CAT

The Newsletter of the Cumbria Amenity Trust Mining History Society



Cumbria Amenity Trust Mining History Society Newsletter No 112, August 2013.

Contents:

News			
Membership Coniston Mineral Rights Culvert Clearance in Brandy Gill Mines Forum, 26 th April Underwater sand mining on Windermere	Page 2 Page 3 Page 3 Page 4 Page 6		
			C
		Meets and Activities	
		Greenside Mine, May 1 st	Page 7
		Carrock Mine Geological Survey	Page 10
Lancaster Archaeological Society visit to Tilberthwaite	Page 13		
Tilberthwaite Mine Update	Page 14		
Force Crag Mine update	Page 15		
Wales Weekend, April 20 th – 21 st	Page 16		
Aldingham Evening Meet, 8 th May	Page 22		
White Coombe, June 12 th	Page 23		
Articles			
Askham Porphyry Quarry	Page 23		
Diaries of Edward Wadham	Page 25		
Edward Wadham in America, 1856	Page 27		
Society Officers and Committee Members	Back cover		

Cover picture

Tilberthwaite Horse Level, Coniston. See report on page 14. On July 14th Jason Hadwin and his son offered to run our trailers up to the level from the road. Many thanks All the equipment is now inside the gated area ready for the next phase.

Membership Phillipa Tindal

I am sorry to have to report that Phillipa Tindal died on March 31st after a short illness. Together with her husband John, she set up and ran the mining display at Threlkeld Museum. They collaborated with CATMHS on this, and were helpful in selling CAT publications there. Phillipa was taking groups underground at the museum the week before she died. Although she was in her eighties she appreciated very much going on underground trips with CAT, especially at Coniston and Greenside. She was a remarkable lady and will be much missed.

New Member

Robin Rutherford, from Darlington, who writes:

"I started caving about 30 years ago when I employed Dave Hobbs as a panel beater at work in our car body repair shop. Dave was a founder of the Swaledale Fell Rescue Organisation and soon had me joining the team and caving at least once if not twice a week. I even managed to get John Brown involved in the manufacture of some security grilles for our old HQ at Marske village hall. We practised SRT from the roof of our workshop and put it to use throughout the caves of Yorkshire but mainly in Swaledale and Kingsdale. The SFRO was a very active team but although we trained for underground rescue, during my years in the team we only ever were actually called to surface incidents. Some were very high profile and involved the Police and RAF teams. Others were less so and involved the local farmer and a crag bound sheep. As Swaledale has a very high proportion of lead mines in relation to its size I soon started getting down many of them. Richmond Copper Mine was a treasure trove of artefacts such as clay pipes, candles wall writing etc with some very pretty gour pools but many are just muddy crawls along tight passages in foul air. Burtersett stone mine in Wensleydale is an excellent example of stall and pillar mining with again some beautiful pools and clog marks from the Old Man can be clearly seen in the mud. John and I started exploring the mines of Nenthead and Coniston and it was on a trip to Coniston when we met two members of CATMHS on the shores of Leverswater, got talking to them, and from that meeting was born the seeds of John's involvement with the society and my occasional trips out with them. I am looking forward to many further years of involvement and exploration with the group both on and under the fells of the Lake District and surrounding areas".

Clif Bar 10 Peaks Lake District Endurance Race

The weekend of 29th June saw the return of the 10 Peaks event in the Lake District. The "short" course is designed for those competitors that saw the 73km long course, with its 5600m of height gain, a step too far. The "short" course follows the same route as the long but misses out a few loop sections, cutting down the overall distance to a more manageable 50km. Congratulation to Tony Holland, he not merely won but came in 46 minutes ahead of the next finisher! Tony used his local knowledge and dug deep, running along the Corridor route to gain nearly 7 minutes on second place man by the time they reached the top of Great Gable. He didn't stop for breath at the Honister feed station but raced on up the final peak, Dale Head, before disappearing over the edge to take a little known miner's track towards the finish. Tony completed the course in 7hrs 54mins and 30secs! Will you be doing the long course next year Tony?

Coniston Mineral Rights in 17th Century

In the last issue I aired a query by Oliver Barratt, who asked "How did the mineral rights at Coniston transfer from the Company of Mines Royal to the Le Fleming family?" The Company of Mines Royal was dissolved about 1648 as a consequence of the Civil War with Cromwell, and the mines were closed in 1651. They were re-opened in 1664 by Daniel Le Fleming

I was pleased to receive the following response from Peter Claughton:

In 1664 the le Flemings would not have owned the mineral rights for copper, they were vested in the Society of Mines Royal on behalf the English Crown who had exerted a prerogative over gold, silver-bearing ores and copper since 1260. They would have had a lease from the Society of Mines Royal to work copper. If the le Flemings were also the freeholders, their position changed in 1693 with the second of the so-called Mines Royal Acts when the right of the English Crown to silver-bearing ores and copper were revoked. After 1693 the rights to minerals other than gold were vested in the freeholder unless reserved when the freehold was sold.

For more information see **Claughton, P.** 'Mining law in England and Wales: understanding boundaries in the landscape', *Mining History* **90**, 161-71.

And from Rudy Devriese:

The Societyof Mines Royal was one of two mining monopoly companies incorporated by Royal Charter in 1568, the other being the Company of Mineral and Battery Works.

In 1568, the letters patent of Queen Elizabeth I which established the Society as a new joint stock company named its principals as the Earl of Pembroke, the Earl of Leicester, Lord Mountjoy, Lionel Duckett, Benedict Spinola and several others.

The establishment of the Society may have been the result of the Queen's success in the Case of Mines. The new Society was granted a mining monopoly for base metals in several English and Welsh counties, including some where there were recoverable mines. It worked mines in Cumberland and had a Smelting plant near Keswick in Cumberland It also opened a copper smelting plant near Neath.

In the 1670s the Society associated its self with the Company of Mineral and Battery Works, but perhaps only informally. Its monopoly disappeared under the Mines Royal Act of 1690. In the 1690s, some of its mines were leased to another mining syndicate known as Mines Royal Copper, and that enterprise subsequently became the London Lead Company.

Culvert clearance in Brandy Gill, near Carrock Mine

The Digging Team carried out some culvert maintenance works at Carrock Mine - which is within the Dalemain Estate. We have a management agreement with English Heritage to conduct certain maintenance works on the site and an annual inspection. The culvert works were identified last December and after receiving agreement from English Heritage we carried out simple clearance work to keep the culvert flowing clear as there was a danger of the culvert and adjacent mine tips suffering further erosion.

Mines Forum meeting, NT Offices, Grasmere, 26thApril 2013

About half the meeting was taken up with reports and discussion regarding pollution and contamination from disused mine sites.

Environment Agency. Elly Whiteford reported their concerns regarding Gategill Mine at Threlkeld. During heavy rain water can build up to within half a meter of the top of the Yellow Dam and water issues from the base and sides of the spoil heap is eroding the track below. Discussions are underway about how to deal with it and where to site a treatment plant. Donald Angus said that Yellow Dam was worth preserving as a historical structure, but although Blue Dam would be retained it was thought that it would be difficult to preserve Yellow Dam. The site should be surveyed and the archaeology recorded before destructive works were carried out.

Water pollution. 14 kilograms of zinc per day is dissolved in water discharging into the river system from the Force Crag Mine area, 1.76 kgs per day from Yewthwaite and 1 kg from Goldscope. There are also traces of cadmium, arsenic, copper and lead. No figures were available for Rachael Wood mine. Feasibility studies at Coniston are pending

National Trust. John Malley reported on Force Crag mine.

Phase 1 has been completed and landscaped. An underground pipe incorporating a monitoring gauge has been installed to carry water issuing from No 1 level directly into Coledale Beck.

Phase 2 is to install a minewater treatment plant. A small pilot has been running on the site using ochre to extract zinc from the water. This is chemically 90% efficient but it is difficult to get water to percolate evenly through the material and difficult to scale up to full size. Design is ongoing for a reedbed system which should be 70% efficient, to be installed on the footprint of the old mine treatment settling tanks. Treatment of water from Force Crag is being used to pilot National schemes and for Gategill at Threlkeld

Phase 3 is to open up Level 0 to secure drainage of the mine. The contractor, Atkins, was now looking at the possibility of digging it out from the surface, culverting it and then replacing the spoil.

Level 3. CATMHS has put forward a proposal and method statement for opening Level 3 in order to prevent surface water draining back into the mine. There is a separate proposal to clear the floor of Level 3 and to protect the internal shaft from there down to Level 2, which is the only internal access to the lower parts of the mine.

John Hodgson reported that investigations into the stability of the tailings dam at Greenside are ongoing.

LDNPA. John Hodgson reported that the Volunteer Network had been launched. 54 volunteers and 8 supervisors had been enrolled. There is a program of work in partnership with the National Trust and English Heritage. Bracken clearance will be carried out in summer and surveying in the autumn. The volunteer resource could be directed at mining related sites. Work at Carrock mine to preserve the pre 1914 mill site should start soon.

CATMHS Warren Allison reported that CATMHS were awaiting permission to clear culverts in Brandy Gill, near Carrock Mine. Overflow water is washing tips away. John Hodgson said he would expedite this.

Richard Shaw of the BGS is to carry out an underground survey of Smith's Vein at Carrock Mine. The Harding and Emmerson Veins were surveyed when the mine was working, so this would complete the geological survey of Carrock. (CATMHS were invited to participate in the survey. See the report on page 10) The Russell Society would like to carry out a geological survey at Silvergill

MoLES

Donald Angus said that attendance at meetings was reducing. Work at Yewthwaite mine was ongoing, but the ground seemed to be moving where spiling was in situ. There is no other way out in the event of a collapse. Creating an alternative entrance from above was being considered. Donald has withdrawn from the Threlkeld mining museum. Sadly, Phillipa Tindal had died recently.

Honister Slate Mine

Alastair Cameron reported that water analysis in Buttermere had revealed that slate dust, probably from earlier workings, was affecting the char fish. Monthly tours at Honister were proving to be a success. The BBC program 'Tonight' were considering doing a report.

There is a shortage of slate building stone which is causing a problem for local builders. Burlington wants to re-develop Moss Rigg Quarry at Tilberthwaite. A survey of existing slate tips is required as these may be sourced or stone and could disappear. This would be part of the Monuments Protection Program, but criteria are needed.

Coniston Copper Mines and Penny Rigg, Tilberthwaite.

The conservation scheme the LDNPA and Natural England were developing under the High Level Stewardship Scheme has fallen through as the Commoners will not agree. Something to do with stocking levels for sheep, which might be halved. (Sheep farming is said to be unprofitable and there have long been suggestions that the area has been overgrazed. However, each animal attracts a subsidy payment, so any reduction in numbers would reduce income. Something not quite right here. IM)

About £30,000 has been spent on conservation plans for Coniston and Penny Rigg. Specifications were in place and the work had gone out for tender. Some tenders were for less cost than expected. Plan B was to apply for a grant from English Heritage and JH has had informal discussions based on the preparations already made. He expressed a degree of optimism, but work could not now be expected to start before next year at the earliest.

A proposal was to be put to English Heritage to deal with the landslip adjacent to Deep Level portal at Coniston.

Lowther Estates have taken back management of all their land in Langdale and Grasmere from the National Trust. This includes the Langdale Axe sites and the mines in Greenhead Gill.

Underwater sand-mining on Windermere

With regards to the Windermere Reflections project, and also the works carried out by Southampton University and by the CAT archivist, I thought it was worth pointing out that a major but unusual form of quarrying exercise at Windermere ran for many decades and eventually ceased in the 1970's. This was underwater sand extraction (but still classified as 'quarrying').

Underwater 'Sand-getting' was carried out by G H Pattinson & Sons using floating barges fitted with modified extraction grabs with extended masts. Sand was transferred to large ore barges of which, I believe, only two remain.

The barge numbered 997 is the larger of the two and is still lying on the bed of the lake. It has been photographed by historians using 'SonarTRX' a side-scanning sonar technique and details of the hull are still clear. The other barge 'Elizabeth' lay on the shore at the Steamboat Museum for many years.

The Elizabeth was built by Watson & Sons, Waterhead, in 1832, carried over Oxen Fell in two halves and launched at Kirkby Quay, Coniston. It was used as an 'ore barge' carrying slate and copper ore down to Nibthwaite until opening of the railway to Coniston in 1859 meant that 'boatage' ceased.

Elizabeth was bought by G H Pattinson in 1880 and brought back to Windermere for use in their 'sand-getting' operation until about 1910 when larger barges such as '997' were introduced.

In 2006 the sad demise of the Elizabeth came to the attention of the two local historians who were at that time penning 'The Story of Coniston'. Subsequently details of the barge and a photograph were included in the book. Brief discussions then took place between the two authors and the Steamboat Museum to see if there were any plans for restoration of the Elizabeth, but there seemed, at the time, not to be any interest.

We even got as far as suggesting to Vicky Slowe that the Elizabeth would be a much better relic to restore and display at the Ruskin Museum, Coniston and significantly more important and relevant to Coniston's history than Bluebird, but she didn't agree.

In 2011 historian Tedd Gregg also became interested and took accurate measurements of the boats structure. He realised that the relic was totally unique and he plans to make a scale model of it for posterity.

Hopefully when the renovation of the Steamboat Museum is complete Elizabeth will be transferred to the new conservation workshop for much needed renovation.

Alastair Cameron

Greenside Mine

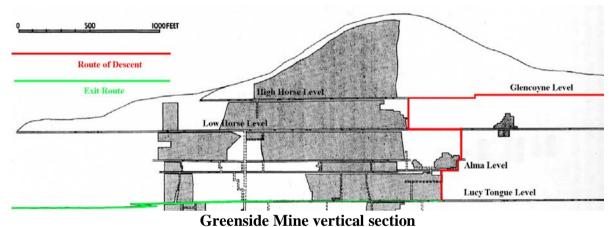
19th May 2013 Lucy Tongue Level

Warren Allison (M L), Gordon Hudson

Through Trip

John Aird, John Brown (M L's), Jason Blackwell (RM*), Anthony Botham, Chris Cowdery, Robin Rutherford, Harvey Sunderland, Geoff Wood

The morning and early afternoon of the 18th May was remarkable for the torrential rain that fell in Glenridding, this meant that only two people were encountered in carrying the ropes up to the Glencoyne level. While this exercise may appear masochistic it had four purposes, to check the time required for the climb, to ensure the gate was unlocked (See NL 87 as to why this matters), to confirm that there had been no change in the route to the top of the ladderway and finally to minimise the loads that had to be carried up on the day of the meet. All of these objectives were satisfactorily achieved albeit in a much damper state than the ML had envisioned; within the portal of the level a curtain of continuous water fell across the whole width and this had to be penetrated in both directions!



Sunday 19th was a much better day and almost all the party assembled at the mine prior to the appointed hour. Having opened the Lucy entrance the group set off for Glencoyndale achieving a very reasonable time for the climb. Kitting up was quickly achieved, the level entered, the waterfall had

reduced to a few drops and then the visitors from Derbyshire came into their own,



Glencoyne level down to High Horse level

for someone had to carry the 126m rope (RM*= Rope Mule). That this was no enviable task became apparent as soon as the party set off down the ladders.



Valve controlling supply to Hydraulic Engine High Horse Level

In the 1850s as the mine developed down from the High Horse level to the Low Horse level and below hydraulic winding and pumping engines were installed in the latter to work the shaft below.

Water was captured from the beck in Glencoyndale and directed via Glencoyne level (the waterfall encountered by the ML the previous day was probably the route by which the water entered the level) into High Horse level where it was impounded by a dam. The group were able to pass through and inspect the breeched brickwork dam, the gate valve that controlled the flow and then climbed down the ladders beside the hydraulic main as it descended.

The route followed exists because in 1952 an Undersecretary of State at the Ministry of Fuel and Power was staying at Glencoyne Farm on holiday and having met the Mine



Hydraulic Main and Ladder down from High Horse to Low Horse level

Manger took advantage of the latter's technical knowledge in connection with the Metaliferous Mining Act that was being drafted. The Manger invited the official to visit the mine along with the Mines Inspector who pointed out that there was only a single entrance/exit to the mine. The Undersecretary was put in the uncomfortable position of having to advise the Manger that a second exit would have to be provided if the mine was to continue to operate. Since stopes were being worked on the Alma level the decision was taken to drive a rise up to the Low Horse level, this and the shaft carrying the hydraulic main were laddered out and the dam breeched so that an exit would be available via the Glencoyne level. (The vertical section on the previous page omits the whole of the mine, now flooded, below Lucy Tongue level which extended down 237 fathoms or 433 metres). The route was checked weekly by the woodman who fitted the ladders and monthly by the Manager, climbing up from Lucy level, exiting at Glencoyne and walking down via Seldom Seen. Descent from the Low Horse level down to Alma level encompasses the full range of ladders, wooden ones, steel ones both bought in and made by the mine blacksmith, and iron chain ladders bought from the Barrow ship breakers.



Alma level

On the level remains the tub that was used to tram the ore from the stopes above to tip down to the drawing hoppers on the Lucy level, in the latter years prior to closure the Alma stopes were mined and the ore held in reserve in the hoppers to be available if production from the deep levels was interrupted, thus production was maintained after the fire in North shaft shut down all of the area below Lucy Tongue level. As can be seen above there has been a major collapse of the Alma level

meaning it is no longer possible to view the explosives transporting kibble made out of conveyor belting.



Rigging the Pull Through at the "Boulder"

Descent from Alma level leads to the "Boulder", the sharp upper edge of which can be seen in the bottom left hand corner of the adjacent photograph. One of the two nylon support straps is visible above the rigger's shoulder and the krab for the pull through is just visible immediately to the left of the ratchet handle of the strap. The RSJ which supports the whole can be seen above the rigger's head, sloping left to right. Most of the abandoned and redundant slings etc could be usefully removed! Rigging is no great problem, a single rope protector being required for the sharp edges of the boulder for all

the party but the last man down, who has to remove the rope protector and squeeze down past the boulder from the rigger's position (many thanks to John Brown). It is easier to descend a further 20 feet of ladder and abseil from there (which rope to use; the one with the rope protector on it!). The first man down has to decide on the route through a mass of mining detritus and make sure that both

ends of the rope go the same way (again see NL 78 for what can go wrong). In this case the team had no difficulties and all ended down on the Lucy Tongue level safely, and the pull through worked perfectly. All that remained to do was to walk the just over a mile to the entrance to the Lucy Tongue level checking out such sights as the drill testing station and admiring the work of the digging team as we went.

Oh and have no sympathy with anyone who claims to have done the descent; got all the way to the Lucy entrance and found it locked. If they'd done a pull through they'd still be at the Lucy entrance! They always intended to climb back out.



Out

John R Aird

Reference "Grey Gold" Samuel Murphy

Many thanks to John Brown, Robin Rutherford for all the photographs and Jason Blackwell for carrying the rope

Carrock Mine Geological Survey, 25th – 26th May

As part of the re-opening of the Canadian Level at Carrock Mine, completed in November 2011, Natural England provided a grant towards a geological survey of the mine. On the sixth November 2012, I met with Hannah Townley (Natural England Geologist), Richard Shaw (British Geological Survey) and Eleanor Kingston (LDNPA) at the mine to have a look at the underground workings on the Canadian Level to decide which part was going to be surveyed.

I explained that a detailed geological survey of the Harding vein had been done while the mine was working, but Smith's vein appeared not to have been done in any great detail. Richard suggested that with the limited funds available, it should be possible to carry out a detailed survey of Smith's vein and he was prepared to put in some of his own time free of charge. (Richard is also a director and member of PDHMS). The finer details of the survey were confirmed between the three parties in February 2013.

Saturday 25th May 2013

Meeting Richard at the mine, he started to sample the water from the following points in the becks including the mine water exiting the entrance to the Canadian Level, which would be tested for a suite of metals including ph and temperature.

- The River Caldew below the bridge
- Grainsgill Beck upstream of the mine
- Grainsgill Beck below its confluence with Brandy Gill
- Brandy Gill

Donning helmets and lamps we walked along the cross cut of the Canadian Level to the four way junction on the Harding vein where Richard sampled the water coming from the North and South of the vein. We then went to Smiths vein, but there was insufficient water in the level to be worth sampling. Retracing our footsteps we soon arrived at the junction where the crosscut to the Emerson leaves the Harding vein, samples of the water beyond the junction on the Harding vein and the water coming from the Emerson were taken.

The ph of the water beyond the junction on the Harding vein was high above 8 (water is normally about 7) and Richard explained that this could be due to the amount of carbonate minerals in the vein. He explained that a great deal could be determined about the veins from the water sampling.







Sampling at the Harding four way junction

The rest of the day was taken up with looking at all the workings on the Canadian level in preparation for the next day, in order to maximise the time available.

Sunday 26th May 2013

As soon as we had met at the mine, we were underground on yet another glorious sunny day. Quickly arriving at Smiths Vein and using the survey from Cooper and Stanley's 'Minerals of

the English Lake District - Caldbeck Fells', we found the junction between the Greisen and Hornfells which was cleaned with brush and water to remove the dirt and grime and duly photographed before locating the lead vein which runs East-West, cutting through both the Smiths and Harding veins. We moved onto find the junction between the Hornfells and Gabbro which took quite some time to find due to the similar colour of the two rocks. Both were difficult to photograph.

From my uneducated eye it appears that the Gabbro is the mineralised part of the vein while the Hornfell and Greisen were un-mineralised. Smiths Vein appears to be very fractured and split into many stringers which accounts for why Cooper and Stanley show the vein as North and East.

Having sampled the vein as we went, we eventually arrived at the forehead of Smith Vein North where there is a very short cross-cut to the Wilson Vein. At the forehead of Smiths

vein (see photograph) the vein appears to split into a number of veins which I assumed had all been laid down at the same time - how wrong I was. Richard explained how one vein had been deposited and then the ground fractured at a later date allowing another vein to be deposited followed by others using the same process which took millions of years.



Richard had brought his UV lamp and found small amounts of Scheelite, an ore of Tungsten. However close to the forehead of Smiths vein small amounts of Fluorite a rare mineral in the Lake District were found which had been previously reported in Cooper and Stanley. We

examined Smith vein east on the way back.



Lead vein on the Harding Level

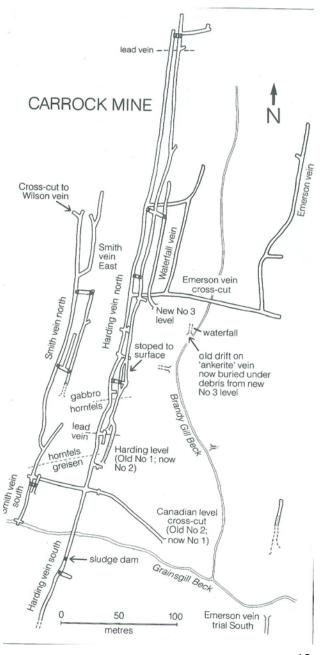
However on comparing the plan in Cooper & Stanley, we found that the level on Smith vein south had been driven much further and agreed to come back and survey it.

We soon arrived at the four way junction on the Harding level and walked up Harding vein north, soon finding the junction between the greisen and hornfells with no sign of Tungsten mineralisation. The East-West lead vein was found and using brush and water, we soon had the vein cleaned of showing the different mineralisation including Dolomite and Quartz with thin (blue) stringers of Galena. Again I had assumed wrongly that this vein had been deposited at the same time until Richard explained that the vein had probably taken nearly ten million years to form.

We carried on along the Harding collecting samples for later analysis, past the numerous hoppers to the forehead before turning left to examine the Waterfall Vein which was being prepared for stoping when the mine closed. This took us onto the cross-cut to the Emerson vein which we followed to the fall before returning to the Harding vein and out to surface. We then returned to survey the additional 70 yards of level on Smith vein south not shown on the plan in Cooper & Stanley.

After lunch we made our way up to the level 150 feet above Smiths level which starts directly on the vein and is stoped out down to Smiths vein north. The vein was made up of many stringers with more lead veins running East-West cutting the Tungsten bearing veins. Having collected additional samples we made our way back to the cars having completed the survey a day early, so agreed to meet at Greenside Mine on the Monday to walk along the Lucy Tongue Level.

This had been a fascinating two days and although having a limited knowledge of geology and mineralogy, in that short space of time I had learnt so much about a subject we don't not normally give any consideration to. A report will be published in due course and hopefully a transcript will be published in a future newsletter.



Copied from Minerals of the English Lake District- Caldbeck Fells by Cooper & Stanley

Warren Allison.

LANCASTER ARCHAEOLOGICAL SOCIETY VISIT TO TILBERTHWAITE MINE

On Saturday the 15th June 2013, I met with 19 members of Lancaster Archaeological Society to show them around the mill and underground as far as the first fall. This followed on from the Cumberland and Westmorland Archaeological and Antiquarian Society visit last year. Having provided everyone with helmet and lamp, we made our way from the car park to the mill. We walked to the entrance to the Horse Crag Level where I explained the slate workings and using the hand drilled holes how the ground was broken. Entering the level we soon arrived at the slate closehead which they were all impressed with, very few having been underground before. I had brought copies of photographs to explain the work that CATMHS had carried out to dig through the first fall and the 1935 plan to explain the underground workings.

After exploring the closehead, we made our way to the gate at the first fall where all of them appeared to be in awe of the huge amount of work the society had put in to access the other side of the fall and that work continued on the second fall.

Returning to the mill, I used Mark Simpson's recent survey to explain how the mill had worked and the impact of the later slate workings which had covered some of the remains of the copper workings.

Arriving back at the cars, the society expressed its genuine admiration for the work that CATMHS had carried out at the mine.



Members of the society at the closehead.

Warren Allison

UPDATE ON THE DIG AT TILBERTHWAITE MINE

Work has progressed most Sundays on the dig to clear the second fall, with the process being constantly modified to make it easier. On this dig we have been filling large one ton bags that are normally used for delivering building materials such as

sand, instead of the small plastic sacks previously used. Progress has been steady and for the last few weeks we have been starting to clear the main body of the fall where the debris is now some 12 feet high by 6 feet wide, in readiness to install the first sets of legs and head trees, with work stopping on Sunday the 23rd June with the fall still standing vertically.



End of the bag wall looking out-bye, which is now 80 yards long and in places 15 feet high



Returning on the 30th June we carried in material left over from the first fall, measuring up to decide on the plan to dig through the fall and what materials would be required.

Fall as of the 30th June prior to steel being installed

Warren Allison

Update on Force Crag Mine.

In Newsletter No 109, November 2012, it was reported that CATMHS had been asked to submit a proposal to re-open No3 level as it was when the mine was working in the 1960's to prevent surface water from entering the mine and contributing to the pollution issue. The second proposal is to secure the rubble slope from No 3 level to No 2 level and ultimately to No 1 level to ensure access to the back of the drainage pipes.

Following a visit with John Malley from the National Trust, Colin Woollard has produced on behalf of the society proposals for both projects. The National Trust has submitted the application to re-open No 3 level to Natural England and English Heritage as the mine is in a SSSI and is a scheduled ancient monument, as well as to the Coal Authority/Environment Agency who are managing the project, and formal confirmation is due very soon. CATMHS has submitted the application to secure the rubble slope to the National Trust and again formal confirmation is due shortly.





Current entrance

Top of rubble slope in No 3 level



Entrance circa 1966

Warren Allison

Wales Weekend April 2013

Saturday 20th April Lliwedd Copper Mine

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

The last time that I, and CAT, had visited this mine was in 2000 (See NL No.60 for details) and over the intervening years I came to the conclusion that there was more to see especially after studying David Bick's "The Old Copper Mines of Snowdonia" where (3rd edition page 97) where he refers to trams sitting on 18 inch gauge "T" rails in cast iron chairs.



General view of the mill area. Material was tipped down a stone lined shute from the mine. Contrary to what readers may think our treasurer is deep in thought and is not watering the grass! Various rolls are located around the building in the centre of the photograph.

We ascended to the site in glorious sunshine and spent some took looking at the remains of the Mill which contains the remains of crushing rolls, water wheels and some objects – see photographs below the purpose of which is unclear but may be parts of a stamp battery. If any reader could clarify this would be appreciated. Most of the parts are without manufacturer's identification but some of the water wheel segments are marked "Hawarden Ironworks Flintshire". This firm, who were owned by Ratcliffe & Sons, also provided a lot of equipment to the Penrhyn Slate Quarries including some of their water balances which operated in vertical shafts. If the internet is to be believed there were only established in 1846 which means that the water wheels were supplied very late in the life of the mine and this probably explains why there is so little waste material below the mill.



This appears to be a large, slow speed flywheel for a device which requires a lot of inertia. Could this be part of a stamp?



This is the other object which the team were unable to identify. Thought to be part of a stamp unsure which part.

The lowest adit was entered and this is blocked after by run in material where, presumably it enters the stope. There is "T" rail in situ. Ascending the hillside a prominent open stope is attained with an open funnel down into the stope in from of it – this being much larger than on our visit in 2000. Behind the funnel the author rigged a route down the stope to land on a 3m high pile of ice the descent of which brought him near to the end of the rope.

Tackle needed:-

- 1 x 50 m rope
- 1 x short sling for deviation
- 3 x 10 mm hangers
- 4 x krabs

Out-bye the stope soon ends in a small chamber, although it is likely that the pile of ice, or the debris which is most likely beneath it, prevents access to the adit. In-bye, there is a small chamber to the left and a flooded stope in the floor. Beyond this the stope opens up and it extremely high (greater than 50m) and a false floor can just be discerned. Water falls down the stope. The stope is only high for approximately 15m horizontally before the roof drops down and a low level is entered which blocked after approx. another 35m. Marked at the far end, with soot from a carbide lamp, are the initials "DB 1952" so this must be on the horizon of the deep adit. The only unknown is what became of the trucks. They would be extremely difficult to remove from site so that must be either under the fallen material or the ice.



John Aird de-rigging the pitch. Note the open funnel in the foreground and the loose material to the left.



The return to day was enlivened by some walkers starting to descend the very loose tips as Captain Aird started to ascend. This was a potentially dangerous situation since loose material would clearly cascade down the stope onto those below. John Ashby told Captain to get off the rope which the author showed the walkers a safer means of descent – at one point that were about to jump across the stope until they were told of its depth!

The team relax at the end of the level prior to returning to surface.

Eagle eyed readers will note that the above description is very similar to that given in for the level descended to in 2000, although those members of the team who can remember for longer than a week are adamant that this was a different level and may well have been the false floor mentioned above.

After de-rigging the team climber further up the hillside, re-opened a very short and wet level, which was blind before coming to the horizon that had been explored on the previous visit. Descending the hillside further to the west the remains of two building were found and at least must have been a barracks for the miners.



Remains of what is assumed to be barracks. This has been deliberately sited behind a low ridge of rock providing protection from the prevailing winds.

On the walk back, tips could be seen below the path and these were descended to only to find that they emanated from a small open working at SH63395282 which are incorrectly recorded as levels on the 1:25,000 OS map.

Saturday evening was spent in the Cwellyn Arms with full advantage being taken of the draught ale and good food.

Sunday 21st April Cwm Pennant

Attendees: Chris Cowdery, John Aird, Jon Knowles (ML).

Sunday dawned grey and cold and rain soon followed. The impressive remains of the Ynys y Pandy Slate Mill which was constructed for the Gorseddau Quarry were visited first. This undertaking had everything that was needed to make it a commercial success including a railway linking it to Portmadoc, the most grandiose mill in the slate industry, and a partly

constructed workers village at Treforys. Only one thing was missing, good slate, and for this reason the whole undertaking had a very short life and in just 10 years, from its large scale opening in 1856, it closed.



General view of Ynys y Pandy. The photographer is standing on the siding which connected the mill with railway from the quarry.



View inside the mill showing that the workings were on the three floors. The central pit was for a water wheel with the drive being in the culvert to the right with belts driving sawing and planning machines on the grassed area.

The wind and rain prompted a return to the vehicle. Backtracking we returned to Cwm Pennant and drove up this lonely valley to a small parking area, immediately before a gated bridge, from where we walked on, an initially unsigned permissive path, up the side of the

Pennant valley to Cwm Ciprwth above. The path ascends via the Gilfach Copper Mine, the middle level of which was entered to view the unusual stairway, complete with handrail, which descends the small stope. The vein breaks surface at the top of the valley and the stope here would be worthy of descending on a return visit.

Climbing higher Cwm Ciprwth opened up in the mist and rain. This fascinating mine site has a water, flat rods, balance bob and winch together with many other artefacts and is well worth a visit. Where else in the UK. outside of a museum, can you see such artefacts?



A general view of the site at Cwm Ciprwth. Centre left is the balance bob above the shaft with flat rods running to the water wheel. The wheel also drove a winding drum through a clutch. Numerous parts are marked "Dingey & Son Truro".



The site was conserved by the Snowdonia National Park and some of this work has recently been redone since some of the flat rods have been replaced. Nearby an adit has been re-opened by persons unknown and requires investigation.

Returning to the vehicle we drove further up the valley

Chris and Captain inspect the wheel at Cwm Ciprwth.

On arrival at the end of the valley we had lunch in the vehicle and awaited the promised drier weather. Unlike the sheep, seeking shelter or a free lunch, this never came and since the upper part of the valley is without shelter and the weather was wet, cold and windy this part of the trip has been saved for a return visit.

Jon Knowles

Aldingham, evening meet, 8th May

Present: P Timewell, E King, P Sandbach and dog.



From Aldingham we marched to the top of Beacon Hill. footpath brought us out on to the road next to lime kiln near Castle. Gleaston Opposite this lime kiln there is a powerful spring with a leat which takes the water up the valley then down the other side to arrive at Gleaston mill with a good head.

The road to Scales took us past Gleaston Castle, Mere Tarn and the house engine Aldingham mine. From Scales we took the footpath back to the coast road. The footpath passes three lime kilns and their quarries. associated The only information I could find about the lime kilns was on the listed buildings website and that was that the



one near Gleaston was early 19th century, the round one near Scales was probably 18c and the last one was probably 19c.

Peter Sandbach.

White Coombe June 12

Present: E King, A Westall, P Sandbach and dog

The cloud seemed to be lifting as we set off up this deeply cut track. It is more than 6ft deep at the bottom but further up it breaks up into several parallel tracks before disappearing into the peat. We had just reached Leadminebreast and when the cloud and rain came down so we got off the hill as quickly as possible.



Peat sledging track?

Askam Porphyry Quarry No 17 in the series unimportant mines of Furness

From Edward Wadham's diary 27 July 1909:

"In House in morning – Miller came about the Lead-Ore at his Farm –Dr Murray came & "tapped me" –Col¹ Gainford came to lunch. Walter went to London by 1 o'clk train. I went out in my Chair to see the alteration in the road at Millwood bridge. Mrs Bordsley – called P-P-C- on promotion to Lancaster – Dull but no rain."

By 1909 Edward Wadham had lost a leg to gout and suffered from a hydrocele. I paid little attention to the report of lead ore at Askam until Jonathan Wignall sent an email:

Barrow News 7/8/1909:

Vein of Lead, Silver and Copper found on Buccleuch land at Askam - only a thin vein.....in a quarry near Askam. A number of men are engaged in testing the nature of the "find". It is the intention of the promoters to sink a shaft and make a thorough search.

He added that he had seen a tiny piece of galena found in Mellon's Quarry. Mellon's Quarry is at SD228778 opposite the old mill ponds (now fishing ponds). It was worked by the Mellon family who had interests in slate, porphyry and bricks as well as surveying for the Millom & Askam Co. The quarry was in the same porphyry as Greenscoe and had (in 1970) an adit about 15 ft long on a small quartz vein.

The quarry was opened by Henry Mellon, civil and mining engineer of Brook Lea, Ireleth in 1899 with an expected output of 600 tons of road stone yearly. A letter written by Wadham

on 21 July, before his meeting with Miller, says that Mellon had been advised to put a couple of men on to exploring the joint but had declined to do so. An analysis of the ore was very favourable, showing 50 % lead so Wadham put his own men on to it. At the time of writing the adit was 3 ft in length, 5 ft wide and 6 ft high. He had also sunk a shaft to try the vein at depth but the joint had not widened out. It was not mentioned again in the letter book.



Mellon's Quarry

It seems that the quarry was almost abandoned in 1915 but a new partnership was then formed consisting of Henry Mellon, Myles Kennedy and J M Challinor. The balance sheet for 1936 shows a loss of £24 7s 1d on sales of £12. The proprietors were then R Mellon, executor of Henry Mellon, Mrs Challinor, executor of J M Challinor and Nigel Kennedy, executor of Hugh Kennedy. Walter Wadham was the Duke's agent. R Mellon was considering an offer of £3 for the plant as scrap. The quarry is now partly filled in with manure and the adit cannot be found.

Peter Sandbach

References:

BD/BUC/46/1/16 Lease of quarry to Henry Mellon BD/BUC/34/28 Wadham's Bucchleuch letter book 1909 BD/HJ/32/16 Papers relating to Ireleth Porphyry quarry

Diaries of Edward Wadham, agent to the Duke of Buccleuch 1851-1913

The diaries were deposited at Cumbria Archive and Local Studies Centre in 2012. Each volume was photographed and then transcribed by volunteers. The diaries were saved from destruction in 1945 on the death of Walter Francis Ainslie Wadham by Henry Atkinson Slater, father of the depositor.

Edward Wadham was born in 1828 in Frenchay, Bristol, the third son of Thomas and Elizabeth Wadham. He attended school in Bitton, Gloucestershire (1841 Census) and trained as an engineer. He worked on the Great Western Railway and in 1851 he moved to Ulverston and then Dalton-in-Furness to work as the Duke of Buccleuch's mining agent. In 1860 Edward married Mary Elizabeth Ainslie, daughter of Montague and Mary Ann Ainslie of Grizedale Hall. They had 6 children: Amy 1861-1944; Arthur Edward Montague 1863-1925; Walter Francis Ainslie 1865-1946; Dora Louisa 1869-1918; Winifred Mary 1875-1972; and Gerald Douglas 1879-1957.

Not only was he involved with the iron industry in Furness, he was also a director of the Furness Railway Company for 24 years, and involved with the North Lonsdale Iron and Steel Company, Barrow Haematite Steel Company and Barrow Shipbuilding Company, later Vickers. He was president and secretary of the North Lonsdale Agricultural Society and a Magistrate for North Lonsdale from 1869. Edward Wadham was one of the original councillors for Barrow-in-Furness and served as mayor between 1878 and 1881. He also served on the Board of Guardians helping to oversee the Workhouse and poor relief in the town.

In 1861 Edward and his wife were living at Lindale Mount, Dalton-in-Furness. By 1863 the family were at Millwood where they stayed until the death of Walter in 1946. Edward died on 13 June 1913.

Two of Edward and Mary's daughters, Amy and Dora did not marry. Dora succumbed to Spanish flu in 1918 and Amy lived until 1944. Arthur married Marguerite J Bridson of Water Park, Nibthwaite. They had three children, Edward 1901-1986, Harold Myles 1903-1999 and Margaret E 1905-1989. Arthur died in Cockermouth in 1925. Winifred married George A Rooke in 1907. She died in Banbury in 1972. Gerald married Edna E Bamford in 1910. They had one child, Elisabeth E born in 1912. Edna died in 1927 and Douglas married Bessie S D H Gloster in 1932.

Walter succeeded Edward as the Duke of Buccleuch's agent and remained in the job until his death on 26 April 1946. On his death, Henry Atkinson Slater became the Duke's new agent and it is thanks to him and his son that Edward's diaries have survived.

Walter was educated at Charterhouse and Pembroke College, Cambridge. He was articled to Richard Johnson, chief engineer on the Great Northern Railway and was subsequently assistant engineer in charge of the widening of parts of the main line between Barnet and King's Cross and resident engineer of the branch line from Ilkeston to Haenor in Derbyshire. In 1898 he joined his father in business as a civil and mining engineer. In 1919 he was elected mayor of Barrow. He was a director of Barrow haematite Steel Company form 1905 until his death. Like his father, Walter was a JP.

In 1887, Walter joined the 1st Volunteer Battalion of the Kings Own Royal Regiment (Lancaster) as a second lieutenant, becoming commander in 1912. He went to France in

May 1915 with the battalion and fought in the trenches at Festubert. In June 1915 he was invalided home and took command of the 3/4th Battalion (4th Reserve Battalion) until 1918.

Both Edward and Walter travelled to America. Edward and Mary sailed from Liverpool in October 1873. Walter travelled to Boston in October 1904 and from there to the Hotel Astor in New York. According to the record on www.ancestry.co.uk, Walter sailed on the SS Cretic, had been to Boston in 1899 and had at least 50 dollars with him. After Walter's death, Millwood was requisitioned by the Army and used to house German scientists working on submarines propelled by chemical reaction.

Positions held by Edward Wadham

Civil Engineer: Proprietor of the firm of surveyors known at different times as Wadham & Turner, Wadham, Turner & Strongitharm and Wadham & Son.

Appointed agent of Duke of Buccleuch for Furness, June 1854.

Mineral agent to Duke of Buccleuch from 1851 to 1911.

Mineral agent to the Earl of Lonsdale.

Mineral agent to Marquess of Muncaster

Director of Richard Thomas & Compnay and the Lydney Tinplate Company.

Director of Walney Exploration Compnay and Vivian Diamond Boring Company and Barrow Salt Company

Director of Gillfoot Mining Company

Director of Barrow Steam Cornmill Co until it was wound up in 1884

Manager of Longlands Mines

Director of Furness Railway Company. 1885 - retirement in 1911.

Agent of Barrow Haematite Steel Co. in Ireland 1877-1879 and director. Chairman of North Lonsdale Iron & Steel Co until he resigned in 1899

One of first Aldermen of Barrow

Mayor of Barrow 1878-1881 Chief Magistrate.

On the Board of Guardians for Barrow

One of first to attempt to form Barrow Conservative party; joint president of Barrow Unionist Association.

Secretary to North Lonsdale Agricultural Society; Chairman of directors of North Lonsdale Iron and Steel Company.

Member of Board of Guardians.

Commission as J.P., January 1869.

Edward Wadham in America, 1856

In 1856 there was still no railway to Lancaster. They were boring for coal at Stainton. Wadham was searching for ore at Longlands and Denny Brothers at Highfield. The Arcadian Iron Co was established by Charles Dickinson Archibald of Rusland Hall.

- **18 March** Inspected the Threlkeld Coom mine. Got Willm Robinson's lease signed, also Wm Coward's for quarries in the Manor of Hawkshead gave "notice to quit" to trespassers on Townson's take in the Manor of Hawkshead to Grizedale at night
- **12 April** To Hawkshead to see how the collection of rents got on. To Caldwell Quarry and gave Coward the levels for a drain therefrom. To Brathay Quarry and left a plan with Robinson.

To Hohne ground Quarry and went over it with Mr Eddy's report. Saw the propriety of adopting it at once, and shall recommend Mr. Nicholl to do so. – To Rusland for the night

Bought two hens

5s 0d

Got two given me

16 April To Newton to look after an encroachment on the Waste found it all a myth – To Ross's to look at a young mare for Ainslie – To Stank to see the Borers, found them down 46 fathoms – To Lindal Moor and levelled Lowfield Adit

Harrison Ainslie & Co for levelling adit at Lowfield £1 1s 0d

24 April To Lindal Moor & took levels for a proposed new Adit from Lowfield house to the old mine – in office in the afternoon received rents from old Slater of Hawkshead for Mrs. Whittaker, Eleanor Jackson & Swainson Coope

Charge Harrison Ainslie & Co

£1 1s 0d

- **28 April** Came down from Rusland. In office in afternoon got orders to go on with Dalton Castle, its repairs
- **19 May** Wrote letters in the morning afterwards spent the day at Rusland with Mr. Archibald, much talk about the Acadian
- **3 June** At Rusland "otter hunting" that is we should have been but the varmint escaped us Drove home in the evening
- **4 June** In office in the morning then to Newland to see Mr. Tom Roper about the lease of "Newland Furness" but found he had gone to South Wales To Dalton to inspect trials for ore, also Dalton Castle, to the new "Weighing House" at Crooklands, to Whitriggs and gave orders to stop a Pit that was getting Derby ore and situate in Buccleuch Manor, to Lindal Moor and underground at A1 and Old Gin very good prospect in both

Sent a big hammer to Dalton

9 June In London, attended meeting at the Acadian Charcoal and Iron Co. Afterwards with Mr. Nicholl to Montague House to see the Duke, but missed him, saw Lord Dalkeith

19 June Via Workington and Cockermouth to Keswick, thence to Threlkeld to inspect Mr. Ainslie's mine there, which we found had not been touched since our last visit the reason thereof being that Herd (the man in charge) is an infernal Methodist and consequently can do nothing <u>straight forward</u>. Came home via Braithwaite, driving Charlie from there, home. Very wet and very slow coaches all the way

4 July Made all right at Rusland, gave John Wilson £20 to go on with – left Rusland at 11-0 a.m. to meet Ainslie at Newby Bridge. He was late only getting there at 12 o'clock, however the "team" had to suffer for it and we got to Birthwaite by one minute past one, and started by the express for Liverpool at 1-20 where we arrived in due course and stopped at the Grecian Hotel, went to the Zoological Garden where there was a grand display of fireworks and other amusements in honour of American Independence

5 July Embarked on board the Niagara¹ from Liverpool for Halifax leaving the landing stage at 10.0 a.m. by the Satellite, got on board at 10.20 steamed down the River and cast off the Mail tender at 12 noon "fired" & were finally off, James Roper saw us off, all went pleasantly a good attendance at dinner & turned it at 10.0 p.m.

6 July Sunday A change has come via the spirit of my dream, two attempts to get dressed and a "puke" each time, struggled on deck by 10.30. No breakfast no lunch. Sandwiches, & W.W. for dinner, sea running high passed a ship at 2 o'clock but did not make out her number, began to get better toward the night & turned in at 10.30 p.m. Sea still high wind W

7 July Got up at 11 o'clock after costing up my accounts, got on deck and had some sandwiches & porter for luncheon, considerable deal better therefore had my dinner on deck, <u>felt well</u>, sea very high, wind heavy NW entered in ships log as "strong gale" Very few on deck and only 7 to dinner, Ainslie beginning to improve. Sat on deck all evening with six other passengers and sang like bricks till 11 o'clock then turned in but did not get to sleep till 2 a.m.

8 July Fine morning, quite well. Got on deck by ½ past 8, had my breakfast like a man at 9.0 a.m. Saw two whales at 11.45, passed an English ship homeward bound, but did not make out her number got my luncheon & read myself to sleep afterwards wrote up this Diary from Friday till now 3.0 p.m.

 $^{^{1}}$ A wooden paddle steamer, 1850 GRT, launched 1847 at Glasgow by Robert Steele & Co. for the Cunard Line.

- **15 July** Wet day with fog, arrived at Halifax at 7.0. p.m., drove up to the Waverley House and secured my quarters there Found Mr. Edw^d Archibald there ready for me Arrived in "Nova Scotia"
- **16 July** Went to see Mr. Foreman and got all arranged about money matters, to wit, that he would supply me. Went with Charlie Dickson to a Temperance meeting at the head of Bedford Basin, met Mr. Howe Chairman of the "Nova Scotia Railway" and was introduced to him there, also Mr. Johnson, the leader of the opposition in the local Parliament. Went to theatre
- 17 July Wrote letter to England, went on parade and to see the Citadel home to lunch, then for a drive with Mr. Edw^d Archibald round by the camp of the 76th Reg^{t,}, back and with Mr. Howe for a drive round the remainder of Halifax, and to call upon one John King, a farmer, who showed his farm, also a bottle of wine, which hadn't the chance of being shown to any one afterwards also, to call upon some young Lady? friends of Mr. Howe's with whom we had much chaff and so home to tea, in the evening went with E. Archibald to call on the Kinnears, had a very pleasant evening with them called on Mrs. Archibald the elder
- 19 July Came up to Truro by the coach with a six horse team, very pretty road along the margin of the Lake. In the first 17 miles not much populated all the way, the principal village being Shubenacadie on the river of the same name, the road lies nearly all the way through Woods which are not very high and consist principally of spruce tho there is some Hactinetac or as they call it here "Juniper" mixed with them, Arrived at Truro at ½ past 4, had dinner and walked out. Mr. Edw^d Archibald to tea
- **20 July Sunday** Went to church at Truro, and then took a walk with Mr. E. Archibald to have a view of the village of Truro, it is a very pretty valley, saw great quantities of wild strawberries and went home and dined Mr. Archibald and spent the day with him Very heavy Thunder rain in the afternoon in fact so far the climate is exactly like England, where I shouldn't at all mind being back again
- **21 July** Adam Archibald called and took us for a drive which we enjoyed much, in the afternoon with Edw^d Archibald to the mines where we found "Carswell" had decamped and we consequently had to "camp" at one of the common Boarding houses for the men which we stomached as well as we could, Ainslie and I had to sleep? on one bed
- 22 July Busy exploring the country "poorish fare"!!
- **23 July** Went to Folly Mountain and all along the track of the hills finding Ore all the way East for 5 miles in a line E.4°S with plenty of hard wood timber

- **24 July** Went to explore Sutherland's Lake as to its properties of supplying water power to the works, also <u>fish</u>. I distinguished myself considerable by pulling out six trout, Goodall (Yankee) and I took it in turn to drive the waggon, seated on a powder barrel
- **25 July** C.D. Archibald arrived in time for breakfast & I went off with Donald Urquhart to explore the line of a proposed tramway for which however I see no necessity, as a decent road is all that is required for some years to come. A smoking hot day
- 26 July Busy at the Plans till 5½ o'clock, when we left for Economy where we arrived at 9 o'clock a distance of 25 miles in two of the country Waggons and found some difficulty in getting put up for the night. Archibald however managed to get us quartered on the various inhabitants, I hanging out at a farm house with the horses, Ainslie at the residence of two "widows bewitched" Archibald at a very snug little spot belonging to a carpenter & builder & so we passed the night
- **27 July, Sunday** Drove on to Five Islands calling on the way to inspect Mr. A's Barytes, which appeared a good thing, got dinner and in the afternoon, walked to the Marble Quarries, which I don't think are worth much
- **28 July** Drove on to Amherst 35 miles, the most almighty road I ever was on, started at 6 o'clock in the morning and arrived at 5 in the evening, 10 miles through the forest, the rest thinly populated, took an "extra" and came on to Dorchester the same night, got nearly upset at starting, and very near lost my teeth in a "beef-steak" for supper
- **29 July** Took the ferry to Hopewell and then in two waggons to the Albert Mines, which we went down & inspected. They produce a very extraordinary species of coal which burns in a candle like "sealing-wax" and is used for making "gas" also "oil" it lies on a vein nearly perpendicular similar to our Iron Ore Afterwards drove on to the Albert Quarries at St. Mary's Point, Harvey New Brunswick where we got a good dinner, (the first since we left Truro) with Lang the manager there, and stopped all night. N.B. The Albert Quarries are really a good thing
- **30 July, Wednesday** Made survey of the Piers &c. at the Quarry & wrote a report to be presented to the governor of New Brunswick, describing the work, had another good dinner, and started per steamer "Maid of Erin" for St. John, the dirtiest beast of a vessel, I ever was in, came on a thick fog, and we had in consequence to lay off the mouth of the river all night & got into St. John at 6 a.m. Thursday, and <u>ought</u> to have gone on to Annapolis at 8 a.m. but the devils told us that there was no boat, so we were "sold"
- **31 July** Mooned about St. John & went out to Cedar-Bank to call on Mrs. Barber (late Janet Brown), met her on the way & were informed that we had got the credit of being two government inspectors, promised to go out there again to-morrow

- **1 August** Went down to Indiantown in the morning, then to Cedar Bank and spent the day
- **2 August** Went about in search of a vessel to Annapolis but finding none, went over to Carleton & afterwards a walk to the Suspension bridge so home, Sherry Coblers & supper at the White House
- **3 August, Sunday** Archibald, Lang, and two Yankees arrived went to church dined & then went with Kemp for a pull up the river St. John which took a considerable of a rise out of us, we however got safely home & spent the evening very fairly.
- **4 August** By the same dirty vessel "Maid of Erin" to Annapolis. There was however a very pretty "Maid of St. John" on board with whom I did considerable talk and so passed the time. Came up in a special to Nictau bringing the said fair maid 11 miles on her way to her friends The waggon broke down, stopped at Bridgetown to change horses. Found the daughter of the inn an unknown fine young gal, & promised to be down there to dinner on Thursday, en route to Annapolis

Edw^d Archibald had not turned up, found a note from him

- **5 August** A fearfully hot day, but nevertheless, got the length and breadth of the Nictau vein of Iron-ore explored, it's a stunner for its size, and no mistake, examined the River in the evening with a view to placing other furnaces on it, further up the stream. Saw an Indian Eel Weir but no eels in it. Telegraphed Edw^d Archibald to come down to Annapolis on Thursday. Wrote E. Archibald
- **6 August** Drove to Gates Breakwater and made examination of it, and the neighbourhood also the road thereto, am of opinion that it might be made available for a Horse Tram, there being only <u>one</u> bad hill on it, which is capable of being much improved. The Breakwater would soon form a good Harbour. Made notes on its position &c. Drove down to Bridgetown for the night found the pretty Annie Miller had been thrown from her horse and had broken her ankle. Got my English letters
- **7 August** Took a stroll about Bridgetown with Mr. Lowden, Ainslie showing external symptoms of being used up came in and at the request of Annie Miller went up to cheer her in her misfortunes and sat with her for two hours Drove down to Annapolis met Archibald, Perkins and Bowman and arranged to go back to Halifax with them instead of to Yarmouth Ainslie struck work and started for St. John, being thoro'ly used up and unable for travel Travelled all night with Archibald in a "Extra"
- **8 August** Travelling all day on the stage with the before mentioned gentlemen, much fine on the way, very full stage arrived in Halifax at 7.0 p.m.
- **9 August** Morning about Halifax with Perkins and Bowman and got provisioned for my cruise to Londonderry called on old Mrs Archibald and on Mr. Howe

- **10 August, Sunday** Very wet day, over to Dartmouth and dined with Mrs. Johnston (late Mary Hill) C.D. A. & E.M. A. and Jn^o McNab there also
- 11 August Journeyed to Londonderry where we (Bowman & I) arrived at 9 p.m. drove up to Goodall's house and found it in a state of quo ante, i.e. without any furniture, nevertheless determined not again to encounter the hospitium of Mrs. Fletcher, so bivouacked there best way we could, commencing by discussing some dried Herrings, part of our stores, by the aid of my "jack knife," in this we were aided by Goodall and Richardson we did not forget some Porter & we drank brandy to settle all differences, and the way Goodall went in to it was a caution, turned in this wise, viz. Goodall & Richardson drew & Wadham and Bowman duo
- 12 August Spent the morning at the furnace observing new casts, and in the afternoon took Bowman up the mountain, showed him the mining also the "charcoal making" and then steered him round by Donald Urquart's house and to home. Dined, (having first cooked it) on some preserved beef which was excellent, sat on the "packing cases" &c, there being no chairs in the house. By the bye we got a set out of crockery from the store, which I most diligently washed & made all right for breakfast at which meal, we perpetuated the expedient of boiling eggs in a tea-kettle went for a walk in the evening and came home to supper at which meal we had considerable singing Mr. Goodall on the violin and one David Thomas on the drum &c. &c. i.e. an empty box stood in for deputy
- **13 August** Started in the morning for Folly River on board one of the Company's Horses. Examined the Falls, also the facilities for making a large Reservoir which I found very good, took a Bath in the River, had much talk with an old farmer as to the ironworks and he concurred with everyone in saying how money had been wasted from end to side. Rode home Dined on some preserved Boiled Mutton which was <u>very good</u> Took a last look at furnace, got some samples packed and started by the stage for Dorchester en route to the Albert Quarries, travelled all night, two stages to Amherst one 20, the other 32 miles
- **14 August** Arrived at Dorchester at 10 a.m. Took the Boat across to Hopewell. Dined with Squire Calhoun and went on with Lang's waggon to the Quarries where we arrived at 5 p.m. in time for tea, found Archibald there
- **15 August** Spent the day at the Albert Quarries, chiefly lying on my bed reading, for I was considerable used up Went for a short drive in the evening
- **16 August** Drove up to Hillsboro, where we took the steamboat "Maid of Erin" for St. John and arrived at 1 a.m. on Sunday

17 August, Sunday

Went to church with Mr. Robinson member of the Council of Newfoundland. Went for a drive with Bowman in the afternoon, took him to call on Mrs. Barber – Had an interview with "Crane" and got all settled that in case of my coming out to the Colonies I should get £300 per annum & £50 travelling expenses, for inspecting the Albert Mines once a fortnight or once a month as occasion might require

- **18 August** Left St. John's at 8 a.m. for Boston in the S. ship Admiral, very fine day, got introduced to Colⁿ Favor "Express Agent" went on shore at Easthurst to see his daughter a very "lively craft" had much fun with her, set her to work playing and singing, she walked down to the boat with us, and saw us off again en route for Boston
- **9 August** Arrived in Boston at 1.0 p.m. The entrance to the harbour is very pretty indeed, studded with islands Dined at the Review House very good fare indeed. Perkins took me out for a drive to Cambridge, Brookline and the surrounding neighbourhood also to Jamaica Pond & showed me the ice-houses, afterwards for a small drive with his own horse, a nice little Black Animal about 15½ hands In the evening went with Archibald to the theatre, but it was so playing slow, we were forced to cut it
- **20 August** To Kettell, Collins & Co's office & got £50 on acct of Acadian Iron Co (a bill from E. Archibald) called on Ben "Bitter-head," and went with him to call on Hulbert, found the latter worthy had got spliced since I parted with him, congratulated him there anent, they were both very kind in wishing me to go to their respective residences & spend the night but, time prevented it left by 4.0 p.m. train with Archibald for New York where I arrived at 1.0 a.m. Dined with Perkins & Bowman at the English Hotel
- **21 August** Was awakened in the morning by a pull of the hair from Ainslie whereby he announced his return from Niagara with him about New York, got myself photographed, took our passages on board the "Arago," called on Mr. Scott, and found his father at home, when to a dealer in furs, and bought some Buffalo Robes dined at the Astor House & started by 5 p.m. train for Philadelphia, where we arrived at 10 p.m. Got our supper and found Benjamin most fortunately, strolled about with him till midnight, when to bed -
- **22 August** Went to see the old State House also over Benjamin's store and a Silversmith's next door to it Took a carriage and drove out to the "Fairmount Water Works" and the Grand College, with which we were much pleased, also the appearance of Philadelphia generally dined with Benjamin at the English Hotel and started for New York by 5.0 p.m. train arrived at 9.0 p.m., found Bowman there, and a letter from Archibald, stating he gone to Washington, and enclosing his English letters

- 23 August Got my "effigy" and embarked on board the "Arago" homeward bound for Old England, felt that I wished she could fly instead of steam across the Atlantic, most of our fellow passengers, are Johnnie Crapaux returning to the land of Frogs, totally different from the good old "Niagara" in every way, prefer the latter by long chalkes, however hope for the best and a quick passage
- **24 August, Sunday** Wrote up Diary since 6th August. Fair winds & smooth weather. Lost a man "overboard"
- **1 September** 9.0 a.m. fell in with the English barque "Amoy" of Glos' ter, disabled and abandoned, went along side, her boats all gone, and no one on board so left her to her fate, she was timber laden, and likely to be in the way of other ships for some time to come
- **2 September** One of the fore-cabin passengers died at 2.0 a.m. buried him at 2.0 p.m., with English burial service
- **3 September** Sighted land (Scilly Islands) at 11.0 a.m. Lizard at 2.0 p.m.
- **4 September** Arrived off "Cowes" at 6^h30^m a.m. and took the tug boat to S'thampton thence to Bournemouth to see the Mother & Sisters where I arrived at 5 p.m. Poor little Dash much worse
- **5 September** Left Bournemouth at 11^h0^m a.m., called in London to see the Doctor but found he was not at home came on by night mail to Preston
- **6 September** Over the Bay to Piel and so home had some talk with Woodburne & dined at the Sun Inn Drove up to Rusland in the evening
- **20 September** In office till 12.0 noon, then to Dalton Castle, and underground at the "Trial Pits," measured up the work. Gave to Bob Ashworth who got his legs broken in the Pits 10s 0d
- 4 November To Newton and Stank with Mr. Hannay and set out place to bore for coals
- **5 December** In London, came down as far as Preston at night
- **6 December** Attempted to get home across the Bay, but had to put back to Fleetwood & come home via Preston, put in to Rusland for the night

²Arago a wooden paddle steamship, 2260 tons built 1855 for New York-Le Havre Line.

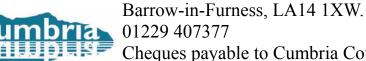
Diaries of Edward Wadham of Barrow in Furness 1851-1912



Edward Wadham was born in 1828 in Frenchay, Bristol. He trained as an engineer and worked on the Great Western Railway before moving to the Furness area in 1851 to work for the Duke of Buccleuch as his mining agent. As well as his work for the Duke and other landowners, Wadham was involved with Barrow Borough Council, serving as mayor three times; he was a Justice of the Peace; he took an interest in the local schools and churches and he was a director of a number of local companies. His diaries cover a period in the history of Furness which saw the expansion of the iron and steel industry, the Furness Railway and ship building as well as the growth of Barrow-in-Furness.

This CD ROM contains transcripts of the diaries along with a copy of his letter of appointment, digital images of two plans, details of the Wadham, Ainslie and Roper family histories and a list of other records relating to the Wadham Family held in the Archive and Local Studies Centre, Barrow.

Available from Cumbria Archive and Local Studies Centre, 140 Duke Street,



County Council

Cheques payable to Cumbria County Council

Cost: £5

Plus £1 postage

CUMBRIA AMENITY TRUST MINING HISTORY SOCIETY

Honorary President: Lord Egremont

Chairman Warren Allison

17 Gilbert Road, Cummersdale, Carlisle, CA26BJ

Phone: 01228 523923

Email: chairman@catmhs.org.uk

Secretary: Colin Woollard,

1 Lanty Close, Brigham, Cockermouth, CA130UZ

Phone 01900 823686

Email: secretary@catmhs.org.uk

Treasurer: John Aird,

1 Hillcroft Crescent, Ealing, London, W5 2SG

Phone: 0208 997 5985

Ian Matheson,

Email: treasurer@catmhs.org.uk

Membership Secretary

& Newsletter Editor: 1 Rothay Holme Cottages

Ambleside, Cumbria, LA22 0EE.

Phone: 015394 32957.

Email: membership@catmhs.org.uk

Meets Secretary: John Brown

Baysdale Farm Cottage Coniscliffe Road, Darlington, Co Durham, DL3 8TA Phone: 01325 487999

Email: meetssecretary @catmhs.org.uk

Librarian/Archivist: Don Borthwick

The Rise, Alston, Cumbria, CA9 3DB

Phone 01434 381903

Email: archivist@catmhs.org.uk

Publicity Officer Mark Scott

58 Tarn Flatt, Marton, Cumbria LA12 0NL

Phone: 07743 274115

Email: mark@classicfellwalks.co.uk

Committee members: John Aird, Warren Allison, Sheila Barker,

John Brown, Ian Matheson, Mike Mitchell, Mark

Scott, Mark Simpson, Angela Wilson, Colin

Woollard.

CATMHS website: www.catmhs.org.uk