

THE TREVITHICK SOCIETY

NEWSLETTER NO. 5

MAY 1974

Edited by J. Hodge at Trannack House, Penzance

RIVER TAMAR TRIP - Saturday 29th June 1974

As a pleasant outing for family and friends an afternoon spent winding up the Tamar can hardly be improved upon - as can be agreed by our many members who undertook the voyage 2 years ago. In view of the demand for tickets on that occasion the Society has decided to repeat this highly popular event, and again our member Mr. Frank Booker will be giving a running commentary on the sights and items of Industrial interest on the way to Morwellham.

The Society has chartered the Millbrook Steamboat & Trading Co's, "Plymouth Belle" which will leave Phoenix Wharf, Saltash, at 2.00 prompt on Sat. 29th June 1974. Tickets (Price: 75p. Adults; 50p children) - and limited to 150 - may be obtained from the Meetings Organizer:-

D. Ingham, Esq.,
25, Barrripper Road,
CAMBORNE.

To avoid possible disappointment tickets should be booked as soon as possible, and certainly before 19th June, enclosing an S.A.E. for reply.

Buffet facilities will be available on the boat, and tea at Morwellham where the boat will make a stop for members and their guests to see new developments at this former copper port.

The total Journey from Saltash is expected to take about 4½ hours with a return to Saltash between 6-30 and 7.00 p.m.

We hope that as many members as possible will join us for this excursion in support of the Society's commitment to increasing the scope and frequency of its meetings.

ANNUAL GENERAL MEETING - Sat. 21st and Sun. 22nd. Sept. 1974

Final details for the A.G.M. will be included in the August Newsletter, but it was felt that it might be helpful to members in planning their Calenders to give information of the provisional arrangements - strictly subject to alteration.

(Please note change of date from that provisionally agreed at the last A.G.M., due to clashes with other events).

Saturday 21st Sept. 1974

- 10-30 a.m. Holman Museum will be open for members to view the Rostowrack Engine, and many exhibits in fact owned by the Society. The Museum is kindly opened for the Society by our Membership Secretary, Ramon Thomas, and in future years this facility may not be available if members do not appear to wish to avail themselves of the opportunity.
- 11-00 a.m. The National Trust Engines at Pool will be open to the public and it is hoped that our member Mr. J.H. Trounson will give members a description of the history and cycle of working of the Taylors engine at 11-30.
- 2.00 p.m. A Coach - seats by ticket, price to be announced - will leave Treswithian School, Camborne, en route for Falmouth.
- 3.00 to 4-30 p.m. The Society hopes to view Falmouth Docks, possibly shortly to undergo radical changes if the "Oil Boom" really occurs.
- 4-30 p.m. The Coach leaves Falmouth to return to Camborne.
- 5-30 p.m. Tea - at Treswithian School.
- 6.30 p.m. A.G.M.

As before members will be able to take the opportunity to pay their current subscriptions - or previous ones if appropriate!

The Society's publications - including "Dolcoath: Queen of Cornish Mines" by T. R. Harris, and possibly the reprint of a Perran Foundry catalogue - will be on sale.

Sunday 22nd Sept. 1974

- 10.00 a.m. A coach will leave Camborne Free Car Park for Ponsanooth.
- 10-30 to 12-30 A guided tour by our member Brian Earl of the Powder Mills and industrial activity of Kennal Vale, by kind permission of our member Mr. Leonard Williams. Parking for members not travelling on the coach is extremely restricted and care should be taken not to obstruct the highways or local residents.
- 1-00 to 2-15 p.m. Lunch - at The Norway Inn.
- 2-30 to 3-30 p.m. It is hoped to be able to visit Perran Foundry.
- 3-30 p.m. Coach returns to Camborne.

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Once the final programme is announced in the August Newsletter members should contact D. Ingham as before for such tickets as they require, and the closing date will be 11th September.

On Saturday 23rd March 1974, the Secretary, John Stengelhofen, Mike Messenger, Frank Booker, John and Keith Wellington and probably more members of the Society attended the annual S.W. Regional Industrial Archaeological Conference at Exeter University. As well as our Society there were local I.A. groups represented from Plymouth, Exeter, Devon, Somerset, Bristol, Gloucestershire, Worcestershire, Gwent and Pembroke. The wide-ranging programme - ably arranged by Professor Walter Minchinton - included the Rudry Ironworks, I.A. in Gwent, Bedford Housing in the S.W., Brickmaking in Somerset, the uncovering of a lock of the Exeter and Crediton canal and the story of the preparation of the Gloucestershire I.A. Group. County I.A. Gazeteer along the lines of the Devon example. John Stengelhofen spoke on behalf of the Trevithick Society about the development of the China Clay Industry and the recent establishment of the Wheal Martyn China Clay Museum. The first item in the morning was a walk around Exeter to see the various sites of industrial interest. It is hoped that next year's conference will be organised by the Worcestershire I.A. Group at Worcester, and details will be included in a future Newsletter in order that the Society can organize transport for those members wishing to attend.

During the lunch break the Secretary joined representatives of the other Groups to discuss the suggestion of the Bristol I.A. Society that a S.W. Regional I.A. Association should be established to ensure the continuance of the Annual Conference, act as a clearing house for information, exchange publications and co-ordinate sales. It was decided to report back to our various Societies that the representatives felt that such an Association would be useful and forward to Professor Minchinton (who had offered to act as temporary Secretary of the Association) ideas for the aims and scope of the Association for possible discussion at the National I.A. Conference at Keele in September. A. P. F. S.

During the week commencing 25th March, the Secretary was contacted by Graham Mercer and Edward Milner, a B. B. C. Producer and Director, in connection with a proposed "Horizon" programme on non-ferrous metaliferous mining in G. B. which is due to be filmed in late April and broadcast in the Autumn. The emphasis of the programme will be on the difficulties in developing mines associated with the discovery and purchase of mineral rights, and it is expected that areas to be filmed in Cornwall may include South Crofty, Geevor, Wheal Jane, the Crowns enginehouses at Botallack and those at Trewarvas, and Wheal Peevor. The Secretary and Journal Editor were able to explain the origin and work of the Society and show several of the more historic sites for possible filming. Besides this several other members of the Society were consulted. Other areas to be covered in the film may be potash mining in Yorkshire, Hemerdon tungsten mine near Plymouth, and prospecting in Scotland and the Shetlands. A. P. F. S.

UNIVERSITY OF EXETER
DEPARTMENT OF EXTRA-MURAL STUDIES
in collaboration with
THE DEPARTMENT OF ECONOMIC HISTORY

INDUSTRIAL ARCHAEOLOGY

An Industrial Archaeology Residential Course will be held at Crossmead Hall, Dunsford Hill, Exeter from Friday evening, 20th September 1974, to Friday lunch time 27th September 1974.

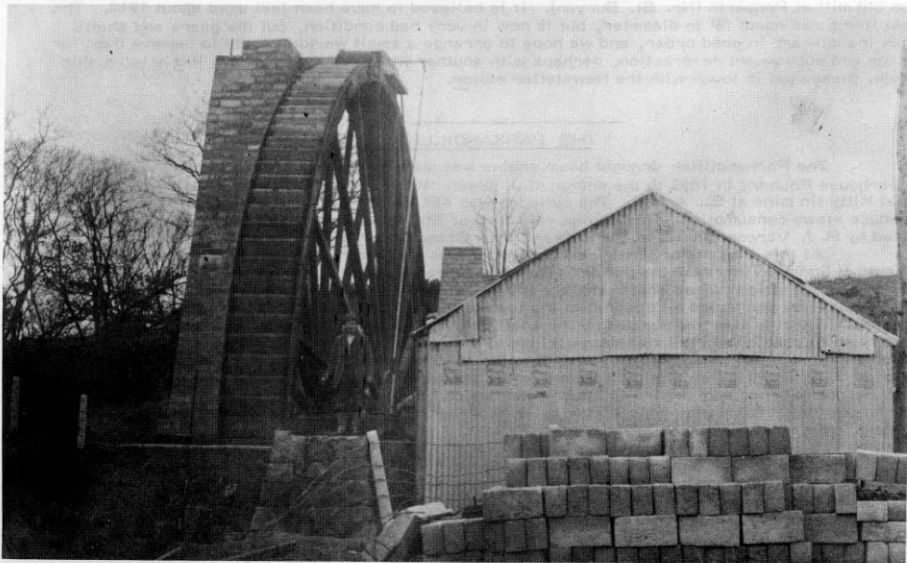
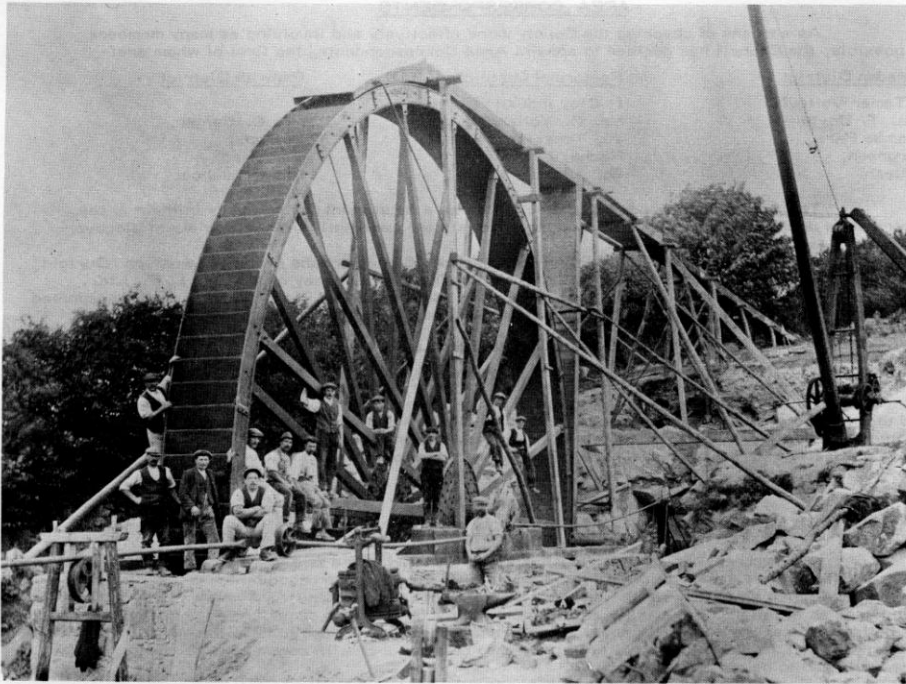
This course will consist of lectures covering the Industrial Archaeology in Devon, the Tamar and Morwellham, Dartmoor, Torbay and Dart Area.

Tours, accompanied by lecturers will be to East Devon, Callington, Cotehele, Exeter, Dartmoor, the Exe, Teign and Torbay & Dart area.

The cost of this course will be approximately £35. So that we can get an idea of enrolment figures we would be pleased if interested people would write to The Secretary, Dept. of Extra-Mural Studies, University of Exeter, Gandy Street, Exeter.

TUCKINGMILL STREAM WORKS

At the time of writing it seems likely that when this Newsletter reaches you the Society's working parties will have completed the dismantling of the above works and transported the 2 round frames and 26" diameter dipper wheel bought by West Penwith R. D. C. to Vounder Dry at Tregrehan, Nr. St. Austell. Our thanks go to those relatively few members who turned up on a regular basis, and in future before taking on such a task it will be necessary to discuss with all members whether sufficient support and enthusiasm will be forthcoming.



AREA CORRESPONDENTS

As a means of covering the County more effectively and involving as many members as possible, the Council has decided to appoint Area Correspondents, the first of whom are:-

Caradon District

(+ Tamar Valley)
Mrs. T. Doyle,
Coombe Park,
Cargreen,
Saltash.

Restormel District

(+ Clay Industry)
Mr. C. Yelland,
26, Tresaize Close,
Roche,
St. Austell.

Penwith District

Mr. C. Carter,
Boleppa,
Sancreed,
Nr. Penzance.

The Area Correspondents will be acting as a focal point for members in their areas, contributing on a regular basis to the quarterly Newsletter, and notifying the Society of discoveries or threats of an I. A. nature.

We reproduce below, as a first contribution, 2 photographs of the "Gawns" or "Durfold" Waterwheel of 50' diameter, supplied by Colin Yelland by the courtesy of the E. C. L. P., Ltd., photographic Library. The largest wheel in Cornwall, third largest in the Country, and transported to Cornwall from Up-Country it is now dismantled and may also be stored at Vounder Dry.

PERRAN FOUNDRY CATALOGUE

As its next publication the Society is reprinting a Perran Foundry Catalogue of C 1870's and this will be available to members at £1 post free. Being now with the printers, members are invited to place their orders for copies to be sent to them on publication. Orders should be sent to the Hon. Sec. 23 Merrick Avenue, Truro, and it is hoped to be able to deliver copies to members at the A. G. M.

BARLOW RAIL

Our member, Brian Sullivan, has kindly donated to the Society a length of Barlow rail, which was recently discovered during the demolition of the walls surrounding the Goods Yard at Redruth and which was formerly the terminal of the West Cornwall Railway, where it was latterly being used as a lintel. The Barlow rail was originally laid without cross sleepers, being buried in the ballast and secured only at approx. 10' intervals by cross tie-bars to keep the gauge. Introduced in Cornwall by I. K. Brunel the rail soon proved to be a failure, with common de-railments, and eventually had to be completely replaced.

PENBERTH MILL

The Society has recently been offered by our member Cdr., Favell, the working parts of an old mill at Penberth (Nr. St. Buryan). It is believed to have been last used about 1912. The wheel itself was about 16' in diameter, but is now in very bad condition, but the gears and shafts inside the mill are in good order, and we hope to arrange a small working party to remove them for storage and subsequent re-erection, perhaps with another wheel. Anyone who is likely to be able to help, please get in touch with the Newsletter editor.

THE PARKANDILLICK BEAM ENGINE

The Parkandillick draught beam engine was made by Sandys Vivian of Hayle at the Copperhouse Foundry in 1852 to the design of J. West. It was made for use in the old sump shaft at Wheal Kitty tin mine at St. Agnes. The cylinder was 45" bore 10-ft. stroke and was steam jacketed to reduce steam consumption. The engine was used at St. Agnes until about 1910 and was then purchased by R. J. Varcoe for use at the Parkandillick China Clay Pit.

At this time the original jacketed engine was replaced by a larger (50") bore non-jacketed cylinder to increase the power. The 15" square pitwork operated a single 17" plunger lift with a 9' stroke which raised approximately 750 gallons per minute of china clay slip 240-ft. from the shaft, which was connected by a tunnel to the lowest part of the now flooded pit on the other side of the road. The clay slip was pumped up the shaft column into an open wooden launder mounted on pillars and so carried to the mica drags close to the road above the engine house. In these drags, which consisted of long shallow troughs with weirs at intervals, the mica refuse settled out for daily disposal. The refined clay slip then flowed into a series of settling and thickening tanks before going to the now demolished pan dry. The clear water which had been separated from the clay was probably returned to the pit for washing more clay by an auxiliary pole pump which was installed in a shaft adjacent to the main shaft near the surface.

Steam for the beam engine and also the skip winding engine was provided by one standard Lancashire boiler bought new when the plant was installed at the present site; natural draught was used. The boiler feed water was supplied by two pumps, one pole pump mounted on the beam engine air pump, drew tepid water from the air pump discharge and the other was an independant steam driven pump with a fly wheel; this pump is mounted on the boiler house wall. The latter pump enabled the winding engine to be used when the beam engine was not in use.

The beam engine is fitted with fairly standard Cornish valve gear - three double beat valves closed by the plug rod and allowed to open either by the 'cataract' time delays or the interlocking quadrants which prevented the opening of the equilibrium valve on the power stroke and vice versa on the idling or transfer stroke when the falling pitwork raised the water. The exhaust steam flows to a normal Cornish jet condenser with the water valve opening and closing with the bottom exhaust valve. The cataract gear is set so that the bottom exhaust opens just before the inlet valve. The engine was fitted with an 'A' frame over the shaft for servicing the pit work. This and the balance box have now disappeared. It is hoped to replace the balance box on the existing loading.

The Skip Winding Engine consists of a twin cylinder simple slide valve non-reversing engine 12" bore 14" stroke which can be clutched into either of two independent winding drums. One drum drew skips up the tip just above the engine whilst the other operated another incline on a tip well below the engine house; the rope for this went straight out of the engine house to a snatch block where it doubled back to the tip supported on pulleys mounted on tall wooden poles.

In operation the loaded skip was raised and emptied and then the drum was taken out of gear and the empty skip lowered on the brake.

The Parkandillick plant was last steamed in 1955; it can now be demonstrated working on air from a two stage fan at only four pounds per square inch. It is ultimately intended to open the site to the public as a satellite of the industrial museum under construction at the Wheal Martyn Clay Dry near St. Austell.

G.W. Wall.

English China Clays Ltd., has kindly made available to the Society Vounder Dry, for the storage of dismantled machinery, and our member Colin Yelland has compiled the following note on the history of the dry:-

"Vounder kiln was originally built to dry clay from Vounder pit, which although no trace now remains, appears to have been somewhere between Pentruff and Garkar Pits.

The kiln was subsequently leased from the Carlyon estate by Frank Parkyn together with Hennalls kiln, lower down the valley, and Carlyon kiln higher up the valley. These dries were leased by Frank Parkyn in the days when the China Clay Association were operating the Best Clay Quota Scheme, where producers were allocated a tonnage of best clay that they could produce. This tonnage was based on the amount of drying capacity that each producer had available."

The Society would like to thank our member Mr. G. A. Tippett who has kindly donated copies of the Cornish Chamber of Mines Year Books for 1918, 1920 and 1921.

Mr. R. Cox of 72 Moorbridge Road, Maidenhead Berkshire, would appreciate any information members might have on the life and work of Peter William Williams, a Victorian steam engine designer and builder.

Mr. E.W.A. Edmonds would like information about two waterwheels used for generating electricity:-

- (a) The Penryn Electric Supply Co., started in 1915 with a dynamo driven by the wheel on Tresooth Mill, which is on the side of the park as you enter the town. It was replaced around 1932 with a suction gas engine in a building at the opposite side of that lane.
- (b) At Kennal Vale, Ponsanooth, one of the Ledgers shows an adjustment of costs which reads "Transfer from Ponsanooth Water Scheme" in 1914/15. The Minute Book records an inquiry, dated 14/1/1920 from Bickford Smith & Co., for a supply of 200 kw with a proposal that the Co., take the surplus power generated by water power.

Any information or photographs to Mr. Edmonds at Newlands, Tarraranean Lane, Perranwell Station, Truro.

With regard to the previous Newsletter, Mike Messenger reports that contrary to the report in the R.C.G. of the Winding up of the West Cornwall Railway, it in fact survived in name at least, and was nationalised by the Transport Act 1947.

CORNISH GAS INDUSTRY

The Secretary would much appreciate hearing from any member who might have plans or photographs of the sites of any Cornish Gasworks, or know of such items elsewhere, in connection with an article written for the Society by our member Peter Laws which it is hoped will appear in one of the Society's publications later this year.

As a matter of record we print details of the membership of the Society on amalgamation in May 1969 and as at the A. G. M. in 1973:-

GEOGRAPHICAL MEMBERSHIP DISTRIBUTION, AS AT DATE OF MERGER

Sources:
CEPS Membership Lists to May 1969
CWPS Membership Records as at date of survey.

Definitions:
West Cornwall - West of Perranporth/Truro.
S W England - Devon, Dorset & Somerset
Joint member - member of both Societies.

	CEPS	CWPS	(Jt. Members)	Total
West Cornwall	75	121	(22)	196
East Cornwall	27	60	(3)	87
All Cornwall	<u>102</u>	<u>181</u>		<u>283</u>
South West England	36	21	(7)	57
Rest of Britain	169	30	(6)	199
Overseas	<u>13</u>	<u>4</u>		<u>17</u>
Total Membership	320	236		566
(Less Joint Members)			(38)	(38)
TOTAL COMBINED MEMBERSHIP				<u>518</u>

Membership Details as at A. G. M. September 73.

Membership total Sept. 72	571.
Resignations & Deceased	24
Automatic termination of Membership due to arrears (3 years)	82
	<u>465.</u>
New Members	62
Present Total	527.

R. Thomas.
Hon. Membership Sec.

ROYAL CORNWALL GAZETTE 100 YEARS AGO - April to June 1874

- 4th April Hartley Iron Ore, Tin, and China Clay Works, otherwise Savath, in the parish of Luxulyan, for sale with a 25" cylinder rotary engine, 120 tons of bridge iron rails, waterwheel of 10' diameter by 4' 6" breast, 3 iron lodes run through the sett.
- " Balmyhear Mine - notice to be given of all claims against the mine.
- " Ding Dong - "It can, at a days notice, increase its yield of tin, and convert its small profit into a much larger one. It does not. Yet it is mainly held by smelters! Is not that one little circumstance suggestive that those who can see as far as most of us are sanguine of better times."

- 11th April A meeting of the Amalgamated Association of Miners at Manchester discussed the desirability of establishing branches in Cornwall and Devon so as to try to end the importation of labour to other areas to break strikes.
A meeting at Redruth, primarily concerned with the abolition of the 5 week system, was presided over by Mr. Richard Williams in the light of the Union Movement started by the men of South Condurrow. It was proposed to form a union to protect against future moves to return to the 5-week system, and aid was promised by a northern mining association.
- " Cargoll Mine - Bowers Shaft lode worth a ton of silver/lead ore per fathom and only a few fms from surface. It was decided to erect a stationary steam engine, estimated to cost £750 and be ready in 3 months. The Manager was Capt. Grose, 3348 shares issued, of which 1328 were held by 6 Adventurers.
- " Belowda Beacon Tin Mine, near Roche - a meeting to be held for winding-up.
- 18th April The men of Pawton Iron Mine, near Wadebridge, on strike over the proposal of the manager to change the working hours to start an hour earlier at 6.00 a.m. and still not finish until 5.00 p.m. as before.
- 25th April Sale of materials at Mid-Cornwall Mines Ltd., - North Bonny Mine, St. Austell and Cornubia Mine, Roche.
- " A contract signed with Mr. Long, Contractor, of Plymouth, for the construction of the railway link to St. Ives.
- 2nd May Sale of materials at Wheal Lovell Mine, Wendron, including a 30" cylinder pumping engine with 2 x 9 ton boilers.
- " "The Directors of the Cornwall Minerals Railway have declined to attend a banquet to be given in honour of the promoters and directors of the railway on the occasion of the opening of the line for goods traffic."
- " East Pool Mine - producing Wolfram in large quantities, sold in the form of tungstate of soda which is manufactured on the dressing floors.
- " Hobbs Hill Mine, St. Neot, recommenced under a reconstruction of the Company as The New Hobb's Hill Mining Co., Ltd., under Capt. Tim Rowse.
- " Capt. Edward Perrow, writing from Long Gully, Victoria, Australia:- "You are very foolish, dear father, to speculate in Cornish tin mines just now. I believe this country will ruin Cornwall."
- " The Tresowes Kaolin Quarries and Works, near Helston, producing 700 tons of china clay per annum of the best quality. It extends over 25 acres, a depth of 30' is proved and a depth of 100' to 120' is believed to exist - therefore reserves of at least 1½ million tons of clay. Production costs F.O.B. Porthleven is 12/9d and the selling price is £1. The estimated profit per annum is £25,000 on the 69,000 ton expected annual production.
- " The nett wages earned by underground miners in Levant this month are nearly £4.10.0 each for 4 weeks, which may be considered good. Two lucky Tributers working at 17/- in the £ will obtain £40 each for 8 weeks work from a rich bunch of ore at the 210 fm. level.
- " Trewasas Tin, Copper and Silver Lead Mine Prospectus (P. 8): 3000 of 6000 shares then offered under a cost book system of working. Situate in the parish of Breage, the sett extends N-S 1200 yards and 800 yards E-W. There are 7 principal lodes; 3 tin and 4 copper. There are also 3 main channels of clay, with silver/lead and iron lodes; although not proven. The east copper lode yielded over £110,000 worth of ore from the commencement of working in 1835 to its abandonment in 1846. It was worked under the sea at that time, but poor ventilation and want of care in opening up levels too near the sea bed resulted in closure. The present company intended to open up the western lodes, and required 10/- per share to be paid on application.
- 9th May Discovery at Pennance Mine - Sir F.M. Williams, Bart., M.P., who is employing a few men has discovered a fine looking lode, 5' wide, only a few fathoms from an adit shaft which is 70 fathoms deep. This is believed to be the old Wheal Buller copper lode.
- " The sale of materials at Mid-Cornwall Mines realised 20% more than at Wheal Bonney last week. A 10-ton boiler at £1 per ton, iron at £4-6-0 per ton, bridge rails at £11-7-6 per ton. The total proceeds at the North Bonney section was £700 and £300 at the Cornubia Mine.
- 16th May Pentewan Railway Bill has had its 3rd reading in the Commons and has passed to the Lords. A Capital of £50,000 is divided into 5000 shares of £10 each. A 2' 6" gauge track is to replace the existing tramway.
- " Levant - forked to the bottom, 266 fms below adit or sea level, and the engine and skip shafts completed. The lode is to be worked at 12/- tribute, with 40 men on tutwork and 140 on tribute at wages varying from 9/- to 17/- in the £1.

- " Discory of rich grey copper lode made at St. Ives Consols while driving the 170 fm. level on Daniels lode.
- 23rd May A large, iron-built, screw steamer was launched from the yard of Messrs. Harvey & Co., on Saturday afternoon. She was named Frank Batters and is intended for the river trade in Spain.
- 30th May Meloder Moor, St. Stephens - a new 30" rotary engine suitable for drawing and winding has commenced working. The owner, Mr. J. Lovering, provided a "capital" dinner at the works.
- 6th June Auction of household furniture and printing plant and type of William Cornish, Green Market, Penzance, including a super-royal Columbian Press, Albion card-printing press, perforating, numbering, ruling and cutting machines, 140 cases of type and a Circulating library of about 1000 volumes.
- " Cornwall Minerals Railway - announcement of opening on Monday next of connection to ports of Fowey, Par, and Newquay.
- " Statement of Earl of Devon at a meeting of the Bristol and Exeter Railway that the Truro & Perran Railway Bill has been abandoned for the present session. "Poor Truro! If any interests are to be sacrificed hers are always invariably the first to suffer."
- " Stannaries Court, Truro - in an action concerning shareholdings it was revealed that New East Russell, otherwise Wheal Courtney, has operated for only 6 months before an official liquidator was appointed.
- 13th June P. 4 - a description of the line of the Cornwall Minerals Railway 3 weeks after being opened.
- " 60 men are at present engaged on the construction of the St. Ives Railway, and the total is likely to rise to 300. A station is to be erected at Brewery Quay, Lelant, with the line then going on to St. Ives Road Station rather than Hayle.
- 20th June Sale of materials at Wheal Crofty, near Pool Station, including a 40" cylinder pumping engine.
- 20th June Sale of sapre materials at Great Wheal Vor United mines:- including a 36" stamping engine with 4 x 16 head stamps with axles complete, a 30" man engine of 12' stroke, 24" whim engine, steam capstan, and large shears at the 85" engine.
- " Cornish Granite Monument:- Messrs. Freeman of Penryn have just completed a 40' high monument to be erected in the grounds of Greenwich Hospital to the memory of the men of the Miranda, Curacoa, Esk and Harrier who were killed in New Zealand in 1863 and 1864.
- 27th June West Caradon to be voluntarily wound up, with the possibility of the mine being offered to some of the shareholders at between £1,500 - £2,000.
- " Great Wheal Vor United Mines:- accounts to 28/3/1874 showed a loss of £3,377 on 4 months working. Total costs for the period were £6,783. The Lord, Mr. Trelawney, has refused to accept the machinery, and one of the engines had been sold elsewhere for £2,000. After the sale of spare machinery the western ground would be worked vigorously, and the Lord had agreed to give up the dues. Estimated monthly working costs for the next 3 months were £120 per month. All pecuniary liabilities, except for about £200, had now been settled. It was hoped to get £4,000 from the sale of the spare machinery.
- " Pendandrea Mines - a reader asked for confirmation that the engine shaft had not been deepened by so much as one foot in the last 7 years.

A. P. F. S.

JOHN HARRIS

THE MINE

Part I.

ARGUMENT.

A Mine-Pit in the Moor - The middle-aged, heroic, broken-spirited Digger - Picture of his Home - His Wife - Her Dream - Her real Cornish Heroism - The Dowzer - The fiery Flying Dragon - Hangman Oak - Sudden turn of the Dowzing-rod - The Dowzer's Oration and Exit - Evening - The Damsel among the Reeds - Her Song of Sorrows - Henry's Promise - His successful Labours abroad - Departure for Cornwall with Trifles for absent Friends - The Tinner's simple Breakfast - His enkindled hopes - Prayer - Shaft - Discovery of Tin - Invention of the Stamps - Growing Success - Maggie's Joy - Invention of the Whim - James Watt discovering the Power of Steam - Extension of the Mine - The Steam-Engine - Rushes used in Blasting - The Introduction of Quills for that Purpose - Picture of a Working-place underground - A pious Miner and his Son.

HOME from his pit among the reeds and flags,
Where he had dug for months, and dug in vain,
The pale man came to dinner. Lost in thought,
Upon a bench, at the low table's end,
He ate his barley pasty minus meat,
Stuffed with potatoes and enough of salt.
His lean dog watch'd him by the three-legg'd stool,
And in a cage beside his lattice small
An old thrush chatter'd with a marvellous glee.
His wife, her face upon her wasted hands,
Sat in the chimney by the red peat fire,
Watching the smoke ascend the smutty stack,
And lost meanwhile in wondrous reverie.
Laying his knife upon the wooden plate,
He broke the silence with a heavy sigh:-

"Tis no use, Maggie, digging anymore.
I've ventured till we've only one goat left,
The weakest of the flock: the kids are gone,
And all the sheep and lambs have long been sold:
The cows have vanish'd from the untill'd fields,
And all the horses have been driven away,
Save that poor pony, lean, you see, and long:
The pigs and poultry feed in other yards,
And every sack of corn has left the barn.
I sold the straw last night to farmer Jones,
And Neighbour Lambrick bought the rick of hay.
Not a potato in the outhouse lies:
The furze is taken from the under croft,
And all the turf is carried from Beck's carne.
My bran-best hat and breeches waterproof,
My buckled boots, my best, my yellow-topp'd,
Bridle and saddle, and my darling cane,
With silver head and silver studded o'er,
I bought when we were married, - all are gone,
And I am left alone, a ruin'd man.
Dame, look around you: where the chest of drawers?
Where all the pewter? where the copper pans?
Where the old china, rich indeed for age,
The bright tin teapots, and the oaken chairs?
Gone! and the crack'd panes echo, 'Gone!'
I've work'd until my bones are almost bare,
And hope has shrieking left me; and, to fill
This dark-hued cup to overflowing quite,
Our only boy could bear distress no more,
And so last night he left us for the seas.
O God, have mercy on us and the lad!"

The poor man groan'd and shook his streaming locks.
Resting his back against the cupboard door,
He fix'd his eyes upon an empty shelf
Then Maggie's full heart pour'd its treasures forth.
She told of many men of humble birth
Who persevered in duty's upward path,
And won estates, rich fortunes, and a name.
"Last night," she said, "I dream'd it was summer-time,
And we were walking by a limpid lake,
Whose face was crystal as the mirror'd heavens,
And overhead the tall trees shadow'd us
And shook their leaves with gladness. We sat down,
And listen'd to the birds, and mark'd the kine
Feeding upon the lawns, while round us lay
Orchards of fruit and fields of waving corn;
And all was ours, and all the gift of heaven.
But I awoke, and, lo, it was a dream."
And then she bade him not to be dismay'd,
But trust in God, who made the mighty hills,
And placed the minerals in their hidden cells;
That nothing came of him who ceased to act,
And wept at every steep he had to climb.
The navigator, hoping against hope,
Still steer'd his vessel over darksome seas,
Until new lands were added to his chart.
The general led his armies on and on,
Through days and nights of fever and fatigue,
Until the city sank beneath his tread.
So he should never give despair a place,
But go and try again another week. -
That week brought fortune in a mine of wealth.

It happen'd thus. Down from a distant carne
An old man came, with wisdom in his face;
Mean his attire, and homely was his speech,
But warm his heart that beat beneath a frieze;
And calling at the tinner's rustic door,
The following morn, he gently knock'd, and said,
"Cheer up, faint heart: I'm come to give thee aid."
And forth upon the moor of pits they went,
Conversing by the way of lodes and veins.
Meanwhile a cloud went marching up the sky,
And blacker grew and blacker, mounting higher,
Until it reel'd and stagger'd o'er their heads,
And sent forth streams of fire that roll'd along
The rocky valley like a flaming beast.
The two men gazed, and cloud and fire were gone.
Then much they chatted in the light of morn.

Spoke the old man with warm heart wrapp'd in frieze,
 "This is the dragon of the mineral vault:
 He's out but rarely, and his presence shows
 A mine of riches whereso'er he rolls.
 His track was down the sheep-path by the oak,
 Where hung for months the miser suicide.
 Strange Souls wall through the branches in dark night,
 Or when the winds are high or breezes low.
 Howbeit, near the oak the dragon roll'd,
 Close by the pit where you were digging last,
 Sad and discouraged. But this augurs well
 For you, my neighbour: and we'll try once more
 What virtue's in the famous dowzing-rod."

So from a white thorn, with his large clasp-knife,
 The old man cut a twig formed like a V,
 And, holding it in both his oozy hands
 Point uppermost, he paced along the vale
 From north to south, till, near the hangman-oak,
 The point turn'd downwards with a sudden twitch,
 And rays of joy shot from the old man's eyes.
 Then back he went, and forth he came again,
 Holding the rod in both his oozy hands,
 And down it went over the same mark's spot.
 So he was satisfied, and said "Sink here:
 There is a mineral-chamber underneath
 Will well repay you for your little loss.
 Behind yon mount o'er which the sun has climb'd
 They saw a fire like this: I used the rod,
 And where it turn'd, two labourers sank a pit,
 Who now have coaches, titles, and estates.
 I'll wager, sinking here, you'll have a mine."
 And o'er the hills the dowzer pass'd away.

The vale is silent, silent are the trees,
 And still the waters of the sleeping lake:
 The lark's last note has floated up to heaven,
 And down the stream the merry boatman glides,
 And louder sings as drawing nearer home.
 The smoke is curling upwards o'er the pines,
 And merry voices ring among the flowers,
 As Eve reposes on a primrose bank
 Amid the reeds a gentle damsel sighs.
 Like harper in the thicket, and the wren
 Puts out his ear among the springing ferns,
 To listen to the sorrows of the maid.
 "He's gone, he's gone, my loving Henry's gone:
 To-day we parted by the village gate,
 What time the sun had reach'd his highest noon.
 He shook his hand, and tears came in his eyes;
 And seeing his, mine own were dim with rain;
 And when he told me he should sail away
 Across the ocean to a land of heat,
 And seek his fortune in a grot of gold,
 Because his father with a hero's heart
 Lost all his little digging for a mine,
 My heart seem'd bursting in me, and I thought
 I should have sunk upon the flinty ground.

"Dont weep, I he murmur'd; I when a few short years
 Have pass'd like visions, Henry will return,
 When the church bells shall ring our wedding chime,
 And we be one and happy. Far away,
 Alone with strangers and a selfish world,
 Thine image shall be with me, going out
 And coming in, and sitting by my chair,
 And mirror'd on the universe of light.
 I'll wear thee vision'd on my heart of hearts;
 And when the daylight dies among the hills,
 And Eve steals onward with her urn of dews,
 I'll think I see thee by thy cottage door,
 And hear thy song float o'er the listening trees,
 And feel thou prayest for thy Henry gone.
 He kiss'd my hand, and soon was out of sight."

10

In a rude land he labour's with success,
 Till one bright morn beneath an ancient tree
 A group of men are standing. Some have rings,
 And some have purses, little boxes some;
 And some have letters cramm'd with lines of love;
 And some have bits of gold, and some have coin;
 And some have strings of pearl, and some have shells;
 And some have portraits of their household flowers,
 Loved, happy faces, group's in miniature;
 And some have books, and some have curls of hair,
 And ribbons some, and some have metal pens,
 And some have landscapes lengthen'd on a leaf,
 And some have little poems wet with tears.
 All eyes are bent upon a fair young man,
 With staff in hand and bundle on his back,
 And face towards his home in Cornish-land;
 And these are trifles for their distant friends,
 Child, mother, wife and lover: so he plac'd
 Each tiny treasure in his travelling-bag,
 Shook hands with all, and hasten'd on his way.

Return we to the tinner of the moor.
 Soon as the dowzer left him, he went home,
 And made his breakfast off a crust of bread
 With salt and water on the great hearth warm'd;
 And then he took his pickaxe, pipe, and spade,
 And ancient canteen swinging in his hand,
 And down the sheep-path once more travell'd he
 Into the place of pits, a hopeful man.
 Laying aside his outer vest, his eyes
 Instinctively turn'd upwards, and he sigh'd,
 "O Father, if it be Thy holy will,
 Prosper the labour of Thy servant's hands.
 The gold is Thine, the tin and copper Thine:
 Direct me where to labour with success.
 However, not my will, but Thine be done."
 And down into the earth the pickaxe went,
 As it a giant dash'd it in the ground.

Down went his shaft through various strata-crusts,
 Thick layer after layer, till he came
 Upon a hope-reviving bed of blue.
 He brought up samples with a gladden'd heart,
 And wash'd them in the rill among the reeds,
 And they produced some grains of real tin.
 Next day a boy came with him, and they plac'd
 A windlass on the shaft, and wound the stuff
 Up in a goatskin fashion'd like a bag.
 Each day the lode grew richer, and more tin
 Was lying on the surface. Then he made
 A wooden wheel, and plac'd it in the moor,
 And on some stakes of oak put iron heads,
 To stamp the rough stones into powder fine.
 Then o'er the wheel he turn'd the limpid stream,
 And round it went; up rose the heavy heads,
 And falling bruised the stones to mineral sand.
 So cleaning it, the old man's pony bore
 The treasure to the far-off smelting-house;
 And he return'd with twenty pounds or more.
 And as it chimed within his mole-skin purse,
 How Maggie's bright eyes twinkled with delight!
 That eve a grateful prayer rose up to heaven.

Then weeks and months and seasons pass'd away,
 And tin was wound up in the goatskin bag,
 And clean'd, and carried to the smelting-house;
 And he return'd with guineas in his purse;
 Till one still eve he sat upon his bench
 Much pondering. Leaping quickly up, he said,
 "I have a whim now whirling in my pate:
 I'll work it out to-morrow." When day dawn'd,
 And to the covert slunk the full-fed fox,
 He cut down wood and nail'd it like a cage
 with horizontal slabs and slabs oblique,
 And through the centre a rough forest tree
 Placed for an axle, and from out its side
 Ran two arms like a giant's. Near the shaft
 He set it up, and round it twined a rope,
 Brought o'er a pulley by the tin-pit's mouth;
 And to the rope a wooden barrel swung,
 Made by a cooper in his village shop.
 He harness'd pony to the great wood arm,
 And round and round and round again it went,
 Pulling the barrel up and down the shaft,
 Till heaps of in upon the surface lay.
 And Fortune fill'd his mole-skin purse with gold.
 And seasons came and pass'd, and came again;
 Rains fell, and sunshine kiss'd the gladden'd earth;
 The crops grew up and fell before the scythe;
 Men wo'd and married, feasted, fail'd, and died.
 Levels were driven, and other shafts were sunk;
 An adit from a valley drain'd the mine;
 Great heaps of tin upon the surface lay,
 And still went round the whim and waterwheel.

There dwelt among the hills a thoughtful boy,
 Whose mother was the model of her sex;
 And he was very forward for his years,
 Fond of good books and study. Other lads
 Seem'd only happy when engaged in play;
 He when with God and nature. On a time,
 As he sat musing by his cottage-grate,
 The boiling kettle hiss'd upon the hearth,
 And so he stopp'd the steam and stirr'd the fire,
 His mother looking on with chiding eyes, -
 Until the power confined thrust out itself,
 And burst the kettle in its rage for fame.
 This led the student on to higher things,
 From steep to dizzy steep, until at last
 He made the great steam-engine, when the world
 Received a boon to bless it evermore.
 And so Watt's name is carved among the great,
 And chimed in song, and deck'd with summer flowers.

Meanwhile the mine extended and grew rich,
 And every month the workmen multiplied;
 The water gush'd from countless cracks unseen,
 Ran down the levels' sides, and bubbled up
 within the adit, keeping the bold men
 From sinking far beneath it, till the wheel
 Was laid aside, and in its place arose
 A small steam-engine newly wonderful;
 And wonderful the ease with which it wrought,
 Draining the mine as strangely as a spell.
 After the shaft was sixty feet in depth,
 Ends were extended eastward, westward far;
 Then winzes sunk for air from level to level;
 And so it ever was and ever is.
 And as they sunk from rugged stair to stair,
 The troubled entrails of the rifled world
 Changed hard as marble. Drills were introduced,
 And mallets rang where picks had clink'd before.
 Then holes were blasted in a dangerous way,
 By rushes thrust into the powder-charge
 Through a small hole made by a copper wire,
 Igniting it as sudden as a thought;
 Ere the poor wretch could say one work of prayer,
 Destroying limbs and often life itself.
 Then quills were used. Still very dangerous they
 And more expensive. Turn we from the fields,
 And ladder after ladder quick descend,
 Until we reach a labourer's working-place.
 It is the hour of morning: on a plank
 A father and his elder son sit down,
 A boy with fourteen Aprils on his face,
 With thought of home and brothers in his mind,
 And sunny slopes and lawns of laughing flowers,
 Denied him here, denied the lad so soon.
 A flask of water dangles to a nail,
 And here a can of powder; candles there,
 A pair of scissors and a bunch of quills.
 Their dinners lie beside them, and beyond
 Are drills and hammers and long iron bars.
 Ere they begin to labour, child and sire
 Kneel down among the rocks, and that dark cave
 is visited by angels, whose bright wings
 Float through the darkness to the voice of prayer.
 Aloud the father intercedes with Heaven
 For blessings on the labour of their hands,
 And blessings on his darling ones at home,
 That He would spare them, if it were His will,
 To meet at eve around the supper board.
 But if they fell and died among the rocks,
 He pray'd that they might dwell in heaven, and sit
 Down at the marriage-supper of the Lamb.
 And then he wrestled for his comrade-boy;
 And in his earnestness he seem'd to grasp
 The arm of the Most High, and so prevail'd
 That heaven kiss'd earth and dropp'd into the mine.
 Could you have peer'd into that youngling's face,
 Hidden in both his hands, you would have seen
 Great shining tear-drops roll down on the stones.
 That boy grew up to bear the cross of Christ.

The Council of British Archaeology is compiling a national register of industrial sites and buildings of historic importance, and we print below the list for Cornwall as an aid to members. Volunteers to expand and check the existing work are urgently required and are asked to contact the Secretary. The number of items listed has grown from 20 in May 1966 to 21 in May 1968, and 148 in February 1973.

N. R. I. M. 10 CORNWALL

Summary of Situation to Date

May 1970 (21 - 20 (21):

no change - only one card added since 1966, despite useful preliminary work by Messrs. J. H. Trounson & C. R. Hill.

February 1973 (20 - 148):

As can be seen by the figures, there has been a major improvement in the amount of entries for Cornwall. This is due to the efforts of Messrs. J. W. Beard, E. J. Wigley, A. C. Todd, and J. Schofield, who with little duplication, have documented a wide variety of sites in the county.

77 of these entries come from J. W. Beard, whose contributions include 30 tin mines, houses and engines, 24 water mills and a wide variety of other entries. From E. J. Wigley we have 20 entries, including 7 tin mines and houses, and 4 water mills. A. C. Todd's major contribution is in Tin Mines (11) out of a total of 18 entries. Eight tin mines and engine houses also make up the majority of J. Schofield's entry. Finally Robert Humm of London, has added 3 railway stations.

Therefore the situation now is that Cornwall has a firm and wide based foundation to build upon, and most especially a good coverage of tin and copper mines and water mills.

	<u>May 66</u>	<u>May 68</u>	<u>May 70</u>	<u>Feb 73</u>	
Entries	20	21	20	148	TOTAL

N. R. I. M. 10 CORNWALL

<u>REF. NO.</u>	<u>ITEM</u>	<u>GRID REF.</u>	<u>LOCATION</u>
100101	Historic Dwelling House	10 637 389	Camborne
100501	Tannery (Manor)	10 937 483	Grampound
103201	Harvey's Foundry buildings	10 550 370	Hayte
103202	Mine smithy & fitting shop; Wheal Busy	10 738 448	Chacewater
103203	Buttery Mills - shovel making	10 551 346	St. Erth
103204	Old Foundry, Harvey's of Hayle	10 558 371	Hayle
103205	Town Mill Iron Foundry	10 691 426	Redruth
103206	Foundry Saa & Sons, water wheel manu.	10 692 426	Redruth
103207	Forge & Tools	10 372 298	Kelynack/St. Just
103501	Tin Mine, Balnoon	10 508 381	Carbis St. Ives.
103502	Tin Mine, Wheal Cleveland Site	10 475 402	Zennor
103503	Copper/Tin Mine	10 519 404	St. Ives
103504	Carrick DuCorcavilew mine	10 507 413	St. Ives
103505	Vorvas Downs Tin Mine	10 509 383	Carbis St. Ives
103506	Wheal Montagne Mine	10 487 381	Towednack
103507	Wheal Mosaic Mine	10 483 388	Zennor
103508	Zennor/Carnellow Consols	10 443 388	Zennor
103509	Copper Mine	10 597 324	Godolphin Bridge
103510	Tremcrom Tin Mine	10 515 368	Tremcrom Hill
103511	Ulla Tin Mine	10 506 376	Trink Hill, St. Ives
103512	Goole Pellas Tin Mine	10 498 397	Zennor
103513	Gwennap, Open cast Copper Mine	10 717 417	Gwennap
103514	Wheal Fortune Open Cast Copper Mine	10 628 285	Breage
103515	Wheal Cupid Copper Mine	10 530 377	Lelant
103601	Abandoned Tin Mine - Engine House	10 684 419	Illogan
103602	Tin Mine - cornish beam engine house	10 673 415	Illogan
103603	Tin Mine - Cornish beam engine house	10 668 412	Camborne
103604	Tin Mine - Cornish engine house & stack	10 365 345	Pendeen
103605	Wheal Ayr Tin Mine	10 513 405	St. Ives
103606	Wheal Providence Mines	10 523 384	St. Ives/Lelant
103607	St. Ives - Wheal Allan, Tin Mine	10 499 399	Hellesveor
103608	Trevega Bal Group of Mines	10 482 405	Zennor
103609	Gurnard's Head Mine	10 438 382	Treen
103610	East Providence Winding Pump House	10 528 387	Carbis Bay
103611	Wheal Sperris and Sandwich Engine House		

103612	Botallack Mine Engine Houses	10 477 380	Zennor
103613	Wheal Clifford, Engine House	10 363 335	St. Just
103614	Old Bossow Mine, later Tyingham Consols	10 740 430	St. Day
103615	St. Ives Consols	10 494 384	Rosewall Hill
103616	Mine Buildings (Corner)	10 506 397	Hellesveor
103617	Godolphin Tin Works/Blowing House I	10 602 323	Godolphin
103618	Burning House	10 604 321	Godolphin
103619	Godolphin Tin Works/Blowing House II	10 595 324	Godolphin Bridge
103620	Melters Cottage	10 604 321	Godolphin
103621	Site of Blowing House	10 707 270	Godolphin
103622	Godolphin Tin Works (General)	10 604 321	Gweek
103623	Wheal Coates Engine House	10 698 501	Godolphin
103624	Bosigran Mine Engine Houses	10 421 364	St. Agnes
103625	Morvah Consols Tin Mine	10 407 359	Morvah
103626	South Crofty Tin Mine	10 667 413	Morvah
103627	Morvah & Zennor Tin Mine	10 416 357	Camborne
103628	Wheal Busy, Engine & Boiler House	10 738 448	Morvah
103629	Silver Lead Mine, Engine House & Stack	10 830 560	Chacewater
103630	East Wheal Rose, Engine House & Stack	10 830 560	Newlyn East
103631	Mine Engine Houses, Rosemergy	10 418 364	Newlyn East
103632	Wheal Jenkin, 2 Engine Houses	20 265 714	Morvah
103633	South Phoenix Engine Houses	20 263 714	Caradon Hill
103634	Wheal Metal, Engine House	10 629 299	Caradon Hill
103635	Phoenix United mine, Engine House Complex	20 266 719	Breage
103636	Scotts Mine, Engine House	10 627 288	Caradon Hill
103637	Tregurtha Downs Mine, Engine House & Stack	10 538 311	Breage
103638	Stable Hobba Smelting House	10 455 294	Marazion
103739	2 Mine Complex of Houses	10 364 333	Trereife, Nr. Newlyn
103640	Engine House only	10 434 345	St. Just
103641	Killifreth Mine, Engine House, Wheal Busy	10 740 447	Nr. Lanyon Farm
103642	Treloweth Smelting Works	10 538 354	Chacewater
103643	Calciner House & Stack, Wheal Busy	10 740 447	Canon's Town
103644	House 'Cant Nancarrow's House'	543 806	Chacewater
103701	Wheal Margery, Engine	10 526 394	Greatwork
103702	Wheal Brothers, Engine	10 509 378	St. Ives
105201	Bottle Factory, now ICI Bromine Works	10 554 382	Carbles St. Ives
105701	Paper Mill (Coosebeau)	10 812 453	Hayle
105901	Stack of Fuse Factory	10 700 420	Kenwyn (Truro)
106101	Milestones	10	Redruth
106102	Iron Bridge	10 791 394	Land's End Area
106103	Road Direction Post	20 120 690	Perranarworthal
106104	Coach Mile Stone, /Truro - Hayle old coach road	10	Cardinham
106201	Quay - copper shipping	20 446 696	Hayle
106202	Harbour & Loading shutes, Trevaunance Cove	10 721 518	Morwellham
106203	Dock - Iron Swing Bridge	10 558 377	St. Agnes
106301	Inclined plane, Canal	10 824 626	Hayle
106302	Waterway/Railway - remains	20 236 642	St. Columb Minor
106501	Caradon/Liskeard Mineral Railway/Toll House	20 233 648	Moorswater
106601	Menheniot Railway station	20 289 613	Looe Mills
106602	St. Germans Railway station	20 360 574	Menheniot
106603	Padstow Station	10 921 723	St. Germans
107101	Slate Quarry	20 075 838	Padstow
107301	Clay Pit (china)	10 595 291	Delabole
107302	Southdown Brick Works	20 436 526	Tresowes Green
107303	Foss Brick & Tile Works - kiln remains	20 434 523	Millbrook
107304	Carbis Brickworks Waterwheel	10 998 596	Millbrook
			Roche

107401	Lime kiln	10 863 459	Tresillian
107402	Lime kilns & quay	10 707 266	Gweek
107403	Lime kiln	20 424 681	Cotehole Quay
108101	Fish Cellar - pilchards	10 808 623	Newquay
108102	Fish Cellar	10 807 621	Newquay
108103	Capstan House	10 351 264	Sennen
108201	Tregunnel House Horse Whim	10 808 609	Newquay
108202	Museum of Early Mech. Farm Machinery in farm	10 862 581	Nr. Kestle Mill
108203	Smithy at Mount Joy Junction	10 872 602	Colan
108301	Water Mill, now part of wayside museum (see 108320)	10 454 384	Zennor
108302	Water Mill	10 398 231	Treen
108303	Water mill - only millstone left in wall of cottages	10 391 266	Russiek
108304	Water mill	10 443 292	Nancothan
108305	Water mill, no remains	10 423 264	Trembothick
108306	Water mill, farm building	10 447 246	Lamorna
108307	Water mill, (see 108335)	10 395 252	Alsia
108308	Water mill, Farm building	10 441 253	Trewoofe
108309	Water mill, Trembath	10 451 290	Newlyn
108310	Water mill, Nanquidno	10 360 294	St. Just
108311	Water mill, Bosavern	10 365 305	St. Just
108312	Water mill	10 431 310	Reskennal
108313	Water mill	10 388 242	Bottoms
108313	Water mill	10 393 247	Crean
108315	Arrallas Mill	10 886 535	Mitchell
108316	Rialton Mill	10 849 623	St. Columb Minor
108317	Shilla Mill	10 941 784	St. Minver
108318	Melinsey Mill	10 908 393	Veryan
108319	Insworke Tide Mill	20 428 528	Millbrook
108320	Zennor Mill (Wayside Museum) (see 108301)	10 454 384	Zennor
108321	Rothdower Mills	10 612 213	Breage
108322	Water wheel drive for farm machinery (Well Town Farm)	20 142 678	Mount, Warleggan
108323	Golden Mill	10 928 468	Golden
108324	Grist Mill/Water Dump	10 541 364	Lelant
108325	Melancoose Mill	10 862 620	Colan
108326	Trungle Mill	10 589 378	Angarrack
108327	Bodgala Mill	20 269 646	Liskeard
108328	Galowras Mill	20 005 437	Portmellow
108329	Sithmoe Mills (also New Mills) 3 in line	10 623 285	Breage
108330	Trannack Mills	10 667 301	Wendron
108331	Trellissick Mills - 2 mill houses	10 629 283	Sithney
108332	Dopes Mill	20 272 638	Menheniot
108333	Green Mill	10 879 473	Probus
108334	Penponds Mill	10 633 383	Camborne
108335	Alsia Mill (see 108307)	10 395 252	St. Buryan
108336	Water Mill (Town Mill)	20 185 678	St. Neot
108337	Treyen Mills, at Penweathers Junction	10 811 443	Truro
108338	Tubb's Mill	10 962 433	St. Michael Caerhays
108339	Ventongimps Mill	10 781 516	Perranzabuloe
108340	Clapper Mill	10 438 253	Trewoofe
108341	Hicks Mill	20 265 823	Polyphant
108342	Lower Boscadjack Mills	10 673 312	Wendron
108343	Paddy's Mill (Tide) - engine House & Stack	10 574 387	Hayle
108501	Corn warehouses	10 700 421	Redruth
108502	Trennick Flour Mill - steam engine	10 835 436	St. Clement
108701	Malthouse	10 919 482	Grampound
108702	Malthouse	10 866 453	Tresillian Quay
109101	Private water supply, /engine house	10 791 366	Enys

NOTE - There are obviously a number of spelling errors, which there has not been time to check, in this list. Please let me have corrections. J.H.

TAYLORS SHAFT E.P.A.C. STACK, POOL

Members will be sorry to hear of proposals by South Crofty Ltd., for the demolition - partially at least, of the stack at Taylors Shaft, Pool, with the letters "E.P.A.L." in brickwork. Built about 1922, the stack has long been a prominent landmark, but - as Mr. Trounson confirms - the top brickwork section has developed a bulge on the S.W. side. South Crofty, who own the stack and adjoining land, are long believed to have been considering the re-use of the shaft as the mine expanded underground, and would obviously be concerned with the safety of the stack. As the owner of the Enginehouse the National Trust was brought into discussions at an early stage, as was the County Planning Officer who commented that the stack "is, of course, fairly prominent and would undoubtedly be of considerable local interest." The Clerk of Camborne-Redruth U.D.C. was also approached, but the Finance Committee of the new Kerrier District Council was unable to recommend a contribution.

The Society must find this decision regrettable after the £28,000 profit realised by the Council on the sale of the land adjoining Camborne Beacon - whose ultimate fate was also demolition. This is perhaps an opportune moment to emphasise that the management of South Crofty Ltd., has gone far beyond the minimum degree of consultation which might have been all that could be expected, and have considered suggestions by the Society that the stack might be used as a silencer for any compressor used in a future re-working. This idea in fact failed to prove attractive because recent changes in design have resulted in marked improvements in the silencing of air compressors. The mine comments, not unreasonably, that while everyone tells them that they would like to see the stack standing they are equally agreed that they cannot pay for the repairs to make it safe. Since that time the new Cornwall County Council has sanctioned a grant of £487 (dependant on a similar amount being forthcoming from the National Trust) which would result in the mine only having to find one half of the estimate repair costs. The Council of Management of the Society will be considering at its next meeting, whether the Society can contribute out of its funds, but it is unlikely that any large sum can be offered. In the meanwhile any donations individual members might wish to make should be sent to the Hon. Sec., at 23 Merrick Avenue, Truro. (They will, of course, be returned if the work is not carried out).

This is an example of the classic situation of the crisis which often arises when important industrial buildings have out-lived their original function. While appreciating the problems involved the Society must make its position clear by emphasising that in its opinion the acquisition of such buildings for actual or hoped for financial gain should also imply, in the present climate of opinion, a wider responsibility to utilise and maintain such buildings for the benefit of the public at large.

DEPARTMENT of ENERGY
Appeal for Plans, Box 999, London SW1P 4QJ

Telephone 01-222 7000 ext 1182

Our Reference
SH644/33/27
Date as postmark 1974

Dear Sir/Madam,

NATIONAL APPEAL FOR OLD MINING DOCUMENTS

A national appeal for old mining documents was launched today by the Department of Energy and we are writing to ask for your help.

You will no doubt recall the accident at Lofthouse Colliery, Yorkshire, in March of last year in which seven miners were killed. The accident was caused by an inrush of water from old workings abandoned last century, the presence of which in the immediate vicinity of the seam being worked was not suspected. A notebook kept by a Victorian geologist came to light after the accident and was found to contain important information on the depth of a shaft from which it is assumed the old workings were driven.

The emergence of this notebook suggested that there may be other privately-held documents which contain vital information not available at present to those responsible for planning new mining operations. Because of this the Commissioner, Mr. James Calder, H.M. Chief Inspector of Mines and Quarries, recommended in his report of the Public Inquiry into the accident that: "A national appeal should be launched... for old mining plans held in private hands to be made available for copying".

We should be most grateful therefore if you would:

- 1) Check to see if you have any plans, maps, notebooks, fieldslips, letters, survey calculations, consultants' reports, photographs, or other documents that might relate to old mining operations, especially those before 1900, even if they are in poor condition.
- 2) If you have, please write to the above address, including as much of the following information as you can:

*description (e.g. plan, notebook, etc.);

*the approximate date of the workings;

*name of the mine(s);

*the geographical location (e.g. county, nearest town or village, place names) to help us locate the mine;

*whether the documents relate to a coal mine (or to collieries) or alternatively to other mines (e.g. ironstone, shale, fireclay, lead, copper, tin, anhydrite, clay, etc.);

*whether the documents are bulky or very fragile, and therefore difficult to send by post. (If they are special arrangements can be made.)

We hope your reply will enable us to assess the significance of the documents and decide how best to proceed. We may, for example, ask you to post them to us (the cost of postage will be paid on request), or ask someone to call, by appointment, to see them so that we can copy and return them safely.

Two further points worth noting are:

- a) We are concerned with all types of mines (not only coal mines), but not quarries.
- b) documents drawn up for purposes other than mining (e.g. for railways, canals, reservoirs) may contain valuable information relating to old mine workings because of the problems of subsidence. We are, therefore, interested in these.

We are sure you appreciate that this is a matter of considerable importance, and hope that we can count on your co-operation. Any suggestions you may have concerning any other ways in which you could help, or other avenues of approach that we could take, would be much appreciated.

It would be helpful if you could arrange to give this letter wider circulation; for example, in journals or staff magazines. Copies of the enclosed notice might be displayed in appropriate places; local authorities might wish to send copies to libraries and museums within their jurisdiction. We will gladly make available further copies of the letter and poster if you would telephone or write to the above address.

Yours faithfully,
J. R. Wilson

BOOKS

"The St. Just Mining District" by Cyril Noell (who is Curator of the St. Ives Museum and a member of the Society). D. Bradford Barton, Truro 1974. £2.75

"Memoirs of a Station Master" by Ernest J. Simmons. Adams & Dart. 1974. £3.15

"The following review is from the Times of April 4, 1974"

Memoirs of a Station Master, by Ernest J. Simmons (Adams & Dart, £3.25). This unlikely book was originally published anonymously under the punishing title, "Ernest Struggles" when railways were still taken very seriously and it was not thought proper to mock. Simmons worked for the Great Western Railway in the 1860's and his memoirs offer, in the words of its editor, Professor Jack Simmons, "a worm's eye view". Stations and people were lightly disguised - "fame" for Thame and "Gabriel Gouge" for the great Daniel Gooch - and Simmons tells his stories well. At Paddington a parson is demanding of the directors the instant dismissal of a porter for telling him to go to hell, and the porter responds: "Well gen'emen, the gent, he comed out of the train, and he says to me, 'says he, 'Porter, where's my luggage?' and I says, says I, what's your name, sur? and he says 'Lester', and in course I told him to go to L, and he thought I meant t'other place, and wouldn't 'ear no reason."

"British Narrow Gauge Steam - A Pictorial Survey" by M. J. Messenger. D. Bradford Barton, Truro, 1974. £2.75. (Not about Cornwall, but by a well-known member of the Society).

RAILWAYS OF LOOE AND CARADON. By G. F. Roose, J. M. Tolson and C. F. D. Whetmath.

This story is a nice microcosm of local transport history, starting with the construction of the Liskeard & Looe Union Canal to convey agricultural necessities such as lime and seaweed for manure inland. Gradually tin and copper moving seaward from the mines of Caradon dominated the canal and a feeder railway was built to serve the mines; as traffic grew the canal company replaced its canal with a railway and steam traction was introduced. At the end of the last century the mines gradually closed down and the railway was forced to build a connection to the Great Western Railway which for many years had literally sniffed at the smaller concern from a great height. After eventual absorption the Liskeard & Looe was nearly made redundant by a direct Plymouth-Looe line but survives into the diesel age largely as a summer alternative to the crowded lanes of East Cornwall.

The authors tell a good story well, with plenty of photographs of all periods, and maps and plans. This is a local history that has long waited to be written and the Celtic background from the wild granite of the Cheesewring to the shark fishing waters off Looe gives a piquant seasoning to the tale. (Publishers' description).

88 pages; 28 photographs. Publication 1st May 1974.
Forge Books, 42 Rectory Lane, Bracknell. £1.30 plus 10p postage.

Camborne School of Mines.

We are pleased to report that the CSM has now received approval from the Council for National Academic Awards for the award of a B. Sc. degree (in addition to the A. C. S. M.)