



Welsh Mines Society

(Member of the National Association of Mining History Organisations)

NEWSLETTER 47

October 2002

Editorial Thoughts

1. First, a 'thankyou' to those who have answered my plea's for WMS field meet reports, your support is appreciated - I hope it continues !

I continue to keep the WMS website up to date with the latest information on the meets (including menus and location maps) and copies of previous publications - please don't forget to drop by every once in a while ! I've also set up an e-mail discussion group just for WMS members - it's really aimed at being a forum for Society issues, but can also be used for shouts for help on Welsh Mining issues and a chance to let folk know if you'd like to meet others when visiting a site. I realise not all members have direct e-mail access, but felt that it at least gives an easy communication facility we currently don't have. (See the WMS website for further details.)

Before I sign off I'd like to add that it's a real joy to receive the articles which members (albeit the same few) continue to send in - we even have a few from non-members. If you'd like others to learn of what you've been exploring or would like to tell us about your latest research success, then please do put pen to paper and send it in - you'll be glad you did !

Finally, I wish you all the very best for Christmas and the New Year - here's to another year of Welsh mines.

Mike Munro & BD

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Events - Dates for Your Diary

(Note that details of forthcoming WMS meets are always posted on the WMS web pages as soon as they are confirmed - URL below.)

2. WMSoc. 2003 Programme

Winter Meet - Sunday 23rd March. Host; **George Hall**, Tel./Fax. (01584) 877 521. George has again offered the use of his home for an informal indoor one day winter meet. He lives at 'Abilene', Sheet Road, Ludlow, Shropshire, SY8 1LR. Arrive at any time from 10:30 a.m. onwards, tea and coffee will be provided. If you want a buffet lunch these will be

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Secretary/Treasurer: DAVID ROE, 20 Lutterburn Street, Ugborough, Ivybridge, Devon, PL21 0NG.

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WMS Home Page http://www.mike.munro.cwc.net/mining/wms/wmsoc_hp.htm

available, cost ca. **£6-00** (pay on the day) but need to be booked a **week in advance**, otherwise just turn up and bring a few slides - all are welcome !

To get there - Sheet Road goes into Ludlow from the southern of the two roundabouts on the Ludlow by-pass (A49), 'Abilene' is about 200 yards down on the right, the third house beyond the N.F.U. Mutual Office.

Summer Field Meet - Weekend 21st - 22nd June. Location; **North Pembrokeshire** - Coal & Slate. Organiser; **Peter Cloughton** Tel. (01437) 532 578

or E-mail **P.F.Cloughton@exeter.ac.uk** Headquarters (Saturday evening meal and accommodation) **Gellifawr Hotel**, Pontfaen, Nr. Fishguard, Pembs. SA65 9TX; Tel. (01239) 820 343, Fax. (01239) 820128, internet: **<http://www.gellifawr.co.uk>** - located 7 miles east of Fishguard. From New Inn (junction B4329 and B4313) follow the B4313 towards Fishguard for one mile, take the first turning right (signed Cwm Gwaun), after a half mile take the next right (signed Gellifawr Hotel) and follow that road for two miles to the hotel. Book accommodation directly with the hotel stating you are with the Welsh Mines Society - recommend you book early. There is a camping field at the hotel, accommodation in the hotel (7 double rooms) and adjoining cottages (up to 35 people in various combinations). Other bed and breakfast accommodation is available locally - details on request.

Saturday 21st June - Meet at **11:00 a.m.** at the **Victoria Hall** carpark in **Roch** (*Note change of venue*) - behind the Victoria Inn, opposite the school, **NGR SM 8715 2145**. Bring a packed lunch. Newgale coalfield; mining from the late medieval to the early 20th century, with local expertise on hand to explain the development of this small outlier at the extreme north-west of the main Pembrokeshire coalfield.

Saturday Evening - Dinner at the **Gellifawr Hotel**. Menu to be circulated via. the next Newsletter and posted on the WMS 'meets' web page as soon as available.

Sunday 22nd June - Meet at **10:30 a.m.** at the carpark in **Rosebush**. (Turn left in front of the Old Post Office Restaurant.) **NGR SN 0750 2945**. Morning visit to Rosebush and Bellstone Quarries; 19th century slate working. (Field notes for these quarries can be viewed at **<http://www.exeter.ac.uk/~pfclough/mhinf/slate.htm>**) Lunch available at the cafe in the village if required. In the afternoon there will be the option of a visit to the quarries and associated harbour at Porthgain, 9 miles west of Fishguard, with a good pub to hand for those wishing to stay for an evening meal.

Autumn Field Meet - Weekend 20th - 21st September. Location; **Shropshire**. Organisers; **George Hall**, Tel./Fax. (01584) 877 521 & **Dr. Ivor Brown**, Tel. (01924) 257 137. Further details in the next Newsletter and posted to the WMS website as soon as available.

Other Societies & Organisations

3. Russel Society Wales and West - branch programme

22nd February; 'The Iron Mines of the Garth', Dr Tony Jukes

11am Saturday morning, Earth Sciences Department, Cardiff University, Park Place.

15th March; 'Portugal - Its Minerals', Dr. Stephen Plant

11am Saturday morning, Taffs Well Village Hall, near Cardiff

For more details, contact Lynda Garfield, Secretary, Tel. 02920 891 588

If you're aware of events or trips which other organisations are holding or making to/into Welsh mines, please let me know and I'll include them in the next Newsletter.

Important Announcements

4. Obituary - We regret that we have to report the death of James Peden of Liverpool who belonged to the WMS for over 20 years and whose huge range of interests brought him in to contact with many within the industrial archaeology, mining and railway fraternity. Our condolences to his wife Shirley.

5. Welsh Mines Society sweatshirts - John & Daveleen Alder would like members to know that there are a few Sweatshirts and T-shirts left over from NAMHO 2002 - Aberystwyth, (white logo on black): Sweatshirts - £16.00; T-shirts - £12.00, inc. p+p.

Also, W.M.Soc.Sweatshirts, (gold logo on navy blue), £16.00, inc. p+p.

Please place orders with Daveleen Alder, 43 Rowlands Crescent, Solihull, West Midlands, B91 2JE, Tel. (0121) 711 1049, or by e-mail to aggie@1ststoponline.co.uk

6. WMS-NAMHO Representative - For several years, this post has been held by Alan Williams, but due to the pressure of work, he has decided he can no longer meet the requirements of this role and would therefore like to offer it to another member of the Society. In essence it means attending two or three NAMHO committee meetings a year which are held in various locations within the UK, and sometimes vote and express views, reporting back if any important issues arise. It would be quite acceptable for more than one person to share this job, taking turns to attend meetings. There is an allowance paid for mileage, so at least you won't be out of pocket !

If this sounds of interest, but you'd like more info, then contact Alan Williams who will be able to explain the finer points of this post;

E-mail alan.williams@britishlibrary.net or Tel. (01244) 370 662 (evenings) If he's not there, please leave a message and your number and he'll ring you back.

New Members

7. The Welsh Mines Society says '**a croeso**' (hello and welcome) to the following new members:

Mr R O Lemon	Lon Gert, Garndolbenmaen, Gwynedd, LL51 9UX richard.lemon@btinternet.com
Mr K Geddes	4 Denbigh Drive, Clitheroe, Lancashire, BB7 2BH Ken.geddes@lineone.net
Mr P Branch	Tyn Lon, Brynrefail, Dulas, Ynys Mon, LL70 9PX, pbranch@talk21.com
Mr M Higgins	56 Robin Hood Crescent, Edenthorpe, Doncaster, S Yorks, DN3 2JJ mchiggins@lineone.net
Mr K Davies	Penlofedw, Devils Bridge, Aberystwyth. mineadventurer@hotmail.com
Mr T Brewis,	50 West Hill Avenue, Epsom, Surrey, KT19 8JU Tony_Brewis@compuserve.com
Mr S Gray	5 Wellington Street, Tongwynlais, Cardiff, CF15 7LP gray.tortoise1@btinternet.com
Ms R J Hayes	Yr hen Ysgol, Arthog, Gwynedd, LL39 1YT
Mr D Westley	83, Cefn y Cader, Morfa Bychan, Porthmadog, Gwynedd, LL49 9YS
Mr G Newton	Yew Tree Bungalow, Brilley, Whitney on Wye, Herefordshire, HR3 6JH

Mr J Dee	16 Brickfields Road, Stonehaven, Aberdeenshire, AB39 2LS jonathonmanx77@aol.com
Mr E Mcavoy	Sycamores, Earl Sterndale, BUXTON, Derbyshire, SK17 0BZ ted@leanderarch.demon.co.uk
Mr G Price	East Lodge, Gloucester Street, Newent, GLOS, GL18 1AE GEOPRICE@LINEONE.NET
Mr R Pinkney	13 Conway Road, Shirley, Solihull, West Midlands, B90 4RE R.J.Pinkney@wlv.ac.uk
Mr S Hodgson	Henwy Golan, Golan, Garndolbenmaen, Gwynedd, LL51 9YU
Mr R Davies	Llwynswch, Llanddarogrd, Carmarthen, SA32 8AL
Mr C J Butler	Tresmeer House, Splatt, Launceston, Cornwall PL15 8QX
Mr D Bowdley	79 Northway, Sedgley, Dudley, W Midlands, DY3 3PR
Mr F Bouweraerts	Irestone House, Wearhead, Co. Durham, DL13 1HT fbouweraerts@aol.com
Mr N Stinchcombe	44 Deerleap Way, Braintree, Essex, CMY 9FH n.stinchcombe@ntlworld.com
Mr P & Ms S Westmacott	13 Alcester Road, Studley, Warks, B80 7AN molehole@care4free.net

David Roe, your hard working Secretary & Treasurer informs us “A rush of new WMS ‘members’ has brought us up to a grand total of 250 ‘Friends’ and ‘Insured Members’ ”.

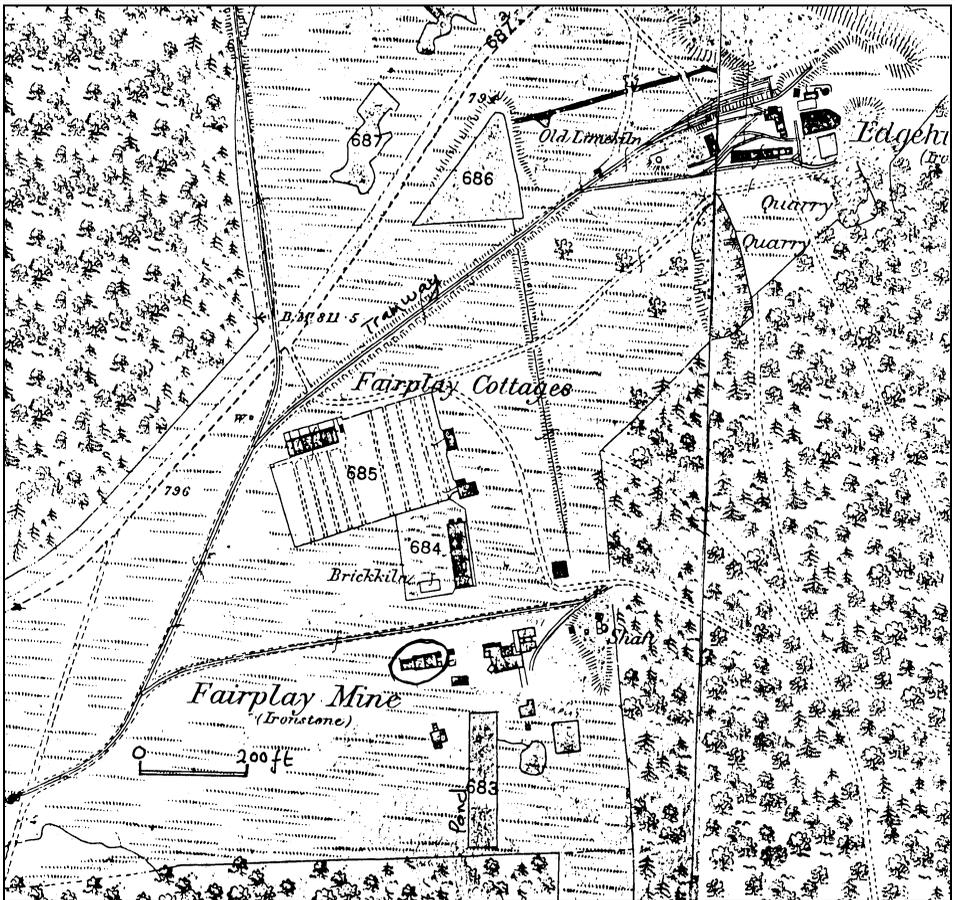
WMS Field Reports

8. Forest of Dean Meet : 21st-22nd September

This was based on Newnham and The Rising Sun pub in the heart of the Forest. Mole led the underground trips and at short notice, David Bick the surface trips.

Saturday: The underground party went to Old Ham, Lambsquay etc., and it proved a fairly tough trip, at least for some. On top, we went to Cannop ponds to see a century-old stone works still going strong with some of the original sawing machines, and then up the Bixslade valley complete with the stone sleeper blocks of the tramroad laid down about 1820 and not closed until after the war. The first call was at a free mine also in full work, and one of the last in Dean. Nearby was a fine life-size stone sculpture depicting two brothers drowned in the Union pit disaster of 1902, and opposite was the Mine Train quarry for building and paving stone, also in full swing. Old adits into a hematite iron mine could be seen in the quarry face. Altogether this is a unique and fascinating valley, still producing coal and stone by much the same methods as applied two hundred years ago. Later, a good evening meal was enjoyed at the Victoria Hotel, Newnham. Thanks were given to all who had helped with the very successful NAMHO conference in Aberystwyth sponsored by the WMS, and it was agreed that the various papers will be published in due course.

Sunday: Still in good weather, the ‘surfacers’ walked up the Oakwood valley tramroad near Bream, and saw sundry iron ore adits, and abandoned freeminers drifts, some still with rails in situ. After lunch and a visit to some scowls (deep open-workings) we went to the Lightmoor colliery beam engine house, now sadly roofless, and then to Fairplay and Edgehill iron mines. The massive base of the Fairplay enginehouse with its huge bob-pit was examined and photographed. The underground party went down Wigpool. And so we departed for home.



Fairplay and Edghehill Mines. The only surviving mine building - the pumping engine house base - is shown encircled. The area is now largely afforested.

*Reproduced from the 1886 Edition 25" Ordnance Survey map,
Gloucestershire Sheets XXXI.3 & 4 (D.Bick)*

Thanks are due to Mole, Terry Evans and Geoff Newton for help in various ways to make the weekend such a success.

David Bick

9. Forest of Dean '3 in 1' No, not the lubricant we use on our karabiners after a muddy trip, but John Hine's (Mole) iron mine field trip in the Forest, "Three Mines in One". It was well supported with eleven members in the team and Mole at the helm.

We donned our gear in the car-park of Clearwell Caves, and walked across fields to a gated entrance in a hollow. This turned out to be our exit ! A further trek led us to the entrance of Old Bow Mine. After a short distance we gathered together while Mole locked us in. As the descending route was through a maze of small passages, we were instructed to keep a check on the one behind, to stop anyone going AWOL.

While we proceeded through this labyrinth we were reminded of our early caving days. When we stopped for Mole to give us his sermon we found that it was indeed a cave,

modified in places by the miners. Occasionally they dug out long water washed passages filled with sand, in the hope of finding chambers filled with iron ore. We asked about transport from these workings, and learned that everything had to be carried up the tortuous route back to the entrance. Much of this work before 1851 was done by children.

We now passed on into the second section 'Lamsquay Mine'. The passages were still very cave-like, with a noticeable absence of levels. For long periods we were bent over like Quasimodo, and I for one looked forward to being able to stand up straight and be dazzled by someone's cap-lamp.

After a time we came to a point where there was no obvious way on. We all looked at Mole. In the words of the song 'the only way is up' ! So, standing on a pile of boulders, a careful climb was executed by everyone through a hole in the roof.

This led us on to the later workings of 'Old Ham Mine' with proper levels and signs of rails. Along these the ore was carried to a shaft (now collapsed) and hauled to the surface.

We regained the older workings and worked our way through small irregular passages back to the gate we had first seen. We walked back to our vehicles nicely iron-ore stained, and gave Mole a big vote of thanks for an enjoyable and interesting trip.

Roy Quilliam. (Brum Cong)

10. NAMHO 2002 - 'The Application of Water Power in Mining' 5th-8th July 2002.

NAMHO holds annual conferences/field meets which are organised in turn by one of its constituent member bodies. This year it was the turn of the WMS. The Conference was centred on Aberystwyth University and proved to be a great success. The lectures were both interesting and nicely balanced. The number of contributions meant that a parallel session had to be held during one afternoon. I always find this sort of timetable very annoying. However it is proposed to publish all the contributions so one will be able to find out what one missed. The siting of the Conference venue provided considerable scope for field meets catering for a wide range of interests. The field meets were well attended.

Some random personal memories of the event that come to mind are the spartan student accommodation; the bar running out of cask beer on the night of the conference dinner; Brigitte Cech's explanation of how gold ore was transported down several thousand metres of Austrian mountainside, and the field visit to Temple Mine in the superb Rheidol Gorge - thanks to Geoff Fitton.

So many members of the society contributed one way or the other to the successful running of the event that it would be impossible to name them all here. However our thanks must go to them and to the indefatigable organising group Peter Claughton, Mole, Daveleen Alder and Anne Oldham.

Tony King

Peter Claughton, conference organiser adds 'The Conference was an outstanding success. There have been a large number of positive responses on the programme and all the delegates appear to have a thoroughly enjoyable time in Aberystwyth. On behalf of the organising group I would like to thank all those who helped to make this an event of which we, as a society, can be proud.'

11. NAMHO - Cwmystwyth Field Trips. During the NAMHO weekend fifty or so delegates from all over the country took part in various trips at Cwmystwyth. Barry Clarke and myself (*Graham Levins*) led trips into Level Fawr on the Saturday and Sunday morning. On the Monday we arranged a more "in depth" trip in Level Fawr. We took a party down the

Incline to explore the workings on the Kingside Level and Level Y Ffordd. John Hine led people up the mountain to look at various adits on Copper Hill, in addition to his own trips into Level Fawr.

A small part of Cwmystwyth history was recreated for the weekend, Roy Quilliam rebuilt the famous water powered “Cwmystwyth Bell”. It was installed in its previous position in the Ore Chute Chamber. The clang of the bell echoing along the passage, was a surprise for our visitors. Roy agreed for the bell to be left in place after the weekend.

On Saturday and Sunday afternoon Simon Hughes led a surface walk, sharing with people his encyclopaedic knowledge of the history of Cwmystwyth and explaining the purpose of the ruined buildings. Simon brought with him many old photographs that helped to bring the site back to life. David James, the geologist, who lives at Cwmystwyth, also attended to explain and answer questions on the geology of Cwmystwyth.

It was great to see Simon climbing the tips and walking around Cwmystwyth again, I know he suffered for it afterwards. Thanks Simon for making the Cwmystwyth experience complete.



*The ‘Cwmystwyth Bell’
Designed & built by Roy
Quilliam - 2002*



Cwmystwyth - July 2002

Simon Hughes (2nd from left) explains all, while others look on.

I am sure the delegates left Cwmystwyth having had an insight into Welsh mining history and exploration at its very best.

Graham Levins

Thanks must also be extended to Alan Holmes for providing an excellent set of photographs of many of the society's meets, and to Dave Linton who provided a PC to display details of his web based information on the manganese mines of Merionethshire, both of which were made available for visitors to the WMS stand to peruse. If you missed it, take a look on-line at <http://www.btinternet.com/~birchlands/Merioneth-Manganese/>

12. NAMHO 2002 - Another Perspective...

To whom it may concern:

Over the recent NAMHO 2002 Weekend Conference, slanderous statements have been brought to my attention to the effect that I have gone 'Soft', I understand this to have been the term used, due to my having taken up residence at the George Borrow Hotel, Ponterwyd, for three nights.

I can assure members concerned that the visit was to check upon the quality of bed chambers, comestibles and liquor, all of which I might add, are first class.

Should I learn that these slanderous utterances are still being broadcast, I shall have no alternative, than to pass the matter across to my legal advisors, Messrs Moses, Kellow and Barrell.

Robert Walford Barnes.

News & Developments

13. 'Slate Inclined'

Pen-yr-Orsedd Slate Quarry - Good news/bad news. The good news is that I can confirm that there are still two Blondin towers standing. Previously reports stated that only one was left. Bad news; the site has much changed with a number of unfortunate 'alterations'. The slate stairway up to W8 level has been breached partway up and access is now only by the 'new truck road' as the old incline further north east has gone. A number of buildings have disappeared, although W6 and W4 seem to have escaped so far - fortunately. W4 mill has been gated and padlocked. There is now a roundabout and one way system on site.

Aberllefenni Slate Quarry - As previously reported in 1999 the table incline has been removed. Apparently the Mines Inspector dictated its fate considering it unsafe being so close to the working adit. (*Apr. 02*) There have been further developments seen on a subsequent visit - one of the buildings close to the above adit has disappeared and the floor only remains. More disconcerting however is the water balance waste incline. Part of the base has been removed in what appears to be a clearing exercise with a Bucyrus shovel on site. It would seem that it is only a matter of time before this suffers a similar fate. (*Sept. 02*)

Rhosydd Slate Quarry - I have been advised that there has been more movement on the surface around the Floor 2 adit area.

Talysarn Slate Quarry - There has been an apparent recent fall from the south face of the old pit working.

South Dorothea Slate Quarry - The Penygroes bypass has now opened with slate waste from the tips of this quarry used as hardcore. Work is still in hand to remove waste but for which project now is not known.

Nant-y-Fron Slate Quarry - Part of the area around the mill has been disturbed. The slate being robbed for apparent 'domestic' projects.

Twll Llwydd Slate Quarry - The quarry is still in operation by the Humphrey brothers who have been working it for around thirty years, prior to this it was operated by their father. Part of the extraction operation is by the old rope around the thigh method. The men are also farmers and the quarry is not full time.

Ty Mawr West Slate Quarry - Applications have been submitted to apply for a licence to clear one of the tips on site. The waste tip is between here and Tyn'y'Weirglodd Slate Quarry.

Gallt-y-Fedw Slate Quarry - The lovely little office building sited close to the former pit workings has seen part of its ornate roof suffer a further collapse. Only around a third now remains intact.

Tan-yr-allt Slate Quarry - Bulk removal of some of the tips are being considered as part of the Slate Regeneration Scheme.

(Above observations noted during May 2002 unless noted otherwise.)

Dorothea Slate Quarry - Unwelcome visitors attempted to gain entry into the Cornish Beam Engine house, during June, fortunately they failed.

John A. Knight 15.9.2002

14. Welsh Mines Preservation Trust - Graham Levins provides an update of activities...

The latest Welsh Mines Preservation Trust meeting was held on Sun. Oct. 6th 2002 at Pontypool followed by a visit to the Glyn Pits. It was great to see the old Engine Houses surrounded in scaffolding, a visible sign that at last something is being done to preserve these wonderful unique buildings.

The Trust are planning to organise a joint WMS / WMPT working day or weekend next summer. Sites that have been suggested so far are Dylife and Red Dragon. If anyone has any other ideas of a mine site in Wales that would benefit from a day or two of cleaning up, undergrowth clearance or minor repairs, please let me know. There is also the possibility that a longer-term project could develop. A decision on the location and date of working day/weekend will be made at the WMS meeting at George Halls next March, and will be published in the next WMS Newsletter. This will be a great opportunity for us to put something back into mining history to repay the enjoyment we all get from visiting and exploring old mine sites. So think about coming along and getting your hands dirty, and I am sure the day will end with a good meal and a few pints.

The Trust is committed to the preservation of relatively undisturbed mine sites in Wales, the first step is to create a database of these sites, we would be grateful of any suggestions, along with details. Each location will be considered with a view to having the site Scheduled, if justification exists. Whilst on the subject of Scheduling, the Trust is in contact with Cadw regarding the possibility of getting further mine sites Scheduled and would be much obliged if WMS members would advise us of any which they think should be included.

Graham Levins, Secretary WMPT

Graham can be found at; 1 Stonecrop Close, Broadfield, Crawley, West Sussex, RH11 9EP.

E-mail: graham.levins@virgin.net

15. Miners Bridge - "Today (*Friday 27th September 2002*) I went to the opening of the rebuilt 'Miner's Bridge' at Pontrhydygroes, located at **NGR SN 738 722**. If you are in the area it is well worth visiting and allows spectacular views of the Ystwyth gorge below the Miner's Arms. If you are unaware of this gorge, you will be surprised. I heard someone dub it 'The

Parson's Bridge of Ponrthydygroes', which is not far from the truth. Not a place for the faint hearted !"

Simon S. J. Hughes

16. Cwmystwyth Publication - David Bick suggested that the slides of Cwmystwyth, that Ivor Richards showed at the Ludlow winter social meet in March, ought to be published. (Ref. N/L 46, Item 7). Ivor and myself are pleased to say that not only were they taken with both recording and publication in mind but that discussions are afoot to get them into print and available to a wider audience.

Some members will be aware that a complete survey of Cwmystwyth has been in progress for over a decade and that it is nearing completion. It comprises not only plans but also longitudinal and transverse sections, and has been paralleled by a comprehensive photographic survey, some highlights from which were shown by Ivor. The survey has become greatly extended both because considerable areas of workings were dug into and, because as the survey progressed and standards improved, it became necessary to re-survey considerable areas to maintain a uniform standard.

It is intended that the publication will comprise a counterpart and extension to Simon Hughes's monograph published as British Mining No.17 in 1981 (*see also Item 25*), rather than duplicating the material presented in that publication. To this end, discussions are in progress with Simon Hughes, the Early Mines Research Group, the Royal Commission on Ancient and Historical Monuments in Wales, and other bodies that have been active in, or sponsored, research and fieldwork on this mine, with the intention of presenting the last twenty years worth of work on this nationally important multi-period site.

17. Cwmystwyth - Blue Level

In Newsletter #44, Item 44, Simon referred to differing interpretations of the identity of Blue Level (tentatively identified as Waller's early C18 'Silver Hill Mine' - BM 17, p.11) which he described as 'inaccessible' (BM 17, p.70). Inspired by this, and working plans of Cwmystwyth that show a level of this name, Barry Clarke reported to Graham Levins, Simon, and myself that he had entered the level that Simon described as inaccessible. Detailed discussions indicated that he had entered the level, named as Pengulan East Level by Simon (BM 17, p.71), which, although a little narrow at its entrance, has never been blocked. As Simon's and my interpretations of some of the levels in this, the Pengeulan section of the mine, differ, we are corresponding on the matter and will in due course present our conclusions to WMS members via the newsletter, for Blue Level is of some importance in view of its possible driving by Waller.

Robert Protheroe Jones - NMGW Curator. (Above two items)

18. Copa Hill, Cwmystwyth. With reference to Item 8, N/L No. 46, David Bick states; 'I am pleased to read in the report on 10 years work by Simon Timberlake and Co., that it is now accepted that galena as well as copper was being mined here in Bronze age times. However it is always assumed that the copper ore was used for smelting to copper, but as I have said elsewhere, in mid Wales at least, there is not a shred of hard proof of this, since no trace of smelting slag or furnaces has ever been found. The ores for cosmetics or pigments was perhaps the miners' real aim.

19. Review of the Royal Commission on Historic Monuments in Wales (*Ref. Item 15, N/L No.46*) Terry Evans and I had a very fruitful and sympathetic meeting with the official conducting this enquiry on behalf of the Welsh Assembly. Our relations with Cadw were

also discussed, not least the delays involved in any attempt to get things moving, and the generally reactive rather than proactive attitude. It was clear that our experience is far from unique, but whether anything will result is another matter.

20. Anglesey Mining Plc. - I have had shares in this venture for many years and seen them inexorably sink to the bottom, with a nominal value of one penny. They are in fact, worthless, but as at Cwm Dwyfor, (The Old Copper Mines of Snowdonia, p. 3 1), until the corpse is quite cold, the directors refuse to give up. With only one person employed, (what for is not recorded), there are no more glossy coloured annual reports but a mere single sheet of A4. It would be nice if the towering headframe, a landmark for many miles, could be preserved as a monument to what was once the most famous copper mine in the world - Cadw please note.

21. Snowdonia Copper Mines (*Ref. Item 26, N/L No.46*)

News that my papers have been deposited in Caernarfon Record Office, like the death of Mark Twain, has been somewhat exaggerated, for scarcely had it been done, than I withdrew them. For quite out of the blue, the Landmark Publishing Co. advised me they would be willing to bring out a bigger and better edition of 'The Old Copper Mines of Snowdonia', which sold 4,500 copies and has been long out of print. Work on the new edition is well under way, and it should be out in the spring. Place your order now to avoid disappointment. **Note:** Any corrections or new material, good underground photos etc., would be welcome and acknowledged if used in the book.

David Bick (Above four items)

22. The Aggregates Levy Sustainability Fund for Wales. - This fund draws its income from the industry by way of an environmental tax on the commercial exploitation of aggregate in the UK. The fund is largely targeted at environmental improvements and reducing the impact of quarrying but there is money available for conserving geological features and the historic environment. Consideration will be given to schemes which 'conserve and interpret historic sites affected by the quarrying of aggregates'. It is evident that this will include abandoned quarries and associated processing areas.

If any member has a proposal to conserve former quarrying sites they should contact the Sustainability Fund Unit, Cathays Park, Cardiff, CF10 3NQ. Tel.: (02920) 801 492

Peter Cloughton

23. Clogau Gold Mine - Cambrian Goldfields Ltd., who possess an Exploration Licence for the evaluation of this mine, have applied for outline planning permission for the modification and extension of the existing surface buildings (at the Llechfraith Adit entrance) to allow the installation of a compressor and 'laboratory' for the crushing and separation of gold bearing 'samples'. It is proposed that these 'temporary' structures will be used for a five year project after which the site will be returned back to its current configuration.

24. Stoic Mining - With reference to Item 10, last N/L, Stoic Mining have won their appeal against refusal to give planning permission for the sinking of a shaft for exploration of old workings at Maestryfer.

Our Dolgellau Correspondent

25. Cwmystwyth - (*one last time !*) Simon Hughes states 'My volume on the Cwmystwyth Mines (British Mining 17) was researched in the late 1970s, and whilst not scarce, it is now

rather long in the tooth. I have now digitised most of my photographs, maps and drawings and hope to produce a more substantial updated electronic version on CD.'

He continues, regarding the 'proposed safety works', (*ref. Item 18, N/L No.46*): 'Thank you all for responding to my request regarding how your complaints were treated by Ceredigion District Council.'

And finally (*ref. Item 9, N/L No.46*) 'Many thanks to Dr David James, Mike Munro and particularly Roger Bird for investigating the linear features above Jackilas Adit and Herbert's Stope on Copper Hill at Cwmystwyth which looked like a leat on the aerial photographs. The lower one appears to be a leat to divert the stream, which now runs into Herbert's Stope, into Nant yr Onnen. This is unlikely to pre-date the stope which is known to date from Morgan Herbert's tenure in the 1680s. The upper feature appears to be a sheeptrack !'

26. Bwlchglas and Cwmbrwyno - I am also in the process of transferring most of the articles which I have written over the past 25 years onto CDs along with additional material which is now freed of all editorial constraints. Apart from the new Cwmystwyth edition, mentioned above, Bwlchglas and Cwmbrwyno are already done.

27. Cwmsymlog - Shaft y Ddraenen, near the chimney at Cwmsymlog, is still in the process of settling down. The subsidence has exposed a very interesting sequence of rock and tailings which must date from the 18th century when Lewis Morris shows the stamping mill near this point. It is quite likely that this shaft is a relic of the Elizabethan exploitation and appears to have been in existence, though not in use, in the early 1850s.

28. Ceunant Mine - Several high fences have been erected around the open shafts at Ceunant Mine which are of such a nature as to preclude all access. I presumed that this was constructed to reduce the insurance liability of the Crown Estates following an incident when a sheep fell into an open stope a couple of years ago, which in turn precipitated a heroic and daring rescue and much press publicity.

29. Esgair Hir - I was disgusted to find that Esgair Hir has been trashed by a combination of the farmer dumping dead sheep and agricultural refuse into the shafts and off road motorcyclists. The fences appear to have been purposely removed so that trailers can be backed up to as close to the shaft as possible and I also noted that someone has been using a length of rail to destabilise the masonry arch leading into the Engine Shaft.

30. Darren Mine - At the northern end of Darren Mine, to the west of Francis's Shaft, a considerable amount of the dump, from Level Y Coed, has been carried away and during the operations the cap over Francis's Shaft was badly damaged.

31. West Goginan (and a dog !) - Apparently a dog fell down a shaft at West Goginan mine during the middle of August but the outcome of the incident is not known.

32. Environment Agency - Metal Mine Strategy for Wales

The recently released Metal Mine Strategy for Wales has not been universally embraced, which is a great shame as it had the potential to be a definitive document. Some of the initial flaws were never ironed out - why include Temple and ignore the environmental problems at Bacheiddon, Bwlchglas etc. The Alltycrib drainage adit and slimes lagoons were not included in the area under consideration, and as for Henfwlch emitting pollution, this can only be called into question if it is either damaging the fishing in Nantymoch reservoir or if there is any value in selling the water for domestic consumption.

The interested parties - now called 'stakeholders', have been identified but the responses need some measure of co-ordination before any policy changes can be made. I was really surprised that the tourist lobby was being taken into account - there is barely enough tourism to support Llywernog and I am fearful that an interpretative centre at Cwmystwyth will not encourage more tourism but reduce the numbers supporting the museum. Surely tourism is not within the domain of the Environment Agency unless tourism is to provide the revenue for reclamation ?

I believe that the next move will be to set up a series of ad hoc committees to investigate environmental improvements using various sources of funding.

Simon J.S. Hughes (Above eight items)

33. Bryneglwys

Fans of this site will be encouraged, or worried, that recent clear felling makes obvious the entrances to adits 5C and 10C. Also, the trees lining the Narrow Vein haulage wheelpit have at last been cut down making for easy access to the various build-and-cover tail-races and the leat to the mill that lead off from the pit bottom.

David James

Query Corner

(Please reply direct to the correspondent. Any follow-up info will however be gratefully received by your editor to allow a suitable response to be placed in the next newsletter for the benefit of all.)

34. Quick-Lime 'Explosive' - George Hall asks the following on this intriguing subject;

'Can anyone please direct me to an authentic account of the use of quicklime for breaking rock in mines ? I haven't be able to find one in any of my books - surprisingly, not even in Agricola's 'De Re Metallica'. Nellie Kirkham in 'Derbyshire Lead Mining' (1968) says that holes were bored and filled with quicklime, when wooden plugs with holes in were inserted, and water poured down the hole, causing the lime to swell and so break the rock. This certainly seems probable, but she doesn't give a specific reference. I would like to see a contemporary account, if there be one, rather than rely on present day assumptions, no matter how intelligent. It seems to me that in many cases enough water would be present in the rock to obviate the need of adding more.

She also says that 'In old workings, an experienced miner can distinguish lime-blasting from powder-blasting', but does not say how. If so, this might be a great help in dating, as lime holes would indicate a time before about 1700, and powder after. I've always assumed that lime holes were of larger diameter, but is this always the case, and if so, what are the critical sizes ?

I cannot see that lime would be effective in driving a level. Surely it would need two free faces ? It would require, I should think, the sudden and much greater power of explosives to blow out a face in shaft or level.'

G. W. Hall (See Item 2 for contact details.)

35. Pennant Stone 'Mines' in the South Wales Coalfield - Earlier this year I had the opportunity to explore a short section of an underground stone quarry near Cilfyndd in the Taff Valley. Water, or perhaps more accurately, a lack of air (!), prevented further progress.

It is hoped that the water level can be dropped sufficiently to allow access into what appears to be a large chamber. I'll report on further progress as and when it happens.

Initial research into this stone quarry has produced little information of relevance. The 'List of Mines', as prepared by H.M. Inspectors of Mines, shows there to be several underground workings for Pennant Sandstone in the Valleys active around the late 1800's and early 1900's, but none appear to be this particular quarry. There are many surface Pennant Sandstone quarries in the South Wales Coalfield, but only a few had underground workings. Interestingly this particular one had no surface workings at all, and is shown on the 1873, 1st Edition, 25" O.S. as 'Old Level (coal)' !

If anyone has any information to offer on the subject of Pennant Sandstone quarries in this part of Wales, then please do let me know.

Michael P. Munro

36. Royal Wedding Rings.

It seems that at every possible opportunity the owners of the Clogau mine at Bont-ddu claim that they, or the mine, have produced the gold for most of the royal wedding rings used in the last century. Not being satisfied that this is true, I've done a little extra research, and as far as I can find out no Clogau gold has ever been used by our royalty.

The first use of Welsh gold for a royal ring seems to have been at the wedding of Prince George, later King George V, and Princess Mary of Teck in 1893. This came from Gwynfynydd mine. A substantial amount of gold was used for the investiture of the Prince of Wales (later Edward VIII) in 1911, which was obtained from the Prince Edward mine, near Trawsfynydd.

By the time of the wedding of Princess Marina to the Duke of Kent in 1934, although the rise in the price of gold from 1931 had encouraged prospecting for it in Wales, the metal itself was proving difficult to find, and three mines, Bedd-coedwr (afterwards called Marina), Prince Edward, and Ogofau or Roman Deep (now called Dolaucothi), had to combine to provide enough. In the end there was a surplus, as sufficient remained to supply the metal for subsequent rings, although this stock had been used up by 1980.

Fortunately we discovered a rich vein at Gwynfynydd in 1983, a discovery for which I claim most of the credit (using Sir Mark Weinberg's money, admittedly !), with the result that he was able to present the Queen with a one kg. bar of Gwynfynydd gold, which I presume will keep the royal family in rings for quite a long time.

I wish to add that these remarks are not entirely my own, but owe a good deal to Trevor Chesters' knowledge.

If anyone is able to confirm or confute the above history, I should be most grateful if they would tell me, either directly or through the Newsletter, as it seems to me desirable that such spurious claims should be refuted.

G.W.Hall

37. Mystery Mine

Two water-filled shafts and several collapsed adits are present along the north-east flowing tributary of Nant-y-Crug around SN 855 831. The workings lie approximately on trend with both the Sigenlas Lode and the N-S lode at Pant Mawr (NGR SN 852 823) and could have been driven towards their intersection. There is not much spoil. The mine site lies on a gentle anticline in rather shaley rock. I am indebted to Simon Hughes and Ivor Richards for checking the literature which establishes that there appears to be nothing recorded about the

site. One vague reference to trials “west of Sigenlas” would not fit the bill; neither would a now afforested site recorded by Foster-Smith nearby at Llyn-du (NGR SN 867 833) which lies on trend with a prominent ENE trending lineation along Nant Twlch. Any information welcome !

David James. *davidmd.james@virgin.net*

[Not being too familiar with this area, I took a look at the 1:25,000 current edition OS, and noted ‘Tip (dis)’ marked further up Nant-y-Crug. They are also marked on the 1st edition 6” OS, but not described. The 6” map also shows what looks to be a spoil tip at SN 8325 8490, but shows nothing where David noted the shafts & run-in adits. M.P.M]

38. Cpt. Matthew Francis - I’ve heard that the Ellis Island data from 1850 onwards is now available on-line, possibly through the Library of Congress or the Smithsonian Institute. Has anybody had a chance to look at this data ? I don’t have the time, but I think that there is now a good chance of finding the late Captain Matthew Francis passing through Ellis Island, where he is supposed to have died, en route from Bilbao, to the USA in 1870. His death at the time the Darren bubble was about to burst is just too convenient an ending to this scandal. Spargo’s obituary to his dear departed friend and colleague at Darren is probably a ruse. He was very fond of his Nanny Simms and if he changed his surname, Simms is a distinct possibility as is Grose, which was his mother’s maiden name - much loved as an identification parameter in the present day.

Simon J.S. Hughes

Book Reviews & Bibliographical References to Welsh Mines & Mining

Book Reviews

39. ‘Stationary Steam Engines of Great Britain; The National Photographic Collection; Volume 4: Wales, Cheshire & Shropshire’, by *George Watkins*. Published by *Landmark Publications*, as part of their ‘Collector’s Library’, h/b, 221pp. £24.00

George Watkins spent much of his spare time photographing and recording stationary engines around the UK, from the 1930s until 1965, at which point he was appointed as a research assistant at Bath University. Here he continued his work full time until the late 1970s. This volume is one of a series of ten, in which several hundred of his photographs are published. Despite the title, there are several photographs of steam locomotives, mainly of the narrow gauge variety, at slate and stone quarries, there are also many images of colliery winding and ventilation engines.

Although one may not be able to invest in the whole series of ten volumes, given the high coverage of Wales in this particular volume, with many plates being associated with mining, (including one of Glyn Pits in 1956), this book comes highly recommended.

M.P.Munro

40. ‘The Rock Cannon of Gwynedd’, by *Griff R. Jones*. ISBN 0-9533692-1-8. It is Only available from Plas Tan y Bwlch, Snowdonia National Park Environmental Studies Centre, Maentwrog, Blaenau Ffestiniog, Gwynedd, LL41 3YU at £8.50, including post and packing.

It is well known that Rock Cannon were habitually used to celebrate heydays and holidays in north west Wales and most people knew several survived but Griff locates well over 200 sites with full descriptions and some supported by photographs. He researches the history of

individual sites, an overview of their use as well as technical details of firing methods. There are 147 pages with around 60 photographs including the largest cannon in Bethesda with 195 holes ! There is a fully listed appendix showing map reference, location and number of holes. The book is well produced and is excellent value at the price. Put it on your Christmas list.

John A.Knight

41. ‘Recording The Underground Archaeology of Mines - A descriptive Specification.’ This draft document, authored by Martin Roe, although not a guide to surveying or archaeological recording itself, discusses the standards and guidelines that should be followed when recording underground workings and artefacts. It raises some excellent points about publication and archiving of records, stating ‘If a survey is produced and then just sits on a shelf then its creation was pointless’, and suggests that a short note ought to be placed in a relevant newsletter (such as this one !) identifying the existence and location of the survey. It also points out that “archaeology is not all about finding things, it is about understanding what has been found”.

A copy of this document, which ought to be mandatory reading for all those who venture underground, can be obtained from the NAMHO website <http://www.namho.org>

42. ‘Life on a line - A manual of modern cave rescue ropework techniques’, by Dr. D.F.Merchant. This publication, despite its sub-title, is essential reading for all those who engage in underground exploration of the slightly more serious kind. What is also noteworthy, and something for which the author must be highly commended, is that it is freely available for download (as Adobe .PDF files) from the internet at <http://www.draftlight.net/lifeonline> To date, two of the three parts have been made available, which themselves run to a respectable 117 pages of extremely sound and informative advice on how to and (perhaps more importantly !), how not to, use ropes and associated equipment when practising SRT underground. Despite being focused on the use of such techniques for rescue purposes, much of that covered is standard procedure when exploring mine workings which are a touch ‘vertical’ in places. Download your copy now !

M.P.Munro

43. ‘Metal Mines of Llanengan: Mining Ventures in a North Wales Parish’, by John Bennett & Rob Vernon. Published by Gwydyr Mines Publications, 17 Apple Lane, Appleton, Warrington, Cheshire. WA4 5JR. h/b, 150 pp. £15.00 plus p & p.

This odd collection of mines in the Lleyn Peninsula has been largely forgotten by the world – and probably many mining history enthusiasts. There is no excuse for us now as they have now had the full blown Bennett & Vernon treatment. Plenty of photos, maps and drawings, and - as is always delivered by this pair – a huge amount of research work presented in a coherent fashion. They have opened up a fascinating chapter of mining history – a WMS visit to this area in the near future is a must. Until then WMS members can be assured of an enjoyable armchair field trip via this book.

David Roe

Bibliographical References to Mining in Wales

44. ‘Abersychan Ironworks 1827-1884’, Brian Foster. Published in ‘Gwent Local History’, No.91, Autumn 2001, pp.19-53.

45. ‘Phosphate Mining’ Mention of phosphate mines in the Berwyn Mountains near the Tanat Valley. *PDMHS N/L, Oct 2002, No.104, pp. 5-6*

46. Welsh Mines & Quarries on the 'World Wide Web'

Amendments to the publications of Alun J. Richards, which include 'Slate Quarrying in Wales' can now be found on his web site at:

<http://homepage.nflworld.com/alun.richardsslate>

47. Welsh Mines Preservation Trust - *November 2002 Newsletter, A4, 5pp.* Subjects covered include work at Glyn Pits, conservation plans for Clive Engine House, Talargoch, and proposals for digitising the Mining Journal.

48. Esgair Lle(e) And West Esgair Lle(e).

The only disappointment, for me, in our President's series of books on the mines of mid-Wales, is that the descriptions of the various mines are not long enough. I can see that he could not give himself unlimited space, but occasionally I think this abbreviation leads to wrong impressions. I've recently gone through the entries on Esgair Lee and Great West Van in the Mining Journal, and this research has revealed further data that I think are worth presenting to the Society, to complement what David wrote on these mines.

The Mining Journal records begin in 1849, when the Esgair Lee Mining Company reopened the old workings east of the uppermost reaches of the Afon Castell, on the western slopes of Cripiau (GR: 795 8295, later Old Esgair Lee). There had been some recent activity, leaving a water-wheel on site, and a little partly-dressed ore. This work, I infer, had been done by John Salmon and his partner Crockford, of the gaming house. They seem to have had extensive mining licences from the Crown at this time, and for some years raised a good deal of blende from Nant-y-Creiau, and had sunk the Pen-mynydd shaft at Esgair-mwyn.

The first report, dated February 14th, over the signature of John Bryant, described a deep adit driven into Cripiau, on the south lode, for 28 fms; an engine-shaft sunk through it and 3 fms. below; and a cross-cut extending from it for 14 fms. to the north lode, which had been driven on for 51 fms. None of this showed much mineral, although there were some ancient stopes. Higher up a shallow adit had been driven for 43 fms. on the north lode, with a winze 9 ft. deep 20 fms. in, that is, a little over 20 fms. ahead of the deep adit, and this winze showed some better ore.

Efforts were therefore concentrated on sinking the winze, called Morgan's, driving the deep adit under it, and establishing an intermediate level half way between, called the 12 fm. level (sometimes 12 above adit). This work led to the discovery of the Caunter lode, crossing the North lode east of Morgan's winze, and striking much more to the north-west than the other lodes. It proved to be the best lode in the mine, bearing ore both north-west of its intersection with the north lode, where a new adit from surface came in to meet the 12, and south-east. Here a poor patch was at least twice followed by a better shoot than the previous ones, and the lode was eventually followed for 200 fms. into the mountain in the shallow adit, 12, and deep adit. These ore shoots seem to have been separated by masses of pyrite. There, in 1853, it intersected the Bwlch Gwyn, or Castell lode. It was not, however, worked much above the shallow adit, in spite of this being under three hundred feet or more of cover, nor were the eastern oreshoots reached by the deeper levels from the engine-shaft.

The first sale of dressed galena, 20 tons, prepared by hand, had been made in September 1849, but promising developments, on the Caunter lode in particular, encouraged the company to erect a new 40 ft. by 2 ft. 9in. water-wheel (supplied by Messrs. Nicholls and

Williams of Tavistock), a set of 26 in. crushing rolls, and lay out better dressing floors, with several jiggling-hutches and a 19 ft. round buddle, early in 1850, all put to work in June of that year. To augment the tiny Afon Castell, a new leat brought water in from the Afon Tarenig at Eisteddfa-curig.

To encourage a supply of labour at their rather remote and unpopulated site the company acquired the Plynlimon Hotel at Eisteddfa, which I presume to have been derelict, and the adjoining stables, and had them converted into a house for Captain Michael Barbery and cottages for the miners. They seem to have paid £300 a year rent for this property, a lot of money at that time.

In spite of the attractions of the Caunter Lode work continued on the other lodes about the engine-shaft, which was sunk to new levels at 10, 20 and 30 fms. To pump here, at least beyond the 20, in addition to crushing and hauling, proved to be too great a load for the 40 ft. wheel, and in 1852 a new wheel, 24 ft. by 5 ft. 7 in., was erected for that purpose, below the 40 ft. Unfortunately an adequate supply of water could not be obtained, and it proved impossible to develop the 30, a failure that no doubt contributed to the abandonment of the mine.

Also, although most of the development showed some galena, and values as high as 3 tons per fm. were occasionally seen, very little lode material carried more than 10 cwts. of galena per fathom. The ground could be stoped quite cheaply, generally at between £2.50 and £3 per fm., but even then this grade would not support all the expenses of a mine, and operations were carried on from first to last at a loss.

At the first meeting of the new company, in November 1849, John Salmon, one of the vendors, took the chair. At some later date Mr. T.P. Thomas, of Old Broad-street, became purser, but in December 1851 it was announced that John Taylor and Sons were to take over the management at an annual salary of £50. This change, however, never happened, as, at a contest at the February 1852 meeting, Mr. Joseph of Sise Lane took the post, at the same salary. Mr. Thomas regained it in August 1853.

Intoxicated by developments on the Caunter Lode going into the mountain, he announced at the October 1853 meeting, that he hoped from then on to make £200 to £250 a month profit, and to declare a dividend in the coming February. That winter, however, everything seems to have gone wrong. Not only would the wheel not keep the 30 drained, but an ore pass ran together, blocking stopes. No reports appeared after March 1854, and in December of the following year Mr. Thomas himself offered the property for sale by auction. It fetched £490.

By this date £7 had been called-up on each of the 1,280 shares, and no dividends had been paid, although shares had once changed hands at £26.

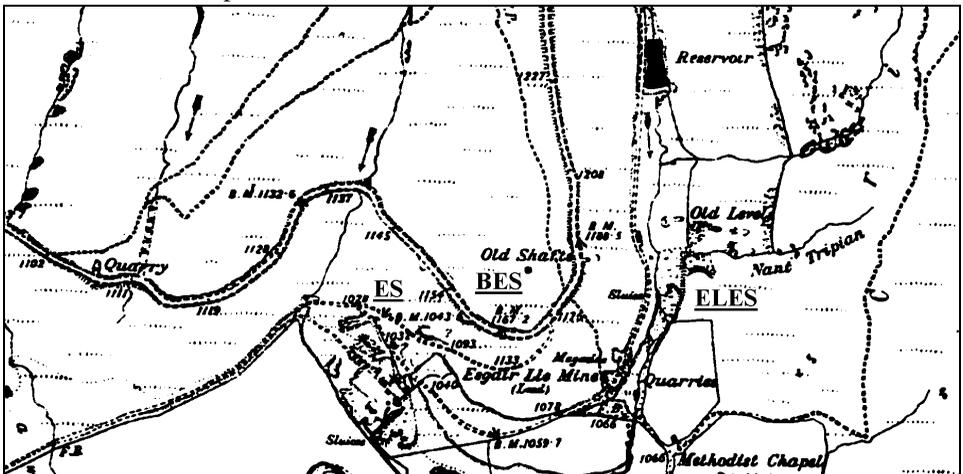
This working dates from a time when the Mining Journal had to publish mine reports anonymously, on pain of attracting advertisement duty, so that it is not easy to trace the names of agents, but Michael Barbery (or is it Barbary ?) had the post in 1849. He may afterwards have been replaced for a time, but if so had returned by 1853. However, after August 1853 all reports appeared over the name of John Lean.

This company also had the mineral rights to the west of the upper reaches of the Afon Castell, the descending ridge round which the A44 loops. This they called West Esgair Llee. It later became known as Great West Van.

They did some work here in 1850 only, starting a new adit going west from below the road, towards ancient workings above, but did not push it far.

A new company, the Esgair Lee Mine Co., an early registration under the 1856 Joint Stock Companies Act, had taken the mine on by June. It had a nominal capital of £10,240 in £10 shares, and offices in St. Stephen-street, Bristol. With Matthew Francis as agent some development was done in the '12 adit', and in three levels from the engine-shaft. But although about 80 tons of dressed galena were sold, before long they too came to grief, the plant being offered for sale, under execution by the Sheriff of Cardiganshire, in April 1858.

At some time in the early 1860s Mr. Stephen Barker of Birmingham reopened West Esgair Lle. He doesn't seem to have done much, if anything, at the old mine, but explored the lodes to the west of the upper reaches of the Afon Castell, where there is a run of ancient workings at surface, crossing the top of the bank. As before mentioned, these had been looked at, but soon given up, by the Esgair Lee Mining Company in 1850. He then worked this part steadily, if only on a small scale, as a private venture. He evidently sank a new engine-shaft, which I think must have been that marked on the 2nd edition 6-in. O.S. map at SN 793 829, as it was later stated to be 108 fms. from Eliza's shaft. This agrees with the section in David's book, although strictly speaking the Old Engine Shaft (of the 1850s) is at Esgair Lle, that is, 100 fms. further east still. It seems to me that it must also have been Mr. Barker who established the dressing-floors, and who started, or at least extended, the adits to the west of and below the A44 loop that later became Great West Van.



Esgair Lee & West Esgair Lee

ES-Eliza's Shaft **BES**-Barker's Eng' Shaft **ELES**-(Old) Esgair-Lee Eng' Shaft

Reproduced from the 1886, 1st Edition 6" Ordnance Survey map

Cardiganshire Sheet VIII, NW (G.W.Hall)

He was fortunate enough to encounter a very rich lode in the 22 fm. level in 1869. This was a good time for such a find, as the lead mining boom of 1869 to 1871, caused by the great discoveries at the Van mine near Llanidloes, and at Roman Gravels and Tankerville in Shropshire, had just got under way, and promoters were on the lookout for promising properties. Mr. Barker took the opportunity by selling the mine to Thomas and William Gundry of London and Cornwall, and friends, for £25,000. They formed The Esgair Lle Silver-Lead Mining Co. (Ltd.), for the purpose of developing it, and making themselves a lot of money. The prospectus stated that the Company paid £67,000 out of its capital of £72,000 for the property. A possible £42,000, less expenses, for the promoters ! However, the capital

was not fully subscribed, and although they worked the mine steadily, it was with some financial difficulty.

The prospectus stated that '150 tons of lead have already been sold'. This presumably refers to Mr. Barker's activities. If so the Mineral Statistics are not complete in the 1860s, although they agree closely with the sales listed in the mine reports of the 1850s and 1870s.

Henry Taylor, the Aberystwyth representative of the famous firm, who was to be the manager, appeared in the prospectus as a director of the new company, although he later sold his interest to the other directors. He said that the mine contained one of the finest lodes he had ever seen in Cardiganshire, so there was good reason for optimism.

This company seems to have started Eliza's shaft. They also erected a new water-wheel, below the old wheel, for pumping, and in January 1872 completed a new line of pumping-rods from it to Eliza's. This is the reverse of the situation shown in David's book, but that may refer to a later arrangement. Unfortunately this fine vein did not last long, and the results of new development soon fell back from the 2, 3, and 4 tons per fm. at first reported, to 1½ tons at best, and usually less.

This now rather disappointing mine, however, experienced a sudden metamorphosis in February 1873, when it reappeared before the public under the engaging title of the Great West Van Lead Mining Company (Ltd.), with a nominal capital of £50,000 in £2 shares, of which it was stated that £10,000 would be available for working capital. At that time the engine-shaft (Barker's) had been sunk 4½ fms. under the 34, and Eliza's, 108 fms. west, to 15 fms. under adit. The previously rather poor levels suddenly, under the romantic pen of Captain James Roach, of Van Consols, became valuable. He recorded the 34 as driven 22 fms. east and 44 west, 'the greater part in a good course of ore, worth 2 to 3 tons per fm.'

To encourage the investors, a dividend of 1s. per share was paid in September 1873, and another at the general meeting held at the mine in August 1874, although on the latter occasion excuses had to be made for the failure to keep up the sales of 50 tons a month promised.

Further development, though optimistically presented, proved to be disappointing. The occasional vughs, 'filled with carbonate of lead in every conceivable shape', were spectacular rather than valuable. The cross-cut from Eliza's at the 34 to explore three northern lodes seen at surface found nothing of value. The 34 opened some good ore, but the 46 proved to be poor, owing to a change of ground to a 'dark shaley barren rock', and the company finally ran out of money at the beginning of 1877. Attempts to raise further funds by a debenture issue produced £2,218 against £5,000 asked for, and needed, while proposals to form a new company came to nothing.

Subsequent correspondence and recriminations in the pages of the Mining Journal revealed just what had gone on. Matthew Greene of Gresham House had bought West Esgair Lle from Henry Wilson, acting as liquidator for the previous company, though for how much was not disclosed. Wilson and the Gundrys, together with Greene, and with the help of W. Ward, a stockbroker in Old Broad-street, then floated the Great West Van Company, and were able to place with the public all the shares they wanted to, 7,000 (£14,000 worth). At the directors' meeting where these were allotted, the Gundrys and their friends took the remaining 18,000 as payment for West Esgair Lle and Old Esgair Lle, as well as giving themselves £4,000 in cash.

It would be interesting to know how many of these shares the Gundry connection sold while they were still marketable. Since, at one time, 'agents from Cornwall of unquestionable

judgement and integrity' 'became anxious buyers of the shares at par', one suspects quite a few.

'A Smaller Victim', writing to the Mining Journal, called this debacle '...One of the most extraordinary mining transactions ever heard of even in Cardiganshire, where the manipulation of new names for defunct and worthless concerns has been raised to the dignity of a science...'

To the beginning of 1878 the Great West Van company had sold £7,369 of dressed galena, at a cost of £8,837, and spent in addition £8,073 for 'permanent works, machinery, and preliminary expenses'. No wonder, if we add in the dividends, most of which had gone to the promoters, that the company became insolvent.

It appears that the Esgair Lle company of 1870-73 did not have rights of (Old) Esgair Lle, while Great West Van did. But in any event little seems to have been done there in this period.

While the Esgair Lle Silver-Lead Mining Co., and after them the Great West Van company, were working the West Esgair Lle mine, an entirely different group of people took up the Castell mine and Hamilton's Shaft (GR: 7785 815), to the west. They, rather confusingly, but no doubt trying to capitalise on the rich discovery of 1869, adopted the name of The West Esgair Lle Mining Company (Limited), but they never called either mine West Esgair Lle, distinguishing them as Old or Western (Castell), and Eastern. It therefore seems to me to be a misleading error to apply the name West Esgair Lle to Castell. West Esgair Lle is the mine worked under the name of Great West Van.

At the subsequent auction of the Great West Van property, in August 1878, Mr. Barker bought back his old mine, which he had sold for £25,000, at the more modest figure of £2,050. He had also the benefit of additional machinery, the new water-wheel erected in 1871, a Blake's stone-breaker put up early in 1874, the two ponds in the upper reaches of the Afon Castell made in 1875, besides drawing-machines and sundry dressing plant.

No later material information appeared in the Mining Journal, but the Mineral Statistics recorded sales of 126½ tons of dressed galena in 1880-82, 14 in 1884, and 100 in 1890-92. The Lists of Mines show a mixed succession of owners including S. Barker & Co., Great West Van, and the West Esgair Lle Mng. Co. between 1880 and 1885 (when lead prices were at their lowest). From 1890 to 1892 the Lists of Mines have Esgair Llee and West Esgair Llee separated, the former in the possession of John James and John Owen, but with little done, while around 35 men were employed at Great West Van, first by a company of that name, and then the Mendips Company, whoever they were.

The section in David's book (Part 2, page 9) shows that these later operations were in the western part of West Esgair Lle, about Eliza's Shaft, where two deeper levels at 58 and 70 fms. were opened after the Great West Van fiasco. This part of the mine had been favourably viewed back in 1877, but later explorers evidently failed to make much of it, although it should be said that they would have been greatly hampered by far lower lead prices than the £14 plus per ton that dressed galena realised in 1873.

At the present time the site is much ruined, and the wheel-pits have been destroyed. It is therefore difficult to make out all the arrangements in detail, but the leats, including that to supply the later Girard turbine, the positions of the three engine shafts, and most of the adits can be found, as well as the general situation of the dressing floors at both Old Esgair Lle and Great West Van.

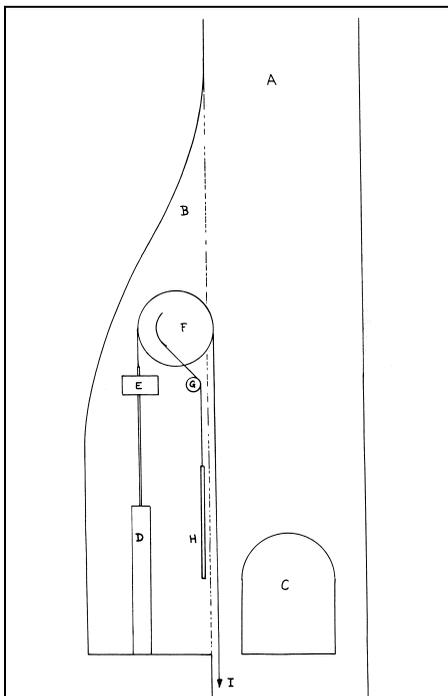
George W. Hall

Miscellaneous

49. Cwm Mawr (Fair Chance) and Cole's Pressure Engine - As noted in N/L 46, Item 13, a study has been made of the surviving data on this mine and its engine - including some supplied by Simon J. S. Hughes. Although no description of the engine structure has been found, there is sufficient evidence to indicate it was probably an attempt to build, a Westgarth-Smeaton machine i.e. based on the water pressure beam engine invented by Wm. Westgarth and installed in 1765 at the Coalcleugh Mine, Northumberland, but modified in accordance with suggestions made to Westgarth by John Smeaton. Most significantly, Smeaton proposed that the 12 foot beam of Westgarth's original engine (which was sited at the top of the shaft) be replaced by a wheel, thereby making it compact enough to work in an alcove in the side of the shaft at adit level. Westgarth's later engines were apparently of this form.

The Fair Chance engine had a 6 foot stroke in a vertical brass cylinder of 8 inches diameter driving a brass pump barrel of 5 inches diameter. When working properly, it delivered 50 gallons of water per minute at 10 to 11 strokes. The water pressure head was 120-130 feet and mine water was lifted about 135 feet to adit level. The pressure in the cylinder was said to have been 23 p.s.i., but this appears to ignore friction and drag loads. Calculations based on these figures point to an engine about 20 feet high and a surviving drawing of the alcove shows it had to fit into a slot only 2ft 6ins wide and, at its deepest, 6ft 7ins deep. The profile of the alcove suggests the probable diameter of the wheel that acted as the beam was 4 feet. This would have had a reciprocating movement through about 180°. The wheel "beam" explains the puzzling references in the records to a flywheel, but unfortunately dismisses any notion that this was a rotary water pressure engine.

First mention of the engine is in 1781, but Cole wasn't appointed to build it until 1784. The castings arrived at Aberystwyth in August 1785 and it was anticipated that building the engine would take two months. Things soon went wrong, including failure of the flywheel axle, and the first successful run wasn't until September 1787. After very many problems, Francis Thompson the engineer was called in to modify the engine in 1789, but he wasn't very successful and a Mr Onions then made further changes. These too were initially problematic, but later modifications finally resulted in an engine that in late 1790 was working well. Unfortunately, by that time the mine itself was not only close to exhaustion, but large numbers of men were having to be used to pump water out of the levels



The Fair Chance Engine

A possible arrangement - Roger Bird

- | | |
|---------------------|-----------------|
| A Shaft | F "Flywheel" |
| B Engine "House" | G Back Wheel |
| C Cross-cut to Adit | H Plug Frame |
| D Great Cylinder | I Pump Rods |
| E Balance Box | Leading to Pump |

below the reach of the engine. In April 1791, the order was given to close the mine. The engine was kept in working order and seems to have still been there in late 1792, but its fate after that is unknown.

The recorded history of the Cwm Mawr Mine itself started in 1753 with a lease to David Hopkins and others, but by 1756, Chauncey Townsend and John Ball are reported to have been in charge. Mentions of drawing water in 1759 and 1763 suggest work continued, but with increasing difficulty due to water ingress. In 1769, a partnership was formed between John Probert, Thomas Johnes, Col. Vaughan and Edward Hughes to work what then became the Fair Chance Mines. According to Probert, the mine then remained active until 1791, despite the latter two partners dropping out, but the absence of accounts for the period 1771-1777 and drafts for new leases both suggest a break then. Work did resume in 1777 and a long adit level was driven, but came in above the bottoms of the mine. This seems to have led to the decision in about 1781 to install a water pressure engine, but, as noted above, it was 1790 before the engine was working well. The mine only had one ore body (which was of small lateral extent, but went down to some depth) and could only be worked in those periods when the engine held together long enough to keep the water out. As a result, John Probert, who ended up with three quarters of the mine, made a loss of over £4,000 in the venture.

John Taylor tried Cwm Mawr again in 1836-40, installing another water pressure engine. Little is known of this except that it was transported from Taylor's Flintshire mines via the port of Bagillt. It may have been built at their Rhydymwyn Foundry. When this second engine was put to work, nothing of value was found and the mine was abandoned until the St. James' Syndicate/Cambrian Lead & Zinc Mines Ltd. worked it and neighbouring Bronberllan for a period between 1907-17. The only recorded output in *Cardiganshire Mines* is 106 tons of lead and zinc ores in 1913.

Roger Bird, Aberystwyth.

50. The Fairchance Engine - George Hall adds some rather interesting field observations;

'Sometime in the early 1940s our school underground exploration club lowered one of its members down the engine-shaft at the Cwm Mawr mine, just north of Pontrhydfendigaid. It wasn't me, but I was present. Whoever it was, if I remember correctly, found himself at adit level suspended over a pool of water (the shaft going on down), and could not manage to swing himself far enough to reach solid rock, and so get into the level. However, he collected some data from which I made a sketch section. I looked this out the other day, and see that we reckoned it to be 150 ft. to water, the deep adit, with a short, shallow adit coming in from the north-east at 30 ft.'

'What is particularly interesting now is that our explorer saw a rectangular cavity in the north wall, about 15 ft deep and 30 ft. high, with a much smaller cavity facing it, about 10 ft up the opposite wall. This cavity was empty when we were there, but I now suppose it to have been the space in which the hydraulic engine once operated. Could this have been so?'

51. Coalminers Song - Heard recently in a pub in South Wales. Obviously it dates from the start of the Trades Unions movement in that area.

A miner's lot is like a sailor's,
Sailing ships across the waves;
Every day his life's in danger,
Still he ventures, being brave.
Watch the rocks, they're falling daily,

Careless miners always fail.
*Keep your hand upon your wages,
 And your eyes upon the scale.*

You've been docked and docked again, boys,
 You've been loading two for one;
 What have you to show for working,
 Since your mining days begun ?
 Worn out boots and worn out miners,
 Lungs of stone and children pale.
*Keep your hand upon your wages,
 And your eyes upon the scale.*

In conclusion, then in memory,
 Keep this watchword in your mind;
 God provides for every worker,
 When in Unions they combine.
 Stand up now and stand together;
 Victory for you prevail.
*Keep your hand upon your wages,
 And your eyes upon the scale.*

I might sing this at the next Meet but, with any ordinary luck, I'll have forgotten the tune !

Adrian Barrell, July 2002.

52. Ore genesis in Central Wales - David James replies to Peter Donovans comments, (*Ref. N/L 46, Item 48.*) as follows...

'It is of course true that the foundation of geological knowledge lies in the field; only there can one confront reality and formulate appropriate questions. However what my article (*Item 52, N/L No.45*) tried to show was that disciplines of laboratory technology (to which I might have added literature search) yield insights impossible to obtain from field observation alone. Apparently I have failed to convince Peter Donovan of this and must try harder next time ! I would maintain that a similar argument applies to many other field-based disciplines, such as industrial archaeology. On his specific queries or comments:-

The opinion that the slate beds were deposited at a 'similar' time to the lead veins is defensible only in the very loose sense that geological time is very long. Much greater precision is now available and, more importantly, proves very helpful in constraining models of ore genesis. The difference of at least 50 million years between sedimentation and mineralisation is far beyond analytical error and must be treated as significant. I did not state this specifically, for which my apologies.

Hydrothermal systems recirculate fluids, using finite volumes over and over again to the point that the volume may become 'effectively' (which was my original wording !) infinite. A relatively small volume of fluid can thus, over time, transport a relatively large amount of metal in solution if it extracts it from country rock along one part of its route and deposits it as ore along a different part. If a rock falls on my head it is effectively unimportant whether it weighs 10 tons or has infinite weight; what may be important, depending on fall distance, is whether it weighs 10 tons or 10 ounces, a much smaller absolute difference. The use of

'effectively infinite' is a useful shorthand to conceal ignorance of quantitative detail while accepting qualitative confidence in an end result.

The sequence of precipitation of the various ores is complex and beyond my competence; I recommend the article by John Mason that I mentioned in the selected references.'

David James.

53. Copper Ingots from the shipwreck of the SS St. George. - This vessel, which sank with eleven hands, some 18 miles off Porthreath, Cornwall, on November 26th 1882, was carrying, amongst other cargoes, 60 tons of copper ingots, as manufactured by the Cape Copper Co. Ltd., several of which were recovered in September of 2001 by Barry P.Gamble. The Ingots are marked with the letters 'CCC' and 'BS', (see photograph right) which are explained as follows :

CCC - The Cape Copper Company

The Cape Copper Company operated the Briton Ferry Copper Works (originally opened c.1853) from 1880 until its closure circa. 1926.

The company name was Cape Copper Mining Co. Ltd. until 1888, and Cape Copper Co. Ltd. thereafter. Contemporary documents usually abbreviate the company name to 'Cape Copper Company' throughout the period of existence of the works. The works, a medium sized concern by the standards of the date and place, was located at Red Jacket Pill, an inlet on the west bank of the River Neath, opposite and upstream of Briton Ferry which is on the east bank.

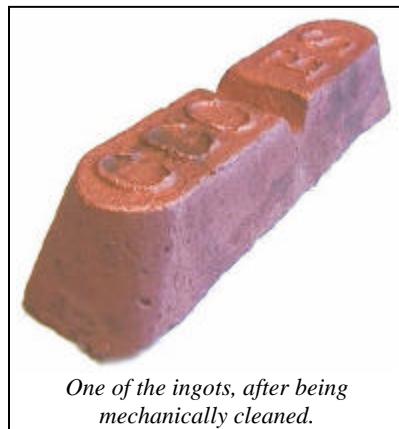
Red Jacket Pill was little used by shipping by the time the Cape Copper Company took over the works. The Tennant Canal connected the works to Swansea Docks, through which it undoubtedly imported its ore (or, by this date, mainly regulus, which is partly-smelted ore), and through which it would have exported its produce. Smelted copper usually formed only a small portion of a ship's cargo – individual consignments were never large enough to fill a merchant ship. (*She was also carrying several hundred tons of coal. BPG*)

No body of records survive from Briton Ferry Copper Works.

BS - Best Selected

'Best Selected' had been the highest grade of refined copper for much of the nineteenth century but by this date it had been surpassed by electrolytically refined copper. The ingots were cast by ladling into cast iron moulds: irregular laminations can usually be seen on their sides. The shape of these ingots accords perfectly with examples of similar date produced by other firms. By the date these ingots were produced, the Swansea region had, after a century of international pre-eminence in the field of copper smelting, begun a relative decline, although the tonnages of copper produced there would continue to grow until the early 1890s. Thereafter decline was swift, with the industry becoming virtually extinct by the mid 1920s.

I am indebted to Robert Protheroe Jones, Curator (Heavy Industry), Department of Industry, National Museums & Galleries of Wales, for the above information regarding provenance of the recovered ingots.



One of the ingots, after being mechanically cleaned.

Barry P. Gamble. August 2002.

Note that the original, article complete with full colour pictures of the ingots, is available on the WMS website - under 'Publications'. Barry Gamble has a long held interest in metal mining, and as a geologist worked for Cominco at Parys Mountain around 1980.

Barry is offering for sale a number of the recovered copper ingots (£65 - £75 each). If interested, e-mail him on **BarryPGamble@aol.com** or find him at 25 Ashwood Close, Plympton, Plymouth, Devon, PL7 2FU.

54. 'The Discovery, Recovery & History of Crossley DV4 No.6693' - By Iwan A. Evans

This article, originally published in 'Stationary Engine', June 2002, pp.20-22, covers the discovery (at *Craigwen Gold Mine - NGR SH 651 191*) and subsequent recovery of a 1910 four cylinder petrol/paraffin spark ignition engine, as manufactured by Crossley Brothers.

What follows is an extract from the original article, which provides a brief history of the Crossley DV4 engine and the Graigwen gold mine.

'While stripping the engine the serial number 6693 was found stamped on the governor parts. Armed with this information we were able to discover that Crossley DV4 number 6693 was delivered new to Edwards and Armstrong, Electrical Engineers, 127 Victoria Street, Bristol, on the 10th November 1910.

It is believed that they installed the Crossley to generate electricity in the Tewkesbury area of Gloucestershire, (precise location unknown). Nothing is known of the engine's history up until 1939, when according to the Crossley order book, the Graigwen Goldfields Ltd., Bontddu, near Barmouth, became its second owner in April 1939. According to local papers, the crushing mill at the mine, of which the Crossley was its prime mover, started production in July 1939, the plant itself being installed by a local contractor. The Crossley was housed in a small wooden shed with the cooling tank located outside. It drove a Swing Jaw ore crusher and a Humphrey vibrating table via a large flat belt.

The Graigwen Goldmine itself had been worked periodically on a small scale since the 1860s. In 1938 the Graigwen Goldfields Ltd. was incorporated under the management of Mr Thomas Williams, Mining Engineer, Pwllheli, who was said to have gained vast experience in the mines of South Africa. Many of the company share-holders were local people, including its owners, the Reverend Thomas Michaeliones and family.

The mine was a small exploratory concern, one or two small levels being driven into the hillside, by two or three miners. Nearby stood two or three small sheds, including the mill and a small farm cottage known as Graigwen; it served as a home, an office and also as stores.

It is believed that very little gold, if any, was found between 1939 and when the mine closed in 1942 due to the Second World War. Post war, it is thought some work was carried out at the mine, and even plans to build a concrete block factory, using mine waste, were envisaged, but like the attempt to reopen the mine again in the 1950s, it failed and the mine was finally abandoned. Eventually the owners moved away, the buildings and plant were removed, but the Crossley was left, stripped of all removable items, to brave the elements, until October 1999 that is.'

The author, Iwan Evans, is interested to learn more about the history of Graigwen gold mine and would also like to hear if members have taken photographs of the engine in the past. He would also like to obtain a small jaw crusher for exhibition purposes, so if you happen to know of the whereabouts of such an item of machinery, then please do let him know. Iwan can be contacted on Tel. (01766) 831 512 - After 6pm, please.

Dave Seabourne and myself tracked down this mine (which became rather enigmatic after one or two detours !) simply to revisit the site as shown in the photograph on page 18 of George Hall's 'The Gold Mines of Merioneth', 2nd Edition, which depicts a couple of 'old-timers', one of whom is pushing a side-tipping truck outside of the mine. Sadly, the open aspect of the location as depicted in the photograph has since been lost due to afforestation to the west and north of the mine.

55. Insurance & the WMS - David Roe puts us in the picture...

The list of those 100 of you who opted to be 'Insured members of the WMS' has been sent to the BCRA for inclusion in their insurance. Any 'Friends of the WMS' who wish to attend WMS meetings are more than welcome, but you will be asked to become a 'Temporary Member' of the WMS and pay £5. I am very grateful for your many kind words during this saga – as you probably realise I believe there is more to life than struggling with the minutiae of insurance.

There are a few points that have been raised and rather than write in response to the individual queries I will attempt to answer them below:

"Do I need the insurance to attend the member's evening event or other social events ?" - No you do not need to be an 'Insured Member'.

"Why don't we bring the 'Friends of WMS' subscription starting date in line with the September start date for the insurance ?" That sounds sensible – I didn't do it this time because I felt members had enough information to absorb as it was – and there are some administrative problems as well.

"What administrative problems ?" Firstly I try to run a laid back society and as a result we have some 'Friends of the WMS' who are 'slightly in arrears' and paid up to December 2001 – and who I trust will pay up one day - while others are paid up to 2007 – bless you ! Secondly it means I will probably have to do a specific mail shot in September which is not a good time for me.

"Is this messing up the society's finances ?" No - at the moment we have a comfortable balance of well over a thousand pounds. There will be no problems if we make sure we collect the insurance from members before we pay the BCRA insurance bill.

"Can I pay two years insurance ?" Please don't – one of the problems is that we have no idea of the insurance rates next September.

"How will this effect the administration of field trips ?" I have come up with a whizzo way of members and temporary member signing up on the day so I hope it will not be too traumatic.

"Surely there is a better way to insure organisations such as WMS ?" The existing insurance which lumps together societies, members and individuals plus overground and underground is a mess. I think the events of the last few months will result in NAMHO and BCRA trying to separate out individual and society insurances but it is rather out of our hands.

"What about multiple memberships leading to multiple premiums ?" As above – it's a mess – I would ask that you pay the extra £4 if you intend to go on WMS trips to save some enormous administrative issues that would otherwise arise as they are just not worth it.

“Am I insured as an ‘Insured Member’ to go down mines as an individual or with friends on an ‘unofficial’ trip ?”. I can not answer this question – you will have to read the policy on the BCRA website and make up your own mind – I personally will not be doing it because I personally do not believe that the insurance company would allow any claim in those circumstances. **What we cannot have is any member telling the landowner that they are undertaking any activities on behalf of the WMS unless it is formally agreed by the WMS. To behave like this would be to bring the society into disrepute and place David Bick, Mike Munro and myself in an intolerable situation of potentially being held responsible for the activities of which we are completely unaware.**

“So what is an official WMS trip ?” I have not yet thought through the implications but I would expect you to formally write with details of the activities, the people involved and evidence of your competence.

“Are you saying I can’t go down into mines anymore ?” No – as a private individual you can do what you like and if things go horribly wrong you might be covered by your ‘Insured Members of WMS’ (remember I personally do not think you are) - but don’t kid yourselves that you are on a ‘WMS trip’ because you are an ‘Insured Member of the WMS’.

David Roe

‘Tailings’

Acknowledgements - Many thanks to all those who have provided me with contributions and feedback for the newsletter. Note that all items are credited to the contributor, unless submitted by your editor.

All contributions welcome - see note below about format. Absolutely any field reports/ notes, or news item from the local paper, T.V., radio or ‘heard down the pub’ are sought. Without these the Newsletter would cease to exist, so please don’t stop sending them in !

Mike Munro & BronwenDog 🐾

WMS Membership - Annual membership:

Friends of the WMS (*Newsletter only*) is £4, (or to ease administration - £8 for 2 years).

Insured Member of the WMS (*Covers for attendance of field trips*) is £4, and additional to the payment of £4 for receipt of the N/L.

The paid up date of both ‘subscriptions’ is shown on your address label - on the envelope you’ve just thrown in the bin !! If you are “paid up to DEC 2002” or earlier, then the date will **be highlighted in red**, your subs are now due, and your Treasurer, David Roe (address on front page), would be most grateful if you could pay promptly.

Copydate for the next Newsletter, **15th March 2003**, publication due April-ish ! Articles (preferably typewritten and ideally on 3.5” disk, MS Word 6.0 or Plain Text format) to be sent to Mike Munro, (address on front page) or E-mail to **mike.munro@cwcom.net**

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