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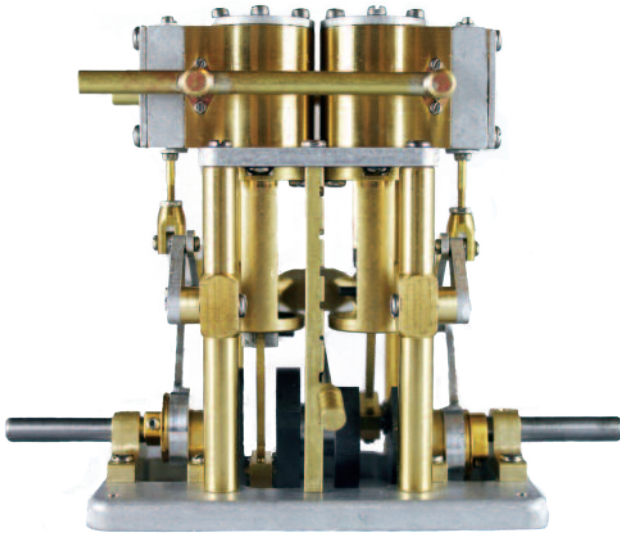


STEAM_{IN THE} **GARDEN**

Regner 'Henry'

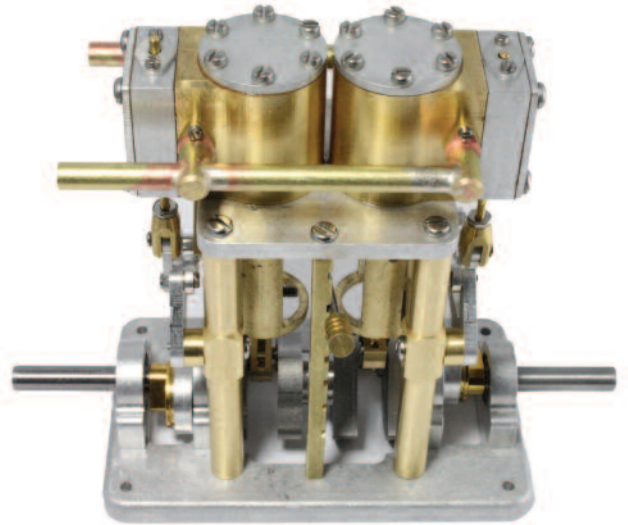
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- **Tributes to Live Steam Legends**
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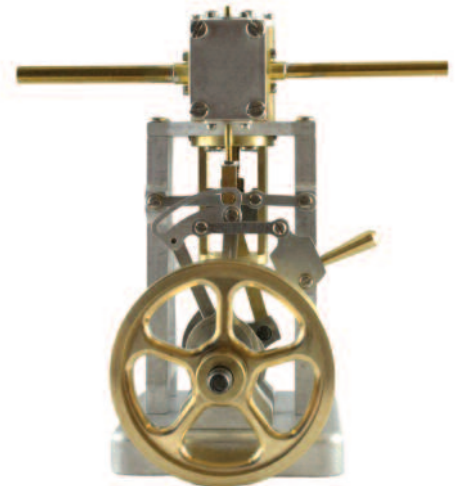
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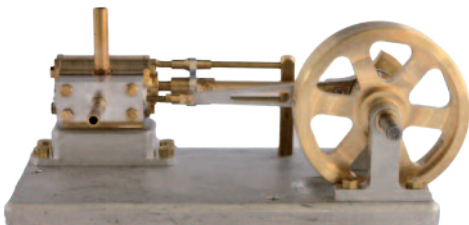


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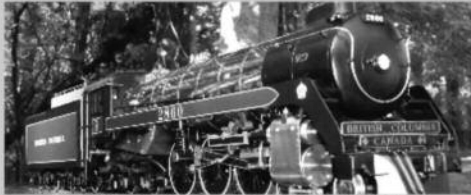
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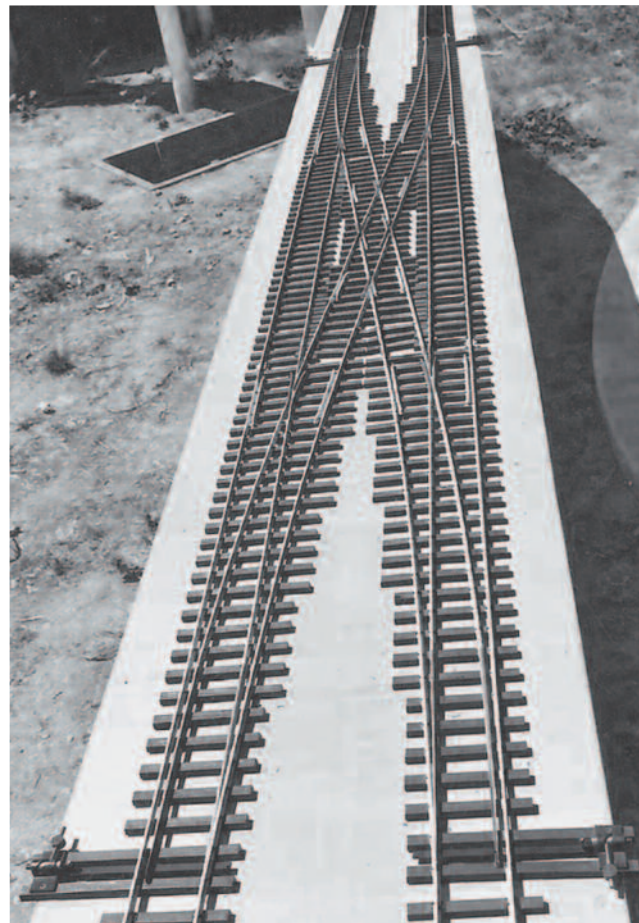
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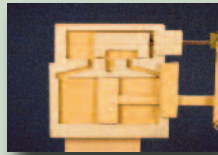


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Cover: Regner "Henry" working hard on the Kittatinny Mountain Railroad. **Photo by Shawn Viggiano**

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LATEST WAYBILL

Tributes to Live Steam Legends

In Memoriam: Jerry Reshew



*Jerry Reshew
1929-2017*

Photo by Scott E. McDonald

Our small scale live steam world lost several legends of the community This summer. On June 23, 2017. Jerry Reshew, founder of the International Small Scale Steamup and Arts Festival, as it came to be known in its latest incarnation, left our earthly presence to join his wife Charlotte in the great beyond. Jerry will be dearly missed,

and the loss of his presence at the steamup known to most simply as “Diamondhead” makes our ranks a bit smaller. Jerry’s personal history in the area of Diamondhead, Mississippi goes back many years to his stint as the Director of the Navy’s Oceanographic Offices in nearby Bay St. Louis.

When the Navy decided to close down the aging offices of Bay St. Louis, Jerry used his management and directorship skills to lobby for the new offices to be opened at nearby Stennis Airfield. This created more jobs in the area and made Jerry a local hero, a title well deserved.

Jerry’s local activities weren’t limited to his government duties. He and his wife Charlotte embraced the southern lifestyle and Mardi Gras way of life, becoming regular supporters of the local Mardi Gras crewe – and becoming the King and Queen of the festival one season. It is through these Mardi Gras activities that many charitable fund-raising events for local needs were established. In 1992 Jerry attended the National Garden Railway Convention held in Reston, Virginia, hosted by the Washington, Virginia and Maryland Garden Railway Society. The WVMGRS at that time had many live steam members, and sought to increase the live steam presence at the convention to extend beyond the Sunday Steamup by adding a track that would be available for many

more hours during the convention. Local fire marshals were skeptical of this aspect of the garden railroading hobby and forced the host society to set up the track on the top floor of the parking lot structure. Local weather during the convention was typical heat and high humidity for a July venue in Virginia and the reflective nature of the concrete didn’t help the situation. Jerry always commented that he felt as though the live steamers were being treated unfairly and it was this event that cemented his drive to have a steamup in a more “civilized” manner.

Jerry immediately went to work to pull together the first “National Small Scale Steamup” for January 1993. In a quick six months’ time, the first of many live steamers that would seek winter-time refuge in the south to run trains began their annual migration to Diamondhead. The venue grew and started to bring in attendees from all over the world, so it was soon renamed to the “International Small Scale Steamup.”



The Diamondhead steamup soon took on a life of its own as the other hobbies of attendees came to light. There were juggling demonstrations, crafts available for those who needed a respite from model trains, and musicians. All of this happened because of the welcoming southern hospitality that brought out the creative nature of the attendees. Jerry welcomed all of these extra-curricular activities and even became a member of the brass band that entertained the steamup for ten years.

Jerry was a well-versed live steamer whose council was sought out by model manufacturers. His careful scrutiny of new models and technical feedback helped to provide the best in quality models for the hobby. The Diamondhead steamup became a key activity whereby new models would make their debut to the world.

In September of 2005 hurricane Katrina made landfall and the Bay St. Louis/Diamondhead area was devastated. The 2006 steamup would have to



Jerry wearing the Dixieland style band hat he provided to all of the band members.

Photo by Carol Jobusch

be dark for that year as the host hotel was unavailable. What few rooms they did have that weren't destroyed by the hurricane were needed to house crews trying to rebuild in the area. In anticipation of the 2006 event Jerry had already invested in t-shirts and other memorabilia that was always made available for steamers who attended. Undaunted by this, Jerry packed up the t-shirts and brought them to the annual January Cabin Fever Model Engineering Expo held in York, Pennsylvania and gave them away. How fitting it was that Jerry had picked a black t-shirt for an event that would have to wait another year until repairs would allow the return to Mississippi.

Jerry loved to travel and he attended steamups all over the United States and the world. A long-time member of the Gauge One Model Railroading Association (G1MRA), Jerry was always welcomed with open arms to the steam activities in England. Jerry was an avid fan of British Rail which was the focus of the majority of his live steam collection. In January of 2008 Jerry was awarded the G1MRA "President's Cup" for his life-long leadership in Gauge 1.

Jerry was well aware of his age and abilities with respect to pulling off the Diamondhead steamup. At the twenty year mark of his stewardship, the number of his volunteers had grown, but he knew that if the steamup was to

continue he would need to pass on the chairmanship. Jerry held a steamup at his home in Diamondhead with the local steamers who attended the Diamondhead venue and they formed the Bayou Live Steamers. Jerry passed the baton and took on a less rigorous "Chairman Emeritus" role.



Jerry delivering the "Welcome to Diamondhead" Speech.

Photo by Scott E. McDonald

He continued to actively support the steamup in this role and continued to give the opening welcoming speech to those in attendance. Of all of the parts of the steamup where he will be missed the most, it is in that function whereby his smile and gentile nature would shine the most to greet us to Diamondhead.

To say that Jerry will be missed is an understatement. He brought joy and fellowship to the hobby and is well deserving of the title as a Legend of small scale live steam.



A rare photo of Jerry actually getting some track time at his steamup in 1994.

Photo by Carol Jobusch

In Memoriam: Dr. Carol Homuth

By Scott E. McDonald

Dr. Carol Homuth of Harriston, Ontario, Canada passed away on August 1, 2017 at the Caresant Care Nursing Home at the age of 93. Born in Harriston on March 27, 1924, Carol was the husband of the late Viola Homuth, having been married for 63 years until her passing in 2010.



Carol Homuth

Robert Weltyk Photo

Carol and Viola were, for many years, regular attendees at the International Small Scale Steamup held in Diamondhead, Mississippi. It was Carol who is credited with the creation of the "Flea Market" after suggesting to steamup founder Jerry Reshew that he needed one. Carol volunteered as coordinator of the Flea Market and served in that capacity for many years.

Carol attended the University of Toronto, and it was during his third year that he met Viola Suomela, a 2nd year student. After graduation in 1946, Carol and Viola joined his father's optometry practice where they worked for 57 years, along with volunteering as optometrists in the Caribbean.

In 1968, Carol became Master Model Railroader, #22 worldwide, and served as president of the Niagara Frontier Region and as a director of the National Model Railroad Association. Carol had a lot of modeling interests. He took great pleasure in his collections of model fire trucks, trains, cars, and his Pequegnat clocks, which he donated to the Harriston Historical Society, an organization he helped form in 2010. His hobby interests soon grew to include live steam and he was a member of Ontario's West Coast Garden Rail Society.

Carol was active in his community, having served on the Harriston Public School Board and the Hydro Commission, as well as being a Past Master of Harriston Masonic Lodge No. 262. He was also a Scout leader for 30 years.

In Memoriam: Geoff Spenceley

By Kevin Schindler



Geoff Spenceley

Michael Martin Photo

Geoffrey Spenceley, "His Lordship" as he enjoyed being called, has passed on. Geoff boarded the outbound train to the great beyond during the early morning hours of August 03, 2017 after nearly 96 years on this planet. Geoff has now reunited with his wife, Queenie and his eldest

daughter Ginny. He is survived by his two sons, Bill and Scott, and his daughter Christine and granddaughter, Lauren.

This piece is simply a collection of my personal memories of Geoff and not meant to be a full run-down of Geoff's amazing life as a Royal Marine, salesman, husband, father and a friend to many of you.

Geoff and I first crossed paths back in 1989 at a Garden Railroad gathering in Humboldt County. He was hosting the very first meeting of a group named the Humboldt Bay Garden Railway Society, based out of Humboldt County in far Northern California. Geoff's enthusiasm and encouragement found me asking more and more questions about Live Steam and our friendship grew from there. He



Geoff Spenceley (left) and Kevin O'Conner (right) share a light hearted moment at a National Summer Steamup.

Michael Martin Photo

became my live steam mentor as I purchased my first locomotive, a Roundhouse Fowler, in the mid-nineties. As time went on, Geoff, together with a few other friends of ours, formed a regional Live Steam group dubbed the Lost Coast Live Steamers. It was a loose knit cadre of like-minded souls that would hold impromptu gatherings to run our Live Steam locomotives each year. Geoff remained involved with the Humboldt Bay Garden Railway group as their President and “Conductor” of the newsletter for many years.

In late 2001, my Dad had been diagnosed with cancer and Geoff was right there with support for both my dad and myself. After my dad had passed on, I used to call Geoff my “Surrogate Dad,” because both he and Queenie were great sources of strength and friendship to my Mom and me during that difficult time.

Geoff’s deep passion for “trains” ran the gamut, from beautiful English Standard Gauge locomotives in Gauge One, up to ride-on engines in both 3 1/2- and 5-inch gauge. He also dabbled in English narrow gauge and American prototypes as well. His interests and skills knew no bounds. He was very proud of the number of Aster kits he had assembled and ran over the years. In fact, there was an uncompleted Aster kit still sitting on his workbench waiting for Geoff’s return. Sadly, that never happened.

Geoff was loved by everyone he met. His charming personality, sense of humor and wisdom endeared him to many. I personally benefited from my friendship with Geoff by being introduced to dozens of the people I now consider dear friends of my own.

Geoff had been going to International Small Scale Steamups in Diamondhead since its first inception. He proudly displayed every single coffee cup he had collected from the event in his living room. With some prompting, he finally persuaded me into going to Diamondhead in 2006. Well, that didn’t happen due to the landfall of Hurricane Katrina on the Gulf Coast. We did however, begin traveling together in 2007 and continued to participate in the “Diamondhead Experience” up until 2010. After that air travel just became too difficult and frustrating from our little remote Humboldt County Airport, and neither one of us ever went back again.

My fondest memories of Geoff would always involve sitting down with a beer or a “Tanqueray over,” his drink of choice, be it at Diamondhead, Sacramento or one of our local gatherings, – this was a tradition for the two of us. We talked about trains, of course, politics and the folks we both enjoyed being around. His laugh was absolutely contagious. His wit was quick and sharp, which certainly kept me on my toes. He was so brilliant with his observations of people and he truly loved his friends.

Geoff was the very first live steamer to receive the Ron Brown Memorial Steamup Enthusiasm Award. The award was given to him at the 2011 National Summer Steamup in Sacramento. Six years later, my dear friend and fellow troublemaker, Jim Hadden and I won the same special award. It was quite an honor to be considered on the same level as Geoff, my long time friend, mentor and traveling partner. We have all lost a very special individual. I will miss him on so many levels. So with all this said, I lift my glass to you my friend, I will never forget you. Cheers to you, His Lordship!

In Memoriam: John Coughran

By Jim Gabelich

John Coughran was born in El Paso, TX in 1931. His house must have been close to the Railroad tracks because I remember him saying he always knew when the freight trains were coming through because the whole house would vibrate from the 2-10-2’s and 4-10-2’s rumbling by.



John Coughran

Rick Parker Photo

During the Korean War John joined the Navy and became a Fire Control Specialist on board a ship that shot 3-inch and 5-inch rockets in salvos to support troop landings.

After his time in the service he returned to El Paso and obtained a degree in Electrical Engineering from the University of Texas at El Paso.

He got a job at Cape Canaveral and was there for 10 years working on Mars probes and other projects and met several of the Astronauts but never worked on the Apollo project. He then came to California and worked at TRW, Grumman, and finally Xerox for a short time before retiring.

I met John in 1997 in Sacramento and we quickly

developed a close friendship. We had a standing Wednesday Water Boiling meet which lasted for all these years and continues to this day with Sonny Wizelman, Rick Parker, Greg Dahlem, John Berry, and John Polen. John taught me all about the *Black Art* of coal firing and so much more. I know he taught many of you the joys of coal firing and

gave seminars at both Diamondhead and Sacramento. John was a genuinely nice person who will be missed.

Farewell John, I am proud to have known you. -- Jim



John Coughran at a Wednesday Water Boiling meeting.

Rick Parker Photo

Waybill continues on page 54

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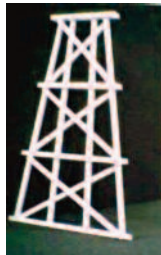
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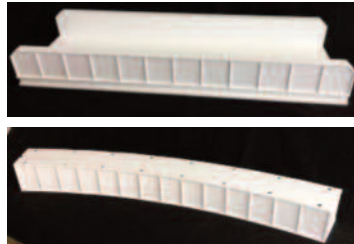
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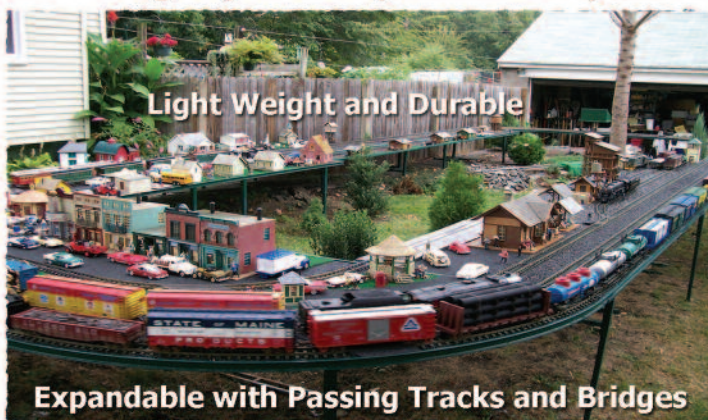
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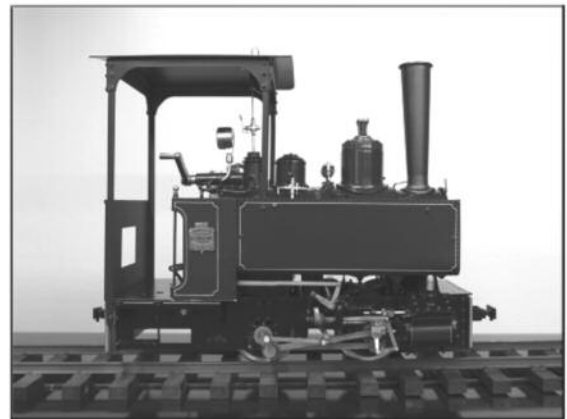
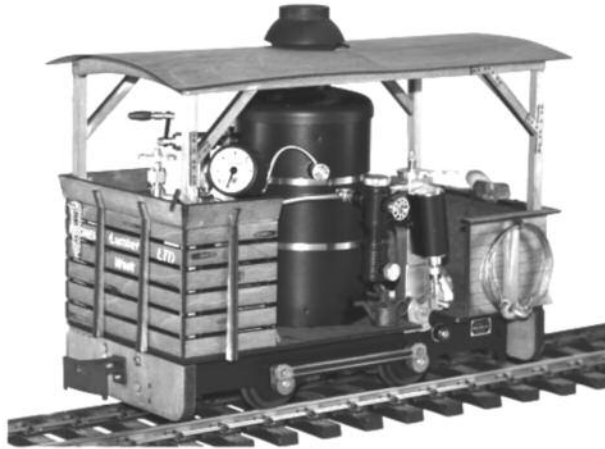


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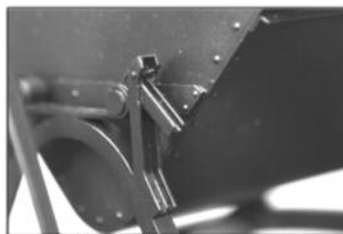
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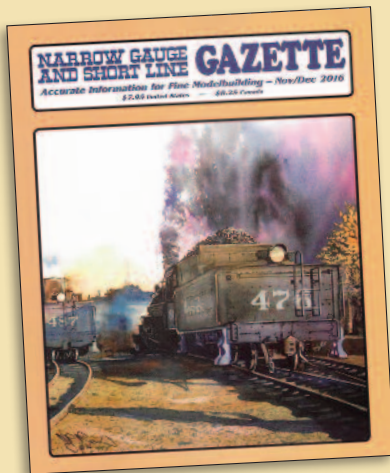
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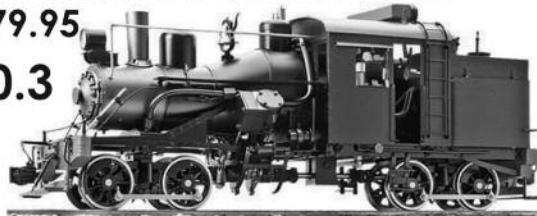
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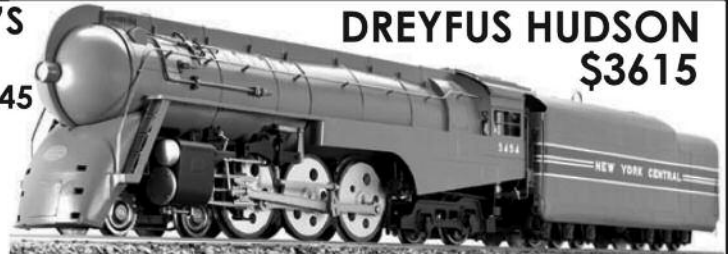


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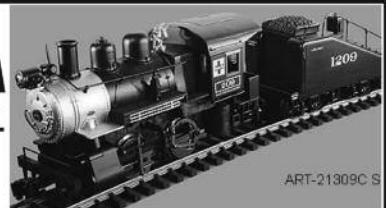
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Regner 'Henry'

From Kit to Steaming

Text, Photos, and Illustrations by Shawn Viggiano

Back in late December of 2016 I saw a photo posted on the Train Department's Facebook page of a new backwoods live steam engine. It was a small geared backwoods engine called "Henry," produced by Regner of Germany. When I first saw the photo I knew I had to add this to my collection of Regner Easy Line locomotives. It also doesn't help that I am partial to anything backwoods. Like all the Easy Line locomotives it is a freelance model not really following any prototypical practice, but can be plausible and will fit on any narrow gauge line. What intrigued me most about the "Henry" was its backwoods look, with its vertical boiler and wood cab. I was lucky enough to receive and test the pre-production "Henry" kit from The Train Department. The actual kit is slated for release in the Spring of 2017, and should be available by the time you read this.

Inspection

Like all my previous Regner locomotives, the

Specifications

Length: 8.66 inches/219.9mm
Width: 4.52 inches/114.8mm
Height: 7 inches/177.8mm to roof
8.8 inches/223.5mm to top of stack
Engine: 10mm single oscillating cylinder motor geared with Teflon piston
Cylinder:
Bore: 10 mm
Stroke: 14 mm
Gauge (Adjustable): 32 - 45 mm
Scale: 1:22
Boiler Capacity: 110ml
Fuel: Butane - Filling capacity: approx. 115 ccm
MSRP: Kit -\$750 RTR-\$1,000

"Henry" kit came neatly packed in the usual plain box with the Regner label and "Henry" marked on the outside. When you open the box you will find everything wrapped neatly in tissue paper for



Photo 1 - Regner 'Henry' kit with all of the parts layed out for inventory and inspection by the build crew.

added protection during shipment.

I first unwrapped each item wrapped in the tissue paper and laid everything out to make sure nothing was damaged. **(Photo 1)**. One thing I like about the Regner kits is they put everything that goes together in its own zip lock, clear plastic bag. The bags were not labeled but it is easy enough to tell what was in each bag and what sub-assembly they belong to.

The Kit and Assembly

After laying everything out, I sat down at my work bench to figure out the order of assembly. This was a pre-production model so I did not have any written instructions. Regner did provide photos of the "Henry" showing where each part goes. Overall the kit is easy to put together and great for a beginner, or even someone with live steam experience who never assembled a live-steam kit. All the metal parts are prefinished and partially assembled; there is no soldering, just basic plumbing, bending pipe work and connecting unions. **(Photo 2)**. Normally Regner sup-



Photo 2 - Build crew lays out the pre-assembled boiler fittings for assembly.

plies the basic tools to put the kit together. My pre-production kit was lacking the tools, however.

All the parts are made from brass and steel and the cab is made from a good quality, laser-cut wood, making assembly easier. Having put a few Regner kits together over the years helped me with putting the “Henry” together using only the provided photos. Overall, assembling the kit went smoothly and only took me a few days. The most time consuming part was glueing the wood pieces together and waiting for the glue to dry. If you're like me that's the perfect time to work on some other projects that have been collecting dust.

If you are familiar with the Regner “Konrad” you will find that the “Henry” has the same frame, gear and motor set up. The biggest difference is the Henry has a vertical boiler rather than the horizontal boiler found on the “Konrad.” Assembling the chassis was easy. Just matter of adding the axles

and wheels as well as the gears and motor. One thing I noticed with the Regner Easy Line locomotives was the lack of bushings or bearings where the axles and rods slide into the frame. I would recommend adding some flanged ball bearings or bushings to lessen the wear. The motor comes fully assembled and mounts onto the frame with two screws. The boiler was also easy to assemble. You have to add the pressure gauge, throttle, oiler and sight glass. The sight glass can be tricky if you never assembled one. Regner does supply you with an extra glass tube in case you over-tighten and break the first glass tube. On my kit I noticed the pre-drilled holes on the floor didn't line up with the boiler mounts, so I had to drill my own holes into the floor.

The wood cab goes together using glue. I use Titebond III to assemble the cab. The most critical part on the cab is making sure everything is square. The

A History of Backwoods Engines



The definition of backwoods refers to a remote or sparsely inhabited region, away from big towns and from the influence of modern life. A backwoods railroad is normally considered a small logging or mining operation that operates on rundown equipment, improvised engineering, and they tend to have a general charm that is associated with the backwoods. They also tend to be nostalgic with the old time steam, weathered buildings, tall pines and thick forest.

A lot of areas in the world, especially the United States and New Zealand, had railways that operated

deep in the forest. They tended to be poor or were too far from civilization to depend on supplies and parts. Most backwoods operations were focused mainly on logging and mining. Backwoods train operations had to be creative from time to time and build things with materials on hand, especially locomotives and cars. Most backwood operations used geared engines and would build their locomotives to suit their needs.

Even though the “Henry” does not follow any prototype, it does not mean something similar did not exist on some backwoods line. That is one of the advantages to modeling and operating a backwoods line. Anything built from scraps can fit into an old backwoods line, look plausible and still have that charm that is associated with a backwoods railroad. Doing an internet search will bring you to all kinds of backwoods trains both prototypical and non prototypical.

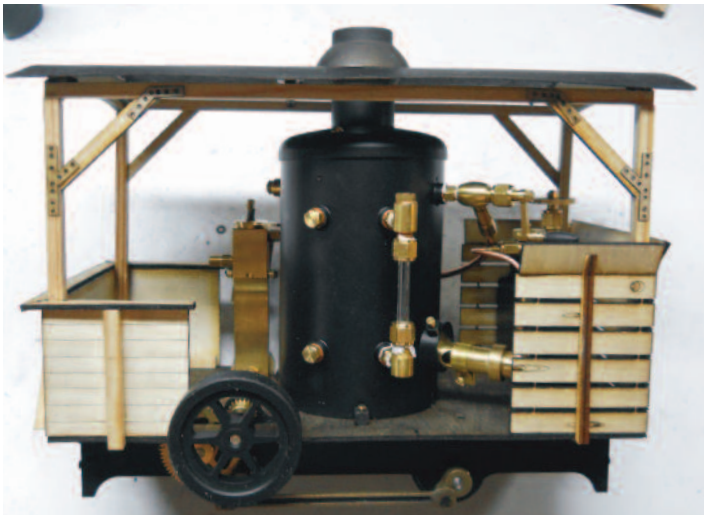


Photo 3 - Cab secured to deck with extra wood braces.

upper beam gave me some issues where it joins the vertical corner posts, as I could not get a strong bond with the glue, which caused the point of connection to be weak and easily come apart. I solved the issue by adding a small hex screw and then filing the head down. Adding the screw helped strengthen the area. The cab was meant to sit on the floor while the side posts extend down past the sides and main frame. The post extensions keep the cab in place. I was not happy with that current

setup. I prefer something more secure. I added some wood braces to the bottom sides, **(Photo 3)**, and used hex screws to secure the cab to the floor. I felt there was no need to have the cab loose since the roof comes off, giving easy access to the inside.

Specifications and Testing

The “Henry” has the same chassis setup as the “Konrad” and the performance is very comparable. The “Henry” is all gear driven by a single oscillating cylinder motor with teflon pistons. It is not self-starting — you have to turn the flywheel to get it moving. It has a forward and reverse lever on top of the motor. It has a vertical boiler with a butane-fired poker burner. The boiler can hold approximately 110 ml of water. It comes with the standard oiler disguised as an air pump and a pressure gauge. The gas tank comes with the the typical Regner gas valve but I replaced mine with the more common Ronson self-venting style valve.

The cab and floor is made from a good quality laser-cut wood, but you still need to be careful when handling the Henry as grabbing it by the wood parts can damage the cab. This is typical for most laser-cut wood cabs. It is best to hold it from the frame. The roof is made from thin wood sheet



and is easily removed to gain access to the inside.

Firing up

The first thing I did before firing the “Henry” up was to make sure all the fittings and nuts were snug. Then I oiled all the moving parts, added steam oil to the oiler and filled the boiler with distilled water. The boiler has a smoke stack that is easily removed and the boiler top has a lid that also comes off. The boiler top is snug on the boiler so a little force is necessary to remove it. This is how you access the pressure/fill valve. I always like to fill the boiler to the top and then remove 30ml of water. You can also add a Regner top-off system (Regner’s version of the Goodall valve) to fill the boiler and also refill while in steam. The final step in preparing the “Henry” is to fill the gas tank with butane.

Now it was time to test for any steam leaks. I turned the gas while holding a flame over the top of the smoke stack. My first attempt at lighting the gas failed. I could not get the flame to go back into the boiler. The flame was staying above the smoke stack like a candle. When this occurs the first thing I do is adjust the air collar. That’s when I realized the burner did not have an air collar and none was supplied with the kit. I had some brass around and was able to make an air collar. With the air collar covering a quarter of the burner hole, I was able to get the flame to stay in the boiler tube.

As pressure was building I noticed a few steam leaks. This is normal when you first put a kit together. The steam leaks were quickly fixed with a few turns on the steam fittings. The day of my test the temperature was in the 70’s with low humidity. The safety went off in approximately 6-7 minutes. Once the pressure gauge got to 4 bars, the safety went off and it was time to test the “Henry” out. Because the the “Henry” has a single cylinder it is not self-starting, so the flywheel has to be spun to get the “Henry” moving. After a few spins on the fly wheel the cooler water cleared from the cylinder and in typical Regner style, off the “Henry” went at its usual slow pace. The first test run the “Henry” ran sluggish and tight but this is typical until the cylinder and gears all wear in together. One thing I noticed while steaming was the exhaust (steam) shot straight out of the motor and out the back. I thought this was odd because it sprays the hot steam into and over the back side of the “Henry,”

causing any rolling stock to get soaked with condensation. Hot spray could also hit onlookers. I felt it would be safer if the steam was directed either out the roof or out the bottom. After I contacted Jay Kovac from the Train Department, he sent me some copper piping and fittings to add to the exhaust so I can extend through the roof. My average run time with one boiler filled was approximately 20 minutes. With the Regner top-off system you can get another 15 minutes of run time.

Final thoughts

After steaming the “Henry” a few times things loosened up and started running smooth and a little faster (went from real slow to slow). If you have the “Konrad” it is very similar in performance. It runs at a nice slow speed, is a great puller and handles grades with ease. The “Henry” that I got and tested was a **pre-production** kit so a few things were missing or not done properly like the boiler not matching up with the pre drilled holes on the decking, no air collar, no exhaust pipe and having a better way to secure the cab to the frame. All minor things in my opinion. The information was passed onto Regner — that way when they start producing the kits they will have the corrections made.

For anyone looking to add to their Regner Easy Line or their backwoods railroad, this locomotive will be a perfect addition. It is also a great locomotive for those that like to kitbash, the ideas can be endless. With a few added details the “Henry” will be right at home on the Kittatinny Mountain Railroad with the rest of my backwoods style locomotives.



Build Your Own Valve Gear Simulator

Workshop project



Text & Photos by Marc Horovitz

Troubleshooting made easier

I recently began designing a new locomotive, a generic 0-4-0T in seven-eighths-inch scale. I wanted this engine to have Walschaert valve gear but had never laid out this gear before. I did as much reading as I could – Martin Evans, Henry Greenly, the Internet, etc. – but there were still some points on which I was not clear. I worked out the gear as accurately as I could based on the information I had, but wasn't confident enough in my design to commit it to metal. I decided, instead, to build a working wooden model of it, two-and-a-half times bigger than the actual engine. This would take much less time, effort, and material and it would show me if I'd done my work properly or, if I didn't, where the errors might lay.

This article is not intended to be a how-to on building a valve-gear simulator. I just wanted to relate my own experience in the hope that it might help someone else in a similar predicament.

Valve-gear simulators of all types were common in classrooms and locomotive shops. They demon-

strated the relationship of the valve's action to the piston's, as well as how all of the components interacted with one another. They went a long way in helping people to understand how the entire mechanisms worked. The cylinder part was represented essentially in two dimensions as a cutaway, so that the actions of the valve and piston could be easily seen.

I drew all of the parts of my enlarged gear full size in an illustration program, then printed them out. Most of the simulator would be made of one-eighth-inch-thick Baltic birch plywood. A couple of the parts were made from one-quarter-inch-thick material, while the uprights that held the various parts in position were cut from three-quarters-inch plywood. The base was made from 5/16ths-inch stock. Many of the parts on the printed sheet and some of the wood can be seen in **photo 1**.

I made most of the rods one-quarter-inch wide, and pre-cut long strips of one-eighth-inch plywood from which to make them. I sprayed the back of my



Photo 1

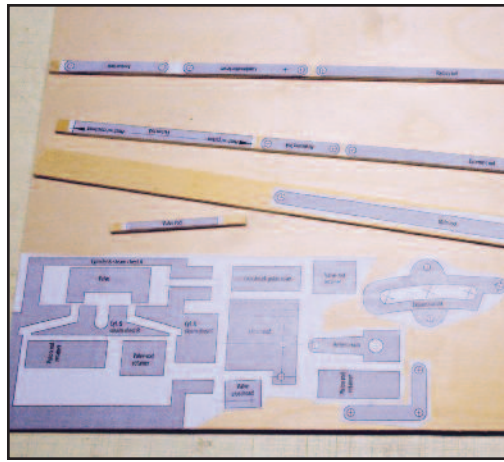


Photo 2

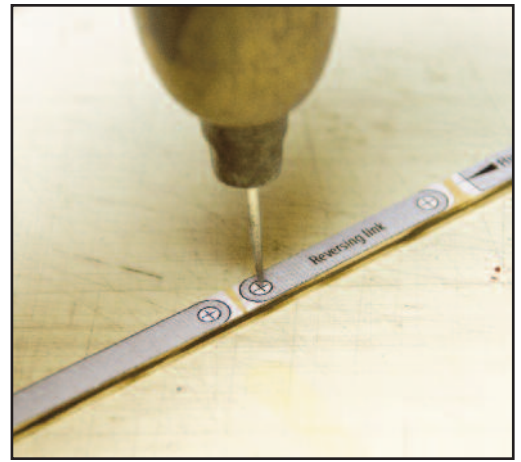


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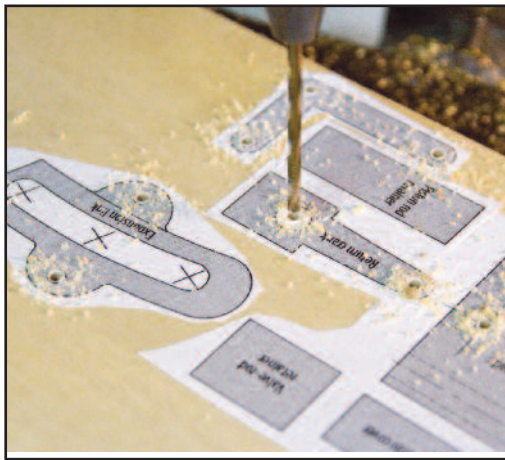


Photo 4



Photo 5

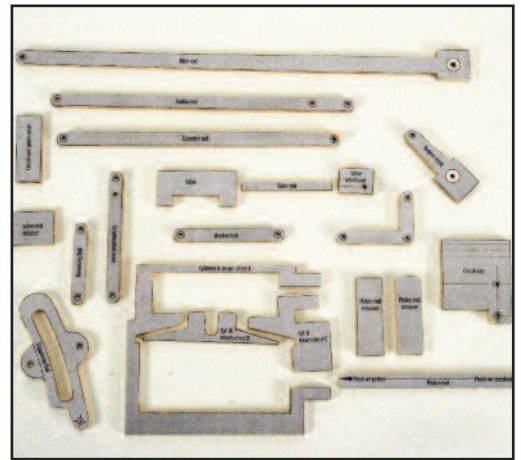


Photo 6

printout with spray glue, then adhered the various parts to the wood (**photo 2**). I marked all of the holes (**photo 3**) before cutting anything out, then drilled them (**photo 4**). I then cut out the parts on the scroll saw (**photo 5**). Several of the cut parts, with the paper still on, can be seen in **photo 6**.

I decided to pin the moving parts together with “headless” nails, cut to length with a jeweler’s saw (**photo 7**). The front part was drilled with a loose-fitting hole while the part to which it would be pinned was drilled with a press-fit hole. This way, parts could be easily and quickly assembled, taken apart if need be, and reassembled. There needed to be as little slop as possible in the system, as any play in the parts would accumulate between the driver and the valve and piston, throwing off their relative positions.

Once all of the parts had been cut out, I started assembling them with wood glue. Some of the sub-assemblies can be seen in **photo 8**. The drive wheel is purely cosmetic and bears no relation to the driv-

ers that will ultimately be used on the locomotive. Only the accurate positioning of the crankpin was important. The cylinder/valve assembly can be seen going together in **photo 9**. The anchor link and combination lever are also in place here. The curved expansion link is in **photo 10**. A very few parts needed to be rendered in metal, but I tried to keep these to a minimum.

Centerlines of the uprights that hold the various parts in position were carefully marked on the baseboard (**photo 11**). This was critical, as any error here would show up later and be difficult to rectify.

Once all of the pieces were cut out, the piston and valve sliding smoothly in the cylinder and steam chest, and the die block moving silkily up and down in the expansion link, I assembled everything for the first time. The base was held in my vise and all of the uprights were clamped temporarily in place (**photo 12**).

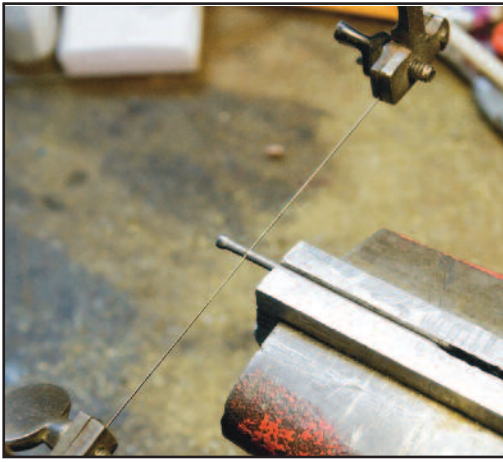


Photo 7

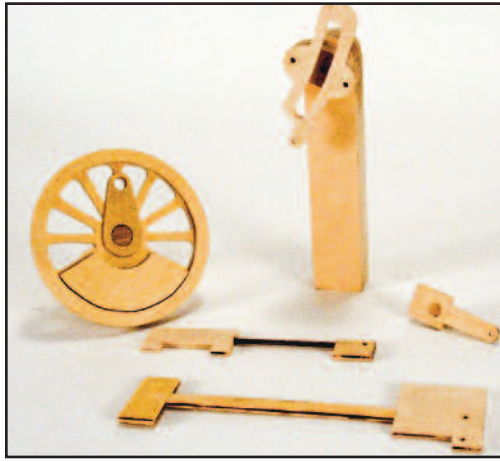


Photo 8

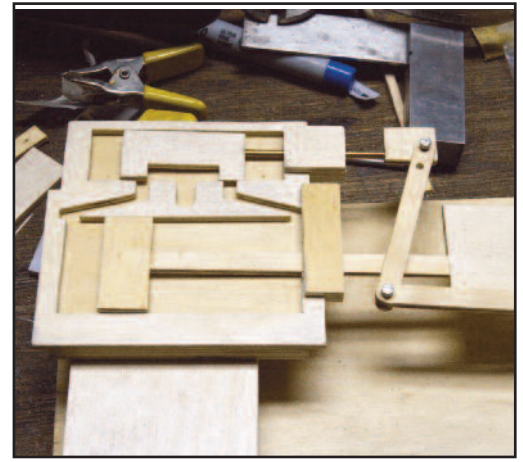


Photo 9

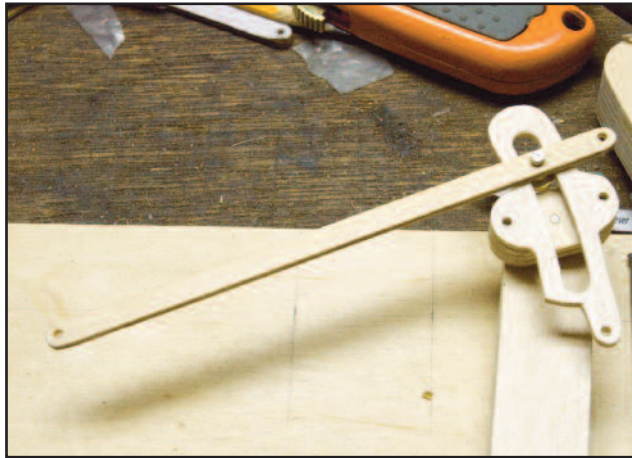


Photo 10

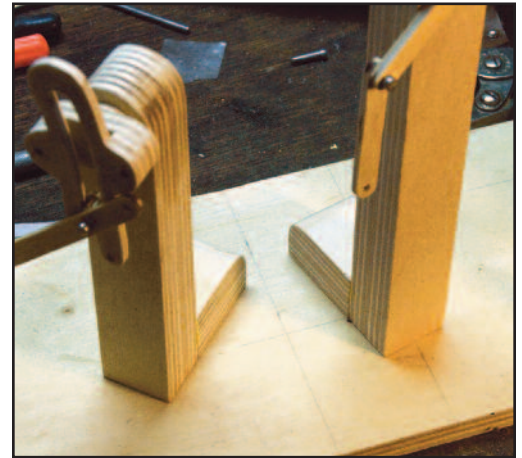


Photo 11

Testing the Valve-Gear

This was moment-of-truth time. I quickly discovered that all was not well. I was able to set the valve to work properly in either forward or reverse, but not both. I was not a happy camper, as there were no troubleshooting guides available on what to do if your valve gear doesn't work. I pondered the variables for a couple of days and, to make a long story short, determined that I had somehow made the eccentric rod too short. After taking some careful measurements, I made a new one, installed it, and life was good again. There was an additional error that I didn't bother to correct. For the mechanism to be in forward gear, the reversing lever must be pulled back. The bell crank would have to be reversed for this to be corrected, which was too much trouble.

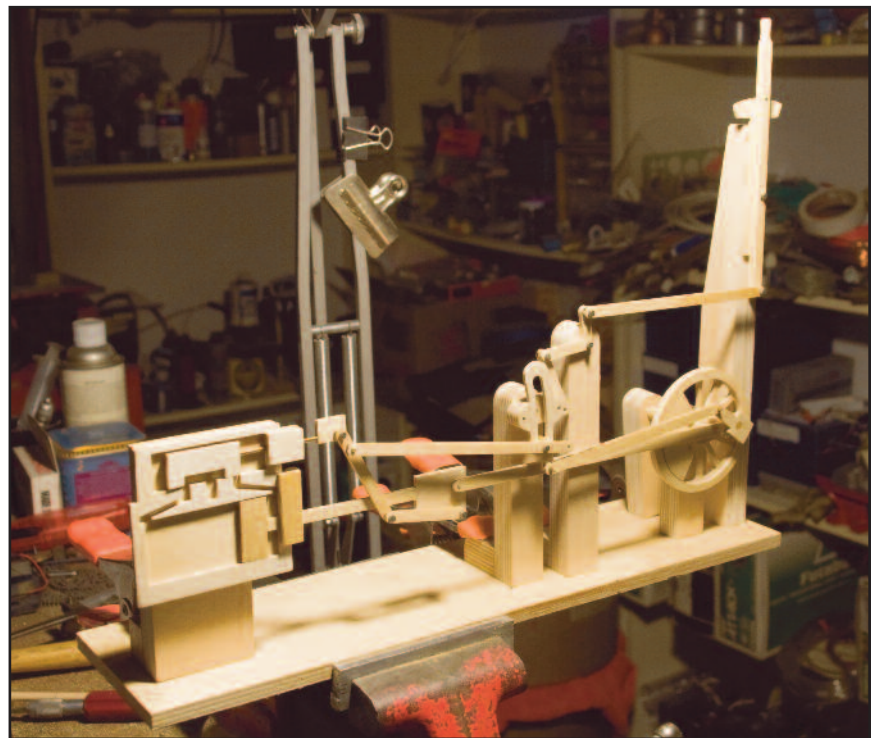
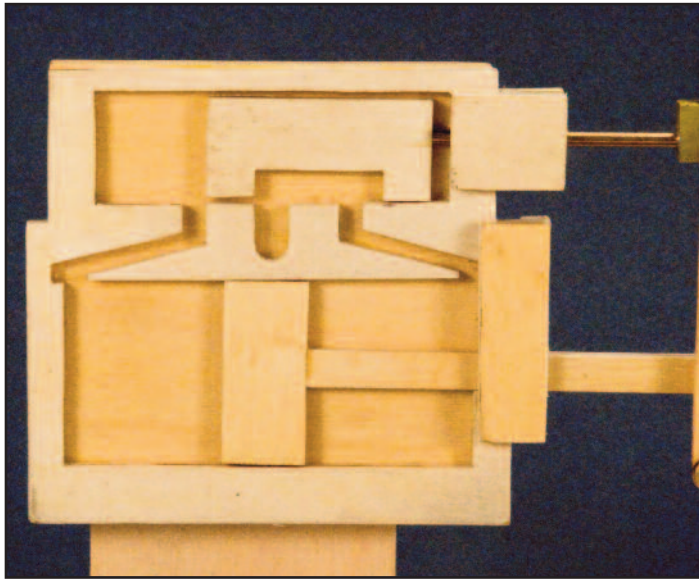


Photo 12 - Final assembly onto the baseplate

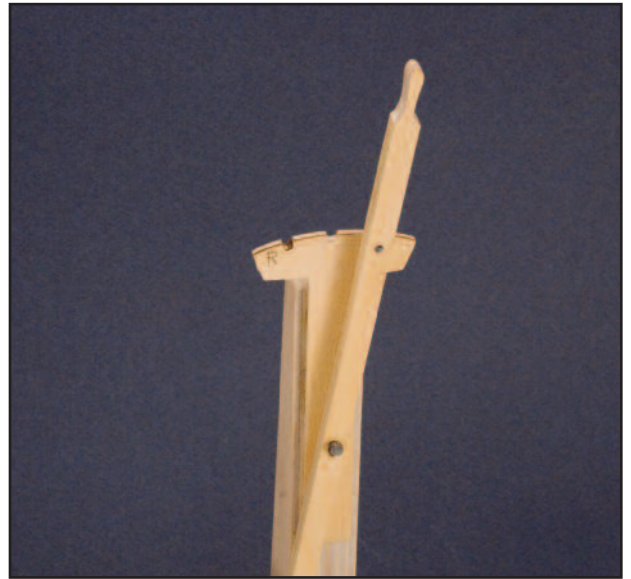
The bottom line here is that the simulator proved its worth. It showed up the error and provided me a quick way of making and substituting a new part. It also gave me the confidence to proceed with the real-life project in metal. Plus, the finished valve-

gear simulator, with everything glued into place and the drive wheel powered by a hand crank on the backside, is a cool artifact. Turning the crank and watching all of the parts interact is kind of hypnotic.

Assembly closeups



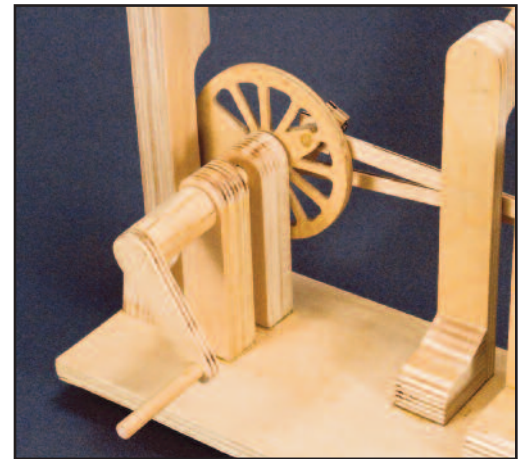
Valve Chest and Cylinder



Reversing Lever

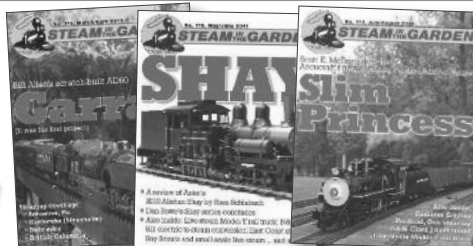


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1:13.7 SCALE Accucraft Decauville



Text & Photos by Carl Weaver

The fuel tank overheating problem was in the process of being addressed by Accucraft when we went to press with the review article in *Steam in the Garden Issue #151 September/October 2017*. Here is the current status. When the problem was recognized early on, Accucraft was quick to issue all registered owners a kit with additional insulation for the smoke box and for around the fuel tank. The smoke box solution worked, but not for the fuel tank, where there was not enough room in the side tank for more insulation. The “fix” only delayed overheating and did not prevent it.

Accucraft was speedy once again to offer a smaller replacement fuel tank which allowed for sufficient insulation. **(Photo 1)**. It was designed with the help of Gordon Watson of Argyle Locomotive Works, Australia. The new tank with more insulation reduced the overheating problem to an acceptable level. For

owners who may feel uneasy about their ability to install additional insulation and replace the fuel tank, Accucraft will do the work at no charge. Just contact Accucraft or your dealer to make arrangements for returning your locomotive.

However, running time is significantly shorter with this solution because the new tank is less than half the volume of the original – more size reduction than necessary in my opinion.

Several owners tried their own solutions instead of Accucraft’s, by substituting a Regner fuel tank which stands on the cab floor, by moving the fuel tank to a following car, or by custom building or fitting an aftermarket tank underneath the cab. One interesting solution was to merely cut off the mounting studs and turn the tank around, which keeps the front away from the smoke box and allows additional insulation to be inserted.



Photo 1 - Fuel Tank Comparison. Top: Original – Bottom: Accucraft replacement

Another interesting resolution to overheating by David Bailey of DJB Model Engineering, England, is to drill out the inside of the smoke stack. As fabricated, the stack has an inside diameter at the base of about 6mm with a 3mm exhaust pipe running up it. David Bailey's recommendation is to increase the inside diameter of the smoke stack. This noticeably increases heat flow up the chimney. He also cut away the inside and part of the bottom of the right water tank to allow for air flow.

I opted for the additional smoke box insulation and the use of Accucraft's replacement fuel tank. I also

drilled out the inside of the smoke stack to increase the inside diameter by about 3mm, and installed a chuff enhancer to prevent oil spray. I am not satisfied with the shorter running time even after topping off the fuel when pressure is reached, but I believe it will improve as the loco breaks in. In the near future, I am going to change to a custom-built under the cab floor tank to preserve the original running time. My only other criticism at this time is the overly sensitive fuel regulator, which apparently has an orifice that is too large. But, it is a problem I can live with.

Overall, I am pleased with my new Decauville.

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Building or Converting Climax Trucks Using Bevel Gears and Chain

Text & Photos by Les Knoll

This article is about two years in the making, and I know that the *Steam in the Garden* staff wonders what took me so long. I wanted to prove out the concepts and materials used in this project with a lot of track time before publishing any information about it.

If you want to build a Climax loco, either class A, B or C, gearing for the trucks has got to be one of the toughest parts. Even the simplified offset bevel or “skew bevel” gearing used in small scale models is extremely difficult to machine, and good luck finding a custom gear shop to do it at any price. The method of constructing a drivetrain for Climax trucks I describe here is useful for rebuilding trucks with worn gear sets, or for constructing new models. It can even be done without the benefit of machine tools.

In issues 94, 95 and 96 of *Steam in the Garden* (July/August 2007 through November/December 2007), I described how I built a Class B Climax using Roundhouse ‘Lady Anne’ components and trucks and gearing supplied by DJB Model Engineering. DJB Model Engineering produced a Climax kit in the 1990’s providing the modeler with truck components including gearing. Minimal machining was required on the wheels and no gear cutting was required.

I bought what must have been the last available set of DJB Climax truck and gear castings in existence in the early 2000’s at Diamondhead, and this was the nucleus for my Climax chassis. Unlike the vertical boiler Class A Climax for which the trucks and gearing were originally intended, I built a Class B two-truck, horizontal boiler Climax.

The project was a success, and the locomotive ran on my Rivendell & Midland Railroad for a number of years and made several appearances at Diamondhead and other steamups as well. This

would normally be the end of the story, except that the brass gears in the Climax trucks started to wear to a point where I could not get all four axles to transmit power. Adjustments were being made constantly in an effort to keep the wearing gear teeth in engagement. Even with regular lubrication, component wear has been an ever-present problem on my railroad. This could be because of a combination of a lot of hard running and abrasive dust from the ballast used on the railroad for as long as I lived in the Chicago area.

Several years ago I replaced the brass bevel gearing on my scratchbuilt Shay (SitG issues 66-67-68, August/September 2002 through January/February 2003) with equivalent steel gears from SDP-SI, a manufacturer of miniature gearing, and have had no wear problems since. Steel gearing seems to be the way to go for longevity. The commercially built geared steamers available today all use it. The conventional bevel gearing used in Shay locomotives is available commercially, but finding the offset bevel or ‘skew bevel’ gearing needed for the model Climax was impossible.

There are few custom gear manufacturers who will even attempt such a project. Those I contacted would charge more for new sets of gears than I would spend for a new commercially built live steam Climax. The prototype gearing on a Climax is called hypoid gearing, which is spiral bevel gearing in which the pinion axis and the driven gear axis do not intersect. The DJB gearing is the somewhat simplified offset bevel or ‘skew bevel’ gearing with straight instead of spiral teeth. Simplified or not, just try to find a gear set matching the specifications of the Climax gearing anywhere on the planet!

...continued on page 30

D&RGW C-25 2-8-0



Engineering Sample Shown

1:20.3 Scale, 45 mm Gauge
 Brass & Stainless Steel Construction, Coal Fired/Butane Fired (Ceramic)
 Available in Black Unlettered, #375 Black w/ Flying Rio Grande, and #375 Green Boiler w/ Moffat Logo
 Limited Production

TASMANIAN K1 GARRATT 0-4-4-0



Engineering Sample Shown

1:20.3 Scale, 45 mm Gauge
 Brass & Stainless Steel Construction, Butane Fired
 Available in Fully Lined Black, Plain Black, Works Grey

RUBY

**SANDY RIVER & RANGELEY LAKES
FORNEY #6 0-4-4**



Ruby #1, Live Steam

1:20.3 Scale, 45 mm Gauge
 Brass & Stainless Steel Construction, Butane Fired
 Available in Ruby #1, Ruby #2, Ruby Kit



Engineering Sample Shown

1:13.7 (7/8ths) Scale, 45 mm Gauge
 Brass & Stainless Steel Construction
 Butane Fired



SOUTHERN PACIFIC P-8 CLASS 4-6-2



Engineering Sample

1:32 Scale, 45 mm Gauge
Brass & Stainless Steel Construction, Alcohol/Butane Fired
Available in #2467 and #2472
Limited Production

PENNSYLVANIA E-6 CLASS 4-4-2



AL97-437 E-6 #460 Green, Live Steam

1:32 Scale, 45 mm Gauge
Brass & Stainless Steel Construction
Available in #1794 Green Lined, #460 Black and #460 Green, Alcohol/Butane Fired
Limited Production

MK1 COACHES



MK1 Second Corridor (SK), Maroon



MK1 Brake Corridor (BSK), Carmine & Cream



MK1 Second Corridor (SK), Chocolate & Cream



MK1 Brake Corridor (BSK), Green

1:32 Scale, 45 mm Gauge
Available in BR MK1 Second Corridor (SK) and BR MK1 Brake Corridor (BSK)

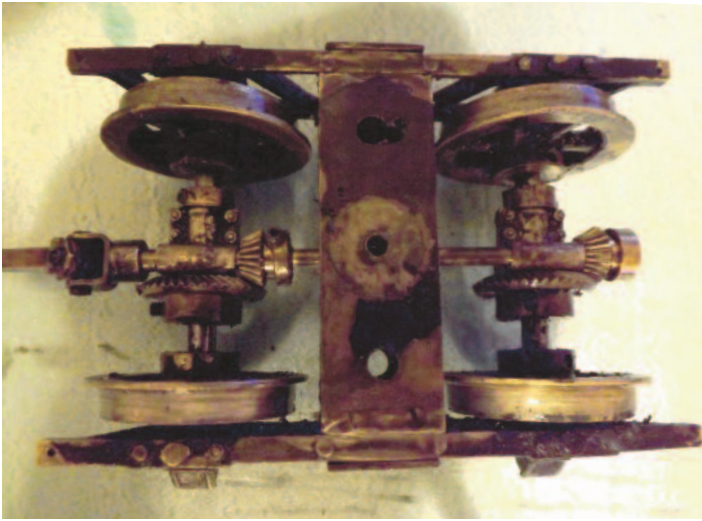


Photo 1 - Original truck with screw bevel gears.

I worked out several schemes for replacement gearing, but many of them required several sets of gears to do what just two pairs of offset bevel gears do. There are pictures on the internet from people that have built Climax locomotives with different combinations of conventional gearing as substitutes for offset bevel gearing, all of which are beyond the capabilities of my present workshop. Mr. Andy Ross built a set of Climax trucks using several sets of gearing as well as a chain and sprocket arrangement. This can be seen at:

http://www.ohio.edu/mechanical/stirling/andy_climax/climax.html.

With Andy's trucks as an inspiration, I finally came upon the idea of a single pair of bevel gears driving one axle on a truck, and a chain drive transmitting power from this axle to the other axle on the truck. This is not unlike how Heisler locomotive trucks work. In the Heisler, the driveshaft drives one set of bevel gears per truck on a single axle and side rods transmit power to the other axle. I simply substituted the drive chains for the side rods so I could retain the outward prototypical appearance of Climax trucks.

Photo 1 and **Photo 2** show a comparison between the DJB trucks with skew bevel gears and my conversion using straight bevel gears and sprockets.

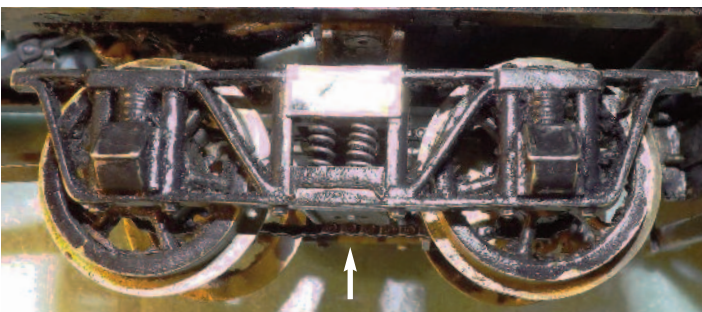


Photo 3 - Chain drive installed (arrow)

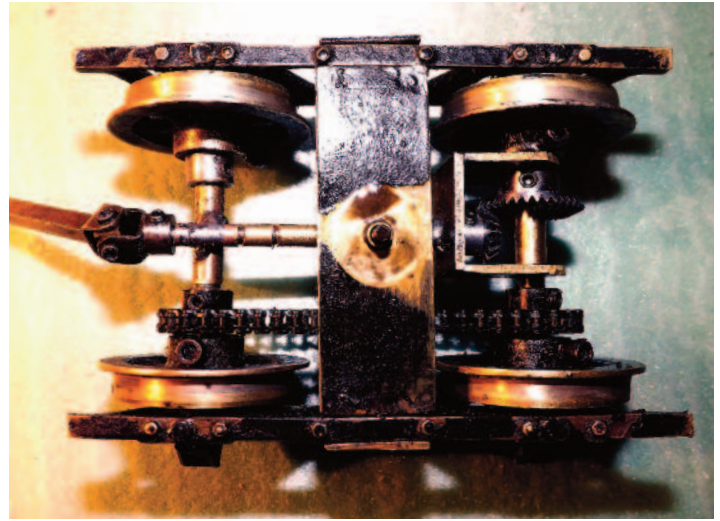


Photo 2 - Modified truck with chain drive.

Photo 3 shows a rebuilt truck on my Climax locomotive. The 'non-prototypical' chain drive is barely noticeable.

I found a set of 48 pitch steel bevel gears with a 2:1 ratio at SDP-SI, the same company that supplied the steel gearing for my Shay. The pinion is SDP-SI part number A1C3-Y48018 and the gear is part number A1C3-Y48036A. The bore on the gear matches the 3/16-inch axles of the DJB trucks. There is also an A1C3-Y48036B gear available with a one-quarter-inch bore. Another supplier for straight bevel gears is Boston Gear. They have similar gears although they are available in brass. There are also non-metallic gear sets available, and after my success with acetal chains which I describe later, I would be willing to experiment with them. The methods I use here can be used for other gear ratios and sizes as well.

The gearbox construction is shown in **Figure 1**. The completed gearbox is shown in **Photos 4** and **5**. The gearbox is made of three pieces of 0.060-inch x three-quarter-inch brass bar stock. The long driveshaft 'bearing' is a 5/32-inch brass tube soldered into the end of the gearbox. I worked out the gearbox dimensions from the center-to-center dimensions given on the SDP-SI website. After carefully laying out the holes for shafts using a digital caliper to scribe locations, I center-punched and drilled the holes. The two side pieces or 'ears' were positioned on the back piece using clamps and a 3/16-inch steel shaft passing through the side pieces (where the axle will eventually be placed) to ensure alignment. With everything as carefully aligned as I could do by hand, I soldered the three pieces together. I then removed the 3/16-inch shaft, inserted the gear, and put the shaft back in. I inserted a one-eighth-inch steel

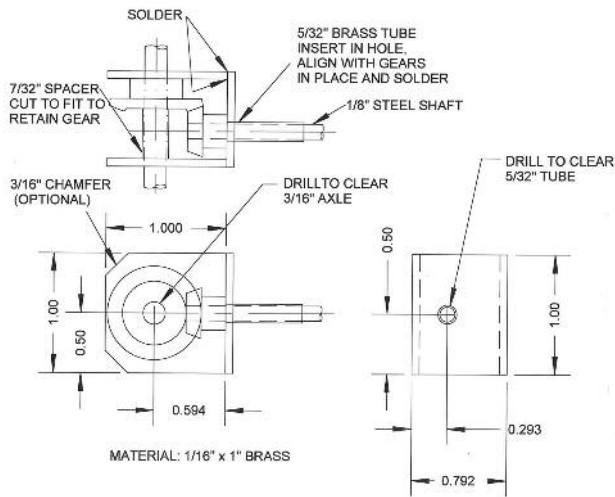


Figure 1 - Gearbox.

shaft through a piece of 5/32-inch tubing, inserted the tube in the hole of the back piece, and put the pinion gear in the gearbox, inserting the one-eighth-inch shaft behind it. With the tube and shaft correctly aligned, I could then smoothly drive the gear with the pinion. The 5/32-inch tube acts as both an alignment guide for the one-eighth-inch shaft and its bearing. The 48 pitch gearing is somewhat forgiving and a small amount of misalignment can be tolerated. When satisfactory alignment was attained and with the gears running smoothly, I soldered the brass tube into the rear of the gearbox. I deliberately left the tubing and shaft long. These would be cut to size later. I left the shaft longer than the tubing and put a one-eighth-inch collar on the end of the shaft to keep the pinion from running into the gear. With a 7/32-inch brass tube spacer over the axle to keep the gear in place as shown in Figure 1, the gearbox was complete.

The miniature sprockets and chain are available

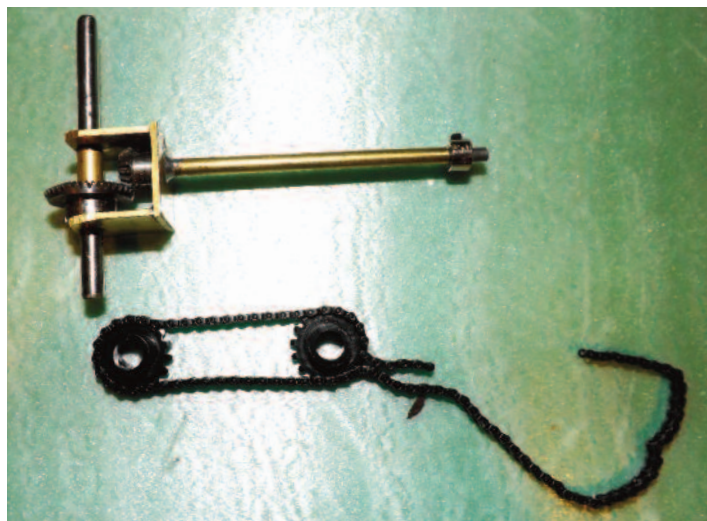


Photo 4 - Gearbox Components

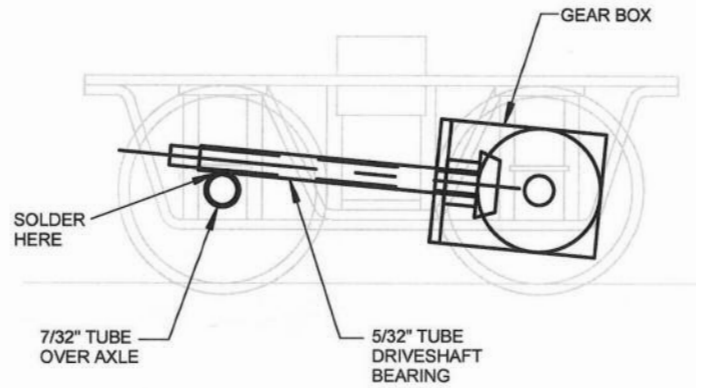


Figure 2 - Driveshaft support.

from McMaster-Carr. They are available in two materials, stainless steel and acetal. I used the acetal chain and 12 tooth sprockets: McMaster #64205K743 (sprockets) and # 64225K72 (chain). If you want to use stainless, the same section of the catalog gives numbers for these. There is about a 4:1 price difference between the acetal and stainless. I checked the temperatures on the trucks when my locomotive was running with its original gearing, and there was no significant temperature rise from ambient on the front truck which is closest to the firebox.

The sprockets are installed with the wheels and axles disassembled. Once they are back on the trucks, the chain can be installed. You may want to use a magnifier to join the chain links as these chain links are quite small.

A driveshaft support that mounts on the axle not driven by the gearbox is necessary to prevent the

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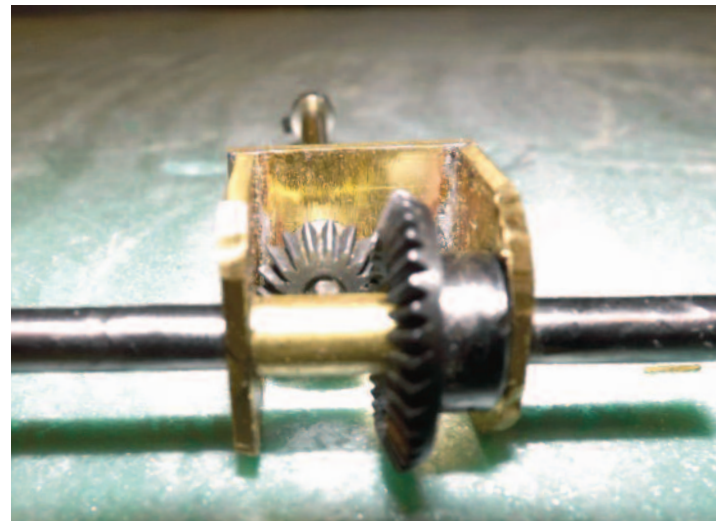


Photo 5 - Completed gearbox.



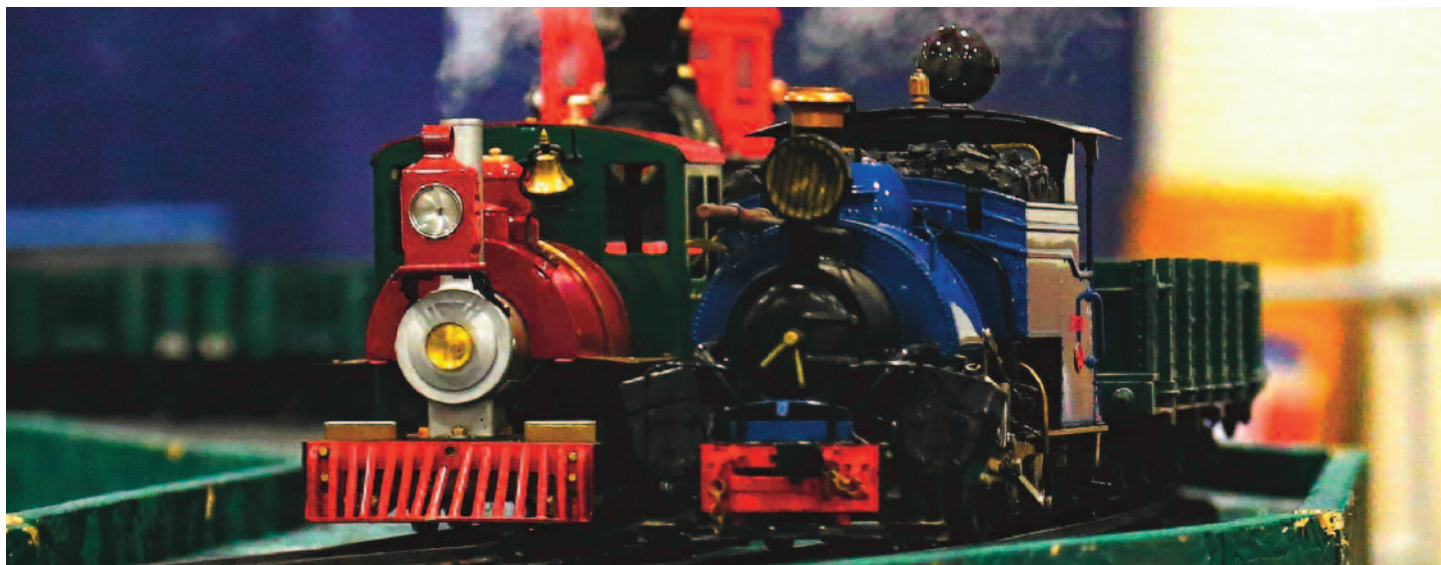
Text by Peter Ronney

There's no way they could fit a steam engine into something that small!" my father exclaimed at one of the many Queen Mary train shows. "It must just be simulated smoke and driven with an electric motor." My dad was proved wrong when he held his hand over the smoke stack and felt the heat of a real fire heating a real boiler making real steam to power real cylinders and

Photos by Rick Parker

making the real steam locomotive run. Originally I didn't think much of it, and in fact I don't remember the Queen Mary shows well. Little did five-year old Peter know he would be a part of the wonderful world of small-scale live steam.

I have been in this wonderful hobby for six years now, beginning with attending backyard steamups in the Los Angeles area when I was in fifth grade.



It's a tight squeeze rounding the curve as Nathan Smith's Roundhouse Sammie on the left edges past a Roundhouse B Class Darjeeling.

This hobby is much different from any other because of its small size – a niche within a niche. This allows for a community of friends to develop and create memories to forever enhance our everyday lives much more than any other hobby could do. In other words, small-scale live steam is the best hobby one can get into.

Ever since we (my dad and I) started attending the L.A. backyard steamups, we have made the six hour, 350-some odd mile trek north to the National Summer Steamup in Sacramento. Both the trip, and Sacramento itself, provide many museums and tourist railways to check out. Owens Valley is home to the Laws Railroad Museum, Yosemite Mountain Sugar Pine RR isn't far, Carson City NV is only a hop away, and of course, the California State Railway Museum is a must for any Sacramento visit.

We set out at about 11 am on Wednesday from Southern California. A straight shot was planned via Interstate I- 5 through the center of the state. This was the first time we would be at the steamup on Wednesday and also the first time the entire family came – usually it's just my dad and I. The car was quite packed with luggage from four family members and trains, it all just barely fit.

Our route to the steamup was a first as well. For one reason or another, there was a two-hour slowdown near Gorman so we ditched I-5 and made a one-hour 30 minute detour through Tehachapi via Lancaster. The desert around Lancaster had many windmills and a few mine-

head frames. More interesting than the road to Gorman in my opinion. When we got to Tehachapi, we stopped for lunch at Kohn's Bakery to get some sandwiches and pastries. We also caught a BNSF UPS intermodal train going through town while we were waiting. Unfortunately the train store in town closed a few months ago so there were no new cars to buy for the steamup. But that's ok, there's always the swap tables waiting for us at the steamup.

We finally got to the convention center at about 8 PM that night. As soon as I walked into the convention center, the familiar smell of denatured alcohol and steam oil greeted me. Not surprisingly there were two very fancy locomotives running on the big loop at that time. A class J and an express British locomotive of some sort.

The first thing I thought of was the swap tables. What gems could be sitting on those folding tables? The first thing that caught my eye was the Marx Atomic Steam Plant. I'd heard about these but never seen one in person. Nevertheless it was really cool. Of course there was the typical rolling stock and locomotives, but two in particular caught my eye. There were two Aster Renos on the table with the asking price of \$1850 on them. A fellow can dream, can't he?

With everything unloaded and stored at the table in the middle of the "Dwight's Way" layout, it was time to fire up! I got my Accucraft Forney out of its disintegrating box, prepped it, and lit it. No issues at all. This was the first time it had run in months so it seemed pretty happy just to be out of its box,



Bill Allen's scratchbuilt Lehigh Valley "John Wilkes" with its coordinated consist was a highlight of the steamup.



L-R: Rob Lenicheck, Bob Chapman, Jim Hadden, Matt Abreu and Kevin Schindler discussing all things 7/8ths. Note the size of the locomotives on the table!

I guess. I had replaced the batteries for the lights, tightened the screws holding the headlight on, and readjusted the position of the whistle under the frame just the day before we left. The light worked just fine, the headlight was pretty secure, but I didn't know how well the whistle would work. I had adjusted it so it wouldn't rub against anything and would float freely within the frame as the Regner instructions said. When the Forney finally came up to steam, I gave the whistle a toot. *PSSHSHSHSHSHSSSSPPPEEEEEEP!* It was one of, if not the, loudest whistles at the steamup. I was very, very satisfied.

The next day brought more steaming as expected. A new Accucraft E6, as well as a GS5, were running

on the big loop. The GS5 was something I've seen year after year but the E6 was new for this year. What a cool locomotive! I have an HO scale MDC Roundhouse 4-4-2 and I think it's really cool but a live steam Atlantic, just purely awesome. Something about the huge drivers seems interesting. Just a cool locomotive. Later that day, Tim Miller had a modified Aster Mikado running on the big loop. It might not seem too interesting, but what intrigued me was the headlight mounted on top of the smokebox. It was lettered for Southern Pacific, but I think it looked more like a Union Pacific or an earlier Santa Fe steamer.

Another notable steamer running that Thursday was Rick Lowland's Hawaiian consist. The locomotive was a custom painted Accucraft "Lynn" 2-4-2 outside frame British steamer which pulled two Bachmann EBT-style coal hoppers (mimicking sugar cane wagons) and two plantation style wooden passenger cars. It's not often when one sees a Hawaiian prototype in any scale, which made this a consist to remember.

No Summer Steamup would be complete without Bill Allen's newest project. This year he has created one of the most beautiful steamers ever built, the Lehigh Valley "John Wilkes." Not just the locomotive this year, but an entire set of heavyweights to match. Originally when I saw this I thought it was the "Black Diamond," but Carla Breitner corrected me and pointed out the "John Wilkes" inscribed on the side of the tender. It turns out that there were two of these streamlined 4-6-2



Author Peter Ronney gets to run his favorite -- an Aster "Reno". Photo by Carla Brand Breitner



Jim Gabelich fine tunes his Accucraft Canadian Pacific Royal Hudson for a turn on the track.

Pacifics built. The “John Wilkes” differed from the “Black Diamond” in that the “John Wilkes” did not have an observation car while the “Black Diamond” did. Bill’s train had the “John Wilkes” locomotive but the “Black Diamond’s” consist. The best of both trains put together. Either way, it was spectacular.

By about 6:30 in the evening, I was absolutely pooped! Time to run windups! A few years back, fellow steamer and windup enthusiast Joe Rothwell introduced me to the wonderful world of Marx and Hornby “O” gauge clockwork trains. Every year is a great opportunity to run the collection on the various “O” gauge loops. This year’s most interesting windup loco was a Marx reversing Commodore Vanderbilt from about 1937. It sure got some laughs when it ran backwards for a couple of laps!

On Friday, I sat in on the silver-soldering clinic, which I hate to admit was the first time I had done so. Most of the info flew right by me. Different torch types, hard soldering, soft soldering, so much I never thought I would know about soldering. Three critical points emphasized were keep it clean, use lots of flux, and don't apply heat directly to the joint. Also mentioned was to use screws to hold small parts together while soldering, which I never would have thought to do. In addition, in the words of Bob Sorenson, “Let the earth be your friend” or in other words, do not clamp anything together; let gravity do the work. I think the best quote came up when on the topic of flux. When Bob said “Anything water soluble is garbage, throw it



Ritchie Jacobs of New Orleans, LA checks his coal fired locomotive.

out,” a voice from the audience said in reply, “Unless it’s beer!”

Later that day, Joe Rothwell purchased an Aster Reno that needed work, so he turned Jake Dearing and me loose on it. It needed a drawbar, feedwater tube, feedwater connector, and one of the drawbar pins was missing. Trying to steam it



Members of the Gauge 1 Modelling Association (GIMRA) pose for their annual group photo showing their solidarity with their international membership. Photo by Carla Brand Breitner

up without a tube made all the steam blow out of the feedwater pipe. Instead of the check valve being in the end of the pipe like a real locomotive, it was in the tender, therefore charging the tube between the engine and tender and holding full boiler pressure. We thought the boiler was empty until

water started coming out of the blower pipe. Finally when we replaced the feedwater tube and got it up to steam, the engine almost wanted to run. Something seemed clogged preventing it from running. Oh well, maybe a little vinegar or something should free it up.



Recipients of this years "Ron Brown Memorial Enthusiasm Award" were (left) Kevin Schindler and (right) Jim Hadden.

No trip to Sacramento would be complete without a visit to the California State Railroad Museum (CSRM). We visited Saturday morning. CSRM has one of the best collections in the country; they have the last cab forward, two of the remaining three Central Pacific locomotives, many Virginia and Truckee engines, the last North Pacific Coast and Northwestern Pacific locomotives, as well as an extensive collection of model trains. They also have a particular favorite of mine, the ALCo RSD15 diesel-electric, stored in their back shop, where it has been for nearly 20 years. I had asked if it was possible to see it on display but unfortunately that did not happen. Instead there were a few antique motor vehicles, including a Union Pacific bus. The two coaches behind North Pacific Coast #12 are also favorites of mine. They have cream-painted trucks with red pinstripes, very very Pacific Coast-like. Something about them always intrigued me. Another interesting locomotive in the museum's collection, unfortunately on display, is their Baldwin DRS6-6-1500 in Southern Pacific tiger stripe. I say unfortunately because I do not believe the unit runs, more that it's just a pretty paperweight.

Possibly one of the most spectacular, or at least most spectacularly displayed, locomotives in the



Rob Lenicheck (center) preps Accucraft's new coal-burning C-25 for its first public run under the watchful eyes of Chris Sortina (left), Mark Johnson (right), and Channing Cheng (far right).



A "Yellowstone" locomotive under construction by Alan Reddeker.

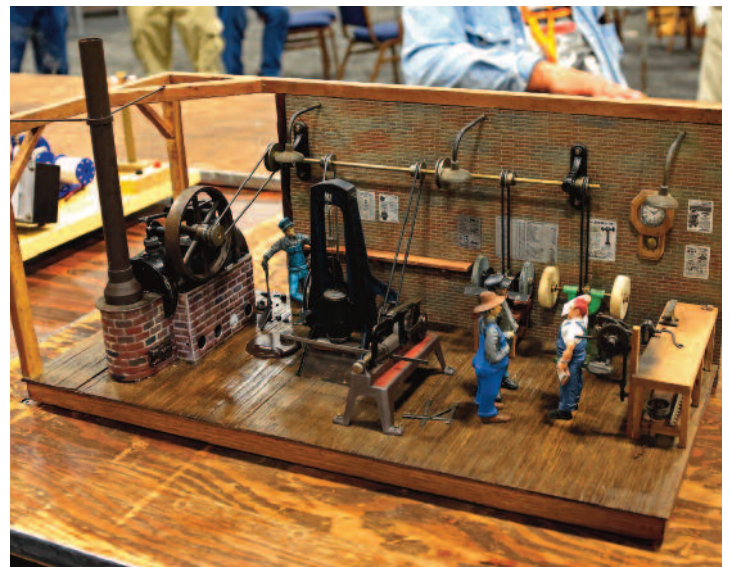


Attendees view the examples from the 3D Printing seminar and demonstration.



Swap table find! Joe Rothwell discovers an Aster Reno and swoops in for the purchase.

collection is Virginia and Truckee #13. Also called the Empire, #13 is an 1873 Baldwin 2-6-0 which is surrounded by mirrors so visitors can see every aspect of the locomotive. My favorite part of the Empire is the fact that it has a cross head pump. Cross head pumps went away from locomotives sometime in the 1880s, so I get excited every time I see one. If you have not been to the California State Railroad Museum, I'd highly recommend a break from the steaming to go take a look at the



A beautiful steam powered workshop by Tom Woolson of El Segundo, CA.

museum.

After our visit to CSRM, it was time for Stationary Saturday, the grand finale of the Summer Steamup. Plenty of Mamods, Wilescos, Jensens, and many others crowded the tables. In years past, Stationary Saturday was only about four tables worth of engines. Now there was a total of 10-plus tables jammed packed full of steam toys. The star of this year's show was Jake Dierking's beam engine, which unfortunately had the wrong type of gasket



Dealer Room was bustling with sales. Sonny Wizelman (center) and Dan Pantages (right) of SitG cutting some really good deals on back issues Andy Hielman (left).

which expanded when put under steam. Jake is a local friend of mine who tells me the back story behind just about everything. His beam engine was built from scratch sometime in the 1950s or 1960s and, presumably, it never ran due to the lack of gaskets. At some point it was dropped and that is where the Dierking family came in. In a collaborative effort, Jake and his dad have been trying to repair and restore the engine. The D-valve doesn't seat very well so it is a pressure hog. Another Dierking-owned marvel was the paddle-steamer inspired Stuart engine with condenser. That ran without a hitch on 5 lbs pressure, although the condenser needed to be emptied twice during the run.

Another favorite was Mike McKenna's Wileco flying machine. Only 100 of these flying machines were ever produced and they command enormous piles of cash. I felt pretty uneasy firing up my Wileco roller and trash compactor-like Weeden next to it; the last thing I would want to do is damage such a rare and cool steam toy. Not directly steam related, but close enough, were three of my calcium carbide-fueled carbide lamps. Only one was safe to run inside; the others have bad seals and could flare up. I'll fire those at my own risk far from anything else. The one that was working served as a torch to light other fires for engines.



No track time needed for this one. Steve Ciambrone sets up his Wileco Tractor for a run in the hall.

Stationary Saturday has been a blast every year; it's always the life of the steamup.

After the Stationary Saturday was over, it was time for the Dave Cole memorial run. Unfortunately Dave passed away in January this year. For the run, Glen Simpson ran Dave's Bellflower Cricket around the "Triple-R/Llagas" track, and Vickie-Marie Parker Ward placed a bouquet of flowers. Also mentioned was that Dave's ashes would be scattered in a coal burning 0-4-0 in the bay area. Dave did such wonderful things for



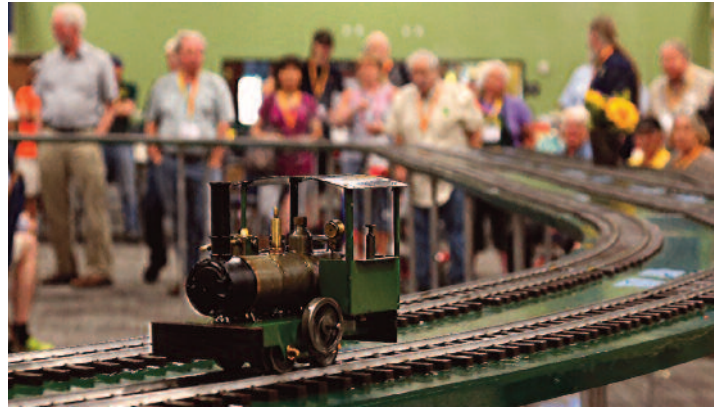
Stationary steamers take center stage as the Saturday Stationary Steamup gets underway.

this hobby, it was such a shame he had to pass so young. I'm sure he's steaming at the big layout in the sky. We'll miss you, Dave!

After the bar-b-q, it was time for the Ron Brown Memorial Steamup Enthusiasm Award. Back in 2011, the mischievous duo of Jim Hadden and Kevin Schindler tried to 'fix' the award by stuffing the ballot box. For their efforts, they were awarded with a fifty-pound bag of manure. But this year, "all was forgiven," and the pair was given the award in recognition of their irrepressible enthusiasm.

Then raffle prizes were handed out. The typical logging disconnects, flat cars, work cars, logging and ore cars, accessories and gift certificates were handed out. This year was pretty special in that we had six under-18 year old steamers at the show, so at the end of the raffle, all the under-18 year olds were given scale wooden crates donated by Dave Frediani. (Too bad there weren't any Hercules powder boxes left.) Door Prize donors included Accucraft Trains, Frediani's 7/8ths, Sunset Valley Railroad, Silver State Trains, Steam in the Garden, Stoke'm & Smoke'm, Steam Events LLC, The Train Department, and Triple R Services.

After the steaming was done, it was time for me to pick my personal favorite as the locomotive of the year for this steamup. This year was very tough, so much variety! One candidate was the Accucraft West Side #3 Heisler. Many were seen pulling logging consists or just by themselves, boiler or fuel bunker forward. Accucraft finally brought out their coal-burning C-25, and that got plenty of attention. Another candidate was the Pennsylvania 4-4-2 E6 Atlantic. Many were seen speeding around the big loops with freight or passenger cars. I find



Dave Cole Memorial Run. The "Cricket" owned by the late Dave Cole, previous editor of SitG and member of the NSS Team, takes a few laps in remembrance.

something about the 4-4-2 Atlantic very interesting. The big four drivers and all those leading and trailing trucks are really cool. Another could be Wuhu's 2-10-0 decapod. A few were speeding around the big loop and what a cool engine! The 10 small drivers with two leading trucks make it look almost like a centipede. I heard that out of one steamer's 40+ locomotive collection, the Wuhu 2-10-0 was his best runner.

And the winner goes to... the Aster Reno! Who would have thought that three examples of this forty-year old engine would show up on the swap table? Patrick McConnell bought one, Joe Rothwell bought another, and alas, the last one went back home with Chris Coley, its owner. These Renos are crude, finicky, difficult, and non-prototypical, yet there's something mysterious about them that makes them so desirable. Maybe next year I'll have the funds for one! I guess I'll have to get a job!

With the end of the steamup comes the farewell. Wishing happy, fun, and safe steaming for all, I hope to see everyone back at the steamup in 2018!



Larry Staver of Portland, OR attends to his Wuhu Western Maryland Russian Decapod.

Steamup Stats

In total, 132 Registered full steamers attended the steamup. 10 others were registered single-day steamers as well as 43 observers and lots and lots of guests. The steamup consumed the following:

- 90 gallons of distilled water.
- One hundred cans of butane.
- Seventy cans of isobutane.
- Seven gallons of denatured alcohol.
- One gallon of brake cleaning fluid (to keep the tracks clean)



Paradise East Steamup

Text and Photos by Scott E. McDonald

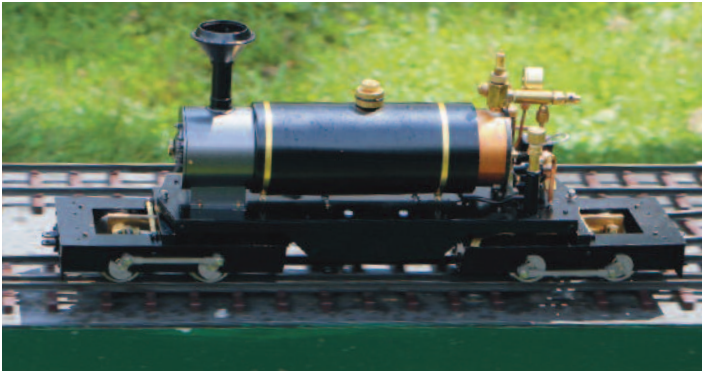
The annual Paradise East Steamup hosted by Marie Brown was another rousing success, with the wet weather that is the usual summer of upstate New York holding off during the primary days of the steamup. Marie continues the tradition she and her late husband Ron Brown, founder and

founder editor of *Steam in the Garden*, began back in the mid 1990's. With attendance from all over the Northeast region including Canada, the event showcased not only new additions to attendees stables, but new creations as well.

One of the new creations on display and in



Marie's beautifully maintained garden provides a colorful background for Harvey Cambell's Aster "Lion" as it chuffs around Tom Bowdler's portable track.



What do you make when you have a couple of spare Accucraft “Dora” chassis? - A freelance Garratt! We’ll have more on this project as it develops.

Steph Vaughn of Endicott, NY (left) and Ed McConnell of Palmra, NY taking a few turns around Tom Bowdler’s portable track.

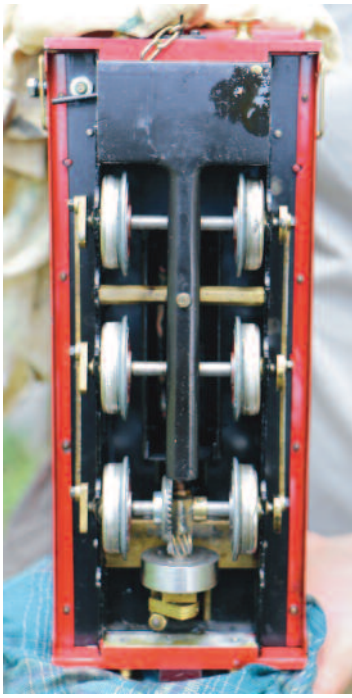
operation was the Project Toucan, a freelance Garratt style locomotive using Accucraft Dora chassis as the motive power. Project fabricator Mike McCormack of Hudson, MA brought the first unit, which is currently about 50 percent complete, to the steamup for its maiden trek. One minor steam leak was detected on its first lap, which Mike corrected once the unit cooled off. The Toucan performed flawlessly on its second attempt much to the delight of the onlookers, especially the team members.

Hergert several years ago. Larry is known for scratch building locomotives with interesting engineering, and the side tank 0-6-0 Rob now has in his collection is no exception to Larry’s ingenuity. Larry would fish around flea markets looking for inexpensive tooling that he could incorporate into locomotives, and he used a gear set from a Zebco fishing reel for this locomotive. With a single cylinder mounted vertically in the cab, the Zebco gears provided the appropriate gear ratio to keep the speed of the locomotive at a nominal rate. If you think you’d like to make something similar, just make sure you find the old

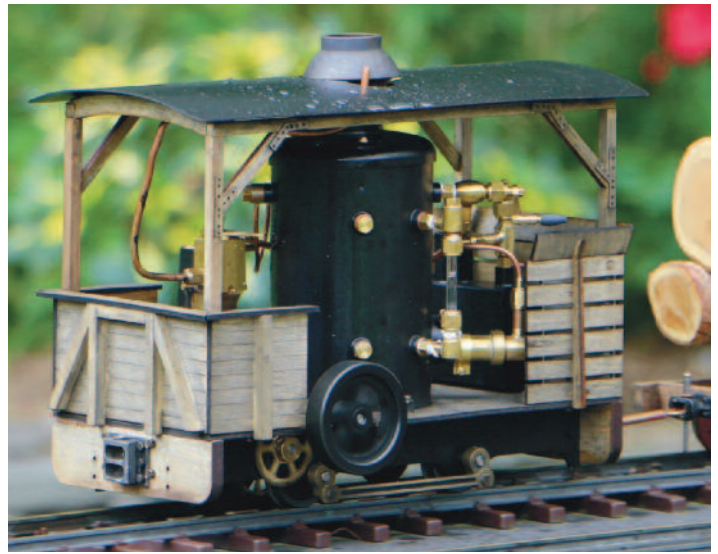
Rob Kuhlman of Pottstown, PA ran a unique geared locomotive that was created by Larry



Project Toucan Development Team. A freelance Garratt prototype locomotive using Accucraft “Dora” chassis for the motive power. From left to right - Jeff Young, Peter Foley, Michael McCormack, Tom Bowdler, and Charles Lawrence. Team members not present are James Barnett and Paul Hagglund.



What do you make when you have a Zebco fishing reel gear assembly laying around? You build a geared locomotive with a single vertical cylinder in the cab. Now owned by Rob Kuhlman, this unique side tank locomotive was created by Larry Hergert of Missouri.



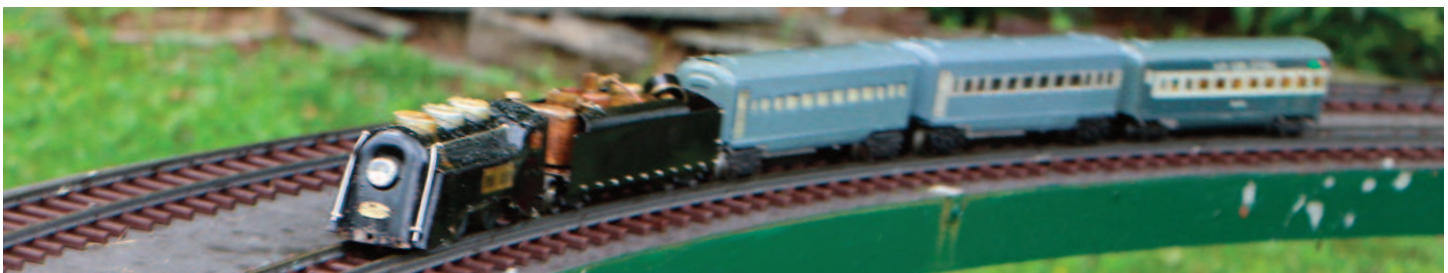
Fresh from the backwoods shop, Shawn Viggiano's Regner "Henry" takes a grand tour on the mainline of the large track. See Shawn's article on his assembly featured in this issue.

reels with metal gears.

In addition to the main line of the railway, Tom Bowdler of Rochester, NY brought his portable track so that additional steamup time would be available. Tom has done this for many years. His initial portable track was featured in *Steam in the Garden* September/October 2004, Issue No. 77, which this author used as a basis for his even smaller portable track. Since that time, Tom has moved up to an aluminum-framed platform available from Triple 'R' Services of Mt. Holly, NJ. All of the locomotives that could negotiate a four foot radius kept the track busy.

There were a lot of 32mm gauge locomotives at the steamup. The inside loop of the main track is dual gauged so we were treated to not only steamers but some clockwork as well. Carl Berg of Attica, NY had the Marx O scale conversion he chronicled in the *July/August 2008, Issue No. 100* of SitG. This model excels on the large radius curves of the layout as it runs at hyper speed.

All of the attendees had a wonderful time and there are not enough thank you's in the world to give to Marie for her generous hospitality. Here's to many more steamups at Paradise East.



(Top) Carl Berg's Marx O Scale Vanderbuilt conversion turns the mainline into a hyper-loop with it's exciting fast pace.

(Bottom) A Double Fairlie, built by David Taylor of Steamcraft, and previously owned by the late Tom Myers, now has a new home with Kendrick Bisset of Mountain Home, PA. Another notable previous owner prior to Tom was Jerry Reshew.

Climax Chain Drive - ...continued from page 31
 gearbox from rotating. See **Figure 2**. This is made from two pieces of brass tubing, one through which the axle passes (7/32-inch for a 3/16-inch axle), and the other a 5/32-inch tube which serves as a guide and bearing for the driveshaft. With the gearbox in place on the driven axle, put a piece of brass tubing over the axle that is not driven by the gearbox. Make it of sufficient width so there is minimum side-to-side play. Let the 5/32-inch tubing coming from the gearbox rest on top of the tubing on the axle. They should form a 90-degree angle. Solder the two pieces of tubing together. Now rotate the drive shaft using the collar that should still be in place. All components should freely turn. If not, check gear alignment and/or make other adjustments accordingly. If enough driveshaft play is provided in the final assembly, this arrangement should even accommodate spring trucks as it does on my Climax.

The steel drive shaft and 5/32-inch guide/bearing tube can now be cut to length to accommodate whatever universal joints are to be attached to it.

After nearly two years of running, the only maintenance on the plastic chain drive has been to remove a link due to chain stretch. If you use the

stainless chain and sprockets, stretch will most likely not be a concern. I have had no wear issues with the drive shafts or axles running in the brass tubing or in the brass gearbox.

The drawings included with this article are intended as a guide. If different gears and/or axle sizes are used, the parts will have to be revised accordingly. These parts can be made without benefit of machine tools, but anyone with a mill and lathe will have a decided advantage fabricating them. The gearbox design could even be modified to a single piece gearbox milled from a brass block.

The concepts explained here do not just apply to rebuilding DJB Climax trucks. They could just as easily be applied to turning almost any freight trucks into Climax trucks. Since the DJB Climax trucks went out of production, it has been difficult to scratch build these locomotives. The class A Climax used to be a popular building project. Suitable engines are still available from Graham and others, vertical boilers are available from Cheddar and horizontal boilers are available from Roundhouse. Using my method of building or rebuilding Climax trucks, this again could become a popular project. You could also try my methods for building a Class B Climax, too.

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Plastic Body, Metal Wheels

Project:

HOW I DID IT

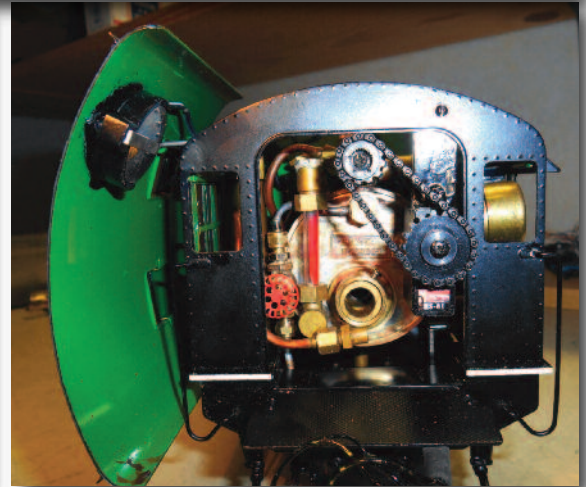
Author: Nicholas (Nick Jr.) Peluso

Project: Throttle R/C With Sprockets

1. Observation

This is my first attempt using chain and sprocket for R/C, I have previously used the link and arm method. I was inspired by Pete Thornton to try this method of using a chain and a sprocket instead. To secure the sprocket to the throttle, drill with #80 drill through shaft and pin with straight sewing pin.

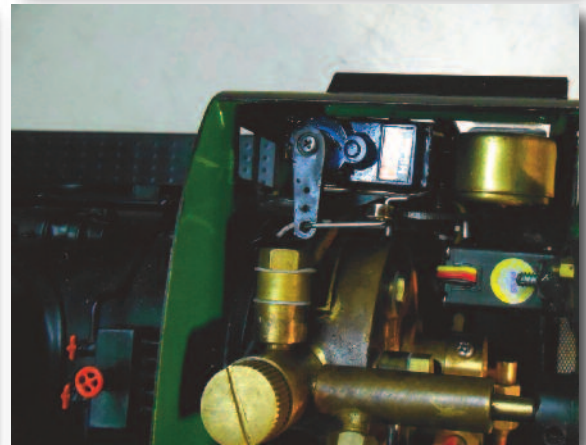
Photo 1



2. Preparation

I first had to re-route the piping and valve for the tender heater. The installation of the servos is straightforward. Using this method you can get more throttle than the arm method just by using different size sprockets.

Photo 2



3. Notes

Tender Heater: The pipe running the length of the tender is closed at the end and has several #80 holes drilled into it. With the valve just cracked the trickle of steam also adds mild turbulence to keep the water mixed. As an added benefit, the steam is turned back into water so there is no exhaust needed.

4. Materials

Sprockets:

1 - 12 Tooth

1 - 24 Tooth

Ladder Chain:

1227 pitch

Source: <http://www.servocity.com/>

Do you have a simple tip or quick afternoon project that you want to share? Send it in to us via e-mail at sitg@steamup.com. Make sure to mention it's for "How I Did It" - editor



CONTRIBUTOR BIOS

The magazine couldn't exist if it were not for the dedicated individuals who take time from the hobby to chronicle their endeavors, interests, and joy of live steam. If you get a chance to meet any of our contributors at a steamup, please thank them for their contribution.



Marc Horovitz - Marc has been interested in steam locomotives — both large and small — all of his life. In 1979 he opened the Light Railway Division of his existing business, Sidestreet Bannerworks, for the purpose of importing small scale live steamers in the U.S. Sidestreet Bannerworks was the original US importer of the Beck Anna and other Beck locos. Marc began writing the “Small Scale Live Steam” column for LIVE STEAM magazine around 1980, and continued on for five years or so, until Garden Railways magazine began to evolve. He has kit-bashed and built many steam locomotives.



Les Knoll - Les started his railroading experience with a Lionel F7 freight set at Christmas at age 6. This grew to a tabletop layout in the family basement, later to be supplanted by a theater pipe organ and a rock band practice space in his teens. Later in life the HO/HOn3 bug bit, and the first incarnations of his Rivendell & Midland Railroad, one of the first JRR Tolkien-based railroads in the US, took shape. The R & M moved outdoors with his discovery of live steam in the early 90's, and after two purchased locomotives, five scratchbuilt live steamers followed ranging from a 14 ton Shay to a 2-4-4-2 logging Mallet. The current Rivendell & Midland is in the back yard of Les's and wife Ruth's lake home in North Carolina. Les is a retired Forensic Engineer and a Registered Professional Mechanical Engineer.



Peter Ronney - Peter was born and raised in the San Gabriel Valley town of Monrovia, CA. Peter has been attending the backyard LA area steamups since he was 10, getting his first locomotive at the National Summer Steamup of that year. In addition to his Accucraft Forney and Roundhouse Leek and Manifold, Peter also has interests in vintage HO brass trains, Lionel and Marx O gauge trains, calcium carbide miners' lamps, vinyl records, 8 track tapes, and vintage radios and televisions. Peter is attending classes at Don Bosco Technical Institute in Rosemead and is planning to work for Verizon checking up on remote cell towers.



Sean Viggiano - Shawn Viggiano is from Wantage, NJ and has been into model trains all his life. His early collections entailed Lionel and N scale trains and by 2006, the dream of having a garden railway became reality. In 2010 his first live steam train, an Aristocraft 0-4-0, had its first run on the rails and he has been hooked ever since. “I like running mainly smaller geared steam trains like Regner Easy Line and Accucraft geared locomotives. They have a charm to them that works with a backwoods logging line. I enjoy sharing my garden train hobby with my wife and three kids”. Shawn currently works as a Park Police Officer for the NJ State Park Service.



Carl Weaver - Carl has been a passionate model railroader since the 1940s — his first train was a pre-war O-gauge Lionel followed by a Märklin OO set he received for Christmas in 1946 while living in Germany. His last and most significant electric setup was an 18-foot by 28-foot HO-scale layout dismantled in 1995. His interest in live steam started in 1976 with the purchase of an Aster "Old Faithful," followed by an SL-3 Mamod kit with a locomotive and two cars. Following his frustration with the Mamod and many aftermarket improvement parts, Carl purchased a first-generation Roundhouse "Billy" — the locomotive that really him me hooked on live steam. Carl has written three books about model railroading and for magazines such as Model Railroader and here in Steam in the Garden.



THE CUPOLA VIEW

Bye-Bye Summer - Hello Fall & Winter

By Scott E. McDonald



As I write this summer has come to a close and fall is starting to show its true colors. It was a rough summer with the loss of so many live steam friends. Steamups are no longer a place to go to just run trains but to make sure we take in every moment with our friends, enjoy each one's company, and to share a laugh or two.

Weather played an important part of late summer as our friends fought for their lives and well-being in southern Texas. As I write this, water is inundating the region and will undoubtedly still be a major issue as you read this. Please keep our friends in your thoughts and prayers.

On the good news side of things, our friends at Regner in Germany have completed the legal proceedings of their company restructuring following the loss of Manfred Regner in 2013. They announced the results on their website in late August. Business operations were transferred to Mr. Mischa Lechner as a result of the reorganization. Manufacturing continues and they have assured us that new products will be coming soon.

Sean Viggiano gives us a great look into his build of the Regner "Henry" which is a great way to jump into live steam. I am a fan of small locomotives, especially those that have a price-point that will appeal to those just starting out in live steam. Knowing that there will be future "Henry" production makes his article all the more timely.

I am asked at various steamups how I view the future of the hobby. This is answered in the article written by Peter Ronney. Peter wrote an outstanding view of the National Summer Steamup and shows that a younger generation is growing into the live steam community. My goal as Editor is to bring all the generations together with article contributors who continue to help us grow the hobby.

We completed our website upgrade, and if it looks like nothing has changed and you can get to all of the areas online, then we were successful. Internet hoodlums still try to push the limits of our security and we push back. We have updated a lot of the software that runs the backend and different modules. This now allows us to update to better versions with new functionality and better security.

My calendar is filling up with steamups for this winter, I hope to be able to see you at these in the near future.

Happy Steaming -- Scott

'Cupola view' is written by Editor Scott E. McDonald: you can contact him at sitgeditor@gmail.com or P.O. Box 1539, Lorton, VA 22199.



TIMETABLE

January 12-14, 2018 - Cabin Fever Model Engineering Show. Multiple Gauge One layouts available. Lebanon Valley Expo Center, 80 Rocherty Road, Lebanon, PA <http://www.cabinfeverexpo.com/>

January 14-21, 2018 — International Small Scale Steamup and Arts Festival, Diamondhead, MS. Info: <http://www.diamondhead.org>

July 5-9, 2018 — National Garden Railway Convention, Atlanta, GA. Self-guided and motor-coach tours of area garden railroads; clinics, vendor hall. Info: http://www.ggrs.info/Georgia_Garden_Railway_Society/NGRC_2018.html.

July 11-15, 2018 — National Summer Steamup, McClellan, Calif. Multiple layouts. Lions Gate room reservations: (916) 643-6222 (<http://www.lionsgate-hotel.com>). Info: Info: <http://www.steam-events.org> or call (408) 230-6716.

Regular steamups

Southern California Steamers. Contact Jim Gabelich for dates, places and other pertinent information. (310) 373-3096. jfgabelich@msn.com.

Crescent City High Iron. Steamups as necessary on an elevated backyard layout on Northern California's upper coast. Info: Don Cure, diamondd1947@msn.com.

On the Brink Live Steamers. Wednesday, and occasional weekend, greater Sacramento, Calif., steamups on elevated live-steam tracks at two locations, as well as special events. Info: Paul Brink, (916) 935-1559, paulbr@aol.com.

Puget Sound Garden Railway Society. Two steamups per month, one at the Johnsons' on the second Saturday and a steamup at a member's track on the fourth Saturday. Info: <http://psgrs.org/> or call Pete Comely at (253) 862-6748.

Michigan Small Scale Live Steamers (MSSLs). Info: <http://www.mssls.info>.

Greater Baton Rouge Model Railroad Club Open House and Gauge One Steamup. Info: Ted Powell, (225) 236-2718 (cell), (225) 654-3615 (home), powell876@hotmail.com.



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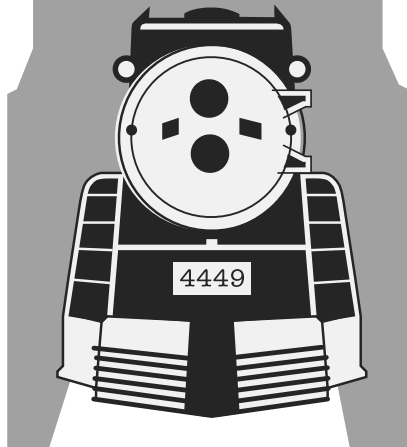
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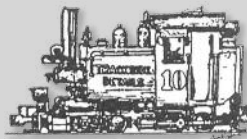
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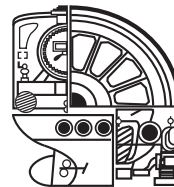
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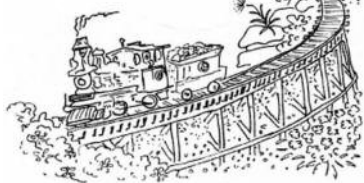
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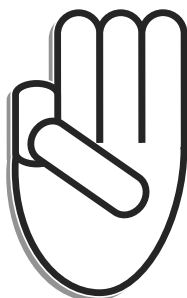
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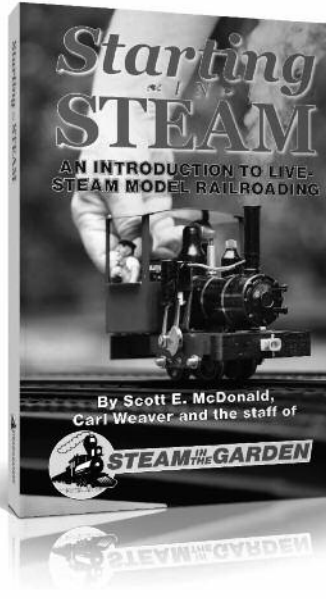
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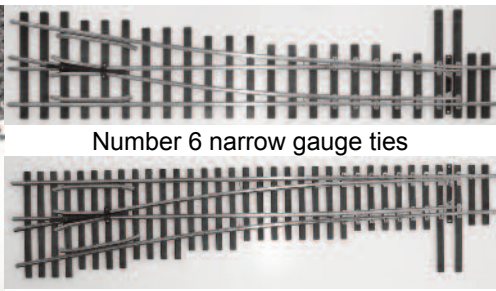
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Channing Cheng of Accucraft preps a model of the Tasmanian K1 Garratt 0-4-4-0. More to come on this model here at SitG.

Rick Parker Photo

Steam ... it's the real thing!



Small-scale live-steam railroading — using models that are anywhere from 1:13.7 scale to 1:32 scale and run on 32mm or 45mm track — is a fun hobby that has room for rivet counters and freelancers, prototype purists and lovers of whimsy.

Steam in the Garden is the only magazine devoted entirely to covering the small-scale live-steam hobby. Since 1990 the magazine has taken readers inside the railroads and inside the workshops of the leading modelers and shown how fun and easy live steam model railroading can be. Six times a year, *Steam in the Garden* gives subscribers a look at the current trends in the hobby and reviews the latest products available.

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Steam in the Garden has a new editor, but the magazine is sticking to its 20-year history of giving hobbyists the best information, illustrated profusely, in an easy-to-read format. Fill out the form below and subscribe today to *Steam in the Garden*.

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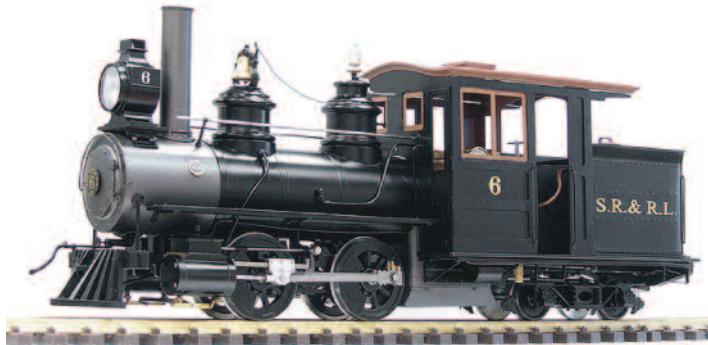
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Waybill -- continued from page 10

Accucraft: C-25 Delivery

Accucraft Model Trains has announced that the delivery of the C-25 2-8-0 or Consolidation type locomotive will be delivered third quarter 2017. Additionally, pre-orders are now being taken for their 1:13.7 scale Sandy River and Rangeley Lakes Forney. <http://www.accucraft.com/>



1:13.7 scale Sandy River and Rangeley Lakes Forney.

Accucraft Model Trains Photo

Llagas Creek Railways

Llagas Creek is now offering their 1:32 standard

gauge switches with plastic ties instead of the previous wooden ties. For more information see their ad and website at www.llagastrack.com.

Wuhu-Bowande: Russian Decapod



Three of the 4 versions of the Bowande Russia Decapod were on display at Sacramento steam-up. Bob Clark, the USA Agent for Bowande pointed out that each special road number, i.e., Western Maryland #1105, Erie #2450 and Frisco # 1630 has the details and locations specific to each model, the generator, headlight, bell, air-pump etc properly located.

The 4th version, the unlettered engine, will also have the brakeman "doghouse" on the tender deck so modelers can have that option for whatever of the other 30 roads they select to model.

Statement of ownership, management, and circulation

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f. Total Distribution: 887.

g. Copies Not Distributed: 213.

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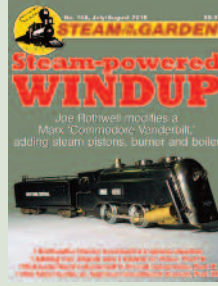
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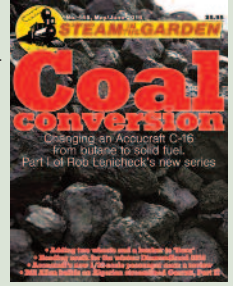
Vol. 26, No. 5; Issue 147/148; September/December 2016, Aster & Accucraft, 'Casey Jones' cars, Tasmania, Maine engines, Steam at the 32nd National Garden Railway Convention, Coal conversion: Part III and IV of six, National Summer Steamup, 'Dora' wheelie. Part III of 3, Project 23: scratch building the SR&RL 2-6-2, Stationaries: at National Summer Steamup



Vol. 26, No. 4; Issue 146; July/August 2016 Steam-powered windup: building a 'Commodore Vanderbilt' 32mm-gauge steamer • Portlandia: a photo essay from Staver Locomotive • Adding two wheels and a bunker to 'Dora,' Part II • Accucraft C-16 coal conversion, Part II • Algerian streamlined Garrett, Part III • Latest waybill: Wuhu, Roundhouse.



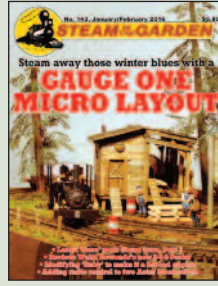
Vol. 26, No. 3; Issue 145; May/June 2016 Coal conversion: Changing an Accucraft C-16 from butane to solid fuel • 'Dora' wheelie • Streamlined Garrett: 1:32-scale scratch built steamer. Part II of three • Pleasing Pullmans • Locomotive diversity: International Small Scale Steamup in Diamondhead. • Latest waybill: Aster, Accucraft, Regner.



Vol. 26, No. 2; Issue 144; March/April 2016 FEF-3: Locomotive review and workshop project building Aster kit • Resurrection of Bowman steamer • 'Dordlebug': A rail bus out of a 'Dora' and a plastic rail car • Streamlined Garrett: 1:32-scale scratch built steamer. Part I of three • Steam in the scenery • Latest waybill: Flair, Bates obituaries, bearing kits.



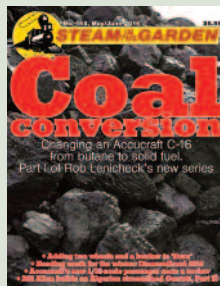
Vol. 26, No. 1; Issue 143; Jan./Feb. 2016 Micro layout: Building an indoor Gauge One track • Review of Wuhu Bowande Porter • Hot-rod 'Ruby': Hopping up a 1:20.3-scale engine • Rolex Asters: Adding radio control • Learning to model in tinfoil with a 'Dora' modification, Part III • Latest waybill: Llagas Creek Railways sold, U.K. distributors merge.



Vol. 25, No. 5; Issue 141; Sept./Oct. 2015 Mamod's latest: 'Brunel' • Learning to model in tinfoil with a 'Dora' modification, Part I • Live-steam group makes sixth appearance at Maker Faire • Adding mesh to Accucraft burner • Salute to Tom King • New products: Aster 0-4-0, Wuhu Bowande German 2-6-2T, Train Dept. with two 7/8ths-scale.



Vol. 25, No. 6; Issue 142; Nov./Dec. 2015 Sacramento stationaries: 2015 National Summer Steamup highlights • Review of Wuhu Bowande G5 • Building an Accucraft 'Ruby' kit • Learning to model in tinfoil with a 'Dora' modification, Part II • 7/8ths WWI car • Latest waybill: 1:32-scale U.K. 'Victory,' 1:20.3-scale 8-driver Saxon.



Vol. 25, No. 4; Issue 140; July/August 2015 Classy Class A Climax — Regner steamer and kit review • Big 'Dora' — Making it a 1:13.7-scale rail bus • Spinning metal • Cabin Fever • Speedometer • Latest waybill: Garratt from Roundhouse; in memoriam — Peter Jobusch; Accucraft UK goes with an African steamer; Mamod saddle-tank loco.



Vol. 25, No. 3; Issue 139; May/June 2015 Steaming amongst the magnolias: Diamondhead 2015 • Laser Loco: Aspinall 0-6-0 (series Part Two) • Workshop: sample tools and equipment • Wicks: A new material • Open cab 'Dora' • Latest waybill: Swiss, U.S. locomotives on the way; a new version of Saxonian in 1:20.3 scale.



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