condition. It was resolved to return and make it good, and this was the purpose of the present meet.

Some thought had been given to the problem of how to rig the traverse in such a way that the equipment could not be stolen. It was decided to use 10mm bolts with the ends peened over, and Anton C P Thomas had manufactured some steel hangers of great strength and small value, which are cunningly shaped so that once installed the maillons cannot be removed from them. Unfortunately a break in at the COMRU store had resulted in the theft of the Bosch electric drills, and the remaining drill was not in working order, so that these could not be used. The best that could be done was to replace suspect bolts with 8mm spits, and to replace the miscellaneous collection of doubtful hardware with proper hangers and maillons. At each end was placed a notice on orange plastic tags which reads: 'Do not steal this equipment. YOU are responsible for providing adequate safety backup'.

Meet Leader: Ian Matheson,
Dave Bridge, Bev Stevens, John Davies
and Paul Timewell.



WHEN	JULY 14 - 17th 1995
WHERE	Lilleshall Sports Centre, Newport, Shropshire
HOSTS	Shropshire Caving & Mining Club

Details and booking form available February.

Send an A4 SAE to :-

Adrian Pearce	72 Hopkins Heath, Shawbirch
	Telford, Shropshire TF5 0LZ
	Tel :- 01952 - 405362

DUFTON FELL MINE

2nd October 1994

It wasn't the best of days for a visit to Dufton Fell Mine which involves a walk of three miles to the upper workings, unless one drives up the rough track. Nevertheless seven stalwarts met at the village car park with various plans in mind. Mike and Barbara came for a surface walk but left the meet early as the weather deteriorated while Sheila, Don, Pete, Jon and Dave were glad to seek refuge underground.

BACKGROUND

The mine, which was originally worked for lead and from 1882 for barytes, covers a vertical height of about 600 ft in which at least seven different limestone beds have been tried (see Fig 1). To the north of Great Rundale Beck is Threlkeld Side Mine where the lowest workings are in the 130 ft thick Melmerby Scar Limestone. The levels here date from the 18th Century and are a series of short crosscuts to workings on Dobson's vein and Hard Ark vein (also here called Barrow's vein), except for 'Threlkeld Level' which follows a prominent natural fissure as far as Hard Ark vein then continues eastwards along the vein passing beneath the beck and undercutting the workings of Dufton Fell Mine.

The earliest workings of Dufton Fell Mine, to the south of the beck, can be seen around 2000 ft where there are numerous bell pits and dressing floors. Eventually the mine was worked from a series of levels on this side of the beck of which at least seven are still open. The most productive workings were high up the valley in the Tynebottom Limestone where extensive flats were worked by the London Lead Company on Dobson's, Hard Ark, Barrow's, Barrow's Sun, Gascoign's and White Rake veins (see Fig 2). A little ore was also extracted from the Jew Limestone. This mine was one of the first lead mines in the Pennines to turn to producing barytes and from 1883 was worked largely for that mineral by the Dufton Fell Lead and Barytes Company. It was abandoned in 1897 and apart from some exploratory work in the early part of this century and some more recent operations by Sanbar Minerals Ltd there

seems to have been little further development underground. Since the early 1980's barytes has been extracted sporadically from the spoil heaps and a small processing plant was erected for that purpose about ten years ago. Today the results of these operations and open cast quarrying at the Tynebottom Limestone outcrops and further down White Rake vein are only too evident. The processing plant has now disappeared.

The lowest level to the south of the beck, at 1500 ft and just beyond the old lime kilns, was driven near the top of the Melmerby Scar Limestone or in the Robinson Limestone in 1792 and is now collapsed at 180 yds (see Fig 3). Beyond that, at the bottom of Hard Ark hush and easily identified by its projecting portal, 'Dufton Low level' tried the Smiddy Limestone but is now collapsed at about 40 yds. Higher up the hush 'Stephenson's Level', dating from the 1850's, tried both Gascoign's vein and Barrow's vein in the Lower Little Limestone but is presently inaccessible. Near the top of the hush at 1940 ft a shallow level which was driven above the Whin Sill is still open. Here rails are still in place as far as a collapse a short way in. Also, 300 yds south of this near the top of the adjacent White Rake hush, now much devastated by recent opencast working, a similar shallow level in the upper part of the Whin Sill is still open for a short distance. Higher up the slopes of Dufton Fell where there is a belt of old collapsed shafts and bell pits, and 400 yds to the ESE, an isolated ore body on Clovendock vein was worked from a further shallow level still accessible for 70 yds. There is also an adjacent open shaft.

Returning to Great Rundale Beck and continuing up the valley the portals to three levels, one in the Lower Little Limestone dating from 1862 and the others in or under the Jew Limestone, have been completely obliterated by the recent working of the tips. Above the second sharp rise in the valley where remains of the old dressing plant and crushing mill are still in evidence 'Atkinson's Level' is still open although entrance is restricted by a concrete dam within. This, the main working level, intersected most of the veins and gave access to the productive flats in the Tynebottom Limestone. However it is now blocked at its intersection with Hard Ark vein about 300 yds in from the portal. A trial

eastwards along Dobson's vein extended beyond Great Rundale Tarn to a heading some 2000 yds from the portal, and 300 yds short of the heading a ventilation shaft was sunk. The shaft top, now a water-filled depression, can be located with difficulty in the peat-hag beyond the tarn. A rise interconnecting with a cross-cut from a point further up the valley, which the L.L.Co drove in the 1820's beneath the Scar Limestone at about 2040 ft, also provided ventilation to the Tynebottom Limestone workings. This upper level is still open to its full extent of 630 yds.

EXPLORATION

As well as checking out the open levels near Great Rundale Beck the underground projects for the meet included an attempt to gain access to the flats in the Tynebottom Limestone (a) from the upper level down the ventilation rise and (b) up short rises above Atkinson's Level. It was also hoped to explore Threlkeld Level lower down the valley.

Starting at the upper level, from a point 330 yds inbye Jon, Pete and Dave descended the narrow circular masonry-lined ventilation rise for 90 ft and squeezed into a tiny stone-arched tunnel at the bottom, almost too confined to turn round in, which sloped down to a downward continuation of the rise. This lower section was descended from a piton belay to the bottom where it opened into the workings on Dobson's vein after a total vertical descent of about 140 ft. The air here was fresh (and there is a very noticeable draught from the upper level during cold weather) but unfortunately a roof fall of large blocks prevented access to the flats. Meanwhile Sheila and Don explored the full extent of the upper level which reaches Barrow's Sun vein where a 6 inch coal seam is visible. There are several trials in the Scar Limestone roof of the level but according to Dunham little if any ore was extracted.

And so on to Atkinson's Level about 1/3 mile down the valley where after negotiating the concrete dam one encounters an oil drum crawl through a collapse just over 200 yds inbye from the portal followed by a rise

about 40 yds further on. It was hoped that this rise would lead to the same flats but after an abortive attempt by Dave to climb beyond two short free-standing ladders Pete applied his climbing skills to the problem and finished in a small blind cavity nearly 30 ft up. Later comparison with the abandonment plan showed that Atkinson's level in fact intersects Dobson's vein at the oil drum collapse where there is a blocked rise to the flats. Access to and beyond the next vein inbye (Hard Ark) was prevented by a recent collapse of wet shaley clay and we were therefore forced to abandon our attempt to reach the main workings in the Tynebottom flats, though on the way out, as a small compensation, a rise at the end of a short spur led to some isolated workings of about 30 yds in extent.

Sheila and Don then went on to explore the lower levels of Dufton Mine while the rest traversed the slopes of Threlkeld Side as far as Threlkeld Level, where Jon and Dave disappeared into the sporting looking fissure which produced a strong flow of water. The level was indeed wet, progressively so as we passed over minor falls at the bottom of a series of rises. After 250 yds along Hard Ark vein, close to where the level passes beneath Great Rundale Beck, the water was approaching waist deep and we had little difficulty in convincing ourselves that it was too late in the day to carry on. We discovered that this level post-dates an earlier crosscut to the vein which takes the same line but with a different slope. Consequently the roof of the present level rises more steeply than its floor until the vein is reached where masonry at the intersection now blocks a continuation of the old (higher) level beyond the vein. While these cogitations were going on underground Pete, with plenty of time to spare, had spotted some 19th Century graffiti high up on the rock wall above the level entrance - undecipherable in the gloom but a potential subject for the camera, as is the stone-lined water leat in the valley below which appears to have fed some dressing plant lower down the valley and is still in excellent condition. A return visit will have to be made, with wet suits.

Dave Bridge

RELATIONSHIP BETWEEN LEVELS AND LIMESTONE BEDS IN DUFTON FELL MINE (HEIGHTS APPROXIMATE)

LIMESTONE

Scar

(Coal)

Upper level

Single Post

Tyne bottom

Atkinson's level
Shallow levels

(Whin Sill)

Total height
about 600 ft

Jew

Lower Little

1862 level
Stephenson's level
Levels lost in
spoil
extraction

Smiddy

Paghorn

Dufton Low level

Robinson

1792 level

Melmerby Scar

Threlkeld level

Fig 1

VEINS IN THE DUFTON FELL SYSTEM

Scale: 1" = 500 yds

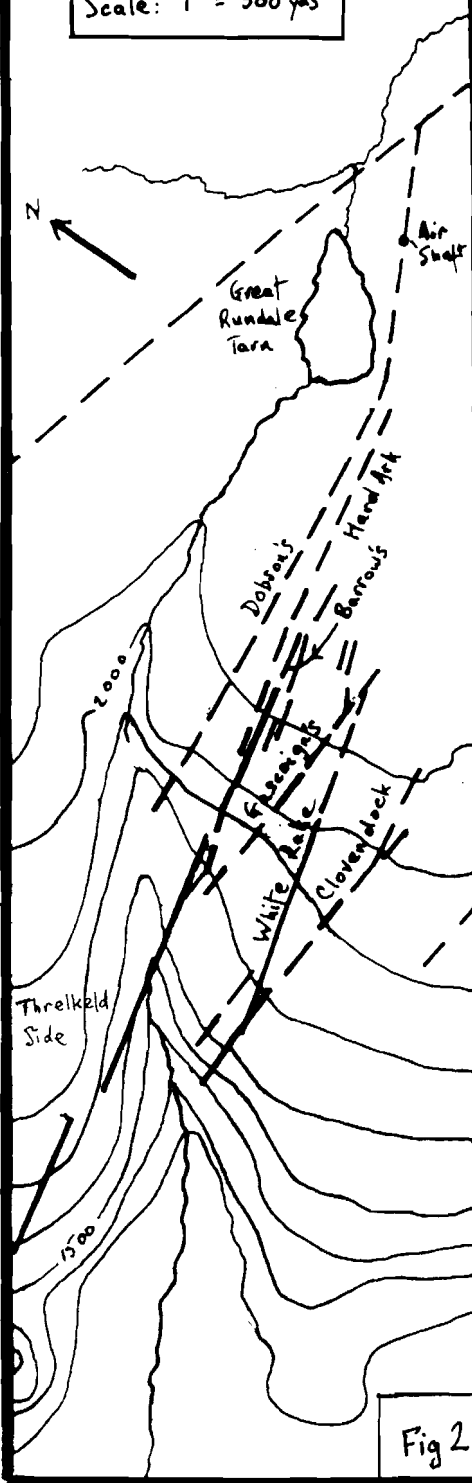


Fig 2

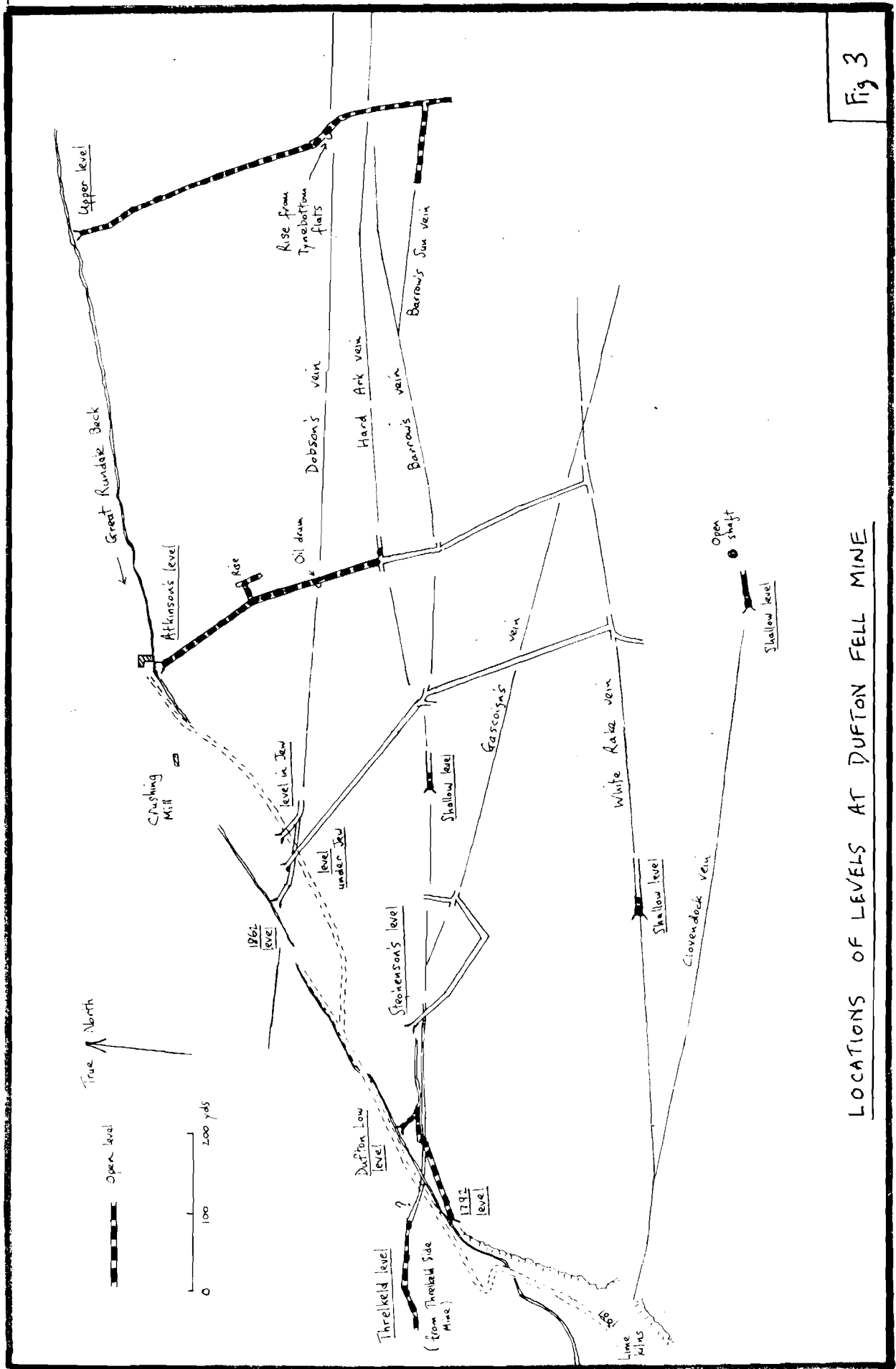


Fig 3

LOCATIONS OF LEVELS AT DUFTON FELL MINE

A New Through Route from Simon's Nick

Dave Bridge

One only has to read Peter Fleming's "Coniston Copper Mine Rediscovered" in Vols 2 and 3 of the CATMHS Journal to appreciate the vast amount of ground that has been explored in the Paddy End workings over the years. Yet the small fenced-off working close to Simon's Nick at the highest point between Levers Water and Grey Crag seems to have attracted little attention despite the fact that in the winter a strong draught comes up from the workings below. About 20 feet down there is a rock-strewn floor which on closer inspection is found to be false and resting on timbers. An opening at its NW end leads into the top of a narrow stope which rises here almost to the surface and it is unlikely that the hole was put in for anything other than ventilation. In the mid 1980's Dennis Webb made a solo descent from this point into a seemingly bottomless working, but he ran out of rope and for some years no further attempt was made to explore this part of the mine.

On 5th August 1990 five CAT members assembled at Levers Water for another look at Paddy End. Two set off for the Crater while the others headed for the working at Simon's Nick where Mike Mitchell had already started to bolt a route down from the false floor. The small group descended the narrow stope for about 70 feet to the remains of a level which ran from the SE wall of the working and disappeared out of sight as the vein curved in the direction of Levers Water. The level was supported on rotting timbers and in places the floor had almost completely disappeared but the SE wall of the stope could be safely reached by belaying to an old stemple for protection. Here a gap had been left in the floor of the level for a ladderway which at one time ran down the end wall to two wooden stagings, the remains of which could be seen below. A pitch was rigged to the lower staging

(approximately 40 feet) and a re-belay made there to prevent the rope snagging the timberwork. Below that the stope opened out to the SE, roughly following the profile of the fellside. From this point we could see the lights of the other group in Arete Chamber some distance away to the NW and below us. This gave us a fix on our position in the confusing topology of the Back Strings.

About 40 feet below the lower staging the vein underwent an abrupt change of hade from SW to NE and beyond that the vast stope plunged on downwards with no sign of a landing place - just smooth walls devoid of any timbers. Once again the descent had to be abandoned due to shortage of rope, but before an exit could be made the writer (who just then happened to be at the sharp end of the rope) found himself in an argument with a rock which had slipped through the floor of the level above - and he quickly became a candidate for the Glasgow Coma test. Fortunately for the casualty the others were all prominent COMRU members (including the COMRU leader) so a rescue was soon organised and carried out with the proficiency we have come to expect from that elite team. After that incident the route was left strictly alone for almost two years.

On 17th June 1992 the writer, now obsessed with the idea of bottoming the "bottomless stope" and bristling with rope bags, set off once again for Simon's Nick, and after about 340 feet of abseiling found himself at Middle Level only a few yards from the landing place for the normal through route. The familiar ground came as a relief for tense nerves though it was disappointing that the descent had not led to an unexplored part of the mine. On this occasion there was no alternative but to prussik out, but a Paddy End through trip involving some 400 feet of abseiling was now on the cards.

The opportunity arose on 25th October 1994 when Jeff Wilkinson and the writer, armed with enough rope for the Gouffre Berger (half of which Jeff had carried up the previous day), descended to

the suspect level with a view to making it more stable. In the event it was decided that an easier and safer solution would be to put in a short stemple traverse so that the old ladderway could be reached without touching the floor of the level - a task for a possible future work meet(?). A 230 foot rope was used from the level downwards with a deviation at the change of hade. The rope, which was a fast new 10 mm Edelrid Superstatic, ran out about 60 feet above Middle Level where a 30 minute bungee bounce ensued while a bolt was hammered into the hard rock of the footwall here covered in wet sticky mud - after which Jeff followed down at breakneck speed warming his frozen body from the heat of his Petzl stop. During the descent the beam of a powerful tracker lamp picked out a level to the SE, possibly a continuation of Top Level, but its floor had long since collapsed. Below that there appeared to be more ground to explore, possibly the workings discovered previously when CAT maypoled into some stopes above Middle Level - but that area was a long way off our line of descent.

The through trip was then completed by the normal route from Middle Level to Grey Crag Level, the sting in the tail being the short abseil near the Pinnacle where we found the

fixed rope was fast becoming a few strands of core [see footnote]. Altogether a vertical descent of about 520 feet had been made, including an estimated 420 feet of abseiling. The next day it was Heather's turn to freeze as she waited at Simon's Nick for Jeff to retrieve the ropes from the upper part of the route.

The descent from Simon's Nick to Middle Level is now fitted throughout with 8mm bolts and hangers, some marked with red plastic tape. Great care is needed at the suspect level 90 feet down but otherwise the line of descent is clear of loose rock and sound. The route provides a more direct alternative to the upper part of the popular through trip but is not suitable for pulling ropes through and in its present state is only advisable for small parties.

Footnote: This worn fixed rope has since been replaced, but until the fitting of Batinox hangers on the normal through route has been completed parties are warned that there is no convenient belay point for the final pitch as the old rusty hangers have now been removed.

(NOTE: Parties attempting any route within the mine are entirely responsible for their own safety and if ropework is involved a bolting kit should be carried.)

Dave Bridge November 1994

Meets that have taken place but reported elsewhere or - not at all

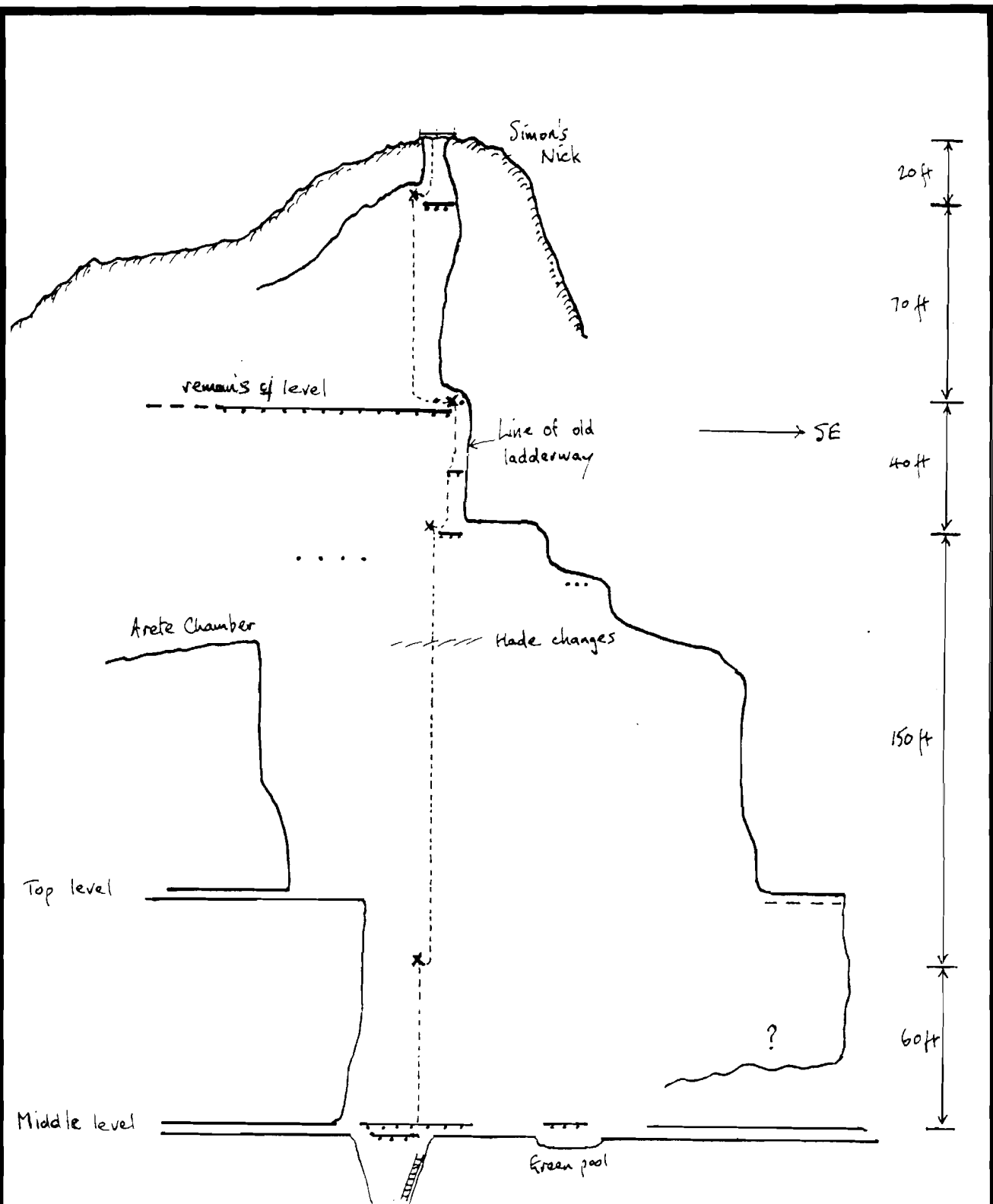
Coniston Old Man -- November 20th -- See December 1994 News-Sheet

Hudgill -- November 27th -- Nothing much to report -- See December 1994 News-Sheet

Bouncy Mine -- Boxing Day December 26th -- Postponed

Carrock Fell Wolfram Mine -- 15 January 1995 -- See Newsletter No 42

Members should remember that work is always being carried out at Newlands Furnace and Greenside Mine, helping hands are always welcome, especially at Newlands.



Line of Descent from the hole above Simon's Nick to Middle Level

Recollections of Coniston Copper Mine

Fay Hartley

Masson Caving Group

On December 4th 1994 we met eight members of Cumbria Amenity Trust at the Coppermines Youth Hostel. The mines have been worked from 1599 up to the 1950s and extend 1240 feet below deep adit level, we passed the extensive Bonser dressing floors and modern water treatment works. As we ascended the hill we saw Hospital Level mouth where we were due to exit later. I picked up the rope sack and continued across Levers Water Beck towards the Middle Level ore shutes. Evidence of Top Level workings could be seen to the left of the track. On reaching the crest, there was a magnificent view of the mine workings and fells below and in front of Levers Water in the mist.

Simons Nick is an impressive gash in the hillside, in 1983 CAT investigated a slip of ground at its side and explored the old Levers Water Level. We explored the upper mine levels, crossing and recrossing a daunting stemple traverse before commencing the through descent. There were many artifacts,

a perfectly balanced tipper truck, windlass, clogs, pricklers and metal containers. An extensive crosscut fitted with wooden ventilation shaft had been drilled through the mountainside but failed to intercept a vein. In many places the walls were coated with rivers of brilliant blue copper 'sulphate'. There were smaller pink cobalt deposits. We explored the levels at the foot of each pitch. The lower pitches are very loose and require a cautious, one by one descent. At Paddy End Engine Shaft we saw the winch and wire rope for kibble winding. This was achieved by an underground horse whim on Gray Crag Level. Finally 4 and half hours later we emerged to daylight via a waterlogged canal - a mind blowing through trip.

Many thanks to Peter Fleming and members of CAT who allowed us to attend their meet. Bob Green, Fay Hartley.

Chris Jones has nearly completed putting in new 'batinox' hangers for the above through trip, but would rather like some assistance to get the job done. Phil Merrin, as you know has been incapacitated, was helping Chris with this project. I understand Phil is on the road to recovery but it looks like a long job. (Editor)

BENEATH THE ALSACE -- Alistair Cameron

It had always been our intention to take a few days off in October and to go the French Alsace to buy some wine. This was the first year that the opportunity presented itself and so, on a Friday night, we hammered down the motorway to catch the first available boat from Dover. By lunch time the next day we had crossed to France and were travelling through the Vosges Mountains getting near to our destination.

The Michelin map of the Vosges shows some interesting features including a number of ancient mining sites as well as tourist attractions in the form of show mines. But for the time being we had other things on our mind. The Alsace wine-field is on the eastern slopes of the Vosges. Alsace wines are magnificent, infinitely better than their near-German neighbours. The next two days

were spent tasting wine in dingy spider-infested cellars until, by the Monday, the car boot was completely full of boxes. It seemed a shame to leave without having a look at the Vosges.

So, on Tuesday morning, we drove into St Marie aux Mines. This was a medium-sized town looking like a cross between Blaenau Ffestiniog and Millom. By the time we got there, the tourist information office had closed for lunch. It opened two hours later. Could we see round any show mines? No, they had all closed for the season but, if we introduced ourselves to two youths we had seen outside, they might be able to help us.

The two youths (a lad and his girl friend) were members of the local mining history society. They were waiting for two more

colleagues and then were taking a large party of school children round the St Dominic mine in the hills above the town. They were very pleased for us to go along. An hour later, in the pouring rain, we followed a school bus up a steep and narrow mine road to a terminus in a clearing in the forest. There we met other members of the local m. h. s.

Martina Dorn was the full-time secretary of the Society. Her job was to raise funds, maintain the Society equipment, arrange maintenance meets and escort members of the public round the various mines which had been re-opened by the Society. We explained our interest and she was pleased to include us in the party. She told us that most of the old mines had extracted silver and, in all, there were about 1000 mines round the town.

After a good half hours walk up the steep hillside in the forest we came to a clearing with a purpose built cabin in which was stored many sets of waterproof clothing, boots, helmets and lights. Behind the cabin was a cutting leading to a well-timbered entrance. All members of the party, both young and old, were kitted out. The group was split into four, and we entered the mine.

The first three hundred meters had been dug out by the Society. It had taken them six years! They had no idea whether the venture would be worth the effort but, in reality, they couldn't have anticipated the magnitude of their find. The mine is about 550 years old. The initial dig lead them to about two kilometres of coffin

level. This we were conducted through and then reached the site of another dig. Beyond here another five kilometres had been opened up. The veins of silver ore were very narrow; no more than 15 to 18 inches wide. Consequently the stopes were of extremely narrow slits and it was possible to climb up them easily by wedging ones thighs against either wall.

We were shown two restored artefacts. The first was a form of inclined counterbalanced skip-shaft which had been restored to full working order. This was quite an achievement considering the original was over 500 years old. The second which was equally impressive was an elaborate ventilation system with well timbered ducts and a huge hand-operated bellows. After the school party had left Martina explained the present projects in the mine. They believed that they had only accessed a small part of the workings. Much more lay further into the mountains and the mine possibly connected with other extensive workings beyond.

We could have spent many more hours at the site but by now it was getting dark and we needed to get ourselves back down through the trees to the road. As we have now made contact with the Society it would be quite feasible to arrange a trip to the Vosges to explore other sites in the area, and buy some more quality wine at the same time.

A D Cameron

Hunter Saws

by Jon Knowles

A recent publication(1) has highlighted the widespread lack of knowledge concerning machinery for cutting slate. It is probably a fair comment to say that most of us do not pay enough attention to what is on the surface since we are often in a hurry to get underground. Without dwelling on the omissions of others I hope that the following article will give an insight into one particular slate cutting machine.

Most readers will have first seen physical evidence of the work of George Hunter on the visit to Maenofferen Quarry in April and our abortive attempt to enter Cooke's level at the

start of the meet. Entry along the level had to be abandoned when the key broke off in the padlock. It was Hunter's tunnelling machine that produced the twin circular bores of that level. The naming of the level as Cooke's is not without significance since William Fothergill Cooke was co-patentee on a number of Hunter's patents. Maenofferen is extremely interesting for tunnelling machine connoisseurs since work has been carried out there by two different tunnelling machines. The twin bores which we observed from the outside of Cooke's level were driven by a machine which must have been as depicted in Cooke and Hunter patent No.3297 of 1865. Higher up there is a large singular bore(3) as would have been produced by the machine

depicted in Hunter patent 1244 of 1864. A drawing of the later machine is shown in figure 1.

Although the figure shows a tunnelling machine, what is common to all Hunter stone cutting machinery, and what makes them unusual, is the use of tool tips that could be quickly replaced, or removed for sharpening, without the machine being out of production for more than a few minutes. This is a principle which is standard on most metal cutting machinery today but did not become commonplace for many years. A typical tool and holder are shown in figure 2 and represent an example unearthed during an archaeological survey of Hafodlas Quarry near Bettws-y-coed. The tool itself looks similar to a golf tee and fits into a tapered hole in the holder.

On the tunnelling machine the holder fitted into a the edge of a cylinder as shown in figure 1. With the slate saw however the holder fitted into a circular disc mounted on an axle. This disc was fixed to a rotating horizontal axle against which the slate blocks, mounted on a table, were brought. In operation it was similar to the circular wood saw we know today.

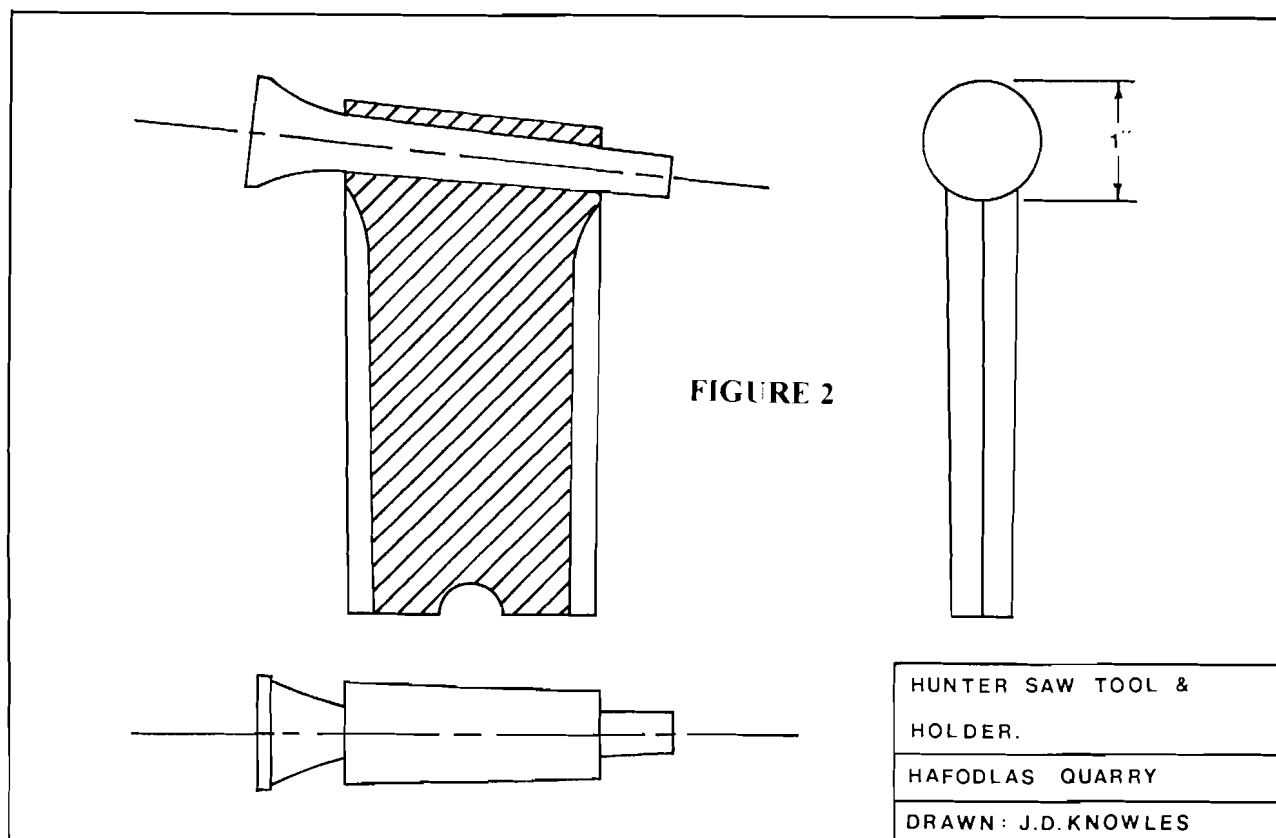
The saw was basically what is termed a high feed slow speed machine where the cutter was fed into the slate to be cut a large amount for every revolution of the cutter. This resulted in a rapid cut but the resulting surface was

rough. Hunter saw sawn surfaces are characterised by wide and deep circular saw cuts. This surface was too rough for slate splitting but was good enough for slab work such as window sills, flooring, etc. The characteristic Hunter saw finish can be seen in many buildings in Bettws-y-coed today.

The original Hunter saws were manufactured by Munro and Company of Arbroath but the majority of those at Hafodlas came from the Vulcan Foundry at Warrington a firm known for locomotive production. It puzzled me for many years as to how the Vulcan Foundry had become involved in the manufacture of unusual slate saws for a small quarry in North Wales. The reason when it came to light was good old nepotism, since William Frederick Gooch, brother of Hafodlas partners Daniel and Henry Gooch, was managing director of the Vulcan Foundry(2).

Notes and References

1. Ian Tyler in Honister Slate (Blue Rock 1994) attributes the invention of the Hunter Saw to J.W.Greave (sic). This is incorrect. The Hunter saw was invented by James and George Hunter and patented by them in 1855 (patent No.913). I think Ian is confused with R.M.Greaves patent number 8931 of 1886 for a rotary slate dresser which was used for cutting the split slates to size. This design is still in common use today.
2. Transactions of the Newcomen Society Volume 56 page 64. 3. See "Slate from Blaenau Ffestiniog" by Graham Isherwood p28 for a colour photograph.



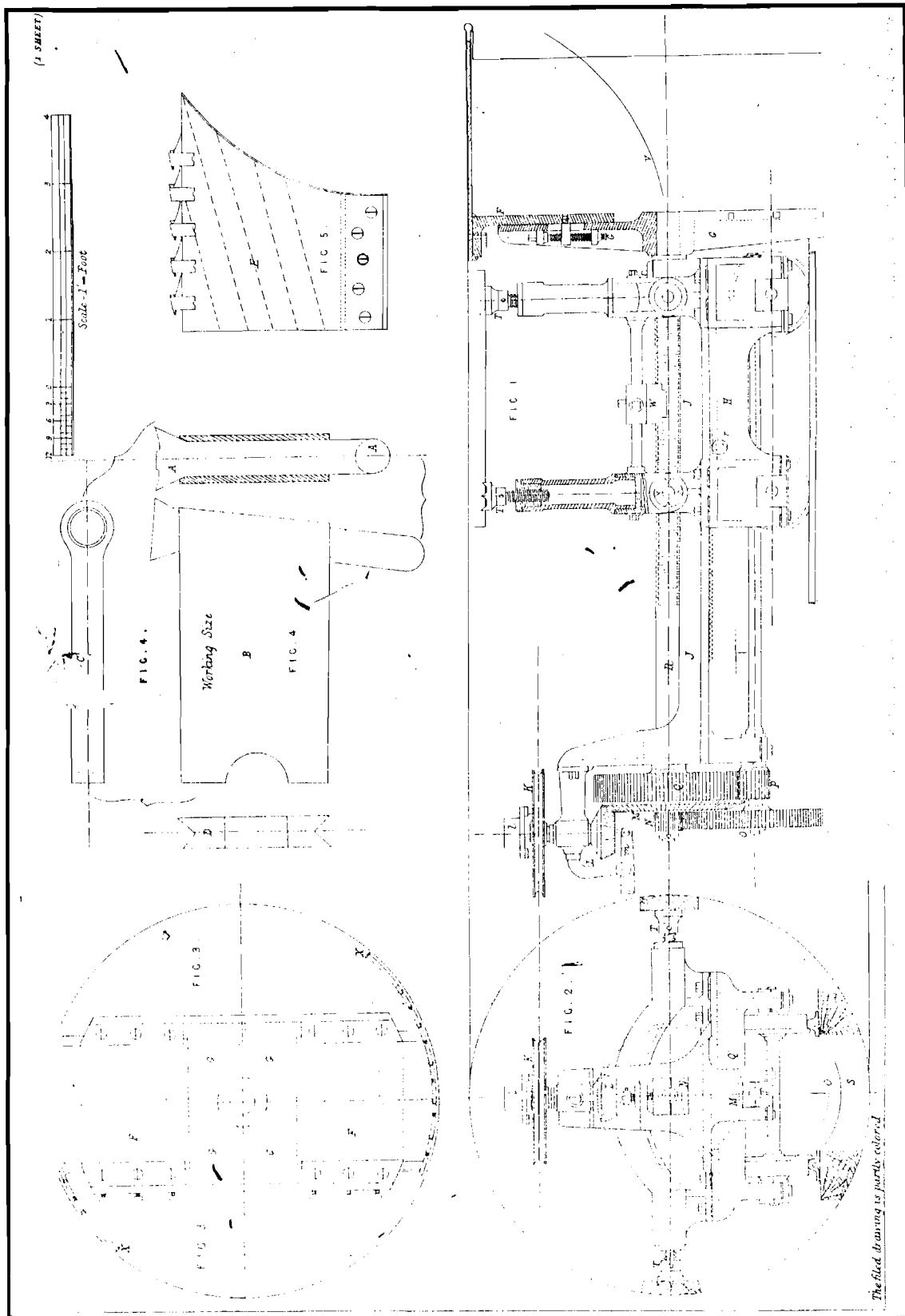


FIGURE 1

A Boxing Day Meet

Alistair Cameron

It never seems to get fully light at this time of the year. In Cumbria a feeble half-light falls on the rain-sodden hills as if darkness has begrudgingly gives a token concession for a few hours of daylight. Warm sunny summer evenings seem an eternity away. At 10am on Boxing Day we looked out of the Mines cottage window at the marching squalls of rain passing across the gloomy Coniston fells. It seemed inconceivable that anyone would want to venture out to join us. But CAT members are made of sterner stuff and by 10:30 there were at least a dozen kitted out and ready to go.

The original plan had been to climb up to Bouncy Mine on the upper slopes of Kernal Crag. In view of the conditions all were agreed that this was not a very good idea. A suggestion was made that we should cross to Fisher Bank on Coniston Old Man. A few weeks previously the entrance to the Fisher Bank level had been dug open. After a brief exploration it was sealed again. It shouldn't take much effort to re-open it and have a look inside. An added advantage was that we would be relatively sheltered from the relentless rain.

It didn't take long to climb up to Fisher Bank. Not much longer to remove the boulders from the entrance. The original dig had been made down the head-wall of the level mouth. The descent onto the level floor was down a narrow squeeze. From above it all looked a bit unsafe. In the end it was felt that it befitted an HSM (Honorary Society Member) and one was rounded up and sent down.

As soon as Mike was in the level, the rest followed. Fisher Bank level was about 200m long and ended in a closehead. According to retired quarrymen in Coniston, a shaft went

down from Fisher Bank to Low Bank below. This was the lowest level of the Old Man system. The shaft acted as a ventilation hole for the workings below. There was also said to be a shaft up from Fisher Bank to workings above.

If there was once a shaft up, then it is now completely obliterated by a massive collapse from the closehead roof which has poured rock and debris down filling much of the closehead. We spent some time trying to work out where the debris had come from. It didn't seem to tie up exactly with the workings above. We also checked the floor with dousing rods and found two points where a shaft down could be located. This will require a future dig. If we can gain access to Low Bank, it will be a considerable achievement.

The group spent about an hour in Fisher Bank closehead. There were a number of interesting artefacts including the remains of a 'mell', a large wooded long-handled mallet used for splitting blocks of slate, a technique which, at Coniston, was known as 'docking clogs'

Nobody seemed very keen to leave the underground workings and brave the driving rain. Eventually we returned to the cottage, where Sheila had lit a fire and had got a brew going. The small common room soon got hot and no one seemed very inclined to drag themselves away and head down-track to Coniston.

The opening of Fisher Bank in the autumn had been done by Martin Carter and Ian Hebson. It had only taken them a day. It was a magnificent effort and they should be warmly congratulated for their hard work.

Martin Carter -- A PROLIFIC DIGGER

All credit must go to a keen mine explorer whose forte seems to be to dig relentlessly at blocked entrances which eventually fall to his onslaughts. Martin Carter, who lives at Loweswater, has a keen interest in the Lakeland slate workings. By now his list of exploration successes is quite impressive.

His efforts first came to our notice when he eventually gained access to the Lancaster Zero system at Honister after six months of relentless graft. With the assistance of Colin Woollard of Brigham and Roger Ramsden of Cockermouth, work started in October 1993 to re-discover the entrance to Lancaster Zero

which was situated somewhere on the scree between the end of the Monkey Shelf and the entrance to Honister Bottom Level. The entrance ran in from the lower section of the External Incline which was abandoned about 80 years ago. Since then scree and slate spoil has poured down the mountainside and even the incline itself has been buried under many feet of debris.

Digging continued throughout the winter. Honister's weather lived up to its usual reputation with rain falling vertically, horizontally and even upwards on occasions. On one day they even experienced Honister's notorious wind being "in the crack". Eventually by April they had dug down and found the former incline retaining wall and on April 13th broke through into the entrance to the level. The tunnel ran for 50 yards to a forehead. In the tunnel were a number of artefacts including tallow candles, a shovel, gunpowder barrel and a leather hat. They surveyed and photographed the system and then left. A fresh fall of scree has now blocked the entrance again.

There have been other successes at Honister. Old records suggested that plans were drawn up for a tunnel to be driven from the base of the Yew Crag incline through Dale Head mountain to the head of the Newlands Valley. It would carry a narrow gauge rail line which would then run down the valley to Braithwaite Station on the Keswick to Cockermouth line.

There was some suggestion that construction of the tunnel had commenced at the Yew Crag side. While researching 'Slate From Honister' I spent many hours trying to find the entrance; if one existed at all. Few believed it would ever be found - until Martin Carter came on the scene. After a concerted dig he found the entrance, opened it up and then explored Lakeland's 'lost' rail tunnel.

Martin's successes have not been confined to Honister. On a recent trip to Coniston, with Ian Hebson from the Borders, he took a look at the blocked entrance of Fisher Bank at the Old Man Quarries. Some years earlier this had been the venue for CAT's Boxing Day dig. On that occasion a strong team had spent many hours trying to open the entrance without success. Needless to say Martin and Ian were successful. They gained access and explored a lengthy tunnel leading to a sizeable closehead.

Martin has now turned his attention to further exploration at Honister Crag. He has already discovered a level which is not marked on old plans. This runs into the Crag close to the Fiddler's entrance (Kimberley No 1). It ends after some distance in a massive collapse. He is now trying to gain access into the last unexplored area in the Crag. This is the closehead at the end of E8 level which no one alive today has seen. He is using a devious route and I suspect that, eventually, he will be successful. A D Cameron

NEWS

Colliery Winders for Sellafield

Two electric winders at Littleton Colliery, Staffs, have been bought by Nuclear Electric and are to be used at Sellafield in the sinking of two shafts down to what will be a nuclear waste store (NAMHO News).

Water Pollution

The Chairman of the N.R.A. (National Rivers Authority) has warned that the prohibited costs of preventing abandoned mines from polluting rivers and contaminating water supplies might

stop the privatisation of British coal unless the Government assumed liability and charged the taxpayers with the cost of pumping out the mines (NAMHO News).

Mining Exhibition In Ireland

It is proposed to develop a Mining exhibition in the Allihies Mining Area in Ireland. Some advice has already been given to the organisers by Alan Williams of Welsh Mines. Anyone who can give support should contact Alan Williams (Tel 0924 848806) (NAMHO News).

Great Orme (Llandudno) Prehistory

The latest edition of The Great Orme Exploration Society (GOES 1994 Supplement 2) is devoted to the cave archaeology of the Great Orme and the surrounding area, and has been written by Tom Stone. CATMHS Members who visited the site a year or so ago and who are interested in Bronze Age Mining will find the Journal a very interesting read. Copies can be obtained from Helen Jones, the Hon Sec of GOES, 42A Gwydyr Rd, Llandudno, Gwynedd. LL30 1HX.

The 1993 excavations NW of Vivians Shaft revealed seven passage entrances. Work at these, together with surface trench excavations, uncovered over 1900 fragments of bone, including several almost complete tools that showed wear marks and 42 stone mauls. Further work has revealed a further three more underground entrances, all interconnected, and which lead down to two parallel NW/SE passages. (G.David, Great Orme Mines Ltd - from NAMHO News)

Blast From the Past Old Style Lime Kiln in Action.

CRAFTSMEN from the National Trust in Cumbria recreated the traditional method for making lime mortar during a three-day course for heritage experts. The event was staged at the National Trust's direct works department depot at Thwaite Yard, between Coniston and Hawkshead.

A specially made cylindrical lime kiln, designed by an architect from Warwickshire was used. Lime was brought in from a Cumbrian quarry before being burned in the kiln along with charcoal.

Water was then poured onto the hot Limestone, causing a chemical reaction. The limestone disintegrates into what is known as lime putty and is mixed with sharp sand to make a traditional building mortar. Lime mortar does not erode so much as a cement mortar and is used to restore many British historic buildings, including York Minster.

National Trust workmen in Cumbria normally buy in the limestone. As well as seeing the lime kiln in use, people on the course also attended seminars at nearby Rydal Hall.

(T.Horne Evening Mail Oct 29 1994)

Petts Quarry to extend?

AMBLESIDE: Kirkstone Quarries has applied to extend its quarrying operations at the prominent Petts Quarry near the top of Kirkstone Pass.

It proposes to continue the existing workings in a south easterly direction and has supported its application with an environmental assessment. The Lake District Special Planning Board's development control committee decided that they should visit the site before determining the application in order to assess the environmental impact of the scheme.

(Evening Mail Monday 7th November)

New Scottish Gold Mine

The go-ahead has been given for a gold mine near the Perthshire village of Tyndrum. Estimates of the gold reserves put them as high as 40 million.

The mine will be the only one in the UK apart from a small operation in Wales, and will be dug at 1200ft at Cononish Farm close to the main access path to Ben Lui.

Consent was given on several conditions: that cyanide, commonly used to process the ore will not be used; that there will be no Sunday working; and that there will be full restoration of the landscape when operations cease.

The developers, Fynegold Exploration, a subsidiary of the Irish mining group, Ennex International, will be required to lodge a 500,000 bond as guarantee against exceptional and unforeseen costs in restoring the environment.

There were objections from members of the planning committee as to possible environmental costs but given the above safeguards and the fact that local employment should be created, permission was given.

The company has further concessions to explore a 20 mile stretch of the country to Loch Fyne.

Work is expected to begin this spring, with the first gold being extracted in the summer of 1996. The mine is expected to bring 8 years work for 80 people.

(Abstracted from an article by T.Bugler in the Daily Telegraph of 09/12/94. Sent in by John Helme)

Alistair Lings, for many years an active member of our Society, was one of the geologists working for 'Fynegold' during the early prospecting stages. (J.H.)

Tilberthwaite Slate quarry given another 10 years

Lake District planners have renewed consent for the underground working of slate at a quarry near Coniston.

Planners visited Horse Crag quarry at Tilberthwaite and gave temporary permission to work it, five years ago.

Officers told the development control committee the operation was small and only worked when there was a demand for slate. Councillors agreed to give further temporary consent for ten years.

(Evening Mail -- November 8th 1994)

Backbarrow Ironworks Repairs.

Lake District planners agreed to a further 2000 grant towards roof repairs at the historic Backbarrow Ironworks. They had already agreed to contribute up to 4000 towards temporary roofing over the iron ore stores. Since then English Heritage indicated it was willing to provide 40 per cent of the cost, not only for the ore store, but for the coke/charcoal stores.

(Evening Mail November 30th 1994. Sent in by Anton Thomas)

Scaffold holds up chimney job

ONE of the area's last remaining relics of the iron mining industry is in danger of collapse if restoration work is delayed, say experts.

The 50ft high boilerhouse chimney at the site of the old Woodbine pit at Newton known as the Dickie Pink mine - was being restored by the Cumbria Amenity Trust Mining History Society. But work came to a halt when an offer from a local company to provide scaffolding to finish the job was withdrawn at the last minute. "We've done half of the work with ladders, but we can't get any further," said Sheila Thomas, of Greengate Street in Barrow, who has been working on the project since it started. "If

someone could help us out with scaffolding, we could resume in the spring. We have a couple of good brickies working for us, but a job like this depends a lot on the weather."

The chimney was built to serve boilers which provided steam for an engine powering the pit cages which lowered and raised men and brought iron ore to the surface.

It hasn't belched smoke in anger since the Woodbine Pit, the last deep mine in Furness, closed in 1946.

The society is financing the work itself -- but funds will not stretch to providing scaffolding, so members are appealing to local firms to help them out.

"This is the last remaining mining chimney in Furness" said Mrs Thomas. "Once that goes there is nothing left to indicate this was an important iron mining area in the past." Mrs Thomas can be contacted on 0229 83591

Alen McFadzean Evening Mail November 11 1994



Dolgellau Gold

They have travelled from Canada's frozen wastes to the heat of Zimbabwe in their search for nature's most sought-after metals. Now, after a decade of digging in the Welsh hills, Terence and Chris Madden are convinced they are just metres from a 2.5m vein of gold. The father and son team, one an expert prospector, the other a geologist, believe their mine on a ridge of the Garn mountain in Gwynedd could contain up to 10,000 ounces of Welsh gold.

"We have found high levels of gold as we dig now we just need to get a few more metres to where it is concentrated," said Terence, 68, from Liverpool. "We have zeroed in on one particular area, and all the geological conditions tell us we are heading towards the right place." The pair have devoted their lives to the hunt for gold. Their obsession began after the father read of pockets of gold worth millions of pounds buried in the "Dolgellau gold belt", an area around Welsh town of the same name.

They arrived in Wales in the early 1980's after spending nearly 10 years criss-crossing the world, and Terence advertised for landowners interested in having their land prospected. Poring over 19th-century mining journals and newspapers at the Welsh National library in Aberystwyth, father and son chose the most promising areas of land to study.

Since they first cleared away the undergrowth and found specks of gold in the rocks, they have spent the last 10 years gaining permission from the owners, taking soil samples, removing old cars and rubbish and excavating 150 tonnes of greenstone rock to form a tunnel and 10 metre shaft. "We know there is gold down there," said Chris, 40. "We have done a lot of research to make it

work." Having spent their savings chasing their dream, they must convince a backer to put \$50,000 into the project to lower the shaft a tantalising few metres to where the gold lies.

Dolgellau relies on tourists and locals are cautiously optimistic. "It would encourage more people to come here if they are right," said Peter Woolven, manager of the Royal Ship hotel. "There is a lot of gold in the hills and in the river but if these two find gold I hope people are not going to come in droves and hack away at the hillside."

As word spread through the valleys last week about the dig, the magical allure of gold started turning the heads of the locals as well as the prospectors. "If they find anything it will start a gold rush, and I would be leading the stampede," said Georgina Probert, 47, a local housewife.

The Welsh gold industry has gone into steep decline since its peak in the late 1880s, when thousands were employed in hundreds of small mines dotted around the countryside. Clogau-St David's, which produced gold wedding rings for the Queen and Princess of Wales, closed a month ago.

The mines may have gone, but individual prospectors are returning. George Hall, a prospector from Herefordshire, plans to drive a tunnel deep into the hill on the other side of the ridge from the Maddens.

"Searching for gold is very romantic," said Hall 70. "It's adventurous and exciting, the thrill of uncovering hidden treasure. I'm a great optimist, and I know if I persevere I will definitely find the gold."

Edward Griffith, 72, a retired sheep farmer, lives on the ridge just below the Madden mine. As he stared at the hill above him, he had no doubts: "Mother Nature has hidden it well, but the gold is definitely here."

Sunday Times 9 October 1994

Welsh Slate

Protesters in Blaenau Ffestiniog have vowed to fight on after losing the battle to stop quarries from re-opening. Gwynedd planners have given the go ahead for the re-opening of the Rhosydd and Conglog quarries at Cwmorthin. But members of Grwp Gwarhodd Rhosydd (Rhosydd Protection Group) have still not given up. They stressed the final decision lies with the Secretary of State because the scheme was contrary to the

structure plan. The group criticised arguments put forward to support the application "It's not over yet, we will have to wait and see if the Welsh Office now decide to call in the application," said Steffan ab Owain. "We believe that totally unsubstantiated arguments, particularly jobs, have been allowed to win the day. Figures of as many as 90 jobs being created cannot be taken seriously." Campaigner Ronwen Roberts slammed individuals and councillors for failing to respect the environment. She recalled a local councillor

commenting that even one new job justified the proposed development. "This seemed a fair indicator of the lack of concern that many people have for their own environment," she said. County councillors approved the plans by Ffestiniog Slate Quarry Company two years after the first consultation papers were submitted to Gwynedd planning chiefs. Welcoming the decision, company managing director Eifion Williams said that mining work would hopefully start in the summer of 1995.

He said: "This was the most 'green' scheme any one could wish for. "All work following the actual mining will be carried out at our existing Oakley quarry. " There will be underground disposal of waste, and the only opencast section is essential as a starting point before most of the work is tackled underground.

"I welcome the council's decision. They have honoured us as local people to tackle the scheme and that is appreciated" Gwynedd council's seal approval follows a series of public meetings, controversial arguments and suggestions that the issue had split the Blaenau community

But at Thursday's meeting priority was given to employment and none of the committee members opposed the scheme. Advice given by planning officers, who recommended that permission should not be granted, was therefore rejected. Officers maintained that the need for extra slate had not been proved and expressed concern regarding the effects the scheme would have on visual amenity,

tranquility of the area and on features of industrial archaeological interest. Two local councillors, Arthur Holland Williams and Gwilym Euros Roberts who attended the meeting strongly supported the application and emphasised it would strengthen the slate industry which had been the cornerstone of the Blaenau Community for more than two centuries.

Underlining the importance of employment, Cllr Holland Williams said the scheme would safeguard the company's workforce of 70 now employed at the Oakley quarry and possibly create an additional 70 jobs in future years. "Slate quarrying is an active and growing industry." Cwmorthin was an area full of work and full of life. " This scheme will help us regain that and provide hope for the future." Cllr Roberts submitted two petitions signed by 2,200 local residents and 69 Blaenau Ffestiniog business people, all supporting the application.

Drawing further attention to the need for jobs, he added that 83 workers were forced to leave his constituency following the closure of Trawsfynydd power station. "Another 100 jobs will go at the power station in March and we will then realise the real effect of the closure" he said. "Slate quarries have been the strength of our community for centuries, it can be so again. We have heard that the scheme could harm the tourist industry. Ironically, the main tourist attractions in Blaenau are the Llechwedd and Gloddfa Ganol quarries." Proposing that permission be granted, Cllr Glyn Owen said that conditions could be imposed to protect the environment.

NEW BOOKS

"TO BE A GYPSUM MINER" Carl Rogers. Published 1994. The Pentland Press 9.50. To be "A Gypsum Miner" provides an attractive and invaluable insight into the world of mining, recounting the author's life as a Gypsum miner, throughout the 19 years as a face worker and years as a mine superintendent. Carl Rogers is a former soldier, potholer, caver and sport parachutist and lives near Appleby.

"THE POLITICS OF THE PICTURESQUE" Stephen Copley and Peter Garside. Published 1994. Cambridge University Press- Approx. 35. Contains a very interesting chapter "William Gilpin and the black-lead mine" - 19 pages.

D. Parsons January 1995

Letters To the Editor

Putting The Record Straight

Ian Matheson

The summer and autumn of 1994 has been a busy time for me. In addition to spending most of August as usual yachting off the West Coast of Scotland, I have also taken over as Principal of Lanehead Outdoor Education Centre at Coniston, and moved house and home to take up residence there. I have also done a couple of evening lectures on behalf of CAT with Mike Mitchell, attended a COMRU practice, spent a long evening securing the pump rods in the Old Engine Shaft, and led three CAT meets. An account of the last of these, the Taylors Level Work Meet appears, I hope, elsewhere in this issue, but due to lack of time in my changed circumstances I have neglected to submit accounts of the exploration of Bouncy Mine at Coniston on July 17th, or of the Brewery Shaft descent in September. Just for the record meet reports were ably written, I believe by the editor, and were published in Newsletter No 40. However there were one or two omissions and a quotation which was not wholly accurate, so this is just to put the record straight.

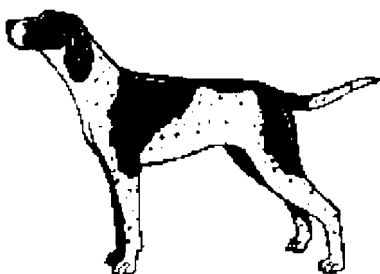
Bouncy Mine Coniston

The writer names some of those who attended, and states "There were others, but I cannot now remember who they were". One of them was the Meet Leader, and another was John Knowles, who rarely misses a meet. Chris Jones and Phil Merrin put in their usual fleeting appearance but did not actually enter the mine. I cannot recall meeting new members Angelar Wilson or Clive Burrow, but, and I have to be very careful here, Angela Wilson and Clive Barrow did attend. Not

much was found in Bouncy Mine and so the meet seemed destined to finish early. However, one evening the previous week Ian Matheson, Mike Mitchell and Adam Gourlay had secured the pump rods in the Old Engine Shaft to the rock, and as the weather had continued dry for a few days it was decided to finish this day with a descent of the shaft to Deep Level. This was accomplished without incident, and it was noted that the rods were longer than had been thought, some 250 feet of 7 inch square Pitch Pine rods are suspended in the shaft.

Brewery Shaft, Nenthead.

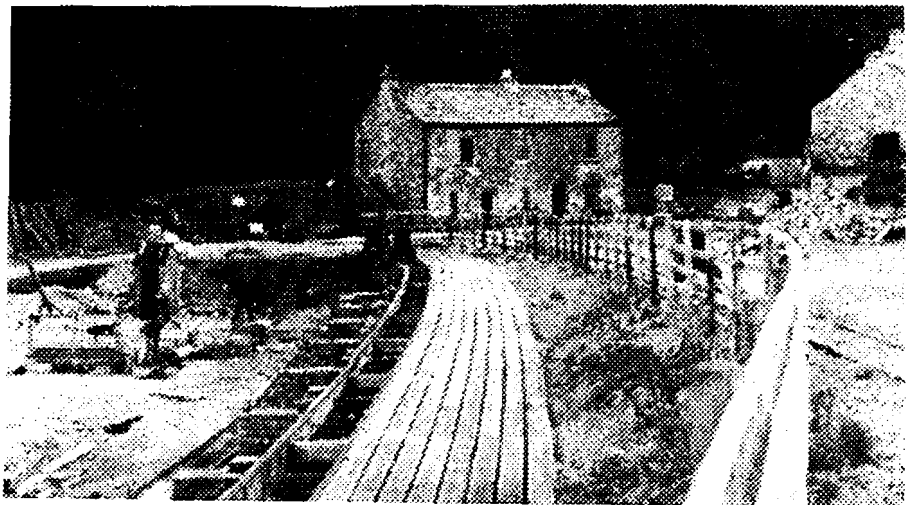
There was a problem on this meet when one of the participants got into difficulties on the ascent. Apparently he had difficulty passing a rebelay, and his harness became unfastened. He was ably assisted by the next in line, John Davies, who prussicked up to him and helped to sort things out. At the time neither person was known to the Meet Leader. I believe that a meet leaders responsibility is to provide suitable tackle, to assess objective dangers, and to check personal equipment. He is unlikely to know personally every one of the members, all of whom have a right to participate in club meets, and he is not in a position to assess their competence or to give or to refuse permission to take part. The grading system designates the degree of difficulty expected at a meet, and therefore of the expertise required, and it is the responsibility of the individual to ensure that he or she is competent at that grade. In this case the meet was one of only two this year to be given a Severe grading, and it was made clear on the day by the meet leader that this was a strenuous, technical and committing trip.



Society Photographs

These have been scanned in at 300 dpi resolution 256 grayscale, altered with image processing software and printed in halftone with a 300 x 300 mono deskjet printer . It is intended as part of a library of sample pictures so that members know what there is and who has them.

Kilhope



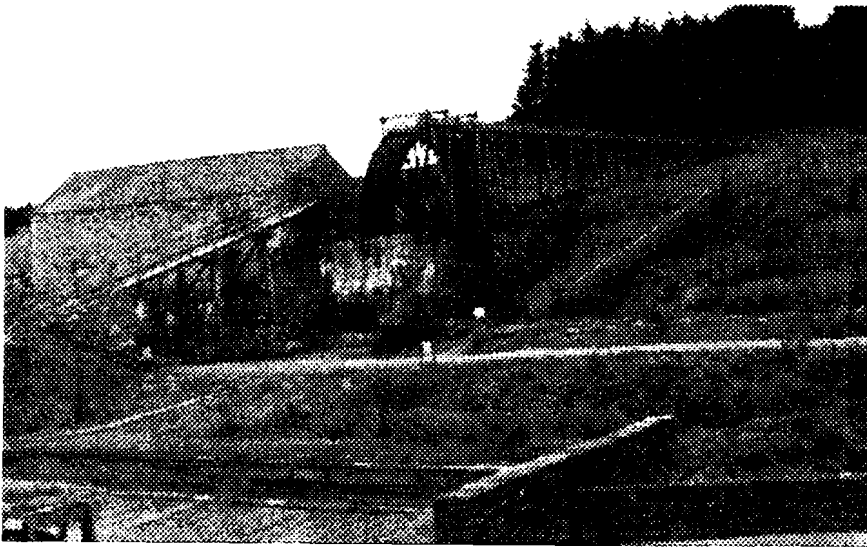
J. Knowles Summer 1994
Adit Portal, Mine Office, Bouse team



J. Knowles
Summer 1994

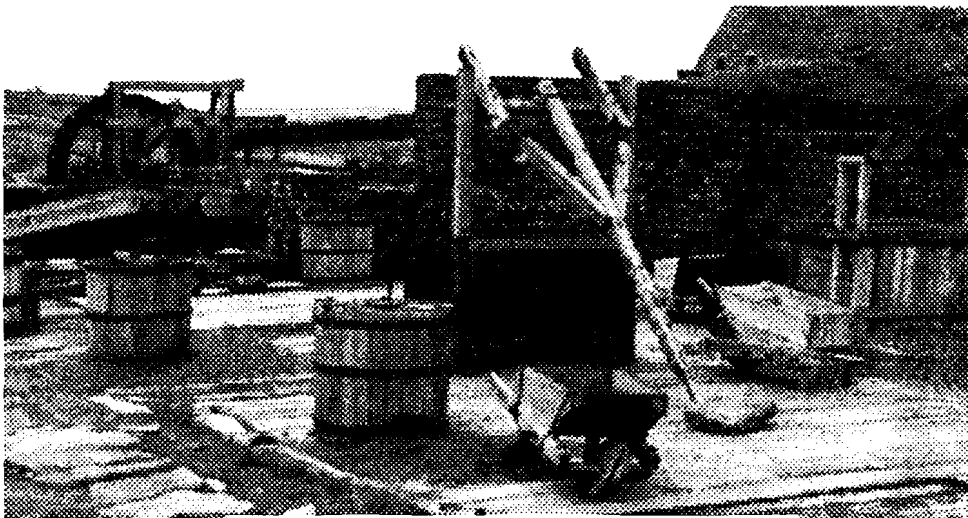


The Smithy-Kilhope 1994 Jon Knowles



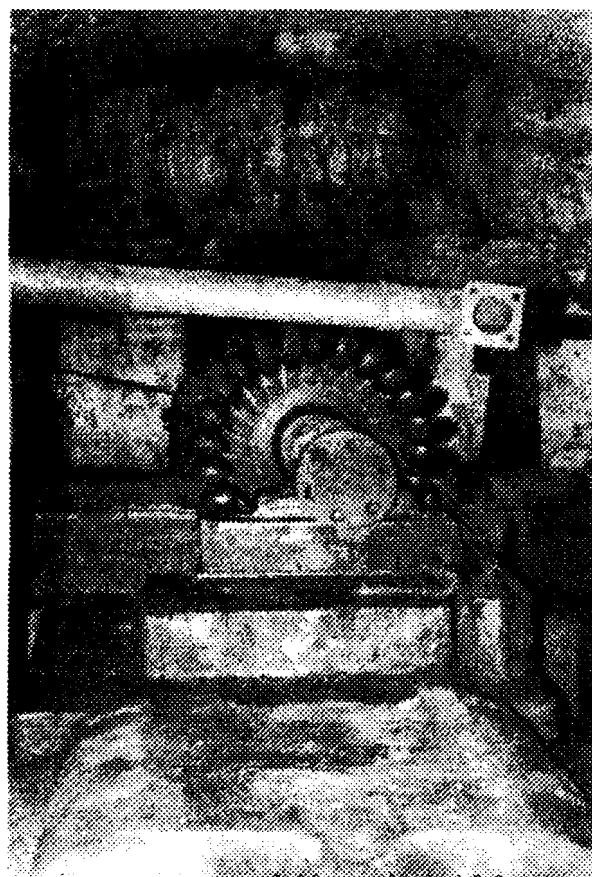
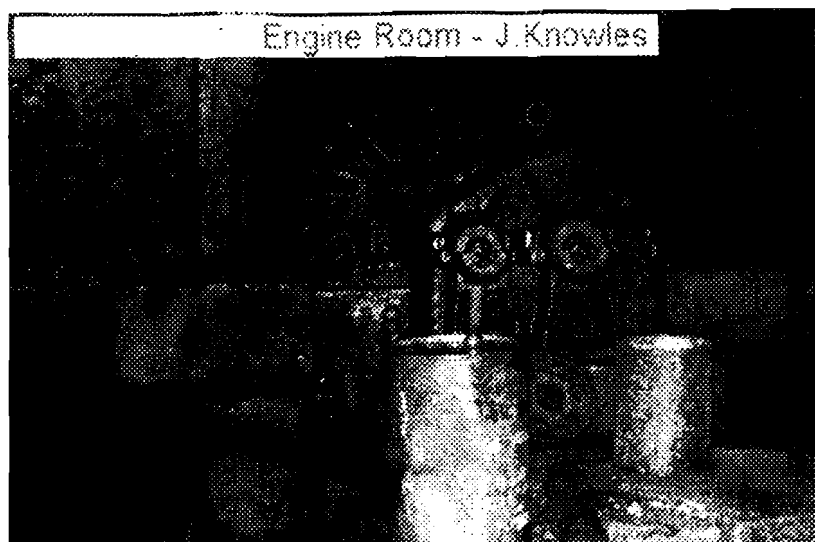
J. Knowles Summer 1994

J. Knowles 1994
Mill, Waterwheel & Launder

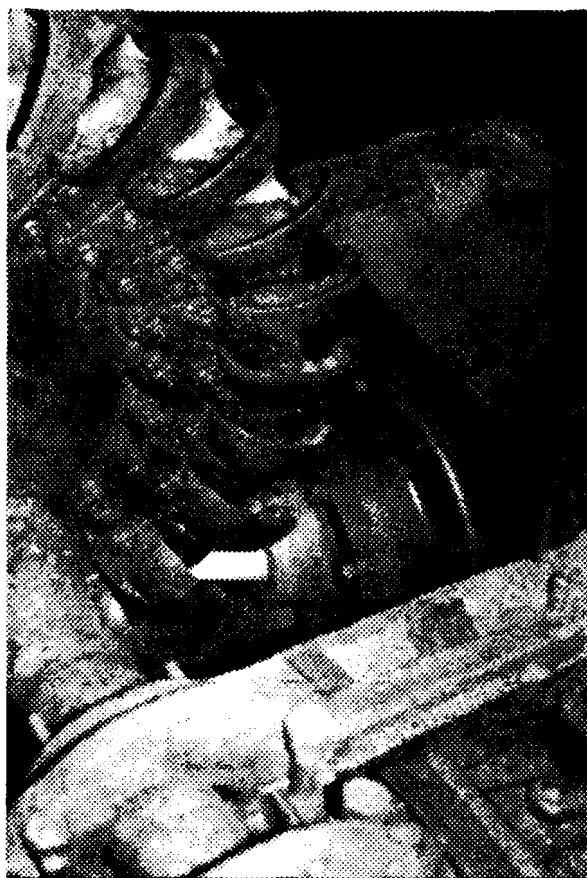


J. Knowles 1994. Ore Processing Floor

Brewery Shaft and Engine Room Nenthead

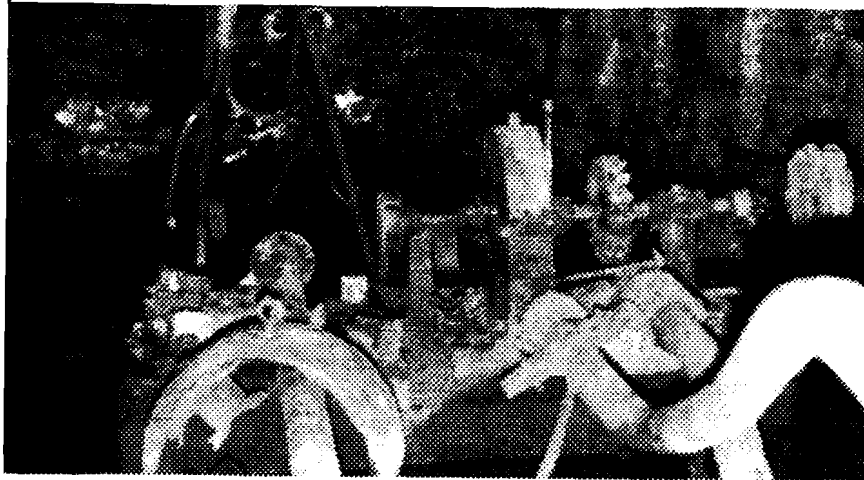


J. Knowles 1994,
Pelton Wheel - Engine Room



J. Knowles 1994,
Pelton Detail - Engine Room

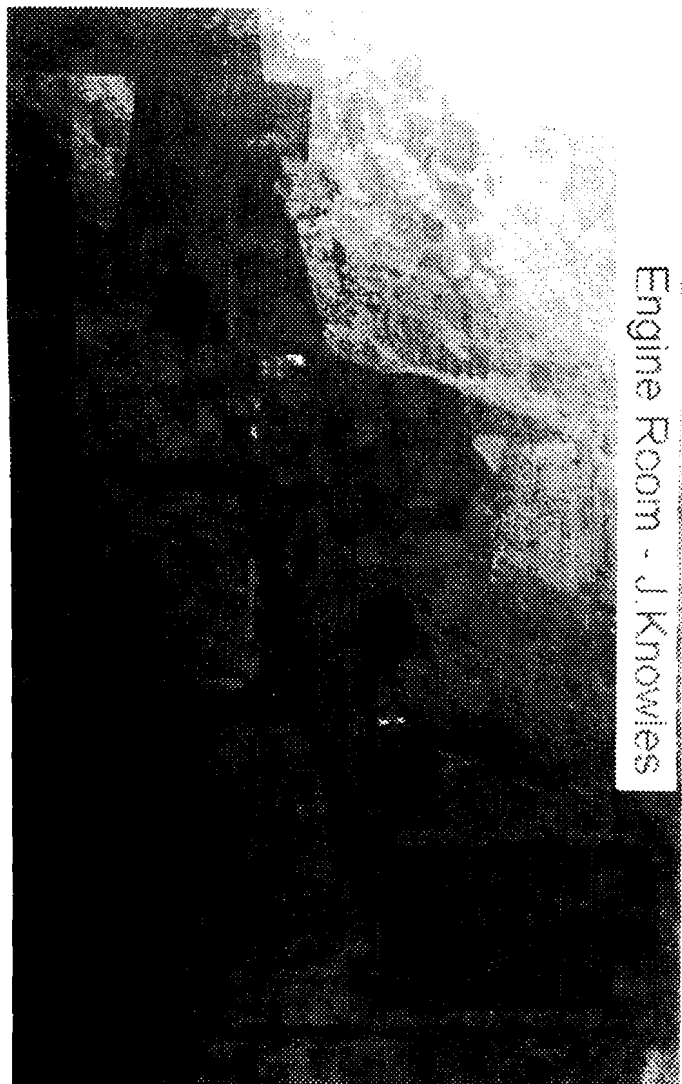
Engine Room - J. Knowles



Water
Wheel - J. Knowles



Engine Room - J. Knowles



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