



THE TREVITHICK SOCIETY

KOWETHAS TREVITHICK
NEWSLETTER 174 WINTER 2016



This is currently on display in the front window of Rowe's Bakery in Penzance.
Photo: Pete Joseph (20/10/2016).

Reg. Charity
No. 1,159,639

CHAIRMAN'S PIECE

BACK TO THE FUTURE (AGAIN)

Someone, I forget who, once said: "What I hate about the future is the uncertainty of it all." As I sit here reflecting on the many remarkable events that have occurred during the year, I am minded that, by the time anyone reads this, the compliments of the season will all have been paid, Auld acquaintance will have been well and truly forgotten, and we will all be staring into the harsh reality that is to be 2017. Whether you put your credence in the right-wing tabloid hack or the left-wing media pundit, they all agree that 2017 is going to be dark, dismal, depressing, completely dreadful, and socio-economic life as we know it, is about to come to an end. All this from the visionaries who last year failed to predict Brexit, another female Prime Minister, and the largest British medal haul in the history of the modern Olympic Games.

Such, I believe, was the case in 1935 when the world was, for the most part, still gripped by the effects of global depression, and the voice and verve of the nation was with that first full generation after the Great War. A generation who were largely, blissfully unaware of impending global conflict, that would unleash advancements, good and evil, that were inconceivable in 1918.

Against this backdrop a small group of like-minded individuals, armed, I suspect, with few resources besides their will, want and determination, decided that something needed to be done to try to preserve what they could of Cornwall's already vanishing industrial heritage. That pioneering group laid the foundations of the Society as it is today.

As each uncertain New Year has rolled by, the Society has risen to meet this challenge and has always managed to do so. In some years, there has been great acclaim, and in others, only modest success. Whichever scenario played out, the achievements were always for the betterment and benefit of the cause of our industrial heritage.

As I sit here on this rather damp and dismal morning, contemplating the approach of yet another uncertain New Year, I am cheered by the notion that, in an ever changing world, some things really don't change that much at all.

Brian Jones

Copy date for next newsletter:

March 15th 2016



Established 1935

LETTER TO THE EDITOR

May I be permitted to correct an impression that may have been given in the article, in the last newsletter, concerning the Princess Elizabeth locomotive, regarding the use of “poor quality coal”?

As a steam loco engineman I would suggest that the crew of 6201 might disagree with you. The safety valves can be seen to be feathering despite the exertions of the pull up from near sea level at St. Erth, the dark smoke at the chimney top being as a result of being a bit light on secondary air as the loco looks to have been eased.

It's a magnificent sight, and one loco that I would love to drive.

Ralph Ingham

W. JOHN TONKIN

It is with deep regret that we record the passing of John Tonkin of Bugle and St. Austell aged 86. After his secondary education John enrolled at Camborne School of Mines gaining his A.C.S.M. in 1951. Thereafter he was gold mining in the Gold Coast, now Ghana, for two years then spent four years in British Columbia. Whilst there he sustained a serious skull fracture in an accident but thankfully survived. He returned to Cornwall and spent the rest of his working life with E.C.L.P. now Imerys Minerals.

John was a man with a wonderful turn of phrase and tremendous humour. As well as being a member of this Society he was a founder member of the China Clay History Society and spent much of his time recording the clay industry and amassing a wealth of information which he was always happy to share.

Our thoughts are with Eve and his family.

Thank you for your past company John, you were a delight to know and be with.

K.J.T.R.

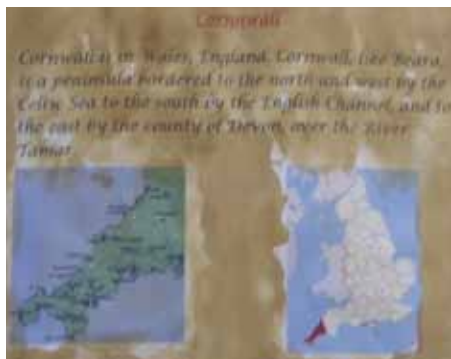


Cornish copper mining in Ireland

Last year we visited Allihies and in typical Irish weather went up to the Mountain Mine. I can't say what it all looks like under different conditions but a very bleak place in July, as testified by the photograph on the right!

The other photo may cause a little Cornish amusement. It was taken in the Museum/cafe in the village.

Marcus Croome



The text above says:

“Cornwall is in Wales, England. Cornwall, like Beara, is a peninsula bordered to the north and west by the Celtic Sea, to the south by the English Channel, and to the east by the county of Devon, over the River Tamar”.

KING EDWARD MINE

This is being written in the depths of winter and, as one would expect, there are no visitors but the site is extremely busy with the builders busy in every corner. During the last week they have finished roofing the mill and stamps and they are now widening the side doorway into the mill. This latter action will prove very useful as the old entrance was exceptionally narrow and getting large items into the building was problematical. The winder boilerhouse has its new roof and fitting out will begin shortly. It will contain a new audio visual display and a basic introduction to the geography, geology and industrial history of the area for the visitor. The Survey Office has been painted, the toilet and blacksmith's shop block has a new roof and the top workshop has had new cladding and a new roof so all is looking very smart and ready to welcome the 2017 season. The Assay Office which was terribly run down is well under way to becoming the cafe.

Our own grounds crew have been busy clearing gorse and brambles at the Fortescue end of the site under the direction of member Tony Bunt. One major job almost complete is the installation of an underground cable to supply electric to the big store which has involved trenching and pulling cables over some 100 metres. This was over seen by member Roger Kellow who will connect into our main distribution board in the mill as soon as we have clearance from the builders.

Member Dave Crewes, assisted by Sarah Jolly, has started to sort and list the vast number of books that we have accrued with a view to selling off the duplicates to save storage space and to hopefully have a usable library. The large tables in the Survey Office are providing very useful space for this type of work.

K.J.T.R.

MYSTERY CORNISH ENGINE

Does anybody recognize this Cornish engine?

I have been asked to identify the location of this Cornish engine and, having drawn a blank, I would like to appeal to the Society's membership in the hope that someone will recognize it. The picture is a teenage watercolour by Peter Lanyon almost certainly painted from life in circa 1934. The position of the bob indoors or "up" suggests that the engine was working at the time, and the high hill in the background is reminiscent of various places, including Carn Brea, St. Agnes Beacon, Porthtowan, Caradon, etc. But none of the engine houses I have so far tried to link it to have the distinctive ornamentation at either end of the roof ridgeline. Being a picture by Peter Lanyon, some artistic license is to be expected, but these were occasionally used on engine houses and are certainly real. If anyone among our membership has any suggestions as to where the watercolour might have been painted, I would be very pleased to hear of them.

Damian Nance.
nance@ohio.edu





CORNWALL RECORD OFFICE

Members will no doubt be aware that a new record office is being built on the site of the old Redruth Brewery. When the brewery closed the Society was given the right to remove any historical items and

some these artefacts are to be displayed at the site to encourage the public interest and member Phil Porter and the writer are currently engaged in working with record office staff to achieve the best benefit for both parties.

K.J.T.R.

MIKE STEPHENS



We are sorry to announce the passing of Mike Stephens, aged 75, at Bromsgrove on 23rd November. Mike was very proud of his Cornish roots as, on his father's side, the family came from Camborne. He was a grandson

of Albert Stephens, chemist in Camborne; and a great grandson of Samuel Stephens (mine agent and long standing member of the Camborne Wesley Methodist Church) and of Richard Stephens (founder of R. Stephens and Sons Ltd., later the Climax Rock Drill and Engineering Works). The fact he descended from two completely different lines of 'Stephens' families was purely coincidental!

Mike grew up in South London, enjoying a happy childhood, and went on to study Metallurgy at Leeds University. He was a keen sportsman, playing Rugby for London Welsh schoolboys, Leeds University and Ipswich. Mike married his sweetheart, Christine, in 1964 and they enjoyed many happy years together. In the same year, he started his career with Manganese Bronze in Ipswich and continued with the Delta Metal Company in the West Midlands, until retiring there as Managing Director in 2001. With three daughters and five grandchildren, the family spent many happy holidays in Cornwall walking the coastal path on sunny days, and researching family records at the Truro archives on rainy ones. Mike joined the Trevithick Society and enjoyed participating in gatherings when he could. He relished the chance to make a contribution to the updated 'From Holman Brothers to CompAir: the story of Camborne's engineering history' in 2012, with a chapter on Richard and William Charles Stephens and the Climax company.

A few years ago, he was thrilled to be invited to a concert of the Holman-Climax choir, where he also met members of the Holman family and received one of the choir's ties!

STEAM FROM SCRATCH

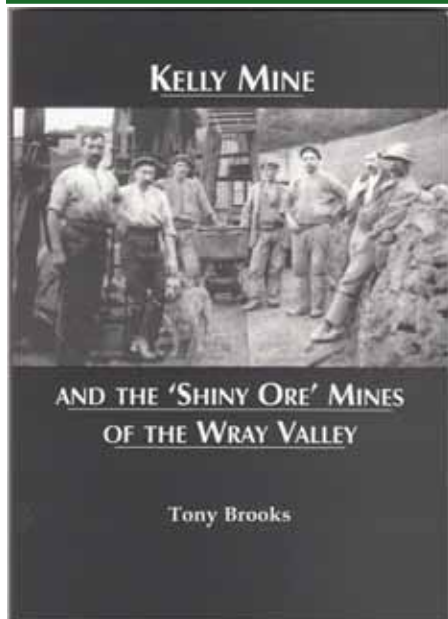
Currently on sale is a magazine called *Steam from Scratch: building new British steam locomotives today*. Chapter 5 deals with the building of replicas covering the early years of locomotive design, starting with the known Trevithick locomotives through to the variants of Trevithick's design that evolved in the north east of England in the following decades, made by such engineers as William Hedley and Timothy Hackworth. This article provides a very good summary of early locomotive development and the representative range of replicas that have appeared throughout Britain. Most remarkable of all is a contemporaneous drawing of Trevithick's Catch-Me-Who-Can locomotive, under construction in 1808. It was drawn by John Claude Nattles, and shows the boiler propped up by large wooden planks, awaiting fitting of the wheels. Apparently this drawing has never been published before.

Another article in this magazine describes the building of the replica Victorian compressed air mining locomotive *Issing' Sid*, which originally operated at the Earl of Durham's Lambton Collieries from 1887. This particular replica was made from recycled parts. The frame was cut from the jib of a scrapped Smith steam crane and, most remarkably, the cylinders were made by Holman of Camborne, which were found by a dredger cleaning out the Kennet & Avon Canal in the 1970s.

I would like to thank John Woodward for bringing this magazine to my attention.

CNF.

KELLY MINE



Kelly Mine and the 'Shiny Ore' Mines of the Wray Valley.

New Book by Tony Brooks

Micaceous Haematite or 'Shiny Ore' as it was known locally was mined commercially for over two hundred years in the Hennock-Lustleigh area of Devon. The main use of micaceous haematite was as a base ingredient in rust resistant paint. It was mined nowhere else in the UK. The mines did not hit the headlines and it is probable that most people in the mining world would not have known of the industry.

The 'Hennock; mines: Bowden Hill, Shuttamoor and Great Rock are covered in my previous book 'Great Rock, Devon's Last Metal Mine', and are only touched on here. Great Rock, where I briefly worked in 1963, was by far the largest mine in the area and the last to close in 1969.

This book, as the title suggests, concentrates on the mines in the Wray valley. From north to south along the Wray

valley they were: Wray, Pepperdon, Kelly, Hawkmoor, Plumley and Shaptor. All were tiny, usually employing less than ten people. Much of the mines' surface structures have been swept away. Fortunately the Kelly Mine preservation Society has restored the surface part of Kelly Mine to working order. Of interest to us, Frank Mitchell, formerly Head of Mineral Processing and Vice Principal at CSM, was consultant to both Kelly and Great Rock.

Once the production costs have been recovered the proceeds will go to support the work of the Kelly Mine Preservation Society

190 pages – 64 plates – 33 figures. Soft back only. Not available through retail outlets £15.00 post free UK only.

Cheques only please, made out to

A. W. Brooks

Polstrong Cottage

Polstrong

Camborne

Corwall TR14 0QA

OLD CORNWALL

In the latest edition of 'Old Cornwall', is a five page article on Richard Trevithick, (Snr) and his marriage to Anne Teague, of their son Richard, William, Murdoch and John Budge. It deals with the development and maintenance of Atmospheric Engines, and of a prototype steam vehicle (?). It also has mention of a commemorative plaque recently laid at Camborne, to each of these great engineers, all of which may well be of great interest to the Trevithick Society.

Additional copies may be obtained via: Terry and Anne Knight editor@oldcornwall.net @ £1.95p or the Liskeard O.C.S. Treasurer, and S.E. Cornwall Trevithick Society Member, Brenda Furse.

Duncan Paul

ARCHITECTURAL VANDALISM

Penny Watts-Russell, Society member and regular Journal contributor, has been in touch about an appalling piece of architectural vandalism in Hayle. It concerns an extension to the White Hart Hotel, which, in addition to being totally unsympathetic to the hotel itself, also massively impairs the view of the adjacent Freemasons' Hall. This latter is of course the original White Hart Hotel managed by Jane Trevithick. The building was approved despite the opposition of the World Heritage Site Office, an extract of whose comments is below. They "considered that the proposed extension would represent an architecturally unsympathetic addition to the historic fabric of the White Hart Hotel which will also in part hide the front elevation of the adjoining Freemason's Hall (listed Grade II). Both buildings comprise part of the Outstanding Universal Value of the World Heritage Site through

their close associations with renowned Cornish engineer Richard Trevithick & the Harvey Hayle Foundry, the latter once the builder of the world's largest steam pumping engines. Given the harm that it is considered would be caused to the World Heritage Site's Outstanding Universal Value it is strongly recommended that this application be refused."

Their suggestion was that: "The impact could be mitigated to a degree if a glass structure was installed rather than the masonry build as proposed."

The Trevithick Society was not consulted on this application nor apparently was the Heritage section of the Planning Department. I understand that the Cornish Buildings Group will cover this in their next Newsletter. Members should be aware of this dreadful act and remember that our industrial heritage relies on the vigilance of us all. We should publicise such acts of vandalism whenever and wherever we can, preferably at the planning stage.

Graham Thorne



LEVANT REPORT

Work to the lime wash on the internal walls to the engine house has been completed. A coating of breathable sealer was applied first in the hope that the top coat will last a little longer this time.

John Woodward has been brought in to carry out some of the repairs needed whilst the engine is shut down for the winter season. This includes work to the air pump and its operating rod bearing., plus the making and fitting of various pipework. The volunteers will be repainting the engine, guards, winding drums and boiler.

Due to the mains water at Levant being very acidic, a new boiler water treatment is now being used to get the pH levels right. The temperature of the boiler feed tank has also been increased to 85 degrees C to reduce the oxygen level which hopefully will reduce corrosion.

Work to the newly constructed internal launder underneath the diverter sheave is now in position. This completes the work to the head frame.

Following an inspection by The Health & Safety Executive, we will have to provide emergency egress at the shaft end



Above: chain block in position for lifting Air pump from Hot well.



Below: hot well and air pump piston.

of the Man-engine tunnel and install an oxygen monitor in the tunnel. There are two exposed adits in Boscregan Zawn and these have been covered with wire mesh at the request of the H.S.E. also.

Jo Warburton from East Pool Mine will be joining us for the new steaming season as the Tin Coast manager, and due to Anthony Power's retirement in February a new custodian has also been appointed.

Ron Flaxman



Two views of repainted Bob loft.

Below: a view of the engine driver's position with grills raised.





Above: Jan Beare inside top of Skip shaft head frame repairing the launder below diverter sheave.
Below: a view of the partially repainted Cornish Boiler.



PUFFING DEVIL AT BOOK LAUNCH

This Autumn the Society received a most unusual request - the Puffing Devil was invited to take part in a book launch!

The book, *The Cornish in Latin America: 'Cousin Jack' and the New World*, by Dr. Sharron P. Schwartz (Photo right), was sponsored by the Cornish Mining World Heritage Site and the book launch served as a double celebration to mark the 200th anniversary of Richard Trevithick's pioneering trip to Peru in 1816 and the tenth anniversary of inscription of the Cornwall and West Devon Mining Landscape on the prestigious UNESCO World Heritage Site list.

The launch, on 23rd November, was hosted by the Cornwall and West Devon Mining Landscape World Heritage Site Partnership, at the Harvey's Foundry site in Hayle. This event included a delegation from Peru to celebrate the 200th anniversary of Richard Trevithick's



journey to the New World. Guest of honour was Minister Raul Hidalgo Gallegos of the Republic of Peru Foreign and Diplomatic service. Minister Hidalgo Gallegos was welcomed to Cornwall by Cllr. Mary May, Vice Chairman of Cornwall Council.



Left to right: Julian German (Chair of the World Heritage Site Partnership); Minister Raul Hidalgo Gallegos of the Republic of Peru Foreign and Diplomatic Service; Dr. Sharron P. Schwartz (academic and author); Nickolaos Filippakopoulos (Peruvian Mission to UNESCO).

Trevithick's trading venture with Peru triggered the development of Cornwall's extensive international business links, based on its mining expertise and technology, which subsequently extended across the whole of South America, and ultimately to every continent on the globe. This world-wide impact lies at the heart of Cornwall and west Devon's World Heritage Site status, which was awarded in 2006.

Trevithick travelled to Peru in 1816 to oversee the installation of his high-pressure steam pumping engines, which had been shipped from Britain to restart mining at the famed silver mines of Cerro de Pasco. Trevithick defied eminent engineering minds of the time, who had asserted that steam engines could not operate at the altitudes of the Peruvian Andes (over 4,000m). The application of high-pressure steam by Trevithick proved that his steam engines could not only function in this rarefied atmosphere but, indeed, successfully pump mines dry. This event constituted the first use of steam technology on the continent and heralded the dawn of the Industrial Revolution in

Latin America.

This incredible tale, and much more, is told in mining migration specialist Dr. Schwartz's long-awaited book. It sheds light on a largely neglected chapter of the Cornish mining migration story of the nineteenth century. Dr. Schwartz recounts in detail how the mining fields of Peru, Mexico, Chile, Cuba, Brazil and elsewhere in South and Central America and the Caribbean, became established or were reshaped through the application of Cornish skills, technology and British finance.

The Cornish in Latin America: 'Cousin Jack' and the New World is available in a limited edition of 200, and exclusively online from the Cornubian Press at: <http://www.cornubianpress.com>. More information on the Cornish Mining World Heritage Site, and other aspects of the Cornish mining migration story, can be found at www.cornishmining.org.uk.

The engine was manned by John Sawle and Colin French, and Kingsley Rickard took part in the indoor proceedings at the nearby museum.



Dr. Martin Critchley (Geologist); Dr. Sharron P. Schwartz; Dr. Colin French; Minister Raul Hidalgo Gallegos of the Republic of Peru Foreign and Diplomatic Service. Kirstin Prisk © Cornwall Council

PUBLICATIONS

The new edition of Allen Buckley's *The Great County Adit* is now on sale at £15.99. The larger format and enhanced maps have given this standard work a new lease of life.

Work proceeds on a very important new work by Rick Stewart. *Mine Pumping Engines in Eighteenth Century Cornwall* is the first work to look in detail at this pioneering period of steam in Cornwall. It is timed to coincide with the first International Early Engines Conference, I.E.E.C., which will take place in May at Elsecar, site of the well-known preserved Newcomen engine. Rick will be presenting a paper at the conference. His book brings together and reviews recent work in this area and will be essential reading for those with an interest in mine pumping, drainage and steam.

A list of all Society publications currently in print is to be found on our website. I am happy to post copies to members without electronic access on request. Following their publication of *Fayle's Tramways* by Chris Legg, a very successful volume on the railways of the Purbeck clay industry, Twelveheads Press has now issued a companion volume, *The Furzebrook Railway – of Pike Brothers' Dorset Clay Works* by the same author. This completes the treatment of this fascinating area's industrial railways and is a large format hardback at £28. Promised later in the year is a full revision of M. J. T. Lewis's *Pentewan Railway* and a volume on *Plymouth's Hidden Railways*.

Graham Thorne

ANNUAL SUBSCRIPTIONS

Many thanks to the many people who responded to the proposed new rates of subscription.

At the Council Meeting held on the 12 November 2016, the Treasurer was able to report that an overwhelming 92% of respondents were in favour of the new levels of subscription.

However, there were some, who were rather more vociferous at the proposed increases, and Council agreed to take the proposals to the next AGM, in May 2017, for approval. This means the new rates (assuming they are voted in) will be effective from 2 January 2018.

It may be worth reiterating that membership of the Trevithick Society also gains free entry to East Pool Mine, Geevor Museum, King Edward Mine, Levant and Poldark Mine. Whilst it is appreciated that these sites are really only practical to visit if in Cornwall, there are moves afoot to include, for the future, free entry to Crofton Beam Engines, Beamish Open Air Museum and the London Museum of Steam and Water, amongst others, for those that live up country.

AGM 2017

Date:

12th, 13th & 14th May

Location:

Tamar Valley

More details to follow about venue for AGM Dinner and possible accommodation.

SOCIETY MEETINGS PROGRAMME

KEM: meet at 1900hrs for a 1930hrs start at King Edward Mine, Troon, Camborne TR14 9DP.

Liskeard: Meet 1900hrs for a 1930hrs start at The Long Room, Liskeard Public Hall PL14 6BW.

Monday 9 January (Liskeard).

Treffry, Cornwall's King of Industry
by Tracy Elliott.

Friday 13 January (KEM).

Boatbuilding
by Gary Mitchell.

Friday 10 February (KEM).

Cornwall's Airfields in WWII
by John Gould.

Monday 13 February (Liskeard).

Boatbuilding
by Gary Mitchell.

Friday 10 March (KEM).

Porthcurno Telegraph
by Gareth Parry.

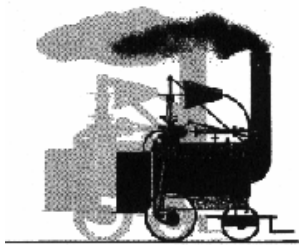
Monday 13 March (Liskeard).

Nature after Minerals
by Nick Coppin.

Friday 7 April (KEM).

My mining experience and images of the working South Crofty
by Simon Jones.

Non members are welcome to attend.
Non-members £2.00 please.



Contact:

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For up-to-date news check:

<http://www.trevithick-society.org.uk>
<https://www.facebook.com/trevithick.society/>

MEMBERS' BENEFITS

Trevithick Society members are entitled to free entry (on production of the membership card) to the following attractions:

- King Edward Mine
- Cornish Engines at Pool (East Pool Mine and Michell's Whim)
- Levant
- Geevor Museum

Also:

- Members are invited to visit Poldark Mine free of charge on production of a valid membership card.
- 10% off book purchases at Tormark.
- 20% off purchases at KEM shop.

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The Trevithick Society, a registered charity, is a recognised body of the study of industrial archaeology in Cornwall. Membership is open to all who are interested in the region's great industrial past, whether or not they live in Cornwall. The Society takes its name from one of Britain's foremost inventors and pioneers of the Industrial Revolution, Richard Trevithick, a Cornishman whose name is inseparable from the development of steam power. This newsletter is published quarterly and, together with the annual journal, is distributed free to members. Letters and contributions are always welcome and should be sent direct to the editor.

The views expressed in this newsletter are those of the authors and not necessarily those of the Trevithick Society.

ANNUAL SUBSCRIPTIONS:

Student members (under 21)	£5.00
Individual members	£20.00
Family/joint members	£25.00
Overseas members	£25.00
Corporate members	£25.00

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