NORTHERN MINE RESEARCH SOCIETY Newsletter Nov. 1988.

"Once upon a time there was a newsletter editor who never had to start off each edition by making apologies for all the little contretemps that never cropped up....."

How I sometimes wish that I were he. Due to circumstances entirely outside my

control, my last attempt at punctuality failed dismally.

I suppose, really, that all this reinforces just how little spare time I have nowadays to devote to such activities. If anyone would like to volunteer to take over as newsletter editor, the job's yours. After all, I have been doing it now for the past 13 years and I am getting a bit stale and short of new ideas. Don't get me wrong, I have over the years gained a great deal of pleasure from doing the newsletter, and made a lot of friends, even if I have never met many of them in the flesh. I feel that new blood should be introduced onto the committee, as do several of the other longer serving members. Every year we ask for nominations for the various committee posts, and every year, you show how much you appreciate our efforts by re-electing the same ones, over and over again. Or is it just that you are afraid of hurting our feelings by proposing someone else?

If you're prepared to serve the society but were too shy to ask, let us know and we'll pull any strings necessary to get you elected!!!

Lectures to Listen To.

Feb.8 1989. (Wed) Looking for Lead Works: Industrial Archaeological Geochemical Prospecting. By Dr Ian Bastwood. To be held at the Yorkshire Archaeological Society, "Claremont", Clarendon Rd, Leeds. (N.G.R. SE 292341) Starts at 7.15pm. (courtesy Y.A.S)

Feb.26 A.G.M. Sicklinghall Village Hall, at 2.00pm.

Metallurgy Vorkshop.

Nov.23 1988. "Muck to Metal". The Historical Metallurgy Society Ltd. are organising a one day workshop at the British Academy, 21-22 Cornwall Terrace, London NV1. 10.30am to 5.30pm.

The workshop is intended to give both professional and amateur archaeologists an understanding of the information that can be obtained from metal artefacts and the debris produced in their manufacture. No prior metallurgical knowledge will be assumed. The techniques required to treat metal finds during excavation and conservation so that the maximum amount of information can be retained will be discussed. The cost inc. lunch should be between £10 and £12. Further details from :- C.J. Salter, Dept. Metallurgy and Science of Materials, Parks Rd, Oxford OX1 3PH.

Chris Salter (the chappy above) would also like any information about any metal-working sites discovered, as well as articles with a metallurgical bias for possible inclusion in their society newsletter. (Expect dire prognostications and God's Great Balls of Fire, if I don't get first refusal. 'aitch.)

Chris is also preparing a paper on Iron Age iron 'currency' bars, and would be very pleased to hear about any Iron Age or Early Roman 'currency' bars or other form of blacksmith's iron stock (i.e. bars, billets, blooms and 'ingots') that have been discovered in the last few years, especially those that have not yet been published.

Following on from.....

Some responses to queries in the Feb. 88 Newsletter.

1. Page 6, re P.J.Challis. South Australian Mining Heritage.

I have a set of the booklets and pamphlets referred to, they cover different minerals, individual mines and separate mining topics like "Exploring Old Mines", "Drilling of Water" etc. I could supply a list and bring to one of the mining societies meetings if anyone is particularly interested.

2. Page 8, Opencast Mines.

We have much experience of claims of subsidence through removal of hydrostatic support, drying out of clays causing shrinkage due to falling water table and landslip

adjoining opencast sites. Ground has also been known to rise particularly close to overburden mounds (up to 7ft at Clares Lane site in Shropshire 1975).

I.J.Brown.

A response to query in the Sept. 88 Newsletter.

Rudolph Erich Raspe was born in Hanover in 1737 and became librarian to the Landgrave of Cassel and Keeper of the Landgrave's collection of coins. He contributed a work on mammoths to the Royal Society in London and was made an Honorary F.R.S. Alas in 1775 the Landgrave noticed that some of his coins were missing and Raspe left hurriedly, surfacing in London in 1776, where he earned a living by translating works on Mineralogy; he got into debt and was struck off the Royal Society's rolls.

In 1782 he was appointed assay master and store keeper at Dolcoath; about this time, in order to raise money, he wrote the original edition of "The Travels of Baron Munchausen" - the Baron was a real character, a retired Army officer who was famous for his yarn-spinning. By 1785 Raspe had moved to Edinburgh where he catalogued James Tassie's collection of Gems - this catalogue was a very creditable performance. In 1791 he moved to Sutherland, took to prospecting, and published a translation of Born's book on the process of amalgamation of gold and silver ores. Having salted the mine he persuaded Sir James Sinclair to part with a lot of money, and left for Ireland. He seems to have called at Donegal, but died at Muckross in Killarney of scarlet fever while engaged in prospecting, in 1794.

He rates four columns in the Dictionary of National Biography and there is a full length biography of him by J.P.Carswell "The Prospector: a life of R.E.Raspe" published in 1950. He was a very clever man indeed, and it is a great pity that he got himself into such difficulties.

D.H.Tew.

Someone else using the postal strike excuse. Sorry, Les, not accepted, I got in first.H.

Sir Francis Mine Meet Report - 5th June, 1988.

As usual with this meet it was well attended by about 14 members and 3 guests from the D.C.C. Nothing much changes in the level, it's very wet, very cold, very interesting and it's even more pleasurable to get out and changed into warm dry clothes on a hot summers afternoon.

A good trip and well worth an annual visit.

Hurst Area Meet Report - 28th August, 1988.

14 or so members gathered at Hurst crossroads on a fine day but with a very strong cool wind, which made for good walking weather. We walked up the spread of shafts towards Vellington Vhim above Fell End, pausing to look at the Grinding Mill Dam and Middle Vhim Gin circle. From Vellington Vhim we walked alongside the boundary wall to the Copperthwaite Vein where we had our sandwiches. The party then wandered down the spread of shafts on Copperthwaite Vein to the dressing floors when the Meet Leader suggested a detour to a Dale hill site, "only a quarter of a mile away". Unfortunately, after struggling through heather and bracken for more like half a mile we arrived at the wrong hummock. But with excuses that one hummock looks much like another, the leader had to admit to a slight navigational error. One piece of slag was found, however, which did somewhat calm the situation and, despite rumours, was not planted.

We then walked back to the cars, where six of us changed into underground gear and the party walked to Pryes Mine. A lovely site, in good condition, which served as a consolation prize after the Dale hill episode. The rest of the party then left and we explored Pryes Level. This mine does not improve with age, but the dig of 1981 is still, amazingly, intact, but great care is definitely needed for this mine.

A good Meet, and thanks to all who came.

Les Tyson.

Lindal Noor Iron Mines

Exploration of the Lindal Moor Hematite Mines in the Furness Peninsula has been taking place all through the summer. New discoveries in the 19th century workings of

Harrison, Ainslie & Co.'s Lindal Moor pits, and the adjacent Millom & Askam Hematite Iron Co.'s Derby pits, have established these workings to contain the most extensive accessible mining system in the south of Cumbria - excluding, of course, the Coniston Copper Mines.

Exploration began in 1982 when, after several years of digging and winching, the B45 Pit gin shaft (known locally as the Ding Dong) was cleared of rubbish by dedicated members of the Cumbria Amenity Trust. Access to the complex systems of the B45, Old B44 and the B46 Pitc was then possible. The following summer, when the water level in the lower regions dropped, a route through into the neighbouring Derby Pits was discovered, also a link with B47 and B43 Pit workings.

During the late summer of 1986 the water level receded sufficiently to allow access to "Ding Dong Extension" and two impressive chambers were located in the workings of Derby No.1 Pit, though things didn't really get under way till June of this year when the water dropped yet again and allowed several hectic visits to take place before weather conditions caused it to rise dramatically during August. Recent discoveries include the "Trespass Workings", scene of a massive encroachment in the 1890's when Harrison, Ainslie & Co. illegally removed 20,000 tons of the Millom & Askam Co.'s ore; two extensive chambers on the Lindal Moor Main Vein, one of which is in an extremely unstable condition, being situated in what the miners termed "drawn ground"; a main shaft station in the Derby No.1 Pit engine shaft; the shaft foot of the B43 water balance pit; B22 and B42 Pit ground; and, most significant of all, the double-tramlined main road leading to the Moor's central and most productive pit, the B30 (unfortunately this was flooded to roof level and will not be navigable this side of the next drought).

The two, occasionally three, enthusiasts still participating in this project are at present striving to establish a high level route into the Extension in order to bypass the flooded tunnels which allow access for brief periods only. Crushed ground and colossal boulder chokes (boulders the size of chest freezers), may, however, prove to be too much of an obstacle.

Members interested in an underground tour of the Ding Dong, flooded areas not included, please contact Alen McFadzean at 7 Silver Street, Marton. Ulverston, Cumbria. We are down the mine most Friday evenings, though Saturday and Sunday visits can be arranged.

Alen McFadzean.

(does this mean you are offering a Meet for next year Alen?)

Council of Europe Colioquy on Mining Engineering Monuments

In September 1988 the Council of Europe held a 'colloquy' at Bochum Mining Museum, Germany on Mining Engineering Monuments as a Cultural Heritage. Over 100 delegates attended from 14 European countries including 6 delegates from Britain. The six included Stafford Linsley from Newcastle University, Peter White (English Heritage), Brian Davies (Director, Big Pit Mining Museum) and the writer. Each morning session was taken up by a series of reports one from each European country describing what had been achieved in the country in mining preservation terms. The quality of this paper was variable, some were highly academic others showed that much actual preservation work was being done on the surface, and, in many cases, underground also. The number of show mines has mushroomed. Germany alone has more than 30, but even this figure does not exceed that of Britain.

The afternoon sessions involved visits to German mines, both preserved and operating, and to mining conservation areas, as at Witten. The Ramsbeck lead and silver mine was visited and a reception barbecue held in the village of Andreast, so named by homesick metal miners who had migrated here from the village in the Hertz Mountains of that name

The many 'receptions' (consisting usually of a meal and speeches) put on by the various mining groups and local authorities were most memorable - each tried to be different. On two occasions the courses and speeches were punctuated by items from a 9-piece miners' band in full miners' uniform. On the other occasions the evening session was held in a recently converted Hoffman brick-kiln, a museum gallery, a miners bath house and in the open air!

The main work of the colloquy, however, revolved around the Papers and the collection of these form a real 'mine' of information still to be properly assessed. Many preservation groups circulated their literature, these ranged from the proposals to preserve a single building to a complete mine (e.g. the £30 million project at Zollverein Colliery) and also to almost complete mining fields (French slate, Alsace potash and the Limburg coalfield). The discussion sessions were most useful and at the final one recommendations were drawn up for presentation to the Council of Burope. In all a most interesting week; should anyone wish to know more, please contact the writer.

(The final 'colloquy' in this series is to be held in Durham in 1989, on the topic 'preserving industrial records and archives').

I.J.Brown.

For Sale from Mining Facsimiles

The following titles in Mining Facsimiles reprint series can be obtained from Hilary Bird, Mining Facsimiles, 41 Windsor Walk, South Anston, Sheffield S31 7EL. Make cheques payable to Hilary Bird. Postage is extra.

Memoirs Geological Survey Special Reports

2.	Lead & Zinc Ores of Durham, Yorkshire, Derbyshire & Isle of Man Carruthers	3	
	& Strahan. 1923		£ 8.50
3.	Lead & Zinc Ores in the Pre-Carboniferous Rocks of West Shropshire &		
	North Wales - Smith & Dewey, 1922.		£ 8.50
4.	Copper Ores of Cornwall & Devon Dewey. 1923		£ 8.00
5.	Lead & Zinc Ores of Northumberland & Alston Moor, -Smith. 1923.		£10.50
6.	Lead & Zinc: The Mining District of N. Cardiganshire & W. Montgomeryshire.		
	Jones. 1922.		£19.95
7.	Lead & Zinc Ores of the Lake District 1921 with Copper Ores of the		
	Midlands,Lake District,N.Wales & Isle of Man 1925.		£14.50
8.	Full colour offprint of geological & mining map from Vol.XX Jones		£ 2.00
9.	Records of Mining Taylor 1829.		£25.95
10.	Lead & Zinc Ores of the Carboniferous Rocks of N.Wales. Smith.		£14.50
11.	The Lead, Zinc, Copper & Nickel Ores of Scotland Vilson. 1921.		£14.50
12.	Arsenic & Antimony Ores with Lead Silver-lead & Zinc Ores of Devon,		
	Cornwall & Somerset.		£14.50
13.	Britain's Metal Mines. Pike. 1860.		£ 5.00
Also:			
	Iron Ore Hematites V.Cumberland, Lancs, Lake District. Smith.		£16.00
	Gold Rocks Great Britain, Ireland, General outline Gold regions of world.		
	Calvert. 1853.	s.b.	£19.00
		H.B.	£29.00

Request for Information

Mr.C.Burton of Truro is currently collating information on sites where stone was mined or quarried for ornamental purposes. He originally started with Cornwall, but now wishes to extend this to England & Wales. By ornamental stone he means that which can take a polish e.g. Frosterley Marble, Hopton Wood Stone, Ashford Black Marble etc. This type of stone was excavated mostly in the 19th century and found its way into Victorian fireplaces etc. He wishes to collect samples of the stone which will form the basis of a proposed scheme to set up a museum of stones and their usage from ancient field boundaries to modern times.

Any information on such sites to Mr.C.Burton, Pengarth, Trolvercroft, Feock, Truro, Cornwall TR3 6RT.

Book Reviews.

U.K. Journal of Mines & Minerals (Rock Bottom) Issue No.5. Summer 88. 48 pp. many illustrations. £3.00. From :- Mrs J.C. Spence, 3 Oak Tree Road, Bawtry. S. Yorks DN10 6LD.

Having pontificated on Journals 1-4 in the past, No. 5 is now to hand (and has been for some time) and a brief note about this current issue may be of interest. In it, John Hodgkins (sounds familiar) gives his reminiscences on the Clogau mine in 1966; Trevor Volloxall outlines the geology and mineralogy of Wh. Owles; Simon Hughes (who is

that man?) discusses the decline in mining in mid Vales and the prospects of revival; Alen McFadzean writes on the mines of Lindal Moor, Cumbria, and there are also a goodly sprinkling of articles on minerals, many of which are well above this reviewer's head (but then, so are many things, I hear you gasp). The preliminary note on the occurrence of mattheddleite in the Caldbeck Fells - yes, you've guessed it, 'tis none other than the far-famed (Pb20 (SiO4)7(SO4)4CL4) - is a case in point. Anything beyond 'gleening Gleena' is just 'owd rocks to me!

To talk scherly, however, this journal is emerging as a tour de force in its field and is currently characterised by its superb four-colour illustrations, including a supplement "British Mineral Classics", comprising 2 full page illustrations worthy of a picture frame in their own right. As mentioned in the past, content and professionalism does the publishers credit and, for three quid, I don't know how they do it.

R.H.Bird.

Report on the North Pennines Lead Mining Heritage Joint Seminar

As outlined in the last newsletter a Seminar took place in Alston on 15th October to discuss the strategy document prepared by Cumbria, Durham & Northumberland County Councils relating to the future conservation and interpretation of the lead mining heritage of the North Pennines.

The meeting was well attended by members of NNRS and other mining and metallurgical history groups, local heritage groups, the county councils and bodies representing several scientific interests including: Archaeology, Botany, Geography, Geology and Mineralogy. The District and Parish Councils, Land Owners, farmers and local residents were noticeable by their absence.

Discussion of the document, was, in general, constructive rather than destructive with all present in favour of the objectives in principle. It is unlikely, however, that large sums of money will be made available to carry out major projects and achieve the full objectives in the near future.

It is inevitable that losses of sites and buildings will continue to occur and it is therefore important that records of what remains today are taken before sites and buildings disappear tomorrow.

The North Pennines Heritage Trust (NPHT) was elected to act as a liaison group but is probably low on active manpower and expertise.

If any members of NMRS feels that they can assist the NPHT in any way with regard to the future of the lead Mining Heritage of the North Pennines will they please contact:- Mr.R.V. Turner, Chairman, North Pennines Heritage Trust, Oaklands, The Raise, Alston, Cumbria.

On the Sunday following the seminar there was an opportunity to visit sites in the area to inspect work being carried out. This was very poorly supported with only six persons attending.

Nenthead was visited first, where we saw the archaeological excavation work which was taking place on the old stamps (near the workshops) and the restoration work taking place on the Assay House. Future plans for the area and interpretive points for the public were explained by Pat Newman of Cumbria County Council.

Allenheads was visited next, where I was bitterly disappointed to see that little of any interpretation of the lead mining heritage had been attempted. Some buildings were being restored, one originally intended to be an interpretive centre. This was now to be used as a cafe, a shop and a holiday cottage (up-market). There is even to be a trout farm. There were plans to preserve the Armstrong 2 cylinder hydraulic engine from the saw mill.

J.H.McNeil.

Mancd Slate Quarry

Roy Fellows' piece on the Manod Slate Quarry brought back some memories, and not just of 'Edge of Darkness' either. Earlier this year Subterranea Britannica held its study weekend at the Snowdonia National Park Study Centre, and not only were we allowed underground in the Manod Quarry, but also provided with comprehensive documentation of the creation, in 1940, of a store for national art treasures. The most authentic accounts are to be found in:- Transactions of the Honourable Society of Cymmrodorion, 1945; and

'The Civil Engineer in War', published about 1946 by the Institute of Engineering, where there is an article by R.Temple-Richards entitled 'Some Special Storages'.

The present owner of the quarry is Mr. Owen Glyn Williams.

Roy also mentioned vast accessible underground workings at Rhiwbach Quarries. These are on Forestry Commission land and the entrances at SH 731464 and SH 747474 have been blocked with steelwork. As we all know, blockages of this kind seem to have a strange habit of coming apart just at the point where the agile might gain entry....

Lastly, Mr.O.G. Williams also owns the Cwt-y-Bugail Quarry. The National Park Study Centre's Practical Industrial Archaeology course spent a week recording this quarry both above and below ground, and there is some doubt about Roy's description of the engine there as a Robey. It was suggested, in 1985, that the remains were those of a dismantled traction engine of the overtype; they certainly don't look anything like the few pictures of Robey engines I have seen, all of which have been undertype. It was possible to deduce from fragments of evidence the use to which the engine was put, and pretty extraordinary it was, but that is another story.

Altogether, if you can get a reasonably dry day for it, a visit to Manod, Rhiwbach, Cwt-y-Bugail and the intervening Blaen Cwm quarries, is full of interest, whether underground or on the surface.

(No doubt Peter is even now hammering the tripewriter keys producing THE other story ? Ed.)

Peter Hay.

Errata.

Memoirs 1988, P.25, '1819' on caption should read '1849'. Typographic error - D.G.C. was not discovered until 1844!

Amendment to Constitution.

Item 23. This now reads :-

The annual General Meeting shall be held in the first-quarter of the year.

Oldbam T3-Cell Safety Valves.

Some of these cells issued since 1986 may have a faulty vent plug.

The cells have a smokey-grey transparent body and the faulty valves are a one piece construction with a black top standing proud of the cell body. If the O-rings become unseated one can block the vent, causing an explosion when the cell is charged.

Replacement valves are available from any caving shop that sells these cells, and can be recognised by the opaque white top with a black rubber blow-off cap fitted.

Meetleaders wanted.

We have had a few offers of meets for 1989, but more would be gratefully accepted. All budding meet leaders should by now be fighting to be first in the queue outside John Mc's house. If you would be prepared to lead a meet, either a one-day or full weekend do, then please let little Johnie know. As well as a venue and time, could you indicate the type and difficulty of terrain anticipated! i/e surface, underground: walking or scrambling: dry (water just over welly depth): wet (" ooh!" level and above); and whether any ladder pitches or tight crawls are involved.

There should be no need to stipulate whether more suitable for poseurs or geriatrics!

Dinner Veekend - May 14/15

The weekend followed the pattern established in 1987, and started (at the Hotel Italia in Harrogate) with three lectures on the Saturday afternoon.

Alan Williams described the mining activities at Llangynog in mid-Wales, one of the earliest of the larger Welsh lead mines producing over 2000 tons of ore a year in the 1730's.

Alan successfully compressed a deal of detail into an interesting talk well illustrated by slides, some showing features now obscured, such as the felsite intrusion round which the richest vein was emplaced, and some of the shaft top buildings put up in the 19th, century when the area was the basis of company share pushing.

Bill Harvey told us of the trials tribulations of those using water for ore dressing and operating water pressure engines at Vanlockhead and Leadhills. It surprised many members who have spent summer holidays in Scotland to learn that water was a rare commodity, carefully carried round hills in lades (leats to the ignorant English). Plans of the system of these lades resembled spaghetti, and cries and counter-cries that "you have stolen my water" rent the air. Bill had done much work to follow the battles.

Finaly, to show N.M.R.S. is truly cosmopolitan, Llyn Willies talked about Derbyshire Mining Law. The essentially simple principles which worked well when the vein was a single ribbon became complex when veins branched, or ran close together. Verbal accusations that "you are working my vein" were hard to resolve by the Barmaster to the satisfaction of the parties. Argument would descend to physical assault, and on one occasion miners at the Magpie Mine tried to smoke out their neighbours at the Red Soil Mine and fatalities ensued.

The pause before the evening dinner was used variously to shop in Harrogate, enjoy a chat over a beer or, best of all (?) have a committee meeting.

The 30 members and guests at the excellent dinner were then regaled by a second talk from Llyn Villies on the work he had done in some very old zinc mines in Rajastan (Northern India for the Geographically ignorant). These predate any remains in the U.K by a long way. Some carbon dating work suggests an age of 3,000yr for some parts. The underground photos were impressive, particularly of the narrow pits like empty tooth sockets some 200ft deep. Questions of how they were worked (fire setting?) and how the ore was taken out are still argued.

Sunday saw a limited number of enthusiasts (why so few ?) meeting at Duck Street quarry on Greenhow Hill on a glorious day. In the quarry is an outcrop of the Greenhow rake, still visible. Malcolm Street then led us via the Cockhill level entrance and the site of the old Cockhill smelt mill, past the extensive remains of the Providence and Prosperouse mines to a delightful lunch spot by a stream and adit entrance. John Mc. found an interesting spider. Finaly, upstream to the Story level, Malcolm keeping us updated with details en route. The halt, lame and wheezy returned to base, battling with an aggressive cock on the way, while the youngsters (i.e. under 40) detoured to a further group of mines.

All in all, a good weekend.

G.B.Greenough.

Subs.

The subs for 1989 are to remain the same as they were last year.

"How do they do it?", I hear you gasp in astonishment, though the answers simple really— the same way as anyone else! Good housekeeping and a thrifty treasurer help of course, as well as all the extra revenue generated by all those of you who covenant their subscriptions. To those who do not. Do you realise that by filling in a covenant in favour of the Society, the Inland Revenue gives us, in effect, a donation of a further 25% at no further cost to yourself what-so-ever?

N.A.M.H.O. Insurance.

The premium this year is fixed at 75p per member, and as last year any member wishing to avail themselves of this, should add the appropriate amount to their subs.

The Society will pay for cover for the officers, meet leaders, and anyone else who may find themselves in the unfortunate position of having to make a claim while acting in an official capacity on behalf of the society.

Please let me have all contributions for the next Newsletter before Feb. 1989. It makes life a lot easier if they come in earlier rather than later, though don't let this stop you.

All masterpieces should be despatched to:- H. Houghton, 29 Parkside Road, Meanwood, Leeds, LS6 4IY.

Any correspondence to ANY officer should be accompanied by a s.a.e. If not, don't expect a reply before the next Newsletter.

Membership cards will be sent out then too.

A HAPPY CHRISTMAS AND A MERRY NEW YEAR TO ALL WHO READ THIS CARD ? !!

Additions to Library List

Bailes. Modern Mining Practice. 5 Volumes.

Barton. The Mines & Mineral Railways of East Cornwall & Vest Devon.

Barton. A History of Copper Mining in Cornwall & Devon.

Barton. A Guide to the Mines of West Cornwall. Buckley. A History of South Croft Mine.

Mongst Mines & Miners. Burrow.

Burt. John Taylor, Mining Entrepreneur & Engineer.

Burt, Waite & Burnlay. Cornish Mines.

Douch. East Wheal Rose. Earle. Cornish Mining. Harris.J.R. The Copper King.

Harris.T.R. Dolcoath. Queen of Cornish Mines.

Henwood. Cornwalls Mines & Miners.

Institute of Geological Sciences. British Regional Geology. N. Wales.

Kirkham. Derbyshire Lead Mining Through the Centuries.

Lewis. Lead Mining in Wales.

Noall. The St.Just Mining District.

Noall. Botallack.

Noall. The St.Ives Mining District.

Pike. Britains Metal Mines. (facsimile reprint).

Pryce. Mineralogia Cornubiensis.

Raistrick. The Lead Industry of Wensleydale & Swaledale Vol. 1.

Raistrick. Two Centuries of Industrial Welfare. Todd. The Search for Silver in Mexico,

Tyson. Rope.

Miscellaneous Booklets, Pamphlets, Magazines, Leaflets etc.

G.H.Brearley. Lead Mining in the Peak District.

D.B.Barton. The Story of Cornwall's Enginehouses.

H.V.Williams. Cornwall's Old Mines.

W.H.Curnow. Industrial Archaeology of Cornwall. P.Laws. Cornish Engines & Enginehouses.

W.Gerwyn Thomas. Coal Mining in Wales.

The Cornish Chamber of Mines. Mining in Cornwall Today.

J.G.Isherwood. Candles to Caplamps. The Story of Gloddfa Ganol. The Wales Tourist Board. Wales. A Glimpse of the Past.

Mines & Miners of Doncaster. C.Heap.

Manod Caverns.

I.A.Williamson.

The Skeleron or York & Lancaster Lead Mines.(A short paper).

P.R.Jenkins.

The Glasdin Propries.

The Glasdir Experiment. P.R.Jenkins.

Society Publications (other than N.M.R.S. Publications

Peak District Mines Historical Society. Vol. 1. Part 1, 1960.

Vol.10. Parts 1 & 2. 1987.

Association for Industrial Archaeology. Industrial Archaeology Review Vol. 9.

1986/7 No. 1.

Cleveland Industrial Archaeology Society. Memoirs No. 2. 1975.

No. 2/4. & No. 3/4. 1986. Mining Survey.

Cumbria Amenity Trust. Vol. 2. 1986.