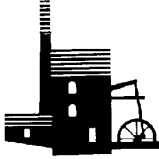


THE TREVITHICK SOCIETY



Engulfed by the crowds at the top of Camborne Hill! Photos: P.E. Tompsett

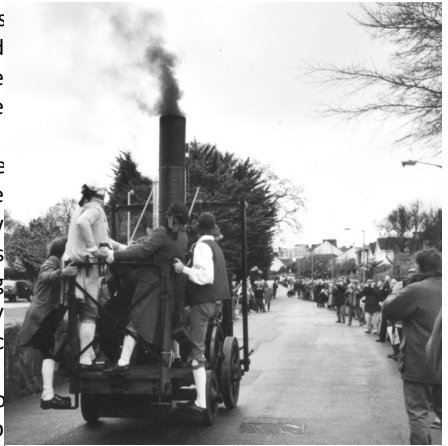
CHAIRMAN'S ADDRESS

After the tremendous successes the Society has enjoyed, first with the Levant Whim restoration and now with the building and operating of the Camborne Road Locomotive, Council are now starting to ask the question; "What Next?".

Certainly we need to find a permanent home for the replica where it can go on show to the public and be the centrepiece of an appreciation of the last few centuries of Cornish engineering and mining. With this in mind, the Society's large collection of engineering artefacts, which is being so assiduously catalogued by the Curator, Pete Joseph, should undergo a systematic programme of restoration to display standards.

There is plenty to be done, however, Council do feel that a new flagship project is needed to keep up the momentum. Some consider that we should look for a project in another field of engineering, maritime

or involving water wheels, or even building restoration. At this early, ideas-stage, Council would very much appreciate any project suggestions or any thoughts as to the way the Society should progress. Please contact me or let your views be known through the auspices of the Newsletter.



Crowds lining Camborne Hill. Photo. B. Tripp

Clive Carter

EDITORIAL

There has been some confusion over the proposal to demolish the Belowda Engine House as some have thought it to be the Belowda Hill Engine House. In fact it is close to the Goonvean pumping engine house on the edge of the china clay pit itself, and according to the clay company is sitting on valuable clay reserves.

NOTICES

Kew Bridge Steam Museum, Green Dragon Lane, Brentford. (Tel: 020 8568 4757) events:

July 4th Seminar. *Richard Trevithick, Romantic Adventurer or Unacknowledged Genius?* (Must pre-book).

July 5th—Sept. 30th

Exhibition—*Richard Trevithick—Maverick Genius of Steam.*

TREVITHICK VIDEO—Showing Christmas Eve celebrations. Contact: Roger Newbery, PO Box



Copy date for next issue is April 12th, 2002

Colin French

LETTERS TO THE EDITOR

Dear Editor,

I much enjoyed overall the content of November's Newsletter 115 with its wealth of information illuminating overall activity, accentuated by the AGM and SE-Tech 2001, etc.

F.N. Lakin's article on the McNaught Beam Engine fascinated in both its Anglo-Australian connotation, and in its engine situation in line of development of the receiver/valve arrangement suggesting a progression from cut-off in the hp only to complementing this with lp cut-off as related to the increase of boiler pressure. Whilst not wanting to overburden research enthusiasm, extending knowledge of the valve events would be worthwhile.

I was glad that my West Country article in the Journal evinced so much comment. It industrial history integrity appears acceptable overall. As an embryo musicologist I fall short in writing off the top of my head!

Gerald Williams is of course right. Less in ignorance than stupidity, I combined my appreciation of both Eric Coates and Malcolm Arnold to the negation of the latter. Ethel Smythe I worship as an oddity and feminist totem, and was at the 1994 Prom of 'The Wreckers' in Support of Cornwall and her latter day disciple. I have listened again to the Arnold Dances with much enjoyment, with Number 3 of the Cornish sequence "Con moto e sempre senza parodia" the most fun. Both works in their 'Tone Poem' sequences are a bit lacking in the slow ponderous beat of the Cornish Engine, the cacophony of the stamps, and the traction puff now newly replicated.

A challenge for the new generation of Cornish composers, and in appreciation that their distinguished forebears lacked the sound image, I will happily supply recordings from Kew and Crofton of Cornish engines, slow and ponderous, or faster with splash, to any composer taking up the challenge in the new celebratory Trevithick year.

Peter Stokes,
46 Carrington Avenue,
Borehamwood, Herts. WD6 2HA
Dear Editor,

It is with dismay that I read of the proposal to demolish the Belowda and Goonvean engine

houses, although it has to be admitted that the building at Goonvean is in a very poor state after suffering severe weather damage in the winter of 1990-91.

Why is there the perpetual urge to destroy? In the early years of the second world war nearly the whole run of engine-houses on the Great Perran Iron Lode were destroyed, as were those of Penhale and Wheal Golden Mines, the latter a magnificent structure with its stack crowned with a castellated top. The reason given for their demise was that they were close to the army training camp at Penhale, and were conspicuous landmarks for enemy aircraft. Then in 1944, shortly before the allied invasion of Europe, the engine house on Black Dog shaft at Wheal Busy was blown up, leaving just the bob wall.

This wanton demolition continued in the 1950s with the loss of the houses of Great Retallack mine, between Perranporth and Newquay, and Hocking's at United Mines, Gwennap. In the 1960s, the remaining engine-house, at the Providence Mines, Carbis Bay (on Higg's shaft) was destroyed and Nangiles went in 1967, leaving only a fragment of the bob wall. Carn Camborne went in 1971, and at Tolvaddon Valley the ornamental engine house on Tregonning's shaft at Wheal Seton was demolished in the company of two big arsenic stacks.

In 1984, we lost Goold's engine-house at Wheal Grenville and one at Penhale china clay pit in the Hensbarrow district. When is this destruction going to stop?

More recently the mania for the so-called restoration, or regeneration, of mining sites has resulted in landscapes altered beyond recognition and hideous to behold, besides being totally out of character with the Cornish mining scene. And two of the so-called restored buildings—Wheal Prosper at Rinsey Cove, and Giew, near St. Ives, had many features of interest destroyed during the renovation work, such that I would willingly dynamite those two myself.

Thank goodness for the foresight and the photographs of the late H.G. Ordish. At least we still have these to look at when muddle-headed bureaucrats eventually bring about the destruction of the remainder of Cornwall's engine houses.

Gerald Williams,
2 Mounts Bay Road,
Alverton Estate,
Penzance

TR18 4QP

Dear Editor,

To answer Justin Brooke's query in the November newsletter, the reference to a young lady riding the Dolcoath man-engine occurred in the *Mining Journal* dated 7 January 1865 under a description of the mine. At that time the man-engine extended to the 190fm level, or 220 fm from the surface.

The writer stated, "A few years since, a young lady courageously rode upon it to its termination—an undertaking requiring no little nerve, and not without danger. A portion of her apparel caught in the ways, but in obedience to the instructions of Capt. Bawden, who accompanied her, she held firmly to the holdfast, and was relieved from her somewhat perilous position by the tearing of her dress".

Kenneth Brown,
15 Coombe Park,
Camborne.
TR14 0JG

Dear Editor,

I am writing to congratulate the Trevithick Society in partnership with the West of England Traction Engine Society for the successful commemorative hill climb on 24th December 2001.

Gauging from media coverage and feedback from my staff, the event was a huge success both for those involved directly with the engine's climb, local businesses and the people of Camborne who are so proud of Richard Trevithick's engineering achievements.

Supt. Colin Terry,
District Commander Kerrier,
Devon & Cornwall Constabulary.

MAN OF CAMBORNE

There appears to be some confusion over the origins and birthplace of Richard Trevithick, the great inventor. It has been asserted that he was born in Redruth, rather than Pool Village, in the parish of Illogan. In the eighteenth century men were identified by their parishes rather than the nearest town, and surprisingly, there were no postal addresses or telephone numbers to alter men's locations.

Richard Trevithick's family had been Camborne parish residents for well over 200 years when he was born. In 1562 John Trevithicke had married Elyzabeth Crane of Crane in Camborne, the daughter of John Crane, an important member of the gentry. Their marriage at Camborne Parish Church signalled the start of a long period of residency there. John and Elyzabeth's descendent, also called John, married Thamasin Oliver at Camborne in 1688, and it is from these two that we can trace the direct line of the engineer. They had a son called John (all the firstborn sons were called John for several generations) in 1690, and he married a maid called Elizabeth. John was buried in Camborne Church in 1750. Their eldest, born in 1730, was also called John, and he married Frances about 1765, and died at Camborne in 1796. This John was Richard Trevithick junior's uncle. Richard's father, also called Richard (senior) was born in 1735, being buried at Camborne in 1797.

So far no problem. Richard's father and uncle John were both senior men at Dolcoath Mine in their home parish of Camborne, and although temporarily living a short distance outside the Camborne parish boundary, both men soon moved back home. Richard Trevithick junior was taken back to Camborne whilst still a child and was brought up there, continuing to regard it as home thereafter. Richard's mother was Ann Teague of Redruth, so there is a connection with the more easterly parish.

Pool Village was in the ancient parish of Illogan, like Camborne a large rural parish, neither of them having any significant village until the late eighteenth century. Redruth was the only local town, being located in the relatively small parish of that name. Richard Trevithick junior's birthplace, Penhellick Vean Farmhouse, now number 35 Station Road, Pool, lies half-a-mile from Camborne parish, and nearly one-and-a-quarter miles from Redruth

parish boundary: hardly an argument for the man being born in Redruth! The modern postal address included Pool with Redruth, but, interestingly, Station Road, Pool, has a Camborne telephone prefix of 71. Although it shows a limited grasp of realities of history to read back a post code to the eighteenth century, the above demonstrates that, whichever way we cut the pack, Richard Trevithick, the great steam engineer, was a Camborne man, born in Illogan, within a short distance of that other great Camborne man, Nicholas Holman.

Allen Buckley

LEVANT REPORT

Normally the engine is being maintained at this time in the year and the engine house is only open on Fridays and by special arrangement. This spring there are only a few jobs to be carried out on the engine following the Millennium refurbishment. The work carried out during the refurbishment has been recorded for a chapter to be added to the book on Levant by John Corin when it is reprinted later in the year.

When the engine was being set up after the refurbishment, it was found that the beam axle in the centre of the beam appeared to be slightly bent, possibly caused long ago when the engine ran away and the flywheel burst. The beam was supported and the axle removed. There were no centres on the axle. John Treloar turned the axle true between centres. The bearings, which had worn oval by 0.080", were realigned. It was found that the bearing blocks had to be raised slightly to prevent the piston grounding.

The bearing of the sweep rod was found to be loose in its housing. A saddle was made to hold it firmly and the bearing has been rebored. The pressure-reducing valve (PRV) has been rebuilt with a set of factory spares. The engine has been run to prove that all this work is

satisfactory.

A safety steam cut-off valve is being obtained shortly and will be fitted to enable steam to be shut off from the engine house and contained in the boiler in the event of an emergency on the engine or old pipe work in the engine house.

There is still security and other work to be carried out on the entrance and the tunnel before the public can be admitted to the area of the Man Engine shaft. A new road surface

PUBLICATIONS

In Newsletter 114 there was a full list of the current Society Publications to which has to be added our Chairman's book, *Cornish Engineering 1801 - 2001* the history of Holman's of Camborne. During 2002 I anticipate re-printing, in a revised form, *Cornish Engines & The Men Who Handled Them* and *Cornish Explosives*. This last is likely to be in soft cover unless there is a demand to hard cover from you, the Members. New publications are envisaged and the details will be in the Newsletter. These new and re-printed publications will be available along with **ALL** existing titles currently in print from:

Willow Books on 01209 822011

or email anna@willowbooks.co.uk

I have virtually completed negotiations for the Society to take over the publication of the "Trevithick" stereo VHS, 30 minute tape that Frank M. Trevithick-Okuno financed and Bournemouth & Poole College of Art & Design produced. The anticipated cost of this tape will be £12.99 +p&p and it would be helpful to know how many copies may be taken up by Members. "Without obligation", as they say, could you let me know (letter or email) if you would be interested in a copy. This will help me with planning the marketing.

Vernon Baldry

PS. Don't forget the CD of the book "Going up Camborne Hill Coming Down" put out by the Society for the 200th Anniversary Run. £7.99 +

Who did die at Ding Dong?

In *Comish Mine Disasters* (edited by Philip Payton from a manuscript by the late Cyril Noall; Dyllansow Truran, Redruth, 1989), the story is told on page 172 of the death of Hannibal Eddy at Ding Dong on August 24 1867. Eddy is said to have died from the loss of an arm after being caught in the revolving rod connecting the engine flywheel with a tozing machine. (As an aside, I'd be interested to know more about the tozing or tossing dressing process as used in Cornwall; did it have any similarities with northern Pennine lead dressing practice?) Eddy had been talking with the engine man, one John Dunn, when his clothing was caught in the rod: a not uncommon incident. The story in *Disasters* is briefly but explicitly told.

However, researching the history of Methodism in Madron, for the centenary of the present (ex Wesleyan) building, and wanting to cover all Methodist history, I explored the obituaries in the *Primitive Methodist Magazine* (there had been a PM chapel in Madron Church Town). In the June 1868 issue of the *Magazine*, on page 362, I found the obituary of **John Dunn**, the engine man, who died at Ding Dong Mine on 24 August 1867. (The delay in publication is not significant; obituaries; often took that sort of time to appear in print.)

Dunn was a young man, born 3 October 1846, at Madron. Associated as a child with the Wesleyans, he was converted at fourteen in a revival meeting at the Primitive Methodist chapel, and became a member of the Prims. He rapidly became a Sunday School teacher and school secretary. In 1864 he was recognized as a Local Preacher. His name also appears on the Penzance Primitive Methodist Circuit Prayer Leaders Plan for April 16 to July 9, 1865 as one of a five-man prayer team appointed to that ministry at 8am on Sundays at Madron PM chapel. As was not uncommon for someone in these offices in Primitive Methodism, he was a member of the Band of Hope, and thus an 'earnest advocate' of temperance. It was the sort of spiritual

progress that would lead others into the Primitive Methodist ministry.

The obituary goes on to describe how he went to work as usual on the evening of Friday 23 August at Ding Dong, and how, at seven the next morning, '.. he went out of the engine-house to breathe a little of fresh morning air, and conversing with a lad belonging to the same mine, his clothes caught in a revolving rod connected with the machinery, which carried him round with such velocity as to wrench one of his arms from the body, and otherwise seriously to injure him. As soon as possible, he was extricated and conveyed to his home, where medical skill did its best to prolong his life, but all in vain; near ten o'clock the same morning his spirit fled to another and better life...'

This, the same incident as in *Disasters*, leads to the death of Hannibal Eddy - and told in very much the same language. What is going on here?

I doubt that we have two deaths; that stretches credibility too far. I doubt too that the *Primitive Methodist Magazine* would print an erroneous obituary. This is reinforced by the facts that ...

- i. the obituarist was a Madron man, the leader of the Prayer Team to which Dunn belonged;
- ii. the obituary quotes Dunn's mother;
- iii. the publication delay gives ample time for any error (however it may have occurred) to be noticed and the obituary withdrawn.

Yet I can believe that the source used for *Disasters* generated an error - or indeed may itself have perpetrated a previous error - arising over the too frequent use of pronouns in mid nineteenth century reports. It can often be very difficult to determine who is actually being referred to when 'he/him/his' are used without care over which person is the intended precedent to the pronoun. We often think that nineteenth century grammar was better than our own; the evidence is that reports by simply educated people - especially workers reported as witnesses - often confuse pronouns. I think this is what has happened here: the death was not of Eddy, but of Dunn.

LOCAL GOVERNMENT LIAISON

Update on the various cases in hand at Nov 01 plus any new cases.

BELOWDA & GOONVEAN ENGINE HOUSES (RBC)

RBC advise that they are waiting for a report from English Heritage.

MAKER WITH RAME EXPERIMENTAL WINDFARM (C&WDD)

Objection lodged but no outcome.

TOLGULLOW VEAN (ZIMAPAN) INFILL (CDC)

The viewing panel recommended refusal with around 100 supporters and objectors attending the meeting. The planning committee accepted this recommendation but not before an impassioned plea for deferment had been made by one councillor. Watch this space.

HALLENBEAGLE INDUSTRIAL ESTATE (CDC)

No further news here. The Society has inspected the site having perused the case proposals. The applicants intend to call a public meeting in Chacewater but no date has been forthcoming. We are in touch with the Hallenbeagle protest group and are giving them our support. This case would result in a further industrial estate on a mining site. Bearing in mind the number of empty industrial units and the other new sites being developed the Camborne, Redruth area really does not need any more.

CAMBORNE & REDRUTH REGENERATION PROJECT (KDC)

The board room contests at South Crofty (Baseresult Ltd) must affect the overall proposal since the SW RDA expressed an intention to put a compulsory purchase order on the South Crofty site. The formation of a "steering company" is in hand and the draft proposal has been approved by KDC.

PORTREATH "SMUGGLERS COTTAGE" (KDC)

Kerrier District Council are to hold a site

inspection meeting (each District Council seems to have its own phrase for councillors taking a look at the site). This building is 400 years old and is associated with the maritime history of the port both prior and subsequent to the construction of the mining port. The Society are in contact with the local authority and will be attending the site meeting.

A member of the Society contacted the LGLC concerning this case and the committee are most grateful for this. More of the same would be welcome.

LGLC members are as under:

Caradon & West Devon	C&WDD
John Badger	01752 786398
Carrick CDC	
Phil Corbett	01209 890897
Kerrier KDC	
Kingsley Rickard	01209 716811
North Cornwall NCDC	
Vernon Baldry	01209 822311
Penwith PDC	
Peter Joseph	01736 364619
Restormel RBC	

WHICHAM IRON MINE

Whilst conducting a field trip recently I was shown a photograph of two slit-window engine houses like East Wheal Rose 100 facing one another across a shaft. This turned out to be Whicham Iron Mine in Cumbria, where the 100 and 90 from Hony and Trelawney did their last few years' work. Thus Barton's statement that the two engines worked side by side in the same house is, I am afraid, erroneous. The photograph is unfortunately not suitable for reproduction. I am indebted to Mr Chris Moore of Millom for much information on the Whicham operation, which was finally defeated by water.

Kenneth Brown

Charles Thurlow 01726 73882

2001: THE TREVITHICK SOCIETY

The public demonstration by Trevithick of his high-pressure steam engine 200-years-ago presented both opportunities and challenges to this Society. It is to the credit of its council that it endorsed the two proposals put before it.

All will agree that the credit due to Richard Trevithick for his work was well overdue. His achievements were well recorded in the history books but until this year they were generally unknown.

A bi-centenary is a rare event and 2001 was seen as an opportunity to widen the activities of the Society to a greater audience. By so doing the Society has been able to gain greater recognition for Cornish engineering skill and industry, the work of Trevithick and other inventors, and much needed attention to Cornwall's present economic plight.

No project has ever been achieved without hard work and criticism. The volunteer members who worked on the Society's projects fully understood the problems they faced but were undaunted.

The Trevithick 2001 Project started a few years ago and its progress has been well recorded in these pages. The replica of the Camborne Road Car was completed in full working order on time and within budget. It was a tribute to all the volunteers who took part and to the support they received from companies and individuals.

The Society and Cornwall now have Trevithick's high-pressure steam embodied in an engine which will continue to gain recognition as the years unfold. During its first summer it has ventured out some twenty times and been steamed in public over thirty days. This has required the devoted labour of a small band of volunteer members who have unselfishly given their time and skill to publicise Cornish achievement and the work of this Society. We will never be able to thank them enough but we must acknowledge their

sacrifices.

The existence of the exciting 2001 road carriage spawned all kinds of attention and interest. One was the offer by Prof John Sharpe to bring two of his steam engineering friends over from Switzerland to address the Society. It was soon very clear that this was not to be the usual Friday evening lecture at the Camborne School of Mines.

The opportunity generously presented to the Society was in recognition of its work over the years to preserve Cornwall's industrial archaeology and its foresight in constructing the replica road carriage.

Word of these eminent visitors spread and there was soon interest from all over the world. It became clear that the Society was being provided with the opportunity for its members to look forward as the brave achievers of the past must have done. The weekend of the AGM was chosen to enable as many members as possible to attend both events and avoid any additional costs for travel, time and accommodation.

There was a problem finding a suitable location in Cornwall to hold the conference and the Royal Naval Air Station at Culdrose was chosen. It was later decided to re-locate to Falmouth, a move which was to have important consequences. Ten days before the conference the World Trade Centre in New York was hit and Culdrose went into a state of alert. This would have cancelled the intended conference.

The sun shone and, according to the bundle of kind letters we have received, everyone enjoyed themselves. The conference had been made possible by the generous offers of the speakers to pay their travel costs and to waive any fees. This is something for which the Society must be very grateful.

During the weekend a great number of significant friendships were established between individuals, societies and organisations. Many of these have already been developed into international links concerning the future of Trevithick's high-pressure steam.

As 2001 draws to a close there is just one

celebratory event left, the Christmas Eve climb of Camborne Hill. Details elsewhere in this newsletter.

All the bicentennial commemoration has been additional work by the council on top of a very busy year. The image of the Society has been enhanced by numerous appearances of its new display tent. We have seen a remarkable increase in the sale of our publications and the Society received a prestigious award from the Gorsedd of Cornwall for its work. A full programme of lectures and events has been held and all the Society's artefacts have been painstakingly reassessed and catalogued on computer. Every member of the Society's council now has a particular responsibility for the goodwill and development of the Society; the international standing and credibility of which has probably



'Be assured your council has put every ounce of effort into their work this year'.

SUNRISE APPEAL

The Parkandillick Engine was in operation on 29 December and donations were collected on behalf of the Sunrise Appeal for the Cancer Unit at Treliske Hospital, Truro. A remarkable £147.22 was raised.

Thanks to all that helped on that day.

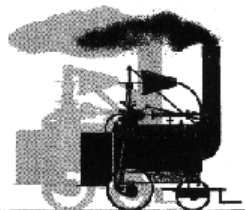
ALAN PRISK MEMORIAL

The sudden and unexpected passing of Alan Prisk last November robbed Cornwall of one of its most thoughtful and devoted sons. Always a supporter of the often overlooked achievements made by Cornish people, Alan was an advocate of the Society's promotion of Richard Trevithick's work. In particular he thought it fitting that a 1000' tower should be erected in the Camborne—Redruth area to bear Trevithick's name.

The Trevithick Society are very grateful to his widow Pam and his family for donating to the Society the collection of £410.00 taken in lieu of flowers at Alan's funeral. It has been agreed that this sum should be held by the Society

until a suitable opportunity arises to create a memorial in Alan's name. The Council was represented at Alan's funeral and wishes to express its condolences to Pam and her family.

Whether it was at a public appearance of the locomotive or the Se-Tech conference, Alan could always be counted on as being in the thick of it. In



FAMILY TREES

If any member is researching Edward Bull or has family trees of any of the Sims, Hornblower or Mitchell families then Mr. Harvey of Cheltenham would appreciate a call on 01242 680972.

THE EAST POOL TELPHER

An agreement has come to light in the South Crofty archives which gives a fair indication of the route of the Telpher line between East Pool and Tolvaddon Stamps.

The first Telpher line was built in 1883 by the Telpherage Company at Weston, Hitchin, to the designs of Professors Fleming Jenkin, Ayrton and Perry.¹

A Telpher line consisted of a series of H-poles 60' apart. On the wooden cross-arms and 8' apart were two cast-iron saddles supporting two lines of iron rods or wires, and which allowed the passage of wheels. At each end the line went into a wide loop on a single iron girder rail. Trains of full skips ran on one side and empties returned on the other.

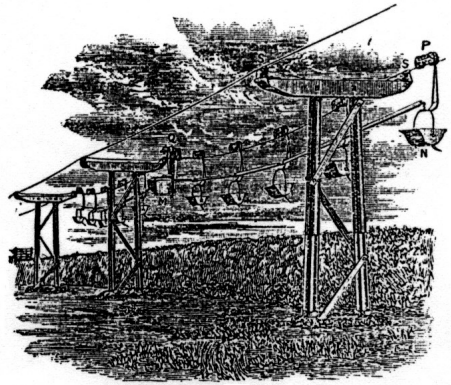
A train consisted of an electric locomotive drawing about five skips connected by wooden drawbars, 120' overall. Each skip hung below the line from two V-wheels supported by an arm projecting outwards to clear the cross-arms. The loco also ran on two supporting wheels with the motor below driving two gripping wheels.

Two methods had been devised for the electrical supply to the loco motors—the series system and the cross over parallel arc system.

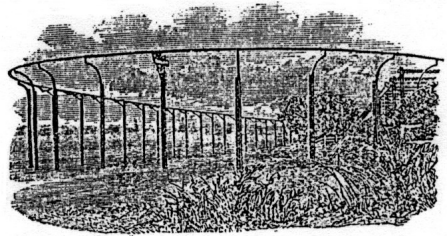
The first Telpher for industrial purposes was built in 1885 at Glynde, Sussex, for a cement works (Figure 1).² Initially it was run on the cross over parallel arc system, on iron rods and powered by a 200v Crompton compound-wound dynamo driven by a Ruston & Proctor steam engine (Figure 2).

The supporting saddles had insulation between the two rods on alternate H-poles, with insulated jumper cables on the cross-arms from A1 to B2, B2 to A3, etc., on the positive side, and from B1 to A2, A2 to B3, etc., on the negative side. On each train the leading wheel and the trailing wheel were connected to the motor through insulated cable. Whether the leading wheel was on a positive section and the trailing wheel on the negative section, or vice-versa, the motors always went forward, though every reversal of current caused sparking on the

TELPHER AT GLYNDE, LEWES.



Straight sections on steel rods.



Terminals and curves on solid rails.

Figure 1.

brushes.³

A train consisted of a loco with 1½ HP motor pushing five 2½-3 cwt skips separated by wooden draw-bars, and pulling a similar line—total ten skips 120' long. Several trains could be run at the same time.

After running for two years it was evident that the 1½ HP Ayrton & Perry motors were unsuitable for the conditions. A 1 HP Immisch motor was tried and found to take half the amount of current, so these were then fitted on all locos. At the same time they decided to alter the line to a simple parallel system, mainly so that steel wire ropes could be used instead of rods, which had had a much shorter life span than anticipated. Wire ropes had proven difficult to clamp and insulate in the saddles.

These new ropes were 2 5/8" circumference, anchored to buried cross-beams and with tightening screws at intervals for straining. Each rope was earthed and connected to the negative side of the dynamo. This system required a second wire, 1½ circumference, on insulators in each side, connected to the positive

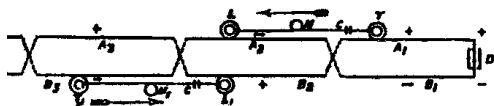


Figure 2. Cross-over parallel

on the dynamo. The current was taken by a copper jockey wheel with wide flanges on each loco. This system was in use by 1887 and a complete success.⁵

The Chairman of the Adventurers of East Pool visited Glynde in 1888. Early in 1889 they signed a contract with The Mines and general Telfer Co Ltd to provide a Telfer line between East Pool and Tolvaddon, presumably on this latest system.

It seems that they included a proviso that the Stamps required a minimum of 1000 tons/week and 170 tons/day, with penalty payments when such tonnage was not moved. The loading bays were to be at ground level and the skips tipped automatically over the stamp passes.

The company directors and engineer visited East Pool and chose the route, which included crossing a railway siding at two points.⁶ The supply of iron work was discussed with R J Stephens and Son and the timber would come from Bayly of Plymouth.

The recently found agreement, dated 11th May 1889, was between The Mines & General Telfer Co Ltd and the Great Western Railway Company "as to carrying a Telfer line over the East Wheel Crofty branch of the Company's Railway near Redruth" (that should have read North Crofty). There is no mention of construction details and dimensions, provision of cradle guard over rails, working voltage, etc. The sketch attached showing plan and elevation does not show pole positions, only a broken route line, and quotes 15' clearance over rails.⁷

The line crossed the centre of the rails at a point 65' to the south of the centre of the turnpike at an acute angle in a north westerly direction towards Tolvaddon, and again in the disused North Crofty Mine coal yard, into which the rails across the lane had been removed by that time (Figure 3). At a point 160' SSE of the turnpike the route angled 125° almost due east around the works of R. Stephens & Son (OS 2865). Projected, that line passes some 150' to the south of where Robinsons Shaft was later sunk and on to the hedge 2883/2884. Angled from there it would have passed over the entrance to Palmer's

Shaft, across Station Road and the Stream Works, across Carn Brea Lane and 2832 on the north side of the Free United Methodist Chapel, in 2833. OS 2832 was vacant on the 1889 and 1907 maps. In 2833 the two wire ropes would have been anchored and each side continued by the single girder rail forming the loop.

Erection had commenced by October 1889 and after a trial run in August 1890 the system was declared satisfactory. They then started running four 5-ton trains but could never reach 60 tons a day as the system was breaking down continually.⁸

The Telfer company soon owed the mine £319, which they could not pay, and kept trying to increase the tonnage carried. It was reported that ore was falling from the skips at Turnpike crossing. Crompton & Co then took over the Telfer company and the Agreement with the Adventurers.⁹

By March 1892 there was no improvement, only 120 tons per day, and in June £500 owing to the mine was unpaid. The mine threatened to take possession and had done so by November.¹⁰

The only available photograph taken at that time shows the single bulb angle iron girder rail loop encircling Michell's Enginehouse and Shaft. The white spots on the top of each post must be the insulators supporting the live wire. In the middle of an old photograph of the Engine Shaft area is what could be an abandoned Telfer H-pole.¹¹

The Telfer line was taken out of service and the mine reverted to horses and carts until 1903, when the Purser of East Pool & Agar United Mines signed an Agreement dated 13.5.03 with the Urban Electric Supply Co. to carry tinstuff on the Camborne & Redruth Tramway to Tolvaddon.¹²

Sidings were laid into Michell Shaft and Wheal Agar Shaft and a branch line laid from the depot to Tolvaddon. Two locos and fourteen wagons were acquired. In 1922, following the collapse of Engine Shaft, a siding was laid into Taylor Shaft.

The Tramway closed in 1927 but the Mineral Line continued until 1934. By then the system was worn out and the mine was paying the full running costs plus £900 per annum.

The mine decided to erect an Aerial Ropeway from Taylor Shaft to Tolvaddon. It was built and erected by Ropeways Ltd—monocable 1955 yards long with telephone wires on the top of the towers and cradle guards at each road crossing. The 59 7 cwt skips were hauled by a

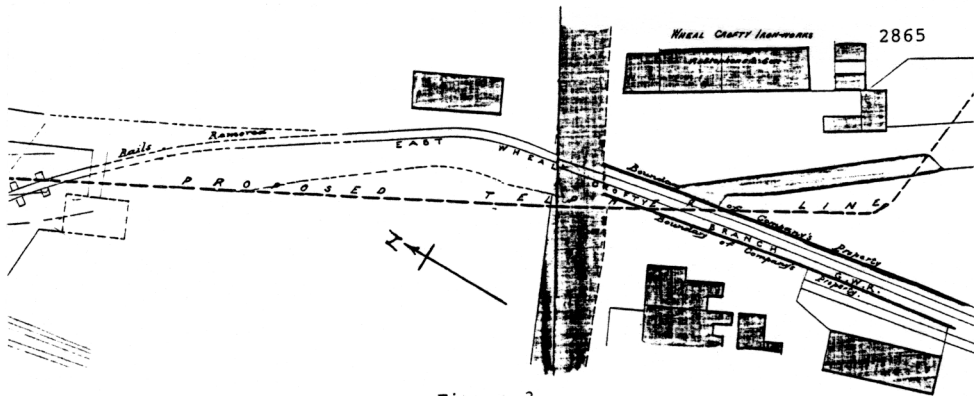


Figure 3

20 HP motor at the loading terminal and were rated at 40 tons per hour. It went straight across the fields from beside the Crusher at Taylor Shaft to an angle station of about 120° some 150 yards from the Stamps, SW67414187-65754197-65704196.¹³

The Aerial Ropeway was put into service in August 1934 and the Mineral Line was then closed and gradually dismantled. It had carried 1,300,000 tons of tinstuff.

The Aerial Ropeway was used continually until the mine closed in 1945. It was sold to ECLP before the auction of the plant, etc., and was soon removed. It was certainly more successful than the Telpher.¹⁴

My grateful thanks to Allen Buckley for the loan of the Agreement.

References

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- 2 *Electrician* 1885 2 Oct p. 388 & 23 Oct p. 455.
- 3 *Electrician* 1884 24 May p. 42, current reversal; 1886 19 Feb p. 286 current reversal, 26 Feb p. 306 also reporting death of Prof. Fleming Jenkin in previous June, 5 Mar p. 326 and 2 April p. 407.
- 4 *Electrician* 1887 17 June p. 122.
- 5 RCG 12:7:88. *MJ* 1888 14 July p. 791 & 4 Aug p. 882.
- 6 RCG 9:5:89 p. 5 & 10:10:89 erection commenced.

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- 9 *MJ* 1891 3 Oct p. 1118; 1892 19 Mar p. 306; 11 June p. 648 & 26 Nov p. 1331. Regular meeting reports 1888 to 1893.
- 10 RCG 16:4:91.
- 11 *Mining in Cornwall*, Vol. I, J.H. Trounson, Trevithick Society, plates 95 & 96. *Mining in Cornwall*, Vol. I, J.H.Trounson & L.J. Bullen, p. 96. Mineral Line p. 102 & 103. Aerial Ropeway p. 114, 115 & 116.
- 12 CEPCo Records—Agreement dated 30:5:03 & subsequent agreements as costs rose.
- 13 British Ropeway Engineering Co Ltd., letter of 27:8:75, who had acquired Ropeways Ltd.
- 14 *MM* 1947 Nov p. 294. Sale by Tender—Lots 1, 2 & 4 land, Lot 3 the complete Ropeway. Conditional to purchaser negotiating access and paying all costs of dismantling and for any damage. Ropeway motor given as 30 HP. Other plant in Auction Catalogues for 25:11:47 and 29:1:48.

Eric Edmonds.

TREVITHICK 2001 PROJECT

After the very busy summer season the engine was laid up in the CompAir UK Holman factory for maintenance work and the fitting of a set of foot brakes and a steam blower. It was decided that a foot-operated brake acting on the flywheels would be a useful supplement to the existing hand operated brake. To fit this brake modifications had to be made to the front platform, extending it on one side.

The steam blower would not have been fitted to the original engine but was added for the convenience of the engine crew. It greatly speeds up the time it takes to get the engine in full steam. It has proved very successful and roughly an hour has been cut from the firing time. The blower exhausts steam direct from the boiler and up the chimney and greatly increases the draught through the fire. The more efficient and hotter combustion greatly increases steam generation and more than offsets the loss of steam through the blower.

All of this work was completed in time for the Christmas Eve bicentenary run, and both proved their worth on the day.

The engine has been registered with DVLA as Make Trevithick, Model No.1 and has the registration number Y717BAF.

A joint committee of the Trevithick Society and the West of England Traction Engine Society organised the Christmas Eve events. They organised the stabling of the Traction Engines, the timing of each hill climb, crowd control marshals, liaison with the police and other organisations and the all important roast goose luncheon in the Tyacks Hotel.

In the lead up to Christmas Eve the Police were invited to send a vehicle examiner to watch the engine perform on the roads within the Holman works, so that all could be assured about the safety of the anticipated crowds during the

Camborne Hill Run.

Special brass plaques were also made to be presented to each engine taking part in the bicentenary celebrations (see page two). In addition new costumes were

specially made by a theatrical costume designer.

Camborne Town Council had new street signs erected in the street proclaiming "Fore Street, otherwise known as Camborne Hill".

The crew included Nigel Watts, for the first time, in honour of the tremendous contribution he had made as pattern maker. On the day itself everything went according to military timing. The replica left the Holman factory exactly on time at 10 o'clock and drove through the town,



Photo: P.E.Tompsett



The crew resplendent in period costume: Nigel Watts, Philip Hosken, John Sawle, Colin French, Kingsley Rickard, John Woodward and the diminutive Arthur Young. Photo: Moira French

with a police escort, stopping once at the top of Wellington Road to stoke the fire, before proceeding down the hill to the base of Camborne Hill. The water bowser was away tending to the traction engines, so local residents helped refill the water tank. The engine was then run in stationary mode to pump water into the boiler, the fire tended to, and interviews given to the assembled television, radio and newspaper reporters. All the while the traction engines made their way up Camborne Hill adding to the enjoyment of the multitude of people lining the street.

The crowds were much larger than on the Trevithick Weekend and people had come from all over Britain to witness this historic run, even though the publicity was intentionally kept to a minimum. The weather was kind, unlike 200 years ago, and the atmosphere in the crowd was joyous. A very happy occasion indeed.

To provide belching black smoke during the run a few shovels of household coal were added to the fire and this added to the drama. The crew then clambered aboard the engine and within seconds of the allotted hour off she sped.

The engine had obviously run-in during the summer months for she had more power, and despite the road being wet from an early morning shower, had plenty of traction too.

As the engine progressed up the ever steepening hill, the crowds lining the street grew larger and as we passed they followed the replica up the street, completely filling Fore Street. Everyone was happy, the mood very festive, and the cheering and clapping crowds reached a crescendo as we reached the top of Camborne Hill, where they were greatly assisted by the Troon ToCh Male Voice Choir. The choir sang carols and entertained the crowd as they waited for the Trevithick replica to appear and as it rhythmically chugged and puffed its way towards the top of the hill, they led the crowd in the singing of 'Going Up Camborne Hill, Coming Down'. It was a very stirring moment for all that were present.

After pausing at the top of the hill for a few minutes the engine was driven into the car park of Tyack's Hotel. There the crowds mingled with the engines on show and gradually dissipated. 109 of us then took our leave and

BOOK REVIEW

had a roast goose luncheon in the hotel. The 110th place setting was laid out for Cap'n Dick himself! An excellent meal was had by all, followed by toasts, speeches and presentations.

Suitably replenished the crew readied the engine for the return journey to Holmans. This time she was bedecked in tinsel and Arthur Young dressed up as Father Christmas, and so as the engine made its final journey of the year, we wished the onlookers in the town a very Merry Christmas!

Earlier in the day, on the way to Holmans to join the engine crew, Kingsley Rickard stopped at a fruit and vegetable shop to purchase some mistletoe as a festive addition to his costume. He picked out the sprig he wanted and amazingly the shop assistant then proceeded to weigh it and charged him the princely sum of four pence. Kingsley certainly got his four pence worth that day!

In the New Year Arthur Young went into the Klick shop to get his costume dry cleaned and the shop assistant recognised him as one of the crew. She went on to say that on Christmas Eve the shop had a very busy day and completely sold out of film and disposable cameras.

CNF.

R.R. Angerstein's Illustrated Travel Diary, 1753-55. Translated by Torsten and Peter Berg. ISBN 1-900747-24-3, £29.95.

Although Reinhold Rucker Angerstein, a Swede, only spent sixteen days in Cornwall in May 1754, he covered a great deal of ground. These comments are based on his coverage of Cornwall, which he has illustrated profusely. However, a close examination of his pictures suggests that he only sketched outlines on the

METHOD OF FINDING PRESENT VALUE OF MONEY

When reading "Gaslight" the Newsletter of the North West Gas Historical Society recently (issue 92 October 2001 ISSN 1353-5056), Eric King discovered an internet site that might be of use to members seeking the current value of an historical sum of money.

Log on to the **Economic History Resources** site, at [HTTP://www.eh.net/ehresources](http://www.eh.net/ehresources) choose your currency (£'s, \$'s or whatever), enter the old sum and date, press the button and in no time there is the 2002 value.

spot, which he completed later indoors. This is shown by his pictures of St. Agnes, showing a shaft sunk on the beach, and mining works in the cliffs, which do not appear to have been conducted in accordance with the best practices of the time. Similarly, his North Downs mining district does not match the shape of the ground as we know it today, and his pictures of Treen Castle and an openwork for copper in St. Just may have been made from a description given by one of his friends, since copper was not mined there in openworks. His sketches of several towns show a stylisation of the houses in far straighter lines than today's survivors show.

The text seems to have been compiled from rough notes, since the Diary does not follow the exact route taken by its author, and many of the entries are undated. But despite these slight drawbacks the book is an important addition to our knowledge of mining and smelting in Cornwall in the early years of the Industrial Revolution, and places Cornwall in the wider context of working metals. For the Cornwall section alone, it is well worth a place in any historian's bookshelf.

JB.

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All members are reminded that their subscriptions are overdue. The late payment of subscriptions may mean that Newsletters and Journals are not posted to you.

TREVITHICK SOCIETY EVENTS AND CONTACTS

MAR 8th—East Cornwall

The Catechism of the Cornish Engine House

By Kenneth Brown.

MAR 9th—Field Trip

West Phoenix Mine. Meet Hurlers car park 2pm

MAR 15th—CSM

The Cornish Miner and Heritage

By Sharron Schwartz.

APR 26th—CSM

Early History of Dolcoath. By Allen Buckley.

MAY 21st—CSM

Levant. A video by John Potter.

Cornwall. TR15 3DS

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*Meetings are held in the Lecture Theatre,
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*East Cornwall Branch meetings will be held
at the Public Hall Complex, Liskeard 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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