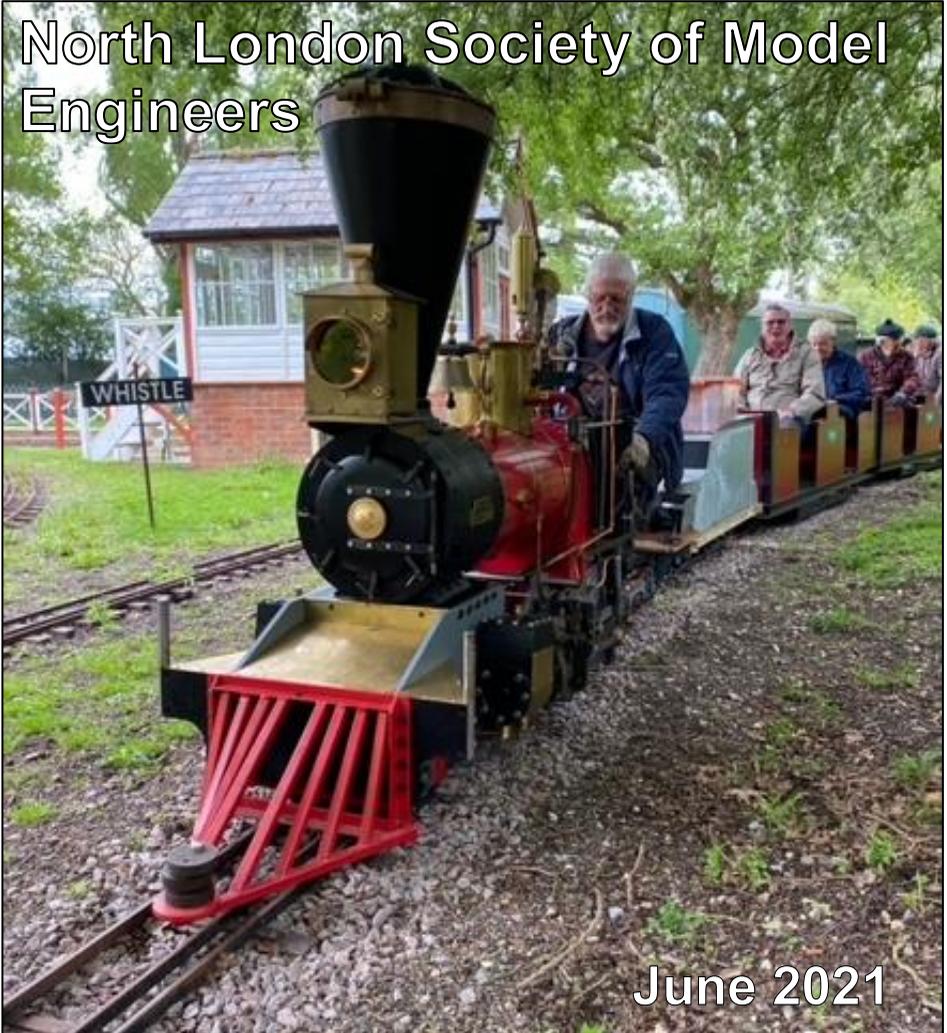


Issue No. 834

June 2021

# The News Sheet

North London Society of Model Engineers



June 2021

You can see this News Sheet in  
colour by visiting our web site at [www.nlsme.co.uk](http://www.nlsme.co.uk)

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### **Front cover photo**

The 20<sup>th</sup> May was one of those milestone days in a builder's life when all those years in the workshop reach a conclusion. Pete steamed his new loco and had the engine inspected by the club's boiler inspectors. With the ink still drying on the new certificates he took his first run with passengers. Just the cab to be fitted and the tender painted and he is all set for an enjoyable summer on the Tyttenhanger ground level railway.

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Your editor is very grateful to all those who have contributed to this edition. Your efforts are much appreciated by all the members of NLSME. This News Sheet would not be possible without you. Articles long or short on any subject which would be of interest to members of NLSME will be gratefully received for inclusion in future editions. If you don't want to put pen to paper but have a suggestion for a topic which is of interest let the editor know and we will do the rest.

**IMPORTANT NOTICE REGARDING NLSME ACTIVITIES  
RELATING TO CORONAVIRUS (COVID-19) PANDEMIC**

This news sheet, being a monthly issue, can never provide members with up-to-date decisions on how the pandemic impacts on our club activities. It is therefore important that members always follow the latest government advice.

**From the 17<sup>th</sup> May 2021**  
**the following restrictions apply to our activities**

**Head Quarters**

HQ is now open. Meetings at HQ are now permitted at any time but limited to a maximum of six persons in each room within the building.

**Tyttenhanger**

Tyttenhanger open to members with maximum of 30 in each gathering, access allowed inside buildings subject to rule of six. No external parties or club visits allowed.

The interim rules (Rev 2) for Tyttenhanger published in the April News Sheet apply.

**Fetes and Fairs**

All future events should be assumed to be cancelled until you are informed by NLSME Council of any change.

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Under government current plans the next stages in reopening will be:

From June 21<sup>st</sup>; HQ and Tyttenhanger open for normal use. However public access and running would be subject to membership agreement and preparedness to undertake stewarding in consideration of Covid situation at the time.

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## Chairman's Comments

Les

Thanks to all who participated in our on-line AGM. I had thought an on-line meeting may enable us to beat the all-time AGM duration record of 20mins set by a past and much missed chairman, Bert Mead. Nonetheless it was gratifying that many stayed online after the business had been completed, in just over 30 mins, for a zoomed chat.

I am most grateful to council members who have agreed to continue for 2021/2022 and to Dudley who has re-joined the council.

The awful May weather has exposed weaknesses in the nearly 40-year-old roof to the HQ, OO railway room. If the rain will hold off for a few days the roof will have been repaired and re-felted by the time you read this. In meantime slot car, O, OO and HO section activities have resumed, subject to six persons per room.

There have been no topic suggestions for a June Zoom general meeting so the next meeting will be Ian's event at Tyttenhanger in July.

Following last month's note about starting the workshop clear out and refit I am pleased to advise that a few members are joining me in progressing this much overdue piece of work. A skip will arrive soon. If you have unidentified personal items in the workshop space which the club does not require in its workshop, please take them away or they will be disposed. The equipment to be installed in this workshop as discussed, a few years ago comprises:

- Drill press – Bending rolls – Welding kit – Compressor
- Pedestal grinder – Band saw – Table saw – Benches and vice

In addition, we have recently been offered a shot blast cabinet. Let me know if you consider anything useful could be added to this list, mindful of the space limitations.

Surely better weather is coming our way soon enabling more running at Tyttenhanger than has been desirable so far this year. So, in expectation of that, I end with the usual refrain, see you at track and HQ.

Les Chairman

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## Normal running and Boiler Testing

By Les

With Tyttenhanger now open for near normal activities we encourage you to come along and run your engines, launch your boats etc. To assist in getting us back on track so to speak a boiler testing event was held in May and another is now planned to allow you to get that engine back in steam. We have all worked hard to get the site maintenance backlog cleared and it is now time for us all to enjoy the facilities during the summer period.

So, in addition to our normal practice whereby members prearrange with one of our boiler inspectors a test date and time, we have decided for this year to set aside Sunday 6<sup>th</sup> June, for “un-booked” boiler tests to take place. At least one of our boiler testers will be at Tyttenhanger between 10 am and 4pm on this date and available to conduct a test. It would nonetheless help us plan the days if you would let me know in advance if you intend to present a boiler for testing on either of these dates.

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## Treasurer’s Report

By Mike

A thank you to all those who have paid their subscriptions so promptly.

As at 16<sup>th</sup> May only thirty-nine members remain outstanding, or have not advised me that they are not renewing their membership. I will hold off listing the Post Codes of those still outstanding until next month.

The May Council meeting broke all records of recent years, when we were pleased to accept ten new members into the Society. The fact that two were previous members re-joining after an absence and five of them are Juniors ranging in age from 15 down to 6 years of age is a good sign for the future.

We must ensure that we make the most of this influx of new young blood.

Keep safe and I hope to see some of you at Tyttenhanger or HQ as the Covid-19 restrictions are eased.



**Mike Foreman**

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## An omission from the AGM.

By Ian Vice chairman

Les led and managed the Annual AGM extremely well. Being the Chieftain of a Clan of over two hundred members from all backgrounds it was no easy matter. Especially after a year when there has been a lockdown, and rules and restrictions imposed for all and sundry. Generally, in normal times, the Club tends to run itself with members self-regulating their diverse activities. But not this past year. Buildings and grounds have had to be closed for Covid, timings of closures had to be implemented and watchmen arranged. And the lack of income arriving on the doorstep of the Treasurer considered. There are always differing views within the members on how things should be run which Les has had to work through.

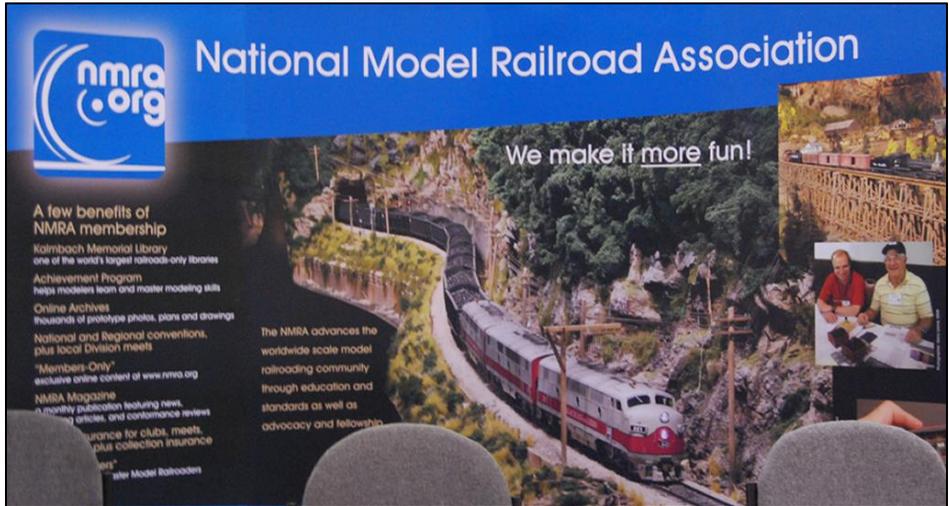
At times Les seemed to be working full time on his duties ensuring that the society ran smoothly and ensuring we were all operating within the Law. Les said that 'it was nothing'. But we do owe Les a great debt for all the assessments, calculations instructions and sheer hard work he put into this year. If the AGM had been in the meeting room at HQ, then I would have proposed a vote of thanks which I'm certain would have been seconded and endorsed by the membership. Well done Les.

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## Letter to the Editor

By Tony

I read with interest the item in the March newsletter regarding a visit to Beachhurst Park back in the 1970's. I was interested because I was one of the organisers of the excursion set up as part of a 25th Birthday Celebration by the British Region of the US National Model Railroad Association at its London convention.



British Region (NMRA) was set up in 1944 to cater for British modellers interested in modelling North American railroads. The parent organisation has a world-wide membership of some 25,000 and organises a 'national convention' in a different city each year. It was realised that our Region (being the first to be set up) would be 25 years old in 1971 and that it would be a grand chance of getting some Americans over to visit the UK.

A committee was set up and we drew up a draft and dated programme before even putting the idea to the main NMRA body for their approval. All this was some years before 1971. We even sent our Region President to the US to present our case! Anyway, our campaign was successful and we got the 1971 National Convention for London.

We had chosen suitable hotels in London and arranged excursions on BR (even special trains to Scotland) and an EMU to take us on a circular tour to see the layouts of The Gauge One Society (including Beachhurst). The annual banquet was something special. The London Transport Museum was, in those days, situated in a disused bus garage in Clapham. We had free-range of the site and a buffet supper was served, to be eaten where you fancied, even on the top deck of the exhibits! It was a great success. In the evenings at the hotel, we showed

16mm British films with railway interest. I organised the day-time technical clinics, also held at the hotel (I even managed to get an engineer involved with the Advanced Passenger Trains Programme to come to talk to us). We took one of our portable layouts to the hotel, much to the amazement of the hotel management and delight of all the guests

We all belonged to the North Middlesex Club at the time, which had a good number of NMRA members and was before we joined NLSME in 1987 after having lost our premises. Anyway, that's how NLSME gained its North American Section with Rai Fenton and I being the only surviving members of the original group who are still active.

Tony

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## Washroom update

Steady progress is being made on construction of the new wash room. (May news sheet page 7).

Whilst George and Mike are getting on with the cladding unfortunately Graham was spotted just fiddling around on the roof!!



The cladding will have been finished by the time you read this and hopefully the window fitted.

They should be making a start on the inside over the next month if all goes well.



## Narrow Gauge Garden Railway

By John

Greetings narrow gauge fans. Welcome to the June news sheet, incredibly we're half way through the year already, unbelievable!

A mixed bag this month and we'll start with what's happening down at Dingly Dell station. For those of you who are not aware it is located next to the raised track at the end of the long straight down in the New Lands.

You may recall some time ago I wrote a brief history of the Tyttenhanger Light Railway, originally an aggregate and then a passenger carrying narrow gauge line between Smallford and Welham Green.

Though long closed some local enthusiasts had always harboured an ambition to restore and even run trains again on a section of the old line. Of course, this was only a pipedream until one of the admittedly small group of the "TLR appreciation society", a certain Sidney Clack won a considerable sum on the lottery. The dream was on! Where to start? As you may remember the back straight of our raised track is actually built on the original TLR track bed and the original Dingly Dell was a tiny halt to allow London day trippers to alight and enjoy picnics in what was then and in fact still is a bucolic rural idyll. The sad truth is that it was a complete failure and after only one dismal summer the station was closed for ever. However, Sidney thought this would be the ideal place to start the resurrection of his treasured TLR....and so work commenced.....

As I'm sure you've guessed this as is the original article all complete nonsense. But Dingly Dell is really rising again from its long slumber. I had always been curious when going round the track about what had once existed at Dingly Dell as all that existed was a crumbling nameboard, a rusty fire bucket and a tap screwed to a post which had long given up being actually in the ground! I began to think it would be nice



to do something positive there and when our editor Keith mentioned a few news sheets ago that it would be good if someone "adopted" the station that piqued my interest even more. And when I found out that John P. was of a similar mind, that



was it, a "bring back Dingly Dell" movement was formed!

And so, John and myself have begun to create a feature of interest for passing trains. It's only since we've started that I've found out that once upon a time it was thought that it could actually be a dropping off point for people to enjoy a picnic there, and it was a complete

shock to see original photographs of the station on Owen's recent excellent zoom presentation to see how impressive it originally was.

I hope that we can do it justice, so far, the original platform has been jet washed and crumbling bits re-mortared. Fence panels have been installed in met posts and a wood preservative applied. In coming weeks, we will have post finials fitted, reproduction and hopefully actual vintage railway signs on display. I hope you enjoy the photos of the work so far. More progress to follow.

But it hasn't all been work, work, work....as you can see from the photo, we have despite the weather been able to have a running session on the Narrow-gauge layout. Here is a great photo of one of Michael's locos on a slow freight passing through Tyttenhanger.

Fingers crossed and with a little good fortune we may soon see some seasonable spring/ early



summer weather so we can have some regular running ....

And finally, whilst rummaging through some old photos I found one of yours truly and my three nippers having a ride on the raised track in 1988!

Yes, that is brown hair!! and my daughter is 40 this year! Half a lifetime ago, where did that go....

See you all next month...and keep safe.



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## For Sale – Silver Crest GWR 14xx Locomotive

This locomotive only been steamed a few times and is in running order. Owned from new by a club member whose family have now inherited the locomotive. Paperwork from original purchase is available. If purchased by a club member then a full Hydraulic and steam test will be undertaken as part of the sale.

If you would like further details, or wish to view the locomotive, please contact Keith.



## The Paint a panel (or two) Appeal.

By Keith



With the refurbishment of Dingly Dell station nearing completion and the work on the GLR fencing complete it has highlighted to need to give Tyttenhanger station a little TLC. So, we are asking you to volunteer to paint just one or two panels of the green fence surrounding the station platforms. It's a daunting task for one person but if a few members volunteer to paint a section of the fence over the next few weeks, then as the saying goes; "many hands make light work." OR to put it another way, many panels will be painted.

It has been decided that we should stay with the same colour green. If you are able to help, paint and brushes can be found in the shed adjacent to the coach. It will be a water-based preservative so brushes can be washed out with water and left where you found them.

You will see that sections of the fence are clearly in need of repair which we will undertake over the next winter but we need to get the fence repainted this summer if possible, to stop the rot and improve the look.

Let me know if you can help. No fixed time to do it, just turn up when you can and paint a panel or two, or three. **Please, please help.**

A replacement station sign is being made off site and will be installed by the end of June. The lamp posts also need a rub down and repaint so any volunteers for this task please take one step forward and let me know.

## Tyttenhanger station signal refurbishment

By Martin

The lattice signal at Tyttenhanger Station has received some much need TLC over 2020/21.

After chipping off the many layers of paint some severe corrosion was exposed to the angle iron frame work, so new metal was welded in place by Jerry ably assisted by George, many thanks.

The signal has now been given a fresh coat of paint and looks as good as new.



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## NLSME Constitution and Terms of Reference for Committees

As announced in April news sheet, Council have updated the Terms of Reference for NLSME committees. There are four committees covering Tyttenhanger, Head Quarters, General Meetings and Exhibitions.

The revisions were necessary to bring the previous guidance notes, dating from March 2010, into line with how NLSME has developed since and how we actually conduct our affairs nowadays. As the Terms of Reference are issued to all members as an attachment to the Constitution, Council decided the best means of disseminating these to all members is to re issue the whole package. Hence you will find the Constitution, dated 2005 and unaltered, together with the 2021 Terms of Reference, included with this news sheet.

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## Forthcoming General Meetings

In this age of uncertainty, it is difficult to arrange future General Meetings for the Club at Head Quarters because we don't know when or if at all we can meet in numbers in the meeting room. It is difficult to organise for an external speaker to attend to give a talk if we can't say if or where we can meet. A home-grown speaker would be excellent as we now have had via Zoom for the April meeting.

In the past our members have been as good if not better than the imported variety of speaker. So, if you know of a member who would be willing to talk for an evening or even half an evening shared with another member; then that would be excellent. Please let me know. The Programme at the moment reads thus: -

**Friday June 4<sup>th</sup>** – Nothing has been planned. Any ideas?

**Friday July 2<sup>nd</sup>** – BBQ at Colney Heath starting 6.30pm. I do hope that some trains will be running and that the soup is agreeable. There will be sausages in or out of bread rolls. An indication of the numbers who are intending to attend would be an advantage regarding the number of sausages to purchase.

**Friday August 6<sup>th</sup>** – An evening of First Aid revision at Colney Heath. In this litigious age we need to show that we have at the least thought about the care of our members and their friends. Help needed.

**Friday September 3<sup>rd</sup>** – Nothing planned at the moment. Any Suggestions?

Any questions regarding the meeting contact, Ian

## Jubilee in steam again

Jim and Peter have taken ownership of a locomotive well known in the club and are seen here on their first successful outing in May.

There is another picture at speed on page 12.

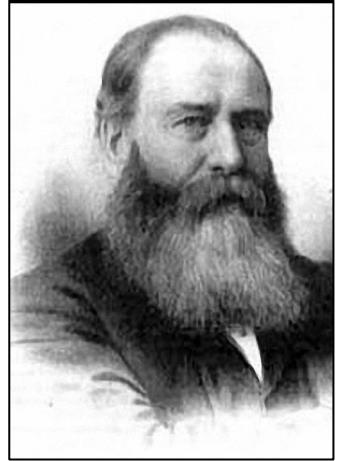


## Benjamin Piercy. 1827-1888.

By Ian

Benjamin Piercy was a land surveyor, railway engineer, agrarian, entrepreneur, fine cricketer, good at chess and a jolly good egg!

I first came across Benjamin Piercy when I was researching the Wrexham, Mold and Connah's Quay railway. (*March News Sheet p22*) The little railway was short of cash and unable to pay their dues to the Railway Clearing house which could have meant the end of the line for the company but Benjamin stepped in and paid up for them out of his own pocket, so saving the Company from bankruptcy. I thought that that was a jolly descent thing to do. Benjamin then went off to Sardinia but did not get his money back which I suspect that he had anticipated.



I looked Piercy up in the *Oxford Companion to Railway History* and soon found out that he was a great character and immediately decided to share the knowledge gained with the cognoscenti of the NLSME and their friends.

Benjamin Piercy was born in Wales in 1827 to a moderately prosperous family. Piercy senior (dad) was a commissioner, valuer, land surveyor of roads and involved in the attributions of the enclosure of common land. Ben had a private education and soon was working for his father and travelling extensively in Wales. I think that he was the equivalent of a train-spotter because Benjamin studied carefully all the railways that he travelled; noting the methods of running, management, and maintenance of the railways visited. He actually did survey work for Brunel with regard to the Thames Tunnel.

Benjamin graduated in Civil Engineering and his big break came when Henry Robertson asked for help getting permission to build a railway from Shrewsbury to Chester there was great opposition from other interests but Ben got the Bill through Parliament. This established his reputation and before you could say: - Llanfairpwllgwyngyllgogerychwyrndrobwlllantysiliogogoch he was obtaining acts for: -

Oswestry Ellsmere and Whitchurch Railway.

Oswestry & Newtown Railway.

Llanidloes & Newtown Railway.

Newtown and Machynlleth Railway.

The Welsh Coast Railways.

Aberdovey Barmouth and Pwllheli Railway.

The Vale of Clwyd Railway.

Cambrian Railway.

And **five other** Railways including the Red Valley Railway which I cannot locate.! Anybody know where it is or was?

These railways were built to take advantage of the Welsh rich mineral deposits. Another later reason was to satisfy the new habit of going by train on holiday to the sea especially to the West Wales coast from the Manchester and Midland areas. Important structures on these routes tested Benjamin's qualifications in Civil Engineering to their limit especially the Talerddig Trench, which was the largest and deepest cutting in the World at that time.

Those of you who have crossed the river at Barmouth will appreciate the ingenuity where large iron cylinders were sunk at predetermined positions, then filled with concrete. (No Ready-mix or Warecrete around it those days.) when the concrete had cured it was topped with a large iron lifting bridge to allow ships to enter the estuary. After over 170 years of use the 900-yard-long viaduct needed extensive repair to the wooden piles which had been attacked by boring worms.

It sounds like Piercy had just about solved Wales railway problems when his reputation had spread to of all places-- Sardinia. Sardinia has not much to do with sardines; the island it shaped a bit like a sardine tin but it is certainly not flat as a sardine tin in fact it is just the opposite and mountainous just like Wales and that is perhaps why Ben was selected. The Sardinian railway system was almost non-existent. A 'local' surveyor had had a go and dictated that almost two-hundred miles of tunnels would be needed to present a fairly efficient railway system. The scheme went to tender and no-one could complete at a reasonable price or give a completion time. This is where Piercy steps in.

In 1862 he resurveyed the route and came up with a requirement of only three miles of tunnels. His plan satisfied the Italian government and the pocket of the exchequer for time and money. So, he got the job; planned in two phases. The first phase was that of connecting the main centres of population and the docks



which he was going to build all in standard gauge. The second phase would be in Metre Gauge to facilitate travel from remote areas where the roads were almost impassable.

As well as solving the problems of building a railway over the mountains Benjamin set about revolutionising the agriculture of Sardinia. He purchased a farm and built a farm house rather like a square castle, built a village for forty workers and their families and set up a very modern farm with 'new' methods of breeding cattle sheep and fowl. He encouraged other farmers to do likewise.

Swamps were drained, arid regions planted with eucalyptus trees and totally reafforested. He must have come to the attention of Mr Giuseppe Garibaldi the father of modern Italy, because they became firm friends, probably it was the farming methods, the improvement of land and the enthusiasm with which he was teaching the folk in Sardinia that did it.



*Villa Piercy Sardinia*

Benjamin also befriended Garibaldi's son Ricciotti who became a pupil and together they went to Assam to build a railway to take coal from the Indian border to Chittagong and to remove rich oil-bearing shale. They had plans to extend the railway into Burma.

Italy honoured Ben with the Commendatore of the Crown of Italy (CC I.) on account of the skilful results that he had achieved in Sardinia both with the railways and with agriculture. With the CC I. came a financial reward which Piercy reinvested in Sardinia even so he still died a very wealthy man. Some members of his family still live and work in Sardinia. One comment from a report said that 'he had a good head for money'.

Piercy was also involved with over 600k of narrow-gauge railways at Vendee. Both areas are well visited today by the rail cognoscenti. They are kept running for that very purpose.



Mr Piercy returned to Wales and built Marchiel House where he laid out “one of the finest Cricket Grounds in the Kingdom”. He then set about the resuscitation of the railways of North Wales where he had been Engineer prior to his work in Sardinia. He reorganised many and planned to build extensions to take advantage of mineral deposits and solve their financial problems.

Unfortunately, Benjamin Piercy {CCofl. MA. Past Chairman of the Civils. and JP}. had a heart attack on 24<sup>th</sup> March 1888 from which he did not survive. So, the nation and the World lost a very sincere accomplished man who was pleasant and popular with it. He was buried in Kensal Green Cemetery where incidentally Isambard Kingdom Brunel is buried also, as is Freddie Mercury.

PS Benjamin Piercy's memorial appears to be defaced, but I have not visited it yet, does anyone know about it?

According to my research the railways of Sardinia and Vendee are kept running for the enjoyment of tourists but I can find no trace of them in concurrent literature. Anybody know? What about a NLSME trip out there?



*Marchwiell Hall. Piercy's retirement home*

16 bedrooms and ballroom and set in 150 acres, later bought by McAlpine.

The cricket pavilion was constructed to satisfy Piercy's love of cricket and is now used by the Wrexham Cricket club.



The house and grounds are now part of the hotel that specialises in lavish weddings.

## Visiting Locomotives remembered – Part 3

By Owen

Visiting locomotives are something of a tradition, one that goes back a great many years with the full-sized railways. In recent times the preservation scene has featured many, increasingly ambitious gala events with ten or more visitors as a draw for enthusiasts. In our own way model engineering is no exception to this tradition with many clubs and societies having gala days, weekends and rallies with modelers from other clubs encouraged to visit and bring with them their engines.

The North London club has been a little more conservative but nevertheless held invitation and theme days a few times most years. Hopefully this tradition will return following the lifting of the current social and travelling restrictions. Owen continues his journey through his extensive portfolio of some of the many visitors I have photographed at Colney Heath over the last twenty or so years.

One of the most numerous British locomotives were the War Department 2-8-0. 935 were built and 733 ended up in British Railways ownership in the 1940's.



A scruffy DubDee clanking through was once such a familiar sight they went almost un-noticed. Only one now remains and that was repatriated from Sweden after service there and in Holland.

There are plans for building these engines in 5" by Clarkson but I have only seen one at Colney Heath. That engine – in WD grey and named "The Royal Marines" – visited in 2017, though the driver needed a box to sit on and lean over the tender.



Whilst attention by model engineers is devoted to reproducing favourite prototypes to scale, there is also a tradition of building engines to their own designs, some great quantities such as Sweet Pea's and those kits produced by Polly.



Less of this type of engine tend to come to visit us, but one such loco has visited several times and always turns heads due to its small size but loud exhaust.

A regular passenger hauler from the Maidstone club this 0-6-0T called Duke of Windsor is a five-inch gauge tank engine similar to Eva Mae, but with Walschaerts valve gear.

A familiar sight on 16mm garden railways are models of Argyll and Atlantic, attractive 0-6-2T Barclay locomotives built in 1906 for the 2ft 3inch gauge Campbeltown and Machrihanish Light Railway in Kintyre Scotland.

In 2006 and 2007 a 3½ inch gauge model of Argyll visited from the Chingford club. However, the owner, being very keen to run several of locomotives in his collection, had arrived early on both occasions and by the time of my arrival on both days he had just finished running the loco.



But it was admired in the steaming bay in its ornate green livery – right down to green painted outside cranks.

The Caledonian Railway dock shunter immortalised by the Rob Roy design for 3 1/2" gauge needs little introduction.

However, it is unusual to find one scaled up to 7 1/4" gauge.

Such an engine was brought as one of the less frequent steam visitors to run on our ground level railway. Nick from the



Chingford Club had a very enjoyable run on August Bank Holiday 2016.

The last steam locomotive built for British Railways has always been a popular model in all scales.

A very fine scale 7 1/4" model of 9F Evening Star visited for the 2008 gala grand opening weekend and made it around the sharp curves of the GLR and returned in August 2014 to run over the improved layout.



Being able to resurrect long gone locomotives has always been of great pleasure to model engineers. A shining example of this has been Gresley P2 three cylinder 2-8-2. After trial of the prototypes only four others of the type were built with the same wedge-shaped streamlining as the A4 pacific.



Martin of Maidstone club built a 5" model of 2003 Lord President in 2001 and brought it to Tyttenhanger that summer and on several other occasions since so we might enjoy the sight and sound of what these engines had been and long before the full-sized new member of the class began to be built in Darlington – though to the styling of the prototype.



## Work in Progress from club members workshops.

With certain restrictions still in force, we continue to report on project's members are working on. In this issue we have just one contribution from Ron.

If you have a project or just a picture or two of your latest projects, please send them to the editor.

### A brace of donkey pumps

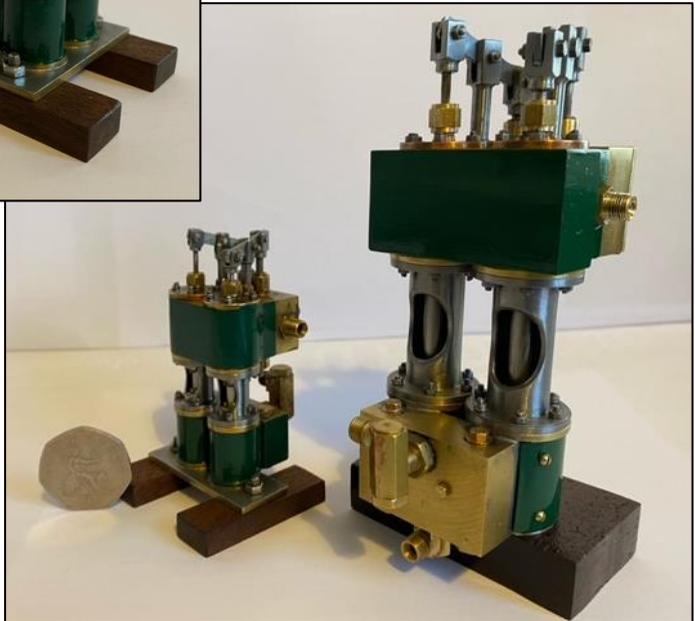
Ron built the smaller of these two engines to the LBSC design. As can be seen this is a very small pump measuring just 3 inches high.



Ron explained he decided to build the smaller of the two pumps to see just how reliable it might be.

The design for the second was also based on the same LBSC design but developed by Ron scaled up to twice original design and constructed with his usual speed and precision.

But just scaling up by just doubling every dimension for each component from the original drawings would not have worked said Ron. It was an interesting exercise amending the design to produce the larger working pump.



Consistent with the engines described last month no castings were used for either of these machines and it will be no surprise that both work very well.



## G.L.R. News May 2021

By Peter

At one hundred- and three-years old Guy has been clearing out some of his unused engineering items I guess making way for his latest project Canterbury Lamb!!! Derek kindly bought the items along to the track and as per Guy's instructions asked for a donation to be made to the club in exchange for any item that the boys took a fancy too. I spotted three precision G clamps that were marked in one thou increment's (collector's pieces one day) and a parallel motion for a small drawing board. Nice keep sakes even if they don't get much use. More to my liking Paul bought some metal numbers for the G.L. club carriages. These have now been fitted so we can easily identify each carriage for routine inspection and maintenance.

Since finishing the post and wire fence Brian and Michael have been wandering around looking for their next project and are homing in on the G.L. signals. Mike has taken home a damaged treadle for repairs. Watch this space as the crew would like to form a Signal Gang all they need is a leader. George has come up with an idea that we like and hopefully we will progress. We would greatly appreciate help from any member interested in such things as signals to join in with this group. But hurry limited spaces available.

Some of you at the track may have noticed that I am physically taking things a bit



easy as I am not yet fully fit for duty. This enforced rest has allowed me to concentrate on getting Maid Marian ready for her first official steam and hydraulic certification that I am pleased to say occurred on Thursday the nineteenth of May. Not the usual type of test undertaken at the club (large steel boiler) and the new Chief Boiler Tester George. With assistance from Ron all went very smoothly and satisfactory thank you both.

Twelve years ago, I built three of these steel boilers on site with Ron inspecting as I went with a test piece

produced to check for inclusions. Back to today, with the engine substantially complete and ready to run it took me a whole month to fettle the frame and body of the tender in preparation for the test. I cheated a bit and purchased the braked bogies from an up-and-coming supplier who I mentioned in last month's news sheet. From asking the availability of said items to delivery was three weeks, not bad service I would say. The bogies and body were married, twelve-volt pump and battery installed and tested on the seventeenth of May and connected to the loco ready for the big day nineteenth.



I can now put the mind of the person to rest who reported in a back issue of the Model Engineer (club chat) that my plastic gauge glass protectors may melt. After some eight hours of steaming Maid Marian her plastic gauge glass protectors have not melted and are fine and as good as I envisaged, they would be. Saving me a small amount in money and lots of time.

I can now start playing with all the toys I have built on the GLR that has been constructed with care and affection by a great team of steam and loco nuts!!



We have two new Derek's helping our working parties at the track now and very welcome they are too. Young Derek who said he was interested in the ground level activities found himself surrounded by a group of instant friends when he happened to say he did not mind a bit of shovelling. He was taken under the wing of Paul Jeffries and was shown how to drive Alban in-between ballasting the track. He hopes to build his own loco one day so a valuable member to cosset and have onboard.

As ever in the muck Peter - G.L.R. Section Leader

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## Bookworm Writes

Note from your editor;

I wish to apologise to the worm for the overuse of my editors scissors last month. I inadvertently cut the article in half. But it is good to see that it has not affected the worm's appetite for munching through even more paper. I will endeavour not to omit details of our bookworm's meals in future.

## Bookworm Writes - Railway Adventure part 2

Owing to circumstances beyond my control the second half of my book review last month did not appear. Of course, in the good old days of typewriters and paper, a stamp, the Post Office, a rosy cheeked young postman on his bicycle delivering copy to the door such things did not occur. I can do no better than to quote from my Law days (chewing through), *digitus tribulationis* probably sums it up.

I am however delighted now to be in a position to continue the tale and owing to the unexpected extra space afforded me to give you a little extra something too in the form of what I believe they call today, a Prequel – that's a *bit of back-story* in old speak.

Meanwhile the story continues: We left it in 1949 and just after the death of Sir Henry Haden Jones...

1950 and enter Mr Lionel Thomas Caswall Rolt – LTC to his friends - engineer and author who had a passion for railways, engineering and history. As modern history would eventually prove he was the right man at the right moment, for calling on friends and likeminded people he proposed to set up a railway preservation society to save and run the line. Here then was where all rail preservation began, this was the movement's 'Genesis' moment. Before these guys got together and formed the Tallylyn Railway Preservation Society nobody in England had ever done it – though I admit there is only a return to Towyn's ticket width between who actually was the first, them or the aforementioned line *up int' north*.

So now stage left, Mr Rolt's friend David Curwen enters the story, a mechanical engineer (and professional model engineer) with a passion for rummaging in the innards of steam engines, joined by juvenile lead John Snell wishing to fan the flames of a desire to drive a train and so along with friend Bill Trinder, Mr Rolt had the makings of a *dream team*. Armed then with much enthusiasm but only one working 80-year-old engine and with rolling stock in various stages of its return journey to nature, plus a renewed urgency of having rails that needed to be more 'permanent' than *just in the way*; our lads put their collective shoulders to the wheel, foot to the spade, hand to the spanner and attempted the impossible, to run trains to a scheduled timetable in 1951.

Away they went that first summer not even being put off by such trifles as when the water ran out or when the engine dumped its fire in a huff (should that be puff?) Or even when having to occasionally assist some of the services by hand – that's the shoulder to the wheel bit – nor even the time when an engine and latterly the carriages decided not to run on the rails but seemed more at home running on the sleepers, still they remained cheerfully determined.

**'But wait a minute!'** I shouldn't be telling you too much. It's the job of a reviewer to only whet the appetite of its readers.

I'll finish this review by just offering this very small *bon bouche* to further tempt you....

Such as the time in summer of 1949 when Tom Rolt and Bill Trinder visited the railway as paying passengers and having arrived at Abergynolwyn decided to have a look at the locomotive that had brought them up the line. Only to discover the youthful driver had 'taken it off' on a joyride along a redundant spur line that he wasn't sure was still there, but thought he would give it go and find out!.....Mind you *I could* just mention as to why there was a brace of bent 2. 1/2inch line-shafting in the repair shed apparently being the result of .....or how the defunct Corris railway helped - But I won't spoil it for you.

**Bookworms Verdict:** Even though all this happened 70 years ago it still tastes fresh and exciting today. If you put only one adventure book in your picnic hamper this summer, make it this one.

**Railway Adventure – L.T.C. Rolt ISBN 0-86299-367-9**

## Prequel - Landscape with Figures - Chapter 1 Review

A group of Manchester business men headed by the McConnel brothers bought the (then youthful) Bryn Eglwys slate quarry in Wales in 1863 from the Pugh family possibly believing that '*there maybe gold in them there hills*'. For in 1860 a seam of gold had been discovered by accident in the Clogau mine situated between Dolgelley and Barmouth. With plenty of money to speculate with they invested heavily in a steam operated railway to serve the quarry (first narrow-gauge steam

railway in the world); alas to no good end and they subsequently sold everything to (Sir) Henry Haden Jones.

The dashing hero of **Railway Adventure** Mr LTC Rolt had in fact first visited Wales in 1943 whilst enjoying a break from his wartime endeavours. Finding the Talyllyn railway at peace that day he ventured over to the Corris valley where he glimpsed loco No3 at work on the Corris valley railway, not then knowing that in but a few short years he would be responsible for not only the saving of the engine for the Talyllyn railway but most of the rolling stock as well.

Upon hearing the trumpet call from the Welsh valleys to come and save the Talyllyn '*our Tom*' consulted Mr David Curwen, engineer of Baydon Wiltshire considered then to be the guru of miniature railways as to what might be a financially viable way of keeping the line going. Re-gauging the poor but useable rail to 10.1/4" gauge and sourcing suitable locomotives was thought to be the way forward. However, at the first meeting of the embryo 'preservation society' held in Birmingham the feeling was that the proposed society stood its best chance to stir the blood of enthusiasts if the line was left as God and Parliament had created it, that being 2ft 3inch gauge.

Enthusing both the Executors of the late Sir H.H Jones and rail enthusiasts alike Mr Edward Thomas – an employee of the old Talyllyn railway, a man of many hats who had worked both man and boy for the line – then 70 years old became the star turn and persuaded all concerned to *give the lads a chance to prove themselves*.

Not moving quickly enough and carried aloft as if lifted by steam itself our hero (LTC) found himself then elevated to the General Managers position for the 1951 season. Here in a time before the term 'Human Resources' had even been thought of much less understood, he found himself grappling with the new phenomena of *steamus enthusiaticus* species *practicarlus* (sometimes) and friends of the railway who turned out to be less than, and the previously less than proving to be helpful friends.....tah! Members!!

**Bookworms Verdict:** This chapter is taken from LTC Rolt's third volume of his autobiography. Even though this review is only of the relevant chapter to our 'adventure' and is but a part of Mr Rolt's interesting and varied life, I confidently recommend the whole book to you for your delectation this summer.

### **Landscape with Figures – LTC Rolt ISBN 9780-75097-0181**

Ooh, I feel like a proper book reviewer, I wonder if the Model Engineer has any vacancies for one.....

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## Model Buildings –

By Geoff

In last month's news sheet, Paul provided us with various suggestions on where to build our first layout, dependent upon the space available. One of the ideas referred to was a layout within a box file, a concept that has been produced by Scalescenes.com.

I have been a fan of the products of Scalescenes for some time and have incorporated a number of their models within the N gauge layout I am building at home, which has seen much construction work undertaken during the lockdown. For those who are not familiar with this company, allow me first to explain their concept. Scalescenes are an online company and have developed a range of building kits relating to railways and towns scenes, all being British outline. These 'kits' comprise of 2 PDF files, a copy of which are purchased for a nominal sum, average £4.99 and, when completing the purchase, you are provided with a link to download and save the files to your computer. One file comprises a set of fully illustrated instructions whilst the other is the 'kit' itself. This is then printed off on 90gms paper and, in accordance with the instructions, mounted onto specified thickness card, which can be bought from hobby and craft shops or laminated to the required thickness using empty cereal boxes, cut out and assembled. Each kit provided the basis of one building, such as a pair of semi-detached houses. If you want more – no need to purchase a second kit, you simply hit the print button again and continue building as required; Scalescenes motto being – buy once, print as many times as required. The models are purchased in either OO or N gauge (both at the same price) but, you can rescale these up or down as required. I know that Paul has done so when he produced the factory building for the O gauge layout as HQ.

In addition to the actual kits, Scalescenes also provide materials for scratch building, these being sheets of brick work, roofing and hard ground in a range of styles and finishes – each available as an individual PDF file for as little as £2.99.

The following pictures provide some idea of the range and style of kits available.

The range of houses and shop actually comprise of 3 'kits' of houses and 1 corner shop and being in N gauge, to illustrate their size, this module is sitting on a A4 cutting board.

Not quite Coronation Street!



The Loco shed is made from two 'kits'-built end to end. For those interested, the locomotives on shed are a Class 17 'Clayton' diesel as produced last year by Bachmann under the EFE Railways label, LNER class J94 and J69 0-6-0 tanks both produced by Graham Farish.



Hopefully you will now have the incentive to start building your own model railway layout with lots of buildings all made with your own fair hand. Should you need assistance or further advise in producing such models, then please don't hesitate join us one Wednesday evening at HQ, as & when the lockdown permits, and we will be happy to share our knowledge of the small-scale construction.



A road overbridge, which includes all the girders and 'jack arches' on the underside.

The viaduct, which is built on a curve. This made it more complex to construct.





## Construction of 4472

By Peter

### The Crossheads and drop arms:

This article is difficult to fit in the newsletter as it takes up 8 blog entries with over 11,000 words but it's a subject that a lot of detail and which follows full size rather than the drawings. I have taken one picture from each blog entry to try and show the process so please forgive the gaps in construction.

A little background, research has shown that for 4472 during my era of 1938 the locomotive had the LNER 1934 pattern crosshead and drop arm fitted. This particular crosshead has an oil reservoir bolted to the outside of the slipper and an oil feed pipe that connects to the gudgeon pin below, a lovely bit of detail. I have to say thank you to Eddie Gibbons from Tyneside for his vast knowledge and many years of research in everything LNER.

I decided to make most of the crosshead from solid but have the slipper separate for future maintenance if required. This first picture shows the blanks roughly machined and the slipper sitting on top being held central by a spigot and slot method.

Main body material is black steel as recommended by Don on his drawings.

The slipper is gauge plate. As can be seen a start has been made on the slot for the con rod little end to sit in. As with most intricate shapes, I try to do most critical operations while still having a square shape to work from, final shaping being left till later



As well as trying to follow the prototype, I have also changed the design to suit what I think works best. One such change is in how the piston rod is secured in the crosshead. As drawn by Don the rod slides in the crosshead and is secured by a taper pin, others may go further and taper the rod as per full size.



I have taken a different approach to make setting up a lot easier and less reliant on criticality. The piston rods are 5/16 stainless steel, I have threaded those 5/16 BSF and drilled/tapped the crossheads to match.

The picture shows a grub screw being inserted to check fit. The plan is to screw the piston rod into the crosshead and check for position/clearance before screwing the grub screw up against it and finish by cross drilling and fitting a taper pin as per usual. The taper pin will be camouflaged to look like a cotter joint.



As can be seen here we have jumped a little, prior to this each blank was set in the 4 jaw and had its end boss turned and drilled/tapped 5/16 BSF.

I then made up some buttons and mandrel to hold each blank in the rotary table for the first stages of shaping.

This particular setup was just to give me a guide for removing the undercuts which involved going back to the 4 jaw and using a purpose ground tool. Details of this can be found in my blog.



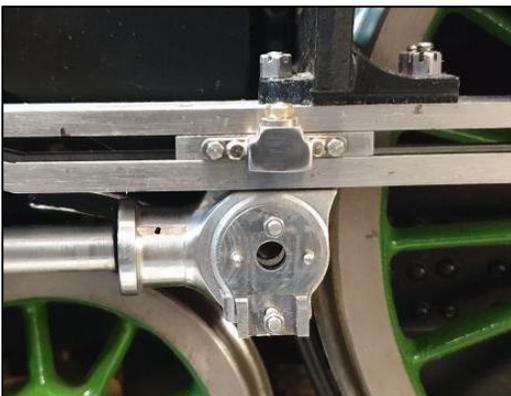
At this stage most of the machining has been completed, the stepped gudgeon pin holes have been cross drilled and counter sunk and the under cuts have been machined using the tool as mentioned above. After this picture there was a lot of hand work involved using a Dremel, files and sanding sponges.

Things are beginning to take shape now, here I am drilling the holes for bolts and dowel pins to secure the drop arm mounting plate to the crosshead.

Again, this is much different to what Don has drawn, IIRC Don's design is the pattern from 1947 which is the same as fitted to FS today.

Rather than the drop arm being bolted to the mounting plate, today it is welded permanently. For 1934 and earlier the mounting plate has two studs at 12 and 6 positions and two dowel pins at 9 and 3.

I found some lovely dowel pins of the correct size that are knurled one end giving a good solid fit into the crosshead, the studs are 8BA.



The picture (left) shows that a number of stages have now been completed.

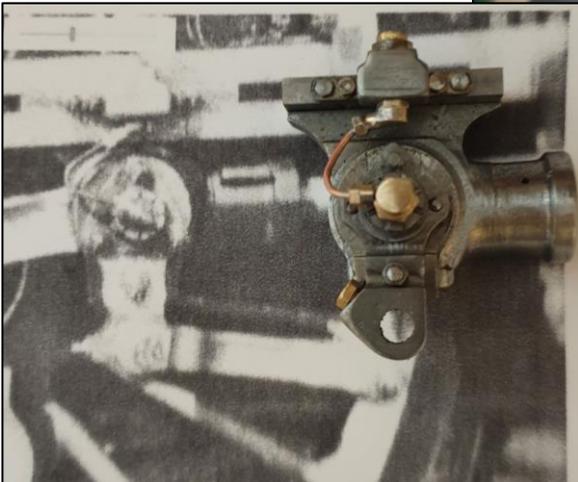
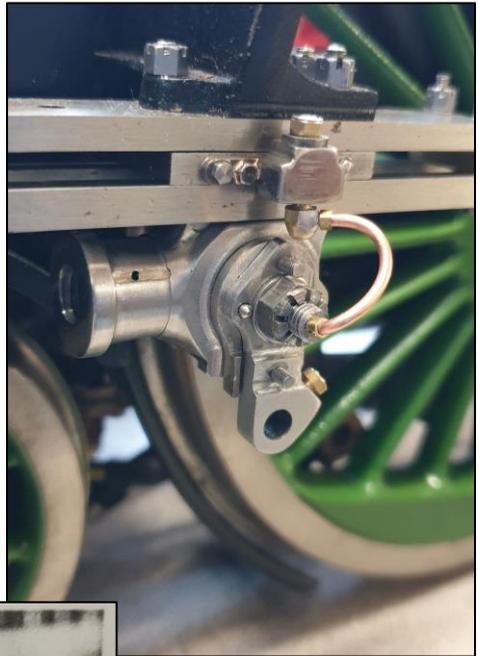
The crossheads have now been shaped and the drop arm mounting plate is fitted, note the two lugs

which the drop arm will sit between. Also in view is the oil reservoir which sits along the outside of the slipper. Later variants kept the reservoir but did away with the oil feed pipe which I'll show soon.

I believe that there was an angled hole drilled down through the crosshead to the gudgeon pin. A slot has been machined at a 30-degree angle for the dummy cotter pin to fit later, a hole has been drilled at the smaller end size of the taper pin but not all the way through to the other side, I'll complete this once the rod is fitted, in this picture the piston rod is still over length.

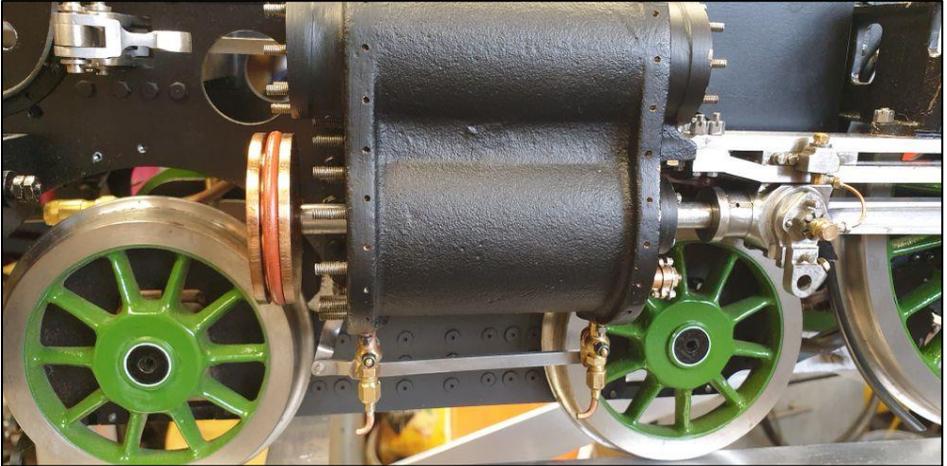
I have included this close up but I later changed the pipework having found a better image to go from. Also, here the oil pipe is larger than scale and thus needed to be changed but I also needed to ensure that oil would still go through it under gravity only.

Note: there is a video on my blog showing this system working. This picture does though give a good idea of what's what and clearly shows the drop arm and castellated nut which was later drilled for a pin. I should also point out that the slippers have been drilled and have oil ways scalloped into them for both top and bottom surfaces to ensure a good layer of oil is maintained.



I have included this picture to show one of the reference photos used to get an idea of how the oil pipe sits. Note that we now have a true scale pipe, IIRC this is 0.5 mm OD and 0.3 mm ID. This pipe was tested using gear oil and timed for flow, it took 3 minutes for the oil to flow through the pipe when empty which for me seems good.

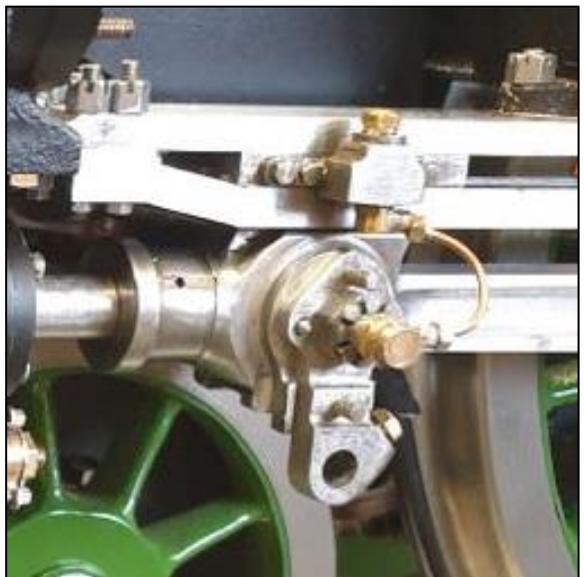
Something to point out here, the picture is of a V2 which had the same crossheads fitted, the drop arm though is slightly different as in stead of using a gravity fed oil system for the union link the V2 had a grease nipple system. Also note that I have made a union to fit the gudgeon pin that follows the prototype although not fully as I needed to think about practicalities. The pipe itself is a push in fit at the pin end, so to remove, it's just pulled back a little and then the union can be unscrewed from the gudgeon pin followed by the nut for maintenance. The pipe is sprung so it won't come out on its own accord.



The last two pictures are included just to give an overall view of how things are progressing. Here the piston rods are being checked to see how much needs to be removed before final fitting.

As I speak all pistons are now fitted and the wheels still turn!

I'll try to find something a little shorter for the next article...



## And Finally – Inside a boiler

By Gregory

The other day we were chatting down the track about boilers and fire boxes. Some of my colleagues had been into a firebox, obviously when it was not alight! I once got into a boiler, albeit a very large ships boiler and thought I would recount the experience.

I started my working career in Horticulture; after spending a year as a full-time student at the Oaklands horticultural college in St Albans I went to work at a nursery in Kettle Green, Much Hadham. They had recently purchased a second-hand boiler from a Thames tug. However, it was very inefficient and Kings of Nazeing were called in to have a look.

The tug would have taken up water from the Thames and sea and this meant that the pipes over the years had built up a layer of crud around them. The answer was to fill the water jacket up with acid and pump the acid around the pipes. Once done, and it took about a fortnight, the whole lot was drained and washed out.

In the top of the boiler was a hatch, when opened a man could just about get in and chip all this crud off of the pipes. This was the job of the boiler man, his name was Stan and he was a very knowledgeable and an all-round lovely chap. I was a lot thinner and agile then and went in there once to see what it was like. The biggest problem being that every now and again water would drip on the light bulb and plunge the place into darkness. The crud was quite hard, brown and black in colour, it was thought the black was salt from the sea water. Poor old Stan would come out of there coloured brown with just the whites of his eyes showing – you can imagine the insults and banter being thrown about!

Here my memory gets sketchy, but I am sure the boiler was fed by 1092 sec oil. This came as a very thick oil, stored in an insulated tank. 1092 sec means that a given amount of oil is warmed to 40 degrees, then passed through a given size hole. The time taken for it to pass through the hole is counted in seconds.

The oil is fed through a heater and then burnt by the burner. The burner is lower down the front of the boiler, and when firing you cannot see the flame it's that fierce. This was a three-pass boiler, heat from the burner would go to the back of the boiler where it was deflected through the pipes back to the front of the boiler and then deflected back to the rear of the boiler and the gases would then go up the chimney.

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## Dates for your Diary

### 3.5" Gauge Running Day on Saturday 11<sup>th</sup> September;

Following council approval, the 3.5" gauge running day will return this year. On that day the raised track will be for the exclusive use of 3.5" gauge locomotives from 9:00 till 17:00, be it steam or electric. We had 10 locomotives out on track the last time we ran this event in 2019 so I want to try and better that number this year as I hear we have some new members with suitably gauged locomotive. So, for now pencil the 11th of September in your diary and start preparing that loco. If you require any further information contact Martin.

The current government restrictions resulting from the COV-19 virus has resulted in all NLSME organised events other than those listed in the news sheet being cancelled until further notice.

<b>June</b>		<b>2021</b>
Tue 1 <sup>st</sup> June		Council meeting to be held on-line at 14.30 (see note below)
Sun 6 <sup>th</sup> June		Boiler testing available at Colney Heath 10am to 4pm (see chairman's comments page for details)
Sat 26 <sup>th</sup> June		Birthday party – Peter F. – Colney Heath
<b>July</b>		
Fri 2 <sup>nd</sup> July		BBQ at Colney Heath starting 6.30pm. An indication of the numbers who are planning to come would help the caterers ordering.
Tue 6 <sup>th</sup> July		Council meeting to be held at 14.30 (see note below)
<b>August</b>		
Tue 3 <sup>rd</sup> Aug		Council meeting to be held at 14.30 (see note below)
Sat 7 <sup>th</sup> Aug		Brean visit to Colney Heath. Sponsor George
Sat 14 <sup>th</sup> Aug		Birthday party – Les B. – Colney Heath

The current Government Covid-19 restrictions have resulted in Council having to hold the June meeting via an on-line platform (ZOOM).

A Non-council member, representing a section or committee, can, on request to the Secretary, attend the council Zoom meetings as an observer or to submit proposals as set out in the club's constitution. If attendance is agreed then the relevant links and passwords will be issued to the member(s) concerned.

Meetings held on line via Zoom is a temporary arrangement. Face-to-face meetings will hopefully resume in July once government restrictions allow.

Reading Society of Model Engineers



Southern Federation of Model Engineering Societies Rally



Saturday 18<sup>th</sup> September 2021

The Reading Society of Model Engineers is pleased to invite you and your members to attend the SFMES rally to be hosted by the RSME on Saturday 18<sup>th</sup> September 2021, subject to any restrictions that may apply.

Our railway consists of 1100ft of 5", 3½" and 2 ½" raised track and 1350ft of 5" and 7 1/4" ground level track in the grounds of Prospect Park Reading. **(A current boiler and insurance certificate will be required).**

All types of locos are welcome.

A limited number of driving trolleys are available.

Refreshments on the day to include lunch.

Camping and car parking available on site.

The Australian Association award will be made at the rally

A presentation will be made to the visitor who travelled the furthest and ran their Locomotive or Traction Engine at the Rally

Our address is



The Reading Society of Model Engineers

82 Bath Road  
Reading  
Berkshire  
RG30 2BE



If using the what3words app entrance to our site can be found using

actor.monks.stove

Finally, if you could let us know approximate number of members that would like to visit us so that catering can be organised it would be appreciated.

If you require more information contact Peter Harrison on 07920 833546

or email [pjharrison31@btinternet.com](mailto:pjharrison31@btinternet.com)