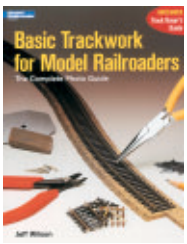
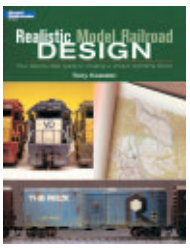
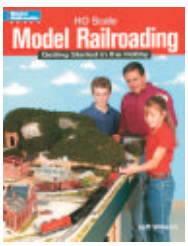
Stan Silverman, 23916 SE 25th Court, Sammamish, WA 98075 (www.StansTrains.com) has designed a computer software CD to convert common weights, measurements, grades, scale speeds, track curvature, figure size, and temperatures to their international or American counterparts. It even includes an interest calculator if you need a loan to buy an expensive model. The domestic price is $15.00; in Canada it is $16.50 (U.S. funds).

Deben LLC, P.O. Box 56, Somerville, NJ 08876-0056 (www.ModelingGuide.com) has issued a 2004 calendar featuring the best entries in their S/Sn3 Modeling Guide photo contest. The U.S. price is $17.95 plus $2.85 first class postage. International prices rise to $22.95 plus $5.50.

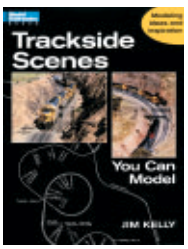
Precision Scale Model Engineering, 33 Harding Street, Milford, MA 01757 (www.psmescale.com) has sent a 2004-2005 catalog with 220 pages of modeling tools, materials, and supplies. The price is $12.00 in the U.S., $15.00 in Canada, and $17.00 elsewhere (via surface mail) but $12.00 is refundable when you place your first order. The catalog is an excellent resource and worth considering.

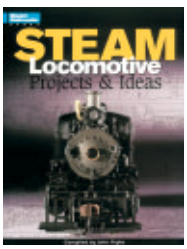






Kalmbach Publishing Company, 21027 Crossroads Circle, P.O. Box 1612, Waukesha, WI 53187-1612 has released five new 8.25 by 10.75 inch softbound books, each mostly in color and ranging from 80 to 96 pages: Tony Koester's *Realistic Model Railroad Design*; Jeff Wilson's *HO Scale Model Railroading: Getting Started in the Hobby;* Jeff Wilson's *Basic Trackwork for Model Railroaders;* John Pryke's *Steam Locomotive Projects and Ideas;* and Jim Kelly's *Trackside Scenes You Can Model. Steam Locomotive Projects* and *Trackside Scenes* cost $18.95 each; the others are $19.95.





SMALL SCALE PRODUCTS

Kadee® Quality Products Company, 673 Avenue C, White City, OR 97503-1078 has an all new, ready-to-run, HO scale Pullman Standard two bay, 2003 cubic foot, PS-2 covered hopper. As is the case with their forty and fifty foot boxcars, the models continue to set a new standard for fidelity and overall quality. Our debut Clinchfield sample includes notched roof hatch covers, single rung stirrup steps, a Universal handbrake, and self centering A-3 Ride Control trucks. Other features include see-through Apex running boards and brake steps, complete underframe and

brake detail, extensive and complete end detail including an AB brake system, scale size couplers, and integral molded narrow draft gear box. Any detail larger than precise scale is intentional, to meet NMRA standards. Each model includes variations to match the era and specific attributes of its prototype. No model railroad product is of higher quality or more accurate. Kadee's covered hopper has an MSRP of $38.95, comes in a limited number of each roadname, and earns our ultimate rating: It is beyond superb.

Bachmann Industries, 1400 E. Erie Avenue, Philadelphia, PA 19124 has a pair of gorgeous HO scale Spectrum® USRA steam locomotives. The first articulated their line, a 2-6-6-2, and a new heavy 4-8-2 offer detail and operational performance equal to or better than that of some brass imports. Each DCC ready model features a die-cast boiler and castings; injection molded plastic cab, tender, cylinders, and separately applied domes; exceptional detailing, fit, and finish; directional headlight; all metal valve gear, blackened or polished as per prototype; and detailed cab interior with sliding windows. Each sample operates beautifully with excellent, smooth slow speeds and reasonable top speeds. Bachmann seems to improve upon every previous model; the current pair has almost nothing a reasonable person could criticize. The Mallet is available in three roadnames as well as painted-unlettered. Its MSRP is $349.00. The Mountain is available in five roadnames and painted-unlettered. Its MSRP is $200.00. From overall appearance to specific

detail to operation, Bachmann's Spectrum® USRA Mallet and Mountain earn our highest rating. They are superb.

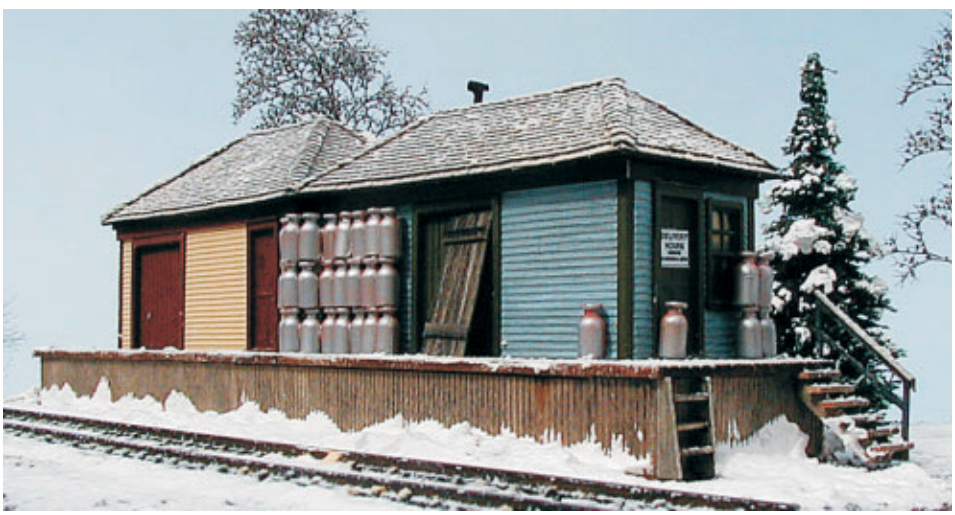
Life-Like Products, LLC, 1600 Union Avenue, Baltimore, MD 21211-1998 has sent samples of three outstanding HO scale products.

The ready-to-run Proto 2000 GP38-2 features the appropriate brake for the model's prototype: standard dynamic, extended range dynamic, or no dynamic. The standard Bettendorf or high adhesion truck sideframes also match those of the prototype as do early or late roof air filter boxes, radiator grills and roof fan spacing, the inclusion of drop steps, and the size of the fuel tank. Each model includes a package of eighteen such detail parts as footboards, snowplows, sunshades, wind deflectors, and m.u. boxes. The number boards illuminate and the headlights are directional. Nearly every detail is present down to sanding lines and alternator cables. As always, the paint scheme and graphics of our sample are superb and the finish includes such subtle weathering as matte finished walkways and lightly dusted air filter screens. Models are available in two road numbers each of eight road-names as well as undecorated. Our sample's operation is superb, especially at slow speeds, very smooth and quiet, and the locomotive can negotiate 18 inch radius curves. The MSRP is $135.00 each. The Proto 2000 GP38-2 earns our highest rating; it is superb.

Proto 1000's new ready-to-run Alco RS11 combines dual flywheels, eight wheel electrical pickup and drive, directional lighting, and substantial pulling power with excellent accuracy, detail, and finish. The locomotives are available in two numbers each of nine roadnames as well as undecorated. The MSRP each is $95.00. Our sample combines outstanding slow speed performance with a reasonable top speed and runs very quietly and smoothly. It is an outstanding product in every respect.

Finally, Proto 2000 now offers the previously available Mather stock car as a partially assembled "one hour" kit. As did the original model, the current kit includes Andrews or AAR trucks to match those of the prototype, blackened metal wheelsets with raised lettering, and Proto 2000 magnetic knuckle couplers. The models also feature closer to scale diameter handrails and grab irons along with the lines' always superb paint and graphics. Double- or single-deck kits are available as appropriate in two numbers each of six roadnames as well as undecorated. The MSRP is $17.00 each. They are excellent models.

Bollinger Edgerly Scale Trains, 45 Gilmore Street, Quincy, MA 02170 (www.besttrains.com) has released an HO scale kit of the Lisbon, New Hampshire milk shed as it appeared in the early 1900s. It consists of laser cut wood; injection molded doors, windows, and detail parts; and retails for $49.95 plus $4.50 postage per order. B.E.S.T. also has an HO scale kit of New Hampshire's Portland & Ogdenburg Sawyer's River depot for $54.95 plus $4.50 postage per order.



In Search Of The Ultimate Layout

People, pictures, and publication

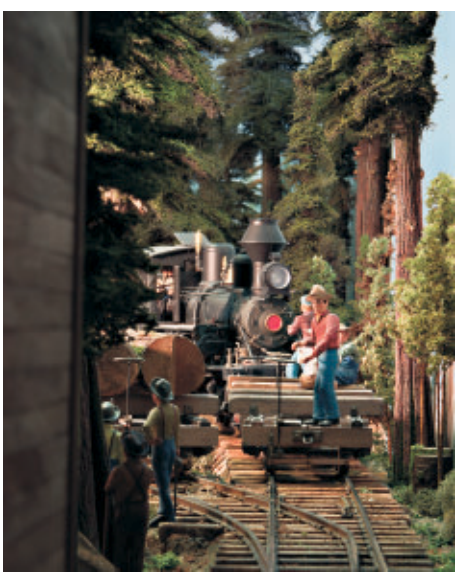
I HAVE JUST returned from shooting four layouts in Houston, my third such photo excursion in as many years. Now that Finescale Railroader comes out four rather than six times per year, I enjoy the luxury of visiting and photographing some of the finest narrow gauge and industrial layouts in the country.

Our first trip was to the San Francisco Bay area where I documented Dave Adams' On3 Rio Grande layout, Don McKenney's On3 logging line, and a 1:20.3 West Side Lumber Company enginehouse diorama by Bob Poli and Mike Gray. Last year we went to the Washington, D.C. region to shoot six layouts. The builders are Gordon North (On30), Larry Nyce (Sn3), Andrew Dodge (On3), Dick Patton (On3), Steve Sherrill (On30), and Bill and Mary Miller (On3 and On30). Half of those already have appeared in the Narrow Gauge or Logging, Mining & Industrial Annuals.

In Houston, I shot photos of Craig Raymond's Sn3 Rio Grande Southern layout, Gil Freitag's famous HO and HOn3 Stony Creek & Western, Barry Bogs' 1:22.5 scale indoor D&RGW layout, and Rich Schiffman's 1:20.3 scale indoor logging line. I also visited an excellent On3 layout by Craig Brantley still in the benchwork and roadbed stage. Each of our hosts has been gracious, generous, polite, intelligent, talented, creative, and generally fascinating.

For some reason, participants attending the National Narrow Gauge Convention voted down Houston's bid to host the 2006 convention. That is a shame because the layouts I visited, and a couple I was unable to photograph, are among the finest in the United States. And model railroading seems to be expanding in that area. New hobby shops have opened and modeling activity reportedly is brisk.

I hope the photos below will suggest a little of what you may expect to see in upcoming Finescale Railroader Annuals. Mostly because of the people I have met, it has been much more fun than work to shoot them.



Above: SCHIFFMAN

Above: BOGS

Above: MILLER

Below: FREITAG

Below: RAYMOND

A Pennsylvania B6sb Switcher

Large scale scratchbuilding

BY GARY MITTNER
PHOTOS BY THE AUTHOR
1:29 SCALE

OVER THE TEN years between 1916 and 1926, the Pennsylvania Railroad constructed 238 Class B6sb steam switcher locomotives. Their wheel arrangement was 0-6-0 and you could find them in major freight and passenger yards or in branchline service. Pennsy management liked the switchers because they negotiated the tightest industrial curves and exerted over 36,000 pounds of tractive effort. Throughout both world wars, they operated nearly everywhere on the Pennsylvania Railroad system.

Between the late 1940s and early 1950s, the B6sb Class slowly disappeared from service. A single leased B6sb switcher continued steaming as late as 1959 in New Jersey. But only one B6sb survives today. It is on display at the Railroad Museum of Pennsylvania in Strasburg.

Since the B6sb is among my favorite steam switchers, I decided to scratchbuild one in 1:29 scale. Construction was mainly from styrene, brass, and wood. An HO scale model provided the dimensional information and construction design.

I began with the cab; I built it from styrene and it went together easily. Then I built up the boiler, also from styrene. It was necessary to scratchbuild such details as the power reverse, air pump, pop valves, whistle, headlight, and numerous other boiler details. All rivets are Micro-Mark Mini Nails, each in its own predrilled hole. I made each of the three separate boiler courses individually, joined them together, and attached the subassembly to the cab-firebox assembly.

With the boiler nearing completion, I turned my attention to the chassis. The first job was the pilot. The pilot on the full size locomotive had a wood beam and steel hardware. My model also has a wood beam; styrene represents the steel parts. The chassis itself was the real problem. It had to be true and square for the model to work well. The initial plan was to build a heavy styrene main frame. When the model's operation proved less than satisfactory, I asked another modeler, Larry Cooper, to machine a new chassis from solid steel bar stock and drill holes for the axles. The new metal chassis provides the additional weight and precision necessary for smooth operation. Styrene frame overlays hide the inner steel block.

Next I used styrene and brass to build up the steam chest and cylinders. I drew and cut the front and back faces, then moved on to the cylinder heads. The crossheads and guides are brass; the valve gear rods are styrene. Once they were in working order, I filed them to shape and size. It also was necessary to make the two air tanks beneath the cab, build cab steps, and to complete the rear of the frame. That finished the main chassis construction.

The B6sb drivers are from a Bachmann 4-6-0 Big Hauler. While they scale extremely close to the prototype's 56 inch diameter wheels, they are imperfect: First, they have only eleven spokes rather than the proper fourteen. I felt the work necessary to rebuild them was too

great. The oversize counterweights are the second problem. Again, because of the drivers' design, I was unable to improve their appearance.

I pressed lengths of brass tubing into the steel chassis block to serve as axle bearing sleeves. When I inserted the axles, the mechanism ran very smoothly and freely.

A large can motor hiding in the firebox and a Northwest Shortline gearbox on the rear axle provide a smooth, quiet, powerful mechanism. I fashioned side and main rods from brass. The valve gear is a combination of parts from an Aristo-Craft 0-4-0 and scratchbuilt styrene pieces.

Finally, I built up the tender. Again, varying thicknesses of sheet styrene were the primary construction materials along with hundreds of individual Mini Nail "rivets". I chose to model a version of the B6sb tender with a coal bunker and wooden extension boards to give the model a little more character and detail. Proper B6sb trucks are unavailable in 1:29 scale so again it was necessary to employ modeler's license; I installed a pair of Aristo-Craft freight car trucks.

After working part time on the B6sb for over a year, I painted the model and applied decals. While the photos appear to show a completed model, such details as the backhead and tender underframe remain incomplete. Someday I will add the missing parts but, for now, I am very satisfied with my first attempt at scratch-building a 1:29 scale Pennsylvania Railroad switcher.

PARTS

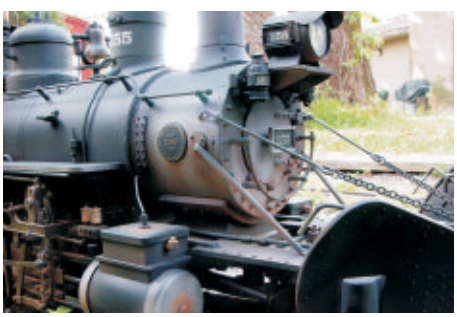
Evergreen sheet styrene (0.010-, 0.020-, 0.030-, 0.060-, and 0.080-inch)
Evergreen styrene angle, half round, strips, and tubing
K&S brass angle, rod, tube, and copper sheet
#1431 Micro-Mark Mini Nails (approximately 1,700 pieces to simulate rivets)
Aristo-Craft 0-4-0 switcher for domes (modified), generator, bell (modified), valve gear, stack, and ART-29101 freight trucks (modified)
Bachmann Big Hauler 4-6-0 drivers
Kadee® 820 couplers

I also want to mention the Gallery of Trains in Miami Florida. The owner, Bill Box, offered some special PRR detail parts including rivets, hex head bolts, nut-bolt castings, PRR coupler lift brackets for the tender, and great looking PRR "claw foot" markers for both locomotive and tender. Other available parts include PRR handrail stanchions and smokebox front.

Note: Gary Mittner is a Modeling Committee advisor for the Pennsylvania Railroad Technical and Historical Society. Their website address is http://www.prrths.com.

Gary Nichols, from Brandon, Florida extensively modified a 1:20.3 scale Bachmann outside frame 2-8-0 into a fictitious RGS "C-20, Number 355". The most noticeable changes include Accucraft Trains C&S snowplow, K-27 classification lights, smokestack, tender doghouse, and couplers. A Trackside Details headlight bracket repositions the light. Gary reversed the position of the bell and sand dome. Trackside Details also provided the sand dome lid and cab arm rests. Ozark Miniatures details include boiler steps, auto-ringer bell, tools, number board, plow brackets, drains, and gladhands. Precision Scale Company made the lagging clamps and automatic firebox door. The crew is from SLM.

Gary lowered the tender, added safety chains, and raised and shortened the coal load to accommodate the doghouse. He also lowered the backup light. Other details include Trackside Details rerail hooks, Ozark Miniatures rerail frogs and brake-wheel, and a Tomar rear classifcation lamp. The decals are from Larry Larsen.



Andreas Becker, from Hagen, Germany extensively modfied a 1:22.5 scale LGB Colorado & Southern Mogul and rolling stock to create a credible train from the 1930s. It operates on a modular layout with handlaid rail and individual wooden ties.

Andreas replaced most of the locomotive's details with commercial metal castings from Trackside Details and Ozark Miniatures. He repainted the rolling stock and weathered each model with an airbrush and powdered pastel chalks. Andreas also shot the photographs and digitally enhanced the images.

Dwight Ennis, from Milpitas, California writes, "Here is a 1:20.3 scale backwoods sanding facility I finished last August. I scratchbuilt it from scale lumber I cut myself. I based the design on a Sequoia O Scale kit. A scratchbuilt water tank will replace the plastic kit in the background and one or two small logging bunk houses on skids will complete the scene."

Bill Welsh, from La Luz, New Mexico photographed a long freight train crossing the trestle on his outdoor layout. The locomotives are from Accucraft and the freight cars from Hartford Products. Bill modified and weathered all the models.

FINESCALE RAILROADER's Mac McCalla received one of Aristo-Craft's first 1:29 scale GE Dash-9 models. Mac has added detail to the pilot and trucks along with light weathering.

Ed Morris from Richmond, Virginia photographed Memaw Creek Lumber Company Climax Number 4 shunting a water car at the company's logging camp. He created the image on an indoor diorama with a 1:20.3 scale Bachmann locomotive and an LGB tank car.

Ed also enhanced a trio of 1:20.3 scale Bachmann side dump ore cars following suggestions by Gary Watkins and Dave Watters in the March 2000 **Finescale Railroader**. He distressed the sides and hand painted the models with Polly Scale railroad colors.

Kitbash A Water Car

Inexpensive and realistic

BY CHRIS ROGERSON
PHOTOS BY JOHN O'BRIEN
1:20.3 SCALE

Sometimes the least likely subject may result in a surprisingly good model. You just need enough imagination to realize it. For example, I found a very inexpensive Hartland Locomotive Works "Mini Series" large scale kit, with a few modifications, easily converts to a credible 1:20.3 scale industrial water car. My approach involved nothing more than trial and error and common sense. In a matter of hours, the project was ready to enter in the 23rd National Narrow Gauge Convention model contest.

The Car Body

I chose the gondola as the basis for my kitbash but Hartland's flatcar might be a slightly better choice since all in the series have the same plastic underframe. I removed the molded details and cut down the coupler mounting brackets with a Dremel motor tool and #11 hobby knife. I removed any trace of flashing from each surface, assembled the car, and installed Ozark Miniatures link-and-pin couplers.

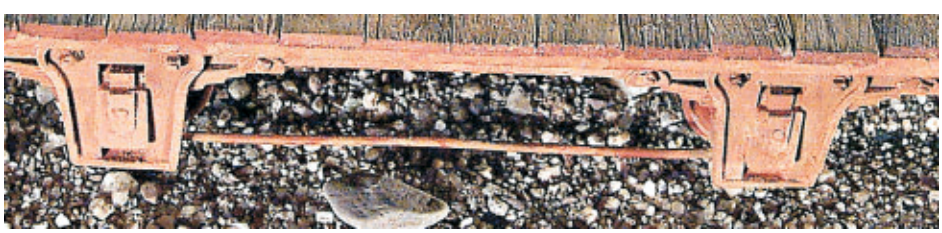
I painted the model with Oxide Red spray primer (available from Wal-Mart for less than a dollar). It dried in the Arizona sun for 45 minutes before I wet sanded the car. I applied a second coat of paint the next day.

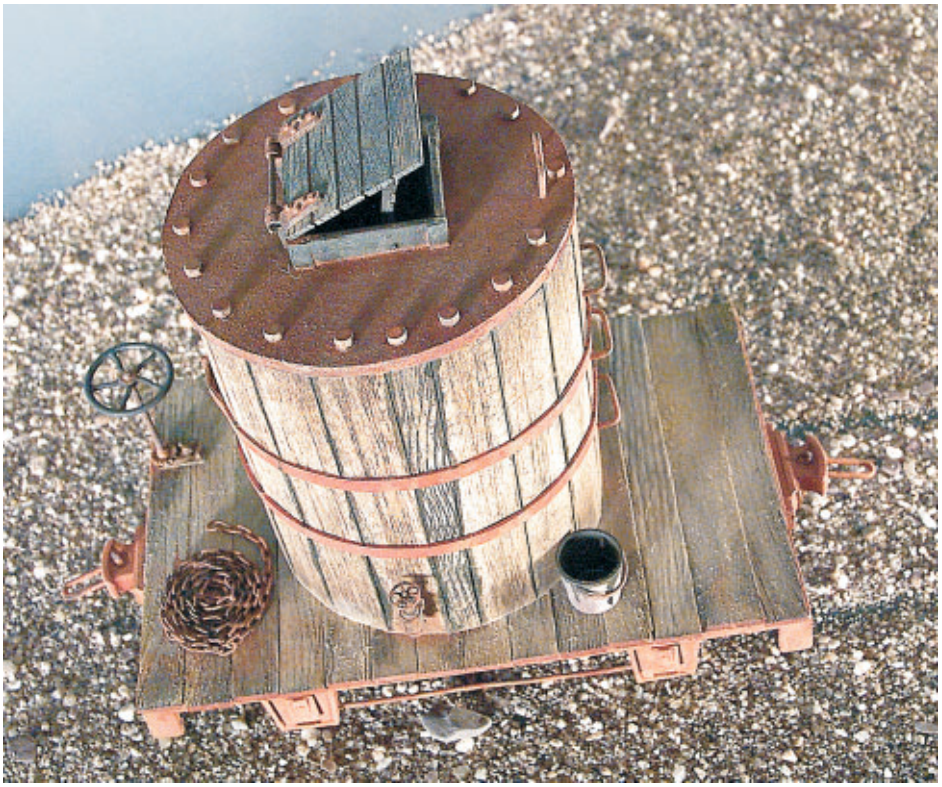
Popsicle sticks cover the flatcar deck. I also replaced a section of the flooring with 1/16-inch thick basswood to represent a repaired section. I cut the planks to slightly different lengths to achieve a rustic effect and lightly scored each with two different razor saws and the #11 knife blade. I kept it subtle, though, to represent a recently rebuilt older flatcar, something many logging and mining companies did to save money and extend the life of their rolling stock. I used Xtream3 Bondini CA cement to fasten the planks and detail parts.

Before adding the blackened metal wheelsets, I decided the water car needed additional bracing. I found some brass rod in my scrap box, drilled a small pilot hole through each journal box, and cut two rods to fit. Once the rods were in place, I lightly sprayed them Oxide Red. The rods seem give the car a little more character.

The Tank

Finding tubing of suitable diameter for the core of the tank was difficult; the flatcar is so small, it has limited space for a water tank. I tried soda, peach, and potato chip cans. Nothing worked until a trip to Home Depot turned up a PVC sprinkler system coupling sleeve. (I had walked nearly every aisle, fitting different cylinders onto the plastic car body, hoping for a





PARTS

Hartland Locomotive Works “Mini Series” 15,000 gallon gondola kit
Popsicle sticks and 1/16-inch thick basswood floor planks
Blackened metal wheelsets
Ozark Miniatures
OM-06EB link-and-pin couplers
OM-119 (alternatively OM 141 or OM-141-2) tank car hatch
OM-127 boiler check and stop valve
OM-12 brakewheel and lock paw
OM-79 water bucket with brass handle

good fit and aesthetically pleasing appearance.) I purchased two sleeves, glued one above the other with CA and, the following day, spray painted the cylinder Oxide Red.

I cemented 1/16-inch thick basswood strips and one Popsicle stick (to represent a recent repair) around the PVC cylinder, sanded it, and applied walnut stain to the wood. I rubbed off most of the stain with fine steel wool and sandpaper, then weathered the tank with a wire brush until barely any stain was visible and some grain had appeared. Then I applied Polly Scale Oil Black between the boards to represent tar sealant.

Shaping the tank lid proved the most difficult step of construction. I ended up making the lid from some old 3/8-inch wide stripwood on my workbench. I cemented the planks edge to edge and filed and sanded the assembly to shape. Finally, I added Micro-Mark #1 by 3/16-miniature lag screws to the water tank roof by drilling pilot holes through the wood and into the plastic PVC sleeve. I applied a drop of CA and slowly and gently seated each screw.

Evergreen #136 (0.030- by 0.125-inch) styrene strip simulates the metal tank bands. I painted the bands the same color as the car body and glued them in place with CA. I installed Micro-Mark miniature lag screws so the straps would appear bolted to the tank.

The ladder is from the same brass rod I had installed for the underbody bracing. I held one end with pliers, bent the rod 90-degrees, and sighted the next bend until the steps looked good. I blackened picture wire and solder to represent industrial hose and cannibalized some brass parts from a cigarette lighter to represent nozzles and inlet plumbing.

I weathered the model with a solution of 99-percent isopropyl rubbing alcohol and powered pastel chalks. A dilute solution of India ink and 99-percent isopropyl rubbing alcohol colors some planking and the tank. An Ozark Miniatures water bucket was the final addition to the model.