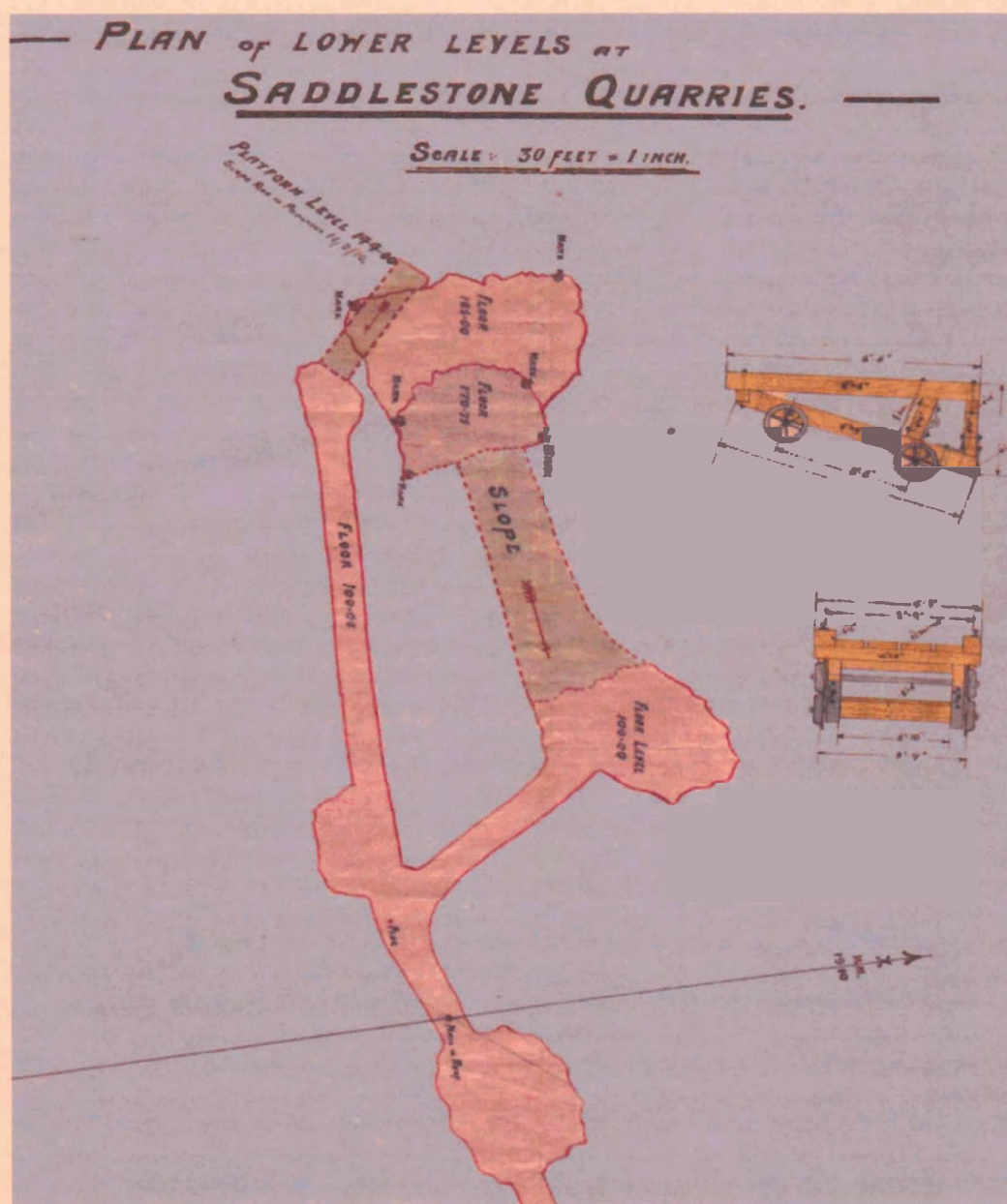


CAT

The Newsletter of the Cumbria Amenity Trust
Mining History Society



Cover picture

This plan is part of the large collection of surveys carried out by Henry Mellon for the Mandall's Slate Company. We are fortunate that we have many of these plans as part of the Brownlee Collection in the Ruskin Museum, Coniston. This particular one shows the workings of Low Bank on Coniston Old Man (known, at the time, as Low Saddlestone). The plan is dated February 1900 and shows the extensive nature of the underground close heads at Low Bank and also confirms the fact that an incline operated in the system. Currently attempts are being made to re-open the Low Bank level.

Alastair Cameron

**Cumbria Amenity Trust Mining History Society
Newsletter No 71, May 2003**

Contents:

Cover Picture	Inside front cover
Where are they now?	Page 1
Editorial	Page 2
CATMHS Library and Archive	Page 2
2004 NAMHO Conference	Page 3
News	Page 4
Meets	Page 7
Meet Reports:	Page 8
Wales weekend, 26 th & 27 th October. Jon Knowles	
Mexico shaft, 2 nd March. Roger Ramsden	
Wales weekend, 15 th & 16 th February. Jon Knowles	
Silver Gill, 23 rd March. Warren Allison	
Articles:	
Coniston Copper Mine Records. Ian Matheson	Page 14
Dr Descender	Page 16
Straw Houses, Smoke Holes & Bruce Willis. Alastair Cameron	Page 17
Britannia Blasted, William Bickford	Page 19
Closure of Lake District Zinc mines. Warren Allison	Page 22
Threlkeld Mining Museum Open Day	Page 23
Minutes of CATMHS committee meeting held on (March & May)	Page 24
Society Officers and Committee members.	Back cover.

CAT web site: www.catmhs.co.uk



A Motley Crew, where are they now?

Wanted – any information leading to the identification of these ruffians, photographed in a field in Cumbria sometime during the 20th century. Can you name any of them? When was the photo taken? Where were they? What were they doing? The photograph was contributed by Richard Hewer,, who appears in it, back row, third from left. You may also recognise Mike Mitchell and Peter Fleming, looking very youthfull, but who are the other fine young men? I will re-print this picture in the next Newsletter, together with their names if possible, and any comment or information, humorous or factual, which you send me. Email ian@rothayholme.freeseve.co.uk, or post to 1 Rothay Holme Cottages, Ambleside LA22 0EE

Editorial

Errors in Newsletter 70!

The caption to the picture of John Brown on page 3 should have read:

‘John Brown with the Chairman’s Award, which he received on behalf of the digging team, John Brown, Peter Blezard, Colin Woolard, Andrew Woolard, Peter Sedgewicke, and William Snaith.

Meets

You should find your new meets list enclosed with this issue. We currently have no Meets Secretary, so this programme has been put together by the Committee. We would still like to fill the post, which is not too onerous. It is not essential for the Meets Secretary to attend committee meetings or to live near Cumbria, as most of the correspondence can be done by telephone or email. Any volunteers? We would also be pleased to have suggestions for future meets or offers to lead meets. In all cases contact either Sheila Barker or Ian Matheson. Contact details are on the back cover of this Newsletter. The next Meets List will be distributed with the November newsletter

CATMHS Library and Archive

A home has been found for our library and archive at the Armitt Library and Museum in Ambleside.

The Armitt Subscription Library was founded in 1909, and grew on foundations laid by Mary Louisa Armitt, an erudite Victorian lady. It grew naturally and absorbed the 1828 Ambleside Book Club and the 1882 Ambleside Ruskin Library. After many years without a proper home the Heritage Lottery Fund helped to provide a proper building on land belonging to St Martin’s College in Ambleside (formerly Charlotte Mason

College). There is a museum on the ground floor, for which there is a small charge, and a large library upstairs, which is free.

The museum houses a permanent local history display and there are a series of special exhibitions, based on archival material, which are change two or three time per year. The current exhibition on Lakeland Photographers is from the extensive collection of thousands old photographs from Herbert Bell, Brunskill, Garside and others. This is shortly due to be replaced by a display about Amblesides many old mills.

The Armitt contains a unique collection of books and paintings from local writers and artists, including John Ruskin, and a large photograph collection. As well as the literary material there are some old maps, and many original water colours by Beatrix Potter, who was a Trustee. We are very fortunate to be allowed to deposit our archive here.

The present agreement is for a period of two years, to be reviewed annually thereafter. It is only likely to be renewed if the CAT Library is used regularly and helps to attract visitors to the Armitt, so, whenever you are in the vicinity of Ambleside, please visit the Armitt Library, free of charge, and make a point of asking to see the CAT library and catalogue. You will find it opposite the main car park in Rydal Road, which is the main road out of Ambleside towards Keswick. Phone 015394 31212.

Our thanks to Anton C P Thomas who has cared for the CAT archive for many years. He has put in a great deal of effort providing safe and suitable storage and cataloguing the collection electronically on Cardfile

The 2004 NAMHO Conference

As reported in the last Newsletter CATMHS are to host the 2004 NAMHO Conference at Coniston. It is to be held over the weekend 23rd – 26th July, and will be based at John Ruskin School. We hope to have input from Ian Tyler of Threlkeld Mining Museum and Mark Waite of Honister Slate Mine and Museum.

A first planning meeting was held at the BMSC Hut at Coniston on 17th March to determine a theme and a provisional programme. 2004 will be the 25th anniversary of NAMHO, and it had been suggested that, as silver is used to signify a 25th anniversary, it might be appropriate to use this as a theme. After discussion we decided that as we know much about silver mining in the Cumbrian area it might be used as a sub theme, perhaps as an introductory lecture on the Friday evening to follow up to the NAMHO Chairman's conference opening speech.

After long thought and discussion about main themes the idea came up about a sequel to the 'Mining Before Powder' conference, which was held in 1994 by the Historical Metallurgy Society at Charlotte Mason College, the theme title to be 'Mining After Powder – The Use of Explosives in Mining and Quarrying Industries'. The Coniston mines span the pre gunpowder period up to the early 20th Century, and the slate industry from early times up to the present day. There are a number of disused gunpowder mills in the area, and Ian Tyler has recently published a history of the gunpowder mills of Cumbria,

The Conference will begin on the Friday evening with registration and a special lecture to celebrate NAMHO's

25th Anniversary. It is proposed that we hold lectures all day on Saturday, and Sunday as well as field visits, and perhaps a coach trip on Monday, with visits to Haig Colliery, Florence Mine, and Threlkeld Quarry and Museum. A trip on Coniston Water in Gondola or Coniston Launch was suggested as a Saturday evening entertainment.

A second planning meeting was held in Ambleside on Saturday 3rd May. It was suggested that our theme title was too narrow and would not encourage either delegates or lectures. The NAMHO conference is held in a different region each time so that people attending can see what different areas have to offer. Theming of NAMHO conferences was a fairly recent development but, as we have a free hand to develop the conference as we think fit, we should concentrate on showing off our Lake District mining heritage. Sheila Barker suggested that we invite papers on 'The Extractive Industries of Cumbria', and this was agreed.

Jon Knowles was unable to attend the meeting, but had emailed a spread sheet detailing his suggestions for field meets, covering a variety of surface and underground visits. Unfortunately there was not enough time to discuss this, so copies were printed off for those who do not have email access. Booking forms do not have to be sent out until January, but arrangements for venues, catering etc have to be done now and require priority.

It is apparent that we shall require a lot of manpower both before and during the conference, in order to run a variety of field meets and ensure that the lecture programme and other arrangements go smoothly. If you can help in any way please let Sheila know, and note the dates in your diary, 23rd – 25th July 2004.

News

NCA Safety recommendations

Extracts from Speleoscene Dec 2002.

CO₂ in mines and caves.

CO₂ is a colourless odourless gas normally present in the air we breathe. Fresh air has about 0.03% CO₂ and expired air about 4%. At 2% humans experience some breathlessness, at 4% there can be panting, a throbbing headache, flushed face, nausea and sweating. Between 7 and 10% there will be mental deterioration and gasping for breath, which at 10 –15% concentration becomes intolerable, unconsciousness occurs in minutes and there are convulsions. The HSE regards exposure of more than 2% for any length of time as a risk to human health.

In caves and old mines the concentration is normally about 1%, but can be much higher due to rotting wood, vegetation, organic pollution, poor ventilation or heavy human traffic in confined spaces. It is thought that levels found underground may be increasing, possibly as a consequence of changes in farming.

Single and Double Rope Techniques

The use by cavers of SRT is currently threatened by Government implementation of a European Union Directive. Part of the Directive will permit SRT to be used only as a last resort in work situations where use of scaffolding, ladders or double rope technique are not reasonably practical. The Temporary Work at Height Directive will require persons working at height to use the most safe system possible. A concern for cavers not at work is that insurance companies might well apply the same approach to recreational cavers.

Early drafts of the legislation sought to ban the use of SRT, but this has been lobbied against successfully. The current concern is to achieve an adoption within UK law of a recognition that recreational use of SRT is worthy of exception in its own right. To this end many different sports have made representations to the Health and Safety Executive.

A Rope Safety Tip

At a CIC assessors workshop the following was suggested as good practice to prevent abseiling off the end of a rope which has been packed in a bag: The end of the rope should be either :

- (1) poked through the bottom of the bag and a stopper knot tied in the end before the rest is fed into the bag
- (2) The end is tied to the bag haul ring or draw cord before the rest is fed into the bag.

English Heritage's Monument Protection Programme in the Lake District National Park

English Heritage's Monument Protection Programme (MPP) began in 1986 and comprises a review and evaluation of the counties archaeological heritage in order to identify the best surviving monuments and sites. At that time CATMHS was asked to compile lists of mines etc which we thought to be worthy of protection. There are currently about 19,000 scheduled monuments in England, and this figure is expected to rise to about 35,000 during the lifetime of the MPP. The information which follows is from a presentation given at the recent conference at St Martin's College in Ambleside.

..... An important element of the MPP work in the (Lake District) National Park has been the increase in

protection given to the industrial landscape. The mining of copper, lead, barites and graphite was a flourishing activity which has led to a wealth of remains lying on the crags and in the valleys of the National Park. Although documentary sources are few, mining is known to have taken place here from at least late-medieval times, and possibly earlier, until the 20th century. National reviews of each industry has led to a selection of sites being recommended for scheduling. The copper industry was already represented with both Coniston coppermines and Carrock Fell mines having been scheduled quite some time ago. MPP has now added a further eight sites including the important group of mines in the Newland valley at Goldscope, Long Work, St Thomas' Work and two sites at Dale Head, together with Carrock End mine and the remains of Haltcliffe smelter near Mungrisedale, and Greenburn mine in Little Langdale. Myers Head mine near Hartsop and Greenhead Gill mine near Grasmere are two additions to the lead mining industry which saw Hoggart Gill smelter and Greenside mines both scheduled some time ago. Force Crag mine, with its exceptionally well preserved ore processing plant, is a recently scheduled lead and barytes mine, while the unique Borrowdale graphite mine – the only one in the country – has also been scheduled.

A number of gunpowder sites in South Lakeland were also recently scheduled including Low Wood, near Newby Bridge. It is anticipated that national reviews of the iron industry and the stone extraction industry will be completed soon and that numerous scheduling recommendations for sites related to these industries within the National Park will emerge.

Whilst the work of the MPP has added considerably to the number of protected sites in the National Park it is clear that much work remains to be done. What has also emerged is the recognition that presently undiscovered sites are likely to exist, particularly in upland areas. Indeed numerous new sites were only discovered during fieldwork to visit known sites, and new sites have also been discovered by historical and archaeological societies, by landowners and by local residents.

What to do if you think a site should be scheduled.

- Gather as much existing information as possible
- Photograph and sketch the site
- Plot the site on a large scale map
- Contact the National Park Archaeologist, the National Trust Archaeologists, or the Cumbria County Archaeologist and the Cumbria Sites and Monuments Record.

Ken Robinson. MPP Archaeologist for Cheshire, Gt Manchester, Merseyside, Lancashire and Cumbria.

It would be helpful if any member doing so would send copies to the CATMHS secretary.

Photographs from The National Monuments Record.

From The Evening Mail, 7th March 2003, contributed by Peter Fleming.

A fascinating glimpse into South Cumbria's industrial past is provided in previously unseen photographs made public for the first time.

The images reflect the importance of the mining industry to the local economy and include one of an

employee at work at the Roanhead and Askam iron ore mines, near Barrow, dating from the return of the century. There are also a series of pictures taken at Honister slate mine at Buttermere, the Force Crag mine above Derwent, and Hodbarrow iron ore mine at Millom. There are among 20,000 images in the collection revealing 300 years of working life in England, which can be accessed at www.english-heritage.org.uk/viewfinder

The National Monuments record has released the photographs; the nation's visual archive looked after by English Heritage. The website was launched yesterday by English Heritage chairman Sir Neil Cossons.

He said "Viewfinder is an extraordinary image bank that provides for the first time ever access to many important historic images for members of the general public and history lovers alike. These are our grandparents and great grandparents at work, it is a record of whom we were and informs who we are. "English Heritage's long term goal is to digitize the majority of it's 10 million items, normally only accessible through a visit to the NMR public search rooms in Swindon and London, creating an unrivalled electronic archive available to all."

Dig reveals Ancient Furnace

From the Westmorland Gazette, 7th March 2003.

Archaeologists are excavating the remains of an important 17th Century iron-smelting furnace that was almost lost forever. The significance of the site only emerged last year and it is now being investigated and conserved by the lake District National Park Authority with a £23,500 grant from English Heritage.

A LDNPA ranger spotted the remains of Cunsey Beck Forge, south of Far Sawrey, after a building was partially demolished.

The Authorities archaeologists have since found evidence of the bloomery forge, a dam, a wheel pit and slag heaps. They have recommended that the site becomes a Scheduled Ancient Monument to protect it in the future. "This very important site is one of only a handful of very important iron smelting furnaces in the country", said John Hodgson, LDNPA Senior Archaeologist. "It represents the period of transition between un-powered bloomeries and blast furnaces, and will add a great deal to our knowledge of early iron working in the Lake District".

Research so far has found that the earliest reference to a bloom forge at Cunsey in a 1623 agreement to buy woods to supply it with charcoal. It was once the flagship smelting furnace of the Backbarrow Company, and was last worked in 1750.

Fieldwork has been carried out by Oxford Archaeology north (formerly the Lancaster University Archaeology Unit) on behalf of the LDNPA. News of the excavation and pictures of its progress will be on the LDPNA website at www.lake-district.gov.uk Visitors can see the remains from a public footpath which crosses the site.

As a result of this report I went to visit the site, arriving on the final day just as the workmen were leaving. The site consists of a ruined barn, which has been demolished on three sides. The remaining side had been stabilised and capped with lime mortar. They had done a very good job and used more appropriate materials than the cement used at the Greenburn Mine

conservation near Tilberthwaite. The wall stands about ten feet high, and original openings seem to have been converted to windows, presumably for a dwelling. These had been converted to arrow slits when the building was later used as a barn. Some lintels had been replaced during the conservation, and the walls built up to a uniform height following the original vertical joints.

I was told that the floor had been examined by digging some trenches across it, but these had been covered with a membrane and covered with soil to protect it. The archaeologists had found a flag floor, and beneath it were the outlines of the construction of the older forge. In one corner they had found remains which were thought to be Elizabethan.

On the other side of the track are several very large slag heaps, evidence of a long period of use, and a dam, holding pond and leat. I was told that two waterwheel pits had been identified. The site is well worth a visit, and we look forward to reading the report on the dig.

Ian Matheson

Stump Cross Caverns for sale

From the Daily Telegraph Property Supplement, 1st March 2003.

Stump Cross Caves have been in the Hanley family since the 1920's when they were bought for £400. As a schoolboy Hanley, now 58, helped as a guide. For a while he worked elsewhere, but he returned in the 1980's with his wife Sue, and they developed the site, building the present facilities. Today 60,000 visitors come each year.

The caves were discovered in 1858 by prospectors searching for lead. They thought they were out of luck, but the

caves became a gold mine as curious Victorians flocked to see the ornate shapes, many coloured brightly with mineral deposits. In addition to the show caves there are four miles of passageways, and a lost subterranean lake, supposedly found by Christopher Long in the 1920's.

It would seem that a would be buyer will have to *stump* up well over £250,000. Any takers?

Meets

Torver & Broughton Moor walk, 7th June

A trip is planned for Saturday June 7th to an area above Coniston which has not been visited before by CAT or any industrial archaeological group, as far as we know. We will be meeting at 10am at Torver, three miles south of Coniston, in the lay-by outside the Wilsons Arms pub / restaurant.

The first venue for the day will be a small slate working in a remote area above Torver that was, apparently, worked during the 20th Century although we have little information at all about it. The leader for this part of the trip will be Hugh Cameron. Nearby is the Bleaberry Hause Deer Dyke, thought to be of Iron-age origin. We are hoping that National Trust Archaeologist Jamie Lund will be with us to explain the present thinking about the deer dyke. Bleaberry Hause is also thought to have been a substantial Bronze Age community.

We will then proceed the short distance over to the Broughton Moor Slate Workings where Burlington Slate's Donald Kelly will be on hand to explain the method of working and how the site has developed over the years from its 'conception' in the 1920's to the present day. Nearby are

ancient slate workings which will form the last venue for the day before heading down-track to Torver. If anyone doesn't want to a walk back to the road Don will give them a lift down in the quarry Landrover.

We have booked warm sunny weather for the day of the trip. Walking is easy, distances are not great and it will be ideally suited for all ages. And there is always the quarry vehicle to bring you back down if it all gets too much!

Alastair Cameron

Rampgill Meet, Nenthead, 24th August.

With regard to the above John Aird will lead a meet to further explore the areabehind what were the Norpex doors with the aim of crossing the top of the Rampgill Underground Shaft and entering the area on the far side. Grade E, through to Diff/SRT, depending how adventurous those attending the meet want to be.

John Aird.

Meet Reports

Wales Weekend 26th & 27th October

Jon Knowles (ML), John Ashby, Chris Cowdery, John Aird (PT).

A small Project team comprising mainly John Ashby, Chris Cowdery and the author with occasional visits from John Aird and Mark Waite has been looking at the small Conclog working which lies in Cwmorthin between the Cwmorthin Quarry and Bwlch Rhosydd. Whilst the scope of this exploration will be reported on when it is finished the purpose of Saturdays meet was to attempt to ascend a chamber from the middle level since the adit on this horizon has collapsed.

Fortunately the Meet Secretary's 27' ladder easily comes apart into three sections which means its weight could be split between the members including John Ashby who had a bad back (again!) but still managed to walk up the hill more quickly than everybody else. As none of the participants had much experience of fixed ladder ascents it was a case of trial and error. Putting two bolts at the highest point on the face accessible with the ladder on the ground was fairly easy. Next it was necessary for the meet leader (where do all the volunteers go at times like this ?) to clip into the anchors while the ladder was hauled un on a pulley also fixed to one of the same anchors. The only really tricky part was then fixing the ends of the ladders also into the same anchors. Once this had been completed the ladder was still a little short of the top. After some more bolting and much looking at the few feet we were short John Ashby produced an etrier (Note 1) from his sack which soon gave us access to the level above.



Chris Cowdery and Ladder



John Aird on the Top of the Ladder

Unfortunately the level above was not extensive, and did not connect with the remainder of the workings on that horizon, but if you don't look you won't find.

A very wet and windy Saturday night was spent in a series of hostelleries in Portmadoc.

Sunday dawned (just) very wet and windy. Most of the area had a power cut but fortunately not our B&B. Driving back up to Blaenau was a bit like an obstacle course. I remember thinking at one point, why is that chap standing in the middle of the road with a chainsaw, and then just missing the tree!

Arriving in Blaenau we quickly decided to spend the day getting as far underground as we could, unfortunately the Aird was missing. Despite attempts at phone contact he never appeared and later reported:-

My apologies for not making it, but when I got in the car I noticed a certain amount of water in the driver's footwell. Having shaken the mat out the door we set off. By the time we got

to the railway viaduct on the road over it became apparent there was about 50 mm of water sloshing around so stopped and bailed it out and continued.

Having driven round one fallen tree via the footpath as we entered Dolwyddelan, the automatic gearbox changed straight from fourth down to first achieving a spectacular number of engine rp. It had become apparent that the electronic logic box and wiring are under the carpet by the drivers feet and you have to take the drivers seat (with shoulder air bag) out to get the carpet up. At this stage it was decided that we had better return to Cheshire and we made a slow and erratic return, occasionally having the gearbox just return to neutral or stay in first or second as it saw fit. Not very nice on the coast road with no hard shoulder and everyone rushing home from half term.

Have made it home today (Monday), with only one period of sitting on the hard shoulder of the M6 while the bloody thing played up totally.

After Chris got chased to the mine entrance by the farmer (Chris won despite his weight and the farmer having a quad bike) we followed the usual route down the Old Vein and on into Oakley on floor DE. Our intention had been to descend to Floor F and then to G using a route than J.K. and Tristan Goldsack had bolted some years previously but a large waterfall was flowing down the first pitch. It appears that surface quarrying operations have caused water to drain through this part of the mine. After various attempts at damming and then trying to drain the area (Our Chairman would have been proud) the waterfall continued as stubbornly as ever so we retreated. After looking for new routes

up through Oakley, without success, we returned to Cwmorthin and explored the lower levels before returning to day.

Notes

1. For those not aware of this an etrier is a 3 or 4 step sling ladder which is very useful when making bolted ascents.

Jon Knowles

Mexico Shaft, Roughton Gill Mines, 2nd March 2003

Having been strongly urged to lead a meet in the northern end of the Lakes I thought Mexico Shaft would be suitable for dozens of members to swing about in. Gerry and I turned up at Fellside car park at 9am with the intention of digging open the level and rigging the top pitch before the mass of members turned up. An early Sheila turned up at 9.15am, but declined the offer of carrying the rope bag!

On site, half an hour digging revealed our oil drum entrance to High Mexico Level, we got geared up and entered the level to rig the first pitch. It was a pleasant surprise to find only a small stream flowing down the shaft instead of the river I remembered from our last visit.

Whilst wasting one bolt to give members greater security for the descent, Gerry had a National Grid Power Failure which prevented him from descending the shaft later. On exiting the level we found the members had doubled to two. Mark had joined Sheila and during lunch the members doubled again to four with the arrival of Mike and Clive. Mark and I descended approximately 50 ft to

Todd Gill level using our existing bolt and the old rail lines as belays. We explored the level to welly depth (it only gets deeper), we re-belayed and descended the last 120 ft approximately of the shaft which slowly changes to an oblong ore shoot, making it somewhat difficult in height.

Exploring Mexico Deep level out-bye we admired the nice proportions of the hand chipped level and a good bait room side drive. In bye there is evidence of a dig at a collapse which is could lead to greater things but, as it is a tight squeeze through to the dig and the collapse is holding back a lot of water, it could be a risky undertaking. After our look-about we ascended, noting the remains of a ladder way and door on one side of the shaft. Back at High level the collapse in-bye was gingerly inspected. Noting the fresh blocks that have come out of the roof, makes you think twice about gaining access to the rest of the workings in-bye.

We de-rigged the pitches, then emerged to the task of closing the drum and re-landscaping the entrance. We sauntered back to Fellside, my fears of dozens of people shuttling up and down the Shaft till nightfall being unfounded.

My thanks to Gerry for his efforts in carrying the rope bag up and back and not using it.

Members present:

Roger Ramsden
Gerry Goldsborough
Sheila Barker
Mark Simpson
Mike Mitchell
Clive Barrow.

Wales Weekend 15th & 16th February

Jon Knowles (ML)

John Ashby

Chris Cowdery

Mark Waite

Mark Simpson

After the previous weekend in October the Meet Leaders reputation for good weather was somewhat tarnished but this was fully restored with wall to wall sunshine, even if it was cold at night.

Bryn Eglwys Slate Quarry at Abergynolwyn is a testimony to changing Government policy over the years. After the underground collapse which closed the workings in 1946 the site was planted with trees by the forestry commission and most of the extant building demolished. This was a shame since the photographs of the time show it to be a super little site in a totally unspoiled valley. However trees eventually grow tall enough to cut down for timber and this has now happened on the Cantrybedd part of the site. In addition a wiser forestry commission is now putting up display boards to explain what would have been obvious if they hadn't knocked it down in the first place.

One of the aims of the meet had been to explore the deep level drainage adit known as the "Lefel Fawr" but the freezing temperatures which had seen ice on the road to the site cause problems to those in four wheel drive vehicles (but curiously not to two wheel drives ones) meant that this was left for a return visit. Heading up the site in strong sunshine all the Cantrybedd side levels and inclines were clearly visible now that the tress were gone. It was a real pleasure to be walking upright rather than crawling on hands and knees spitting pine needles. Fortunately it was possible to walk straight to 5C level which had previously proved elusive to the author due to the trees. This level appears to be very old and was probably soon

abandoned as the workings followed the slate down. Returning to the mill area we viewed the remains of the water powered chain incline haulage system before entering the Daylight Level. We rigged and descended the main shaft from floor 20 to floor 25. A large quantity of water flows out of floor 25 and whilst most chose to land on their feet hard man Ashby thought this too soft and decided to lie down in it. There is no way on from this level. Once all were back at surface we explored the working on the Bryn Eglwys side of the valley.



John Ashby Lying in the Water

Since Mark Waite now lives locally he had generously offered to provide accommodation and this proved to be excellent. Saturday evening was spent at a local hostelry before returning to Mark's fireside and a drop of whisky.

On Sunday the plan had been to complete the exploration of the Tyn-y-berth Quarry in upper Corris which had been started in 2000 (See Newsletter 63) but these workings seem fairly determined to keep some of their secrets for as long as possible. After an initial walk up the site to take GPS readings on the various shafts and open chambers we rigged and descended part way down chamber 5. Chairman Simpson went first and was so engrossed into digging his way into a flooded level with much crashing of rocks and falling water (hard to believe of Mark I

know !) that we seemed to ignore the fact that he was standing in the fall zone of others descending. Once the level was sufficiently open to allow exploration we waded through water and deep mud before passing the run-in entrance to chamber 4 and then entering another chamber (3 on plan) which went both up and down. Continuing along the level the floor became progressively higher with material which had been washed in until progress was no longer possible at what is assumed to be the entrance to chamber 2.

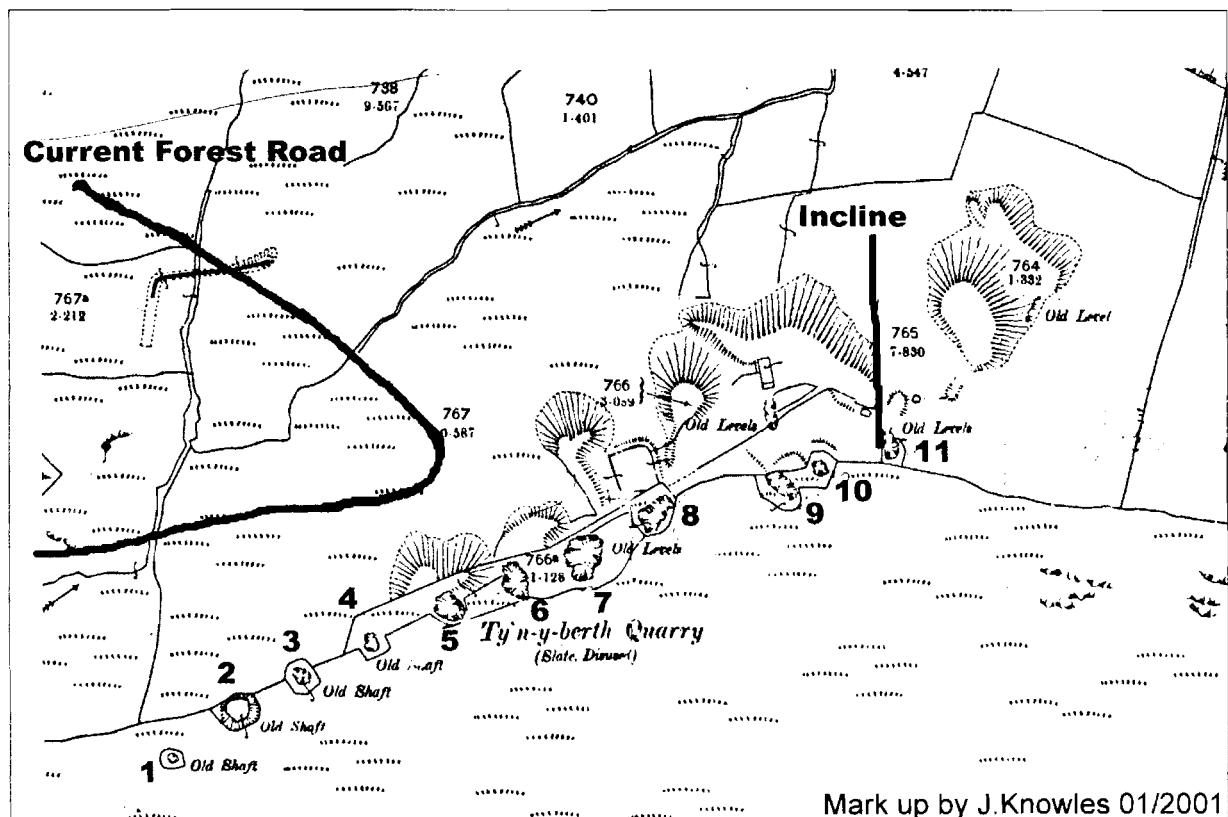
Returning to chamber 3 this was rigged and descended to the lower floor. This floor again has much washed in material and progress outbye looked extremely wet

and was not attempted. Progress inbye was not dry and John and Jon waded through chest deep water for some distance before the level eventually dried out but was blind at its inner end. Returning to surface ice had formed on the rope on the main pitch so after de-rigging we returned to Corris.

In a further attempt to get to the bottom of this mine a further meet will be held on the 5th & 6th July where the following will be attempted, ideally with two teams :-

- Descend chamber 3 in stages exploring any further levels.
- Descend the large open chamber (1) at the top of the site.

Jon Knowles



Tyn-y-berth Quarry, Upper Corris.

Silver Gill, 23rd March

A total of eight members turned up at Fellside, Caldbeck (Warren Allison, Peter Fleming, Mark Simpson, Alan Westall Maureen Fleming, John Aird, Jane Moreland, John Crammond and Ian Matheson. Ed.) and started the three mile walk up to Silver Gill mine, the site of recent research, which has put names to the main workings of the largest Elizabethan mining complex in the Lake District.

On the way, the smelter at Hay Gill was examined, which apparently worked from 1794 for a short period of time, and was eventually converted into a row of cottages. During the building the slag was removed and eventually a barytes processing plant was built around 1877. It processed barytes brought from Old Potts Gill mine, which was being worked by the Cleator Moor Iron Company until 1892. The Hushes at Brae fell mine were discussed, although not on the scale of Alston, they are still impressive. The Lake District is not renowned for hushing, but a lot more went on than people realise, this valley alone has over a dozen.

After passing the bottom end of the famous Red Gill mine we started the climb up Silver Gill, the first working was a level which had been started, but little more than this had been done. A short distance further up the gill, the closed entrance to the Silver Gill 60 fm level came into view, this had been opened many years ago and was driven as a crosscut for approximately 60 yards until it hit the vein, where it was collapsed.

The next level reached was what is now known as New Staln, which was being worked in 1573. The level was driven as a crosscut for 40 yards to the Silver Gill vein and then turned left

and right. The left hand branch is 30 yards to a forehead, whilst the right hand branch is collapsed, there is also a flooded shaft in the floor. The crosscut is one of the finest examples of a hand driven level in the Lakes.

Silver Gill - Mine Entrance - Alan Westall leading



The next level is 90 feet higher up the gill and is the rediscovered Emanuel level, again being worked in 1573. It was the discovery of this level which allowed the individual workings, as described in Hochstetter the younger to be identified. By 1630 the New Staln was 260 fms long, with Emanuel being 220 fms long. Fortune, which is 90 feet higher than Emanuel, was wholly decayed, but was being worked from an internal rise, all the ground along the vein had been removed.

Emanuel is a 15 yard crosscut to the vein, where there is a three way junction. The branch to the left goes to a forehead after 20 yards, the branch in front is 40 yards to a forehead. There is a blocked shaft in the floor, with a jackroll over it, which is from examination of the workings in the 1850s. The right hand branch follows the hanging wall of the vein for 60 yards, where a crosscut into the footwall has been driven and stopeing carried out, but is now collapsed. The main level carries on for 40 yards, with several crosscuts into the footwall and stopeing, until a major collapse is reached.

In an inventory in 1602, there is mention of the use of Rowle wagons, which were a primitive form of an underground railway. The tubs had wheels which ran

Silver Gill - Warrens enigmatic timber



on wooden boards, with a pin in the front, which located itself in a groove between the boards to locate it. There is now evidence of this underground, which is the subject of continuing research, if it is proved then this will push the early railways back approximately 100 years.

After climbing the gill, the collapsed entrance to Fortune was passed and on exiting the gill an old surface shaft was passed. From here we traversed along a water leat, which supplied several hushes in Thief Gill and Silver Gill (Thief Gill is the valley above Roughtongill) to the open workings on the Roughtongill vein.

We started to descend down Roughtongill, passing the site of a shaft by the beck, which was sunk on the vein and eventually coming to the Roughtongill 30 fm level. This was driven as a crosscut to the vein and broke into hand chipped workings. These were from the shaft sunk higher up the gill,

which we had just visited and had been driven along the vein. On reaching the Roughtongill 60 fm level, members visited another of the Elizabethan workings, the Blinde Wastel, this was driven for a short distance on the end of the Silver Gill vein, with hushing above exposing the vein. From here we walked to the Roughtongill 90 fm workings, where the main dressing floor were located and eventually back to the cars.

There is currently much original research being carried out, with the blessing of the National Park Authority and for more information, the early research has been published in the 2001 Transactions of the Cumberland & Westmorland Antiquarian Society.

Warren Allison

Coniston Copper Mine Records.

Email from Albyn Austin:

Ian, reading the latest CAT newsletter, about your work on Coniston records, I wondered if you might be interested in the following snippet. Did you know that there was an account book for the Coniston mine for 1882-3 or thereabouts in Staffordshire Record Office, Eastgate St, Stafford, ST162LZ <http://www.staffordshire.gov.uk/archives/> It is their reference D347. I came across a reference to it years ago, just too late to let Eric Holland know to use in his book. I learned the book was being printed from him and that he was pleased to see the back of it, so I didn't have the heart to tell him about it. I believe they'd be quite happy for it to come to Cumbria, and I've mentioned it a couple of times to staff at Kendal PRO but I don't think anything has ever happened. I've never looked at it myself, one of those things on the to do list, that never gets done, but at least I've mentioned it exists and a note can be put in the CAT records, even if you're too busy to look at it for a while, regards, Albyn Austin

Email from: Ian Matheson to:
staffordshire.record.office@staffordshire.gov.uk

Subject: Coniston copper mine

I have been told that you have a cost book for 1882 or thereabouts originating from Coniston copper mine, and have been given the reference D347. I have been researching the Coniston mines for some years, and know of three other cost books. They contain a great deal of interesting information, and I would be most grateful if you would confirm or otherwise that you have one in your records. If you do then I would also be interested to learn how it came to be in Staffordshire.

Yours faithfully, Ian Matheson

Email from Staffordshire Record Office:

We do indeed hold a Cost and Returns book relating to Coniston mines (Ref No. 347/M/B/1), it covers the dates 1875-1884. The book came to Staffordshire Record Office in 1954 via the Clerk of the Justices, Stafford Division. I am told that there are plans to transfer the book to the Cumbria Record Office in due course.

I hope this has been of some assistance to you

Matthew Blake
(Archivist)

Staffordshire Record Office, Eastgate
Street, Stafford, ST162LZ

<http://www.staffordshire.gov.uk/archives/>

Online catalogue:

www.archives.staffordshire.gov.uk/

Coniston Copper Mine Cost Book No 2

This is a leather bound foolscap sized volume. It contains a complete record of the costs of the mine for the period November 1838 to March 1843. This book is in the possession of JWB Hext,

who is a direct descendent of the mine owner John Barratt and who is Vice President of our society

Costs are listed under the following headings:

- Agents Salaries
- Tutwork (Contracts between the mining company and teams of miners to carry out specified work, usually driving levels sinking shafts etc.)
- Tribute (A profit sharing system whereby teams of miners were paid a proportion of the value of ore they produced after deduction of costs such as gunpowder, candles and blacksmith work.)
- Dressing costs
- Carpenters, Smiths, etc.
- Carriage and Horse Work (Details of carting both ore and materials are listed. This heading also includes the boating of ore down the Lake.)
- Surface or Day Work Expenses on
- Ores
- Materials
- Sundry Payments
- Receipts (These consist mainly of rents and payment of old debts.)

The final entry is 'To Coniston Cost Book No 3'

I understand that the Ruskin Museum has recently acquired a book listing transactions around 1870-1880. Does anyone know the whereabouts of Cost books 1 and 3? To have all three Coniston Cost books would give huge amount of detailed information about the mines from their opening in 1824 right through to their heyday in the 1850's.

Cost Book for Threlkeld Mine, Tutwork bargains at Coniston.

This is a foolscap sized ledger, also in the possession of Major Hext. Pages are ruled for accounts.

There are 16 double pages containing The Accounts of Threlkeld Mine from

September 1825 to Jan / Feb 1835.

After this the book was used to record Tutwork Bargains at Coniston mine from July 5th 1862 until November 3rd 1866.

Loose between the pages are a number of actual take notes, and two original letters, one of which concerns the discovery of cobalt at Coniston Mine.

Tutwork bargains let from July 5th to Sept 6th

1862 24 Bargains are listed.

eg July 25th 'A new level to drive west on a vein from the bottom of the Gill below the New Bridge by 2 men stinted 2 fms.

Taken at £3.10.0 per fm

By William Thompson, John Crellin

From September 6th to July 1st 1862.

23 bargains

October 6th. 4 bargains

From November 1st 1862 to January 3rd

1863 24 bargains

From Nov 1st 1862 to January 3rd 1863.

Paddy End. 12 bargains

Tutwork bargains Nov 1862. 1 bargain.

December 1862. 6 bargains.

The last entry in this book is as follows;

Bargains let Nov 3rd 1866 to January 5th 1867.

William Dixon late stope in the bottom of a drift over the Top Level east of Stephen's Rise in Paddy End Vein by 2 men.

Taken at £2.5.0 per fm. By William Dixon, John Dixon.

Ian Matheson.

Dr Descender

Dear Doctor

I have been a member of a Charitable Trust for many years and for most of that time I have either been an officer or a committee member or both. After giving a years warning I eventually stood down

to pursue other interests only to find that at the committee meeting prior to the AGM I had been co-opted onto the committee without my knowledge or agreement. Is this normal ? and could you have a word with those concerned.

Anon, Huddersfield

I have spoken to some of the people concerned and I think they apologised but they had so much egg on their face it was difficult to tell.

Doc

Dear Doctor Descender

Recently I went to a Christmas Party in a very expensive location in the Lake district. Some one who was too embarrassed to bring his wife hired a very attractive woman for the night. Can you tell me what such a service costs, and who to contact. What 'extras' are included in the price?

Anon: No wife and not likely to find one either.

Dear Doctor

I recently moved house. However since we were moving back close to where we moved away from a few years ago I thought that there was not much to do so I left my wife and daughter to it. I went up to the Lakes with two discrete "friends" to recover some ropes from a mine. The trip was almost successful with all ropes except one being recovered but I was surprised that my wife was quite upset that I had taken the house keys with me. Is this normal ?

Anon

I couldn't possibly comment. Doc

Doctor Descender this month has been provided by the Good the Bad and the Ugly.

**Straw Houses, Smoke Holes and
Bruce Willis
Alastair Cameron**

It is astonishing how much history can be found on one Lakeland mountain. Coniston Old Man holds evidence of man's activity from the Bronze Age, Iron Age, mediaeval era and onwards to the present day. Since the settlement of Coniston was first established the mountain has figured largely in the lives of the community and even today at least a dozen families in the village still owe part of their livelihoods to their work on the mountain.

The study that we have been carrying out, to piece together the industrial history of the mountain, goes on with enthusiasm. The small team has been out several times during the Spring. One area that has attracted interest is that of The Cove. Cove Quarries are an extensive and remote sprawl of ancient workings. They spill down from just below the summit on the south west side of the mountain. They are rarely visited by anyone. Anthony Inman from High Ground Farm, who holds common grazing rights on the Old Man, will go there no more than a couple of times a year. Occasionally the hunt might pass through, but hardly anyone else.

Walkers and climbers pass along the track below the Cove workings and many will probably not even notice the ancient banks of spoil high above, so well have they mellowed with the surrounding mountain. The first 'tourists' here were the mountaineers heading for Dow Crag. In 1886 W.P. Haskett-Smith climbed a route on 'E' Buttress and became the first climber to record a climb on the Crag. No doubt on his way up to Dow (and back down again) he must have been very conscious of the activity at Cove. In

1886 at least 40 men and boys were working there. There would have been constant activity and noise from the quarry. The dull thud of black-powder and rattle as 'rid' was disposed of over the tip-end would have mixed with the call of the ravens and buzzards.

A couple of years ago Nils Wilks and I made an attempt to gain access to some of the highest chambers at Cove, without success. Late last year Jane Moreland and I paid another visit to Cove, this time to carry out a brief survey of the site and try to estimate the dates of some of the workings. Although Cove was last operated in the 1920's the first workings on this side of the Old Man are lost in the mists of time and may well date from shortly after the Norman Conquest.

Earlier this year we were presented with a set of old plans and documents, which are destined to form part of the Brownlee Collection in the Coniston Museum. One of the old plans was of Cove Quarries. It had been produced by the eminent surveyor Henry Mellon, in 1906.. As well as showing exactly where the old areas of slate extraction had been, the plan also marked the exact location of the Cove Straw-house, one of only two straw-houses* known to exist on the Old Man. Clearly we had to go back to Cove to see if we could find the remains of it.

On a fine day in early March the team assembled at the Fell Gate and set off along the Walna Scar Road to Cove. We halted at the remains of Cove Hut, the old magazine on the fellside below the quarry. It is now only a tumbled ruin but most of the team remembered using it in their youth. It was a good place to stop for a brew. Further up, on one of the lower quarry banks, are the remains of a small cottage, re-built in

the 1950's by Jack Diamond, a Coniston school master.

The Brownlee plan showed the location of the straw-house almost directly above the cottage. We spent some time scouring the hillside, without success. Quite clearly all remains are now lost, although on a subsequent visit, Maureen Fleming thought she may have located the original position.

During the past two months we have turned our attention to Scald Cop Quarry, one of the highest workings on the North-east shoulder of the Old Man. Donald Kelly, who has worked in the industry all his life and 'served his time' at Moss Head, remembers setting off charges in the Moss Head closehead and seeing smoke issuing from Scald Cop entrance high above. We decided to investigate the reason for this and took Don along with us.

This proved to be a most interesting afternoon. Don had the key to the gate at the bottom of the Brossen Stone track so we rode up to Brossen in the quarry Landrover and walked across to Moss Head. It seems that the reason that smoke vented from Scald Cop was because a 'smoke hole' in the form of a vertical shaft had been constructed between the two. We wanted to find both ends of it so went onto the Moss Head floor with powerful lights and studied the roof of the chamber high above. It was difficult to identify any feature; even with several million candlepower, but in the end we thought we might have spotted it amongst the irregular blocks forming the closehead roof.

Later we walked up to Scald Cop. The old plans marked the top of the shaft very clearly. We wriggled through the tight entrance – and there it was, just as

Henry Mellon had recorded it. It is interesting that, during an early CAT trip here, we had eaten out lunch on the actual shaft top. Perhaps if we had known what was beneath we may have moved somewhere else.

The most interesting feature at Scald Cop are the old surface remains. Don studied them carefully. I had always estimated that the great roof collapse of the cave-working had occurred in the 1790's. We talked this through for some minutes and we both became convinced it must have occurred much earlier – possibly even one hundred years earlier.

Later, back in the village, we enjoyed a pint in the Sun. 'Stormer' Walker, one of Lakeland's most skilled slate-men, joined us. After an afternoon discussing the history of the industry Stormer brought is back to the present day with a bump. He informed us that his Company (Kirkstone) had just won a contract to supply the celebrity Bruce Willis with slate for the numerous luxury bathrooms in his new New York mansion..... I believe it is only recently that we have focused correctly on the real history of the mountain. In the past we have been content to put our helmets on and 'bash through' the underground areas of Moss Head, forgetting that the real history of the mountain lies elsewhere. Moss Head is relatively modern and of little historic importance. The real history is still waiting to be discovered – on the surface.

- A straw-house is a small, well constructed building in which powder straws were stored. Dougie Birkett, now retired, remembers collecting straws from the fields of Spoon Hall and Coniston Old Hall after the harvest and filling them with powder in his back kitchen.

Britannia Blasted

or

There is nothing “Nobel” about that
Swede

By William Bickford

During the January 2003 meet at Nenthead, led by Sheila Barker, to explore areas of Rampgill which had been sealed off by the “Norpex” doors, members located in a stope above the main level a pair of 50lb. explosives boxes, detonator boxes and a single 4 oz. cartridge of explosive. It was possible to decipher the words “Cotton Powder Company” on both the boxes and the cartridge, enough information to recall a period of history when not merely British mining companies but also the British explosives industry were at the cutting edge of technology.

Through the late 18th Century and early 19th Century rapid advances in chemical knowledge encouraged many experimenters to attempt to produce explosive compounds to replace gunpowder with the aims of increasing explosive force and reducing the amount of noxious fumes and smoke. Whilst claims were made that both aims were achieved by so called “improved” gunpowders (usually involving the addition of potassium or sodium chlorate to the normal ingredients of sulphur, potassium nitrate and charcoal) the resulting powders proved very prone to spontaneous ignition during manufacture or transport with disastrous results.

Two chemical compounds, nitroglycerine and nitrocellulose (guncotton) formed the first “high” explosives i.e. when exposed to a sufficiently energetic shock wave (velocity 1500 to 9000 metres per second) they decompose from a solid or liquid state into a much greater

volume of gas, whereas gunpowder produces gases much more slowly (in these terms) by burning. Both compounds were first produced in 1846 and came to be associated not with their discoverers but with the men who exploited their commercial possibilities. Alfred Nobel and the nitroglycerine based dynamite that he developed are known to all, while Sir Frederick Abel and his nitrocellulose explosives have passed into oblivion.

The discoverer of guncotton was Schonbein, a German and Professor of Chemistry and Physics at the University of Basle. He treated cotton wool with hot concentrated sulphuric and nitric acid and produced a material that looked exactly like the original but felt much harsher. When ignited unconfined it burnt with a flash but if confined it exploded. Schonbein claimed that 1lb gave an effect equal to between 2 and 4 lbs of black powder, no residue remained and no smoke was produced. Additionally he claimed, “the manufacture is not attended with the least danger”, a statement that returned to haunt those who believed it.

Britain being the major industrial power with the world’s largest navy and substantial army not to mention a very significant mining industry it was natural that Schonbein came to demonstrate the new explosive to the authorities at the Woolwich Arsenal in August 1846. Interest was so great among gunpowder makers, mining companies and the military that £1500 (about £165000 in present day terms) was provided by the Government to pay for more demonstrations. Trials at Penryn granite quarry and in the iron ore mine at Restormel (the first underground use of a practical high explosive) greatly impressed everyone. John Taylor & Sons, the international

mining company, who organised the trials, agreed terms and John Taylor himself took out a patent in October 1846 covering the manufacture of guncotton. This involved cleaning and drying cotton, which was then immersed in a mixture of one part concentrated nitric acid and three parts sulphuric acid at 15 degrees C for one hour, then washed until free of acid, pressed as dry as possible, spread out and dried at 65 degrees C. Taylor immediately entered into an agreement with John Hall & Sons, a long established gunpowder maker at Faversham, Kent giving them a monopoly on the process for three years for a down payment of £1000 and an annual payment of the same amount (£110000 today). That the new explosive was far more powerful than gunpowder was attested to by the explosion at the new plant in July 1847 when 21 people were killed, all buildings within quarter of a mile were stripped of their roofs and even a full mile away in Faversham itself windows were broken. The cause of the blast could not be definitely ascertained, but may have been due to excessive temperature during the drying process, failure to completely wash out all traces of acid from the guncotton, which greatly increased the sensitivity of the product to any minor shock or simply the universal failure to appreciate how terribly easily dry guncotton could be ignited.

A series of explosions across Europe lead to either an outright ban on the making of guncotton (Austria) or the commercial abandonment of the process because it was uneconomic given the high level of risk involved. It would be wrong to imply that these difficulties were unique to guncotton, the problems Nobel experienced attempting to use liquid nitroglycerine finally caused Parliament to pass the

Nitroglycerine Act of 1869 prohibiting the manufacture, sale, transport or use of the chemical. However the demand for explosives was growing and attempts at innovation led to the sale of highly dangerous materials resulting in numerous accidents. Public unease finally forced the imposition of the Explosives Act of 1875 upon the reluctant "laissez-faire" industrial establishment. The Act proved farsighted and efficient, appointing an Explosives Inspectorate to regulate all aspects of production, sale, transport and end use, leading to an immediate increase in safety for the public and a more gradual improvement for workers in the industry.

In the case of guncotton researchers continued to try to improve safety by washing the nitrated cotton for as long as 21 days and then boiling the washed material in a dilute alkali, but success eluded them until the arrival on the scene of Fredrick Augustus Abel. Born 1827 in Woolwich, he was one of the first pupils of the Royal College of Chemistry, became Professor of Chemistry at the Royal Military Academy and in 1864 was appointed to a new post that evolved into being the Chief Chemist to the War Office. In 1865 he obtained a patent that by amalgamating all the previously attempted washing mechanisms allowed the production of a satisfactorily stable high explosive. The nitrated cotton was pulped by passing between rollers fitted with knives to break up the physical structure and so ensure that the washing and neutralising process did remove all traces of the acids and impurities. His assistant E A Brown discovered that mercury fulminate was a very efficient detonator of dry guncotton that would itself detonate wet guncotton. The latter could be stored very safely and compressed into

high-density blocks capable of being machined to shape, obviously of great importance for military munitions.

Abel's principle interest was in military explosives but he suggested mixing guncotton with sodium or potassium nitrate to make a less powerful but significantly cheaper blasting explosive. The "Cotton Powder Company" of Faversham had been set up to make an explosive made from a mixture of guncotton and sugar (Pushon's Powder), which was unsuccessful. In 1873 George Trench the manager developed an explosive called "Tonite" a mixture of 50% guncotton and 50% barium nitrate. The barium compound raised the density of the mixture so giving a greater weight of charge per inch of shot hole, the oxygen from the nitrate combined with the carbon released from the guncotton to increase the total energy produced and also reduced the amount of poisonous carbon monoxide and nitrogen oxides produced by blasting. The wet guncotton was mixed with the barium nitrate and pressed into either cylindrical cartridges or blocks, dried, dipped in wax and finally wrapped in waxed paper. As the explosive was dry it was simply fired using a detonator and the Cotton Powder Company soon set up its own detonator factory. Abel's success in stabilising the high explosive element is witnessed by the fact that the railway companies carried Tonite under the same conditions as they did gunpowder whereas they would not carry dynamite. It had considerable success in mining, (to a large extent in Cornwall) quarrying and civil engineering (the Manchester Ship canal, demolition of bridges on the Great Western railway between Reading and Twyford prior to the doubling of the line) being particularly prized for the low level of fumes produced. Witness the evidence of

Thomas Walker in charge of driving the Severn railway tunnel "For blasting in the works, Walker exclusively used Tonite made by the Cotton Powder Company. It was selected as it gave off less noxious fumes than any other explosive. Tonite was also unaffected by cold or moisture and was conveniently packaged". The explosive was manufactured in the USA by Duponts, being virtually the only nitrocellulose explosive produced in N. America.

Fredrick Abel went on to play a leading role in the development of cordite, the only propellant used by the British forces from the Boer war until after the 2nd World war, being rewarded by a grateful nation with both a knighthood and a baronetcy.

From the evidence of use of Tonite at Rampgill the Vieille Montagne must have been persuaded of its superior qualities as were many others since the Cotton Powder Company worked well into the 20th century before passing into the omnivorous maw of ICI's Nobel Explosives division (Tonite was still being made in 1950 although by ICI at Ardeer in Scotland). It would be interesting to know if the miners of the North Pennines had as great a confidence in the explosive as did the Cornish since it is recorded "The Captains have been in the habit of lighting a piece of Tonite and making a torch, which gives a fairly strong light"

References:

- G I Brown "The Big Bang A History of Explosives" Sutton Publishing 2002
- J Akhavan "The Chemistry of Explosives" The Royal Society of Chemistry 2001
- B Earl "Cornish Explosives" The Trevithick Society 1978

The British Government and Australian Mines Close the Lake District Zinc Mines

A friend of mine once remarked that newspapers are a great source of information and since my research on Patterdale started, I have gone through every page of the Cumberland & Westmorland Herald, which is based at Penrith in Cumbria, from 1865 to 1965, so only another 38 years to go. I have noted every reference to Patterdale and also any other mining activities, I now have hundreds of references. One of the most interesting is that of the British Government and the Australian mines being responsible for the closure of the Lake District Zinc mines.

In December 1920, Thornthwaite mine closed due to the depressed price for Zinc, but the pumps were to be kept going and a small staff retained, so a start could be made if prices increased. During the summer Force Crag mine had stopped Zinc production and Threlkeld mine had suspended all production, but men retained in the hope that prices would soon rise. At this time the British Government was buying Australian Zinc ore under an arrangement made at the end of the first World War and the Board of Trade had resolutely refused to include the home mines in the contract. Thus allowing them to go bankrupt, while the British taxpayer financed the Australian producers.

In early 1922, a newspaper article reported that the British Government was actively stimulating the output of Zinc from Australia, granted under a contract until June 1930, at a price fixed without relation to either the market value of Zinc or the demand for the ore. We paid the following amount of money to the Australian mine

owners: in 1918-19, £1, 221, 859; 1919-20, £490,137; 1920-21 to March; £151, 951 - a total of nearly £2,000,000. A Sir Robert Horne entered into a verbal undertaking that the huge stocks in Australia would not be sold under their cost price. The British owners were thus safe guarded to a large extent, as to deliver the Australian ore to the British smelters would cost at least £8 and if the interest was added, much more. This undertaking was dishonoured and in the autumn, the Government decided, that they would sell the ore at a nominal price of 75s, just a shade more than the cost of the transport.

This was a crushing blow to the British industry and efforts were made to avert it, but without success. The Government hoped that they could stimulate the production of the Zinc ore and thus create a certain amount of work. They had decided to carry the Australian mines on their shoulders and add the heavy weight of the smelting industry. They undertook to provide the Zinc ore required at home from their previously purchased stocks and to sell it at a price less than half the cost. The only arrangement left out of this pleasant arrangement was the home mining industry. When the matter was put forward, the President of the Board of Trade held his breath with horror "You are actually asking for a subsidy, a policy that his Majestys Government can never sanction" He said in effect, "I am very sorry for you, but if you cannot sell your ores at half the cost, as the Government can and is doing, you must permanently shut close down, or at any rate close down until you can manage to see reason". It now became evident that the Government saddled with this contract, of which they were seeing the absurdity, were determined to crush the home industry, as being in competition with their selling

operations and having the tax-payers pockets to draw upon, and confident that the tax-payer would not take the trouble to look into the matter. Every Zinc mine in the country had now closed and the tax-payers were having to find over £100,000 per month to meet the requirements of the Australian mines. The Geddes committee puts the losses for the contract at several millions. There was no desire to exaggerate the importance of this small industry, but the fact that it was small was the reason why it was impossible to obtain any redress.

In January 1924, Mr George Marple, head of Marple and Gillot, steel manufactures from Sheffield and Mr A B Wilson, Thornthwaite Grange started to develop Threlkeld mine, it had been idle since January 1921. There was even a proposal to build upwards of 50 houses in the village, to house the workers. However by October 1928 the last British Zinc mine closed, it had been employing 44 men and boys and paying a weekly wage bill of about £110. Output had been 1000 tons per year.

The reason why the contract was drawn up in the first place was that, before the first World War, the Germans had acquired a monopoly of the Zinc industry and with a view to breaking this up, the British Government during the war took over the Australian Zinc stocks, which had accumulated and to buy purchase the supplies from the mines for ten years after the war. The Government promised the British suppliers that they would be treated favourably and in any case the Zinc ore would not be sold under a cost price. Neither of these promises were kept. The Government persuaded the British smelters to buy all their ore from them and the smelters would re-organise their works to deal with the powdered Australian ore, instead of the granulated British ore, which would allow them to purchase the ore at below the cost of production. The home mines could not

compete, other than on the world market. However the Government unable to dispose of the ever increasing quantities of Australian ore entered into that market too. They flooded the Continental market with ore and were selling to anyone, who would buy it, including the Germans. In 1927 this represented a loss of £ 2 17s 2d a ton.

The whole matter had been debated in the House of Commons on the 21st February 1922, where it was put to a vote, to help the mining industry, however the Government whip was put on and the motion to help the home industry was defeated by 167 to 79 votes and so the closure of the British Zinc industry was completed, this made the decision to re-open Threlkeld mine in 1924 a brave one.

Warren Allison.

Threlkeld Mining Museum Open Day

It had long been my intention to visit the museum, and prompted by the last newsletter I duly went along. COMRU was there, apparently they practice

Threlkeld Mining Museum Opening - March 2003 -



regularly here, and, as time went on, so were many other people. Ian Tyler was out at Glenderatera Mine in the morning, so the official opening could only happen on his return. Everyone then piled into the shop for a very good feed and a look at the museum. I have to say that what was in the museum would do justice to a building twice the size – well worth the visit.

Mark Simpson.

CUMBRIA AMENITY TRUST MINING HISTORY SOCIETY

Committee Meeting held on the Monday 12th January 2003 at the Rise, Alston.

Agenda.

- | | | | |
|----|--|----|----------------------------------|
| 1 | Apologies for absence | 2 | Minutes of the last meeting |
| 3 | Matters arising | 4 | Secretary's Report inc. NAMHO 04 |
| 5 | Treasurer's Report | 6 | Membership Secretary's Report |
| 7 | Meets Secretary's Report | 8 | Newsletter |
| 9 | Publications | 10 | Library |
| 11 | Coniston Coppermines | 12 | Hudgillburn |
| 13 | Date and venue of next committee meeting | 14 | Any other business |

Present S. Barker (SB), J. Aird (JA), I. Matheson (IM), J. Brown, P. Fleming (PF) ,& M. Mitchell (MM).
The meeting commenced at 4.30 pm. 6 members in total attended.

1 Apologies for absence from: M. Simpson (MS), D. Bridge (DB), M. Scott (MSc), J. Knowles (JK) & A. Wilson (AW).

The meeting arranged for the 6th Jan. had been cancelled due to a combination of the Chairman going into hospital and bad weather.

2 Minutes of the last meeting

The minutes of the committee meeting held on Monday 11th November had been previously circulated to members. It was PROPOSED by IM and SECONDED by JA that the minutes be signed by the chairman as a true and correct record of the proceedings. This was carried unanimously.

3 Matters arising

3.1 Item 3.1 JA had sent IM an article to put in the NL regarding underground scheduling, to be done as part of the English Heritage's Monuments Protection Programme. This gives details of how to go about applying to get a site scheduled. If any member thinks we should suggest a site to EH, please contact the secretary with the required information, which will then be discussed at the next committee meeting.

3.2 Item 8 R. Flewer had asked for 3 free copies of Journal No. 5, he had paid the postage costs himself.

3.3 Item 3.5 The Local Heritage Initiative Funding would be discussed at the next meeting-Action J. Aird.

4 Secretary's Report

4.1 The secretary and treasurer had received an email from A. D. Cameron (ADC) regarding points raised at the AGM. He felt members should make more effort to the sell our books. Problems had arisen due to book sellers preferring to buy from wholesalers. Committee members were about to start visiting book shops for the usual pre Easter round. PF would also try Cumbria Books (who have several book shops in the Lakes) and MM would visit PR Books. IM would put a note in the NL asking members if they would try their local book shops or railway outlets.

4.2 ADC had already put about 50 hours work into the re-draft of 'Slate from Coniston', with about the same time required to finish the work, and thought it only fair the society got an effective selling operation going.

4.3 NAMHO 04 planning meeting would now be held on the same day as the next Committee meeting.

5 Treasurer's Report

JA presented a balance sheet for the period 31st October to 31st December which included:

- The current a/c now stood at £1092.72 and the building society (Scottish Widows) a/c at £8600.00
 - The Christmas dinner had made a profit.
 - Total donations for Journal No. 5 now amounted to £421.
 - £55 had been spent on SRT equipment/40m rope (which the BMSC had agreed to fund).
 - Income from publications had been £866.98.
- 5.1 The Archive insurance had been renewed.
- 5.3 Subscriptions paid £588.
- 5.4 SB asked if the committee would agree to the society buying a copy of Microsoft Office Professional for her use for the administration of the NAMHO Conference. It would mean that a flow chart

could be used for the bookings and it would be a lot easier for SB to pass information around the membership. The software could be purchased at a special registered charity rate. All were in agreement. IM thanked JA for recording different categories of postage and printing separately on the balance sheet.

6 Membership Secretary's Report

IM reported that there were now 90 paid up members, the usual reminders would go out. There had been two new members recently, Alex Thompson and Ann Strange.

7 Meets Secretary's Report

Two additional meets to go on end of the current list:

1) 27th April to Goldscope.

2) 18th May to Caudale Quarries. They would be noted in the next NL.

Trips for the next meets list would have to be decided at the March committee meeting.

8 Newsletter

IM reported that next NL would be going out soon and he would like any copy next week. JA had done an article on the present state of the 3rd party insurance.

9 Publications

IM gave his ideas regarding the next CAT publication, to celebrate our 25th anniversary, a new field guide of all the mining area's in Cumbria. To be a walking and car guide for the general public. To be discussed again at the next meeting.

The CAT Publicity leaflet was with D. Sewart, a decision between having it printed professionally or printing small amounts ourselves when we need them, had to be made.

10 Library

Due to a change in circumstances the CATMHS library and archive has to be moved. The John Ruskin Museum at Coniston has kindly offered to store it temporarily for us. PF to hire a transit van to remove the contents to Coniston. JA will inform insurers of change of address. A day to be organised to go through the contents ASAP.

11 Coniston Coppermines

PF reported that the LDNPA had finished the repairs to Miner's Bridge and Deep Level Portal. He had received a letter from Carter Jonas (land agent to Rydal Estates) saying they had gated Old Engine Shaft, Thriddle and Glory Hole. He had sent a key and asked who else should be given a key. COMRU to be suggested.

11 Hudgillburn Mine

There had been three meets at Hudgillburn since the last committee meeting, JB reported that it had been decided to remove the overburden from the level as this would make re-arching easier. When most of the overburden had been removed it became obvious that the miners had originally dug a wide channel in the bedrock and then built the arched level in the channel and covered it. This means that our fear of the bank collapsing can not happen, which was very good news. SB asked Walter Fryer (NPHT's building foreman) to visit HGB and advise us on the re-arching and to estimate how much stone we will need. He will return when we have cleared the level to give instruction on arching.

Work on the ladderway in the rise up to the Cavern will continue in bad weather.

12 Date and venue of next Committee Meeting

To be held on 17th March 2003 at the BMSC Hut, Coniston, at 3 PM. This is to allow time to discuss The NAMHO CONFERENCE, the next MEETS LIST, plus the usual meeting, with a break in the middle to eat.

13 Any other business

13.1 SB to write to the LDNPA, Northern Area with details of the CAT meet on 2nd March.

13.2 SB reported that John Helme has been in hospital with a heart attack, the committee asked that their best wishes for a quick recovery be sent to him.

There being no further business the meeting closed at 6.30pm.

SB 18/01/03

Acting Chairman
P. Fleming

CUMBRIA AMENITY TRUST MINING HISTORY SOCIETY

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Vice President:	Major J.W.B. Hext
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Honorary Members:	Sheila Barker, Peter Fleming, John Marshall, Mike Mitchell, Dave Bridge.