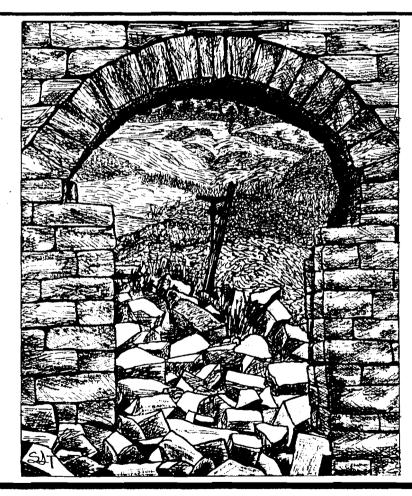


No 40 OCTOBER 1994



The Newsletter of the Cumbria Amenity Trust Mining History Society

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DAVE BLUNDELL

It is hard to believe that almost two months have passed since Dave Blundell decided to rest in the sun at Hudgillburn Mine before joining in a dig, and soon afterwards quietly but tragically passed away in his sleep. Dave was one of the earliest members of CAT and it would be hard to find a person more deeply interested in mining history or more actively involved than he was. A meet without Dave's company was a rare thing and the fact that his presence is still felt by so many of his friends is a sure indication of his popularity. Not only was Dave extremely well-read on the subject of mines and their history but his firsthand experience was second to none, and above all he was more than willing to impart his knowledge to anyone who cared to engage him in conversation. And his interest was not confined to the Lake District where he spent much of his working life. He was a frequent visitor to Wales where he had projects planned, and one would be hard pushed to find a site anywhere in the country that he either hadn't visited or couldn't elaborate on. His encyclopaedic knowledge was matched by his meticulous record keeping and for four years, from 1986 to 1989, he was secretary for the society. At the age of 41 he is a great loss to all who knew him well and our thoughts go out to his wife Cathy and to his daughters Susie and Linda.

Dave Bridge

A Tribute to Dave Blundell

It was with disbelief and shock that I read of Daves sad and untimely death in September News Sheet. Dave was an extremely popular person, always the first to greet you and your family. A true friend and walking companion. We often accompanied each other on the field trips (always arriving last). In him I found instant friendship, engaging conversation and complete understanding and appreciation of the surroundings.

He will be sadly missed by all and especially by my family and I.

Richard, Eileen and Steven Hewer.

Tribute To Dave

During the period 1984-91 a group of us formed a company to try and refurbish Force Crag Mine near Keswick. Many people gave us practical help, Dave Blundell was one.

Dave turned up most week-ends to help with this project which had inspired his imagination. The work was arduous and dirty but Dave undertook any task with enthusiasm and selflessness. Those who worked with him enjoyed his wide range of knowledge not only of mining history and politics, but Dave had an informed opinion on most subjects and great sense of humour.

I am sure that I speak for all those who worked with Dave at Force Crag in thanking him publicly for all the selfless effort he put into this project.

Thanks Dave it was a privilege to have worked with you.

This tribute is sent on behalf of all those involved in the Force Crag Project Peter Blezzard and Ann Danson September 1994

Society Notes

This newsletter will reach you a bit later than intended, for several reasons, the main one being that until near the end of September few people had sent material in for this publication. It was said at some committee meeting that the newsletter should come out four times a year regardless of how little is in it, well, it is a point of view, however, since Alistair now produces the News-Sheet and looks like doing so for the forseable future, this aspect of disseminating information has been taken care off.

This leaves one wondering about the role of the Newsletter vis-a-vis the News-sheet and the Journal. I happen to think that three time a year would be better, so that there is less chance of copy starvation, and so continue to make it a thing worth producing.

By the way the other reason, is that I was building my own computer, an interesting but not difficult experience. (For those interested it will be a 386 DX40 with 170MB IDE HDD, 5.50 ins 360Kb and 1.44Mb 3.25ins FDD's. with 4Mb Ram.)

Wood was considered but, would take too long, Babbage in 1830 tried out of metal and did not succeed, due to the technology of the day not being up to his requirements. This

'computer' has now been built and works as intended, anyone who has seen this thing in action cannot fail to be impressed by the mechanical beauty of the device. It is not to fanciful to think of steam driven computers in operation a hundred years ago!

More relevant items: English Heritage are going to a rebuilding job on Red Dell water wheel tower, and other works. We got a complement about our efforts on the coping stones of the associated wheel pit, but our efforts in other directions were not appreciated. One is tempted to say that time and the hand of man is no respector of Ancient Monument Status, and that surely we as a Society can not just sit around and just let these monuments crumble into dust, without trying to do something, however little it is.

There is more than one C.A.T. in the world, there is the Centre for Alternative Technology in North Wales. I went there last summer, and their pride and joy is the water balance passenger incline. After seeing the displays of water and wind power I could not help thinking that mining concerns had done most this over a hundred years ago, yes, even the odd windmill. A book perhaps - mining and alternative technology?

Diary Dates

Remember the Newlands Furnace Meets

Social meets Every second Wednesday of the month at the Farmers Arms Lowick.

5 & 6 November Hudgill Weekend

20 November Coniston- Field Survey of Slate Workings on Coniston Old Man.

Meet car park at SD 289971

27 November Hudgill

4 December Levers Water to Grey Crag Level - Coniston

11 December Christmas Dinner and AGM at Yewdale Hotel

Coniston. Guest Speaker Richard Hewer

26 December

Boxing Day Dig -- Bouncy Mine -- To complete the investigation started earlier this year. Meet Coniston BMSC Cottage

Members are reminded that Motions that they may wish to put to the AGM should be received by the Secretary of the Society 1 calender month before the AGM.

If you have not received your Journal it is because:-

- A) You have not paid your subs (It is now about that time again for members to pay up for next year)
- B) You have changed your address and not let the membership secretary know. Mr Shane Brunker are you still there?

FORTHCOMING MEET

There will be a meet on Sunday 20th November at Coniston which will consist on a walk over Coniston Old Man and some underground exploration of the slate workings on the mountain. The meet will be lead by Alastair Cameron who is currently researching a book on the history of the slate industry in Coniston. A considerable amount of interesting detail has been uncovered about the workings. The trip would be very suitable for families.

WANTED URGENTLY

Demolition Contractor to start work immediately in Coniston. Please reply to the editor with full particulars, and details of experience, quoting reference PJ.

Meets Reports

GREENHEAD GILL 3rd JULY 1994

The aim of this meet was to complete a survey of the surface remains in Greenhead Gill which are thought to be at the site of the Grasmere lead mine known to have been worked for a short period in the 16th century. The backbone survey which extended about 200 yards up the gill covering two apparent areas of mining activity had been carried at a previous meet, and so on this occasion it was a matter of filling in several details, including the open works at the upper end of the site and a terraced area lower down. The meet was described as "easy" and few were prepared to disputed this, beguiled by the warm sun and the peaceful atmosphere of the deep valley. In fact lunch was described by one member as "the longest rest we've ever had on a CAT meet!". Could it be a symptom of age, or are we just getting wiser?

Dave Bridge

Coniston Exploration July 17

This account is just for the record. A goodly number turned up at the BMSC Hut for the days events, Mark Simpson, Mike Mitchell, Peter Flemming, Angelar Wilson, Clive Burrow, being amongst them. There were others but I cannot remember now who they were.

The days project was to investigate whether there was any connection between the bottom of Bouncy Mine and any of the levels adjoining Triddle Shaft. The origin of these speculations was an old mine section plan that Peter had seen.

It was a nice day and we all trudged up to the site ladden with gear for the days operations. The shaft down to the Bouncy Mine adit level is just inside the obvious cleft in the rock above the old mine entrance, and is about 70ft, not far. What there was at the

bottom, which was not much, was soon looked at so it was concluded that the most promising area was right at the bottom of the shaft, where all the spoil was. It being noticed that there was a foot of water inbye of the shaft and none outbye.

This area received all our attention for the rest of the day but without any conclusion, another session will decide the issue one way or another.

Mike said on the day that when CAT dug open the top of the shaft many years ago, they found that it had been well covered over and it had been a major muck shifting excercise to get in. It is likely that if there is a way on down, the shaft will be similarly well boarded over.

NAMHO Field Meet 1994

Forest of Dean

I went down on Friday night like most other people but, unlike the rest staying at the campsite I arrived at about 6.00 in the evening, the others in the small hours of Saturday morning, and noisy with it. The campsite was the Forestry Commission one, and once the tent had been erected on the NAMHO allotted bit, I could see that as sites went it was large and that there were 'hundred's of campers there.

First thing to do was to go round to Clearwell caves and book in, a relatively painless experience and with the benefit of a nice tea room. A look at the board indicated about 70+ people were coming on the weekend. I cannot remember much about the rest of the evening but it seemed to involve looking for the pubs mentioned in the handouts i.e Where the Pig Roast was going to be held (Miles and miles away) and The Dog and Muffler.

The first was straight forward, the only remarkable thing being the sheep, great big things much given to lying by the side of the road looking dead. The second said to be within walking distance took nearly a hour to

find down some little winding lanes-- Unusual place I saw some things there that I never saw before.

The night passed, interrupted by the noisy mining people and it was back to Clearwell to start the days events which in my case was a through trip in the Clearwell Mines Complex

Our leader was 'Mole'a very distinctive personage much given to wearing shorts underground, must have iron knees. (This character arrived on what appeared to be a motor cycle/side car combination of distinctive design.) He gave us to understand that the rest of group (about 8 people) were some what over dressed for an arduous trip in a dry mine. (He was right). We started of at half ten and kept on going right through the day. He also took a safety lamp just in case we came across something nasty.

For those of you who have been to Old Millclose in Derbyshire, well it was like that only dryer, a lot of irregular workings for iron disseminated in the 'Crease' Limestone. One of our number being wider than the rest had problems with some tight bits, this provided a breather for the rest of us.

The geology was interesting, if only one could have had time to study it, but, I now know what a Nellie is.

(A small ball of clay about golf ball size, with two holes in it, one for the candle, the other for a short piece of wood, the other end of which was clenched between the miners teeth.)

Come three in the afternoon I had enough, time was pressing, and as we were near the entrance to Lambsquay, about half the party made their way out and back over the surface to Clearwell. I do not remember much about where I had been as distinguishing features few, the visit being more of a caving trip in a mine rather than a serious attempt at mining history. Any way it was nice to get changed and have a cup of tea.

It was then back to the campsite for me and a shower, before heading off to Moseley Green, and the Rising Sun where the Pig Roast was being held and also the NAMHO Council meeting, which I said I would attend, as Sheila Barker (OUR NAMHO REPRESENTATIVE) could not make it. Also there was Chris Jones, for the NCA and Eric Holland For Earby Mines, Alistair Cameron, as usual was just going, after spending a interesting day down a Free Mine.

The NAMHO COUNCIL MEETING

The meeting did not take long but several points of interest did come up.

Correspondence had been received from the Department of the Environment with respect to the Working Party which was carrying out the Review of Natural Contamination, much of this contamination was coming from gases being pushed up by the rising water table caused by the end of coal mining activity.

Membership of the NCA should cease as NAMHO was not receiving any benefit.

In future NAMHO members should pay their insurance premiums direct to the BCRA. This would avoid the complication of the difference in financial years, save admin costs for NAMHO and ensure that member clubs received their Insurance certificates faster. It was noted that the current insurance period ended on the 30th October 1994.

Regional Important Mineral Heritage Sites (RIMHS)

The last NAMHO Council meeting agreed to establish a Working Party to investigate the potential of the RIMHS scheme. Geof Cox was particularly keen to promote this due to the demise of a lot of mines. A meeting to get this idea off the ground was held at Ecton Mines on the 9th of October.

The meeting over we joined the others as the Pig Roast was being fired up and the ale called. A pleasant evening then ensued, marred by the fact that we had to travel some distance back to where we were staying, unless you were lucky enough to have arranged a lift. The drive back to the camp site was uneventful, I did not get lost or crunch any sheep's legs.

Sunday: Back to Clearwell Caves and a slow cup of coffee in the cafe (This room is worth a visit by itself with all the artifacts on the walls and hanging from the ceiling), not forgetting to retrieve my lamp which had been put on charge by the proprietor (Many thanks). After a while Alistair and Family appeared, and it transpired we were to visit the same mine that morning. The Brinchcombe Limstone level, a stone mine, to where half an hour later a small group of us met up. Nothing world shattering about the place the early history being somewhat scanty. However for those who wish to know more, A Mr Arthur Price

has produced an excellent article on this mine.

The stone was used as a flux in the iron smelting process in the late 1800's. The mine consists of two parallel levels at right angles to the short entrance adit, the one nearest to day appears to have been originally stoped out to the surface along the line of a vein containing what Alistair later found out to be cobalt. It appears that after the mineral was either worked out or the use ceased that the mine was further worked across the dip of the rock, for limestone.

The visit did not take long and on our emergence we had a conversation with a travelling person sitting on the step of his residence just parked not far from the adit. He did not appear to be going far judging by the efforts of the Forestry Commission to prevent his doing so.

The intent then was after lunch to visit the nearby Perseverance Iron mine. Alas! twas not to be, just as I returned from lunch I was informed that this was not going to take place.

Fine! or some such words, it was bit late in the day to make alternative arrangements still an effort had to be made to retrieve the situation, so it was a mad dash back to Clearwell to see if any other trips were on. After a fruitless tour round the Forest Of Dean looking for a venue I gave it up as bad job and retired to camp site.

That evening was spent down the Dog and Muffler, (it is in long walking distance), where a pleasant evening was spent in the company of many who were attending the Field Meeting. Eric Holland told me a lot about early society history, which must have been a very different organisation in those days.

If you have never been there it is worth a look. The art collection on the bar walls. The head of a beast, it might have been a dog, with a yellow and black scarf round its neck, stuck on a board over the fire place. (It was so mournful looking across at the bar fifteen feet away.)

Monday: - another fine day and back yet again to Clearwell to arrange a visit to another iron mine, Wigpool this time. There was just four of us this time that assembled by a forestry plantation, the way in being a short walk into a wood. The entrance, Sway Hole, being a square stone lined shaft that opened out into the top of a large steeply sloping chamber floored with rubbish from the shaft,

some of it very sharp. This chamber was followed down for some distance into various levels and irregular workings. This place was more interesting and had time allowed it would have been nice to have seen more, as judging by the mine plane, the place is quite extensive.

Mid afternoon and it was all over ,an interesting weekend with plenty to see, and all in some very nice country side, which, in itself is well worth a visit.

My thanks to those who organisers and helpers for the occasion.

Next years NAMHO Conference is at Ironbridge,

Hudgill Burn, 17th September.

Despite a weather forecast that threatened to be stormy and wet the usual group of enthusiasts descended on Hudgill Burn for another dig. During the previous week heavy rain had fallen in the Northern Pennines and streams were in spate. We weren t sure what we would find but were prepared for the worst.

Work meets at our dig take on a set pattern. CAT s pump and associated equipment is collected from its keeper early in the day. The first people to arrive (who are usually the ones who have travelled furthest) clear the entrance and then start to pump out the mine. On this occasion the advance group were confronted by the results of storm damage. A stream above the mine had burst its banks and flowed down into the cutting at the entrance, taking much of the bank with it. The task of clearing it all looked daunting, but was soon completed. Meanwhile the usual pump crew of Cameron/Knowles started to clear the mine which was full of water virtually up to the roof. This took less than an hour and, after a quick check of the timbers at the dig to make sure there was no damage, the pump was removed and the digging team were rounded up.

Everyone got stuck into their allotted tasks. The cutting was fully cleared of storm damage. Anton, with the help of young Ian, constructed an aerial bucket flight from close to the dig in

the mine to a point where the wheelbarrow could be loaded, timber arrived and was unloaded and stacked, two more members constructed a track round the hillside to a tipping point, and Mark started to dig a hole in the ground at the end of the cutting.

As soon as the aerial flight was complete the digging crew could make a start. Our champion digger is Sheila Thomas. She likes nothing better than to labour away crouched in 1ft of water cutting through solid clay. No one else in the Society can match her. The new aerial hoist meant that it was very easy to clear the waste material from the dig site to the tipping point. Work progressed steadily, the digging team sweated and, outside, Mark continued to dig his hole.

Bucket after bucket of waste was removed from the mine. A brief halt was made for lunch and then work resumed. Mr Watson, the land owner, called to view the proceedings. He asked that we refrained from tipping close to the boundary wall. He was concerned that his beasts might be able to jump the wall easily. Outside Mark worked hard on his hole. It was getting quite deep now. Someone asked him what it was for.

At about 3:30pm those in the mine noticed that the water level had suddenly started to rise. It was getting dangerously close to welly-top height. Had it started to rain heavily? Those outside confirmed not. Then we noticed that water was seeping in through the mud walls of the level. A rapid exit was made and we discovered that an experiment had been in progress and was being wound up rapidly. It was all connected with Mark's hole which had, by now, got to about 6 ft in depth. He had dug down to the roof of the outer portion of the level which was badly blocked. A number of junior members had diverted the stream towards the hole which had readily filled up. The idea was to flush mud from the blocked portion of the level and this had been partially successful. It was a good idea but unfortunately water had also run the other way and had started to fill the mine.

It was now quite late in the afternoon and there was no point in getting the pump started again. It was a good time to call it a day. We tided up, secured the site and departed.

Later that evening, in front of the fire in the George and Dragon, we unfolded the mine plans and maps of the area and debated what

we were likely to find when the breakthrough occurs. There was a general opinion that there would be little problem with deep water behind the blockage and that a large area of ground should be opened up. But whether the Hudgill Burn Mine connects directly with the nearby Lovelady Shield system is something that we will not be able to prove until the breakthrough occurs.

Alistair Cameron

Brewery Shaft, Rampgill, Mine Nenthead September 1994 Meet Leader Ian Matheson

A good turn out of members for this trip, about 10 of us all told looking forward with interest to the descent of this nearly 300 ft shaft and a look at the engine rooms at the bottom. Mike Mitchell, Clive and Don elected for a lightening tour of Rampgill itself, whilst Sheila Barker decided to enjoy the good weather and study surface remains. The meet leader had his usual distinction? of arriving last.

All having kitted up and the required rope checked, we all trooped into Rampgill Mine. The shaft is not very far in and is the first turning on the right. The shaft, about 10-12ft in diameter is an impressive sight, dropping as it does vertical straight down, The fact that it is lined throughout and still carries large pipes down to the bottom increases the impression of great depth.

The number of people wishing to descend ment that a number of re-belays would be necessary, eventually three were put in, but on reflection 4 would have been better, there being no shortage of anchor points. Jon Knowles set of first with the dubious privilege of setting all this up. After the second re-belay had been set up he called the next man down Mark Simpson, to start down, and so the business of the descent was gotten under way.

The descent presented no problem, though serving as a reminder when one came to the change over of the necessesity of practice to render this process more easy. (On the way back up I thought this many times).

The bottom was a huge pile of debris (about 20 ft of it) off which one made one's

way round the large air receiver which is to one side of the shaft (Bell-shaped it is not). The damp nature of the shaft bottom plus the odd bit of debris still resting on various brackets in the shaft did not encourage lingering.

The main engine room is not far from the shaft bottom and is interesting for the fact that there is still something to see (a rare thing). What you have are the remains of:the Pelton Wheel (Top casing removed), a speed reduction gearbox (casing only), the remains of the compressor (crank shaft and flywheel) all on or near a big central engine bed. To one side is a work bench with many metalic odds and ends it. There is sundry pipe work from the receiver to the pelton.

The chamber between the shaft bottom contains many bits and pieces plus a lot of pipework, the main item of interest being a small double pelton wheel arrangement with a speed regulating device adjacent to it, the whole thing being almost intact. The pelton shaft appears to have been coupled to some form of electrical generator (now gone).

After looking round these areas, several members investigated a level that was cut across the back them and may even predate the engine rooms. Inbye was followed for a short distance over several falls, until the water got to squeaky voice depth. Down stream not far, was that rare thing, a water wheel, surrounded by the remains of its supporting structure and resting in the level bottom, what looked like a beam for some sort of pumping arrangement (If any one knows if there is a reconstruction of this device, it would be nice to see it.) Coming from above and to one side of the level was a small square cut shaft. Also at this point the level turns through approx a right angle and there are several wooden bodied ore trams. Beyond this point the water level is progressively deeper, though one must assume that it must eventually drain into the Nent Force Level.

After taking the obligatory photo's the group I was in made its way back to the main engine room for lunch, and await for the last people to descend the shaft.

Jon Knowles being first down, was first up, I was second, and a lot slower. After the first 50 ft I was regretting the substantial breakfast consummed that morning. After the first hundred I was wishing that I had taken up weight training. By the time 200ft had been reached the end was in sight and by now all my bits and pieces where starting to work in co-ordination. Still I was glad to complete the ascent. (By the way did anyone notice a level

coming in behind the pipes about half way up the shaft?).

My apologies to those below me waiting patiently for their turn on the rope.

It took sometime for the rest of the members to ascended, it was a strange sight watching people making their way up , with the lights illuminating the shaft.

This process was not helped by someone pressing the self-destruct button on his harness about 50 ft up the shaft. As fortune would have it Jon had a long rope in his van and there were enough bodies at the top of the shaft to arrange a pull out. The alternative would have ment belaying the indiviual concerned to a suitable position, freeing the main rope and then hauling him out, a tedious process.

Still, the moral of this is that:- SRT is a serious business and mistakes can cause a lot of grief and aggrivation, to you and people with you.

All in all the end to an interesting day and a good weekend.

Mark Simpson

(Ian Matheson wishes to point out that the meet was graded severe, and although the Meet Leader has the final say on who should come on a trip, he feels that members attending should ensure they are capable, and not put the ML in the position of having to refuse them.)

Extract from:- The Nenthead Lead-Mines and Works of the Veille-Montagne Zinc Company 1913. An article from the transactions of the North of England Institution of Mining and Mechanical Engineers 1912-1913.

The water is conveyed from two reservoirs, in pipe lines to the top of Brewery Shaft, which is sunk from the surface, ar alous a total depth of 328ft, on which a water tower about 90ft ft high has been erected. The water enters a verticle pipe line, and reaches the tower by its own efforts to find its level. The pipe-line is here connected by a bend to a downfall line, also in the tower, near the top of which line is a system of holes and small internal pipes which admit air. A quantity of air is thus sucked in by the descending coloumn of water, and conveyed to the bottom of the

shaft, where it flows into a bell shaped receptacle, there separating from the water and rising to the top of the bell. The water escapes through an ascending pipe in the shaft to a height of about 200ft, and creates the back-pressure necessary to compress the air to a pressure of 90 psi. The water from this third pipe line, with its fall of 200 feet, is brought down another pipe-line, and used to drive the Schramm compressor at the bottom of the Brewery Shaft, where it finds a natural outlet through the Nentforce Level. This hydraulic compressor produces about 13 cubic metres of air for a consumption of 6 cubic meters of water per minute.

The complete article is in our library.

HUDGILL BURN MINE (A few notes)

Hudgill Burn mine 1812-1870 John Walton and James Pearson (formerly of Flowedge mine) drove Hudgill Burn level in the shale beneath the Great Limestone. After driving a thousand ft they cut two weak veins and made a trial into them. They drove levels 500 ft to the N.W. with rises into the limestone, but found no ore. After continuing the main level another 500 ft, they gave up. They had sunk two shafts from the surface and a sump into the Four Fathom Limestone. They also drove the North waggonway N.W. for 1300 ft, without finding any ore. Sopwith estimated the cost of these works at 1,929, they abandoned the mine in 1808.

John and Jacob Wilson obtained a grant for the mine in 1812. They drove the level forward on a new S.S.E. heading (the South waggonway). In April 1814 they cut a vein 2 ft wide, followed by another 120 ft further on. A rise was made into the low flat horizon of the Gt. Limestone. To the east the veins converged and the Hudgill Burn vein became what was probably the richest vein on Alston Moor. Three hundred feet beyond this vein, the level cut the Hudgill Burn First Sun vein (in about 1816). Here a rise into the limestone revealed a spectacular cavity that extended 1000 ft bearing to the S.E. The North waggonway was

extended 600 ft to the west in 1820, along the level originally driven by Walton and Pearson but no trials were made. Also in 1820 an unsuccessful trial was made from the Nent Force level, starting at the Lovelady Shield shaft to the Jacob Teesdale's vein. In 1825 they drove a short-cut circuit crosscut 600 ft from the portal, to make access to the workings easier. By 1830 they had cut the Fourth Sun vein and holed into the Galligill Sike workings. By 1834 the 'bonanza' days of the Hudgill Burn mine were over. Production on a smaller scale continued till 1870, when the mine closed.

There have been eight workmeets at Hudgill Burn mine since March of this year. The work is going well, the site looks very organised with it's bucket ropeway operational and the whole site enclosed in a good fence, to keep the beasts out and the landowner happy. At the recent committee meeting we discussed our plan of action for the day when we break through the fall (soon I hope). We intend to make an extensive photographic record before the hoards trample clog prints etc. to oblivion. To continue in this vein, we dug deep into the CATMHS files and dusted off the 1987 Policy on Artefacts found in mines on CATMHS meets (see below). Ideally the artefacts should stay in situ and the mine secured. The mine is situated on private land so there will have to be access control in accordance with the landowners wishes.

> Sheila Barker. 23rd September 1994

ARTEFACTS FOUND IN MINES ON CATMHS MEETS 1987

The Policy of the Trust is that artefacts found on CATMHS meets shall become the property of the Trust. It would be preferred that the artefacts are left in position undisturbed. A photographic record should be made and the details given to the Meet Leader. If it is not possible to take photographs at the time of the discovery and it is unlikely to be disturbed, it should be left in place until it can be recorded. If removed, it may be held in the possession of the discoverer, provided he/she is a CATMHS member and has suitable storage facilities. This arrangement is subject to the condition that it may be recalled for display at some future date.

Roanhead Survey Meet 21st August

Present: P.Timewell, A.&S. C.P.Thomes, P.Sandbach, D.Robson, D.Bridge, S.Barker.

Anyone doubting the need for a survey of iron mining relics in Furness need only take a walk along the Dalton Bypass. From West to East, there is:

Thwaite Flat Iron Mines, now the site of a golf driving range.

Site of Park and California pits, long gone to build a rubbish tip.

Greenhaume Mines, where the site of a ginring and magazine have recently been flattened, and Green Haume open works filled with bypass spoil.

Elliscales No4 engine house without it s slate roof, and No6 sop, which has been filled with bypass spoil.

A sop near the Rifle Pits, filled with bales of silage.

Site of Gill Dub shaft, flattened in a fruitless search for topsoil.

The survey aims to measure, photograph and record all items of mining interest, particularly buildings and engine beds. So far, the rate of progress is roughly equal to the rate of attrittion.

Our first target of the day was a mine store, the only building left at Kennedy Brothers administration and maintainance centre. There are no buildings shown here on the 1850 OS map, but an estate map of 1877 shows the cluster of buildings as it stood until recently. Besides the store, there was a cottage, reservoir, locomotive shed, fitting shops, etc sawmill, kennel, smithy, joiners shop, stable, the engine and boiler house of No1 pit, and the office from which it was all

run. On some later plans, part of the store is marked off as a pumphouse, but I presume this means a pump store, or repair shop. The 1877 map shows a brickfield where Kathleen Pit changehouse is now, and a limekiln, giving rise to the speculation that these buildings were made from materiels already on site. Although the 1877 map shows no activity around Rita sop, it does show No1 (Plunger) pit, No11 (Garden) pit, and No16 pit, of which more later.

The second target of the day was an engine bed at Sandscale No1 mine. Chosen for it s curiosity value, this massive sandstone engine bed seems out of proportion to the scale of the mine. Having taken all the measurments on the sides, we started clearing the tops of the engine beds of rubble and vegetation, ready for another photographing and measuring session at a later date. To end the day we went looking for a magazine shown on the 1895 OS map, and found two. A good time was had by all, and we returned home with moderate sunburn and midge bites.

Sandscale Mines- A Querie

According to the Lancashire and Westmorland mineral stastistics, the Sandscale Mining Company appeared in 1883, and produced 66000 tons of ore over the next nine years. From 1893 to 1905 the mines were worked by Kennedy Brothers, and the production included in the Roanhead return. From 1905 to 1932, Sandscale No2 was used as a pumping station to protect Rita and Nigel pits. Uniquely among the Furness mines, Sandscale No1 had it s own branch line. Not a mineral railway but a fully engineered branch of the Furness Railway, it was opened in 1882 and maintained until 1934. Allowing another 66000 tons for the Kennedy years, the total traffic on this line would be 132000 tons. plus 9411 tons of unsalable ore, which was sent off between 1905 and 1931. This was not a proffitable branch. Various sources recall engines being stabled at Sandscale, and that the loco driver lived at the bungalow here, but is is usual to build the railway to the engine drivers house?

The End of Plunger Pit

Barrow Records Office contains a book of mine reports in which Mr J.T.Rigg, and his successor, Francis W.Rabey report monthly on the state of Roanhead mines, from 1903, until the closure of Nigel pit, in 1942. Their employer, Wadham & Co, reports annualy to the landowner, the Sandys family of Graythwaite. This article is based on those reports.

In working an iron mine, the first shaft is sunk before the extent of the deposit is known. If the site proves to be too close to the ore, then pillars of ore must be left to support the shaft, or a new shaft will have to be sunk at a greater distance from the deposit, to work the next level of the mine. In his reports on Nigel Pit, Mr Rigg describes how this should be done.

When the reports start in 1903, the extent of the deposit is not known, but five teams are driving haulage roads to the limmits of the ore. Plans are being made to move the farmhouse to its present location, the air shaft is being sunk, and in a rare moment of criticism, Mr Rigg reports: "They are taking out groundwork for a new drawing engine at Nigel, but I am sorry to say that it is little better than the present old scrap they have working." By February 1904, the new engine is working, the air shaft connected, and 13 teams are at work.

The first mention of Nigel No2 comes in October 1905: "They are starting to make a new tramway towards the site for the proposed shaft to work the Nigel deposit from, instead of the one at present in use." Shaft sinking started in April 1906. By 1909, Nigel No2 had been sunk to the 90Yd level, with haulage roads driven to the extent of the deposit, and rises driven to meet the Nigel No1 60 Yd level. This left little work to be done until November 1911, when Nigel No1 was worked out to the 60Yd level, and Nigel No2 90Yd level became the new haulage level. The Nol shaft was used for lowering timber until 1918, when the headgear was taken down, but the shaft kept open for ventilation.

The same series of reports shows how a similar operation should not be carried out. Plunger pit worked the Western tip of the Burlington sop, where it passed into the Roanhead royalty. This ground was also worked from No11 (Garden) pit and No16 pit.

No16 closed in 1882, and No11 about 1885. At the start of the report book, there were three teams in No1, taking the last of the ore from the 90Yd level. (But estate map Z2941 shows No1 pit deepened to 110 Yds in 1882!) By October 1903, this is reduced to two teams, and in May 1904, the pit is closed. The intention was to clear out and reopen No16 shaft, to work the same ground at a deeper level

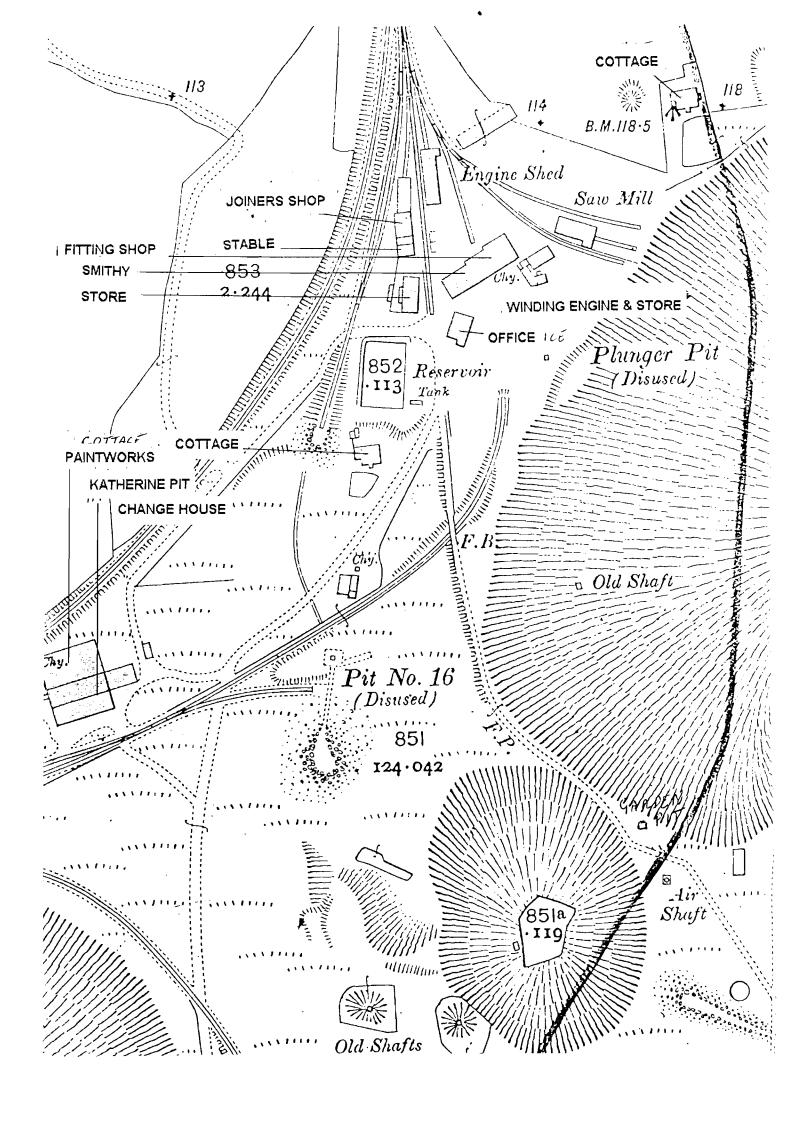
At the same time as the development work at Nigel pit, there was extensive work going on at Rita sop. The Hathorn Davey engine was being installed at Violet pit, which was to be the main pumping station. A new drawing engine was being installed at Rita pit. In June 1905, Mr Rigg states: "They have started to pull out the old drawing engines at Rita, and propose to erect them at No16 pit. They have got the headgear up ready for reopening and repairing No16 shaft, and are busy erecting the drawing enginer at Rita."

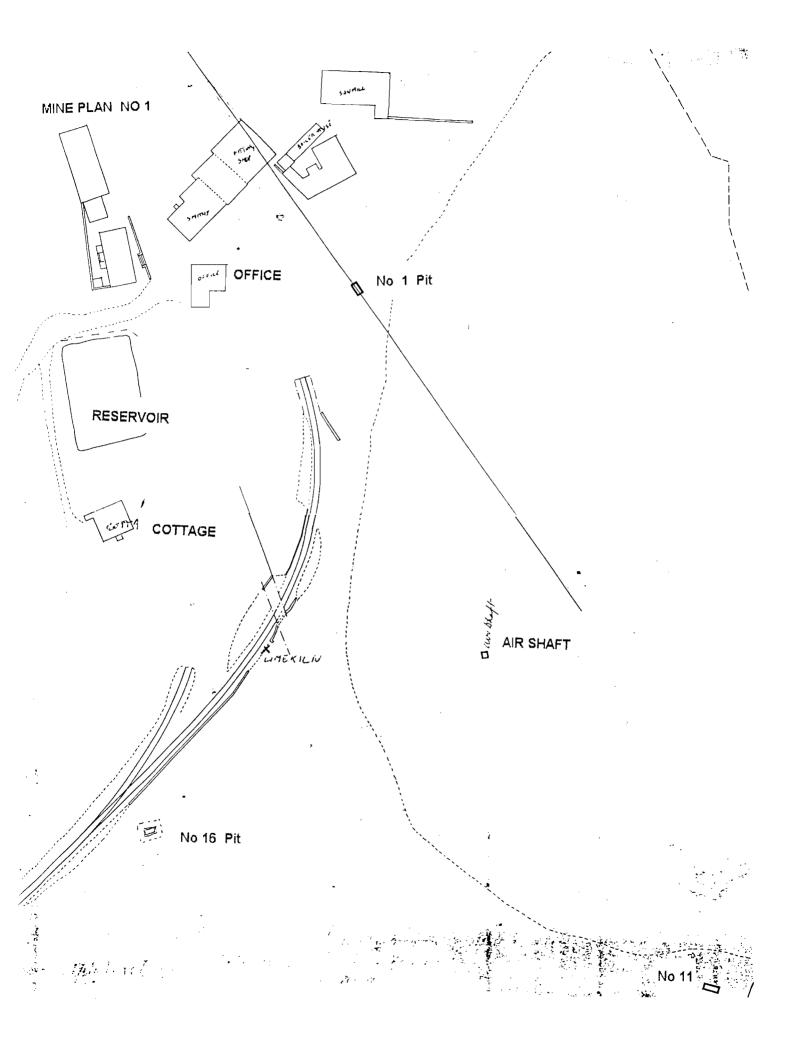
In April 1907, No16 shaft has been sunk to 205 Yds, and is driving out to the ore.

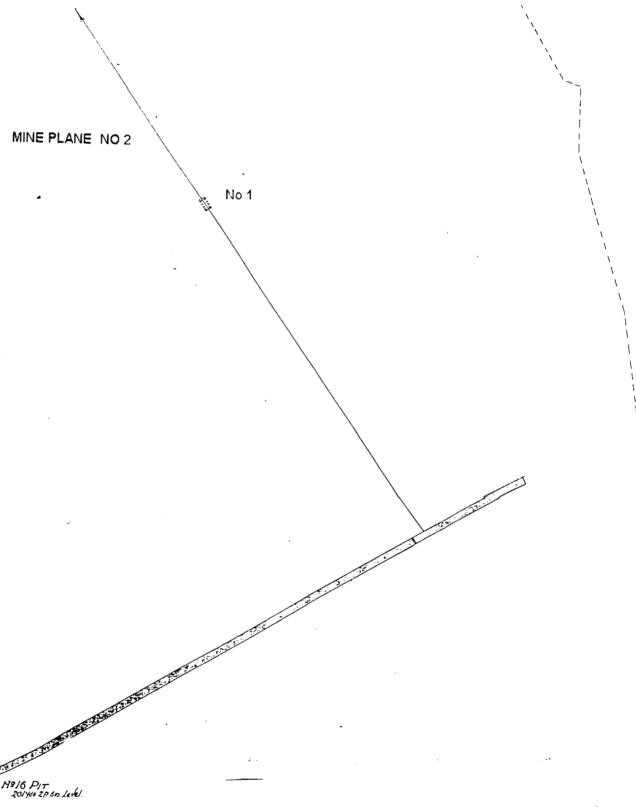
Next door, at Park Mines, an era is coming to an end. The Burlington sop, on which Barrow Haematites, (and therefore Barrows) fortune was based is almost worked out. It seems to have been a matter of honour that the bottom of these large sops should be reached, and at Burlington, Rita and nigel, this was done in defiance of mere economics. In July 1906, the ore was worked out to the 124Fm level. It was not worth deepening the shaft, but a winze was sunk to 134Fm, and the last bogey of ore was raised from this in July 1908. Barrow Haematite lost no time in raising their pumps from the 124 Fm level, to the 84Fm level.

Across the boundary, work carried on. In February 1908, Mr Rigg reports three workings in No16, heading towards Plunger pit ground at 50, 62, and 205 Yds. The first two were standing in June. Work stopped on the 205 Yd level in September 1909, because they were approaching the broken ground, and afraid of cutting the Burlington water, which was 40Ft above them.

The records office contains a valuation of the Roanhead estate for the executors of the late Col T.Myles Sandys, dated 11th Dec 1911. Although very conservative in their estimates, the valuers allow for 5757 tons of ore, with the comment: "Other pits situated in







No 16 PIT 201 yds 2ft 6ins Level

this area which will - unless unforseen circumstances arise - resume their operations when the proper time arrives are:-The Nol or Plunger pit and the Nol6 pit. From both of which a fair quantity of ore should be raised."

The proper time has not arrived yet.

Caption to map:Part of the Ordinance Survey 25" map, Sheet XV 12, 1923, from Barrow Records office, annoted to show the Roanhead/Park boundary. Functions of buildings and site of Garden pit added by PS.

Caption to mine plan 1:The top sheet of mine plan Z3035, from Barrow Records office, showing the relative positions of No1, 11, and 16 pits, the edge of the broken ground, buildings and the boundary. The building functions are taken from mine plan Z3034, 1894, which also shows Plunger pit 90Yd level.

Caption to Mine plan 2: The bottom sheet of mine plan Z3035, showing the 201Yd 2Ft 6In level, No1, 11, and 16 pits, and the boundary. Dated April 1910.

Early Copper Mine Sites in the Lake District

by Dave Bridge

Copper is known to have been worked in the Lake District at least from the 13th century, culminating in the extensive workings of the Coniston Copper Mine which reached peak production in about 1860. Most of the early sites are familiar names but their histories and earliest dates of working are often obscure. Below is a list of workings which were active prior to the 19th century together with dates (where known) and a brief description of associated building remains or other surface features from recent field work. The early Coniston workings in lower Red Dell and at Paddy End, which now have statutory protection, have not been included in the survey. Also omitted are a few minor sites which yielded little if any ore, such as Fornside near St John's in the Vale.

NEWLANDS

GOLDSCOPE

Earliest documentary evidence 13th century Worked by the Germans from 1566 to at least 1620

In the 1680's by David Davies Between 1697 and 1704 by Thomas Robinson

For lead in 19th century

Lead mining operations have obliterated an earlier stamp mill and washing floor by

Newlands Beck but there are early sorting or hand-dressing sites near the open vein workings and also near the collapsed adit portal on the west side of Scope End. The reservoir and leat from Scope Beck which fed a 40ft waterwheel in the lead workings originally drove an internal waterwheel erected by the Germans in St George's Shaft around the year 1600, the water being channelled into the mine through an earlier hand-chiselled adit on the west side and draining to Newlands Beck on the east side via the main adit level which is still open. The site of a possible lower adit to Newlands Beck, apparently begun by Thomas Robinson but never completed by him, has been virtually obliterated by spoil from the lead workings.

OTHER WORKINGS IN NEWLANDS

Robinson referred to "eleven veins opened and wrought by the Germans" in the mountains of Newland. As well as God's Gift (ie Goldscope), which included work in the Furdernus Adit and St George's Shaft, the German Accounts of 1569 to 1577 refer to work at St Lienhart, the Bagpipes, the Franckenstein, the Hamblin, St Peter, St Daniel, High St Daniel, St Reichart, the Vogelsang, the

'Wais nit' vein called Windenberg (possibly not in Newlands), and a working above Littletown, as well as the lead working called St Joseph. Robinson adds St Thomas' Work and Long Work. It is impossible to identify most of these workings, but it is likely that St Lienhart, Bagpipes, Franckenstein and Hamblin were separate workings (mostly open cuts) on the main Goldscope copper vein as these were worked early and continuously. It is also likely that the copper veins at Castlenook further up the valley would not have been overlooked by the Germans.

Of the known workings other than those on the Goldscope vein LONG WORK, an open cut in the valley bottom at Dale Head [NY 228162] on Dale Head North Vein, was extended by Davies and Robinson around the year 1700 and then reworked between 1919 and 1922. ST THOMAS' WORK which refers to one or possibly two open cuts on the western slopes of High Spy towards the head of the valley [NY 230166] was reworked by Robinson in 1699, and it is possible that the open cut on LITTLE MINE CRAG near Littletown [NY 233191] was also re-exploited at this time. The least disturbed of these three sites is St Thomas'Work where a faint zig-zag track leads up to what appears to have been a terraced sorting and hand-dressing floor beside the southernmost working.

DALE HEAD MINE

On Dale Head South Vein was worked from three levels, the lower of which is in precipitous ground at about 1800ft and is still open [NY225156]. There is no clear documentary evidence that this vein was worked by the Germans. Grant believes this to be the 'Black Vein' worked by Thomas Robinson in c1700 because of its black ore which he calls 'pitchy copper'. Certainly the black oxide of copper, tenorite, has been identified there. The open level is hand-drilled and an internal railway of iron strips laid on wood suggests mid 18th century. Ward refers to Cornish miners here in c1775. There is no record of 19th working.

On a nearby shoulder of ground are the remains of a well-constructed rectangular stone hut with internal fireplace uprights still standing [NY222157]. Close by the hut is a paved hand-dressing floor surrounded by a roughly built shelter wall. Below the ore dressing site is a prospecting trench or hush off the main vein. There are also trials where the vein crosses the ridge between Dale Head and Hindscarth and on the slopes beyond. Below these trials above the steep crags overlooking Honister Pass and hidden in the groove of a landslip is another smaller stone hut which is almost complete except for the roof. It is not clear if this was connected with the mining

operations.

In September of last year Peter Fleming spotted a mortar stone, 15" long and weighing 30lbs, which had been built into the shelter wall of the dressing floor. This stone is near triangular in shape and similar to those found at the copper workings at Leverswater. It is significant that the Dale Head South Vein contains a high proportion of green copper ore which is also a feature of the Leverswater workings. The mortar stone may indicate an earlier period of working at Dale Head Mine than the records suggest although there are no visible open stopes on the vein.

SEE Fig 1 on Page 18

During Robinson's involvement the Duke of Somerset built a COPPER SMELTER in the valley, possibly at the mill on Newland's Beck about a mile north of Long Work as recorded by Hutchinson in his notes of 1704. Heaps of calcined copper could still be found in the valley in the mid 1800's.

BUTTERMERE Worked by the Germans between 1568 and 1620 Between 1822 and 1825 by Knott and Taylor

There is an adit by the west lakeshore [NY 180157] recently blocked by large boulders and about 150 yards up the fellside in the forest a narrow rib of rock indicates an open vein working which is near to the site of an old level marked on the 1878 Geological Survey map, now totally obliterated by forestry

operations. The same vein was also worked where it crosses Combe Beck above the forest [NY 182150] as evidenced by particles of green copper ore and the remains of a small hut built into the west bank of the beck. Buttermere Mine first appears in the Accounts in 1568 but later references call it Gasgarth (ie Gatesgarth). In 1602 an adit was begun there and it subsequently produced ore until the year 1620 by which time another adit had been started. It is not clear whether the Buttermere and Gasgarth sites are the same as there is also

a small mining venture to the east of the lake [NY 192155].

SEE Fig No 2 On Page 18

BORROWDALE Worked by the Germans between 1564 and 1600 Re-worked in the mid 1800s

The main working is the Copper Plate Vein at Ellers [NY 246178] but it is recorded that in 1570 the Germans were also working a different site in Borrowdale, possibly the Manesty or Salt Well Vein [NY 251185].

CALDBECK FELLS

ROUGHTON GILL Worked largely for lead and silver by the Germans from 1568 to at least 1631; copper also produced Worked again in c1695

Worked throughout most of the 19th century.

The Accounts of 1569 to 1577 mention at least seven workings at Caldbeck, ie St Emanuel, New Stoln, St David, the Rider, Fortune, St Elizabeth and St Mark. By 1602 when the mines were badly run down only three works were mentioned, all adits, ie New Stoln (bottom adit), St Emanuel and Fortune, and it was proposed to drive another adit 15 fathoms below these three. In 1622 this lower adit was referred to as Blind Wastel but there is no evidence that it was ever completed.

Again it is impossible to identify these precisely, but below the open workings on the vein in upper Roughten Gill [NY 301339], which were said to have been hand wrought to a great depth, the 30 fathom level has been located and opened up by MOLES. This is a hand-chiselled coffin level which has since been widened. There were two or possibly three levels above this (to the right of the beck), the highest being at the junction of the Thief Gills and also opened up by MOLES. This may also be of Elizabethan origin but there are signs of more recent hand-drilling. The 60 and 90 fathom levels lower down the gill are of 19th century origin.

SILVER GILL

There is no documentary evidence that the Germans worked the Silver Gill Lode but the highest working in Silver Gill known as the Golden Vugh [NY 293343], recently collapsed, is thought to be very ancient. Also a note written around the year 1700 refers to a level driven by the "old man" from Roughton Gill in the direction of Silver Gill. This coffin level has been located and opened up by MOLES. Given the age of this ambitious enterprise, a hand-chiselled crosscut to the same vein from Silver Gill is also likely to originate from before the Civil Wars. Later working took

place in the 19th century. RED GILL

This mine [NY 295348] is said to have been wrought extensively with stope and feather, and the Old Dutch Level is attributed to the Elizabethans though there appears to be no documentary evidence for this. Later working took place in the 19th century.

HAY GILL

This rich little copper mine [NY 308360] is also said to have been originally wrought with stope and feather and attributed to the Elizabethans although there is no supporting documentary evidence. Very little work was done after the mid 1790s. Present surface features, which include a wheelpit, dressing floor, and the remains of what may be a powder house date from the 1790's.

UPPER BRANDY GILL

It is reported that copper was extracted at or near Brandy Gill in the 16th century and the upper vein [NY 322338] was developed in the 1720's. An anonymous visitor of 1747 spoke of abandoned copper mines there "long since worn out". Any early working has been obliterated by 19th century operations.

CARROCK END

Thought to have been known to the Elizabethans and worked prior to 1692 from an opencut and a whim shaft when it was known as Dutch Moss. There is also reference to an early gin. The present surface features [NY 351342] which include a rod-way trench and gin circle almost certainly date from the 19th century.

CONISTON AND TILBERTHWAITE

The following workings which existed before the Civil Wars and are not part of the scheduled workings at Red Dell or Paddy End were listed by Roger Fleming, brother of Sir Daniel Fleming:-

GOD'S BLESSING, a rich but isolated pocket of ore high up in Red Dell [NY 285005], was discovered in 1619 and dewatered by an adit the following year. It was reworked briefly in 1907. Below the surface working the widened adit is still open and there is a small dressing floor across the beck. JOHN DIXON'S WORK is thought to be an open work on Brimfell [SD 278985] with a more recent crosscut driven below it. HEN CRAG is

thought to be the site of the workings at about 1800ft on Swallow Scar, Wetherlam [NY 29400028] where there is a short hand-chiselled level. The tiny stone shelter on the the plateau below appears to be of more recent origin and does not resemble the ancient 'hutts' at Leverswater.

The THREE KINGS in Tilberthwaite may refer to workings on Benson's Lode at Tilberthwaite Mine [NY 298009] where plug and feather grooves can be seen, although their precise location is unclear. WIDE WORK or THOMAS HIRN'S WORK, said by Roger Fleming to be two miles from John Dixon's Work and wrought about 60 fathoms with a 'shaft or sump to draw the water away' may also have been at Tilberthwaite, possibly the wide opencuts on North Lode. There is also a hand-chiselled level about 1/3 mile to the north west at 1600ft. In 1602 St Edward's Stoln was mentioned as the only place worth working at Tilberthwaite but its location is uncertain. Holland located the possible site of a 17th century stamp mill with a masonry lined water leat and lagoon close to Benson's Lode and there are also the remains of several rectangular stone huts in the vicinity. The Tilberthwaite veins were reworked to a small extent in the 18th century and then in the early 1800's under John Taylor when a dressing plant was built in the upper valley. After about 1860 the mine was worked from Deep Adit.

BLACK SCAR

These workings are situated in a gill to the west of Leverswater at around 2000ft [SD 997273] and attributed to 'the ancients' although there appears to be no documentary evidence to support this. It was thought possible by Gnosspelius that the mine could be Thomas Hirn's Work yet it is only one mile (not two) from John Dixon's. There is extensive open work in the gill on a quartzy vein with spoil containing green copper ore and nearby a small collapsed rectangular stone hut built into the slope, approx 7ft x 8ft ID, with pierced roofing stones scattered on the scree below. Fine vein material here indicates a dressing floor. Some way down the gill is a hand-drilled trial level. The site, which is isolated and

trial level. The site, which is isolated and undisturbed, is noted for a rare lichen which grows on copper ores.

HAWK RIGGS

This is an extensive hand-chiselled stope in a small outcrop to the north-east of the main Tilberthwaite workings [NY 301016] and is also thought to be of Elizabethan origin. The site was considered by Gnosspelius to be another possible location for Thomas Hirn's Work. It is also known as Haggrieg's or Walker's Work. The working has a hand-cut rainwater channel and has been opened out more recently at the entrance. About 60ft below is a level which is still open and said to have been driven in 1911. Beside the upper we king is a small roughly built stone hut with a roof of loose slates which stands on the site of a larger and more substantial building of dimensions 16ft x 12ft OD with walls 2ft 6in to 3ft thick. The slates are pierced and obviously taken from the earlier building which may well date from the time of the earlier working.

GREENBURN

There is evidence that Greenburn Mine was worked in the late 17th century, but any early working is thought to have been obscured by 19th operations.

COCKLEY BECK

This is a small working beside the Beck [NY 249013] with a hand-wrought level, wider than a coffin level, and is known to date from about 1700. Nearby is a tiny enclosure approx 10ft square ID with walls some 3ft high and floor completely covered with fine vein material containing green copper ore. This structure is still largely intact and it is doubtful if it dates from the time of the earliest recorded working.

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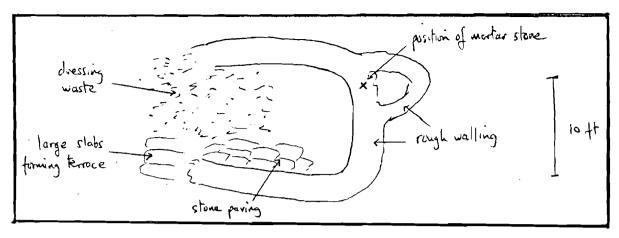


Fig 1. Dressing floor at Jale Head Mine

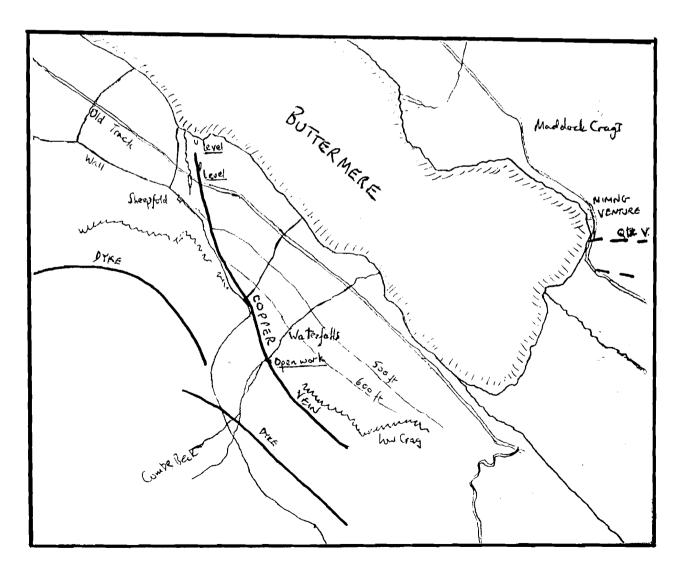


fig 2. Site of Buttermere Copper Mine

Catmhs40

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Mine General (MG). - Histories, Guides etc.

Associated Industry (AI). - Works not specifically concerning mines or mining but nevertheless of associated interest, eg smelting, railways etc.

Journals/Newsletters (JN). - Lists not only those of mining societies but also those of clubs and societies with associated interests.

Mine Plans (MP).

Maps (M).

Archives (A). - Club archives, Historical miscellania, contemporary mine Co brochures & prospectuses etc. This section will also deal with all those snippety bits like newspaper clippings, occasional copies of county archive material, accounts of interviews with people having recollections of the past, photographs etc.

Using the Windows card index.

Windows cardfile provides an easy but effective means of seaching for indexed items, the only requirement being that the target information exists in the database.

From the top menu select View. This gives you the option of displaying the cardfile in card format or as a list. Both are displayed alphabetically. In card format you may bring any particular card to the front simply by didging on it. To search for all particular entries on any given topic select Search from the top menu. From it's drop down menu select Find. This will open a dialogue box into which you may type the required field of search. For example go Search > Find > "Quar" (note, inverted commas not req'd). This will flag all cards containing the word quarries, quarrying or quarrantine. (Note, the find command only works when the file is displayed in card format.) Similarly, the cardfile may be used to verify which entries have been "Purchased" by C.A.T., or donated by "Bloggs". For some silly reason cardfile treats the titles and contents of the cards seperately, so to search on titles the Search > Go-To command must be used. For example Search > Go-To > "Tunn" will flag up all cards containing the word Tunnelling in it's index title. The Go-To dialogue box can be invoked quickly by simply pressing the F4 key. The Find command only operates upon the content text of each card and not on the title text.

Convention.

The library files are issued seperately under the content of minetechnical, minegeneral etc, this is to allow for the

potential growth of the library in consideration of the memory hardware required by a composite index file. Cardfiles may be easily merged however to enable searches on joint index files.

Merging Cardfiles.

Activate a library index file. From the top menu select File. From the drop down menu select Merge. This will invoke a dialogue box from which you may select the file that you wish to merge with the current active file. Press O.K. to enact, and after a few seconds your screen will display the merged cardfile. This new cardfile will have arranged itself alphabetically, and will operate under the same Find & Go-To commands as detailed above. When you have finished your enquiry you may simply exit and quit the merged file. It is best not to save the changed file, for this will overwrite the seperate datum index. If you want to merge again in the future, it is easy enough to merge from scratch.

The Index is on a 3.5 ins 720kb Floppy Disc but you need Windows to use it.

HONISTER UPDATE

VANDALISM FEARS

Slate Forum Meeting

On Sunday 2nd of October an ad-hoc slate forum meeting was held at Honister. The mining history societies were represented by Alastair Cameron (CAT) and lan Tyler (MOLES). The rest of the group consisted of officials from the Lake District National Park including planning officers and legal experts. The purpose of the meeting was to view the five or six areas that the two 'experts' had earmarked as needing special conservation action. The National Park archeologist John Hodgson had specifically requested to see the Yew Crag surface remains and the group were duly takenup the external incline at Yew Crag and viewed a number of artefacts. The weather was to Honister's usual standard and high winds and driving rain made interpretation very difficult.

At lunch time the, party returned to the Hause, collected sandwiches and then proceeded to Honister's Road End entrance to eat them in relative comfort. Fortunately lan and Alastair had sufficient helmets and lamps to kit everyone out and the visitors were briefly shown the base of the Kimberly Incline before moving on to the real purpose of the trip which was to examine the Honister Incline, which is generally felt to be the last counterbalanced -incline in (more or less) full working order in England

It was rather fortunate that Planning Board officers were with us as they were able to view at first hand the main threat to this installation. Since the last visit by either lan or Alastair, serious vandalism has taken place in this part of the crag, A hand winch

assembly has been rolled down the incline from Level 3 and was found to be lying at the based of the incline with cog wheels mashed by the fall. As if this wasn't bad enough, all present were very alarmed to see that someone had started to dismantle the counterbalance weight. A quantity of WD40 had been used to free some of seized bolts. Someone appears to be in the process of taking the wheels off and a number of the bolts have already been removed. At the top of the incline the sheeved wheel and brake mechanism have also received attention.

There was more to come. On level 4 of the Honister system the side-tipping rail truck, which normally sits on the rails in the level had been removed. The hopper section was lying at the side. of the level but the base had completely disappeared. There was some evidence that it had been lowered down the incline and out of the mine via the Road End entrance.

There is little that the Nationial Park officials can do about this in the near term. They are all keen to push forward with the work of surveying the area, which is to be carried out by the Royal Commission for Historical Monuments within the next two years. In the more immediate term they felt that in the absence of the lease holder taking any action, it would be up to CAT and MOLES to try and protect the incline from more vandalism. Some responsibility!! especially as on the day of the visit, the group disturbed a lone individual who turned tail and ran!

Englands Last Working Slate mine

Scenes from Englands last working slate mine are to form the front cover of CAT's proposed new book Slate From Coniston. George Tarr, of Coniston, who runs the Horse Crag Mine in Tilberthwaite showed a number Of us round the workings recently. To conform to planning requirements the operation is completely underground. George is working a number of walls in the closehead and is even using a wire saw assembly he made himself. During the day he works for a local builder but on several evenings each week he goes up to Horse Crag and works for a few hours alone. His main problems at the moment are disposing of waste material, finding good slate 'metal' within the closehead and preventing theft and vandalism.

NEWS

RACE TO SAVE PIT BUILDING

Volunteers are racing against time to save the roof at West Cumbria's last deep coal mine. They are afraid the historic engine house at Whitehaven's Haig Pit could lose parts of its roof if work is not done quickly to secure it before winter weather sets in. This could dent hopes of establishing a mining museum at Haig, which closed in 1986. "We've hopefully got to it just in time," said volunteer John Greasley. "Slates are coming off the roof and it's going to take quite a few thousand pounds to fix."

The Lakeland Mines and Quarries Group bought dilapidated Haig for just one pound from British Coal last year and a Haig Pit Restoration Group was formed early this year to carry out improvement work, which is being undertaken by a team of ten volunteers. Work started in April, painting walls, cleaning floors, repairing windows and reclaiming two giant steam winding engines. The group plans to have the number four engine under steam again next summer, when it hopes to open part of the building to the public. After launching a recruitment drive last month, membership of the Restoration charity group trebled to over thirty. It is currently fund raising and plans to eventually seek business sponsorship to help pay restoration costs. Whitehaven News, 8th September 1994.

Sent in hy Dave Rridge

Messiah Sung Down Cornish Tin Mine Saturday 10 October 1994

As part of the BT arranged 155 simultaneous performances of Handel's Messiah on behalf of the Hospice Movement, the Goonvrea Singers from Perranarworthal in Cornwall, sang this work in a big chamber 2500 ft down in the South Crofty Mine.

One can only say that it would have been a privilege to have been able to have been there and heard it.

South Crofty as you may know is the last working tin mine in Britain, and has recently been saved from closure by many donations.

Mark Simpson

A CLEAR CASE FOR DOCTOR DESCENDER

....What are we to make of Hinton Sheryn, the Devon man who was so thrilled with the news that his book, "The Illustrated History of Excavators", had finally been accepted for publication that he stopped a girl he vaguely knew in the street and kissed her. He then invited her back to his place to see his videos and pictures of mining machinery, an offer that few hot-blooded women would be capable of refusing.

Not only did Claire Stacey refuse, she went straight to the police and tried to have him up on a charge of indecent assault, which the magistrates dismissed after no evidence was produced. In court this week Sheryn was charged with common assault instead. As part of her defence, Miss Stacey said that she was so upset after the stolen kiss that she could not sleep that night. Hinton Sheryn was found guilty and ordered to pay 500 compensation, 45 costs and was bound over for two years. "Perhaps it was a bit over the top," he said of his impulsive hug. He added: "I am fairly lonely, spending hour upon hour in my flat with no-one to talk to."

The Scotsman, 2nd September 1994. Sent in by Dave Bridge.

Protests as Snowdonia quarry wins approval

The Snowdonia National Park committee voted yesterday not to oppose plans for open cast quarrying of slate in the park above Blaenau Ffestiniog, Gwynedd.

A final decision on the application by the festiniog Slate Company to open cast 5.6 million tonnes of slate at the Cwmorthin quarry which has not been worked for more than 50 years, will be taken by the planning committee of Gwynedd County Council On October 20.

Conservationists fear that yeterday's decision will substantially influence the final outcome.

The committee rejected the advice of its officers and opposition from the Country-side Council for Wales, the National Grid, the local highways authority and the Snowdonia National Park Society.

The decision was based on the urgent need for jobs in the area following the closure of Trawsfynydd Nuclear Power Station.

The application involves cutting a track to the old quarry enabling lorries to transport the uncut slate through the mountain villages to Oakeley Quarry.

Objectors said the committee had ignored the policies and guidelines intended to protect national parks.

From the Daily Telegraph September 29th 1994 Sent in by John Helme.

Report on Mine site Conservation and Related Matters in Wales

Aberllyn Mine -- approval given for project to proceed. It will involve capping and adit grilling. limited work will be carried out on the mill site as much of the area is an SSSI.

Pandora, Coed Mawr Pool, Alltwen and Gwaenllifion Mines in the Gwydyr Forest. Feasibility studies to be carried out with a view to making safe mine workings and conserve features of interest.

Llanengan - A project put forward by the Local Council to cap shafts and generally tidy up the area has been temporarily shelved.

Rhosydd Slate Quarry and Mine - A proposal has been put forward to work the quarries. It is not known at the moment as to how the underground workings will be affected.

Gronant Engine House - Despite much interest shown by CADW and other parties, permission has been given by the Local Council for the engine house owner to demolish it. At the time of writing the Engine House is still standing.

Lloc Engine House - This site is currently for sale. The planning permission relating to the site has completely ignored the fact that the Engine House is a listed structure.

Clwyd Metal Mincs - A survey of all mine sites in Clwyd has recently been completed by theClwyd/Powys Archaeological Trust. The survey has identified features of interest and areas for further investigation.

The Welsh Mines Preservation Trust has only been in existence since 1992 but they have made their mark by raising both public and official awareness of the rich mining heritage that abounds in the Principality. Projects that they are involved with include:

Penrhos Engine House - Clwyd County Council and CADW have agreed a conservation project. Restoration work is scheduled to start June 1994.

Glyn Pits Engine Houses - Various meetings have been held on site with Council Representatives and CADW. Trees affecting the structures have been cut down, and the area sprayed with weed killer. A financial estimate is currently being prepared as to the likely cost to conserve the engines and structures on this unique site.

Parys Mountain Engine House - Meetings have been held with CADW, Gwyncdd Archaeological Trust and the Naturc Conservancy Council. Estimates are currently being obtained from specialists with regard to the cost of conserving this structure.

Minera - Members have assisted in the identification and interpretation of mining structures. The Trust is currently coordinating the publication of a book on mineral extraction at Minera.

Other projects which the Trust are involved with are Pennant and Talargoch in Clwyd, SouthShropshire Mines, Mid-Wales and a proposed interpretation trail at the Parc Granite Quarry, Waunfawr.

Anyone interested in the activities of the Trust should contact John Bennett on 0606-889325

Rob Vernon

8th March 1994 Presented to the NAMHO Meeting March 1194

Book Reviews

Lewis Morris and the Cardiganshire Mines. By David Bick and Philip Wyn Davies. Published by The National Library of Wales. Aberystwyth. A4.89pages. 31 plans and 11 plates. Hardback ISBN:0-907158-65-X. Price †15.00 plus †3.00 p&p from The National Library of Wales.

This book is a study and edition of Lewis Morris's "Account of the Lead and Silver Mines in the King's Mannor called Cwmmwd y Perveth". It arose from a suggestion made to the National Library of Wales by David Bick and this book is the result of his close collaboration with Philip Wyn Davies. David Bick is already well known for his various publications mainly concerning the metal mines of Mid-Wales. Philip Wyn Davies is an assistant archivist in the Department of Manuscripts and Records and is an acknowledged authority on the work of Lewis Morris.

The book is divided into four sections. A chapter on mining in Perfedd before Lewis Morris, the subsequent history and present state of the mines, a biographical introduction on Morris and the transcribed and edited text of the manuscripts. The first two mentioned above have been written by David Bick and the latter by Philip Wyn Davies.

The text from the manuscripts is most interesting and is presented in a page for page format, where possible, with the minimum of editing thus leaving the reader with a real flavour for the original manuscript. The reproduction of the plans is excellent and there is a large coloured fold-out reproduction map/plan of the whole area as drawn by Lewis Morris.

The two sections written by David Bick are, as we have come to expect from him, well written and researched and make interesting reading with the monochrome plates shoving the mine sites as they are today together with a couple of older views. It has to be said, however, that most of the text can also be found in his Old Metal Mines of Mid-Wales series. It does though make the book a more complete volume and this is justification enough.

The book is likely to have a relatively limited appeal but will be a must for all those who are interested in the Cardiganshire mines and Lewis Morris.

Damian McCurdy

The Lancaster & Westmorland Mineral Statistics with the Isle Of Man. By R.Burt, M.Atkinson, P.Waite and R.Burnley.

Published by: The Mining Research Group, Department of Economic History, University of Exeter in association with the Northern Mines Research Society and PDMHS. 1983.

The Mineral Statistics of Great Britain are referred to in any serious work on Mining history, and I had imagined them to be a series of volumes resembling the London Telephone Directory, but less readable. I was therefore surprised to be offered the loan of a slim paperback containing the relevant figures for the Furness iron mines, together with Westmorland and the Isle of Man. The book is part of a series which covers metalifferous mines in the whole of Britain for the years 1845 to 1913.

The statistics consist of :- annual production figures; tonnage, iron content and value, Employment; surface and underground, Ownership and Management; Manager and Chief Agent. Only the ownership and management data are complete in most cases. To this, the authors have added a grid reference and comments usually indicating where a mine is mentioned in another return. This adds up to a complete background to every mine, but, there are some snags. The statistics for iron mines begin in 1863, they contain the figures that the mine owners chose to provide, under headings of their choosing.

The Greenscoe Mine, for instance, appears under the heading of Askam No1. In 1893 the production figures double to 121232 tons. This does not indicate substantial new developments, but the inclusion of Dalton Mines under the same heading. The percentage Iron figure, where given, is suspiciously often 50% or 55% and the figure for the value of the ore is given intermittently. Being naturally suspicious about statistics I decided to check the production figures against an original source. 1884 was a good year for Barrow Hematite, and their production figures are, unusually, given in their mine reports book. (BDB/47/Box 6, in Barrow Records Office). The original page reads something like this:-

B.H.S.CoLd Mines Department
Ore Raisings Year Ending December 31st 1884

Mine		1884	1883	Increase	Decrease
Park	Quarry	20250			
	No9	97430			
	Burlington	186150			
	California No1	16587			
	" No2	5439			
		325856	321584	4272	
Stank Buccleuch		38895			
	No3	26137			
	No4	39295			
	North	24778			
		129105	116705	12400	
Newton	North	7536			
	West	488			
		8024	5463	<u>2561</u>	

Whitriggs	Parrock Backguards Wood Horse Level Crossgates North	5276 25943 9824 1812 1526 189			
		44570	64755		20185
Old Hills No4&Crossgate		2957	6504	3547	
Stainton Reial	S	5397	3890		1507
TOTALS		515909	518901		2992

The equivalent figures from the mineral statistics are:-

Park	325859	321588
Stank See Newton		
Newton	137123	121180
Old Hills See Whitriggs No1		
Stainton No2	5397	3890
Whitriggs No1	47534	71261

The figures match to within a few tons.

Whatever omissions or ambiguities are present in the statistics are not the fault of the authors. They have taken a mass of statistics, and presented them in and orderly format. The authors claim that the text has been reproduced directly from the output of a high quality printer. The typeface indicates that printers have improved since 1983. The map references and comments are the responsibility of the authors, and here there is much room for criticism. Dalton Mines have 5 entries, all with the same map reference, which is somewhere in Tudor Square. The comments are written in BLOCK CAPITALS and sometimes abbreviated to the point of obscurity.

At 85 pages, the book is not overlong for the weight of information that it carries. If the comments were expanded into plain English, it would do much to make the book readable. A further improvement would be to give a 6 figure map reference where possible, and to omit the map reference where the exact site is not known.

Other than this, the book is one that anyone interested in Furness mines should own. Great credit is due to the authors for sorting out a disorderly mass of figures into something that is relevant to your local mine. This reader feels that further explanation would be useful, but if the series is reprinted I will certainly buy a copy of this volume.

Peter.R. Sandbach September 1994

MAJOR RESCUE AT CONISTON

On Sunday 31st July a major rescue took place at Coniston where after a lengthy period all concerned returned to the surface safely. However before detailing the days events it is worthwhile spending a few lines setting the scene.

Sunday dawned hot and sunny. Ten o'clock saw messrs Simpson, Borthwick, Sandbach and Knowles together with clan Thomas and Sheila Barker at the BMSC hut ready to carry out conservation work on the Old Engine Shaft Wheel Pit. On arrival at the pit a considerable amount of time was spent realigning the stones that form the top of the pit, some of which were making a credible attempt to make their way down to the dressing floors. The proceedings were enlivened by a young child from Barrow tying the meet leader's legs together but it appears he enjoys this sort of thing! Once all the stones had been aligned the general area was tidied.

Shortly after lunch the group was approached by an anxious lady who informed us that she had seen something fall down one of the holes further up the valley. A party quickly set of for the open stopes complete with rope and a small net with Mark had brought along. On arrival at the open stopes our thoughts turned to descent and even the recovery of Ian Matheson's rope! Therefore we were a little surprised to hear "no over here" as the anxious lady stood by the New Engine Shaft Wheel Pit. The rescue soon became clear as a sheep, apparently, unharmed could be seen lazily chewing grass in the bottom. A rope was quickly knotted and two hardy souls descended to the bottom. Once on the scene one problem immediately became clear, how do you rig a sheep?. After a failed attempt at improvising a "lay harness" for our four legged friend we decided to use Mark's net. The original intention of bringing a fisherman's net on a CAT meet had been to lift stones from the wheel pit, for which it had proved of little use. However, as a sheep harness it was excellent and after a trial lift and a little adjustment our lump of mutton was soon back to day and with an ungrateful look ran off.

Would members from the other organisation please note the specilaist piece of equipment used in this rescue.

On a more serious note much useful conservation work was done on the Old Engine Shaft Wheel Pit that should prevent further deterioration in the near future particularly to the stones which cap the walls of the pit. As well as realigning these a general tidying of the whole area took place.

After the dramatic rescue mentioned above work started on another conservation project not far away but English Heritage has asked us to desist for the moment (Note to M.Simpson - Please ensure timber for this project is not used for furniture).

Jon Knowles

THE CROESOR FILE

The author first heard of the general details of the Croesor through trip from a gentleman called Adrian Barrell via member Peter Hay. Adrian, being less agile than some of us, wanted to find out what was in this unexplored part of the mine. Since our visits to Croesor, the author has had much correspondence with Adrian concerning all aspects of the mine and its history.

To cut a very long story short Adrian and his colleagues had initially intended to write a history of the mine but on discovering that a

more accomplished author intended to do this in due course, decided not to. Unlike too many people however they felt that their researches were too important to be lost and so decided to make them available to others for further study and discussion. The result of this is "The Croesor File" which is a loose leaf A4 binder running to almost an 1" of closely typed double sided paper and provides a wealth of information on the mine and its history. Not only is the work extremely interesting in its own right but it provides an excellent example for others to follow when doing research even when they do not get it published. Additionally it is intended to issue updates as more information becomes available. One copy of the file has been given to the club and this will be held in the library just as soon as this author has finished studying it, which is likely to be at the end of the year.

On another matter, in newsletter No.39 it was mentioned that a future newsletter would contain more information on this year's exploration of the mine. With hindsight I have decided to include this in a detailed article on the whole mine to be included in the next edition of the Mine Explorer.

Staying with Croesor I must confess to a minor error in my article on Moses Kellow in the latest Mine Explorer. In the second paragraph I refer to his father being granted a patent. Since the article was written I have come across further information that shows that the patent was granted to Joseph Kellow who was most likely Moses's uncle.

Jon Knowles

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