

BAY AREA GARDEN RAILWAY SOCIETY

TRELLIS AND TRESTLE

NOVEMBER 2023



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PRESIDENT'S PERSPECTIVES

2024 DUES : MEMBER SURVEY

NOVEMBER 4 — SWAP MEET

MEMBERSHIP RENEWAL FOR 2024

Membership renewal for 2024 happens in November and December. Dues for 2024 are payable no later than December 31. Good News! Dues are not going up! The Board voted to keep dues at \$40. We will send out an email about the renewal process.

MEMBERSHIP SURVEY

40% of us have responded, which is great. 60% of us have not yet responded, which is not so great. The survey is taking an average seven minutes to complete. To those of you who have not yet responded, please do. We need the broadest possible input to set the path forward for BAGRS for the next few years.

NOVEMBER 4—SWAP MEET

To date, 10 member-vendors have signed up to sell their wares on 20 tables. Some complete collections are up for grabs. We can also salivate over Accucraft products old and new. See the post details later in this edition (More space is available).

HUDSON VALLEY HIGHLIGHTS

While in the Hudson Valley Last week, I enjoyed the garden railroad of Gary Buteux, met the President of the Hudson Valley G-scalers, Nick Savatgy, and spent time with John Sacerdote of the Amherst Railway Society who will be directing NGRC 2026. I was very impressed and believe that it will be a great convention. Liz & I also came across lots of aging railroad equipment.

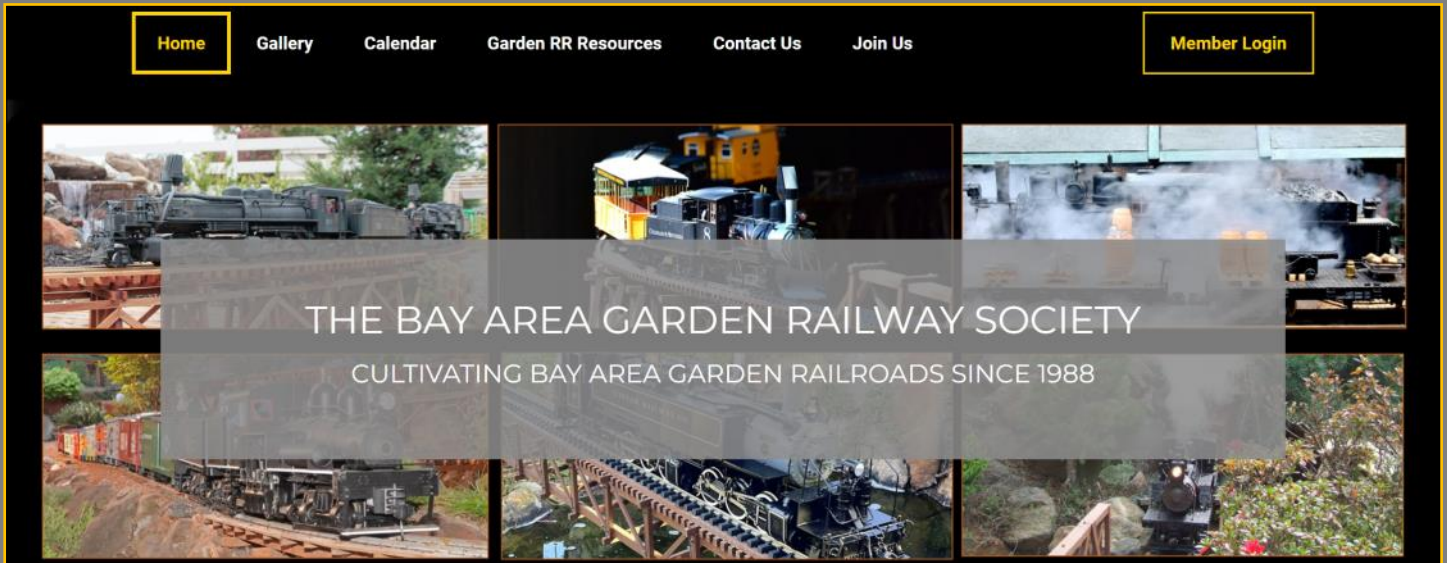
Front End on Ray Buteux's Line, which will be open for NGRC 2026.



Rusting Caboose right next to a road we happened to be travelling on!



WHITHER THE NEW BAGRS WEBSITE?



We had hoped to unveil the new BAGRS website last month. We did not because critical functionality from our club management software provider, Wild Apricot, is not working as advertised.

It is imperative that the technology interface between our club management software and the new website work flawlessly. Wild Apricot claims that it does. We know it does not!

Our philosophy from the outset has been—**‘Never launch a website before its time’**—meaning we will not launch the new BAGRS’ website until extensive testing proves that it works flawlessly.

Technical teams are liaising on the problematic functionality. When they tell us it is fixed, we will go through another round of testing.

Given the above, no matter how quickly the problem gets fixed, we are now targeting to launch the new website early next year because launching the site in the middle of the holiday season would not be a good idea. ■





FROM THE EDITOR'S DESK

Contact the editor at communications@bagrs.org

Roger Nicholson grew up in Fremont, California, in a house that was located *right next to the Southern Pacific railroad tracks*, and still remembers his first Lionel train. Roger operates the *Crystal Cove & Rose Railroad*.

- **On the Cover.** The turntable and engine house on Claude Leglise's *Monida & Yellowstone Railroad* during the 2023 NGRC. Photo by Jeff Namba.
- **New Members.** It has been a pleasure meeting some of the new BAGRS members during the Fall Open Houses. However, I have been a bit negligent: As I was coming up to speed on editing the last two issues of the *T&T*, I neglected to welcome BAGRS's newest members. I will be doing that again starting with this issue. If you are a newer member of BAGRS (and by "new" I mean within the last year or two!), please send me something about yourself if you can, so that we can get to know you.
- **Special mid-November Issue of the *T&T*.** If you have anything to share regarding the open houses that you visited during September and October, please send them to me for inclusion in the Special Edition of the *T&T* devoted to Fall Open Houses, which will be released in mid-November.
- **All Steamed Up.** Richard Murray's column does not appear in this issue. The report on the Murray's open house will instead appear in the mid-November Special Edition of the *T&T*.
- **36 Media, LLC** has given us permission to reprint the article that originally appeared in *Punch Magazine* about the Murray's *Greenhills Railroad*. We have included the reprint of that article in this issue.
- **The "Construction Department" and the "Repair Department."** In addition to the "Garden Department," which will be a regular item, we have a construction article and a repair article for you in this issue. Please send me any construction or repair information that you think might be useful to BAGRS members. You can expect to see a lot more construction and repair tips in the future, and perhaps even a "Battery Conversion Department."
- **Are you receiving the emails for the *T&T* and Open Railroads?** We have had a few problems with some members not receiving the emails announcing the *T&T* release or open railroads since October. We believe that it may be a technical issue with the automatic mail distribution. If you are NOT receiving emails since sometime after the September *T&T* was distributed (in other words, you didn't receive the October *T&T*) please let me know. We are working to correct this. Previous emails were sent from "publisher@bagrs.org," but current emails are sent from "communications@bagrs.org," **so please make sure that "communications@bagrs.org" is not getting caught in your "spam folder."**

—Editor

WELCOME NEW MEMBERS

We would like to welcome BAGRS' newest members and invite you to tell us something about yourself. We are happy that you decided to join us, and we hope that you will enjoy getting to know other members. Remember, you do *not* have to have a garden railroad to contribute to BAGRS or the *Trellis & Trestle*—approximately half our members do not have their own railroad. Also, if I get some information wrong or misspell your name, please let me know and I'll take care of it.

If you would like to submit an article, member update, fun train-related thing you saw while traveling, open house you visited, photographs, videos, or have any questions or corrections, please contact me (Roger Nicholson) at communications@bagrs.org.

- **David Howard**, Millbrae, CA. Joined 7/5/2023.
- **Bryan Graves, Judy Shaefer**, Concord, CA. Joined 7/6/2023.
 - Railroad name: New Albion, Under Construction
- **Ranjani Ramesh**, Sunnyvale, CA. Joined 8/28/2023.
- **Noah Jeppson, Cory Rawdon**, Healdsburg, CA. Joined 9/22/2023
- **Kathryn Schoendorf**, Menlo Park, CA. Joined 9/25/2023.
- **Sesh Mudumbai**, San Mateo, CA. Joined 9/28/2023,
- **David and Renee Cullinan**, San Rafael, CA. Joined 9/30/2023.
- **Bradley and Judy Nicholson**, St. George, UT. Joined 10/3/2023
 - Railroad name: Not yet named, Under Construction
- **Joseph Franck**, Los Altos, CA. Joined 10/04/2023
- **Daniel and Nichole Cortopassi**, Gilroy, CA. Joined 10/09/2023
- **Brett and Susan Kennelly**, Kamuela, HI. Joined 10/13/2023
- **Julie Juracich**, Sunnyvale, CA. Joined 10/15/2023
- **Bruce and Ariel Wooley**, Los Altos Hills, CA. Joined 10/17/2023

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all aboard the garden railway

LAYING (MINI) TRACKS ACROSS THE PENINSULA

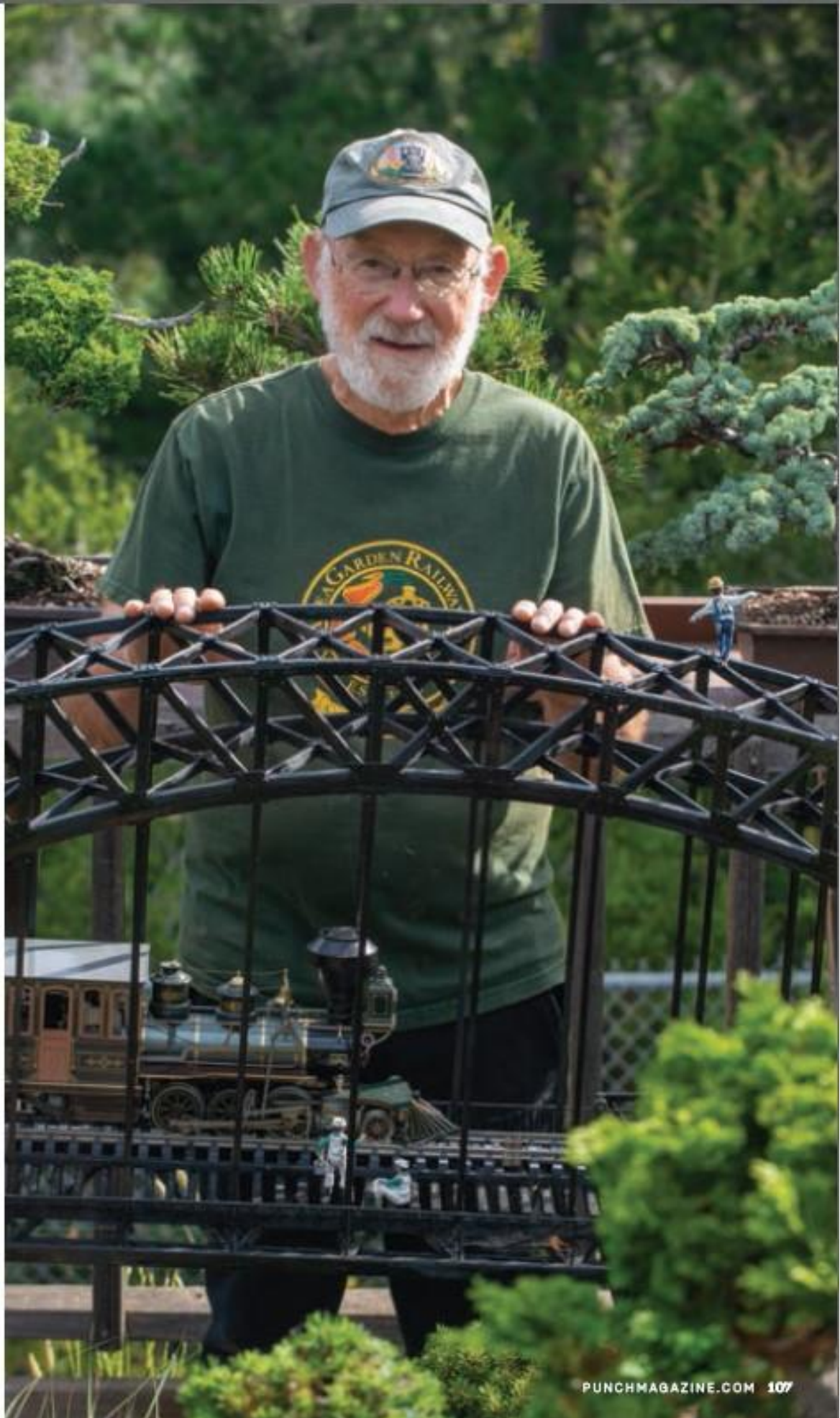
words by JOHANNA HARLOW photography by GINO DE GRANDIS

Ever been out for a neighborhood stroll and pondered what lies beyond those rows of backyard fences? Maybe it's something predictable like a hammock or a hot tub—then again, maybe it's an entire miniature world.

Richard Murray is one of the kingdom keepers. In his Millbrae yard, the sun-tanned octogenarian strides along an extensive garden railroad bordered by Lilliputian-sized structures—a saw mill, a machine shop, a mountain lodge, a gold mine. “If you take your eye off the engine for five to ten seconds, the engine is gone,” Richard remarks, as he gestures to 550 elaborative feet of track, which weaves and wanders around clumps

of bonsai trees, skirts mini-mountains and ducks in and out of tunnels. “You have to go looking for it.”

It's quiet here today—your ear will pick up the puffing of a 2-8-0 steam engine joined by the burbling of a miniature waterfall and the occasional sucking sounds of a koi slurping bits of algae from the pond—but rail-roading for Richard is far from a solitary pursuit. He plays an active role in the Mid-Peninsula chapter of the Bay Area Garden Railway Society (BAGRS), the largest garden railway society in North America with several hundred members. “It's one of the friendliest clubs I've ever joined,” Richard says. “Requirements are that you love trains.”



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TRAIN CLUB

Richard found his way to BAGRS after retiring from dentistry. “Pretty much any hobby, you should join a club,” he holds. “There is a wealth of information within any club. You don’t have to discover how the wheel works. It’s already been discovered. Just ask.”

Because of their multi-faceted attributes, garden railroads can be a massive undertaking for anyone trying to build on their own. “You need to be a landscaper. You need to be a planner. You need to be a plumber. You need to be an electrician,” explains Richard.

The persistence and perspiration required for his own *pièce de résistance*—from the boulders stacked into proud peaks to the teeny-tiny lettering painstakingly hand-painted on the storefronts—is almost unfathomable. “It’s time-consuming. It takes hard work and imagination. Not everybody has each of those qualities,” he points out. But each member has their own expertise to lend. In fact, Richard credits his koi pond and waterfall to another’s handy skill set. “There’s probably a thousand feet of plumbing out here,” he surmises.

Some members specialize in electronics, while others break out

lathes, drills and welders to build locomotives from scratch. Richard is a bit of a bridge guy. His most elaborate build, an almost nine-foot model of Hell’s Gate Bridge in New York City with intricate stone abutments, took him 1,000 hours of labor to complete. On the far side of the garden resides a replica of the famous cantilever bridge featured in the 1957 war film *The Bridge on the River Kwai* (which Richard designed after close analysis of the movie’s promo poster).

He’s also quite the garden guru. Richard’s plant-forward track shows off his membership in another organization: the Kusamura Bonsai Club. Around



300 shapely bonsai lie along the railroad's verdant topography. "This is probably a garden that happens to have a railroad," Richard reflects. "I think the garden still takes precedence."

About a third of BAGRS opts for "live steam" locomotives, Richard among them. He did give electric engines a try, but... "I'd put a chair out here, watch them go around, and within a half hour I'd be sleeping," he recalls with a chuckle. "You never get tired with steam engines. You never know what's gonna happen next because they're so individualistic. Two engines—the exact same model from the exact same

manufacturer—might work differently... They're all handmade. They're gonna be different." It could come down to a different guy on the assembly line or a dull drill, Richard says. "Some may start more easily. Some may just be ornery."

SCALED TO SIZE

Richard steps past one of his trackside towns replete with sheriff's office, bank, church and general store. Over his garden wall, a real-life golf course spills across the distant hills. Far-off golfers in their carts seem to-size with the plastic citizens of Richard's realm, eliciting a sense

of surrealism.

"Scale is very important," Richard notes, bending to adjust a bowler-hatted gentleman. "When I first started, I said, 'Whether it's this height or this height, it'll be fine. Yeah... It's not. It sticks out like a sore thumb.' He now tries to keep the populace to three inches in height. No six-inch giants here.

It seems the monster-sized rats, moles and squirrels haven't gotten the memo. "We have had lots of varmints," laments Richard, who says the pesky rodents



leave holes in the ground and dine on his plants. For BAGRS members, it's an annoyance that comes with the territory. Far from defenseless, Richard uses an electric fence and a rat trap to keep invaders at bay.

He's also had to fend for the koi—and blue herons, though majestic, have proven quite the foe. "I saw one of those big birds flying away, and I said, 'I know what that bird does. I hope he didn't stop at my yard.' I come in and we're one or two fish short." Deepening the once "soup bowl-shaped" pond has helped—espe-

cially with raccoons who dip long, agile fingers into the shallows to scoop out fishy delicacies.

TRAIN TALK

But what's the point of an exhaustive labor of love if you can't share it? Each month, when the weather is good, a handful of BAGRS members in a particular geographical region will open their railroads for a club meet-up (or "steamup"). "Really, one of the reasons for the open houses is not just to show off the layouts, but for people to gather, socialize, meet with friends that perhaps

all aboard the garden railway



you haven't seen for a while," Richard says. "It recharges you to be amongst friends with like minds."

Beyond its monthly gatherings, BAGRS hosts an Annual Membership Meeting. It's an all-day affair with breakfast and multiple members giving talks on everything from historical railroads on the West Coast to Walt Disney's fascination with model trains.

But the Big One happens every five or so years when the club hosts the National Garden

Railway Convention. This summer, nearly 1,000 attendees (some international) convened for dozens of talks, access to operating layouts and railroad supply vendors, opportunities to hop aboard the Napa Valley Wine Train and Roaring Camp Train and open invites to more than 60 backyard garden railways stretching from Sonoma to Santa Cruz. "We're the ones oftentimes who do the national conventions because we are one of the biggest and most active railroad clubs in the United States," Richard explains.

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BY BAGRS PRESIDENT MICK SPILSBURY

GARDEN RAILWAYS TAKE DIFFERENT ROUTES

- + **Era:** Many garden railroads recapture the age of steam. Others operate modern diesel equipment.
- + **Size:** Some take over an entire yard with hundreds of feet of track. Others are limited to a section of a yard.
- + **Complexity:** This varies a lot. A few are built for elaborate switching operations. Some are built for simple watch-while-having-an-adult-beverage operation!
- + **Power:** Locos use power from the tracks or on-board battery power. Still others are live steamers, burning butane or coal.
- + **Detailing:** Some are highly detailed with many buildings, figures, animals and all manner of smaller trackside details. Others focus on operations. Some garden railroaders build locos from scratch, but most are purchased ready to run (though often customized in some way).
- + **Plants:** Some garden railroaders focus on plants; some don't. Many railroads feature miniature plants, some carefully trimmed to look like scale trees.
- + **Sounds:** Most have locos with sound on board. Others feature trackside sounds including animal sounds, music or even mine operations.
- + **Lighting:** Many have elaborate lighting for night operations but not all.
- + **Realism:** Some model an actual railroad while many are the product of the owner's imagination, with backstories to match.





DREAM IN STEAM

These days, Richard spends the majority of his track time pruning plants and performing a slew of groundskeeping activities. “It’s a full-time job!” he notes. Though the project is never fully finalized, he speaks wistfully of the years he toiled to actualize the layout.

“I was building it so I could run engines, play with the railroads, but frankly what I didn’t realize at the time is that it’s actually more fun to build things,” he muses. “Building the railroad

required a lot of sweat, a lot of money, a lot of time. But it was thoroughly enjoyable. And I remember many of the moments—I treasure them.”

He’s clearly come a long way from the Lionel track that once ran a simple circuit around his childhood Christmas tree. But no matter the scope, time with locomotives always triggers nostalgia. “It brings out the kid in all of us,” Richard reflects, as his eyes come to rest on an itty-bitty boat, docked and waiting to launch into the pond where whale-sized koi swim. **P**

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THE CONSTRUCTION DEPARTMENT

One Room Log Cabin: Design and Construction

By Claude Leglise



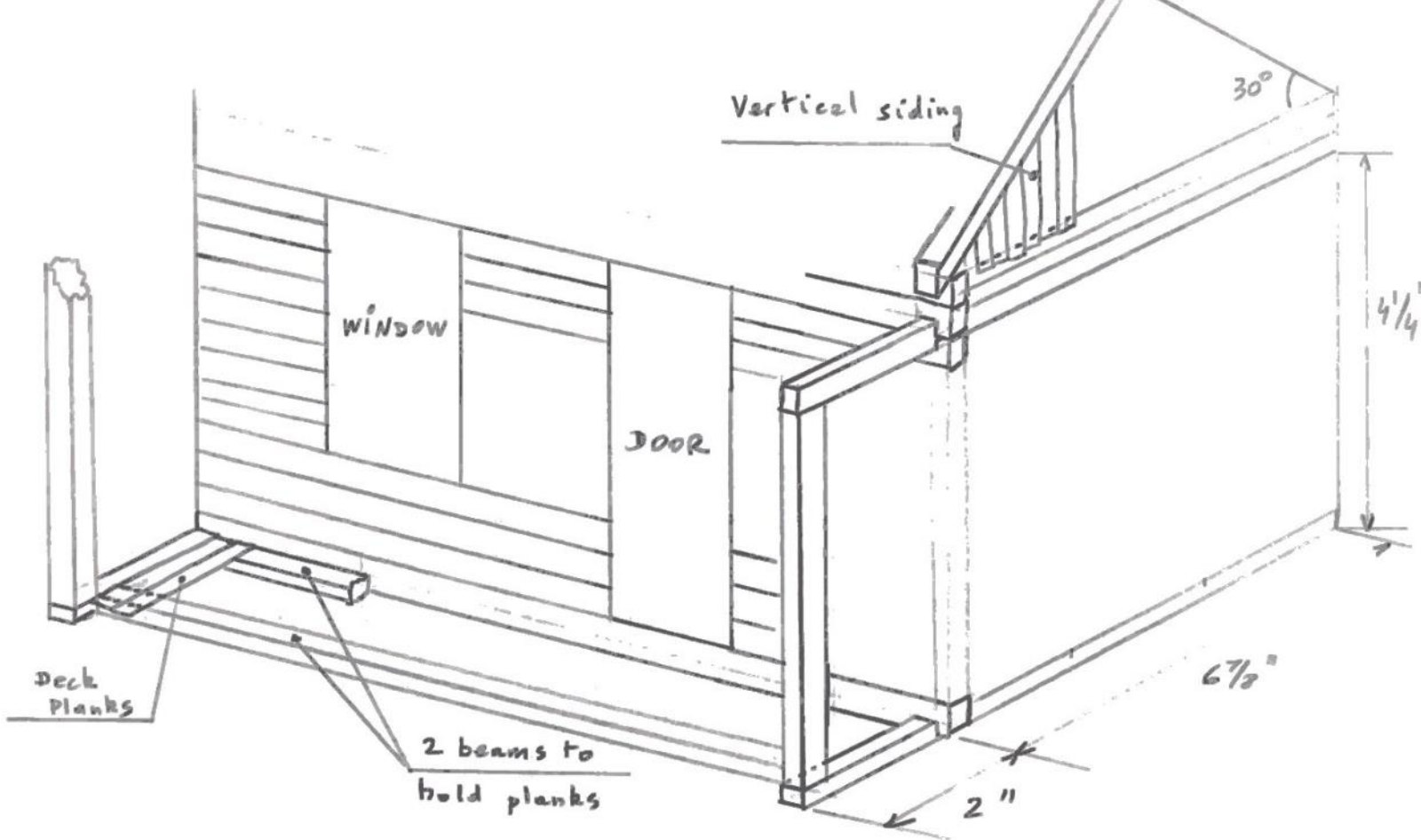
In the 19th and early 20th century, log cabins were everywhere in North America where timber was the most readily available construction material. If your railroad theme is more recent, do not despair, log cabins have gained renewed popularity with modern construction techniques and heating systems. Many folks build modern homes out of logs. On our garden railroads, log cabins add a touch of realism and old-time flair. Best of all, if you have the right tools, they are not hard to build.

Design

My cabin will cover some air and power track controls. It will be 11" long, 6 7/8" deep, and 5 1/2" inside, to accommodate the control boards. Feel free to use different dimensions. Before getting started, create a rough drawing of the expected result and sort out any possible engineering problems.

A few items came out as I was drawing this:

- The two "foundation" beams will run the full length of the side walls plus 2" for the porch, for a total length of 8 7/8."
- Two additional beams are needed at ground level at the front of the cabin to allow for nailing the porch planks.
- Approximately 4 1/4" above ground, two additional beams will extend the full length of the walls plus the porch. Along with two posts, they will hold the porch roof in place.
- The gables will be finished with vertical siding rather than built up with logs. This is prototypical; logs dry and shrink for several years after construction, which would lead to unwelcome roof sag.
- I will add a door and a window on the front wall; a window on one of the gable walls and the chimney on the other.

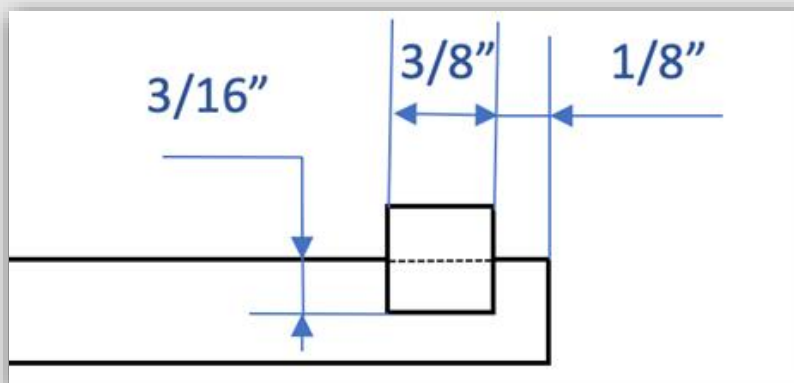


Construction

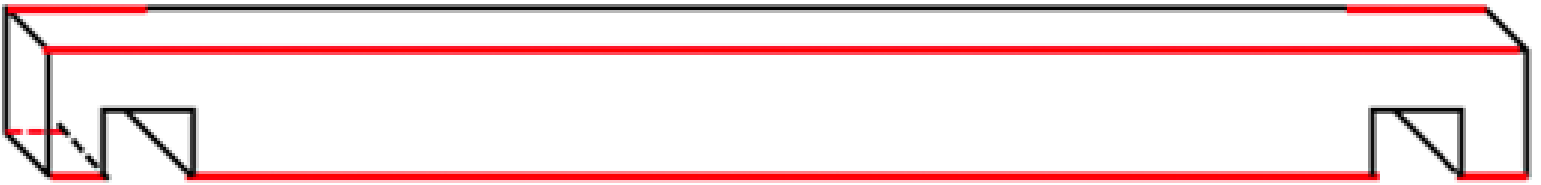
The easiest to model are hewn logs. I start with 3/8" x 3/8" redwood lumber and shave the edges off to simulate the look.



Hewn logs



One common technique for interlocking the logs is to carve the bottom of the upper log to fit tightly on top of the lower one.



Using square lumber makes the cut simpler since it is also square. The notches need to be $\frac{3}{8}$ " wide so the pieces will fit together, $\frac{3}{16}$ " deep to go halfway down the lower log, and I am going to leave a $\frac{1}{8}$ " overhang at the end of the log. Both ends of each log will be cut the same way. I use a table saw with a dado blade to cut the notches. A simple blade or a band saw will work just as well. Once the logs are cut, I run a utility blade to remove the edges that will be visible; they are shown in red in the diagram above.

The exact amount of wood to remove does not matter much, and the cuts do not need to be perfectly straight as we are trying to model the look of tree trunks. Just let the knife blade follow the grain.

This picture shows the look I want to achieve.



For construction, the first layer is the most critical as it will set the shape of the whole building. Start with the “foundation” logs under the two side walls; they are 8 7/8” long. Mark the location of the 11” logs under the front and back walls carefully. Then nail them in place while keeping the whole thing square. Add the two logs in the front that will be used to nail the porch planks.



Once this is done, build the walls by adding two logs at a time; first do the side walls, and then the front and back walls. Put a little wood glue between the logs and 3 or 4 brad nails to hold them in place. I use Grandt Line doors and windows (available from San Juan Details); making the openings for them is straightforward.



Measure the space needed to insert them when the walls are built; then cut and assemble shorter logs. I recommend using a square to verify that the section of wall between the door and the window that is not connected to anything is vertical. The header beam will hold the whole wall in place.



Once the walls have reached the proper height, add the posts on the porch, and the basic log structure is done.

The 30-degree sloped roof is held by three simple trusses.



The sheathing for the main roof is made from leftover redwood, and for the porch roof from a small piece of plywood. I did not install the last piece of sheathing to keep access until the finish on the porch roof was in place.

The vertical siding on the gables is also made from leftovers.

For roofing material, I used 600 grit waterproof sandpaper cut into $\frac{3}{4}$ " wide strips and installed with GE silicone glue



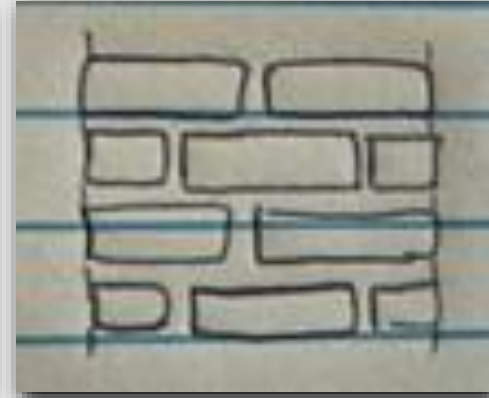
Chimney

I wanted to model an interesting chimney design I saw at the Nevada City Old Town Museum in Montana. The bottom half is made of lumber and the top of the stack is bricks. Evidently bricks were scarce in that part of the country and wood was not, so this design was adopted and commonly used.

For the lower wood part, I started with a 1/2" x 1/2" core that I covered with 1/16" thick veneer and I added a cap that will hold the brick section. I glued and nailed this assembly to the outside wall of the cabin.

The brick section will be simulated by painting another piece of wood that I cut and sanded to shape. Once that was done, I cut an opening in the roof where the brick stack will go.

Drawing and painting the bricks requires some patience and precision. First, apply a couple of coats of a suitable color of red, such as ATSF Mineral Brown, to the wood piece. Select a pattern for the bricks. My basic design looks like this:



Then draw your design in pencil on the red paint. Be careful to wrap the pattern around the corners; if a brick's wide edge shows on one side of the chimney, the narrow edge will show around the corner, and vice-versa. Once you are satisfied with the results, etch the pattern into the wood with a steel point. This will create a small groove that is easy to fill with paint to model the mortar. I chose the Aged Concrete paint color.



My paint lines are not quite straight and clean, but neither is mortar in real life. This was my first attempt at modeling bricks and I am reasonably satisfied with the results.

Finishing Touches

With the construction finished, all that is left is to make the model a proper log cabin. For me this included:

- Aging all the wood with MicroMark's gray weathering agent.
- Painting the Grandt Line door and windows Depot Buff.
- Making curtains from wound dressing gauze material.
- Adding two birds on the roof and a few kids' toys on the porch.



If you like this project, more details are available in the free chapter of my book *Design and build your own garden railroad buildings and structures* that you can download from: <https://www.railroad-buildings.com>. Maybe you will want the book too. ■

THE REPAIR DEPARTMENT

Replacing the Main Axle Gear on the Bachmann Mogul (4-4-0 and 2-6-0, 2001-era), using the NWSL gear part

By Paul M. Newitt



Photos by Paul M. Newitt

Many owners of the 2001-era production Bachmann Spectrum 4-4-0 and 2-6-0 Fn3 locomotives have unfortunately discovered that their main drive gear is cracked or broken. These cracks originate from the center outward over time, to fail under load while on the tracks. If the drivers of these locomotives move freely with no electrical power, then it means that the main drive gear has cracked on the main shaft and is slipping, unable to work properly, requiring this repair procedure.

This article describes the replacement of the original Bachmann nylon drive gear with the North West Short Line gear (part number 2223-6, 24 tooth, 15.5 mm OD SG; Fn3 4-4-0 Gear) in a few simple steps with some basic tools.

The photos provided for this article show the locomotive upside down, so, we'll call the pilot end "right," the cab end "left," and the driver assembly "top" or "bottom." This procedure does not include any details for sound system-related parts or sensors. When removing parts that are attached by soldered wires, please use care to not break those connection(s).

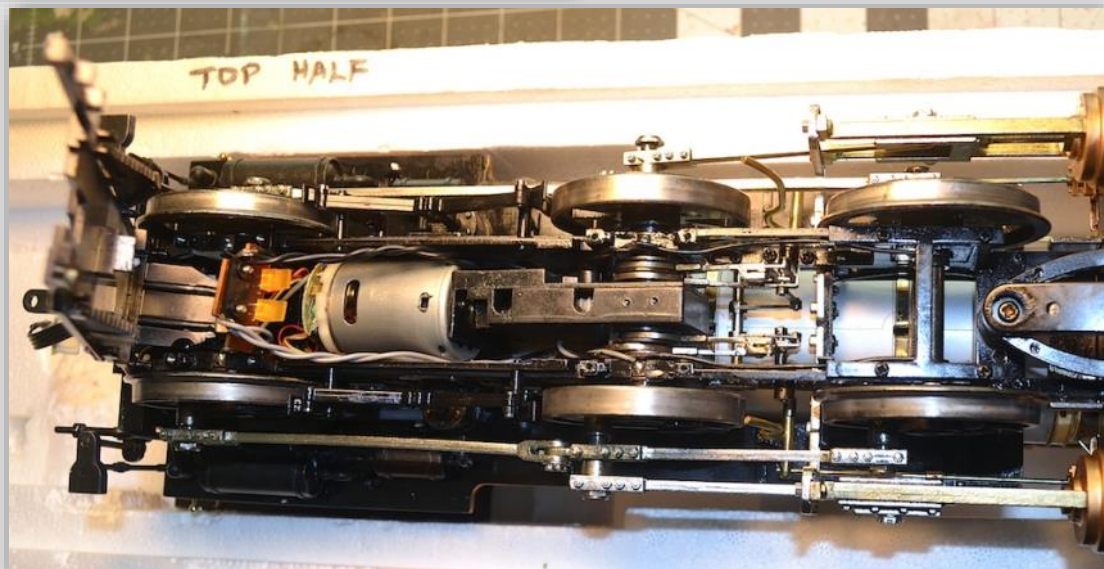
PREPARING YOUR LOCOMOTIVE:

1. First, you'll need to round up a few tools: A small Phillips screwdriver, and a small flathead screwdriver. A 7 mm or 17/64" size hex nut driver (a wrench or screwdriver type) will be required to remove the nuts that hold the side rods in place. Angled needle-nose pliers can be used if necessary. To remove and replace the main gear part from the drive shaft, you'll need a small vise, a 1/2" or 5/16" size deep (ratchet type) socket, and a small hammer (preferably with plastic rubber heads). A few small plastic bags to hold parts is a good idea, too.

2. Next is to set up a cradle to carefully hold the locomotive upside down while working on it. If you still have the original Styrofoam packaging box, use the top piece and turn it over, which works perfectly. Separate the locomotive from the tender.

GETTING TO THE DRIVE GEAR

1. On the underside, you'll see a total of eight black screws that hold the main baseplate (ignore the magnet on this baseplate). Carefully remove these screws with a small Phillips screwdriver, one by one, placing them into a small plastic bag for safekeeping. When you lift the baseplate (taking hold of it near the front of the loco), you'll discover that there are two clips that are part of the "chuff" effect, pressed against the middle of the rear drivers under the cab. Carefully lift and rotate the plate upward, and the clips will pop out. You can't remove the plate entirely because the wires attach to it. Just set the baseplate out of the way without too much stress on the attached wires. You'll also see the two yellow firebox LEDs on a small circuit board, which you can lift out if necessary for access.



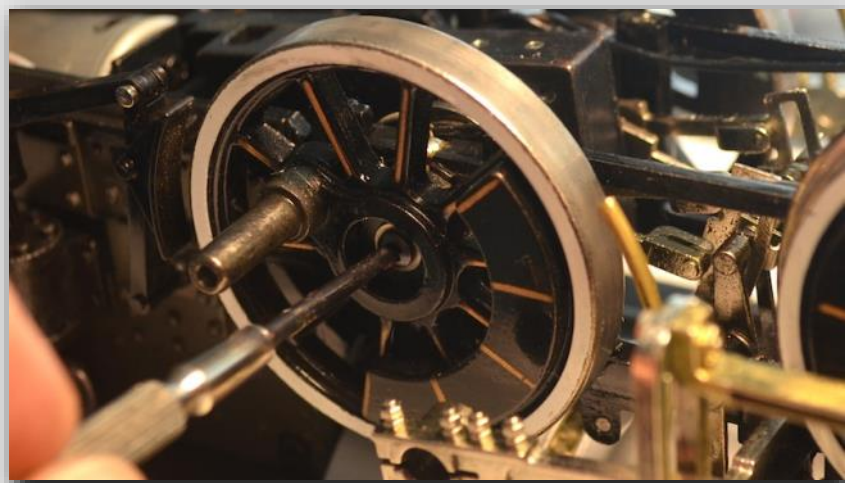
2. With the small flathead screwdriver, pop off the little caps located in the center of the drivers (on the 2-6-0 it's the middle drivers, and on the 4-4-0, it's the forward drivers (the same part for each loco)).

3. With the hex driver, remove the hex nuts that hold the side rods on the center and rear drivers (only), and each rod from the cylinders (on the 2-6-0, you can leave the side rods attached to the front drivers). If the side rods are too difficult to remove, just tap wires from a 9 volt battery onto the drive wheels to rotate them a bit for easier side rod removal. Lift up and rest the side rods out of the way, on the underside of the pilot (Note: If you don't have a hex driver, angled needle-nosed pliers will work just as well).

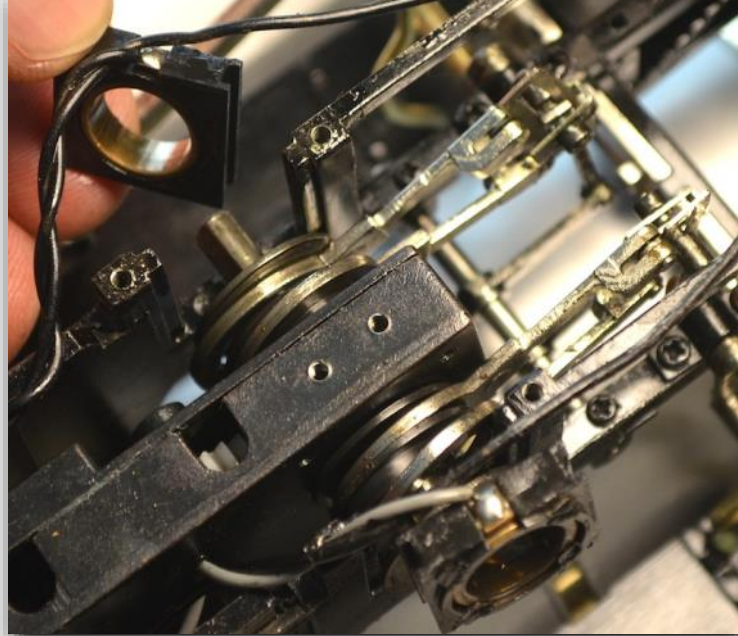


4. Next, with the small Phillips screwdriver, remove the drivers from the loco. They are attached to the main drive shaft. Set the drivers aside, and make note of the attaching screws with washers. They drivers are the same part (L or R), but keep track of which side they were removed from anyway.

Place the side rod bolts, driver screws and washers, and plastic driver center caps into a second plastic bag for safekeeping.

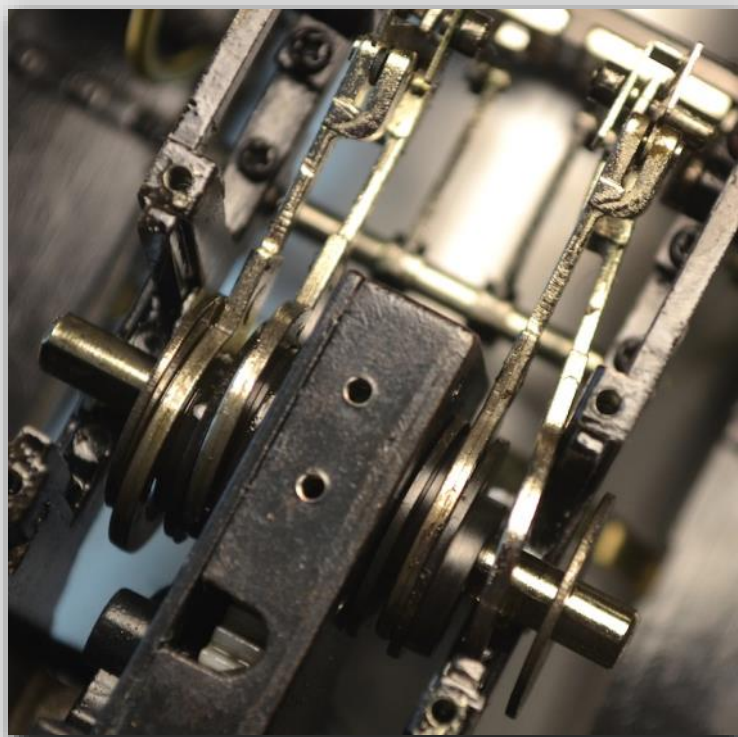


5. To remove the motor and gearbox assembly, you'll need to lift it out (if the guide pins bracket is in place on top of the gearbox, now is the time to remove it). First, you'll see the two bearing blocks (L & R) with a wire attached to each. Remove them from of the main drive shaft as you lift the motor/ gearbox assembly upwards. At the same time, you'll see the eccentric rods and their plastic spacers are attached to the drive shaft (Note: all of these items will come off the drive shaft at the same time, so take your time to remove them).



To remove the eccentric parts, first take note of where

1. the outer metal washers are,
2. which eccentric rod is higher than the other when in place,
3. that there are two specific plastic spacers dedicated to each side, by the shape of the oval eccentric as it sits on the drive shaft (as you set them aside, make note of which plastic spacers are from the left or right side. Do not mix them up after they have been removed).

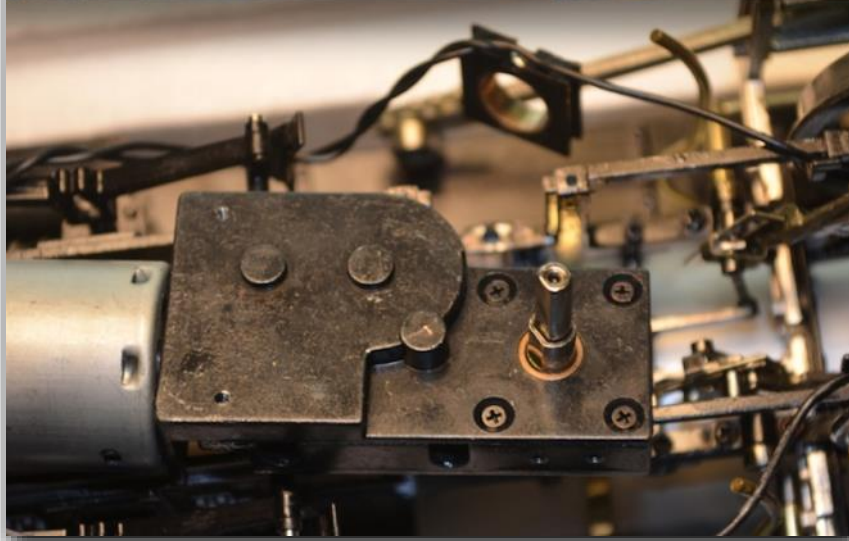
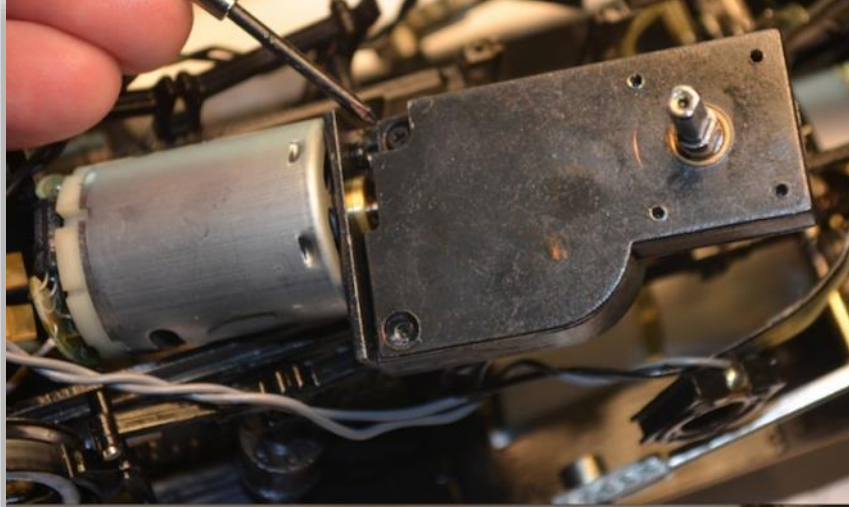


In this photo, the bottom spacers and washer (shown on the left) are from the eccentric assembly shown on the right in the above photo.

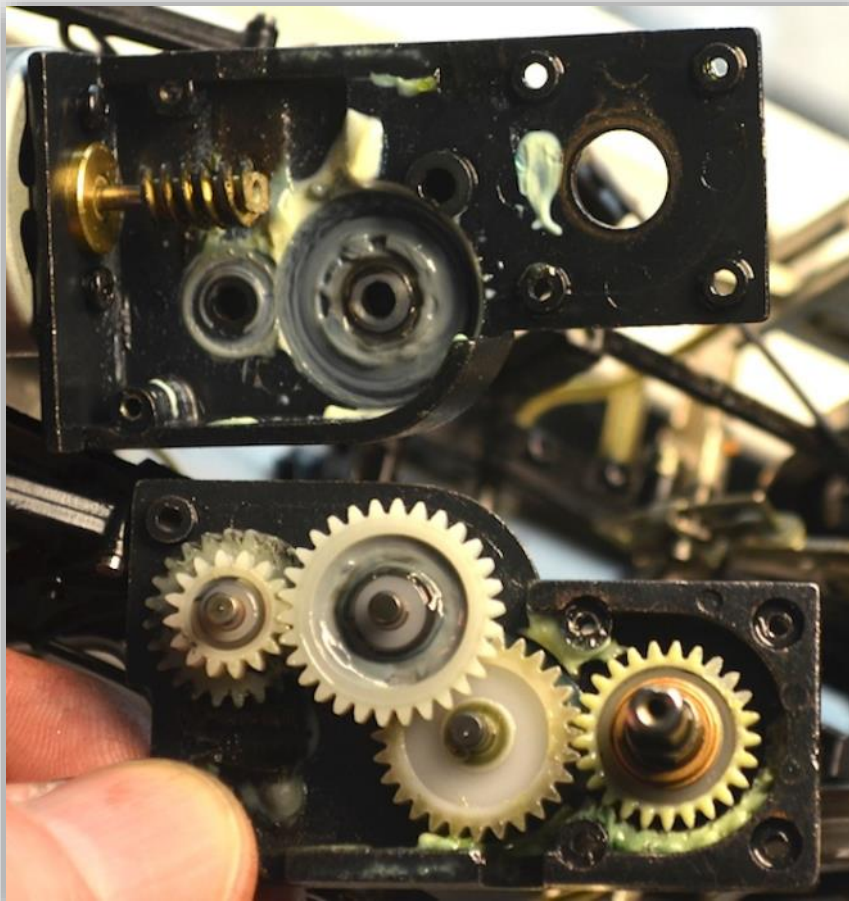


REPLACING THE DRIVE GEAR

1. With the eccentric rods and plastic spacers set aside, you may lift the motor and gearbox assembly up for repair. The motor is attached by wires to the loco, so you can't completely remove it (there's a plug, but it's too difficult to get to). Turn it on it's side and you'll see 4 screws on one side, and 2 on the other side. Carefully remove all 6 screws, and place them into another plastic bag for safekeeping.



Be advised that once the screws and plate are removed, the nylon gears can fall out! Keep the gears in place as you remove the top of the gearbox, then you can lift the drive shaft with the (broken or cracked gear) out. Carefully set the gearbox assembly aside to keep the other gears from falling out.



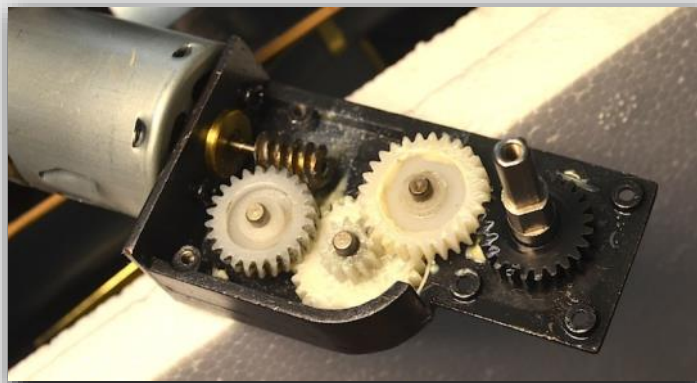
2. The main drive shaft is symmetrical, so there is no proper orientation to remember for reassembly. Place the drive shaft into a vise, and with the long socket just gently tap the broken gear and it will fall off the center of the shaft.



3. Take the NWSL gear (#2223-6) and place it onto the drive shaft as it sits in the vise. Make sure that it sits level, and then with the same deep socket tool and small hammer, gently tap it into place. You'll know that it's properly seated in the middle when the gear part totally covers the knurled marks on the center of the shaft.



4. With the gearbox in hand return the main drive shaft into place next to the other gears. Since the NWSL gear part is made of Delrin, it's self-lubricating. At this time you can either spread the existing gear grease onto all the gears (or clean it out completely, and replace with appropriate, plastic-friendly gear grease). Carefully align the gears inside the gearbox, and then install the screws (4 on one side, 2 on the other side).

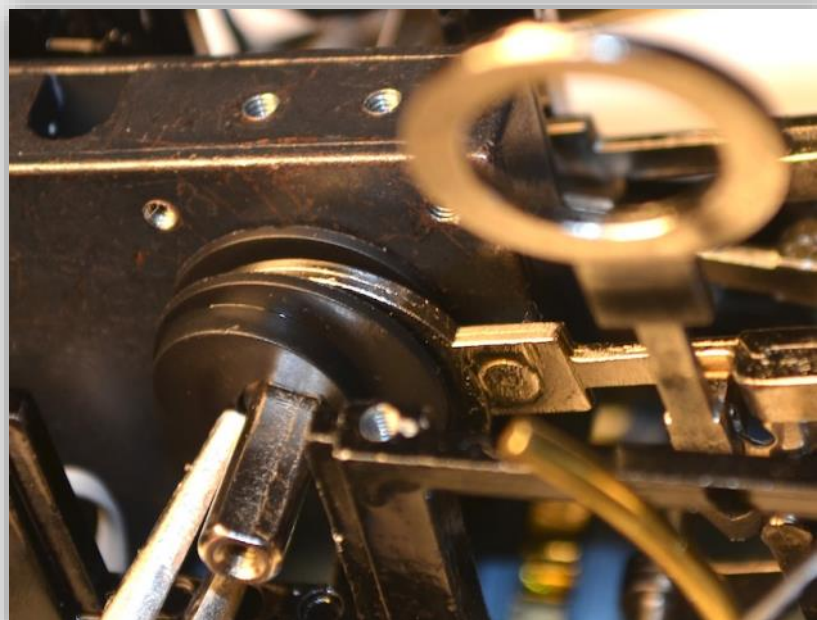
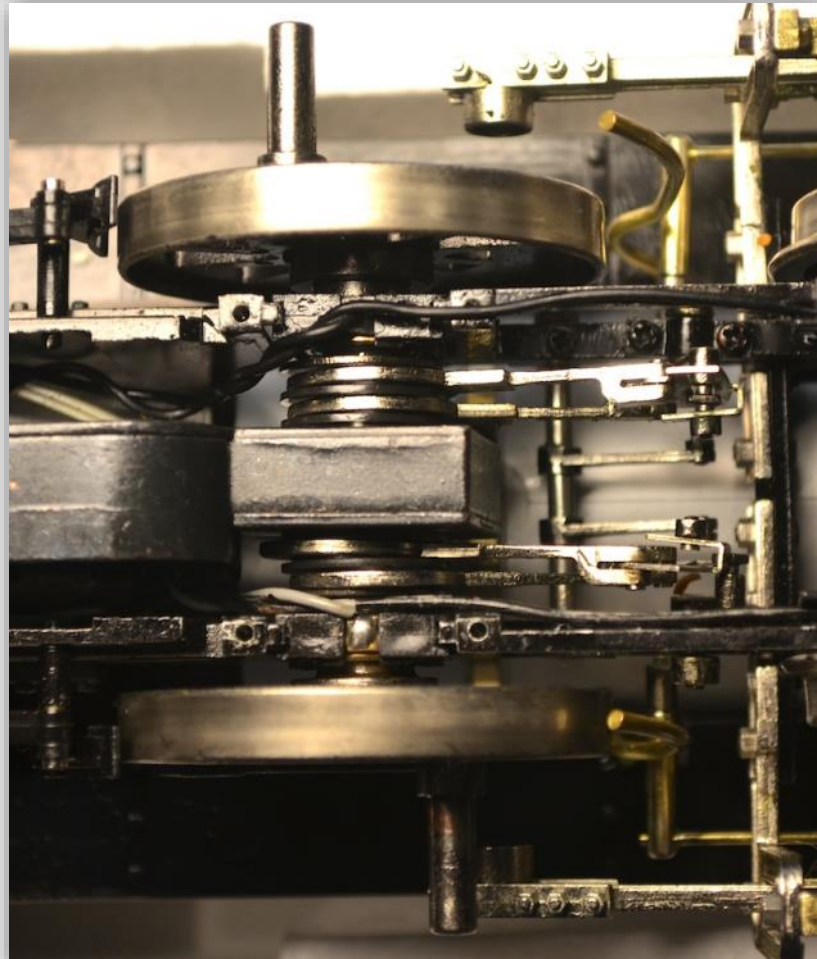


REASSEMBLING THE LOCOMOTIVE

1. Set the Motor Gearbox back into the loco, with the flat side (no hump) up. You'll see the two screw holes for the pin guide that some locos may still use. The motor will seat into the chassis, and the firebox LEDs (yellow) circuit board should be reinstalled into its side slots.

2. The reassembly of the eccentrics can be tricky (see photo). As you're looking down on the frame (pilot to the right, cab to the left), on the top side, the lower eccentric rod sits against the gearbox, and the upper eccentric rod sits on the outside. On the bottom side, the upper eccentric rod sits against the gearbox, and the lower eccentric rod sits on the outside.

3. On ALL four eccentric rods, the plastic spacers are oriented where the flat parts face inward, and the raised centers set into the eccentric rod centers. The trick is to place each set of two plastic spacers (each side) onto the drive shaft so that the offset is up for one and down for the other. Do the same on the other side. This will create the offset cranking effect for each set of rods. Once the eccentric assemblies are set, then slide on the washers. You'll have to carefully hold the eccentric assembly together as you attach the bearing blocks. Then set it all into the frame.



4. Now reattach the drivers, and note to "quarter" them by how they sit onto the shape of the drive shafts. Align the drivers to match how the other drivers are oriented (quartered). Reattach with the driver screws and washers, and you'll notice that the (seemingly) loose gearbox/eccentrics/blocks will properly tighten up all at once (don't over tighten the screws). Reattach the plastic center caps to the drivers.

5. With the entire center driver assembly completed, you may need to tap the driver flanges with a 9V battery and wires (or similar) to get the drivers to move a bit to align for the reinstallation of the side rods (since the drive shaft is keyed, it's easy to determine if it's lined up or not for the side rods). Install the side rod bolts.

6. Carefully insert the baseplate back into position, with the clips for the "chuff" effect set back into its original location. Be sure that the firebox LEDs and circuit board is also set into the slots provided. Attach the baseplate with the eight black screws, and it's completed.

7. Test the repaired assembly as it sits in the cradle to make sure that nothing is binding. Then test your loco on the track, and you're good to go! ■



THE GARDEN DEPARTMENT

Musings of a Brown Thumb: Aptenia

by Roger Nicholson

I have a confession to make—I may have what some call a “garden railroad,” but the “garden” part probably exists in spite of me. While we can count some master gardeners among the ranks of BAGRS, I am definitely not one of them. Ironically, people have often complimented me on my yard (from which all traces of lawn have long since been removed). I tell them that my yard abides by the law of the jungle: “survival of the fittest.” My wife brings home plants that she finds on discount. Some are on their way out of this life when I receive them. I put them in the ground, and if they are lucky plants, I take the time to route the drip system to them. Then we wait. If the plant is still alive weeks later, then it deserved to live. If the plant died, then perhaps it didn’t deserve to live...at least not in my yard. I know...this is pretty harsh.

The irony of this approach is that my yard has filled with hardy plants that can actually survive my lack of attention. Years ago I discovered a magical species of plant that could resist my efforts to kill them: succulents.

Among the survivors on the *Crystal Cove and Rose* is a succulent ground-cover called “Aptenia”. I had a bit of Aptenia in my front yard, where it had never really thrived. I took a few cuttings and stuck them in the ground on my newly constructed main line and it...exploded. In fact, I regularly have to cut it back from the mainline when I want to run. The funny thing is I never routed my drip system to this plant. It’s been five years...I’ll get around to it any day now.

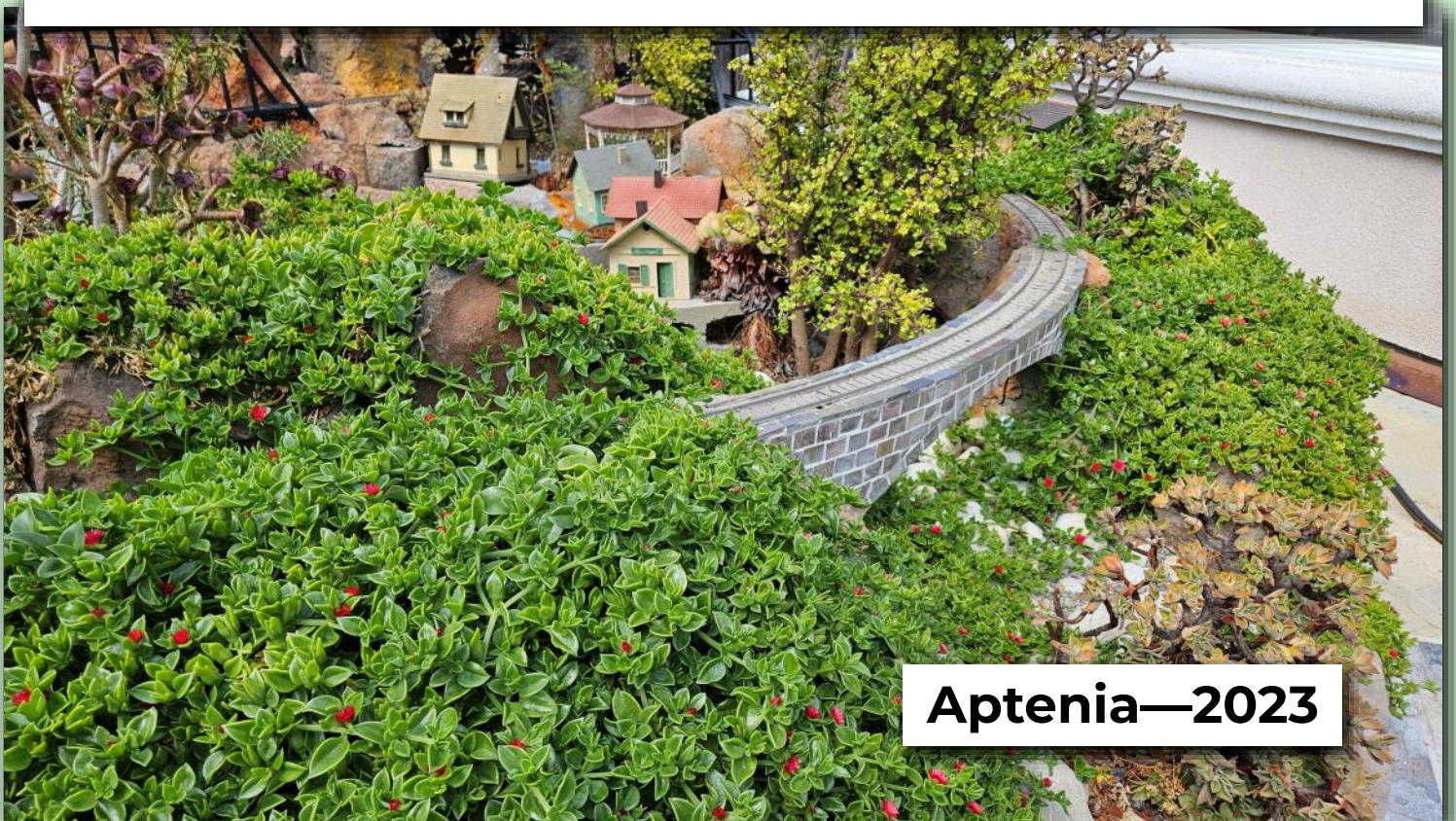
This plant would like to take over my yard if I let it. The bees love the red flowers which open up during the day and close back up during the night. The bees and I seem to have an understanding—I try not to bother them too much while I’m trimming back the area around the track. They, in turn, seem to not perceive me as a threat.



Aptenia—2018

I noticed that toward the end of each year, as the weather turned cooler, the leaves would start to dry up and look a bit sparse. I decided to cut it all the way back, almost to the ground. Each spring, it explodes back.

I mentioned to Nancy Norris one time that I was doing this, and she said that this was what I was *supposed* to do with it. To paraphrase a popular saying: Even a broken clock will do the right thing twice a day. ■



Aptenia—2023



DAVE'S CORNER

Born and raised in San Francisco, **Dave Frediani** moved to Sonora in the early 1970s. Married for many years to his best friend Juanita, Dave once purchased an Accucraft 7/8 scale Emma locomotive, and soon realized that no one supplied 7/8 scale rolling stock, so he started building it himself, and hasn't stopped.

THE END OF A LONG PROJECT

Now that the construction of my 7/8 scale Irish Motorcar is finished, with the exception of a few odds and ends. The motorcars measurements ended up being 45" long x 4-7/8" wide and 8-5/8" tall.

With the Irish Motorcar sporting a fresh coat of primer, for its base coat before painting, we're off to Hagan Park for the Sacramento Valley Live Steamers Fall steam up in Rancho Cordova, for what turned out to be one of my best days at the park.

The best part of belonging to the club at Hagan Park is that they welcome all types of G scale locomotives on their elevated track, whether they're electric, battery powered or live steam, and yes even gas powered.

Leaving Sonora at 6:30 a.m. and only stopping for breakfast at Frank's in Mokelumne Hill, the trip to Hagan Park wouldn't be complete without stopping for breakfast. It's a great time for the three of us to catch up, but on this trip one live steamer couldn't make it. With only four live steamers in the Sonora area, it's good to keep in touch. We made it to the park by 9:30 and were ready to run by 10:00.



Motorcar at Hagan Park



Motorcar front view



Motorcar rear view

Along with the Irish Motorcar, I brought a Bachmann rail truck that was converted to battery power with an R/C unit, my two cylinder live steam Shay from Accucraft, and my 7/8 scale diesel-electric box cab.

My box cab uses a single cylinder, four-cycle overhead cam, gas-powered engine that runs at only 600 RPM. The engine drives a generator which sends electric power through a speed controller, and then to an electric motor block; this unit is also R/C controlled. One of the nicer things about this gas-powered box cab is that it isn't loud like most other small gas-powered engines.

The Irish Motorcar was a hit. Everyone was amazed at the

way this extremely long car articulated around the radius of the track, as well as the way it passed through switches from the main line to the sidings and back. This motorcar was my largest 7/8 scale build so far and the most challenging. I think I've reached the limits as far as the length goes for a single 7/8 scale car. But who knows there may be a longer one down the road someday. But I hope not in the near future.



Box cab getting ready for road

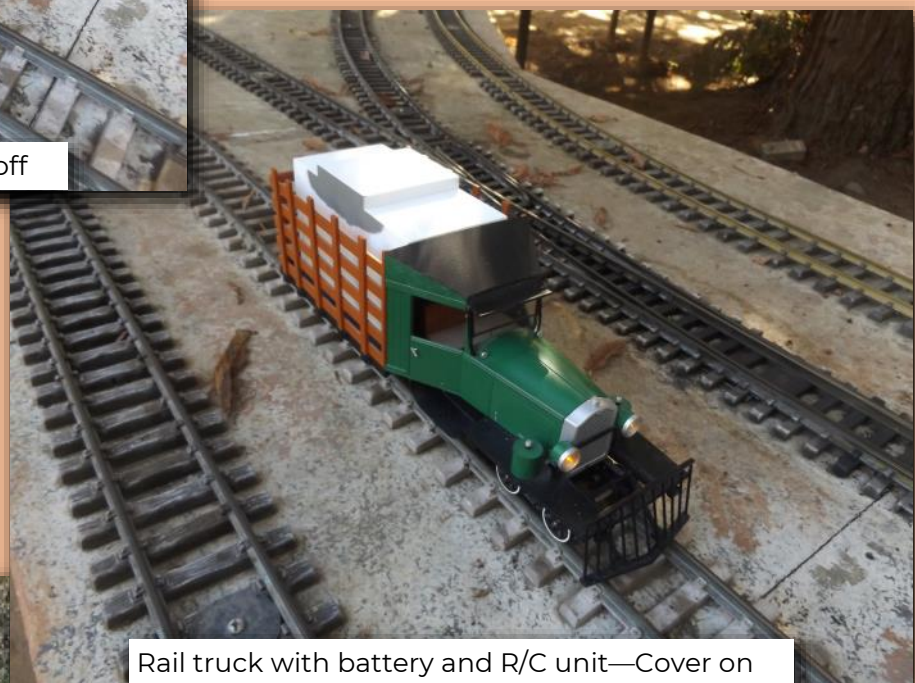
Well I'm back home now, thinking of the great time I had and my only regret is that I hadn't taken more photos. ■



Boxcab at Hagen Park



Rail truck with battery and R/C unit—Cover off



Rail truck with battery and R/C unit—Cover on

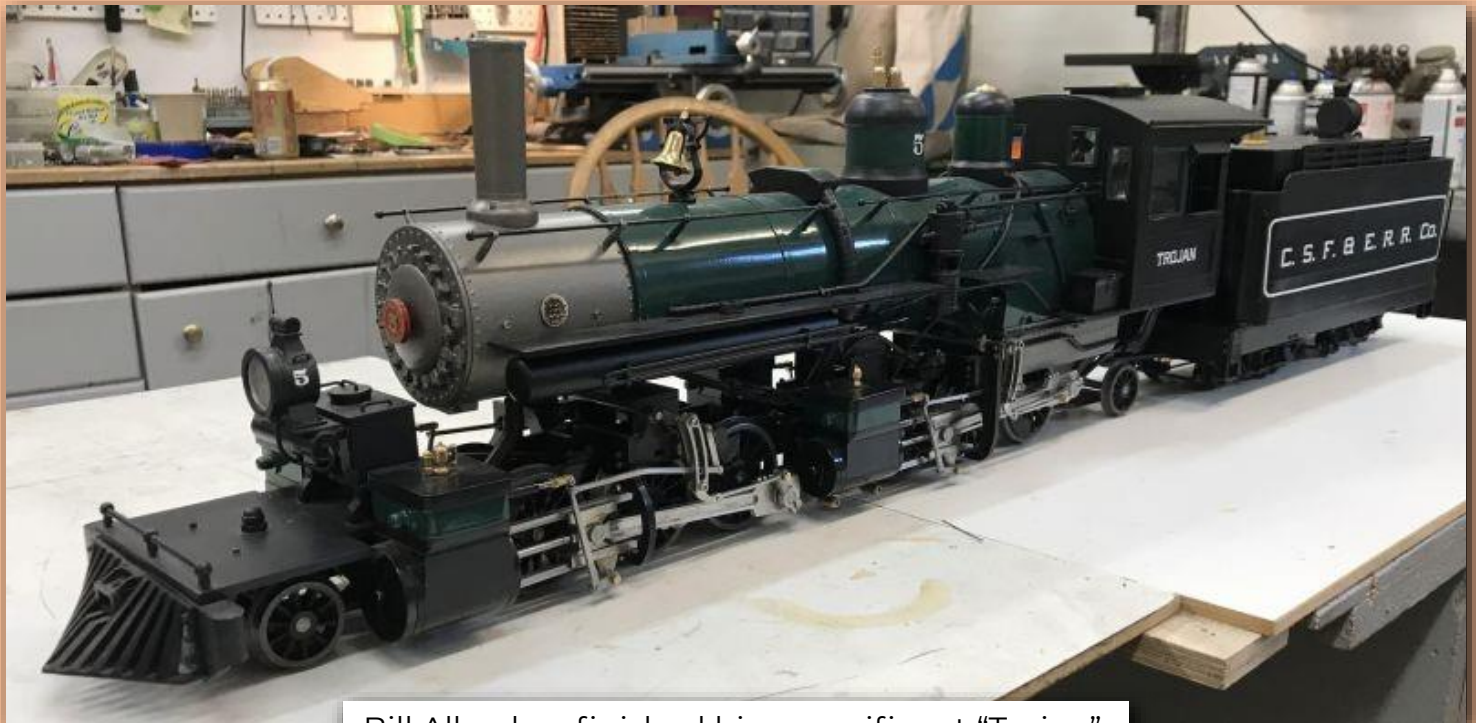


My live steam Shay double-heading with my friend Bill's Shay



EAST DEVIL HILLS MODELING GROUP

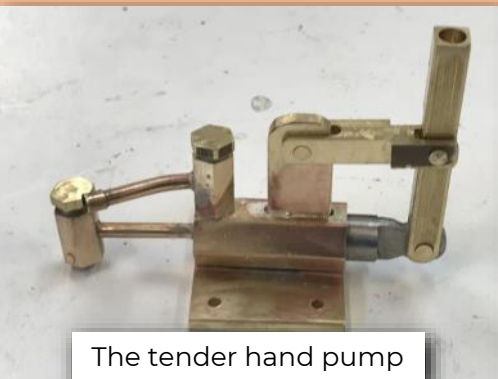
Formerly of Fremont, California, **Henner Meinhold** now resides in Berlin, Germany. The East Devil Hills Modeling Group meets regularly to create, collaborate, and share incredibly machined models.



Bill Allen has finished his magnificent "Trojan".



Some details:



The tender hand pump

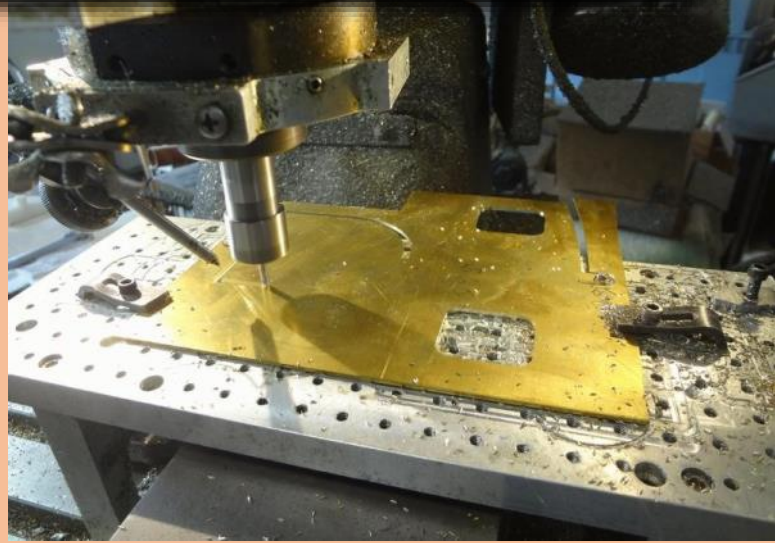
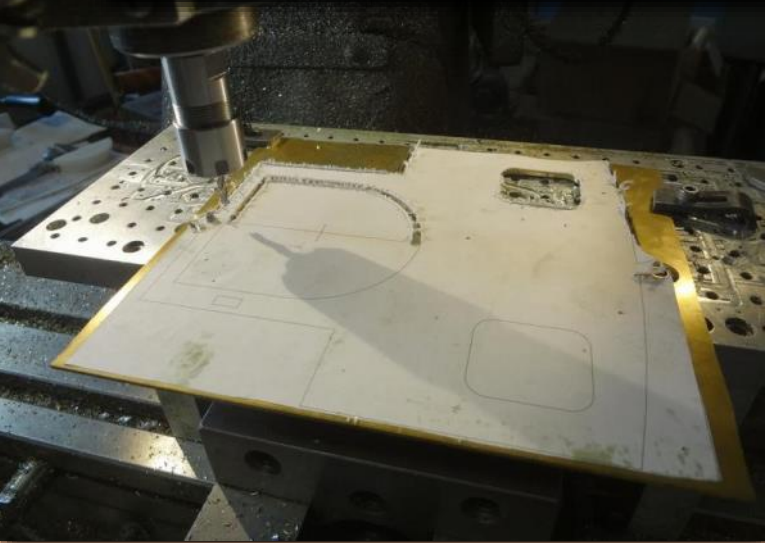


A view inside the cab



The tender ladder milled by Dennis

Rob Lenicheck builds a Darjeeling 0-4-0. He has outsourced some of the sheet metal work to Dennis and his CNC mill. As the scale is 7/8", the parts get pretty big. Especially the front of the cab could not be milled in one go. Dennis had to add holes for registration. So he could first tackle one side, and then the other side.



Marc Horovitz is always finding new ways to solve problems. When he had to machine replacement buffers for an old locomotive, he made an intricate form tool for his lathe:



This is the form tool



The form tool in action



And the output

Finally some progress on my ride-on A-climax. The boiler has been outsourced to a friend (<http://www.eichendampf.de/>), who fixed a leak and built a ceramic propane burner:

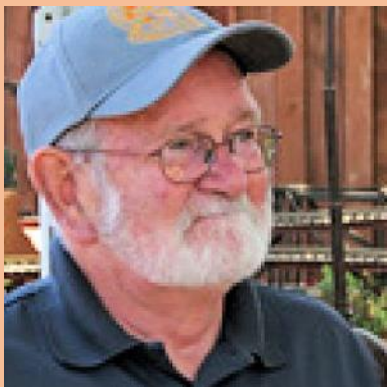


His design is different from our BALSAM pattern. He uses a ceramic, which is readily available but rejected by most of us as being inefficient. However, Dieter claims he gets about 10kW (about 34,000 BTU/h) out of his burner. Also, his mixing “tube” is essentially open. A picture of the first test run in the boiler (not yet completely heated up)



He will do a final test with a Stuart D10 steam engine, the same as in my loco.

A couple of days ago I visited the Berlin Park Railway, where I attended a presentation of a Dutchman (Ton Pruissen), who as a young man in the 1960–1970s visited all narrow gauge railways in Eastern Germany still operating and filmed them. There are stunning scenes (e.g., street running through a small village with fleeing chickens and a tiny railroad ferry). During the last couple of years, the ferry has been restored and will be displayed together with the ferry dock. Also very interesting were his encounters with the local police. He was even arrested once for filming trains. After the reunification of Germany, all the files of the secret service have been preserved and are open to individuals. He reported that his file was quite impressive... ■



RAILROAD RAMBLINGS

Retired from the publishing industry, **Bill Ralph** knows a thing or two about amusement parks and postcards. Bill operates the *Porcupine Gulch Railroad*, located in Fremont, California.

DOC BROWN'S TIME TRAIN

Photo by Bill Ralph

In the final scenes of *Back To The Future Part III*, Dr. Emmett Brown and his family return from the past in his steam-powered locomotive time machine to meet up with Marty McFly and Jennifer Parker. Despite being built with relatively primitive materials of the late 1800s, Doc Brown's time train was the culmination of ten years of extensive work based on the technology of the original DeLorean time machine complete with successful temporal displacement, operating flux converter and with the addition of hover conversion. The location of the closing scene was the site of the explosion of the 1897 Rogers 4-6-0 locomotive when barely reaching the required 88 mph for time travel while pushing Marty in the DeLorean.



The design of the Time Train was loosely based on Jules Verne's *Nautilus* submarine in Disney's *20,000 Leagues Under the Sea* and constructed in miniature, full size, and in digital versions by Universal Studios. Based on the dimensions Sierra Railways movie Locomotive #3 used extensively in the scenes and around Jamestown, the static Time Train was filmed on the Ventura County Railway with digital animation and effects added later. Doc Brown's Time Train is permanently on display at Universal Studios Orlando. ■

MEMBER UPDATES

Bradley Nicholson, a new member of BAGRS (who, coincidentally, is the father of the editor), has dabbled with trains on and off over the years. In fact, 35 years ago he was in the process of building a live-steam 7 1/2-inch gauge Pacific, but never completed it after pressure testing the boiler. It is currently a unique “lawn ornament” in front of his house in **St. George, Utah**.



He was inspired after viewing the Zell's railroad during the 2023 NGRC, and is now determined to construct a G Scale railroad on his 3/4 acre lot in St. George. The first step in this process is to construct a “train depot.” He started pouring the concrete base for the building in mid-October.



The building in the back with the train on it is actually his workshop, and the trains will pass through it on their way to other parts of the property.

Now I know what I'll be working on each time I travel to visit the parents.

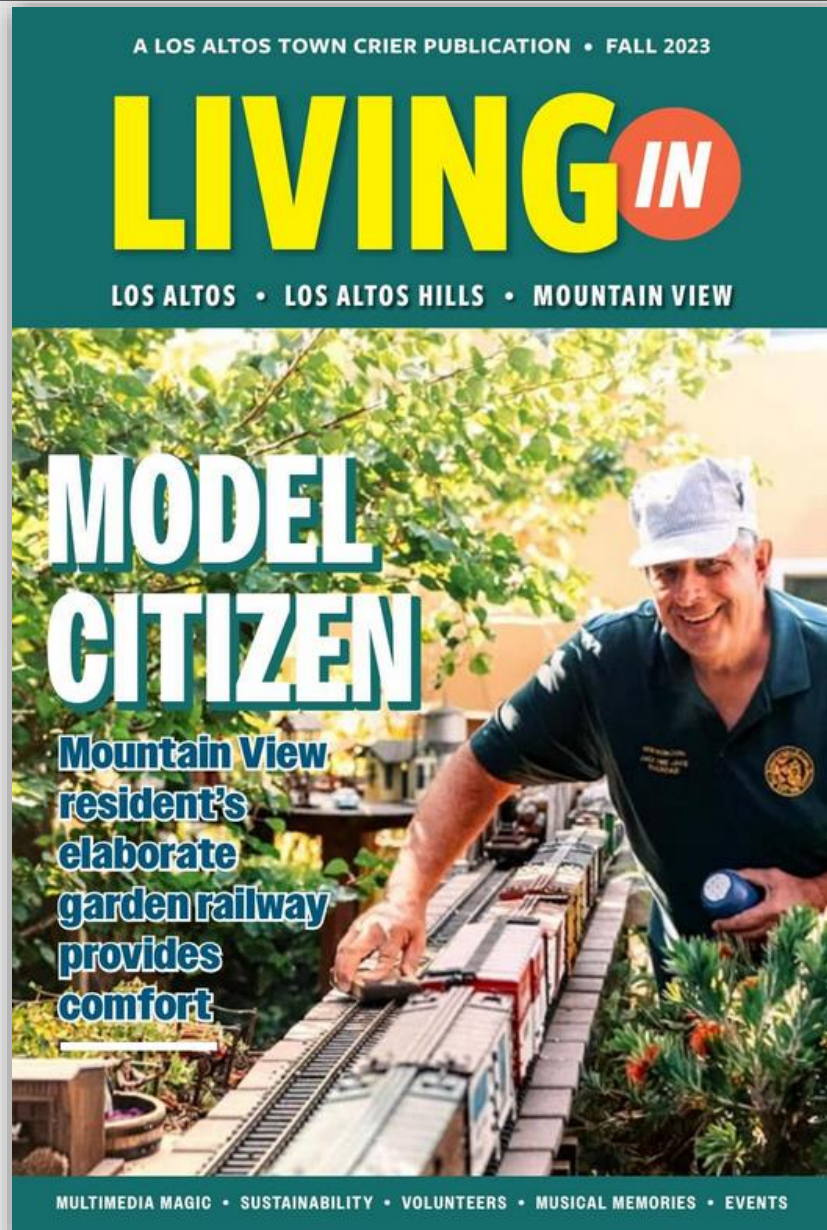


MEMBER UPDATES

Rob and Nancy Ronconi have joined the ranks of BAGRS members whose railroads have been featured in a local magazine: In this case, we are talking about the South Bay publication, *Living In Magazine*.

The magazine is online, and you may read the story about the Ronconi's **JJC&J Railroad** here:

[Model Citizen: Mountain View resident's elaborate garden railway provides comfort](#)



Robert Burrill provides an update from the **Rural Burrill Garden Railroad**:

New Switching Shack closed down for Winter. 1 Million leaves are starting to fall...I get my RR back in January 2024... Thank you RLB

MEMBER UPDATES

A video describing the history of Jack and Pauline Verducci's **Crystal Springs Railroad** has been posted on the *Planes, Trains & Automobiles* YouTube channel here:

[Jack Verducci Layout](#)



Since dealing with “The Great Flood” that prevented Bill and Virginia Allen’s **Bill, Virginia & Truckee Railroad** from being open during the 2023 NGRC, it is nice to see that Bill has posted a new video on YouTube: [“Trojan”](#): October 25, 2023.



MEMBER UPDATES

From Ray Turner: Our last operating day this season for the **Mystic Mountain RR** was October 12. The MMRR is a large railroad and much of it is 20 years old. The sun has taken its toll over the years breaking the small, plastic “spikes” holding the rails to the ties (Llagas Creek track). Track repair has been a burden for the past several years getting progressively worse. I determined this summer I was going to have to downsize the railroad—or at least downsize the maintenance burden. I made an inspection of the RR track noting where it needed repair and where it should just be replaced. And I noted the other maintenance work (a lot!) that would be required: landscaping, car maintenance (couplers & decals, etc.)

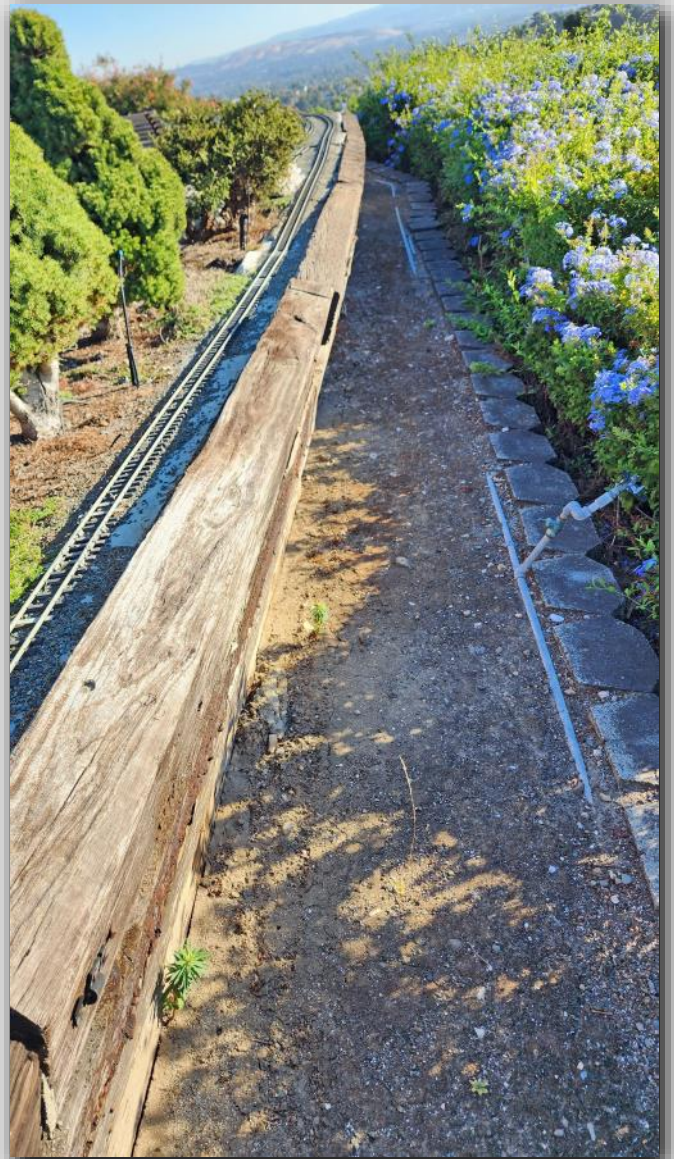
I planted a grove of Seiju Elms 20 years ago. Then they were 12–18” high with ½” trunks. Now I have to cut them back to 3’ height twice a year and the trunks are huge (8–12”). They also have a bad habit of misting a sap onto the tracks beneath. And in winter they drop thousands of tiny leaves on the railroad which the rain “glues down” to the track. Too much maintenance! They had to go. I still have many Hokkaido Elms, which are well-behaved and require very little maintenance.



MEMBER UPDATES

Part of the railroad is supported on a wall, part of which is an 80' long stack of railroad ties (prototype-sized). With the annual earth movement we get on the hillside, they are leaning—badly in spots. While it still provides support, I know someday it will fall over and create a bigger problem. So, I'm working on a solution, but it will require removing a lot of track, hopefully without damaging it and restoring it later. And somehow straightening the wall of ties. Or???

Thus begins the last major reconstruction of the Mystic Mountain Railroad. My hope is to get another 5 years of operation out of it before it just becomes too much maintenance for me—I'm not getting any younger. Stay tuned as the repair saga continues. ■



GARDEN RAILWAY CLUB NEWS

BAGRS has a policy of reciprocal sharing of newsletters with the following garden railway clubs. We do not share private member information such as home addresses or tour information without the express permission of the particular member. We provide links here to the most recent editions that have been made available to us. For other clubs wishing to obtain a copy of the latest BAGRS *Trellis & Trestle*, please contact **Roger Nicholson** at communications@bagrs.org

[Central California Coast Garden Railway Society—2023 Special Edition](#)

[Central Ontario Garden Railway Association](#)

[Denver Garden Railway Society Newsletter—October 2023](#)

[Gold Coast Garden Railway Society—October 2023](#)

[Orange County Garden Railway Society—September 2022](#)

[Puget Sound Garden Railway Society-October 2023](#)

[Redwood Empire Garden Railway Society—October 2023](#)

[Rose City Garden Railway Society—October 2023](#)

[Sacramento Valley Garden Railway Society—October 2023](#)

[San Diego Garden Railway Society—April 2023](#)

[Santa Clarita Valley Garden Railroad Club—October 2021](#)

[The Garden Whistle New Zealand Large Scale Newsletter—October 2023](#)

[Garden Railroading News—September/October 2023](#)

The 2025 NGRC 2025 will be hosted by the Sacramento Valley Garden Railway Society. Website coming soon at ngrc2025.org



BAGRS BOARD AND CONTACT INFORMATION

ROLE	NAME	EMAIL ADDRESS
President	Mick Spilsbury	president@bagrs.org
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Treasurer	Larry Silverman	treasurer@bagrs.org
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Communications	Roger Nicholson	communications@bagrs.org

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Sunnyvale & Santa Clara	Mike Paterson
San Jose & Milpitas	Michael Laine
Santa Cruz & Monterey Counties	Trevor Park
South Santa Clara & San Benito Counties	Open
Members Outside BAGRS Districts	Nancy Norris

ANNOUNCEMENTS

Please take the BAGRS 2023 Member Survey here: [Take the survey](#)

SWAP MEET

Date: Saturday November 4

Time: 9 a.m. to 1 p.m.

Location: Accucraft Trains: 33260 Central Ave, Union City, CA 94587

BAGRS' pre-holiday Swap Meet is the perfect opportunity to acquire holiday gifts for others or ourselves! This is also an opportunity to see the latest items in Accucraft's product line and to view many of their past, classic locomotives and cars. It is particularly great for members building or expanding their railroads (or thinking of doing either) to acquire locomotives, cars, buildings and accessories at excellent prices.

Member Vendors need to register by sending an email to Mick Spilsbury at president@bagrs.org with your name and the # of tables you will bring. There is no charge, but there is a limit to the number of tables we can accommodate so best to email sooner rather than later! Also, note: You need to bring your own tables and the 'meet' is weather dependent because it's in Accucraft's parking lot.

From Ray Turner: Over the past several months I have been contacted by family members about their parent's or spouse's garden railroad equipment wanting help in disposing of it. Sadly, this is getting to be "a thing" as many of us in the hobby get older. The most recent example is Jane Mills, trying to dispose of her father's equipment, who sent me a couple of photos.

There is some great stuff here so, if interested, you can reach her at: mills_ja@comcast.net

Of course, BAGRS is not in the business of buying and selling garden railroad equipment. But I also know that some BAGRS members are building or expanding their garden railroads and may be able to use such equipment. I don't want to be in the middle of this, but, perhaps, setting up some sort of posting board would be appreciated by members.

And a related thought . . . Does your spouse/family know how to dispose of your equipment when you can no longer keep it running???



MEMBERS ONLY PAGES

MEMBER BULLETIN BOARD

Including recent entries from "Items for Sale by Members"

- **From Dan Turgeon:** I have acquired 6 Wild West Rodeo rolling stock but missing the **LGB 24251 Wild West Forney Steam Locomotive & Tender**. If anyone is no longer using their Wild West loco and wants to part with it, please reach out to me. I plan to run a RailPro Battery train like my other GR trains. # 67413706.
dan.turgeon@gmail.com
- **From George Nagata:** Wanted: USA Train Power #RPT10. Please email me. See member directory for contact info. Thank you, George. **gnagut@comcast.net**
- **From Dennis Mack:** Dennis Mack, a long time member of the Sunnyvale District, has closed his railroad and has a large selection of rolling stock and track for sale. In the coming weeks. He is looking now for interested buyers for individual items. Here is the list of items: for sale: [D&B RR items for sale.pdf](#) **dennis@bigmack.org**
- **From Jim Goss:** I have Stainless Steel Switches: 2 "Y" Switches: 1 Right Hand and 1 Left hand Switch. Make offer! Jim Goss. I live in South/East San Jose. . **Cell #. 408-887-5413. wvc505@yahoo.com**
- **From John Brawn.** If you have any figures, buildings, and rolling stock that you would like to donate to the Oakmont indoor railroad, Please contact me at **jbrown@gmail.com**

MEMBERSHIP INFORMATION

NEED A BAGRS NAME BADGE?

Send a \$15 check, payable to BAGRS, for each badge ordered. Be sure to print the name(s) and city(s) for the badge(s) clearly. Send to: BAGRS Member Badges, 210 Friar Way, Campbell, CA 95008

BAGRS FOR SALE BY MEMBERS

List items you have for sale or items you want. You'll find it in the middle of the "Members Section" menu on our website, bags.org. Log in is required.

BAGRS ONLINE PHOTO AND VIDEO LIBRARY

Many photos & videos are hosted at <https://photos.google.com>

Click on "Go to Google Photos," if offered. Login with this email and password: BAGRSvideos@gmail.com BestClub4014 The upper-left corner has a pull-down menu to select ALBUMS. Then click on the album of interest.



THE LAST PAGE

Well, that was fast...

The October 2023 issue of the *Trellis and Trestle* was distributed electronically at 10 a.m. on October 1. At approximately 3 p.m., after visiting the open house of the Little Bear Railroad, we stopped by to take a look at the **Oakmont Dining Room Railroad**. We found the cover of the October issue of the *Trellis & Trestle* already framed and displayed on the table next to the railroad. —Editor

TRELLIS AND TRESTLE

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Submissions are encouraged. Please contact the editor for further information. We reserve the right to edit for length, clarity, and content.

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