

GARDEN Rail

AUGUST 2021
ISSUE 324

**ROUNDHOUSE ENGINEERING'S
DARJEELING LOCO REVIEWED**



ANNIE THE BAGNALL HOW YOU CAN SCRATCH-BUILD THIS POWERFUL LITTLE LOCOMOTIVE



**WE BUILD A COMPLETE GARDEN RAILWAY
IN A DAY – AND TAKE IT TO THE NATIONAL
GARDEN RAILWAY SHOW!**



Request your **FREE**
Catalogue
today!

Garden Railways

16mm & G Scale

Visit Our Aylesford Showroom!
Open Monday-Friday 10am-4:30pm
Saturday 10am-1pm

0800 022 4473
www.dreamsteam.co.uk

Locomotives | Rolling Stock | Track | Accessories | Upgrades | Fixing kits & Washers | Chuffers | G Scale Figures | Curve Setters

Get your set-a-curve ready for the track laying season ahead

£15

Available in 32mm & 45mm

Radius 3.0 3.3 3.6 3.9 4.0 4.3 4.6 4.9 5.0 6.0 7.0
8.0 & Straight



FEATURE OF THE MONTH: MSS Rolling Stock

911509 MSS Water Tank £55
911515 MSS Water Tank Kit £53

-Green
-Maroon
-Black

Available in 32mm & 45mm



911500 MSS Log Wagon £55
Available in 32mm & 45mm



911101 MSS Goods Van £55
911103 MSS Goods Van Kit £53
Available in 32mm & 45mm



911505 Real Wood Coal Wagon £55
911505-3 Real Wood Coal Wagon (Rake of 3) £155
Available in 32mm & 45mm, Painted and Unpainted



911001 MSS Guard's Van £55
911003 MSS Guard's Van Kit £53
Available in 32mm & 45mm



911401 MSS Tender £55
911411 MSS Tender Kit £53
-Maroon
-Blue
-Green
-Black
Available in 32mm & 45mm



9911201 MSS Passenger Coach Built £55
911203 MSS Passenger Coach Kit £53
-Maroon
-Blue
-Green
Available in 32mm & 45mm



911301 Pair of MSS Flat Bed Wagon £63
911303 Pair of MSS Flat Bed Wagon Kits £55
911305 Single MSS Flat Bed Wagon Kit £28
911308 Single MSS Flat Bed Wagon £35
Available in 32mm & 45mm

PECO

32mm (SM32) Track

Flexi Track - 12 Pack	SL600x12	£115.00
Flexi Track - 4 Pack	SL600x4	£40.00
Flexi Track - Single	SL600x1	£12.00
Setrack Curve - 6 Pack	ST605x6	£55.00
Setrack Curve - Single	ST605x1	£10.00
Setrack 38 Radius Curve - Single	ST607	£10.00
Setrack 38 Radius Curve - Six Pack	ST607x6	£55.00
Right Hand Point	SL6895	£48.00
Left Hand Point	SL6896	£48.00
Y Point	SL6897	£48.00
Small Radius Right Hand Turnout	SL6891	£48.00
Small Radius Left Hand Turnout	SL6892	£48.00
Wagon Turntable and Crossing	SL627	£20.00
Rail Joiners - 24 Pack	SL810	£3.50

45mm (G45) Track

Flexi Track - Six Pack	SL900x6	£95.00
Flexi Track - Single	SL900x1	£17.00
Setrack Curve - Six Pack	ST905x6	£50.00
Setrack Curve - Single	ST905x1	£8.50
Setrack Straight - Six Pack	ST902x6	£50.00
Setrack Straight - Single	ST902x1	£8.50
Right Hand Point	SL995	£65.00
Left Hand Point	SL996	£65.00
Point Motor Mounting Plate	PL8	£4.00
Metal Rail Joiners - 18 Pack	SL910	£6.00
Insulating Rail Joiners - 12 Pack	SL911	£3.50
Dual Rail Joiners - 6 Pack	SL912	£6.00

SUMMERLANDS CHUFFER

These highly developed and precision engineered chuff pipes that can bring the real sound of a working steam loco!

A wide range always in stock!
Specials can be ordered on request

£29
inc. P&P

Piko Battery Powered Clean Machine GE-25Ton Track Cleaning Loco
Green Manual £230
Red, Radio Control £295



MSS

Maroon Tender (32mm/45mm)	911403	£55.00
Green Tender (32mm/45mm)	911405	£55.00
Black Tender (32mm/45mm)	911401-BL	£55.00
Blue Tender (32mm/45mm)	911402-BL	£55.00
Maroon Passenger Coach (32mm/45mm)	911201	£55.00
Blue Passenger Coach (32mm/45mm)	911201BL	£55.00
Log Wagon (32mm/45mm)	911501	£55.00
Goods Van (32mm/45mm)	911101	£55.00
Guards Van (32mm/45mm)	911001	£55.00
Coal Wagon Grey (32mm/45mm)	911505	£55.00
Coal Wagon Unpainted (32mm/45mm)	911505-1	£55.00
Pair of Flat Bed Wagons (32mm/45mm)	911301	£55.00
Straight Track	910003	£35.50
Curved Track	910005	£35.50
Left Hand Point	910001	£25.40
Right Hand Point	910002	£25.40
Side Tank Locomotive (32mm/45mm)	909003	£210.00
Saddle Tank Locomotive (32mm/45mm)	909013	£240.00
Side Tank Locomotive Kit (32mm/45mm)	909011	£200.00

SLATERS

Festiniog Railway Ashbury First Class 4-Wheel Carriage Kit	16C01	£73.50
Festiniog Railway Third Class Ashbury 4-Wheel Carriage Kit	16C02	£73.50
Dinorwic Slate Wagon Kit	16W01	£20.00
Festiniog Railway 2 Ton Braked Slate Wagon Kit	16W03	£26.60
Festiniog Railway 2 Ton Unbraked Slate Wagon Kit	16W04	£27.00
War Department Light Railways K Class Skip Wagon Kit	16W06	£23.00
Dinorwic Quarry Slab Wagon Kit	16W08	£25.50
Dinorwic Quarry "rubbish" Wagon Kit	16W09	£25.50
Slaster's Mek-Pak	0502	£5.00
Slaster's Mek-Pak Brush	0505	£3.70

DSW

Upgrade Cylinders	DSUPCYL	£72.00
Ceramic Gas Burner Set	DSUPGBS	£90.00
Three Wick Meths Burner	DSUPWMB	£45.00
Dead Leg Lubricator	DSUPDL	£29.00
Steam Regulator Kit	DSUPSRK	£38.00
Small Brass Chimney Cowl	DSNSMCWL	£4.00
Brass Cab Hand Rails	DSENCH	£4.20
Brass Side Tank Hand Rails	DSNSTHR	£5.20
Brass Smoke Box Hand Rails	DSNSBXHR	£3.10
Cylinder Covers	DSNCGCV	£12.00
Brass Sand Boxes	DSNSBX	£12.50
Brass Tank Tops	DSNWT	£9.40
Lubricating Oil	SWLB30	£3.00
Meths Burner Wick	DSWVK6	£1.90
Curve Tipped Syringe	DSWCTS	£2.10
450 Steam Oil 500ml	DSW450SO500	£5.50
220 Steam Oil 500ml	DSW220SO500	£5.50
Solid Fuel Tablets	980001	£3.50
Water Filler Bottle	DSWWFB	£4.00
Meths Filler Bottle	DSWMFB	£3.00

Set-a-Curve

Available in 32mm and 45mm
with a wide range of Radii

£15



MSS Locomotives are available in 32mm & 45mm starting from £210

DON'T FORGET YOUR MAMOD ELECTRIC LOCO CHARGER £35



Dream Steam Ltd, Ground Floor Suite, Vanguard House, Mills Road, Aylesford, Kent, ME20 7NA

Call us: 0800 022 4473 or send an email to sales@dream-steam.com

www.dreamsteam.co.uk | sales@dream-steam.com | Instagram: @dreamsteam ltd | facebook @dreamsteamworks



VIEW FROM THE END OF THE PLATFORM



Incorporating GARDEN RAILWAY
WORLD Issue 324 August 2021

Publisher: Steve Cole

stevec@warnersgroup.co.uk

Editor: Phil Parker

phil.parker@warnersgroup.co.uk

T: 07879 664 383

Design: Ruth Jamieson

Advertising: Bev Machin

bevm@warnersgroup.co.uk T: 01778 392055

Production/Advertising Designer: Amie Carter

amiec@warnersgroup.co.uk

Marketing Manager: Carly Dudge

carlyd@warnersgroup.co.uk

Contributors: David Baker, Rik Bennett, James Berry,

Andrew Coward, Dave Skerchly, Mark Thatcher

Cartoon: Barbara Martin

www.warnersgroup.co.uk

©Warners Group Publications plc 2020

All rights reserved. Material is only accepted on the understanding that there are no copyright restrictions. Although every care will be taken, all materials submitted are at the owner's risk and Warners Group Publications cannot be held responsible for loss or damage however caused. Copyright on all materials in this magazine remains vested in the Authors and Warners Group Publications. Reproduction of the whole or any part is forbidden without relevant permissions. Warners Group Publications and the Editor cannot be held responsible for any error that might occur in text or advertisements. Reliance placed upon the contents of the magazine is entirely at the reader's own risk.

Printed by: Warners Midlands plc

Distribution

News Trade – Warners Distribution

T: 01778 392417

Model Trade – Warners Trade Sales

T: 01778 392404

Overseas Agents – Japan

Erei Co, Ltd 1-1-12 Toyotama-kita,

Nerima-ku, Tokyo 176

Subscriptions

T: 01778 392465 F: 01778 421706

(UK & Overseas)

subscriptions@warnersgroup.co.uk

UK: £57.00 12 issues (1 year)

(UK DD: £11.99 Quarterly, £49.99 Annually)

Rest of Europe: £71.00 12 issues (1 year)

Rest of World: £83.00 12 issues (1 year)

You can now manage your subscription online at:

www.world-of-railways.co.uk

www.warners.gr/gardenrailrenewals

Back Issues

T: 01778 391180

subsacccetteam@warnersgroup.co.uk

West Street, Bourne, Lincolnshire PE10 9PH

SHOWTIME!

What a terrific weekend at the National Garden Railway Show.

Mick Blowfield and his trusty team of volunteers from the 16mm Association put on a fantastic event in difficult circumstances. They anticipated that we might not be free of Covid restrictions, and sadly, were proved right. Despite this, the planning allowed the show to go ahead while keeping visitors and exhibitors as safe as they would be entering a supermarket.

Everyone I talked to enjoyed themselves and many in the trade report better than expected sales. There were plenty of boxes leaving under people's arms. It looks like there will be plenty more modelling this year.



Getting out and about among people seemed a bit odd after 18 months shut away, but we enjoyed putting faces, or at least the top half of them, to names. Thanks to everyone who took the time to drop in at the **Garden Rail** stand and say hello.

You can read about our 'Layout in a day' in this issue. Let's just say, it didn't all go quite as planned, but we still enjoyed ourselves, and that's what it's all about.



CONTENTS

- | | | | |
|------------|--|------------|--|
| P3 | VIEW FROM THE END OF THE PLATFORM | P30 | ANNIE THE BAGNALL by Dave Skerchly |
| P6 | GARDEN RAIL AT THE NGRS | P36 | EVERYONE'S CUP OF TEA by Mark Thatcher |
| P14 | CONVERTING AN LGB STAINZ TO BATTERY POWER by James Berry | P39 | MAILBOX |
| P18 | SCRATCH-BUILDING AN ENGINE HOUSE by David Baker | P42 | SOJOURN AT SHADE GAP by Andrew Coward |
| P20 | FREIGHT MANAGEMENT by Rik Bennett | P44 | PRODUCT NEWS |
| P24 | SANDFORD by Mark Thatcher | P47 | DIARY DATES |

P50 SEEN AT THE NGRS

KENT GARDEN RAILWAYS

Check out the extensive listings of "in stock" items and special offers in our online shop



LGB



26816 DRG Class 99.22 Steam Locomotive with mfx/DCC Sound £1952.00



23591 SOEG Diesel Locomotive, Road Number Köf 6001 with sound £500.00



20184 DR Lenz loco 99 5605 with mfx/DCC Sound £634.00



25911 MPSB Diesel Loco £259.00
24141 Field Railroad Steam Loco KJF £293.00



31356 DR 2nd Class coach £223.00



31357 DR 2nd Class coach £223.00



33521 RhB type As parlor car, 1161 - £333.00



33662 MGB Panorama Car with Ski Bar £413.00



42430 Tipper wagon red £35.00



46897 RhB "Spar" Container Car £188.00



We strive to keep the full range of LGB track in stock as well as all of the normal packeted accessories.

PIKO



37154 Circus Roncalli Battery Powered RC Starter Set £205.00



37523 Piko G scale DB Railion BR365 Diesel Locomotive £250.00



37591 Piko G Scale DR BR106 Diesel IV (DCC-Sound) £561.00



37575 Piko G Scale DR BR118 Diesel Locomotive £395.00

BACHMANN G SCALE

93803 1:22.5 Center-Cupola



Caboose - D&RGW #0506 £85.00



93265 1:22.5 Reefer Berkshire Brewing Golden Spike £72.00



91702 Los Angeles Railway - 1:29 Peter Witt Streetcar £270.00



96251 Speeder Pennsylvania Maintenance of Way £92.00



In stock items



Jennie - blue - 32mm £799.00



Fowler - black with radio control - 32mm £1885.00



ACCUCRAFT

Available from stock

Z1 Square head chopper coupling with bob weight and hook £7.50
Z2 Round head chopper coupling with bob weight and hook £7.50
Z49 Replacement chopper with bob weight for Z1/Z2 couplings - pack of 10 £9.50
Z3 25mm wheels G0 £7.50
Z4 25mm wheels G1 £7.50
Z5 30mm wheels G0 £7.50
Z6 30mm wheels G1 £7.50



1:19 Large Quarry Hunslet Available in Red, Black, Penrhyn



lined black and blue. £1595.00
1:19 'TALYLLYN' TR 0-4-2ST Available in TR Green, Indian Red or Black and either 32mm OR 45mm gauge £1650.00



1:19 Talgarth 0-4-0T Black, green or maroon £1050.00
1:19 Sabrina 0-4-0ST Black, green, or maroon £1050.00



R19-26 Isle of Man Pairs style Half Brake £175.00



R19-10 IOM 4 wheel coach Maroon and cream £90.00



R19-19 - L&B 3rd Class coach in Southern Green £150.00

R19-20 - L&B 3rd Class Centre Observation SR Green £150.00

R19-21 - L&B Composite in Southern Green £150.00



Isle of Man G Van, with or without vents (portholes). Light grey with various numbers or data only £80.00
SR Howard Van £100.00
SR brown, 4 numbers or L&B grey data only



R19-1E L&B 4 wheel wagon - L&BR grey #10, 11, 17 or 18 £55.00



R19-2 L&B goods van L&B Grey, SR brown plus grey or brown data only £60.00

Pre order items



R19-18 L&B brake composite - est. delivery spring 2021 £175.00

POLA G



330850 Pola G Scale Silverton American Station Kit £161/00



330851 Pola G Scale Silverton American Engine Shed Kit £117.00

Kent Garden Railways, 68 High Street, St Mary Cray, Orpington, Kent BR5 3NH
Telephone 01689 891668

Internet, telephone and exhibition sales only

www.kgrmodels.com



THE MODEL SHOP FOR BIG IMAGINATIONS

MODEL RAILWAYS - SLOT CARS - PLASTIC KITS/WARGAMING - DIECAST/COLLECTABLES

FREE POSTAGE on orders over £15.00
NEXT BUSINESS DAY DELIVERY available £4.95
FREE NEXT DAY on orders over £150.00

Great prices on **LGB Track**



LGB10000

Straight Track 300mm

OUR PRICE

£6.50 per length



LGB11000

Curved Track R1 30°

OUR PRICE

£7.25 per length

LGB12000/12100

RH or LH R1 30° Point

OUR PRICE

£42.50 per point



G SCALE SPECIALISTS



PIKO

POLAR

Preiser ORIGINAL

Probably the Best Stocked Shop in the UK:

120 Ranges

20,000 Products in Stock

Over 50,000 Products Listed from around the world

Got Amazon Vouchers? All of our products are listed on Amazon.co.uk

amazon.co.uk

bit.ly/gaugemasteramazon

Prefer to pay by PayPal?
We have an eBay shop as well!

ebay

bit.ly/gaugemasterebay

GAUGEMASTER Controls Ltd, Ford Road, Arundel, West Sussex, BN18 0BN, United Kingdom
 tel - 01903 884488 fax - 01903 884377 email - sales@gaugemaster.com

www.gaugemaster.com





Garden Rail at the National Garden Railway Show

Five hours of soil, sweat and gravel – we built a garden railway at the 16mm Association's exhibition, but not without incident.

While I might spend plenty of time enjoying looking at, and even building, 16mm scale models, there isn't a 32mm gauge line to run them on, at least, most of the time.

All this changed for a few hours at the NGRS when we built the **Garden Rail**, garden railway - a temporary line that only exists for the duration of the show.

Readers may remember our first attempt at doing this back in the June 2019 issue. The premise is simple enough: Turn up with a car full of compost, gravel, plants and trains, and build a real, ground-level layout. Run trains for a day, and then take it all away again.

Repeating the exercise ought to have been simple, but the pandemic had thrown a couple of curveballs our way. In 2019, the

plants were borrowed from a local garden centre near the venue. Picked up on Friday, they were carefully looked after and returned on the Saturday.

Well, it's not really fair to ask at the moment. People are (rightly) a bit squeamish about goods that have been handled before, and you can't easily sanitise a plant. The change of show date also moved us from a quiet trading period to a busy one. Emptying their shelves for free, wasn't really an option.

Thanks Mum

Fortunately, my mother is a keen gardener and, with a bit of planning, and the promise of free bags of second-hand compost, she agreed to sort me out some greenery. Basically, nothing small was planted in the

garden until after the show. In the weeks before, the patio was covered with little plant pots containing all sorts of goodies. The later move from April to June meant more colourful flowers were available, but please don't ask me to name the species.

In addition, it seems gardeners are always happy to buy plants, and my dad found himself taken on several trips to the garden centre "because Philip needs some plants for his railway". We'll come back to excuses for shopping later...

Dave and Mark pitch in

The **Garden Rail** layout is a great opportunity to showcase some of the projects that have appeared in the magazine, and once the dates were confirmed, Dave Skertchly offered to dig the pottery cottage he wrote



Dave Skertchly's "Annie", whose build you can read about in this issue, proved to be a powerful slow runner, perfectly suited to the wobbly permanent way. Sadly, the Groudle coach didn't like the sharp curves, and was replaced by wagons for a less authentic, but better running, train.

up last month, and bring it along. Not just sticking it in the back of the car either. When the building arrived, it came in a tray with plants, ready to be put into the display, along with a flock of sheep.

He also inaugurated the first Mostyn 7 car rally with a fine selection of different models on show. Thanks also to Richard Cable and Daniel Cousins, who brought vehicles to add to the display.

Mark Thatcher lent us two buildings by the late Stuart Currie from his enviable collection, a delightful platelayers hut and magnificent chapel, which formed the centrepiece of the display. Sadly, he insisted on taking them away again afterwards, I wasn't the only person who would happily have found a home for these works of art.

Time to get building

Arriving at the venue nice and early, the team pointed me at our space, a three-metre square area that looked bigger than I remembered, even though it was exactly the same. I unloaded, thankful that extra space between stands meant I could spread out a bit, laid the plastic sheet used to protect the hard concrete floor (no, I'm not sure why I do this) and got to work.

The trackplan is worked out on the day, mainly because my normal layout design software doesn't cover Tri-ang Big-Big plastic track. A lot of people asked about this, and it is the toy red plastic track, but 20 minutes with a can of Halfords black spray paint makes it look much more realistic. A day of running will wear the paint off the top of the rail, but it's quick and simple to repair, and I like to think the red showing through gives a realistic rusty rails effect.

Geometry is a little bit of a problem, with a single size of curve, single length of straights and two points to play with, coming up with an interesting layout is tricky. Eventually, I started with a simple oval and gradually expanded it to nearly fill the space.



One of the longer trains we ran was a line of Tri-ang Big Big tippers behind a nice, heavy, IP Engineering Dotti. Two AAA batteries provided power for well over an hour of running.



In 2019, the mainstay of our operations was this IP Engineering Ezee train. This year, for no good reason, the brake coach decided to hop off at different spots on the circuit. I suspect more weight will solve this, but guess who didn't have any lead in his toolbox? We still ran a reduced one coach service for a while to the amusement of children who love a bright red train.



A Saltford models vintage special powered by the Simplex built in our July 2020 edition, hauling some original wagons built by the Editor in the 1980s.



In the coal yard, a Phil Sharples Hunslet poses with some wagons and Jones the steam looks on. It looks like the **Garden Rail** van could do with a bit of superglue under the roof...

For future shows, I need to track down the half-curves to match the points, but 1960s track isn't easy to come by, and collectors tend to push the price up. Everyone seemed pleased with the end result though, and it certainly took locos a pleasing time to complete a circuit.

Soil and stones

Track down, I spent a happy half hour crawling around putting gravel under it for ballast. The stones of choice are "Golden Gravel" from the local DIY shed. For a permanent layout, something smaller and less smooth would be better, a bit of shopping around for me next year. Does anyone have suggestions for readily available stones?

Ground contours were built up with slabs of expanded polystyrene insulation and then the whole lot covered with compost, aiming

for at least an inch depth everywhere. Just under five 50-litre bags were needed for the job in the end.

Planting

Who said gardening is relaxing?

To keep things simple for packing up, most of the plants stay in their pots, which are then hidden with extra compost. This is a benefit of a temporary model, there's no rain to wash banks of soil away as there is in the garden! Not all can, of course, the shallow soil means some have to come out and be squished into place, they seem to survive this OK though.

One innovation my mum came up with, is wrapping some of the roots in damp newspaper tied up with string. It certainly makes putting plants in place easier, they can be poked into place and propped up



The NGRS saw the inaugural Mostyn 7 rally with both 16mm and 7/8th scale vehicles exhibited by several GR readers. These attracted a lot of interest and Dave Skertchly was on hand much of the time to expound on their history, even without lubrication provided by a pint of Auld Fagbut.

Building a quick and easy narrow gauge platform



The platform is a simple sheet of 12mm thick MDF. I was lucky to find an off-cut in a hardware shop. The paving slabs along the edge are carved out using some very cheap (£3 a set from eBay) tools. Scribe the line with a heavy knife and it's quite easy to produce reasonably straight groves.



If the model was going to live outside, several coats of sealant or varnish would be a good idea. I skipped this and moved straight to dabbing "Pure Grey" and "Flintstone" emulsion paints over it with a sponge, as Mark Thatcher has shown in many of his builds. The mottled colour is most effective.



Fencing is made using art shop lollipop sticks, chopped in half, fixed to lengths of coffee stirrer using PVA glue. The main posts are 5mm square basswood strip, chosen because I had a length handy.



The posts are fixed to the back of the platform with brass screws to make removal easier in the future. Pilot holes are a must, or the basswood will split.



Mark Thatcher took the opportunity to test a newly bought Roundhouse Bulldog. The heavy locomotive had no problems with the light plastic track and trundled round with real presence. We also ran a Harlech Castle and thanks to a flangeless centre axle, it surprised us by managing the curves perfectly.



Up the path to Dave's Pottery Cottage from our July issue. Apparently, the sheep are gathering to have a quiet word with the shepherd about his comments on the subject of mint sauce.



A Timpdon Models railcar built by Mark Thatcher (due to appear on these pages in a couple of months). It's too long for Big-Big curves, but a lovely looking model that runs very sweetly.



The last train of the day, Dotti, pushing a Brandbright stake wagon. A few minutes after the photo was taken, the layout was no more.

with compost to show their best face to the audience. As well as making them much easier to position in the scene, there's no guessing which pot they need to go back into when packing up.

All this involves a lot of bending and scrambling around, making for tired legs. If I'd taken a long-handled rake, I could have stood on the earth and then hidden my footprints. Or, follow the Skertchly advice to place stepping stones where you know you will need to stand.

Doors open

Before the show, all the locos had been checked over, oiled and given some fresh batteries. Most haven't run any distance since 2019. I reasoned that five would be plenty for the day.

The doors opened, crowds arrived and the trains started to run. The plan was to leave something trundling around while we were chatting, but the trains had other ideas. Stock that was reliable last time, decided to hop about and depart the rails. Batteries seemed to have short lives, and on the far side of the model, there was some wobbly track that caused trains to stall through lack of adhesion. They hadn't done this while

Seen at the show



Bowaters models provided space for this terrific display of models built from PDF kits in tribute to the much-missed Peter Farley.

A few more photos from the show can be found on page 50.

being tested, and it was (of course) the most difficult part of the layout to get at.

A couple of locos needed attention as gears came out of mesh, but being kits, re-fixing motors with a dab of superglue wasn't difficult. Very soon, unreliable stock was weeded out, Big-Big tippers run perfectly, except if you find the one with finescale wheels that is. Remove that, and the train will run forever. Coarse flanges are your friend!

Throughout the day, people started to sit in front of the model, which is what we hope for. I think all readers will know the pleasant feeling of just watching the trains pass by on a model. I found myself doing just that late in the afternoon after photographing a visiting model and it was lovely. You really don't need a massive layout to be a happy garden railway fan.

Time to go home

Five o'clock arrived and it was time to go home. Time to hand back the buildings. Time to put the plants back into their pots. Time to scoop up the gravel and soil, then try to cram it all back in the car. Time to wish I'd brought a broom and not just the dustpan and brush. Thanks to the stewards who not only borrowed one, but swept up the detritus. An hour and half saw everything packed away.

Will we do this again? Of course. All being well, in 2022, we'll be back with another load of garden materials. I returned the plants in a good enough state that I've been promised another batch for next year, after more research trips to garden centres no doubt. ■

New products on show

We'll be bringing you full details of all these products in the future, but here's a quick snapshot.



Roundhouse Engineering and its 16mm scale Small England class.



Oakeley Carriage by The Lineside Hut.



John Knowles Clay Tub by Harecroft.



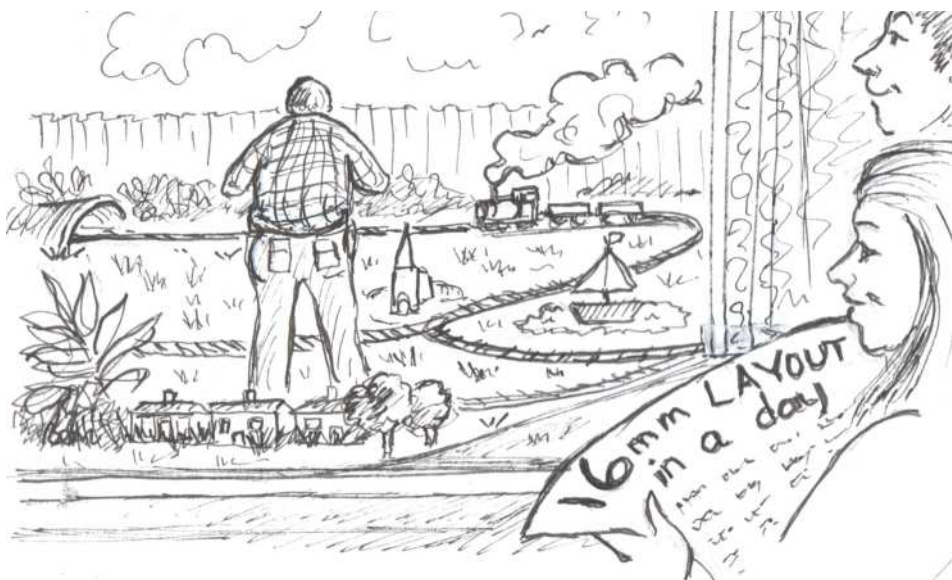
Garden Railway Specialists looking very pleased with the production Quarry Hunslets.



A TR GVT coach from IP Engineering, the hand sanitiser isn't part of the kit!



Accucraft with a whole stand of locos not widely seen in public, including the GWR 43XX sample that had arrived a few days before the show.



A layout in a day? He started this one years ago..Every time I think it's finished he has another bright idea.....

ANYTHING NARROW GAUGE

www.anythingnarrowgauge.co.uk • 01409 255510 / 07711 387621 • anythingnarrowgauge@googlemail.com

Shop: 6 Bank House, Chapel Street, Holsworthy, Devon EX22 6AR (10:00 to 16:00 Tuesday to Saturday)

Roundhouse

All Locomotives in stock
FREE UK DELIVERY

Katie R/C: Deep Brunswick Green **£1648**

Katie R/C: Festiniog Maroon **£1648**

Merseysider R/C: Maroon Sound **£875**

Silver Lady R/C: Victorian Maroon **£2025**

Russell R/C: Maroon **£1995**

Jennie 32mm: Black **£828**

David Lloyd George 32mm R/C:
Festiniog Maroon **£4200**

Diesel Chassis kits

HBKD2 0-4-0: **£148**

HBKD3 0-6-0: **£169**

NOW IN STOCK



Peco SM32, G45 & G1 Track

SL600 SM32 12 x Flexitrack **£109.50***

SL695/6/7 SM32 Med. Radius Points L,R,Y.... **£47.50***

SL691/2 SM32 Short Radius Points L,R **£47.50***

ST605 SM32 30" Radius Curves **£48.94***

ST607 SM32 38" Radius Curves **£48.94***

SL640 SM32 Bufferstop Kit **£4.95***

SL810 SM32 Fishplates **£4.00***

SL900 G45 6 X Flexible Track **£92.99***

SL995/6 G45 Point Left/Right **£64.99***

SL910 G45 Fishplates **£7.22***

*PRICES MAY VARY

Stockists of Sunset Valley
Railroad Pneumatics
and The Train Department
TTD Upgrade Valves &
WeeBee Safety Valves



ALWAYS IN STOCK

WANTED

**GARDEN RAILWAY LOCOMOTIVES
AND COMPLETE COLLECTIONS**

WE CAN ARRANGE PACKAGING & COLLECTION
BEST PRICES PAID - SPEAK TO SIMON

QUALITY WOODEN LOCOMOTIVE STORAGE BOXES

- Fitted with interchangeable locating rail
- Includes fire retardant protection foam

LOCOMOTIVE SERVICING BOX AVAILABLE **£48.50**

REPAIRS & SERVICING AVAILABLE – Please call for details

• PLEASE CHECK OUR WEBSITE FOR FULL STOCK AND THE LATEST SECONDHAND LIST •

The Season Turns...

...Time To Think About That Winter Project



Home Builders Kits in stock and ready to go. Build your own Lady Anne, Billy, Katie, Fowler or George. Each kit comes with comprehensive instructions and allows you to build at your own pace. Help and advice is available throughout the build. Our quality, your achievement!

ROUNDHOUSE

www.roundhouse-eng.com

mail@roundhouse-eng.com

01302 328035

WHAT IS AVAXHOME?

AVAXHOME-

the biggest Internet portal,
providing you various content:
brand new books, trending movies,
fresh magazines, hot games,
recent software, latest music releases.

Unlimited satisfaction one low price
Cheap constant access to piping hot media
Protect your downloadings from Big brother
Safer, than torrent-trackers

18 years of seamless operation and our users' satisfaction

All languages
Brand new content
One site



AVXLIVE . ICU

AvaxHome - Your End Place

We have everything for all of your needs. Just open <https://avxlive.icu>

• Trade in with Hattons for payment within 1 or 2 days of your items arriving with us! •



Use our self-service tools to list your collection quickly and easily online!

We purchase all manner of items:

LOCOS &
ROLLING
STOCK

GARDEN
RAILWAYS

DIECAST
VEHICLES

UNBUILT
PLASTIC
KITS

So why choose Hattons?

- More than 70 years of experience
- Offering you the best prices in the industry
- Valuations made by experts
- Free quotes with no obligation to trade
- We can arrange delivery – no collection too big or too small
- Fast, secure payment • Store credit available

**WE PAY
STRAIGHT AWAY!***

*Same day payments apply for collections received Monday to Friday before 2pm. Any collections received after 2pm will be paid on the next working day. Please note: In the unlikely event that we revise our offer price for your collection, you will be paid after responding to our offer. For full Terms and Conditions, visit hattons.co.uk/preownedterms

Get cash for your items in just four easy steps...



List

Prepare & submit a list of your items online or send spreadsheets, documents or photographs to us via our website.



Offer

Our expert staff will review your list and create your bespoke valuation.



Send

Once the offer is accepted, send your items to us.



Pay

Items are checked, the offer confirmed and payment made via **Bank Transfer, Cheque or PayPal**.

Start your trade in today at:

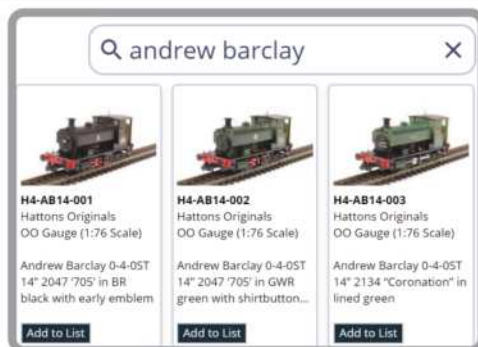
PRE-OWNED GARDEN ITEMS FOR CASH



We purchase a wide variety of brands, including...



The easiest way to put your
list together...
Utilise our extensive product
database and preset item
conditions to quickly
and easily compile your list.



Take our 60 second quiz and immediately learn if
we can make an offer on your collection!

www.HattonsModelMoney.com/quiz



Get in touch with our friendly team...

Call us on: **0151 305 1755**
Phone opening times: Mon to Sun 9:30am - 5:30pm

Email us at: preowned@hattons.co.uk

17 Montague Road, Widnes, WA8 8FZ



www.hattonsmodelmoney.com



Converting an LGB Stainz to battery power

James Berry leaves track power behind with this comprehensive, and invisible, conversion.

While I am currently running my garden railway on 24v DC analogue track power, I thought I would give battery power a go. Initially, I was going to use a trailing car containing the battery and electronics to power my Otto or Porter, however, a chance buy of an LGB Stainz, via a forum, saw my first change of plan.

On receipt of the loco, it far from met my expectations. The cab had been “tar brushed” black, a large number of components were damaged or missing, and all the original electronics of the Direct Decoder (DCC ready) had been removed and replaced by a 3rd party DCC chip. After agreeing a substantial discount from the vendor, and as the loco was now stripped as part of my investigation into its issues, I thought this would be ideal for conversion.

Having never ventured into battery power or remote control (R/C), discussions were

had with a retailer about my requirements. We decided that the battery would be a 3s LiPo at 11.1 volts, to be sited in the cab, with a Molex balanced charging point fitted underneath. During this time, the missing and damaged spare parts were sourced, luckily a second-hand cab became available, which included sound. Better still, on receipt, it was found to contain all the electronics, though for an earlier model. When bench tested, it all worked, so I decided that I would utilise these parts meaning a second change of plan.

I had always intended to change the lights to LEDs, so, these, plus resistors and heat-shrink were sourced, and after some research, a bridge rectifier, required to ensure the cab light worked in both directions.

Due to my low skill rating in electronics, I decided to make the system modular, so that the whole thing could be built and bench tested, then, dismantled and reassembled

in the loco. However, back on the track, the loco ran well, but I was so disappointed with the early LGB sound. It was time for a rethink.

In a third change of plan, I striped all the electrics, except for the rear light, out of the loco, leaving the battery and charging point that I had just fitted. Then, a proprietary sound card was fitted and the speaker replaced. The sound card would run in its



The battery and charging point wiring.

automated configuration, with no input from the RC transmitter.

With the lead weight and main board removed, the lead weight was taped over to prevent accidental shorting, and a piece of Veroboard was cut and fixed to the weight, taking care that the fixing screws were isolated from the electronics.

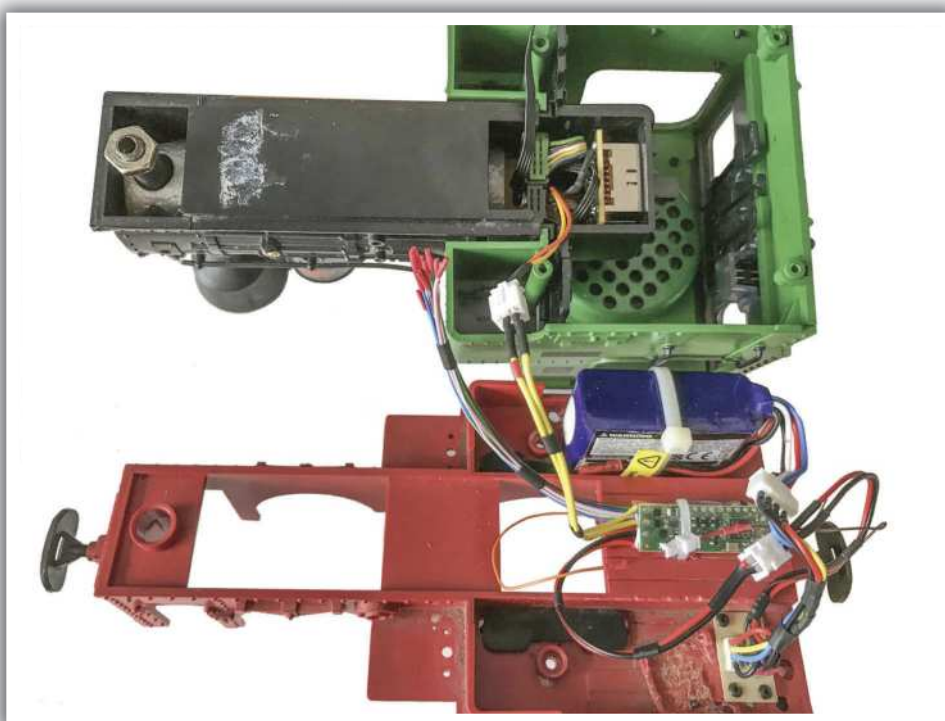
Sticking with the modular design, JST-XH connections were used, 3-pin for the battery power and warning LED, 2-pin for the motor power and 2-pin for the speaker, with fly leads attached to the board for the sound card connections.

The sound card would just fit in the space vacated by the main board, with board fly leads connected to the sound card. It was fixed to the weight using double-sided Velcro to make removal easier. The front LED is twin warm white/red, and plugs into the motor connection on the board, which allows switching of the LED colours, with reversal of the power. The modified weight was refitted in the boiler, and the boiler base refitted. A quick bench test proved all was working.

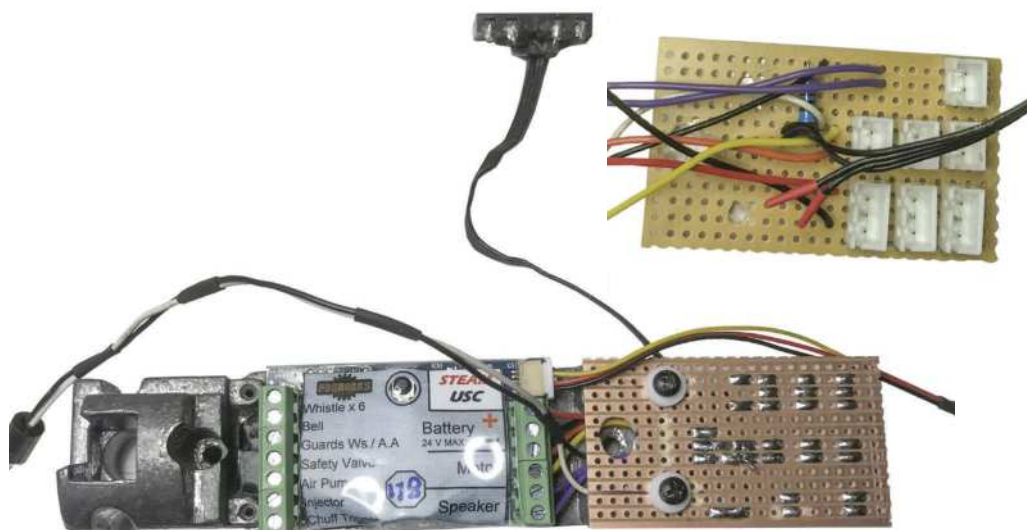
Everything was disconnected, and the new speaker fitted where the original speaker was in the cab roof, the boiler was then fitted to the cab, and connectors plugged back into the board, and the loco was reassembled.

The receiver was Velcroed upright in the cab, just in front of the driver. Using the sound card remote, the card was programmed to my requirements, and now I am very content with my battery-powered Stainz.

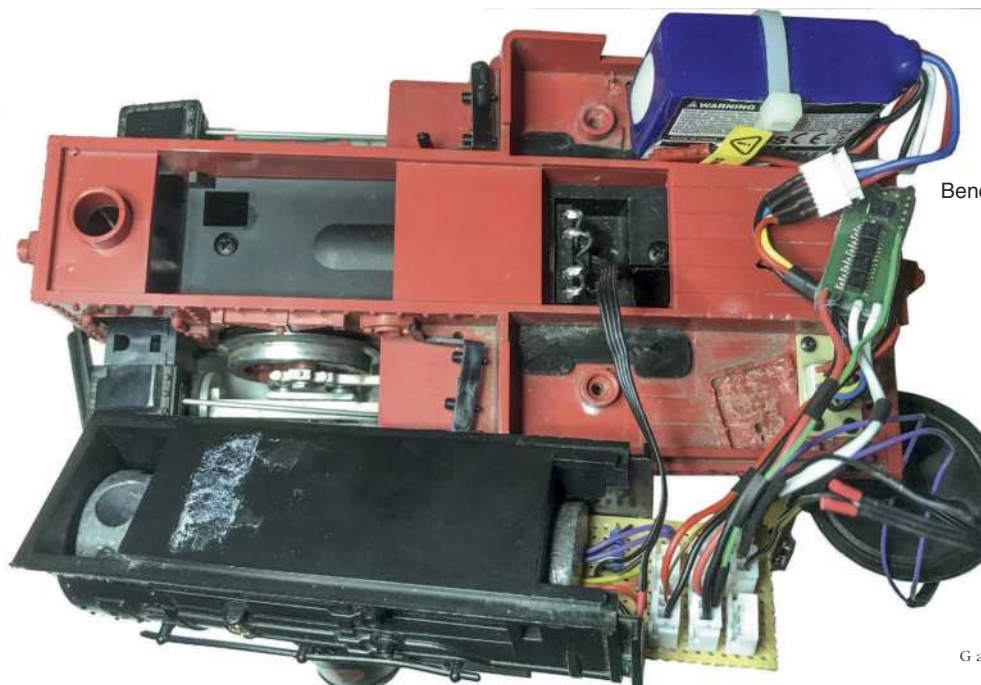
The battery is 850 mAh and so far, I have only run it for 2-3 hours at a time, followed by charging, but each time has come back with a residual of 10.6 – 11.2 volts, which suggests I should get at least four hours from a fully-charged battery. ■



My initial modular setup installed for testing.



The revised modular design with the Molex plugs fitted to the Veroboard (above).



Bench testing the final design.

Component list

Deltang Rx65c receiver
Deltang Tx 22X transmitter
Nano-Tech 850 mHa 25C 3S LiPo battery
Toggle switch/charge module (Micron own)
MyLocosound Steam sound card
Massoth 8241020 speaker



RAILS OF SHEFFIELD

railsofsheffield.com

Corporate members of



WANTED

CASH OR EXCHANGE

WE WANT **ANYTHING** MODEL RAILWAY RELATED,
ANY AGE, ANY GAUGE, FROM A SINGLE ITEM TO A
LIFETIME COLLECTION. DISTANCE NO OBJECT.
PLEASE TELEPHONE, OR EMAIL YOUR LISTS TO
SECONDHAND@RAILSOF SHEFFIELD.COM

BUY · SELL · EXCHANGE · ANY GAUGE · ANY AGE

RAILS OF SHEFFIELD VALUE YOUR SECOND HAND COLLECTION VERY HIGHLY

LOCOS - COACHES - WAGONS - TRACK-WORK - CONTROLLERS - ACCESSORIES
DIE-CAST - LORRIES - BUSES - PLANES - SOLDIERS - RAILWAYANA - AND MORE

FULL COLLECTIONS PURCHASED / UK & WORLDWIDE COLLECTION AVAILABLE

**TOP
GUARANTEED
PRICES
PAID**

*We urgently require collections of any size,
featuring products from the following manufacturers:*

**FAMILY
BUSINESS
FRIENDLY
SERVICE**



WE ALSO BUY RAILWAYANA

SIGNAGE AND TOTEMS

AND MORE...

Telephone our Second Hand team on: (0114) 255 1436 or email: secondhand@railsofsheffield.com

21-29 Chesterfield Road - Sheffield - South Yorkshire - S8 0RL - UK - Tel: (0114) 255 1436 - Fax: (0114) 255 5982

Email: info@railsofsheffield.com

Web: railsofsheffield.com

[railsofsheffield](https://www.youtube.com/railsofsheffield)

[railsofsheffield](https://www.facebook.com/railsofsheffield)

[railsofsheffield](https://www.instagram.com/railsofsheffield)

[railsofsheffield](https://www.tiktok.com/railsofsheffield)



ELLIS CLARK TRAINS

Unit 1 Toller Court
Shortbank Road, Skipton
North Yorkshire BD23 2HG

WANTED

VISIT our
**O GAUGE &
LARGER** gauge
SHOWROOM

LOOKING TO SELL YOUR COLLECTION?

WE HIGHLY VALUE YOUR MODELS

- ◆ Full/part collections purchased
- ◆ No need for a list - we travel and view/collect
- ◆ Everything purchased - railways, die-cast & Railwayana
- ◆ All gauges and ages, including continental & US
- ◆ Upfront payment by cash, bank transfer or cheque
- ◆ Vast experience in purchasing large collections
- ◆ Friendly and professional service
- ◆ Specialised interest in 7mm O gauge

GET IN TOUCH

ellisclarktrains.com

01756 701451

ellis@ellisclarktrains.com

CONTACT ELLIS OR ALBERT





Scratch-building an engine house

David Baker makes use of some useful dolls-house technology.

Constructing a model of an Engine House had been in the back of my mind ever since I visited the 2019 National Garden Railway show. It was there that I saw, sat on the corner of one of the club layouts, a single-storey building that was lit up inside. It had windows on three (I think) walls and a horizontal mill engine that was gently turning over via an air pump positioned under the layout baseboards. It added additional interest to the layout, but sadly, I don't remember the layout name.

The reason that it interested me is that in 1989, I machined and constructed from castings a similar-looking horizontal mill engine, the H10 that Stuart Turner models produce. They provide models either as a set of castings, machined kits, or ready to run.

Now to 2020, the world is in lockdown due to the pandemic, my wife Jean and I

The bare MDF shell is painted the colour of the stonework mortar.





Applying stone compound over Mylar stencil.

have been housebound for three months when she said, "Would you like me to build you a shed for your mill engine?" At this stage, I should mention that my wife Jean is a keen dolls house constructor and she wanted to try her hand at 1:19 scale stone work.

We had some offcuts of MDF board in the garage to use - remember we couldn't go out shopping. This model would have to be a fair-weather or indoor model, we didn't think that it would last very long outside no matter how much varnish we coated it with.

The model was sketched out full size using the mill engine as a guide to the floor area and door height, and the MDF was cut out using a saw bench. Window openings were cut out with a sharp craft knife and then the main components clamped and glued together. One long wall was left off to allow Jean to lay floor tiles, skirting boards and decorate the interior.

Jean painted the exterior walls a grey mortar colour then covered them with a stone compound mixture over a 1:19 stencil (The manufacturers, Bromley Craft Products, also has a video demonstration on their web-site). The roof was finished in a similar way but using a different stencil and a different colour compound mix. The compound mix is coated with varnish when dry. I have, as a trial, put some surplus compound mix outside to see how it weathers, up to now, after a week of rain it is still hard. Promising!

Windows also came from Bromley Craft Products, we selected the largest ones in the 1:24 scale. They are supplied in two parts; an outer frame and an inner frame with a recess for a clear plastic sheet between them. I spray painted both frames green before fitting to the model.

The internal walls were painted by Jean in a light yellow colour, architrave was made with moulded lengths of wood from Jean's



Remove the stencil while the stone compound is still soft.

scrap box, they are mitred at the corners and were glued around the window openings. To allow the mill engine to be more visible, I fitted skylight windows in the roof made from thin strips of wood and clear plastic.

A miniature engineer's work bench was built from scrap wood and includes a dummy vice. The bench and work area has been decorated by Jean with tools from the Minimum World shop.

The double doors are hinged by using pins fixed into the top and bottom outer corners of the doors, these are also inserted into holes in the wooden threshold at the bottom and into the head of the door frame. They seem to work alright. The hinges and latch on the outside of the doors are dummy 1:12 scale gate fittings.

I think that the model has turned out well, I particularly like the appearance and feel of the stonework and general finish, and for that, I must thank Jean. There are a few small bits to finish, the small MDF plinth that the mill engine sits on will be covered in stone slabs. I also want to get the mill engine to run at a slow tick over, but this is causing me a problem. It will run on compressed air in the garage but not from a small aquarium air pump that I have. I may have to get a bigger pump, or I could maybe incorporate a small electric motor connected to the fly wheel. Time will tell.

I have a plan in the future to make another model, but using a weatherproof carcass instead of MDF, such as foam board, to see if that will stand the rigours of the outside weather when stone-clad. This project was a fun build, it was interesting having someone to work with and to see how other hobby techniques and materials might be used by us garden railfarers. ■



The side wall after stencil has been removed showing the impressive relief in the stonework.



The horizontal mill engine installed alongside the engineers workbench.



Roof clamped and glued along the ridge line.

Garden Rail Resource

Bromley Craft Products
PO Box 283, Uckfield, East Sussex,
TN22 9DY
www.craft-products.com

Minimum World
Prospect House 2, Little Money Road,
Loddon, Norfolk, NR14 6JD
www.minimumworld.com

Stuart Models
Grove Works, West Road, Bridport,
Dorset, DT6 5JT
www.stuartmodels.com

Please mention **Garden Rail** when contacting suppliers.



Freight management on the Peckforton Light Railway

Do you run trains for fun, or do they have a purpose? Rik Bennett explains how he operates to a timetable.

When I run a full operating session on the Peckforton Light Railway (see **Garden Rail**, September 2020), I enjoy the challenge of running reasonably realistic trains, with passenger services following a timetable that is based on the Southwold Railway timetable from 1923. However, I see passenger trains as a bit of a distraction from what I really enjoy, and that is the transportation and management of goods on the railway.

At the start of each full session, which represents a typical day's running on the railway, I use a computerised freight management program that I have devised to generate manifests for the movement of goods wagons on the railway for the two daily mixed trains and pickup goods. The manifests are then printed out and when time comes for those trains to run, the

make-up of each train and destination for each wagon is decided for me. Although the algorithm used by the program is weighted to ensure only plausible movements are generated, it sometimes throws up some unexpected transfers, which I would never have considered without its intervention.

The underlying principle for my freight management program is that each wagon on my railway is given a percentage weighting that it will travel from any one destination to another on the system. So, for example, the weightings for coal wagons are that they could travel from the main terminus, Beeston Market, to any other station and back again. The stations which serve larger communities have a higher percentage weighting for coal wagons than smaller communities. Coal wagons are then

highly likely to return to Beeston Market once they are empty. Closed vans could travel anywhere on the system, but there is a greater chance they will travel to Bulkeley, where they are needed for conveying soft fruit. Timber wagons are more likely to travel to and from Peckforton where the sawmill is located and wagons containing beer barrels are heavily weighted to travel to and from Beeston Castle where there is a brewery.

The various screen-shots and example print-outs hopefully explain how the system works.

Although I first described my computerised freight management system in the June 2012 edition of **Garden Rail**, the program has been completely rewritten and enhanced. This version was written using a freely downloadable programming envi-

Saturday, July 18, 2020

Wagon Summary

Beeston Market

1 - OP01 - Open wagon 1 - coal load Leng = 1
 3 - OP03 - Open wagon 3 - Coal load Leng = 1
 5 - OP05 - Open wagon 5 - Coal load Leng = 1
 11 - OP11 - Open wagon 11 - mixed load Leng = 1
 18 - CL02 - Closed van 2 - LGB conversion (blue) Leng = 1
 20 - CL06 - Closed van 6 - GRS Leng = 1.5
 21 - EX01 - Explosives van Leng = 1
 22 - CT01 - Cattle wagon 1 - W&LL homebuilt Leng = 1
 23 - CT02 - Cattle wagon 2 - W&LL homebuilt Leng = 1
 24 - CT03 - Cattle wagon 3 - IP Eng Leng = 1
 25 - CT04 - Cattle wagon 4 - IP Eng Leng = 1
 26 - CT05 - Cattle wagon 5 - Accu Leng = 1
 29 - T02 - Timber wagon 2 Leng = 1
 30 - T03 - Timber wagon 3 Leng = 1
 31 - T04 - Timber wagon 4 Leng = 1
 38 - TK02 - Tanker wagon 2 Leng = 1
 39 - F01 - Flat wagon 1 - Tractor load Leng = 1

Beeston Castle

6 - OP06 - Open wagon 6 - Tarpaulin cover Leng = 1
 37 - TK01 - Tanker wagon 1 Leng = 1

Peckforton

14 - OP15 - Open wagon 15 - builders load Leng = 1
 35 - T08 - Timber wagon 8 - long pit props Leng = 1

Mill siding

15 - OP16 - Open wagon 16 - Coal load Leng = 1

Bulkeley

9 - OP09 - Open wagon 9 - Early type - coal load Leng = 1
 17 - CL01 - Closed van 1 - LGB conversion (red) Leng = 1
 40 - F02 - Flat wagon 2 - Agricultural equipment Leng = 1
 41 - F03 - Flat wagon 3 Leng = 1
 42 - F05 - Flat wagon 5 - Milk churns Leng = 1.5

Copper Mine

32 - T05 - Timber wagon 5 - small pit props Leng = 1
 33 - T06 - Timber wagon 6 - med pit props Leng = 1
 34 - T07 - Timber wagon 7 - long pit props Leng = 1

Bickerton

2 - OP02 - Open wagon 2 - Coal load Leng = 1
 4 - OP04 - Open wagon 4 - Coal load Leng = 1
 7 - OP07 - Open wagon 7 - Curved ends - Coal load Leng = 1
 8 - OP08 - Open wagon 8 - Curved ends - Tarpaulin Leng = 1
 10 - OP10 - Open wagon 10 - Early type - timber load Leng = 1
 12 - OP12 - Open wagon 12 - barrels Leng = 1
 13 - OP14 - Open wagon 14 - coal load Leng = 1
 19 - CL05 - Closed van 5 - GRS Leng = 1.5
 28 - T01 - Timber wagon 1 Leng = 1
 36 - B01 - Bolster wagons 1 & 2 with timber load Leng = 2

The program is fired-up on my laptop and I print out a list showing the location of each item of goods rolling stock on the railway. I have five stations and three additional sets of sidings (the copper mine, the flour mill and the sand quarry) where goods rolling stock will be found at the start of a session. The program 'remembers' where each wagon was left at the end of the previous session but because I run ad hoc trains in between full sessions, stock can sometimes become misplaced. Hence the need to ensure all wagons are placed where the program expects them to be.

Create Trains

Main Menu
Create Train
Accept Train
Print Train

Train name

Train length

Busyness

Very quiet

Normal

Very busy

Unload time? ☒

ID	Wagon description	From	To
T02	Timber wagon 2	BM	PK
OP03	Open wagon 3 - Coal load	BM	BK
OP05	Open wagon 5 - Coal load	BM	BK
CL06	Closed van 6 - GRS	BM	BK
CL02	Closed van 2 - LGB conversion (blue)	BM	BK
T08	Timber wagon 8 - long pit props	PK	CM
F01	Flat wagon 1 - Tractor load	BM	PK

I then generate possible manifests for the day's goods train movements. Depending on the weather forecast and demands on my time, this, as a minimum, will be the pickup goods (maximum eight to 10 wagons) and either one or two mixed trains (maximum four wagons). The program shows each possible set of wagon movements for each train and I can decide whether or not I like the look of them.

In this example, we see that I have used the system to create a possible Down pickup goods train. Before clicking the 'Create Train' button, I enter the name for the train, its length, how busy I want the service to be (when it's quieter, only very urgent goods are sent – ie wagon transits with a high level of probability – and vice versa) and whether unloading time should be allowed before the wagons are included in a future train. In this example, the program has suggested a train of seven wagons, with Timber wagon 2 travelling from the Beeston Market to Bickerton and timber wagon No. 8 travelling from the sawmill at Peckforton to the Copper Mine with a load of pit props. Once I click "Accept Train", the wagons are assumed to have travelled to their intended destinations and so I am committed. I can then print out the manifest for the train.

ronment called Livecode. Livecode is based on a package called Hypercard, which was once distributed free of charge with Apple Mackintosh computers many years ago. It uses a high-level (almost conversational) programming language called HyperTalk.

As the name suggests, the original Hypercard program took the concept of a card-index type of database and added features to it, thereby enabling cards to contain interactive objects such as buttons, sliders text-entry fields and display fields – as evidenced by the screen-shots. What makes this programming environment particularly versatile is that once a program (or "stack" – as in a stack of cards) has been created, it can be exported as a stand-alone program for others to use. Having originated on Apple computers the exported programs can be created to run on Apple computers and Windows PCs (and also Linux). In addition, it is possible to create Apps that can be run on iPhones or Android phones and tablets.

I have made this stand-alone freight management program freely available via Dropbox in both Apple and PC formats should anyone be interested in using it. I haven't yet got around to exporting it as a phone or tablet app as that would require some re-working of the screens. One day, I might get around to it. In the meantime, I have created a cut-down version, which runs on my rather antiquated Psion pocket computer that enables me to operate a similar system out in the garden on the fly. You may have figured out that I feel a lot more at home with older technology than new-fangled gadgets such as smartphones.

My freight management program is based on a system, which I devised for my indoor 00 gauge railway in the days when one computer needed the whole floor of an office block. That system used punched cards, a six-sided dice and a knitting needle. Each wagon on my indoor railway has its own card with six holes punched across the top. To determine which wagons will depart for the fiddle yard from the station, I roll the dice and pass the knitting needle through the relevant hole at the top of the stack of cards for the wagons presently in the station. Wagons that travel less frequently have several holes snipped through, whereas those that travel more often have very few holes snipped through and hence are more likely to be skewered by the needle. Cards that are hooked are then shunted onto the train.

For those unfamiliar with the Peckforton Light Railway, it is a 45mm gauge, roughly 15mm scale model representing a hypo-

Down Pickup Goods

Beeston Market

T02 - Timber wagon 2 (To: Peckforton)
 OP03 - Open wagon 3 - Coal load (To: Bickerton)
 OP05 - Open wagon 5 - Coal load (To: Bickerton)
 CL06 - Closed van 6 - GRS (To: Bickerton)
 CL02 - Closed van 2 - LGB conversion (blue) (To: Bickerton)
 F01 - Flat wagon 1 - Tractor load (To: Peckforton)

Beeston Castle

Peckforton

T08 - Timber wagon 8 - long pit props (To: Copper Mine)

T02 - Timber wagon 2 (From: Beeston Market)
 F01 - Flat wagon 1 - Tractor load (From: Beeston Market)

Mill siding

Bulkeley

Copper Mine

T08 - Timber wagon 8 - long pit props (From: Peckforton)

Bickerton

OP03 - Open wagon 3 - Coal load (From: Beeston Market)
 OP05 - Open wagon 5 - Coal load (From: Beeston Market)

As you can see from this print-out, the manifest shows not only what wagons are needed to depart from each station, but also the wagons that need to be shunted off the train and into the sidings at each location. If you look at the entry for Peckforton Station, we can see that it will be sending the pit props wagon to the Copper Mine and receiving two wagons from Beeston Market.



The goods wagons are removed from the storage sidings at Beeston Market and moved to their locations at the end of the previous session. In most cases, the wagons will have been grouped in the storage sidings according to their positions on the system when the previous session ended and so redeployment is simply a reverse of the storage process. The eagle-eyed may spot that I use camouflage netting to hide the less salubrious corners of my garden!



Once the wagons needed for Beeston Market have been parked in their sidings, the wagons for Bulkeley and Beeston Castle are taken delivered. Wagons for Bickerton and Peckforton are stored in another set of storage roads at the other end of the line. The redistribution of the stock usually takes about a half to three-quarters of an hour.



When it is time for the train to be shunted, the manifest is consulted to determine the consist. With mixed trains particularly, wagons are positioned fore or aft of the coaches, dependent on whether the intended sidings face Up or Down the line, to ensure there is minimal disruption to passengers while the wagons are being shunted at each station.

thetical three-foot narrow-gauge railway that might have existed primarily to serve the copper mines located in the Peckforton Hills in mid-Cheshire. The mines actually existed but were never particularly profitable, despite an optimistic survey conducted in 1906, which predicted the mine could yield copper ore to a value of at least £1.1m (approx., £130m today)!

My theoretical history of the railway assumes that this potential was exploited, leading to the discovery of further rich seams that have sustained the railway ever since. Furthermore, the railway supported the communities it served despite competition from road transport and survived the Great Depression due, in part, to the patronage of the local landowner, Lord Tollemache who (in reality) was keen on technology and, though not relevant to the railway, croquet and bridge.

My model shows what might have existed in the year 1932. There are five stations on the line – two termini and three

intermediate stations, plus the Copper Mine at the end of a branch and a Mill Siding (similar to that on the Southwold Railway). There are several lineside industries that have become dependent on the railway including a brewery, sawmill, sand quarry, soft fruit farms and a boneworks for processing animal carcasses and manure into fertiliser and gelatine. As a consequence, goods traffic on the line is extremely heavy – hence the need for a system to keep the operations manager on his toes!

My freight management program certainly adds a lot of interest for me when running the railway – I gain great enjoyment from the logistical puzzles of shunting the wagons off and on the trains at each station - and I do enjoy watching a mixed freight train meandering through the foliage!

There we have it, remote control, no long runs of wiring to go intermittent and very low cost. Why not give it a try? ■



The train winds its way down and up the line, shunting wagons off and on dependent on the requirements of the manifest. Here we see ex-Southwold Railway Manning Wardle loco No. 4 Bulkeley passing the Copper Mine.

Garden Rail Resource

Livecode Community edition

www.livecode.org

Standalone Freight Manager program (Windows)

Downloadable from: <https://tinyurl.com/y4z7mh93>

Standalone Freight Manager program (Mac)

Downloadable from: <https://tinyurl.com/y5y73axm>

Please mention **Garden Rail** when contacting suppliers.

Setting-up the program

Before the freight movements can be generated the program needs to be set up with the information it needs to create them. In effect, there are two databases underpinning the process – a database for the locations and another for the wagons.

Location number: 1

Create / Edit Locations

Location

Beeston Market

Short name (max 3 chars)

BM

☒ Central location?

Buttons: [Dropdown], [Previous], [New], [Delete], [Next], [Up]

In the present version of my freight manager program, up to eight locations can be created. As you can see, each location is given a name and also an abbreviated name. One location in the set is designated the 'Central' location meaning that all wagons can be returned there in the wagons database with the click of a button. This is useful if I want to start an operating session from scratch without having to distribute the wagons around the various locations.

Create / Edit Wagons

Description

Open wagon 15 - builders load

Wagon number: OP15 Wagon length: 1

Present location: Beeston Market

Journey weightings (%)

		To						
		BM	BC	PK	MS	BY	CM	BK
From	BM	10	20	20	10	10	10	20
	BC	50	40	0	0	0	0	10
	PK	50	0	10	0	20	0	20
	MS	60	0	0	30	0	0	10
	BY	50	0	20	0	20	0	10
	CM	50	0	0	0	0	50	0
	BK	50	0	0	0	20	0	30

Once the locations have been created, the details of each wagon can be entered into the system. The wagon description can be as simple or as detailed as is necessary but I find the shorter the better when using the manifest to shunt or marshal a train. The relative length of the wagon can be entered – assuming 1 represents the shortest wagon in the fleet, wagons up to four times this length can be described, in half-wagon intervals. The wagon's present location is shown using a drop-down list, which is why the locations need to be created first. And then comes the heart of the system – the weightings for that wagon's possible movements. In the example shown here, the open wagon with a builders' load has a 20% chance of travelling from Beeston Market (BM) to Bickerton (BK) and a 20% chance of travelling from Bickerton (BK) to Bulkeley (BY). But it will never travel (0% chance) from Peckforton (PK) to Beeston Castle (BC). Although this table looks quite daunting, it is quite quick and easy to complete as it's possible to clone the details of a previously wagon so, for example, most coal wagons on the line have a similar transit profile with just a couple that have a roguish tendency to wander more freely!



Is it a bird? Is it a plane? No, it's Sanford

Mark Thatcher builds a unique guard's van in 16mm from Wood Valley Works.

Firstly, happy anniversary to me. In March 1996, precisely 25 years and one month ago, as of writing this article, I wrote my first article for **Garden Rail**. I was 34 years old at the time. Egged on by the then editor, Tag Gorton, I reviewed a Hunslet kit, which sat atop a motorised LGB 0-4-0 chassis from Garden Railway Specialists in Princes Risborough, and, to be honest, I have never looked back since!

So, why the odd title to this review? Well, this model is somewhat of an oddity in itself, but with love and care, will provide the 16mm modeller with a really rare artefact, should you choose to add this model to your fleet.

Sanford is indeed quirky and unique, and sadly, is the only piece of rolling stock that could not be saved from the Penrhyn Railway. In the late twenties, Sanford was acquired by the Penrhyn Railway as a Bag-nall 0-4-0 loco. If this had featured in one of

Wilbert Awdry's books, then Sanford would have been the grumpy engine. It never really worked, so in the early sixties, its boiler was removed, but the cab and chassis were retained to turn it, rather ignominiously, into a working guard's van.

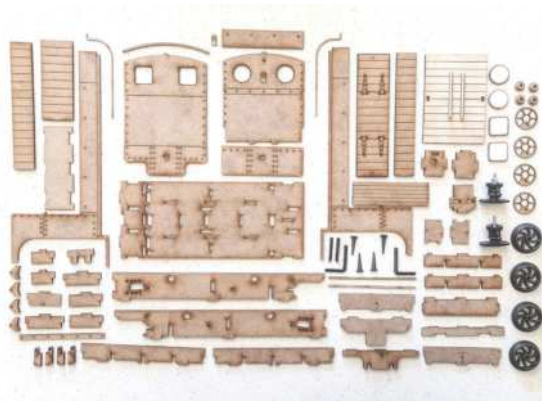
Initial attempts to use it as a mobile water tank failed miserably as it was hopelessly unstable. That plan was scrapped, the tank dispensed with, and the result was a sort of compromise between a guard's van and a permanent way vehicle. In the compartments atop the chassis was space for some tools and some extra ballast to help with track adhesion.

Another winner

Yes, it is 'winner-winner, chicken dinner' with this new kit from WVW. This kit is as comprehensive as their 16mm wagon range, which I reviewed en masse over a year ago.

When unpacking the model, I would ad-

vise getting to know it, and spend a leisurely half an hour or so removing the parts from the frets. Also, take a little time to sand the retaining pips off these that initially hold the components to the frets. Coach & Wagon Work's miniature sanding blocks are ideal for this.



I counted around 97 parts but there may be a few more! Certainly, there is lots of detail to be eyeballed in this fascinating kit.



If you fancy a riveting experience and want to add the 167 rivets in total, it is far easier to do this prior to assembly. Getting the rivet spacing correct is very easy as their positions are marked on the sides and ends of the body with little etched-in circles.

Great instructions

OK – you are not going to get pages and pages of printed instructions, but what you do get is a helpful link to three stages of the build process, plus a further PDF file, which is a parts list, that you may view online (and save the planet) or print for ease of use. The instructions are some of the best I have ever seen – but you must follow them as so many parts look similar. If you go rogue, then you will probably mess things up. I indeed did just that and dropped two howlers – more of this later!



Plenty more rivet detail on the cab front as, with the chassis complete, we can now start to build up the body sides and the rear cab end.

There are some notable pieces of genius in this kit, too. I like the high-quality wheel overlays that depict the holes for the cranks as the original Bagnall would have had. The hinges for the flat bed and some stringers and underframe supports are nicely 3D-printed too. My favourite, however, is the pre-cut thick plastic glazing for the square and round spectacle plates in the cab. These are actually chamfered, so they only go in one way but are a push-fit, so there is no chance to smear them with glue in the fitting process.



Here is the underframe arrangement, with everything slotted neatly into place.

I am officially now a rivet counter

The first stage is to build up the chassis, very straightforward, but again I stress – follow the excellent step-by-step instructions. It builds up straight and true and took me only an hour or so with Coach & Wagon Work's instant grab PVA glue.

But, before we get too carried away, I should mention that there are circular etched markings on the body panels to accept faux rivets. These rivets are also supplied but are really tiny. They are actually nail art sticker-on-y-things. All that health and beauty stuff is beyond me, so unless you are going to send me for an all-expenses-paid weekend at the Champneys spa resort, don't ask further questions on this matter, please.

You don't have to apply these rivets, but it is worth the effort if you do. They have a flat and convex side and are impossible to turn over individually. TIP: Just stir them around with a blade of a knife and some will flip up the right way. I just dobbed a little superglue onto a bit of card, then dabbed a cocktail stick into this, and blobbed a little glue onto the body where the circular guidelines were marked, doing about 10 rivets at a time. Then, with a really sharp pointy blade, picked up each rivet and positioned it. I found it a pleasant way to while away half an hour or so. And, before you ask – yes, I am now officially a rivet counter and there are 167 of these on this model. Don't worry about losing a few, as you are supplied with hundreds of thousands of them and will be finding them all over for months to come. I even found one in my microwave – melted of course.



Starting to build up the guard's seat now. Note the clamping squares from Coach & Wagon Works are doubling up as small set squares for this job.

I modified the seat by adding this fillet of wood to fill in the hole underneath it. I think it looks tidier.

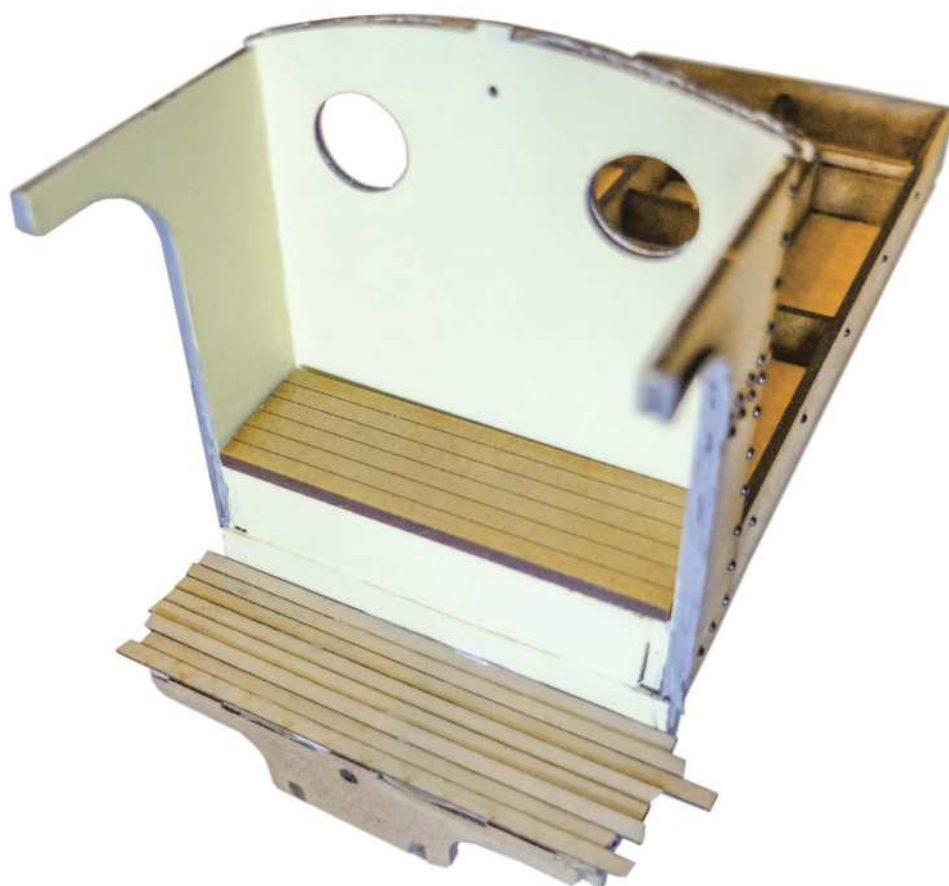
I went for an industrial grey look for the body as a lighter colour would hide the rivet detail too much. Had I had a blood red in stock, I may well have gone for that for the buffer beams for the same reason. Once the interior of the cab was all painted up, I added the roof – DOH! Please ensure you add the spectacle plate glazing before you do this! It is doable after the event but only just. 25 years down the line and I still make schoolboy errors. Anyhow, I do this so you don't have to.

Four views of a cast iron wheel with a rubber tire, showing the front, back, and two side profiles. The wheel has a dark, possibly rubber, outer rim and a cast iron body with a central hub and spokes. The spokes are arranged in a cross pattern, and there are small circular holes in the lower part of the rim.

It is worth test-fitting the wheels in place before positioning the brakes as you don't want them to foul each other.



Before the final assembly of the cab and roof, it is worth checking they all line up by temporarily securing the cab end in place using the centre buffer, which allows some wiggle room for final adjustments, but don't glue this in place at this stage. And spot the mistake – the roof is upside down, the etched fold lines should go underneath – whoops!



The cab interior all creamed-up. I added some thin strip wood (left over from the roof of Timeless Model's DHR luggage van) as I think it lifts the detail here. I cut the strips flush with the cab sides once the glue had set. It is a lot quicker than trying to get eight lengths of wood to precisely the right length beforehand.

After the industrial grey colour was added to the body and matt black to the chassis, the last job was to fit the wheel bearings, wheels, axles and brake blocks. The bronze bearings really need to be lined up with millimetric accuracy otherwise the axles will bind. I got the wheel bearings nice and level (or so I thought) but still resorted to running a drill bit through them just to buy me a little more wiggle room. Had I read the instructions more thoroughly, they do mention to use the axles, slide through these bearings to line them up, and perhaps that would have helped. I would advise not to fit the brakes and hangers until you have a free-wheeling chassis, as it is far easier to fit these after the wheels are in situ.

Cut-and-shut

So there you have it. Another successful build and a really nice end result too, to my eye at least. I am not sure why I did not get the rear of the cab in quite the right place to begin with, but apart from that, all-in-all, I think this is a very well presented and well thought out kit.

The plastic-moulded centre buffers are also excellent, the 3D-printed components are good (just carefully ease them off the carrier base with a scalpel or razor blade), the rivets are fiddly but worth the effort and the wheel overlays are a nice touch too. It would have been nice to have metal wheelsets instead of plastic ones I guess, but you can always swap these over to you feel the need to do so. Likewise, some three-link chains for the centre buffers would have been a good addition, but not essential.

I must admit to never hearing of Sanford before writing this article and am quite intrigued as to how the Penrhyn railway managed to cut-and-shut an old and tired Bagnall 0-4-0 tank loco, make something of it and end up with this weird and whacky guard's van. I suppose it is a good example of the fact that on the railways, ingenuity knows no bounds. ■

Garden Rail Resource

Wood Valley Works
15 Dart Close, Alsager, Cheshire, ST7 2HY
www.woodvalleyworks.co.uk
16mm Sanford guard's van kit £50.00

Cambrian Model Railways
PO Box 85, Greenhithe, Kent, DA10 9DN
www.cambrianmodelrail.co.uk

Please mention **Garden Rail** when contacting suppliers.

NEW & RESTORED MODELS



BAUER FLORIST'S SHOP
PRICE: £75.00



FRED'S SNACK BAR
PRICE: £79.00



FREIGHT SET
PRICE: £24.00



PICO BOILERHOUSE
PRICE: £85.00



TRAIN STATION ACCESSORY
PRICE: £25.00



STORE SHED WITH OFFICE
PRICE: £78.00



RAILROAD WORKERS
PRICE: £29.00



WORKERS
PRICE: £29.00

All items are plus P&P

www.tonygreensteammodels.co.uk
Email: sales@tonygreensteammodels.co.uk



www.micronradiocontrol.co.uk
sales@micronradiocontrol.co.uk
Dept GR, Uplands House
Castle Howard Road
Malton, YO17 6NJ

Eliminate worry about dirty track, stalls, shorts, and all the frustrations of track power.
Battery power and radio control – the future of model railways

Visit our website or send a A5 Large Letter SAE with 'GR' written on the back

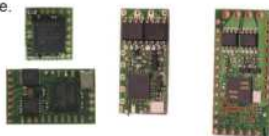
An on-board battery and R/C receiver frees your locos and trains; no more time wasted cleaning track and pickups. Run your layout without track power - no need to insulate turnouts and no messy wiring.

R/C trains can operate alongside track powered locos, either direct control or DCC.

Receivers and controllers operate on 2.4GHz using the popular Spektrum DSM2/DSMX protocol. Receivers have a short wire aerial, some are available with extended aerials for use in totally enclosed metal bodied locos.

R/C Receivers

The range of R/C receivers covers all scales and gauges; from N to SM32, Gauge 1 and beyond with motor currents from 0.5A to 6A. The smallest receiver, suitable for N and 009, measures 9x9.6mm. A selection is shown here.



All Deltang receivers have multiple auxiliary outputs for controlling lights, coupling actuators, sound modules or whatever on-board function your imagination wants to implement.

Batteries

On-board batteries can be NiMH or LiPo for best size/capacity ratio. LiPo cells can be charged in the model and frequently topped up when the loco is resting. Most locos do not need the full 12V - 4V or 8V from 1 or 2 LiPo cells is usually sufficient. For space restricted installations, a single LiPo cell can be used with a small booster to give 9V or 12V.



Hand-Held Controller

A range of hand-held controllers, from simple, single loco to multi-train units. All are pocket sized and available with forward / reverse on one knob or full-range throttle and separate direction control. See our web site for details. We can build bespoke controllers with knobs, switches, push buttons to match your needs.



Sound

Mtroniks or MyLocoSound sound modules can be used to complement your R/C installation. Receiver outputs control motor sound and trigger bell, whistle, horn...

MyLocoSound now with Industrial Light Diesel sounds using 100% recorded sounds.

Installation

Micron provides a complete R/C model rail installation service using Deltang R/C receivers, MyLocoSound modules and supporting components. We can install in most scales/gauges, from N through Gauge 3.

We discuss an installation specification with the customer to see what combination of products and features will best suit their needs and to estimate the installation cost. A firm quotation will be supplied after we examine the loco.



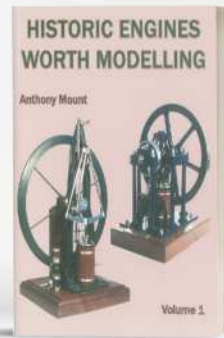
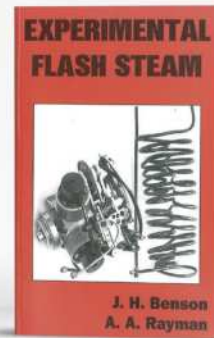
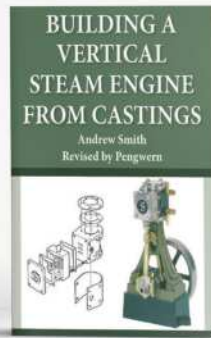
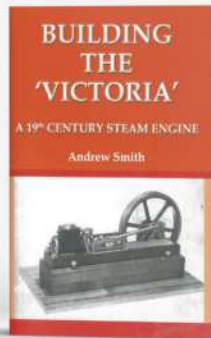
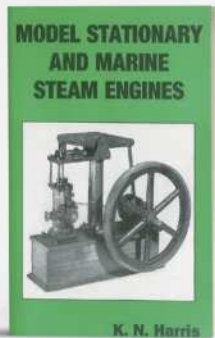
THE GAUGE ONE MODEL RAILWAY ASSOCIATION

Just imagine the thrill, spectacle and sound of a real live-steam hauled express train like this one running through your garden, or perhaps a more sedate goods train hauled by a modest tank engine. Whatever your tastes, G1MRA – the oldest established large-scale and garden railway association can help you realise that dream. Benefits include our renowned quarterly Newsletter & Journal, a wide range of construction book publications, friendly local groups and trade supplier lists. G1MRA layouts are regularly featured at major exhibitions nationwide - check our website Events list for details.

For joining details please visit our website: g1mra.com, or write to:

The Membership Officer
PO Box 363, Trimdon Station, TS29 6YU
07547 804142
Email: g1mra.membershipofficer@gmail.com

See our website for prices and our full range of books



OUR RANGE INCLUDES BOOKS ON THE FOLLOWING TOPICS:

- Aeromodelling and IC Engine Building
- Boilermaking, Soldering, Brazing and Welding
- Casting and Foundrywork for the Amateur
- Clock and Clockmaking
- Electrics - Motors and Projects for the Modeller
- Farm Tractors
- Garden Railways
- Gears and Screwcutting
- Hot Air Engines
- In Your Workshop
- Industrial Archeology
- Lathes and Other Machine Tools
- Marine Modelling and Steamboating
- Model Steam Locomotives
- Painting and Finishing Your Model
- Stationary Steam Engines
- Steam Road Vehicles and Traction Engines
- Woodworking and Woodturning

SEE ALL BOOKS ON OFFER AND ORDER NOW

W: www.teepublishing.co.uk

T: 01926 614101

E: info@teepublishing.co.uk

Putting you on the right track



Bridges & Viaducts



Bespoke Model of Client's Home



Lineside Buildings & Infrastructure



Stations & Platforms



- models made to any scale
- bespoke design and build service
- fully weather proof (not resin)

Brunel Models

334 Wellington Street, Long Eaton, Nottingham NG10 4JJ
Call us: 07802 409 757 or Email us: enquiries@brunelmodels.co.uk
www.brunelmodels.co.uk

Annie the Bagnall



Why did it take Dave Skertchly 45 years to get around to making a model of his favourite locomotive?

It all began when, as an idle student apprentice, I would sit and gossip with the equally idle, but better paid, graduate trainees.

We would while away the hour or so between tea break and knocking off time in casual conversation about trains. Until then, I had never even heard of narrow gauge railways but was tempted to join the Merioneth Railway Society. I received the iconic issue 12 of the *Merioneth Mercury* (MM) (1976) and dutifully started to build Bagnall 0-4-2 "Excelsior" from the Roy Link plan.

Then, in the autumn, issue 14 landed on my doormat. This is the issue in which Ted Wade famously started to grumble about the labours of serving a membership approaching 100 and which led eventually to the collapse of this fine society. Meanwhile, the Association of 16mm Narrow Gauge Modellers went on to have a membership of 4000, but that, as they say, is another story.

In MM 14, along with a rather shocking exposé of Lady Mallaby Deeley (don't ask), there is an intriguing article reprinted

from *The New Zealand Railway Observer*, which detailed the story of the Gentle Annie Tramway. This tramway served the Gentle Annie Quarry operated by Gisbourne Borough Council; if you have no idea where this obscure place is, do not worry, you are not alone. A replica of Annie has since been built and can be seen on the Groulle Glen Railway on the Isle of Man.

Along with the article, were drawings of the two tiny but charming Bagnall locomotives, Annie and Jack. There is no credit given to the rather nice drawing but, as printed, it is slightly out of scale and was therefore corrected on the photocopier.

With a half-built Excelsior to my credit, I was now the works expert on narrow gauge railway modelling and was dared to build Annie the delightful 0-4-2 with the strange boxy side tanks; and so it was, as lockdown took hold in October 2020, a mere 44 years later, I started work. By the way, MM issue 13 was published sometime later and is a reprint of a *Picture Post* feature of Roland Emmet's visit to the pre-preservation Tallyllyn



The project started with 20mm Binnie wheels, which were the right diameter and had moulded holes that were just right for 2mm screws used as crank pins.

The frames were clamped together and the axle holes drilled to the same size and spacing as the cranks using a jig that was also used to drill the connecting rods.



Railway. This is still a treasured read.

I started my project with Binnie 20mm mm wheels, which are the correct diameter, and have moulded holes just right for 2mm screws; however, I eventually made some brass bushes for the cranks. Despite locking the wheels with a keyway cut into the axles, the wheels still tend to get knocked out of quarter.

The frames were clamped together and the axle holes drilled to the same size and spacing of the cranks, using a jig that was also used to drill the connecting rods. The axle holes were then opened out to the size of the axles. Nails were cut to length and tapped as the frame spacers.

Connecting rods were each hacked out of sheet steel. Starting with a piece of scrap the holes were drilled with the same jig that was used to drill the frames. The bulk of the metal was cut away with an angle grinder and the final shape cut with a file.

The trailing bogie was made from a piece of square tube with a bush running in the centre of the axle. The pivot was made from a nail drilled and tapped at the ends and the spring from a piece of garden wire.

Annie has deep frames and, being inside framed too, it was not possible to fit the mo-

tor conventionally between the frames with the worm gear attached to the motor shaft, so a remote gearbox was made. The gearbox was made from a piece of square tube and the bearing holes were carefully drilled to suit the rather small Cambrian Models worm gear. All sorts of washer and bushes were fitted but it is still a bit rattly. The gearbox was then mounted to a wooden sub frame and the cheap can motor from Squires glued in place with epoxy.

The motion and crossheads are plastic dummies. The shape of the motion was cut from a copy of the plan and placed on a piece of Plastikard. A light blow over from a handy spray can revealed the shape to be cut out. The dummy motion and crossheads look good once the detailed working bits have been added and highlighted with metal paint.

The bodywork was made from 1/8" (3 mm) and 1/16" (1.5mm) plywood. The stepped body was a bit of a problem. At the very point in the structure where you want strength and stiffness, it had to be cut away to clear the motor and batteries. A removable lid was fitted to clear the batteries, which left just enough of the boiler top to fool the eye. By the way, the boiler was made from

Stages in making a connecting rod: Starting with a piece of scrap, the holes were drilled with the same jig that was used to drill the frames. The bulk of the metal was cut away with an angle grinder and the final shape was cut with a file.

a Steradent tube, but please keep this to yourself.

From then on, it was a constant struggle to stop the body from drooping and twisting. The smoke-box was laminated from 1/64" (0.4mm) plywood and the dummy casting cut from sections of 1/8" plywood sanded with a Dremmel and filled with Polyfilla. The firebox was laminated oversize to hide the motor.

Annie's body was built up from plywood and eventually matched to the chassis, wheels, connecting rods and dummy motion. The chimney and dome were made from plastic tube, plastic off-cuts and a kebab stick. The roof supports are bamboo chopsticks, and the crew moulded from body filler. The switch was disguised as the reversing lever.

The bottom of the boiler would not be visible, so the opportunity was taken to add



The frames and rods are bolted together and checked for free running. The generous use of nuts ensures there are no tight clearances for bits of metal to collide with each other.



Annie has deep frames and, being inside framed too, it was not possible to fit the motor conventionally between the frames with the worm gear attached to the motor shaft, so a remote gearbox was made.



The trailing bogie was made from a piece of square tube with a bush running in the centre of the axle. The pivot was made from a nail, drilled and tapped at the ends and the spring made from a piece of garden wire.

some weight in the form of steel strip. The balance pipe between the tanks was bent from a nail. The front end is rather complicated but is an important part of Annie's charm.

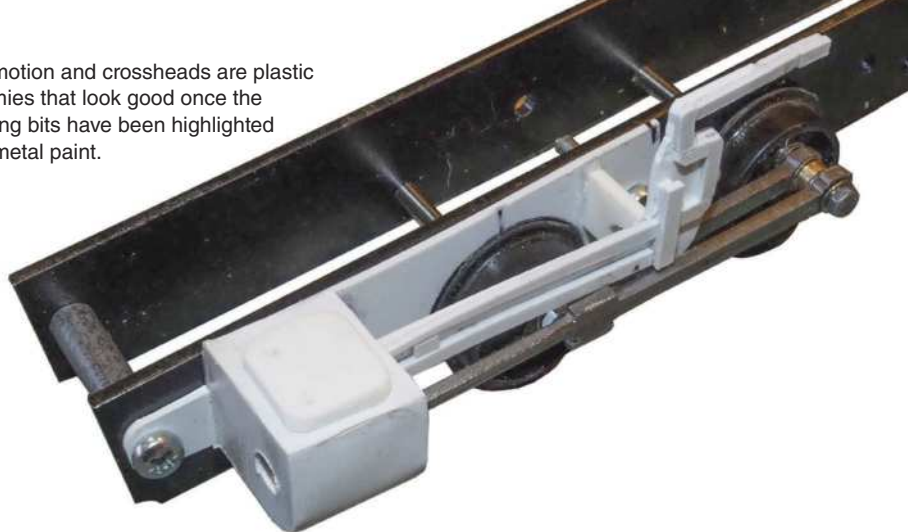
The finish was a coat or two of sanding sealer followed by a light "blow over" with grey primer to help identify the remaining grain and high spots, before applying a coat of model aircraft dope in areas where rivets were to be placed. The rivets were from Cambrian and stuck with thinners to the sealed plywood and with MEK to the Plastikard motion. The final finish was grey primer followed by Humbrol enamel No.20 (Crimson) and various paints from my box.

This my first attempt at lining. The lining position was marked out with masking tape and then drawn using black and yellow paint pens. The lining was perhaps a bit ambitious and is a bit bodgy, but I like it. A final coat of Plasticote varnish and it was time for a run.

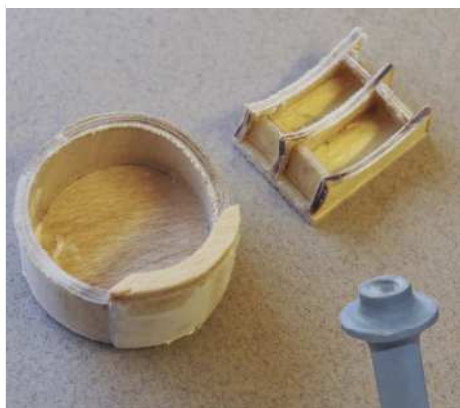
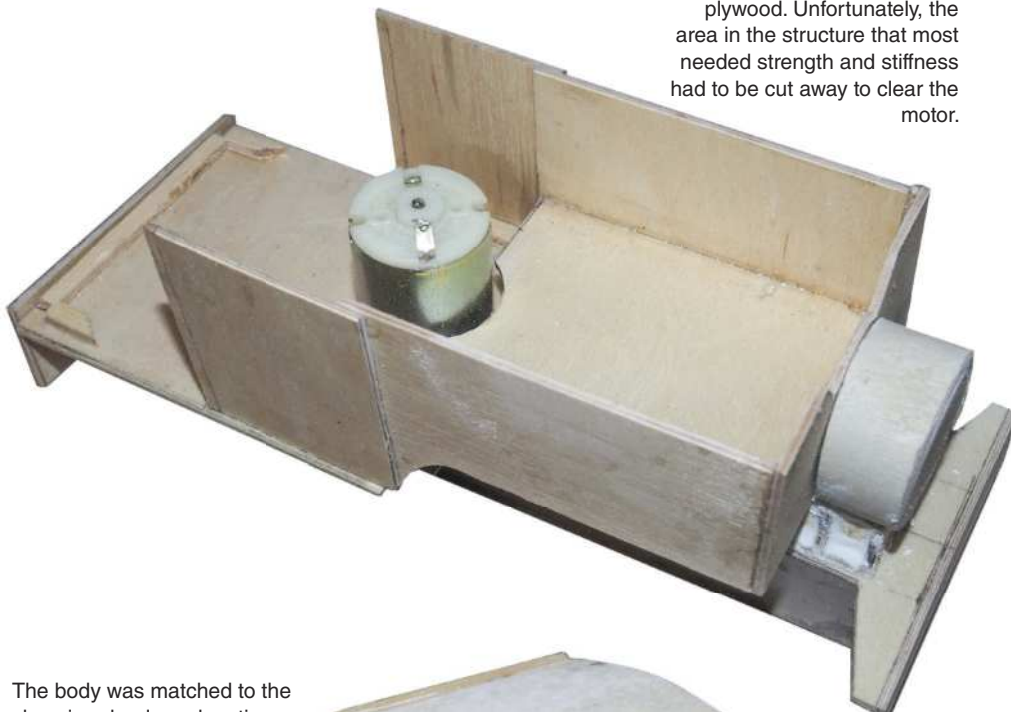
The chassis and drive train was initially very stiff and required running in with Brasso. After cleaning up and final adjustments it was time to run. Although still running-in, Annie seemed a bit slow, so I timed her around the scale 1/3 of a mile circuit of my railway. The time was 2 mins 50 seconds,

The smokebox was laminated from 1/64" (0.4mm) plywood.

The motion and crossheads are plastic dummies that look good once the working bits have been highlighted with metal paint.



The bodywork was made from plywood. Unfortunately, the area in the structure that most needed strength and stiffness had to be cut away to clear the motor.



The body was matched to the chassis, wheels and motion. The chimney and dome were made from plastic tube and off-cuts, and the roof supports from chop sticks.



which amounts to a scale speed of 11.5mph. This is, in fact, typical for most industrial narrow gauge railways and is even in line with Board of Trade rules for some of the less auspicious passenger lines.

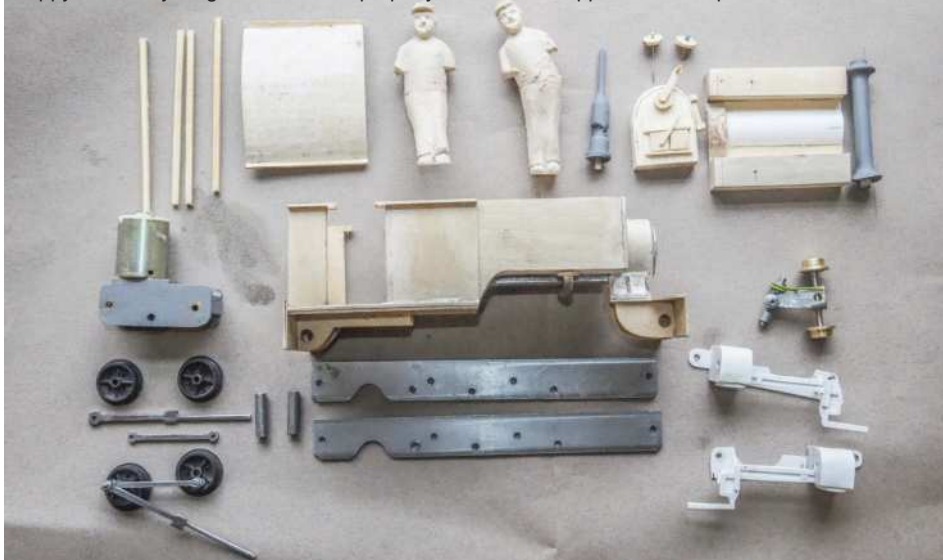
As I sit outside the Sheep Shearers Arms, I notice that Annie is indeed a very small locomotive, little more than an early 20th Century dumper truck. It was probably this small size that first attracted me to the narrow gauge. I also realise that I have reached the limits of typical modelling materials, which are too thick to truly represent the parts of these tiny locomotives. I have decided that I can either take up fine scale model engineering or have another pint of fine Auld Phagbutt. Cheers!

P.S. I happen to know that Editor Phil has some Groudle Glen coaches, which might look rather splendid behind Annie, something to look forward to in the future. ■



This was Dave's first attempt at lining. The lining was marked out and then drawn using black and yellow paint pens.

Happy that everything fits and works properly, the loco is stripped down for paint.



Two models made 45 years apart from plans published in the erstwhile Merioneth Mercury, left Excelsior from MM13 and right Annie from MM14.

Annie at Sea Lion Rocks on the Groudle Glen Railway in 2017.



Garden Rail Resource

Cambrian Model Rail
PO Box 85, Greenhithe, DA10 9DN
www.cambrianmodelrail.co.uk

Squires Tools
100 London Rd, Bognor Regis PO21 1DD
www.squirestools.com

Please mention Garden Rail when contacting suppliers.

The real Annie

Annie, currently seen on the Groudle Glen Railway, is a replica, built by Richard Booth and based on the design of a Bagnall class 'E' 0-4-2ST locomotive of the same name built in 1911 for the Gentle Annie Tramway near Gisborne, New Zealand.

The New Zealand loco ended up at a quarry at Motuhora, but after being laid up in 1924, were buried by a landslide 30 years later. Dug up in the late 1970s, her frames can be seen in the East Coast Museum of Technology at Makaraka.

The new Digital Membership

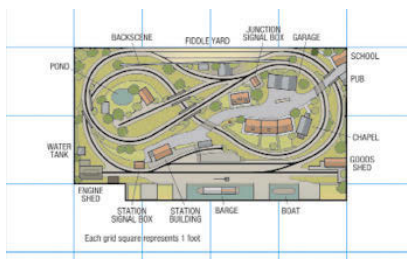
**SIGN UP
NOW!**

that brings you all of this...



ARCHIVE

PLUS



TRACKPLANS

PLUS



VIDEO

PLUS



COMPETITIONS

PLUS

- Digital Magazine Library
- Trackplan Archive
- Great videos
- Exclusive competitions
- Free Show Ticket
- RMweb Gold access

FREE SHOW TICKET

PLUS

RMweb



RMWEB



PLUS

SIGN UP FOR YOUR FREE TRIAL AT

www.world-of-railways.co.uk/membership

IP Engineering (uk) Ltd

Carousell, Spilsby Rd
New Leake Lines PE22 8JT
Tele : (01205) 270010

Visit our secure on-line shop at
www.ipengineering.co.uk



New Jessie Loco Kit



All metal kit, screw
together construction kit

Jessie loco Kit

is designed to be a viable alternative to live steam locomotive. It has the presence and weight, and therefore the pulling power, of a typical steam loco, but at a fraction of the price! Made from laser cut steel with white metal castings providing extra detailing the kit is complete except for paint and glue, and can easily be bolted together on a kitchen table! A speed controller, working headlamp powerful 7.2 volt motor and four wheel drive chassis are all standard! With a choice of either modern nylon heavy duty gearbox or a traditional brass steel geared gearbox. It also has insulated wheels and couplings so you can couple up to any rolling stock and that's all in a standard kit!

Size :- length 220 mm width 110 mm height 150 mm

£199.00



All Major Credit Cards Accepted By Post,
Phone And In Our Secure Online Shop



Jackson's Miniatures

www.jacksonsminiatures.com



TIME TO GET STEAMING AGAIN! Celebrate Summer with one of our 'Superior' top up bottles, purpose-made for filling locomotive boilers. It delivers 3 times the quantity of water in one squirt compared with a typical plant spray. Please use your plant spray top up bottle for your plants and our Superior top up bottle for your loco.

Two sizes of bottle available **650ml** and **950ml** – at the same price of £14.99 including postage.



The 'Superior' water top up bottle – £14.99 (including UK postage & packing)

Please see our web site for full details of all our garden railway products
Doors and windows for scratch builders, and cladding sheets for buildings

Old Fir Tree Inn, Peacemars, Gillingham, Dorset SP8 4EU

tel: 01747 824851

e-mail: info@jacksonsminiatures.com

John Sutton Models

I sell a wide range of new and
secondhand models in SM32 and G45

- Orders welcome for UK and Overseas
- Callers welcome by appointment only please

Now in Stock:

**Roundhouse Lady Ann, Darjeeling B
Class in Deep Brunswick Green, Russell, Katie,
Accucraft Large type Quarry Hunslet.
G Vans and IOM Pairs Coaches.
Last Talgarth in stock
- in maroon.**

Wanted: Your Garden Railway locomotives and
complete collections. Excellent prices paid. Will
pick up or can arrange collection - speak to John

**Many new and second hand locos in
stock check website for availability**

66 Carthorse Lane, Brockhill, Redditch, Worcestershire B97 6SZ

Tel: 01527 67696 - Mob: 0779 8924575

www.johnsuttonbooksandmodels.co.uk

johnsutton3@sky.com



7/8ths 18" Baldric



16mm Arthur

Manufacturers of 16mm & 7/8ths Scale Etched Brass Kits

We currently supply five 16mm scale and six 7/8ths scale locomotive body kits to suit Accucraft & Roundhouse chassis. There are also six rolling stock kits in 7/8ths scale to compliment the locomotives.

Body kits feature half etched lines with major parts supplied pre-folded and roofs rolled for ease of construction.

All kits are supplied with the required fasteners for kit construction, a mix of lost wax brass and white metal castings and laser cut components where required.



7/8ths Slate Wagon



7/8ths Skip

Available From

Mikes Models

3-5 Brockwell Rd, Birmingham, B44 9PF

Phone: 0121 360 4521

Email: info@mikes-models.co.uk

www.mikes-models.co.uk



Everyone's cup of tea

Mark Thatcher takes a look at the 16mm Darjeeling Class B live steam loco from Roundhouse Engineering.

I must have had a dozen or so live steamers from Roundhouse pass through my hands over the years. I still have an early and rare example of this company's Lynton & Barnstable "Taw" (only produced between 1990-1995) and its Vale of Rheidol "Owain Glyndwr" (2004-2011), which are both very happy steamers. But, I have always wanted a reason to own the Darj, and, in March this year, I had the perfect excuse! I started to review some DHR rolling stock kits from Timeless Models, so it was a given that I "needed" the Class B loco to pull them.

This model has been in the Roundhouse stable since 2002, when it was launched at the 16mm Society's annual show and AGM that year, and the fact that 21 years later it is still in production speaks volumes about its popularity. The latest batch is due to hit the dealerships in October 2021, although, luckily, I did not have to wait that long as

John Sutton Models had a Darj in DHR blue, which was exactly what I was after.

In its day, it was the most detailed loco that Roundhouse produced and set a new benchmark in this department. Still to this day, it stands up well not only to other well-detailed locos from this company, like their new double Fairlie, but also to other companies' offerings of similar detail.

Stick shift

I opted for the radio-controlled version, so included with my Darj was a good 2.4Ghz Exmitter EX7 transmitter. This has a stick shift (two sticks, one to control the reverser and one for the speed), which I much prefer to the wheel control version, commonly used for RC cars, which I have on my Vale of Rheidol model.

In the box, you will get the model itself, two centre buffers, which you have to bolt into place, two maker's plates, and the usual

bag of Roundhouse accessories, which are common to all the models in their range. This includes a bottle of steam oil, a set of white gloves, a duster, a re-gauging tool and an Allen key, to adjust the gauge between 32 and 45mm and the instructions. You will have to supply your own gas filler adaptor though. Also included is a syringe and a small packet of spare gaskets.

A walk around the model

Additional details abound. You get a re-railer and a set of brass firing irons too. The re-railer can be fitted to either side of the model and simply locates into a slot on the front of the coal bunker. Front and rear buffer safety chains are included and the large (very prototypical) front and rear headlights are a great addition. These are non-working but I have seen them with modifications and working in the past. The faux coal load has a circular cut-out to allow



The steam lubricator and pressure gauge are located to the left in the cab and directly below the lubricator is the lubricator drain screw.

access to fill the gas tank, which is located in the coal bunker. This coal load is removable to allow access to the 4 AAA batteries that power the receiver. The on/off switch is located to the left underside of the coal bunker. The blue dome is removable and gives access to fill the boiler, by removing the boiler filler cap, which is also the safety valve.

Business as usual

On the footplate it is pretty much business as usual and, if you own more than one of Roundhouse's models, you will see commonalities in this area. One nifty touch is

that the cab roof is designed to swing away and over the left side of the model to give easier access to these controls. The valve gear again is the tried and trusted simplified Walschaerts type valve gear, but the gear is either engaged in the forward or reverse direction with no option for 'notching up'. This is standard Roundhouse practice. The FG type gas burner is again common across the range. As the wheel arrangement is 0-4-0, the loco will run round a two-foot track radius comfortably.

Whilst out of the box, there is a lot of nice detail, there is so much more that can be easily added. Roundhouse do an



A standing Modeltown driver will fit into the right side of the cab with a squeeze, but without any nasty amputations!

optional set of etched brass plates to include a maker's plate and the N.F. logos. These are really a must-have addition. TIP: Use a very small amount of silicone sealant (the stuff that is used to seal up fish tanks) to glue the plates to the loco. Any excess can be carefully picked off with a cocktail stick when dry, and should you wish to remove these plates in the future, you may do so without harming the paint on the body of the loco.

Brand-style guide

I painted the front and rear cab railings



The faux coal load hides the receiver, gas tank and batteries. Top right is the gas filler nozzle and forward of the coal bunker the filler/safety valve can be seen with the blue dome removed.



The simplified Walschaerts type valve gear is controlled by the right stick of the transmitter, left or right for the direction of travel.



For better access, the hinged cab roof swings away to the left-hand side, though I found it is easier to fill the steam lubricator with the roof in its normal position.



Modeltown figures adorn the front of the model. They just fit with a wiggle between the handrails and stay in place pretty well during a run. This is actually very prototypical as often two 'Sanders' would sit here to throw sand onto the rails to help with track adhesion during some of the more arduous climbs. From this angle, you can also see the buffer safety chains that come as standard on this model.



The loco has an 0-4-0 wheel arrangement, but, as you can see, there is quite an overhang as these are set well inside the chassis.

Roundhouse Class B Darjeeling locomotive specification

- Internal gas firing using 'FG' type burner
- 0-4-0 outside framed chassis with two double acting slide valve cylinders operated by a simplified Walschaerts type valve gear
- Exhaust enhancer
- Water top-up system and water gauge
- Controls fitted as standard are; steam regulator, safety valve, pressure gauge, displacement lubricator, gas regulator and reversing gear
- Length 365mm over buffers, width 115mm, height 170mm, weight 3.5 Kg.
- Full radio control is available for both regulator and reversing valve gear using 2.4GHz R/C
- 32mm and 45mm gauge
- Minimum radius 2'

Price

Manually controlled: £1,991.80.

Radio-controlled: £2,259.00

Brass etch of various additional plates and emblems (with three nameplate choices): £20.40

black. I have seen them in red, white, yellow and even gold. There is very little colour coordination on the DHR and I doubt, unlike LNER, they have not employed Saatchi & Saatchi to provide them with a brand-style guide! I highlighted the cab grab handles in white and the Indian-themed figures are available from Modeltown, too. A little sticky-backed Trimline was stuck to the lower cab sides. This is an easy modification to reverse, should the loco be sold in the future.

Happy days

The loco steams as well as any other Roundhouse product, in other words, perfectly. The company has deservedly earned its reputation over the years and this model certainly doesn't disappoint.

So, enough chat, let the pictures do the talking.

Time for a cup of char and a steam up methinks! ■

Garden Rail Resource

Roundhouse Engineering Co. Ltd.
Units 6-10, Churchill Business Park,
Churchill Road, Wheatley, Doncaster,
DN1 2TF
www.roundhouse-eng.com

Please mention **Garden Rail** when contacting suppliers.



Letters are welcomed on any aspect of large scale railway modelling. Please e-mail the Editor: phil.parker@warnersgroup.co.uk or post to The Editor, **Garden Rail Magazine**, Warners Group Publications, West Street, Bourne, Lincolnshire, PE10 9PH

TRACK STANDARDS

An admirable article by Dave Skerchley on radii in your March issue, however, I must correct one statement. The wheel and track standards are the current Gauge 0 Guild coarse scale standards. These are published online at: [www.gaugeoguild.com/revised_manual/New_manual_files/Sept 2017 part 1 Standards..pdf](http://www.gaugeoguild.com/revised_manual/New_manual_files/Sept%202017%20part%201%20Standards..pdf). Note that the principal difference between these and the older standards quoted is that the flangeway (Dimension W on the track standard table) has been reduced from 2.5mm to 2.2mm. Marcway Gauge 0 Coarse scale roller gauges reflect this change.

One solution to tight radii on curves is an easement, or a slight widening, of gauge. This is most easily achieved on scratch-built track, though I managed it using Brandbright wooden sleepers and Tenmille plastic plug-in chairs. I simply cut the spigot off the chairs on the outer rail and pinned them in place with brass pins while using a T-shaped gauge. The illustration from Greenly's 1924 book *Model Railways: Their Design, Details And Practical Construction* explains how using it builds in a little slack to the track gauge. I was fortunate to inherit a cast brass T gauge, do not know of any current commercially available version. The Greenly illustration also shows a version that could be made from thick sheet brass.

Stephen C Evans

LOCO BUILDER

In answer to Rob Brittlebank's request for loco builder recommendations in the July issue, can I suggest he tries Mike Danby: www.mikedanbylocomotives.co.uk. He is a prolific and highly regarded builder in both Gauge 1 scales (10mm and 1/32), Gauge 3, 0 gauge and 16mm scale.

Tac Foley

MYSTERY LOCOMOTIVES



I wonder if any of your **Garden Rail** readers could help me identify the loco in the photos attached? I believe it is a white metal kit, which someone has filled the boiler with lead. It has a set gauge of 16mm & runs on a PP3 battery.

I seem to remember a small company, about 25 years ago, producing something similar, and I think their name was something like Sixteenmillers.

Dave Pollard

Editor: Interesting models, obviously based on the Crewe Works 18-inch gauge railway, but I can't identify the maker of these. Can anyone help?

LED DIMMER CONTROL

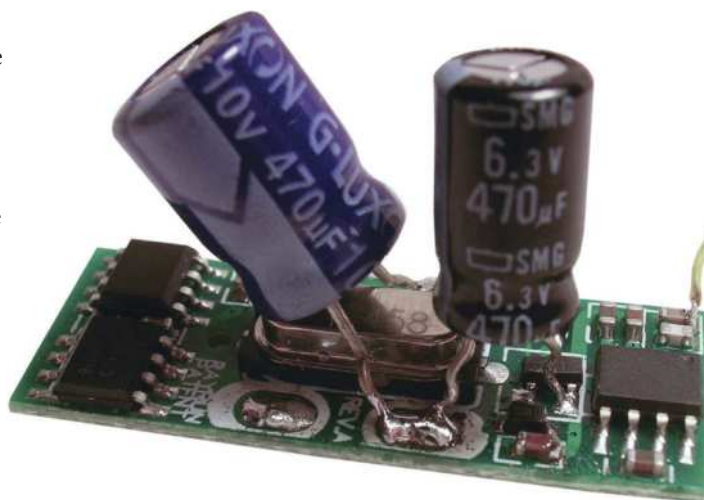
I've been running one of my small electric locos using the basic system with some limited success due to the short range. I'm now trying to install Mike Jeffries ideas published in *Garden Rail*. He says the two capacitors are soldered to the battery terminals but the photo seems to show them attached to the LED terminals. I've also tried to solder the 173 mm wire to the underside of the aerial track but it lifts the rather small track. Should I be soldering it to one or both of the components in the top right corner?

Gordon Pryor

I passed Gordon's letter to Mike, and he responds:

I'm sorry you've been having difficulties fitting the capacitors but I'm 99% sure that the labels on the wires in the photo you attached to your mail are the wrong way round. If you look at Figure 1 on page 30 of **GR322**, you will see that the wires on the left go to the LED/motor and not the battery as your label shows.

Regarding the antenna, I soldered mine to the tiny capacitor on the top of the board rather than the track on the bottom. You can just see this in Figure 2 on page 31 of **GR 322** – I've asked the Editor to re-print it a bit larger this time so it's clearer.



MODEL TOWN

www.modeltown.co.uk



UK's leading manufacturer of resin figures and building kits
Visit our secure online shop where all major cards are accepted

Beecholme, 6 Station Road, Halton
Holegate, Spilsby PE23 5PB
Tel: 01790 612237

www.modeltown.co.uk

Tel: 01905 676167

MPB Model Supplies

Model Railways and Live Steam Models

10 St Andrews Street

Droitwich

WR9 8DY

We stock Peco track for garden railways in Gauge 1, SM32, and G45, Plus accessories to suit.

Live Steam and electric Loco's from Roundhouse and Mamod



www.mpb-model-supplies.co.uk

contactus@mpb-model-supplies.co.uk

NEW PREMIUM LIGHT INDUSTRIAL SOUND £65



For small diesel and petrol powered locomotives.
Includes a choice of seven engines, five transmissions and six horns.
Bell, Air brake, "All aboard", guard's whistle and brake squeal.
All sounds chosen and adjusted using a £12 TV remote control.
For battery radio control or track power. Easy screwdriver install.
Also great for 5" and 7¼" ride on locomotives.

On YouTube search for **mylocosound premium light industrial** for a short demonstration.



Plus soundcards for British Steam, Heavy Diesel, Electric, Trams, Rail Buses, US Steam and Galloping Geese.

www.mylocosound.com

Distributed by Fosworks of Blackburn
01254 814675 E-mail sales@fosworks.co.uk

northpiltonworks.com

Call: 02030 062564

7/8th & 16mm Scale

North Pilton Works
16mm Scale Garden Railways northpiltonworks.com

Complete range of building and accessory kits for every aspect of your railway.

Full range of rolling stock in 16mm and 7/8th scale with industrial range and standard range of kits complete with heavy metal axles and binnies buffer couplings.



New range of 7/8th scale industrial wagons now launched

Buildings, accessories, signals, rolling stock and locomotive kits



POLLY MODEL ENGINEERING LIMITED



Find us on



Build your new 5" gauge coal fired 'POLLY Loco' and be ready to enjoy running in the new season.

Supplied fully machined, assembly requires hand tools only – no riveting, soldering or other complex processes. Kit includes boiler CE/UK CA certified and accepted under Australian AMBSC regulations. Model can be supplied as full kit (unpainted) or a succession of kit modules.



10 other models, tank engines, tender engines, standard gauge/narrow gauge – something for everyone!
Prices from £5716 including VAT and carriage.
Build & cost optionally spread over 12 months.

Buy with confidence from an established British Manufacturer

144 page Catalogue £2.50 UK £8 International posted (or download free!) and enquire for further details or visit our website where you will find other Polly Locos, Kits, drawings and castings for scale models and comprehensive ME Supplies.



Polly Model Engineering Limited
Atlas Mills, Birchwood Avenue,
Long Eaton, Nottingham,
NG10 3ND, United Kingdom

www.pollymodelengineering.co.uk
Tel: +44 115 9736700
email: sales@pollymodelengineering.co.uk



16^{mm}
Narrow Gauge Modellers

JOIN TODAY -

online or by phone and get
Membership till 1st March 2022

New 120 page Guide to 16mm Scale Modelling (RRP £15)

Exclusive Members Only Online Resources

including download access to over 120 back issues

Bonus 16mm Today Magazines (while stocks last)

& full membership benefits for 2021-22 year

Membership starts from as little as £19 annually
(£10 for U18 / students)

Join by Direct Debit, save money
and get the added benefit of
ongoing hassle free annual
renewal - never miss a
magazine!



Call 01778 392016 Mon - Fri 8 - 6, Sat 9 - 5
Join online 24/7

www.16mm.org.uk



**The Home of
Garden Railways**

since 1987

Good Times with Great Friends
25 UK Area Groups & Free Online Support



**Join
Today!**

12 Months of Full Membership Now!

4 Quality Journals (worth £20+)
Society Calendar, free Insurance* & Technical Manual

www.gscaleociety.com

*see website for details



07538 127785

email coachandwagon@gmail.com

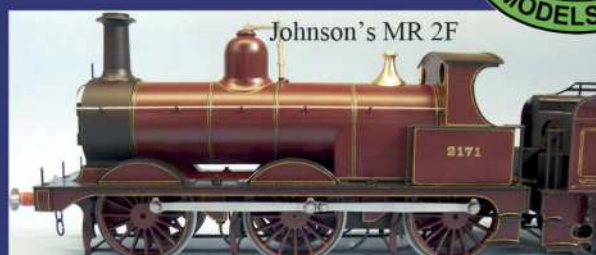
New products recently launched include-

Wood Stains
Clear Plastic (PETG)
Foamex Board
More Paint colours
FREE P&P



www.coachandwagonworks.co.uk

**UK MANUFACTURES OF LIVE STEAM
LOCOMOTIVE KITS IN GAUGE 1 & 3**
CELEBRATING 40 YEARS OF BARRETT MODELS



Johnson's MR 2F

Spirit fired, twin cylinder, hand and axle pump £1880

www.barrettsteammodels.co.uk

Tel no. 01922 685889

Works:-47a Coronation Rd, Pelsall, Walsall, WS4 1BG

Sojourn at Shade Gap



A passenger train pauses at Shade Gap. The surrounding trees are mainly slow growing Alberta Spruce of about 25 years age, which give the station its name.

A small country station on a sunny day when the birds are singing and the bees a buzzing. Suddenly, the peace is broken by the arrival of a train, which stops for a short period of frantic activity and then departs leaving the station to slip back into its sleeping state. This is the sort of scene a lot of us want to create on our garden line, and Andrew Coward is no different.

Another daydream. A scrap metal merchant buys a closed railway. Visiting to plan its destruction, he decides not to scrap it as it's too historically valuable, and he has not the heart to destroy such a gem, so he begins running steam trains on part of it. The rest of the line is left frozen in time, with rolling stock standing on the spot where it was on closure day over 60 years ago.

Sounds like a good fantasy story right? That is exactly what happened on the 3ft narrow gauge line in Pennsylvania USA known as the East Broad Top railroad.

I have been a fan of the line for many years. A station on the line has the name Shade Gap. When planning a station for my Isle of Westland Railway (**Garden Rail** January 2021), the name seemed to suit a station that was set in woodland.

In those days, I was working in US 2ft nar-



Station staff watch as No 4 eases the train containing the hand crane round the platform curve towards the bridge. Another second-hand purchase is a dock crane kit much altered. It was 45mm gauge when purchased and I have done a lot of work on it. The Roundhouse Alco is another superb model.



It is a fact that any garden line has its running stock dictated by the tightest curve in the track and this is mine! Had I started from scratch, the plan would be different, but there is a 30-year history behind my line. Additions and alterations dictated by what already existed rule the day as I have no wish to demolish it all and start again. The Roundhouse Karen did not appeal to me when I first saw it, but over time I succumbed, and what a good model it is.

row gauge and wanted to build a Y junction to turn sets of Bachmann three-bay hoppers. These are based on the East Broad Top railroad hopper, and I had just under 30 in my fleet. My plan was for three 10-car sets, as for many years, I had the pleasure of visiting Alan Leslie's line, which snakes around his large garden with its steep gradients. Those were the days when Lady Anne's ruled the rails in meths burner form, and three of us would get together to use the hoppers, both double-headed and banked. Fun with a capital F. We didn't know what a rivet was in those days but did not care.

Having run these sets of wagons at home on my line, it was obvious that my line had curves too tight for my hopper train as they just daisy-chained on the curves. Keeping my US stock, even adding to it as will be told another time, I reverted to UK railways. The Y idea was abandoned and one point removed, but I liked the look of the line that remained.

My version of Shade Gap went through a number of rebuilds over the years to reach today's state. Trains cannot pass as there is only the main track and the two sidings but it is signalled to allow two trains to run in close proximity in the same direction.

The pictures show the small goods yard and the siding mentioned above. A gate across the siding track protects the line from invasion by the IOWR.

The surrounding trees are mainly slow-growing Alberta Spruce of about 25 years of age, although a few younger ones were added a couple of years ago. I hope you enjoyed this quick visit. ■



Staff chew over the latest gossip while at Shade Gap. The loco is the Accucraft Baguley with a substitute chassis by Roger Hine. The loco is the most used on the line covering everything from track tests at the start of a running session to retrieving steamers that have run out of puff. I have a number of chassis built by Roger and recommend them highly. The oldest is one of his Budget Diesels, which must have travelled halfway to the moon by now and is covered with dents from track testing tumbles but runs as well as when new.

From the works

Trade information on new products for the garden railway modeller...
If you are a trader with any new product, then contact phil.parker@warnersgroup.co.uk
Please mention **Garden Rail** when contacting suppliers



LGB G scale DR Steam Locomotive VII K

The German State Railroad management in Dresden purchased 32 30-inch gauge locomotives, built to a standard design between 1928 and 1933. They were soon designated colloquially as "Saxon VII K" even if this designation was incorrect since the units were purchased by the DRG, not the Saxon State Railways.

These 600 horsepower, 57 metric ton locomotives, capable of 19mph, fulfilled all expectations and were used on many narrow gauge lines in Saxony. Another 26 locomotives, to a more modern design, were ordered by the DR between 1952 and 1956 and several of these locomotives are still currently in use on museum railroads in Saxony.

The LGB model, number 99 731, is based on a prototype to be found on the Zittau Narrow Gauge Railroad.

This is a model of a DR class 99.73 (also called VII K) narrow gauge steam locomotive. The paint and lettering are prototypical for Era VI as a museum locomotive, road number 99 731, as it currently looks in use on the SOEG.

Power comes from a pair of powerful Bühler motors. The locomotive has an mfx/DCC decoder with many light and sound

functions, such as headlights that change over with the direction of travel, firebox lighting, cab lighting, running sounds, a whistle and much more, including a built-in smoke generator with steam exhaust synchronized to the wheels as well as cylinder steam.

Length over the buffers 51 cm / 20-1/16".

Price: €1,590

G scale SOEG coaches

To accompany the SOEG loco, a pair of coaches as they currently appear. Livery and lettering are prototypical for Era VI.

The doors to the platforms can be opened and there are complete interior details. Each carriage has metal wheelsets.

Length over the buffers 58 cm / 22-13/16".

Price: €239,00 each



LGB

Stuttgarter Str. 55-57, D-73033
Göppingen, Germany
www.lgb.com

PHIL SHARPLES

16mm scale O&K loco kit

Based on the MD2 model built in Germany by Orenstein & Koppel, there is still one of these to be found at the Amberley Chalk Pits Museum.

The kits are laser-cut in MDF and include motor wheels and gears.

32mm gauge only.

Price: £40



PHIL SHARPLES

www.philsharples.com

"Estate" wagons

Laser-cut kits complete with wheels. Due to the size of these models, they are only available in 32mm gauge.

Flat Wagon: £8.50

Bulkhead Wagon: £9.50

Brake Wagon version: £9.50

Basket Wagon: £12.00 This wagon is based on the early wood built peat wagons, and can be built to run on 32mm or 45mm track.



BOWATERS MODELS

16mm scale Ffestiniog Railway Heritage Vans 4 and 5

Constructed as a bogie brake van by Brown, Marshalls in 1880, the prototypes originally had no passenger accommodation until a rebuild at Boston Lodge in 1928/9 with a new body, incorporating a guard's compartment and passenger accommodation in 1st and 3rd class.

Now part of the Ffestiniog Railway heritage fleet, the kits represent the vehicles as seen operating today.

Each kit comes complete with bogies in the gauge of your choice (32 or 45mm) from Houstoun Gate Locomotive Works and Accuraft Chopper Couplings. Kits are also available without these items if you prefer.

Price

MDF: £70

Plywood: £100

BOWATERS MODELS

www.bowatersmodels.co.uk



GARDEN RAILWAY SPECIALISTS

Lever frame kit

A simple laser-cut metal lever frame kit designed for signals and points.

Price: £24.95

GARDEN RAILWAY SPECIALISTS

Station Studio, 6 Summerleys Road,
Princes Risborough, Buckinghamshire
HP27 9DT

www.grsuk.com



RESURGAM ROLLING STOCK

16mm scale RNAD Brake van

Several types of steel bodied Bogie Brake Vans were built by Hudson Ralettrux for use in various British Military establishments during the late 1980s. This particular example is based on a 2ft 6in gauge design, used by the Royal Naval Armaments Depots, with examples known to have been allocated to both Dean Hill and Broughton Moor.

Once the depots closed in the 1990s, many of these vehicles eventually found homes at a number of preserved narrow-gauge lines; some retaining their original 2ft 6in gauge, whilst other were re-gauged to 2ft 3in and 2ft gauge as required. For those not keen on the very striking yellow livery, it should be noted that most have gained more reserved local liveries.

This new, 16mm scale laser cut kit is available in MDF or Plywood and features a fully fitted interior as well as proven hidden slot and tab construction for easy, accurate assembly. It is complete with Binnie Engineering wheels, axles

and coupling hooks, as well as HGLW oil filled bronze bearings and SLR Models 3D printed Bell Mouth Couplings. It can be built to either 32 or 45mm gauge as supplied.



The Wasp Stripe transfers are not supplied with the kit, but are available from Endon Valley Custom Transfers.

Price

MDF: £60.00 each + P&P

PLY: £65.00 each + P&P



16mm scale Ffestiniog Railway Vans 4 & 5 (a.k.a. Carriages 11 & 12)

Kits for these stalwart FR vehicles in their present-day condition, have joined the range of FR Heritage Carriages. As with the 'Bowsiders', they have been produced in collaboration with Will Curry, combining his excellent scratch aid designs, with Resurgam Rolling Stock's hidden slot and tab construction methods. They both feature the correct split-level floor and it is intended they will be supplied with 3D printed guard's duckets for simplicity of assembly.

They will be available to purchase separately, but seeing as the full-size examples are so often seen as a pair, a multi-purchase discount is available when they are ordered together. Both kits will be available in MDF or Plywood and are to Resurgam's usual specification, including bogies with steel wheelsets on shouldered axles, as well as bronze bearings and 3D printed door furniture. The kits do not include couplings, vacuum pipes, or lettering.

Both kits are able to negotiate a 2ft 6in radius curve with care on 32mm gauge,

but will be significantly restricted on 45mm gauge (available to special order).

Carriage 11 / Van 4

MDF: £125.00 + P&P

Plywood: £135.00 + P&P

Carriage 12 / Van 5

MDF: £135.00 + P&P

Plywood: £145.00 + P&P

Multi-Purchase Price for 11 & 12 aka

(Van 4 and Van 5) when ordered together

MDF: £250.00 + P&P

Plywood: £270.00 + P&P



16mm scale Ffestiniog Railway Bowsider 'Open Sole-Bar' kit

When the full-size prototype carriages were first constructed, their sole bars were covered with cosmetic wooden strips. During the latter half of the 20th century, these strips were removed as an aid to maintenance and the carriages ran in this condition into the new millennium. Since then, their original appearance has been restored, with all of these vehicles now being part of the Heritage Fleet. For



those wishing to represent these vehicles without the sole bars covered, all of the Bowsider kits can now be ordered with an Open Sole-Bar arrangement, demonstrated here on Carriage 19, turned out in the familiar red and cream Mountain Prince livery. There is no charge for this variation; please just specify when ordering.

RESURGAM ROLLING STOCK
www.resurgamrollingstock.co.uk

DIARY DATES

Date: 22nd August 2021

Event: Exbury Garden Railway Steam Festival

Venue: Exbury Gardens & Steam Railway Exbury Southampton Hampshire SO45 1AZ

Times: 10.00 am - 4.30 pm

Admission: £13 Adults £4.50 Children price includes Entrance to Gardens

Organiser: Gary Stevens and John Sutton

Additional Info: SM32 layouts ,G45 layout and some smaller scale layouts with trade support from N gauge to Gauge 1 in the storage shed. Miniature steam road vehicles outside. 12 1/4" railway on site.

Date: 25th September 2021

Event: The Yorkshire Garden Railway Show

Venue: Elsecar Heritage Centre, Wath Road, Elsecar, Barnsley, S74 8HJ

Organiser: The Yorkshire Group of 16mm NG Modellers

Web: www.yorkshire.16mm.org.uk/Yorkshire16mmShowhomepage.html

Date: 14-17th October 2021

Event: The Midlands Model Engineering Exhibition

Venue: Warwickshire Event Centre

Times: 10am - 5pm (4pm Sunday)

Organiser: Meridienne Exhibitions

Web: www.midlandsmodelengineering.co.uk

Date: 30th October 2021

Event: Exeter Garden Railway Show

Venue: The Matford Centre, Matford Park Road, Exeter, Devon EX2 8FD

Organiser: The South Devon Garden Railway Group

Web: www.exetergardenrailwayshow.com

Date: 11th and 12th December 2021

Event: Steam at Rowington

Venue: Rowington Village Hall, Rowington Green, Warwick, CV35 7BU

Times: 10am-4.30pm both days

Admission: £4. Accompanied children under 16 free

Organiser: John Sutton

Additional info: Four garden railway layouts + smaller scale layouts + live road steam display. Nine traders. Refreshments, and free parking

Date: 14th May 2022

Event: Llangollen Garden Railway Festival

Venue: Llangollen Royal International Pavilion, LL20 8SW

Times: 10am to 4:30pm

Admission: £7. Accompanied children under 16 free.

Web: www.lgrf.co.uk

In light of current events, please check with the organisers before travelling a significant distance as **Garden Rail** can't be responsible for changes or cancellations. Please be aware that travel restrictions issued by the Government may also impact your journey.
 To submit an event for publication, please email phil.parker@warnersgroup.co.uk

SUBMISSION NOTES

Garden Rail welcomes articles submitted via posted disc, email, Dropbox (or other large file sending systems online). Please ensure that your name, e-mail address, telephone number and postal address for payment on publication are included. Send to: phil.parker@warnersgroup.co.uk or to the contact address on the Contents page.

Articles should be submitted in MS Word or other word processing format. Please do not use fancy formatting or embed photos in the piece, these should be sent separately at the highest resolution possible and in JPEG format. Printed photos of a historic nature will be accepted. Captions for all photos should be included as part of the submission. You must own copyright to any material submitted and not have submitted it to other publications.

Hudson Raletrux – 'RNAD' Bogie Brake Van

Laser Cut 16mm Scale Kit



-Highly detailed kit with hidden slot and tab construction for easy and accurate assembly

-Fully fitted interior detail

-Complete with Binnie Engineering wheels and axles, HGLW Bronze bearings and SLR Models 3D printed couplings.

- Builds to 32mm or 45mm gauge

Price: MDF: £60.00* / Plywood: £65.00*

*All prices plus postage



E-mail: info@resurgamrollingstock.co.uk • Web: www.resurgamrollingstock.co.uk



3 Laurel Drive, Rugeley Road,
Burntwood, Staffordshire, WS7 9BL

Custom Battery Packs built to specification

Small Loco G 0/1

Gauge 3



Tel: 01543 683122 • Email: sales@strikalite.co.uk

Web: www.strikalite.co.uk



Timeless Models Made To Last



www.timelessmodels.co.uk
timelessmodles@aol.com

ADVERTISERS' INDEX

ACCUCRAFT UK	51	MBV SCHUG	49
ANYTHING NARROW GAUGE	11	MICRON RADIO CONTROL	28
BARRETT STEAM MODELS	41	MIKE'S MODELS	35
BOLE LASER CRAFT	49	MODEL TOWN	40
BOWATERS MODELS	49	MPB MODEL SUPPLIES	40
BRUNEL MODELS	29	MY LOCO SOUND	40
CAMBRIAN MODEL RAIL	49	NORTH PILTON WORKS	40
COACH & WAGON WORKS	41	OLD MILL FARMHOUSE	49
DREAM STEAM	2	P & S HOBBIES & MODELS	49
ELLIS CLARK TRAINS	17	POLLY MODEL ENGINEERING	41
GARDEN RAILWAY SPECIALISTS	52	RAILS OF SHEFFIELD	16
GAUGE 1 MRA	28	RESURGAM ROLLING STOCK	48
GAUGEMASTER	5	ROUNDHOUSE	11
HATTON'S MODEL RAILWAYS	12, 13	STRIKALITE	48
I P ENGINEERING	35	TEE PUBLISHING	29
JACKSON'S MINIATURES	35	16MM NARROW GAUGE MODELLERS	41
JOHN SUTTON MODELS	35	THE G SCALE SOCIETY	41
KENT GARDEN RAILWAYS	4	TIMELESS MODELS	48
MAXITRAK	49	TONY GREEN STEAM MODELS	28

**GARDEN
Rail**

NEXT MONTH

On sale
15th July

"Spending time in the garden boiling water is the main attraction of my railway"
Matthew Foster treats us to a tour of the Takasaki Light Railway.



Kevin West builds a Southern Railway luggage van from the Bowater Gauge One kit.

Modeltown's 16mm scale Watermill kit is built by Mark Thatcher.





www.pshobbiesandmodels.co.uk

THE SHOP WITH THE STOCK IN STOCK!

North Yorkshire's Largest Premier Dealer for LGB & Massoth
FREE FITTING & Programming on all LGB and Massoth Decoders
Massive stock of parts and spares available for LGB
DCC Conversions a Speciality. Quick Service. Ring for details

32 Castle Road, Scarborough YO11 1XE
also at: 4 Walmgate, York YO1 9TJ

Bowaters
MODELS
specialising in distinctive 16mm models



The home of distinctive
rolling stock kits for your
Garden Railway.



New from
Bowaters
Models, British
Railway Class
33s on 1:32
Scale.
£380 each

Available now from our website!
shop.bowatersmodels.co.uk • info@bowatersmodels.co.uk

B&B Trawsfynydd, Snowdonia

Old Mill Farmhouse B&B - perfect for visiting
the Great Little Trains of Wales
PLUS our garden railway is open again



Tel: 01766 540397 • www.oldmillfarmhouse.co.uk

CAMBRIAN 16mm Narrow Gauge

Online shop with prompt Worldwide delivery (No UK VAT outside UK)

BOGIES:

NB1 Lynton & Barnstaple Freight 4' wb, NB2 Lynton & Barnstaple Freight 3' wb
NB3 "Fox" Pressed Steel 3' 3" wb, NB4 L & B Passenger 4' 4" wb, NB5 Rye & Camber Coach

AXLEGUARDS:

NA1 Talylyn Railway, NA2 "Record" Wagon, NA8 W & L Type Wagon, NA22 "Sandy River"
NA26 Simplex Loco, NA27 "Fowler", NA28 GVT Coach, NA34 Simplex, NA38 GVT Wagon

BRAKEGEAR: (non working)

NA9 Set of 4 Brakeshoes & Hangers, NA10 Set of 4 shoes & push rods as fitted to GVT coaches

FITTINGS:

NA3 Talylyn-type Coach Door Handles, NA4 Hooks & Eyes for safety chains, NA5 Nut & Bolt heads
NA6 Brake Handwheels and gauges, NA7 Rivet Heads, NA11 Centre Buffer Coupling
NA12 Set of four sprung buffers, NA13 Handrail Knobs, NA14 Large Loco Headlight, L & B type
NA15 Coach Door Vents, NA16 Simplex type Radiator, NA17 Louvres, NA20 Radiator - Ford "A" type
NA21 Detailing parts for Simplex locos, NA23 Radiator Panel 48mm x 29mm, NA24 2 Diesel Horns
NA25 Pressed-type Loco Seat, NA29 Headlight, NA30 Cowcatcher, NA31 Coach end steps
NA32 Loco Brake Standard, NA33 Guard's Van Brake Standard, NA35 "Ruston" Radiator Grille
NA36 4 Coach Roof Brackets, NA37 Platform Canopy Valance

The range also includes Signal Pans and Wheels

4mm Wagon Kits are also available send C5 SAE for either catalogue
www.cambrianmodelrail.co.uk cmr@cambrianmodelrail.co.uk
01322 515672 (2pm to 4pm) PO Box 85, Greenhithe, Kent, DA10 9DN

BOLE LASER CRAFT

Web: www.bolelasercraft.com

Phone: 07900 995164

NEW!

Ransomes & Rapier 20hp Locomotive



1/19 scale, 32mm gauge
dimensions 158 x 64 x 121 mm

This kit is based on the 2 cylinder diesel
locos built in Ipswich between 1932-39
Kit features pre-built, 4 wheel drive
chassis and many quality 3D printed
components

Prices

Kit £140
Ready To Run manual control £215
R-T-R "loco remote" control £270

**Remember if you don't trust the Internet
you can always order on the phone ! (9 am to 6 pm please)**

Kits include everything needed except glue, paint and tools.



SR&RL 0-4-4 FORNEY

7/8ths Live-Steam, Coal fired ...

In stock !



We speak english !

MBV SCHUG Neustrasse 18 D-54340 Detzem / Germany
Phone +49 6507 802326 info@accucraft.de www.accucraft.de

MAXITRAK.COM

The best of model rail and road

PAY
MONTHLY
TERMS
& CONDITIONS
APPLY

**3/4" SENTINEL
DG6 FLATBED**

Ready to Run
£1645

Conversion kit from £95
Radio Controlled
Live Steam
Custom Graphics



10/11 Larkstore Park, Lodge Road, Staplehurst, Kent,
TN12 0QY Tel : 01580 893030 Email : info@maxitrak.com

Seen at the show

With so much to see at the National Garden Railway Show, we can't bring you everything, but here's a selection of models that caught our eye.



Lumpy Tom No. 14 on Rhydypenderyn.



The Gauge One East Anglian group layout, Anglia Roads, provided plenty of live steam entertainment.



The Isle of Man 15mm Scale Group exhibited a fine selection of models, including this pair of railcars.



Lincolnshire potato railway, Albion Estates, is home to a couple of interesting 2ft gauge diesels.



A working Travelling Post Office set in action on the Upcycling Pop-Up Railway.



A Baguley petrol loco prepares for a trip to the Belgian front on 4000 Yards.

ACCUCRAFT UK LTD

LIVE STEAM & ELECTRIC LOCOS AND ROLLING STOCK FOR GARDEN RAILWAYS

NEW FOR GAUGE 1 - 1:32 GWR 43XX 2-6-0



The GWR 43XX 2-6-0 'Moguls' were a product of Churchward's standardisation policy and owe their origin to the 'family' of locomotives he developed at the beginning of the 20th century. The class was built in a series of batches from 1911 until 1923 with Collett adding further examples (with a side-window cab) between 1925 and 1932. In total 342 of these useful mixed traffic locomotives were built. The class served all over the Great Western system and 11 examples from the 53XX series were sent to France to serve with the Railways Operating Division (ROD) during WW1. During the 1930s class members were withdrawn and their parts used to create the 'Manors' and 'Granges', a process interrupted by WW2 after which British Railways started to scrap the class, the last examples being withdrawn in 1964. Luckily two survived, No. 5322, now at Didcot, and Collett example No. 9303 at the Severn Valley Railway.

The model is to 1:32 scale, gas-fired with a single flue boiler. Built to a similar formula as our very successful 61XX 2-6-2T, the chassis is constructed from stainless steel, the wheels are un-insulated. The boiler is copper, the cab and bodywork are constructed from etched brass. The gas tank is in a water bath in the tender. The model is designed to run round 4' 6" radius curves. We are aware that there were a large number of livery variations among members of the class and will therefore be offering the variants subject to order volume (full details on our website). The anticipated UK RRP is £2500.00 (RTR), £2350.00 (KIT), subject to the usual provisos, and delivery is scheduled for Q3 2021.



For details of our complete range of models visit our website – www.accucraft.uk.com

ACCUCRAFT UK LTD. PO BOX 394, HEREFORD, HEREFORDSHIRE HR1 9QN

TEL: 01981 241380 Email: info@accucraft.uk.com





Garden Railway Specialists

The big Summer Sale!

(August 1st to the 31st)

On all Second Hand*

(excluding Commission Sales and not available for web orders)

£500 or under - 10% off

£501 to £1000 - 15% off

£1001 to £1999 - 20% off

£2000 or over - 25% off

***10% off Live Steam**

Offers on Commission Sale items - please ask

LGB Summer 2021 Specials

Call to order now!

Regular prices in Black
Save by becoming a Premier Member and
pay the **Red prices**



L21480 DR Steam Loco Class 99.7 £1763.50
£1587.15



L21430 GE 4/4 Electric Loco, with air whistle
£1153.47 £1038.12



L36356 SOEG Passenger Car £240.23
£216.21



L36357 SOEG Passenger Car £240.23
£216.21



L45926 RhB Container Transport
Car £250.29 £225.26



New GRS Accessories



TIE001 Lever Frame Kit
with six levers £24.95



TIE002 4 Brass Brake Shoes,
24mm diameter £11.25

TIE003 4 Brass Brake Shoes,
20mm diameter £10.35

Garden Railway Specialists Ltd

Station Studio, 6 Summerleys Road, Princes Risborough, Bucks, HP27 9DT

E-mail: sales@grsuk.com Website: www.grsuk.com Tel: 01844 - 345158

Monday - Friday 09:00 - 16:00hrs Saturday 10:00 - 16:00hrs