



THE TREVITHICK SOCIETY

KOWETHAS TREVITHICK

NEWSLETTER 152 JULY 2011



Reg. Charity
No. 246586

Stephen Thomas, who has been Society Treasurer for 26 years, receives a Trevithick Gold Medal from President Bryan Earl at the AGM.

CHAIRMAN'S ADDRESS

Home at last?

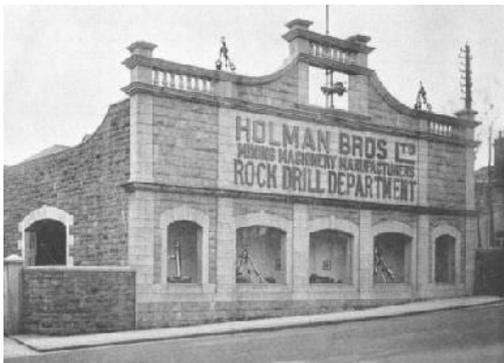
Your Society has set out along the long torturous road of funding applications, media exposure and possible disappointment towards the quest for a home. From my records I see we started this journey eight years ago and readers of this column must have wondered if we'd ever make any real progress.

Following the consensus at this year's AGM that we should pursue the possibility of a permanent home a vote at a recent Council meeting confirmed the wish to appoint a consultant to undertake the first stage of a Heritage Lottery Fund application. A Preliminary Application was submitted to the HLF last year and received a positive response.

Members who have been down this path will know that it requires dedicated work, nothing is simple, nor is it quick. Concurrent applications will be aimed at developing the website to improve our communications with all who could benefit from our resources, seeking funding for environmentally friendly heating systems and applying to the local Townscape Heritage Initiative for assistance with the reinstatement of the windows and the Holman lettering on the front of the building.

The Society will need to raise money from other sources towards the total funds. Should the Society be successful in the above it is anticipated that it will set up an incorporated body to control the development of the site and its subsequent operation. Applications for directorships will be invited at the time.

Should there be a successful outcome, the property will be made available to the Society by Coastline Housing Ltd., a Registered Charity that is committed to providing independent living on the former CompAir Holman No 3 factory site in Trevu Road, Camborne.



Philip M Hosken

EDITORIAL

I am happy to report that the Puffing Devil passed its boiler test with flying colours again this year. It is a testament to the design and build quality of the engine that the boiler inspector described it as 'looking as new'.

Colin French

Copy date for next newsletter: September 30th



Established 1935

LETTERS TO THE EDITOR

Dear Editor,

Whilst I always appreciate the excellent Trevithick Society newsletters, I was particularly pleased to read on page 14 of Newsletter 151 that the National Trust have now dropped the name 'Cornish Mines and Engines' for Michell's Whim and Taylor's shaft at Pool.

I would like to say, as the ex-Chief Executive of The Trevithick Trust which restored Taylor's shaft as a major visitor centre, the change of name at the time was against the wishes of the Trevithick Trust but done on the insistence of the National Trust who felt that the new name would be more attractive to visitors.

However, I am concerned about the plethora of mining heritage attractions in the Camborne/Redruth area, with East Pool Mine, King Edward Mine, Tolgus Tin, the Heartlands project and the proposals of the Trevithick Society for a headquarters in the Holman buildings. There are also several smaller attractions in the area with a mining or industrial theme. There does not appear to be any central coordination for all these activities, which in the absence of an over arching body such as The Trevithick Trust which is now defunct, perhaps should be coordinated by the World Heritage Site office in Truro.

Stuart Smith

Dear Editor,

CONCRETE WORKS AT POOL

(Response to enquiry in newsletter 150)

The Concrete Block Works adjacent to Taylor's shaft at East Pool & Agar Mine was set up by two brothers named Lovelock. They had been involved in mining before the Great War but on their return they recognised that the industry was in a parlous state. The Grenville United Mines, Basset Mines, Carn Brea

& Tincroft, the mighty Dolcoath and others had all closed by the early 1920s. Unemployment was rising at an alarming rate.

Alfred and Bob Lovelock saw the possibilities of investing in the production of concrete blocks and established this works, which they named the Cornwall Concrete Construction Co., adjacent to the newly sunk Taylor's shaft. It proved to be a shrewd decision as their business prospered. There are about ten people in the photograph all of whom are block works employees. They are not visible in the image in the newsletter but can be seen in the original photograph. It is not unusual that no-one is around the mine buildings as they are carrying out their various duties within the buildings.

At about this time, in the early 1920s, concrete blocks were a new innovation to the building trade. It is thought that this works was amongst the first in Cornwall. The mine produced the raw material, i.e. rock for the block making. In the newsletter article the writer states that the mine owners were involved in block making, which is not the case. The proximity of the block works to the shaft was convenient for the purchase of waste rock virtually on site. To this was added the cement etc. and in those days the blocks were individually hand-made. Each block mould was operated by one man.

At my family home there were a number of concrete blocks piled behind the greenhouse. They had the mark C C C Co No 7 on the side. My late father told me that the letters stood for Cornwall Concrete Construction Co. but did not know the significance of the number. I was to learn this many years later when it transpired that the girl I married was related to the Lovelock family. Alfred Lovelock explained that particularly large and regular sales were made to Council housing sites. Many of these housing estates were erected between the wars. On one occasion a complaint arose over some inferior blocks in a batch supplied to a St. Ives development. In order to prevent this problem arising again it was decided

to give a number to each block mould and, instead of having random use of the moulds, each employee was allocated his own equipment. A simple but effective form of quality control!

Operations continued until the closure of East Pool & Agar mine shortly after the end of World War II.

Joff Bullen

GOLD MEDAL FOR SERVICE TO TREVITHICK SOCIETY

The Trevithick Society presents its Gold Medal only rarely to those who have made a very particular contribution in the Society's areas of interest. Such presentations are therefore very special occasions. But the most recent of these, at the Society's May AGM weekend was particularly noteworthy when the Society's President, Bryan Earl, presented a Trevithick Gold Medal to the second member of the same family.

Receiving his medal to mark his impending retirement from the office of Society Treasurer after an unprecedented 26 years was Stephen Thomas of Camborne. Stephen has guided the Society's finances through a period of unprecedented change. Stephen's father, Milton Thomas, was 'Greaser-in-Chief' and leader of the gang, who restored to steam the 1840 beam engine at Levant Mine in the 1970s. In recognition of this project and his service to the Society, Milton Thomas also received the Trevithick Medal in 1991. Other recipients were Joff Bullen, Jack Trounson and Dr. A. K. Hamilton Jenkin.

Stephen's talents will not be lost to heritage matters. He will now be devoting more of his time to his other interest, the Helston Railway Preservation Company, where he is Director of Locomotives and Rolling Stock.

TREVITHICK COINS



I was recently fortunate to find a couple of Trevithick £2.00 coins in my change. As I tucked them away, I noted that the circulated coins are now looking decidedly worn. It is still possible to purchase some of the remaining untouched, uncirculated, encapsulated coins from this Society, the only source, with full provenance including the Royal Mint delivery note number 31963778, at just £3.50 each including P & P. Please send cheques, made payable to The Trevithick Society, to me at my address on the back cover.

Philip Hosken

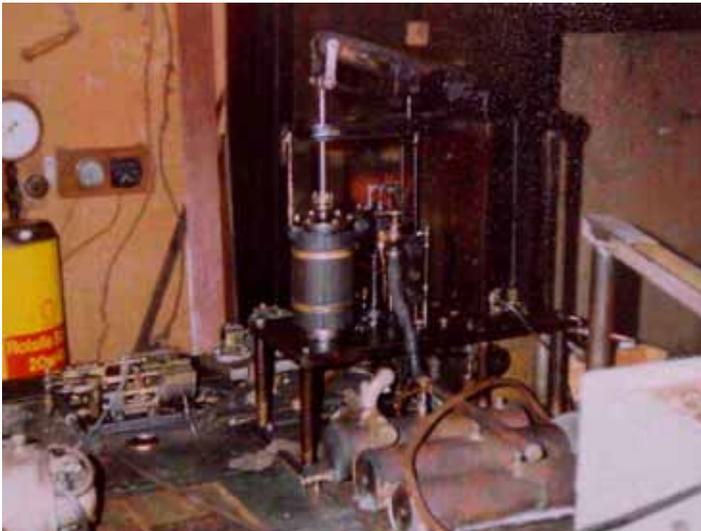


THE TREWHELLA MODELS EPISODE 3

INVENTORY OF MY UNCLE'S MODELS AT RESTRONGUET

You may remember from an earlier Newsletter that I wrote about visiting Cornwall in 2001 and getting involved with the restoration of models at Geevor Tin Mine Museum made by my Uncle Bernie, Charles Bernard Trehwella. At the time living in Spain and having no proper workshop I felt that I was not a very good choice. My only saving grace and possibly why Geevor welcomed my involvement was that I knew the models in depth. It was up to me on my return home to set to and compile a comprehensive inventory of the models that were set up in his workshop at Restronguet to form the mine, as well as any others not in use. In parallel with this I also needed to try to find out what models were, in fact, hidden away at Geevor.

My cousin Priscilla Fursdon (Bernie's daughter) sent me various pictures she had taken at Restronguet and



Picture 1. Beam engine

also copies of the correspondence she had had with various people at Geevor with the object of ensuring that no models disappeared. The replies gave varying degrees of assurance but were not much help in establishing if any had disappeared or for compiling an inventory. 2001 was the year that the Pendeen Community Heritage (PCH) took over the running of Geevor so they had no real knowledge of the models. However, I was fortunate in that Pete Joseph was still part-time curator for Geevor, as well as for the Trevithick Society, and he checked out for me various stores including the strong room and was able to confirm for me that he not only knew the models but that most of them not on display were in the strong room at Geevor. At this stage we were not sure what might be missing, as no correspondence existed detailing what was actually given to Geevor.

INVENTORY OF MODELS MOSTLY OPERATIONAL AT RESTRONGUET

This is not quite the original inventory I compiled as I have updated it where new information has come to light. Some idea of the layout at Restronguet is also important, as it will help in the rebuilding of the ensemble as a working model. Perhaps more important is how my uncle conceived the model mine which I, too, believe to be a desirable feature.

LAYOUT

The model mine was built on two tables of

approximately the same height set at right angles to form an "L". The stamps, shaking tables and ore bins are still on the original table at Geevor. The exact position of the beam engine, generators, and headgear and winder has to be an educated guess for any rebuild. From various pictures, it is possible to establish the height of the water tank, fed by the beam engine, and hence get the water supply to the mill at the correct pressure, as it is a gravity feed supply from this tank.

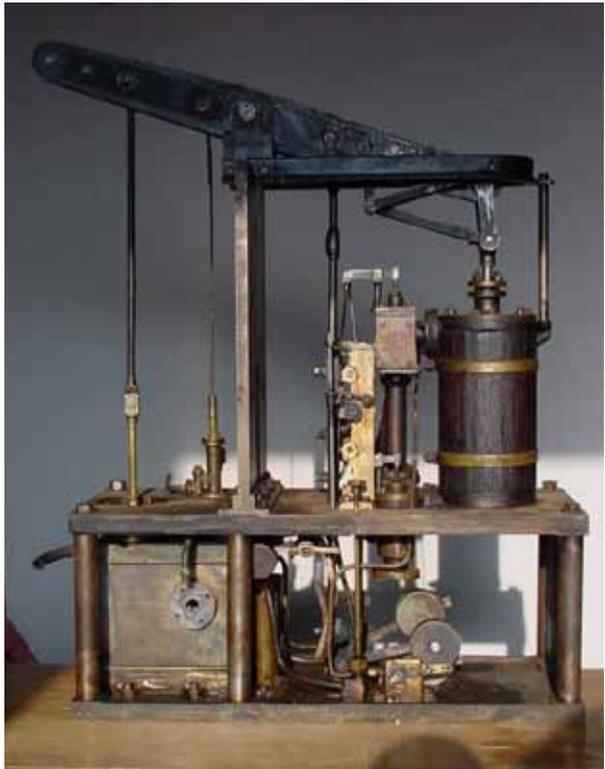
INDIVIDUAL MODELS

These are taken in order, working from the beam engine round the layout, to the mill.

BEAM ENGINE

This is one of the earliest models made by my Uncle and is about 1/36 scale. It is smaller than the mill, which is estimated to be 1/12 scale. It worked in a similar manner to a full-size Cornish pumping engine operating on the Cornish cycle. As you can see from picture no 1, it is self-supporting and is mounted off a solid steel base plate. A second plate of similar thickness is mounted off this by three spacers each side. This is the mounting base for the cylinder, and what would be the "driving platform" of a full size engine. The bob wall is a vertical plate and is also mounted off this "floor", the load being carried through to the lower base plate by two of the spacers, one each side. This plate, as well as supporting the bob, has a hoop mounted off it enclosing the indoor end

of the bob. The centre of the hoop is also supported off the back of the cylinder by a vertical rod. The parallel linkage for the piston rod and valve gear is mounted off this hoop. All this is shown clearly in picture no. 2, as are the balance weights for the valve gear, the air pump rod and the boiler water feed pump. The exhaust pipe to the condenser has been removed, and you can see the flange on the side of the condenser where it fits. The delays at the end of the stroke are hydraulic pistons and cylinders with adjustable bleed valves. The previous picture no 1 shows the three dummy boilers that were fed from the main boiler via a pressure-reduction valve. The pressure used was about 30 psi. The water was pumped from as deep as my Uncle could make it under the workshop floor. The pump was a typical force pump, like



2. Beam engine

those used in Cornwall, though the valves are simple non-return valves. It looks quite typical.

BOILER WATER FEED PUMPS

These are model water feed pumps made from castings supplied by Stuart Turner. There are a pair of them mounted on an aluminium casting which can be seen on the left hand side of picture no. 1. The Stuart Turner water pumps are normally single-acting, but my Uncle built a replacement for one of them that is double-acting. They pumped hot water into the boiler from the main condenser located under the table near the boiler. All the exhausts except the beam engine, were routed into this condenser.

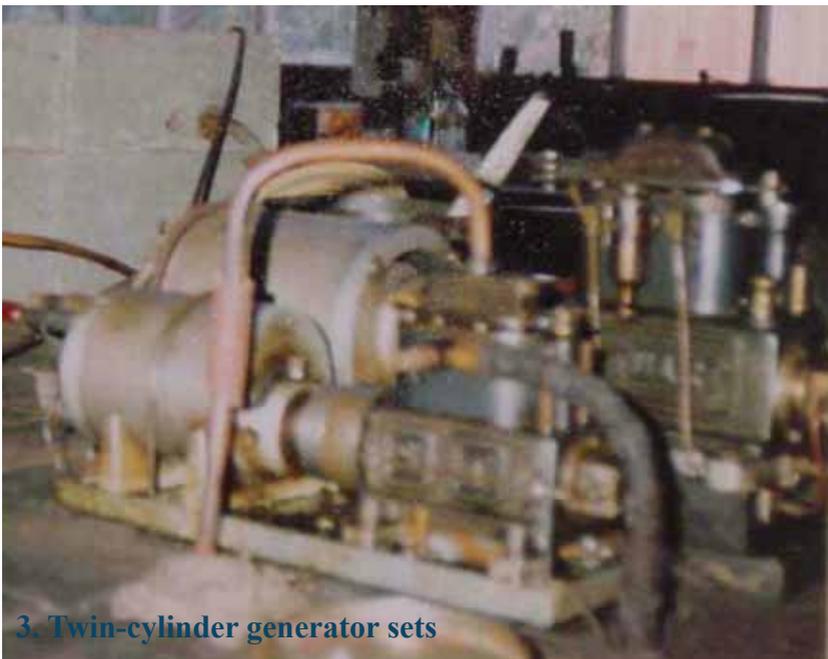
HORIZONTAL PUMPING ENGINE

This was alongside the beam engine on the other side of the water tank. The only picture of it is very out of focus

and not included here. It was a very pretty single-cylinder mill engine driving a plunger pump via reduction gears and an angle bob. Pete Joseph did not see this engine in his search, and later investigations indicated that it went to Geevor but was no longer there.

TWO TWIN-CYLINDER GENERATOR SETS

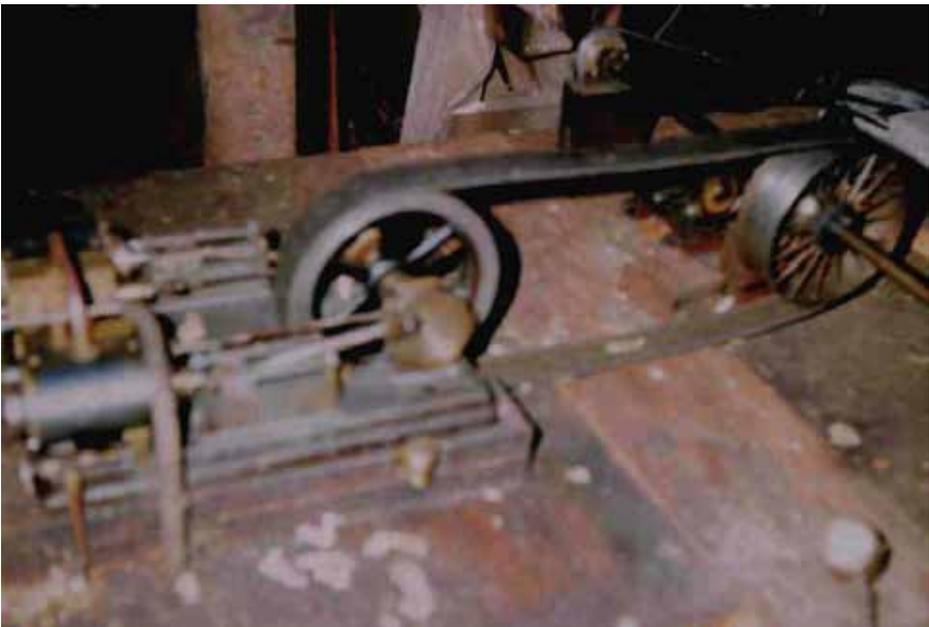
To establish the position of the two generators, look at the first beam engine picture no. 1 and you will see the end of a dynamo in the bottom left hand corner. The two engines are twin-cylinder, single-acting, running at over 2,000 rpm. The crankcases are totally enclosed, and oil to the bearings is pressure-fed on both engines. Both were made from castings supplied by Stuart Turner at very different times. These engines were modified by my Uncle from the original design which had splash-oil feed to the bearings to have pressure-fed bearings. The oil pumps are



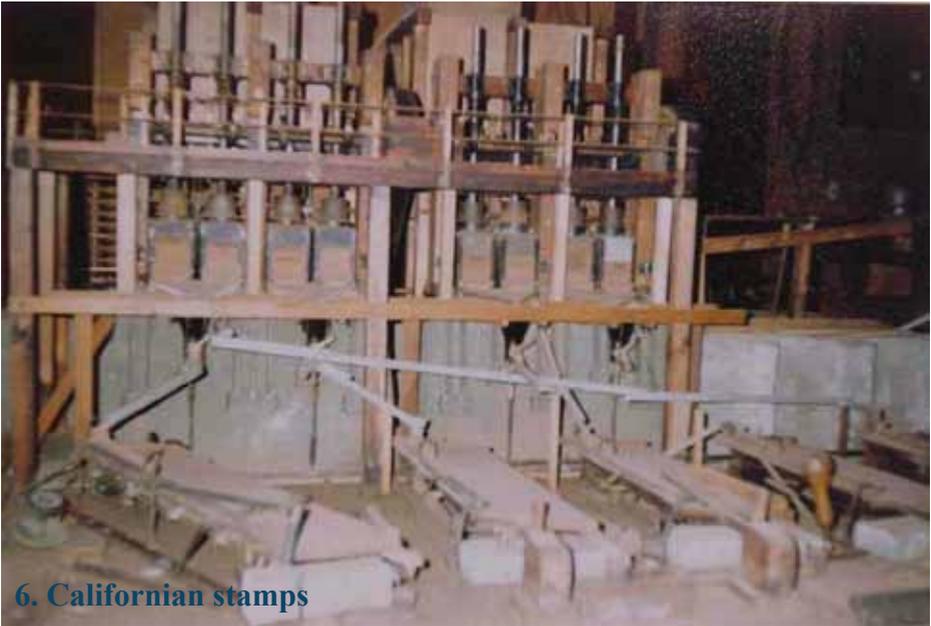
3. Twin-cylinder generator sets



4. Headgear and winder



5. Mill engine for stamps



6. Californian stamps

on the front of the engines, driven directly off the end of the crankshaft. The larger engine also has three main bearings instead of two, as in the case of the Stuart design. They are shown in picture no. 3.

HEADGEAR AND WINDER

This is shown in picture no. 4. The "shaft" associated with the headgear was just table-to-floor height and two skips auto-emptied into the ore bin. My uncle was building an aerial rope-way to go from headgear to stamps, but he never finished it. The winder was a reversible electric motor driving twin drums through a worm and wheel reduction gear. The headgear was approximately in line with the ore bins of the stamps.

TWIN-CYLINDER COMPOUND MILL ENGINE

This pretty engine was one of the last my uncle built and is shown in picture no. 5. A belt from the flywheel

of this engine drove a lay-shaft which stretched the whole length of the mill, driving the Holman stamps directly and the Californian stamps by a further lay shaft to reduce the rotational speed to match the different rotational speeds required by the two types of stamps. In the picture, at the end of the lay shaft, a small pulley can be seen that drove the shaking tables via a really long round rubber belt.

CALIFORNIAN STAMPS (NISSEN STAMPS)

My Uncle always thought that these stamps that he built, were Californian, but I found out from Tony Brooks that they are in fact Nissen Stamps. They are very similar except that the ore boxes of the Nissen are cast singly rather than in multiple units of five that are more usual for the Californian ones. In fact, the Levant mill was a mixture of both types. My Uncle started building these in the 1930s, about the time the mill at Levant was being scrapped, and he took measurements of



the Holman family obtained the drawings for the model from them, so it is a true replica; I think, including the bolt sizes! This model was loaned to the Holman Museum in Camborne. It remained there until the museum was closed. Then it was reunited with the other models by The Trevithick Society. The model, picture no. 7, actually works very well, crushing small stones at a prodigious rate. There are at Geevor some photos of their old mill made up of these stamps, and one can see that it is a very accurate model.

7. Twin Holman stamps

the stamps and their foundations prior to the dismantling; so, they are replicas of some of the new Levant mill. He always said that all the nuts were too large because he refused to go to the trouble of making the large number needed to scale.

Picture no. 6 shows the unit in the workshop at Restronguet. On the right of this picture it is possible to see the concrete base on which the Holman stamps used to be mounted. At the end of the shaft operating the shaking tables, not quite visible at the right of this picture, there was a reduction gear and pulley wheel. This was driven, as explained above, by a rubber belt from the main lay shaft.

HOLMAN PATENT AIR CUSHION STAMPS

This was quite a late model that my Uncle built. My Uncle being a friend of

SHAKING TABLES

The complete set of shaking tables can be seen in the picture of the Californian Stamps (no. 6). Four of them are models that were made to function, while the fifth one, picture no. 8, was built much later, and it is a scale model of a James narrow-bed slime table. I notice from more recent photos that it is missing one of the water feeds. This unit was independently driven, initially by a belt drive from a small vertical steam engine which suffered from being at the end of a long steam pipe and never worked satisfactorily and was soon replaced by an electric motor. It has its own gearbox with a cam that applies the motion to the table.

COMMENT

This completes the inventory of what was set up at Restronguet. I am also sure that most of this went to Geevor, however I suspect the winder and headgear remained at Restronguet as my Uncle always thought of them as a bit of



8. James narrow bed slimetable

a toy, and of course the Holman Stamps were already in the Holman Museum. From my contact with Pete Joseph only one model appeared to be missing, and that was the horizontal pumping engine of which there was no sign. He also reported that quantities of bits of pipe were found in store, hopefully amongst them the beam engine pump. In fact, later most of the beam engine pump was found, as was the pump of the horizontal pumping engine. Two other engines from Restronguet now belong to my Uncle's grandson, Michael Fursdon. They are the small vertical steam engine that originally drove the James table and the single cylinder mill engine that drove the stamps before the twin cylinder compound was made.

In my next instalment I will tell you about my first visit to Geevor to delve into the large pile of bits and pieces, and how helpful the new Geevor curator, Ben Beckworth, was, and also how he had collected together every odd piece of pipe he found. It was quite extraordinary that, after 25 years of not seeing the models at Restronguet, I was still able to find a home for nearly every piece of pipe!

Richard Fishwick

SOCIETY WEBSITE

The new Trevithick Society website is now up and running. It has been created by Sean Croft, and, whilst it is still in its infancy, its overall design and ease of use, is an improvement on the two previous incarnations. Currently it does not possess a great deal of content. That situation will be sorted out over the coming months, as will the addition of new features and facilities which will enliven the Society's 'shop window on the world'. Suggestions and constructive criticisms are very welcome.



LEVANT REPORT

Maintenance work throughout the winter and spring period has gone well with the engine, winding drums and boiler receiving new coats of paint. Several new volunteers have come forward and are proving to be invaluable to us. Four have qualified as drivers, including our Custodian, Anthony Power.

The re-siting of the boiler fuel tank has been delayed by a few months, but it is hoped to soon free up space in Skip shaft to facilitate visitors during inclement conditions. The plans for a separate NT Reception shed and mobile cafeteria has been abandoned for the time being

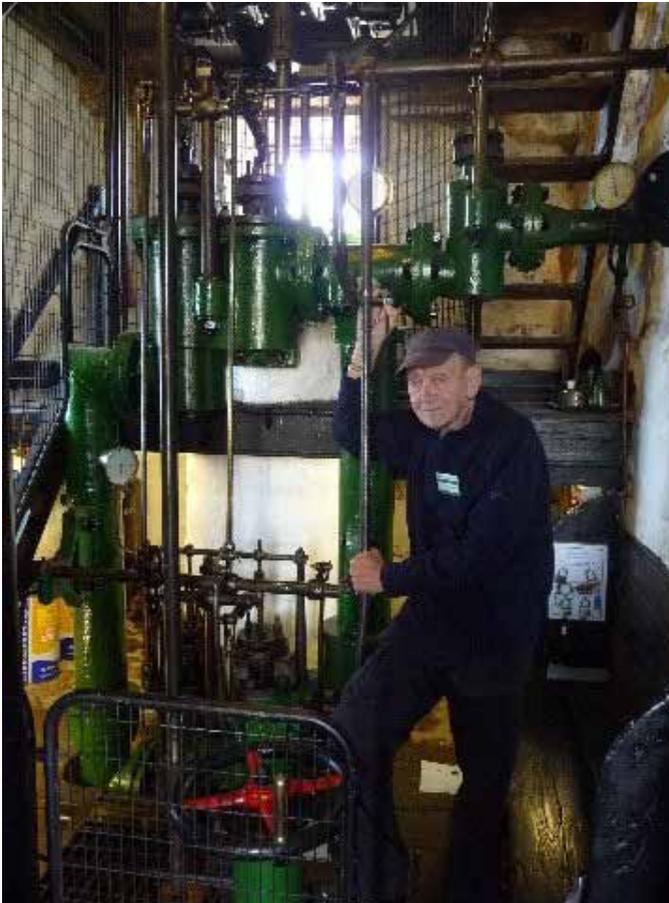
because of opposition from St Just Town Council with regard to granting planning consent.

The Mucker (Rocker Shovel) was recently tested and proved to run very well along track laid by the volunteers. Adequate compressed air is available to power it, and for safety this is done well away from the general public.

Fumes have started to emanate from the lagging of the modern Fulton boiler, which appears to be a failure of the internal refractory lining. Replacing the lining is about half the cost of a new boiler, but as the boiler is 18 years old already, we fear that a new boiler may be the only practicable answer. At the time of writing we are waiting for a report from Fultons

on the way forward. Volunteers from Botallack Vean have carried out working days on the incline rising up to the site of the Stamps Engine. They have made the discovery that the old original double tramway was no longer needed in later years, and this has been covered over by a single track system, probably about 1921.

The photo shows Tom Barr, our longest serving regular driver on the engine. Tom started work on Levant Whim with Milton Thomas and others in 1984. Tom is hoping to move to Cornwall from Surrey, but in the meantime travels down and drives the engine and takes guided tours around for the months of June and September.



Ron Flaxman

CÔR MEIBION ABERCYNON AND HIRAETH

There is no direct translation of hiraeth into English. The University of Wales, Lampeter, cogitated at length before defining that it is 'a mix of longing, yearning, nostalgia, wistfulness, and the earnest desire for the Wales of the past'. In this instance that the Cornish language has the word 'hireth' that means all of that, so we are not at a loss.

Hiraeth is what the Abercynon Male Voice Choir brought to Camborne in June when they sang at the Wesley Chapel in memory of their village and hero Richard Trevithick. One of their songs included the word 'hiraeth'.

Abercynon takes its place in the history of self-propelled transport very seriously. As the destination for the first steam tram track journey in the world it is now a haven to Trevithick memories. Its emotions are captured, in true Welsh tradition, in song. Its choir, emblazoned with badges depicting Trevithick's locomotive, travel with a hand-embroidered banner to illustrate the exciting history of their little village.

The choir shared a good humoured evening compèred by Cllr Mark Kazcmarek with members of the Carharrack & St. Day Silver Band. Together they performed to the delight of all who had the privilege of enjoying an evening of Welsh song and Cornish silver band music. Both

groups included modern melodies with the traditional music of their homelands.

Cornwall depended upon the millions of tons of coal and iron from South Wales for its mines and engineering industries. The Welsh used Cornish steam engineering ingenuity to win those commodities. Links between Cornwall and the former industrial areas around Merthyr Tydfil are strong and kept alive by those



who continue to develop their rich heritage. We are grateful to Côr Meibion Abercynon for their visit.

P.M.H.

HISTORICAL ASSOCIATION LECTURE

The Historical Association Cornwall Branch invites all members & friends of the Trevithick Society to a free talk:-

Friday 27th January 2012 @ 7.00pm
How Did Science Operate in Victorian Cornwall? by Dr Simon Naylor (University of Exeter in Cornwall) at The Council Chamber, County Hall, Truro.

A.I.A.

Following on from the most enjoyable 2010 conference that the Society organised for us, I noticed from reading an earlier 2010 newsletter that the Trevithick Society had been hoping to organise an I.A. trip to Ireland, but had to call it off. Members should be reminded that the 2011 A.I.A. conference will be held in Cork, from August 25th to 1st September. All Trevithick Society members are affiliated members of A.I.A., and are thus entitled to full benefits there from.

Details of the conference visits, etc., are available from John McGuinness at East Boynings, 29 Altwood Rd., Maidenhead, SL6 4PB; Tel. 01628 621791; email johnmcguinness203@btinternet.com

We would very much like to see some of our Trevithick friends at this conference - you are owed a lot of drinks!

p.s. The latest editions of Lightwood Press's *Railway Archive* (number 30) contains an illustrated article on what happened to the 18 Cornwall Railway 0-6-0 tanks (designed to be worked in pairs back-to-back) of 1873/4 after the line went bust and was taken over by the G.W.R. in 1877. These tank engines were apparently built to the designs of Francis Trevithick, Richard's eldest son, after his departure from Crewe.

R.A. Ford.

GOOGLE DOODLE



All Trevithick aficionados were delighted to see the way in which Google celebrated the Cornish inventor's 240th birthday (April 13th 2011), even if they had forgotten it themselves. The eagle-eyed probably overlooked the impact Google had thoughtfully made and noted that the doodle wouldn't work! However, all publicity works and we have to be grateful.

P.M.H.

TONY BLEWETT

It is very sad to report that Tony Blewett has passed away. He was a Levant volunteer in the early days of The Greasy Gang and an Assistant Custodian to Geoff Ball when the site was opened to the public in 1993. Until he and his wife, Karen, moved to France approximately eight years ago, he was a resident of Newlyn and had taken early retirement from British Telecom.

FURTHER HONOUR FOR TREVITHICK IN S. WALES

The Trevithick Trail Connect2 Project is being run by Merthyr Tydfil County Borough Council in collaboration with Sustrans and the EuroRDF. Its objective is to construct a £2m footbridge ('traffic-free' is the modern jargon) at Pentrebach over the A4060. To be known as the Trevithick Bridge it will form a section of the Trevithick Trail established in 2004 and will link to the Taff Trail.

Sustainable transport charity Sustrans plans to have 80 portrait benches installed on pedestrian and cycle routes across the UK by 2013. The proposed design for the new bridge incorporates a large wheel which will represent a cog wheel which would have been connected to the driving wheels of the famous Penydarren locomotive.

There will also be a sculpture bench with three figures. The local community was asked for suggestions who these might depict and the organisers say that there were three clear winners out of the 479 suggestions. Richard Trevithick will be accompanied by two locally born clothing designers, Laura Ashley and Julien Macdonald. They will be portrayed life-size in cut out steel.

Local heritage councillor, Derek Games said, "Merthyr Tydfil can feel rightly proud of Richard Trevithick and the world's first steam locomotive, and our world renowned designers - Laura Ashley for her fabrics and Julien Macdonald who is leading the trend today.

We are grateful to Keith L. Lewis-Jones FBCS CITP, a project team member, for supplying this information.

P.M.H.

TORDOWN QUARRY ENGINE

The engine has now almost been reduced to manageable chunks for transport purposes. The compressor it drove has already been removed to King Edward. The site has now been sold and good relations now exist with the new owners. Hopefully the project will have reached a conclusion by the time of the next newsletter and we will be able to publish a full report.

K.J.T.R.

FILM SHOWS

We held two more well attended public film shows in Camborne showing more of the Holman films and interviews with retired staff reminiscing on their days with the company and telling of incidents which the then management would be glad they did not know of!

Appeals for volunteers at these shows produced an encouraging number of enquiries which we hope will come to fruition.

K.J.T.R.



KING EDWARD MINE

The season is now with us and started with Open Day on May 1st. Unfortunately the skies also opened and we were subjected to extremely heavy showers which prompted the decision to stage the musical and dance events indoors. The few hardy stationary engine owners, the Puffing Devil and three portable steam engines had, of necessity, to stay outdoors! The rain, however, did ease after lunch when we had visits from one or two steam vehicles.

It was a delight to see the Holman jaw crusher being run by Ben Ralph's portable steam engine. We had obtained a load of second hand bricks from the National Trust at East Pool to help make the ramp to enable access between the two fields and the crusher did useful work in reducing them in size and, at the same time, provided a visitor spectacle. It is many years since the machine last operated but proved a fitting celebration for its centenary year, it having been built by Holman Bros. in 1911.

The mill equipment and the Sulzer engine next door were all functioning and as usual attracted much interest. The electric motor which drives the Californian stamps failed recently and a new replacement was sought and Nigel Macdonald and the mill men have worked hard in recent days to get it installed and up and running. I hasten to add that "Nigel Macdonald and the mill men" are certainly not a boy band, a fact you would appreciate if you saw them! If they were a group I suspect they would more likely be "Dickie Back and the Slipped Discs!"

The ground crew also worked hard to prepare the fields for the Open Day having cut back much invasive undergrowth and burnt it up including last years remains of "donkey rhubarb" or *Fallopia japonica* to the botanists amongst you. When put on a bonfire this plant produces a sound akin to a series of fire crackers.

It was nice to see the shop fully stocked for the season as it looks so dead

during the winter. Kevin Baker works hard to obtain the right merchandise for us. All we have to do now is sell it!

Recently we have had a two week period when we had apparently put the clock back. The Camborne School of Mines have used us to run a surveying course so it was back to the old days.

The Holman display is slowly taking shape in the winder house and during the Open Day a number of ex Holman staff visited and seemed appreciative of what we are trying to achieve.

On Friday, June 17th. David Blight, Kevin Baker and the writer were pleased to journey to Liskeard to collect a Certificate of Commendation awarded by the Cornwall Buildings Trust in recognition of the excellent work done at the Winder House. Representatives of the Contractors, Messrs Gloweth, were also awarded a certificate.

As we were due to go to press an urgent situation arose. A telephone call from a friend who had called at a local scrapyard alerted us to the fact that a Cornish pattern boiler was due to be cut up. A hasty visit to the scrapper by the writer noted that the artefact was an early example but had already had a second life. The fire tube and grate had been removed, the back flue hole had been plated over and the front now had a door in it. As it had been buried it was assumed that it had been used as a WW2 air raid shelter. The scrap dealer would only release the boiler if we traded in an equivalent amount of scrap and we had twenty four hours to comply. The writer was then taken ill and so thanks go to Kevin Baker, Hugh Rowe and Ben Ralphs for their efforts in solving the problem within such a limited time, however, we are pleased the boiler is now at King Edward. The construction of the boiler points to a manufacture date of 1850 or even earlier so it is quite a significant find. It is sad that when the boiler was pulled out no official had the wit to think to make an enquiry as to its historical value. Heritage has a very low priority even though Cornwall has so much to offer.

K.J.T.R.

TREVITHICK DAY

The event was a great success, and, in spite of the weather forecast was a dry day. The Society tent was a hive of activity as usual and thanks to the canary crew, Phil. Hosken, Lincoln James, Pete Joseph, Roy Kelynack, Lisetta Laird, Dave Mann, Barbara Tripp and George Wilson who helped answer the questions, swell the takings and send away happy customers.

K.J.T.R.

LAUNCESTON STEAM RALLY

In recent years the rally has been unlucky in its choice of weather and this year was no exception! The first two days were certainly wet and windy, however the Bank Holiday Monday was much better and we welcomed a number of people to the tent and had a very pleasant day.

Thanks to canaries Phil Hosken, Stephen Docksey and George Wilson and to member Tony Dymond who runs the trade stands for the show.

K.J.T.R.

TAVISTOCK STEAM FAIR

We were invited to attend the Tavistock Steam Fair, an event we have never previously visited. This event provides publicity and finance for the Robey Trust at Tavistock and proved very successful from their point of view and from ours. Held in the Wharf Car Park it was a very convenient and pleasant venue and we made a number of new friends as well as seeing some old ones. A heavy shower mid afternoon did not appear to dampen the enthusiasm of all present. Canary crew Phil. Hosken, Cheryl and John Manley and George Wilson all looked resplendent.

K.J.T.R.

PUBLICATIONS

Our reprint of *History and Progress of Mining in the Liskeard and Caradon District* by Webb & Geach was launched at the AGM weekend in May. This new edition, prepared by John Manley, contains the full original text of this rare 1863 work plus updating notes, new photographs and a section on what to see today. Webb & Geach is a 158 page paperback and costs £10.99.

Regrettably some copies of our Dolcoath Mine book have suffered problems with their binding. The problem afflicts a small number of both the hard and softback editions. All remaining unsold stock has been examined and where necessary rectified. Any member who has a copy, which they believe to be defective, should return it to Tormark for replacement. The Society will meet any costs incurred in returning copies for exchange.

Work is now at an advanced stage on our next book, *H G Ordish: the Early Years*. These hitherto unpublished photographs will I think be of enormous interest.

Graham Thorne



PUFFING DEVIL

Trevithick Day went well. A normal early start for the crew, however, this year we had a trick up our sleeves in the form of an electric fan from a car to blow air into the fire box. It was operated via jump leads connected to Sean's car, so to distant onlookers it appeared that we were being jump started. The fan certainly speeded up the steaming process and consequently we were not the last engine to arrive in Basset Road for the first time ever.

All went well until the start of the Camborne Hill Run when the engine seemed to have lost some power, and when we reached the steepest part of the hill, near the crest, Colin and Sean had to get off and push enabling the engine to get over the brow, cheered on by the massive crowd. Initial thoughts concerning the loss of power were:

- Too much water in the boiler.
- Sean had put on weight over the winter.

The consensus reached was that

a forged steel arm which sticks out of the cross beam had bent sufficient to affect the valve timing.

The rest of the day went really well until we ran out of steam about 60 yards short of the car park where the Puffing Devil was to be laid up for that evening.

The following morning was the King Edward Mine open day. It started very wet and cold and the arrival of the Puffing Devil was delayed due to the fact that the towing tractor was needed to service the annual traction engine road run with water. Rather a pleasant day ensued and, despite the weather, large numbers of people streamed into KEM much to the delight of all present.

The crew on Trevithick Day was Colin, John, Mark and Sean, and at KEM it comprised Colin, master James Woodward, John, and Sean. Also a teenager, John Moore, assisted us on both days. He was both keen to learn and enthusiastic about steam.

The next outing for the engine will be the West of England Steam Engine Society Rally at Stithians on 19th., 20th. & 21st. August.

John Woodward



Photo: 'Going Up Camborne Hill' by Eileen Merritt

AGM WEEKEND



The lost valley of Deerpark with its hidden industrial history remained mysterious for a while longer as the small group in the top car park wondered where every one else might be. Everybody was meanwhile listening to Martin Summers down at the bottom of the hill in the cafe, giving a pictorial and verbal introduction of the tour to come. Fortunately, all intrepid explorers found each other, and forming a group of 38 set off to discover what was formerly known as East Cornwall Gunpowder Works.

Martin Summers, the ranger at Deerpark, explained the site can boast of being the longest running explosive manufacturing industry in Cornwall. The East Cornwall Gunpowder Company was started in 1845 by the Isaacs family and after different ownerships finally ended in 1965 with ICI. In 1977 the site became transformed by the Forestry Commission into a luxury holiday cabin site, and so our walkabout snaked amongst forestry cabins, and woodland.

Strange as it may seem with the very different face of today, the valley has never lost its character. The very same reasons why holiday makers may like to come to the valley now are still quite comparable to what attracted the Isaacs in 1845. The Isaacs needed a secluded valley away from a mass of population that could become injured if accidental explosions occurred and Deerpark's remoteness still is valued by the holiday maker. The Isaacs also needed woodland for charcoal, and trees to act as a green blast protector. Perhaps the blast of green is seen to protect the soul in the modern world and therefore trees are still regarded as an ingredient of sorts.

Martin Summers, during the walk, described the various processes in gunpowder making with great clarity, and showed everyone what remains of the mills. The recent icy winters unfortunately have resulted in the collapse of the end wall of one mill adjacent to the cafe. The picture (left) shows the building in 1989 in a much better condition, however, the outline of the waterwheel and more modern engine mounting are still visible. Another, small incorporating mill which survives in





the woodland still has the main wheel axle, wheel hub and bearings in situ, and also part of the wooden launder visible.

A discovery of a piece of steel tram sleeper whilst on the walk (see photograph on previous page) demonstrated aptly the engagement Martin encouraged, and the find added to the excitement of uncovering the history of the East Cornwall Explosives Works. Martin very knowledgeably guided the group around to each area of interest and thanks to him everyone gained a very great insight into the site's long history.

S a t u r d a y morning dawned blue and sunny, just the sort of day to go off in a char a bang, or as it happened a Thrifty mini bus. Liskeard rail station saw the gathering of two minibus's full of members destined for Herodsfoot mine.

On arrival at Herodsfoot all members felt very welcome by hosts Richard and

Frances Humphrey who offered tea and cake to everybody. Richard and Kingsley Rickard skilfully interpreted and very knowledgeably guided everyone around the site which has two engine houses, a boiler house, a crusher house, a magazine, and stream tunnel. It was whilst getting a closer look at the tunnel that one member ended up in the stream. It is nice to see such enthusiasm, even if it did result in eight stitches.

Herodsfoot mine is very unique in many ways. Firstly, although built of killas, a comparatively poor building material, many of the buildings are in good condition. Secondly the timbers in the crusher house remain intact and in position. And thirdly its two engine houses still have many fascinating and unexplained features.

Richard and Frances Humphrey's hospitality was greatly appreciated by all 40 members. Everybody felt well cared for with tea and cakes, and warmly welcomed. Our many thanks to them for a hugely enjoyable visit.

During the Saturday evening the nitty gritty of the AGM weekend got under way with the meeting being held at Hannafore Hotel, Looe. During the meeting particular thanks were given to Keith Letchford for his archive, digital computer skills and support to the Society in many ways, and also to Treasurer



BOOK REVIEW

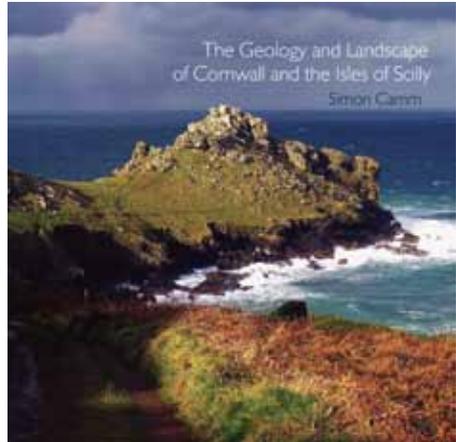
Stephen Thomas. Stephen has served the Society for a magnificent 26 years with great proficiency and commitment. To mark The Society's appreciation, an award of the Trevithick Society's gold medal was handed to Stephen with very great thanks for all his work.

Following the AGM meeting a very enjoyable meal was shared, conversations flowed with mutual loves, and with great satisfaction, appetites were fulfilled.

Sunday dawned with blue skies over Devon Great Consols. Here by the chimney we were met by Rick Stewart our guide, who immediately added to the dramatic power of the site with his expressions naturally oozing his in depth understanding of DGC. The significance of DGC, Europe's richest copper mine for 20 years in the 19th century, was very skilfully projected to a group of 40 plus. As we progressed we took in the different characters of the tips, the evidence of the huge extent of the flat-rod runs, and the knowledge of great sizes of the water wheels to power these. We saw a seriously ochreous quagmire which advertised adit drainage, various danger keep out shafts, rows of arsenic calciners, a sizable ball mill, and the precious remains of arsenic grinding mills. We were able to absorb the vastness of the site's workings, and feel this mine's great importance by passing through with our eyes opened by our very knowledgeable guide. Our thanks to Rick Stewart for a splendid visit.

Many thanks to all the members who came to the AGM weekend and made it a very special occasion, we look forward to seeing you again next year, if not before! And special thanks to ... for making the sun shine all weekend!

Cheryl Manley



The Geology and Landscape of Cornwall and the Isles of Scilly. Simon Camm. 120 pages, glossy paperback. ISBN 13 978-0-906720-83-7. Alison Hodge. £5.95.

The Geology and Landscape of Cornwall and the Isles of Scilly is a vast subject spanning 500 million years. It involves such events as major tectonic upheavals that have moved Cornwall northwards from below the equator, associated with massive shifts in relative sea level, climate change, and the affects of mountain building and vulcanism. Add to that the geomorphological changes of glacial periods and interglacials, which have fashioned much of the present day landscape, and a very complex and fascinating story awaits to be told.

Remarkably, Simon Camm, neatly summarises this whole subject in a mere 120 pages, in a way which is easy to understand and sufficiently technically robust to be of value to both earth science novices and those well versed in the subject. To achieve this much has had to be simplified and some parts are glossed over, however, the overall effect is very informative and well presented.

The chapter entitled 'Geology' forms the bulk of the introductory pages and very concisely and effectively summarises those 500 million years. This is followed

by a gallery of rock types which acts as a useful pictorial guide to many of the rocks to be seen in Cornwall, which often feature in Cornish hedges and walls.

Following the introductory sections, the geology and landscape of twelve areas are described from right across Cornwall, though mostly coastal where geological exposures are generally best. The descriptions are liberally supported by excellent photographs, some of which are annotated. The annotated photographs are particularly useful both in explaining the descriptions given in the text and as an invaluable guide to deciphering the geology in the field. The photographs are well chosen and superb in quality, and consist of a mixture of landscape views, exposures in the field, and of the rocks themselves showing structures such as folds or of the minerals present.

Of the twelve areas, the section dealing with the Lizard proved to be of particular interest in explaining the history of that unique block of oceanic crust which was thrust up and jammed against the rest of Cornwall. Perhaps the least effective section was that dealing with Carnmenellis: Camborne to Helston where the opportunities to view the underlying geology is much reduced.

At the end of the booklet is a much needed, and pretty comprehensive, glossary, which helps to decode the plethora of specialist geological terms.

The index provides grid references for the sites of interest. This is



Folding in sediments at Millook Haven

particularly desirable.

At approximately 6 inches square this booklet is too large for most pockets, nevertheless, it is perhaps best considered as a field guide. Certainly, the most value is to be gleaned from visiting the locations described armed with the descriptive text and annotated photographs which so concisely explain the key features on view.

Overall, *The Geology and Landscape of Cornwall and the Isles of Scilly* provides a very useful, glossy, introduction to the geology and landscape of Cornwall, which comes alive when carried in the field. The choice of many of the coastal sites and the degree of interpretation is most helpful in enabling people to read rock formations and unravel the stories they have to tell about their formation and subsequent history.

The Geology and Geomorphology of Cornwall is a fascinating subject which is less well understood than it ought to be. This booklet will undoubtedly help to enlighten many more people, and hopefully will stimulate some to further study this scientific discipline.

CNF.

RALLIES AND SHOWS

The Society intends to have a presence at the following events during the 2011 season.

- Camborne Show – July 16th.
- Bude Heritage Day – Sunday, 7th. August.
- West of England Steam Engine Society Rally at Stithians Showground – 19th., 20th. & 21st. August.

Other events may come on-stream in the meantime.

Volunteers to join the Canary Crew and share the excitement are always welcome. Ring the Chatline for details.

SOCIETY MEETINGS

Society Programme

Sat., 16th. July, ECB.

Moorcroft Quarry Visit-A rare chance to visit a working limestone quarry, Organised by Dave Warne. Meet at the quarry entrance off the A379 at Billacombe roundabout-Plympton. SX520 538. At 10.30am. Stout footwear to be worn. Please contact us for a space on this tour.

Fri., Sept. 9th., KEM.

Lead Mining Month. An Open Seminar by Colin Short.

Sat., 10th., Sept.

Field trip: *The lead mines at Porthleven.* Led by Colin Short. Meet 10-30am. Take road to Loe Pool and park in first car park.

Tues., 20th. Sept., ECB.

Liskeard Public Hall 7.30pm. A talk by author Rick Stewart (The mining expert on the TV series "An Edwardian Farm") on *Fire-setting the ancient way of breaking rocks before explosives.*

Fri., 14th. Oct., KEM.

The Early History of Teetotalism in Cornwall. By Dr. John Lander.

Sat., 29th. Oct., ECB.

Field trip to Wheal Benny led by Stephen Docksey. Due to very limited parking at the site we will meet at the Engine House Tea Room at Compton Park.(PL17 8EA. SX370 704) to share cars at 10am. On completion of the walk we will meet back up at the tea room for refreshments, if wished.

Tues. 22nd Nov. ECB.

7.30pm Liskeard Public Hall. *Machinery and Men of Dartmoor, Tin Mines 100 Years Ago.* An illustrated talk by the author Tom Greeves.

Tues. 31st Jan. ECB.

7.30pm Liskeard Public Hall. *Forder Mill and Tramway-Industrial Activity in the Forder Valley in Saltash.* An illustrated talk by John Parsons, Chairman of Saltash Heritage.

March 2012. ECB.

Visit to West Mary Ann Mine at Menheniot. A rare chance to go underground in a local mine. Dates, times will be confirmed on the next programme.

The West Cornwall Branch meets at King Edward Mine (KEM) at 7.30pm.

The East Cornwall Branch (ECB) usually meets at the Public Rooms at Liskeard and commence at 7.30pm.

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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.

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