

NOTES...2010 JW: This article was published in "Mine Explorer 1" in 1984 (without photos). It is the Journal of Cumbria Amenity Trust Mining History Society. By kind permission of the author and C.A.T.M.H.S it is reproduced here....Part 1 of 3. *It records the spirit of adventure and discovery of those early visits to the Coniston mine.* Article and Photographs are copyright © of Peter Fleming unless otherwise stated. Slides digitised and added by Jeff Wilkinson with cooperation from the author.

CONISTON COPPER MINES RE-DISCOVERED

By Peter Fleming

PART I

Since the turn of the century, generations of fell walkers and climbers must have passed by the extensive remains of Coniston Copper Mines on their way to the fells and crags. Some may have been impressed by the huge heaps of waste rock, numerous waterways to feed long gone water wheels, the tumbling ruins of mine buildings and tunnels and shafts dotting the hillsides. Few of these people would realise the extent of the underground world beneath their feet, now silent, forgotten and sealed by collapses. The Coniston Mines are probably the deepest and most extensive copper mines in the country. In its heyday in the period 1850/60, it is said that over 600 men, women and boys were employed both above and below ground. Coniston Village itself would not be as we know it today but for the mines.

Recorded exploitation of the copper veins goes back almost four hundred years. The mineral was worked at that time by the Company of Mines Royal, which was instrumental in bringing in German miners and overseers who were more experienced in tunnelling the hard country rock. Some workings attributed to them can still be seen, but without doubt much work would have been done which where the veins outcropped on the surface long before this period.

Final closure of the mines was due mainly to two factors. The falling price of copper was one, the other being the great depth the mines had reached which increased the cost of hauling and pumping. The deepest workings were over six hundred feet below sea level and the deepest shaft, Triddle Shaft, was 1700ft. This shaft was driven from a tunnel adjacent to Kernal Crag in Red Dell. When the water wheels which operated the pumps were finally stopped, so extensive were the workings that it took five years for the water to reach the lowest tunnel to allow drainage to the surface. This is known as the Deep or Horse Level and lies not far from the Copper Mines Youth Hostel by Red- Dell Beck. There are now over 1000 ft. of flooded workings below this horizon. Above this level there are still miles of passages, hundreds of feet of worked out near vertical veins (stopes) and various shafts. Timbers supporting stacked deads and false floors have rotted, resulting in collapses and blockages and making the workings dangerous

It is for these reasons perhaps that until recent years no serious attempts have been made to re-discover the more inaccessible areas of these mines, but since the closure ninety years ago is now beyond living memory historians and industrial archaeologists are taking an interest and exploration using modern mountaineering and caving techniques and equipment are making re-discovery possible.

It is the purpose of this article to record and describe some of the exciting explorations and finds that have been made since 1974, but it will be confined to the workings beneath Red Dell Valley on the Bonsor Vein which was the richest deposit found in the Coniston Mines. It is hoped to complete the story in a future edition of this publication to cover the remaining section of workings at Levers Water and Paddy End which are still being explored at the time of writing.

A cross section of the Red Dell workings is appended together with a key to the numbers shown thereon. This cross section is not intended to be accurate. In order to give depth, a little artistic licence is deemed permissible; also much detail has been left out for clarity.

In January 1974 excavation in the floor of the oddly named "Glory Hole" (No.1 on the Section) revealed 5ft down, a timber covered shaft. This was descended on 20th January 1974 and found to be 35 ft deep. It connected with Bouncy Level which extended for a distance of sixty yards with 18" of water at the end. Some two years previously an attempt to dig open this level from the surface was unsuccessful. This small working, although high on the fellside does not date back very far.

The 26th January 1974 was to be an important day in Red Dell. A strong team re-opened the long blocked entrance to Fleming's Mine (No.4 on Section) which dated back to the 1820s. There was a feeling of excitement as it was known to be an extensive mine from old plans which had been examined, but we were unaware at that time how long and difficult it would be to explore it. On entering the tunnel which is a "cross cut" to the vein we waded through the wet section passing a flooded sump in the floor. The dry section beyond contained only the imprints of miners' clogs and the planks along which their wheel barrows were pushed. No one had been in here in living memory. For the next nine years' we were to continually find ourselves in similar situations. It was exciting not knowing what would be found round the next corner. After about 130 yards the vein was reached. The tunnel ran left and right along it, with a small stope overhead. The left branch followed a weak vein for 90 yards, passing a small manhole in the floor and ending at a ventilation shaft which connected with the surface but was sealed at half height. The right hand tunnel soon ran into a widening vein which was worked out to a great height above and below, which meant we were on a false floor. After 30 yards the floor had gone, due to a collapse from the hanging wall on our left. A gap 30 ft deep and 40 ft across loomed ahead with the tunnel continuing on the other side. The question was how to get there.

The following weekend we returned with electron ladder and ropes. After clearing rubble and loose timber from the end of the false floor we descended the 30 ft pitch (No.5 on the Section). At the bottom on the far side was a short slope leading down to a rising crawl on the left, which appeared to be blocked with stone. This was pushed aside and crawling through we found ourselves in the continuation of the vein which was faulted and thrown about twelve feet. Above us were three tiers of false floors. These were rather good examples, set on timbers. One of them would be the continuation of Fleming's Level. Ahead of us the way came to an end on the brink of a narrow stope which seemed to go down a long way. Cross timbers and platforms could be seen (No.6 on Section). It was

a long time before we returned to this point, because of lack of equipment (or maybe nerves). An attempt was made, however, to reach the continuation of Fleming's Level from below the collapsed floor. This was done by using a "maypole" of scaffolding tubes with electron ladder attached. It was successful but not very safe. The tunnel was followed through the fault line and on to yet another collapse in the floor. The bottom was impossible to see and all around it was a scene of collapse and dangerous loose rubble.

It was known that somewhere beyond this impasse, Triddle Shaft came down to intersect the workings, but to reach it from here was impossible. We retreated and it was not until 1978 that any further progress was made when fresh timber was brought in to make belay and abseil points. This was done at the top of the previously mentioned, narrow stope. A long ladder was lowered. The first down had difficulty passing down the narrowest section - it was only about 12" wide and yet some ancient miner had actually worked in this space with hammer and chisel. On later visits it was found to be possible to hang the ladder in a different position to avoid the tightest section. Near the bottom a heavy iron chain hung down, disappearing under the rubble on the floor upon which we landed. The pitch was 50 ft. Ducking beneath unstable platforms holding up tons of stacked deads which looked as if they would collapse at a touch, we came to the top of a steeply sloping chute covered in loose rock. It was not possible to see where it finished. A volunteer was sent down on the end of a safety rope. Taking great care he found after 79ft he had reached a black void (No.7 on the Section). The bottom could not be made out and distances always seem greater in the dark, so a second man was called for; two lights being better than one. He had hardly started down when the loose stones began to move under his feet, gaining momentum within seconds, and the slope began to avalanche. With a great roar the flowing rock bore down on the man below who seemed to have no way of escape. With great presence of mind and great agility, however, he did the only possible thing to avoid disaster. The end of the chute was 'V' shaped and with a great leap upwards he was able to bridge the gap, allowing the rock avalanche, some 3ft deep, to pass underneath and pour over the edge into the void with a tremendous explosion of noise. Those remaining at the top, unable to see, feared the worst and expected to pull in a rope with a frayed broken end and it was with considerable relief and disbelief that he was seen scrambling back up unharmed: he was not so easily got rid of ! It had had been a close call however and we decided the mine had won again and beat a retreat.

These early probes into the mines were carried out by only a small group of friends with the minimum of equipment and little experience. It was obvious that to pursue these explorations any further, more serious organization would be necessary with a larger number of willing participants. To this end it was decided to form a new mines research society and on the 9th October, 1979 an advertised meeting was arranged inviting all interested people to attend and Cumbria Amenity Trust was founded. It quickly went from strength to strength. More equipment was purchased through subscriptions and funds raised. The first year or so was spent in visiting and exploring mining sites throughout the North, finding our feet and assessing our new found colleagues.

By the spring of 1981 we felt we had a strong enough team to challenge the Coniston Mines once again and on the 15th March we went into Fleming's Level, noticing how bats were now inhabiting the tunnels. When the point was reached where the avalanche had occurred, what remained of the loose rock was cleared and made safe. A belay point was established at the bottom of the chute and an

intrepid member abseiled into black space. Soon his voice came up from the depths to say he had reached the bottom and would look around before deciding if it was worth anyone else descending. Out of view of the 4 others but quite clearly heard, he climbed a steep boulder slope and found he was stood on the brink of Triddle Shaft (No.8 on Section). With this news others went down the 55 ft pitch and joined him at the shaft viewpoint. It was found to be very interesting. Massive timbers still in good condition spanned the wide roof above our heads and through an opening above the shaft the supporting blocks for a pulley wheel that had once carried a haulage wire could be seen. Looking down the shaft our side was built of stone, otherwise it was driven, through solid rock. The bottom was beyond the range of our lights and left us speculating on the secrets down there.

We retraced our steps to the bottom of the steep boulder slope and went in the other direction around a dangerous hanging corner into a widening stope. At the end was a manway with the remains of a ladder. One side of this was formed by a latticework of rock only one stone in thickness (No.10 on Section). This 30 ft pitch was soon descended and we found ourselves in a tunnel which we thought might be Taylor's Level. An old oil can was found at this point. The tunnel was blocked before it intersected Triddle Shaft and we noticed the floor was hollow at this point. In the other direction the tunnel continued over a small collapse with an open stope above and then half of the floor had been neatly mined away over a good distance and to a great depth. Further on wooden water channels were still on the floor of the tunnel and crystal clear pools stained pale blue by the copper, were crossed. There was a steep manway in the roof, (No.12 on Section) which has not yet been explored. The tunnel went round in a loop and a very worn wagon wheel was found here. We had decided by now that it definitely was Taylor's Level no doubt about. Eventually we came to a collapse on a weak vein, which blocked the tunnel, but it did not look to be a big job to clear it. However, by that time we had done enough for that day and returned to the surface.

We returned in force a month later for a two day siege on 11/12th April 1981. One team set about clearing the collapse in Taylor's Level whilst another prepared to descend the hole where the floor was half mined away. It was estimated that it would be about 90ft and would bring us to Deep Level, but there was so much collapsed rubble down there it was not possible to enter Deep Level. The digging team were successful in getting through the blockage and further along the tunnel came to an opening on the left, giving an impressive view into an enormous stope with daylight coming down from the surface 200ft above. This was the New Engine Shaft slopes, around which the fences are in Red Dell (No.16). At our feet a heavy sheaved winding wheel lay partially buried and beyond the great stope plunged down over a hundred feet to the water level. The shaft itself came down somewhere in the middle of this great stope and Taylor's Level at this point disappeared under one of the largest collapses we had seen so far. A sixty foot scramble up this huge pile which had come down from the sides (No.14) brought us to the edge another very deep drop into unknown depths. Looking up we could see the heather hanging over the edge of the stope at the surface. Over the years, I had often stood up there looking down these fearful holes and wondered what was down there, little realising I would be one of the first to find out.

On our way back along the level one member went down a small shaft we had noticed earlier, and which lay close to the New Engine Shaft stopes. At 110ft he arrived at a small lake and could see the heavily timbered Deep Level above him,

but it was not possible to reach it. Daylight filtered down to give an eerie light on the water, even at this depth. Further exploration with a dinghy was suggested for a later date.

Before we left Taylor's Level that weekend, we examined the hollow floor previously mentioned near to Triddle Shaft. On removing some timbers it looked as if it could be a manway that would take us to the bottom of Triddle Shaft. This too was left for another visit and we returned to the surface very pleased with our discoveries.

The next event worth recording took place on 24th June 1981, when it was arranged to take a BBC team into the workings to make a short documentary for the "Look North" series. Much time and effort went into carrying the camera, lighting, batteries and sound equipment etc. up the hill and down the mine. We went as far as the bottom of the first pitch in Flemings Level and there were some anxious moments whilst lowering £23,000s worth of camera in a rucksack on the end of a rope down through the collapsed floor. The powerful lights made the whole place as bright as daylight. The film was screened on the 2nd July 1981.

On the 27th June 1981, the club returned to investigate the manway below the hollow floor in Taylor's Level, using an electron ladder. A curious tent shaped recess was reached 30ft down and from there the descent took us into the side of Triddle Shaft, which was very wide at this point. One side was formed of heavy timbers holding back deads. The bottom was reached after another 70ft and we wondered how long it had been since it was last seen by anyone. The first thing we noticed was that Deep Level appeared intact in both directions. We were at another interesting stage of our explorations. Vivid green and blue copper stains ran down the walls and stalactites were numerous. There was no sign of Triddle Shaft continuing through the floor and it must be well sealed over. Deep Level was followed in the direction of the New Engine Shaft though we knew it would not go far before the collapse discovered on the 11th April 1981 was reached. The roof to this point was in a very dangerous state due to the immense weight on the rotten timbers. Going in the other direction from the shaft bottom, the tunnel passed through a fault and continued beyond a deep flooded sump. This was tackled by an intrepid volunteer clad in a wetsuit. Looking like a porpoise on a string, with much splashing and swinging, he managed to get across this section and continued to follow the level to its end, reached after about 170 yards. There was no sign of workable copper. At this point in Deep Level it is over half a mile from the entrance. Being the main haulage and drainage level for the whole of Coniston Mines it has many branches, the longest extending nearly one and a half miles almost beneath Levers Water. We were pleased to reach the limit of one of its branches.

The next day it was decided to investigate the fenced off holes in Red Dell with the idea of establishing a through route via Taylor's and out of Fleming's Mine. We were not sure at which point the best line of descent lay and it would be a case of trial and error. A long rope was lowered and secured to the 'Danger' sign and fence posts. A member equipped with full prussicking gear in case he needed to return the same way abseiled down. After over 100 ft and some awkward traversing movements he gained the flat top of a huge wedged block which had dropped 6 ft out of the roof. It was about 40ft long and 10ft wide. This point became known as 'boulder plateau' (No.19). Running across the top was a strong quartz vein carrying a good show of copper ore (chalcopyrite)

which the old miners had not known about. From the top of Boulder Plateau it was only a short descent on to the top of the 60ft pyramid of rubble and a scramble down to reach Taylor's Level, a vertical descent of 200 ft in all, so we had found a route down. The rope was substituted for electron ladder for those not expert in single rope technique (SRT) but the ladder was secured at the S.E. end of the stope at the surface, so that it hung at a pronounced angle. During the course of the day nine members of CAT completed the newly established through route going in both directions to clear the equipment left in Fleming's Mine from the previous day.

This was another important milestone in our explorations beneath Red Dell. We had used 700ft of rope and 500ft of electron ladder to complete the through route. At a later date we found a more direct and easier descent line marked No.17 on the Section, which took us in one good pitch of 140ft to a small landing platform, then a 30 it abseil to a point halfway down the rubble pyramid. This has become the standard line of descent or ascent.

After this spate of activity the Mine was left in peace for some months whilst we turned our attention elsewhere, but in March 1982 we returned and two members abseiled down Triddle Shaft from the viewpoint in Flemings Mine to seek the continuation of Taylor's Level on the other side. With difficulty they pendulumed across the yawning shaft at the end of a 100ft rope and got into the tunnel. This was cut in solid rock and quite safe. After following it for 70 yards they came across a staggering sight. Pouring from the roof and down one wall was a frozen cascade of azure blue copper carbonate, which fanned out in a thick layer across the tunnel floor. We had got used to seeing these slow forming colourful deposits which leach out of the veins throughout the workings, but this was by far the most spectacular. It was photographed and carefully left undisturbed. Fortunately it is in a very inaccessible part of the mine and few people will ever see it. The tunnel was then followed another 20 yards to its end, where, like Deep Level below it, there was no copper worth extracting.

CAT had agreed to act as hosts to a visiting group of mines research societies later that year and it was decided to take them on the Red Dell through route. Accordingly a lot of preparatory work had to be done to make the trip as safe as possible, despite the fact that everyone had a third party insurance cover. Extra abseil points were put in using bolts and hangers. Small platforms were built at awkward take off areas and loose rock was cleared. The largest job was to re-make the entrance to Fleming's Mine which for over eight years had been kept open by a 40 gallon bottomless drum. This was removed and a fine, new timbered entrance was constructed.

The weekend of the visit began on 18th September 1982. Saturday we took them through the Levers Water, Paddy End system and on Sunday the Red Dell system and in addition some of our members made the first descents by abseil of the Old Engine Shaft and the Bonsor East Shaft (not shown on Section), both to Deep Level where they walked out to daylight. Numerous letters were received afterwards thanking the Society for a most interesting weekend and for all the trouble taken in preparing it. The Coniston Mines had not seen so many people since the 1860's.

To descend the top section of Triddle Shaft had been a talking point for a long time. Usually with bated breath owing to its great depth and the stories we had heard of others trying it years ago using SRT methods and having to return up

the rope in a very exhausted and frightened state after what they saw some 160ft down. We knew from calculations that it was about 350ft down to the viewpoint above Taylor's Level. Would it still be possible to reach this point all the way down the shaft? By now we had a team of 'hard men' rapidly becoming experts in SRT and what better time to decide to have a go than after the Club's annual dinner, when we were full of beer and big talk in the comfort of a country pub!

The next morning Sunday 5th December 1982, five set out laden with equipment and entered the access tunnel to Triddle Shaft (No.2 on Section). At the end of the tunnel is a platform 5ft down. Upon this stands the remains of a balance bob which was a large weighted pivot device for changing the direction of the pumping rods from horizontal to vertical in this case. It was linked to the New Engine Shaft water wheel at the foot of the incline. From this balance bob the shaft plunges straight down into impenetrable blackness, which in cold weather often belches out steamy vapour from the warmer air in the mine. Secure belays were made and the rope lowered. The first man descended, hanging free in space and was soon out of sight. Communication was not easy without a whistle. At 144ft he was able to get into a side passage, where the other four soon joined him. The shaft was cut in solid rock except for the last few yards where it entered a stope with some poised, loose rock around. The side passage ran S.E. to a collapsed false floor and an enormous hole which was recognised as being the same one we had viewed from the other side all those years ago. We were in the continuation of Fleming's Level. Returning to Triddle Shaft where it intersects this level, a lot of loose rubble and timber was cleared to try and cross to the other (NW) side. The 12ft gap was crossed with difficulty and access was gained to the tunnel again which we were now eager to explore. In the first few yards there were three short trial tunnels running off, partially backfilled. Here and there original tallow candles were still on the walls. After 30 yards we came to a 'T' junction which was a worked out vein extending upwards beyond the reach of our lights. To the left was a false floor with a ladder sticking out of a manhole (No.9 on section). Very tempting but dangerously rotten. We followed the tunnel to the right which in places was a riot of colour in blues and greens of all shades caused by the copper carbonates being deposited during the 150 years or so since this tunnel had been driven. At 70 yards another fork was reached. In the right hand one which went for a further 30 yards we found a small wooden gunpowder cask which had sprung Open like the petals of a flower. Other small rusted iron artifacts were lying around. The left hand branch went about twenty yards and was backfilled. Our examination of the tunnels was hurried because we still did not know what the outcome of our continued descent would be and time was not on our side.

Returning to the shaft we prepared to descend the next pitch. The bottom was visible about 70ft below in a large chamber. The shaft down to this point was inclined at a steep angle, it was not vertical. On landing at the bottom we looked around. This area could have been an important shaft station in its heyday. A large stope was to the S.E., the same one we had seen from above. It was in fact at the far end of this stope around a bend that our normal line of descent lay between Fleming's and Taylor's Levels. In one corner adjacent to the shaft was found a tunnel which led to a deep, clear pool and in it was an almost complete wheelbarrow. Just beyond this a narrow stope went up. We continued our descent of the shaft which was more constricted and timbered over at two points. We had to duck and weave our way through huge timber platforms and manholes which were thankfully in very good condition due to the dampness

hereabouts. Soon we came to the one with the pulley supports which we had seen from below in March 1981. We were almost 'home' but not dry! A short abseil led to a slippery plank over the last 200 ft of the shaft. The end of the plank allowed us to drop directly on to the viewpoint at the side. Had it not been for the plank it may have been impossible to pendule across from the manhole.

We were very pleased to have completed this descent, but we still had to get out, so being on familiar ground we quickly scrambled down into Taylor's and along to the New Engine Shaft stopes where we had previously suspended a rope down. After prussicking out the 200ft to the surface, where it was now very dark we celebrated with a pint or two, probably three, in the Crown at Coniston.

We returned to the shaft again on 30th January 1983 to examine the continuation of Fleming's Level in more detail and on this occasion we lowered a large piece of new timber down to help bridge the 12ft gap. The ladderway in the false floor was descended and found to connect with the tunnel below with the wheelbarrow in. A possible alternative line of descent was also noted further down the shaft. Once again we exited via the New Engine Shaft.

A big discovery was made on the 15th May 1983 when a team of five, equipped with wet suits and dinghy abseiled 315ft down the Red Dell stopes to the water level (No.18 on Section). This line of descent coincided with the line of fall of a 26 year old walker in January 1978, who did not survive.

With the dinghy it was intended to sail along to the "lake" at the bottom of the New Engine Shaft. However this was not successful due to obstructions and collapses, but in the other direction, some 15 ft above the water table, Deep Level was entered. It was still intact over a good distance until a heavily timbered roof was reached. A lot of these timbers were square in section, which is unusual. Running along the floor was a good example of a wooden launder. One side of a section of the tunnel was made up of a stone wall again an unusual feature in Coniston Mines. Through gaps in the roof could be seen an enormous stoped out area with timber platforms here and there. It was so high it was hardly possible to see the roof, which would be in excess of 200ft and the vein was up to 15 ft wide. It was believed to be the upper part of the fabled 'Cobblers Hole' which was the richest ore body discovered in Coniston Mines. The lower reaches, now under water, were much wider. According to old plans and cross sections this was the right location for Cobblers Hole, beneath Red Dell Beck. It was a remarkable discovery.

The tunnel ended in a collapse midway along the stope, but on climbing through a gap in the roof it was possible to climb to the top of the huge pile of rubble and view the excavation. However, owing to lack of more equipment they were unable to descend the other side and returned to the surface after a long prussick to break the news. Meanwhile another team had been down in Taylor's Level to investigate the small stope (No.13 on the Section) near New Engine Shaft. Climbing wooden timbers a small recess was reached at 30ft and in it was found a 4lb single handed boring hammer, complete with shaft. Twenty feet above this a tunnel appeared to lead off with wooden trunking sticking out of it. This can only be reached using a 'maypole' technique. This has still to be done. It could possibly connect with a tunnel marked on old plans that comes in from the side of the New Engine Shaft stopes at a much higher level. I suspect there is much unexplored workings between here and Fleming's Level.

A month later on the 12th June 1983, a team of two descended the 300ft pitch to see the big discovery for themselves, first having to rescue a sheep at the top and boot off the body of another from a ledge lower down, where it was in the way. On reaching the Cobblers Hole they climbed the big rubble pile and descended the other side, which was in fact a built stone wall with the tunnel underneath, running back into the collapse, but ahead there was a hopeless run-in. This was climbed for about 80ft until further progress was stopped by the increasing angle. There was nothing further to do so a return to the surface was made.

Little more exploration has been done since then except for a probe into the other Red Dell hole (No.22 on Section). It was bottomed at 170ft, but another line of descent was spotted. It has not yet been tried. An American youth fell down this hole on 22nd July, 1972, and was very lucky to survive but he was seriously injured.

This brings us to the time of writing. This is a fairly accurate account of our explorations of the Bonsor Vein in Red Dell over the last nine years and it is with some relief that we know that the largest part of these mines are full of water and quite inaccessible, that is the 1000ft of workings below Deep Level, as mentioned at the beginning. There still are many corners and holes to check out before we are finished. I suspect we will be going back for some time to come.

In the explorations which have led to this report, thanks are due to all those members who endured the darkness and dirt and the danger. I recall emerging from the mines on many occasions on bitterly cold winter nights and having to change out of wet suits, etc, in thick snow and howling winds, then washing in icy streams. Tough! But rewarding. After all what else is left to do in our Lake District National Park that has not been done before? I have regarded mine exploration as an untapped source of adventure, and this, it appears, is slowly catching on.

FURTHER READING IN PUBLICATION DATE ORDER

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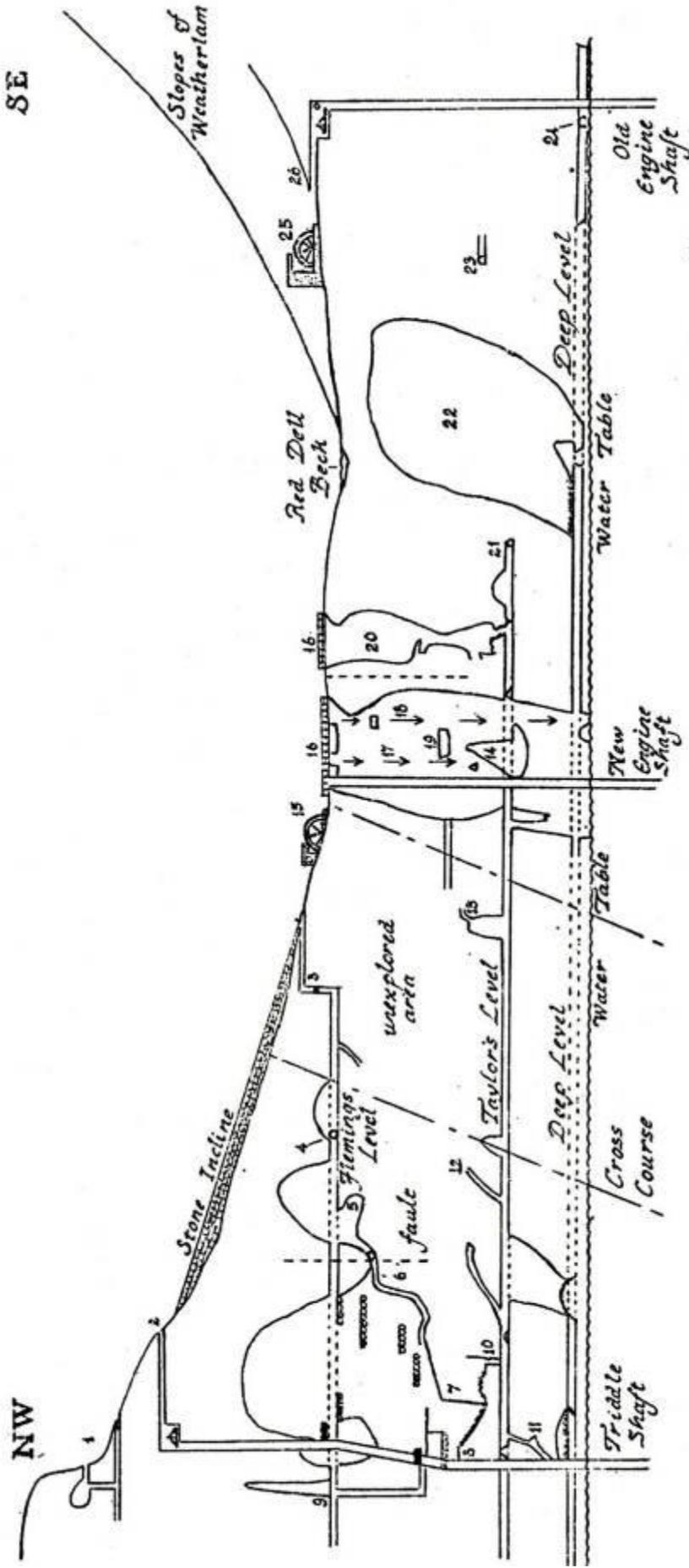
FRCC - Fell & Rock Climbing club of the English Lake District

KEY TO NUMBERS SHOWN ON THE CROSS SECTION

- 1. Glory Hole and Bouncy Level.**
- 2. Access tunnel to balance bob platform and Triddle Shaft.**
- 3. Air shaft from Fleming's Mine.**
- 4. Entrance to Flemings Mine via cross cut from surface.**
- 5. 30ft pitch through collapsed floor.**
- 6. 50ft pitch down very narrow stope.**
- 7. 55ft pitch - site of rock avalanche.**
- 8. Viewpoint of Triddle Shaft from top of unstable boulder slope.**
- 9. Extension to Fleming's Level. Wooden gunpowder cask found here.**
- 10. 30ft pitch to Taylor's Level.**
- 11. Descent route to Triddle Shaft Bottom.**
- 12. Unexplored manway.**
- 13. Stope and tunnel - not explored. 4lb boring hammer found here.**
- 14. 60ft pyramid of rubble (collapsed).**
- 15. Site of New Engine Shaft water wheel.**
- 16. Fenced off open stopes.**
- 17. Line of abseil to Taylor's Level, 200ft.**
- 18. Line of abseil to Deep Level, 300ft.**
- 19. Large flat detached block with copper vein running through it.**
- 20. Open stope - not fully explored.**
- 21. Taylor's Level via cross cut from surface - blocked.**
- 22. Very large stope. Believed to be the upper part of "Cobbler's Hole".**
- 23. 17th Century tunnel from surface, known as "Cobbler's Level".**
- 24. Cross cut from surface (adit) to Deep Level.**
- 25. Site of Old Engine Shaft water wheel.**
- 26. Access tunnel to Old Engine Shaft and balance bob platform.**

CONISTON COPPER MINES, RED DELL WORKINGS

Section Through Bonsor Vein Showing Areas Explored ~ 1974/83



- approximate scale in feet -

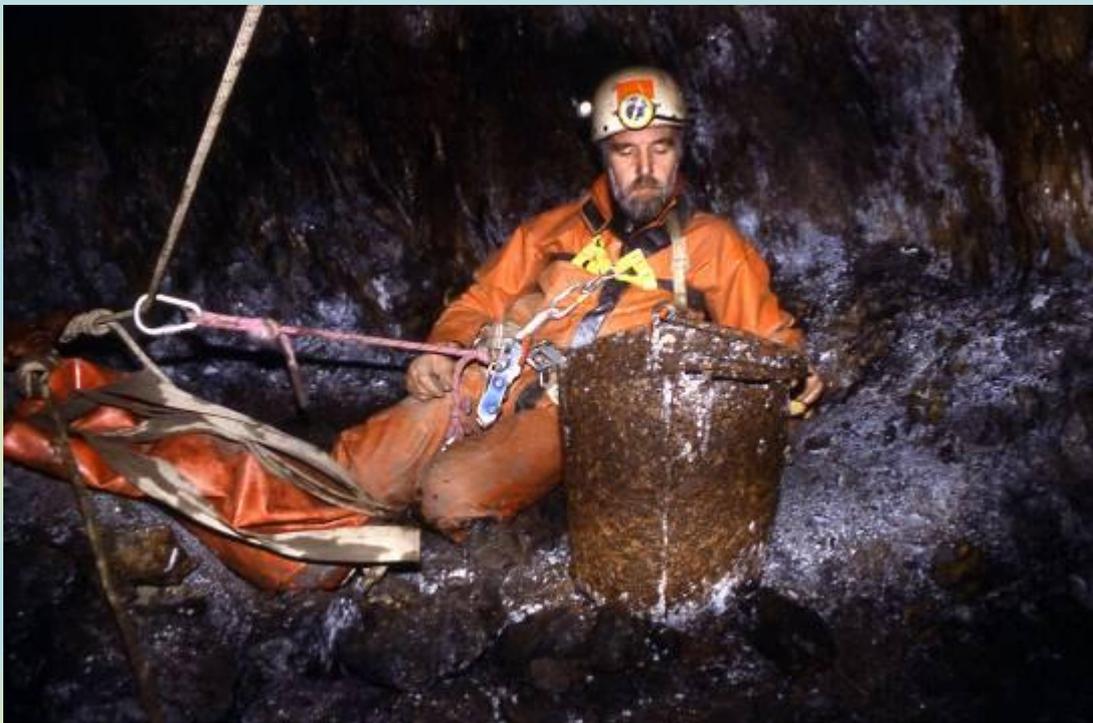
- P. Fleming - 1983 -



Relaxing after another successful exploration of the extensive Red Dell workings...1981. The equipment used on this exploration included 700^{ft} of rope and 500^{ft} of electron ladders!



About 200^{ft} down the Red Dell Stopes to the North of the New Engine Shaft on the 1st descent in 1988.



A mine kibble discovered about 200^{ft} down the Red Dell Stopes in 1988...to the North of the New Engine Shaft. The kibble is now on display at the Ruskin Museum.



After a 480^{ft} abseil down Triddle Shaft a branch of Deep Level beneath Red Dell was reached...the year 1981.



The "Blue Cascade" discovered in 1982 in the far reaches of Taylors Level beyond the Triddle Shaft.



About 300^{ft} down the Red Dell Stopes on the Deep Level horizon
after descending the New Engine Shaft...1983.



First descent of the Bonsor East Shaft to Deep Level...1982.
In the foreground can be seen a gunpowder barrel.



Deep Level reached from a 315^{ft} abseil down the Red Dell stopes in 1983, (*No 18 on Section*)...believed to be in the area of the “fabled” Cobblers Hole.