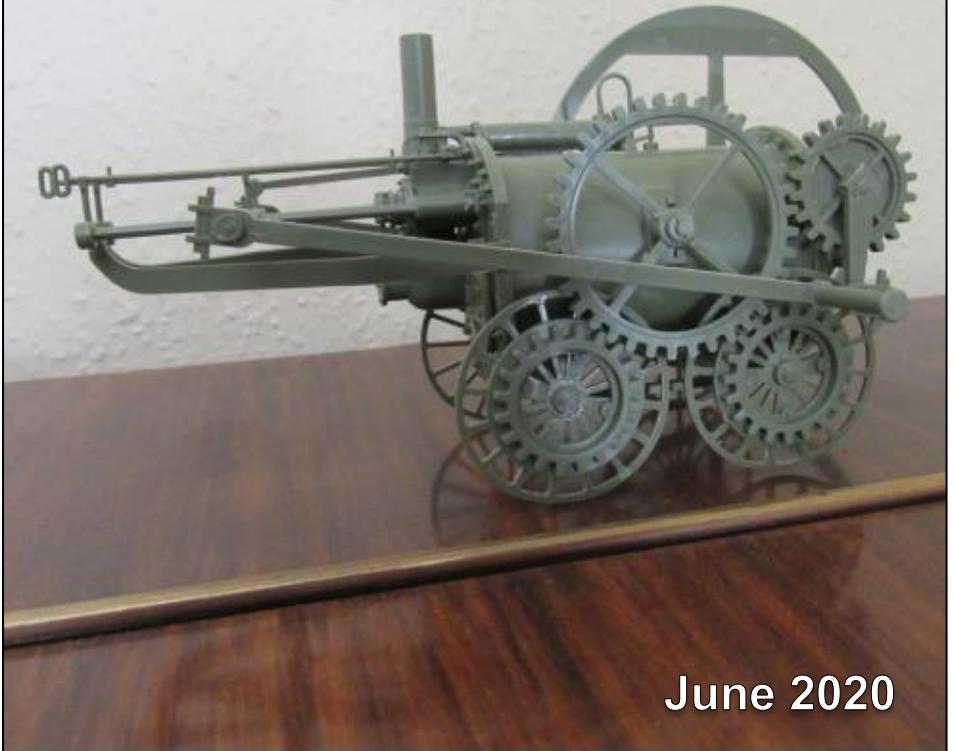


Issue No. 823

June 2020

# The News Sheet

North London Society  
of Model Engineers



June 2020

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

With the continuing restrictions on our movements we have for a second month added a few extra pages. Your editor is most grateful to those who have contributed. Even by increasing the number of pages I still haven't been able to include everything so some contributions will be published in the July edition. In this issue Mike gives us part 2 of the story which resulted the coach getting to Tyttenhanger. My sincere thanks to all those who have contributed. More contributions are always welcome. Usual fee will be paid.

## Contents

COVID-19 Notice to members	Page 3
Chairman's Comments	Page 4
Chairman's AGM report	Page 5
Treasurers Report	Page 7
Work in progress	Page 8
Recycled Ride -On	Page 8
Gresley V2	Page 10
New Raised track carriages	Page 11
A rolling road	Page 13
4mm scale coach building	Page 14
Narrow Gauge Garden Railway	Page 16
Fetes and Fairs section	Page 18
G.L.R. News (Tyttenhanger Light Railway)	Page 19
A Coach for Tyttenhanger – Part 2	Page 22
Bookworm writes	Page 28
Gauge 1 report – June	Page 30
The London to Birmingham Rly – Ch 2	Page 33
Book Review	Page 36
Grounds Maintenance	Page 38
Dates for your diary	Page 39
Contacts list	Page 40

### Front cover photo

An Airfix kit bought long ago of Trevithick's locomotive has now finally been built by John D (G1 group). It will be put to good use as a wagon load.



## **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.

Please refer to Chairman's comments on page 4 and note the following restrictions currently apply to our activities.

### **Head Quarters**

All meetings at HQ are cancelled until further notice.

### **Tyttenhanger**

All activities and functions are cancelled. The site is off limits to members until such time as Affinity Water accept our risk management plan.

On acceptance of the plan members will be advised of new interim rules consistent with UK government guidelines.

### **Fetes and Fairs**

Fetes and Fairs activities are dependent on the host organisation continuing with the event. At present all events have been cancelled.

## Chairman’s Comments



At time of writing the government has relaxed the lockdown a little but unfortunately, we cannot yet restart activities at Tyttenhanger.

Affinity Water have made it clear that we must prepare a risk assessment for their review prior to any presence re commencing on site.

This news came to us on Friday 15<sup>th</sup> May. Accordingly, I sent all members (that allow their email addresses to be available) on same day, an urgent message that I repeat below for the benefit of those that did not receive or have forgotten it.

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*Dear member,*

***Be advised our Colney Heath site (Tyttenhanger) remains closed.***

*Today Affinity Water advised they require a CV-19 related risk assessment or appropriate rules for their review. (In case you are not aware we have use of the site under licence from Affinity Water). NLSME council are now working on these rules which we hope to issue next week. In the meantime, DO NOT JEOPARDISE our position by visiting the site.*

*For your information, Affinity Water are having problems with users of their sites, sports clubs, fisheries etc. who must also provide risk assessments/rules before any activity resumes regardless of the present UK government guidelines.*

*Let’s not become another problem for Affinity Water.*

*So, stay away until advised otherwise.*

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Representatives from council and TSC are preparing the necessary risk assessment from which a set of rules will be prepared for members to follow. These will be for members benefit only, public will not be allowed on site for the foreseeable future.

At HQ we have a different issue in so far as London Borough of Barnet have not intervened and therefore Government guidelines only are applicable. HQ section leaders are reviewing how their activities, which of course are all indoors, can be safely reintroduced. This I might say is a different and difficult task.

Rest assured your council are as keen as anyone to get back to HQ and Tyttenhanger and are actively working to achieve this. You will be formally

informed either through email, this news sheet or postal bulletin if necessary. In return we ask and expect you to abide by whatever restrictions and rules inevitably apply. In the meantime, if you have any queries raise them with your section leader or any member of council. There is no need for rumours or scare mongering. If in doubt, or concerned please ask!

Keep well and healthy, see you at track or HQ, CV 19 permitting

Les B

Chairman

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## Chairman's Report for 2019

*The NLSME Annual General Meeting which was due to take place in May was cancelled. The chairman's report which would have been presented at the AGM is published below.*

We finished the year in markedly different situation to the one prevailing when we entered it. Nothing has previously impacted our activities quite like COVID-19, but more of that later

As with 2018 the year may be summarised as one of consolidation with no new projects started, progression of existing ones and, most importantly, time spent using the facilities we have created. An exception to this was the substantial repair and refurbishment of the HQ meeting room.

We have again been fortunate to have all our official and leaders' positions filled, though a vacancy for exists for raised track section leader. I should like to remind you that the society requires the fulfilment of 58 positions so to have 57 of them in place is a remarkable achievement. The club cannot function without the input of time, expertise and care from our members. I extend thanks to those undertaking these roles which contribute so much to the wellbeing of the NLSME.

### **Events**

The society had a busy calendar with various sections attending external events and hosting visitors to our own facilities. At Tyttenhanger we hosted Barnet Beaver Scouts, a visit from the Samuel Ryder School and visits from Fareham Model Engineering Society. Three toy boat regattas were held and the G1 section hosted visits from the West Kent and East Anglian Gauge 1 groups. We held an invitation day for owners of 3.5 and 5-inch gauge locomotives and held our own 3.5 inch only locomotive day. Tyttenhanger witnessed five members birthday parties, the Bob Todd memorial rally and 12 public running days. Fetes and Fairs attended 16 events covering 23 operating days. HO, OO and gauge O sections did not attend any exhibitions but regular running on the OO, HO and O railways

is increasing. Slot cars held a successful race day which raised a three-figure sum for the society's coffers.

Events included the most enjoyable 75<sup>th</sup> anniversary day at Tyttenhanger. This was less grand affair than previous celebrations but nonetheless was a successful day. It was most pleasing to see many members some of whom had travelled a considerable distance to be with us. Of course, this included locomotives we have not seen at our track for some time.

### **Section activities at Tyttenhanger**

The Narrow-Gauge railway continues to develop and enthrall, providing a most interesting diversion for visitors to watch whilst queuing for rides on the raised track. Gauge 1 section continue with very well attended Wednesday running and manning the coach serving teas on public running days. Marine section has operated the pond successfully throughout the year. The RT section whilst leaderless had busy running season and has undertaken winter maintenance replacing three main support sleepers, re-gauging where necessary, correcting alignments of rail joints and replacing many corroded fishplates. The ground level section has enclosed the running shed making it a much more attractive feature, upgraded the turntable and commenced re ballasting the track bed. The never flagging grounds maintenance team continue with the eternal task of keeping the site in good condition for us all.

### **Section activities at HQ**

HQ sections have been busy with regular Wednesday attendances at OO, HO and Gauge O railways supplemented by slot cars who also now gather on Wednesdays.

The gauge O section continue reconfiguring the layout to incorporate a gas works scene together with other scenic detailing. OO section continue with developing a new yard. HO section has upgraded the Woodside depot, Mason yard and Baldwin sidings, subject of a comprehensive report in the May issue. Workshop nights during the winter months continue as do the general meetings on first Friday of every month. We have been fortunate this year to have interesting speakers from within our ranks.

### **Infrastructure.**

Our HQ building meeting room has been refurbished and the library moved to more suitable location. At Tyttenhanger the machine shop is ready for use and we are at present resolving controlled access to it. This has been disrupted by the COVID-19 virus but will be addressed in the forthcoming year. I would remind members that this is a machine shop - it is not a general workshop. A workshop, space number six between the containers, will be available for general use.

### **Conclusion**

The COVID – 19 put a temporary stop to all our activities. Even access to Tyttenhanger on an individual basis had to be stopped until such time as Affinity

Water were satisfied, we were following HM Government guidelines for health and safety during the wretched pandemic. One can only hope that members being the resourceful persons you are have put the time to good use and continued modelling activities at home.

As my opening comments refer, I am appreciative of the work performed by the membership which enables us all mutually to enjoy the facilities at our disposal and end with a thank you to all members for ensuring our mutual enjoyment of the NLSME.

## Treasurer's Report

A thank you to all those who have paid their subscriptions despite the problems caused by Covid-19. I finally managed to get to the bank on the 11th May and paid in six lots of banking slips dating back to the 8th April. So your cheques should be clearing your bank accounts now. This time last year I only had 56 subs overdue, but this year I still have 68 member who have yet to pay. I am aware of some members who pay in cash and I don't expect to receive them for a while yet, but an indication that you are paying in cash would be appreciated.



I will hold off listing the Post Codes of those still outstanding until next month. Keep safe in the meantime and see you when we are allowed to meet again.

**Mike F**

**Hon. Treasurer**

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## Forthcoming General Meetings

General Meetings at our Legion Way Headquarters in North Finchley

**Friday June. 5<sup>th</sup>. First Aid at Colney Heath.**

Meeting CANCELLED

**Friday July 3<sup>rd</sup>. BBQ at Colney Heath.**

This meeting is at present CANCELLED

Update next month if circumstances change

Any questions please ring, Ian J

## Work in Progress from club members workshops.

With the current restrictions in place we thought it a good idea to find out what project's members are filling all this enforced spare time with. So, we asked and several have responded. In this issue we have contributions from George Cato, Mike Foreman, Les Brimson, Keith Hughes and Paul Godwin.

We would like to make this virtual work in progress section a regular feature over the coming months. So, if you have something of interest whether it be a boat, slot car, plane, railway (all sizes) or any other project which would be of interest please let your editor know. We will even offer to put the words around your photo's if that would help.

### The Recycled Ride-on or (The Dolly Trolley)

By George C

Having taking a fancy to the ground level railway and the welcome of these boys showed me, I looked to find a loco that was useful to my needs. A loco came to mind that I had seen in a magazine that I could get from my home to the track and also could be driven by grandson. So, I made my order and awaited several weeks for this loco to be made and this arrived in the week before Xmas.



*Photo courtesy of Ride on Railways*

On the meeting of the lads at New Year's Day I took this battery loco up to Colney Heath for a run with my family. The loco is made by Ride on Railways of Romford and is called Dolly in their catalogue. Its 24 volts on two axles and has a seat that fits two. A club passenger carriage was coupled up and off we went joyfully around the track this included my grandson Freddy driving all was ok.

On later runs in January with somewhat larger people on board (they will remain nameless) I found that Dolly struggled on the inclines in the new lands. So, I thought of making a carriage that was half the length of the clubs carriages to reduce the weight on the loco. An order was placed with our friend in Macclesfield for axle and wheel steel.

I drive for living and everywhere I go I see abandoned road signs. Some are supported by angle and others 25mm square steel. I owned a Mini years ago and remembered that they had front and rear subframes which gave me the idea of using the 25 mm square to make a subframe to fit the 5-inch wheel sets. I then had to work out how to fit the axles to this subframes. A lot of 7 ¼ inch carriages have UCT bearing housings so I ordered four of these from eBay for my axles. then I used 12mm square section steel to allow the UCT housings to slide up and

down in the sub frame all good so far. Then came the problem how to spring these two axles. I had looked at garden gate return springs before and decided to take a chance and try. I cut 4 springs from these and flattened the raw ends to make them sit flat in the UCT housings and the top of the subframes. I also had to drill the UCT housings out to 19mm to fit the adapted springs, So far so good.

Now Covid-19 stuck and for my wife's safety who has had pneumonia several times over the years, we both isolated. This then gave me all the time in the world to do what I want as long as I don't leave the house. I have always seen a use in many things my kids throw out and one of these was the bed from my granddaughter Gracie. This was a MDF head and toe board and side rails of pine all white in colour now as all the wood yards are closed for the duration , I looked at what I had around the workroom and garden to make the seat structure and had the idea to use the bed head and toe boards for the sides and the bed pine sides for the foot rest boards .That left with the problem of the end boards for the carriage to find This was solved by using an offcut of shuttering ply found in a skip. My intention was to make the new carriage fairly square in design and allow the 2 subframes to fit inside. But I made a mistake in my design, the subframes were too wide to fit inside the seat bit. I should have worked this out on a rough drawing first.

Time for a cup of tea, reflect and hey-presto out comes a great solution. Angle the sides by 5 degrees to give the necessary space for the sub frames to go inside the seat. All I needed to do was cut some battens at 5 degrees to provide a flat surface to sit the subframes inside the seat. I cut the shuttering ply as two



rectangles front and back and fitted it with some old dexion angle, but I did not like the way this was looking, it was too box like. So, I angled the sides 5 degrees. and sanded the ply ready for painting. The result wasn't very good so tried a different approach with some old beechwood cupboard doors which I cut to the thickness of the ply. I then machined a tongue and groove joint, applied adhesive and clamped the lot up. The finished appearance with a coat of acrylic paint was much better.

The final job is the seat. I have the foam but as I write this, I cannot find the fabric vinyl needed for the cover. But this will show up when I not looking for it.

The only items I have paid for was some of the steel and the UCT bearings.

However, the main belt on my Boxford lathe started slipping when turning the 5-inch wheels so I had to order a new segmented belt on eBay. But this stretched over the following 3 days of use. I had to take out a link and then try turning again then another link and another.

I have not been able to try this Dolly trolley yet as the track is closed at the moment because of Covid 19 but I cannot wait for when it opens, I will be straight up there.

Cheers for now George

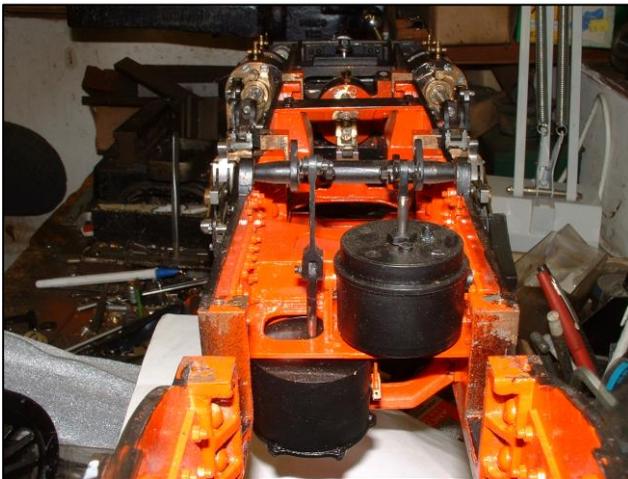
## Gresley V2

By Mike F

I first got interested in Model Engineering in 1957/8, my school was fortunate enough to have a 3 1/2" gauge ground level miniature railway outside the metalwork shop. This was at about the same time that I started train spotting, mainly in the first place at New Barnet station on the GN Mainline.

Whilst I have always had a high regard for the work and designs of LBSC, I have always preferred to model prototype locos. Hence in 1960/1, I started building Martin Evans 'Rob Roy', a Caledonian 498 class dock tank. This with interruptions was finally completed in 1975 and I was looking for the next project. The Chairman of the Barnet Model Railway club was a great friend of the late Harry Clarkson of York and I visited his works in York and decided that a 3 1/2" Gresley V2 was to be my next loco.

A set of H P Jackson drawings were purchased, followed by a lot of castings, which from memory cost me £35. The design was a start, but some of the details were not to my liking, I wanted piston valves for a start. A full-size General



Arrangement drawing was obtained, at which point any ideas of building the model quickly evaporated rapidly. Spin the clock forward 44 years to February 2020 and I have a loco and tender ready to run, but still awaiting a cab and footplates.

Enter Covid-19 to put a spanner in the works, but not deterred I modified my Rob Roy

rolling road and set about steaming her for the first time on the 2nd April. Fairly successful but usual bugs to resolve, the worst being that neither injector would work at all. These are brand new injectors from Polly and after trying them twice

more I am no nearer success.

The next step is to put the injectors off my 5" V3, which worked last week, onto the V2 and try again.

As a cross check I will put the Polly injectors onto the V3 to test them again.

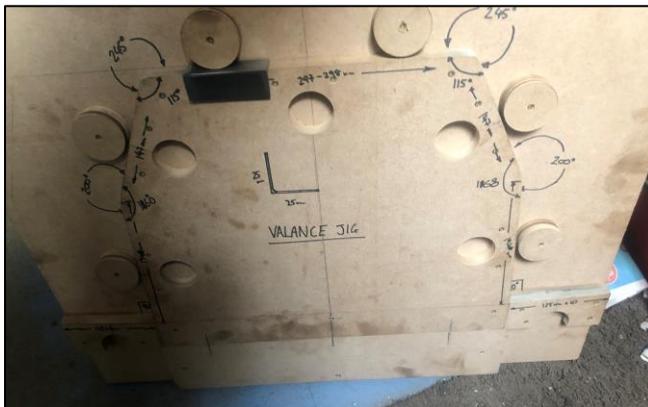
What have I

learnt? I'm not an engineer for one thing, but building the tender first was the best way forward, as mistakes are not so critical and when the loco is finished you are ready to go and enjoy.

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New Raised track carriages

By Les B

A lot of work has been done so far and it's all coming together. Once the majority of machining has been completed the next task will be to concentrate on getting one carriage working and tested.



A jig has been made to help form/weld the valance end sections to the specification we gave but has since been altered to allow them to be made longer. The plan is for one "longer" end section to be made which can be attached to one of our existing carriages once the site reopens. It can then be

pushed around the track to check the clearance before making the others, just in case there's a problem.

As per our request provision has now been made for a brake lever at both ends of the carriages with a quick release lever. We have requested the contractor



consider how the braking on the new carriages can be improved the first proposal was for a solution utilizing a caliper from a quad bike, but the idea didn't get our vote.

So, the current proposed solution that is very similar to the original, and as soon as

it's possible we will be visiting the contractor's workshop to see a trial fabrication for us to approve. The brake pads have now been sent off to a specialist contractor to cut them to size.

To summarize the work so far;

- Main chassis frames are all welded.
- Bogie frame sides - waterjet cut and drilled (160 holes to be tapped).
- Axles & disc brakes made and assembled.
- Wheels made - one carriage set fitted to axles.
- Brake compensator units made.
- Brake rods partially made (no picture).
- Bogie pivot plates made.
- Buffers made.
- Axle boxes partially machined (bearings arrived yesterday but waiting on springs).
- Axle box front plates made.
- Axle box retaining plates - cut, awaiting drilling.
- Various small fittings and components made.
- The seat bases are made and upholstered.

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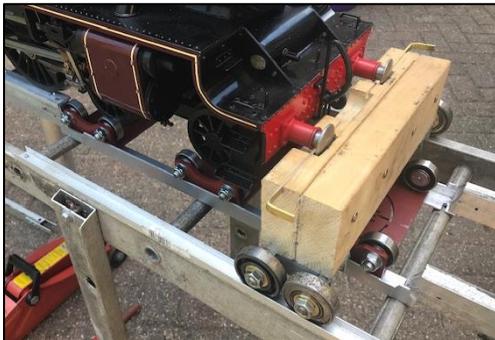
## A rolling road

By Keith H

I have just completed the repair and rebuild of a friend's locomotive and now need to get it in steam to check all is well. I need a rolling road but have been putting off fabricating one with the excuse; I don't have the bits necessary. Now the job of news sheet editor allows me to see articles a couple of weeks before publication. The article by George C in this month's edition challenged me to look around and recycle what was already in the garage. The result is shown in the following photos. The only things purchased (but not my me) were the actual rollers which I had been given as a birthday present earlier in the year. The ladder is bolted to a wall at one end and supported by axle stands at the other. With the interim support legs this provides a stable structure.



The real challenge was to work out how to get the loco positioned over the rollers without any manual lifting. As can be seen in the photos with a couple of bits of timber and some roller bearings for wheels I cobbled together a gadget to support the loco as it is moved into position over the rollers.



A trolley jack being used to lift the loco about 10mm to get the loco on and off the wood block. The two bits of brass you can see in the picture slide behind the buffers to prevent the loco slipping off the

block as it is moved. A piece of U section channel guides the wheels of the block along the edge of the ladder. For occasional use this arrangement seems to work

ok. But if I just need section of track to place the loco on for general maintenance and cleaning after a run. The rollers are easily removed and replaced with the rails you can see on the ground in the first picture.

It's amazing what can be achieved with a ladder, a few bits of aluminum sections and some bearings which had been in a drawer for many years. And of course, it goes without saying a few errors on the way, tea breaks and plenty of thinking time. The whole lot comes apart and as it is all aluminum with a mixture of galvanized and stainless-steel bolts it can be stored behind my shed without fear of corrosion.



Just in case you were wondering the loco gets moved around on an adapted hydraulic lifting table which is essential with my back. The next challenge is to steam up the loco to check all is well. Fingers crossed.

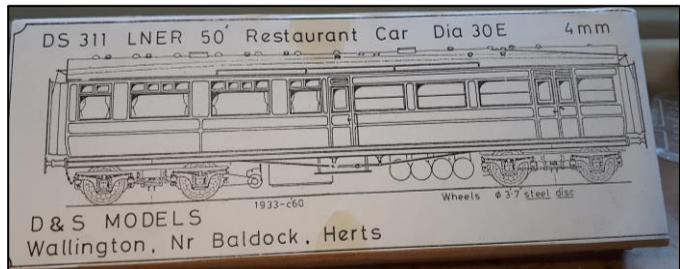
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## 4mm scale coach building

By Paul G

Modelling the GER section of British Railways in 4mm scale cannot be truly accomplished using only ready to run models, of which there are several splendid examples these days. So, a significant part of my modelling is scratch-building, assembling kits or "bashing" which is short for making something out of something else.

In this example I have unearthed an etched brass kit of an ex GER



Restaurant car. It has languished untouched in my "to do" draw for over a decade. This will eventually be finished in the two – tone "Blood and Custard"

livery used by BR in the 1950's. These particular carriages survived in traffic until quite late in the 1950's. This kit was incomplete when I acquired it – both in the etchings and the instructions. However, with a bit of effort in fabrication and knowledge in how it all goes together, it is forming nicely into a completed model. It is essentially built as 4 main sub-assemblies that bolt together – the body, the chassis and two bogies.

Here are illustrations of the box, the body (nearly 30 individual components so far) and the frames (about 20 components so far). Assembly is by soft soldering



for which I use 3 different solders of various temperatures with fluxes to match. The trick to the soldering is to keep a very clean iron tip (not easy with the aggressive fluxes) and very clean components. It also helps to have various cunning methods to hold components in place when applying heat – especially the tiny pieces which have a habit of trying to stick to the tip of the iron rather than stay on the model. Fingers are useless (they burn) but

aluminium hair clips are very handy in this context. I sometimes wish I had three arms too!

The last picture shows a different coach from the same range of kits. This, together with a partner coach, were completed over 2 decades ago. These are both finished in a drab brown used on former mainline stock retired to rural lines.



A key feature of the build of these and my restaurant car is fully compensated running gear which works on the “three-point suspension” principle meaning that all wheels are on the rails at all times.

Happy days.



## Narrow Gauge Garden Railway

By John

Even though there is still no activity taking place at Colney heath I thought that I really couldn't use that as an excuse to go rambling off on other subjects non narrow gauge related again. Your esteemed editor has been twisting my arm to write something world war 1 related, of course this is a massive subject to consider, so I thought I might focus on one aspect and that is on something which has always intrigued me, the Simplex "Tin Turtle" locomotive. In fact, our member Laurie runs a fabulous 5" gauge one

on our own railway, which always turns heads especially when operating the klaxon! (See photo on page 12 November 2019 edition)

Built by the Motor Rail Company who originated in Eastbourne they developed a gearbox suitable for motor trams in 1911 but very soon moved to Lewes and renting space in the Phoenix foundry they created a narrow-gauge loco using their own gear box and a twin cylinder Dorman engine. In 1916 the call went out from the war department who were looking for a 2-foot gauge loco that could haul 15 tons at 5 mph with an axle loading of no more than 1 ton. So, using the knowledge and engineering capacity they had a 20 HP loco was built for



evaluation again using their own gearbox and a Dorman engine, this received War Department approval so a small order was placed and they were soon in use in France. Here they proved to be very successful so a significant order was placed and this led to them moving to Bedford in 1916.

Soon they had developed their next version this used an improved 40HP Dorman engine and a 2-speed gearbox and it came in 3 versions the "open" this had armoured end plates with a canopy on adjustable pillars. The "protected" which was the same as the open but had armoured side doors and visors. And finally,

the “armoured” this was completely enclosed in armour plate including roof with just slits for the driver to peer through....it must have been hell to drive!



2

The company supplied over 900 locos to the WD and I'm sure their contribution to the war effort cannot be overestimated. Post war they found many uses back in Blighty and indeed to this day they are the most common make of narrow-gauge loco found in the UK.

Motor rail continued as a company producing mainly narrow-gauge vehicles with the odd excursion into light

standard gauge inspection cars for example. Interestingly enough the trade name “Simplex” had been used by them since 1915 but was only registered as such in 1953. They carried on until 1987 when the business was sold to Alan Keef of Ross-on-Wye who continue to build and supply spares for the locos which now have a design well over 100 years old.... not bad at all!



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Photo 1 shows an armoured “open” cab loco and Photo 2 a fully enclosed armoured type. Photo 3 of a simplex is thought to be one of the earliest photos of one in action, and it shows one of the early 20HP locos used for evaluation.

Photo 1 is courtesy of Google images and photo 2 by our member Jim Almey who took it at a WW1 event at Leighton Buzzard.

It was extremely sad to read in the last newsletter of the loss of John Secchi one of our slot car members to this awful virus, my condolences and sympathy to his family and friends. And to our members who have contracted the virus may I offer my hope that you continue to recover and regain full health. I'm sure we will be back playing trains, boats etc very soon.

## Fetes and Fairs Section.

By Jim M



For the first time in many years I have no excuse for not going to the workshop.

All Fetes and Fairs so far have been cancelled and due to social distancing, it is unlikely we will be able to give rides any time soon. Maintenance is also a problem as our locos are stored at the track and being over seventy, I would be breaking the law by leaving our home to go to the Colney Heath, not recommended for anyone.

However, it's not all bad news, I've discovered Zoom a web system allowing me to keep in touch with the family. Alistair, who lives in Newcastle has now recovered from the virus and Simon has been moved from wards at Cheltenham hospital to his normal duties at a health centre and Peter says no films, TV shows or live concerts are happening so he's playing with his tractor in his field somewhere in Hertfordshire.

It has however given me a chance to review some of the many videos on Youtube. I have put a number on the web so if you are at a loose end you might want to view those listed below.

LINKS TO THE VIDEOS CAN BE FOUND IN THE PRINTED VERSIONS OF THE NEWS SHEET DISTRIBUTED TO MEMBERS ONLY

[Around the track at the NLSME](#)

[Last run of the season 2016 part one](#)

Keep safe hope to see you soon, Jim



## Tyttenhanger Light Railway – June

By Peter F

Are we there yet! Got fed up with all those jobs that needed to be done and have now got a bit of cabin fever through spending too much time in the workshop anyone feel the same?

The weather has turned for the worst this week just as I was about to put my tender crops in over the allotment, I guess that planting out will have to wait until it warms up again. Till then It looks like its back down the workshop (there are worse problems to have).

Some of you more observant types may have noticed that I have changed the heading of the "Ground Level News "to Tyttenhanger Light Railway "this is in response to newer members and some existing asking what does TLR stand for on the base of the stanchions holding up the roofs on Smallford and Tyttenhanger stations alike, Well the most obvious reason must be the track's near location to Tyttenhanger House and maybe the nearby quarry of the same name that may or may not have had a NG railway to transport the stone or aggregate away (the last bit is me fantasising) The moulds that were used to cast the base of the stanchions were made by a once very active but sadly now departed member

namely Tom L whose son Bryan is still a member and has kindly put me on the right track. Another often quoted saying in the club is T L R stands for Tom Luxford's Railway sounds good to me I'll go with that. Was the Ground Level Railway Tom's baby? If Tom was still here, I wonder what he would have thought of the Tyttenhanger Light Railway today!

I contacted Bryan Luxford and have the full story of the T L R and it follows in Bryan's own words below;

T.I.E.R.& L. were stencils that the late Ted M "came across" ( A model engineer expression, used when an article found may come in handy one day for something.) the stencils were used to paint large oil drums that were placed around the site at Tyttenhanger with LITTER painted on the



side, these were used until they rusted away.

George M (Ted's son a Country member) refurbished 2 passenger cars one winter with splendid chocolate and cream Pullman style valances, the cars were not named but required some lettering. The only combination using the stencils available was T.L.R. for Tyttenhanger Light Railway.

When the station canopy project was undertaken Dad (Tom) and Jack Calderbank made 2 moulds to cast concrete bases and incorporated the TLR using iron bar square section for the letters, it was just the R that required bending. (We used this section at our studio to support stained glass windows (I now use stainless therefore had a supply) The letters were then screwed to the plywood on the inside of the mould, the mould was greased up all over to prevent the cement sticking to the plywood, and I remember it being a very messy job. The mix of the cement was critical the drier the mix the better the outcome, we had a few mishaps but what joy when the letters hadn't collapsed. Dad and Jack did not undertake the task alone most of the work party at that time were involved and always took an interest when the mould was removed.

Many thanks Bryan sometimes it is nice to look back and recognise the efforts of fellow members. It was about that time that I joined the club and one of the first jobs I took on was to finish the concrete oversight to Tyttenhanger Station platform that encompassed working around the stanchions. And let's not forget without the input of members gone by we wouldn't be where we are today!

Down to the workshop, St George on the slippery slope weighing well over half a ton (old money) took some holding back but arrived without any mishaps.



Once St George was sitting safely on the building frame the first job was to jack the loco up and remove the wheel sets. A straight forward exercise all be it messy. I then mounted them (axle)

on the lathe and started making chippings. The chuck end run out on the first axle was 0.0015" as I had mounted one end directly to the chuck that enabled the wheel crank to drive the pair of wheels and not damage the crank bearing surface. After some shim was placed under one of the chucks jaws the run out was negligible. I then measured the depth of the grooved wheel at 0.065" at its deepest. The groove was only apparent on one wheel and was at its deepest opposite its crank pin? So, I asked the advice of one of many tutors and surmised

that before the wear had taken place this one wheel must have been originally turned off centre to the axle, and must have lollered along for years! This now was the amount to be taken off all the wheels that in turn would give me back my flanges! Top slide was set over two and a half degrees a radius tipped tool was used for cutting and 0.015" cuts were the most I dare take, four passes and a five thou finishing cut later one wheel was finished. It must be said that often members would comment that St George did roll about a lot? We will see when we run again if George has a steadier gate. I used a pair of callipers to judge the final diameters. A note was taken of the cross-slide number after cutting the first wheel and returned ready to start on the next wheel. I turned the axle round end to end clocked up and repeated the operation on the remaining wheel, job done first axle finished. The second axle was a bit trickier as a grub screw that located the position of wheel to axle had rolled in its hole. This had to be extracted before any turning work on this axle could commence. As you can see from the picture the grub screw was well and truly passed its sell by date the wheel had moved on the



axle in service and would no longer perform as it should because this movement had thrown the timing out. The wheel was made as a push fit on the axle the problem now was how to get the grub screw out; I did not want to risk drilling out what was left of the screw so decided to push the wheel off the axle and repair the resultant damaged thread. Fortunately, the threads on the grub screw gave up without a fight and the Axle

and wheel under pressure parted company easily flattening the threads of the grub screw on the axle side, taking the grub screw out with one push. The axle was cleaned up and reduced to a sliding fit on the wheel then put on the axle, now the damaged locating thread could be cleaned up once re tapped a bolt was fitted to get everything back in the right place. Loctite 601 was applied to the wheel and axle then left to set. The following morning, I removed the locating bolt fearing it may have got Loctited along with the wheel fortunately it had not and was replaced with a new BSF grub screw that had been previously ordered online.

More next month.  
As ever in the muck

## A Coach for Tyttenhanger

Mike C *continues the story*

### Part 2

If at first you don't succeed...

**G**reatly disheartened on learning Cohen's 'Best Burner' had destroyed our luggage brake van, Tom Luxford, Mike Radford and I returned to considering our original options but our hearts weren't really in it. Learning of our predicament, the late Bob Fitzhugh, a North London SME member at the time, invited us to accompany him on a visit to Whittlesea to look at a possible alternative vehicle.

We were little aware of it at the time but Bob was the ideal person to help.

He had joined British Railways in 1953 and had spent most of his career with the former London & North Eastern Railway as Shed Master at Hatfield (1957–58) and Depot Master at Peterborough (1965–68) in the days when the depot employed several hundred men. Between times he was at Great Northern House at Kings Cross. In the last ten years of his service before retirement in 1988, he was Locomotive Maintenance Engineer to the British Railways Board. Coincidentally, Bob lived in the Bedfordshire village of Langford where my brother-in-law, Rev'd Robert Nokes, was vicar (1973–90).

Accompanied by my son Anthony, then just four years old, Tom, Mike and I were greeted at Whittlesea by Bob who escorted us to a siding with stock destined for scrap including E70719, another condemned BZ luggage brake van. It's not what you know but who you know! With Bob as our guide, were we able to examine the van and explore other interesting stock nearby including a travelling post office for sorting mail en route. TPO services ended nearly thirty years later on 9 January 2004, the carriages being sold for scrap or to preservation societies. The vehicle we saw seemed to be in very nice order.

Following our enjoyable and informative outing, we reported to the Track Committee and Council that Bob had found us another BZ luggage brake van and, with his influence, advice and support, we could proceed with our original plans. Advising us to tender for the vehicle, Bob assured us our offer would be favourably considered since the vehicle would be preserved, not scrapped.



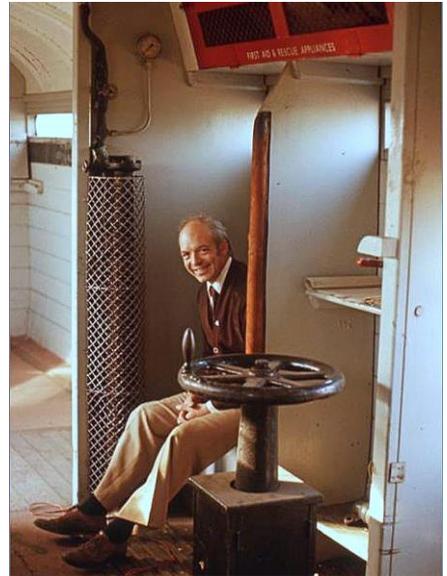
*Above; BZ luggage brake van E70719 on a siding at Whittlesea, long since gone*



It was probably his influence that resulted in acceptance of our offer of £450 subject to VAT which, at the time, was 8%. Cohen's would have charged us £400 plus VAT. As we had no use for the wheelsets and running gear, we were advised they could be removed and sold for scrap which brought the actual cost of the van on its frames to £200.



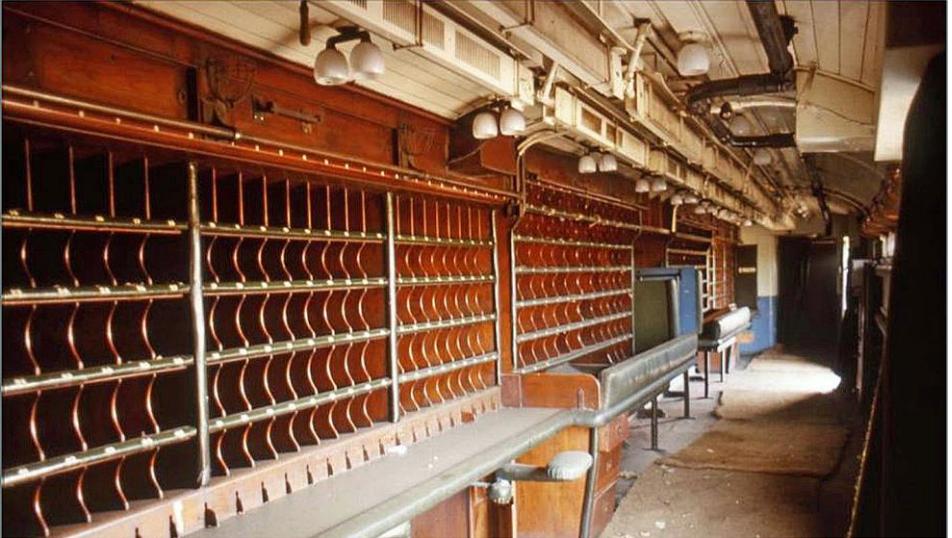
*Tom Luxford with Anthony in front of the area that is now our kitchen.*



*Mike Radford checks out the guard's seat.*

While Bob arranged for the necessary preparatory work to be undertaken at the St Neots depot at no additional cost to us, Mike choreographed arrangements to get the vehicle to Tyttenhanger. My choice of the word 'choreographed' is deliberate for a truck was required to transport the van to Tyttenhanger and a crane to lift it onto sleepers laid out at the track. It didn't take me long to write that sentence but the work involved was considerable and all credit must go to Mike

for its organisation, just as much as to Bob for smoothing our path to getting the luggage brake van.



*This travelling post office van seemed in good condition.*



*This condemned wood bodied van was also at Whittlesea during our visit.*

In due course we arranged to meet Bob at St Neots and watched in amazement while the body of our van was lifted onto the truck using the only crane available on site that was far too light for the work. One end of our van was raised, sleepers placed beneath and the van lowered onto them. The crane was then moved to the other end of our van and the process repeated. By this means our van was raised little by little until the truck would fit beneath. A modern HSE inspector would have been apoplectic! Needless to say, we all kept well clear! When our van was considered to be high enough, the crane took the load at one end, the pile of sleepers at that end was removed and our truck was reversed carefully as far as possible under the van.

The crane was transferred to the overhanging end, the van was lifted, the sleepers removed and the projecting van end was lowered onto a second truck. Between them, the truck and crane drivers managed to nudge our van until it was settled properly on the flatbed truck. What a performance! I've already said the crane wasn't adequate for the task but would never admit the alarm bell was sounding throughout the lifts. Safely on the truck, Anthony and John, a colleague who'd come along for the experience, climbed into the cab for the journey to the track while Tom and I travelled with Mike in his car to enable me to get at least one passing shot as our van headed south down the A1.



*The wheelsets were valuable scrap.*



*Sleepers were used to support the van between lifts.*



*Needless to say, we kept well clear!*



*A second truck helped nudge the van to position.*



*Anthony and John Rudling  
hitch a lift.*



*On its way at last, heading south  
down the A1.*

Meanwhile, back at the track, Bryan Luxford was in charge of seeing our hired crane on site. I should explain that we'd had a lot of rain in the preceding days and weeks. On the day itself, an optimist might have said it was hardly raining at all. Imagine our surprise when Tom, Mike and I arrived at the track to find the crane up to its front axle in our soggy field. In those days, a simple chestnut paling



*Our track site as it was in 1997 with sleepers placed ready for the arrival of  
our BZ luggage brake van body.*

fence separated our track site from the Water Company and we'd been given permission to use the Company's hard standing for access. Our plan had been to get the crane on site adjacent to the final location of our van and then for the truck to negotiate our normal access gate to bring the van on site. It would continue to get as close as possible to the final location and the crane used to lift

our van off the truck. Once clear, the truck would move away and the van lowered onto sleepers laid ready and waiting for it. No chance!

It took quite some time to extricate the crane back onto hard standing and it was clear there was no way the truck could negotiate its way to our planned destination. It was agreed by all concerned, mainly the crane and truck drivers, to keep the heavy vehicles on hard standing, get the crane as close as possible



*Up to its axle in a soggy field*



*The final lift over the boundary fence on the way to our track site at last*

to the picket fence, lift our van off the truck and lower it onto sleepers hurriedly laid out on our side of the fence. The resultant manoeuvres were a sight to behold and, although they got none, the crane and truck drivers certainly deserved hearty applause for their efforts but I doubt they would have been impressed by anyone calling for an encore!

So, there we were, at the end of a long and memorable day with our BZ luggage brake van at the bottom of a soggy field with the daunting prospect of somehow moving it to where we'd originally planned for it to be at the end of the day's efforts.



*Next time; they told us it couldn't be done!*

## Bookworm writes

Is real talent under threat in the world of Model Engineering? Are machines replacing the traditional skills? Isn't all this reliance on machines making for a poorer outcome? I am sure this sentiment must have been expressed only last week. It was however expressed in 1937.....

Source: ME 1937 Aug 5 page 134

Did you know that as far back as 1955 that the General Motor Company at their "Progress for Power" show held in Chicago, demonstrated a 15inch model electric car powered by solar-cells? At the time it was reported that only a model car covered with cells was possible and that they doubted its application for the propulsion of full-size cars. However, from small beginnings....

Source: ME 1956 July 5 page 1

Phew, found the last four volumes heavy going so have stopped for a breather.... As I sit and look, I am looking at a picture of no lesser person than Walt Disney who is photographed looking at a part built 7.25" gauge(?) locomotive - looks to me like a 4 cylinder Castle class loco - picture claims to have been taken in his studio machine shop! It seems that Walt Disney had a passion for small steam locomotives and created his own half mile track around his Holmby Hills Estate called Carolwood Pacific Railroad. He worked along with his studio craftsmen to create all sorts of railroad vehicles to indulge his passion - does this mean Walt was a fellow Model Engineer?

Source: ME 1955 Nov 24 page 803

The LNER in 1937 (oh happy days), held an Exhibition of locomotives and rolling stock in the sidings of New Barnet Station on 4<sup>th</sup> and 5<sup>th</sup> June. Mr G.W. Randell supplied his portable track and with a few friends gave rides to 1,700 passengers (wow!) giving the proceeds to Barnet Hospital.....good show!

Source: ME 1937 June 17 page 553

And again, this time nearer to home.... taking his 3.5" gauge portable track Mr G.W. Randell attended Hatfield Pageant held in Hatfield park on Bank Holiday Monday 1937, having brought it from Finchley. Passenger hauling was shared between 4 engines and drivers including uncle Jim Crebbin who ran from 10.30am to 8.30pm during which time 1,020 passengers were given rides - was 1937 the high point of passenger hauling at fetes?

Source: ME 1937 Aug 19 page 169

I am in the dark about this .....Camden Town 4 way junction on the Northern line tube -always a busy little spot - it was stated in this item, that control of trains over this junction was modernized with the installation of automatic signaling and train control in 1957 and was the first of its kind. Replacing the original signal cabin at Camden Town, three "interlocking machines" did the work of the original manual power-operated 4lever cabin. The remaining responsibility for train

description to operate the system was shared between signalmen at Edgware, East Finchley, and Kennington cabins.

Source: ME1957 May 23 page747

Footnote: Talking of tubes, it's some years since your guide was last on East Finchley station where there are 4 tracks running through the platforms, two of which separate the two impressive art deco station buildings, suggesting travel to faraway places.



Apparently these two central tracks go nowhere other than to Highgate stock sidings beyond.

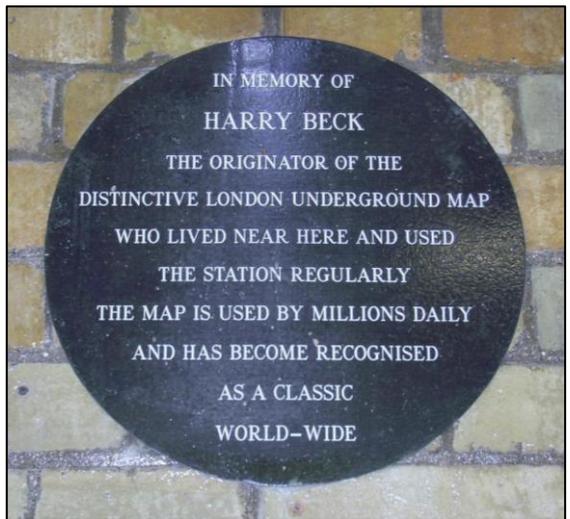
Finchley Central is the next station along the route there are more sidings and the line splits to serve High Barnet and the branch to Mill Hill East.

In 1946 there was a proposed extension of the Mill Hill East / Edgware line from Finchley Central towards Aldenham and

Bushey Heath. Work started but never completed. Visible from the A41 are the unfinished brick-built arches.

Finchley Central station also has another claim to fame; Harry Beck, designer of the original Tube map lived nearby and used the station in the 1930's.

There is a commemorative plaque on Platform 3, together with a facsimile enamel panel of Beck's iconic 1933 design.



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## Gauge 1 Group report - June 2020

By Geoff H

As I write this, we are in week 9 and I am pleased to say that the Gauge 1 Section has been busy even with Social Distancing involved.

To keep our mind focused in important things as we are all in Lockdown, we started a weekly report detailing what has been going on in workshops.

It's surprising what has come to light. From cleaning wheels of our models through to building wagons and coaches and on to Locomotive construction and modification. All this is going on in separate locations dotted around Hertfordshire. So far over the weeks we have reports from over 20 of our group. So they have been active.

Considering we are "Model Engineers" "We have some people working on Locomotives. An Airfix kit bought long ago of Trevithick's locomotive which is featured on the news sheet front page has now been built by John . It will be put to good use as a wagon load



*Chris Dean's LNER P2*

Having given thought on how to minimise the meth's damage to the tender of my newly acquired P2, I am pleased to say that the Precision Paints LNER Doncaster spray can has proved to be as good a match as I am likely to get. I removed all the paint on the poorer tender side, primed and resprayed it to good effect. That leaves the lining to be tackled at some time. Following some detailed research, I noted that the footplates of the loco were about 5mm higher than they should be. Having decided that I could not live with this, what should I do? After some thought they were removed along with the smokebox cover and cab. The

footplates were then tempered and the reverse curves in front of the firebox reshaped to give the reduction I was looking for. The smokebox cover/deflectors also needed to have 5mm added to the bottom edge. Successfully accomplished



but at the expense of having to undertake a significant repaint. Once you start on a job, where do you finish.....!

The photo below is an ongoing project by M Wrottesley who has taken on the task of rebuilding an SECR D class model in the guise of an LMS 2P.



Coaches and wagons have not been overlooked. We have Dave progressing with his Pullman Coaches. Dave has been milling these on his CNC

machine in various plastics and they are now looking the part. The trouble with a



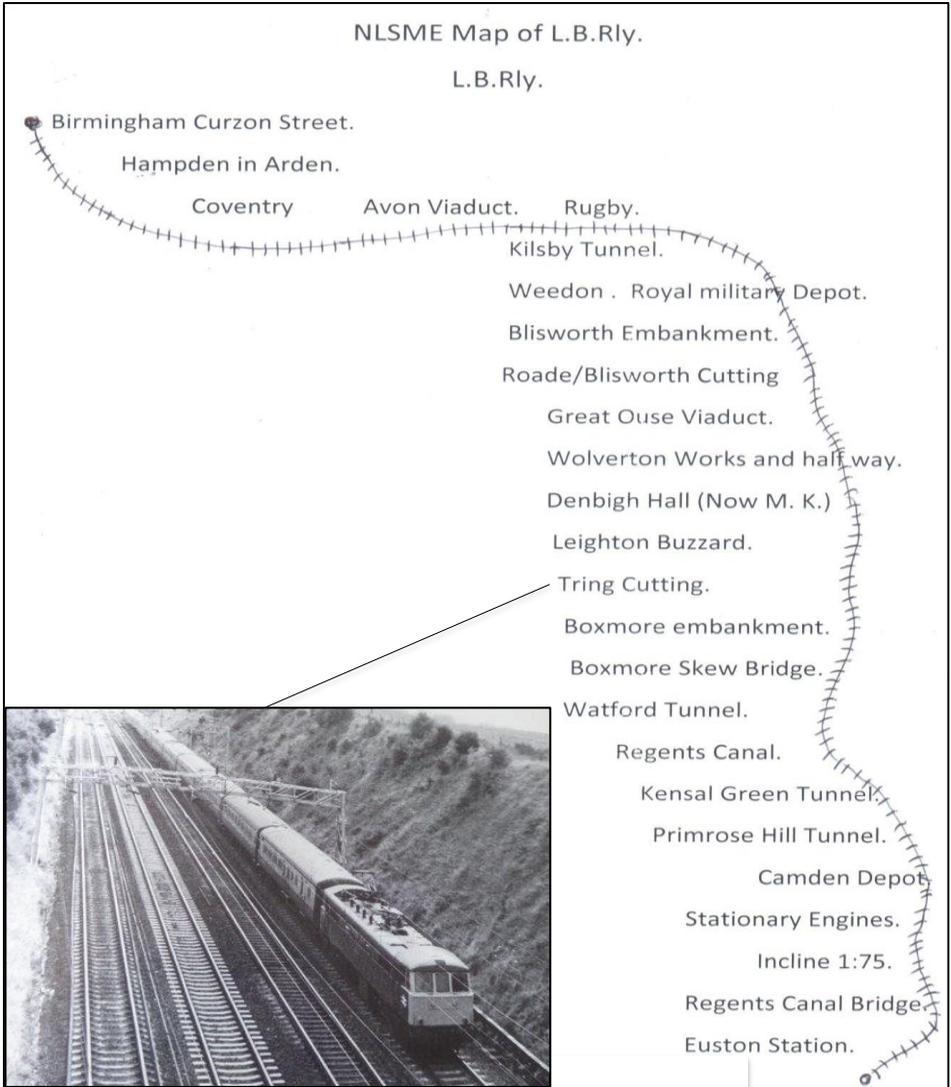
rake of coaches, it means there is multiple production runs for the many components. Just think of the number of seats that are needed. Thank goodness for the CNC machine.

John has built a Southern Utility van, just one of three that are known to be being built by members of our group. Currently Johns is the most advanced and is shown below.



# The London and Birmingham Railway.

Ian J continues his journey north along the route of the London to Birmingham railway providing an insight to the history behind the construction of this railway.

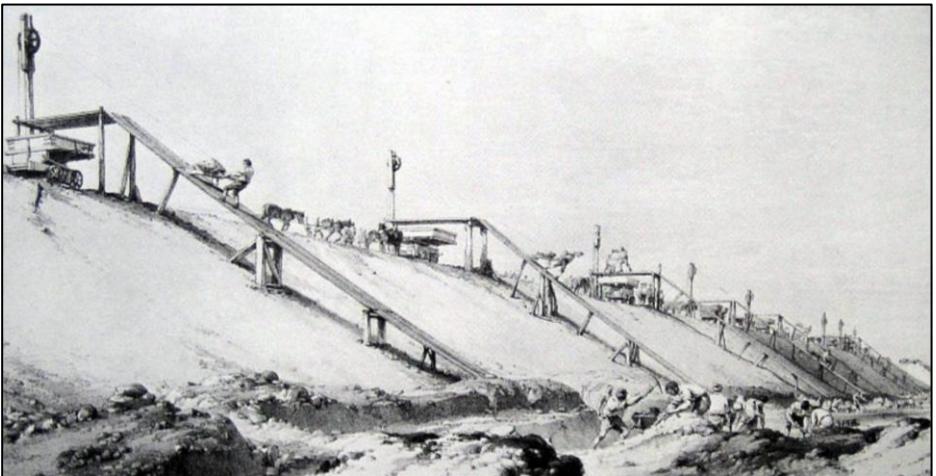


## Chapter 2 Boxmoor to Denbigh Hall

**Boxmoor to Tring** presented a great problem with the deep cuttings at Tring. The cutting is on a straight track alignment two and a half miles long with most of



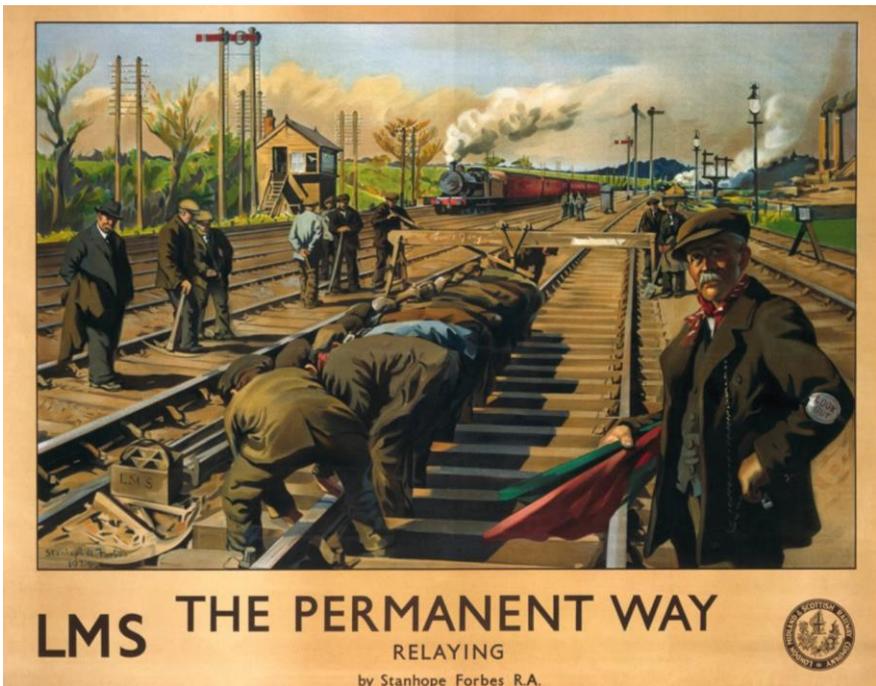
the cutting forty feet deep and up to sixty feet deep on a section of about half a mile. That was some achievement when the chalk had to be mainly dug by hand with horse whips to take the barrows up on boards to the top for disposal. Remember that this was the era of stage coaches and before the development of drag lines and mechanical excavators.



The navies were on 'piece work' so needed no prompting to move a goodly tonnage of spoil. Of course, with such a long high cutting adequate drainage from the cutting was needed and below track drains.

The Grand Junction Canal cutting runs beside the railway cutting. The Canal Company sued the London Birmingham Railway Ltd when they noticed that their top level was running low and alleged that it was the work of the Railway that did it. The LBR Ltd settled the comment by driving a new well to drain naturally into the Canal

This section of line (Opened October 1837.)



This classic 1924 LMS poster by the artist S Forbes depicts the railway just north of Tring cutting at Pitstone. The cement works which dominated the area for so many years can be seen in the background.

**Tring to Denbigh Hall. (Milton Keynes).** This section of the line was more straight forward than some other sections. Now we know what happened to a lot of that chalk that was dug to make the Tring cutting. Just north of Tring there is an embankment about six miles in length; it is thirty feet high much of the way and 1.4 million tons of spoil from the Tring cutting found its destination here. The

Birmingham railway runs alongside the Grand Junction Canal for much of its way and is crossed at Pitstone by a skew bridge which was originally an iron bridge similar to the one at Iron Bridge.

The Linslade tunnel of 284 yards seems to have been dug with just one ventilation



shaft and no loss to life. Denbigh Hall was for a time the place where passengers alighted and took the stage coach to Rugby due to the delays at Kilsby tunnel. A bit similar to the present time where there is often a bus replacement service instead of the train.

This section of the line opened in April 1838.

*Incidentally Ian Petticrew of the Tring Historical society welcomes items taken from his account but wishes to be appreciated for all his hard work in research. He approves and allows the use of visual material in this rendition.*

*Next month Ian will describe construction of the line between Denbigh Hall and Rugby which will include a description of the construction of the biggest challenge on the entire route at Kilsby Tunnel.*

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## Book Review – Slide Rule: Nevil Shute

Reviewer Colin B

I am delighted to kick off this new section in the News sheet by recommending to you Nevil Shute Norway's book "Slide Rule".

NS wrote many novels over a period of approximately 30 years several of which were made into successful films. Model Engineers are likely to be more acquainted with his work "Trustee from the Toolroom" in which his lead character Keith Stewart becomes involved in a set of circumstances that take him around the world all the time with model engineering as its backdrop.

"Slide Rule" however, first published in 1954, is his autobiography in which NS takes the reader from his early years after leaving university through to the time he left the business world to concentrate on his writing. In recommending this book I also wish for it to re-acquaint you with a period of our aviation history that is now largely forgotten.

The early part of the twentieth century saw ongoing development of fixed wing aero-planes. However, by the mid-1920s these planes were still yet to be sufficiently developed in terms of size and power to make them suitable for the transportation of large numbers of passengers / freight over distance. Large rigid airships however, did show promise in this direction and from such considerations the R100 and R101 projects were born – R100 specification: Length 709 feet, Diameter 130 feet, Power 4,200hp, Engines 6 Rolls-Royce Petrol, Carrying capacity 100 passengers and mails (post).

The book takes us from his start in the world of engineering, through his years as Chief Calculator to Barnes Wallis working on the airship project of the R100 to forming and running Airspeed Ltd a successful manufacturing and development Aero company of the 1930s before retiring from business to concentrate full time on the writing of his novels.

Having re-read this book recently it made me realise that in terms of engineering we have come a very long way not least because he reminds us of the difficulties encountered when designing and calculating stresses (number crunching) used in structures before the invention of computers and 3D CAD, and how using today's aids we should be able to achieve so much more; however, absorbing what NS has to say about Governmental politics of the 1920/30s makes one wonder if the politicians have learnt very much since then.

This book in my view describes more a time than the man, of a past that correctly can be described as part of this country's industrial history; I thoroughly recommend it to you.

Colin



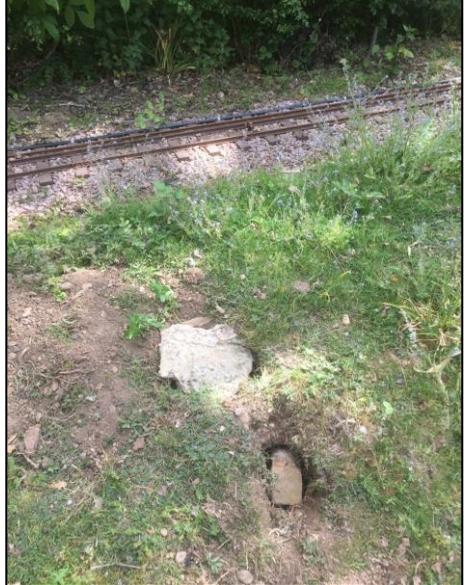
## Grounds Maintenance

By Nigel G

It was my turn on the 19<sup>th</sup> May to do a security check and confirm all was well at the site. I had a really lovely day with my wife Helen who came with me. There were four cars in the lane when we arrived one of which was loading up a rather large black dog. Two cars in the lane and a family out for a walk when we left.

The perimeter fence remains secure, the rabbits have continued with their super highways either under the fence or more a serious tunnelling effort where there was a large double entrance tunnel in the car park which disappears under the GLR and into the Affinity site.

There were a number of super highways along the back straight fence which I blocked. Whilst blocking the rabbit holes the trees in the new land were once again, watered using the long hose. Back at the container the hole in front of container number 3 which I blocked up on my last visit remains blocked. Let us hope it stays that way!



## Dates for your Diary

The current government restrictions resulting from the COV-19 virus has resulted in all NLSME organised events being cancelled  
Please refer to page 3 of this News Sheet

<b>MAY</b>	<b>2020</b>
<b>Sun 21<sup>st</sup> June</b>	<b><i>Deadline for copy to Editor for July News Sheet</i></b>

NB. Please notify our Secretary of all meetings and other Society events for inclusion in the Society Calendar. Approval for special events still rests with Council and/or the Tyttenhanger Site Committee.

## And Finally

From booklet "Of the rails" by Patrick Wright"

