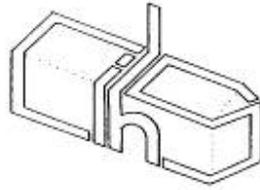


Cumbria Industrial History Society



BULLETIN

No. 96

www.Cumbria-industries.org.uk

DECEMBER 2016



CONTENTS

Page 3	CIHS Activities .
page 4	Book Review.
Page 5	Gazetteer of Cumbria Cotton Mills.
Page 8	Dyfi Furnace Visit
Page 12	Aberllefenni Quarry Visit
Page 13	The Industrial History of Cumbria – Whats new on our website.
Page 14	Questions and Answers 2016
Page 15	More useful than Limestone – The case for Coal
Page 16	Committee members details.

EDITORIAL

Well another year as passed and the committee has managed to bring another exciting programme to you for next year. We are however finding it harder to come up with speakers for conferences and also venues for autumn conferences. Sites to visit are also starting to get a bit thin on the ground and offers of leaders for and areas to visit would be gratefully received

The Society like any other Society only runs as well as the committee running it. At present all the officers of the committee are full but we would still like more members to try and share some of the load. This load is not too onerous with 4 committee meetings on Tuesday evenings usually at village halls in the Kendal area. Most of the day to day business is usually conducted by e-mail.

Hopefully in the near future a ninth volume of the Cumbrian Industrialist should be published and hopefully volume ten may appear shortly afterwards. I am still looking for articles to fill these volumes.

I hope you all have a Merry Christmas and a Happy New Year and you enjoy 2017 and have a good year on industrial history.

FRONT COVER: THE HAWK BOBBIN MILL CALDBECK.

SOCIETY EVENTS 2017

Saturday 22nd April 2017 SPRING CONFERENCE AND AGM. THE POWER OF WATER 9.30am.

Programme and booking form to follow or consult the website.

Saturday 20th May 2017 WALK AROUND MARYPORT. 11.00AM.

Meet at Maryport Station car park CA15 6DA. For a walk lead by Chris Wadsworth.

Tuesday 15th June 2017. EVENING MEETING TO LOOK AT GREENBURN MINE. 6.30PM.

meet at 6.30pm in the small car park opposite Blea Tarn. The car park is on the right hand side if you are travelling from Little Langdale. From there we can squeeze into a smaller number of cars and park on the roadside near the divide between the Blea Tarn road and the Wrynose Pass. There is parking for five or so cars there.

We can then walk up to site and have an hour and a half on site and then be down by 9.00pm. Lead by Jamie Lund NT archaeologist.

Saturday 8th JULY 2017 VISIT ST BEES BY TRAIN AND TOUR PRIVATE RAILWAY MUSEUM.

Meeting place and time to announced when summer time table is out.

Sunday 24th September 2017 WALK AROUND THE ORIGINS OF BARROW. 11.00am.

Meet at the Dock Museum Car park.

Saturday 14th October 2016 AUTUMN CONFERENCE INDUSTRIES OF THE CALDBECK AREA. 9.30AM.

In Caldbeck village hall. Programme to be announced.

November 2017 RIFLE RANGES OF THE LAKE DISTRICT.

At Greenodd Village Hall. Talk on rifle ranges by Jeremy Rowan Robinson. Date to be announced.

We are still trying to arrange a visit to Gilkes factory at Kendal.

BOOK REVIEW

“Railways in the Landscape” by Gordon Biddle. Pen & Sword Transport: 2016
ISBN 978 1 47386 2 357: £25

In Gordon Biddle we have a local author with a distinguished reputation in the fields of architectural and transport history. As early as 1983 he co-authored with O S Nock (another railway writer with local connections) the encyclopaedic *“The Railway Heritage of Britain”* to be followed in 2003 by the definitive Oxford gazetteer *“Britain’s Historic Railway Buildings”*. Other railway titles have included *“The Railway Surveyors”*, *“Victorian Stations”* and *“Railways around Preston”* as well as a series of studies of the canals of the north-west including *“Lancashire Waterways”* and *“Pennine Waterway”* - a handbook to the Leeds & Liverpool Canal. The railway stations at Carlisle, Penrith and Oxenholme – all the work of the Lancaster & Carlisle Railway’s architect Sir William Tite – have also been a subject for Gordon’s particular attention.

“Railways in the Landscape” dedicated by Gordon to his late wife Dorothy who passed away last year, comes as a thoughtful distillation of all the precise observation and detailed recording that enabled his earlier works. This book’s eight chapters trace the lasting effect on our surroundings of a century and a half of railways from their development through gradual decline to a present revival of fortune. Victorian enthusiasm introduced this new means of transport to every town and almost every country area in the land

With the visual novelties of viaducts, bridges, earthworks and a myriad of transport related structures came also fresh opportunities for travel and trade. Railways had a striking impact on Britain’s coastal landscape. Not only did railway builders find that a coast afforded them a reasonably level route but it also provided a range of destinations for a newly mobile population. If the lie of the land generally dictated the route taken by the railway in rural areas, in already existing urban situations the arrival of the railways frequently caused great upheaval as wide swathes were cut through towns and cities, disrupting street patterns, dislodging communities and creating tracts of industrial premises alongside their lines. A chapter on ‘Townscapes’ provides a fascinating reflection on the impact of the railway on the major centres of population. In some cases a huge over-bearing viaduct was driven above areas of housing while in other places the arrival of the railway was the impetus for a positive reorientation of a town centre and the creation of a new focus.

Carlisle is cited as such an example where a gasworks, a marble factory and some slum housing was cleared to form the open space that lies between the Citadel Station and Sydney Smirke’s iconic law courts.

Unsurprisingly Cumbria fares well among the range of fine coloured images that adorn the book. More than a dozen local scenes are included from Grange,

Leven Viaduct and Parton on the Cumbria Coast line, Ribbleshead and Langwathby on the Settle & Carlisle, to Milnthorpe, Clifton and Kingmoor on the West Coast main line. A chapter entitled 'Places the Railway Made' features Barrow, Carnforth and Tebay as instances of new urban developments influenced significantly by the arrival of a railway. A stark image of the abandoned gritstone abutment that supported Thomas Bouch's amazing Belah tressle viaduct on the Stainmore line keeps company with a picture of a bridge in a field near Clifton on a section of railway that went out of use a little over a year after being constructed. Another relatively short-lived railway investment in the county that features is the now derelict Kingmoor marshalling yard north of Carlisle.

Turning to the impact of the modernised railway on its surroundings another chapter illustrates the effect of main line electrification. Visually the installation of overhead high-voltage wiring can be less intrusive in rural situations than in urban area. Often the more evident effects of electrification schemes is the alterations required to overline bridges to give additional clearance. A bridge near Milnthorpe is used to show an architectural solution to the problem. A photograph of a location near Lancaster illustrates the changes to lineside fencing that have been adopted to increase the level of security alongside rail tracks.

This is a book that will certainly delight railway enthusiasts but it is also one that will equally be enjoyed by anyone who takes notice of their surroundings and retains a curiosity about the oddities and differences that reveal themselves in the most unexpected places.

Alan Postlethwaite

GAZETTEER OF CUMBRIAN COTTON MILLS

(for Carlisle and district see Cumbrian Industrialist No. 7. 2010)

NORTH CUMBRIA ADDITIONS.

Brampton has three groups of waever cottages. (See Brampton trail)

Longtown, which was laid out in the 18th Century by Robert Graham of Netherby, has terraces of weavers cottages of one and two storeys. By 1802 they were weaving for Carlisle Mills.

CALDBECK

The Howk bobbin mill of 1847 water powered with a 42ft x 3ft wheel. The mill is a ruin but the coppice barn has been rebuilt. There is also evidence of a drying kiln.

The Old Brewery at the wet entry to the village is a former cotton mill of 1829 with a weir and headrace behind.

WEST CUMBRIA

ASPATRIA

The former Larma clothing factory was started by R. H. Lowe of Congleton in 1945 – a West Cumberland Development Co. factory which employed 21 0 workers and produced 12000 garments per week. Now converted to industrial units and creamery, it is a good example of 1930's type modernist architecture.

WIGTON

Another centre of the clothing trade. Redmaynes was founded 1868/75 to make ready made clothing. The factory was in Old Lane until 1981 and after a short spell at Warwick Bridge cotton mill in the 1980's returned to premises at 30 High Street. The main building was brick built with large metal window frames and steel roof trusses with separate floors for cutting rooms and sowing machines. (Allan S. 1993)

COCKERMOUTH

In Bank Court there is a c.1790 textile factory with workers housing.

Stoddarts cotton mill is upstream of the Castle Brewery and is 8 bays of 3 storeys built 1790 – 1815 and now a store.

Whartons mill is a linen scribbling mill on the River Derwent.

In Sullart Street there is a 4 storey 5 bay mill of a type unknown.

Derwent Mill of 1834/47 is 4 storey 20 bays long and built of coarse rubble stone with ashlar quoins for the Harris linen and cotton firm who made embroidery thread. Post World War Two it became Millers shoes.

(Bradbury various dates)

KESWICK

Brigham Forge site had a 1779 cotton mill by Hardisty, Banks & Co. South of the River Greta there was also a dyeworks of 4 storeys, Stoddart and Temple. (The complex was woollen from 1820's and bobbins from 1861)

(Davies-Shiel 2013, Aspin p383)

WHITEHAVEN

Barracks mill Catherine Street of 1809 is 4 storey by 15 bays with a central pediment. There is an engine house at rear central. Occupied originally by J. Bell for flax and linen production. Converted to housing.

CLEATOR

Part of Ainsworth's flax mill remains on River Ellen of 1859 of 2 storeys 30 bays with 5 projecting. There is an engine house and chimney on the north east corner.

SOUTH CUMBRIA

MILNTHORPE

Bela Mill a water spinning mill of 1787 by R. Parker remains as a 2 storey building and house with commemorative plaque. It was a woollen mill after 1810. (Aspin p.468)

BURNESIDE

Site of a cotton mill run by Wakefield from 1783, engraving of 1830. Any remains now incorporated in paper mill complex.

STAVELEY

Barley Bridge mill, large complex for cotton spinning and bobbins, had 72 spindle waterframes. (Aspin p.385-9)

ULVERSTON

Ellers cotton mill, Neville Street mid 19th Century.

Low mill south of town and steam powered from 1830 site was later a tannery some remains near canal.

Backbarrow cotton mill 5 storeys, outbuildings later Dolly Blyue works. Main building now hotel.

Cark cotton mill, largely demolished, some remains of engine house on site. (Challoner TCAAS 1964)

EAST CUMBRIA

KIRKBY STEPHEN

A carding mill on the River Eden on south east side of town had also hand mules, is demolished except for footings. A cotton mill sited 100 yards north east of the parish church from 1798 – 1830 became a workhouse and may be illustrated on an old postcard.

BROUGH

There was a cotton mill on Mill Lane (Nos 31-2) and a mill house.

Yosgill cotton mill of 1768 run by J. M. Carlton of 4 storeys and 75ft x 24ft. may be representd by a small ruin in front of a 1726 folly. (Aspin p. 468 and M.M 19/11/1993)

SEDBERGH.

Birks Mill 1790 Gosforth and Sidgewick, Uptons 1813 – 35. Converted to house and reduced to two storeys. (Ingle G. p.202)

A. D. George.

DYFI FURNACE VISIT 21ST OCTOBER 2016

All photos by D Robson except the first which was taken by Kate Roberts.
Present: Alan and Meriel Postlethwaite, David and Janet Penglington, John and Owen Bate, Mark Waite, Peter Sandbach, Dave Robson, Kate Roberts, tour guide.

Dyfi furnace is a charcoal fired blast furnace built in 1755 by Ralph Vernon and the Kendall family. It was operated by the Kendalls until it closed about 1800. It was then used as a woolen mill and later as a sawmill. The charging house is now a summer roost for horseshoe bats and visits are only possible after the bats move to their winter quarters in October. The site has been stabilised by CADW with a new roof and re-instatement of the stack. The top of the stack had been cut down after closure to allow a single slate roof to cover the whole building.

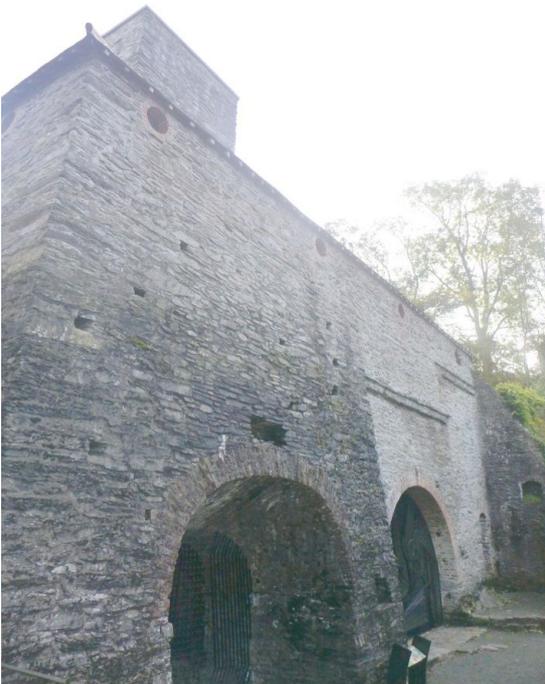


At 30ft the waterwheel is about the same size as the last wheel at Newland but mounted higher on the building. This is possible because the furnace is situated close to a waterfall, allowing a much larger head. The position relative to the stream would also explain why the layout of the site is a mirror image of Newland or Duddon.



The dam and leat

The most striking difference between the furnaces is that where the blowing arch and taphole entrance at Newland are corbelled and Duddon has stone arches, Dyfi found an artist in brick.



In this picture the first arch is the taphole entrance. The second arch leads to the blowing chamber and is equivalent to the arch connecting Newland to next door's garage. The third arch corresponds to the narrow walkway at the back of Newland blowing chamber. It is described in the Dyfi brochure as the counterweight room. As there are unexplained pillars in the same place at Newland, it seems that they served the same purpose.

Note also the circular brick windows on the charging floor. The ceiling of the blowing chamber is a vaulted brick arch in the style popular on the railways 100 years later and supports a stone slabbed floor in the charging house. In the background there is a fireplace in the wall but it is not known whether this was workers houses or offices.



Amazingly the hearth has survived and it looks nothing like what I was led to expect. The wall behind is the outer lining, the inner firebrick lining having been stripped out from top to bottom at a time when the stack was used as a root vegetable store.



The hearth viewed through the blowing arch.

The alcove in the taphole entrance is of interest. If the ones at Newland are at the same height relative to the hearth, we may not expect to find any remains in the proposed dig.



Looking from the charge house into the stack. With the firebrick lining removed there is no indication how wide or how high the tunnelhead might have been. A camera left here in summer might make a great wildlife film.



The charge house

As at Newland heat damage and decaying lime mortar left the stonework in a crumbling condition. Dyfi furnace has been repointed but still shows the scars from use. This painting was made in 1804 and shows a crack that is still visible after repairs. There is some evidence in the Backbarrow ledgers of ore being shipped from Ulverston to Dyfi:

Henry Kendall Esqr's exors & Co Dr to Whitriggs iron ore £34 9s for 60 tons customary weight dd them at Dovey in 1787 as pr acct rendered to 10 May 1788 viz:
Apr 18 1787 by the Industry, Thomas Daniel 31 t at 11/- pr ton put on board at Conishead £17 5s

May 26 1787 by the Bridget, Will^m Richard 29 t at 12/- pr ton put on board at Barrow £17 8s

Henry Kendall Esqr's exors & Co Dr to Stenton iron ore £34 15s 6d for 53 t 10 cwt customary wt dd them at Dovey ye 17th Oct 1787 by the Three Cousins, Jacob Rees as pr acct rendered 10th May 1788 13/- pr ton put on board at Barrow.

Gaskell & Bell Dr to Stenton Iron Ore £31 17s for 49 ton customary weight delivered them at Dovey by the Lark, David James master 21st August 1900 @ 13/- a ton put on board at Barrow.

With thanks to Kate Roberts for showing us the non-public areas of the furnace and to Dave Robson for taking the photos.

ABERLLEFENNI QUARRY VISIT REPORT.

A cool but dry start saw the group on a circular tour of Aberllefenni, its Quarries, and other features of interest.



Staring at the National Resources Wales (formerly the Forestry Commission) car park just south of the village the walk went via the main village mill which dates from circa. 1850. It is still in use and even has half of its original water wheels since when the floor was concreted these were simply cut down to floor level and plated over. The village remains interesting since almost

every building was associated with the quarry and the majority of the houses are still owned by the company with operated the quarry from 1956 to April 2016 although the quarry has been sold a group of 16 houses and land remain on the market with an asking price of £1.5 million.



The next point of interest was the quarry office which has been restored as a "weekend retreat" but externally it is in excellent condition with the original pattern of slating and bell being re-instated. Moving on to Hen Gloddfa Floor 6 the quarry workings were explained in detail together with the nature of the narrow vein and the water balance incline was inspected.

Leaving the main site via the terrace of cottages known as "Bluemaris" the expensive 6km long road which climbs 325m on route to the top of Hen Gloddfa and Ceunant Ddu, installed in a

largely abortive attempt to un-top the older workings, was seen. The valley road was following up the Llefenni valley to see the remains of the Cambergi Mill and its workings on the skyline. The limited extraction here proving that the narrow vein on which most of the workings in the Corris area are situated being far superior to the Broad Vein exploited only at Cambergi and Abercwmeiddaw.

Returning down the valley to the main Aberllefenni Quarry at Foel Grochan the inclines and other features were seen together with the rails which run out of floor 8 remain in the road. It always amazes the author that whilst the quarry bought the last new locomotive to be used in the slate industry in 1974 it only bought its first locomotive in 1956 and this was 8 years after the railway to which it had been connected for nearly 100 years had been closed. The group then returned to the village before taking the track to Cwm Ratgoed. It was interesting to note that the conifers have been clear felled below the track in Cwm Ratgoed improving the views although they remain above it. The Aberllefenni workings pass right through the hill and where they emerge a red derrick crane manufactured by Rushworth of Colne exists in situ above a deep chamber it being a remnant of a pillar robing operation which saw blocks latterly being transported by road around the hill rather than through it.

Level 5 was entered although there was some remonstrating with the guide regarding the depth of the water since when questioned at the start of the walk he had said walking boots were fine and that wellies were not needed. When it was pointed out that most of the party had wet feet he was heard to replay that people had not run through the water quickly enough since his feet were dry. The full accessible length of Floor 5 was seen together with the numerous remnants of cranes. All were impressed by the verticality of the workings.

Once back outside the majority of the party ascended to Floor 4 to see the remains of an ex. marine steam winch, latterly powered by compressed air.

THE INDUSTRIAL HISTORY OF CUMBRIA – WHAT’S NEW ON OUR WEBSITE

I know that many of you are regular visitors to the society’s website at www.cumbria-industries.org.uk, but in case you have missed them here are some of the new items that have appeared on it – as usual a mixture of new and previously published articles and photos. My thanks go to all the contributors.

Trevor Purnell’s conference presentation of a few years back on **Calder Hall** re-appears on the 60th anniversary of its opening.

Graham Brooks article on **Warwick Bridge Corn Mill** is linked to a gallery of photos taken during an open day visit organised by the North of England Civic Trust who are attempting to renovate and breathe new life into the building.

Alan Postlethwaite has written two new articles to boost the Farming section – one on the role of **The Landowners**, another on the development of **Agricultural Education**.

Roger Baker has written an overview of the **Wool** industry in Cumbria, linked to a photo gallery of Mike Davis-Shiel’s images of woollen mills.

Dai Powell and Fred Lawton have contributed some fascinating photos of **Iron and Steel Works** in West Cumbria.

Please let me know if you would be willing to write about a subject or an industrial site that would fill a gap on the website – just text is fine, I'll handle the technical bit. Or you may have collected articles from old magazines for example that could safely now go on-line. What about those photos you took of buildings since demolished or industries no longer active?

Roger Baker

QUESTIONS AND ANSWERS IN 2016

Our website, www.cumbria-industries.org.uk, continues to attract attention from family and other researchers, leading to requests for help. These are circulated to all members who are part of our 'mail group' in the hope that somebody will have the necessary local or industrial knowledge to provide answers. If you are not receiving this kind of email, plus notices and newsletters etc from me, but would like to do so, please contact me at lowludderburn@btinternet.com.

Ailsa Sutcliffe knew her grandfather was a colliery manager in the Brampton area. Thanks to Graham Brooks and Margaret Martindale, and the Durham Mining Museum website, we found that he worked for Naworth Collieries Ltd and was in charge of several pits including Gairs around 1925-30.

Catherine Queen, of Exeter University, wanted help with research into electrical infrastructure of West Cumbria. CIHS member, Peter Hearn, who is a member of the Institution of Engineering and Technology, volunteered. Peter Sandbach also provided some information.

Alverie Weighill was researching Porter family foundries in Carlisle and Dumfries. Graham Brooks, Mark Brennand and Chester Forster were able to find references to the Porter foundry in Carlisle and I sent a photo of a Porter drain cover taken by Mike Davies-Shiel.

Krista Williamson was trying to link a James Williamson who was 'Factor of the copper mines in the North' in 1595, to her ancestors at Millbeck, near Keswick. Fred Lawton provided some references.

Barbara Skelton's mining family lived at Yew Tree Yard, Blennerhassett in 1911. Mike Turner replied to say that he lives in the same location but the name had changed to Beech Tree Yard! Four other members replied with local mining information.

Alison Lash was trying to find out a bit more about where her great- and great-great-grandparents lived and worked in Seaton, before they emigrated to NZ. Dai Powell made contact with her.

Becki Davison is doing a Master's degree in History and had been set a topic including the decline of the cotton industry in Cumbria. Six members replied, some with extensive

reading lists. Becki said “I was slightly dreading the Industrialisation module but I'm actually really enjoying it and it's so interesting.... Thank you all again so much for your help - very much appreciated!” Judy Pyle’s grandfather and great-uncle owned and managed the Thompson’s Board Mill at Little Salkeld, near Penrith, which closed around 1991. She had seen a photo of their Hollander Beater, taken by Mike Davies-Shiel, on the Cumbria Archives website and was querying the date. She has transcribed her grandfather’s diaries from 1899 to 1952 and they make fascinating reading. Graham hopes to publish an edited version.

Helen Caldwell

MORE USEFUL THAN LIMESTONE? THE CASE FOR COAL.

At the society’s autumn conference, our chairman Geoff Brambles – in his welcome to Peter Standing - threw out a challenge to the audience to come up with a rock with more uses than limestone, the subject of Peter’s talk. Of course I didn’t have the nerve to say anything at the time but have been mulling it over afterwards ... what about coal?

At the gasworks bituminous coal was heated in retorts to produce coal gas which was then ‘cleaned’ to supply town gas fit for consumption. The processes involved gave rise to a number of by-products which – after further refining and distillation – had many hundreds of uses. Some of these processes took place at the gasworks, most at an associated chemical works.

Most of these products have for a long time now been derived from oil, but for decades the source was coal. I rest my case.

Here are some examples:

- Hydrogen sulphide providing sulphuric acid for superphosphates, bleach, viscose etc.
- Ammoniacal liquor producing ammonia used in waterproofing, plastics, refrigerants etc.
- Crude benzol further refined for use in photographic chemicals, polystyrene, paints, varnishes, lino, and toluol – used in the production of TNT
- Light oil from crude tar – vitamins, perfumes, Dettol
- Middle oil – firelighters, dyes
- Heavy or creosote oil – disinfectants, insecticides, sheep dip
- Anthracene or green oil – dyes, laxatives
- Pitch – briquettes, insulation material, tarmac

COMMITTEE MEMBERS DETAILS

Roger Baker,
3 Sun St
Ulverston
Cumbria
LA12 7BX
mbarb@freenetname.co.uk

Bill Myers
20 Lord St.
Millom
Cumbria
LA18 4BL
bill.myers@nwemail.co.uk

Geoff Brambles, Chairman
21 Derwent Drive
Kendal
LA9 7PB

Graham Brooks, Bulletin Editor
Fairhurst
Aglionby
Carlisle CA4 8AQ
solwaypast@yahoo.com

Mrs Helen Caldwell, Secretary
Low Ludderburn
Cartmel Fell
Windermere LA23 3PD
lowludderburn@btinternet.com

Alan Postlethwaite, Treasurer
17 Railway Terrace
Lindal-in-Furness
Ulverston LA12 0LQ
mandatelsop@btinternet.com

Mr Dan Elsworth, Publicity Officer
6 Town Street
Ulverston
LA12 7EY
dwelsworth@cooptel.net

Dr Ian Hill
5 Parkside Drive
Arnside
Cumbria LA5 0BU
fi.hill@btopenworld.com

Mr Robin Yates Membership Secretary
Glenrae
Brigsteer Rd
Kendal
LA9 5DX

Mr David Beale, Minutes Secretary,
Low Row
Hesket Newmarket
Wigton
CA7 8JU



REMAINS AT GREENBURN MINE.

