

THE TREVITHICK SOCIETY

NEWSLETTER No. 38

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AUGUST 1982

Morwellham and Tamar River Trip



Some of the 36 members and friends of the Society enjoying the Tamar trip on 5 June, as reported on page 8. Standing almost directly beneath the P of 'Plymouth Belle' is our Chairman, Rodney Law, and on his right our Vice-chairman, Joff Bullen. One member not in the picture is Bryan Earl — he is wielding the camera.

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Editorial

This editorial is being written in some haste, on the eve of yet another threatened rail strike. I have just learnt from our printer that he is liable to problems due to staff being unable to get to work, and so I am endeavouring to send at least some of the MSS to him early, to lessen the risk of this issue of the Newsletter being out late. This is particularly important due to the plans for this year's AGM, which appear on page 8, and also because to save postage it is planned to send out the Journal in the same envelopes. Of course, persistent rail disruption could make the Journal late too ...

I have received one article from a member for this Newsletter but I would be grateful if other members having an interesting field of study would put pen to paper on the subject. The diversity of interest amongst our members is far greater than some issues of the Newsletter would suggest. Waterwheels particularly are an area which seem to be neglected, yet there are many placed in Cornwall still where their evidence, if not the actual machinery, may be seen.

Elsewhere in this Newsletter will be found the Minutes of last year's AGM. Members are asked to read them carefully and be prepared to raise any points they wish at the meeting, or by letter to the Hon. Secretary beforehand.

Elsewhere in this Newsletter will be found the Draft Minutes of last year's AGM. Members are asked to read them carefully and be prepared to raise any points they wish at the meeting, or by letter to the Hon. Secretary beforehand. Also please note the Nominations for Election on this page.

Last copy date for MSS for the November 1982 Newsletter is 3 October — and this deadline will be strictly adhered to.

The Editor

£40,000 Botallack appeal launched

The Carn Brea Mining Society has produced a splendid brochure in aid of the appeal to save the two enginehouses on the Crown's section of Botallack mine. They are in a precarious state and it is estimated that £40,000 will be needed to safeguard their future, an operation that stops well short of complete restoration.

The two enginehouses are perched spectacularly on the edge of the cliffs, a situation which does not make the prospect of erecting and working from scaffolding an easy matter. The lower house was erected about 1830 and contained a 30-inch pumping engine (strokes 6ft 4in and 5ft 4in) which probably worked until the mine's closure in 1895. The upper house contained an all-enclosed beam winding engine, the cylinder bedstone and flywheel pit of which are still in situ. It was erected about 1860 and drew from the famous Boscawen inclined shaft until the Crown's section was abandoned in 1875.

The cash being sought is to carry out six urgent remedial jobs:

- 1 Rebuild and seal the tops of all walls to prevent water ingress
- 2 Replace all defective door and window lintels
- 3 Reinstate collapsed internal facings
- 4 Rebuild the partly collapsed north-facing wall of each house to eaves level
- 5 Rebuild the chimney stack on the pumping engine house to its original height, and
- 6 Repoint all walls and replace missing or weak masonry.

All remedial work will match the original materials and design. The outline walls of the boilerhouse for each engine are still visible and it is to be hoped that the rescue plan includes these. The 30-inch engine had two Cornish boilers of dissimilar size, the whim had one.

Powerful support for the appeal has been pledged by a number of influential Cornish bodies, including this Society, the National Trust and three local MPs.

The two enginehouses are regarded as perhaps the most striking and best known evidence of Cornish mining history. They epitomise the skill and perseverance of Cornish engineers and builders in a situation where every stone and every item of machinery had to be lowered down the cliff to the site. And coal for the boilers was conveyed by droves of mules toiling up

and down the steep paths where traces of spillage may yet be seen.

The enginehouses lie within an area recognised as being of special importance for conservation, which adds powerful strength to the Society's efforts to save them. Enquiries and contributions should be addressed to Lawrence Holmes ARICS, "Whispers", Ladock, Truro, TR2 4PL. Cheques should be made payable to Carn Brea Mining Society (Botallack Appeal Fund) and crossed.

Copies of the brochure may be obtained from the same address, price £1.40.

Holing engines, punching engines

What were these devices? Wheel Clowance copper mine, Crowan had a holing engine in 1823, and Beeralstone silver-lead mines had a punching-engine in 1822. References Royal Cornwall Gazette 18.10.1823 and 7.9.1822. Information to Justin Brooke, Chymorvah Vean, Marazion, please.

Nominations for election 1982-3

Elections for the following officers will take place at the AGM:

- (a) President
- (b) Hon. Secretary
- (c) Hon. Treasurer

The following members retire in rotation from the Council:

Messrs. D. A. Hill, D. S. Jenkin, M. Trinick, Captain M. Tarrant and Mrs. M. Smyth.

Nominations should reach the Hon. Secretary, Mrs. Smyth, together with the written consent of the nominee, by 4 September 1982, after which date no nominations can be considered.

Settlingstones 60-inch Cornish engine

Following my article on the two Cornish engines that went to Northumberland lead mines, I have solved the mysterious reference to "Chiverton Mine" where the Settlingstones 60 is said to have worked prior to its move north in 1868. I did this by widening my field of search to include not only those mines with "Chiverton" in the name but others which were worked on the same run of silver-lead lodes as the famous West Chiverton, in Perranzabuloe parish. I was looking for a 60 built by Harvey & Co. in 1864 with strokes of 10ft and 9ft.

This led me to Wentworth Consols, less than half a mile from West Chiverton, where a 60 exactly answering the description of the Settlingstones engine was advertised for sale in "Mining Journal" for 25 January 1868. Two other 60s in the area are ruled out. A recent visit to Wentworth Consols found the base of the enginehouse, clearly demolished by explosives, and the tall stack ditto. There is enough of the enginehouse for the walls and boilerhouse to be discerned, however, and the dimensions correspond with a 60. Moreover the 1876 O.S. map shows an empty enginehouse on the exact site.

I am grateful to Mr. Justin Brooke for help in this piece of research. The identity of the 70-inch Cornish engine which went to Stonecroft Mine about the same time still has to be established and I would be delighted if any member could give me a lead on this. Mr. Vernon's letter published elsewhere in this Newsletter is of interest, but the date of installation is needed if documentary sources are to be consulted.

Kenneth Brown

Society publications

Members may wish to purchase Society publications (as listed in previous newsletters) at either of the forthcoming meetings (24 & 25 September and 19 November) to save postage. Would those who know their requirements, please let Mr. Edmonds know in advance so he knows how large a stock to carry at the meetings? His address appears on the front page.

Sri Lanka — the time machine

by Kenneth Brown

When my firm asked me to spend a fortnight in Sri Lanka to cover some technical stories of dam building on the Mahaweli River, my first reaction was, where is it? "Sri Lanka used to be called Ceylon" was the reply — which made it all clear.

From the steam point of view, all I knew when I stepped off the plane — in a tropical rain shower — was a vague rumour that there were some Beyer Garratts somewhere on the island, and a recent report in the magazine "Steaming" about two Robey steam wagons still working commercially in the capital, Colombo.

After a 12-hour flight, the long car ride — actually only 80 miles but it took more than four hours to reach Victoria Dam being built by British firms — offered little opportunity for steam exploration. But passing a railway station replete with slender semaphore signals, and a steamroller slumbering by the roadside, not to mention all the 1950s vintage motorcars, induced a strong feeling of having gone through the time machine. And when we came across bullock carts and even working elephants "in steam", the illusion was complete!

The only free afternoon whilst staying up in the mountains — and what a splendid climate, 80-90°F the whole time — was spent in Kandy, the old inland capital. There is nothing steam here, but there is a fire engine of 1900 vintage which Lord Montague had tried unsuccessfully to purchase ("we still use it"). At the all-diesel loco shed I inquired about the Garratts. "There's one at Nawalapitiya", I was told. "And there's a train just leaving". I looked at the decrepit rolling stock, remembered I had a driver waiting and politely declined.

Kandy has several old buildings. Islamic Mosques and Buddhist temples seem to be trying to outdo one another for ostentation. And thousands of buses. Even in the country the roads are always full of brightly-dressed people on foot, on bicycle, on animal cart or in buses. They always seem to be going somewhere, but what they do when they get there I've no idea.

On the second Sunday I was due to drive to Colombo. I'd found Nawal-whatever it is on the map. Since it involved a detour of only some 20 miles, I arranged with my driver to do just that. Arrival at the place was not propitious. No sign of a loco shed, and inquiry of the natives produced mixed results. Finally I was told "The shed foreman who has the key is away having his lunch. But I will take you to the shed".

Down the main line

The route was straight down the main line, past more of those superb semaphores. The shed turned out to be a roofless structure with two diesels in it, but alongside was the repair shop and through a wire mesh doorway I could see No. 347. On arrival at the office, I became absorbed by framed photographs round the walls showing the shed in steam days. The man in charge wrestled with a telephone — the sort where you wind a handle frantically to arouse the other end. Finally he said "I can let you in" and we went back to see the Garratt. Like everything the least bit unusual in Sri Lanka, the exercise had gathered a large audience!

No 347 was built by Beyer Peacock in 1945 according to its plate, and burnt oil. A 2-6-2 + 2-6-2, it is nevertheless a large machine on a gauge of 5ft 6in. Eight of them were used on the mountain section towards Badulla where the line climbs more than 5,000ft. No 347 used to be steamed regularly to keep her in trim for the occasional steam excursion but the practice has now lapsed.

Well satisfied with having seen and photographed one of the most remotely situated steam locomotives in the world, I continued on to Colombo, pausing to look at the roller, an 8 ton Aveling & Porter machine dated from 1926 and seemingly still usable. At least I arrived at the hotel reasonably clean! Incidentally that hotel is air-conditioned: after a week living at temperatures that nature intended it was like walking into a fridge!

The following day, my business calls done I repaired to the nearest railway station, called Maradana, where commuter lines of 5ft 6in and 2ft 6in gauges run side-by-side to the

terminus at Colombo Fort. I was staggered to see two locos in steam on the narrow gauge — chunky 4-6-4 tanks built by Hunslet in several varieties between 1913 and 1929. One of these was on an empty stock train going to Fort. The fireman motioned me on to the footplate, a driver appeared from nowhere and we were off — me complete with briefcase and umbrella! It seemed a pretty hairy ride over some very dodgy looking sets of point. But the loco rode beautifully and the driver seemed pleased to learn that I was from England where delights like footplating are confined to museum lines.

Trains on the narrow gauge are now confined to the morning and evening peaks (if four trains in two hours call be called a "peak") so next day I decided to watch the evening rush from Fort. This is a typical British-built colonial station with much activity on the all-diesel broad gauge. Again I got a lift, this time from Fort to Maradana on the last train of the day, the 6.15pm narrow-gauge departure. This line used to run 85 miles to the gem city of Ratnapura but is now sadly truncated to a mere 35 miles. And only one train goes the whole distance. About half the trains are diesel hauled.

Demadagoda loco shed

On the Wednesday I'd arranged to visit the loco shed at Demadagoda after a morning appointment, but it was, to coin a phrase, raining cats and dogs. It was so bad that on arrival I was marooned in the shed office for 1½ hours talking to Mr. Basil Benedict, the man in charge of the steam locos and a notable character. He knows every loco like an old friend, and talked wistfully of the days when more than 200 were on the shed books. Now he still has the steam shed but it is half full of wagons under repair. Due to his not inconsiderable influence, a dozen broad-gauge steam locos of various classes, mostly 4-6-0s, still survive. Regular steaming of them "to keep them in trim" has stopped, however, due to a crucial manpower shortage. There is the possibility that No 251 "Sir Thomas Maitland" built by Robert Stephenson and Hawthorn at Newcastle in 1949 may be restored to work special trips. Outside is another Garrett, No 343 in indescribable condition, her main frame buckled. "She caught fire" said Mr Benedict "and I had one hell of a job towing her in from Nawalapitiya."

Two roads in the shed are for the narrow gauge and here again, about a dozen Hunslet 4-6-4 tanks stand, mostly idle, plus two Sentinel steam railcars and an ancient 4-4-0 tank. Mr Benedict has restored one of the railcars and it is destined for the Welshpool & Llanfair line. Some of the Hunslets are used as spares to keep the others going. Three were in steam, between the morning and evening rushes. Photographic forays to locos outside the shed were punctuated by heavy showers, and I soon learnt the position of every leak in the shed roof! Incidentally, one of the Hunslets was used (and destroyed) in the film classic "Bridge over the River Kwai", which was made in Ceylon.

The sound of exhaust beats and a steam whistle puzzled me, then I found "it". This is a steam-operated traverser which is kept busy winching wagons and carriages in and out of the repair shops nearby and trundling up and down with them. Plates on it proclaim it to have been built in 1912, the engine unit by Ransomes and Rapier of Ipswich. Mr. Benedict told me that another in the north of the island had been electrified "but I fought tooth and nail to keep this one steam". It is a real delight with its upright boiler and stovepipe stack, and looks as though it has stepped straight from old advertisement pages in "Engineer" and "Engineering".

Narrow gauge

Weather now brightening so back to the narrow gauge. Hunslet No 292 was outside being prepared and the crew said "This engine is going off shed at 3.47 to work a train to Pannipitiya (about 15 miles) and back, would you like a ride?" I thought quickly. What about my afternoon appointment? It could probably wait, most Sri Lankan officials keep me waiting. What time would I be back at the hotel? 8 pm if lucky, but still plenty of time for dinner and a bath. Would it

be safe? Well I'd had two short rides already and nothing had jumped the rails had it? Besides, I would probably never visit Sri Lanka again.

"Done" I said and I was introduced to first the controls, then the driver. He didn't speak much English but another chap, who is now on diesels, said he'd come to act as guide and interpreter. He did an excellent job.

To say it was an interesting, if at times hair-raising trip, would be an understatement! I have written the full story for one of the railway journals. The loco was worked extremely hard with 8 coaches and over stiff gradients. My attempt to fire her almost proved disastrous! We had all manner of things and people on the line, and the inevitable cow, trailing its halter. At times I shut my eyes but we didn't actually run over anyone. Small children screamed and waved when they saw a European on the footplate — clearly a most unusual sight! In places the train brushed against the dense mango and palm trees lining the route, and almost touched the straw eaves of houses built a little too close for comfort. On downhill stretches I'll swear we were going faster than the official 20 mph, but the loco rode beautifully.

On the return journey running bunker first 'on the headlight' in pitch darkness, we came to a grinding halt at a tiny station. "There's trouble with the tablet instrument at the next box and have to wait for a pilotman". So for twenty

minutes the four of us — driver, fireman, guide and self — sat on the rails in front of the simmering No 292, in the warmth of a tropical night. While the fireflies flitted round us among the mango trees, we talked about Maggie Thatcher and Tony Benn, the English people the Sri Lankans seem most anxious to hear about!

This story has two interesting sequels. The clothes I was wearing were fit only for the hotel's dry cleaners. Back they came — cleaned yes — but with a complaint about the stains! And on my last day I paid a fleeting visit to the shed to say goodbye to Mr. Benedict and take photos in better light. As I passed through the gateway and turned into the road, I almost bumped into one of the drivers who had given me a short ride earlier in the week. "I hear you've been joy-riding!" he grinned. "Half of Colombo seems to have heard about it," I replied. Then he said "I am working the same train this afternoon with the same loco, would you like another trip?" His invitation was quite genuine, the Sri Lankans are like that, and I was really sorry to refuse.

The only place I did not explore properly was the Colombo dock area. But I did manage to visit a US-built steam floating crane and a 90-year-old slipway winch engine by Day, Summers of Southampton. As the chief docks engineer said "Next time you visit Sri Lanka you must give yourself more time." How right he was!

Trinity House Depot — Penzance

by G. Smith-Grogan

The depot at Penzance is the large well maintained granite building and yard opposite the floating harbour. It is one of Trinity House's main depots, covering all lighthouses and marker buoys in the south west as far south as the Channel Islands. The depot acts as a combined store and works with a specially designed ship attached, to service the lighthouses and to place buoys.

History of the depot

Trinity House's interest in a depot at Penzance began when the decision was taken in November 1859 to replace the beacon on Wolf Rock off Lands End. This rock is a major danger to shipping and had been marked since about 1840, but the marker beacon was continually being damaged by the elements so it was decided to replace it with a lighthouse.

The depot site was originally located on the shoreline just above high water mark. First recorded as 'a brick house and yard' in a deed of 1729, it was leased to Trinity House by Bolitho & Sons of Penzance in 1861 for 14 years at a rent of £100 per annum, being then described as 'a dwelling house, office, warehouse, blacksmith's shop and yard'. A temporary pier was built and the yard used for cutting and shaping the interlocking pieces of granite from which the lighthouse was constructed.

After stone cutting finished in 1868 the site was established as the centralised Trinity House supply depot for all the lighthouses in the far west. On expiry of the lease the site was purchased by Trinity House.

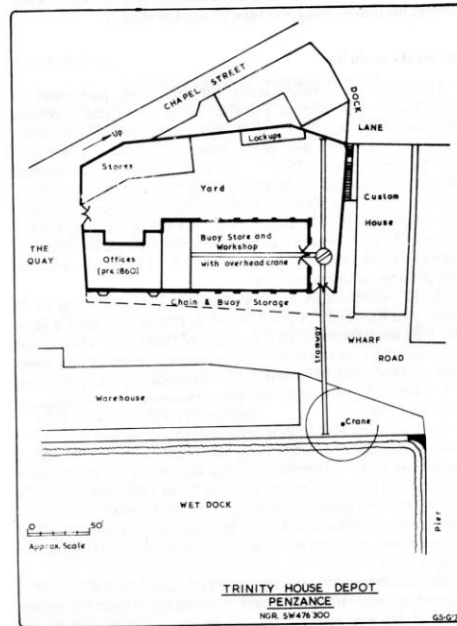
In 1886 after building of the harbour extension and Wharf Road on land reclaimed on the seaward side of the depot, agreement was reached with Penzance Corporation (owner of the harbour) for the Trinity House vessel to berth at the new quay. The agreement included for the laying a tramway from the depot across the road to the quay on which an area was to be rented for a 4 ton crane, the rent of 1/- (5p) per annum being paid until 1942 without an increase! The cost of the tramway was shared between the Corporation and Trinity House but the crane had to be supplied by Trinity House and made available for the Corporation's use. The buoy store, incorporating an overhead travelling crane, was added to the side of the original office building in 1900 to complete the depot complex.

No further major alterations took place until in 1941 agreement was reached with the Corporation to allow the quayside crane to be rebuilt to 10 ton capacity to handle the large modern buoys. Most of the tramway system closed in 1962 when a 10 ton Coles mobile crane was purchased, being

capable of not only lifting but also carrying the buoys. The quayside crane was cut up for scrap in 1963.

The depot is sited on a shelf cut into the side of the hill in the centre of Penzance and is constructed entirely of granite. The frontage is made up of the offices and buoy store. The offices are located in the original pre-1861 building, the first floor of which is formed of large granite planks trimmed on the top face only. This floor is reached via an external staircase near the main gate.

The buoy store is mainly single storey (a loft is located at the office end with access via an internal timber staircase) with a wood block floor and a 6 ton overhead hand crane that can run the full length of the store. At the back of the granite





Booy store from Wharf Road. Right, tramway crossing.



paved yard are various stores built into the retaining walls. The tramway was laid by Penzance Corporation to 3ft 6in gauge using grooved tramrails bedded in large granite setts extending 18in either side of the track. Within the depot there was a wagon type turntable (of timber construction with steel plate deck) opposite the buoy store making a connection with the line into the store. The buoy store line runs the full length of the building, the rails being let into the wood block floor. Outside, the rails cross Wharf Road to the quay.

The rolling stock consists of a hand pushed timber framed trolley (by Ashbury & Co of Manchester) 1ft long, 5ft 6in wide with a platform 2ft above rail level. The trolley was capable of carrying buoys up to 6 tons in weight. Initially it must have been used to transport heavy goods such as spares, stone for repairs etc, to the supply ship moored at the quay, but by the time the buoy store had been built it was used mainly for moving buoys. It is not known if more than one trolley was used.

Today almost all of the tramway remains in situ. Inside the buoy store the trolley remains were used occasionally to move buoys around until recently when the store was taken out of

use (consideration is being given by Trinity House to turn the store into a museum due to the large amount of old lighthouse fittings held there). The turntable pit outside has been filled with concrete, the turntable being aligned with the buoy store line allowing the trolley to run out of the store for loading or unloading the buoys by the mobile crane.

Most of the history of the depot has unfortunately been lost when Trinity House in London was destroyed by fire bombs in 1940 (just after the records were 'centralised'). However much assistance has been given by the London staff and the 'Officer-in-Charge' and depot Boatswain at Penzance, for which I should like to thank them, also of course that 'mecca' of the Cornish historian, the County Records Office at Truro.

Correspondence

Dear Editor,

Local Studies Library

May I correct two minor points relating to this Library as noted in the report of Justin Brooke's lecture in the May Newsletter?

Whilst the County Local Studies Library is accommodated in Redruth Public Library it is no longer (since 1974) administratively or in terms of staffing run as part of it, although perforce its opening hours are the same. I remark on this only to eliminate the persistent confusion which leads to local history enquiries being addressed to the Redruth Reference Library and telephone calls being routed through the Lending Library, neither of which helps us to help you. Our address is below, and the direct telephone number is Redruth 216760.

The other point is that although our collection of MINING JOURNALS is incomplete, it does cover the periods 1835 to 1929 and 1964 to date, and that is the one significant gap. So it forms one of the best publicity available sets. On the other hand we do *not* have MINING WORLD, save one volume. We have other mining periodicals, e.g. THE MINING AND SMELTING MAGAZINE, the REPORTS OF THE MINERS ASSOCIATION OF CORNWALL AND DEVON and the MINING INSTITUTE OF CORNWALL, THE TRANSACTIONS OF THE CORNISH INSTITUTE OF ENGINEERS, etc. and as stated the MINING MAGAZINE.

It might be worth mentioning too that we have a fairly extensive collection of microfilmed newspapers, including the SHERBORNE MERCURY (1737-1867), WEST BRITON

(1810-1982), CORNISH TIMES (1857-1982), FALMOUTH PACKET (1829-1848) and 1858-1982), CORNISHMAN (1878-1982), CORNISH GUARDIAN (1901-1982), CORNUBIAN (1867-1925) and various others. For those members who have Nigel Tangye's list published by your Society, I can offer a free up-to-date list of our holdings to complement it — for the price of an S.A.E.

Yours sincerely,
Terry Knight,
County Local Studies Librarian,
Cornwall County Library, 2-4 Clinton Road,
Redruth TR15 2QE.

* * *

Dear Editor,

Trevithick's Coalbrookdale Locomotive

I was much interested in Mr. Wellington's comments on the failure of Richard Trevithick's locomotive project at Coalbrookdale. Interested, but not convinced. Mr. Wellington suggests that the failure was largely due to Trevithick's volatile nature, but I do not consider this a fair estimate of the man's character. Impetuous he may have been, but not scatterbrained. Let the record as chronicled by his son speak on his behalf.

In August of 1802, Trevithick writes to his friend Davies Giddy "The Dale Company have begun a carriage at their own cost for the railroads". By May of 1803, he writes "There has been no further trial at the Dale", but gives no explanation for

Correspondence (continued)

the abandonment. To suggest that as a result Trevithick lost interest in locomotive work until Samuel Homfray revived it with his patronage at Penyarden is contrary to the recorded facts. When Coalbrookdale failed him, Trevithick turned back to his earlier ambition to build a steam road coach, and made a splendid carriage for the London streets, but was defeated by the hostility of the horse-driving fraternity and the hazardous road surfaces. At the same time, work was going on 'with spirit' in Derbyshire on an engine which may or may not have been a locomotive. We hear no more of that.

Driven off the roads, Trevithick decided that rails were the answer. Homfray gave him a new opportunity, which would have succeeded but for the inadequacy of the existing track. The same thing happened at Newcastle, and then again in London, where he built a circular railway and an engine called 'Catch Me Who Can' to run on it, and demonstrate to the people at large how his invention could be put to public use to the advantage of all. The people took no notice. This ultimate failure, combined with other misfortunes, finally broke him. He gave up then — hardly for want of trying.

As regards the 500 guinea bet. I too had thought that it was made with Anthony Hill, until Dr. Stuart Owen-Jones of the National Museum of Wales and creator of the full scale working replica of the Penyarden loco, assured me that Crawshaw was the proposer of the bet, while Hill acted as mediator appointed to see that fair play was observed. All of which suggests that convictions and feelings were strong on both sides.

One cannot but wonder how far the Coalbrookdale fiasco was hastened by Trevithick's implacable enemy, the firm of Boulton and Watt.

Yours sincerely,
Miles Tomalin,

61 Gloucester Avenue, London NW1 7BA.

* * *

Dear Editor,

Congratulations and many thanks for another splendid Trevithick Society Newsletter. The following points arise:

1. "Mines of Devon: North and East Dartmoor", by A. K. Hamilton Jenkin. Your views about republication are noted, and I will discuss the matter with my co-executors at our next meeting. If a decent time is allowed to elapse between the sale of the last Devon Library Services edition and the preparation of an edition in normal format, it might be appropriate to consider updating the work in the light of research subsequent to the date of the original manuscript. I understand that a number of copies remain unsold.

2. **Old prints of Cornish mines.** The well-known one of Carclaze, an open-work, which appears in Devonshire and Cornwall Illustrated by Allom and Bartlett, 1831, appears to be a rather poor mirror copy of one by L. Farington, RA, engraved by S. Middiman, and published by T. Cadell and W. Davies, Strand on 1 May 1813. The Allom print comes in two states, one with the spelling Carclaze being presumably the earlier and rarer, and one with Carclaze, doubtless the later. The Farington print measures approximately 9 in by 5 1/4 in on a sheet about 14 in by 11 in. If Mr. Lindley happens to be in Cornwall some time I can show him a copy.

3. **Henry Francis (1784-1853).** If it is possible for me to have a sight of the copy of Henry Francis' account-book for 1837-38, I would gladly pay postage; the Cornish entries would be of considerable interest to me. I have notes on a number of members of the Francis family who came from Goldsithney, only a mile from where I live, and shall be glad to make them available to Mr. Grenville Francis.

4. **Redmoor enginehouses.** The engine erected at Redmoor by the New Redmoor Mining Co Ltd (1881-1905) was made by Harvey of Hayle in 1872 or so for the Gellygaer Colliery in South Wales. It was erected at Redmoor about 1882 and was supplemented by a 30 in drawing-engine made by the Vivians of Tuckingmill Foundry for Wheal Crenver (Cowan, Cornwall) and bought by the New Redmoor company.

Operations at Redmoor were stopped by February 1884; in 1888 the property passed to Callington United Mines Ltd. The Redmoor company was finally struck off the Register in 1905.

Yours sincerely,
Justin Brooke,

Chymorvah Vean, Marazion, Cornwall.

Editor's note: The Gellygaer Colliery engine was an 80, 10 ft and 9 ft, made by Harvey & Co in 1870, to the order of M. Loam & Son, see Trans SWIE 1878-9.

* * *

Dear Editor,

Cornish engines in Northumberland

I was most interested to read your article in the last Newsletter on the Stonecroft Lead Mine. Perhaps the following information will help you further in your research.

(i) North of England Institute of Mining and Mechanical Engineers Transactions Vol. XXVII 1877-78 p. 21.

The Institute visited the Stonecroft Mine (owned by the Stonecroft and Greyside Mining Co.) on the 19 October 1877. Their report mentions the engine as follows:—

"The Mine is kept free from water by a Cornish pumping engine with a 70 in cylinder and a stroke of 10 ft, beam 32 ft. The water is pumped by a plunger, 21 in diameter, driven by the weight of the spears, which are lifted by the pressure of the steam. The surplus weight of these spears is taken off by a counter balance weight, attached to an auxiliary lever or beam. About 558 gallons of water are lifted 53 fathoms per minute. This engine works up to 250 horse-power and consumes four pounds of coal per horse-power per hour. The valves for the plunger set are Husbands (Quadruple) patent."

A further note states "The water is extracted at Settling-stones by a 60 in cylinder Cornish Engine".

(ii) A description of the mineral veins is given in Sir Kingley Dunham's *Geology of the Northern Pennine Orefield*. He states that at Stonecroft "The pumping shaft is 380 ft deep." The rate of water into the mine is "on average 700 to 800 gpm., a high figure for the Northern Pennines".

Yours sincerely,
Rob Vernon,

78 Oakenshaw Lane, Walton, Wakefield, W. Yorkshire.

* * *

Dear Editor,

Cornish engines in Northumberland

Thank you for your most interesting letter with the news that the provenance of the Settlingstones 60 inch engine has been identified as a result of your article in the May issue of The Trevithick Society's Newsletter 37, for which many thanks — it is a well put together publication of obviously permanent reference value. The reproduction of the Stonecroft photo is excellent (for photolitho). Now for the provenance of the 70 inch Stonecroft engine. . . !

Yours sincerely,
Robin Gard,
County Archivist,

Northumberland County Council, County Record Office,
Melton Park, North Gosforth, Newcastle upon Tyne NE3 5QX:

Tin price went wild

The 1981 annual report of the Cornish Chamber of Mines refers to the extraordinary fluctuations in the price of tin which had peaked at £8,500 per tonne during the year and then slumped to £5,800 per tonne. Since then there has been a slight rise but such fluctuations mean that for much of the time, Cornish mines are making a loss.

However the 3,900 tonnes of tin concentrate produced last year exceeded the 1977 peak, and the report gives a figure of 1,633 people currently employed in the mining industry in Cornwall and Devon.

Last year's AGM

Members are asked to bring this newsletter to the forthcoming AGM on 25 September as these Minutes will **not** be distributed separately.

Minutes of the Annual General Meeting of the Society held on 26 September 1981 at Camborne School, Camborne, at 6.30pm.

Apologies were received from Messrs J. Hodge, D. S. Jenkin and L. Wallace.

The Minutes of the AGM held on 20 September 1980, having been circulated in the Newsletter, were approved and signed by the Chairman.

Chairman's Report. Mr R. J. Law, Chairman, welcomed all members present. He reported the death of Mr W. M. Symons who had been Secretary of the Society and a member of the Council for many years in the past, and was one of the recipients of the Society's Bronze Medal.

On the questionnaire that had been sent out, about 50% of the membership had replied and the Chairman recorded the Society's gratitude to John Stengelhofen for analysing the results. It appeared that a small number of new members joined each year, and this increased temporarily when some special project took place.

On the whole, members expressed satisfaction with the Society's activities. Main interests were Cornish engines and mining, waterwheels, railways and iron foundries. Interest in Richard Trevithick was only 33%. 94.7% were satisfied with the Journal and 94.1% with the Newsletter. The Chairman paid tribute to Dr. Acworth and Mr. Brown for the work they had done on the new Journal and Newsletter. 47.4% of members were willing to undertake practical work, but he felt this number should be treated with caution.

Some members wanted more meetings and social events and an increase in subscriptions to cover the cost. The Chairman referred to Council's discussion on these matters and they had appointed a sub-committee to "consider what recording in the field is being done in Cornwall, to look at what other Societies are doing and to recommend what this Society should do and how such work should be undertaken". On the subject of finance they needed more money, and here each member could help by a personal approach. Finally, the Chairman thanked Council members for their support during the past year.

Secretary's Report. The Secretary, Mrs. M. Smyth, referred to the year's events and the good attendance at Council meetings. Mr. K. Brown had been co-opted as Newsletter Editor, the Rev. Dr. R. Acworth as Journal Editor and Miss E. M. Rule as Programme Secretary. Four General Meetings had been held and one field trip. It had been agreed to hold a biennial Hamilton Jenkin Memorial Lecture and the first would be in 1982. Tapes of the Society's three Brains Trusts were available. The Secretary thanked the Chairman and members of the Council for all their help.

Treasurer's Report. Mr. M. Trinick reported that subscriptions and donations were slightly down and the Publications Account was now financing the Society's activities. The Journal and Newsletter should be financed by subscriptions. If members wanted to encourage the recording and conservation of Cornwall's industrial heritage, then subscription rates must be raised or the Newsletter reduced. It was essential that members should pay their subscriptions promptly at the beginning of the year.

At present the Journal took 50% of the income, the Newsletter 25%, printing and postage 18%, insurance 2% and the rest 4%. At present 25% of the publications account was going to general funds and this was very disheartening for the Publications Secretary. The subscription must be raised and he recommended £5.50 p.a. for individual members and £7.50 for family membership and corporate bodies. Proposed by Mr. J. Smyth, seconded by the Rev. Dr. R. Acworth and carried.

A member asked if a direct debit could be arranged with a Bank instead of a Banker's Order, but the Treasurer said that they were too small a Society for that to be suitable. The adoption of the Treasurer's Report was proposed by Mr. P. Stephens and seconded by Mr. J. Stegelhofen and carried.

Publications Officer's Report. Mr. E. W. A. Edmonds reported a fairly steady demand. Storage was the biggest problem. He had recently had notice to leave the Wheel Jane store at short notice, and all the stock was now at his house. Urgent consideration would have to be given to the matter of storage.

Membership Secretary's Report. Captain Tarrant reported 340 paid up members and reminded the meeting that if they were not fully paid up they would only receive the first two Newsletters in the year. He had put repeated notices in the Newsletter about the need to have Bankers' Orders altered and with the new subscriptions in 1982 this would be more important than ever. The Chairman said there could not be any Societies that had two such energetic officers as their Publications and Membership Secretaries and he proposed a sincere vote of thanks to them. Mr. J. H. Trounson added the names of the Treasurer and Secretary and the meeting agreed.

Elections

1. **President.** The Chairman proposed that Mr. J. H. Trounson, MBE be elected President. Mr. Trounson accepted the office and expressed his thanks. Carried with acclamation.

2. **Hon Secretary.** Mrs. M. Smyth was proposed by Mr. M. Trinick, seconded by Mr. J. H. Trounson and carried.

3. **Hon Treasurer** Mr. M. Trinick was proposed by Mrs. Smyth, seconded by Mr. C. Trounson and carried.

4. **Members of Council.** The following members were due to retire in rotation, and had agreed to stand for re-election.

Messrs. L. J. Bullen, B. Earl and E. W. A. Edmonds. Mr. C. Carter proposed their re-election, seconded by Dr. R. Acworth and carried.

The following three members had been co-opted during the year and were willing to stand for election:

The Rev. Dr. R. Acworth, Mr. K. M. Brown and Miss E. M. Rule.

Proposed by Mr. G. Richards, seconded by Mr. J. Barnes and carried.

Appointment of Accountants. Messrs. Trudgeon, Halling & Co. of Bodmin were proposed by Mr. M. Trinick, seconded by Mr. C. Trounson and carried.

Any Other Business. Mr. Bullen proposed that Mr. Gordon Richards be elected an Honorary Life Member. He had done much for the Society over many years and it would be opportune to honour him on this his 78th birthday. The Chairman seconded, carried unanimously. Mr. Richards expressed his appreciation — an honour he had not been expecting.

Warm appreciation of that afternoon's field trip led by Mr. J. H. Trounson was expressed. The Chairman proposed a vote of thanks to Mr. and Mrs. Ingham for providing tea and accommodation, and Mr. Trounson thanked Mr. Bullen for all his help in planning the outing and for keeping him on schedule.

There being no further business the Chairman declared the meeting closed.

* * *

A copy of the **Treasurer's Report** as presented to the 1981 AGM may be obtained if required on postal application to the Hon Secretary enclosing an sae.

From 'Mining Journal' ...

"Lightning at a Mine. — A strange occurrence is related as having occurred at Carnyorth Mine, St Just, during an awful thunderstorm. The lightning struck the engine-house, cleaving the spring beam, a balk of timber 9in square, knocking the stair to pieces with the windows, roof and stack. The fluid went down the shaft at 50 fathoms, striking H. Boyns in the arm and rendering Hugh Lanyon speechless. They thought a gun had been fired at them. On finding the arm not broken they proceeded up with great difficulty. The lightning went down altogether 300 fathoms, and ran along the tramroad 300 fathoms more, striking R. Angwin in the foot, and W. Tresise in the chest. All the men underground received a severe electric shock. The ozone was suffocating. No death occurred, nor

injury to the ironwork of the engine. A man called Archer, working at the stamps engine, was knocked backwards, and the arms of the round buddle machine were knocked away". (MJ, 28 November 1868, p 845)

"Curious effects of the summer and autumn drought at great depths. — At the Botallack Mine meeting, Captain Henry Boyns gave a curious and interesting account of the effects of the recent drought. The deep sea adit level at Higher Botallack, which is 40 fms. deep from surface, and drains a large part of the workings, until about ten days ago was almost dry, and had been so for several months; in fact so diminutive was the stream that on some days it was almost imperceptible. During the rainy winter season he had often witnessed a river rushing through it. At Wheal Cock portion of the mine, which is about 170 fathoms below the sea level, and where some of the workings are a quarter of a mile long, for months past the water pumped from underground did not exceed 12 gallons per minute. At the higher mine, which is 205 fms. below sea level, and the various workings in which are 1/2 a mile long, the whole of the water pumped from below the deep adit for some time past was not more than 80 gallons per minute. At the Crowns, which is 250 fms. below sea-level, and the workings upwards of two-thirds of a mile long (including 1/2 a mile extended out under the sea), the whole of the water pumped up amounted to about 190 gallons per minute. During the past four months they had been often put to their wits' end to know how to obtain a sufficient quantity of water merely to supply the steam-stamps, floors, and round buddles. A well, adjacent to the mine, noted for its excellent supply for some time past, has been quite dry, and this was never known to have occurred before. In the Nancherrow Valley, where all their water-stamps are situate, these had been almost idle for months; in fact they had been almost useless for returning tinstuff, which had been the source of great and serious inconvenience to them in keeping up their returns. There was one large water-stamps of 24 heads, at Nancherrow Valley, that had not stamped one single sack of tinstuff for six months up to the end of October."

(MJ, 30 December, 1970)

Memorial to Levant disaster

It has been reported in the Cornish press that a memorial plaque is to be erected for the 31 miners killed in Cornwall's worst disaster at Levant in October 1919. This was the famous man-engine disaster when the main cap at the top of the wooden rod broke as men were coming up from the day shift, causing the rod with its human cargo to drop down the shaft.

According to the report, arrangements for the plaque are in the hands of Mr Raymond Trenoweth of Trewellard. It is to be erected at the Trewellard Methodist chapel — the nearest to where the disaster took place. A memorial service is to be held there on 20 October and it is hoped that the Trevithick Society will be well represented.

Frank Booker

The death of Frank Booker, which was briefly reported in the May Newsletter, occurred in Maldon Hospital, Essex on 2 March. He was 72. He worked as a journalist for more than half a century joining the staff of the Western Morning News in 1933 as music and film critic and retiring in 1971 as Assistant Editor. He was a Member of Council of this Society for many years, driving down from Plymouth to Camborne and back to attend its meetings. He only resigned from the Council when he and his wife went to live with his son at Little Braxted in Essex.

Frank Booker will be remembered best for his book *Industrial Archaeology of the Tamar Valley*, which appeared

in 1967 and has since been reprinted twice. To launch this book the publishers organised an all-day visit to Morwellham and Gunnislake by coach and steamer from Plymouth. Frank Booker led the excursion, which was an eye opener to those attending it. But his book had a more lasting result for it inspired the Dartington Amenity Research Trust to restore the port of Morwellham and to appoint him as their consultant in industrial archaeology. Appropriately he was a founder and President of the Friends of Morwellham.

He also wrote several other books including a short history of the Great Western Railway. He will be greatly missed for his friendliness and humour. We extend our sympathy to his wife and family.

RJL

Morwellham and Tamar River trip, 5 June

The afternoon was spent viewing the many items of historical and technical interest which have now been assembled at Morwellham and those energetic enough followed the trails. Several new attractions had just been opened: a blacksmith's forge, a cooper's workshop and a well equipped assayer's laboratory with a well-furnished cottage adjoining, all with demonstrators in period costume. After tea the party now numbering some 36 embarked for the boat trip down the Tamar.

The interest of the river trip was enhanced by the notes prepared by the Honorary Secretary, but the high spot for some was Devonport Dockyard with ships being prepared for service in the Falklands. On arrival at Phoenix Wharf the coach was waiting to take the Cornish contingent home. Local members had to wait a while for their minibus back to their cars at Morwellham, but this can hardly have marred a very successful outing.

The Society expresses its gratitude to the Friends of Morwellham and in particular to Bob Le Marchant, Engineer to the Trust, who gave up his Saturday afternoon to welcome the party.

Coming Events

Fri/Sat 24-25 September — AGM weekend

24 Sept. Lecture "The Perran Iron Lode", Ambulance Hall, Redruth, 7.30 p.m.

25 Sept. Field trip to the Perran Iron Lode, guided by our President, Mr. Jack Trounson. Assemble at New Inn, Goonhavern (on Redruth-Newquay road) at 1.45 p.m. sharp.

The field trip will include other places of interest and end in time for members to make their way to the Community Centre in Camborne for tea at 5 p.m. The Annual General Meeting will take place at the Centre, starting at 6.30 p.m. Further details with a booking slip for members ordering tea are given in a separate slip to be enclosed with this newsletter. Any queries, please telephone Mr. Tony Brooks on Camborne (0209) 713506.

Fri 19 Nov. Joint meeting with Carn Brea Mining Society, slide show of historic mining scenes in West Cornwall by Mr. J. A. Osborne. Main lecture theatre, Camborne School of Mines, Trevenson, Pool, 7.30 p.m.

1983

Fri 28 Jan. Illustrated lecture "Rise and fall of the Cornish coasting trade" by Mr. Clive Carter. Ambulance Hall, Redruth, 7.30 p.m.

Members are advised that due to the effects of the Aslef strike on our printing operations in London, the size of this issue has been kept down and some items have been held over.

The Trevithick Society for the study of the history of Industry + Technology in Cornwall incorporating The Cornish Engines Preservation Society and The Cornish Waterwheel Preservation Society

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