



THE FRIENDS OF  
KILLHOPE

PRESIDENT - *Sir Kingsley Dunham F.R.S.*

NEWSLETTER NO 36

February 1996

As you will read elsewhere the highlights for Friends this year will be the opening of Park Level mine in April and The Pays in June to celebrate the event. In addition there will be the usual full programme of Friends happenings listed later. All of which should convince you that your membership is excellent value and prompt you to send off your subscriptions as soon as possible. These were due on 1st January and remain as last year £9 family, £6.50 individual, £4 senior/student.



Killhope washing floor looking superb and as it must have done about a hundred and twenty odd years ago. Photograph taken in October during filming of Catherine Cookson's novel *The Girl* - see inside. (Photograph: B Chambers)

### Wither No 34 ?

Members may have noticed that there has been no newsletter numbered 34, and have perhaps concluded that the Wheel Supplement had been allocated that number. Although this was not the original intention we think this is the simplest solution. Therefore please consider that the Wheel Supplement is Newsletter No 34.

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## **The Pays**

Every year (and every six months from 1861) the miners of Weardale got paid from the WB Lead offices at New House, Ireshopeburn. John Lee, in his book *Weardale Memories and Traditions* described this biggest event in the nineteenth century calendar as follows:

*One of the great events in old-time Weardale was the yearly pay at New House, headquarters for the miners of Wentworth Blackett Beaumont. It was a real old-time fair and gathering of the clans. Men brought their wares, chiefly soft goods, from far and near to be bought eagerly by those who could afford them. Booths were erected with all sorts of performers and exhibits and drinking tents supplied an abundance of beer and spirits. Temperatures rose and found an outlet in dancing and rough play on the one hand and the paying off of old scores by free fights on the other. Sports were held the chief of which was wrestling.....Billy Purvis (1784 - 1853) Tyneside comedian.....was there with his tent and troupe.....*

Killhope decided it would be fun to celebrate Park Level Mine with our own "Pays Weekend" (but without the paying off of old scores, we hope). I expect as many Friends as possible will join in our recreation of the Victorian pays on June 22nd and 23rd, when Killhope will be filled with stalls, entertainment and music.

If you would like to help, give Maureen Murray a ring at Killhope (01388- 537505). Otherwise make a date in your diary, and turn up on the day in appropriate costume! This promises to be an event to remember.

### **THE PAYS - Saturday 22nd & Sunday 23rd June**

**Judith Watson**

I suspect that a lot of articles this year will refer to the opening of Park Level - well so is mine (sorry!)

The staff team at Killhope hope that you will turn out in force as you did for the Great Drink - and in costume suitable for the late 1870s.

If you feel that you used the only suitable items in your wardrobe the last time, can I suggest a slightly different angle? Since The Pays were very much an occasion for workers and tradespeople, how about trying to represent a job?

The old nursery rhyme Tinker, Tailor, Soldier, Sailor, Richman, Poorman, Beggarman, Thief, is a good starting point. A collection of items on a tray, in a basket, in a bundle or on the end of a stick would be sufficient to give the right effect.

An ankle length skirt (several layers) voluminous shawl, heavy shoes and hat or bonnet for the women. Gardening-type clothes, boots, shawl or cloak and hats or caps for the men - these should produce an authentic atmosphere! Flat caps and trainers are definitely not nineteenth century!

Trying dipping into The Victorians in the children's section of your local library, especially if you want to be more fashionable middle or upper class.

I will be happy to try to answer any questions or discuss any ideas if you **ring me at Killhope 01388 537505**.

This handsome group from the unforgettable Great Drink were selling patent medicines (allegedly). I am sure the children at least were innocent!



Judith also loaned me a copy of part of the census return for Middleton in Teesdale in 1861 from which I have extracted the following occupations which might give readers some ideas for a costume for the Pays: labourer, shepherd (bring your own collie), game watcher (bring our own bonny moor hen), poacher (though not in census) ditto, woodman (axe), draper, grocer, chemist, innkeeper, confectioner, ironmonger, dealer in fancy goods, miller, pedler, rag dealer, groom, washerwoman, mangler of cloths(!) carter, blacksmith, lime burner, lead miner, joiner, bootmaker, brushmaker, clogger, cap maker, straw bonnet maker, lace maker, clerk for London Lead Company (in our case W.B. Lead) general practitioner, rector, curate, schoolmaster, surveyor.

Good Luck! - Editor

Members may recall the odd reference to the Killhope Ghost - usually when some unfortunate is required to stay the night to guard the minerals exhibition in September. Well at least a hundred individuals will now claim sightings after (surprise, surprise), the Halloween weekend. An eye witness reports:

"We chanced across the last "Happening as it began outside the mine shop - with dusk fast approaching. Fortunately we were not alone as about 30 children up to the age of at least 60 were gathered and dressed in cloaks and pointed hats. Some had pumpkin lanterns while others seemed unconcerned by the bats which flitted around their heads. We admit that the atmosphere was right for a good haunting and that is just what we got, starting with the hideous ghost of a long dead miner which emerged in frightening fashion from Park Level.

Once we had recovered a little from the shock we agreed that there was a certain familiarity about the "thing" - perhaps its descendants still live in the dale today? Or maybe the staring eyes and cadaverous pallor were simply reminiscent of any Killhope information assistant at the end of the season?

From where we crowded into the mine shop the gloom and heavy atmosphere quickly evoked an impression of such places 150 years ago. We were easily provoked into an epidemic of coughing by our ghostly guide with his clever and entertaining narrative and were totally unprepared for what followed! To our horror one of the sleeping figures leapt into life! We had been invited to scream if frightened and many took up the invitation without a second bidding. Others made a dash for the doors.

Those of us made of sterner stuff were nevertheless glad to be led outside only to be directed into the gathering gloom of the Killhope woodland where on a circular tour we were to encounter still more ghostly apparitions. A headless horseman was glimpsed through the trees and his missing part came rolling down the slope towards us. Fortunately this turned out to be just a hollowed out pumpkin.

At the old stable a singing, guitar playing ghost was advised by a small witch in the party that it wouldn't seem so dark if he took his "shades" off! - but could we have some more music please? Great fun!

In atmospheric Hazely Hush we met with more sorry creatures and just as we thought we were going to be safely out of the wood came the chilling cry of the timber wolf on the still night air. We should be so lucky! This turned out to be a werewolf which led us barefoot (it, not us) down the stoney path and eventually to disappear into the toilet block.

No doubt feeling a little braver now we all relaxed into broad smiles and agreed we'd had an excellent entertainment in spite of suffering the most painful puns - not to mention moments of sheer terror!

The children (and parents) plainly enjoyed making their own hats, lanterns, etc - ably assisted by Killhope staff in the upstairs room and the whole exercise was good for Killhope. It was excellent public relations and broadened the scope and appeal of the site.

All this was possible only thanks to the considerable efforts and dedication of former Killhope employee Kevin Watson and his Hardline Production friends - fresh from the "Edinburgh Fringe". (At least I hope it was they who took the parts of the ghosts.) So if you require a good haunting or similar theatre entertainment I'm sure Kevin and company would be glad to oblige. He can be contacted via the editor."



Ghostly Kevin Watson (right) and his Hardline Production friends (or should that be fiends?) in the mineshop at Killhope. (Photo: B Chambers)

## Project Officer's Report

Ian Forbes

Unforgivably, your projects officer disappeared off on holiday at the time of the last newsletter, leaving the editor without his promised report. Despite the best of intentions (I'll write it in Scotland and post it) the report never got written. However this has proved to be only a rod for my own back, as I now have to summarise what Friends have been doing since last May!

Last year's talks and events programme witnessed several utterly memorable highlights, and many moments to treasure. Others will have their own favourite memories, but two points stand out for me above all the others. The first came in a part of our tenth birthday lecture "Rookhope in Retrospect", given by our President, Sir Kingsley Dunham, in June. Sir Kingsley entertained and educated a large audience in his characteristic clear and lucid manner, and included an account of his journey as a young man into the fabled Boltsburn flats at Rookhope. No-one will ever see these again, so Sir Kingsley's memories, from 66 years ago, were spellbinding. This historic talk is now available on cassette.

Spellbinding too was the astonishing display of minerals at our September "Grand Mineralogical Exhibition". This was a truly superb show, which Trevor Bridges reported on in full in the last newsletter. I would like to thank Blue Circle for their

continued sponsorship of this event - we value their help and support. Thanks also to the stewards and watchers who ensured absolute security for the minerals at all times. This team consisted of Trevor and Shelagh Bridges, Brian and Jane Young, Dick and Margaret Graham, Carol Sutton, Russ Parkin, Doug Tyerman, Pete Andrews, Bill Grigg, Bryan and Dorothy Chambers, Helen Cannam and Pam Forbes. Special thanks must go to Brian Young for once again judging the competitive part of the exhibition with authority, encouragement and good humour, to Trevor and Shelagh Bridges for putting so much into the event including their own non-competitive exhibition of Cheviot agates, and to Doug Tyerman and Pete Andrews for overnight guard duty. One of them volunteered; and young Pete was treated to this experience as a surprise!

Our AGM in June reverted to Killhope after a brief flirtation with Nenthead, and was better attended than that of 1994. After the formal business we had a pleasant amble round the village and industrial remains at Nenthead, including a look at Hillersden Terrace, built by the London Lead Company, and the wheelpit for the massive 60' waterwheel behind the ruins of the smelt mill. The following day our Annual Friends Open Quoits Competition didn't draw as full an entry as the previous year's event, but once again Joe Bean ran out the winner. As ever this was a friendly competition, played in an excellent spirit. Much of the credit for this must go to Peter Nattrass, who always organises the occasion in a relaxed, friendly, and efficient manner. In July Killhope's "Woolly Weekend" saw sheep shearing with hand clippers, and a major contribution, via Marjorie Grigg, from the Tynedale Guild of Spinners and Weavers. Their infectious enthusiasm for their craft filled the upstairs room of the visitor centre, as did many superb examples of their skills. All the visitors who tried their hand at what was on offer left Killhope having enormously enjoyed being encouraged into attempts at spinning, carding etc.

Our autumn programme of talks reminded us again of the many facets of our subject. In September the Redfearns gave a presentation based on Richard Watson's poem "My Journey to Work", in October Brian Young talked on north Pennine geology, and in November Ian Tyler enlightened us on mining in the Lake District. Although our talks draw a steady and appreciative audience, I always feel there could perhaps be more of you. Our speakers were all experts in their chosen fields, and all the lectures added to our understanding and knowledge. The final event of 1995 was our Christmas members night with interesting slides and chat from several members. I should perhaps add that the venue for our talks - Stanhope Old Hall - enhances the relaxed and friendly atmosphere we always enjoy. If you haven't been to one of our talks before, give it a try this year!

The Day School in October was, I thought, another triumph. A full room listened to "Pennine Journeys" - a series of lectures which started with the prehistoric, and ended in the mid nineteenth century. This was a varied programme and thoroughly enjoyable too. Like Sir Kingsley's talk this is also now available on cassette, thanks to the hard work of Doug Tyerman.

An innovation last year was our "Dirty Weekend"; an opportunity for Friends to work on the site in a more structured manner than usual. This proved a considerable success, with a great deal of good work being done. Those who came to work over the weekend were Bill Attwood, Ian Jowett, Bryan and Dorothy Chambers, Trevor

and Shelagh Bridges, Russ Parkin, Lesley and Luke Blackett, and Jane Young. Between them they finished cleaning out the waterbox on the north bank of the burn - this had got badly silted up and full of vegetation, and Lesley and Luke Blackett had started to clear it out before the dirty weekend. The workparty also cleared out the vegetation and debris from the watercourse leading down from the reservoir to the waterwheel and from part of the tailrace of the wheel. (Let nobody tell you waterpower is free - watercourses require an immense amount of maintenance.) Others worked on reconstructing jigs in the jigger house, and started work on building a wooden office to go in the jigger house. I hope those who came on the "Dirty Weekend" enjoyed it and found it worthwhile. I certainly felt it achieved a lot of useful work. If you'd like to join in, there's another one this summer.

I am particularly grateful to Ian Jowett, one of those who started work on the jigger house office. Ian felt he should see through to the finish what he'd started, and came back week after week to toil away until the job was done. The office is a fine addition to the site, and helps greatly to bring the jigger house to life. Ian should be proud of demonstrating what one determined volunteer can achieve. Having done all he could with this, he has now started work on rebuilding the broken-backed section of waterbox on the north bank of the river.

Gordon Parkin also made a highly significant contribution to the maintenance and development of Killhope. As the site ages the maintenance liability gets heavier, and Gordon lent us - entirely free of charge - one of his workers, full time, for a number of weeks in the summer. Working to Russ Parkin, Chris Eastwood got through a large number of very useful jobs.

The Friends committee is aware that work on cataloguing our archives must now be carried forward as quickly as possible, so that the collection can be made available to members. Although Carol Sutton has done noble work in starting this job, there is a huge backlog; really more than one person can reasonably be expected to cope with. By the time this newsletter comes out several committee members will have had a training session from David Butler, archivist at Durham, and from this we will move to set up an accessions register and catalogue. I appeal again for cataloguing volunteers - give me a ring on 01388 - 537505.

Donations have continued to come in: George Pickin has given us more of his archive in the form of various books, maps and plans, Harry Parker has generously donated some of his mine plans collected during a lifetime's interest in the north Pennines, and Bethany Megan Robinson has given us a copy of her student project on leadmining. For the site Gordon donated a stretcher for Park Level Mine, Trevor Bridges let Killhope copy some of his wonderful underground slides for the visitor centre exhibition, and Edna Emerson gave an old waistcoat for the mineshop.

Individual Friends have helped elsewhere on site. Lesley Blackett took down the old scaffolding from the partially completed heather thatched stable in the wood, Doug Tyerman cleaned and produced clear versions of George Green's patent drawings from the 1870's for display in the jigger house (the machinery in there came from Green's Aberystwyth foundry) and he and Pete Andrews again gave smithying demonstrations to the delight of large numbers of visitors.

I have talked before of Friends' help and involvement in the mine project in many ways. I'll give two further examples of this. Frank Unsworth has on several occasions lent caving lamps and helmets when we've wanted to take parties underground, and Trevor Bridges is currently involved in taking photographs in the mine for publication in leaflets, and in the mine souvenir book.

As you can see the last nine months have been busy ones at Killhope, and to all those Friends whose help has been so willingly and cheerfully given, I say a sincere thank you - and hope to see you all again this coming season.

### **Events at Killhope in 1996**

The Friends programme is detailed elsewhere in the newsletter. Friends might also like to make a note in their diaries of the following events organised by Killhope.

April 5th, 6th & 8th *Eggstra Special Easter Weekend.* Traditional Easter activities with children's workshops.

April 13th *Inside the Hollow Hills.* Slide show at 2.30 pm

April 20th *On the Lead Hills - An Industry Explored.* Slide show at 2.30 pm

April 27th - May 24th *Artists of the Hills Two.* An exhibition of art and ceramics by the new Killhope Artists Group

May 25th - June 1st *Naturally Killhope.* A week celebrating the wildlife and natural history of Killhope. Includes a Bird of Prey flying display on 30th May

June 2nd *The Things People Collect.* Display by Bill Quay Collectors Society

June 9th *Mineral identification workshop and walk* led by Barry Webb. (Bookable in advance)

June 22nd & 23rd *The Pays* Joint event with the Friends of Killhope

July 6th & 7th *Woolly Weekend.* A weekend based on sheep, and the uses of wool. Sheep shearing, rug making, hand-knitting etc. Joint event with the Friends of Killhope.

For further details of any of these events, ring Killhope on 01388 - 537505  
All events and activities will be held at Killhope.

**Friends Programme 1996**

**Wednesday April 10th**, 6.30 pm onwards "Park Level Mine preview". Your chance to see round the mine, with tours led by Ian Forbes. Meet at Killhope from 6.30. Bring your wellingtons, if you have them, and warm clothes.

**Wednesday May 8th**, 7.30 pm "Lead Mining in Britain" by David Cranstone. A talk at Stanhope Old Hall.

**Saturday June 15th** Annual General meeting at Killhope, followed by a walk round Allenheads.

**Sunday June 16th** Annual Open Quoits competition at Killhope 2pm onwards

**Saturday/Sunday  
June 22/23** The Pays weekend (joint event with Killhope)

**Saturday/Sunday  
July 6/7** Woolly Weekend (joint event with Killhope)

**Wednesday July 10th** 7.30 at Core House, Rookhope - Rookhope borehole meet with Dr Johnson "Straight to the Core"

**Saturday/Sunday  
July 20/21st** Dirty Weekend at Killhope - your chance to do some work on site

**Saturday/Sunday  
September 7/8th** Grand Mineralogical Exhibition

**Wednesday September 11th** "Allenheads Emigrants 1849" by Nora Handcock. A talk at Stanhope Old Hall

**Saturday October 12th** "Power in the Pennines" Friends of Killhope day school.

**Wednesday November 13th** 7.30 pm talk at Stanhope Old Hall - to be arranged.

**Wednesday December 11th** 7.30 pm Christmas Social and Members Night at Stanhope Old Hall.

**KILLHOPE - THE MOVIE STAR**

Dorothy Chambers

Horror of horrors! Friday 20th October dawned with a clear blue sky and the film crew had ordered a typical Killhope day of horizontal rain (the Friends should have arranged a barbecue!)

It was Killhope's introduction to the world of the movies in the shape of a Catherine Cookson novel being filmed for television. "The Girl" is a story woven around the lead industry in the Pennine dales.

By the time we arrived on the scene, Killhope had been transformed. What remained of the car park was covered in cables and rose fertiliser from the horses and ponies being prepared with wooden pack saddles and the cart horse being introduced to his load of timber. Standing aloof was the master's fine white horse quite prepared to pose for photographs. Cluckling away in a corner was a crate of chickens - supplies for the chuck wagon perhaps?

A steady stream of shifty characters large and small appeared from the upstairs room of the Visitor Centre. The "extras" were being prepared for their duties on the washing floor.

Emerging from the Visitor Centre we entered the "set" to be transported back 120 years. As shooting began to the sounds of "quiet please" and "turning over" the washing floor became a hive of activity, horses trundled past the mine entrance towards the big wheel, tubs were pushed from the mine to the bouse teams and Mr. Beaumont was seen to be discussing the state of the industry with his mine manager. This scene was to be repeated many times - we have all heard it before "Scene 1, take 10!" Such unforeseen distractions as a light aircraft buzzing overhead, a hot air balloon looming over the hill (believe it or not) all held up filming. Even the main road traffic was controlled by police from about a half mile either side of the site so that nothing untoward moved once the camera started to roll.

At last the Director was satisfied and lunch was called. The chuck wagon miraculously provided a three course lunch for 60 crew and 40 or so actors and extras.

The afternoon session was far more problematical because of the non arrival of a crane to allow wide angle overhead camera shots. Three hours were spent filming a rowdy scene of miners outside the mine entrance "Scene 2, take ....."! until the crane arrived at 5pm. We departed as the actors were prepared once again for "Scene 2" with overhead camera. The crew and actors departed the site long after dark.

And what about the rain - well it seemed that the next day's filming was to be the wet one and for today at least everyone was happy with the blue sky and sunshine.

Saturday again dawned clear and bright and not a sign of cloud. A hitherto unimagined phenomenon, a rain machine was necessary at Killhope. Undeterred, the crew set about producing a wet day at Killhope, much to the delight of some of the washer boys who delighted in "testing" the rain. The "set" for the day was the mine shop entrance with "the girl" running down the woodland path near the saddle house and along the path above the washing floor, past the mine entrance and up the steps to the mine office - in her wedding dress - and of course in the pouring rain. The area was duly soaked and resoaked as the

sun did its best to improve the conditions. "Turning over " "Scene 3 - take 1". "This should be quick, they would not subject the actors and crew to more than one "take" thought I". Wrong! "Scene 3 - take 10" - unbelievable to the onlooker, what were they trying to do to that poor girl - straight out of drama school. I wonder if she was having second thoughts about her chosen profession. The hot water bottle was refilled and towels used to absorb excess water but still she shivered and the Director called for more "action".

Lunch was mercifully called at 1pm after 6 hours of filming. They are early birds in this industry with a 7 am start, frost and all.

The afternoon session was not for spectators with all action being confined to the mine office for actors only, the "extras" being paid off at lunchtime.

It was a privilege to witness the re-creation of Killhope in its heyday 120 or so years ago and hopefully captured on film by the crew. The screening of this production is scheduled for early 1996 - possibly February but only four minutes of film will be produced from the two days work at Killhope.

**P.S. The screening of The Girl starts on Tyne Tees television on Friday 16 February for three weeks.**

### **Killhope Fungi Foray**

Expert Brian Atehey and a large group of visitors gathered an enormous quantity (and variety) of fungi one Sunday last October and afterwards enthusiastically consumed those for consumption. For the less adventurous Killhope staff thoughtfully added some of Sainsbury's finest to the barbecue. This was very informative and enjoyable event. Don't miss it next time.

### **Killhope Ducks**

Last year visitors enjoyed the sight of 5 ducks solemnly making their way down to Killhope Burn. They survived various scrapes during their stay including going missing for a couple of days - much to everyone's consternation. The site was searched from top to bottom - except for Park Level and the new mine which is where they were found when the next inspection was carried out! Sadly I understand they have now gone to the duckpond in the sky.

### **Copyright**

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Responsibility for obtaining permission to use someone else's material also lies with the person submitting the article to the newsletter and not with the editor.

## ASHGILLHEAD LOW LEVEL WATER REGULATING VALVE Harold Beadle

That the regulating valve was located in the level was known, but because of obstacles in the level between its mouth and the bottom of the hill where its evidence disappears underground, it had not been possible to examine it for many years. However, the time came in the early 1970s that there was to be an investigation into the possibility of extracting fluorspar which was known to exist in many of the redundant lead mines in Upper Teesdale, particularly on the east side of the valley which is on the edge of the Fluorite Zone.(1) It was then that a company named Exud Limited decided to explore the Ashgillhead levels and engaged Donald Elliot, an experienced mine manager with a good knowledge of the Teesdale mines, who with a handful of local men, first of all investigated Ashgillhead Old Level which begins at the bottom of the valley down which flows South Langtae Sike. This level was driven to work the well known South Langtae Head Vein in which a good deal of spar had been seen in past years, particularly on the higher ground to the east. (2)

Later, they turned their attention to Ashgillhead Low Level and the first real obstacle they had to contend with was an exceptionally strong brick and concrete dam, this being located just beyond the waterblast shaft to which was bolted the valve. (3) However, with the assistance of explosives it was eventually breached and the valve together with its bits and pieces were deposited outside near to the level mouth.

### The purpose for which the valve was installed

Although Ashgillhead mine was situated at 1800 feet O.D. Comparatively speaking it was well supplied with water, mainly from Ashgill Beck, South Langtae Sike and that which flowed from the levels. In any case it was only required for washing and dressing. After use there it was collected and taken by a water race to where it could be re-used at Lady's Rake Mine, a mine which had increasing problems with its water supply, particularly after Janson's shaft was sunk at the bottom of the valley close to Harwood Beck. The sinking of the shaft involved the provision of enough water to operate a water balance haulage system designed to draw the shaft and a turbine which operated a 12" Cornish type spear pump, in addition to that required for the dressing floors. Though it should be said that the water from the mine was pumped high enough to be used for dressing. It was in order that Lady's Rake could be assured of an adequate and regular supply of water that the level at Ashgillhead was dammed and fitted with a manually controlled valve which also had an adjustable overload valve which automatically guarded against an excessive build up of pressure when the manual control valve was closed. (4)

### The rescue of the valve

It has already been said that the valve and its parts were deposited outside the level mouth where they lay for some months, because it was with the greatest difficulty that it was possible to interest any of the museums to take it into their care. However, it was through the good offices of two of my industrial archaeology friends, Dr Stafford Linsley and Mr Ronald Judge, fellow members at that time of The Industrial Archaeology Group for the North East, who arranged that it would be taken by the Ryhope Water Pumping Station and put on display there. Eventually the day for the rescue came (Saturday 30th September 1972). Stafford was able to secure the use of a Land Rover and he, Ron and I

together with one unknown to me managed to load the main casting and smaller parts to be transported to Ryhope. (5)

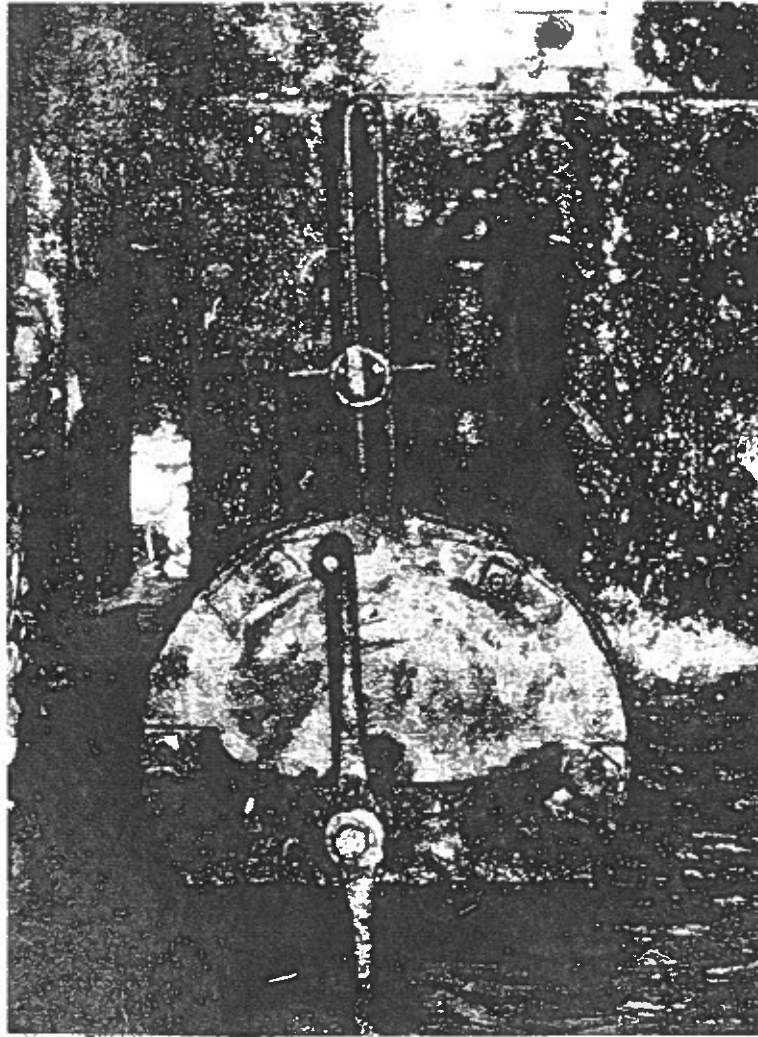
References:

- (1) Geology of the Northern Pennine Orefield, Vol 1, p.100
- (2) Local men. George Richardson, Melvin Toward, Philip Robinson and John Boyle.
- (3) Photograph of valve in position before removal from the dam.
- (4) A mine was usually said to be either 'wet' or 'dry'. This depended on the strata or ground being mined. Some mines were wet in parts and dry in others. Lady's Rake was very wet particularly after the shaft was sunk and a level driven under the beck, hence the employment of a very large pump at a small mine.
- (5) See photograph taken while Ron and Stafford considered the best method to employ in what proved to be a rather difficult operation.

Notes:

- (1) An article "Lady's Rake Mine, Harwood in Teesdale NGR NY 806 343" appears in The Cleveland Industrial Archaeologist No 7. 1977 pp 17-23
- (2) Ashgillhead mine ceased production in the early 1880s. How soon after that the level was dammed so that it could be used as a reservoir remains unascertained.
- (3) Photographs by the author.

"The views expressed in this newsletter are those of its correspondents and are not necessarily agreed with or shared by the Friends of Killhope, its officers or the editor. The accuracy of submissions is the responsibility of the authors and will not necessarily be checked by the editor for validity."

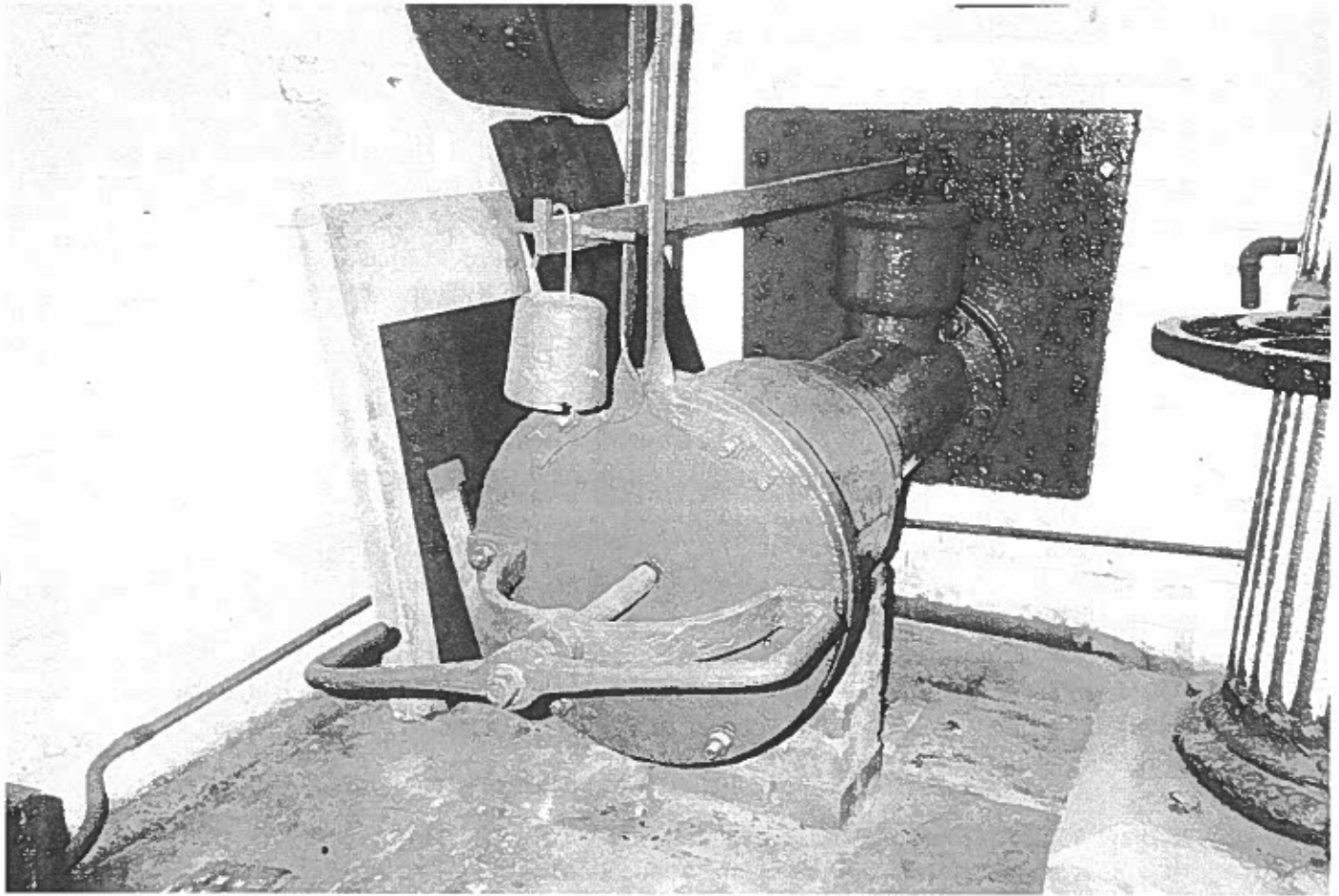


Water regulating valve as found still attached to the dam



The rescue of the valve Saturday 30 September 1972

The valve displayed at Ryhope Pumping Station. Photograph taken in December 1995.



Photograph by B. Chambers

### **THRELKELD QUARRY & MINING MUSEUM**

This venture has brought together Calbeck Mining Museum & Thelkeld Quarry Project and the museum is open six days/week from 11 am to 4.45 pm. The Quarry Engine House and narrow gauge railway will be open to the public at weekends only. Many of the original buildings still exist and a large display of artefacts, plans, photographs etc are on view. There is a canteen and a very well stocked shop on site at Threlkeld, Nr Keswick, Cumbria CA12 4TT, telephone 017687 79747.

READER'S LETTERSClement Burlison & Thomas Sopwith

Further to our recent correspondence concerning Clement Burlison (FOK newsletter 32, page 17) I have come across some more information which may of interest.

The new book "Thomas Sopwith, Surveyor by Robert Sopwith" has I believe been mentioned in FOK newsletters. I bought my copy in the Killhope shop and I thoroughly recommend it.

On page 302 we learn that Clement Burlison executed two paintings concerning the Sopwith family during the 1850s. The first depicts Jane Sopwith seated in the drawing room of Allenheads Hall with her daughter Ursula and son Arthur respectively standing and kneeling by her. The second depicts two other sons Tom and Arthur Sopwith, turning up stones in a local burn and looking for fish, while two family dogs look on : a pack train wends along a track over the head of the valley near the sky-line.

If you recall, I indicated that in 1853 a painting entitled "Tickling Trout in a stream near Allenheads Allendale" was exhibited by Burlison at the Royal Academy? Is this the same picture of his family portrayed at a Royal Academy exhibition? The R.A. was an institution he could closely relate to.

Perhaps someday there may be an exhibition concerning the work of Clement Burlison and there may be many other North Pennine connections waiting to be discussed.'

Roger Bade

The underground waterwheel at Killhope

Many thanks for your letter of 3rd December 1995 about the calculations for the underground waterwheel at Killhope, which is a tremendous achievement by the Friends of Killhope - a brand new waterwheel from new patterns and castings in 1995 must rank in world wide terms as something of a record!

As far as comment on the horsepower, speed and water flow to the wheel is concerned, I'll wait until I have more information and have had a chance to see the wheel in action. However, you should draw the attention of the Friends to the clerical inconsistencies of Fig 2 in the Newsletter Supplement on the New Wheel:-

with 48 buckets at 7 rpm, this gives 336 bucket/min NOT 250 buckets/min

with 600 gallons/min and 336 buckets/min, this gives 1.78 gallons per bucket NOT 2.14 gallons/bucket.

Finally, 600 gallons/min falling 18 feet, equals 3.27 hp, i.e. the potential energy of the water supply NOT the power developed by the waterwheel.'

Tom Hay

ONE DAY.....

B Short

"RRRRRIIIIIINNNNNNGGGGGGGG!!!"

Its not that time already, I asked myself before opening my eyes and becoming fully awake. Alas, it was true, and it was time to get up, earlier than normal, as it was my turn to light the fire and put the kettle on. I carefully eased the bedclothes back so as not to disturb the others in the bed, the man next to me and the boy laid across the bottom. I shuffled wearily in the gloom of the cold March morning, across to the equally cold fireplace and reached up and pulled my trousers down, with a shower of dirt, from the drying rail above. After pulling them on I picked up my clogs, turning them upside down and tapping them together in case there were any cockroaches in them. After cleaning the fire out I soon had it blazing, lit with dry sticks and candle stumps, the peat following shortly. When I had put the kettle on the hanger I sat back and contemplated.

There I was, stuck in this lodging shop, Monday to Saturday. Because of the remoteness of the place, it was easier that way, easier that is than walking the three miles there and back every day from civilisation up to here, here being Westernhope Mine, at the top end of the valley of the same name. Surely there is more to life and better ways to earn a living than this, after all, its Friday the 25th of March, 1847, and if all stories are true, the place to be is across the water in America. When I first came here I said I would stick it for two years, and here I am, still here after five. Looking around this room, which is about sixteen feet square, I can see three beds, in the one I have just vacated is my brother in law, Harry, and his son, Mark, a boy of only ten years. He has been here only three months. One of the other beds contains two men from Stanhope, John and Wilf, the third is occupied by two men from Teesdale, Tom and Matt, both experienced miners, they were here when I first came. Although a lot of the other mines work on the partnership system, we all work together here, finding it is fairer that way. They all have their wallets draped over the bed-heads and in the corner is a table and two chairs, there isn't room for any more. Everyones clothes are on the drying rail and their clogs are on the floor near the fire, hopefully drying out overnight. By now the kettle is starting to sing and it's time to light the oil lamp and wake everyone up. Like me, they won't really feel too bad about that because this week we aren't working Saturday and we're all looking forward to spending more time than usual with our families. My family and I are planning to use the extra time to visit relations over at Nenthead, that will be on Sunday as I intend to catch up in the garden in readiness for setting potatoes and such like tomorrow.

Everyone is up now and there is quite a commotion, with the dust from their clothes, much coughing and the odd other manly sound associated with getting out of bed. It's 5:45 am now, by the time we've had a mug of tea each and slice of bread with jam it will be time to take something from our wallets for bait in the mine, a piece of cheese or cured ham to accompany the by now stale bread, and set off for work, on the way filling our bottles with water from the spring outside.

Downstairs the horse in the stable is waiting to be kitted up for the shift in the mine, when that is done all we need to do is collect a couple of tallow candles each and set off for work. We take advantage of the luxury of a ride into the mine in the empty tubs, keeping our feet dry that little bit longer.

The entrance to the mine is only a short walk from the lodging shop and while Mark is attaching the three tubs to the horse I can see two or three figures coming up the mine track with the horse and cart. We only have a basic dressing floor up here, a knocking wall, buddle, two hotching tubs and a dolly tub. The dressers only work three days a week, they can dress all the ore we can produce in that time. After dressing it is taken down to Rookhope for smelting. When I first came up here I worked on the dressing floor for a while, it was winter time and I was only too pleased when a job came up in the mine, the conditions inside being a little less hostile than those outside, of course in the summertime it's a different story. It takes about ten minutes to get to where we are working in the mine, the first part of the level is in shale so most of that section is stone arched, but because of the dip in the strata it isn't long before the sandstone comes into the roof and the arching stops. About forty fathoms into the mine there is a level off to the right which goes under Harry's Hush. It was worked in the early part of the last century on the surface and it's now also worked out underground. A bit further in there is another band of shale then it's the Great Limestone, the bed we are actually working in. Where we are, on the Westernhope Vein, the limestone is about sixty five feet thick, and the vein is almost three feet six inches wide in all. When we reach the vein at the end of this crosscut we turn right, and if the surveyor is right we are on a line with West Grain and Wolfcleugh on the surface. If you turn left and go so far along the level and climb up into the worked out stopes, you will come to where that accident happened seventy three years ago in 1774. On that occasion the miners broke into some "old mans" workings which were standing full of water. One man managed to climb up some ladders to safety but the other three perished in the ensuing flood. There is always a danger of that happening even now when you are driving a level forward or overhand stoping, because in the old days the standard of surveying wasn't very good so some of the plans are not very accurate. Now that we have reached our workplace we light all our candles instead of using just the one as we did when we came in, we have to save where we can because we have to supply our own candles. If you have never been in a mine I cannot describe how dark it is, nothing like as light as night time outside and it's deathly quiet apart from the odd drop of water coming from the roof and splashing into the water on the floor. Odd times you will hear a thud when something falls somewhere or a crack or creak when the ground is settling on the support timbers but you get used to that after a while. The more we can produce, the more money we can make, so we are all soon at it, Harry and me are drilling forward at the top of the stope, often thinking about that accident, the other four are working in pairs picking and wedging off the looser softer vein material and shovelling it into the tubs for Mark to take out to the day with the horse and tip at the dressing floor. After what seems like a very long time Tom looks at the candle nearest to him and decides, by gauging how much it has burnt down that it must be dinnertime. When all work has stopped and we are sitting down to have our baits I can hear the tubs rattling along the rails down the level as the horse pulls them along. When they come around the corner I can see Mark sitting with a smile on his face in the first tub, he also knows that it is dinnertime. We've had a good morning's work, two sets of three full tubs out to the dressing floor, but, more often than not, it isn't as good as that, it all depends on the softness and thickness of the vein and rock.

After bait, Mark has a go at "beating the borer" as they say in Cornwall, that is, I hold the jumper in the hole in the forehead while Harry and Mark take turns at hitting it with their hammers, a risky business for me with a young lad just learning, but he'll be as good as Harry in no time at all. Towards the end of the shift we have drilled ten holes and they are charged with black powder and stemmed ready for firing at hometime. When everyone is clear I light the fuses, their length giving me three minutes to get to a safe place before the charges go off. As soon as I have reached my work-mates the silence is broken by a loud, low-pitched thump as the powder explodes and the blast is successfully contained in the hole by the stemming, breaking the maximum amount of rock with the force. The noise is immediately followed by a great rush of air from the blast and then all is still and quiet again. The material brought down by the blast will stay there until the next shift, by which time the air will have cleared.

Mark hasn't appeared with the horse and tubs so we set off to walk out. We get our feet wet splashing through the water but it doesn't matter too much at this end of the shift because in fifteen minutes time we will be back in the lodging shop where we can dry out by the fire which, hopefully, Mark has kept burning. It's just coming in dusk when we get out to the day and Mark shouts from the shop to tell us that it is 6.00pm. We have been in there for twelve hours. He also says that it has been cold, wet and windy so perhaps it's not so bad after all being a miner!

The horse is already fed and watered and bedded down for the night so we go straight upstairs, greeted by a cheerful fire and a warm feeling about us. The kettle is already boiling, bless you Mark, so we have a mug of tea each and eat whatever we have left in our wallets, leaving only a piece of bread for the morning just before we set off for home. Last night we had rabbit stew after Wilf had snared one but tonight we have no such luxury. After washing and packing our few personal belongings into the wallets we settle down for the evening, reflecting on our week's work and how much we have earned.

After a couple of stories and a game of dominoes it's time for bed, I'm asleep almost as soon as my head hits the pillow.

"BEEP"- "BEEP"- "BEEP"- "BEEP"

I open my eyes to see the red figures on my radio alarm clock and I can hear early morning traffic faintly through the double glazing in my bedroom window. The central heating radiator ticks as the hot water flows through it.

Ah well, it's strange how a dream can seem so real, isn't it?

#### DATA PROTECTION ACT

Please note that a database of membership records exists to allow the printing of address labels. If you do not wish your membership details to be included, please let the Treasurer know when you join/renew your subscription.

EMIGRANTS CORNER  
BY KEVIN WATSON  
PART 5 - MODEL EMIGRANTS?

"Tea?"

"Thank you very much."

"Ice?"

"How many of the miners died?" a fellow once asked me at Killhope.

"All of them," I replied.

"Seems like there were a lot more ways to die then," he said before ambling off towards an exploration of Bill Sharp's cavernous knowledge of matters geological. He missed the joke but hit another truth. The phrase "a lot more ways to die" could have come straight out of a nasty Peckinpah western had he not delivered the line with quite so much essence of Yorkshire.

Infant disease, the dangers of childbirth to mother and child, dust and damp in mines and mineshops - death was never very far away in the story of the North Pennines' in the nineteenth century and it would be deceitful for me to tell you that the situation was so very different in the American west of the 1840s. Matthew Dinsdale wrote home to his family in Wensleydale telling them how similar the climate and wildlife was but Matthew Willis was nearer the truth when he filled the same community with stories of rattlesnakes, mosquitoes and extremely changeable weather. I know, for I have seen these things. Even the wind can kill in Wisconsin. Driving along the highway, Loren Farrey, my American cousin, pointed to the spot where a town was until the tornado took it away a few months earlier. Only three weeks before I moved to Ripon, Wisconsin, a tornado picked up the town's *Burger King* and rearranged it in pieces across the street. They say a tornado has so much force it can take a piece of straw and drive it straight through a telegraph pole. A cow was once picked up and put down in a field a mile further up the road. Randy Miller claims the same thing happened to him but everyone knows that it was really Jack Daniels that picked him up and we all saw him thrown down again on his favourite barstool at Timmons Corner Bar<sup>1</sup>.

When I first found myself in the midst of a Weardale winter, local yokels all insisted that as far as winter was concerned I'd "seen now't yet". I can now say, however, the same to such people, with regard to a midwestern winter. The winter of 1993/4 was particularly bad. It did not feel so cold because there was not the dampness of an English winter but I saw the Mississippi frozen over, when I touched my nose outside it made a disturbing crunching noise and cars only started because they were plugged into heaters all night. The wind chill factor made it so cold for a while in January that a trip to the North Pole would have warmed the population up. Such winters have the power to kill

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<sup>1</sup>Timmons Corner Bar in Ripon, Wisconsin humbly offers you the best grilled chicken and cheese sandwich in the midwest. If Friends clubbed together, I feel we could get Jimmy, the bartender, to England to make us sandwiches for less than £5 a piece. This I would consider a culturally valuable usage of Friends' resources since grilled chicken and cheese tastes significantly better than rusty quoits or old rocks.

and for the new arrivals of frontier days who did not know what to expect this must have doubly been the case.

It was in this winter, that I joined ninety people who were the survivors of a century and a half of such weather in the sleepy little town of Benton for a cup of tea and a chat about the old country. Although a century and a half had passed since the peak of emigration, many still retained surnames which originated in the North Pennines. It became apparent from the evidence of that occasion and subsequent investigations, that whilst others went to California in 1849, the emigrants who had arrived from the North Pennines (and were still arriving) generally chose to remain in the lead mining region and make use of claims abandoned there, rather than gambling on a fortune further west. A century and a half of change and recent severe economic depression has done remarkably little to change that. The image of North Pennines immigrants in America to be drawn from this is that of conservative thinkers who had little desire to wander and held more realistic, or at least less ambitious economic and social expectations than other settlers on the frontier. In comparing them to Cornish immigrants, David Morris claims that the North Pennines emigrants' *"nature and traditions allowed for rapid absorption into the American social order."*<sup>2</sup> After six months of fooling around on the Upper Mississippi, I had to come to some conclusions on whether this was the case. Did North Pennines "nature and traditions" prompt a rapid cultural absorption or did they act more as intrusive "cultural baggage"?

Until the 1930s, there was a demand in Wisconsin for newspapers in the German language. Whole communities existed throughout the state in which the English language was not spoken. At the Benton English Tea, a story was told of an unfortunate immigrant from Eastern Europe who moved to Wisconsin in the hope of finding a better life. He learned the language, found employment and settled into a relatively comfortable life in a small town. After a short time, he was invited by a friend to the state capitol, Madison, to hear a speech by Senator LaFollette, who was becoming an important name in American politics. The immigrant was disturbed when he heard the speech because he did not understand a single word spoken. His investigations revealed that he had not learned to speak English, as he had supposed, but Norwegian. Such a communication problem did not exist for the new arrivals from England, and consequently, they were more easily and swiftly accepted as a part of the social landscape of America.

There were other ways in which the society of the Mississippi lead mining region was sufficiently similar to that of the North Pennines to put immigrants from there at a considerable advantage. Earlier in this series, the attraction of cheap and available land was considered as an asset of particular use to them since they had been part of an economy in England which encouraged the combination of farming and mining. In addition to this, however, only Cornish immigrants could match the experience of the Dalesmen in matters of mining. Geographically, the lead mining area of the North Pennines was more limited than that of the Mississippi. There was a need for efficiency and, therefore, greater skill than around the Mississippi mining region. Consequently, the lead miners of the North Pennines who worked the

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<sup>2</sup>Morris, David, The Dalesmen of the Mississippi River, York, 1989, p.89.

Mississippi mines formed the most economical and experienced mining workforce available and when in the late 1840s mining operations were forced deeper beneath the surface in search of greater quantities of lead ore, they had all the experience necessary for the task. Until the pace of industrialisation took over they built and used tools such as buddles and hotching tubs which were identical in name and dimensions to those used in the North Pennines.

Earlier in this series, the experience of immigrants in the lead mining region of the Mississippi was set against Frederick Jackson Turner's frontier thesis. Materialistically, the environment of the frontier undoubtedly Americanized North Pennines immigrants. Furthermore, in an area where people occupied in both farming and mining felt a great shortage of available labour, the importance of the individual was more prominently felt. Where Turner's ideas found little breathing space for many years was with regard to the idea that the experience of the frontier bound people together in a spirit of patriotism. This may have been true for settlers from the American south when faced with the dangers of the Indian conflicts of 1827 and 1832, but there is no evidence from before the Civil War to support the idea that North Pennines immigrants showed any real interest in American politics or American patriotism. Charlotte Erickson has argued that in letters written by English emigrants before the Civil War, references to politics almost always related to events and interests in England rather than the United States. To some, government was just another word for taxation and few aligned themselves with a specific political party for many years after they emigrated.<sup>3</sup> Only when the Civil War finally came around and North Pennines immigrants found themselves very directly involved in the conflict, did references to the war began to appear in their letters. As we saw in part 4 of this series, there was a certain amount of resistance but in the end even that bastion of all things North Pennines', the Primitive Methodist Church, was drawn into the fracas:

*"Resolved, That we (the Primitive Methodist Connexion), as a branch of the Church of Jesus Christ, will stand by and support our Government; and we pray that God will bless the President, and all our rulers also, our soldiers and sailors."*<sup>4</sup>

It is clear from the above that the Civil War pulled both individuals and the church into a political struggle. In the Primitive Methodist Church, this was a time of expansion. New societies met at Janesville, Waukesha and Racine County, areas in which few if any Dalesfolk made their homes, although it is significant for our purpose here that these all collapsed almost as soon as the Civil War ended. More importantly, the County histories of Iowa, Jo Daviess, and La Fayette counties confirm that significant numbers of former Dalesmen died as a result of disease or wounding during the Civil War. Of those who survived, many had not welcomed their involvement in the conflict but it served as a political rite of passage for them.

Whilst the Primitive Methodist Church took a political stance in the years of the Civil War, it is otherwise true to say that the denomination was in no way politically radical. This series has argued that although some of the roots of emigrant Americanization could be found in the origins of Primitive Methodism in England, the effect of the denomination was to anglicize its members once they arrived in America. Members may not all have originated from

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<sup>3</sup>Erickson, Charlotte, Invisible Immigrants - The Adaptation of English and Scottish Immigrants in Nineteenth Century America, London, 1972.

<sup>4</sup>Quoted in Ibid. p.62.

the North Pennines but few were not from England. In 1846, Richard Hodgson was dismissed from his work as a Primitive Methodist itinerant preacher for joining a Masonic Order. The August Quarterly Meeting declared:

*"That we will cleanse ourselves from all Secret Societies, as we believe them contrary to the Gospel."*<sup>5</sup>

Another preacher, Mr Lazemby, resigned in protest over the dismissal of Hodgson. Curiously, although Primitive Methodism as a denomination always opposed membership of secret societies, a significant amount of Primitive Methodists were members of such organizations. A private collection of records concerning the Odd Fellows<sup>6</sup> in Leadmine, Wisconsin, lists the names of members and the disciplinary charges brought various individuals<sup>7</sup>. Although the majority of members had last names which originated in England there were some from other parts of Europe too. This indicates that organizations like the Odd Fellows which concerned themselves with the practical needs of the community, were quite effective in integrating North Pennines emigrants with people from other ethnic backgrounds. The Primitive Methodist Church, in condemning such societies, was isolating itself even further from the mixed community to which it hoped to appeal. It was an ethnic church based on the Primitive Methodist traditions of early nineteenth century Teesdale, and as such, it never became a major denomination in the area but instead remained almost the exclusive property of English emigrants and their descendants.

After the Civil War, most of the lead ore near the surface had been worked out and deeper mining excavations were increasingly developed. In the 1870s, zinc became the predominantly mined mineral around the Upper Mississippi. Changes in technology and the scale of operations meant that the sort of big company which had once driven people to emigrate from the North Pennines came to dominate the mining area north of Galena with investment control of the Wisconsin Lead and Zinc Company being based in Chicago.

By 1880, the frontier line had long since moved west of the Mississippi and the land in the area was portioned out into regimented looking squares of crops. Nevertheless, a trickle of emigrants from the North Pennines continued to arrive united in their experience of the past and their dream for the future. Their nature and traditions caused problems at times and in their Primitive Methodist culture there was an element of revelling in their ethnic origin but despite elements of separatism, most notably in the dark days of the Ku Klux Klan revival against Catholics and eastern Europeans in the 1920s, the lead miners of the North Pennines took to the Mississippi lead mining region qualities which enriched the American culture of which they are still a part.

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<sup>5</sup>Quoted in Ibid. p.35

<sup>6</sup>Private collection of Loren Farrey, Pardeeville, Wisconsin.

<sup>7</sup>The usual charge was drunkenness in the vicinity of the Longhenry Saloon, an offence taken very seriously which occasionally resulted in expulsion from the Odd Fellows.

CROOK BURN LEAD MINING COMPANY.

Nigel Chapman

The Crook Burn Company was formed late in 1879 with a capital of £6,400 made up in £1 shares.

Operations got off to a good start early in 1880 with William Vipond as Agent. He reported during March that they had commenced shaft sinking and in the process of boring into one of the expected veins had released a feeder of water. The director's had purchased a Pulsometer pump which was soon delivering 1500 gallons per hour clearing the shaft in a couple of days. At the time the shaft was 10 fathoms deep towards the intended depth of 20 fathoms.

April 10 1880. W. Vipond had commenced driving in from the side of the shaft to make room for a second pump to lift water. From the Foreman's report he did not believe the Pulsometer was working properly. He suggested to Mr. Smith that a man who could work the pump should be sent. This suggestion appears to have done the trick as the shaft was soon being sunk again. They proposed to put a sump below the shaft and then to sink both day and night. Sinking of the shaft and the driving of a water level to intercept the sinking was commenced. Towards the middle of September a period of wet weather set in and flooded the shaft to within 27 feet of the surface and brought operations to a halt. To deal with the situation a steam engine was purchased to pump the water and soon placed on a bed near the shaft top. A set of pumps in good condition were still hanging in the shaft of the nearby Metal Band mine, these were extracted and brought to the mine. By October 9th Mr. Robert Scott the Engineer reported the machinery ready to commence once the pumps were in the shaft. The water level had been cut into the shaft and was completed.

Later in the month pumping had removed the water and was lifting about 65 gallons per minute from a feeder. A gang of Sinkers had got into the shaft to remove and replace old timbers in the shaft bottom. Shaft depth was noted as 12 fathoms 4 feet. During December Mr. Robinson, a noted Mine Manager of Newcastle and William Vipond visited the mine to study an East to West vein cut in the sinking. The vein was described as a promising lode, while the shaft was 19 fathoms 3 feet deep. Their report suggested the continuation of the sinking to the Tyne Bottom Limestone.

William Alder as Mine Agent was writing on December 25 to report the cutting of a branch of the vein already located and the finding of pieces of lead ore. Into 1881 Jacob Craig seems to have become Mine Agent and reported the shaft as sunk 3 fathoms 2 feet into the Tynebottom Limestone. He further noted that if the engine and pumps kept in working order, they should soon sink to the depth of the proposed shaft bottom level. Early in March 1881 operations were stopped by the severe weather with roads blocked by snow. Coal was prevented from reaching the mine and the stocks available were exhausted. Work ceased until the end of the month when the engine was steamed again to clear the water accumulated in the shaft bottom. Once the shaft bottom was dry a cross cut was commenced and a vein soon cut. It was composed of quartz, carbonate of lime and a little blende, but no lead ore. Progress was made driving the level north from the shaft, but no veins were located. A second level driving south from the shaft was also commenced and a rise was proposed from the level.

Timber buntings were now fitted into the shaft bottom and the pumps lengthened to lift water from the mine which would collect in the sump. Into the Summer the levels were driven and a rise above the south level was said to be about to cut a vein. At this period the steam engine was stopped while a winding drum and gear was fitted to improve the output. During the stoppage of about 14 days the water again accumulated in the mine and operations came to a halt. Operations were again commenced in the middle of July with water removal then lead ore winding the priorities. Repairs were made to the levels following the damage caused by the water, then driving the levels was recommenced. Jacob Craig believed they were then in a position to develop the mine in a proper manner.

During July the alterations to the steam engine so that it could wind as well as pump were complete. They were busy winding mineral from the North and South cross cuts. A rise had been put up into a favourable

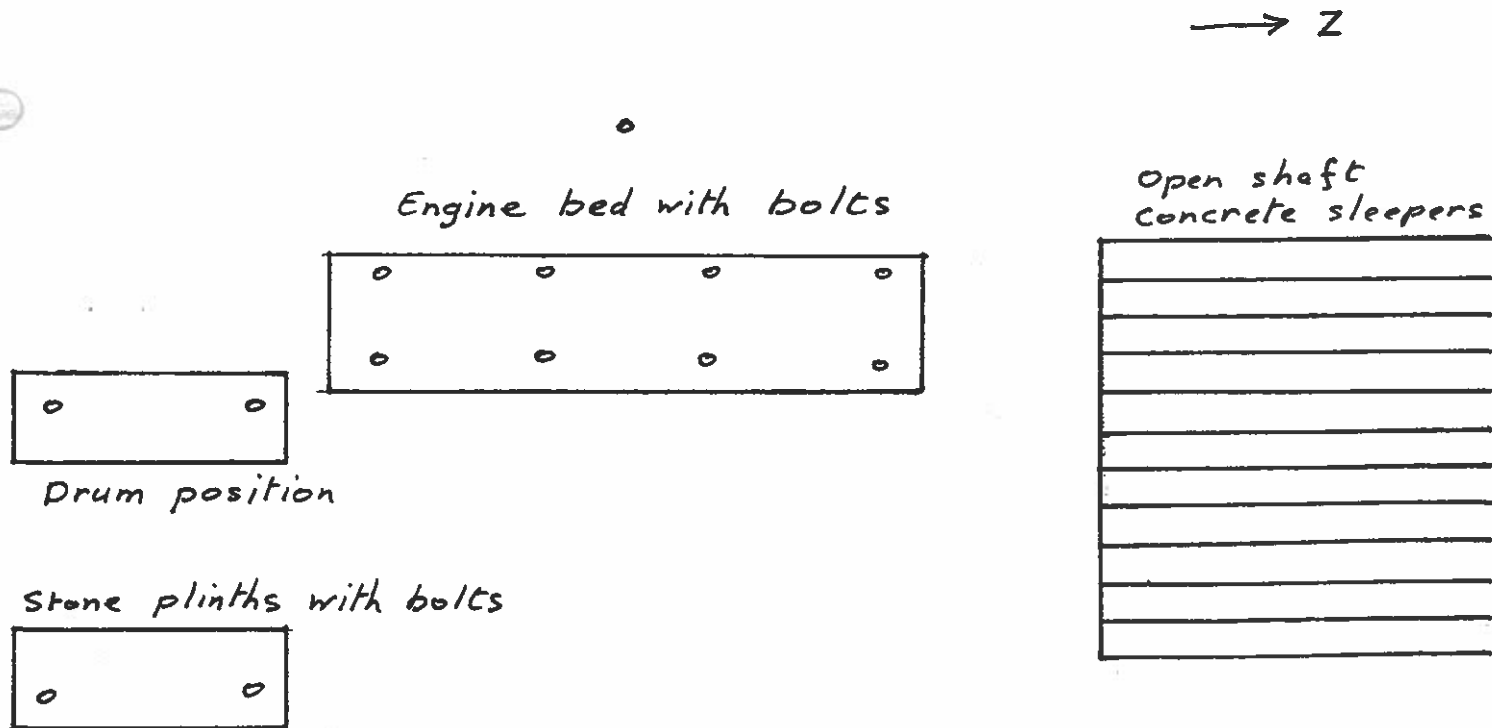
looking vein and stones of lead ore were found. Jacob Craig was working during August with only four men as the rest were busy hay making on their small holdings.

So far the above information is all that has come to light on this trial. When in the area recently looking at lead mining sites, I managed to find the Crookburn shaft and made the following notes.

Site Visit of August 27th. 1995. NY. 778348.

Stone lined open shaft filled almost to the top with water and covered with concrete railway sleepers to make it safe. To the south about 4 metres stand three stone built foundations, all with iron bolts projecting from them. Two of the foundations are a metre apart and parallel, being the mountings for a small winding drum. The other foundation nearer to the shaft and off-set to the west, has two rows of iron bolts to hold a small horizontal steam engine on its foundations. It would appear that the cylinder of the engine was towards the shaft with the crank and flywheel away from it. By this means the drum would have been operated. For pumping, a crank on the opposite side of the engine would have powered rods to the shaft top. Then a quadrant on the edge of the shaft would have operated the vertical shaft pump.

A small tip to the south of the shaft showed very little mineral and not much rock either! Suggesting a very short period of working.



**Park Level Mine****Ian Forbes**

We have travelled a long road. There have been huge, and often unforeseen, difficulties to overcome. Yet Durham County Council has remained committed, and now Park Level Visitor Mine is all but finished.

From the early days of the Killhope adventure it has been a dream to open the mine to the public. Eleven years ago Earby Mines Research Group attempted the first exploration beyond the roof fall in Park Level, cutting out a narrow crawlable passage in wet and treacherous conditions.

After this the Friends of Killhope got involved, under the wise and patient supervision of Angus Oliver. We dedicated many weekends to cleaning out the level, laying new rails, and securing the tunnel roof. But the fall defeated us. It was too unstable for inexperienced volunteers; any accident would have meant the end of the whole project. The full resources of Durham County Council's Environment Department - with massive help from European funds - were then committed to turning the dream into reality.

The excavation of Park Level from the surface, and the construction of an immense underground concrete box was a major engineering scheme. This too was a fight against the odds, battling with Killhope's weather, water, and loose ground.

Next came the building of the show mine inside the box by Compleat Works. Never before had they - or anyone else in this country - tackled a job as large as this in this way - and certainly no-one had dreamed of doing it underground! And, as you know, Friends maintained their involvement with the donation of a magnificent waterwheel.

So now, finally, the hours, weeks, and years of work and meticulous attention to detail by everyone involved have paid off. Park Level Mine looks magnificent.

The first fee-paying members of the public will enter the level on April 1st., and, as you can imagine, everyone at Killhope is working hard towards that first day. 1996 will be, then, for all of us the year of celebration of Park Level Mine. Friends and Killhope staff are working together on a programme of events and activities to mark this superb achievement at Killhope. I hope you will all be able to join in. Details of what's planned can be found elsewhere in this newsletter.

**Park Level Mine - Charges**

All visitors to the mine will have to be accompanied by a member of Killhope staff, and given helmets, overshoes and caplamps for the trip. Park Level Mine is therefore quite costly to run, and, particularly in today's difficult times for local authorities, it is important that it covers its costs.

This means that we will not have free access to the mine as part of our Friends of Killhope membership. However there is an opportunity to go round the mine (entirely free of charge!) at our April meeting. See the programme for details. Charges for the mine this year will be £1.60 for adults, and 80p. for children. Site charges remain the same as last year.

### **Friends of Killhope Log Book**

**Ian Forbes, Projects Officer**

I know, both as manager of Killhope and as projects officer for the Friends, that the Friends of Killhope make a large contribution to the work of running and developing Killhope. This contribution is recognised and valued by Durham County Council. Whether you are working at rebuilding part of the site, clearing and repairing neglected areas, talking to visitors, bringing your own visitors to Killhope, or using your influence to make things happen or elicit contributions in kind, you are helping Killhope advance.

Yet until now the Friends have had no way of measuring their input. Your committee has decided that it would be useful to keep a record of what Friends do on site, and of when they are there.

Therefore if you do come to Killhope to work (and work includes talking to visitors) or if you bring guests who wouldn't otherwise visit - I would be very grateful if you could just jot down your attendance in the log book kept in the shop, with a note of what you've been doing, or helping with. Thanks.

### **Killhope Staff News**

**Ian Forbes**

The opening of Park Level Mine has meant a major expansion of the team working at Killhope. We welcome Di Crampton, Denise Fisher, Sue Hewlett, Cliff McCarthy and Debbie Reed as temporary staff, and Vicki Goodwin, Margaret Manchester, Ella Mulcahy and Maggie Willey as casuals. I hope you will introduce yourself to them so we can continue to work together to keep Killhope the friendly and welcoming place it always has been.

We welcome back Julia Marshall from maternity leave, and Kath Brown, returning after a year's sabbatical as part of a team researching cot deaths.

There is also excellent news for all of us; staff and volunteers alike. Janet Ward and family will again be running *Killhope Kitchen* this year. We wish Janet a successful season.

Judith Dunn has decided to return to her profession of social worker. Although she will not be working regularly at Killhope this season, I am delighted that she is staying on the books as a "casual". I would not have liked her to sever all links with us, as she has been an invaluable member of the team. I wish her well in her new job.

## Mineral Widow ?

When the children were around 5, old enough to wear walking boots, backs broad enough to bear a mini rucksack and the stamina to walk a few miles our holidays enjoying the fells of the Lake District commenced. Albeit the bribe of mars bars to reach our destination often helped.

At about that time the 'other half' became interested in the mines and minerals of the Lake District and our walks often took us along tracks to the old mines with spoil heaps at the end - we needed a reward too. Scratching around with small trowels always led to small finds of minerals of varying colours to be carefully wrapped in yesterdays newspaper and carried home to be scrutinised and re-wrapped or thrown in the garden. At the end of our holiday a spoil heap of our own was the legacy left to the owners of the cottage we rented.

Small 'I Spy' type books became priority purchase in order to identify the 'gems' together with visits to museums. Why couldn't we find minerals like the ones seen in these institutions ? Our future holidays were planned in earnest. Winter evenings spent on research, maps scrutinised, mineralogical 'bibles' read and digested. Our hobby was to be established and serious.

It is surprising the number of people you meet scratching like hens in a yard in the middle of the fells, pouring with rain all with a common interest, minerals. The 'crack', 'found anything', 'look at this', or talk about ones' finds 'yester-something', 'big crystals', 'rare inclusions', eyeglasses in place. Cleavage, micro, cubic, pseudo and words ending in 'ite'. Understood by the few but thought mad by the many, the lay. Sandwiches eaten early in order that the precious specimens could be carried and protected from damage in the 'bait' box.

Shows and clubs were slowly infiltrated, buying those specimens we had no hope in finding. Visiting private collections, towns and places with weird sounding names and the social history of the various areas studied.

The rockery festooned with rocks from numerous locations, a knock on the door from local folks with weathered and misshapen 'samples' from becks, gardens and, 'I found this in our dry stone wall any use to'ee ?' How do you say no ? Even been presented with Blackpool rock by friends, usually pink, cleaves badly and with alphabetic inclusions.

Now, fond memories of kids running around chasing frogs, paddling in becks on warm sunny days, or more often in illuminous wet-weather gear marching out like 'Startrite' kids. The dog bounding ahead marking his territory on every other rock ignorant of sheep grazing in the bracken. Even the dog learnt to collect rocks, depositing stones at our feet which he had retrieved from the becks, his contribution for the day.

There is no room for the car in the garage now. If he had his way the washing machine and freezer would go. Wooden tomato boxes treasured like antiques because they are all now made of cardboard.

Do we keep this specimen or this one, four eyes scrutinising the specimen. He looks at the technical side, me the aesthetics invariably we keep them both. (I like to think I'm right)

Oh to be around when the mines were open, to own a time machine, but to day, oh to have a JCB.

The other half's interest became permanent with shrines in the form of cabinets illuminating corners of the lounge. Were I to be another widow, not football or golf but a mineral widow. Firmly NO. If you can't beat then join them.

**SECOND FRIENDS OF KILLHOPE PUBLICATION**

Although I still need a couple of articles for our new book I am hopeful that it could soon be ready for the printers. As all the material is not available it is not possible to get an exact quotation so that we can arrive at an economic price. However, to help safeguard the Friends finances our committee have agreed we should ask for would be subscribers to make a commitment to buy the book at 20% off the retail price.

The new publication will be the same format as Men, Mines & Minerals of the North Pennines with a similar number of pages and quality of paper. It should have around a dozen or more articles on Pennine subjects again written by experts in their fields. Our President, Sir Kingsley Dunham writes about his life's work with an emphasis on his time at Rookhope, from apprentice to the Rookhope borehold and beyond. There are historical accounts of mines, quarries and people involved in the extractive industries of the area as well as articles on geology, rare minerals and mineral processing. Most contributions contain maps, diagrams and photographs.

A preliminary estimate of the cost suggests we may be able to sell to the public for £8 to £10 so subscribers would pay £6.40 to £8. A list of subscribers would appear in the book.

I stress that at this stage we ask only for a commitment to buy in due course. Please fill in and return the form.

.....

I would be willing to buy ..... copies of the new Friends of Killhope publication at 20% off the retail price.

Name .....

Address

.....

.....

Please send to Bill Grigg, Treasurer, Friends of Killhope, Heatherlea, 6 East Blackdene, St John's Chapel, Bishop Auckland, Co. Durham DL13 1RE

REPORT FROM DURHAM COUNTY COUNCIL

Patrick Conway

As you will know it has been a hard winter at Killhope, with the site regularly inaccessible as a result of snow and, when the road was open, staff having to leave cars by the roadside and cross the tundra-like landscape on foot. Despite this we have been busy working on the completion of the mine, planning a souvenir publication for the mine and organising a programme of events to celebrate, in as many ways and media as possible the opening of the mine. I am certainly looking forward to an exciting season for 1996.

Durham County Council is promoting a major programme of events and exhibitions for 1996 across the County as part of Visual Arts Year, when the whole of the UK is looking to the North East to take an artistic lead. At Killhope we are appointing an artist in residence who will spend time at the site throughout the year and respond to the place, the people and events such as the mine opening to produce an exhibition which will be shown first at Killhope and then toured around the County.

Early in the season we will be commissioning yellow AA temporary signs to guide visitors to the site and highlight the opening of Park Level mine. Please let me know whether you think these are a success.

As always I would like to take this opportunity to thank the Friends for their continuing support during the season with events and activities and, during these darker months, with behind-the-scenes work.

I look forward to seeing you on site over the summer and hope you will join us on the weekend of 22/23 June for the big celebration of the mine opening when we recreate "The Pays" - the miners' pay day with a Victorian festival.