



THE FRIENDS OF
KILLHOPE

NEWSLETTER NO 35

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

SEPTEMBER 1995

AS SEEN ON TV!

It seems an age ago now but one freezing Monday morning in June, Tyne Tees Television sent reporter Dawn Thewlis with her camera man to Killhope to film a piece advertising our annual quoits competition. Fortunately our organiser Peter Nattrass was able to attend to supply all the technical details and two of our most senior members, Jack Gardiner and Ken Fairless (over 170 years between them) provided "local colour." Some suitably attired school children also got in on the act and the result after almost two hours filming and interviews was an excellent TV advertisement for our event and of course for Killhope. The Tyne Tees people showed a genuine interest and I'm sure took away a good impression of Killhope and the Friends. Our thanks go to all concerned.



TT TV presenter Dawn Thewliss during filming at Killhope with Peter Nattrass (left), Jack Gardiner (seated) and Ken Fairless

Don't forget the Day School on October 7th - details enclosed.

AN EXPLANATION

Members may have wondered why in the last newsletter I said I'd held back some articles because of lack of space when the pages were printed on one side only! This was not how it was planned and this criminal waste of paper was just one more twist in the saga of a particularly fraught newsletter which had the added ingredient of a non-extendible deadline since it carried the notice of the Annual General Meeting.

As usual there was a desperate rush to get the last items in but given the printer's excellent record of prompt turn-round (48 hours on average) we were confident all would be well. With the newsletter "put to bed" we completed our routine which is the addressing of and stamping the envelopes.

Unfortunately when we rang the printer expecting to be able to collect the newsletter we were told there would be a delay of 2 days due to illness in the department. This news generated some anxiety but this was nothing compared with the alarm when we realised when we eventually received it that for some reason for the first time in 34 editions the newsletter had been printed single-sided - thus we had twice the number of sheets and twice the weight to post. This meant another trip to the post office to have the heavier newsletter reweighed and extra stamps bought. Naturally the deficit could only be made up by two stamps leaving us with the task of sticking on an extra 700 little gummed rectangles. Mercifully the envelopes were a new bigger size capable of taking the oversize edition which was eventually despatched in the nick of time. Had we been using our usual smaller envelopes we would have had a major crisis on our hands as the material was far too big for that size. We were not sorry to see the back of that particular edition!

Now the main purpose of this little tale is not so much to show what a hard time the Hon. Secretary and Editor have but to urge all contributors to submit their material in good time. We must all remember that at the end of the production line is our excellent printer who try as he might cannot guarantee a delivery. As we have seen illness, breakdowns and rush of other work cannot be predicted so we must do all we can to give the printer as much time as possible to turn round our material.

We would like to take this opportunity to thank members who have offered help with the posting of the newsletter. When we can make use of extra hands we will be in touch but especially in situations such as I have just described it isn't practical to whistle up outside help. Even in normal circumstances we never know for certain exactly when a newsletter will come back from the printers and rather than wait for help to arrive we prefer to get it out as quickly as possible.

By the way members could help by paying subscriptions promptly (January 1st) as sending reminders and checking lists make a lot of extra work.

AN APOLOGY

The gremlins also got at the recent Wheel Supplement in which some of the final pages became transposed and one received no print at all. The page listing the organisations who had helped with the project should have been the last one - sorry!

ENVELOPES

We can sometimes get free envelopes though they may not always be ideal. So if you get a newsletter in an envelope which seems unnecessarily strong or large it is because we are being frugal with your subscriptions and not the opposite!

A BURNING MOUNTAIN!

A few days ago a fire broke out and is still burning on the mountain of Kilhope in Weardale. On Friday last the brisk westerley breezes fanned the flames to an immense magnitude, presenting such an alarming spectacle that some contemplated leaving their homes. For some 20 miles down the valley people found the smell of "peat rock." It is not known how the fire originated.

Auckland Chronicle
Friday August 7th 1868

Since we have just experienced our driest summer for years I thought it appropriate to print the item above. Editor

A PUZZLE

For many years now I have been puzzled by a quotation which I credited to Thomas Sopwith in the first half of the last century. It began "At Frosterley is a commanding eminence with a crushing mill and washing places - the first indications of mines which appear....." Frosterley has commanding eminences but no one seems to know of any crushing mill or washing floors anywhere near the village.. Sites of these can be found in the adjacent Bollihope valley so I suggested to Ian Forbes our Projects Officer that perhaps Sopwith had detoured via Bollihope and had stretched a point in his description - which admittedly seemed uncharacteristic of such a man.

Ian confirmed that the question is from Sopwith's "An Account of the Mining District of Alston Moor, Weardale and Teesdale" (1833) P.176 in which he described a journey up the dale. Ian quotes from the text, "The route continues westward through a somewhat less pleasing country; the vale is yet fertile and well wooded; but wants the luxuriance which is so much admired further down. The hills become more suddenly elevated, and bare green pastures and healthy moors increase. At Frosterley is a commanding eminence with a crushing mill and washing places - the first indications of mines which appear. The rocky bed of the river - the precipitous face of limestone quarries - the diminished verdure of the hills and their abrupt formation, now indicate the Geology of the Lead Measures, and gradually combine to form the characteristic features of a mining district. Stanhope derives great beauty from the broad foliage which here adorns the vale" etc.

This suggests that Sopwith is describing a journey up the valley rather a diversion round Bollihope. If this is the case, where is the crushing mill?

The only other possibility which I can suggest is that the very extensive quarrying around the village at Rogerley, Broadwood and North Bishopley for example which followed the arrival of the railway in 1847 may have destroyed any remains of the operations described by Sopwith.

Can anyone throw any light on the subject?

(Bryan Chambers, Newsletter Editor, 18 Cheveley Walk, Belmont, Durham DH1 2AU
Telephone 0191 3868491)

Below is the Alston Moor Historical Society programme of events for this season which members may well find interesting. Note: SKS = Samuel Kings School, Alston.

Programme 1995 – 1996

Meetings at 7.30 pm in SKS Library on Wednesdays.

- September 6th **Ten Turbulent years on the
Settle–Carlisle Line.**
Cannon Greetham of Kirkby Stephen
- October 4th **Wartime Agriculture and the Role of the
Land Army.**
Andrew Humphries of Newton Rigg
- November 8th **Emigration 1849.**
Nora Handcock of Allendale
- December 6th **Moorland and Fell: Farming in Upland Northern
England before the Agricultural revolution.**
Angus Winchester
of Lancaster University
- March 1st **Annual General Meeting – and Members' Night**
- April 17th **Is Alston Moor Avalon?**
Philip Dunn of Newton Rigg
- May 8th **Ignatius Bonami and his work
in the North Pennines.**
June Crosby of Stanhope
- June 5th **Memorials, Monuments and Inscriptions
on Alston Moor.**
Peter Wilkinson of Frosterley

+ Summer Outing to be announced.

Membership only £4 for the Season, 50p for Juniors.

Visitors welcome £1 per meeting.

Look out for our posters each month.

TEL: 01434 - 381933

LITTLE EGGLESHOPE LEAD MINE**Harold L Beadle**

(situated in a valley bearing the same name, GR NY 988 313 and known locally as California Mine and by the miners as "Cala")

The valley of Little Eggleshope in common with other valleys in Teesdale where lead mining and dressing took place contained many interesting remains after it was finally vacated by the London Lead Company in 1902. All the plant and machinery was removed by them but there was left intact the mineshop and blacksmiths shop and store which all stood at the mouth of the level. The teams were located a short distance lower down but for some obscure reason the main washing rake was lower down still some 500 yards distant from the mine entrance. It was here that there was located other substantial buildings which include a shop, presumably for the use of those employed in washing and dressing, and it may be of interest to note that it was at this place where Dick Watson, the Teesdale Poet, completed "My Journey to Work." One of his most popular poems. (1)

However, it was during the 1920s and early 1930s that these remains very largely disappeared. Ralph Allinson of Spring Hill, Middleton-in-Teesdale, reached an agreement with the land owners to demolish the buildings and dispose of the stone which was used in other building work and road foundations. Later, during the 1939-1945 war the site was extensively used as a training area by the army which resulted in further deterioration and, after the war, some of the dead heaps were processed for fluorspar. What could there possibly be left to see?



Little Eggleshope Mineshop partly demolished c.1930 - Photograph from the author's collection



Little Egglehope level mouth partly demolished with Ralph Allinson c.1930
Photograph from the author's collection

It was in more recent years when I was roaming over the now derelict area and in particular having a look at the place where stood the mineshop all those years ago with the adjacent level which was begun in 1848, and the shaft up the hillside which was sunk to connect with it about a hundred fathoms from its mouth. (2) It was then that I discovered by the side of the road leading along to the shaft some sandstone foundations into which was leaded iron bolts, something which I am unable to relate to anything connected with mining. In any case they were in an isolated place. What had they been used for? Some years later I was sent by a friend a photocopy of a paper which had been given to the Society of Engineers on the conversion of peat into fuel etc in Little Egglehope. At the same time stating that he and other searchers had been unable to locate the remains of any peat works. After another visit to the site I realised that my problem was solved and that what I had discovered was the site of what in times past had been a bold venture and an interesting experiment whatever the results. This being peat fuel making and gas made from the product which was variously used at the mines, the smelt mill and in some of the homes of the company's employees. (3)



Peat mining machine site photographed looking north with part of the area on which stood the drying sheds which extended to the west. Photograph by the author.



Peat mining machine foundations photographed looking south.
Photograph by the author

It was the high cost of coal delivered to Blackton Smelting Mill, Eggleston, and to the company's mines, many of which were remote from the nearest coal pits, which led to experiments being carried out near to Little Egglestone mine to cut, dry and mince peat which could be used as fuel instead of coal. That the dried and minced peat was also used to make gas will be seen later. Blackton Mill and its predecessors were situated in what could be called a strategic position. This is, they were located at the lower end of the mining area which they were designed to serve and not very far away from the coal then being worked round about Woodland and Copley some five miles distant. The mines in Great and Little Egglestone which produced large quantities of dressed lead ready for the mill over a long period were about the same distance from the smelt mill and the coal mines, but others were farther away, the farthest being at the head of Harwood some fifteen miles distant from Blackton.

However, it was in 1873 that Charles Edward Bainbridge, the second son of Robert Walton Bainbridge, Superintendent of the London Lead Company's works in the north, commenced experiments designed to cut the cost of fuel not only at the mines and smelt mill but also in some of the employees homes in the villages of Middleton-in-Teesdale and Eggleston which eventually had fireplaces installed which were designed to burn peat but which would also burn other fuels as well. See diagram of peat burning fireplace with adjustable flues and air ducts, designed by Bainbridge and Pinkney, manufactured by a local foundry and, at the time of the report, had been fitted to at least twenty houses and were working satisfactorily with a great saving of fuel. Pinkney was most probably Mark Pinkney, the chief millwright with the company at that time who was credited with the design of some of the machinery employed including a hydraulic pumping engine. (4)

Bainbridge was assisted in the experiments by one Charles Hall who professed to be expert in the machines and processes available at that time and it was reported towards the end of 1876 that since 1873, "... the peat works of the London Lead Company have been in successful operation." However, it must be said that during that time there had been very considerable alterations in the processes to the extent of using a different machine.

The machine first used was designed and manufactured by Messrs Clayton Son & Howlett, which combined a plugging and mincing action. It was said, however, that during the practical operation of the machine over two and a half years defects and imperfections were discovered, and it was observed that there was included in the machine, "... a complication of machinery which was both unnecessary and undesirable." This led Bainbridge and Hall to design and patent a more suitable machine which was more efficient and economical and would thereby reduce costs still further which was, of course, the aim and object of the experiment.

The works were situated a short distance to the north-east of the mineshop at an altitude of just over 1500 feet in a position where they could command a huge area of peat lying on a gentle slope down which it could be trammed to the drying sheds which covered 20,000 square feet, to undergo a lengthy drying period before being transferred to the mincer which was driven by a steam engine. The engine was fired by the top layer of heather and weathered peat which was first of all removed in order to obtain good quality material to begin with. Drying seems to have been a problem which was not easily resolved, relying as it did on the currents of air passing through the racks and variations of this process were tried from time to time but with small success. However, it is evident that an acceptable product was produced and that there was some means of condensing or compressing the

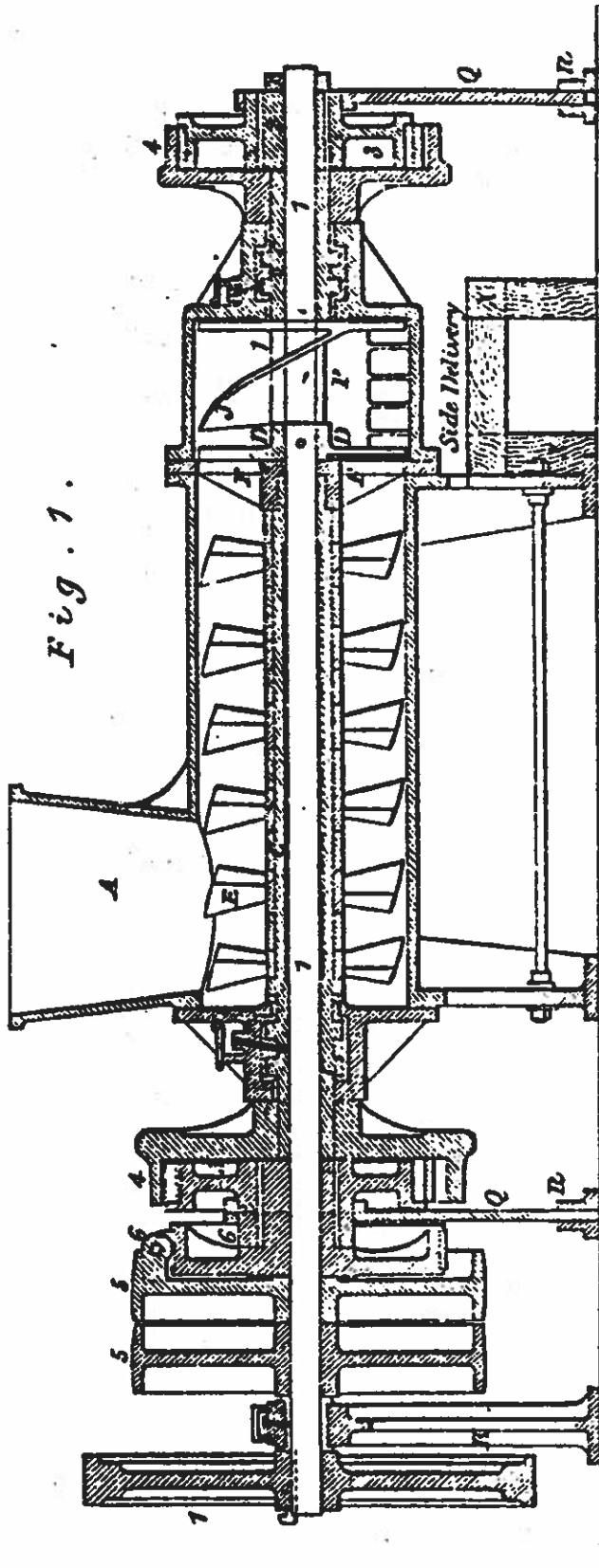


Fig. 1.

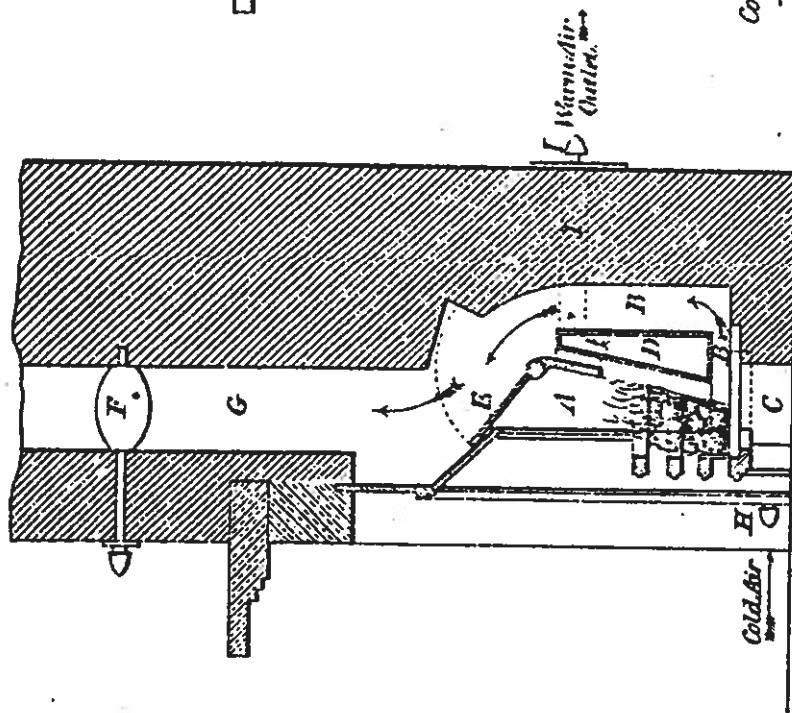
Sectional Elevation

Scale of Feet.



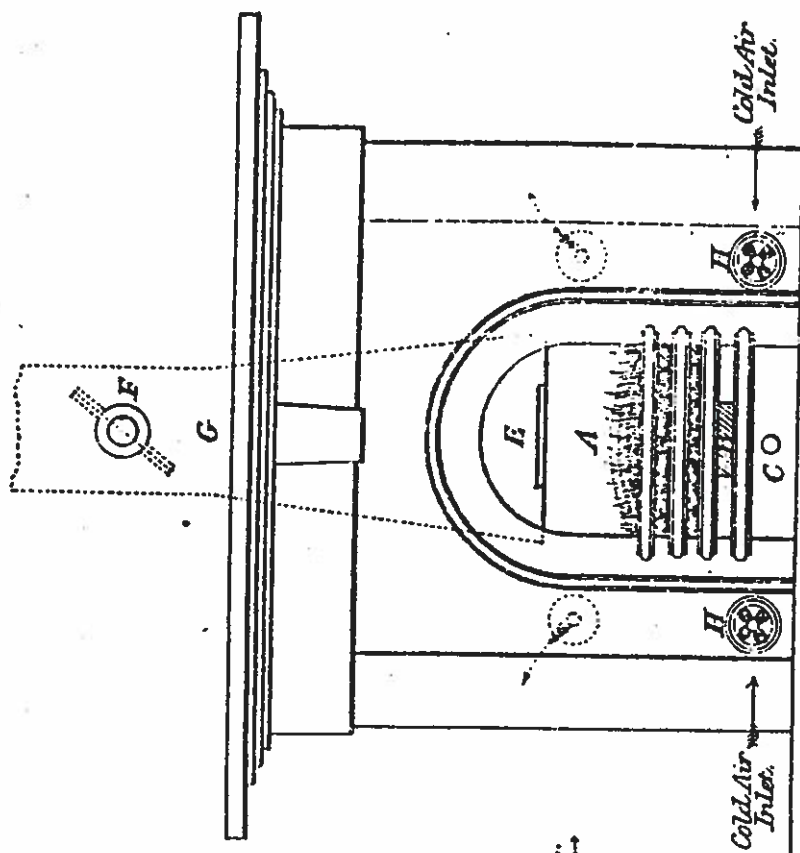
Sectional view of peat mincing machine invented and patented by Charles
Edward Bainbridge and Charles E Hall

Fig. 8.



Sectional Elevation.

Fig. 9.



Front Elevation.

Peat burning fireplace invented by Charles Edward Bainbridge and ?Mark Pinkney

dried peat in order that it could be transported and become usable in various ways already mentioned.

The use of it in the several processes at Blackton Smelting Mill was probably the most interesting part of the experiment and also probably the most successful from a technical standpoint. It was said that the condensed minced peat could be used for most metallurgical operations in which the Siemens gas or other regenerative furnace is used; and as a gas producer; having reference to the quality made at Eggleston. Bainbridge stated that he had used it successfully in crude gas generators and also in the production of purified gas by apparatus adapted for peat. And that one of the Lead Company's smelting works is now lighted with gas made from peat and the quality of the gas is excellent! Mr Porter of Lincoln, who it seems was the designer and engineer of the plant had to say that the gas second to none, except oil gas, in illuminating power. (5)

References and notes

- (1) Poems and Songs of Teesdale by Richard Watson (p115 1930 edition)
"And going down an easy gentle slope. I reach the lake (rake) of Little Eggleshops. And to the shop beside the mill proceed."
- (2) Due to the partial demolition of the level mouth for the recovery of building stone which later (as tradition has it) was completely destroyed by the Royal Engineers during the war with a "Test Explosion" it is difficult to pinpoint the precise position of it. However, the walled oval shaft is in an excellent state of preservation principally because for safety reasons it was capped by an iron rail grid secured by concrete, but for this timely action this priceless lead mining relic would almost surely have been lost.
- (3) Correspondence in 1976 with Robert G. Guthrie, a fellow member of the Cleveland Industrial Archaeology Society and a member of the Northern Mine Research Society, who had sent to him the photocopy of the paper which he passed to me for my comments.
- (4) Teesdale Mercury Wednesday 22nd November 1871.
- (5) The Second Edition 25" Ordnance Survey shows Blackton Smelt Mill with a gasometer.
- (6) The discerning eye may be able to assess the area from which the peat has been removed during the period of operations. Though this evidence, which can best be seen from the high ground to the east of Candleseive Sike, is very quickly disappearing.
- (7) The shaft which is shown on one of the mine plans as "Engine Sump" had by then been sunk to a depth of 55 fathom, and that it had a steam engine for winding and pumping seems to be clear which is further confirmed by the amount of slag which can still be seen scattered down the hillside below the surrounding stonework.

SIKE HEAD LEAD MINE. RAMSHAW NORTHUMBERLAND.HISTORY.

Nigel A Chapman

Little is known of the early history of the exploitation of the lead veins in the Ramshaw Valley. Certainly by 1700 the veins had been discovered and workings were visible on the ground. In 1713 a lead smelting mill was built at Jeffrey's suggesting that a sizable output already was being produced. Most of the ore at this period would have originated from the Jeffrey's group of veins, but the Whiteheaps area could have been prospected and probably worked to a small extent. It is tempting to suggest that the series of grass covered shaft mounds on the line of the Red Vein may date from this period. These mounds are seen alined with, but slightly north east of the incline.

By the early nineteenth century several shafts and levels had cut the complex of veins at Whiteheaps and exploration was in full swing. At one point an opencut of 100 feet width is said to have existed. Two mines were developed, one in the bottom of the valley became known as Low Whiteheaps, while the second to the West on higher ground became High Whiteheaps. Workings were developed along the vein complex and gradually to the south west, towards the Sikehead Moors. All the ore was trammed along the levels to the Crag Shaft or Skottowe's level at Low Whitheaps.

At some point in the 1840's the decision was taken to sink two pairs of shafts to test the veins at depth and to centralise the pumping and winding plants. To the north west, on high ground near High Whiteheaps two shafts were sunk close together, one to be a pumping shaft and the other to wind the output, the necessary power was provided by a waterwheel.

At the other end of the vein complex, on the moors to the south east a further two shafts were sunk at Sikehead. One shaft named Ellen was to be for winding while the other, named Ruth was for pumping. After many unknown difficulties these shafts were completed to the 80 fathoms level which was the base of the Great Limestone by the early 1850's. The driving of a level was undertaken from the bottom of these shafts but poor ore values were found and operations suspended.

Mining was concentrated on the existing levels and stopes down to the 50 fathom level with the output raised by the winding wheels at these shafts. Near the top of each winding shaft a short level was driven to permit the kibles to be emptied in to wagons underground. In both instances large dressing floors were established at the mouth of each level. In the case of the Sikehead dressing floors a self acting tramway incline was constructed to transport the dressed ore down to the valley bottom for delivery to the smelt mills. As the loaded wagons

were descending the incline on a rope, the other end of the rope having passed round a wheel at the top was attached to an empty wagon at Whiteheaps. Once the brake was released the weight of the loaded wagon pulled the empty up to Sikehead.

The 20 feet diameter water wheel at Sikehead was altered to be a winder for Ellen shaft, while a 48 feet by 4 feet wide breast water wheel at Deborah's level was fitted with 1600 yards of flat rods to enable it to operate pumps in Ruth's shaft. At High Whiteheaps a waterwheel placed in the valley bottom close to the Bolts Burn performed similar functions at the Whiteheaps Shafts.

For a number of years this arrangement appears to have worked successfully and enabled a considerable output of lead ore to be raised, smelted into pig lead and sold at a profit for the company. About 1862 the construction was commenced of a private standard gauge branch line from the Weardale Iron Co's. line at Bolt's Law across the high moors to Sikehead. The new line terminated very close to the Sikehead shafts and the tramway incline was rebuilt to standard gauge and extended to the moor top. Here a steam engine was erected on a Grit stone block bed together with a boiler and a coal depot. Loaded railway wagons were lowered by rope with the assistance of the steam engine into the valley at Whiteheaps and emptied. Coal and lead depots were constructed at Whiteheaps and goods loaded and unloaded at this point. The steam engine was then used to haul the loaded wagons to the incline top and these were taken away to Teesside or the Tyne by locomotive.

With a supply of coal readily available by rail at Sikehead the improvement of the pumping plant was undertaken and a 40 inch Cornish steam engine was erected to pump from Ruth's shaft. The flat rod system to the 48 feet wheel at Deborah's level was dismantled and the wheel either found other work or was removed.

It appears that the output from the Sikehead Mine failed to justify the expense of these improvements and operations over the next few years were gradually run down. Development work moved to the East of the sett with work centring on the sinking of Taylor's Shaft to test the eastern extension of the vein system. Sikehead shafts while still producing an output were no longer the main centre of operations and gradually declined.

During 1872 the 40 inch Cornish pump was advertised for sale and later removed by the railway over Bolt's Law to a new situation, probably to be reduced to scrap in the furnaces on Teesside.

The plant was demolished and the buildings including the chimney abandoned to the wind and rain. About 1920 the Hunstanworth Mines Ltd reopened the mines to produce both lead and fluorspar with some prospecting being done on the site. A

vertical boiler with a steam engine from a scrapped ship was fitted to wind from the Ellen shaft. By this period Ruth shaft had probably collapsed into the hollow which remains today and was of no further use. The steam engine had been made originally at Trelborg in Denmark by J. O. Petersens and carried the No.268, it had been a winch on a ship but was useful as a winder at the shaft. When the mines again closed in 1931 the engine and boiler were left on site to be slowly reduced to scrap iron by visitors.

The mines were reopened in 1945 to supply high grade fluorspar to the steel industry, to be used as a flux in the production of steel. Eventually taken over by the British Steel Corporation in 1967 the mine supplied fluorspar to some of the Scottish steel plants until sold to Weardale Holdings in 1983.

THE REMAINS TODAY. NY. 955465.

By April 1982 when we first visited the site, the Cornish pump house had collapsed into the hollow of Ruth's shaft and the cast iron trunnion that once carried the beam lay near Ellen shaft. Some excavation in the foundations of the house soon revealed the stone cylinder bed with four bolt holes through it. West of the house was the stone foundations of the boiler plant terminating in a squat round stone built chimney still in good condition. Further west was a small coal house for the boiler with a pit for a man operated capstan next to it. The capstan had been constructed so that the drum was below ground level with a walkway over the rope track.

Ellen shaft is still open with a concrete cap and a small hand operated capstan bolted to the cap. To the east of the shaft top is a stone built bouse team. However most of the ore was landed below shaft top in Robinson's level and trammed along this short level to the dead heap. Built into the far end of the tip is a fine stone built ore slide of best Cornish design and totally foreign to the area. Ore would have been hand cobbled at this point before being moved slightly down the hillside to the dressing floors. Once a water wheel powered crushing and dressing plant but now a few heaps of large pieces of gangue with several heaps of finely crushed material. A track can be noted leading to the incline for the concentrated ore to have been taken down into the valley and away to the smelt mill.

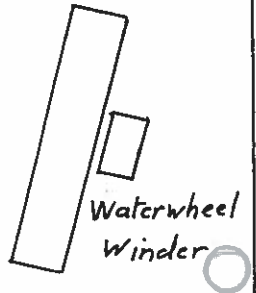
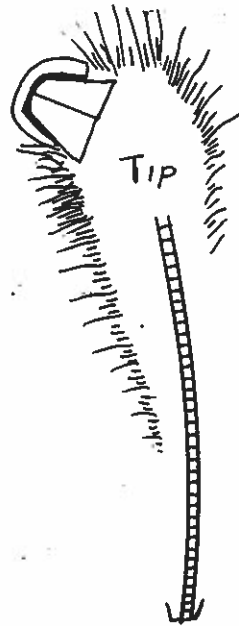
Beside the mouth of Robinson's Level stands a wooden post with several holes bored through it plus some marks of an iron strap. This post is believed to have been part of the flat rod system formerly pumping in Ruth shaft. To the north is the stone foundations of the 20 feet diameter water wheel, once the winder for Sikehead. Next to the wheel pit is the smaller pit for the winding drum. Slightly further north is a stone pier for the water supply from the nearby reservoir to operate the winding wheel.

Site of Dressing Floors



Standard gauge railway incline

One slide

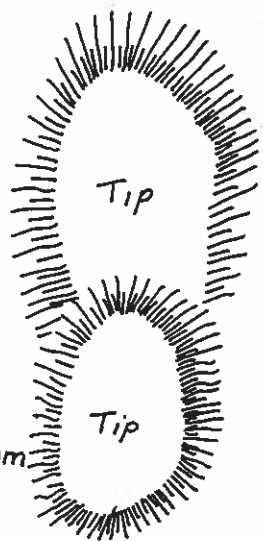
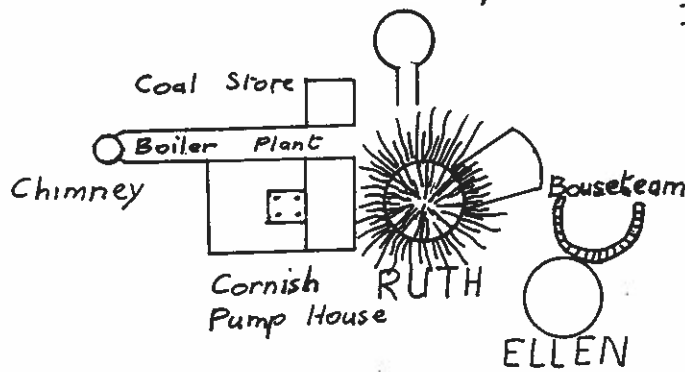


Robinson's Level

Stone 'Kip' to prevent runaways



Manual Capstan



Ex Marine Steam capstan

Sketch Plan of the remains of Sikehead Lead Mine.

During 1993 a return visit was made to the site following the closure of the fluorspar mine. Very little now remains of the Whiteheaps mine in the valley bottom, most of the site being an expanse of white gangue. Climbing the incline to the Sikehead shafts we did find a large stone with a fine example of a rope mark and a couple of holes for a railway chair. At the incline top the stone foundations of the engine bed remain, again with several holding bolt holes in them.

At Sikehead the remains were much as before except for the removal probably as part of the salvage operations of the steam engine and the beam trunnion from the site.

HISTORY.

The Derwent Mines were taken over in 1857 by the Derwent Lead Mining Co. with a capital of £84,000 in shares of £300 each. They employed John Taylor & Sons to manage the mines and allowed them to introduce Cornish methods and equipment, using terms such as 'tribute work' for bingtale and 'tutwork' for fathomtale. The company also appears to have brought in several Cornish miners to establish the new system. Their resident Manager was John Morpeth who would have been responsible for the construction of the distinctly Cornish remains still visible today. Parallels can be drawn from the extant remains of other mines, mainly in mid Wales worked by John Taylor & Co. In fact the major lead mines of the Aberystwyth area appear to have been developed mainly by Cornish mining engineers during the last century. The capstan noted at Sikehead is similar to an example beside Skinner's shaft at Cwmsymlog lead mine near Aberystwyth formerly operated by John Taylor & Co. The ore slide has parallels with examples in the Rhiedol Valley and at the Llettyevanhen lead mine near Aberystwyth.

One notable item on the list of Cornish introductions, is the use of a long run (1600 yards.) of flat rods to pump the Sikehead shafts. Such lengthy systems of rods were quite common in Wales, while the example quoted here plus the system to Taylor's Shaft, again on the Derwent Mines, appears to be the only North Pennines examples. Can anyone add to the list?

References:

1. Geology of the Northern Pennine Orefield, Vol 1 Sir Kingsley Dunham F.R.S BGS(HMSO) and
2. Mining Journal

EMIGRANTS' CORNER
 BY KEVIN WATSON
 PART 4
 WAR FEVER

'Finally, the chest of the doomed soldier began to heave with a strained motion. It increased in violence until it was if an animal was within and was kicking and tumbling furiously to be free.

'....His tall figure stretched itself to its full height. There was a slight rending sound. Then it began to swing forward, slow and straight, in the manner of a falling tree. A swift muscular contortion made the left shoulder strike the ground first.

'The body seemed to bounce a little way from the earth. 'God!' said the tattered soldier.

'The youth had watched, spellbound, this ceremony at the place of meeting. His face had been twisted into an expression of every agony he had imagined for his friend.

'He now sprang to his feet and, going closer, gazed upon the pastelike face. The mouth was open and the teeth showed in a laugh.

'As the flap of the blue jacket fell away from the body, he could see that the side looked as if it had been chewed by wolves.

'The youth turned, with sudden, livid rage, toward the battlefield. He shook his fist. He seemed about to deliver a philippic.

'Hell-'

*'The red sun was pasted in the sky like a wafer.'*¹

I was sitting in a park in Edinburgh with an actress trying to rework a romantic scene from a play I was in that had not gone right for some time. It was a big scene in the play but compassion was being sabotaged by aggression and the whole effect was not working anymore. In the park it was getting dark, the buskers were flagging and Katy and I looked at the stars because we could not think of what to say without a script in front of us.

A stranger with a set of bongos joined us. He smoked Katy's cigarettes, drank my beer, and after entertaining us with various rhythms of the world, he told us his disturbing story.

Chris was a soldier with the Australian army who had seen the kind of action that no one should ever be a part of. His body is scarred from the bullets he took over other people's ideas and other people's hatred. Just before he was shot, Chris killed a man. He watched that man, "the enemy" go down in front of him, his face horribly disfigured and when "the enemy" held out his hand, Chris grasped it and they cried together until death took "the enemy" away. Death was a long time coming.

"Round about then everybody realised what was really going on," he said. "Suddenly we all knew that if we kept on fighting everyone would die. There was no longer any meaning for anyone so we stopped. Everyone just stood still and that was the end."

¹Crane, Stephen, The Red Badge of Courage, New York, 1895.

Chris has since served time in prison for what the military authorities see as helping the enemy when wounded Australian soldiers were in just as much need. He is now a pacifist.

"Nobody would go to war if they really knew what it meant," he said.

Few could have had any notion of what the Civil War would mean to America in 1861. If they had, it would never have happened. After the election of Abraham Lincoln to the office of President, young southern men rushed to enlist in the Confederate army before the fun was over. On the Union side, ladies of Washington society travelled with their husbands to be entertained by the first battle of Bull Run only to find that war is no game. The American Civil War was conflict in a transitional stage. Hand to hand fighting combined awkwardly with the introduction of such modern technology as the submarine and the hand grenade to create massive numbers of casualties. One hundred and thirty years after the war ended, the south has still not recovered from the damage inflicted on it. Consequently, we cannot understand America or Americans without knowing something of the Civil War. Nor can we understand the story of our emigrants from the North Pennines without questioning the effect of the Civil War on their lives. They came from England yet were asked to risk their lives in the name of the United States. As we have already seen they brought with them a gospel of love and forgiveness yet they were asked to fight and kill. What did the Civil War mean to these people? How did it change them?

Charlotte Erickson¹ claims that the American Civil War was the turning point for English emigrants. For the first time they wrote less of English politics and more of the American situation. Letters in the Graham collection make increasing mention of the conflict:

"O this cruel war it have raveadeged the country...(the) cities and towns we have passed through is tore to pieces and most of the people gone."

This was a conflict of such intensity that all other matters seemed trivial. In that sense, this was modern warfare.

Erickson's survey of emigrant letters reveals that those who emigrated to the South defended the southern position whilst those who emigrated to the northern states favoured the northern position. British origins seemed to have no bearing on an individual's attitude towards slavery. Indeed, throughout the Civil War there were consistent attempts by the Confederate States to recruit British support (even, in 1864, an offer to ban slavery throughout the Confederacy in return for British military assistance). Britain had fared well against the economy of the southern states, most obviously in the cotton mills of Lancashire. There was, then, no point of view which might be deemed the British perspective. How an emigrant responded to the Civil War depended on where he lived since where he lived was where the conflict would come knocking on his door, demanding his involvement whether he wanted to be involved or not.

The history of the Mississippi lead mining district's involvement in the Civil War lives in the shadow of its greatest Civil War hero. General Ulysses Grant, who was to become the brilliant commander of all the Union forces and later a not so brilliant President, lived in Galena, Illinois, about twelve miles to the south of where most of the North Pennines emigrants settled. Modern visitors can stroll around his southern style mansion, pressurised to think not of a man but a nineteenth century superhero whose self-destructive urge

¹Erickson, Charlotte, Invisible Immigrants - The Adaptation of English and Scottish Immigrants in Nineteenth Century America, London, 1972.

³Graham Collection, 1864.

towards heavy drinking should be seen as no more than bad press. General Grant is the great American spirit personified. Bold, courageous and determined to get the job done.

To their credit, the ordinary people of Jo Daviess County do not seem to have been inclined to think of war as a glorious enterprise. After President Lincoln's war declaration, they continued as a local government body to seek the means of compromise. On April 16, 1861, Galena's mayor addressed the town saying,

*"I am in favour of sustaining our flag, our constitution, and our laws, right or wrong. Yet I am opposed to warring on any portion of our beloved country, if a compromise can be effected."*⁴

War fever did not grab the emigrants for a couple of years. It was not their war, not their cause and yet when many young men of the county were killed in a train derailment engineered by the Confederate forces, it was becoming their war and their involvement was unavoidable.

Nevertheless, some resistance was inevitable and, one would argue, quite appropriate. In a pasture known as Elk's Grove, an organisation met to plan their means of dodging the draft when it was introduced by act of Congress in 1862. The members of this organisation shared their secret codes and hand signals and made plans for future resistance. Unfortunately for them, a member of the United States Secret Service was taking notes in the tree above them. Organised resistance did not last long in the lead mining district.

Primitive Methodism had come out strongly against slavery as early as 1856 and was much criticised in newspapers of the time for using religion to interfere in political matters. Even in the war years, the Primitive Methodist stance against slavery was much criticised. It must be understood at this point that if northerners had thought they were fighting purely for the rights of black people, most would have thrown down their weapons in disgust. On both sides in the Civil War, soldiers believed themselves to be fighting for noble abstractions - freedom, democracy, the American way. It is curious that so many were willing to die for a cause never specifically defined.

The Primitive Methodists, then, were in a minority in that they defined what they believed to be the issue in terms that were not abstract. Slavery, they believed was wrong and should be opposed. This message they preached in an area to which many people had emigrated from the south bringing their slaves with them.⁵ A woman in Galena tried to open a school for black children during the war years and was forced to abandon the project by angry citizens. So controversial was the Primitive Methodist stance against slavery that local preachers in Benton began arming themselves as a matter of course. Financially, the anti-slavery stance made the Primitive Methodists feel the pinch.

⁴Quoted in History of Jo Daviess County, Illinois, Chicago, 1878, p.376.

⁵Owning slaves was not illegal in the north. Only slave trading was banned. President Lincoln believed that to ban slavery in the United States was unconstitutional. He felt himself able to sign the Emancipation Act, freeing all slaves in the Confederate States because these were no longer a part of the United States, and thus had no rights under the Constitution. The irony of this, of course, is that the act meant it was still legal to own slaves in the northern states.

Nevertheless, the evangelical zeal which was so much a part of Primitive Methodism often hit a chord in the Civil War years. New meetings opened in places away from North Pennines' centres of population and thrived for a while until the end of the war removed the demand for intense evangelical experience and the newer meetings closed. George Wells was a Primitive Methodist who worked as a hospital chaplain and wrote of what he saw:

*"The sick ones receive these visits with joy, and exhibit much interest in my conversation and prayers. I have preached for their exclusive benefit twice. To see their sunken eyes, blanched cheeks, and emaciated frames, touches a tender chord in my heart, and knowing that Jesus is touched with a feeling of our infirmities and sympathizes as no other can, I directed their attention, while preaching, to him as their comfort in sorrow, strength in weakness, and peace when Jordan's swelling waves around them rolled. My efforts were not in vain, a few receiving comfort from my ministrations have taken Christ as their portion, and the lot of their inheritance."*⁶

The Primitive Methodists were not pacifists. Such a concept was alien to a society which only now went through what might be termed modern warfare. Little was said of violence in these years but much was spoken of championing the cause of freedom and promoting a religious awakening.

"War is a terrible calamity," said George Wells when the guns were finally silenced. *"What was the duty of the government in the crisis?...Principles were involved. There was then to begin a great struggle between truth and error, right and wrong were to meet face to face, and the great battle between glorious, heavenly liberty, and hell-born, hell-bound slavery was to be fought. As to the final results who could doubt but freedom would be triumphant."*⁷

The Reverend Christopher Hendra added,

*"Let us pray more and preach with more energy, with more faith and with greater expectation to see sinners converted, and think our work is not done, our object not accomplished until we see sinners broken by the truth and saved by God's mercy."*⁸

After the war, the lead mines of the Mississippi were more mechanized than they had been before, the antagonism between north and south was as strong as it had been before and white people still hated black people. *"What's the use of being free if you don't own enough land to be buried in?"* a freedman asked Whitelaw Reid whilst recruits to the newly formed Ku Klux Klan were told that *"the Maker has intended to give us over inferior races a dominion from which no human laws can permanently derogate."* The leader column in the *American Primitive Methodist Magazine* concerned itself not so much with the tragedy of Lincoln's death but with the fact that he happened to be in such a place of ill-repute as the theatre when the assassin struck. The KKK would eventually become quite a popular social club in the lead mining district and as the war over Civil Rights raged on in the south throughout the 1960s, corn prices was more of an issue in the midwest.

Chris spent a couple of hours with Katy and I and then we parted ways. Back at the flat there was a documentary on television about the war in Bosnia and the idea of ethnic cleansing. Katy and I went out to find a late night bar and some whisky. It made more sense somehow.

⁶Quoted in Tyrrell, Charles W., Steeple on the Prairie - A Pen Sketch of Midwestern Primitive Methodism, Dubuque, 1987, p.77.

⁷Ibid. p.80f.

⁸Ibid. p.81

AN INTERESTING HORSE WHIMHarold L. Beadle

This photograph started as a glass plate which was one of four handed to me by John A. Hill in August 1968, when I said that I would undertake to produce prints from them. This I duly did and handed them back to him together with copies of the prints which he added to his collection. Upon being asked for details in order that I could record these for posterity he stated that the horse whim was located on Crawley Top, Stanhope in Weardale, and was used during the first world war to pull up spar from Canada Bottom and that it worked very well, but unfortunately it was the scene of an accident which resulted in the death of a horse. He also added that the man standing near to the whim was Johnnie Walton who was manager of Crawley Mine.

It may be that one of our members with local knowledge of the area will be able to add to the above brief details, such as the precise location of the whim and Canada Bottom. And was the spar hauled up to be put on rail for its ultimate destination.

READER'S LETTERSMore on Hushing

J.L. Barker

As hushing is one of the issues which has aroused interest amongst "Friends" in the Teesdale/Weardale area as well as in Swaledale and Arkengarthdale, I thought the following letter may be of interest.

The letter came to light, not because of lead mining issues, but as a consequence of research by Mrs Katherin Lart into the history of her house, Manor Farm at Great Smeaton. The original letter is deposited in the County Record Office at Northallerton, ref ZQH12.

Redcar July 13th 1808

My D^r Sir

Thank you for your Letter of the 8th. We heard of your Teesdale Excursion when we made our pay. I have some Idea of the Tract of Mining Ground you have pitched on - and suppose your object is to get hold of a Vein w^{ch} emerges(?) from the Bishop of Durham's Liberty into that Ground. In forming the partnership, if convenient, I shall have no objectⁿ to take an 8th Share. In the Conduct of the Tryals, it is a material object to select a skilful Mining Agent and I sho^d prefer one upon the Spot (if such a one can be met with) who has a local Knowledge of all the Strata and where the ore is likely to answer, after the Discovery of any vein - From my own observation, the greatest Discoveries, and at the least Expence, have been made (where the Ground will admit of it) by Hushing - the Situation of the Ground you have fix^d upon, is well calculated for Tryals of that Sort - and if there be a Defect of Water in the Summer Months, yet Summer is the proper Season for constructing Dams, w^{ch} are sure to be fill'd in Autumn, Winter and Spring - and the Hush Gutters (where there is a sufficient Descent) may be made in such Directions as to discover any vein, or Break of Consequence at a very trifling Expence - another observation I have made in that Country, is, that sev^l of the strongest veins have produc'd most ore in what they call "the "Slate Sills" w^{ch} in general are near the Surface.

Lead is advancing in Price - and applications from all Quarters are now making to buy - but we shall suspend further Sales till we see what Effect the present favourable aspect of affairs will have on the Lead Market - the last sales we made were as follows - your father sold 800(?) pieces at Stockton at £26:10s:0d and I sold to Walkers(?) & Maltby (who have for their own Interest made peace with us) 1000^d pieces at B:Bridge at 25£ which (reckoning for the Difference in Weight & Carriage to market) is equal to £26:12s:2d at Stockton - we have sold in all (since we began to sell lately) 9,907 pieces w^{ch} have, & will (when the bills are in Cash) produce above £10,000 so that we can now venture to breathe & look about us a little & I have hopes we shall soon see Lead at £30 p^r fodd^r.

I was confined (in the last month) for a fortnight by a severe rheumatic attack w^{ch} made me quite a Cripple. I have been using the warm Bath & I hope I have banished the Complaint. I am now daily dipping in the Sea & find my general health much improv'd. Mrs B. joins me in best respects - I request you will offer kind Remembrances to Mrs Chaytor & my little godson. I am D^r Sir yr sincere fr^d & faithful Serv^t.

John Brearley

Laurence Barker's discovery affords another fascinating glimpse of aspects of our industry and I am indebted to him for kindly undertaking the "translation" of the original.

Rodcar - July 13th 1803

My D^r Sir

Thank you for your Letter of the 8th - we heard
of your Toosdale Excursion when we made our pay - I have
some Idea of the Tract of Mining Ground you have pitch'd
on - and suppose your Object is to get hold of a vein, w^{ch}
goes from the Bishop of Durham's Liberty into that
of - In forming the partnership, if convenient, I shall have
an Object to take an 8th share - In the Conduct of
the Trials, it is a material Object to select a skilful Person
and I shall prefer one upon the Spot (if such a one
can be met with) who has a local Knowledge of all the
Strata, and where the Ore is likely to answer, after the
Discovery of any vein - From my own Observation, the
greatest Discoveries, and at the best Expense, have been made
(when the Ground will admit of it) by stushing - the Situation of
the Ground, you have fix'd upon, is well calculated for Trials of
that Sort - and if there be a Defect of water in the Summer months
yet Summer is the proper Season for constructing Dams, w^{ch}
are sure to be fill'd, in Autumn - Winter - and Spring - and the
Hush Gubbers (when there is a sufficient Descent) may be made

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 Messrs V & Malby (who have for their own interest made
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 (when the Bills are in Cash) ^{produce} above $\text{£} 6000$ - so that we
 can now venture to breathe & look about us a little - &
 I have hopes we shall soon see Lead at 30^{t} $\text{£} 2$. Good.

I was confin'd (in the last month) for a fortnight by a
 severe rheumatic Attack which made me quite a cripple - I have
 been using the warm Bath, & I hope have banish'd the Complaint -
 I am now daily dipping in the Sea - & find my general Health
 much improv'd - Mrs. B. joins me in best respects - I request you

wife of our kind remembrance to Mrs Chayton, & my little
 Gordon I am Dr. of your kind & faithful friend
 John Breare

PAULL

I am presently researching my family history on the Paul(l) side and would be delighted to hear from anyone who may have any information on this old mining family. In particular any reference to them at Ramshaw mine during the period early 1800s to 1880 would be very useful and also the whereabouts of a William Paull in Cornwall from about 1770 (his approximate birth date) and 1799 when he had moved to Mary Tavy in Devon and married Mary Webber of Mary Tavy (his first wife).

Shelagh Bridges (nee Paull)

10 Springfield, Ovington, Nr. Prudhoe, Northumberland, NE42 6EH.
 Tel: 01661-833634

The views expressed in Reader's Letters are those of the correspondents and are not necessarily agreed with or shared by the Friends of Killhope, its officers or the editor.

THE GRAND MINERALOGICAL EXHIBITION- 1995.

This event was held on the 2nd and 3rd of September at Killhope. It proved to be the best ever. About 35 feet length of tables were covered in superb specimens. I cannot think where a better display of North Pennine minerals could have been mounted anywhere in the last 50 years or so. Much of the material on display had not been seen here before, but a number of my favourite specimens from previous years were present again. I am beginning to see these specimens as "old friends" and look forward to seeing them again next year. Some I mention in the notes below.

We changed the rules a little this time and grouped the North Pennine classes together for the Blue Circle Trophy. David Hacker was the overall winner, I managed second place and David Barker came third. So far a different person has won every year and I think that is a very good thing.

It was a very enjoyable weekend and it only works because of a lot of effort from a lot of people. Once again we must thank Blue Circle plc for their sponsorship. They have generously supported us every year so far and this is gratefully acknowledged. Once again Brian Young undertook the judging. This is an unenviable job and we are very grateful he continues to do it. Then there are all those Friends who did all the administration, got the room ready, stood guard and especially including Doug and Peter, who slept on the premises overnight. Last but by no means least are all the people who took the time and trouble to enter specimens. They all have our sincere thanks.

So now for a summary of the various classes:

1. A Specimen of Fluorite.

There were 12 entries, all fabulous. The first place was split between a small green fluorite from Heights Mine and a rather larger piece from Blackdene Mine. A nice yellow green specimen from West Pastures Mine came third and a colourless fluorite from Cambokeels was third. One of my "old friends" was present again. A small specimen from Barbary Mine, belonging to Maurice Wall, the crystals are unusual in being in the form of flat plates.

2. A Group of Three Specimens of Fluorite of Different Colours.

This section was a classic demonstration that big is not always best. The winning group consisted of specimens no more than 1.5 inches across and the third group were thumbnail sized pieces. All of these were beautiful clear perfect crystals in a range of magic colours. The group coming second were rather larger, but by no means massive. Many old mines were represented, including Hilton, Heights, Frazer's Hush, Cambokeels, Boltsburn, Rogerley etc. In all there were 8 entries, 24 specimens altogether.

3. A Specimen of Galena.

Another large entry of 12 pieces. Blackdene Mine featured prominently and provided the first and second places. The first was a particularly lustrous specimen with minor associated quartz. Third place went to a specimen from Frazer's Hush Mine.

4. A Specimen of Any Other Sulphide Mineral.

This was one of the new sections and the change worked well. There were 13 entries and while sphalerite dominated, many other sulphides were also entered. The winner was just about the smallest specimen present, a crystalline pyrrhotine from Cambokeels Mine. While pyrrhotine is a fairly common mineral, crystals of it are extremely rare and this one was world class. Second was a nice specimen of sphalerite and third a lovely pyrite. Many other entries must have contended for places and there were unusual specimens like botryoidal sphalerite from Stotsfield Burn Mine.

5. A Specimen of Calcite.

As usual with this mineral, the entries (14 in all) covered a wide range of crystal types. Cambokeels and Tynebottom Mines took the honours, the judge preferring some of the more unusual crystalline forms. Although it did not get a place, I liked a large 3 inch complex crystal perched on quartz from Cambokeels.

6. A Specimen of Quartz.

A smaller entry of 9 specimens, but all very beautiful to see. Quartz always displays well and attracts a lot of attention. Cambokeels specimens took first and second places with a small Brownley Hill Mine piece coming in third.

7. A Specimen of a Barium Mineral.

Another new group, this brought in 13 specimens of 4 different minerals. First place went to an "arrowhead" shaped group of baryte crystals from Settlingstone's Mine and second to a group of large flat plates from Hilton Mine. Third was a nice small alstonite from Brownley Hill Mine.

8. A Specimen of a Secondary (Supergene) Mineral.

This new class attracted 12 entries covering 9 different minerals and was certainly the most colourful section. A magnificent "jackstraw" cerussite from Redburn Mine came first, with a small bright green annabergite from Hilton Mine coming second. Third was another of my "old friends", a lovely white cerussite from Stotsfield Burn Mine. Other entries included nice green malachite, brilliant green pyromorphite and blue azurite.

9. A Specimen Showing an Association of Three or More Minerals.

The North Pennine were famous for their complex multi-mineral specimens, which prompted the introduction of this new class. It was very successful, attracting by far the largest entry of 18 specimens and wonderful many of them were. The winner was a fine old Boltsburn fluorite with siderite and chalcopyrite crystals sprinkled on it. A Boltsburn quartz with fluorite and chalcopyrite came second and a complex large sphalerite with 3 other minerals from Redburn Mine came third.

10. A Specimen of a Fossil.

There were 14 entries and a fine large slab of spiriferid brachiopods came first. A small single Eospirifer with excellent labelling came second and a piece of Frosterley marble third.

11. A Spar Box.

Three boxes were displayed. All were of mining scenes and all were made by Jim Raine. I like to see this revival of an old art form and wish I had the artistic ability and time to make one myself. Alas I have to content myself with admiring others work.

12. A Collection of Specimens from Anywhere.

You could have spent hours studying this class. There were 6 very diverse entries and I did not attempt to try to count all the specimens. The winning entry was a group of specimens from the West Cumberland Iron Orefield, that were all magnificent and mostly very rare now. Second was a fine colourful display of minerals from around the world and third a group of calcites from South Wales. Other nice entries were optical grade fluorite fragments from Boltsburn Mine and a selection of poisonous minerals with a recommendation that you do not pick them up! Although not really dangerous they perhaps served to remind people that if you handle minerals it is a good idea to wash your hands before eating or drinking.

13. Under 16 Class.

Alas only one entry, a nice fossil from Luke Blackett. Come on all you parents. Most schools include the earth sciences in their curriculum, so encourage your children to enter next year.

14. A Photograph of a Mining Scene.

This is always a very interesting class. I like to hover nearby listening to comments from visitors along the lines "that is my Uncle Fred". The result was a clean sweep by Thomas Wall. These photographs are now our history and it is nice to see them treasured and so well labelled.

15. A Display or Piece of Mining Ephemera.

The entries included carbide lamps, detonator boxes, spirit levels, hammer heads, picks and drills. Again the prizes all went to Thomas Wall, who must be complimented on a fine entry.

16. The Biggest Crystal of Any Mineral.

At least this class only needed a ruler and the result was not open to argument. The winner was quartz from Carrock Mine in the Lake District, second a calcite from Wapping Mine in Derbyshire and third a fluorite from Yorkshire.

In addition to the prizes, the judge gave a number of Certificates of Merit. I forgot to make a note of these, but I know the Barbary Mine fluorite I mentioned earlier got one and so did a fine sandstone slab with worm casts on it.

So that is a summary of what was a very interesting and enjoyable weekend. I expect the Friends will run another one next year after this years success. Again our thanks go to everyone who took part or helped.

Trevor Bridges.

REPORT FROM DURHAM COUNTY COUNCIL

It's been a pretty unusual summer and even at Killhope a pullover and anorak haven't always been compulsory. By the end of August the lack of rain was causing a few problems for us in contrast to the floods of the early part of the year.

I regret that I was unable to attend Friends AGM as I had hoped to renew some old acquaintances and to make some new ones. I have, however, visited Killhope several times both officially and unofficially and have been pleased with the reports from Ian Forbes of the hard work put in by Friends. Congratulations on another successful Grand Mineralogical Show, although I gather the weather could have been better.

Our attention is of course focused on the opening of Park Level Mine in Spring 1996. at the time of writing (early September) Compleat Works are almost finished the main fitting out contract and works will be completed by late October. As some of you have the opportunity to see, the Mine looks superb and, I am sure, will be a great visitor attraction. A program of events is being organised for April 1996 followed by a major press launch in May and a huge weekend celebration in June. Plans are still under wraps, but you will be the first to know the details!

At this time of year the County Council is beginning its annual budget process and I have to report that there is another very difficult year ahead. Corporately the authority is faced with possible cuts of 23 million. This follows budget reductions of £15 million in 1994/95. The Authority remains committed to good quality arts, libraries and museums provision but naturally we must all be aware of the costs incurred. The Chancellor's budget announcement in late November, accompanied by his statement on the local government financial settlement will be crucial for Durham County Council. Let us hope it is favourable to public services.

Patrick Conway
Director Arts Libraries & Museums

All That Glistens.....Trevor Bridges

This is the title given to an exhibition of "Northumbrian" minerals at the Hancock Museum, Claremont Road, Newcastle upon Tyne. It has been mounted by the Russell Society in conjunction with the Hancock and Sunderland Museums and uses specimens from these museums and private collections. At present the exhibition is in the foyer, but in early October it will be expanded and moved into a small gallery. The exhibition draws heavily on North Pennine specimens, but includes Cheviot agates and some material from the Coal Measures and Permian.

We should be able to arrange a special afternoon for Friends to see the exhibition with Russell Society and museum staff present to answer questions. A date and time will have to be announced later. The exhibition should run up to Christmas.

Trevor has agreed to organise this visit and anyone interested should ring him on 01661 833634 during the week commencing 9th October but not before. The likely date of this event is late November but this will have to be confirmed. (Editor)

REQUEST FOR INFORMATION ON TOURIST SIGNS

Dave Pollard of the Underground Quarry Museum in Wiltshire is experiencing a problem with his local council and would appreciate advice from fellow museums.

He has applied to Wiltshire County Council for brown and white tourist signs to be erected advertising his museum and he wishes to use a mine headgear as a logo. A headgear is commonly associated with mining amongst the general public but the area traffic engineer of the council has refused to allow it, claiming that it is not a recognised symbol.

Does any museum use a headgear logo on their own brown and white tourist signs or do they know of cases in other areas? If so, this would be useful to quote as a precedent.

Can you write direct to Dave Pollard please at The Underground Quarry, Park Lane, Corsham, Wiltshire SN13 0QR.

KILLHOPE QUOITS COMPETITION 1995

Last year, after entering the competition every year it has been held our Project Officer actually won his first game and we all delighted in his modest success. This year he beat several doughty opponents to be runner up! I understand an enquiry is underway.....!

WESTGARTH FORSTER - A SON OF WEARDALE?**Peter Wilkinson**

I wrote an article in the last newsletter about the book written by Westgarth Forster's sister Phoebe entitled "Emma or the Miners Cottage" published at Alston in 1821. This article was primarily about Phoebe and the Garrigill Poachers incident and not about her famous elder brother.

Westgarth Forster (Junior) was of course the author of the famous "Treatise on a Section of the Strata from Newcastle upon Tyne to Cross Fell" usually referred to simply as "Forster's Strata."

The first edition appeared in 1809, the second much enlarged in 1821 and the third revised edition edited by the Rev. W Nall, in 1883. This final edition contained a Memoir of the famous geologist, surveyor and mining engineer. Whilst perhaps not the father of English geology (this honour usually goes to William Smith), Forster must rank amongst the great pioneering names of applied geology and amongst the finest of the early writers on the subject. Though the first edition of his book was not published till 1809, he had been executing superb horizontal and vertical cross section of the strata before 1800, a number of examples of which are still in existence. He also had an excellent understanding of ore processing and smelting which he demonstrated in his second edition of the Strata (1821.)

In writing the previous article I briefly looked at the family background of this famous man and examined the Memoir written in 1883 by the Rev W Nall. I also made reference to some of Nall's documents and papers and noted the remarkable lengths he had gone to in his genealogical investigations of the Forster family.

William Nall was a curate at Alston for many years up to 1892 after which time he removed to become Vicar of Alnham in Northumberland. He initially researched the Forster family in the later 1870s and early 1880s for his revision of Forster's Strata and then in greater depth at the request of Thomas Forster-Brown (Mining Engineer, Chief Inspector of Mines and relative of Westgarth) during the years 1903-1906. Over a period of many years therefore he gathered much interesting information about the famous family and its various connections, during which time he had access to their original documents, including letters, plans and reports of the famous Westgarth. Many articles have been written over the years about the renowned geologist and his work but the Rev. W Nall remains his principal biographer and the obvious source of much of the information which exists.

In looking through some of this material I was surprised at how little was known, not only about Westgarth Junior's early life and work, but also about that of his father (Westgarth Senior) himself an extremely able mining agent and surveyor. It is not my intention to go into any detail regarding some of these omissions in this brief note, but I would like to examine several important points.

As Nall admits we know little of Westgarth Foster's early life and education. There is no known date of birth, no apparent baptism record and no definite place of birth, the only clue to his age being the inscription on the family tombstone in Garrigill Churchyard which states "Westgarth Forster, son of the above Westgarth and Lucy Forster of Unthank Hall, died November 9th aged 63 years." This indicates he was born in 1772. The Rev. Nall made extensive enquiries, examining the Church registers of numerous local parishes to

determine the date and place of baptism, all without result. Whilst pre 1800 records rarely give dates of birth, baptisms often took place within three to four months of delivery, so giving a close approximation.

Even early register entries often gave the parents abode which was usually the place of birth.

The Forster family owned a property at Jeffreys Rake, in the Parish of Hunstanworth, near Blanchland where Westgarth Senior was born in 1738. His parents were George Forster and Mary Westgarth of Unthank Hall in Weardale, who had married in 1736. Westgarth Senior married Lucy Emerson of Weardale (?) in 1765, after which time they apparently sometimes resided at Jeffreys House, though Nall found no later record of young Westgarth being baptised there, nor did he find any record at Garrigill in Alston Parish where the family owned another property, Ivy House. The Garrigill registers did show the baptisms of daughters Lucy and Susan in 1771. Whilst it was known that the family were resident there between 1769 and 1771, the lack of any record of young Westgarth for the year 1772 indicated to Nall that they had returned to the house at Jeffreys, Hunstanworth, and that our famous author was probably born there, but where, for some reason, there was no baptismal record. Many later writers have turned conjecture into fact and simply state that Westgarth Forster (Junior) was born at Jeffreys House, whilst others suggest he was born at Garrigill.

The Rev. Nall however, was obviously never happy with this mystery and continued his quest over the years, examining the church registers of Blanchland, Allendale, Whitley Chapel, Slaley, Haydon Bridge, Hexham, etc. though in doing so he was also looking for other family links.

I was intrigued by this puzzle and decided to briefly re-examine some of the facts to see if I could shed some light on the matter. As the record stood Westgarth Forster (Junior) was supposedly a Co. Durham man and a probable son of Wear Valley District! If I could place his birth in Weardale itself, then I thought I may gain the approbation of some of our members (and score some *Kilhope Brownie Points!!)

I considered Weardale because of the connections with the Westgarths of Unthank Hall at Stanhope, a then famous family much connected with lead mining. George Forster had married Mary Westgarth in 1736 and the families had remained closely linked. Their firstborn was named Westgarth and his eldest son the same and he had also married a Weardale(?) girl, Lucy Emerson. Both Westgarth Senior and Junior spent time at Unthank and the family leased the hall at a later date, Westgarth Senior dying there in February 1797, though buried at Garrigill. Lucy, his widow remained at Unthank till about 1801, when she removed to Ivy House at Garrigill. Whilst the Rev. Nall had checked the Stanhope registers, I felt he had perhaps concentrated more on the Westgarth side of the family, so I thought that possibly the "missing link" was to be found there.

I carefully examined every entry in the baptism register from 1770 to 1780 (just in case the age given on the gravestone was incorrect) without success. I rechecked the registers of Garrigill, Hunstanworth, Blanchland, etc. all to no avail. I wondered if young Westgarth had been born/baptised whilst his parents were on holiday - maybe I should check Tynemouth or Whitley Bay or possibly further afield to Blackpool or even Bognor Regis! I eventually regained my composure and stared at the racks of local registers. Perhaps the

entry was in the Nonconformist records, though highly unlikely knowing the family background or possibly he was never baptised which I thought even more unlikely. What about Alston Church registers? Impossible I thought! The Rev. Nall clearly states both in his Memoir and his private notes, that "there is no record of his baptism in either the Alston or the Hunstanworth Parish registers." Furthermore Nall was curate at Alston for many years, he wrote numerous articles on all the registers and even assisted their transcriber in later years.

Garrigill Chapelry however, though part of Alston Parish, always kept its own registers and records and Nall was a native of Garrigill looking for entries for another Garrigill based family. Why should he check the Alston registers which involve the areas external to the Garrigill boundaries. When he stated Alston registers, did he mean only that part of the parish he thought relevant to his enquiries, that is Garrigill? Apparently so because the Alston Church Register for the year 1772 under the baptism section carries the following entry:

WESTGARTH S (son) WESTGARTH & LUCY FORSTER OF COALCLEUGH
DEC.8 1772.

This entry more or less confirms his year of birth as 1772 and allowing for the tradition of about three months between birth and baptism this would suggest he was born in the September or October. It also provides us with a foundation for the start of his life, rather than it being shrouded in mystery.

More important perhaps, it indicates a place of birth. Most of the older entries in this section of the register name places within the Alston and Nenthead area (excluding of course the Chapelry of Garrigill) except for this one which clearly states Coalcleugh, which is in West Allendale. This strongly suggests that Westgarth Forster (Junior) of "Strata" fame was born at Coalcleugh in Northumberland and not at Jeffreys, Hunstanworth in Co. Durham. Not a son of Weardale, I'm afraid, but most probably one of Allendale. No doubt this would have pleased the well know N.E. historian Richard Welford whose series on "Men of Mark Twixt Tyne and Tweed" (1889) included an entry on Westgarth Forster. In a letter to Rev. Nall offering him one guinea for the entry information, he asked him to bias his notes towards Forster's work in Northumberland, seeing that he was not a native of the county!

Rather sad for William Nall who showed a strong interest in the Forster family for such a long period of time and never traced this primary piece of information. Even worse that it was located within the very area on which he was a leading authority. How he would have reacted to finding out it was in a cupboard at his own place of work, I will leave to the imagination!

As to birthplace, why at Coalcleugh, I can almost hear Les Blackett (FOK member from Wearhead) ask. Well it is all to do with some of his ancient ancestors who owned mines there - Sir Walter Blackett & Co. I believe Nall and other writers were correct in their assumptions that Westgarth Senior removed from Garrigill about the year 1772, but not to Jeffreys at Hunstanworth as indicated. I would strongly suggest he went to Coalcleugh, probably temporarily, to assist the ailing Grove Steward (Mine Agent) there, a relative by the name of William Westgarth. Shortly afterwards in 1775 he moved to a new post as Chief Grove Steward at Allenheads, a position he probably held for more than twenty

years. During most of this period I believe he was resident at Allenheads. There is therefore substantiating evidence to confirm the entry in the Alston baptism register which indicates Coalcleugh as their then place of residence. Further qualifying facts could be given regarding Westgarth Senior's work during this period, but they are best left for another occasion, as is the answer to the question of why young Westgarth was baptised at Alston.

Pity about the Weardale link, but it is not all bad news if we bear in mind that the Blckett Company Coalcleugh District, at that time included the mines at Killhope, for the obvious reason that the two areas are only two miles apart. The Coalcleugh District Mine Agent and his assistants were responsible for both sets of mines, so it is likely that Westgarth Senior regularly came home at that time with Killhope dirt on his boots and perhaps even sparkling pieces of mineral (for baby Westgarth to get his gums into!)

I would be very interested in locating any of the Forster family papers if anyone knows of their existence. During the latter part of the nineteenth century they were, I believe, in the hands of the Brown family at Garrigill.

I should add as a footnote that our esteemed President, Sir Kingsley Dunham, as a young man had some responsibility for the renewal of the Forster family gravestone at Garrigill in 1931, an occasion, which I am sure he will still remember. I have most of the background details of that event which I could put into print at a future date if anyone was interested.

* I have used the old spelling of Killhope throughout this article.

Editor's note : Naturally I have asked Peter to write a piece on the renewal of the Forster gravestone which I hope will appear in the newsletter.

PROJECT OFFICER'S REPORT

I regret there is no Project Officer's report but the next newsletter will cover all the events since the May edition. (Editor)

FRIENDS PROGRAMME 1995 - A REMINDER

Wednesday 11th October, 7.30 Stanhope Old Hall - Talk by Brian Young of the British Geological Survey about aspects of his work in Northern England.

Wednesday 8th November, 7.30 Stanhope Old Hall - Talk by Ian Tyler about mining in Cumbria.

Wednesday 13th December, 7.30 Stanhope Old Hall - Members night and Christmas social evening.

Boulby Potash Visit - details are still to be finalised. Ring Ian Forbes on 01388 537505 for confirmation and bookings.

SOME MORE EVENTS AT KILLHOPE ORGANISED BY THE CENTRE

Sunday 8th October 1995 at 1.30 - Killhope's Fungi Foray and Barbecue.

Help expert Brian Atehey search for and identify the beautiful varieties of fungi around Killhope's woods and cook the edible ones on the barbecue. Bring your own sausages or other accompaniments.

Cost - £2 adults £1 concessions.

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28/29th October 1995 - Killhope presents "The Trees have Eyes"

A frightfully comical, musical menace starring your very own Kevin Watson and musician Darren Martindale (Hardline Productions.) "1995 Edinburgh Fringe Festival Comedy sensation."

2 shows per afternoon 1pm and 3pm

There will be workshops to accompany these shows starting at 11am making masks, bats and lanterns. (Bring your own turnip or pumpkin.)

Cost - £1 per person for shows and workshops.

Please note these charges are additional to Killhope's entrance fee to cover workshop leaders expenses etc. but Friends still have free entry to the site as usual on these days.

Christmas Shopping

The Killhope shop is again open Sundays through November for Christmas shoppers.

To book any of the above events or further information, please contact Maureen Murray at Killhope on 01388 537505.