

# CAT NEWSLETTER

No. 17

Summer 1987

## HOTEL PLANNED AT COPPERMINES!

Mr Phillip Johnston, the owner of the controversial Coniston Coppermines site has once again caused a stir amongst some regular users of the valley. In recently published plans he reveals an intention to turn the Victorian sawmill and carpenters shop (later the turbine house) to "provide luxury residential accomodation for up to 18 guests". The hotel, field and study centre is due to open at Easter 1988 and will offer guests the full 5 star treatment with the bedrooms all "fully fitted with en-suite facilities" including telephone, television and a teamaker. A blacksmiths forge is to form the centrepiece of the dining area and the whole building is to be fitted out with antique pine. A Range Rover is to be provided for transporting guests. As well as a hotel the plans reveal a large selection of courses including "The Mining Heritage... investigation and study undertaken both above and below ground". The Course Director is Chris Lane who is also the Chairman of the Lakeland Mines and Quarries Trust. L.M.Q.T.'s help is also "gratefully acknowledged" elsewhere in the brochure in which Mr Johnston announces his plans. No official response from the planners has yet been recieved.

### ORE TUB SECURED

Recent excavations on the newly discovered Coniston Coppermines Top Level extension revealed a complete metal ore tub perched in a very precarious position, likely to be crushed by falling deads. A CAT team led by Mike Mitchell have dug out and removed the tub, cleaned out the area and made it safe and built up new stemples and rails. The tub was then replaced in its original position. This is not the first rescue of an artifact in this area, a windlass was also rebuilt earlier this year by the same team. A plaque is to be placed over the top level dig commemorating CAT's successful penetration of the mines inner reaches.

CAT's literary talent scouts are on the look-out for the next newsletter editor. See inside for further details.

Phil Merrin, caught at last. Will this mean the end of Mega Mine Man? More details on page 2.

CAT members investigate a dig in Furness' answer to the Nentforce Level. See page 2.

*Percy Pitprop-Exclusive interview! page 4*

**WE WANT YOU!**



**FOR THE NEW NEWSLETTER EDITOR.**

Following the resignation of Alen as Newsletter Editor the committee are eager to find someone else interested in taking on this job. If you are interested then contact any committee member for details of what it all entails.

Phil Merrin has at last surrendered his freedom and has finally found someone to put up with his appallingly loud Hawaiian shirts. Some poor unsuspecting girl has taken pity on him and has agreed to marry him. Perhaps Chairman (Grandad) Mike can talk her out of it. Failing that, best wishes for the big day in October.

Will this mean the end of Mega Mine Man?

CAT members, under the leadership of Anton Thomas are investigating the possibilities of digging in Furness' long drainage adit, Clerks level, which ran from the Lindal Moor Mines to its outflow at Urswick Tarn, a distance of some 3600 yards. Little is yet known of the difficulties involved in reopening this level and it is known to be blocked some distance from the entrance. If access can be obtained it may provide an entrance to parts of the Furness Mines at Lindal that have never been seen since the mines closed early this century. At present Anton and his team are looking at several projects in the area

including spore testing, digs, etc.

According to surviving original documents the level should never have been built where it is as the mining surveyor employed to look at a drainage adit for the mines favoured a level driven from "the low ground below Dalton, so as to admit of the water being discharged into the mill dam." This proposal showed less distance to the mines and one or two other advantages such as the whole adit being in the Duke of Buccleugh's royalty. We do not yet know why the other route was favoured. Anyone got the answers?

#### Continental Mines.

*Chris Jones and Alistair Lings are hoping to form a continental mines interest group to include Eire. Any one interested, contact them.*

#### Welsh Slate.

Following the recent nine month long strike in North Wales and the subsequent sackings some of the sacked miners have opened their own quarry at Croes y Ddawy Afon. They are apparently doing well and we wish them every success.

#### Roman Gold Mines.

*When every one else was enjoying themselves in North Wales at Easter (see the Meets Report) I paid a visit to Pumpsaint to see the Dolau-Cothi Gold Mines. The site has certainly changed since I was there in 1982 when I wandered about at my leisure. Now the National Trust have set up a mining museum on the site, and what a museum, plenty of money spent there. The main area on site is being converted to look as it was in the last period of working in the 1930's and to this end the headframe from the Olwyn Goch Shaft at Hendre, near Mold has been brought to the site although it has not yet been erected. Much of the trucks, etc. have also been brought from there. There is a miners trail which takes the tourist along many parts of both the Roman workings (including a level of this period) and the later work. If you're in the area pay it a visit.*

WHEN IS THERE GOING TO BE A SHOW MINE IN THE LAKE DISTRICT???????????????

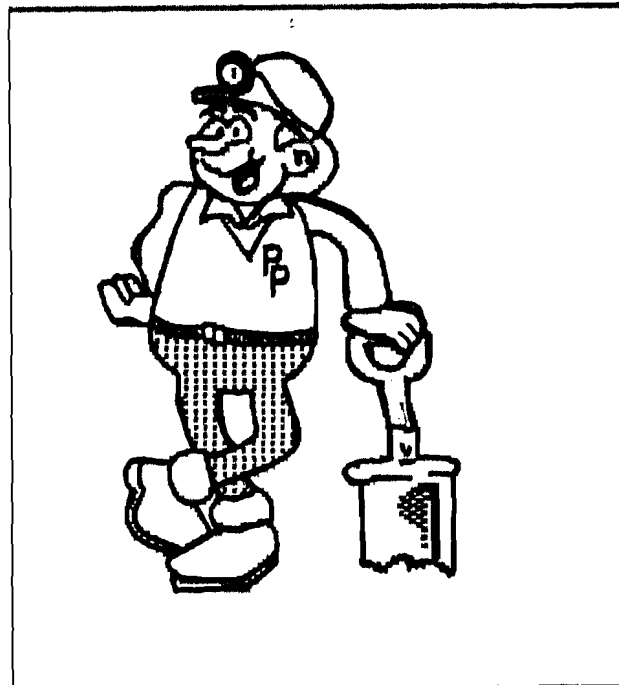
#### Boat Level.

I also paid a visit to Nantymwyn mine, an intriguing spot, again last mined in the 30's. Not much to look at really just a huge wasted area, a Cornish Engine House in good repair and no sign of the Upper and Deep boat levels. But they could be entered with a serious dig. Unfortunately you might flood a rather nice caravan site. Still, a lovely place to base a CAT meet sometime.

### PITPROP INTERVIEW.

We regret due to a severe lack of space in this newsletter that the Percy Pitprop interview will have to be held over to a later edition. In the meantime look out for that new film which should be on at a cinema near you soon.

PERCY PITPROP & THE MINE OF DOOM!



### IMPORTANT NOTICE.

Members are reminded that it is technically an offence to drive up the coppermines valley to the Youth Hostel and beyond. This reminder comes about after an unfortunate incident a few weeks ago when some people claiming to be CAT members caused a nuisance driving up the valley and when challenged by a voluntary warden, parked outside hospital level entrance, were extremely abusive and offensive. This has caused a certain amount of bad feeling and adverse publicity in this area which we certainly do not need. The last thing we want is for the Coniston Fells to become a no-go area like the Caldbeck fells.

You are reminded that the only people with a right of access up to the Youth Hostel are residents and members of the Barrow Mountaineering and Ski Club. Many CAT members are also members of the B.M.S.C. and should anyone be interested in joining then please see Pete Fleming who will fill you in (with details). The club has rather an attractive club house which many of you will know which is at present available to members for only 50p per night. It makes an excellent base to explore the coppermine and the whole Coniston area from.

PLEASE HEED THIS WARNING.

Peter Fleming

The guidelines by our Hon. Chairman in Journal No.2, entitled 'Safety in Disused Metalliferous Mines Prompted me to reflect on numerous narrow escapes I have experienced and there are lessons to be learned from all of them.

I have always enjoyed pursuing potentially dangerous adventure activities such as mountaineering, and more recently mine exploration. Without that element of danger - of pitting one's wits against the odds, I would feel the lack of excitement that these adventures give.

C.A.T. members have a reputation for pushing their luck in mines exploration and there is indeed a bold and expert nucleus within its membership which forms the vanguard for original explorations, particularly in the Coniston mining field. Without their spirit and team work, nothing new would be discovered. May their luck never run out!

Just to illustrate the kind of things that do happen, I will describe six first-hand accounts of incidents which occurred to me. Two of them have already been published in the "Mine Explorer", but I include them here for completeness.

1. Greenside Mine -

In 1974 before C.A.T. was even thought of a small group, who were later to form the society, had just re-opened Glencoyne Level and were carrying out the first exploration of Greenside Mine since its closure. We were amazed to find all the ladders intact and had descended down them for 700 feet to within sight of Lucy Tongue Level 40 feet below. We were excited to have got this far down so easily and could hardly wait to see Smith Shaft winding station. The two remaining ladders, each 20 foot long, looked as sound as all the rest of them had been except that these were wooden ones not iron.

Throwing caution to the wind, I started down the first. As I gripped the sides, I noticed my fingers sink into the wood up to the knuckles - dry rot was obviously rampant. The ladder was rather shaky and reaching the final staging I warned the others not to follow without a top rope and set off down the final ladder. I had just got my chin level with the top rung when there was an awful cracking sound, combined with a sinking sensation and I felt myself falling backwards through space.

Lucy Tongue Level was kind to me. I landed on my back in water with splinters of timber cascading round about. I was unhurt but felt a wally, lying in a pool of water, still clutching pieces of ladder. Getting out again was another story.

2. Hartsop Hall Mine, Brotherswater -

A few of us were exploring the stopes north of No.4 Level, which are fairly unstable at the best of times. We were unaware of the cloudburst happening outside, which normally would have little effect within mine workings, but these stopes pierced the boulder clay on the fellside and the water percolating through, caused the odd stone to fall which puzzled

This article has an '18' certificate.  
Not to be read by anyone of a nervous disposition.

us at the time, We decided to return to the safety of No.4 Level and had just passed through a narrow section when there was a rumble and crash. We turned round to see a heap of stone and rubble piled 5 feet high in the space we had vacated only seconds before. Whether this stope is still accessible I am not sure, but it should be treated with great caution in wet weather.

### 3. Coniston Copper Mines 1978 -

This incident occurred during our early explorations in Flemings Mine, Red Dell. I had descended a steep unstable boulder slope on a top rope to see where it went to. It ended in a sheer drop, the bottom of which could not be seen. A second member, who (to protect the guilty) shall remain nameless, started down the slope without exercising proper care, and started the loose rocks sliding. Very soon the whole slope was on the move and a full scale avalanche was heading straight for me as I stood at the bottom. The walls at the bottom of the slope formed a 'V' section and this presented the only way to escape being swept over the edge, which was to jump up and bridge across the V where it was fortunately just theright width. A roaring torrent of boulders about three feet deep rumbled passed with just enough clearance and poured over the edge to go crashing away to the bottom far below. The rest of team could not see how I had escaped going over with them and were amazed to see me coming back up unharmed. Just in case anyone thinks Fleming Mine got its name from this incident - it is not true, but maybe it was looking after its own.

### 4. Carrock Mine -

I was fell walking on the Caldbeck Fells and was returning to the car via Brandy Ghyll and Carrock Mine, when I passed by one of the old air shafts dropping down on to the Harding Vein. The mine operators at the time (1980) had just installed a new extraction fan on the surface and new ladders and staging going down the shaft. Too interesting to be resisted! I had a torch in my rucksack and I was familiar enough with the mine to know my way out from the Harding Vein stopes if I descended these new ladders. I set off down. All went well until at 40 feet down, the ladders suddenly ended for no apparent reason, but I had noticed a line of large iron ring pegs continuing down at 3 foot intervals. So I thought "Fair enough. I'll give them a try." After all the miners of old used to use them. Another 20 feet and one was missing, which meant a long reach of 6 feet to the next, I was hanging on to the upper one with all my weight and had just got my foot on the lower one when suddenly the upper one pulled out of its socket and I fell backwards into the shaft. It was a split second nightmare - "here we go again" sort of thing. With only a few seconds for thought I knew the shaft was just over four foot wide and I straightened and kept myself rigid, dropped the useless ring peg down the shaft and put my hands behind me just as my shoulders hit the opposite wall. I froze in this position - feet on one side, shoulders on the other and kept a determined calm whilst I tried to think my way out of this fine mess. I decided I must try to go up rather than down in case more ring pegs might be missing or loose. I was on my own, no one knew where I was. First of all I had to get into an upright position and then attempt to climb the blank 9 foot gap up the sheer rock walls without falling down the shaft. I must have remained

motionless for 5 or 6 minutes weighing the sequence of moves and holds available. I inched my shoulders as high as possible until I could reach the wall behind with one foot. Then for the moment of truth - would it take my weight whilst I moved my hands higher. It did, and it was with some relief that I achieved an upright, bridged position, but I still had to make some very hairy moves before I could grasp the ring peg above my head. It felt beautiful to come out to the surface, where I offered up thanks to whichever deity deserved them.

5. Coniston Copper Mines 1985 -

Four of us had entered the "funnel" at the back strings to check out certain things observed on a previous trip. One of these was a tunnel about 50 feet down the Windy Stope. Two rock pitons were placed

in a crack in line with and above the tunnel mouth and an abseil commenced. All went well until it became necessary to brake opposite the tunnel. Unfortunately the two pitons were not equally loaded and the one under strain came out suddenly.

According to 'Sod's Law', the second piton should have pulled out when subjected to the sudden weight of a falling body but it did not. The luck was with us again. The stope beneath this point dropped 200 feet to the bottom.

6. Scraithole Mine 1986.

A group of us had been exploring around and had been both down and up a set of ladders and stagings. I was one of the last up and had just stepped off the top ladder when the planks gave way and I plummeted down with a crash on to the platform some twelve feet below. Fortunately this held and once again I emerged from the splintered timber work unharmed.

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If C.A.T members do have nine lives then I have only three left - that is if I don't count the other six I have lost whilst mountaineering, but those are another story, and perhaps are not counted on the same tally.

I know other members have had their own narrow escapes, some more serious than any of mine! (Pardon the pun.)



Safety Conscious Anton C-P-T is shown here laboratory testing to destruction the latest design of mining helmet. Anton will be publishing a full 17 page test report of his findings just as soon as his headache disappears!!

## The Exam.

If you were sitting an examination in mining about 112 years ago these are some sample questions you might have been asked, how would you have coped?

1. How do the rocks called "Elvan" occur? Illustrate your answer with a sketch.
2. What are right running and what are caunter lodes?
3. What is gossan which frequently appears on the back of lodes? What lodes frequently have no gossan?
4. Describe the process of costeaning.
5. How much run or fall is usually given to a level in which a tram-road is laid?
6. How are the walls of the lode supported after the mineral is removed?
7. How is a hole charged with gunpowder for blasting?
8. Describe the Cornish long handled shovel, and state its size, weight and price.
8. In sinking a shaft below a given level , how should th men in the bottom of the shaft be protected from the fall of stones from above.
9. Compare the relative advantages and disadvantages under different conditions of (a) chain; (b) hemp rope; (c) iron wire rope; (d) steel wire rope.
10. Describe the construction of poppet heads and give sketches in illustration of your answer.
11. Make an illustration of an ordinary "plunger lift" showing the situation of the clacks.
12. Why should levels be driven truly level, or nearly so.
13. What are the objections to the over stamping of ore?
14. What are the "catch pieces" and what is their use.
15. Describe the water blast or trompe, and give a sketch showing its mode of operation.

Well- how did you get on. The questions are taken from a total of 115 exam questions. Answers for the curious will be in the next newsletter.

## NEWS FROM INDUSTRY.

Scotland - Fynegold Exploration Ltd. (Ennex International Group) are drilling for gold on their prospects around Tyndrum in the southern highlands. This phase of



exploration is expected to last to the autumn.

Shetland - Shetland Talc Ltd. are evaluating their talc deposit at Cunningsburgh on mainland Shetland. The deposit was worked by the Vikings.

Northern Ireland - Ennex International has been granted planning permission to drive an adit to explore its gold deposits near Curraghinalt in the Sperrin Mountains.

A new area of gold mineralisation has been found about 12 km. to the south and exploration drilling is soon to start.

The further evaluation and development of the lignite deposits around Lough Neagh is conditional upon a decision by the government on which of three proposals it will accept for the construction of a new power station.

Republic of Ireland - Conroy Petroleum and Natural Resources have discovered a major new zinc ore-body near Galmoy on the Laoir-Kilkenny border. The find has been widely heralded as a second "Tara".

London based Europa Minerals are exploring the old west Carbery mining field in the extreme south-west. They now hold six licences in the area.

Still in West Cork, after 20 years of holding the prospecting licences covering the Bearhaven Mines, Emerald Isle Mining has finally relinquished them. A.S.L.

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Percy Pitprop says, men who stay out until 4 o'clock in Nenthead should watch out for barmaids spouses!

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## ROPE CARE (PART II).

There now follows the second part of Anton Thomas' article held over from the last newsletter. The story so far... Mary has discovered that her father was married before and that the woman she thought was her mother is, in fact her half-sister. Meanwhile in Nenthead Mike has regained his memory and has discovered Pete having a shower thus proving that he could not have been run down by a kibble in Derbyshire... Now read on.....

### (2) INTERNAL ABRASION

Internal abrasion is caused by small particles of grit and mud entrapped in the "weave" of a rope. Inside, and subject to the movements and internal pressures of a rope in use, it will tend to grind away at the ropes fabric. For this reason, external abrasion aside, a rope gets weaker every time it is used.

Ropes will usually receive a dose of grit and mud in portage both above and below ground, when used as furniture for a comfortable tea/dinner break or when dragged through muddy crawls... and have you seen the state of the back of C.J.'s landrover ! They will usually then receive a second dose as they are uncoiled on the floor prior to paying it out over a cruddy ledge and down a hading gritty stope. The resultant concoction will now be ready for being ground deep into the rope with descenders and jammers or where the tensioned rope is in contact with gritty rock.

The best way to guard against internal abrasion is of course to keep the rope as clean as possible. A good way as any of achieving this is to carry all ropes at all times in tackle bags, ie, each rope of significant length (say 80 ft plus) is carried in it's own personal bag, loose coiled (don't forget to keep a stopper knot tied in the bottom end) ready for immediate use at the pitch head. One end of the rope may be drawn from the bag to rig the belay. The bag is then attached to the first person to descend by means of a chord from the main attachment maillon of his/her sit harness. As the descent progresses, with the bag suspended just below foot level (see fig. 5) the rope will be withdrawn as required. The only points at which the rope will be exposed to grit then is where the rope comes into contact with the pitch face, and most of these will be eliminated by abrasion prevention techniques any way. A rope protector for example serves just as well as a grot protector.

At the bottom of the pitch any surplus rope will still be in the bag and so protected from being trampled underfoot by the rest of the party. On return, the bag can be hauled up the pitch and the rope fed straight in so eliminating the usual "birds nest" where a restricted pitch head disallows a meticulous coiling job. The bag can then be carried out with no fear of

loose hanks snagging, further exposure to dirt, they can be sat upon, spat upon, in fact barring water borne particles in wet sections, they're just about safe from every thing.

A rope bag for each rope will of course be an additional initial investment but will be amply compensated for by peace of mind and savings in terms of longer lasting ropes.

Note!

(i) If there is any doubt as to whether the rope is long enough for the pitch and if the rope is not your own and thus was not last packed by you, or if for any reason you are in doubt as to whether there is a stopper knot at the end of the rope, then as you descend and you feel the bag getting towards empty, be sure to pull some rope out ahead of you (say 10 ft hanging beneath you, ie, 20 ft drawn from the bag) and keep doing this until you either

arrive at the pitch bottom or you can assure yourself that there is a stopper knot on the rope. This will prevent you from abseiling off the end of the rope if it is too short for the pitch.

(ii) With the ropes used from bags in this way, all the wear and tear will tend to be subjected to the upper half of the rope, ie, the end which gets left in the bag at the pitch bottom will often be unused. To distribute the usage evenly and thus get the most from the ropes, then every few trips, after your usual washing/inspection session, put a stopper knot on the other end of the rope and feed that end into the bag first.

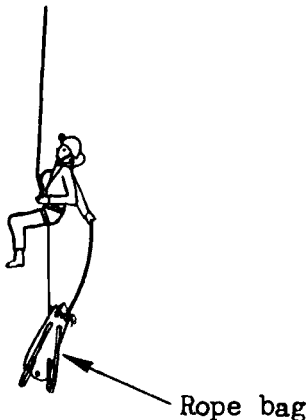
(3) PERCUSSIVE FRACTURE

Well, I must admit that sounds like bullshit terminology, but I'm afraid I couldn't think of anything else to call it.

Percussive fracture will usually occur when moving or falling rock strikes the rope as it lays on a hard, unyielding surface. In such an event the rope will be partially or totally fractured, (buggered).

Ropes are most at risk from percussive fracture during un-bagged portage, where the odd rock or two may get rattled about over them, (especially when deposited near to digging activity) or that portion of the rope which is beneath you on a pitch, and which is exposed to any debris which may be dislodged on your descent. Treading on ropes as they lay on rocks will also damage them. The use of rope bags will eliminate these risks. As the first person

Figure 5



descends, he may dislodge any amount of debris as he clears the pitch, safe in the knowledge that the rope is out of harm's way in the bag just below him.

#### (4) CHEMICAL ( or other) CONTAMINATION

Ropes may be detrimentally affected by several chemicals. Gasoline,\* grease and battery acid are those listed by one manufacturer. To expand on the battery acid problem - for there is potential, however slight, for contamination of ropes from lead acid lamp cells, and please note that I do not possess, or have never possessed a lead acid unit, so this is purely speculative - I would just like to make the following comment. Any cell unit which has some form of mechanical breather/vent control, like anything else which is mechanical in nature, may well be prone to loss of efficiency or failure. I note that some cells require measures to prevent the ingress of water when immersed. If water does enter, and any water borne particles with it, then this may further impair the reliability of the vent control. After a wet cold trip, and when exposed to the warmth of a well heated car, the gasses and liquids in the cell will tend to expand. As they do, and if the vent control is inefficient and the cell not upright, then it may tend to spit or dribble a little electrolyte. If an exposed rope is laying around, then it may end up contaminated. One issue of "Caves and Caving" showed a picture of a rope which had been acid contaminated and it looked far from healthy.

Sunlight is another contaminant, ultra violet radiation degrades the "molecular fabric" of the rope. This degradation, albeit insignificant compared to normal wear and tear, will be limited to the mantle of the rope. As the mantle contributes significantly to the overall strength of a rope though, it would be prudent to guard against it. Unused ropes left in the backs of cars, or ropes carried on long summers day surface hikes would be best off protected in some way. Again, rope bags.

When washing ropes, my own instinct is to avoid all soaps whatsoever. After all, if you were to walk into a shop and ask for something which was just soap and nothing but soap (ie, no colourings, no dyes, no scents, no anything,) well they'll probably tell you that such a product hasn't existed for thirty years. Similarly, washing powders are anything but good old fullers earth, they're full of Christ knows what, a bit of chemical x for this and a bit of chemical y for that, all developed no doubt to give you that whiter than white "Free Fall Freshness". Also avoid fabric conditioners, bleaches, in fact all detergents and chemicals, so its no good softening up that old bit of Bluewater 2 with Comfort either. Any way, with the newly released C.J. "Winky warmer" type rope cleaner, the best place for cleaning ropes is "In t' beck bottom". Incidentally, I am reliably informed that there may soon exist a Mk 2 "W.W." rope cleaner which will feature the addition of a hold down foot strap to make things even easier for those of us who are well endowed.... with ropes that is.

In conclusion then (and also to fill up this page, thus sparing us the inevitable ice cream cart joke) we have seen that there is a considerable arsenal of technique for dealing with abrasion. However it is dead easy to miss the odd abrasion point and it calls for extreme vigilance on the part of the first man down to ensure that all are guarded against, for even a minor rub on a rope used by a large party will cause significant damage. Anyone subsequently descending who discovers an abrasion point which has been missed should not be shy of addressing the problem himself (carry a rope protector for this purpose) or if unable, then at least draw it to the attention of someone who can. As I say, abrasion points can be elusive, they have to be looked for. As you descend and every so often, flatten yourself off against the pitch face so the rope hangs against the rock as it will for the return ascent, and as you look up the rope any abrasion points will become evident. If you see one then change over to prussik, ascend to it and deal with it.

La Fin

\* a colonial expression meaning petroleum. Ed.

# LOGG I NEWS

For the benefit of non-local members and for those who may have missed them first time around here are a few items of interest culled from the pages of the local press.

## Long Marton, nr. Appleby.

British Gypsum who produce gypsum and anhydrite from mines at Birks Head, Longrigg, Newbiggin and an opencast mine at Houtsay Farm to produce plaster and plasterboard at their mill at Kirkby Thore, ran into considerable local opposition with a recent planning application to extend the underground workings of their Birks Head mine by a further 653 acres towards the east fellside villages of Knock and Dufton. (could this be D.B.'s attempt on the worlds longest sentence - Ed.) British Gypsum stated that the existing mine has only four years reserves left and the additional reserves covered by the application would give another 5 years reserves totalling 3 million tonnes. Local residents feared:-

Subsidence around homes and farmland.

Underground blasting, which it was claimed already disturbed some families.

The mine which is around 200 meters deep, operates a 3 shift system, 5 days per week working the mine by a variation of the pillar and stall system, blasting at the shift end times of 5.15 a.m., 1.15 p.m. and 9.30 p.m.

A public meeting held at Kirkby Thore on the 21st June between the local residents, and British Gypsum did much to dispell local fears and following this planning permission was granted for a 10 year period subject to certain conditions designed to safeguard local mines.

## Threlkeld Side, Great Rundale Beck, Dufton.

Welland Minerals Ltd. of Kettering were given planning permission in February 1985 for the extraction barytes from 5 small veins on Threlkeld side. In May of this year Norwest Holst Mining of Chesterfield as agents of Welland Mining applied for planning permission to Cumbria County Council to extend their area of working to include the Dobson Vein. This followed a discovery that the that the barytes deposit was more extensive than first thought. The application was approved subject to conditions, the main ones being require that the consent will expire on the 31st January 1990 and that on or before that date all plant, biuldings, machinery and foundations shall be removed from the site, lagoons backfilled and the workings restored to the County Council's satisfaction.

## Nenthead and Killhope.

Killhop visitor centre goes from strength to strength with visitor numbers for April setting an all-time record of 3055. Meanwhile over the hill at Nenthead, the newly-formed North Pennine Heritage Trust in conjunction with the County Council

have made a start on their long term projects of stimulating employment prospects in Nenthead along with work to preserve the mining remains and heritage of the Nenthead area. A £30,000 derelict land reclamation grant was made last year by the Department of the Environment for fencing, draining, landscaping and stabilisation of tailings. This year the County Council has asked the D.O.E. for £30,000 for the Rampgill Mine area, which the council hopes to buy from the Catholic Trust and £100,000 for further stabilisation work. A car park and toilets have to be built and Cumbria have loaned a caravan, staffed by volunteers of the N.P.H.T. giving information on the area. About 10 M.S.C. workers are employed on restoration work in the Nenthead region.

Still in Nenthead, on the 24th March this year a ceremony was held marking the end of a 4 year scheme by Eden District Council using M.S.C. labour to make safe disused mine workings on Alston Moor. The ceremony involved capping the 350 ft. deep Lovelady Shield shaft (see CAT investigations on the Nentforce Level - The Mine Explorer, Vol. 1), one of the air shafts on to the Nentforce Level. During the project gates have been erected on 250 levels and around 400 shafts have been capped.

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## **SALE OF THE CENTURY!**

Following the unsuccessful attempt to get rid of Dunham's "Geology of the North Pennine Drefield, Vol. I" the committee has decided to offer the book for sale by sealed tender, the money to go to CAT funds. The book is in good condition, originally having been a library copy, but since sold off by the library. Should anyone wish to see the book please contact Chris Jones on (0229) 63882.

If you are interested there is a reserve price of £15.00 and you should send your SEALED tenders to the chairmans house by September 1st, 1987.

*Extra Meet-Extra Meet-Extra Meet-Extra Meet-Extra Meet-*  
SUNDAY OCTOBER 18th. DALE HEAD SLATE QUARRIES. Grade E. A visit to slate workings not yet visited by CAT under the guidance of Alastair Cameron. Meet at Honister Youth Hostel. Contact Ian Matheson for details.

### WOODENDS ENIGMA.

There is a story told in Coniston of an adit whose entrance lies beneath the surface of Levers Water. It was submerged when the level of the dam was raised, and it's entrance sealed with an oaken plug. It was known as Woodends Level, and is shown on an old mine plan as lying to the east of Simon's Nick. At the beginning of 1987 when members of C.A.T. discovered the workings which eventually gave into the Top Level Extension there was speculation that there might also be a connection with Woodends Level. That seems to be the case, but it has given rise to more puzzles.

Top Level is blocked by a heavy fall about 75 fathoms from it's entrance. Water trickles through the blockage bringing blue copper deposits, and the roof has been strengthened with old railway lines. It appeared that they had collapsed under the weight of the fall, and this has so far discouraged any attempt to dig through. However, on reaching the other side via a dig from the new discoveries, it could be seen that these railway lines had had their ends ground to a chisel shape, and it seems that they have been driven through by some past miners in a vain attempt to clear the blockage. Further into Top Level there are other signs of digging which has been carried out after the main period of working.

In the narrow stope off Dead Dog Passage and directly above Top Level there had been a false floor on which were stacked deads. This had collapsed, causing the blockage which I have described. A fragment remained some fifteen feet above the floor of the stope, and beyond it was a low tunnel rising at an angle of about thirty degrees. On our second visit I back and footed up and demolished the wall to gain entrance to the rise. It continued for a few yards to a rough hole in the rock about two feet six inches in diameter which gave into a spectacular square shaft, about six feet across by forty feet high, cut from the solid rock and lined with blue green copper deposits. There is no sign of a vein, and it has the appearance of a hopper feeding through the hole at the bottom. This discovery gave rise to speculation that the Top Level blockage was in fact a collapsed ore chute, once used for loading directly into tubs standing on the Top Level tramway, and further inspection of the structure of the Top Level passage below supported this theory. The scale of the newly discovered works, and the probable cost of constructing them, gave a prospect of some considerable workings above.

A few days later I assembled Mike Mitchells maypole in the blue shaft and prussicked up. Forty feet above I climbed into a level which was partially blocked by an old wheelbarrow and some fine rock material which was holding back some beautiful blue water with swirls of white material on its surface. It was about two feet deep and lay in a level which bent out of sight to the left some eight yards along. Above was another vertical shaft with four sections of miners ladders in place. I waded along the level trying not to disturb the sediment, and round the bend came face to face with a massive wooden barrier. Was this the oaken plug of Woodends Level? It was made of horizontal boards bolted from the other side onto heavy timbers set into the solid rock at the top and sides of the passage, and probably at the bottom too but this cannot be seen as it is under water. At the centre was a very rusty oval plate with a threaded iron stud protruding from it with a nut on the end. On the floor was a large spanner. Water trickles through at the side of the frame, but the boards sound hollow when thumped. The oval plate and stud have since disappeared.

Several attempts to climb the ladder shaft by maypole resulted in the collapse of the ladders, but failed to succeed, partly because the maypole was too short, and partly because the top of the shaft was a steep bank of fine unconsolidated and unstable material. Eventually an evening assault by Mike Mitchell and myself gained entry into the level above. The top of the shaft is in a clay vein which has exfoliated from the roof, and which lies in granules about three feet deep on the floor. Some has fallen down the shaft and dams the water by the wheelbarrow. The level bends to the right after two meters and continues for another five meters where it ends at a blockage, which at the time of discovery was drafting into the mine. It was an extremely windy night, and we thought that we could hear gusts of wind outside. This has not been confirmed by other visitors, and so far the entrance has not been located on the surface.

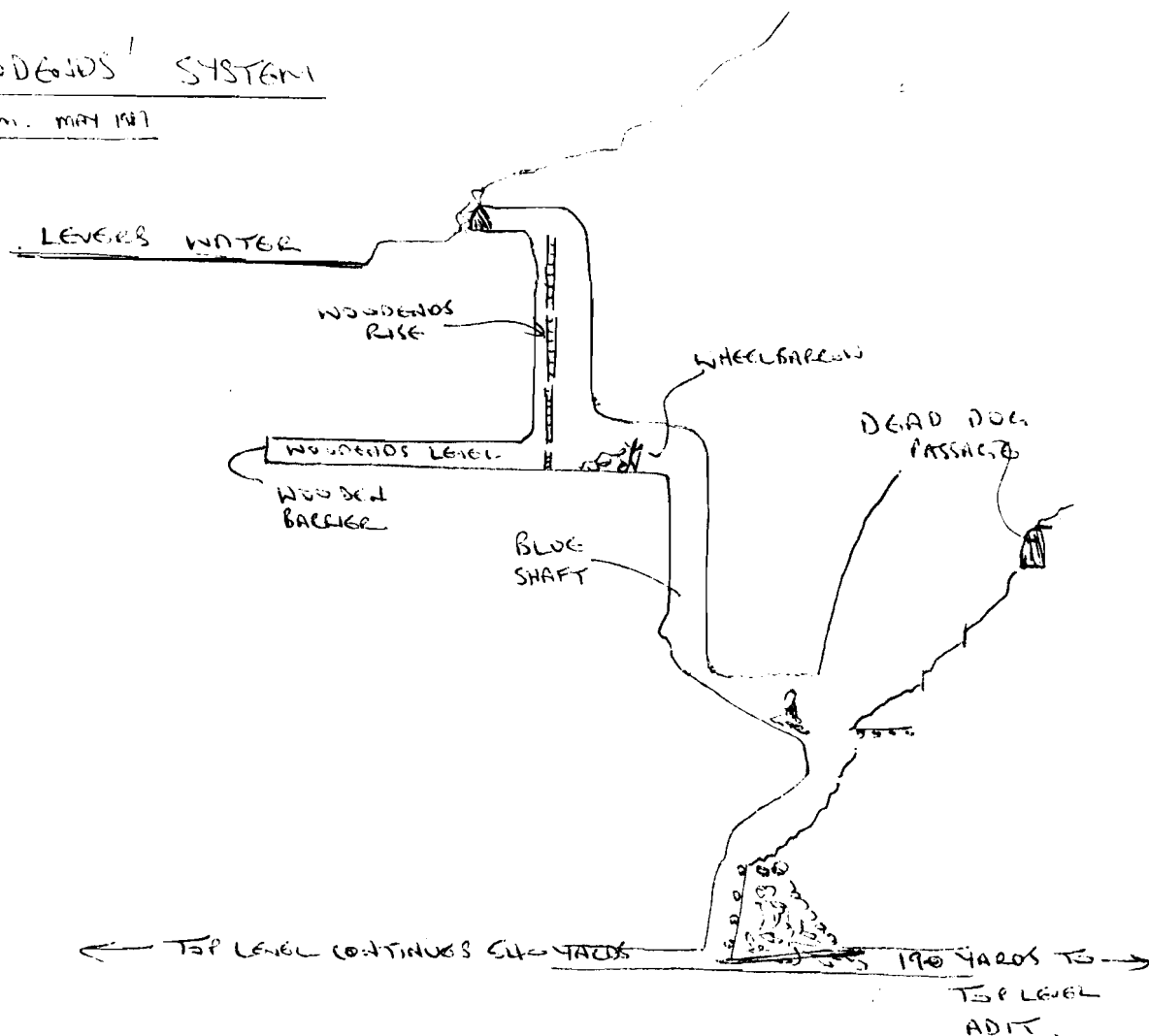
Now to the puzzle. What I have described is all there is. There is no sign of a vein, or of evidence of any attempt to mine the area. The whole system seems to be a structure designed solely to pass materials from the top of the highest rise, which seems to connect with the surface, down past Woodends Level to the Top Level tramway about a hundred feet below. Where then did this material come from? How was access obtained when the system was in use? There is only one way up or down, and this would be blocked by the material in it. What is beyond the wooden barrier? Water trickles through which is the source of the blue green deposits in Woodends Level, in the Blue Shaft, in the Blue Arch above Top Level, and in Top Level itself. Incidentally, the destination of this water is as mysterious as its source, for it does not flow out along Top Level, but disappears through the floor of the blockage. There is more to discover here. Alistair Lings has carried out a barometric survey of the system, and he found 'Woodends Level', if that is what it is, for there is now some doubt, to be eleven meters below the surface of Levers Water, which makes the top of the ladderway rising from it to be one meter above it. This is on exactly the same horizon as the adit to Levers Water Mine, which is adjacent to it. Was material from Levers Water Mine tipped through here before that mine connected with Middle and Grey Crag Levels?

And 'Woodends Level'. If it is really eleven meters, or thirty seven feet, below the surface of Levers Water, then it lies beneath the bottom of the dam, which is not that high, and it can never have come to day above the surface of the mountain tarn which must have existed prior to the construction of the dam. So what is behind the wooden barrier, and what was its purpose? The men who constructed it left from the other side, for the timbers were fitted that way, and unless they are still in there they must have reached the surface by some other route. Perhaps the vein of copper is through here. Perhaps Woodends Level has not yet been found but lies beyond the barrier. Perhaps we shall find out.

Ian Matheson. May 1987.

# WOODENDS SYSTEM

I.M. MAY 1977



Sketch plan of the "Woodends System" by Ian Matheson.

## More Coniston Exploration.

### Top Level Extension

At a recent CAT meeting a team of explorers led by Ian "Pork Pie" Matheson descended the stope at the end of the level past the shattered stope. This led into, not as the team expected, Avalanche Stope and the connection with Levers Water Mine but a totally new and previously unexplored part of the system. The way down consisted of a convoluted series of rebelays and deviations to the end of a 100 m. rope and then beyond over very dangerous ground to the bottom. Unfortunately the way on was blocked by an horrendous pile of deads, over which when rocks were thrown, water could be heard.

### Red Dell

Roy Garner and a team have forced their way down to deep level near the old East Engine shaft. **This** leads into the extension of Deep level beyond the collapse at the Old Engine Shaft. Again, the way down is particularly dangerous and sports a series of rebelays and deviations.



## EASTER MEET REVIEW

Nine members and one guest participated in this year's Easter meet, and after battling through the Bank Holiday traffic met at the campsite of Maentwrog. No meet leaders? No rope? (Don't mention the rope!)

### FRIDAY

We left the campsite and drove to Sygun mine (lucky to arrive in one piece as the Secretary drove). Since our last visit, Sygun (pronounced S'gun) has been opened to visitors and surface and underground workings are on show. Our enthusiasm for exploration of higher workings didn't meet with official approval, however, and we made a hasty retreat.

### SATURDAY

Another active day (particularly for Alistair who graciously carried the meet leaders gear and lunch).

Two parties set off to explore different areas. Anton and Andrew visited Glenaber terrace and Manod where access is now possible though previously banned by the M.O.D. The second group sought gold and found mines (no gold, just pianos) at Cwm Prysor, Prince Edward, and Gwynfinnid (where Royal wedding rings originate). \*

At Prince Edward mine a jackroll was still in position and numerous stopes and shafts were explored, as well as surface workings, whilst at Gefail-y-Miners, a surface water wheel still turned.

### SUNDAY

The energetic half of the party, myself, A. Lings, C. Jones, S. M. Godfrey, spent Sunday in what can only be described as poor weather, visiting the Britannia Mine on Snowdon, above the shores of Glaslyn at almost 2,500 feet. The levels are all open and mainly wet, with some unstable false floors to traverse. A commendation must go to Alistair again here, the sight of him in a small rift wearing nothing but a smile, just to get himself very wet and cold attempting to penetrate the waters of number 4 level was an example to the astonished onlookers, and something I will undoubtedly be proud to tell my grandchildren about.

\* Apologies for the spelling of Gwynfynedd to all Welsh readers (Ed)

The remaining group visited the extensive workings at Cwmorthen State Quarry descending the main incline and emerging at daylight below.

### MONDAY

Again the group was split, and those who had visited Cwmorthen the day before returned, this time reaching a level of 5 floors below the low adit. Robin Westerman led a heroic, exploratory foray into the uncharted geological wilderness of the Coed-Y-Brenin Forrest based around the two sites of the Cwmheisian Mine.

Percy Pitprop says:

"If you let someone carry your dinner, you might have to let them eat it, too."

Borrowdale Quarries & Closeheads 31.5.87

M.L. A. C-P-Thomas.

Only 3 members turned up as everyone else was over in Patterdale playing M.A.S.H. 4077 (C.O.M.R.U. Helicopter rescue practice).

### Sites Visited.

1. Quayfoot quarries. Nothing of interest (2 levels to closeheads) except for zone of recent collapse (1980'ish) in now disused carpark.
2. Closeheads on Low Scandell facing Castle Crag. 3 or 4 short levels.
3. High Scandell or Righead quarries. Not all open. One of these is full of rubbish from the nearby climbing hut (Bastards!) Aerial ropeway and headwheel.
4. Passing up and over Dale Head, he then descended Yew Crag (Honister) Incline looking at various levels on the way down.

As intimated on the mmets list this meet provided an opportunity to get to know the topography of Borrowdale (and develop some blisters), offering only occasional refreshment and cooling off by sticking ones head down the odd small hole.

Total round trip approx. 8-10 miles on surface and about 3-400 ft. underground. ----- I WANT MY MONEY BACK! A.C-P-T.

An early start to prepare the pitches and avoid delays meant that the job meeting the members on arrival was delegated to John Adams and Mike Mitchell.

C.Hodgson, E.Brown myself and 'Bear' climbed the steep slope to the top shaft inspecting on the way the handywork of D.Ramshaw and myself who had the previous Sunday dug open the Deep Level which was totally run in and sumped to the roof (Dave now suffers from 'Miners Leg'). The air shaft, a pitch of 20' was rigged and descended. This leads to the top of the main shaft. Just before I started down Roy Garner arrived, clad in black rubber, definitely a purist, thank God he left the \*\*\*\*\* behind. On descending the 80' main shaft to 'the kink' a further bolt was inserted as my good eye failed to spot the one put in by Mitchell back in 1983. After rigging it I descended the free hanging pitch to the deep level some 100' below. During the next hour all members made the descent and having explored the 200 yds of level they made their thigh-deep way out.

On de-rigging the pitch assisted by Messrs. Brown and Garner we returned to the car park for lunch. Most members had taken this opportunity to change into smart walking gear, unaware of the delights to come. We waited for Don to finish his lunch and then made our way to the N.E. Low cross-cut, an interesting stone arched level. This had collapsed at the junction of the stone arching and the bedrock and according to local tradition was never re-opened, all the tools and working gear being lost. E.Brown lept into the murky green water which was filled with poly bags and dead sheep...not surprisingly he came out quickly leaving the way clear for Mitchell who with a practised eye and nose, removed his helmet and said "I'll leave it for another day".

On passing the old mill (or garage for stone age cars) we went to the top N.E. cross cut. Alas this was run in and sumped to the roof but not to be denied the pleasure of a wet level for the flock I set to work with R.Garner and E.Brown and 1 or 2 others to gain entry. Others relaxed in the warm sun. While the level spilled its contents we visited the Myers Head Engine Shaft and the two ancient Myers Head levels.

Mr. Lings was dressed as an out of work country squire nestled on the ground praying that the strong sunlight would go away so that he could rest his tired and aching head. Back at the top N.E. cross-cut there was now 2' of air space. Graham was first in and in true CAT style most



members followed on. Even 'Bear' decided to follow on, paddling past everyone at a vast rate of knots only to be outdone by Graham's underwater frolics. On returning to the Car Park 7 members decided to visit Hartsop Hall mine to try and detect the elusive 'Wood Level' which but for 'Chindit' Mitchell might never have been found. The level was dug open to reveal nothing more than a short 12 yard cross-cut.

Another CAT first.

Ian Tyler

#### CARROCK MINE.

As usual in the Tyler household the day started with organised panic. Don Borthwick arrived and transferred his gear to 'Das Boot'. We sped gracefully towards Carrock and passing through Heskett Newmarket passed Mr Lings in the Green Goddess going the other way waving madly not to be seen again until 6.00 p.m.

Arriving at the mine 16 members had turned up. We split up into 3 groups. One was led by messrs Mitchell and Brown who went to tackle the Harding vein South. This entailed a 120' abseil from the open stopes calling in on a level previously explored by E. Brown and myself. Much of the original timberwork remained and a nice pick hammer was found. The descent was continued to No 2 level which was latterly used for slurry disposal from the mill but this was aborted due to lack of tackle. The second group, led by Dave Blundell went through the whole of the Carrock day level workings.

The third group led by myself went from the top Wilson level (the last to be driven) through the 70' of the Wilson stopes down to a sub-level which was explored, J. Capper making a bold attempt to reach the forehead. The group then continued down another 60' to emerge from hopper 16. Special mention here of Don Borthwick's 'shot crow' method of exit. Following lunch everyone returned underground to tackle various other trips including the full Cook's tour of all 3 veins. A special watery dig was made on Emerson at a small cross-cut which revealed a small rise with copious amounts of water coming down. After a sustained effort by Borthwick, Capper and Barrow they revolted and reminded me that Carrock was supposed to be a dry mine.

On exit most of the group inspected the mill before dispersing. The time was 5.30 and Alastair Lings arrived in time to say 'Cheerio'.

Ian Tyler

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Newsletter Editor - Chris Jones to whom all threatening mail should be forwarded.