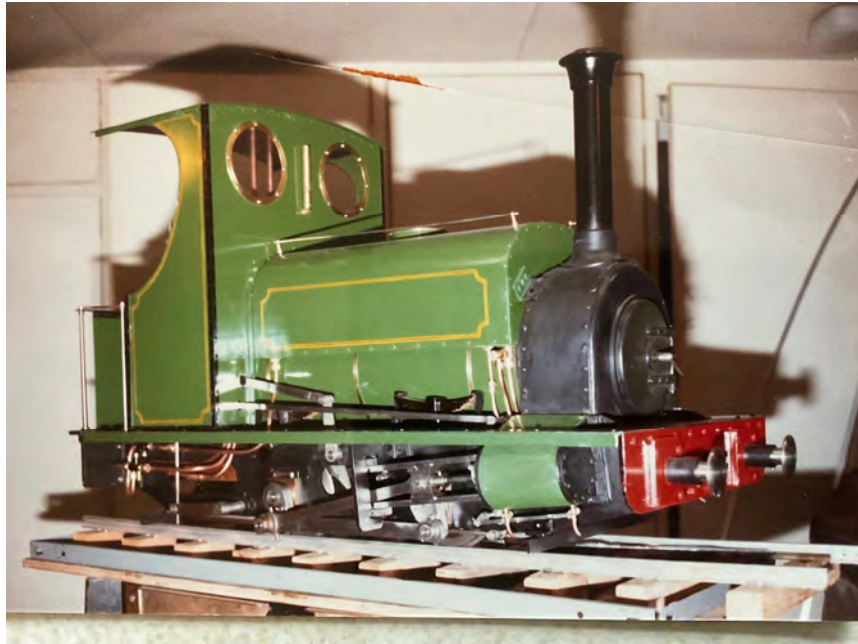


# **BEECH HURST NEWS**



**Cover picture: -**

*In Colour:* In the last edition of the newsletter, I printed a black / white photograph of Brian Joyce at the controls of his 'Hunslet' loco. Courtesy of Brian's family, I now have the above colour photograph to share, together with some more photographs of Brian's models, which appear inside.

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## **Editor's Notes**

A belated Happy New Year to all readers and as I start this edition of the newsletter we would normally be at the London Model Engineering Exhibition, Alexandra Palace. Unfortunately for the second year in a row this event has been cancelled on the back of the risks posed by Coronavirus, so let's hope that 2023 will go ahead and we can display our models, including many 'lockdown' projects, and enjoy catching up with fellow model engineer friends once again.

As we turn a corner into 2022, let's hope that our new season will commence at the beginning of April. With optimism in mind, a thank you to all members who took part and completed the recent survey, the results from which will give us an important indication of how to plan with certainty and positivity for the near future. It is true the last couple of years have been less than normal; however with a fair wind we can look at the most positive way forward for the club, for example how we can encourage all our new members to become involved with the operational side of the railway. SMLS remains one of the best model engineering clubs in the country, with facilities to match, and together we can surely keep it that way.

The previous edition of this newsletter was released just before Christmas and thanks through these pages to Roy P for his contributions.

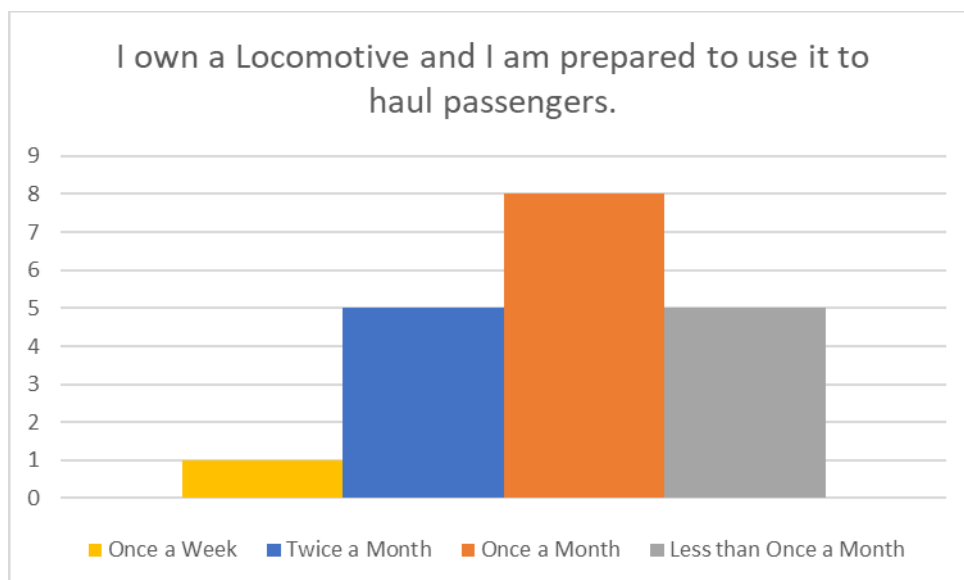
Inside the first release for 2022, I am very sorry to report the passing of former SMLS member and society treasurer Alan Garner on 20<sup>th</sup> January, a short piece about who appears inside. Also, I have included a few previously unseen projects that Brian Joyce completed during his life, photos for which I did not have in time for last newsletter. In addition, there are a number of Brian's last projects which the family have asked for me to advertise for sale via SMLS. There are also short pieces about outstanding subscriptions, an updated Diary, including the AGM on Saturday 5<sup>th</sup> March, and a last minute submission from 'Down-Under'...

**Andrew B**

## **Chairman's Notes**

It felt like only yesterday that 2022 started and now we are already into February. With the AGM just around the corner, the committee has been busy preparing the documents required and as you will have all seen the new Articles are to be voted on during the meeting. A big thank you goes to John Baldwin for handling these with Mike W and getting them into a modern and up to date format. Also, thanks to everyone who gave feedback and picked up on a few minor errors we had missed or overlooked – these will all be updated prior to the AGM.

In preparation for the AGM and the 2022 running season, we have also carried out a survey to establish the availability we have within the club to maintain our regular service of 2 days a weekend, Bank Holidays & Wednesdays in the school holidays. The feedback we have received has been invaluable to show us where our strengths lie and where we need to focus going forward, whether that be training or organising work parties, so thank you to all those who responded and wrote personal feedback. A report of this will be sent out prior to the AGM for you to see and to give you an idea of how we look for tractive effort from the 31 members who completed the survey; here are some results (**see next page top**).



**Graph above:** This would give us a total of 147 locomotive turns (based on a 6 month season averaging 4 weeks per month, i.e. 24 operating weeks in total).

Lastly from me, I would like to give a brief update on the LNER 2-8-0T club locomotive which is currently undergoing an overhaul by Roy Preston. As many of us know the locomotive is a brilliant passenger hauler, and very user friendly, but it has done some miles in its life and this is starting to show. Roy P & Steve S decided it was time to take a closer look and upon inspection found two noticeable issues: the boiler and the rear axle boxes.

**The Boiler:** It was found to have a significant amount of soft solder in various places (9 stays externally, various bushes and around foundation ring etc...). Therefore, it was decided a new boiler was the best way forward whilst such work was being undertaken. Roy spoke with a number of boiler manufacturers and with lead times up to 36 months for a silver soldered boiler the decision was made to go down the TIG welded route with a lead time of 8 – 9 months. Roy has prepared 3D CAD files to bring the boiler up to modern practice and is in the process of producing 2D drawings for the manufacture to begin. When the new boiler arrives, we'll be sure to put some photos in the news for you all to see.

**The Axle Boxes:** This is the trailing axle which sits below the ash pan. Over the years ash + oil has turned to grinding paste and has worn away the boxes with the worst being ¼" oval and almost reaching the top of the axle box! The original boxes were split and nicely made, as is the case with the rest of the motion, and Roy has made new boxes with some modifications including O-rings to prevent the ash ingress and double spring pins rather than single to aid with lubrication.

Once all the work is complete there will be some minor paint touch ups where required with some other minor jobs along the way. Roy aims to do a full write up when he is further along with the project – thanks Roy, keep up the great work.

I look forward to seeing many of you at the AGM on Saturday 5<sup>th</sup> March...

**Adam**

## Subscriptions

A quick reminder that subscription rates for 2022 will remain the same as per 2021 at £5 for all members aged under-18 & £10 for all members aged over-18. Ideally payment by BACS to: Account No: 20688428 and Sort Code: 20-49-76, adding your name as a reference, however cheques (payable to 'SMLS Ltd') to: Mr G Miller (SMLS), 128 Western Road, Sompting, BN15 9TY are fine too. Cash payments can also be made with all sub's to be paid by 28<sup>th</sup> February.

**Committee**

## Alan Garner

It is with sadness that I should report the passing of Alan Garner on 20<sup>th</sup> January. A former SMLS member and excellent society treasurer, Alan was a member for a number of years and took over the reigns of treasurer from Gary Smith.

Alan grew up in Hillingdon, North London, during the last years of steam and saw the transition to dieselisation. His knowledge of railways was very broad and the interest was not just with the present day railway but also with the development from day one, including a particular interest for the GWR Broad Gauge system. Together with close friend John Ely, they put together the Broad Gauge Society in 1978, which continues to thrive to this day.

One of Alan's many life achievements has been the construction & development of a scratch-built Broad Gauge model railway (**see picture below**), which to use John's words is a 'historical marvel' and one that Alan planned to develop further.



Living in Lindfield, Alan was close to Beech Hurst and a regular attendee during the early 2000's when he was treasurer. He would always be keen to help out with Station Master and driving duties, as well as general maintenance too.

A move away from Sussex to the Wiltshire town of Chippenham followed and there he and wife Mary have called home for the past 10 years or so.

**Andrew B**



## Brian Joyce's Projects – By Andrew B

When I published the last edition of this newsletter, Brian's family were still to look through a collection of photographs he had, some of which pertained to his model engineering activities. Since Christmas, it appears that Brian meticulously kept a pictorial record of each model he built and sent to me in the last few days are some hidden gems that many of our members will have never seen before. The 'T9' (**see pictures below**) is of particular interest, not only because it is a rare outline in model form but also because it is one of the locomotives I remember Brian running when I was a teenager. There were no SMLS archive pictures of the locomotive either but fortunately we do now have a record of this locomotive, together with a few more colour photos of the narrow gauge Hunslet, the Malayan 'Class 56' & the GWR 15xx 'Speedy' (**see picture next page top**) which was Brian's last locomotive project. For me, the 'T9' will always be Brian but the ploughing engine (**see picture next page bottom**) looks very nice too.







## For Sale

Following the passing of Brian Joyce, I have been liaising with his family to sell a few last items from his collection of models. All are stationary engines or steam pumps, which I am hopeful to be of interest to SMLS members. If they remain unsold then I will advertise via the open market. All proceeds from these sales are going towards the cost of the new boiler for the LNER 2-8-0T locomotive, which Brian sold to SMLS a few years ago for a very advantageous price and which is currently being overhauled by Roy P.

A brief description, together with a guide price for each model is listed and members are invited to e-mail me with their best offer for each item. The highest offer will seal the deal so to speak with all offers to be with me by 28<sup>th</sup> February. Any questions, please feel free to ask...

### ***Model 1 – A Sanderson Beam Engine by Clarkson's of York***

The first model is a Sanderson Beam Engine, designed by Clarkson's of York. Part-built but currently disassembled, Brian did have this model largely up together when he lived at St George's (**see picture below**) and before his move to Ashton House care home.



Castings alone for the beam engine generally sell for around £300, so the guide price for the part-built model is £400.

## **Model 2 – A Stuart Turner Feed Pump**

The second model is a Stuart Turner designed Feed Pump, for which Brian had previously prepared a text sheet (**see picture below**).

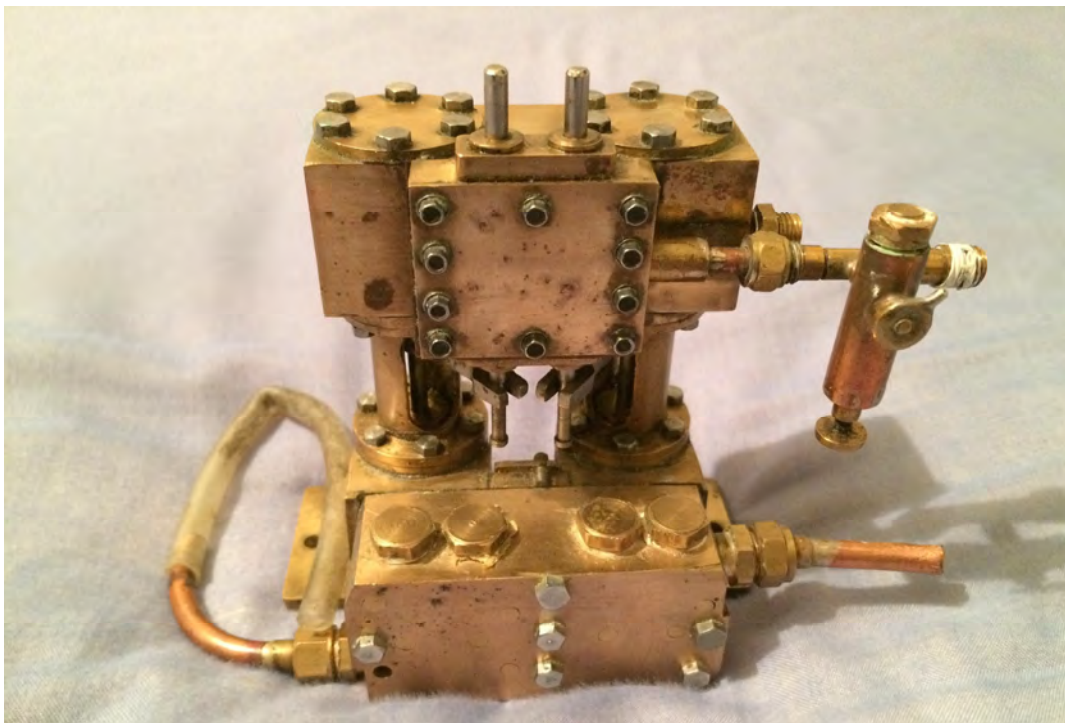
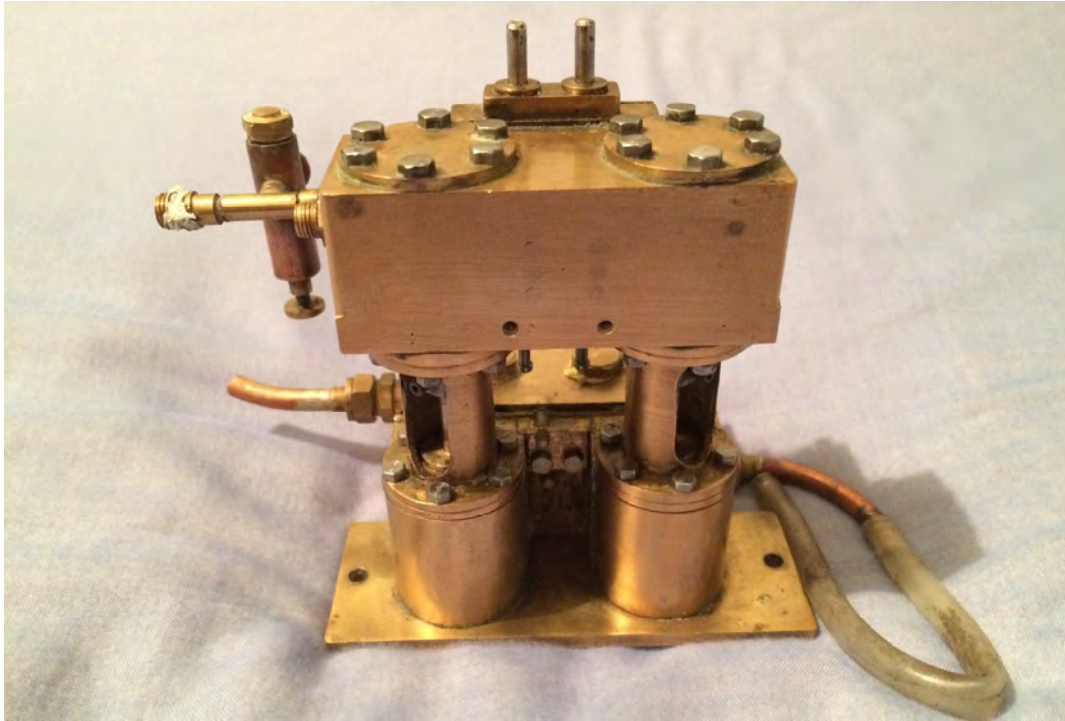


Castings alone for the pump generally sell for around £130, so the guide price for the part-built model is £150 given the potential remaining work required.



### ***Model 3 – Twin Cylinder Steam / Water Pump***

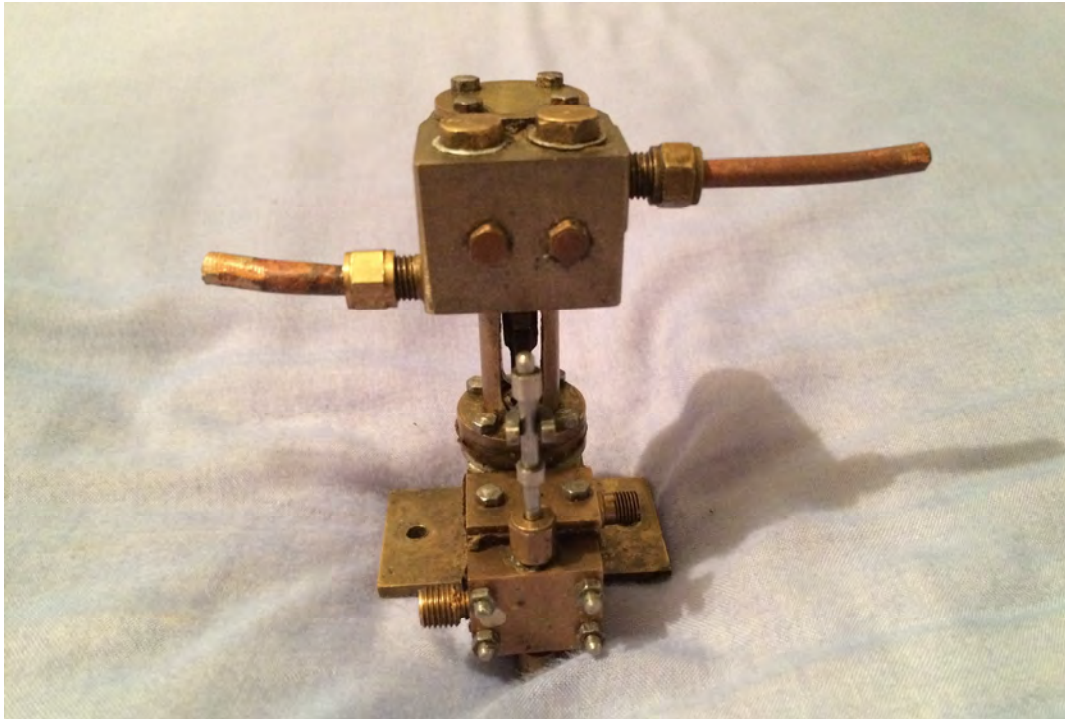
The third model is a nice twin cylinder steam / water pump (**see pictures below**). Fabricated from brass stock, I have air tested the pump and it works beautifully!



Similar to the pump on 'Wharfedale', so a reasonable guide price of £400.

#### ***Model 4 – Single Cylinder Steam Pump***

The last of Brian's models is a single cylinder steam pump (**see pictures below**). Similarly to model 3, this pump is fabricated from brass stock and works on air!



A less intricate pump, so a reasonable guide price of £150.

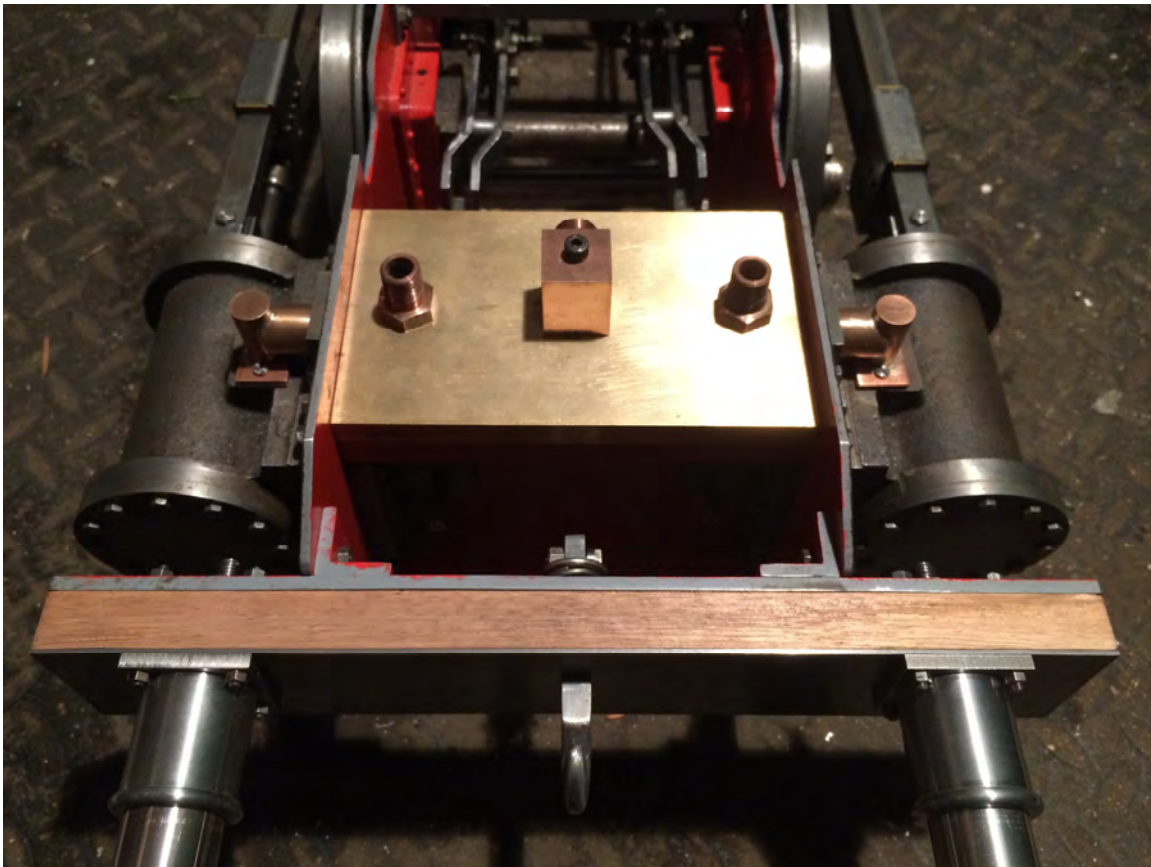


## Work in Progress – 'Project 75' – A 'North London Railway' 0-6-0T

Since Christmas I have ploughing on with 'Project 75' and because of the mainly cooler days, most of the time has been spent inside and not on the planned boiler work. Nevertheless, there has been a near endless list of chassis components to deal with. The coupling rods have now been finished and fitted to the chassis. For such an accurate job, these went really well and largely without error. The fit on the crank pins and smooth wheel rotation is something I am pleased about.

After an air test, I decided to re-seal the cylinders, which had originally been fitted with foil gaskets, all very nicely made but too many pin hole leaks for my liking. This process took a couple of days but all the joints are now 99% tight. At the same time I also finalised the inlet and outlet steam pipes, including the front stretchers which support the smokebox. This has been a tricky task but as I wrap up this edition of the newsletter, the front end pipes are largely complete.

Other recent 'in between' jobs have included fabricating support brackets for the slide bars, tapered wedges for the crosshead to piston rod joint (a horrible job) and locking bolts which hold the connecting / coupling rods to the crank pins. Now, I am finishing off the 3-piece buffer beams, which are a sandwich of hardwood between metal (**see picture below**). Before starting back on the boiler I shall finish these, together with the completion of the buffers / stocks...



Andrew B



## Forthcoming & Diary of Events

In 2 weeks time our AGM will be held at Beech Hurst and by the time this edition lands, all members should have received their AGM Notices. With a bit of luck our 2022 running season will be able to kick off from early April and details for this will appear in the next newsletter shortly after the AGM.

5<sup>th</sup> March 2022 – SMLS AGM at Beech Hurst – Will start from 14:00 – See above

**NB.** Certain events may be organised at short notice and will not therefore appear in the newsletter. Please check white / notice boards in the clubhouse for details of such events.

**Andrew B**

### Just in..., from Australia – By Andrew B

As I concluded this edition, an e-mail from Warwick Allison at Sydney Live Steam arrived, which details a project to replace a section of their raised level track. A visit to the UK in summer 2019 brought Warwick to Beech Hurst, where he talked at length with Roy P about the construction of our track. Ideas were shared and taken to Australia, where they have been put into practice (**see picture below**).



The complete replacement of a 250ft section took place as detailed next page.

An excerpt below from Warwick's e-mail, detailing the specification + fabrication:

*"The first trial section was installed in 2019, but alas Covid lockdowns has prevented quicker progress. However, last Saturday we completed the next 75m section. The construction has mass concrete piers cast to match the ground height and with an inbuilt threaded nut. The channels are 9m long galvanised rolled channel section 75mm x 40mm x 4mm with galvanised pipe spacers. Bolts are either hot dip galvanised or stainless. Holding down plates, channel fishplates and anti-tip rail attachments are all laser cut stainless. Fortunately we have a member with a business! The track is of welded steel bar construction, 20mm x 10mm mild steel for the 5" gauge rail and 20mm x 5mm for the 2 ½" and 3 ½" gauge rails. Track is welded up in a jig to suit the curve radius. So far only 25m and straight track has been made, but 2 other radii will be needed by the time the job is completed. The channels are rolled to suit the radius. The track is located by recycled plastic sleeper blocks between the channels. It is held down by suitable brackets. Expansion joints (**see picture next page**) are provided at the end of each curve and then every 30m (maximum) on the straight with the mid point anchored to the channel. Each expansion joint should allow at least 20mm of rail movement. The channel fishplates are slotted to also allow expansion and the fishplate bolts have nyloc nuts so they can be left loose without play. The anti-tip rail brackets are slotted for adjustment on the straight / curves.*

*It is a little noisier than the old track (not objectionally so) but, of course a much improved alignment! Our plastic sleepers are low maintenance but harder than your timber and transfer the vibration.*

*A video of our test runs can be found at the following web link....:"*

<https://www.youtube.com/watch?v=Y4trqJVyUFW&t=5s>

**Ed No.** Thanks to Warwick for sending the e-mail / pictures and for the video link, which is well worth 5 minutes of your time. The track looks very nice from both perspectives and the 3 ½" gauge locomotives in the video seem to go very well! Below is a second e-mail excerpt, which details the expansion joint fabrication (**see also picture next page**) and calculations:

*"It is constructed of stainless and laser cut 'leafs' that slide. The idea came from my last UK visit where I saw some flexible track at Guildford for carriage shed access and thought it could be adapted to an expansion joint. Being laser cut it is all assembly and very little manufacture. Each steel channel is 9m long, so for 50C variation that equates to nearly 6mm of expansion. Installed at around 25C gives us 3mm each way and looking at one end gives us about 1.5mm each way. Each channel is independent and connected to the next via slotted fishplates that are supposed to allow these slight movements. The channel is supported on a rubber pad on the pier so hopefully that will absorb some of the movement. Otherwise the pier may also move a little. Time will tell. The track itself is free to move along the channels but held laterally by guide blocks mounted below the sleeper, every so often. The track is bolted to the channel mid-way between each expansion joint so that it does not walk. Hopefully the expansion joint will do its job and accommodate the movement up to 10mm each side.*



*Both the structure and the track have their own expansion provisions built in with the only physical interface being the bolting of the track to the channel section mid-expansion joint."*

**Picture below:** The stainless steel slotted expansion joint...

