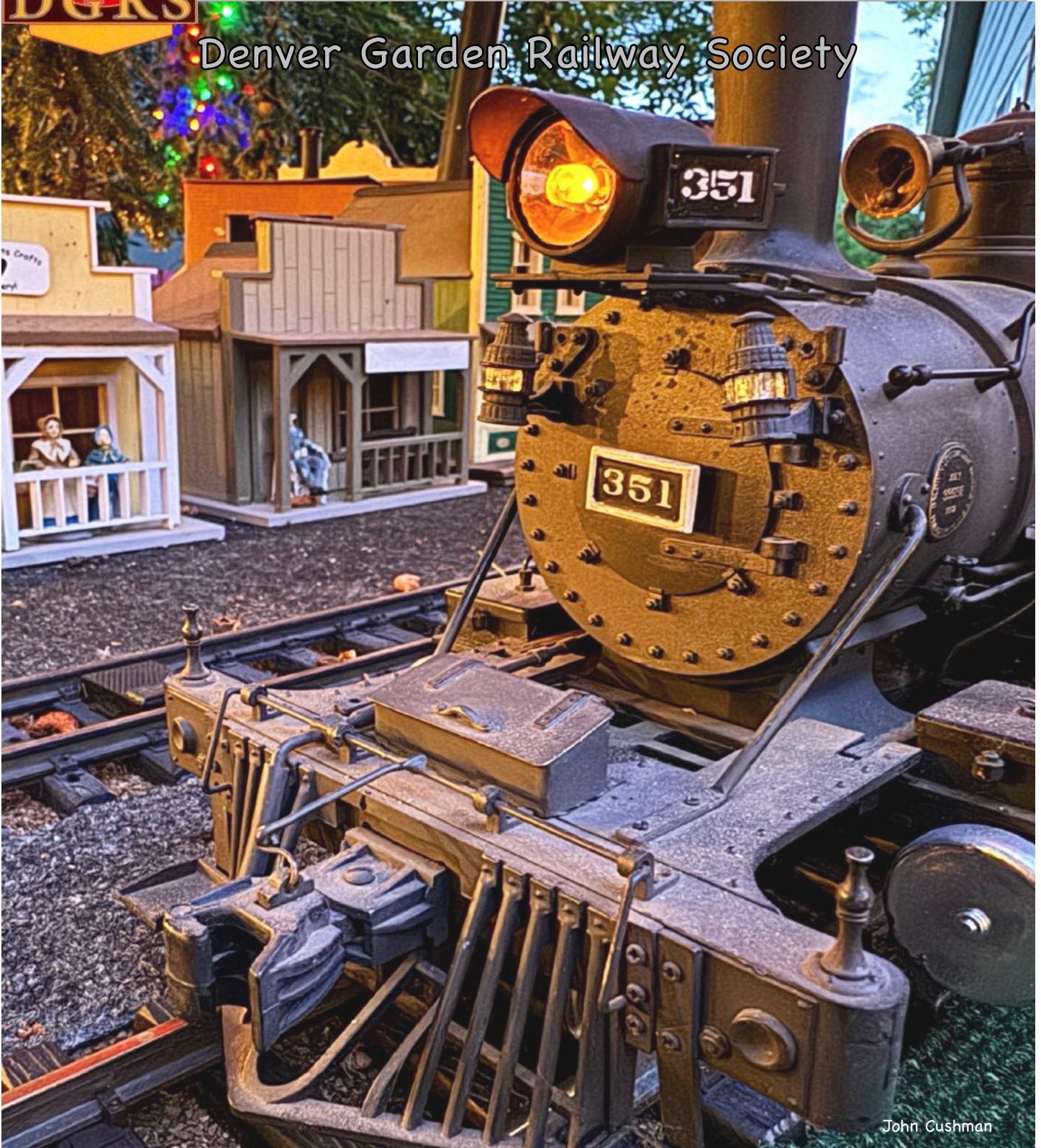




NEWSLETTER

Denver Garden Railway Society



John Cushman



View From the Caboose

The days have gotten longer and the heat is on. We are definitely into the warmest days of the summer now, and the best way to spend some quality time playing with trains is likely to be at the Colorado Railroad Museum. Even when it is hot, there are lots of trees and shade at the DGRS layout. Our layout at the museum is really quite pleasant, and you might enjoy running your favorite train there instead of doing all the work to get your own track up to speed and running the train at home. You will enjoy having others see it and hear the comments your train brings. It can be a delightful way to spend a morning or an afternoon and still be able to enjoy our hobby.

I encourage you to visit the DGRS layout at the Colorado Railroad Museum. Wear your DGRS name badge, slip in through the car gate nearest the pavilion and go directly to the DGRS layout. Be respectful of all the visitors and activities going on at the museum and join other members at the DGRS layout. You can visit with other DGRS members and work helping where needed. There are always weeds to be removed, buildings that need to be repaired or cleaned. The fence mesh needs new zip ties installed, and if you know about pruning the little trees, cleaning the pond of algae, or replacing ties on track, you can help with regular maintenance. Someone will direct you almost any time you show up willing to work. Of course, running a train is always an important "task". I was delighted to be able to get to see all the Lillys blooming in the pond and help remove the old tired ties on the steam track so Mike Harris could replace them with new ones. I know you will also enjoy a few hours helping out at the museum. It is a very rewarding experience to be able to spend time with people who share your interests and appreciate your hobby. I encourage you to try it. I don't think you will be disappointed.

Our Ice Cream Social will be at the Miller's this month and I expect it will be a delightful evening. Sara Burns will tell you about her experiences with native plants in her yard and you will be dazzled to learn how little water these plants demand. I apologize in advance for not being able to attend. Our children, grandchildren, and great grandchildren will be joining us in the mountains to celebrate our 60th wedding anniversary. I plan to visit the Burn's yard later in the summer and see the results of all this native planting for myself.

It seems that everyone who was planning to be on tour in July had to cancel. That is unfortunate, but we still have tours scheduled in August and a fabulous meeting planned at the Leise Farm near Larkspur. That is always a great deal of fun! September will be our last open house tours for the year before we return to the Clement Center for our September meeting. I'm conjuring up some fun activities for our fall meetings. After all, this club exists so we can have fun with our hobby! We will have a tooting good time at our meetings!

Cherylene

On the Cover

Engine #351 was acquired by the Boulder Valley & Pacific to haul the Presidential Coach and its companion press corps combine, together with their horses, for main line service. The Bachman C-19 Consolidation 2-8-0 was upgraded to C-20 power, and purchased from the Cascade & Silverton Railway. It had been customized in their shops by Ron Kaiser, superintendent.

The headlight was lifted from the front of the boiler to a proper position atop the boiler in front of the stack. Marker lights, number boards, couplers and tool box were added, and the model was beautifully weathered. The original gears were replaced with heavy duty metal gears, and the locomotive was placed on the mainline operating out of Louisville, in the Spring of 2024.

John Cushman

CONTENTS OF THIS ISSUE

View from the Caboose	Museum Happenings	Hospitality	Publications
Programs	Outreach	Clinics	Members ONLY

Newsletter Contributors this Month

- A Special Thank You to each for your contributions

- | | | |
|-----------------|----------------|----------------|
| Al Blount | James MacKay | Michele Miller |
| Anne Loring | Joe Foss | Pete Lammer |
| Bob Finch | John Cushman | Richard Corey |
| Cherylene Evans | Kevin Strong | Ron Keiser |
| James Ingram | Marilou Hendel | |



Pete Hendel

Programs

July 30, Tuesday,

Short meeting and Ice Cream Social at Michele Miller's home.

August 24, Saturday

General Meeting at Larkspur, LCRR, Bob & Glenn Leise's home. Meeting, lunch, G Scale trains, and 7 1/2 inch train rides.

September 24

Our first fall regular General Meeting will be held at the Clements Community Center. Richard Luckin will present our September program about the Pullman Car company and its history.

October 29

Our regular General Meeting will be held at the Clements Community Center. Paul Hammond from the CRRM will talk about the museum and its programs.

November 19 NOTE Date Change due to Thanksgiving

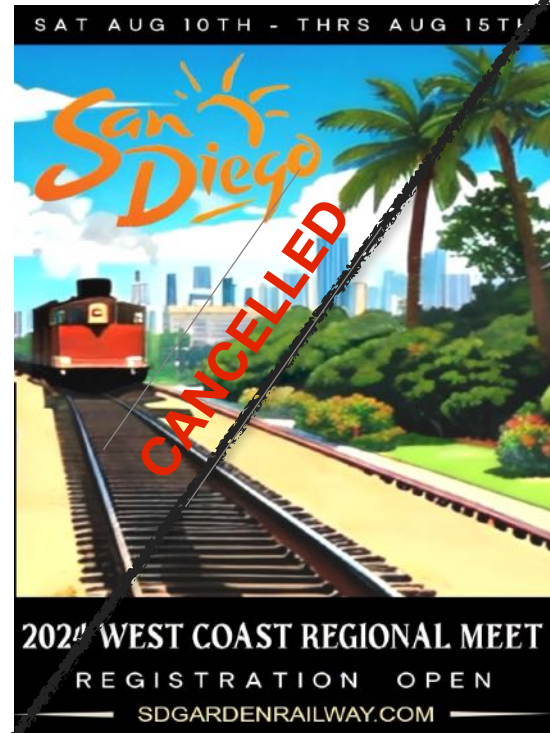
Our regular General Meeting will be held at the Clements Community Center. Bill Robie and Dave Ropchan will talk about the beginning of the Georgetown Loop.

January 28, 2025

Our regular General Meeting will be held at the Clements Community Center. Lindsey Ashby will be our speaker to tell us how all the equipment was moved to Silver Plume to start up the Georgetown Loop.

Ron Keiser

San Diego Regional Meet **cancelled** due to lack of people signing up. Fewer than 20 people had signed up, so they were forced to cancel.



Hobo Brunch

The Hobo Brunch Group meets on the 2nd Saturday of every month at 8:30 a.m. Next meeting **Aug 10** at Valley Inn. Just show up, no reservations necessary!

Location: **Valley Inn**, 1997 S. Wadsworth Blvd. Lakewood



Hospitality

Here's what Hospitality has coming up:

GENERAL MEETING and ICE CREAM SOCIAL Tuesday July 30th. Come at 6pm to enjoy the Miller Family layout,-The Denver and Clear Creek Railroad. **BRING CHAIRS.** Meeting starts at 7pm, followed by a brief program on water wise plant ideas by DGRS member Sara Burns. No share and tell at this meeting- we'll save them for our September meeting back at the Clements Center. We'll finish off with ICE CREAM-floats or sundaes-your pick!!!

Address: 10123 Summit View Pointe, Highlands Ranch CO 80126.

From C-470 and Broadway, go south to Wildcat Reserve Parkway. Left on Wildcat, then left onto Summit View Parkway. Left onto Summit View Pointe at the bottom of the hill if mobility issues. We'll try to have the driveway and spaces in front of the house clear. Anticipating a crowd and limited spaces in our cul de sac, if you're able to walk, please park in the Summit View Elementary lot just past (east) of our street entrance. We're the 4th house on the left. You're welcome to drop your chairs off first. **Call (720)560-3165 if difficulty finding us.**

GENERAL MEETING/ TRAIN DAY Saturday August 24 at the Larkspur Consolidated Railroad. A great way to close out the summer meetings!!! The Leises and rest of the Larkspur crew are preparing for a day of fun at the Leise Farm. Hot dogs and beverages provided by DGRS, side dishes alphabetically by LAST names.

A-K Salad (pasta, egg, potato or green, baked beans, etc)

L-Z Fruit dish/ salad or dessert

Like the picnic, an RSVP is needed to ensure enough to eat for everyone. If you would like a veggie option, please specify that when responding. Specific instructions for the day will be in the next newsletter.

If for any reason you're unable to make the meetings because of transportation issues, we already have several carpool groups that have developed. Let me know if having a ride would make a difference in your attending, and we'll make sure to facilitate that!

We hope to see you at the July meeting. It's the best way to hear about changes or get more details as events approach. As always, find me if we haven't talked in a while, or if you're new to the DGRS...

Reminder: We have a good number of new members. Please remember to wear your badge (or your membership card in a lanyard sleeve (we have some in the Alpine Tunnel Building at the layout), and will have some available at upcoming events). This helps us all put names together with faces! We still have badges in the Alpine Tunnel Building, awaiting their homes...

Can't wait to see everyone-reach out if any questions!

Michele

OUTREACH:

In addition to train shows, outreach opportunities continue at the club layout. It's here that conversations at the fence occur with people expressing an interest in the hobby. It's easy to plant those seeds in the young and more mature folk alike! Track 7 is especially good for this. For those who missed the picnic or didn't make it over to the layout, a plaque was recently installed to honor Aleen Caruther's vision and generosity in making Track 7 a reality. While initially intended to demonstrate how easy it is to make a garden layout, it also allows nonmembers to see how fun garden railroading can be! Aleen's daughter Sally Hooks (a former DGRS member herself) was at the picnic and had a tour of the layout and museum grounds by Alan Olson. Sally was the one who made sure her mom's wishes were fulfilled!



We'd love to have you join in the fun! Feedback has been very positive from visitors who have noticed the trains running more frequently. While they've been told this can happen at least Thursday-Sunday mornings through mid August, they're pleasantly surprised to see members out at other times!

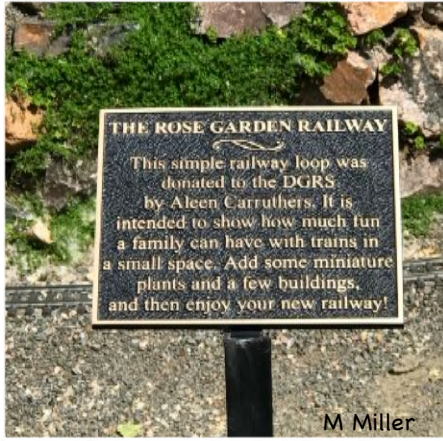
In addition to operators helping out at the DGRS layout, the club continues to look for community based outreach. Terry Foley, Outreach Chair, has his sights set on planned Rec Center events (starting with South Suburban as a pilot). Stay tuned, and let him know if you'd like to be involved in the planning! This will hopefully attract people (individuals and families) to the hobby. The Hudson Gardens layout option was explored but found not to be workable for our DGRS members.

The Outreach Committee is also eager to hear any ideas club members might have as to school or community events that DGRS could travel to. Please let us know of these, and we'll do our best to make it work!

Outreach also includes helping those in our club who might need help with a specific project that would allow for railways to be built or continue operating. Let us know if/ how you want to be involved!

Michele & Terry

MUSEUM HAPPENINGS



M Miller

The Rose Garden Railway plaque



C Evans

Cherylene

Working on repairing the steam tracks

Alan Olson

Mike Harris



C Evans



C Evans



C Evans



P. Hendel

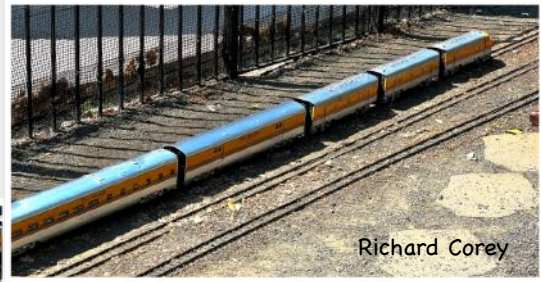
Every year the Cottonwood trees make a huge mess

Here are some photos of running my ski train at the club layout. I would like to thank Bob Poncar for selling these beautiful cars to me. I will be running these more at the club layout in the future.

Richard Corey



Richard Corey

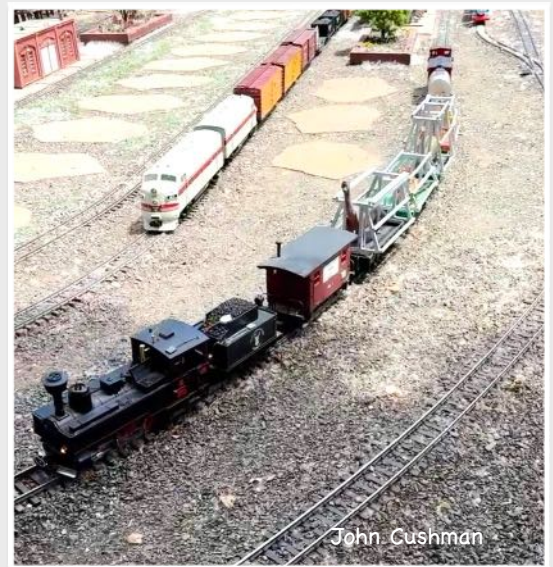


Richard Corey



Pete Lammer

Alex Manne running his Bachmann trains



John Cushman

John Cushman's Dinosaur Train



Pete Hendel



John Cushman

THE COMO HEADLIGHT

Vol. 3 Number 2 Summer 2024



Newsletter of the South Park Rail Society



COMO SUMMER 2024 OPEN HOUSES and BOREAS PASS RAILROAD DAY SCHEDULE

Submitted by Tom Lawson

**OPEN HOUSES: Saturday July 20th, Saturday September 21st
and "Fall Leaver" Saturday September 28th**
Tour Guides / Docents, Rides and Merchandise Store will be OPEN



BOREAS PASS RAILROAD DAY Saturday August 17th
**Tour Guides / Docents, Rides, Merchandise Store Open, Food and Concert
 with Denver Brass and the Celtic Colorado Pipes and Drums**

CLINICS (sort of)

A LONG, LONG TIME AGO, AROUND 2009, KEVIN STRONG WROTE A 2 PART ARTICLES ON SWITCHES. WITH HIS PERMISSION, THE 2ND ARTICLE IS PRESENTED BELOW.

Basics of gauge-1 switches, part 2

Switch troubleshooting for garden-train enthusiasts

By Kevin Strong

Published: June 26, 2009

If you were to ask any model railroader what the biggest headache on his or her railroad was, "switches" would rank in the top three every time. If we want our trains to do more than just run around in circles, however, they're a necessary part of any model railroad. So, as in any successful relationship, we must learn to love them despite their faults. Fortunately, getting our switches to operate smoothly usually doesn't involve too much work.

The **first thing** a switch needs for smooth operation is a firm, flat base. Even if your track floats in ballast, it's advisable to mount your switches on some kind of sturdy base, such as length of 2 x 8 lumber. This keeps switches from twisting and the track leading into and out of them from dropping precipitously off the ends of the switch. All the rails going into and out of the switch need to be in one plane.

The next thing is to make sure the points can move back and forth easily, and close firmly against the stock rails. Cleaning the points is the most routine of any switch maintenance and really should be done before each operating session. I carry a small, stiff brush in my pocket when I'm running, as ballast likes to migrate and continually needs to be kept out of the works (**Photo 1**).

If your switches are controlled remotely, it may be advisable to not ballast the points of the switch, to minimize the chances of debris working its way between the points. Murphy's Law seems to apply itself

Photo 2



The frog and guardrail flangeways—like the points—need to be kept clear. These areas aren't quite as prone to debris jumping in over the course of normal operations.

readily to the most inaccessible switches on a railroad.

The flangeways through the frog and guardrails need to be swept clean as well, though these areas are less prone to debris bouncing in during regular operations (**Photo 2**).

Photo 1



Keeping dirt and debris out of the moving points is imperative to proper operation. The author uses a stiff brush to keep things moving freely through an operating session.

Kevin Strong



Switches invariably cause the majority of derailment problems on any railroad, regardless of scale. As the wheels roll over the points and the frog, they have a choice of which way to go. Proper maintenance makes it much easier for the wheels to make the desired choice.

As important as it is to keep the points and flangeways clear, that's not even half the battle in terms of proper operation. The biggest culprit in derailments over switches is actually not the switch itself, but the wheels that run over it.

There are two aspects of the wheels that determine how well they'll operate through as switch: gauge and flange depth (**Figure 1**).



Figure 2 — Gauge

Photo by Marc Horovitz

Gauge is most commonly described as the distance between the rails, but it can also refer to the distance between the points where the flanges meet the wheel treads on a wheelset. This distance is important because it determines how well the wheels fit on the track (**Figure 2**).

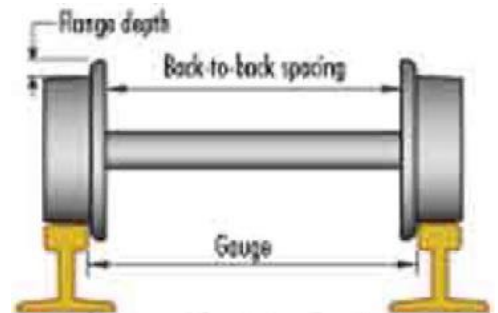


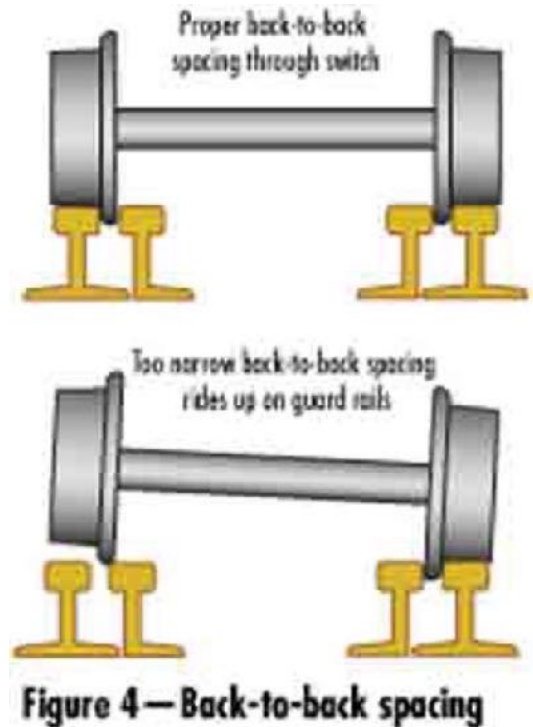
Figure 1 — Terminology

Photo by Marc Horovitz

A wheelset that's gauged too narrow may fall between the rails, while one that's too wide will tend to ride up and over the rails. From the illustration, one could draw the conclusion that there's a bit of leeway in terms of gauge, as long as the outside edges of the treads are always greater than the gauge of the track.

That might be true for any regular track, but when it comes to switches, there's another aspect of the wheel gauge that needs to be taken into consideration, called back-to-back spacing. This is the distance between the back sides of each wheel. This measurement is critical because, when a wheel enters a switch, it runs through the points and over the frog, and has to navigate through the guard rails.

When the back-to-back spacing is too narrow (**Figure 4**), the wheel will ride up over the guard rail, possibly leading to a derailment. For gauge-1 track (45mm), the optimum back-to-back spacing is 1.575".



Adjusting the gauge of the wheels may or may not be a simple task. In many cases, the wheels can be adjusted by removing the wheelset and adjusting the distance by tapping lightly either on the axle or the wheel, depending on which way the gauge adjustment needs to go (**Photos 3a, 3b**). Adjusting the gauge on locomotive axles can be more problematic, so if it's not causing a problem, don't worry about it.

Photo by Marc Horovitz

Photos 3a & 3b



If the wheelset is gauged too wide, tapping the axle against the opposite wheel will bring the two wheels closer together.



If the wheelset is gauged too narrow, a light tapping on the end of the axle as shown will move the wheel out the desired amount.

The second aspect of smooth operation through a switch is the depth of the wheel flanges. Flange depth is important because, on most switches, the frog's flangeway is a certain depth below the railhead (**Figure 3**).

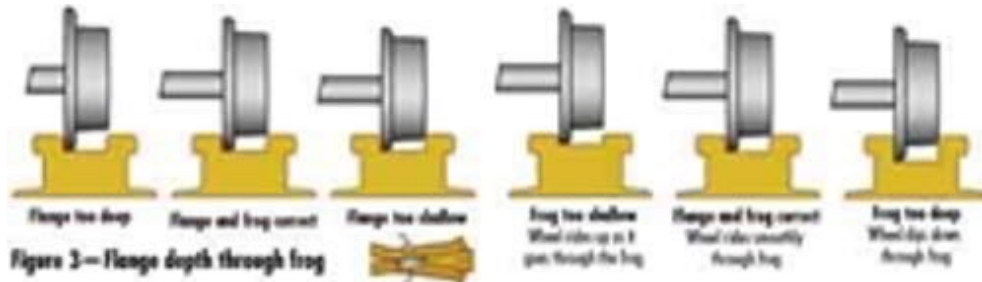


Photo by Marc Horovitz

Ideally, this flangeway should be the same depth as the flanges on the wheels, so that the wheel rolls smoothly through the switch. If the flangeway is too shallow, or the flanges too deep, the wheel will bump

up while going through the switch. If the flangeway is too deep, or the flanges too shallow, the wheel may slip down at the throat of the frog (the point where the two flangeways converge).

On many switches, it's at this momentary point that the wheel is supported by the flange, not the tread. While flange depth through the frog will seldom cause a derailment, it can cause nerve-wracking bumps as the cars go through the switch.

Curing this problem isn't very cut-and-dried, though, primarily because each manufacturer seems to have its own preference when it comes to flange depth. The ideal solution is to standardize all your rolling stock by using a single brand of wheels. This way, you can adjust your flangeways (if necessary) to accommodate the vast majority of the wheels on your line, and live with a small handful of pieces that go "bump." Usually, these will be locomotives, which have more weight and are less likely to be affected by bumps.

It's also possible to file down large flanges by mounting the offending wheel in a drill press (**Photo 4**).

Photo 4



If the wheel can be removed from the car, then it may be possible to chuck it in a drill press to file down an oversized flange.

Adjusting the depth of the flangeway to match the flange is a little easier. If the flangeway is too deep, small strips of styrene can be glued in to raise the surface of the flangeway to the proper depth. If it's too shallow, a bit of sandpaper or a file will quickly take away the excess material. See (Photos 5a & 5b)



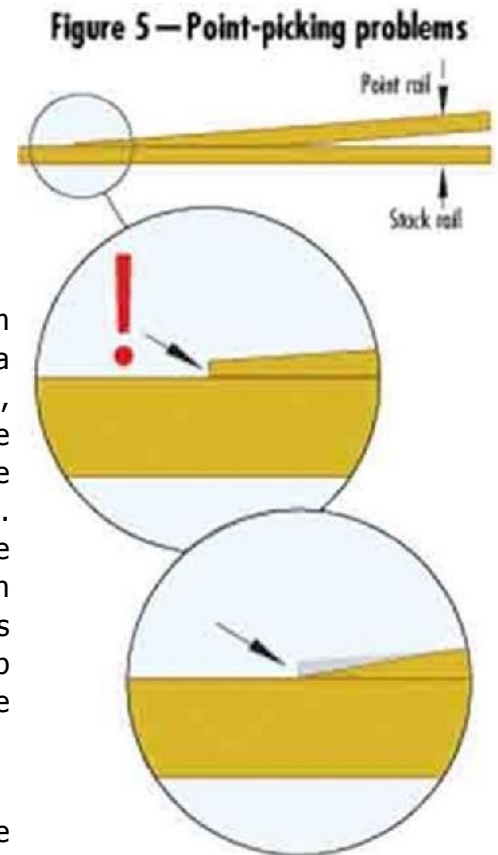
If the flangeways are too shallow, some sanding and filing will remove the excess material so wheels can pass through without bumping.

Deep flangeways can be filled with small strips of
Photos 5a & 5b

The most common cause of derailments at a switch comes from equipment "picking the point" of the switch. This occurs when a wheel hits the point and, instead of going the intended direction, decides that the path of least resistance is to either roll over the point or push it aside and roll through the wrong way instead. The cause of this lies at the place where the point meets the stock rail. In many cases, there's a little bump where this occurs because the point rail doesn't taper sufficiently (**Figure 5**). The flange will catch on this and, instead of rolling to the side, will climb up. This problem can usually be eliminated by filing a small taper into the tip of the point so it joins the stock rail smoothly. This eliminates the bump that causes the flange to want to ride up.

I don't think the terms "trouble-free" and "switch" can ever be considered remotely synonymous. These necessary pieces of trackwork will always find ways to confound and perplex the railroader, no matter what scale. However, with some proper care and routine maintenance, they can be made to be as reliable as Mr. Murphy will allow. And that's about as much as we can ask.

Kevin Strong



Most switch derailments occur where the points meet the stock rail. The point rail often has a little bit of a lip that catches on the flange, causing the wheel to roll up and over the point. By filing off that lip at a slight angle, it's less prone to catch the flange, allowing the wheel to roll through without derailing.

Photo by Marc Horovitz

Publications

Publications

This part of the newsletter contains articles and photos provided by club members. Part of the enjoyment of Garden Trains is to see other layouts, engines and rolling stock, thus it helps the hobby if club members, or readers of the newsletter provide photos and stories for the DGRS newsletter, which is sent to clubs all over the world.

To submit an article, you can include the text in a Microsoft Word document, Apple Pages document, plain text or just in an email. Photos can be sent by email also. It is best if the photos are sent separately so the quality is not lost. PDF files are difficult to edit/format, so they are not preferred. Thanks for your contributions.

Pete Hendel pbhendel@gmail.com



Bob Finch

Garden Trains on Facebook and YouTube

Facebook has Public and Private Groups.

A Public group on FaceBook allows anyone to see who's in the group and what they post. It is visible to anyone.

A Private Group allows only members to see who's in the group and what they post.

Most Groups are visible and anyone can find the group. When you join Facebook, you do not have to provide any information that you do not want to share with others.

This is a **Public Group**: [GRNews on Facebook](https://www.facebook.com/groups/grnews), and you do not need a Facebook account to view.

The following are **Private Groups**, and you need a Facebook account and join the group to see what is posted.

DGRS has a Private group page (Denver Garden Railway Society). Videos of the operations and others are posted there.

<https://www.facebook.com/groups/970224199655068/>

These are other Private Groups:

G Scale Trains: <https://www.facebook.com/groups/248809748503280/>

LGB Train fans: <https://www.facebook.com/groups/52647946993/>

LGB Train Sales & Trades: <https://www.facebook.com/groups/316404888778962/>

GScale.Net: <https://www.facebook.com/groups/gscale/>

G-Scale- Garden Trains: <https://www.facebook.com/groups/268889036532980/>

Rocky Mountain Railroad Club: <https://www.facebook.com/groups/rockymtnrclub>

There are many other groups on Facebook that have similar interests.

From the local Park County Newspaper the "Flume"

PAGE 16

PARK COUNTY REPUBLICAN AND FAIRPLAY FLUME

FRIDAY, JULY 5, 2024

Painting & Lettering C&S Boxcar #8311

BY NORM ACKER, DIRECTOR SOUTH PARK RAIL SOCIETY

Over the past year, volunteers at the Como roundhouse have been preparing and painting C&S boxcar number 8311 for the U.S. Forest Service so it can be moved back up to the top of Boreas Pass for display on a section of track across the road from the restored section house. Conditions on the pass are very harsh, with high velocity winds that carry sand grains, ice fragments and snow pellets and driving rain nearly horizontally at high speed, which blast the equipment and buildings and wear down

the wood and paint. On this car, the side that faced west in the path of the prevailing winds was so sandblasted that the edges of the tongue and groove siding were rounded off as if someone had taken a power sander to them. In addition, there were cracked boards and several holes created by woodpeckers. Along with deterioration from ultraviolet light and extreme temperatures, these are very common conditions for most historical railroad equipment which is displayed outdoors in Colorado.

The car was trucked from the pass to Como in 2023 for exterior repairs, preparation and repainting. Como project volunteers carefully sanded the tongue and groove siding on the sides and ends of the car and filled and sanded the cracks and holes.

The car was then given two coats of primer followed by three coats of



Sam Kunugi, Luke Miller and Tom Fade lettering C&S #8311. Photos courtesy of Norm Acker and Tim Frade.

commercial/ industrial grade acrylic paint to prepare it for lettering with Colorado & Southern identifying marks which were appropriate for the time period of the early 1900's. This style was known as C&S Block lettering, and it was applied to cars that were manufactured for a ten-year period starting in 1907. This lettering style is unique as all of the letters and numeric characters have straight sides with no rounded or curved edges. We use historic photographs, detailed drawings of the cars from railroad archives, and sketches known as equipment folios to determine the placement of the rail-

road's logos, car numbers and dimensional data like weights and capacities in their proper locations on the car.

The lettering process begins with positioning heavy cardstock stencils on the car and taping them in place, taking care that they are placed correctly and level with the horizontal roof of the car. The stencils for each of the large C & S letters are approximately three feet square, so the wind in Como on the first day of painting on June 1st made this a little challenging, and extra tape was required to keep the stencils on the car. The Colorado Railroad Museum deserves

thanks for generously loaning us the proper Block-style stencils, which were hand cut by the museum's car shop volunteers. Additional stencils for the car were made by scanning C&S artwork, which was digitally traced using Adobe Illustrator and cut with a Cricut Maker 3 craft and vinyl cutter using heavy 100-pound cardstock. This method was also used to create the stencils used for lettering the C&S 4319 coal car (gondola) and the DSP&P 608 boxcar which are both on display in the roundhouse.

Once the stencils are correctly positioned and checked for good alignment, the outlines of the large C&S letters and the bodies of the smaller letters and numbers are filled in and painted using both standard art paint-brushes or foam "pounce brushes". We applied two coats of industrial grade white acrylic paint to ensure good coverage.

We still need to add more letters and numbers to the car - on the sides, doors and ends - which we plan to do on the next workday. Once the lettering is complete, we are planning to apply a heavy spray coat of U.V.-resistant Marine Spar Varnish to help fend off the elements.

The car is tentatively scheduled to be returned to the Pass in 2025, and we hope that we've given her sufficient protection so she will look good for another five years - weather permitting, of course!



New trolley control greatly increases the potential for disaster.



Simple DCC Automatic Train Control

Introduction

As you probably know, many of the LGB and Piko locos can run on DCC, and DCC decoders can be added to many other large-scale locos.

As you also probably know, DCC will control ANY loco from ANY manufacturer of ANY scale — as long as its decoder conforms to the non-proprietary NMRA DCC standards.

The NCE DCC Corporation produces in their Rochester NY factory a 'Simple Programmable DCC Train Controller' (its official name is "NCE Mini Panel") — which gives us a relatively-simple way to automatically control these DCC locos — without having to add any "blocks" in our track, or otherwise modify our track.

This "NCE Mini Panel" has nowhere near the capability of the advanced Arduino-based DCC systems used by DGRS member Tom Wilcox, whom you may have visited on the June tours -- but is probably much easier to learn -- for those of us not technical enough to learn the Arduino.

Categories:

Automatic train control can be divided into roughly 2 categories:

- (1) "LOOP" operation where the train(s) travel on a continuous loop of track, and
- (2) "SHUTTLE" operation (aka point-to-point, aka back-and-forth) where the train(s) go back and forth on the same track WITHOUT turning around (like the RTD commuter trains operate).

In this article, we'll look at several examples of "SHUTTLE" operation.

Note that these systems are probably best limited to INDOOR layouts and displays — as the "NCE Mini Panel" is not-at-all weather-proofed.

Four Streetcars — Shuttle Operation

This shows 4 MTH "O-gauge" streetcars operating in a back-and-forth SHUTTLE operation.

This link (https://youtu.be/QxD4mln_oC8&t=78) should start you at the 1:16 minute point in the video -- which shows a fast-forwarded overview.

If you watch to about the 2:41 point, you can get an idea of how it operates.

This system can operate with any combination of the 4 cars: just 1 car, any 2 cars, any 3 cars, or all 4 cars.

Note that Fig. 1 shows a "Start" pushbutton that the public can push, which will have the controller move all the cars from "lower station" (on the right), to the "upper station" (on the left), then move all the cars back to the "lower station".

These could also be SHORT TRAINS instead of streetcars.

For Continuous Operation:

Closing the "Repeat" switch on the control panel, will keep the controller running the cars continuously. When the "Repeat" switch is opened again, the controller will "park" the cars in their starting position.



Figure 1

The controller will then “wait” until someone pushes the “Start” pushbutton again.

The two Z-Stuff infrared detectors just sit ALONGSIDE the track (no physical connection to the track), and will work for trains as small as N scale streetcars, up to large-scale trains.

USA Trains GP9 in Shuttle Operation

In my opinion, this works best with a diesel with sound, lights, and rotating cab beacon — so you have ACTION even when the loco is stationary.



Figure 2

This Video 804 shows a USA Trains GP9 with a Zimo decoder — operating in shuttle mode.

Note that even when the GP9 is stationary, you can hear the sound, and see the beacon light on top of the cab.

This link (<http://youtu.be/h7k8SPWgRmk&t=671>) should start you at the 11:11 point in the video -- which shows the GP9 approaching the bumper.

If you watch for about 30 seconds, you can get an idea of how it idles with the sound and cab beacon light operating.

Two Pushbuttons Allow Public to Control Train

This Video 823 demonstrates the use of TWO pushbuttons — so the PUBLIC can use those buttons to run the loco themselves FWD or REV.

Detectors at each end of the track inform the controller when the train has reached the end, and prevent the train from running off the end (even if the button is held down).

Fast-Forwarded Overview:

This link (<https://youtu.be/umyWolje4sE&t=31>) should take you to the 00:31 point in the video -- which shows a fast-forwarded overview of both 2-button and single-button operation.

If you watch for about 60 seconds, you can get an idea of how it operates.

Two-Button Operation:

This link (<https://youtu.be/umyWolje4sE&t=269>) should take you to the 4:29 point in the same video — and the demo continues to about the 7:17 point.

Single-Button Operation:

The pushbutton-assembly can be “flipped over” — so there is just a single “run” button.

The public can push and release this button to have the train make a single back-and-forth trip.

This link (<https://youtu.be/umyWolje4sE&t=439>) should take you to the 7:17 point in the same video — and the demo continues to about the 9:59 point.

For Continuous Operation:

Closing the “Repeat” switch on the control panel, will keep the controller running the train continuously.

When the “Repeat” switch is opened again, the controller will “park” the train in its starting position.

The controller will then “wait” until someone pushes the “Start” pushbutton again.

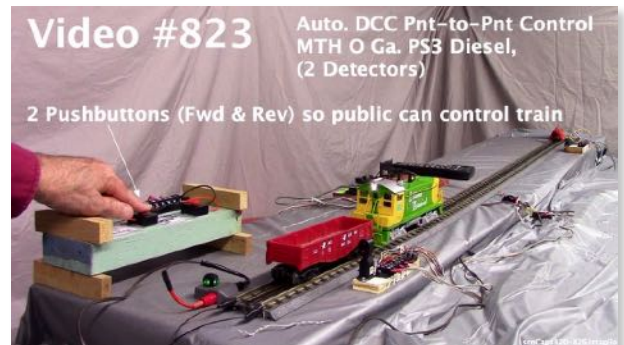


Figure 3

Simple Demo with NO Detectors

This photo shows a simple setup I have here in Denver (most of my railroad equipment is back in Pennsylvania).

Note if you're doing only the single-button shuttle operation, you can do a simpler setup with NO detectors. You just program the loco to back up against the "bumper" for a few seconds and spin its wheels — this assures it always positions itself at the end of the track.

This seems to work fine with lighter-weight locos that can "spin their wheels" with minimal effort.

Demos for DGRS Members

If any of the DGRS people are interested in knowing more about this 'Programmable DCC Train Controller', you're welcome to stop by my house sometime (DGRS Members can see James's contact information in the New Member section of this Newsletter).

I can show you how to read commands in the Controller, enter commands to create a simple 3-line program (see Fig. 6A below), and then "execute" those commands to test the program.

The "Getting Started" Video #816 shows some of the "getting-started" exercises we can do with the Controller.

Part 1 (a fast-forwarded intro) is at <http://youtu.be/7W-LonNTVC4&t=59>

We can just do a couple of these beginning experiments.



Figure 4

Attempts to Interest Kids

TRAINPROGRAMMING.COM
O-Ga. Programming videos

vms 570-322-7597
James Ingram
TCA 87-26080



Spark your grandkids' interest in both programming and O-gauge trains -- by showing them how to use a simple DCC 'programmable model train controller'

Automatically control:

- 2 or 3 trains on 1 loop
- 1-3 trains point to point
- automatic passing siding
- 6 streetcars on 1 loop
- relays for analog locos

Figure 5

This photo shows a notice I have inserted in the TCA National Headquarters News written publication — attempting to get railroaders to introduce this "Train Programming" to their grandkids.

I have also been corresponding with the Youth in Model Railroading group in Westminster CO — attempting to get them interested.

So far I have managed to a partial demo for 2 of them back on May 18 at their store, but they were too busy for me to do a full demo.

Commands Used with the NCE Mini Panel

We can use a few simple, easy-to-understand commands, to control our locos.

A PHD degree in Computer Science is NOT necessary.

- The above Fig. 6A shows a simple 3-line program - that blinks the LED on the Controller every 1/2 second.
- The Controller’s LED blinks whenever it sends a command, so we can send commands to non-existent turnouts to cause the Controller LED to blink.
- This is a simple exercise -- to get started with the “programming”. To see this being programmed, go to https://youtu.be/FQ_HBHn6-wo&t=34.

4	1	Accy: 2000 Norm	1, 2000 , 1	Set non-existent turnout # 2000 STRAIGHT (to blink Mini-Panel's LED)
4	2	Delay 1/4 sec: 2	5, 1, 2, 2	Delay 1/2 second (¼ sec x 2)
4	3	Link to Input: 4	5, 3, 4	Go to Input 4 (repeat blinking every ½ second)

Fig 6A - Three-Line “Blink The LED” Program

In	St	Command	Entry	Lok	Explanation
MP 36EP O Ga Youth In Model Railroading Demo Pnt-Pnt., 5/16/24					
Demo 6 – Run PCC Car Fwd & Back on Pnt-to-Pnt Track (test mode)					
9	1	[[SELECT]] Loco: 420	3, 1, 420	420	Select MTH Yellow PCC Car #420
9	2	F0-F4: 0---	3, 3, 1 [0]	420	Turn headlight ON (F0=headlight)
9	3	Speed Fwd: 2	3, 2, 2, 2 F	420	START car Fwd at Speed 2
9	4	Delay 1/4 sec: 36	5, 1, 2, 36	420	Delay1 = 9 second (¼ sec x 36) (traveling FWD)
10	1	Speed Fwd: 0	3, 2, 2, 0 F	420	STOP car
10	2	Delay 1/4 sec: #24#	5, 1, 2, 24	420	Delay 2 = 6 sec (¼ sec x 24) Car is STOPPED for 6 seconds
*** REVERSE ***					
10	3	Speed Rev: 2	3, 2, 2, 2 R	420	START car Rev at Speed 2

Fig 6B - Commands to Move a Loco FWD, and then Stop

- The above Fig. 6B shows 6 lines of “programming” — used to move the yellow-colored MTH O-gauge PCC streetcar (shown in Fig. 4 above) forward about 3 feet (lines 9-3 & 9-4), stop it (line 10-1) and then pause it for 6 seconds (line 10-2).
- If you browse the RIGHT column, you can pretty much understand what each command is accomplishing.
- We can then use SIMILAR commands to move it backwards about 3 feet, to where it started from.

More Information

For More Information: The website www.AutoControls.org contains Youtube playlists by scale, plus hookup drawings, and copies of programs".

There are ‘SHUTTLE’ playlists for HO, S, O, and Largescale; and also ‘LOOP’ playlists for N, HO, S, O, and Largescale.

There are also playlists for the older “analog” type controls -- using the LGB EPL controls.

The oldest video V8907 (<https://youtu.be/vx-tKfvfjeg&t=16>) -- recorded by Byron Fenton back in July 1989 on VHS-C tape — shows 6 LGB trains operating on 1 loop of track on a small 12’ x 12’ layout (using the LGB EPL analog system).

James Ingram

The Present and Future of Rail

Belgium

If France and Germany are the beating hearts of rail in Europe, then Belgium is the eastern terminus. Belgium got its start in high speed railway back in 1997. There are three high speed rail systems that end up in Brussels. Eurostar, ICE (German), the TGV (France).

There is also an intercity system all its own: none of the aforementioned systems are allowed to operate over intercity lines within Belgium, and in fact, they cannot even sell you a ticket on Belgium's intercity system.

HSL 1 connects Brussels with the French border, and also goes through to Paris. Paris to Brussels rail time: 1 hour, 22 minutes.



Figure 2 ICE 1

HSL 2. Connects Brussels, Leuven and Antwerp - not quite 60 miles.



Figure 1 TGV

HSL 3 connects Liege to the German border, only 35 miles.



Figure 3 Eurostar 1

HSL 4 connects to the Dutch border. Only about 25 miles long, it is used by both ICE and Eurostar.

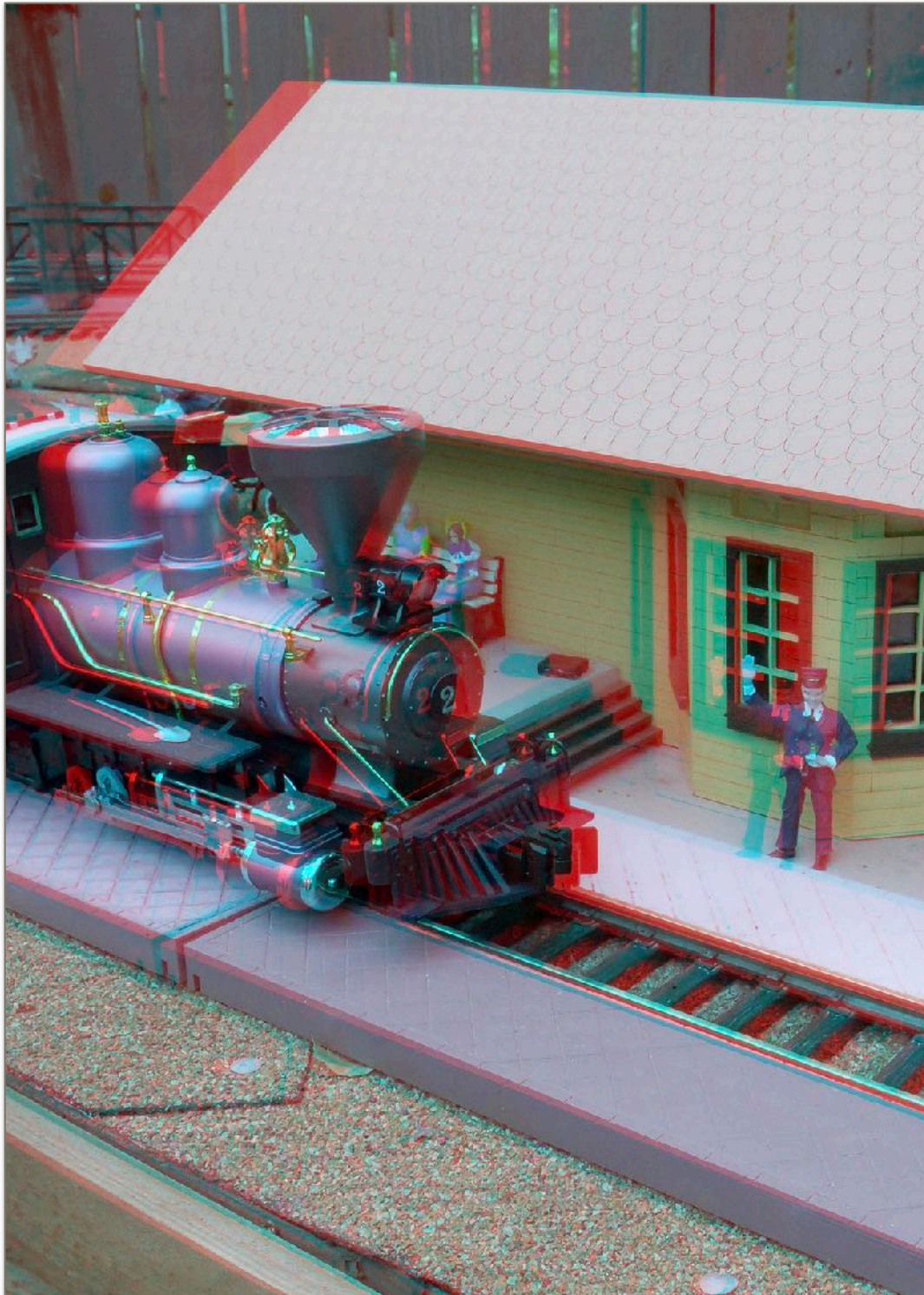
This sounds unnecessarily complex to me. For example when we fly to Amsterdam, we depart Denver via Air Canada to Chicago, then switch to United to go from Chicago to Amsterdam. We bought one ticket each to accomplish this. On the way back, we will go from Amsterdam to Toronto to Chicago to Denver (long day!) again on one ticket which we purchased from the cruise line for the trip, Holland America.

However, the part that is NOT complex about Belgian rail is the technology: they all use the same system for high speed, 25,000 volts supplying trains that run from 160 to 190 miles per hour on the same welded rail.

Joe Foss

John Hart took this photo of an engine arriving at the station on John Cushman's layout, using his 3D cameras.

You need special glasses to see the 3D effect. Hardly anyone will have saved them from the last 3D movie they saw.



Garden Railway Club News

This section is an opportunity for our members to learn from the efforts, tips, techniques, and news of other garden railway clubs. Please Click on each club name below **or** go the following link to access all the clubs:

<https://www.denvergardenrailway.org/index.php/links-to-other-clubs/>

[Northern Colorado Garden Railroaders](#)



**Northern Colorado
Garden Railroaders**

[***Mile High Garden Railway Society***](#)

THE GARDEN WHISTLE

[New Zealand Large Scale Newsletter](#)

[Bay Area Garden Railway Society](#)



[Puget Sound Garden Railway Society](#)



[Rose City Garden Railway Society](#)



[North Texas Garden Railroad Club](#)



[Gold Coast Garden Railway Society](#)



[Northern Ohio Garden Railway Society](#)



[Garden Railroading News \(GR News\)](#)

digital magazine

[Central California Coast Garden Railroad Society](#)



2024 DGRS Calendar

DATE	EVENT	DETAILS
July 30, Tuesday	GENERAL MEETING and ICE CREAM SOCIAL July 30, Hosted by the Millers. Come at 6 to enjoy the Miller Family layout.	BRING CHAIRS. Meeting starts at 7pm, followed by a brief program on water wise ideas by DGRS member Sara Burns. No Share & tell Address: 10123 Summit View Pointe, Highlands Ranch CO 80126.
August 6, Tuesday	DGRS Board Meeting	7:00 PM, @ Doug Mayes Office. 7114 W. Jefferson Ave, Suite 210, Lakewood 80235
Aug 10, Saturday	Hobo Brunch; Members get together and swap stories at breakfast.	8:30 am at the Valley Inn, 1997 S Wadsworth Blvd, Lakewood, CO
August 10 & 11, Sat & Sun	DGRS Summer Layout Tours - Northwest quadrant, North of Colfax and West of Wadsworth	A list of layouts on tour will be sent our prior to the weekend. Contact Chris Greenwald if you want to be included.
August 24, Saturday	GENERAL MEETING/ TRAIN DAY on Saturday August 24th at the Larkspur Consolidated Railroad-A great way to close out the summer meetings!!	The Leises and rest of the Larkspur crew are preparing for a day of fun at the Leise Farm. Hot dogs and beverages per DGRS, side dishes alphabetically by LAST names. A-K Salad (pasta, egg, potato or green, baked beans, etc) L-Z Fruit dish/ salad or dessert
Sept 3, Tuesday	DGRS Board Meeting	7:00 PM, @ Doug Mayes Office. 7114 W. Jefferson Ave, Suite 210, Lakewood 80235
Sept 14, Saturday	Hobo Brunch; Members get together and swap stories at breakfast.	8:30 am at the Valley Inn, 1997 S Wadsworth Blvd, Lakewood, CO
Sept 14 & 15, Sat & Sun	DGRS Summer Layout Tours - Southwest quadrant, South of Colfax and West of Wadsworth	A list of layouts on tour will be sent our prior to the weekend. Contact Chris Greenwald if you want to be included.