

THE B&O MODELER

Number 44



MJB Models GA Tower Kit Review
Greensburg RPM Meet Recap
Modeling B&O's M-15K Boxcar in HO
Bruce Elliott's B&O's Piedmont Division HO-scale Layout
The J. J. Tatum Patented XLT Slack Adjuster
B&O Structure Standard Colors

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AN INVITATION TO JOIN THE B&O RAILROAD HISTORICAL SOCIETY

The Baltimore and Ohio Railroad Historical Society is an independent non-profit educational corporation. The Society's purpose is to foster interest, research, preservation, and the distribution of information concerning the B&O. Its membership is spread throughout the United States and numerous foreign countries, and its scope includes all facets of the B&O's history. Currently the Society has over 1600 registered members.

Members regularly receive a variety of publications offering, news, comments, technical information, and in-depth coverage of the B&O and its related companies. Since 1979, the Society has published a quarterly magazine, *The Sentinel*, dedicated to the publication of articles and news items of historical significance. Other Society publications include monographs, calendars, equipment rosters, and reprints of original B&O source material. Their purpose is to make otherwise unobtainable data available to the membership at reasonable cost.

Membership in the Society is a vote of support and makes all of the Society's work possible. It provides those interested in the B&O with a legitimate, respected voice in the railroad and historical communities. By working together, B&O fans are able to accomplish much more than by individual efforts. No matter how diverse your interests or how arcane your specialty, others share your fascination with America's most historic railroad. We invite your participation. Several classes of [annual memberships](#) are available, Regular annual memberships are only \$45.00. If you would like to join, click [here](#) to fill out our [membership application](#), print a copy and mail it to:

B&ORRHS

Attn: Membership

P. O. Box 1608

Sykesville, MD 21784-1608

FROM THE EDITOR

Congratulations to *The Keystone Modeler*

(PRRT&HS) on the publication of its 100th issue. *TKM* was one of, or perhaps THE earliest railroad historical society e-magazines. These publications tend to economically solve an ongoing conflict between railroad historical society members who feel any modeling material in the society's hard copy journal corrupts and debases the historical purpose of the society. It is my understanding that then PRRT&HS President Al Buchan freely shared his template for *TKM* with first *B&O Modeler* editor Bruce Griffin. What was interesting and what many don't recall is that under Al Buchan's presidency of the PRRT&HS and Chuck Blardone's editorship of the PRRT&HS's esteemed journal *The Keystone*, the prototype history/modeling barrier had actually been broken some years earlier with an article I wrote in *The Keystone* on the PRR's GLb class hopper—so there was no longer an issue in *The Keystone* with model vs. prototype. *TKM* simply provided the capability to offer more content and in color at minimal marginal cost. Product reviews in *TKM* continue to be what I would call “comprehensive,” or even “killer.” At any rate *TKM* continues to be a venue for the publication of world class modeling executions. Issue 100 was a “commemorative” one featuring reprints of prior articles including not one but three pieces by Jack Consoli and one by regular *B&O Modeler* contributor, Bob Chapman. One of Jack's articles actually has B&O relevance (the “Coal and Coke” class cabooses) and has been cited in the “Enthusiast Press” section elsewhere in this issue. As with *The B&O Modeler*, recent *TKM* issues are available for free download, and earlier issues are available on CD for a reasonable fee.

Congratulations to the B&ORRHS on the acquisition and grand opening in April, 2017 of its new World Headquarters and Archives. The building, a former

senior center in Eldersburg, MD, was acquired in the spring of 2016. The last year has been spent moving the contents of the former Arbutus archives and “toning up” up the building. A grand opening was held in April of 2017. Having spent but little time in the cramped but serviceable Arbutus site previously, I can say the new site is definitely much more appealing. In fact, most of my prior “archiving” was done by proxy, asking friends, “next time you are at the archives, see if you can find such and such.” I'm sure I will be visiting the new site more often. Thanks goes to the hundreds of person-hours and donors of thousands of dollars which went into making this project a success, including schlepping furniture donated by the Carroll County, MD Board of Education. Our President, Greg Smith, was a champion at engaging local contractors to do what had to be done to tailor the building to the Society's requirements. Well, for those who regret that an even more perfect site could not be found along the railroad tracks like the PRRT&HS's archives in Lewistown, PA, I can offer the following: 1) Eldersburg is probably within an hour or less for a large number of B&OHS members, 2) It's only about 3 ½ miles due north of the Old Main Line in Sykesville, MD so that if you get hungry while “archiving” it's a short drive to “Baldwins,” the E. Francis Baldwin-designed Sykesville station restaurant for lunch or dinner, 3) Greg tells me when the wind and fog are right you can indeed hear the grade crossing horns on the Old Main Line inside the new HQ and 4) The Patapsco River overruns its banks in Sykesville occasionally. Plus, it's a block away from a high school, so I can see the possibility for future potential internships. Attendees to the 2017 Eastern Minicon on July 15 will get a chance to see the new building firsthand!

John Teichmoeller
Editor
May 29, 2017



Baltimore & Ohio Railroad Historical Society's new World Headquarters and Archives facility located in Eldersburg, MD

FROM THE COMPANY STORE

Past Issues of *The B&O Modeler*:

Issues in Vol. 1-2 (2005-2006, 9 issues), Vol. 3 (2007, 6 issues), Vol. 4 (2008, 6 issues), Vol. 5 (2009, 6 issues), Vol. 6 (2010, 6 issues), Vol. 7 (2011, 4 issues) are available on CDs from the B&ORRHS Company Store. Each CD is \$10.

Vol. 8 (2014, 2 issues) may be downloaded for the time being as well as issues 40, 41, 42, 43 and 44.

To find these you will need to scroll down to the bottom of the Company Store subject list and click on "Videos and Other Digital Media") <http://borhs.org/Shopping/index.html>

A link to the free comprehensive index of *The Modeler* prepared by Jim Ford is also found in the CD order section. (Note, this is a *true* index, not just a contents listing. You might be amazed at what has been covered over the last 11 years!) http://borhs.org/ModelerMag/BO_Index_Website.pdf

UPDATES AND ERRATA

Readers are welcome to submit questions about content or information about additions or errors with appropriate documentation.

UPCOMING EVENTS FOR POTENTIAL B&O MODELS ON DISPLAY OR B&O PRESENTATIONS

We don't receive direct communications from any Prototype Modelers Meets, so the listings below are a function of Scott's and John's "general awareness." Guess we have too low of a profile! Moreover, since we have an indeterminate publication schedule, some of the events below may have already occurred by the time you read this. Nevertheless, the links provided should enable to provide you with necessary information about the group's next event.

In any event, let us know if your "favorite" meet that is likely to have B&O content is omitted and give us details. Have other meet organizers send notices to us at: rmighpr@comcast.net

2017

[St. Louis RPM](#) – June 23 & 24 in Collinsville, IL.

- [Photos from the 2016 St. Louis event](#)

B&ORRHS Eastern Mini-convention - July 15, 2017 in Eldersburg, MD.

B&ORRHS Annual Convention – October 5-8, 2017 in Cumberland, MD.

RPM Chicagoland (aka "Naperville") - October 26-28, 2017 Sheraton Lisle-Chicago Hotel, Lisle, IL.

- For updated registration info, presenters and program schedules see www.rpmconference.com or contact Mike Skibbe at mike@rpmconference.com

[Garden State RPM](#)– November 4-5, 2017 in Scotch Plains, NJ.

2018

[RPM Valley Forge](#) – March 23-25, 2018 in Malvern, PA.

- [Photos from previous RPM Valley Forge events](#)

[Prototype Rails](#) – early January in Cocoa Beach, FL – specific dates will post when available.

- [Photos from the 2017 Prototype Rails](#)

[Savannah Prototype Modeler's Meet](#) – March 30 to April 1, 2018 in Port Wentworth, GA.

[New England/Northeast RPM](#) – June 2-3, 2018 in Enfield, CT.

- [Photos from previous NERPM events](#)

B&O MODELING IN THE ENTHUSIAST PRESS

BY JOHN TEICHMOLLER

Below are articles and product reviews of relevance to B&O modelers from the enthusiast press. We will particularly mention any evaluative comments that might be useful to purchasers or builders. Let us know if we have missed something. As you can see from the items cited below, the B&O has gotten some decent coverage across the enthusiast press in the last few months.

“Spring Mills Depot HO wagontop hopper,” Product review by Eric White, June 2017 *Model Railroader*, p. 66. Gives this product all good marks, which it certainly deserves. Points out the multiple lettering variations in which this model was produced. Most of these models were sold on a prior reservation basis, but you might still be able to get one, particularly the undecorated kit on the secondary market. The company has announced the possibility for another run in a few years. Decals are available from John Frantz.

Also:

“Wagons HO!,” Product review by Tony Lucio in *Model Railroad News*, March 2017, pages 34-35. Tony had 4 samples to review, and model photos show detail and lettering variations among the samples. He counts 48 variations of detail/lettering being offered and is so impressed by the detail on this model that he is going to have one in service in his fleet even though it is “out of era” for him.

“Modeling the B-27 baggage car,” by Gregory LaRocca in *Model Railroad Hobbyist* (e-zine), March 2017, pages 176-1 to 176-27. This car is one of the B&O’s horse express cars and is one of my favorite passenger cars, although I am not really a passenger car fan. The article is basically the instruction sheet for the kit. Greg and I agreed that now he has executed this challenging project, it won’t be long before this car is produced by Walthers. Ha!

“Bachmann HO Sound Value USRA light 4-6-2” Product review by Dana Kawala, April 2017 *Model Railroader*, pages 92-93. The B&O’s USRA Pacifics were class P-5. The review sample was lettered for New York Central, so prototype comparative remarks were limited to that prototype. The review did not point out any mechanical deficiencies that would suggest you avoid the product and went into some detail about the DCC controls. We welcome a B&O-centric review from steam experts. Jon Vogel won’t be covering this one because he already has a USRA light Pacific from another manufacturer.

“Upgrading Athearn 86-foot Boxcars” by Harry K. Wong. *Railroad Model Craftsman*, March 2017, pages 56-63. This article is not necessarily B&O-specific but does lead off with a nice model photo of B&O 493025. Harry works on old Athearn 8-door HyCubes and upgrades a number of aspects including body mounts, trucks, coupler mounts, end coupler platforms. He also fabricates those wacky end air hose assemblies. I have a pair of Walthers 8-doors for my through trains with traffic to and from the Broening Highway Assembly Plant (now the site of an Amazon distribution center) with which I am pretty satisfied, but the article did motivate me to go ahead and order a pair of the Plano etched stainless coupler platforms (No. 134 @ \$2.75) for a “lite” upgrade. Now I just have to figure the best approach to changing the numbers on one of my identically numbered cars.

“E7 arrives from Bachmann” Product review by Tony Cook in *Model Railroad News*, March 2017, pages 46-57. This is another non-B&O-specific review but the locomotive is offered painted for B&O. *MRN*’s reviews tend to be more in-depth, covering prototype information (none B&O here) as well as detailed mechanical information. They also tell you “how to take the top off” which the other magazines are getting better at. In the old days, they also typically did a decoder installation but that is no longer the case since most locomotives offer a decoder-equipped version.

“Bachmann SoundValue HO scale EMD E7A” Product review by Dana Kawala in *Model Railroader*, May 2017, pages 60-61. Review sample was a PRR unit but model is available in B&O paint. Dana told how to take the top off and performance was rated good. Diesel experts are invited to evaluate the B&Oicity of the model and/or offer a possible detail upgrade article.

“Appalachian scenes along the B&O,” by Dale Ridgeway. *Model Railroader*, March 2017, pages 44-50. Dale’s “Ridgely Division” is a 1960s era B&O-inspired 18’x 20’ layout located in a basement on the Eastern Shore of Maryland, said to be significant because basements are unusual there. He completed the layout in 2015 and professes no complaints with it. Now completion and no complaints are both unusual! The article contains a sidebar showing how Dale models those tree-covered West Virginia hillsides with dried sedum blooms instead of polyester puffballs.

“Modeling an ND and NDA Cabin Car” by Jack Consoli in *The Keystone Modeler*, Spring 2017, Issue 100, pages 58-78. What? Those are PRR caboose classes! Well, the PRR’s ND was very similar to the “Coal and Coke” class 4-wheel bobbers inherited by the B&O. A number of modelers have considered building a “C&C” using one of the available models of the ND. To my eyes, there are differences in the end railings and steps. I don’t think Bruce Elliott has tackled this one yet, but Jack’s article, reprinted from an earlier issue of *TKM*, starts with the Quality Craft/Gloor Craft wooden and metal castings kit and goes way beyond the kit. So, this article provides a marvelous road map into a modeling adventure that you can take as far as you like, maybe into insanity, using the several C&C car photos that have been published in the B&O caboose literature. You might consider using the F&C resin kit as a base instead. If you like to unsolder and resolder, there is even the Railworks brass ND (labeled “4 Wheel Drive” on the end of the box, seriously).

NEW PRODUCTS

BY CLARK CONE AND THE MODELER STAFF

New Product Notices and Disclaimer

A model is a representation of reality. It is up to the purchaser to decide what level of prototype fidelity is acceptable. As our readers are probably aware, we do not generally receive “review samples” of newly issued B&O models. Accordingly, we will do our best to cite new B&O scale models as notices appear in enthusiast publications, with whatever prototype information is available. At the same time, we realize that manufacturers will never stop pasting B&O identity on patently incorrect models, and our inclination is to cite all claimed B&O products. The *Modeler* staff read most of the enthusiast publications and we will try to cite any new “B&O labeled” products we see. If we miss something you think should be cited, by all means let us know—even “way past due” items.

Based on published artwork and without seeing and measuring actual models, it is usually unfair to make blanket assessments about cited products with regard to B&O “fidelity.” Accordingly, our approach is to cite all B&O items we come across and avoid the sarcastic comments, however tempting. Many of our citations are for products that are not available yet, so we invite readers to actually purchase and review the products when they materialize. The basic principle of *Caveat Emptor* should prevail! JT.

HO-Scale

N-34 Covered Hopper!

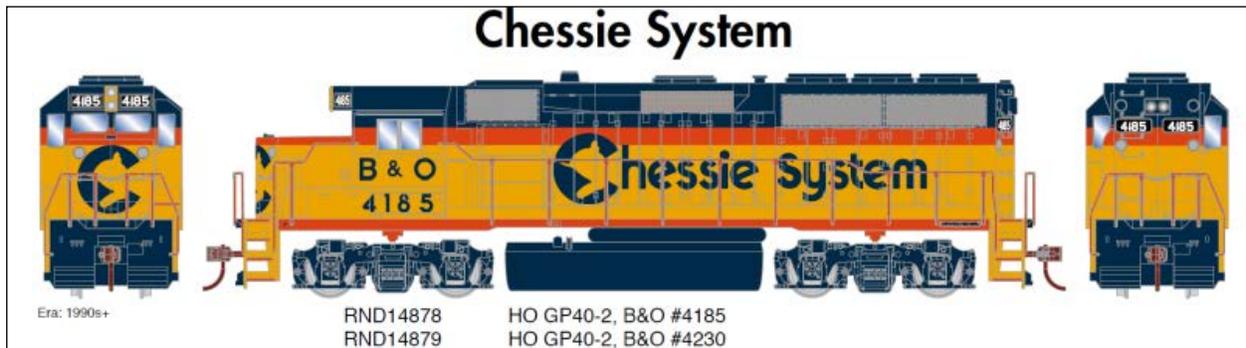
The N-34 was a research-intensive project. SMD claims that no accurate model exists on the new or used market (take that, those of you who thought your brass or F&C kits were accurate!). With no blueprints and no drawings, SMD had to reverse engineer the entire car. They believe they have accounted for every rivet on the car. The brake rigging and piping on the B end of the car is simply amazing. How did they get that stenciling on the air brake reservoir? Due to other projects in the pipeline, a second run might be considered in several years. The car arrived in early 2017 so if you preordered you should have yours by now. As of June 17, Bill Carl of Spring Mills Depot reports there are fewer than a dozen of the cars left and of only one lettering scheme. Check with the website, www.smd.cc or e-mail to info@smd.cc.



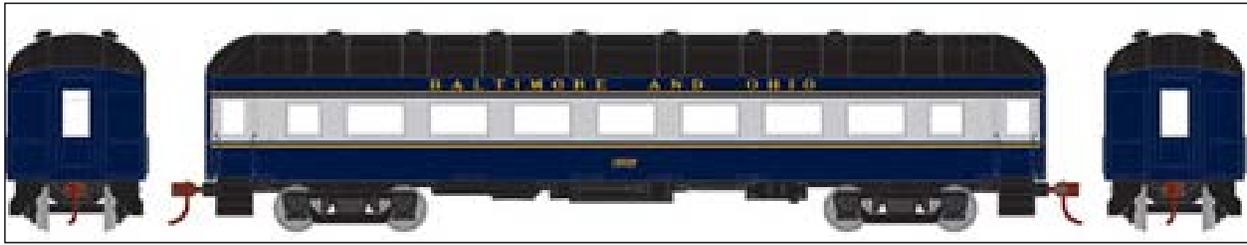
Atlas is releasing an HO-scale steel caboose with centered cupola and equipped with Accumate knuckle couplers. The Trainman series ready-to-run model is based on a prototype Magor Car Co. car built in 1937 for the Chesapeake & Ohio. In addition to the C&O, road names will include B&O Chessie System. For additional information, contact a dealer or visit the [announcement page](#).



Accurail has released a 36-foot car with wood ends decorated for the Baltimore & Ohio. It is based on a prototype built in 1925 and rebuilt in 1942. The car has double-sheathed, wood sides; a steel roof and fish belly underframe. [More information is available here](#).



Athearn Trains will be releasing an EMD GP40-2 in their Roundhouse Line with B&O and C&O reporting marks, two road numbers each. The engine will have a five-pole motor with dual flywheels, 8- and 9-pin plugs for a DCC decoder, and Celcon handrails. Expected January 2018 release at \$99.98 per unit. [More details are available here](#).



Athearn has updated the tooling for the 60-foot, arch-roof Harriman-style heavy weight passenger cars introduced decades ago by Model Die Casting. Upgrades include improved window glazing, appropriate trucks with machined metal wheelsets, and body-mounted knuckle-style couplers. The removable roof is held in position with magnets and the artwork for the lettering schemes has been vastly improved. Body types available in this release include RPO, baggage, baggage/coach combine, coach, diner, and an open-platform observation car in B&O markings. [More details are available here.](#)



HO 40' Box Car - Single Door, B&O #466182 \$24.98 Due Late January, 2018 Roundhouse Line
[More details are available here.](#)



Athearn plans to release a 53-foot GSC trailer-on-flat-car (TOFC) with a 40-foot exterior-post trailer. The ready-to-run TTX flat, shown here with a B&O trailer, features screw-mounted trucks and McHenry knuckle couplers. For more details, check out [the announcement PDF.](#)



Atlas O has announced a B&O-Chessie ACF 3-rail, six-bay covered hopper car. Special details include operating hatches, see-through roof walks, separately applied grab irons and brake detail, and 100-ton sprung diecast roller-bearing trucks with rotating bearing caps. Two road numbers each will be available. [For more information, visit the Atlas O site.](#)



Speedwitch Media has announced HO-scale decals for **B&O class P-11 flat cars**, \$6. Set letters two cars. [Check them out here.](#)

HO-scale 50' plug door boxcar from Walthers Mainline series (i.e. cast-on details), yellow body, blue door, road no. 473318, may be close to M80b, need more information and scrutiny from the “boxcar gurus.” Product blurb November 2016 *Model Railroad News*, p. 60.

HO-scale B&O head end car kits from Model Railroad Warehouse have actually been available and promoted in small magazine ads for over a year. Kits feature etched brass sides and Bethlehem Car Works parts packs for B-8, B-18, B-27, C-15 and C-17 (See “Enthusiast Press” section for citation of B-27 article by Greg LaRocca in the e-zine *Model Railroad Hobbyist*).

HO-scale Union Railroad Class H5 70-ton twin hopper from Funaro & Camerlengo, Kit No. 8430. What does this have to do with the B&O? A number of the U.S. Steel roads had cars like this including the Lake Terminal. The kit’s instructions say that the B&O got 100 of these cars from the LT in 1963. The January 1966 issue of the *Official Railway Equipment Register* shows the Union with 493 of these cars (number series 4000-4499). Comparing dimensions with the B&O entry in the same *ORER*, it looks like the B&O had 28 cars in the number series 23000-23149 (33’ inside length, 10’ 6” width, 2028 cubic foot capacity). These cars have 8 rectangular panels and heavy looking side posts, so they provide a different look for your hopper fleet. You will have to cobble together your own B&O decals.

HO-scale Authorized Product Pre-Announcement: **Funaro & Camerlengo plans to release kits for the class N-13 and N-10 hopper cars.** The N-10 is 8-rectangular panel, box-end sill car and the N-13 is the side dump car featured in *Modeler* No. 43. A “best efforts” target date for the kit availability is the Timonium Show but this is not firm. Steve had hoped to have them out earlier but winter weather in “F&C Land” caused problems with resin and RTV supply deliveries that disrupted production. When you run into Steve at train shows and other historical society meets, be sure to tell him how you are looking forward to these cars.

N-Scale

Smooth side passenger cars, Bachmann, 72' baggage car, 85' coach, 85' boat-tail observation car. Ad on back cover of April 2017 *NMRA Magazine* and elsewhere. Offered in B&O decoration but based on window patterns of coach and observation don't appear to be B&O prototype.

Micro-Trains announcement of a **B&O O-59 gondola** with release September 2017.

Miscellaneous

O-Scale Decals for B&O P-24 70-ton AAR flatcar from Protocraft

[More details are available here.](#)

Large Scale—B&O Sentinel boxcar in silver and blue, road no. 466098 from Piko America. Product blurb in April 2017 *Railroad Model Craftsman*, p. 81.

MJB MODELS GA TOWER, PITTSBURGH DIVISION GARRETT, PA. KIT REVIEW BY BRUCE ELLIOTT



East Side

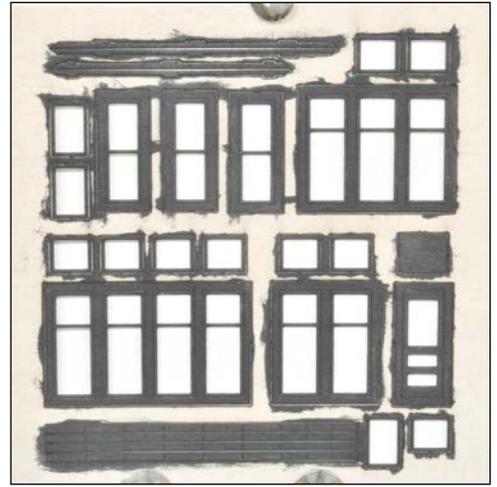
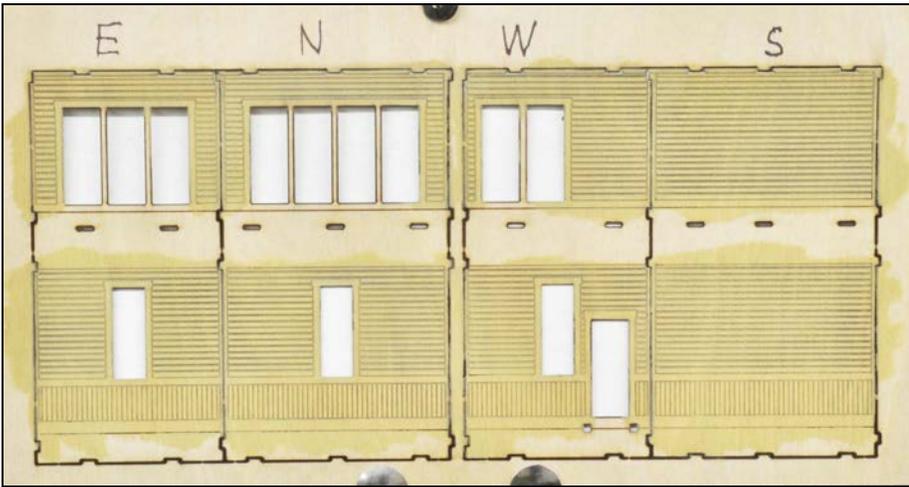


West Side

Introduction

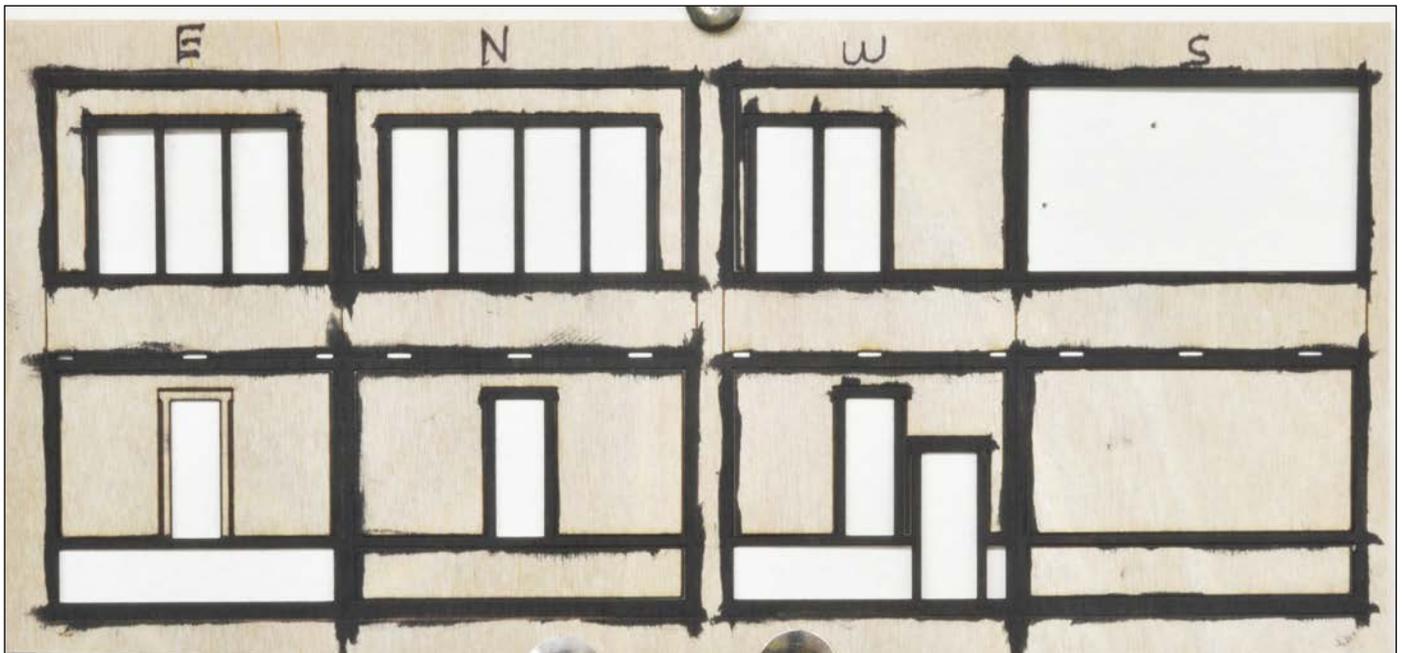
GA Tower controlled the interlocking at Garrett, PA for the Berlin Branch, the third track east to Yoder, and the Quemahoning Branch from Rockwood--all this from a 12x15 ft. tower. The tower design was a bit unique in that it had no exterior second floor steps. Access to the second floor was by way of a spiral staircase within. Since I am modeling a representation of Garrett on my layout, you can understand my desire to have a faithful model of this tower. In the past if you wanted a specific wood frame B&O tower—and they all seem to be different, don't they? --, you had to kitbash; using the Alexander/AHM/IHC/Model Power/tooling of the year kits. And a kit of GA still might have applicability if you have a "generic" B&O layout and want to have a tower with a B&O "look" without the complexity of the outside stairway. Like many towers, this was an all-electric plant. Over the course of its life, it was moved once, several hundred yards east of its original location, to accommodate the Quemahoning Branch when it was built.

The model, is the second "specific" tower model from Mark Bandy, dba MJB Models, but it won't be the last! WD Tower, Fairmont, WV was reviewed in *B&O Modeler* No. 40. While MJB Models products are all craftsman kits and require a little bit more skill to assemble, they're laser cut and everything fits like a glove. This is also due to the fact that the manufacturer goes to great lengths to check and re-check everything during the set-up of the laser. Since the introduction of the WD kit, the manufacturer has learned a lot and put those insights as "step savers" into this kit. Having said that, the instructions are on the Spartan side, so as we build this kit, I will discuss these step savers in more detail and offer some tips to aid construction.



Tower Sides

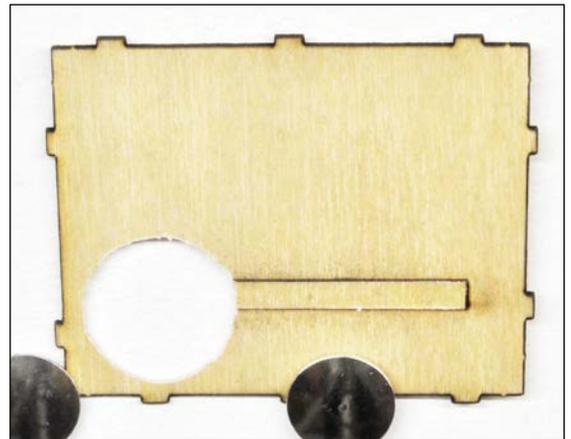
The sides require several stages of assembly, and it is recommended that you paint the pieces before you remove them for assembly. I chose to paint this structure in the “cream with black trim” of the post 1946 era. The first step is to glue the exterior door, window trim and framing to the wall. While the walls were easy to remove, with virtually no clean up, the outer edge of the door, window and framing required a #11 Xacto knife to score around the pieces because the laser cut was incomplete in a few places. The pieces came out clean, but it was a slight oversight during the cutting process. The next step was to install the inside window frames and the first-floor door. This was followed by adding the window framing for the upper window sashes. Windows and the door are a three-level assembly and this is easily seen in the finished product. Once the sides and trim have been assembled, this is the best time to come back and touch up the layers of trim with paint. Though the parts were pre-painted, the cut spots need touchup.





Second Floor

The second floor needed a little work done to it to adapt it to the interior that I chose to install. Once again, like the model of WD Tower, a hole was cut in the floor by the laser for Armstrong levers. But GA was an electric plant, so the hole needed to be filled. There was enough material for this from the "fret" that the floor panel came from. This tower had a spiral staircase, so a hole needed to be cut out for the staircase itself. I have no idea what the diameter of the stairs was, but I reasoned that it would be at least 5ft. in diameter, and so a hole was cut out for the stairs. This was done for the interior that was installed, over and above the basic kit. [By the way, the circles that show in the photos are just thumbtacks Bruce uses to hold the parts down while photographing them JT]

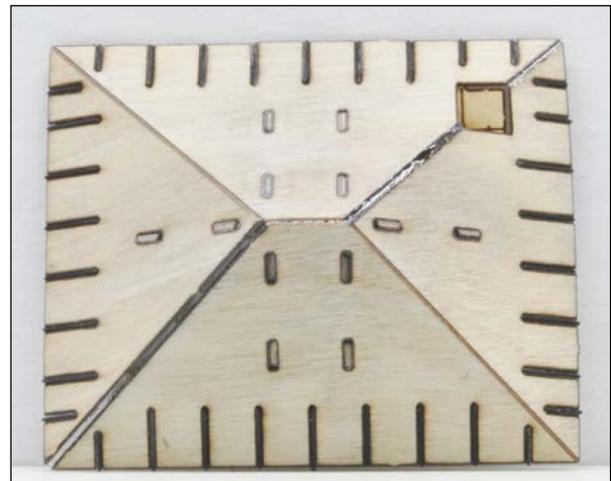
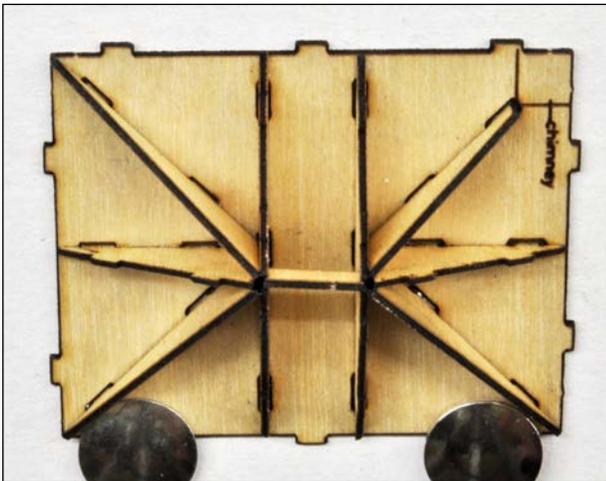
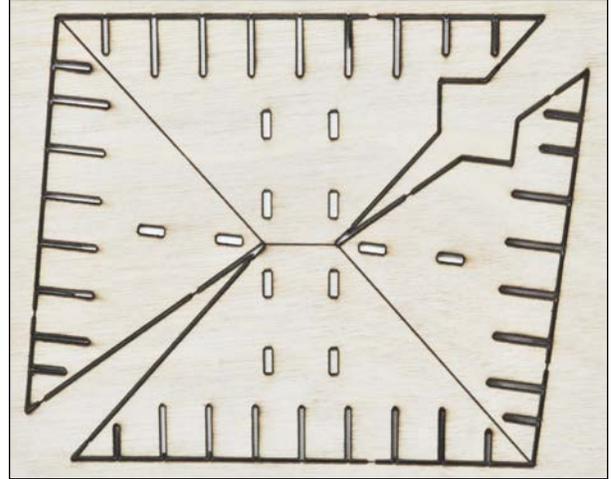
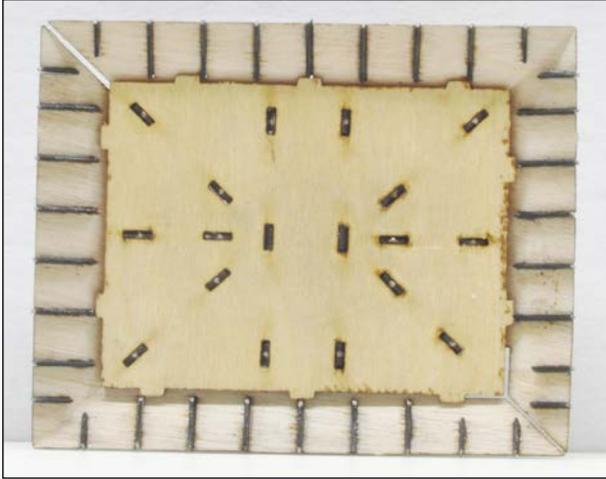


Before the walls were assembled for the second floor, all the window glazing was applied to the first-floor windows and door. To assemble the model without an interior, second floor window glazing should also be applied at this time. Once the walls are secured to the second floor, the access to the first-floor windows and door and second floor windows diminishes drastically. The finished walls (minus the second floor "skirt") were glued to the second floor. In no particular order, I started with the east wall. The second floor fit into the slotted tab like a glove. I then installed the north wall to the floor. Once it was dry, I glued the seam where the two walls come together, for the full length of the wall seam. The west and south wall were applied in like manner giving me a square, smooth box. I next installed the first-floor base.

At this point I chose to paint the second-floor interior. The interior wall color for a post war tower was a light gray, that I simulated with Floquil CN gray. I used Floquil mahogany wood stain for the floor. At this point, I chose to add my second-floor window glazing that was cut to the size of the window framing and I chose to use CA to secure the acetate windows to the frames.

The roof assembly on this kit takes advantage of some of the lessons that Mark has learned from the past. While the ceiling and the rafters are the same design as in the past, the roof sheathing is now "one piece", yep, a one-piece hip roof that starts out flat. This is one of the "step savers" that I mentioned earlier. Traditionally in the past each side of the hip

roof was a separate piece. To make the roof fit, it's necessary to score the seam along the two alternate roof edges, as well as the roof ridge. Yes, you can bend wood without breaking it! The roof sheeting fits right into the tabs of the rafters, and I felt it was better to apply glue to the holes where the roof sheet and the rafters meet on the outside. Take note that the roof rafters and the roof sheeting are cut out and marked for the chimney. Pay attention! I think it would be difficult, at best to apply glue to the edge of the rafters and then try to put the sheeting on the rafters. I chose to fit the sheeting on the rafters and then use CA at the tab holes. This was followed with a second filling application of Ambroid wood glue.



Two seams, on opposite edges of the roof sheeting will benefit from laying a bead of glue down them. This will give it a little more stability and strength. Once this assembly is dry (overnight) the rafter ends need to be applied to the edges of the underside of the roof sheeting. Once this is dry, sand the four roof sheeting surfaces smooth.

Now the roof covering can be applied. The roofing comes in three pieces. Again, you have a self-adhesive backing on the roof material. I highly recommend that you test fit to see if the roofing will fit the roof sheets before you peel and stick, just to be sure, as you don't get a second chance. It is necessary to cut out the roofing to accommodate the chimney, take your time. I found this task to be easier once the roofing was



applied. The roof ridge cap covers the seams smoothly. These have to be glued on. There is a seam down the middle of the four-ridge cap covers. I recommend that you use an Xacto knife, and gently put a bend in the ridge cap from the back side. This will give the ridge cap a better fit when you glue it to the roof. Once the roof assembly is finished, it is at this point that I painted the roof exterior. I choose Floquil weathered black. The underside of the roof edges got a coat of Floquil engine black. The interior ceiling was painted Floquil antique white, simulating age. The chimney was painted Floquil freight car red and cut for height according to photographs.

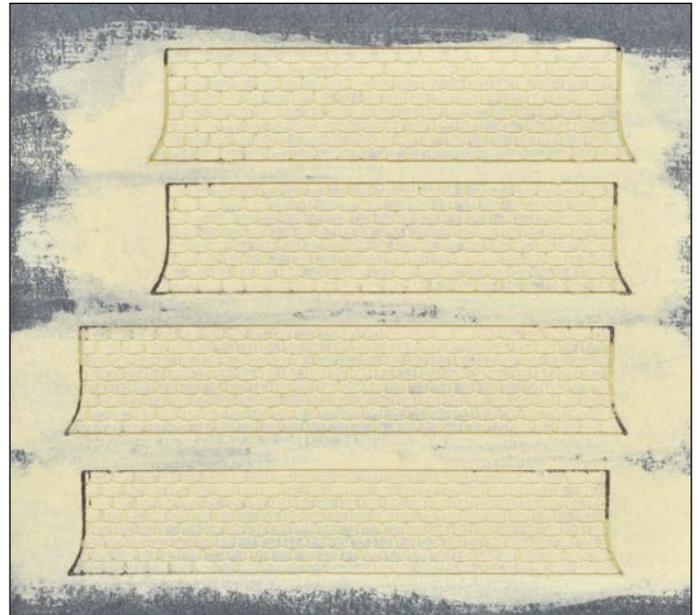


Final Touches

The second-floor exterior "skirting" was next. Prior to applying the skirting, it is necessary to install the lower skirt edge. This is a delicate wooden strip that needs to be secured, which allows the lower edge of the skirt to protrude outward. Once all four of them are installed, it's time for the "skirt". The "skirt" is a peel and stick application. The skirt, while paper, is stronger than the wooden strip that holds the lower edge out. I therefore recommend that you pre-roll the skirt. This will allow the skirt to fit and look right. If you don't roll the skirt, you will have a straight angled skirt instead of a properly curved/curled one. After all four skirt sides were installed, I next applied a bead of glue at all four exterior corners, giving a smoother appearance to the skirt. This was followed by touch-up with paint.

Next is to paint the concrete foundation. I used Floquil aged concrete. This was done before the first-floor steps are assembled to the structure.

The only steps on this tower are for first floor entry door. Interestingly enough each stair riser is two pieces. This was one piece on WD tower. So now, you have a total of four risers. These are also painted Floquil engine black. A 3-foot square train order board was built from a .010 Evergreen styrene sheet, and trimmed with an HO-scale 1x4. Evergreen strip.





Parts List

Manufacturer	Part No.	Description
Floquil <i>[Out of Production]</i>		Engine Black
		Weathered Black
		Aged Concrete
		Antique White
		Depot Buff
		Freight Car Red
		CN Gray
Evergreen	9010	.010 sheet
	8104	HO-scale 1x4 strip
Glue		Cyanoacrylate (CA)
		Ambroid wood glue



North Side

GREENSBURG RAILROAD PROTOTYPE MODELERS MEET

BY JOHN TEICHMOELLER



Caboose Display by Bruce Elliott, photo by John Teichmoeller.

The annual Pennsylvania last-weekend-in-March Prototype Modelers Meet was held this year at the Ramada Inn in Greensburg, PA.

Meet committee member and publicity chair Eric Hansmann reports 206 registered attendees and 436 models in the display. Of course, there were clinics (some with B&O content), vendors and layouts open for visitation and operations. Next year's meet will switch over to the Desmond Hotel and Conference Center in Malvern, PA. The Greensburg meet always seems to me to have more of an industrial as well as B&O content, but I like both meets.

This year a different room with improved (outside windows) lighting was used for the model display. Model documentation, while still incomplete and imperfect, was much improved (brief description, name and contact for modeler, etc.). Table leg risers were also used, improving model visibility. Now how do we get the modelers to spread their stuff out along the edge of the table so it's visible rather than stacking it all the way to the back?

Eric has posted an album of the model photos he took: http://www.pbase.com/ehansmann/2017_rpmeast

The following is some editorial commentary on B&O models in the display. I probably missed some including any that were "hidden in the herd."



B&O 187360 M-24 by Bill Hanley, photo by Eric Hansmann.

Westerfield Kit (USRA) painted Scalecoat II Boxcar Red. Kit supplied decals were used. Trucks are EB Products Andrews (Formerly Lindberg).



B&O 151165 O-48 gondola by Jim Kubanick, photo by Eric Hansmann.

Built from the special kit produced in 2016 by the B&OHS. The kit run is sold out and won't be re-run. Now we know at least one person besides Bob Chapman has built it.

Bruce Elliott mounted an impressive display of steam era cabooses, ranging from I-1 through I-17 to compliment his clinic on the same subject. If you missed it at Greensburg, you have another chance at the Society's Miniconvention in Eldersburg, MD, July 15. This display was particularly interesting because there were several different versions of commercial products used and there were also some unfinished examples. We should be able to get Bruce plenty of table space at Eldersburg so he can line them all up single file and with adequate space between cars.

Bruce started with a Quality Craft kit, employed a K brake valve, Oriental Ltd. Brass trucks, Tichy brake wheel and pedestal, and Evergreen styrene end sills and roof ends.



B&O 1611, I-3 originally CH&D, late years modified to closely resemble I-1, photo by Eric Hansmann.

B&O I-6 No. 1676 appears on the following page. No official diagrams have turned up for this class, but photos of both left and right sides of No. 1676 appear on page 43 of Dwight Jones's *Cabooses Photos and Diagrams*, and Bob Hubler helped Bruce with construction drawings. This is a real kitbash that started as an Ambroid AT&SF car. End platforms came from Ye Old Huff'n'Puff, smoke jack from Pacific Mountain Shops, Kadee truck frames with Walthers leaf springs and Proto 2000 wheels, fabricated wire end railings, Gloor Craft running boards, Evergreen styrene window awnings and end buffers.



B&O 1676, I-6, originally C&W, photo by Eric Hansmann.



B&O I-5d C1979 by Ken Larsen, photo by John Teichmoeller.

This caboose was scratch-built by Ken to go with his 1968-1972 era CL&W layout and was based on a 1973 Dan Dover photo <http://www.rr-fallenflags.org/bo/bo-c1979abp.jpg>

With only two windows on the other side. I guess Ken just couldn't wait for the Spring Mills Depot version of this style carbody. The carbody was completely scratch-built from styrene, but you could do this with the Pro Custom/Gloor Craft/Quality Craft I-5 kit. [They may not show in the photos, but Ken used MicroMark rivet decals on the "steel" ends.](#) Underframe and end details came from an old brass I-12. Note the oil stains below the oil tank fill point on the right end of the car.

MODELING B&O's M-15K BOXCAR IN HO

BUILDING THE CHICAGOLAND RPM MINI-KIT

BY BOB CHAPMAN



The Chicagoland RPM mini-kit nicely models one of B&O's 1240 class M-15K wagontop boxcar rebuilds.

Registrants of the 2016 Chicagoland RPM received a great door prize – a mini-kit for B&O's M-15K wagontop boxcar rebuild, with the choice of either HO or N-scale. Summary instructions accompanying the kit covered critical construction steps; remaining steps were left to the ingenuity of the modeler. Accomplished N-scale modeler Keith Kohlmann wrote the summary instructions for the N-scale version and expanded them to a formal article which will appear in the July-August, 2017 issue of *N Scale Railroading* magazine, a print publication available in hobby shops.

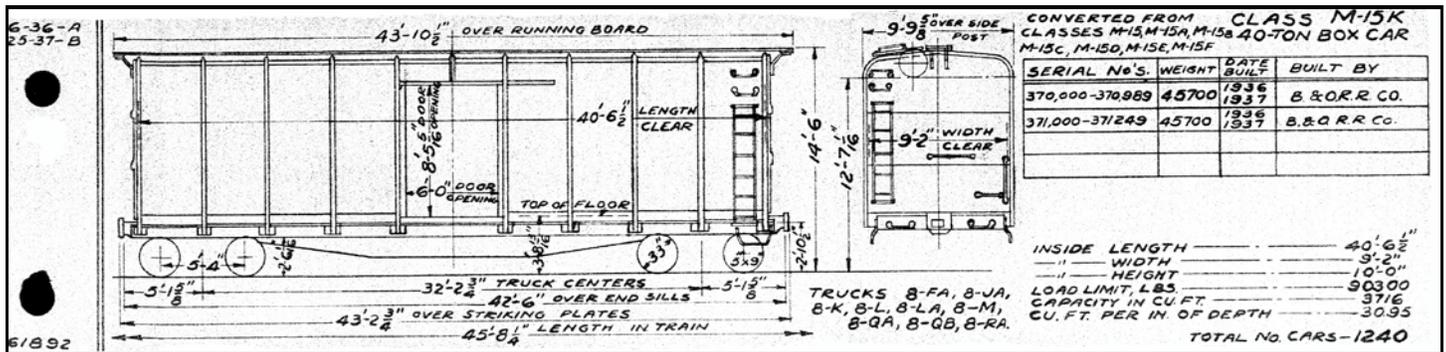
Our article attempts to close this detail gap for HO modelers, covering the entire project from beginning to end, and incorporating suggestions from various e-lists and blogs. For those who missed the mini-kit - the essential components are available commercially.

The Prototype

In the early 1930s, B&O found itself with an aging fleet of 1910-24 era M-15 double-sheathed boxcars, and the need for larger capacity steel cars. Always frugal, in 1934 B&O Car Department general superintendent John J. Tatum rebuilt a single M-15B into an experimental steel car, class M-15BA #279000. Its radical wagontop design consisted of sidesheets smoothly curved around the eaves to the car's centerline, held in place by U-shaped sidepost/carlines similarly curved onto the roof.

Based on the success of the experimental car, in 1936-37 the Mt. Clare Shops similarly rebuilt 1240 M-15's, reclassified them as M-15K, and numbered them #370000-370989 and #371000-371249. The M-15K's heavy fishbelly centersill, notched lower sidesheets, and lack of a Duryea underframe distinguished them from the later M-53 wagontops built new in 1937-38. The famous Cumberland Bolt and Forge Shop formed the distinctive hoops, re-rolled from railroad scrap, probably axles.

The M-15K's served durably until 1955-57, when all but 18 of the M-15K's had their 40-year-old underframes replaced. Reclassed to M-15NA were 376 cars, and to M-15P 400 cars; 18 cars remained unrebuilt. The rebuilding eliminated the notched lower sidesheets, but the heavy endsills remained as a spotting feature. Survivors of the class lasted into the early 60s.



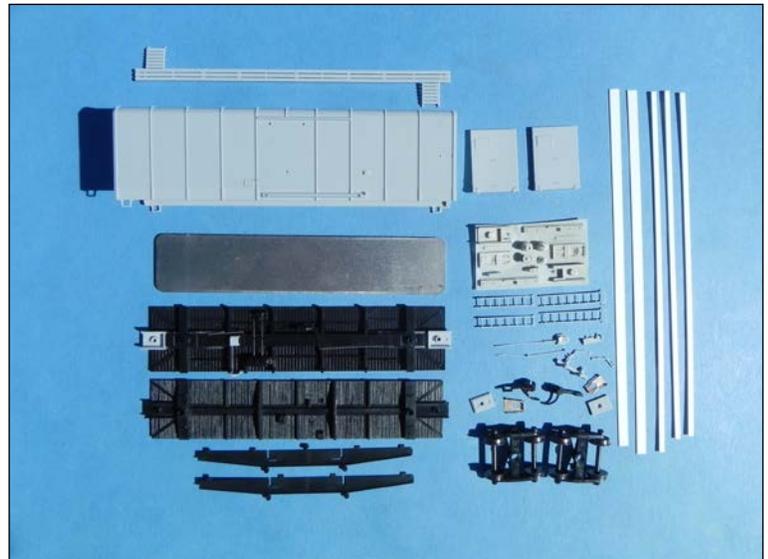
The M-15K Mini-Kit

The mini-kit is comprised of the following components:

- An undecorated M-53 wagontop carbody from Fox Valley Models
- A fishbelly underframe from Accurail (#105)
- Cast resin endsills and AB brake components
- Assorted styrene strips
- AAR (“Bettendorf”) trucks
- Kadee #5 couplers
- Wagontop decals from Speedwitch Media (#D-130)

Modelers completing the mini-kit will need additional parts as shown in the accompanying parts list.

For those creating their own mini-kit – FVM currently catalogs decorated M-53’s in a variety of lettering schemes; undecorated models MAY be available on special request. The sheet of cast resin parts was a custom run, and is not commercially available; the AB brake components are available from several commercial sources, and the endsill can be easily scratchbuilt. In acquiring trucks, consider using the Andrews type -- the prototype’s primary style.



Included in the mini-kit are an M-53 wagontop carbody, and Accurail underframe, a sheet of cast resin parts, trucks, sundry details, and decals – nearly everything needed to complete the model.

Comparative Models

The hobby’s first M-15K kit was offered by Sunshine Models in cast resin – a “flat kit” except of course the sides were curved and difficult to build without gaps between the side-roof pieces and the ends. Now mercifully out of production, it was a fine prototype model for its day.

More recently, Funaro & Camerlengo released an M-15K with a one-piece cast resin carbody. Having built F&C’s M-15L (a companion kit to their M-15K), I can attest to much easier assembly. Detailing is comparably fine vs. the FVM carbody. I have not built the F&C M-15k, but the completed model photo on F&C’s website suggests a fine prototype model (although the slant of the notched sidesill undercut from one end of the car to the other is a bit disturbing).

Whether to create your own mini-kit or buy F&C’s offering is a close call. The amount of assembly work is nearly the same, as creating the notches in the FVM carbody about offsets the time to deflash F&C’s cast resin parts. The purchase cost economics are also nearly identical. It may boil down to one’s relative comfort of working with styrene or cast resin. Both alternatives will result in a fine prototype model.



The fine detail of the completed mini-kit compares favorably with previous M-15 wagontop offerings such as Funaro & Camerlengo's M-15L and Sunshine Models' M-15K.

Modifying the FVM M-53 Carbody

In addition to the supplied instructions, the project has been discussed in various on-line forums. The following instructions build from the original instructions as well as on-line comments from Jerry Hansmith, Chris Vanko, Mike Skibbe, and Ted Culotta.

Another note up front – the sequence I used for the carbody modifications works fine, but from hindsight, there's a better one. I'll present my sequence, but would suggest that you re-order the steps for your model in the following sequence – steps 1, 5, 6, 7, 3, 4, 8, 9. This alternate sequence uses the edge of the sidesill spacers (steps 5 and 6) as a guide for precisely truing the sidesheet bottom cuts (step 2), potentially resulting in a more precise positioning of the underframe supports (step 4).

Step 1

Using a straightedge as a guide, with a knife or single-edge razor blade scribe a straight horizontal line in the lower sidesheet between the sidestakes and below the lowest rivet line. With a razor blade make vertical cuts next to the sidestakes, allowing you to snap out the piece (similar to how you would do it with sheet styrene). Be sure to similarly remove pieces below the door guides and at the stirrup locations.

Step 2

After snapping out pieces the length of the car, even them up with a file.



The M-15K's distinctive sidesheet notches are scribed and snapped from the M-53 carbody, then trued with a file.



Completed notches.

Step 3

Cut four underframe supports from .125" x .125" styrene strips 12'0" long, and glue them at each end flush above the underframe locator ledge molded on the interior of the FVM carbody. Note that the thickness of the replacement Accurail floor at the bolsters is an exact match for the FVM floor, and no adjustment of coupler height is required.

Step 4

Cut two underframe support pads from a scrap of .080" sheet, sized to fit between the .125" x .125" supports at each end of the car; these will be used to secure the floor to the carbody. Length is not critical; I made mine 7'0" long.



The floor is supported by .125" x .125" strips and .080" pads.

Step 5

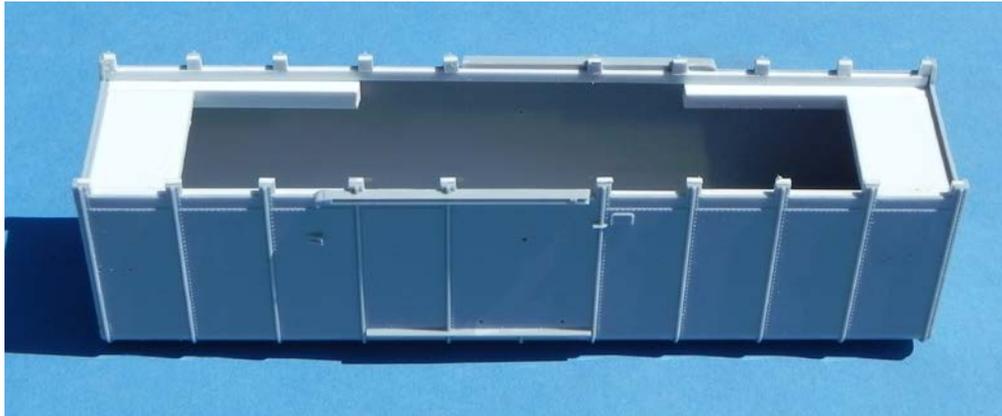
Cut away three small lugs molded inside each side of the lower carbody side. Cut two .040" x .080" sidesill spacers 40'8" long. Note that these replaced the .040" x .100" strips provided with the kit, which appeared too deep vs. prototype photos. Glue them behind the sidestakes, nested against the underframe locator ledge molded into the FVM carbody.



I substituted .040" x .080" sidesill spacers in place of the .040" x .100" strips

Step 6

Cut 16 sidesill spacer pieces of .040" x .100" x about 10" and glue vertically behind the sidestakes. We'll trim them to exact length later.



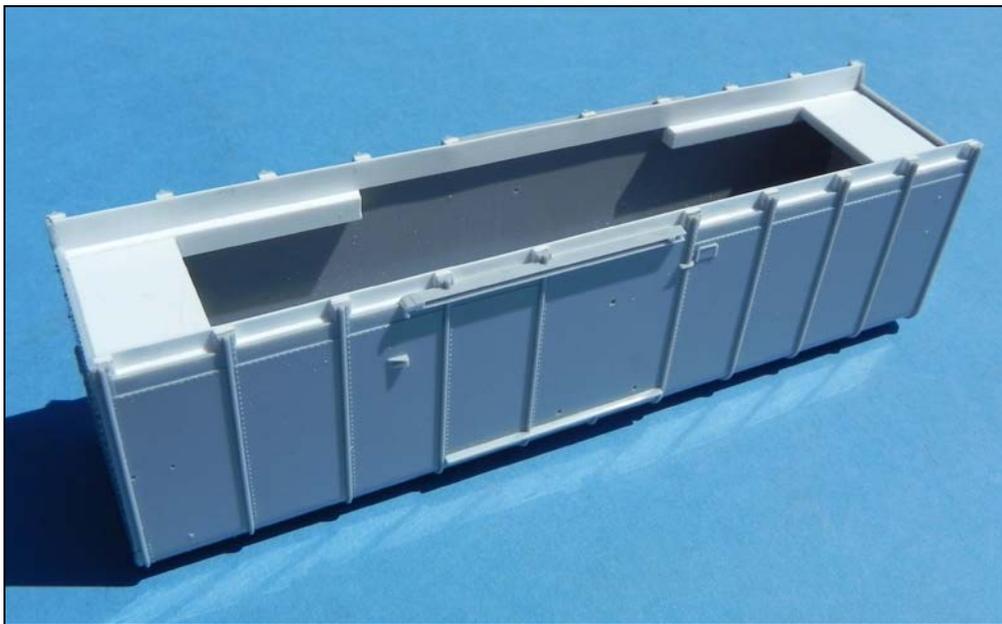
Sidesill spacers .040" x .100" x 10" are glued vertically behind the sidestakes.

Step 7

Cut four corner sidesill spacers of .040" x .080" strip x about 10" long, and glue them behind the sidestakes at the carbody corners.

Step 8

Cut two sidesills of .015" x .188" x 40'8" and glue them behind the sidesill spacers, edge butted against the .125" x .125" underframe supports.



Sidesills of .010" x .188" complete the M-53 carbody modifications.

Step 9

With sandpaper on a flat surface, trim the ends of the vertical sidesill spacers flush with the bottoms of the sidestakes.

Complete the Underbody

The mini-kit includes two underframes – one from the FVM M-53 kit, and the fishbelly replacement from Accurail. Check the fit of the Accurail underframe; on my model, I removed a small amount of material from each side of the underframe.

Cut away the coupler pockets from each end of the underframe, and file the area flush with the floor. Add a .030" x .040" spacer at each end of the underframe.

The coupler box screws will serve to secure the boxes and the underframe to the coupler support pads. Drill (#42) the centerpost of the cast resin coupler box to accept a 2-56 mounting screw. At each end, center the box on the floor and extend the hole through the floor. Insert the floor into the carbody, mark the location of the holes on the underframe support pads, drill (#50), and tap.

Add couplers (I replaced the kit's couplers with Kadee #158 scale couplers), assemble the underframe to the carbody, and add trucks to check coupler height. While the mini-kit's AAR ("Bettendorf") trucks are correct for some of the M-15K's, I substituted Andrews trucks – a type much more common on the prototype. On my model, coupler height was correct without adjustment.

The coupler box opening on the cast resin end sill is narrower than the coupler box, offering two options – either shorten the coupler box, or widen the opening. I chose the latter. Glue the endsill to the carbody.

Remove the underframe from the carbody, and add the fishbelly centerbeams. Forum comments speculate that some M-15K's survived their rebuilding with a hybrid AB brake system, which retained the cylinder and reservoir from the original Type K brake system, and added a second reservoir and AB valve. It appears that other cars were fitted with the standard AB system. Lacking prototype photos, I went with the latter.

Assemble the cast resin components, and install them per the photo. The end of the reservoir and the brake valve are supported on .040" x .100" risers. Install the levers and rods per the photo. With the underbody largely hidden in normal viewing, I ignored the piping.



Coupler boxes ready for installation.



Completed underbody detail; details not visible from side viewing were omitted.

Remove the slack adjuster from the FVM underframe, and install it atop a scrap of .040" strip per the photo. Lacking a photo of how the slack adjuster shaft related to the fishbelly beams, I omitted it.

Detail the Carbody

The grabs supplied with the FVM carbody have very short legs, intended to be glued into dimples cast into the carbody. I have an aversion to parts getting knocked off a model after completion (the repair never matches the original), so I substituted grabs with legs installed drilled (#78) holes and glued from behind. Many 18" grab choices are available; I used Westerfield #1198 straight grabs on the sides and ends, and #1197 drop grabs on the end sills. Details Associates #6601 vestibule grabs match the longer grabs on the ends.

Glue the running board to the carbody from the inside. I used the FVM corner grabs for the lateral running boards, but substituted a stub of wire for the oversized eyebolt at their corner.

Glue the ladders to the carbody; snip off about 3" from the bottom of the side ladders due to the recessed sidesill. If you enjoy carbody variations, note shorter ladders with an extra grab at the top in some M-15K photos.

The wagontops had unique stirrups, best bent from 1/32" x 1/64" bar stock. Bend them with two pair of needlenose pliers, using the photos as a guide; note that there is a 90-degree twist at each end where the stirrup meets the carbody. For a stronger attachment, I left a leg on one end bent 90 degrees, which I inserted into a hole drilled (#61) in the end of the end sill.

Install the handbrake housing/rod assembly on the "B" end, terminating the rod atop the end sill. Glue the cast resin retainer valve above the hole next to the top of the ladder. I replaced the styrene retainer pipe with a straight section of .010" wire, securing it in holes drilled (#78) below the retainer valve and through the top of the end sill. Glue the brake platform and brake wheel into the holes provided. I omitted the air hoses as redundant vs. the Kadee coupler "hoses".



The unique B&O-design stirrups were bent from 1/32' x 1/64" bar stock.

At each end of the running board, glue a pair of diagonal supports cut from .010" x .020" strip 9" long.

The unweighted car weighs a little over two ounces, and the hefty weight provided brings it slightly over four ounces – above the NMRA recommendation of slightly under four ounces for a 40-foot car; I went with a smaller weight. If using the wide mini-kit weight, it can be installed atop the underframe supports after painting.



Paint and Lettering

B&O's "freight car red" varied significantly across eras, and sometimes within era. Through WW2, the predominant hue was a brownish version of "Boxcar Red". New paint formulations following WW2 shifted B&O's freight car red closer to "Oxide Red," often with an orangish tint reminiscent of "Zinc Chromate Primer". For my model, I used a 50-50 mix of out-of-production Floquil Oxide Red and Zinc Chromate Primer. If you like this shade, there are paint conversion charts on-line which can help translate Floquil's colors to brands currently available. Or – go with an Oxide Red of your choice; you'll be in the ballpark if not right-on.

According to B&O historian Chris Barkan, B&O boxcar lettering varied significantly across eras, including three variations utilizing the small "Kuhler era" capitol dome herald from 1937 to 1945, and three additional variations built around the larger "13 Great States" herald prevalent from 1945 to 1957. Large B&O initials began to appear on cars in 1955, carrying well into the 1960s.

The decal set provided with the mini-kit (and a similar wagontop set available from Speedwitch Media) appears capable of handling this entire set of variations. Note that the film in the mini-kit decal set is very thin. After wetting the decal must be carefully slid from the backing to the carbody; any attempt to handle the film separately will likely result in a pile of decal mush. Also – the backing paper is almost white (why do they do this!). The heralds and large lettering are easily located for cutting, but the small lettering is almost impossible see against the backing. By wetting the needed section of the sheet before cutting, it's possible to make out the outlines of the small lettering.

For my transition era car, I opted for "The Postwar 13 Great States" variation prevalent from mid-1946 to mid-1955. Lacking a B&ORR lettering diagram for the M-15K, I measured lettering locations from the prototype photos. A few of the things I came up with – the top of the overline for the reporting marks and the bottom of the herald are both 5'3" above the bottom of the side (excluding the sidesill). The B&O roadname is 7'6" above the bottom of the side. The bottom of the end numerals is 8'6" above the top of the end sill.

Overspray the car with a flat finish such as Dullcote, and weather as desired. On the prototype, grime tended to collect adjacent to the sidestakes; I used Pan Pastel Red Iron Oxide Extra Dark to simulate this effect.

Glue the weight, secure the coupler boxes and floor to the carbody, add trucks, and she's ready to roll!





Completed model; some weathering near the sidestakes adds realism.

Parts List

Manufacturer	Part No.	Description
Detail Associates	2206	Eyebolts
	2503	Wire, .010"
	2505	Wire, .015"
	6601	Grabs, Vestibule
Evergreen	100	Styrene Strip, .010" x .020"
	132	" " , .030" x .040"
	144	" " , .040" x .080"
	145	" " , .040" x .100"
	186	" " , .125" x .125"
	9080	Styrene Sheet, .080"
Westerfield	1197	Grabs, Drop, 18"
	1198	Grabs, Straight, 18"
(Various)		Brass Bar, 1/32" x 1/64"

References

Railway Prototype Cyclopedia, Vol. 9, "B&O Wagon-Top Box and Automobile Cars," Pat Wider, pp. 1-25.

(Comprehensive history of the wagontops with three M-15K photos)

Steam Era Freight Cars Reference Manual, Vol. 1, "B&O Wagon-top Box Cars," Ted Culotta, pp. 140-142. (One M-15K photo)

Focus on Freight Cars, Vol. 7, Ted Culotta, pp. 48-52. (Seven photos of M-15K #370282)

The Postwar Freight Car Fleet, Larry Kline and Ted Culotta, pp. 75-76. (Two M-15K photos)

B&O Magazine August, 1937, "New Type Box Car Developed on the B&O," by Lawrence Sagle, pp. 19-20.



M-15K N-scale model by Keith Kohlmann.

THE J. J. TATUM PATENTED XLT SLACK ADJUSTER

BY ED KIRSTATTER AND CHRIS TILLEY

History

Have you ever wondered what that little rectangular apparatus is hanging from the bottom side sill of certain B&O cars? This is the Tatum Slack Adjuster. In order for a train to stop safely, the brakes on each car must apply and release more or less simultaneously (of course allowing for the travel of air pressure in the train line). A car with worn or stretched parts would take longer to reach application than those around it, so part of routine car maintenance was adjusting the play in the brake rigging to an acceptable standard. The foundation brake line under railroad cars has a certain amount of slack, but this slack will increase over time to an excessive amount due to wear of the brake shoes and stretching of the mechanical linkage. The linkage can be adjusted by moving pins to other holes in the linkage to tighten things up. Unfortunately, this adjustment requires a worker to crawl under the car to do this, typically straightening and removing a cotter pin, shifting the clevis pin. to another hole and replacing a new cotter pin. This is a dirty, uncomfortable and awkward maneuver even on a bright clear spring day, and let's not talk about snow and ice conditions. (Years ago, in an issue of the PRRT&HS's magazine *The Keystone*, the late former PRR car inspector John Harris described and photo-illustrated this task.)



Figure 1 - XLT Slack Adjuster ratchet mechanism as applied to M-53.
Chris Tilley photo.

One of the small details exclusive to the B&O was the so-called XLT Slack Adjuster. This device was one of the many freight car improvements or new car designs invented by John J. (J. J.) Tatum. Tatum's XLT Slack Adjuster was designed to allow this task to be accomplished from the side of the car using only a wrench and hammer. The concept is simple—a shaft here when rotated wraps up a chain that is attached to the floating brake lever at the A end of the car and removes the slack in the brake linkage.

We discussed Mr. Tatum in *B&O Modeler* No. 42, pages 41-46. Mr. Tatum was a remarkable chap who worked his way up through the ranks of the Car Department to eventually become General Superintendent. (There is an excellent writeup of Tatum's life and career on page 95 of Dwight Jones' *Encyclopedia of B&O Cabooses, Vol. 3.*) Among his many patents are a one-piece route card holder, a one-piece brake step and a boxcar door track system. J. J. Tatum is most widely known for designing the wagon top cars (boxcars, covered hoppers and cabooses), all signature cars of the B&O. He also designed other cars of more conventional design using newly developed metal alloys, many of which are now used in freight car manufacture. A few photos surface here and there of these cars, often leading to a article in the *Sentinel*. Tatum used the trade name XLT for his designs.

It was common practice around the turn of the 20th century for an employee of a company to design and patent something on the side and sell (assign) the patent to their company for a profit. Employment contracts of today seem to dictate that the invention is the intellectual property of the company, precluding the employee from profiting from a design, even if it is for the company's benefit. In modern day terms, this would be called a conflict of interest.

Tatum received a patent for the XLT Slack Adjuster in 1932. Patent No. 1,888,942 dated 11/22/32 appears to cover the basic design and principle, and a subsequent patent, no. 1,912,321 dated 5/30/33 covers application to a "cushioned" (e.g. Duryea) underframe. The device was used on some B&O cars before the patents were issued. We will reproduce the patent drawings for the non-cushioned design with this article with only brief commentary, since with a little study they make it pretty clear how the device works. We will leave it up to the reader to download and read the numerous pages of patent verbiage from the U.S. Patent Office website. We plan to reproduce the drawings of the cushioned underframe patent in a future *B&O Modeler*.

Applications of the XLT Slack Adjuster on B&O Car Classes

The maddening thing is that application of the device, as far as we have seen, is NOT designated on the railroad's official freight car diagrams. Your eyes must be the guiding force. (Certainly at one time the B&O's Mechanical Department maintained a listing of cars equipped, but it has not been located by the authors.) The main spotting feature of the XLT Slack Adjuster is the ratchet and pawl assembly mounted below the side sill of the car, except for gondolas where it was affixed to the fish-belly side sill. This part was mounted on the "A" end (the end opposite the brake wheel) on the right side, looking toward the "A" end on most cars. On box cars, it was mounted to the inboard edge of the first-floor cross tie, about a foot or so inboard of the wheels of the inner axle. On covered hopper applications, it appears to be mounted to the inboard edge of the body bolster, above the wheel.

Based on visual evidence, the authors have identified use of the XLT Slack Adjuster on the following freight car classes. This list is probably not comprehensive:

Boxcars: M-15K (possibly and on other M-15 wagontop rebuilds), M-26D, M-36E M-53, M-55, M-55A, M-55B

Covered Hoppers: N25B+, N-31, N-34, N-36

Gondolas: O-27B, O-40, O-59, O-59A, O-60

Open Hoppers: N-35 (possibly, photo in Bob Charles Collection is dim)

Caboose: I-7, I-12 (at least some)

If anyone has a copy of an official listing, we will certainly publish it!

While it seems intuitive that the XLT would have been installed on other classes of rebuilds, such as the various other subclasses of the M-15 wagontops, no photographic evidence is readily available to back up that assumption. Why none of the other Tatum patent cars did not use this appliance is a mystery.

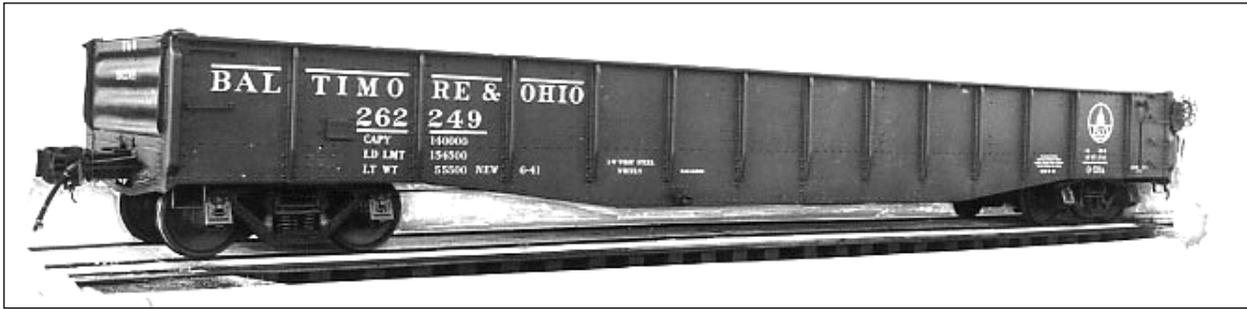


Figure 2 - O-59A number 262249 clearly shows the XLT Slack Adjuster below the fifth stake from the left (A) end.
Photo courtesy of Bob Witt, BORHS.

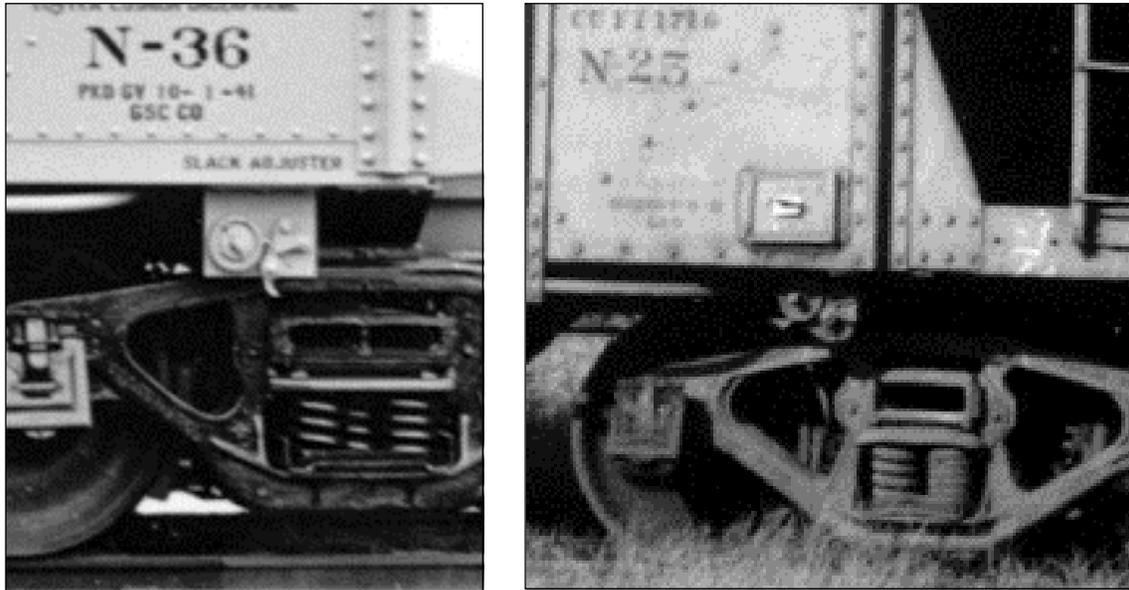


Figure 3 - (Left) The XLT slack adjuster applied to class N-36 covered hopper. Note that this is a mirror image of the version shown in figure 1 above. (Right) The XLT on the N-25 has a slightly different back plate.

The visible ratchet and pawl and back plate and other XLT parts were possibly manufactured at the company's Bolt and Forge Shop in Cumberland, Maryland from recycled steel brought in from all over the system.

The authors have never seen any XLT appliances fitted to cars of other roads, probably having something to do with the royalties Tatum likely demanded. However, some other appliances with similar function have been noted on at least some cabooses on the L&N railroad. Sloan Railroad Products, Universal Railway Devices Company and SAB are other known slack adjuster manufacturers.

How It Works

The rigging behind the scenes is not apparent from most viewing angles, but the following diagrams, from Tatum's patent approvals will aid those modelers wishing to add that extra level of fidelity to their model. As noted previously, there were two variations of XLT systems, one for fixed underframes and one for cushioned underframes, such as the Duryea patented system used extensively by the B&O. The difference was the means of attachment and points of flexibility designed into the system since the brake rigging could not be rigidly affixed to a sliding center sill. Of course, different car types required different setups, especially those without floors, such as hoppers and covered hoppers.

Nov. 22, 1932.

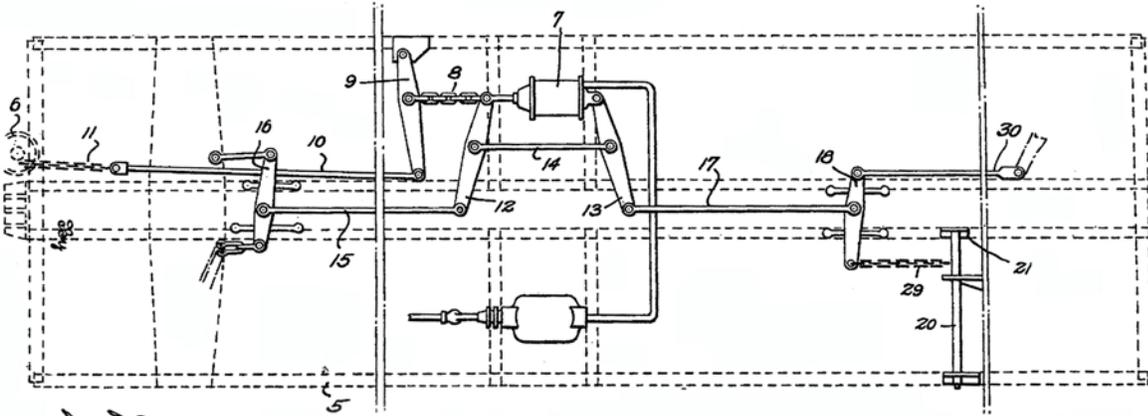
J. J. TATUM

1,888,942

SLACK ADJUSTER FOR RAILWAY BRAKES

Filed Aug. 15, 1929 4 Sheets-Sheet 1

Fig. 1.



Inventor
J. J. Tatum
 Attorney
James A. Gordon

Nov. 22, 1932.

J. J. TATUM

1,888,942

SLACK ADJUSTER FOR RAILWAY BRAKES

Filed Aug. 15, 1929 4 Sheets-Sheet 2

Fig. 2.

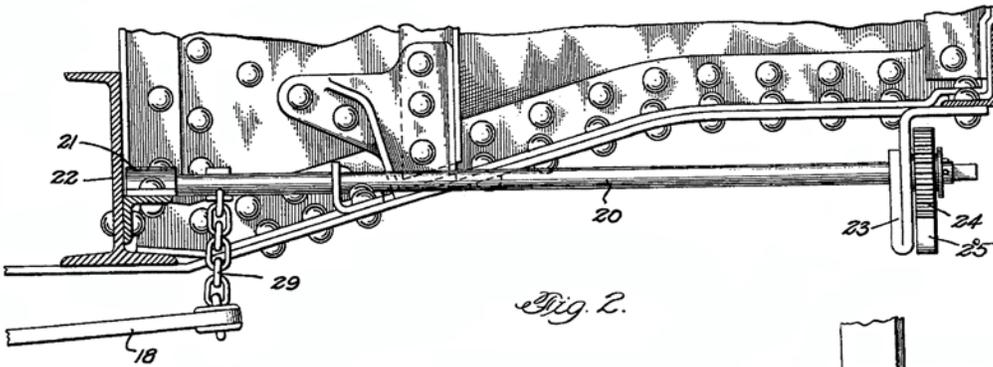
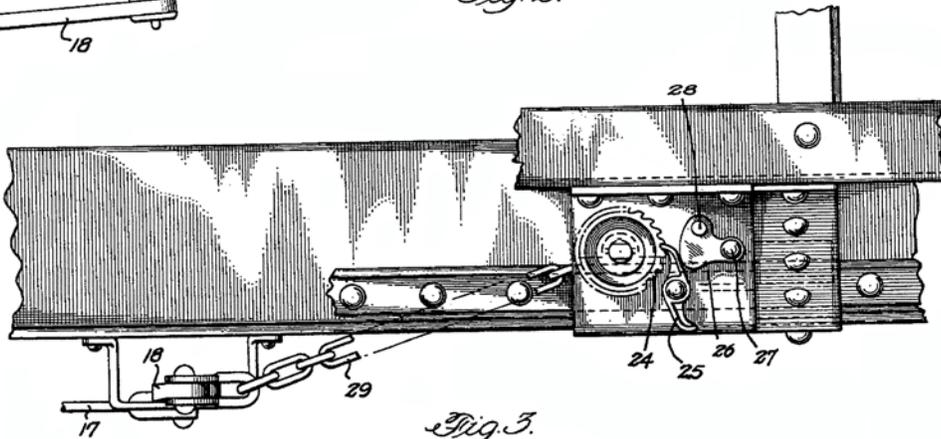


Fig. 3.



Inventor
J. J. Tatum
 Attorney
James A. Gordon

Nov. 22, 1932.

J. J. TATUM

1,888,942

SLACK ADJUSTER FOR RAILWAY BRAKES

Filed Aug. 15, 1929

4 Sheets-Sheet 3

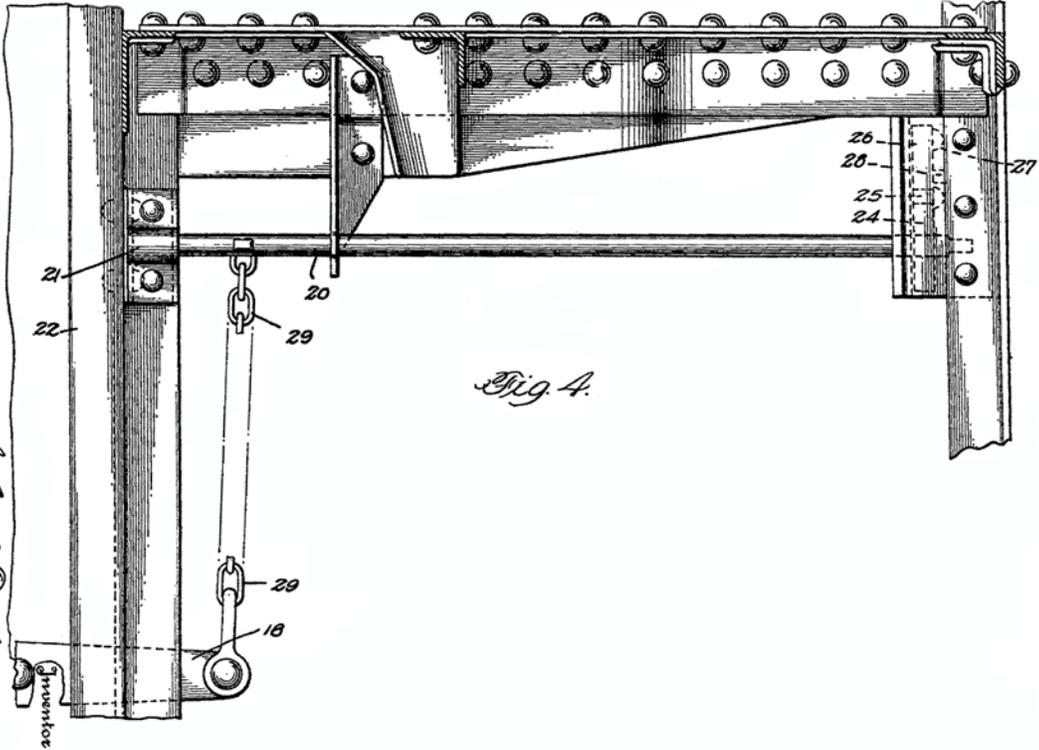


Fig. 4.

J. J. Tatum
Inventor
John W. & G. S. Tatum
Attorneys

Nov. 22, 1932.

J. J. TATUM

1,888,942

SLACK ADJUSTER FOR RAILWAY BRAKES

Filed Aug. 15, 1929

4 Sheets-Sheet 4

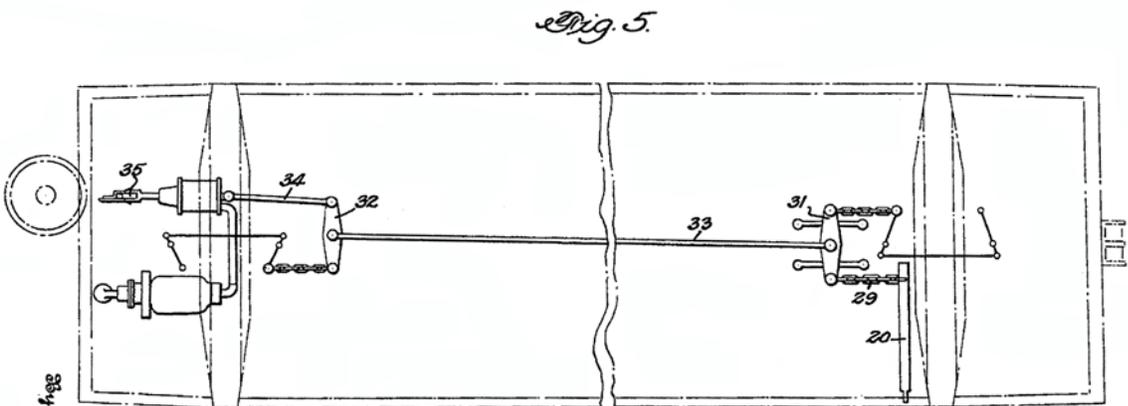


Fig. 5.

J. J. Tatum
Inventor
John W. & G. S. Tatum
Attorneys

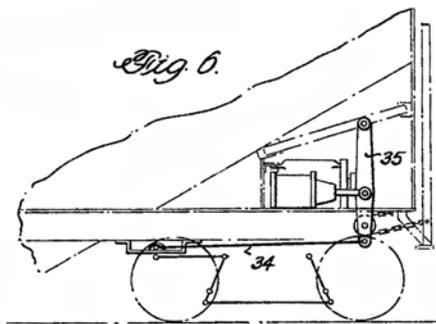


Fig. 6.

J. J. Tatum
Inventor
John W. & G. S. Tatum
Attorneys

The previous figures are from Patent No. 1,888,942, fixed underframe cars

Patent Figure 1 Arrangement of slack adjuster and brake linkage looking down on car. Slack adjuster is at the “A” end (top of drawing). This is the general layout for a fixed center sill car other than a hopper bottom type car. In this case, shaft (20) winds a chain (29) which pulls on the long end of the intermediate “floating” lever (18), pulling it toward the end of the car, which by virtue of the interconnecting rods, pushes the ends of the front and rear piston levers (12 and 13 respectively) toward each other, pulling the slack again toward the center of the car. The outboard end of shaft (20) and the ratchet assembly are all that is visible from the side of the car. United States Patent Office.

Patent Figures 2 and 3 Transverse and side view of slack adjuster. United States Patent Office.

Patent Figure 4 View of slack adjuster shaft looking down through car floor United States Patent Office.

Patent Figures 5 and 6 This arrangement is for the fixed center sill variety with end-mounted rigging, as on a hopper or covered hopper car. The action of shaft (20) winding chain (29) acting to pull the floating lever (31) is identical to that in figure F except that the piston is at the end of the car and there is no rear piston lever. Since all the fixed brake rigging is at the end of the carbody and the adjuster acts on a floating lever, this is likely the setup for cushioned center sill covered hopper cars also. United States Patent Office.

Chris Tilley’s Suggestions for Modeling the XLT Slack Adjuster

For those modelers wishing to include this interesting detail, the underframe rigging is simply a matter of patience in bending and installing brass wire. Although dimensions for the rods are not given in the patent diagrams, .012 wire should be about right. The underbody rods, levers and chains will probably foul the model running gear, so most modelers will probably confine themselves to the most visible part of the mechanism which unfortunately is the hard part. Let’s start with the following diagram that shows the dimensions of the ratchet and pawl assembly. If you get confused, take another look at Figure 1 at the beginning of this article.

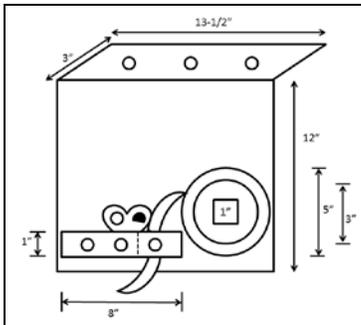


Figure 4 - Line diagram of the ratchet assembly common to both types of XLT Slack Adjusters. Dimensions in scale inches. Chris Tilley diagram, based on application seen on M-53 385897 at The Baltimore & Ohio Railroad Museum. The gear has 28 teeth and is 5 inches across. The washer is 3 inches across. The shaft is 1-3/8 inches (round) coming out of the back of this assembly, and 1 inch square on the visible end. Covered hopper applications are mirror images of this diagram.

No, this part is not commercially available. One way to start is to go to watchmaking school and learn the craft of making tiny gears from brass. Use of 3-D drafting and printing skills would be another approach, although the resolution level of today’s hobby printers might be borderline for the size of the detail in an HO model.

Method 1. A reasonable stand-in is to start with the old-fashioned brake step with ratchet and pawl casting (for vertical brake staff applications) on the Tichy Brake Parts sprue.

Method 2. You may have some extra resin brake steps from Westerfield or other resin kits. By trimming it down and adding slivers of styrene for the pawl, strap and cam, the assembly can be glued to the bottom of the side sill. This piece ends up being a bit too small in all dimensions, however.

Method 3. This way goes a bit farther than the above approach: make the back plate as dimensioned above (and described in more detail below).

1. Take the brake step with ratchet and pawl from the Tichy brake parts sprue. Cut away everything except the gear and sand the backside to reduce the thickness about 1/3.
2. Glue to the back plate with CA.
3. Fashion the pawl from .010 brass wire. Make the dog, a heart shape, from .010 styrene about 6 scale inches across and glue it to the back plate. Make a strap to go over the heart and pawl and across the remainder of the back plate.

For those modeling in HO-scale wanting greater fidelity, 100% scratchbuilding is currently the only answer available.

1. Begin by cutting a piece of .020" styrene 15 scale inches tall x 13-1/2 inches wide. Fold over the top 3 scale inches to form the mounting lip. While .020 is thicker than the prototype (about 2 scale inches in HO), a little extra strength is called for in this application since the possibility of snagging on objects during handling is great.
2. With the lip facing up, begin adding the components to the plate. The gear is 5 scale inches across and has 28 teeth. This could be made out of a piece of .020 styrene with the teeth filed in with a triangular jeweler's file, or perhaps a watch repair shop could provide an appropriate gear—or, wait, what have you been saving those broken watches for all these years? This piece is only about an actual 1/16 of an inch across so it won't be easy to make. It is attached with the center 3 scale inches from the right edge and 3-3/4 scale inches up from the bottom. Plastruct Bondene cement is recommended in this step over Tenax 7R since it is slightly less aggressive on the plastic.
3. A 3-1/2 scale inch diameter washer should be centered on top of the gear. This should be made of thinner material such as .005" brass.
4. The pawl is about 8 scale inches long shaped like a letter S. The easiest way to make this part is to bend it out of .012" brass wire. It is centered 3/4 scale inch up from the bottom with the point touching the gear.
5. A strap 1 scale inch wide x 8 scale inches long goes over the pawl. It is attached with the center 3/4 scale inch up from the bottom and almost flush with the left edge of the base plate.
6. Make a RTV mold and cast duplicates for your other cars.



Figure 5 - Chris Tilley's scratchbuilt resin casting (about 10x life size in the photo) of the XLT Slack Adjuster for covered hopper applications.



Figure 6 - XLT casting installed on kitbashed N-36 class covered hopper. Chris Tilley photo.

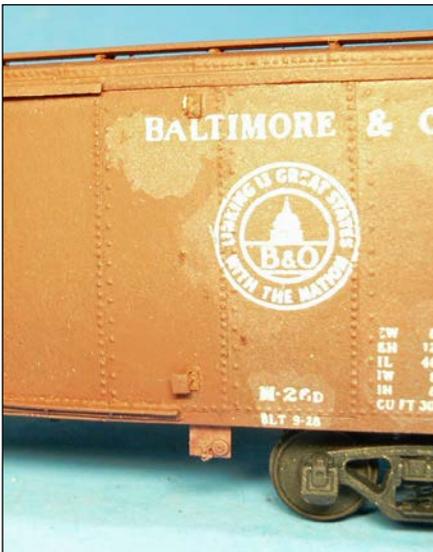
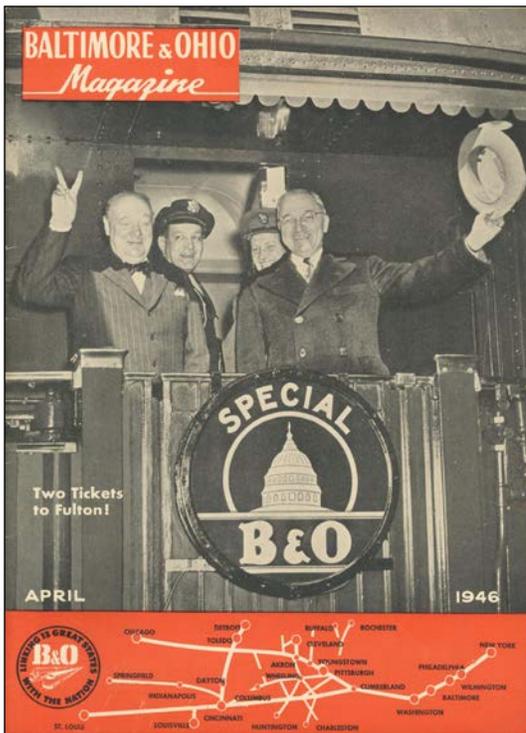


Figure 7 - Ed Kirstatter S-scale model of an M-26D boxcar.

SPRUCING UP THE RIGHT-OF-WAY

BY JOHN TEICHMOELLER



The question of B&O lineside structure colors for models arises from time to time, most recently as a thread on the B&O Yahoo Group. The answer to this question of course depends on your era of interest. Jim Mischke unearthed one form of documentation, namely an article in the April 1946 issue of *Baltimore and Ohio Magazine*. This article, by Larry Sagle, spells out the light cream with black trim specified for frame structures and black for shop buildings. Al McEvoy, our archives manager, has scanned the article so we now reprint it for future reference purposes. And just to show how imperfect our memories are, it turns out the same article was reprinted, without commentary way back in Volume 7, No. 4 (1985) *The Sentinel!*

We could stop right there, couldn't we? Of course not. As with many articles in *B&O Magazine*, this one probably raises as many questions as it answers. Consider the following to be almost an editorial. You may have differing opinions; in this case consider this an open invitation to submit your own article on the subject of "Painting Frame B&O Structures." Here we go:

Light Cream?

What color actually is "light cream?" For many years, modelers used Floquil's "Depot Buff." While I personally really like that color, and I have used it, I agree with critics who contend it is wrong, too yellowish.

Prototype color photos indicate the color is much paler. Some years ago, I discovered Polly Scale "CSX Tan" which I used to paint my model of Ilchester Station. This is still not as pale as the following Floquil mixture which has been shared by Henry Freeman and which seems to be about right: Equal parts Depot Buff, White and *Flesh* (did Floquil actually make such a politically incorrect color?).

John King tends to confirm this shade based on his careful studies of numerous color photos of old B&O structures as well as even some archeological paint research of the fire-damaged Dickerson, Maryland station. I can't bring myself to use it because—even if correct—it just looks ugly, especially under my fluorescent lights. Some years ago, I stuck with pure Depot Buff on my Mountaineer Precision Products "12'x14' Office Building, smudging it with brown and black weathering chalks. I was mainly being guided and inspired by a super color photo Ed Kirstatter shared with me of the "troll's shack" under the Center St. bridge in Youngstown that was tinted by the iron ore dust continually being ground into it (see *B&O Modeler*, September/October 2009).

Before the Cream

What about earlier periods? Well, discussing this point is beyond the scope of this article. But we have to do it anyway, right? We have only the comment in the *B&O Magazine* article that the colors were "dark Indian red." It is known, however, that this body color was supplemented, at least in some locations, by black trim. I remember one in Tipp City, Ohio, we visited during the Dayton Convention that had a corner of the aluminum siding damaged exposing traces of body red and black trim underneath. Also, Jim Mischke has found evidence that doors were sometimes green. And there were some "non-standard" applications.

John also points out that it took time to change these structure colors so you can have some variation. John said he has "a photo showing the Winchester freight station was still red around 1955. But the Winchester passenger station was cream and black by October 1951. The Charles Town, West Virginia passenger station was still painted red in 1962 with the darker trim. So the change did not occur immediately, and it was quite possible to have more than one paint color in the same city. Also, the black trim didn't stay stark black for long, quickly weathering to a brownish black or grey depending on its environment.

Sprucing Up the Right-of-Way



THE SMART NEW COLOR SCHEME of our right-o-way properties is well illustrated by this shot of the newly painted tower at Fort Meade Junction, Md.



HERE'S HOW the station at Fort Meade Junction looks in its new cream and black finish

FOR a long, long time, all buildings along the tracks of the B&O—stations, towers, tool houses, water tanks, shops, sheds, fences, etc.—have been painted a dark red. It was distinctive, without question. But it wasn't bright and cheerful. Some liked it because it was so typically B&O. Whenever you saw a watchman's shanty or a section-house painted a dark Indian red, you just knew it was the B&O!

But that is being changed now. Tradition can't stand in the way of progress; and it is progress even to brighten up your buildings. The MofW Department has adopted an entirely new color scheme for the exteriors of buildings. Stations and roadway buildings will now be painted a light cream shade and trimmed in black. Almost everyone who has seen the new

B&O stations, towers, water tanks, etc., are coming out in a new dress of cream with black trimming. It'll be standard from now on

colors on a station agrees that it is a vast improvement over the drab red of other years.

The pendulum swings in the other direction, however, where shop buildings at engine terminals are concerned, along with water tanks, both steel and wood. The prescribed color is black! Perhaps it was thought that, where exposed to locomotive smoke and gases, the red buildings eventually achieved a tone closely akin to black anyway. But this only applies to wooden structures. No brick, stone or concrete surfaces will be painted in the future, and where paint has previously been applied, it will be removed.

Incidentally, have you seen any of the brick stations, such as at Laurel and Point of Rocks, where sandblasting has brought out the warm, rich color of the old bricks, which, contrasted to the mellow-green trim of the door and window frames, makes a most pleasing effect?

The writer prefers the mortar between the bricks to be white, like that on the old Mt. Clare Station, although he knows of one official in the MofW Department who violently disagrees with him on that.

Oh, well, an opinion is an opinion! It's a free country. But any change from that drab, monotonous red is agreeable. And our own private "galloping" poll tells us that most of our employees agree with us on that score.—L.W.S.



THE TOOL HOUSE at Fort Meade presents a snappy appearance now that painters have spruced it up

After Cream and Black

What came after the cream and black period, and when did it end? We know it was still in effect in 1956. John King quotes the June 1, 1956 Maintenance of Way Rule Book, Rule 1952, that states “Standard color combinations for exterior of stations and other roadway buildings, other than at engine terminals, will be cream shade body with black trim in accordance with master paddles issued by Manager of Research.” Anybody have any of those paddles? John says that “some published photos as early as 1960 show stations being painted in solid cream color with no contrasting trim,” (some photos of Dickerson in this scheme from 1968-1972 were published in the May/June 2010 *B&O Modeler*), and he himself has “many photos of stations taken in the mid and late 1960s with solid cream paint and no contrasting trim.” Now that’s really ugly! Maintenance of Way Rule Books would appear to be the definitive VERBAL source of painting specifications if you are looking for “stuff” at paper shows. (See below for resources in the Yahoo List archives.)

Then at some later point, apparently when C&O interests began to creep in, a cream with handsome tannish-brown trim scheme began to appear. John notes “Millville, West Virginia was solid cream in 1968 and had been repainted with cream and brown trim scheme by 1975 or so.” However, so far we have no documentation on this change. For what it’s worth, the B&O Ellicott City stations still use this scheme on the wood and shingle portions of the structures and have for some time although I can’t date when it began. I have a photo of the B&O tower at James Road in Columbus taken in September of 1966 with this pale cream body color and with tan trim.

Floquil/Polly Scale Replacement for Depot Buff or CSX Tan or Whatever

I somehow get the feeling that before Floquil/Polly Scale died, most modelers stocked up on a lifetime supply of their favorite soon-to-disappear colors. But for new modelers or those who didn’t stock up, Joe Fugate of *Model Railroad Hobbyist* appears to be on the cutting edge of the “equivalence battle,” at least in the acrylic world. You can free-download his many-page e-book *Model Railroad Hobbyist’s Guide to Acrylic Paints in a Post-Floquil World*. If I understand the *MRH* website, you can even purchase a real hard copy book for a reasonable cost. The MicroScale decal company website has or used to have a Floquil color equivalent chart but it was incomplete last I looked.

Joe’s work is focused on acrylics. I think it is too early to sort out the battle between the TruColors, the Rapido products, the Scalecoats, the Vallejos and whatever else is bucking for shelf space in the constantly shrinking universe of hobby shops. Then there is the craft paint option which is probably viable for structures because many modelers end up brush-instead of spray painting their structures. Greg LaRocca wrote a must-have treatise about using craft for those who want to spray and can find the necessary two adjunct Liquitex potions in the June 2015 issue of *Railroad Model Craftsman*, and he specifically gave us craft paint equivalents for B&O passenger car gray and blue (Folk Art #467 Italian Sage for the gray and Americana #DA167 Paynes Gray for the blue).

My efforts are focused on compiling equivalences between my old Floquil bottles and the Testors Model Master line. Joe includes ModelMaster equivalences but it is incomplete, at least last I looked. I have a feeling he will be publishing more on this whole subject. And he may have already, because I don’t read *MRH* regularly. And now most articles in *Model Railroader*, especially those by staff, are giving such explicit information simply because the Testors line is widely available, in huge vendor displays, at craft stores. Hey, wasn’t Floquil part of the Testors corporate empire? Aarggh!

Some Official Resources

The Yahoo list “photos” section contains a scan of a color chart dated April 15, 1939. With some trepidation, I offer the following very clunky URL I pasted from my search:

[https://groups.yahoo.com/neo/groups/Baltimore_and_Ohio/search/photos?query=%20colors structure](https://groups.yahoo.com/neo/groups/Baltimore_and_Ohio/search/photos?query=%20colors%20structure)

If this doesn’t work, go to the PHOTOS section of the Yahoo Group and just type in “structure colors” in the search box at the top of the page. Click on the chart and you should get some additional variations of the chart with color corrections I believe by Wade Rice. The last time I looked there were also some photos of the restored red Harper’s Ferry station there, too.

I offer some further commentary: Ed Kirstatter tells me he passed it to the Archives after a friend of his from Youngstown found it among papers in the New Castle roundhouse. Wade Rice scanned it and posted it to the Yahoo list. The chart is included here with some reservations, but I suggest you download and print it out yourself and argue with yourself as to

what is right and wrong vs. your paint drawer. And then you might have some more questions. To start, the title of this document is “Standard Paint for Storehouse Buildings, Bins, etc. G.S.K. Cir. C-239.” Note that there is no comma after “Storehouse.” Does “Buildings” mean things like stations and towers or do the words mean “Storehouse Buildings?” If so, where is the color chart for stations and towers? Also, the heading of the chart enumerates three sections. Section I is Storehouses & Offices, Section II is Storage Facilities, Section III is Storehouse Appurtenances. Where are the “Sections?” All these words and they don’t seem to connect. There must be an accompanying document. Undiscovered in our Archives?

In any event, the “chips” on the chart would seem to create a warm and fuzzy feeling about what modeling legend has taught us. But maybe some more questions arise here, too: Do we suppose the 1939 chart’s “Cream” is what in 1946 became Larry Sagle’s depot and tower color. “Devils Red” would be what we know as used for firefighting apparatus enclosures. Would that be the same Devil’s Red modelers are supposed to paint their cabooses? There may be some mixed metaphors here. And what is “Passenger Car Truck Enamel” doing with a set of structure colors? There was some discussion on the Yahoo list about where the term “Indian Red” came from. Well, that’s what Larry Sagle called the earlier structure body color. Do you suppose “Ext. Bld. Red” on the chart is Larry Sagle’s “Indian Red?” Probably Larry did not have the actual color chart in front of him when he wrote the article.

Now, what about those “Maintenance of Way Department Rules and Instructions?” John King has loaded scans of selected pages (Painting Rules) of the 1928, 1944 and 1956 editions. These are in the Files section of the Yahoo list. I’m tired of trying to copy and paste URLs—just click on the “Files” section of the Yahoo site and type “Painting Rules” in the search box. You will get text only. There were apparently no color charts in John’s books.

OK, now it really is time to stop before really getting into non-documented trouble with Chessie System and CSX lineside structure colors. At least we now have one definitive data point, 1946 is the start from red to cream.



Left: Depot buff, weathered; Right: CSX tan, unweathered.

STANDARD PAINT FOR STOREHOUSE
BUILDINGS, BINS, ETC.
G.S.K. CIR. C-239

SECTION I : STOREHOUSES & OFFICES

SECTION II : STORAGE FACILITIES

SECTION III: STOREHOUSE APPURTENANCES

COLOR CHART:



STK. 100
LOCO. BLK.



STK. 140
ALUMINUM



STK. 162
TUSCAN FLOOR
RED



STK. 182
BUFF



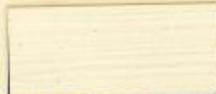
STK. 184
EXT. BLD. RED



STK. 186
CREAM



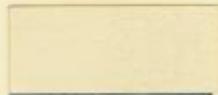
STK. 188
BATTLESHIP GRAY



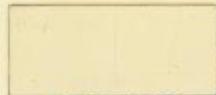
STK. 194
STA-WHITE OR EQ.



STK. 195
TERRA-COTTA



STK. 197
ZONE WHITE



STK. 199
ZABOLITE OR EQ.



STK. 312
DEVIL'S RED



STK. 329
PASS. CAR TRUCK
ENAMEL



STK. 245
GOLD LETTERING
COLOR



LIGHT
OAK

THE BALTIMORE & OHIO R. R. CO.
OFFICE OF GENERAL STOREKEEPER

STANDARD PAINT FOR
STOREHOUSE BUILDINGS, ETC.

B.P. No. 80. APR. 15, 1939.

THE BALTIMORE & OHIO'S HO PIEDMONT DIVISION

BY BRUCE ELLIOTT



Introduction

Many of us have our favorite section or location of the B&O. We then proceed to build a layout based on that area. But I had a problem. After many years of photographing pretty much the entire system and enjoying much of it, I found it impossible to narrow my layout down to just one location or division. My solution was to design and build a layout that contained favorite subjects, and/or had track plans that would work well together to achieve a plausible model railroad, of course subject to selective compression.

Layout Design Concepts and Model vs. Prototype Considerations

Construction on my layout started in March of 2013. The overall dimensions are 21' x 44' 8". The overall layout is rectangular in shape with mainline trackage around the perimeter. There is a staging yard that runs diagonally through the rectangle with the capacity of 5 eastbound and 5 westbound trains and a pair of run-through tracks. There is also a double ended branch line, as well as a stub end branch line that is still under development. I did not prepare a formal track plan (sorry, Tony Koester). Instead, I decided I needed to incorporate the following locations: Point of Rocks, MD, Somerset, PA, Garrett, PA, Patterson Creek, WV and Fairmont, WV. Point of Rocks (POR) was a must. The track plan for the interlocking allows for such a diversity of train travel. On top of this is, I have personally visited the location no fewer than 100 times over the last 50 years. So how do we tie these sections together? With POR as a definite, and what we know (prototypically) as the Old Main Line (OML) in one corner/end of the layout, I decided that the OML would go into a staging area shortly after the single-track leg of the wye that connects the Metropolitan Branch with the OML. This left me with a staging yard running diagonally over a 20-ft. span. I needed a similar mainline split at the other end of the layout to connect to the hidden staging yards. What's missing? On my previous layout, I chose to model Laughlin Jct. in Pittsburgh, which gave me the same basic track arrangement as POR (i.e., with a wye). This time I had about 10 ft. less width. Minimum mainline radius is 40", and I wanted to give as much space to a location as possible. Hence, Patterson Creek was chosen to go at the opposite end/corner of the layout.

I have two turntables that were going to be used. Like POR, these too were "must" items on the layout. The older of the two was built by my father in the mid-late '60s, with an 80-ft. bridge and seven stall tracks. Looking over the locations on the railroad that had 1) 80 ft. tables and 2) seven stalls, my only choice was Somerset, Pa. There were two compromises

that were made relative to the Somerset prototype 1) the roundhouse at Somerset only had six stalls and 2) there was only a single track mainline on the prototype S&C going through Somerset.

The second turntable has a 115-ft. bridge (awfully convenient for those EM-1's or two SD diesels). The roundhouse was built from six Walthers roundhouse kits, with a total of 17 stalls. With space limitations and roundhouse appearances to consider, Fairmont, WV was finally chosen. In addition, I wanted to have some sort of branch line operation, and the OML that was single track from Federal Jct. (at Fairmont) over to Moundsville, WV would be perfect to fill that bill as well.

So now we have Point of Rocks, Patterson Creek, Somerset, and Fairmont. I needed the other end of the single-track branch line to connect with the mainline at the other end of the layout. Let's go back to Patterson Creek for a minute. West bound at Patterson Creek, you have the Cut-off to McKenzie, or in my case to the staging yards, and the mainline going to the Fairmont yards. East bound at P-Creek there are three tracks. Obviously, predominantly the B&O is a two-track railroad. Well, I could have brought three tracks into two easily enough, but I had to bring in a branch line somewhere. Garrett, PA. was my answer. Eastbound from Garrett, there were three tracks that went to Yoder, and the coaling tower there. Also, there was the Berlin Branch coming down from Berlin, PA. So now I had three tracks from Patterson Creek smoothly blending into three tracks at Garrett, and I had the other end of a single-track branch line that started at Federal Jct., in Fairmont.

So, what did I end up with? POR consumes 24 linear ft., Patterson Creek 13 ft., Somerset 28 ft., Garrett 13 ft., and Fairmont at a whopping 40ft. Yep, 40 ft. While the mainline locations are totally based on reality, the branch line is fantasy, based on B&O practices, and is 45 ft. in length.

The present Coal, Coke and Logging (CC&L) branch line serves a colliery with trackage to handle 40+ coal cars comfortably at Consolidated Coal Co's Arnold Mine. The Schoonover Mining and Logging Equipment Co. handles equipment for branch line industries and a 24-oven battery of beehive coke ovens operated by the Fairmont Coke Works. The branch line rises and descends on a 2% grade.

Overall Scenic Effect and Traffic Patterns

The layout is "island" style with no backdrops as such; instead, there are the typical mountains in the background of all scenes. Scenery extends about 8 ft. into the body of the layout and at least 6.5 ft off the floor. A rough estimate of percentage of completion at the time this is written is over 20%. A stub-end branch needs to be built that will serve a second small coal load-out and a family size sawmill and continue into the woods. A double-track mainline runs around the layout. A train can circumnavigate the layout three ways: 1) around the perimeter, 2) over the branch line or, 3) over the "cut-off" between POR and Patterson Creek. These routes can be traveled both EB and WB. Add to it that you can turn a train around by either using the wye at POR or traveling through the "cut-off". The layout is DC controlled. I enjoy building structures.

As many readers probably know, at least in the past there haven't been many correct B&O structures available as kits. Fortunately, that is changing, and in my role as Society Model Committee Chairman, I am doing my best to improve things.

Along with my eclectic collection of locations is an equally eclectic collection of rolling stock and motive power from around the system. However, one thing is constant; the time frame for this is 1950 to 1955. This allowed me a greater variety of everything, including paint schemes on structures.

Keep in mind again that this layout is a "work in progress." Having said that, I feel readers will enjoy seeing the progress, and to do this I will approach the project on the "installment plan," offering some photos of each section of the layout progressively. The first section we will cover will be Point of Rocks, MD.



This is the west end of Point of Rocks, with POR tunnel and the US 15 bridge. The siding in the foreground was there in 1950, and served a livestock loading pen. The Potomac River flood back in the 1930s eliminated a lot of the rail traffic at POR, but this siding was still there at this time. Don Barnes and I speculate that the siding was used for either bad order cars or perhaps helpers.

In this photo we see the interlocking for POR. The road in the lower left is "old" US 15 crossing at grade. The town is obviously on the other side of the tracks. The far siding is for the freight house. The OML is to the left in the background, and goes to Patterson Creek. The mainline to Somerset is to the right. In the upper left is a small portion of the Coal, Coke & Logging (CC&L) branch. The coal cars are spotted on the siding for the Fairmont Coke Works.



This is the foot print for the freight house at POR. The track in front of the foot print is the siding, the next two tracks are the OML, and the two tracks in the lower right corner are the mainline.

There are two town structures that I plan to have. They are the church, and the Town Hall/Masonic Lodge, of which their footprint and relative location are seen here.



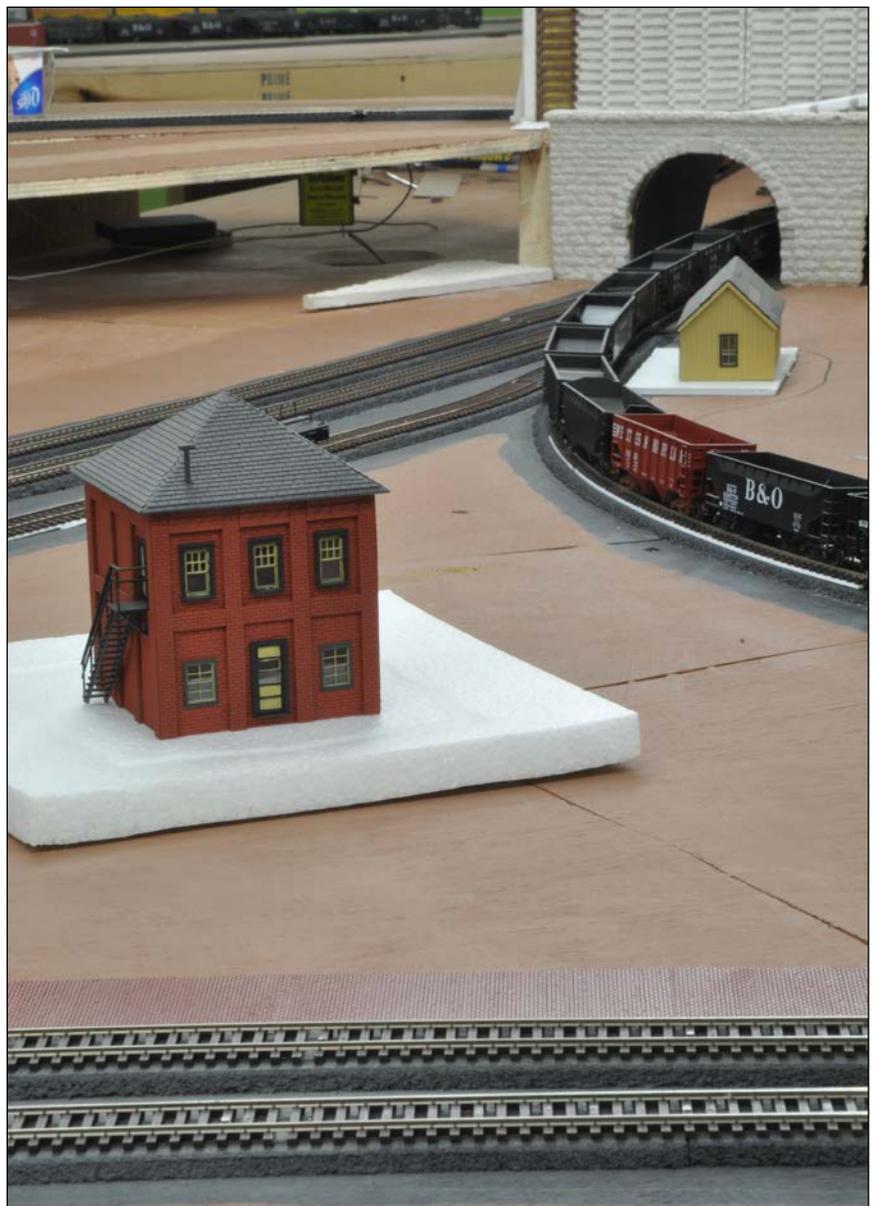
Easily recognizable is the west end of the station platform and the CPL. What may seem a bit odd is the foundation for a water tank. After the turn of the century a water tank was designated at this location. Like many former structures, I surmise that it was quite possible that the concrete footers were still there in the early '50s.

This is the heart of POR! KG tower is in the foreground. This is its appearance in the early '50s. The model was kitbashed/scratchbuilt from an IHC kit. Behind is the POR passenger station, the kit that came out almost twenty years ago from Model Tech Studios. The model still has a few aspects that are incomplete, such as a few doors and windows missing, and both awnings need to be built. The awnings that were supplied with the model were not satisfactory and will be scratchbuilt. [This is seeming to be a general complaint about the kit, and when Bruce gets around to building the awnings we'll try to get him to share his technique. JT] The POR station signs were not supplied with the kit and were printed on my computer from B&O station font.





Another view of KG tower and the station. Most notable here is the telephone poles and cross bars. An early '50s fan trip photo revealed this arrangement and location. The station platform is built from Vollmer brick, and replaces the plaster casting for the platform that was supplied with the model. It was necessary to extend the brick platform several car lengths to the right. The large white house above and to the right of the station represents a house that sat at that location for decades. Either the family eventually moved or the property was purchased by MARC when the parking lot was built for the expanding commuter rail service.



This purpose of this two-story brick structure has puzzled rail fans for years. The answer is that the second floor was the Division Superintendent's Office, and down on the first floor was a small MofW machine shop. This model was scratchbuilt from Vollmer brick material, Selley windows and Central Valley steps and railing. In the background is the section tool house at the OML end of the single leg of the wye. This was also scratchbuilt using Evergreen styrene, and was featured in Vol. 6, No. 6-Nov/Dec 2010 issue of *B&O Modeler*. Obviously due to space constraints, modeling license causes the OML to go into a tunnel and into a hidden staging yard at the east end of the leg.

This is the east end of POR, with the single leg of the wye entering the mainline. This curve is a 40" radius. The railroad structures and town are in the top background. The aluminum control panel mounted on the side of the fascia controls Tortoise switch machines on the branch line located above and behind POR. Since this is a DC controlled layout, the lower three toggle switches are track power for sidings.



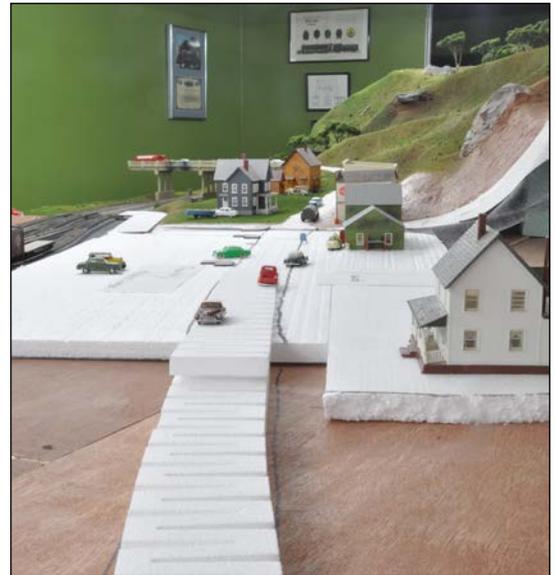
This is the other side of the station and KG tower. The OML is in the foreground.

This is the section tool house, located at the east end of the wye and the OML. The two tracks in the foreground are the OML.





This view gives a bit more context to the previous photo. The tracks to the left go into the hidden staging yard. The stacked up styrofoam above the tunnel is US 15, which will become Main St. when it gets to Somerset. There is an unfinished retaining wall behind the styrofoam that is Clark tunnel on the branch line.



This is an overview of the town of POR, looking west. Railroad structures are correct for the location, but a bit more modeling license was taken with town structures as there will only be two correct structures. The road in the center is US 15. There are a couple of side streets that should be at the right, but a lack of space kept them from being modeled.



This is the location and footprint for the freight house. This is the last railroad structure that needs to be built. No kit is available so this will be another scratchbuilt project.

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EXTRA SECTION NO. 1 – D-15G BAGGAGE-DORMITORY- COFFEE SHOP-LOUNGE

BY BRUCE ELLIOTT

Bruce Elliott did some custom building of HO-scale passenger cars for Harry Stegmaier who recently passed away (*Sentinel* 2nd Qtr. 2017, p. 35). One of these was a single-car class D-15g, Baggage-Dormitory-Coffee Shop-Lounge. The prototype car was rebuilt at Mt. Clare in 1949. Its purpose was to be a "fill-in" for the D-30s that were on the new lightweight Columbian, when one of the D-30s might be in the shop for routine maintenance. The interior appearance of these cars mimicked their D-30 counterparts right down to the last detail in virtually everything with the exception of the baggage door location and the six wheel trucks. This was the most modern and up-to-date heavyweight, and therefore was frequently found on the Capitol Ltd. as well. Unlike most heavyweight cars that had deep windows and rivets on the sides, this car was smooth sided and appeared just like a lightweight car. It's just amazing what Mt. Clare could do!

Bruce built one of the model cars for himself and one for Harry. He was able to purchase the one car from Harry's relatives who were selling Harry's collection. Since there was only one prototype car, Bruce didn't need two of them so was able to sell Harry's car to a member of the Yahoo list for a very reasonable price. The new owner may employ it in his Walthers Capitol Ltd. consist occasionally. And visitors will probably ask, "When did Walthers do that car?"

Bruce built the model using a Rivarossi lightweight express car and a lightweight coach and heavyweight trucks. It includes Kadее 36" ribbed back wheels, Kadее couplers and Venetian blinds. The model Bruce is keeping has the ice breaker on it and is lettered for the Capitol Ltd. The radio antenna is on the car. The ice breaker bar was removed from the head end cars to the dome cars sometime after 1955. JT & BE



Bruce Elliott's D-15g parked for photography at Pt. of Rocks on his layout. Bruce Elliott photo.

EXTRA SECTION NO. 2 – UPDATE ON Q-3 PROJECT USING THE BACHMANN USRA MIKADO BY JONATHAN VOGEL

The Q-3 incorporated a Hodges trailing truck with a 44" spoked wheel. I found a dozen Q-3 photographs that were at the right angle to show the spokes. So, the project continues.

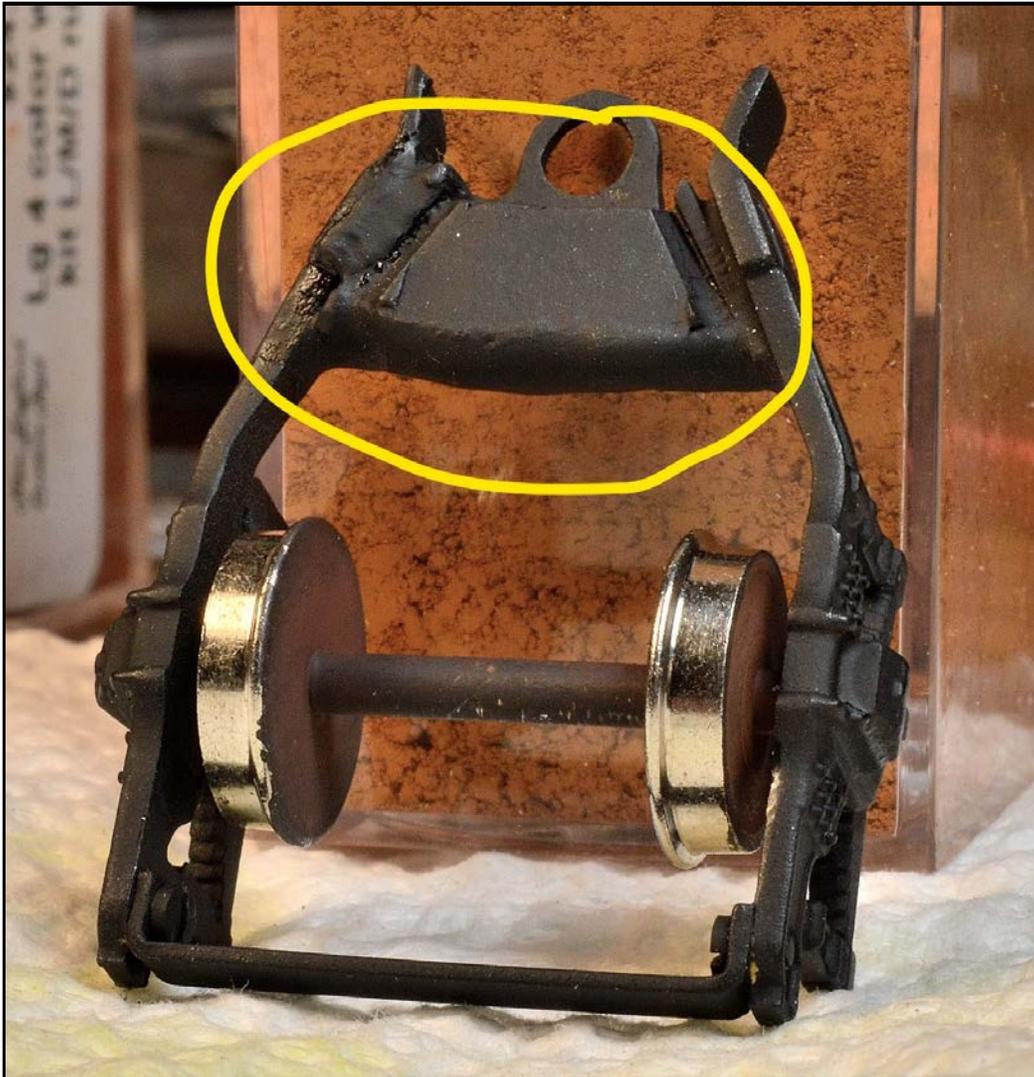


I found a brass Hodges trailing truck from Uncle Dave's Brass Trains. The truck does not have a spoked wheel, but there is at least one source for spoked wheels; Greenway Products. Here is a 42" spoked wheel in stock:

It may make a great stand-in if I can't find a 44" wheel. The difference is about .020" in diameter. (Can anyone tell the difference?)



The brass truck required some re-soldering and filing to get it to fit under the Bachmann model. I also added some shaped lead under the truck to ensure the truck would track well.



New solder and lead weight added.



COMING FUTURE ISSUES

Does it seem like our pipeline list of articles is getting shorter? Maybe to some like our friend Ray Stern it does, who thinks we should be begging like some of our sister groups. Fortunately, we aren't there yet. Having said that, we cordially invite you to send us your articles or projects! Reflect on the fact that some of our features have started with little more than a couple photos and some e-mails, while others, of course, have been full blown articles. We can start with glimpses of your project and torment it into an article! Our B&O modeling readers are interested in seeing what you are up to! Remember, we are dedicated to the B&O's idiosyncrasies! And do let us know if there is some aspect of B&O modeling we should be covering but aren't.

Here are the titles of articles for which material is in hand or is backed by credible author promises. Plus, if you can help or have anything you feel might contribute to the strength of articles on these topics, please contact the editors:

Layouts — Fran Giacoma's Shenandoah Subdivision
More of Bruce Elliott's HO Piedmont Division
B-8 Baggage Car
Concrete Phone Booths
Lees Coaling Tower Model
One Man's Roster-Wagon Top Cabooses
One Man's Roster-Wagon Top Covered Hoppers
Walthers E9A Diesel Review
More on the "Original" Lidgerwoods
C-17 Express Car in O-Scale
Pt. of Rocks Station Canopy Reengineered
N-34 Covered Hopper
Tatum Slack Adjuster—Cushion Underframe Edition

