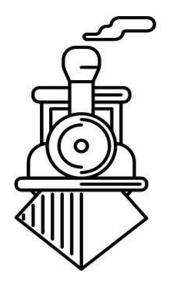


NEW ZEALAND LARGE SCALE NEWSLETTER



# **MARCH 2024**



# THE GARDEN WHISTLE

NEW ZEALAND LARGE SCALE NEWSLETTER

# March 2024

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<u>Cover photo</u> — Neil's Climax passing through the trestle bridge.

Photo supplied by - Editor.

The **Garden Whistle** is published monthly by the Christchurch Garden Railway Group and features news from various Large scale Groups in New Zealand.

Each club is a separate identity and the contact details may be found in club contacts.

Contributions of articles and/or photos are always welcome. Photos should be sent as separate jpg attachments.

The views expressed in this newsletter are not necessarily those of the Editor, Executive, or members of the Christchurch Garden Railway Group

Editor: Iain Collingwood, Email: <u>gw.editor@outlook.com</u>

# **Christchurch Garden Railway Group Meeting**

Report - Editor, Photos as credited

#### Christchurch Garden Railway Group Meeting

Our February meeting was held at Kabita Whale's Collins Creek Branch Railroad in Lincoln, this is a raised railroad with no track power available which meant a selection of battery locomotives ran for the day. This was our first meeting in Christchurch for a couple of months since January their was the convention in Wairarapa so was great to be able to catch up with people, plenty of trains were running all afternoon so thank you Kabita for making this happen. Next months meeting will be in Hokitika on the 16th and 17th so hopefully you have marked it in your diary's to take the trek over the alps, keep an eye out in your emails for the weekend information for those interested in attending.



Andrew Wilson's Mallet pulling NZR freight - Photo Bill Stanley.



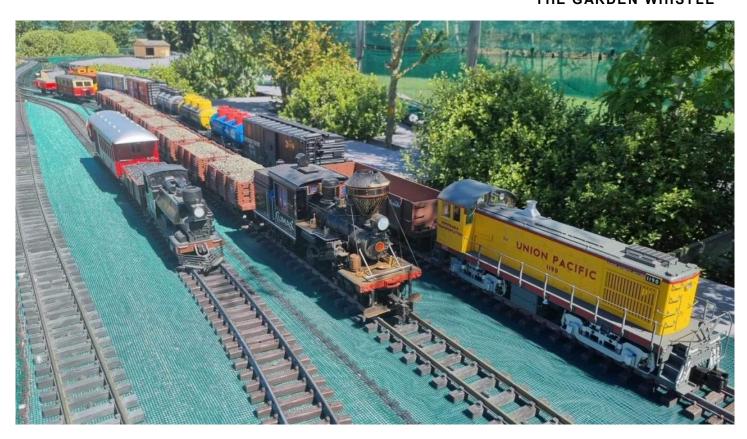
Bruce Verey's RS3 crossing the trestle - Photo Bill Stanley.



Andrew Wilson's F72 and short consist of La Wagon and Carvan - Photo Andrew Wilson.



Douglas Wall's mixed freight passing the town of Carter - Photo Editor.



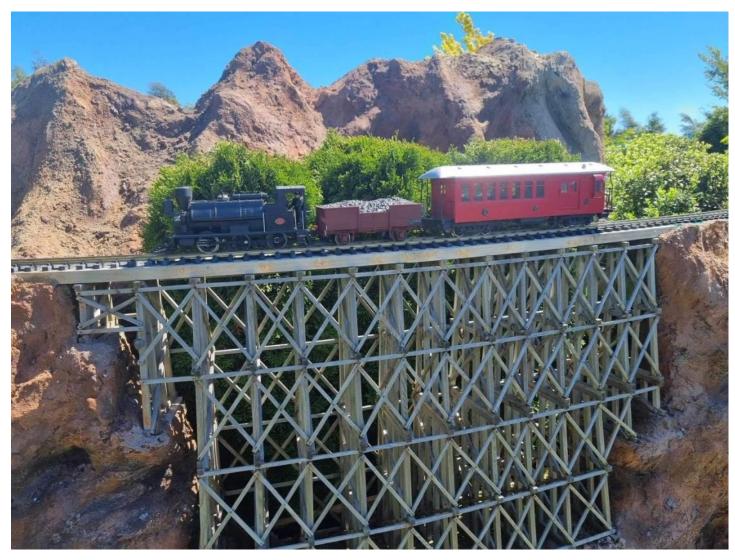
Motive power line-up - Photo Andrew Wilson.



Noels Pig Snout loco with newly built trailer - Photo Editor.



Ian Galbraith's CFGR MOW Train passing the township of Carter - Photo Bill Stanley.



Andrew's NZR train passing over the trestle - Photo Andrew Wilson.



Neil Wiggins Climax with air wire battery control pulling frieght - Photo Bill Stanley



Andrew Hamer's new FA1 Locomotive - Photo Editor



The line-up in the engine shed - Photo Bill Stanley.



Many Members enjoying the sunny day running trains and chatting - Photo Editor.

# From the workbench

#### Photos and Article - Ian C Galbraith

#### Schweineschnaeuzchen

Noel Collingwood has an LGB version of one of the tiny Wismarer railcars and wished to have it converted to battery power, PIKO radio control with MyLocoSound. With not a lot of space available, where to fit the receiver, sound card and speaker?

First check was to see what operated. It was found that three of the lamps did not work.

The model was dismantled, and the track pickups removed, and the motor wires lengthened for connection to the PIKO receiver. Close study revealed that the receiver and sound card could be mounted on the floor of the railcar in the aisle without being too conspicuous. The mounting of a speaker and its enclosure presented a problem. An enclosure was drawn and 3d printed and the speaker attached to the interior lighting bar. All lights were replaced with LEDs. The wiring was completed, the sound card appropriately adjusted, and the railcar run on rollers. So much for the railcar. Now the battery car.

A four wheel wagon for use as a battery car had been provided but, it did not "feel" right. An article by Franz Neubauer on his web site, (www.frankneubauer.de/model/schweine.htm) showed a model of the railcar and proposed coach and, prototype, but never built, trailer.

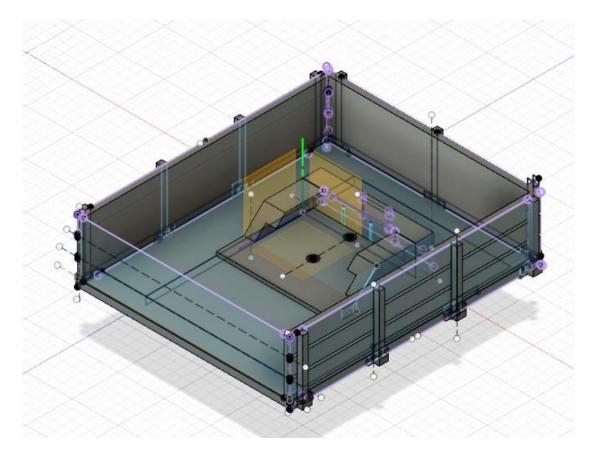
The trailer shown in Franz's article looked to be a better option. (The drawing was only 40mm x 10mm, 1.5625" x 0.37", so details were sketchy) As the battery to be used was a MAKO 2Ah power tool battery, the trailer needed to be dimensioned to suit, "modellers licence", was invoked. The trailer body, incorporating the battery mount, was drawn in Fusion 360, and 3d printed, as were the solebars. Provision was made in the solebars for the fitting of 3mm x 6mm ball races. The drawbar assembly was made from square brass tube of such length that the towbar front to axle centre was the same as the railcar trailing axle to tow point. This would allow for the extended body swing through curves. A removeable tailgate allowed for easy removal of the battery for charging. The prototype trailer was to have been fitted with retractable, wheeled legs to facilitate loading and loading when detached from the railcar. These have not, at this age been modelled for two reasons. Insufficient detail and fragility as this were to be a working model.

A tow mount was drawn and printed. This was attached to the railcar with two 2.5mm screws. To hide the battery, a "canvas" cover was drawn and printed to represent a canvas cover. A test run was made on Noel's "TadBroke Railway" before packing the consist to take to the Garden Railway Convention in the Wairarapa, in January 2024, for it is first "Official" run. Following negative comments, the trailer was redrawn and a replacement printed and finished. The photos show the redrawn trailer and cover.

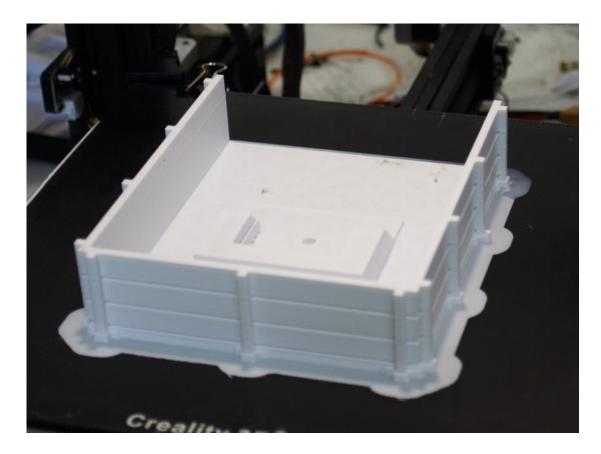
Many Garden Railroaders are using power tool 18v batteries in trailing cars to power their locomotives because of the availability and price. In this instance a MAKO 18V 2Ah battery was used. Cost: \$40.00. Suitable charger \$25.00.

Battery mounts have been drawn and printed for MAKO, OZITA, B & D and Makita to date. (In the early days of battery power, 16 x AA 1.2v 2000mAh cells were used, Cost today \$145.00 and the charger cost \$285.00)

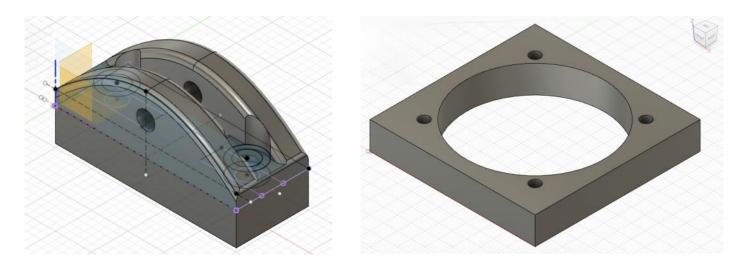
(A rough translation of the name, Schweineschnaeuzchen, "pig snout.")



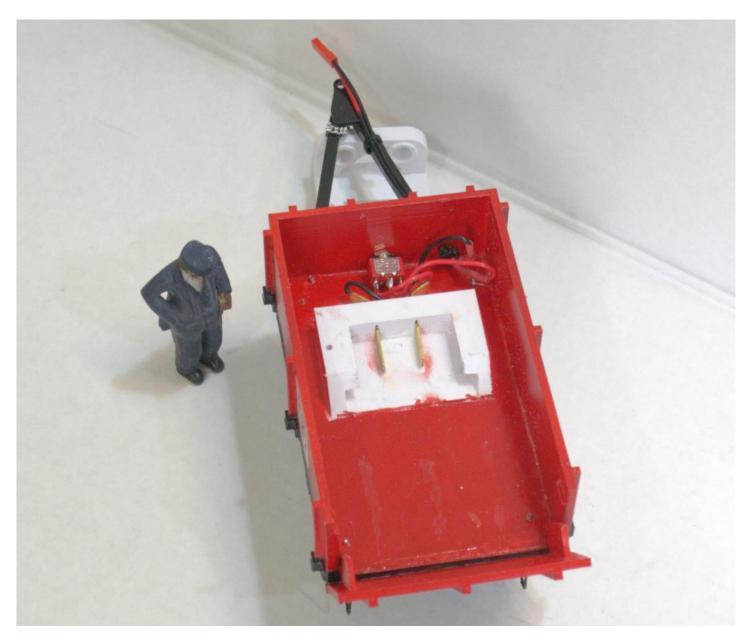
### 3D drawing of trailer body.



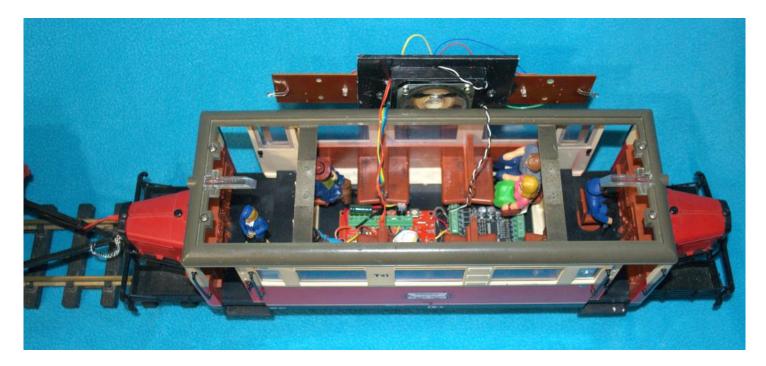
Trailer body on printer.



3D drawing of the coupler pocket and of the speaker mount.



Showing battery mount.



Interior showing the placement of the receiver and sound card.



Side showing battery.



Side with canvas cover.



View of the railcar and trailer.

# Wairarapa Garden Railway Group Meeting

Report Warren Stringer, Photos - As Credited.

### **Running Day At Brendon Clarke's Layout**

This February we had our running day at Brendon and Jemima Clarke's layout in Masterton.

With a beautiful fine warm and calm day it was marvellous picnic weather, so being out in the back yard running trains felt like a nice relaxing way to spend our time.

Those who joined us for the recent Garden Railway Convention will remember this layout with its nice level track on a gently sloping site, with twin tracks running around the perimeter of the back garden lawn.

With a variety of motive power on show we took advantage of the flat track to run a variety of trains. Both Ian and John (up from Wellington for the day) ran their live steam locos. Brendon ran his DC-powered locos on track power, and I used my Stainz train with batteries on-board on the unpowered track loop.

The train running was not perfect of course – this is one of the reasons why we have running days – to test our tracks out with other peoples trains. We found the odd bits of track and rail joints that need work, and some of the supports under the track bed are a bit wavy in places so there was the occasional decoupling of wagons going on... In other words just a normal running day.

And of course what would picnic weather be like without food and drink to help us enjoy ourselves, and Jemima made sure that we were all "fed and watered" well on this lovely laid-back afternoon. Thanks Brendon and Jemima we all appreciated the work you put into hosting our running session once again.



Warren's Stainz passing through the station - Lucus Clarke.



Brendon Clarkes freight train coming into the station - Photo Lucus Clarke.



Warren's battery powered train - Photo John Seward



Freight trains passing at the station - Photo Lucus Clarke



Exiting the tunnel - Photo John Seward



Warren Stringer pointing the way - Photo John Seward



Live steamer running - Photo John Seward

## From the workbench

#### Photos and Article - Ian C Galbraith

#### Another building for the Culcreuch Fold Garden Railway.

It was decided that the town needed another building. A barber shop seemed proper. A suitable starting point was found in High Street, Rangiora. Using this as a starting point, a building was designed and drawn, in nine parts, in Fusion 360. These were the front, side wall x 2, rear wall, front roof support, and four corner braces. All were printed in PLA+ on an Ender 3, 3D printer. The parts were assembled using SLO-ZAP thick CA instant adhesive.

The model was painted using Resene Test Pot colours.

The signwriting was cut from vinyl using a CRICUT Explore 3 cutter. The sign was attached to a piece of clear acrylic sheet and glued in place. The Red, White, Blue striping was also cut from vinyl.

The boardwalk was assembled using coffee stir sticks glued and pinned to a suitably sized piece of 9mm plywood. The building was attached to the base (boardwalk) with four screws. A photo was taken at a temporary placing on the railway to check.



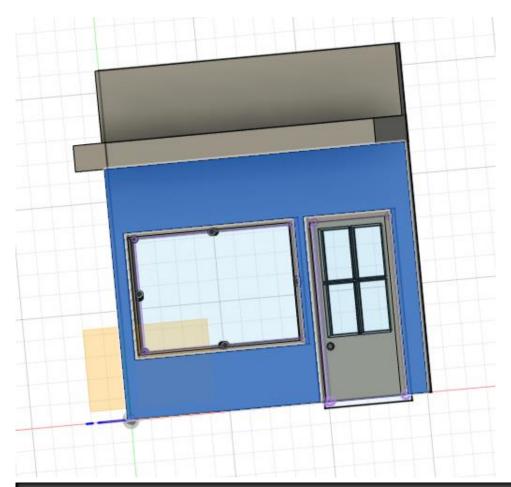


#### Above -

The inspiration for the building was found in Rangiora.

Left -

The sign in preparation for the shop window.



#### Left -

The front of the building drawn using Fusion 360, ready to be 3D printed.

Below - The building Temporarily positioned on the Culcreuch Garden Railway.



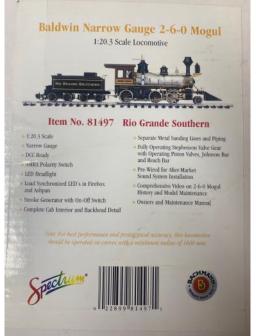
# From the workbench

#### Article and Photos - Editor.

#### Replacing faulty drive gear on the Bachmann Mogul Locomotive.

I was asked by a fellow club member to repair their Bachmann Mogul which had the common issue with the earlier versions of splitting the drive gear, I believe this seemed to be an issue from factory with the gear being made from weak plastic and being placed under stress when pressed onto the shaft. with having the same locomotive on the shelf awaiting repair this became the push to repair my own locomotive at the same time, with repairing multiple Bachmann Consolidation locomotives with the same issue I thought this must be an easier task but with the Consolidation locomotives there seems to be guides online to do this repair but very little for the Mogul locomotives.

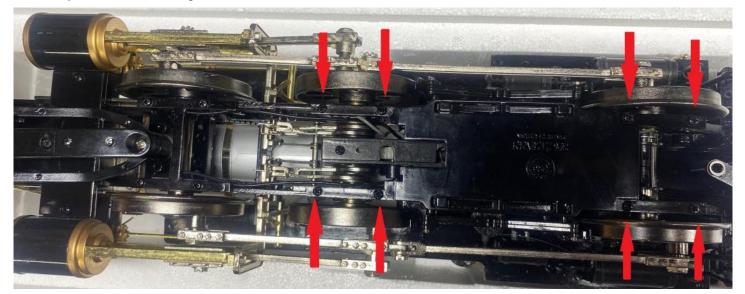
Since I had done the Consolidation repairs I had purchased multiple spare replacement gears from <u>Northwest Short Line</u>, with reading online it states that there are 2 types of gear versions for this locomotive either a 24 or 25 tooth version and <u>NWSL</u> has both but the 25 tooth seems to be more common in the Mogul maybe 24 tooth more for the 4-4-0 Bachmann locomotive.



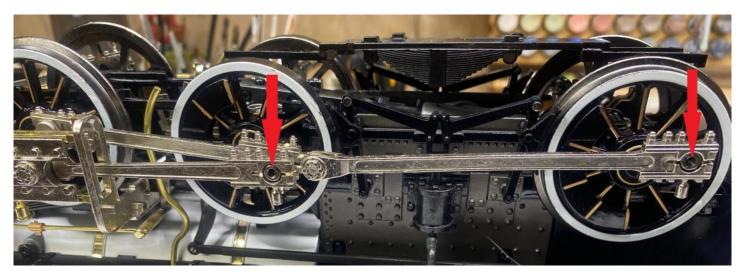
#### Step 1:

First thing to do is grab tools required, this being a parts container to place small screws and bolts into also tweezers, small screwdrivers and sockets.

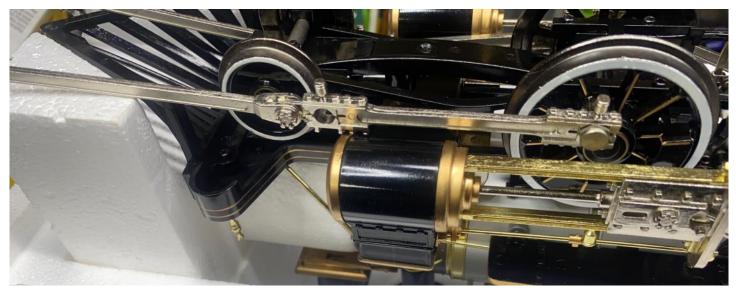
#### Step 2: Disassembly



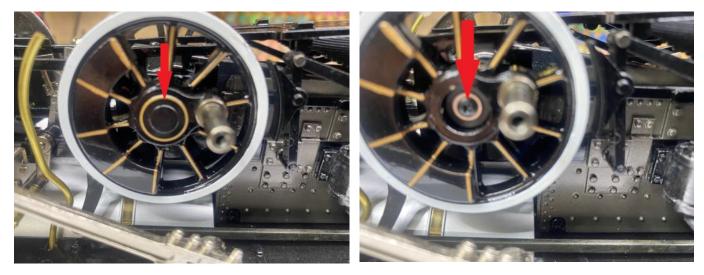
To gain access to the gearbox place the locomotive in its polystyrene lid to support it upside down, here you will be able to remove the 8 little screws marked with red arrows.



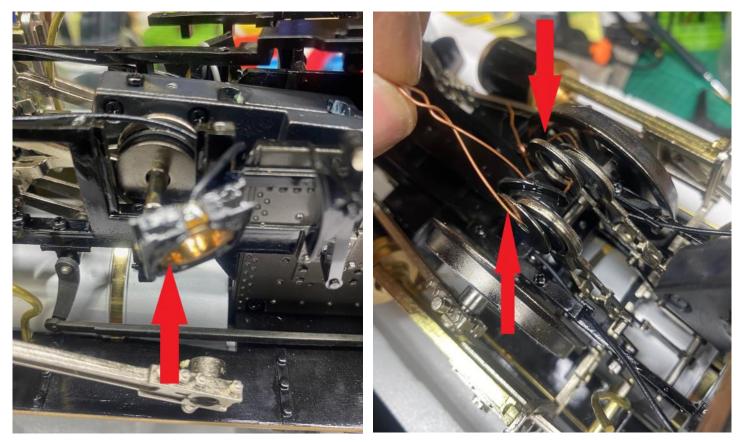
Now remove the bolts holding the side rods to the wheels marked with the red arrows, this must be done on both sides.



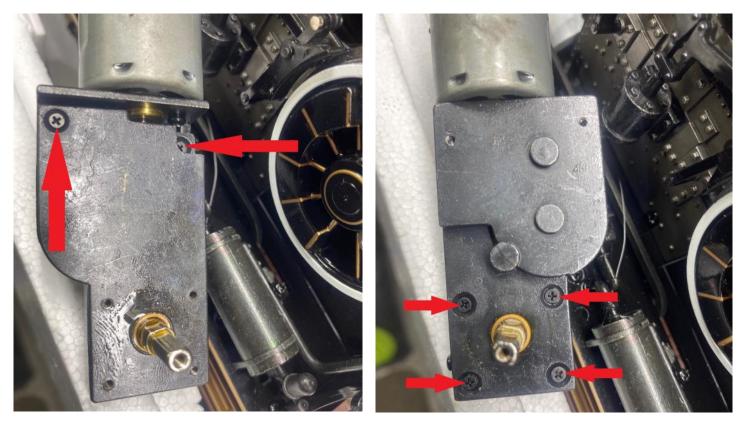
With the bolts removed the side rods can be spread off the wheels and folded out of the way.



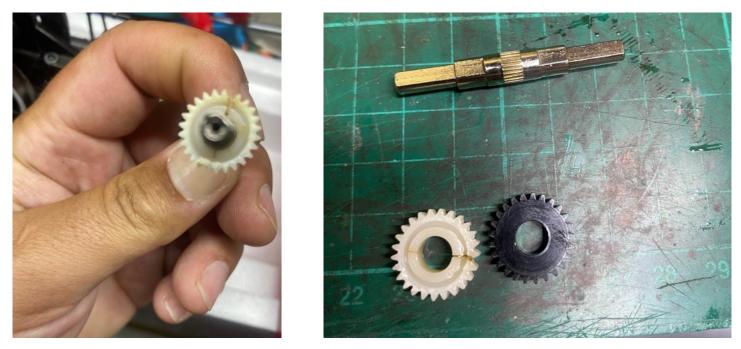
Next remove the center cap on the main drive wheel to allow access to the screw holding the wheel to the shaft, remove the screws on both sides.



Left - Removing the pickup housing these just lift out of the frame, Right - Slide the concentric mechanism off the main driveshaft. Note the use of wire to hold parts together in correct order.



Gently lift out the motor and gearbox being careful with the attached wiring, now remove the 6 screws holding the gearbox together thus allowing the gearbox to be split open.



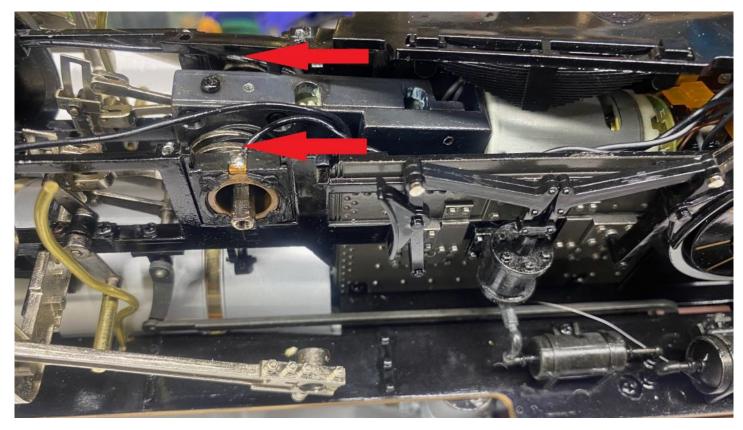
Left - split main gear on shaft from the gearbox. Right - Split Bachmann gear versus the replacement gear from Northwest Short Line.

#### Step 3: Gear replacement

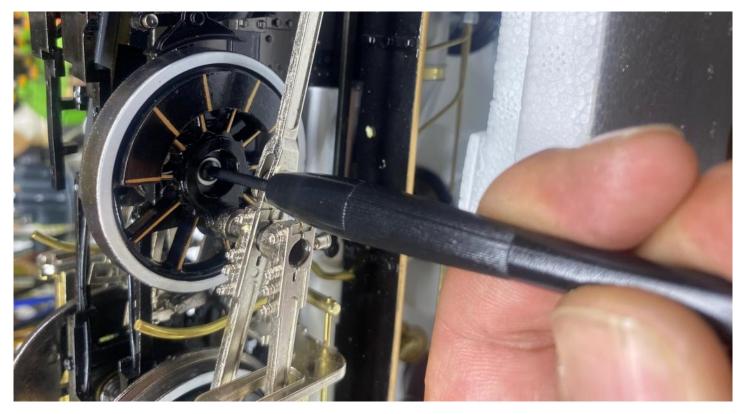


Left - Gear being pressed on with the sensipress. Above Right - New gear pressed on the shaft. Below Right - gear fitted back into gearbox and fresh grease added to new gear.

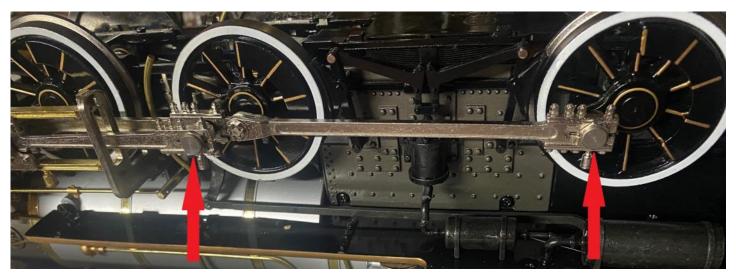
#### Step 4: Reassembly



Place gearbox and motor assembly back into locomotive with the concentric mechanism being slid back onto the shafts each side and pickup housings slid back into the frame.



Slide the wheels back onto the shafts and insert the screws and retighten them then click the covers back over the screw holes on the main drive wheels each side.



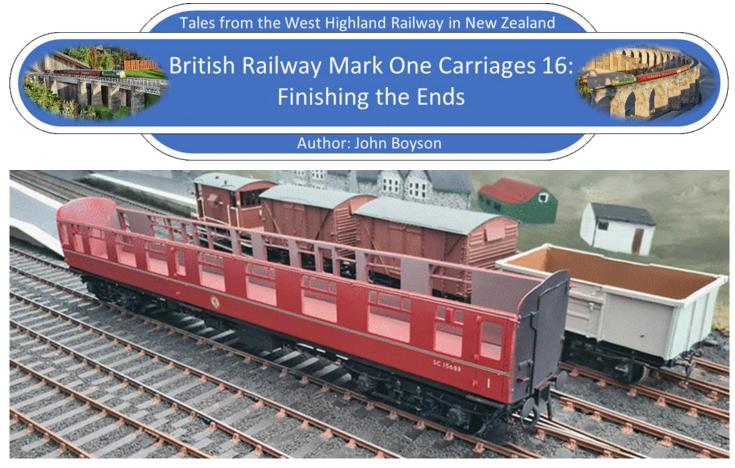
Next align the wheels and refit the side rods then tighten the side rod bolts each side.



Reinstall the cover and retighten the 8 screws as marked by the red arrows.



Complete! - Locomotive with repaired gear ready for service.



#### 1. Introduction

The next external area to be tackled was the carriage ends. These had a number of fittings which needed to be modelled. They also had to be painted.

#### 2. Adding the details

#### 2.1 Creating and Fitting the Tail Lamp Brackets

These essential items came as two variants:

- Body mounted bracket and
- gangway mounted bracket

This section deals purely with the body mounted brackets. The gangway mounted brackets will be covered in the next article in the series.

These items were fabricated from bits of scrap brass in my many left-over boxes, and glued into place with araldite.



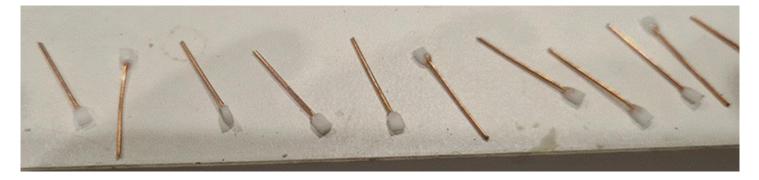
The carriage mounted brackets being fabricated and fitted. On the right, the 3 in 1 machine has come in useful once again but not in a way the manufacturer probably anticipated! Nonetheless, it was great for dangling the bodies whilst the bits being glued were kept horizontal and at a convenient height for occasional adjustment!

#### **2.2 Electrical Connections**

Somewhat bizarrely, as mentioned in the earlier parts of this series, the carriages generated their own power through dynamos backed up by batteries for when the carriages were not in motion. However, as a further safeguard to even out power distribution, they were also electrically interconnected with cable couplings. This system did not initially extend to electrical connections to the locomotive despite being utterly sensible in the case of diesels and electrics particularly the diesel electrics and electrics given they already had their own power supply. Bosses for these had been included in the end prints. Thus, some copper wire and printed connectors formed the connecting cables. The one obvious compromise is that I will not be connecting these up unlike the prototype. The same applies to the heating and brake pipes mounted on the underframes!



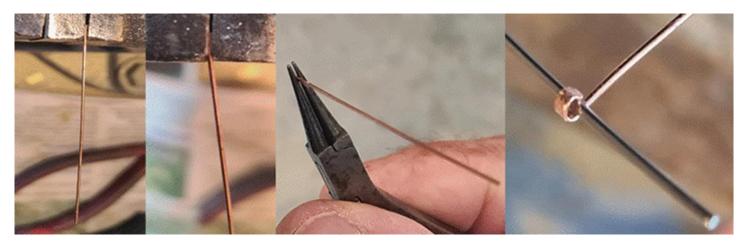
On the left: opening out a pre-printed hole with a 0.7mm drill bit for electrical connector cable in the boss at the end of the carriage and the printed connectors for the other end of the cables. On the right, a connector is having its printed hole drilled out with the same bit ready for a bit of copper wire.



A batch of the completed cables and connectors awaiting fitting.

#### 2.3 Brake Piping and Rodding

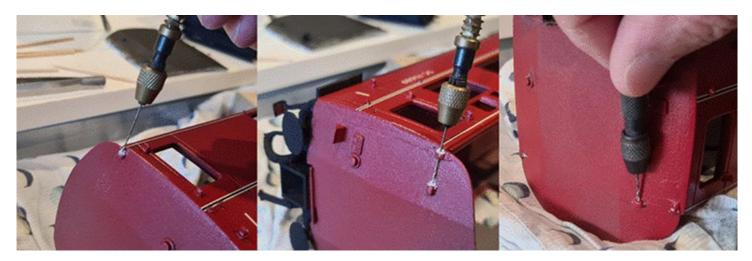
This was provided at one end of each carriage and consisted of a pipe connection and rodding which connected a valve to the emergency chain that would apply the train brakes when the chain was pulled. On each end of the rodding was a bar which indicated which carriage had had the chain pulled for ease of identification by the guard. This feature was known as a "tell-tale". The bosses for connecting these items together had been pre-printed with the ends. So, it was a matter of redrilling the pre-printed holes in these before adding the rodding/piping. The brake pipe was formed from 1mm diameter wire bent to shape and glued in place. The connecting rods were formed from 06mm copper electrical wire. One end was flattened and curved around a short length of 1mm diameter wire to represent the "tell-tale". Once threaded into place the copper wire was bent to represent the remaining rods.



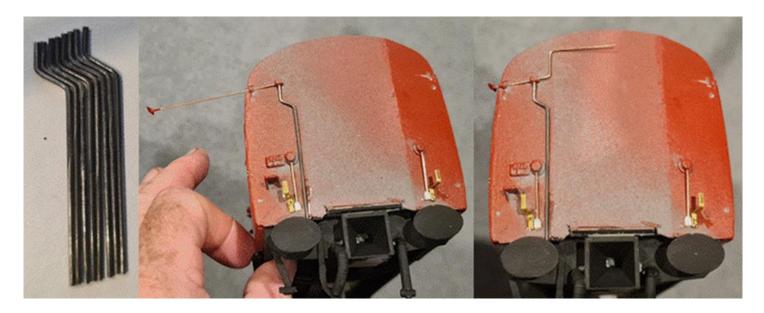
Preparing the emergency brake "tell-tale" rodding



"Tell-tales" prepared and primed at the ends ready for the top coat.



Opening out the holes for the brake pipe (right) and emergency rodding (left and centre)



On the left: the brake pipes formed, Centre: threading the "tell-tale" and rodding through the connecting boxes and, on the right: the rodding connections formed by bending the wire. Just the other side to do. Note the brake pipe, electrical connecting cables and tail lamp brackets (described below) have also all been fitted.

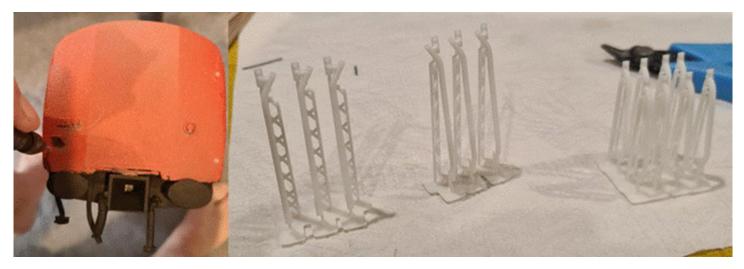
#### 2.4 Handrails

These were formed in two styles for the non-toilet ends of the carriages.

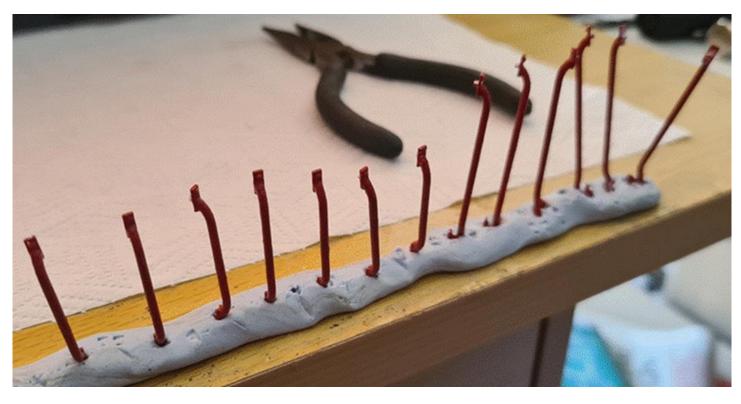
The earlier build carriages had handrails together with steps that went all the way up onto the roof at both ends. The toilet ends used this pipework as a water conduit to fill the header tanks for the toilets. It is unclear why the pipework and steps went up to the roof at the non-header tank ends. With the onset of electrification over parts of the network in the early sixties, British Railways sensibly removed all the steps, apart from the lower one that was still needed to access the electrical cables and tail lamp bracket. The handrail was also cut back to a point below the roof line at the non-toilet end of the carriage.

Later builds of stock used a specific short handrail at these ends. This differed significantly from the earlier versions as can be seen below.

After a number of attempts to fabricate these items from wire and other odds and ends, I fell back to printing them on the 3D printer which worked beautifully. What has been sacrificed in strength is more than made up with detail and accuracy.



Drilling out the holes for the handrails/water pipes and the printed pipe work



Pipework removed from sprues and painted



Variations in end fittings at non toilet ends. Left to right:

- 1. old style handrails and no brake fittings,
- 2. old style handrails with brake fittings,
- 3. new style handrails and no brake fittings and body mounted tail lamp brackets,
- 4. new style handrails with brake fittings and body mounted tail lamp brackets,

The toilet header pipework/handrails will be fitted after the roof is fixed since the pipework at these ends goes over the roof from the end in a clean sweep.

#### **3 Painting**

Whilst the official livery for the ends was maroon, the reality was far different since the automatic carriage cleaners could not reach into these areas. Thus, they became dirty very rapidly and remained so for much of their lives. Accordingly, whilst I did paint the handrails maroon and likewise the "tell-tails" the rest was painted black to reflect the reality. Firstly, the black etch primer was used on the metal pipework and then an acrylic black was applied to the rest. However, some wiping and dry brushing was used around the edges to achieve a blended soft edge to the blackening to reflect the fact it was muck not a true colour!

#### 4. Conclusion



A completed example on its bogies with a roof placed on top

With the end details done, the final external job was to fabricate and fit the gangways. This is will be covered in the next article in the series.



Two coach ends with gangways fitted

This article has been prepared for joint publication in the Garden Whistle and G1MRA NZ newsletter.

Photos and plans provided by the author except where stated.







Pirfic Station is on Youtube find it here:

www.youtube.com/ @PIRFICSTATION

The January / February Garden Railroading News is available to read online, this can be found at <u>www.GRNews.org</u> or

Click here to view the current issue.



Welcome to the 2024 West Coast Regional Meet August 10<sup>th</sup> – 15<sup>th</sup> San Diego, California

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### 15<sup>TH</sup> NZ GARDEN RAILWAY CONVENTION CHRISTCHURCH GARDEN RAILWAY GROUP WAITANGI WEEKEND FEBUARY 6<sup>TH</sup>, 7<sup>TH</sup> & 8<sup>TH</sup> 2026

#### Do you have an article for the Garden Whistle Newsletter?

Do you have a workbench project that might be of interest to the Members; or recent pictures of your layout improvements; or even running of your trains? Then you have material that may make a great submission to the Garden Whistle and the Editor wants to hear from you! For help in submitting pictures or text articles to the Garden Whistle, contact the Editor.

#### gw.editor@outlook.com

# NEXT ISSUE PREVIEW

#### Riding the Rails Part: 1

By Iain Collingwood





The British Railway Mark One Carriages 17: Making and Fitting the Gangways By John Boyson, Pokeno

# **COMING EVENTS**

March 22-24 2024 March 23-24 2024 April 6-7 2024 April 13-14 2024 April 26-28 2024 April 27-28 2024 May 4-5 2024 May 4-5 2024 May 30-2 2024 June 1-2 2024 Julv 6-7 2024 August 10-15 2024 August 23-25 2024 October 12-13 2024 November 16-17 2024 June 18-21 2025 February 5-7 2026

> Do you know of an event? Contact the Editor to include in the next Garden Whistle newsletter gw.editor@outlook.com

Mini AMRA, New Plymouth Nelson Model Railway Show, Stoke Nelson Model Train Show, Bulls Model Railway Exhibition, Hamilton 2024 National Convention NZAMRC Northeast Large Scale Train Show, West Springfield MA USA Dunedin Model Train Show, Mosgiel Hobby & Craft Expo, Levin Midwest Garden Railroad Gathering, USA Hastings Model Train Show Ashburton's Model Train Show. Tinwald West Coast Regional Meet, San Diego, California USA Southern Regional Garden Railroad Get-Together, USA The Big Train Show, Christchurch RailEx. Lower Hutt 40<sup>th</sup> Garden Railway Convention, Sacramento CA, USA 15th NZ Garden Railway Convention, Christchurch

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Ian Galbraith, Rangiora

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Contact Chris cdrowley@xtra.co.nz

THE GARDEN WHISTLE

# Club Meeting

# **Club Contact**

March: TBA

further notice

### Auckland:

Auckland Garden Railway Society Inc

Club Contact:

Email: grahamclannz@xtra.co.nz Robert Graham, Ph: 09 600 2157

### Waikato:

GROW: Garden Railway Operators of Waikato.

Club Contact:

Email: sandnlipsey@gmail.com

Stefan Lipsey, PO Box 612, Waikato Mail Centre, Hamilton, 3240, Ph: 07 859 3650

#### March 3rd (Sunday) 1pm

### Wairarapa:

Lloyd Dickens Castletown 55 Titoki Street Masterton Also that weekend on Saturday and Sunday 2nd/3rd March at Castletown will be a live Steam weekend. All are welcome to both events

Running Days/Meetings cancelled until

Wairarapa Garden Railway Group.

Club Contact:

Email: <u>Lloyd.dickens@wise.net.nz</u> C/- Lloyd Dickens, 55 Titoki Street, Masterton. Ph: 06 370 3790.

#### March 17th (Sunday) 1pm

Wayne Haste 21 William Donald Drive, Masterton

## Wellington:

Wellington Garden Railway Group.

**Club Contact:** 

Email: <u>bilthompson@xtra.co.nz</u> Coordinator: Brent Thompson, 6 Bodmin Terrace, Camborne, Ph: 022 619 4006

#### March 16th & 17th (Saturday & Sunday)

Hokitika Weekend

March: TBA

Jim Staton's Railway & Westland Industrial Heritage Park (Check email for update)

## Christchurch:

Christchurch Garden Railway Group:

Club Contact:

strial Email: <u>2days61@gmail.com</u> Secretary: David Day, 61 Carnarvon Street, Linwood, Christchurch. Ph: 03 981 4424 President: Bill Stanley, Ph: 027 282 4244



# All Aboard 2024

#### April 26 - 28, 2024

Corban Estate Arts Centre, West Auckland

#### Newsletter 1

The 2024 national convention for the New Zealand Association of Model Railway Clubs will be held April 26 - 28, 2024, at the Corban Estate Arts Centre. The centre is in the heart of West Auckland on the historic grounds of the former Corban Estate Winery. The convention is being hosted by the Western Districts and City of Sails model railway clubs and is intended for modellers of all prototypes.

The convention will have layout tours, clinics, AGMs, SIG meetings, a convention dinner and the NZAMRC model competition. There will also be a modelling challenge sponsored by the Australasian Region of the National Model Railroaders Association and at least one operating session.

The local organising committee looks forward to meeting you at the convention.