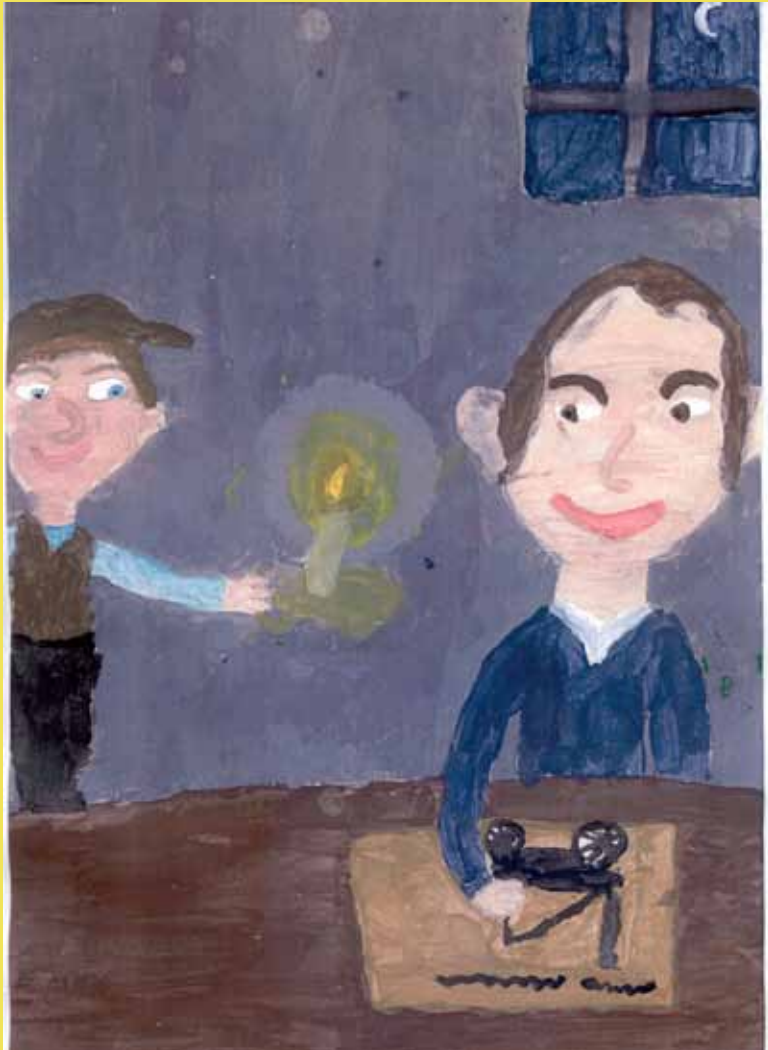


NEWSLETTER 149 OCTOBER 2010



Established 1935

# THE TREVITHICK SOCIETY



*Holding the Candle for Trevithick.* Painted by Tamar Knight of Callington school, the winner of an art competition run in July 2010 by the Trevithick Society. It depicts an event in 1808 when Richard Trevithick was designing the Catch-me-who-Can locomotive. In the evenings a young boy called William West used to visit this cottage to hold the candle for Trevithick as he worked on his plans.

Reg. Charity  
No. 246586

# CHAIRMAN'S ADDRESS

*'Camborne, cradle of locomotion'*

A note was included with the previous newsletter explaining that your Society is planning its future and seeking assistance from those members. We are grateful to those who responded and for the expertise they will bring to our work.

Regular readers of this spot will be aware that we are seeking to widen the Society's involvement in Cornwall's industrial archaeology and the ways in which we can share our resources for the interest, education and enjoyment of all. To achieve this we have to carefully plan the future and acquire accommodation where we can focus our activity and welcome people.

We are well aware how important it will be for the Society not to lose its way and will work to extend our present well developed interests and activities rather than pursue other courses, no matter how attractive they may appear!

At the moment we are negotiating for two very different properties. This means that we may acquire two buildings, one, or none at all. We would like to involve more members, so, if you are moved by the prospects of exciting and demanding times ahead I would ask you to contact George Wilson, our Secretary, and outline where your interests, however humble, may lie.

Thank you.

**Philip M. Hosken**

# EDITORIAL

*Errata.* In the article concerning the casting of beam for Grenville Mine by Holman Bros. in 1906 (Newsletter 148, p.12-14), the weight of the Harvey cylinder was 25 tons and not 255 tons, as stated on page 14.

The 2010 Journal will appear with the next newsletter, which should be sent to members early in January.

**Colin French**

**Copy date for next newsletter: Dec. 15th**



## LETTERS TO THE EDITOR

Dear Editor,

I am a Portuguese scale modeler and I have just finished a small diorama in 1/35 scale picturing an hypothetical scene of Mr Richard Trevithick and Mr Samuel Homfray having a conversation in early 1804, a few days before the historic journey.

I am enclosing a few photos for your appreciation. If you are interested in seeing a more detailed evolution of the work, here is a link to a Portuguese scale modeling forum, where I usually write.

<http://forum.modelismo-na.net/viewtopic.php?f=141&t=14747>

Unfortunately the text is in Portuguese, but the images are universal.

I would like to thank Mr Philip Hosken for his encouragement and some very useful historical hints and tips. All the

mistakes that I may have made are 100% mine.

Best Regards

**Antonio Sobral**

## GEOFFREY SMITH-GROGAN

The Council of Management is sad to report the passing of our colleague Geoffrey Smith-Grogan on August 21st., 2010. Geoff held the positions of Minutes Secretary and Honorary Secretary at different times, and as a civil engineer with the railways he was often in demand to answer queries relating to his field.

Although living in Reading, Geoff had a good record of attendance at management meetings until his health deteriorated in the last couple of years. We shall miss his wise counsel and extend our condolences to his wife and son.



## BELOW THE WAVES

The July newsletter contained a letter from Todd Stevens, a diver who lives on the Isles of Scilly, who appealed for assistance in identifying the cargo of a wreck he found in 2005.



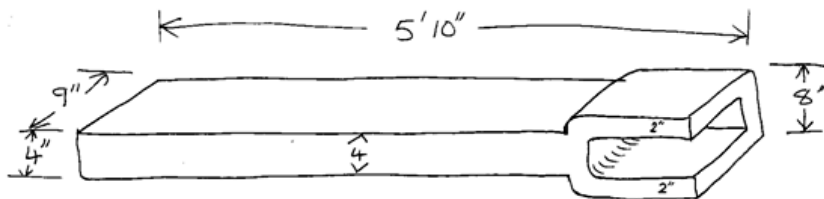
Under the terms of the English Heritage licence that Todd holds to examine the wreck he is not permitted to disturb or raise any items. He has provided us with some excellent photographs and has carefully drawn and measured many of the items. The cargo is clearly the product of a foundry and contains an assortment of items made for special order. We have been able to identify some, but others, because of their location and concretion still remain a mystery. Are there any members with experience in this field who can help Todd with what the EH inspectors called 'unique'? All his photographs and drawings will be made available.

## OUTSIDE EVENTS

In late May the yellow show tent was prominent at the Launceston Rally overlooking the main ring where we received a steady stream of visitors and had an enjoyable three days. Camborne Show took place on July 17th and at the site we had erected the tent but before we could peg it down a huge gust of wind totally inverted it. With the help of passers by we quickly had it back on its legs and were soon back doing what we were there to do; entertain the public. Conversely the three day West of England Steam Engine Rally in August suffered strong winds and rain for the first two days which badly affected attendance. The best place to stand on those days was on the lew side of the Puffing Devil – nice and warm there! The third day, however, was bright and sunny and boosted our takings and morale. This year the venue for the show had changed and was at the Stithians Showground. Given the wet weather conditions the metalled roads were a godsend.

At the show we also had on sale for the first time our new line - baseball caps. These are in two sizes, black with the Society logo in yellow, so now you can all look smart for £4-50.

**K.J.T.R.**



Whatever is this?

**P.M.H.**

## A.G.M. AND MEMBERS' WEEKEND 2011

At the 2010 AGM at Hayle there was a discussion of a proposal to hold future AGMs in the spring and Members' weekends in the autumn. The AGM was to be held before a normal monthly meeting with reports and any resolutions circulated in advance and postal voting to be introduced. The proposal was rejected meaning that the status quo should be maintained. However, there was support for having reports and resolutions circulated in advance and for the introduction of postal voting although there was no formal vote taken on this issue.

At a Council meeting on 11th September 2010 it was decided that the 2011 and future AGMs will be held during the Members' weekend as in the past but reports and resolutions will be circulated in advance and postal voting will be introduced for those unable to attend. It is hoped that this may make the AGM more interesting by allowing members to prepare any questions and statements in advance. The 2011 AGM will be held during the weekend 13th to 15th May.

**George B Wilson**  
Secretary

## DONATION

We were recently invited to the AGM of the Launceston Steam and Vintage Rally at which the Society was kindly presented with a cheque in recognition of its attendance at the Rally over a number of years (see p. 15 of the last newsletter) and its work in the promotion of early steam locomotion. There were six recipients of donations including Cornwall Air Ambulance and Precious Lives. In addition to repeating our thanks for their generosity, we should congratulate the Rally organisers on their ability to produce the substantial profits that enable them to be so generous.

We look forward to seeing you at

Launceston Steam Rally again next Spring Bank Holiday.

**P.M.H.**

## PUBLICATIONS

Tony Clarke's translation of Moissenet's work on nineteenth century tin dressing came out in early August. It looks well in its hardback edition and has attracted much favourable comment. At 173 pages it is good value at £18.99.

Allen Buckley's *Dolcoath* was published at the beginning of September with a signing session at the AIA Conference. This is a definitive history of over 400 pages and is available as a paperback at £24.99 and in a limited run of 100 hardback copies at £36.99. The story is told in Allen's inimitable style and there is a splendid foreword by Professor Charles Thomas whose family played such a part in the Dolcoath story.

I am pleased to say that both recent volumes, *Hard Graft* and *The Metal Mines of West Cork* have been well received with the former attracting some good reviews. Dolcoath signalled the end of our 2010 programme, which has been an exceptionally heavy one with a need to reissue old favourites as well as our new books. The press is now likely to fall silent for a few months but I can promise members much of interest for 2011 including a new and fully updated edition of our Holman history and mining volumes from both ends of the county. One or two other interesting projects are also at a formative stage.

I am always happy to discuss potential publishing projects with members and to clarify the availability of books but please note that I cannot accept or fulfil individual orders, which should be sent to Tormark, taken to local bookshops or to specialist outlets such as Geevor or King Edward Mine.

**Graham Thorne**

## MODEL MAKER'S JOY

John Day of Dorking has acquired a complete set of 1/10th scale production drawings specifying materials, tolerances and surface finishes. They detail a model of what is commonly known as the Trevithick Dredger engine, although such engines were made in quantity by numerous manufactories for various applications and to slightly varying specifications. The boiler diameter is 5 inches. These drawings were meticulously prepared at the Royal Ordnance Factory, Nottingham in 1960, presumably as an apprentice exercise although it is not believed that any engines were produced. They comprise of 130 pages of full size drawings together with ten sheets of index.

John, who well remembers a personally conducted tour of Cornish engines by Jack Trounson, had already embarked on a Model Engineer version of the same engine when these came to hand. These drawings are probably unique. Is any member in a position to shed any further light on their history or assist the Society to copy them?

**P.M.H.**



## KING EDWARD MINE

A summer that has had its ups and downs regarding weather has proved a successful season for King Edward, in fact we have had our busiest August ever.

We have also had another big success in the completion of the winder house. On August 16th a short ceremony was held to celebrate the occasion, when the building was declared officially open by the leader of Cornwall Council, Alec Robertson, who was supported by staff from the World Heritage Office who master minded the funding. Blessed by good weather the visitors toured the site, viewed the mill and enjoyed light refreshments in the Survey Office. An honoured guest was Courtenay Smale of Newquay, who, back in 1957 when the original building was consumed by fire, was a School of Mines student. Courtenay had recently bought a camera, then a big investment for a student in those days, and took photographs of the building as it burned. At the time the School of Mines banned him from giving the press access to the pictures but we were extremely glad all these years later to have them at our disposal to enable us to draw up plans for the replacement building. As the site is listed we had to replicate the new addition exactly.

Superlatives were definitely the order of the day as the visitors examined the building and its workmanship and congratulations must go the contractors, Messrs Gloweth, for the exceptional quality of their work.

On Friday, September 17th another artefact arrived at the site in the shape of a 16 tonne jaw crusher. In its life it had worked at a number of sites but in recent years had languished at South Crofty Mine. Upon their closure it was moved to a plinth outside the old CompAir Offices adjacent to the Tesco roundabout at Camborne. It carries the legend "Holman Bros. Engineers, Camborne, 1911" and was made at the Holman foundry on the site now occupied by Tesco. This site was Holman's largest works, known as

## CUTTY SARK AT FALMOUTH

"No 1", and has largely been demolished for housing. The final act of demolition is imminent and hence the need to move the crusher. The developers, Midas Homes, arranged to move the machine with MacSalvors providing crane and transport. Thanks to Midas Homes for the speedy way they made arrangements and for providing the plinth.

We are sad to report the loss of our colleague Edward William Uren, aged 84. Willie, as he was known to us, was our mentor in all things mineral processing. Apart from a short spell in the Gold Coast, now Ghana, Willie spent his career at South Crofty Mine, eventually to become mill supervisor. It was under Willie's guidance we were able to reconstruct our Frue Vanner, to our knowledge the only extant working example. He was a regular on Sunday mornings until poor health overtook him during the last couple of years. Being of the old school Willie was always dressed in flat cap with collar and tie and always in good humour. On several occasions, Willie, always wanting to be in the thick of it when we were moving heavy kit, has said to us younger ones, "Come out the way, let me move that". Willie we shall miss you.

**K.J.T.R.**



Readers will recall the item in the previous newsletter detailing the remarkable Brooksbank film collection. All of this film is original and requires a great deal of painstaking work to rehydrate it and mend the very many splices. This work has been willingly undertaken by David Jewell of Camborne who also presented an evening of truly remarkable entertainment at KEM recently. The Brooksbank films originated in the early 1930s and had not been seen for at least 50 years; they included:

- East Pool Mine, Taylor's Shaft and engine house, below ground by carbide lamp and the electric surface tramway to the crusher.
- Climax, manufacturing, testing and animation long before Honda.
- Falmouth harbour, featuring the Cutty Sark, ocean going racing yachts, dredging and tugs.

David also showed a later colour promotional film made shortly after the opening of Wheal Jane Mine. It is believed that only seven copies of this film were made.

There is much more film in the Brooksbank Collection and David has a wealth of early local film showing such scenes as coasters under sail entering and leaving Portreath harbour. Future showings will be advised to those members who have provided the Membership Secretary with their e-mail addresses, please ensure that you have done so.

**P.M.H.**

## EAST CORNWALL BRANCH WILLIAM WEST EVENTS

The East Cornwall Branch has had great fun this year celebrating the Society's 75th anniversary year with a wide range of events under a William West Theme.

The centre-piece was a month long exhibition at the Liskeard and District Museum which brought together the amazing story of William West's life and innovations. The colourful display was very popular with visitors who asked for it to be repeated at St. Blazey. Parts of the display were therefore moved to St. Blazey Church, a very appropriate venue as it is only feet away from West's grave.

The Liskeard Museum exhibition included an impressive display of paintings carried out by local primary school pupils. The pictures depicted the story of West, whom as a boy held a candle for Trevithick, when Trevithick worked on plans of his

Catch-Me-Who-Can locomotive. It is encouraging to see the enthusiasm shown by the younger generation towards Cornish engineers. The winning picture by Tamar Knight, on the front cover of this newsletter, is now on display at Trevithick's cottage together with the story of William West's connection to Trevithick. We can only presume West was inspired by Trevithick and carried Cornish engineering forward with his own passion and ingenuity.

Enthusiasm was certainly also in evidence from the children who took part in the William West Bottle Pump project. The bottle pump is a design created by Andy Millar and gave children from nine different schools the chance to build an amazingly effective working pump from a lemonade bottle. A William West information pack created by the Trevithick Society and collated boxes of materials, including tools, wooden discs, plastic sheeting, and Bottle pump instructions and work sheets were distributed around schools. Over 60 of these pumps were produced by children in South East Cornwall using the





kits. The pupils had great fun and learnt a lot about pumping water with pumps they had made (see picture) and practical engineering skills. Likewise many visitors at the Liskeard Show enjoyed working the models that were on display. Many thanks must go to the Cornish Mining World Heritage for funding and support of all the materials, and assistance with information. Many thanks also to Liskeard School and Community College for their very valuable assistance in promoting the engineering knowledge to local primary schools. Hopefully these children too will also be inspired by Cornish engineers and go on to achieve great inventions.

Part of the William West event included a photographic competition held at Stuart House depicting the many William West engine houses that are

around Caradon as its theme. Many of the exhibitors have kindly donated their photographs to the Trevithick Society's archive and these will be used to assist the Society in its endeavours to preserve industrial heritage. The open night for the exhibition and museum display was made very special by the attendance of several members of the McDougal family who travelled from Norfolk and are direct descendants of William West.

The final event of William West Reflections was a field trip around Phoenix United. The trip was attended by over 25 walkers who explored the hidden remains of this once great mine. A high point of the walk was the chance to stand beneath the balcony of Phoenix count house, and look up at the balcony where William West made his famous speech to the miners of



Photography competition winners and descendants of William West, Mark Barnard (great, great, grandson), Elizabeth Jane McDougall (great great granddaughter) Victoria McDougall (great great great granddaughter).Struan McDougall (great, great, great grandson). Also in the picture are Phil Hosken, John and Cheryl Manley of the Trevithick Society and Andy Robinson of the Caradon Hill Project.

Some of the walkers on the Phoenix United walk outside of the Court house.



Phoenix United.

We would like to thank all that have supported this year's events, members and non-members. They have all played their part in making this great Cornish Engineer's name better known and making his life and work an inspiration for the next generation of potential Cornish engineers.

**John & Cheryl Manley**

## **A.I.A. CONFERENCE 2010**

The Association for Industrial Archaeology was set up in 1977 with its first president being L.T.C. Rolt. Tom Rolt was the accomplished author of many books in the I.A. field and was closely associated with the Tal-y-Llyn Railway and the Inland Waterways Association. The A.I.A. Annual Conference is located in a different part of the country each

year, and visited Cornwall again this year, the last time being 1978. The Trevithick Society was proud to be the organiser of this seven day conference which was based at the Combined Universities Campus at Tremough, Penryn. Almost a hundred delegates attended the various lectures and field trips and of course on the Saturday the "highlight" of the week, the A.I.A. Annual General Meeting! It was at this time that the new President, Prof. Marilyn Palmer was installed during a brief ceremony by the outgoing President, Prof. Angus Buchanan. This was followed by a selection of members' contributions, the presentation of the A.I.A., at which the guest of honour was Cornwall's Lord Lieutenant, Lady Mary Holborrow. Awards and then by the Annual Dinner. After dinner entertainment was provided by the Cape Cornwall Singers. The lectures during the week covered a diverse selection of subjects including the china clay industry, early steam trials for the Admiralty, Methodism and Mining, new research into

Richard Trevithick, Dolcoath Mine, new discoveries at Carclaze in the china clay area and the conservation work of the National Trust. A reception at County Hall at Truro saw a welcome to delegates from the Council Chairman, Cllr. Mrs Pat Harvey accompanied by the portfolio holder for environment Cllr. Julian German and this was followed by a lecture highlighting the Cornwall & West Devon World Heritage Site by senior archaeologist Adam Sharpe. After the reception the delegates enjoyed a dinner at the Green Lawns Hotel at Falmouth. The field trips included visits to Falmouth Docks, Levant, various china clay installations, Porthcurno, Geevor, Pentewan, Charlestown, The Bodmin & Wenford Railway, Botallack, St. Austell Brewery and several mine sites in the Pool area. Overall the weather was kind apart from one day when it came down "in stair-rods".

The resident guides at Tremough were Owen Baker, Pete Joseph, Kingsley Rickard and Graham Thorne. Thanks go to members who contributed in some way to make the conference a success: Tony Brooks, Ivor Bowditch, Allen Buckley, Phil. Hosken, Tony Pawlyn, Adam Sharpe and Charles Thurlow, and members Michael Messenger and Paul Saulter who contributed as part of the A.I.A. management.

## VISIT TO IRELAND

Many thanks to members who, last year, expressed an interest in a visit to Ireland and apologies for lack of news. I had a long spell of indifferent health earlier in the year which was followed by an excessive workload which did not allow time to investigate the trip. It is to be hoped we may be able to attempt the visit next year.

The names already submitted will be kept on file.

**K.J.T.R.**

## MINING PITWORK AND OTHER EQUIPMENT

A small group on the South East side of Dartmoor near Ashburton, had hoped to set up a museum of Devonshire mining. They had accumulated various artefacts and bits of kit, surveyed the site, made plans and were optimistic for the future. Sadly, bureaucracy in its various forms proved too much of a barrier and the vision has now been abandoned. The equipment is currently being distributed between a number of suitable sites. Amongst this equipment is a set of pumps which has been put into the care of the Society. This has now been transferred to Cornish Engines at Pool where the kit will be complementary to Taylor's engine. Discussions will now take place with the National Trust as to the best way to display them. Four Hudson trams have also been delivered to King Edward Mine and two to the Great Condurrow site.

**K.J.T.R.**

## LIFE OF RICHARD TREVITHICK

Mr Adam Gordon who publishes books on transport and allied subjects has printed a softback edition of the "Life of Richard Trevithick", 1872. This is a single volume edition of what was originally two volumes.

Anyone who is interested in buying a copy can obtain it directly from Adam Gordon Transport Books, Kintradwell Farmhouse, Brora, Sutherland, KW9 6LU. Telephone: 01408 622660, e-mail <adam@ahg-books.com>, website <www.ahg-books.com>. Cost is £25 plus £2.50 post and packing. Mr Gordon is unable to accept either credit or debit cards so payment will need to be made by cheque but it may be worth checking with him that this is still the current situation.

**George Wilson**

## PART 2 MODEL RENOVATION

*My return to Cornwall, and how I came to carry out repairs and refurbishment on some of the steam driven working models of late 19th early 20th century Cornish mining machinery now at Geevor Mine Museum made by my Uncle Charles Bernard (Bernie) Trehwella.*

### **Return to Cornwall**

It was many years since I had been to Cornwall, the last time being in 1989 when, en-route from Spain to the Hamble I had sailed into Falmouth harbour for some minor repairs. My Uncle Bernie still being alive, I went to visit him at Restronguet Mylor Bridge, but that was only a fleeting glimpse.

I had retired and left the UK in 1985, finally settling in Mallorca in 1991, where I have been living, married to a Spanish girl, ever since. It was sometime in late 2000 that Beatriz (my wife) and I decided that it was time I took her to see Cornwall, my home, where I had spent my childhood. It was a particularly good choice of time as the Trevithick Society in 2001 was holding a symposium on steam,

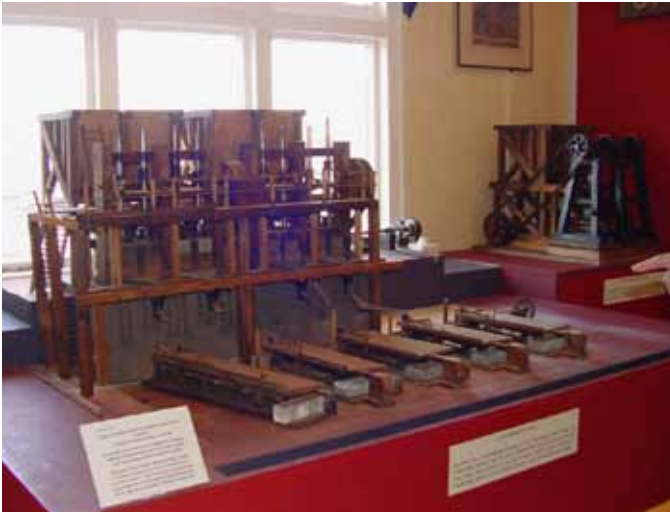
“Se-Tech 2001”, to celebrate not only the bicentenary of Holmans but also of Richard Trevithick driving the worlds’ first self propelled steam vehicle through the streets of Camborne. We could combine our trip to include this.

It was thus in September 2001 Beatriz and I arrived in Plymouth on the ferry from France on a bright and clear sunny morning. We crossed the new Tamar bridge with its fine view of Brunel’s railway bridge, and we were in Cornwall! Not having visited for many years, it was quite a homecoming for me and I saw many changes, particularly in the main roads that had been altered and I must admit, generally much improved since my last visit. Once off the highway and into the lanes it was much as I remembered.

Our first objective was to visit the The Eden Project, then on down to the Gurnards Head Hotel, from there a visit to many of the West Penwith mining sites: Botallack, Levant, Geevor and other places like East Pool Mine, Saint Michael’s Mount, St Ives, where I was brought up, Trengwainton gardens, Lands End, Sennen Cove. My word the water there was cold! No, we did not go swimming, just paddling!

We stayed in Falmouth for the Trevithick Society Conference on Steam. This we both enjoyed greatly, much to

Beatriz’s surprise. What a marvellous weekend it was, culminating in a splendid display of steam vehicles in the dockyard. There was of course the Puffin’ Devil being driven up and down the road, “Freddy” the steam Locomobile replica being driven around, its’ Irish owner giving rides to all the ladies. Also there was Dr Bob Dyke’s White Steam Car, driven over from Penzance that very morning. What a day!





And glorious sunshine as well!

Then it was time to leave Cornwall, and head for my sister's home near Aldermaston.

Since our journey to Aldermaston took us quite close to the Crofton Pumping station (about 6 miles South by East of Marlborough), I thought it would be great to visit en route. Much to our surprise it happened to be in steam. There is a full history on their web site, but I can't resist giving just a few details; it was built in 1807 to provide water to the summit of the Kennet and Avon Canal and now houses a 42 inch bore Boulton and Watt engine which was installed in 1812 and a Harvey engine in 1846. The latter was a Sims compound which was never satisfactory. This was converted to the conventional Cornish cycle with a new 42 inch cylinder in 1905. Both engines now run on the Cornish cycle and are supplied by steam at 20 p.s.i. from a Lancashire boiler. Do you know when operating they actually turn the electric pumps and the engines do the job they were built for. My wife was by now an expert on Cornish pumping engines! After some prodding from the engine driver she was able to explain to him, much to his surprise, exactly how the Boulton and Watt engine he was driving was working. A real feather in her cap! (not that she could do it now). He really found it quite surprising that

this Spanish lady not only spoke beautiful English but knew about steam engines as well.

It was early in our holiday that we went to Geevor, after spending some time at the Levant winder. Besides seeing what had happened to the place after the mine was closed and how it had been converted into a museum we wanted to see if they had my Uncle's models on display, whether they would be in working form or would half of them have disappeared during the closing period. We found the mill (see picture 1) set up as a static display; the Californian (actually Nissen) stamps plus the treatment plant, a set of 5 shaking tables, were there as a unit. The pair of Holman Patent Air Cushion Stamps were also present, on one side. These had been given or lent to the Holman Museum by my Uncle, and when this closed the Trevithick Society had made a point of reuniting them with the other models. These are quite unique, as explained in "Childhood Memories" having been built from a copy of the original Holman drawings (see picture 2). To my horror no mill engine to drive the stamps, no beam engine, no generators were present.

On the display there is a plea for help restoring the models. A big push from my wife, and I found myself volunteering to do some restoration work. How I was going to do this with no workshop, living in Spain, and all my workshop in store, I did not know.

Anyway, I was taken to meet Bill Lakin, Chairman of the Trustees of Pendeen Community Trust, who welcomed my offer despite its' short comings. He told me that there were a lot of models in store for safety and probably the missing items would turn up there. I happily discovered that the curator was in fact Pete Joseph who was also the curator of The Trevithick Society, though this was likely to change as the new management at Geevor took over. This is no disrespect to Pete but it was not going to be practical for him to continue doing both jobs, particularly as Geevor wanted a man full time on the site.

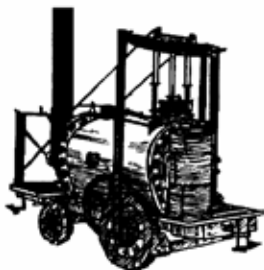
It was obvious that my first job would be to compile a description and inventory from memory of what my Uncle had setup at Restranguet and compare this with what was found at Geevor. So, no workshop work to start with, just paperwork! The next instalment will talk about our findings and what decisions, at least I thought were made, in the first few years that I was involved in trying to get them organised into a working ensemble.

**Richard Fishwick**

## LETCHER BLOWPIPE



At the 2010 A.G.M. member John Dickinson presented a Letcher blowpipe apparatus for the Society to display. Apprenticed to the well known instrument maker William Wilton of St. Day, John Teague Letcher went into business with his brother T.H. Letcher producing this blowpipe apparatus which won a Society of Arts prize in 1870.



## W. KENDALL ANDREW LETTER

Kendall Andrew's interest in the china clay district is well known. Member Keith Wellington, whose father the late John Wellington, was a long time member of the Society has recently uncovered a letter from Andrew to his father dated 5th November 1955 and is of interest, shows his thoughts at the time, and so is quoted below.

Dear Mr Wellington,

Herewith some notes from my notebook on the Restowrack engine, the one now erected in Holman's Museum.

I had a long conversation with Owen Bunt, who drove the engine until she stopped in June 1952. He said that when Lower Goonvean engine was broken up (since the war), the piston of that engine was put in Restowrack, both engines were therefore 22in. cylinders. The old piston ring, a spiral ring with liner, and the junk ring, out of Rostowrack engine when this was done, were lying in the top chamber at Rostowrack, also the piston rod, and I measured the ring as 22in.

Bunt told me his family had driven Rostowrack, at Restowrack for 84 years. He had for 48 years, and his father for 48 years and other members of the family over lapping, always one of them there. Eighty four years from 1951 makes it 1867. The Bunts started driving her then from the time she was installed at Rostowrack to 1867. She was 15 years elsewhere Bunt says. He says she was at Lockengate. This is on the south of the main Bugle – Bodmin road at the hamlet called Lockengate. I can't find much about Lockengate mine; it is mentioned in the Geological Survey of Bodmin and St. Austell under the name Bodwen Mine, situated near Lockengate on the south of the high road leading to Bugle. It was abandoned not long after being tried for tin ore, but another attempt is being made now (this would have been about 1909, the date of publication of the

Geological Survey handbook). There are plentiful signs of the old stream gullies etc. alongside the road at Lockengate and the whole vicinity is a famous one for tin streaming. My idea is that the engine, if it did come from Lockengate, was probably intended to drive stamps there.

The noticeable thing is that this engine, and the one of the same size at Lower Goonvean are of the same date, and both made by William West. I think myself they were probably made for one of the mines in the cliff area at the east of St. Austell. It would be interesting to find how two such similar engines came to fetch up on the same clay work. One would almost think they had been purchased at the same sale (mine sale).

Before the engine was dismantled at Restowrack I made a careful examination of the beam, and although attempt had been made to chisel off the details, by looking at the beam in a strong side light, you could clearly see West & Sons, St. Blazey Foundry.

The date is not so clear but a "5" can be seen and what looks like a "1", the spacing of the figures is right for a "1". There was no doubt in my mind that the date was 1851, and this is confirmed by the Bunts, who have scraped the beam and seen the letters, beside their tradition. Their tradition also was that the engine had been somewhere else for 15 years before it was at Rostowrack in 1867.

The similar engine at Lower Goonvean bore the date, "West & Sons, St. Blazey Foundry, A.D. 1851". You can see the "A.D." on the Rostowrack too.

Between ourselves, the Rostowrack engine originally had a three valve top nozzle, according to the Bunts. The Lower Goonvean was a double acting engine, but apart from this, the beam and the slide rods and the dimensions were all so similar that I feel certain that they were made from the same patterns.

I think we can say that Rostowrack was a West & Sons, St. Blazey Foundry 1851, and on Bunt's evidence that she was put in at Rostowrack about 1867, and that before that, she is said to have been

at one time at Lockengate Mine. My own view is that she was possibly somewhere as well. I don't think they ever did much, at any rate there is no return of sales from this mine in the tables in the Geological Survey handbook. She could of course have been erected at Lockengate and lain there many years idle. I doubt if she was made new for Lockengate. I cannot see a venture of this sort buying a new engine. More likely in the St. Austell mining area, Par Moor or Crinnis, or Pembroke, or Charlestown and then found her way to Lockengate, and thence to Restowrack. Perhaps one day we shall find further evidence. The detailed day to day story of these mines can be traced from the weekly Mining Journals of these years, but it needs a lot of time to go through the weekly reports, even in one volume. Mine Sales and particulars of the plant on the mines can also be found in these volumes, which are a terrific source of information.

I hope these notes will be of help about Restowrack.

Yours sincerely.  
(signed)  
W.K. Andrew.

The Holman Museum was closed in 1980 and the artefacts dispersed. Sadly many items disappeared and their whereabouts are now unknown. The Restowrack engine was dismantled and spent several years in store courtesy of English China Clays, now Imerys Minerals. More recently we have accepted custody of it and it is stored at King Edward. The beam, sweep rod, flywheel and condenser/hotwell are on view to visitors but the cylinder and smaller parts are stored under cover for preservation and security reasons. The long term aim is to install this unique engine in the long disused beam winder house and operate it in steam. It is described as "unique" as it is now the only example of a single acting rotative engine.

**K.J.T.R.**

## LEVANT REPORT

This spring and summer have been difficult times for Levant. Both of our Custodians found that their services were no longer required, and indeed numerous other National Trust employees in West Cornwall found themselves either unemployed or redeployed.

All credit must be given to the Levant volunteers who kept the site open during this time with no Custodian on site. Visitor numbers are approaching 20,000 for this season with lots of nice comments passed to us for the tours and demonstrations.

Our new Custodian is Anthony Power who has come from Morwellham Quay, and he is gradually getting to grips with managing everything. The next stage is to teach him to drive the Whim - not difficult in itself but learning all the 'whistles and bells' is trickier!

The engine in itself is performing well, although a knock in the cylinder before bottom dead centre had us fooled for a while, until two volunteers stayed behind after hours to carry out piston alignment tests. It was found that one link on the parallel motion had too much play in its bearing due to a loose wedge. Easily rectified with careful application of a lump hammer.

We now have a winter maintenance programme drawn up, ranging from inspecting the piston, refurbishing springs and linkages, and painting the engine, Cornish boiler, winding drums and outside bearing box.

On the 7th of September, BBC2's 'Flog-It' programme showed 9 minutes of good quality filming at Levant. The presenter, Paul Martin drove the engine under the guidance of Chris Quick and it also included clips from their 1970 documentary 'Yesterday's Witness' giving live accounts from three of the men that were involved with the 1919 Man Engine disaster.

**Ron Flaxman**

## WINTER VOLUNTEERS PROGRAMME

### TAMAR VALLEY VOLUNTEERS

**All tasks 10 - 4ish, bring food & drink.**

#### **Tues. 26th October.**

Practical conservation day in Kit Hill Quarry. Clearing vegetation off the finger dumps. Meet at North View car park at SX377715.

#### **Wed. 10th November.**

Practical conservation day at Lower Clitters Mine, Gunnislake. Clearing vegetation from around the mine buildings. Meet at Bittams Lane below Red Sands.

#### **Wed. 1st December.**

Path management and habitat work at Prince of Wales Mine. Meet opposite Stamps Industrial Estate, Harrowbarrow.

#### **Mon. 13th December.**

Practical conservation day on Kit Hill. Clearing vegetation from lode back pits near South Kit Hill Mine. Also Christmas party - wear silly hat! Meet at Summit Car Park SX375713.

#### **Wed. 19th January 2011.**

Practical conservation day on Kit Hill. Clearing vegetation from the small 19th century quarries just south of Kit Hill summit. Meet at Summit Car Park SX375713.

#### **Thu. 3rd February 2011.**

Practical conservation day on Kit Hill. Clearing vegetation from mine workings on the lower north slope of Kit Hill. Meet at Incline car park on B3257 SX374723.

#### **Wed. 9th March 2011.**

Gorse bash and dogwood prune. Meet at Drakewalls Mine, park opposite the Tamar Valley Centre SX425706.

For more info. contact Jenny/Chrissie on 01579 370030 [jheskett@cornwall.gov.uk](mailto:jheskett@cornwall.gov.uk).



## BOOK REVIEW

*Cornish Rocks and Minerals*. Simon Camm. 112 pages, glossy paperback. ISBN-13 978-0-906720-71-4. Alison Hodge. £5.95.

Cornwall is extraordinarily rich in mineral species. We know this from the mineral collections, in museums around the world, that display rocks collected when mining was pre-eminent in Cornwall, such as the Rashleigh Collection at the Royal Cornwall Museum, Truro. Perhaps less well known are the many, more recent, discoveries of new minerals fossicked from mine burrows and prospecting trips underground, which have greatly enriched our understanding of Cornwall's geo-diversity.

Such immense mineral wealth and the depth of knowledge, and available resources, in Cornwall, should be generally well appreciated amongst the general populace, and yet the vast majority are probably unaware of what lies beneath their feet, and mineralogy is at best a fringe activity, perhaps perceived as a dry and dusty subject.

Simon Camm's *Cornish Rocks and Minerals* throws open the door on this hidden, perhaps secretive, world and brings the dark, dank, ochre-coloured, often mono-tonal, subterranean depths to life, by exposing the diverse riches of colour, texture and form that can be found below ground. As a result, it is demonstrated that minerals can be bright and sparkly, with vivid iridescent colours, and can possess a variety of interesting crystalline shapes, and the study of rocks and minerals is an interesting field of endeavour after all!

Written in an accessible style and beautifully illustrated with several hundred excellent photographs of minerals, related views of the Cornish landscape and a few colour drawings, this, almost pocket-sized book, provides a concise introduction to the mineralogy of Cornwall. It briefly covers the geology and mineralization of Cornwall and then describes the interesting and

significant minerals of eleven geological districts, including Camborne-Redruth, Gwennap, The Lizard, Wadebridge and Liskeard. There is also a chapter on the rocks of Cornwall and one on precious metals and semi-precious stones. This is followed by a mineral gallery which gives the physical attributes of a selection of minerals alongside a photograph of each mineral. A helpful introduction to the next stage in understanding and studying minerals.

Cornwall's rocks and minerals are an integral part of its World Heritage, and as such deserves to be more fully appreciated. As a useful introduction to the subject, this book is informative and well-balanced, and for those who are tempted to explore further it does contain details of where to see mineral collections and who to contact. Overall, it is the sort of book that should inspire future generations of geologists and mineralogists, much as the Observer's Series inspired my generation into many fields of study.

CNF.

## PUFFING DEVIL

The Puffing Devil was commissioned for two days of filming this summer.

The first was for the BBC's Coast series, the idea being that the engine would be filmed with the backdrop of the sea and cliffs. So, it was arranged to do the filming at RAF Portreath (Nancekuke airfield) where the perimeter road was flat, well surfaced, had magnificent views and there was no traffic to disturb the filming. Unfortunately, on the day of the filming the cloud base met the runway and all views of the sea were obscured by mist and fog. Nevertheless, great fun was had by all driving up and down the airfield. The only other technical problem encountered was the micro-waves from the Radar interfered with the BBC camera equipment as we got within a quarter of a mile of the radar dome. So, obliging as ever, the RAF switched the

Radar off, leaving Britain un-defended for an hour! Dick Strawbridge and his crew certainly enjoyed their day despite the soaking.

The second film shoot was for a video to be shown to the public at the Heartlands Project in Pool, in a visitor centre to be created there. For this they wanted the crew in 1801 costume. This time the filming was done at Wheal Busy and the weather was much more favourable. Although the road at Wheal Busy is off the beaten track, it was surprising just how many cars use it, and perhaps most surprising, just how many people carry cameras in their cars, for not infrequently passing traffic would stop and photograph us as we drove up and down in costume.

When getting into costume John Woodward asked if anyone knew how to tie the stock tie. Nobody knew, so one of the video crew whipped out her mobile phone, got onto the internet and then within a few seconds up came the relevant instructions.

The WESES Rally (St. Agnes Rally) was held at the Stithians show ground for the first time. The Puffing Devil

had a prime spot close to the entrance, so every visitor walked past it at least twice. Sadly, the weather was not kind. The first two days were wet, visitor numbers were well down, as was sales in the Society tent. Thankfully, the ground stood up well to the rain and whilst the Rally would have been abandoned at the old St. Agnes site, due to the amount of rain, it remained fit for purpose on the last day at Stithians. So everyone was able to enjoy one dry day, the atmosphere was excellent, and we were able to demonstrate the workings of the locomotive to many hundreds of people.

Close to the Puffing Devil was the steam car which recently broke the world land speed record, plus another of 1900s vintage. It was certainly good for people to be able to compare the changes in steam technology from 200 years ago, 100 years ago and the present day. Equally, it was good to see the latest holder of the world land speed record alongside the Puffing Devil - the holder of the first world land speed record!

**CNF**



## SOCIETY MEETINGS

### West Cornwall Branch

**Meets at King Edward Mine at 7.30pm.**

We will continue our season of old films covering a variety of subjects, many of which have never had public showings on **Nov. 12th, Jan. 14th 2011 and Feb. 11th.**

### East Cornwall Branch

**Meets at various places, please check the programme for details.**

**Tuesday 19th October**

**Liskeard Public Hall 7.30pm**

*Making the Connection....the Liskeard to Looe Canal*

An illustrated talk by Mark Camp, a blue badge guide, author and local historian.

**Tuesday 7th December**

**Liskeard Public Hall 7.30pm**

*Arsenic, its Production and Use.*

An illustrated talk by Kingsley Rickard, Vice Chair of the Trevithick Society.

**Tuesday 22nd February 2011**

**Liskeard Public Hall 7.30pm**

*Underground Landscapes of Devon and Cornwall.*

A photographic excursion by Dave Warne, Chairman of the Plymouth Caving Group, showing mining remains underground.

**Tuesday 22nd March**

**Liskeard Public Hall 7.30pm**

*Fire setting*

Rick Stewart's preliminary work in West Devon, an illustrated talk by author and mine manager, about this ancient method used in mining before explosives.

**April** - to be confirmed where, a field trip.

**May** - details to follow AGM to be held in the Tamar Valley Area.

### KINGSLEY HONOURED



Congratulations are due to our Vice Chairman, Kingsley Rickard, who was awarded the London Cornish Association Shield at Gorsedd Kernow, which was held in St. Ives in September. The shield was awarded in recognition of many years of service to Cornwall and its people, through the promotion of its Industrial Heritage via the Trevithick Society, Trevithick Day and many other groups.

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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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