

THE B&O MODELER



Number 53

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Accurail kit



Upgrade by Eric Hansmann

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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

COMPANY STORE

BY JOHN TEICHMOELLER

Change in Reprint Policy

Not every railroad historical society can offer the wealth of information available in reprinted company publications for purchase by members and non-members that the B&ORRHS does. We have cited specific publications that turn out to be particularly useful to modelers and/or historians in this section of *The Modeler*. The Society has decided to change its method of distributing these; namely they will change from photocopy to electronic form. There will be a price reduction and no postage fee. See the Company Store section of the B&OHS website for more complete information including availability of remaining stock of printed material. What's not to like? Well, your printer toner bill may go up. But now you have fewer excuses for not having your own copy of the *Form 6* for your era of interest, *Summary of Summaries*, etc.

In tune with Bruce Elliott's description of his HO Fairmont locomotive terminal elsewhere in this issue, it seems appropriate to cite Terry Arbogast's book, available from the Company Store:

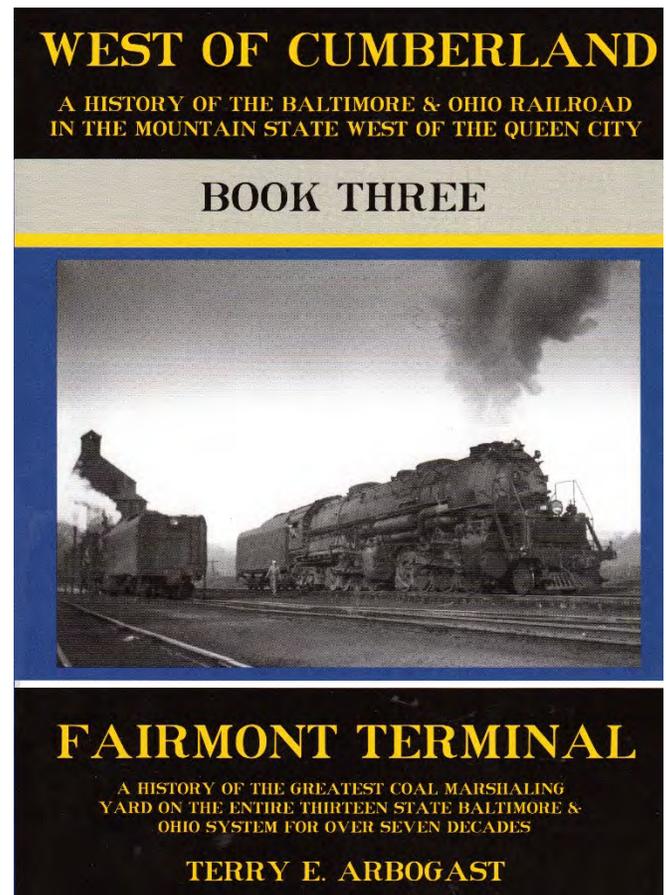
10174 West of Cumberland A History of the Baltimore & Ohio Railroad in the Mountain State West of the Queen City—Book Three Fairmont Terminal by Terry Arbogast

Covers the story of over 70 years of history of the greatest coal marshaling yard on the entire B&O system. The book is hardbound, containing 472 pages on 100# coated paper (32 pages in color), with more than 700 photos. Weighs about 5 lbs.—do not drop it on your toes.

The book was reviewed by Wade Rice in *The Sentinel* Vol. 42, No. 2. Let me add some personal comments:

I think I first met the author at the Clarksburg convention in 2002. He was sitting at a table with a row of 3-ring binders in front of him. He explained that they constituted the basis for a multi-volume work covering the B&O in West Virginia west of Cumberland. I was impressed. I figured I might not be interested in the entire contemplated work but would probably buy at least some of the volumes. The material on Fairmont was particularly enchanting since I was unable to attend the Society's convention in Fairmont in 1987. Moreover, the *Sentinel* devoted minimal coverage to that convention; So, I never had a personal sense of the significance of Fairmont to the B&O. Yet I knew from talk of fellow B&O fans that Fairmont was very important to the railroad's business and was curious to learn more. I did get a small taste of Fairmont in 2002. The Mid-Central Region of the National Model Railroad Association had their spring convention in 2006 in Morgantown. Eric Hansmann, who at the time was living in Morgantown, was giving a clinic on the Fairmont Belt Line and gave a bus tour showing the area way removed from its former glory. Terry's book expands on this glory and includes coverage of the Fairmont Belt Line. I had no idea of the extent of the industries in Fairmont-- a metallurgical coke plant, a glass plant, etc. A final note I would add is that the forward end papers of the book contain a complete map of the Fairmont trackage by Gary Deavers. This map labels yards, industries and other features which are annotated with page references in the book; this is a great help in following the extensive detail in the descriptions and oral histories in the book and serves as an easy-to-access index.

So, if you're like me and "missed the boat" on the real Fairmont, here is your chance to get a robust taste of it. JT



33439 HO kit of the D-14 Combine by Bethlehem Car Works for \$59.95, less 10% for members. This kit was mentioned in readers' comments in *Modeler* No. 52 but has not been formally reviewed. Based on various reader responses, this seems to be a welcome addition to HO B&O passenger stock offerings.

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

Listed below are activities of potential value to B&O fans that we know of. For sure don't buy your first class air ticket or book your Amtrak parlor car until you check the appropriate website. As this is written, we're a long way from herd immunity.

2021

[St. Louis RPM](#) – July 30 - 31, at Gateway Convention Center in Collinsville, IL

[Mid-Atlantic RPM](#) – September 10 – 11, at the DoubleTree by Hilton Baltimore – BWI Airport.

[Central Ohio RPM](#) – September 23-25, at Marion Union Station Sept. 23-25.

B&O Historical Society Annual Convention – September or October in the Akron, OH area. Information should be out by early July. Check the B&O HS [website](#) for more details.

UPDATES AND ERRATA

Modeler No. 48

In issue No.48, on page 34 below the caboos photo, it states "The prototype was retired in 1956 ...". Here is a photo of this car in front of the Bradford PA B&O (former BR&P) station in February of 1953. It was retired shortly thereafter and was one of the founding pieces (other than mostly replicas) in the new B&O Museum that opened that year (1953).

Brian DeVries
BDeVriesBuffDiv@Gmail.com



NEW PRODUCTS

BY CLARK CONE AND THE MODELER STAFF

Atlas Alco S-4 HO-scale AND N-scale!

Atlas is rerunning its American Locomotive Company (Alco) S-4 switch engine (introduced in 1950), in HO and N-scales, in late B&O colors. The HO-scale *Master Series* model is based on a 1,000hp prototype with a retooled cab.



The N-scale locomotive features fine scale handrails, separately-applied air hoses and uncoupling levers, and directional LED lighting. In addition to standard DC operation, the model will be available for DCC operation with a factory installed ESU LokSound decoder.

For more information: <https://shop.atlasrr.com/p-58566-n-gold-s-4-baltimore-ohio-9104.aspx>

Micro-Trains N-scale 36' conventional steel cupola caboose

Micro-Trains has released a new 31' bay window based on a prototype class C-27 car built for the Baltimore & Ohio that, through mergers, wound up on the CSX.

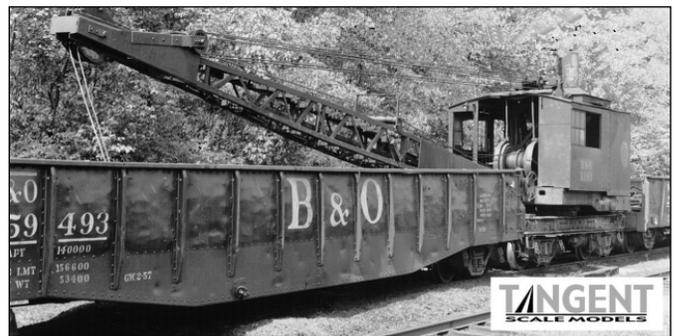


The caboose is grey with yellow ends and black lettering and runs on Bettendorf Swing Motion trucks. Even though most cabooses have been retired for decades, some still have limited use on specific areas of the CSX system. This caboose was still in service in 2014.

For more information: Micro-trains.com

Tangent Scale Models HO-scale Bethlehem Steel Co. 52'-6" 70-ton riveted-side drop-end gondola

Tangent is releasing a B&O "1957 O-59 Repaint" Bethlehem 70-ton riveted drop-end gondola with one of the B&O's repaint variations. This car has a large gothic "B&O" in white stenciling sprayed onto the car sides and is one of the most requested paint schemes for this car. This particular variant of the company scheme was applied by B&O's Glenwood Yard shop forces, located in Pittsburgh. Tangent is now offering this all-new scheme in 6 road numbers, prototype-specific details, wire grab irons and uncoupling levers, and Kadee scale couplers. \$40.95.



For more information: tangentscalemodels.com

The Wellsville, Addison and Galetton-decorated version of this car has also been reissued; the first run several years ago sold out quickly.

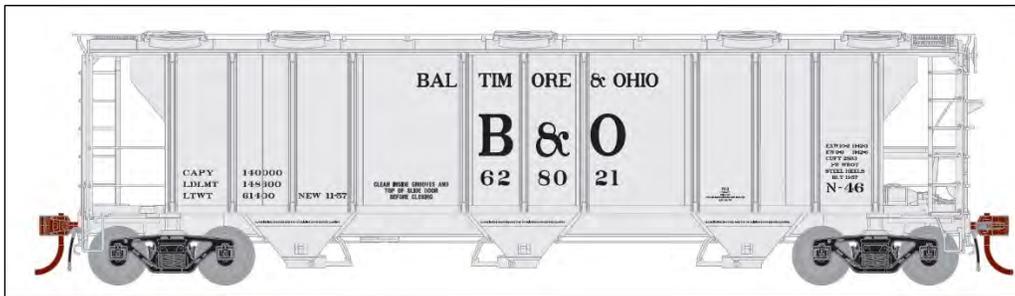
Accurail HO-scale 40' AAR boxcar

Accurail has released a 3-car set of 40' AAR boxcars decorated for the Baltimore & Ohio Railroad. The cars were built in the late 1940s with 6' Youngstown sliding doors. The second illustration is the model with the 8' door and Time Saver Service Slogan.

For more information:



Athearn HO and N-scale P-S 2893 Cu. Ft. Covered Hopper



Athearn is upgrading its HO-scale Pullman-Standard 2893 cu. ft. covered hopper and will release it as a Genesis model. Details will include separately applied round roof hatches, a photo-etched metal roof walk, wire grab irons, individually applied brake appliances including wire brake plumbing, detailed discharge fixtures, and rubber trainline hoses. Depending on the practice of the specific prototype being modeled, the cars will have either solid or roller-bearing trucks with 33" nickel silver wheels.

Details on the N-scale model include separately applied round roof hatches, discharge outlet, and brake appliances; photo-etched roof walk, separately applied wire grab irons, and screw mounted trucks with machined metal wheels. B&O Class N-46, see *Morning Sun Color Guide*, page 57

For more information: <http://www.athearn.com/Products/Default.aspx?ProdID=ATHG73597>.

Athearn HO-scale Ford F-850 Truck

A Ford F-850 truck with a stake body is included in Athearn's March 2022 production schedule. Features will include rubber tires and clear window glazing. Note side-view mirrors.

For more information: <http://www.athearn.com>



Centralia Car Shops N-scale

Features sharp painting and lettering, wire grab irons, interior details, interior lighting. Available in multiple numbers, InterMountain metal wheels with Micro-Trains® trucks and couplers.

B&O 10-5 Sleeper

Taking reservations. 2 numbers available.

For more information:

<https://www.intermountain-railway.com/distrib/ccs/html/ccs6843.htm>



B&O Diner

Production confirmed. 2 numbers available.

For more information:

<https://www.intermountain-railway.com/distrib/ccs/html/ccs7014.htm>



Intermountain N-scale EMD F3A Locomotive

Production confirmed. 4 numbers available.

For more information:

<https://www.intermountain-railway.com/n/html/69108.htm>



Intermountain N-scale EMD FT Locomotive

Production confirmed. 4 numbers available.

For more information:

<https://www.intermountain-railway.com/n/html/69006.htm>



InterMountain HO-scale

Listed below are the B&O HO-scale items planned for production. If an item is listed as "Taking or Needs Reservations" please let your favorite hobby dealer know that you would like the item. Reservations are NO RISK to you, no deposit is required, and you may cancel your reservation at any time.

M-26d Boxcar

Date: COL 8-47

6 numbers available.

For more information:

<https://www.intermountain-railway.com/distrib/redcaboose/html/RR-37080.htm>



AAR Alternate Standard 2-Bay Hoppers

Date: BLT 4-42 NN 7-60

6 numbers available.

For more information:

<https://www.intermountain-railway.com/ho/html/47158.htm>



B&O P-32 Flatcar

Date: PNTD 8-69

6 numbers available.

For more information:

<https://www.intermountain-railway.com/ho/html/48718.htm>



B&O/Chessie System Flatcar

Date: RPKD 10-73

For more information:

<https://www.intermountain-railway.com/ho/html/48716.htm>



Trainworx N-scale 4427 cu. ft. Pullman Standard PS2CD covered hopper

Trainworx is accepting advance reservations for a new production run of its N-scale 4427 cu. ft. Pullman Standard PS2CD covered hopper. The ready-to-run N-scale models will have etched metal roof walks and grab irons and road-specific trough hatches. Delivery is planned for the 1st quarter of 2022.



Reservations can be made through a dealer or by contacting InterMountain Railway at www.intermountain-railway.com

Sunset Models/GGD O-scale EMC EA/EB



The B&O late EA/EB pulled the B&O Capitol Limited. The models will be expertly-crafted with fine scale detail ABS body with Sunset's famous horizontal drive. All units will be powered and sold in A/B sets only. Built to reservations only: <http://www.3rdrail.com/reservation.htm>

Also available is the B&O Capitol Ltd. aluminum passenger car sets. GGD is proud to announce this very unique train for the B&O. These B&O cars are available in 3R and 2R:

- 8-car set
- Extra 10-6 fluted
- Extra 10-6 Smooth
- Extra BUDD Sleeper

Sunset Models/GGD is currently accepting reservations on these models.

Note: Sunset Models considers a reservation as an order and expect you to honor that order when the models become available. To make a reservation, contact [3rd Rail](#).

NEW PRODUCTS SECOND SECTION, BLURB EDITION

BITS AND SCRAPS AND QUICKIES AND BLURBS AND SECOND TAKES.

BY JOHN & SCOTT

Product announcements spotted since last issue of *Modeler* and more details on prior announcements; for actual availability check with your hobby shop or favorite on-line dealer.

HO-scale Alco/GE/Ingersoll Rand Boxcab—produced by Apogee Loco Works, this is a 3d print of the locomotive shell. It is produced in 2 versions, one to fit the Bachmann 44-ton loco mechanism, the other to fit Bachmann’s 70-tonner. This product was introduced in a blurb on page 32 of the January 2021 *Model Railroad News*. Price is indicated as \$45. I did not study in detail and compare the rivet/door/window pattern to that of the B&O’s prototype; several versions of the boxcab are available. The rooftop radiator piping assembly is available as a separate 3d printed part as is what looks like the correct truck side frames (Bachmann’s are incorrect). Now that the old Roundhouse “grinder” boxcab model seems to have migrated to the rare category in the secondary market, this new product appears to offer an alternative. Apogee offers several other non-B&O but interesting industrial locomotive shells—a Whitcomb 2 axle switcher (to fit a NWSL Stanton drive), an 0-6-0 fireless loco (to fit the Bachmann 0-6-0t, and a Whitcomb 65 ton “humpback” diesel, etc.

For more information: <http://apogeelocoworks.com>

HO-scale two-bay “34 ft. Ribbed open hopper” from Athearn; cited in *Modeler* No. 52 but additional comments provided here: this is a RTR version of the old tooling, with cast-on details and a product upgrade to metal wheelsets, plastic coal load and McHenry plastic knuckle couplers; no B&O hopper class visible on promo artwork; not a B&O prototype.

For more information: <http://www.athearn.com/Products/Default.aspx?ProdID=RND1022>

HO-scale and N-scale 50’ Double Sliding Door Boxcar; Cited in *Modeler* No. 52 but additional comments provided here: I believe this is old tooling (at least HO-scale version) with upgraded metal wheelsets and McHenry couplers. Class designation not visible from promo art but appearance is close to M-65 except left side door should be 7’ and right side 8’. How good are your eyes? Tolerable stand-in for many modelers. See *Morning Sun Color Guide* page 65.

For more information: <http://www.athearn.com/Products/Default.aspx?ProdID=RND7387>

Rapido HO-scale PRR GLa Two-bay Hopper. The B&O acquired these from a coal company and they were classed N-15. Members survived until ca. 1934. Rapido’s advertising art does not show any B&O versions being offered but they are doing undec. so if appropriate to your era this will be a nice car. Ads call trucks 12DF8 PRR class; should 2DF8.

For more information: <https://rapidotrains.com/products/ho-scale/freight-cars/ho-scale-gla-hopper>

The Coach Yard is producing the National Limited in brass. A complete heavyweight train from the 1940's will be available along with a four car add on set. In addition, individual cars will be available in the 1950's paint scheme.

For more information: <http://www.thecoachyard.com/Pages/Equipment/BONL.html>



N&W HO-scale Y6b 2-8-8-2 And for those modelers who envision a CSX that refurbishes and runs steam fan trips using available locomotives:

[6416 N&W Y6b 2-8-8-2, #2198, 1960's Blue Fantasy Paint Scheme, 221 tender, Paragon3 Sound/DC/DCC, Smoke, HO](#)

Ridge Rolls, Hip Rolls and Finials; continued from page 9, *Modeler* No. 52. From Bruce Elliott: Four other people and I were given samples of Ridge Rolls, Hip Rolls and Finials that were designed by Charles Sloan and 3D printed by Shapeways. Mine were in HO-scale, but I believe they were also done in S and N-scale as well. I was most impressed. To make sure everyone knows what we are talking about, these are the roofing trim pieces used to seal the ends of slate structure roofs. They are/were fabricated by cutting parts from flat galvanized iron or steel, then bending and soldering together. The Standard Plan books include some of the designs. It is not known if the B&O had these produced in quantity and warehoused them or contracted with local roofing contractors. By the late steam/early diesel era, many of the slate roofs had worn out and had been replaced with rolled roofing so these "tin" appliances would have disappeared. But they are a noticeable fixture on earlier era structures.

With the sample parts that were sent I had more than enough material to do GA tower at Garrett, PA. The manufacturer of the tower kit actually tried to laser cut finials only, but they were poorer in quality than even what Webster Classic Models did back in the '90s so at the time I built the GA kit, I thankfully opted to leave them off.

These pieces went across the top edge and ends of B&O hip style roofs and were both functional as well as stylish. Wooden structures as small as a Section House and larger with a hip roof would have had these trim pieces on a slate or shingle roof, but not on a metal roof. Close to 30 years ago now Webster Classic Models first came out with these detail pieces as soft metal castings to go along with kits that they offered at that time. These new parts—not castings but 3D prints-- are outstanding due to computer technology for design and construction. These are detail trim that frankly has been left of and left out of B&O wooden structure kits for the past 30 years. That said, there should be a surge in their sales once they become available. Perhaps one reason model manufacturers didn't go to the trouble of creating these parts might be because as time went on, when it was time to re-roof a structure it might have been deemed too much trouble to repair them and the roofers simply used tried and true conventional methods. Structure photos in later years simply may show structures that no

longer had them on at that time that a model was created. Moreover, unlike 30 years ago with the Webster Classic pieces where the roof and hip rolls were one and the same, careful research has revealed that the roof angle is different between the roof pitch and the hip. Merely grabbing parts and gluing them on is not recommended. Paying attention to who's who and what's what will yield results that rivals reality. The designer, Charles Sloan went all out, leaving no stone unturned and even went so far as to design the Final for a square Hip Roof where all four sides are even. In the case of a square Hip Roof there is no Ridge Roll, only four Hip rolls. This is my first experience with 3D printed parts and Shapeways. Initially I was a little apprehensive about how fragile these parts might be, but they appear to be made of quite durable resin.

These parts are to be available through the Shapeways store.



This is an overall view of the new parts applied to GA tower. The three biggest advantages to the new parts are A) the exquisite detail, B) lengths that don't require splicing and C) availability.



No detail was overlooked in their design.



This is actually an example of what Webster Classic Models offered (for comparison). The ridge roll here is actually a new section of hip roll (from Shapeways) that I started to throw away.

EXTRA SECTIONS FROM THE READERS

BY JOHN TEICHMOELLER AND READERS

We encourage readers to comment on and/or correct content in *The Modeler* and especially share a snapshot or two of their latest projects. It's amazing how someone else's modeling efforts can inspire you to reload a new blade into the X-Acto knife and pierce the nozzle of a new ampoule of cyanoacrylate. Here is the latest batch of gleanings from my e-mail inbox and Groups.io postings.

The Animation Division, From Michael Loomis

I just wanted to share the progress I've made on my animation of #5306. If you like, check out the link here:

<https://vimeo.com/486523452>

The caption goes something like this:

The B&O passenger Train 21, "The Washingtonian" on its daily westbound express run between Washington and Cleveland – shown here circa 1953 on the picturesque section of the line between Brunswick and Harpers Ferry. B&O #5306, a P-7b class locomotive, also known as the "President Van Buren", provides power during a time when steam was gradually being replaced by diesel. Featured prominently are the town of Brunswick (including the west end of the substantial Brunswick Railyard), and the tunnel, bridges, and town of Harpers Ferry located at the confluence of the Potomac and Shenandoah Rivers.

Several members of the io group helped me with my research to get the details right, and I thank you for that! It should be a pretty good representation of Brunswick / Harpers Ferry circa 1953. Not perfect, perhaps - there's always room to quibble - but certainly in the ballpark. Some of the larger structures are modeled from photos or plans, if available. Many of the residential structures are not exact house-to-house representations of 1953, but they are modeled directly from actual homes in the area - so stylistically they should be accurate.

From Alan DelGaudio

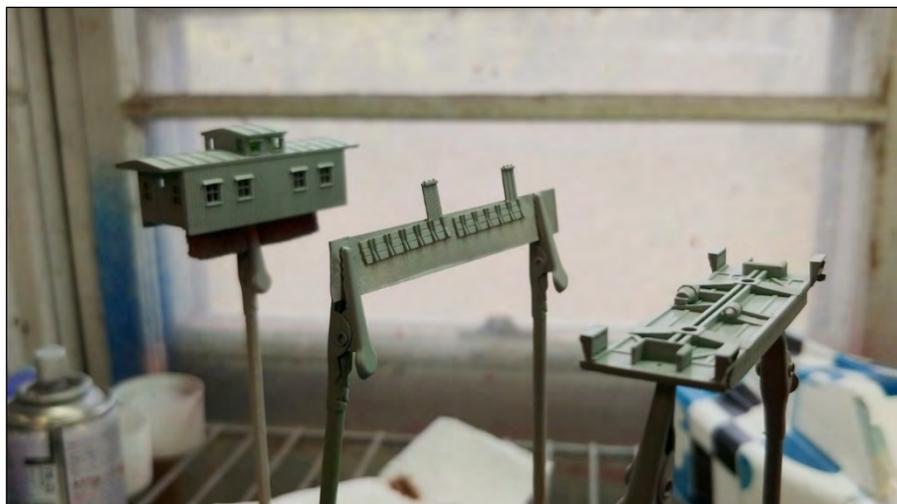
Here are a couple shots of Al Pugliese's HO Mt. Royal Station. This was produced by Mark Bandy in laser-etched acrylic.



3D Printed N-scale I-1 Caboose (and more) from Tony Hines

My hobby shop was shut down for a month or so last year for the initial Covid outbreak which gave me some time to explore a different hobby, 3d printing. I had always wanted to play with it, but the quality to make paint ready models just wasn't there. But I think consumer 3d printing is *now* ready.

These cabooses were pretty much built because of a challenge from a member of TheRailwire forum. He was looking to make a basic wood caboose and happened to use a photo of an I-1 for his reference. I figured I could use a few more than the single laser cut model I had, and from that was born a collection of I-1 cabooses in N-scale. I started with the early narrow porch design, added a wide porch with vertical steps version and then a couple versions missing their cupola. I'm offering these as kits including decals if anybody is interested. I have an I-5 on the drawing board next. Also have plans to work on a C-15 express/baggage, part of the reason for Steve Long's request for info recently on the group list about the oddball Pressed Steel trucks. Steve has also built a couple of these cabooses and his put my work to shame. If anybody is interested in the kits, e-mail me off list. My intention is not to clog this list up with that type of discussion. I just wanted to show what is now possible. The parts are ready to paint with a very minimal amount of touch up from removing the supports from the printing process--not much more work than removing the sprue from a plastic model. In the first photo of the 3 cars, everything except the trucks and couplers were printed on the middle caboose. The left and right models have had wire grabs added. Skipgear@aol.com





PANDEMIC PROJECTS

EDITED BY JOHN TEICHMOELLER

During the summer of 2020, Bruce Elliott suggested that readers send in shots of modeling projects the virus has allowed them to execute, and that are helping them keep their sanity during the pandemic. Hopefully I have correctly sorted and separated the images and text from the numerous e-mails and not lost any in the process.

This collection grew more than expected so we decided to run the nice quantity of “From the Readers” material already in hand in *Modeler 52* and carry over “Pandemic Projects” to *Modeler No. 53*. Comments and photos are by submitters with some editing. Thanks to all who have submitted, and I know everyone will appreciate and be inspired by what’s to come.

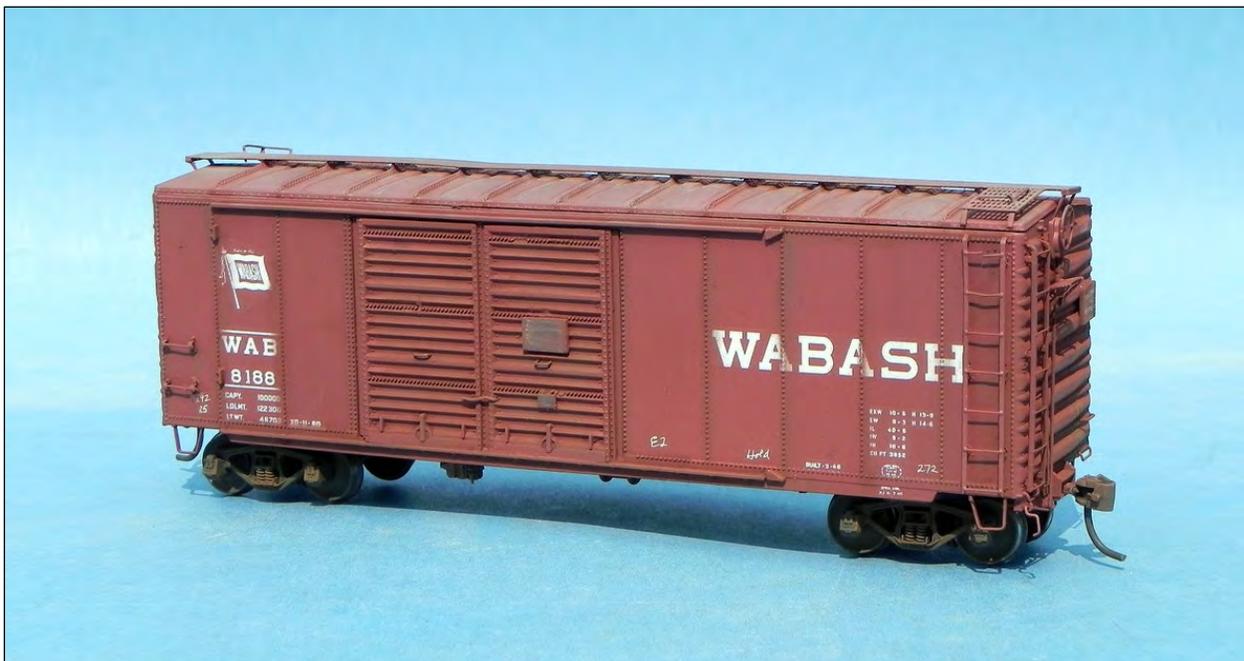
Here are Bruce’s introductory comments: “While this virus has curtailed a lot of peoples activities, those of us who model have found this a time to finish projects that have been on the back burner for a while. “The Pandemic has created a lot of extra time on our hands as we try to figure out how we will stay healthy, all things considered. Those of us with model railroads will never have enough time to complete our projects, but this is a golden opportunity to spend those empty hours doing what we love best. Tom Greco gave me the inspiration for this article by posting on the Yahoo group photos of projects that he was completing that he called “Pandemic projects”.

We start off with some of Bruce’s comments based on and combined with info provided by Bob Chapman

“With extra Covid stay-at-home modeling time, Bob Chapman took the opportunity to drain his stash of a dozen vintage undecorated styrene boxcar kits he had bought circa 1990 in a cents-on-the-dollar fire sale at the local hobby shop. The kits, from C&BT, IMWX, and Front Range, were among the earliest models featuring separate add-on details. While the carbodies were nicely executed, the detail parts were crude and well below today’s standards. Thus the Covid project became 1) identifying a prototype that matched the specific carbody design, 2) replacing the crude detail parts with today’s parts matching the specs of the prototype, 3) painting and lettering the cars to match prototype photos, and 4) weathering the models. All of the cars were foreign road, with several representing roads unlikely to have been selected from the hobby shop shelf; as a result, the Covid project proved a great opportunity to diversify the boxcar fleet.”

Wabash #8188 is a member of the 300-car DD boxcars series #8000-8299 of 1950. The carbodies featured 12-foot door openings, R-3-4 early improved dreadnaught ends, riveted panels, and a diagonal panel roof. Front Range’s circa-1990 kit #4090 nearly matches this prototype, exceptions being a 13-foot door opening and the later-style improved dreadnaught ends.

The door opening was narrowed to 12 feet with styrene spacers, and the deep-fishbelly side sill narrowed to more typical depth, bolster to bolster. Contemporary detail additions include Apex running board, Kadee 7/7 ladders and Miner brakewheel, and Tahoe Barber S-2 trucks. Decals are K4.





Erie boxcar #78507 is an IMWX kit representing the 1937 AAR design. The kit roof was replaced with a Viking roof, a feature of the Erie prototype. Added detail parts include Tichy 8/8 ladders, an Apex running board from Yarmouth, a Kadee Ajax brake wheel, and National Type B trucks from Proto 2000. The black roof and ends were Erie features; decals are Speedwitch Media.



SR #23252 is a C&BT kit representing the 1944 AAR design. The prototype had 8-foot doors, represented on the model by splicing two 6-foot doors. Detail parts include a Morton running board from Yarmouth, Kadee ladders/grabs/brake wheel, and Barber S-2 trucks from Tahoe. Decals are Speedwitch. Weathering is a bit of dust with pencil highlighting.



SP&S #11046 is also a C&BT kit representing the 1944 AAR design. Detail parts include a Yarmouth Apex running board, Tichy 8/8 ladders, Kadee grabs and Ajax brakewheel, and Kato A-3 trucks. Decals are Microscale. Weathering is airbrushed with some Prismacolor pencil highlighting.



This too is a twenty plus year old kit with a lot of detail help. Continuing to clean out the three-decade stash of unbuilt styrene undec kits, Front Range kit #4070 features 10-panel riveted sides, 8-foot door, diagonal panel roof, and R-3-4 ends; a prototype near-match is DT&I's #14300-14549 series (the prototype with early improved dreadnaught ends, the model has the similar late version).

Circa 1990, Front Range offered styrene kits for variations of postwar AAR boxcars with R-3-4 improved dreadnaught ends and diagonal panel roofs, a cache of which I unburied in my pandemic project to drain the stash of long-slumbering styrene kits. One of the variations is a 12-panel welded car with 8-foot doors – a prototype fielded by Wabash subsidiary NJI&I, which acquired two 50-car series in 1/50. If you're not already a NJI&I modeler (!) – the New Jersey, Indiana & Illinois was a short line created by Singer Sewing Machine to connect its South Bend plant to the Wabash 11 miles south; the road name comes from the three states hosting Singer plants. Acquired by Wabash in 1926, it was operated as a separate subsidiary. Completing these undecs has added the fun of modeling prototypes that I

would never have dreamed of pulling off the shelf at the LHS. [NJI&I must have a cult following—one year a special-lettered NJI&I Athearn blue box caliber boxcar was offered as a convention car at one of the NMRA Nationals—there is one in service on my layout but nobody from the eastern US ever pays it any attention. JT]



A batch from Tom Greco

I had a bit of a dry spell, but I'm back at it again. First is my latest Pandemic Project a coal dump from the B&O's Standard Plan book.





↑ Freight House Holgate, OH ↓



Target signal, North Vernon, Indiana [Some years ago Model Railroader published an article, I think by Bill Darnaby, on making an operating target signal like this. There were any number of these used on the B&O, Cleveland, Newark, etc. JT]



Albion, IN, Combination Station and Outhouse



Medina, OH, Section House & Fire Hose House



C-8a Express Cars

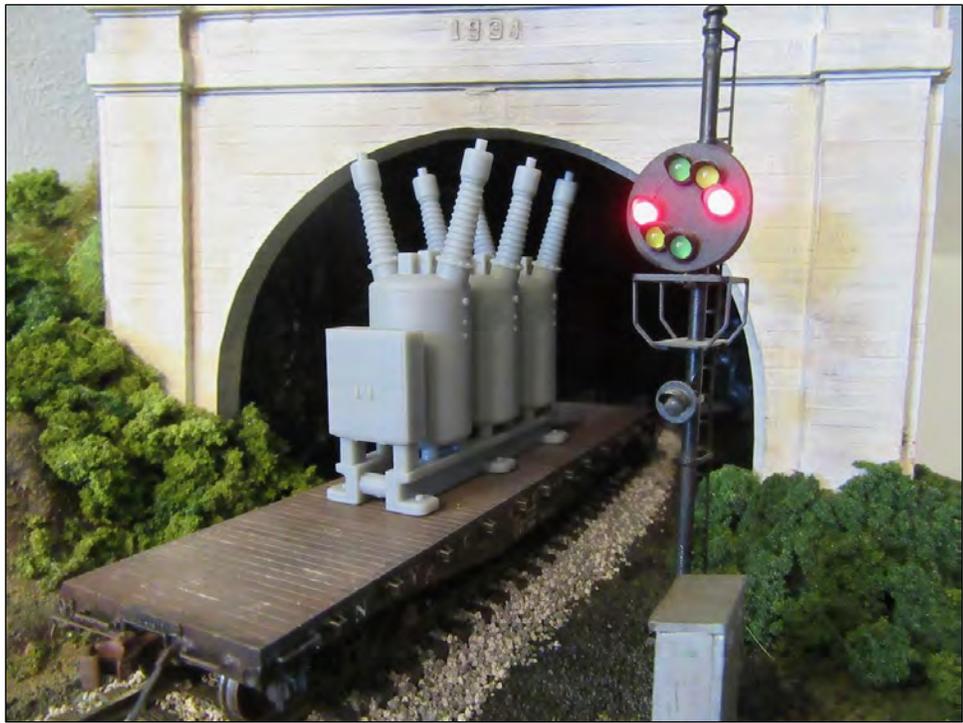


Relay, Md. Anyone who has been to or has seen photographs of the Thomas Viaduct will recognize the Directors Monument located at the east end of the bridge adjacent to where the former Relay House hotel was located.

Tunnel portal engineering from Fran Giacoma

While staying at home during COVID, I have been working on improving existing loads for flat cars and gondolas. I recently obtained a set of 3 oil filled circuit breakers; however the circuit breakers were about 3 scale feet too tall to get thru the tunnel portal at Harpers Ferry on my B&O Shenandoah SD HO layout. So I relocated the portal out an inch so I could raise it up about 1/2 inch. I also moved the signal out about 1/8" inch and re-did the scenery to blend it all in. Attached are before and after pictures plus a picture of the circuit breakers on a flat car to ensure it clears the raised tunnel portal. The project came in on time and under budget!





From Tom and Julia Pruyne

This scratch built HO model is of DX tower at Camden, circa 1950. Tom did the drawing and Julie did the modeling that features a complete interior.



From Jim Ford

This was obviously inspired by Bob Chapman's article in *Modeler 47* on using the Pro Custom Hobbies kit as a template for a scratchbuilt I-16 in HO. Mine is in N-scale. The construction is all styrene and is in four pieces: underframe (cut down from a 40' boxcar), side sills/end platforms/end braces, body, and roof. The tricky parts were fitting the compound angles at the top of the bay, getting the roof battens evenly spaced, and making the roof detachable so I could glaze the windows after I had flat-coated the decals. The paint is Model Master caboose red, the decals are Microscale, and the trucks and couplers are Micro-Trains.

The roof is essentially like the lid of a shoe box. The upper trim strip on the sides and the triangular end trim are attached to the roof sheets. They slip down over the side sheathing and the end braces to hide the joints. The hand holds on the roof should be attached to the end ladders, but they're stuck into the end trim so they lift off with the roof.

The body (a rectangular box open at top and bottom) similarly slips down over the fishbelly sides and the end platforms. The end framing is sturdier than it should be, the price of working in styrene and having it anchored only at the bottom. In 1:160, you learn to live with some compromises.

I, like Bruce Elliott, have not glazed my other cabooses, and it does make painting easier. In most light they look OK. For something like an I-12, I could have built the body and roof as a unit and glazed from the bottom, but the bay made that trickier. I think I'm through building cabooses (though I could use another I-12), so I won't have to repeat this process.

Someday I have to tackle Bob's E-7c baggage/RPO from Vol. 4 # 4. This car made up half the consist of the daily Rochester-East Salamanca flyer, which has to be one of the most compact passenger trains on record.



B&O MODELING IN THE ENTHUSIAST PRESS

CAPTURE AND COMMENTARY BY JOHN TEICHMOELLER

Note: I try to pick up articles and books of B&O modeling interest from the general modeling press. However, after being a print subscriber of Model Railroader Magazine for 62 years, I have let my subscription lapse. Accordingly, if any readers happen to notice relevant items from MR, I will be happy to cite them if you let me know. I did subscribe to the “electronic” version of MR via Zinio. I read the e-version of MR but find it hard going because of their navigational control, and I miss a lot. Anyway, you may regard some of this issue’s selections as “peripheral” but here they are. JT

“Bethlehem 2622 cu. Ft. Triple Hopper,” text and S-scale drawings by James Kinkaid in *Railroad Model Craftsman*, December 2020, pages 70-73. A number of railroads had this design with subtle variations. C&O had Bethlehem Steel build 1000 in 1951. Then C&O built a batch from kits in 1956, some of which were transferred to the B&O in 1963. These cars had arched ends referred to as heap shields. Kincaid does not include photos of the B&O cars or the B&O number series, but I believe these were B&O class W-13; see page 41 of the *Morning Sun B&O Color Guide*.

The significance of this car to modelers is that it is close to the old “3-bay” hopper, originally offered by Model Die Casting/Roundhouse. Initially it was a flat die cast zamac kit, then with metal underframe and injection molded body. (Even with the metal underframe model is still on the light side and will run better with Adair Shops weights applied inside and underneath between the hopper bays.) And traditionally this model has earned mostly contempt from prototype modelers, even though it turns out that the model is pretty good for Bethlehem and ACF prototypes.

While the traditional models had all cast-on details, Athearn reissued the car for December 2017 release and managed to do what Bowser refuses to do to their various PRR hoppers, not quite making it a “Genesis” level product but upgrading it with wire grabs, slope sheet braces, sill steps and possibly other details. See page 9, *B&O Modeler* No. 43 for a somewhat disrespectful and admittedly uninformed new product citation written by your editor. From the artwork, which may not depict the actual product as issued, the arched ends appear more like N&W angular style than C&O rounded style. In the ‘70s I bought a number of the un-upgraded plastic body version in WM lettering (including a couple in unprototypical black--does that make them collectibles now?) and C&I. As a footnote, ca. 1997 the B&O Museum acquired one of the C&I cars, but it was subsequently cut up—I’m sure there’s a story there.

MODIFYING AN ACCURAIL BOXCAR TO REFLECT A B&O M-23

BY ERIC HANSMANN

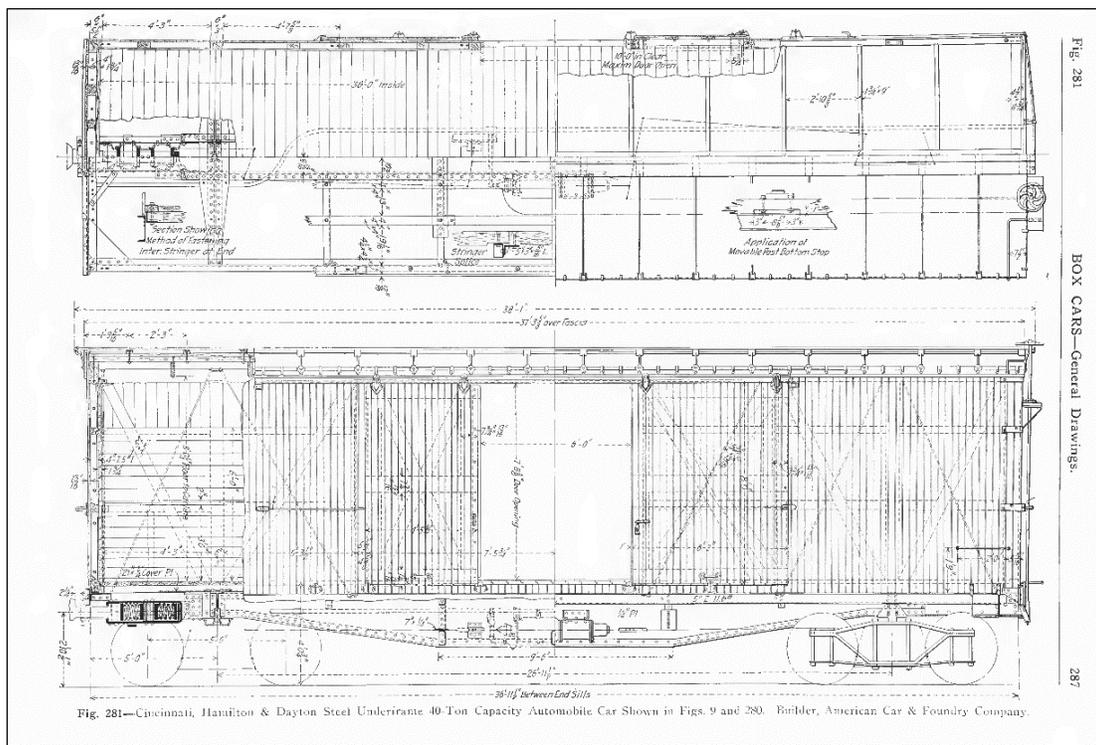


The Accurail 36-foot wood-sheathed boxcar kit factory decorated for a B&O M-23.

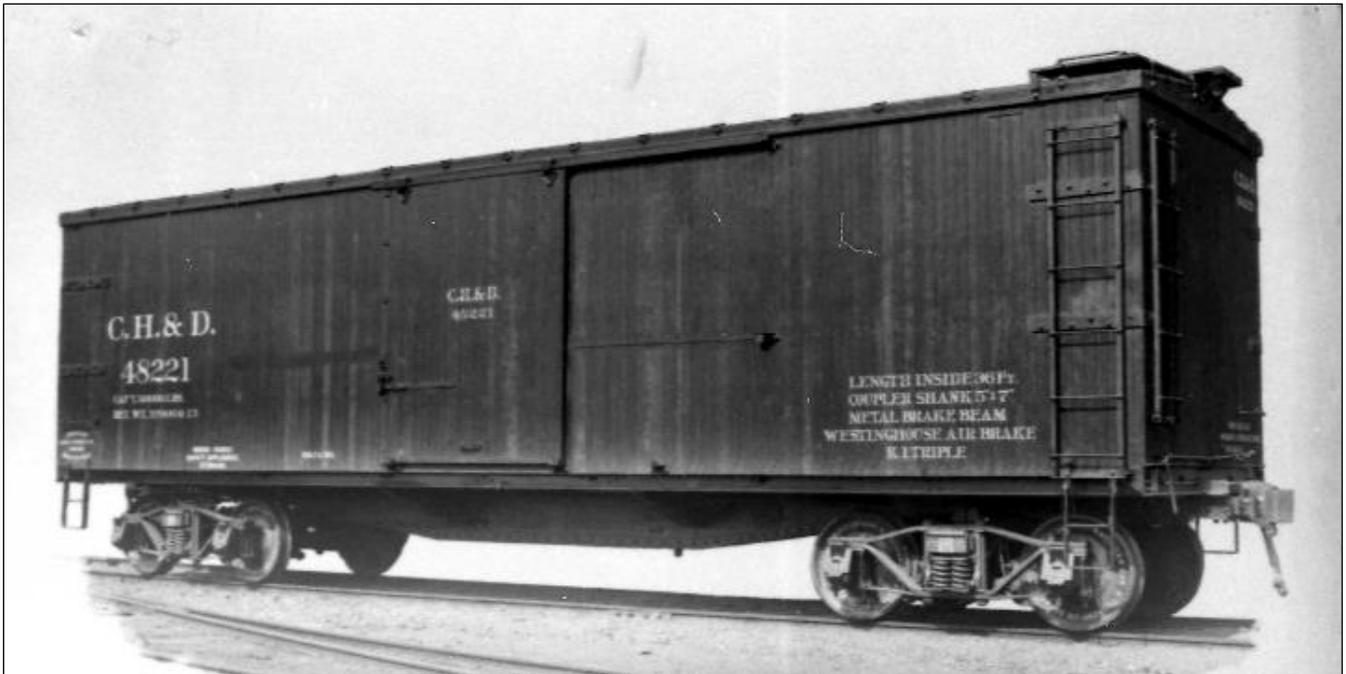
Many Pre-Depression Era modelers rejoiced when Accurail released four model versions of 36-foot, double-sheathed boxcars. There were an incredible number of similar prototype boxcars that were in service from the teens into the late 1940s. As a B&O modeler, I noted the fishbelly center sill models with wood-sheathed ends had similarities to the M-23 class. There was a sister class of automobile boxcars, the M-22, that had a wider door opening. I was excited these models could be used to model B&O prototypes that fit my 1926 era.

Prototype

The M-23 and M-24 class boxcars came into the B&O fleet with the acquisition of the Cincinnati, Hamilton & Dayton Railway in 1917.



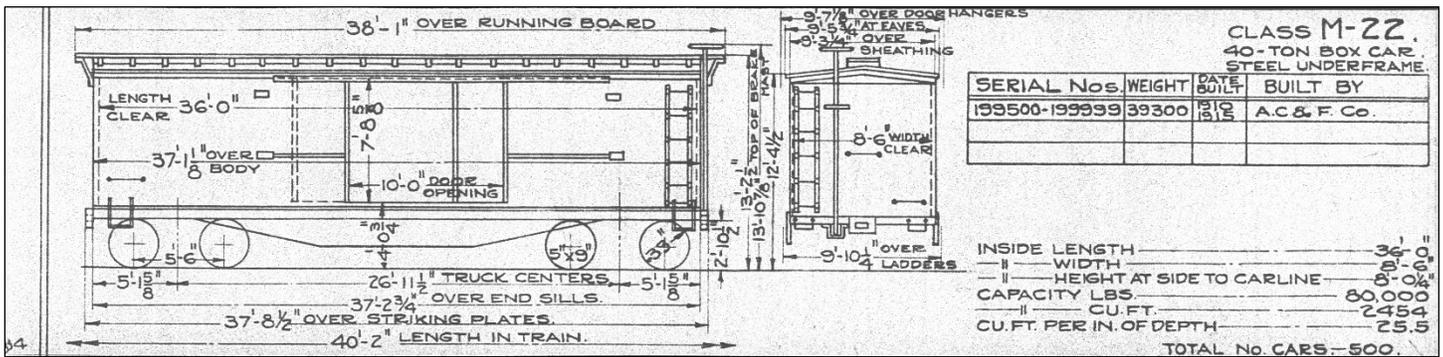
Cincinnati, Hamilton & Dayton Automobile Car from 1913 *Car Builders Dictionary*.



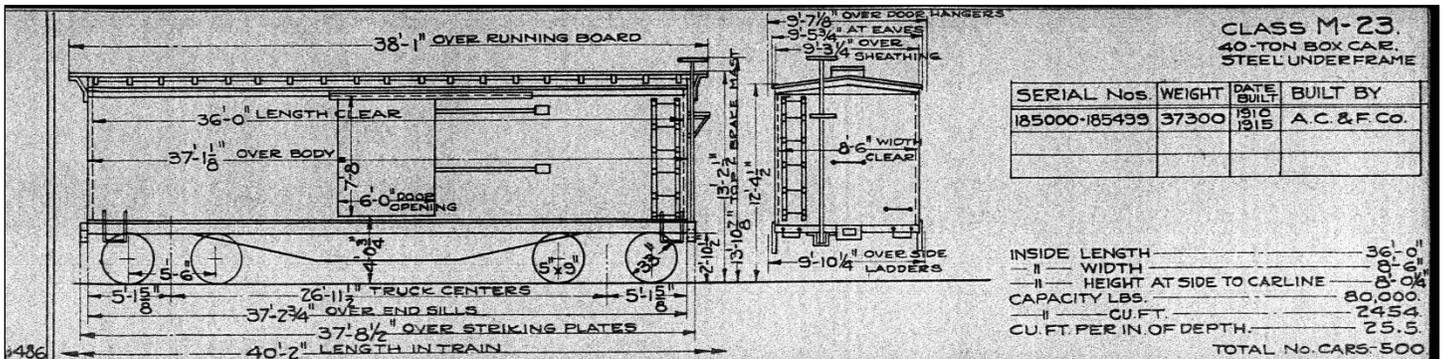
The CH&D installed 500 boxcars from American Car & Foundry in 1915. AC&F photo



The CH&D also installed 500 automobile boxcars from American Car & Foundry in 1915. Except for the door openings, the automobile and boxcars had the same dimensions. AC&F photo



B&O M-22 Diagram



B&O M-23 Diagram

These cars followed a common design of the Teens that is traced back to several thousand cars built for the New York Central & Hudson River in 1910. Ray Breyer authored prototype overviews for the Accurail models. These are available to download as resources on my blog. <http://designbuildtop.hansmanns.org/accurail-prototype-data/>

Here's a dimensional comparison between the Accurail model and the prototype cars. The models are not spot-on, but they are close in many ways.

	Accurail	Prototype
Length Over Running Board	38 ft., 3 in	38 ft., 1 in.
Length Over Body	36 ft., 10.5 in.	37 ft., 1.125 in
Length Over End Sills	37 ft.	37 ft., 2.75 in.
Truck Centers	27 ft.	26 ft., 11.5 in.
Width at Eaves	9 ft., 6 in.	9 ft., 5.75 in.
Width Over Sheathing	9 ft., 4 in.	9 ft., 3.25 in.
Height to Eave	12 ft., 6 in.	12 ft., 4.5 in.
Height to Running Board	13 ft., 5 in.	13 ft., 2.5 in.
Door Opening	6 ft.	M-23 - 6 ft.; M-22 - 10 ft.



B&O 185099 is caught on film in a 1925 or 1926 an incident on the Lackawanna.
 Photos by William B. Barry, Jr., Negatives X4521 and X4522, NPS Steamtown

As the cars were relettered for the B&O, there were few changes. We are fortunate that thousands of images captured by Lackawanna company photographers have been scanned by professionals at NPS Steamtown. So many of these inspiring images are important modeling tools.

By late 1926, the B&O listed 477 M-23 cars in the 185000-185499 number series and 481 M-22 automobile boxcars in the 199500-199999 series. These seem like low quantities compared to the thousands of M-8 and M-15 boxcars that dominated the B&O boxcar fleet of 1926, but consider the B&O was assigned 500 USRA boxcars in their M-24 class. I often consider car class quantities to develop my model fleet. The car quantities dwindled over the next 20 years. The January 1943 *ORER* lists three M-23 cars along with three M-22 cars that still had 10-foot wide door openings.

Modeling

I started the project with an Accurail 36-foot, wood-sheathed boxcar with fishbelly underframe and wood ends (kit #1702). I set a goal to upgrade details and keep the factory lettering.

As an aside, the car color is not entirely correct for the 1920s, as the B&O used a milk chocolate shade of brown as their freight car color. It's my fault Accurail produced the models in red--I did not relay the correct information properly.

The first step was to remove the cast on grab irons on the car ends and on the left end of the car sides. Ladders were used on the prototype. I used a new X-Acto #17 chisel blade to remove the grab irons with slow pressure to control the blade. A dental scraper and sanding sticks were used to remove material down to the sheathing surface. Sheathing grooves were added using the chisel blade to impress a path for dental tools to fully contour the grooves.

In addition to the ladders, the prototypes have thin strip of metal installed along the side sills to keep the wood sheathing affixed to the car. A wider strip wraps around the ends and forms a funky curve in the corners. A friend had used automotive pinstripe painting tape to replicate these details. I thought I'd give that material a try.



The ladder grabs are gone here and the sheathing grooves have been scribed over the grab iron locations. Use care so other details are not accidentally removed.



Additional end details were installed.

I bought a 60 yard roll of quarter-inch wide K Tape via Amazon. This is a 0.10 mm thick, poly series fine line tape. I cut strips to the desired widths and carefully applied it to the model. A toothpick was used to burnish the tape onto the surfaces. I washed the model before applying this tape to ensure it stays in place.

Thin styrene strips were added on the end sill to better represent the channel appearance. New grab irons were installed on the end sills. Thin styrene supports were added under the brake platform and running board ends. Styrene 1x4 strips were also added to the fascia. A retainer valve and line were added using a Tichy casting and 0.008-inch diameter brass wire. The uncoupling lever is 0.0125-inch diameter brass wire anchored with a pair of eyebolts. The brake staff is 0.020-inch diameter

phosphor-bronze wire with a Tichy hand brake wheel on top. This wire is larger than the prototype but it is more robust in regular operation. The different wire sizes also reflect a prototype look.

Remember, my goal for this model was to add detail and keep the factory lettering. Once all the small details were installed, it was time for the ladders.



These etched metal ladders are delicate. Plastic versions could be used if they are close to the prototype.

Yarmouth Model Works (<http://www.yarmouthmodelworks.com/>) produces a few different etched-metal freight car ladders. I chose the 18-inch rung spacing (YMW-304) and shortened the stiles as per the prototype. I used straight grab irons for the rungs and left a couple grab iron legs long to ease installing on the car.

Before the ladders are installed, I touched up the details and sheathing with a fine brush and Vallejo acrylic paint. I can't recall the color I used but it wasn't a good match for the factory paint.



This is a workbench grab shot to document progress. Use your iPhone or digital camera as you build. The images often reveal details that need attention, especially paint touch up. It's also handy when you send your work into the *B&O Modeler*.

After the ladders were installed, they were also brush painted with a Vallejo acrylic color. I suspect I used burnt umber with a bit of aged white added on a palette. I used a similar combination to spray a thinned overall coat onto the carbody. I covered the weigh stencil data and location just above the left truck with a strip of blue painter's tape before spraying the thin coat.

Pan Pastels were applied for weathering. Burnt umber was used sparingly. Burnt sienna was applied for some dust and a dark grey shade was used for soot. After weathering, the tape was removed from the weigh stencils to reveal less worn lettering. This is a detail often seen in prototype photos.

A light grey Prismacolor pencil was used to highlight edges and small details. I also added a route card using a small square of newsprint. It's mounted near the reporting marks. Scrap pieces of newsprint was also added to represent old placard remnants. A small dot of canopy glue on the model holds these paper details.

Once the carbody was on the underframe, Hi-Tech air hoses were installed on the car ends.



The M-23 car is riding on Tahoe Model Works AC&F arch bar trucks with semi-scale wheelsets. I use Accurail Proto:HO couplers on most of my 1926 equipment.



I completed upgrading another Accurail boxcar about the same time. Compare the Missouri Pacific car with the B&O model. The factory lettering was preserved on both models, with the B&O car retaining more.

I built the car underframes separately. They are sprayed with a rattle can of Krylon flat brown or camo brown. I don't add much detail, except for a wire from the brake lever at the brake cylinder clevis that ends near the bolster. This represents the connection from the vertical hand brake shaft.

I have a packet of Standard Steel Car Company half-door castings somewhere in my stash. I haven't checked to see how they fit these Accurail 36-foot boxcars. I suspect they might need work to fit for an M-22 automobile boxcar. It's another project for down the road.

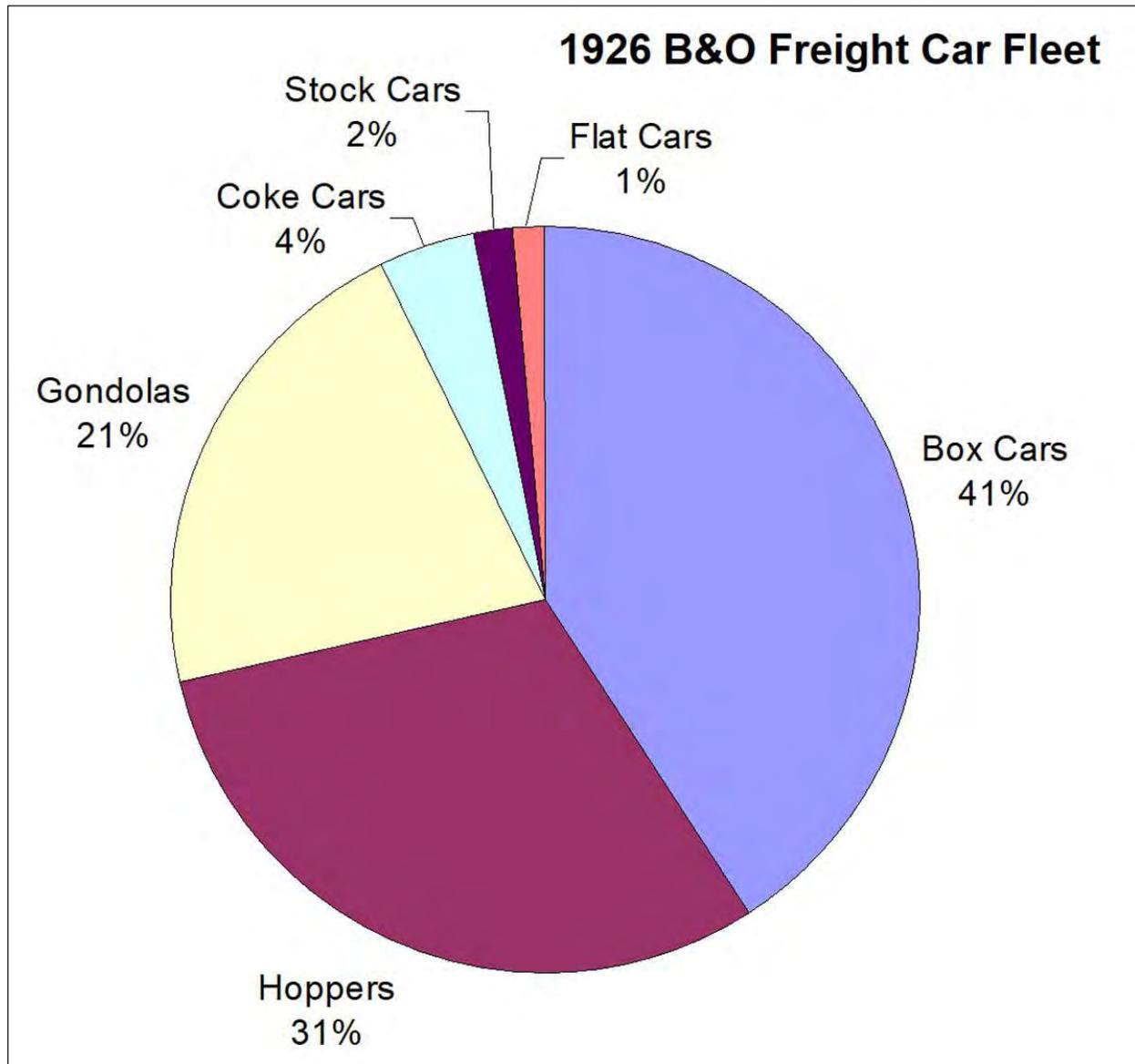
Missing

What I really need are M-8 class boxcars since those held nearly 25% of the 1926 B&O boxcar fleet. These Accurail shortys are slightly larger but dimensionally close. But there is one BIG detail that holds up the project. Most of the M-8 photos I've seen show the cars have a left-opening door. Maybe I'll scratchbuild an M-8 carbody around the Accurail underframe. Again, another project for down the road.

BALTIMORE & OHIO 1926 FREIGHT CAR FLEET

BY ERIC HANSMANN

The Baltimore & Ohio Railroad had an interesting freight car fleet in 1926. The October 1926 *Official Railway Equipment Register* indicates there were 101,227 B&O freight cars in service. These cover a variety of car types and car classes. The pie chart below illustrates the various car designs of the B&O fleet.

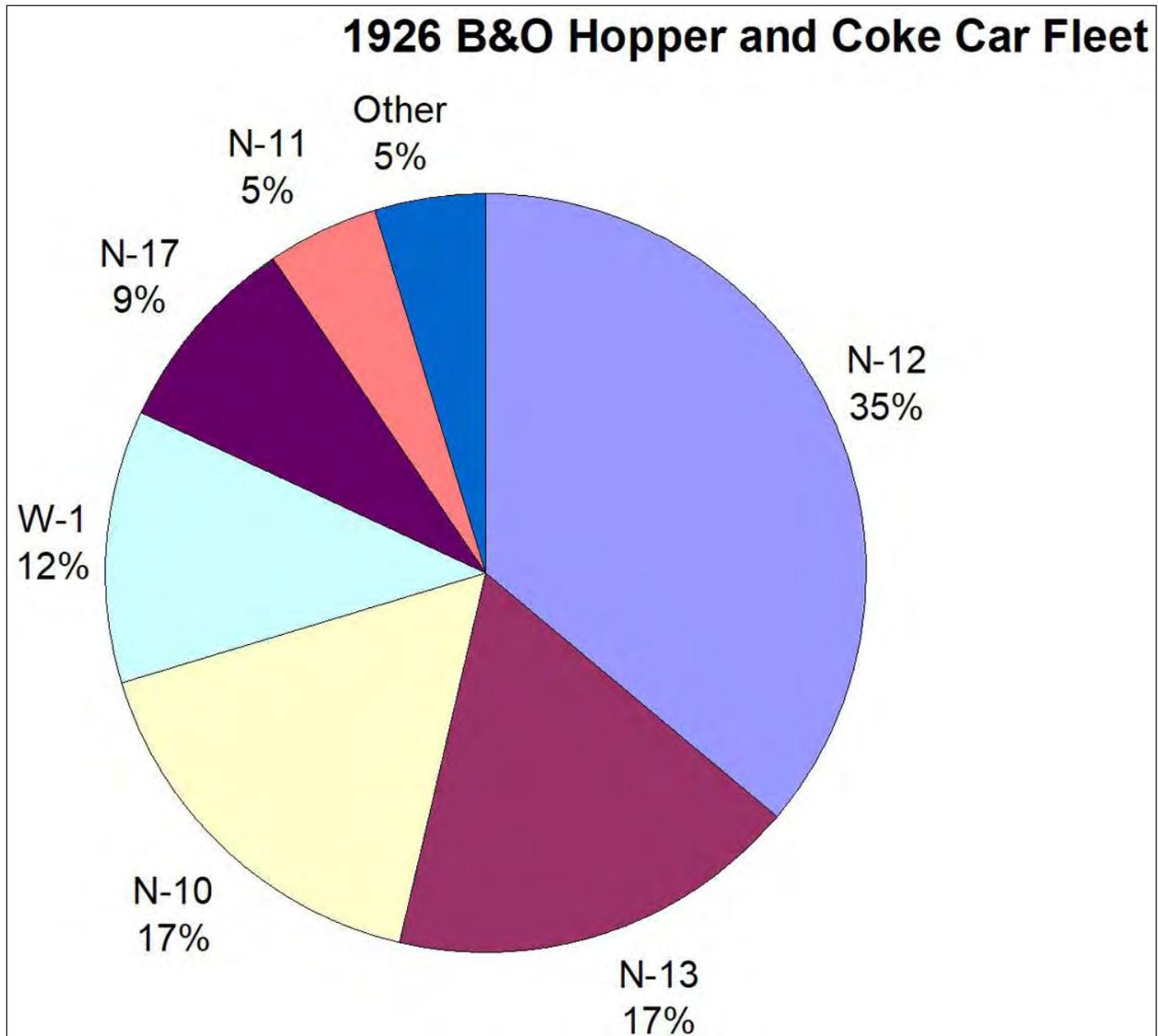


Let's take a closer look at the B&O car classes of 1926 and focus on the hopper fleet. Boxcars were previously featured in *Modeler* No. 48 and gondolas in *Modeler* No. 49 and can be reviewed on the [B&O Freight Car Fleet of 1926](#) page of the DesignBuildOp blog. An additional section covering flats, stock cars, and cabooses in the fleet will be published.

This article was compiled in June 2019 with subsequent additional commentary and images provided by the editors. Where possible John Teichmoeller photos of models from the collection of the late John Schletzer as well as a Bob Chapman photo of his N-12 have been incorporated.

Hopper Cars

37,343 B&O open top hoppers are listed in service across 25 car classes and subclasses in a 1926 *Official Railway Equipment Register*. The B&O classified coke hoppers separately at that time. Combining the coke and hopper cars amounts to 35% of the 1926 fleet. This pie chart illustrates the car class proportion of the hopper fleet covered in this summary.



The 1926 B&O hopper fleet was the third largest among American railroads. Only the Pennsylvania and New York Central fleets had more hopper cars. A large proportion of the B&O hopper fleet was built and installed between 1905 and 1915. Hopper cars were often rebuilt within ten years of entering service. They took a beating hauling coal on the B&O. The W-1 class was originally built for coke service. With traffic and coking methods changing by 1926, these cars were in coal service.

The data was collected from an October 1926 *Official Railway Equipment Register*, the July 1926 *B&O Summary of Equipment*, and *B&O Fifty Years of Rolling Stock Rosters, 1905-1954*. The latter two books were purchased through the [B&O Railroad Historical Society](#). The Company Store offers reprints of many official B&O books to assist with your research efforts. The B&O Summary of Equipment books are found under the Equipment link on the Company Store pages.

N-12 and Subclasses

14,364 cars, 38% of the hopper fleet



An AC&F builder image of N-12g 327989 taken in April 1923. (Photo from the John W. Barriger III National Railroad Library, AC&F Industrial Archival Collection)

Class	Car Series	Cubic Capacity	Number of Cars	Built	Notes
N-12	220000 - 221999	1800	1800	1913	
N-12d	223000 - 225409	1800	2355	1915	
N-12e	322000 - 323414	1800	1411	1921	
N-12f	326000 - 326999	1800	999	1922	
N-12g	327000 - 331999	1800	4998	1923	
N-12g	420000 - 420499	1800	500	1924	
N-12h	420500 - 424879	1800	1001	1924	
N-12j	225500 - 225799	1800	300	1923	ex-Hillman Coal & Coke
N-12k	425000 - 425999	1800	1000	1923	

The N-12 hoppers are iconic B&O cars; you could say that this class group was clearly “king of the hopper fleet” in 1926. The car design seems to be an update on the N-10 design with fewer side stakes and slightly shorter in overall length. The B&O added several thousand N-12 cars after WW1 to replace an aging coal gondola fleet.

For many years, B&O modelers had to satisfy themselves with various model versions of the USRA hopper to represent the two bay hoppers in their fleets. However, we are now fortunate because several years ago

Funaro & Camerlengo issued a resin kit with one piece body for the N-12 and even produces several variations. *B&O Modeler* 41 contained material on this model. If you wanted a quantity of N-12s and were willing to compromise on some details and fidelity without the expense and time of resin kits, the old Varney/Life Like “USRA” twin would be a good start as you don’t have to drill all those grab iron holes.



Funaro & Camerlengo HO-scale N-12, photo and model by Bob Chapman

N-10 and subclasses

6569 cars, 18% of the hopper fleet



N-10f 527076 is a rebuilt car wearing lettering of the pre-Kuhler emblem years. The image is undated.

Class	Car Series	Cubic Capacity	Number of Cars	Built	Notes
N-10b	24000 - 24999	1790	599	1910	
N-10	124000 - 124999	1790	809	1905-06	
N-10a	125000 - 126999	1790	1643	1905-06	
N-10b	127000 - 130019	1790	1390	1910	
N-10d	233800 - 234199	1800	129	1911	ex-Jamison Coal & Coke
N-10f	520000 - 527292	1790	1002	1925 rebuilds	Rebuilt N-10, N-10a, N-10b, and N10d hoppers

The N-10 hoppers became an early all-steel, self-clearing hopper standard for the B&O and the first to be built with copper-bearing steel. The cars had nine side stakes with the top of the sides 10-feet 8-inches above the rail.

The N-10 class followed and improved upon the earlier N-8 and N-9 car designs that had heavy fishbelly sidesills and corrosion problems. The N-8 and N-9 cars were not listed in the 1926 *ORER*.

As of this writing there are no HO-scale models of the N-10 group. Funaro and Camerlengo reportedly started working on the project but it has been “set aside” for the present. It is significant to note that most of the N-12 and N-10 subclasses had ladders at the corners instead of grabs, a lot fewer little holes to drill on the model. As with the N-12 classes, the “platform” end sill is a distinctive feature.

N-13 and subclasses

5930 cars, 16% of the hopper fleet



B&O N-13 229234 at Mt. Clare, Baltimore, Md., March 29, 1941. Tom Arnold photograph.



Have all these N-13s come home to spawn at Locust Pt. Elevator B. Date and photographer unknown.



N-13s unload at Port Reading coal trestle on Arthur Kill, 7/6/16, photographer unknown. Note the abundance of manpower in use to facilitate unloading.



N-13 227839 at the B&O Museum; hard to photograph here, the photo of the car appears to be blue instead of black due to fading and shaded location.

Class	Car Series	Cubic Capacity	Number of Cars	Built	Notes
N-13	222000 - 222999	1800	987	1915	
N-13	229000 - 232999	1817	3952	1915-16	
N-13	235000 - 235999	1817	991	1917	

The N-13 class is an interesting design that used Enterprise longitudinal discharge doors and a hopper slope angle greater than what was used on many coal hoppers. A few modelers and freight car historians suspect the cars were bought for a specific use or customer, but no documentation has been found.

One car has survived the decades and is among the B&O Railroad Museum holdings. It is lettered as B&O 227839.

Currently there are no HO-scale models available for this prototype; however, Funaro and Camerlengo are reportedly working on a kit. Present status is also claimed to be “set aside.”

In *Modeler* No. 43, Ed Kirstatter gave a little background of the class and Bryan Porter offered a description of kitbashing an N-13 in HO using the old Varney/Life Like “USRA” twin hopper.



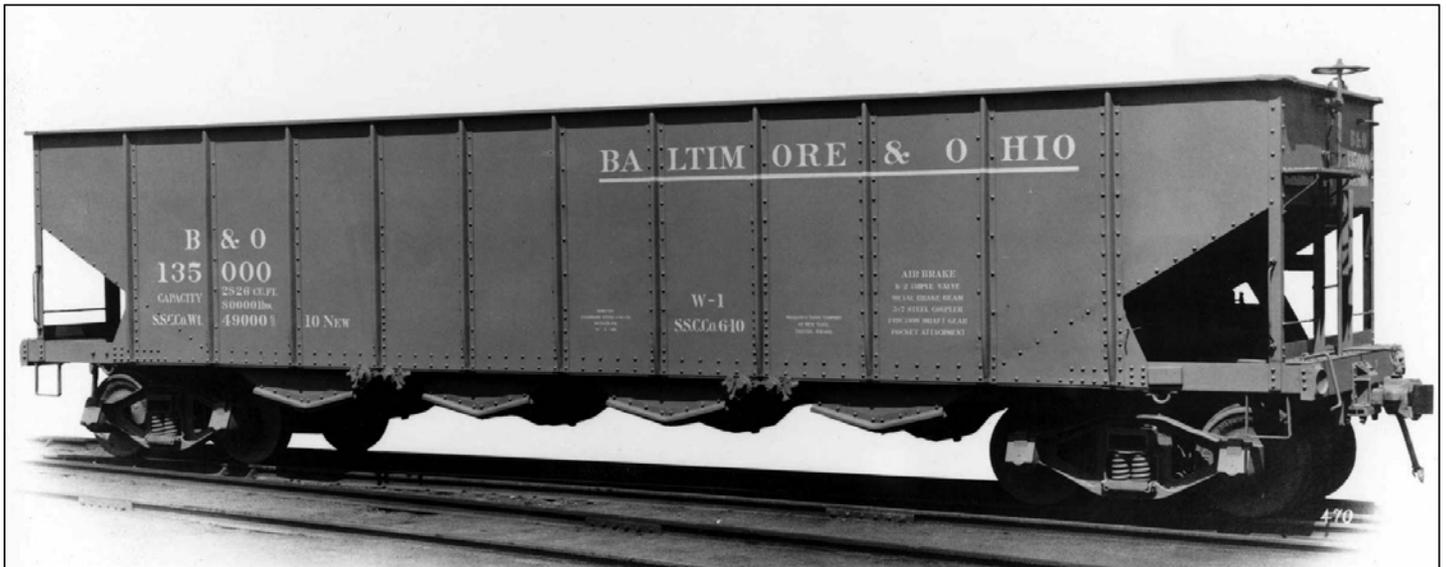
Bryan Porter's HO N-13 kitbash from Varney/Life Like car.



John Schletzer's W-1 from a Bowser PRR H21. The H21s in coke service originally rode on 50-ton archbar trucks, and photos of the B&O's W-1s show many on 50-ton Bettendorf T-sections as John has rendered here.

W-1 and subclasses

3960 cars, 11% of the hopper fleet



W-1 135000 in a June 1910 Standard Steel Car Company builder image. (Keith Retterer photo collection)

Class	Car Series	Cubic Capacity	Number of Cars	Built	Notes
W-1	132000 - 133999	2511	1064	1911	
W-1	134000 - 134999	2511	626	1910	
W-1	135000 - 135999	2511	195	1910	
W-1a	332000 - 332999	2511	712	1922	
W-1a	333000 - 334999	2511	1363	1922-23	

The W-1 hopper car design is similar to the Pennsylvania Railroad H21 hopper cars. When new, the W-1 cars were in coke service and rated at 40-ton capacity. Many coke oven operations were served by the B&O in the coalfields of northern West Virginia and southwestern Pennsylvania. Coke is produced by burning out the impurities in coal. A much lighter product results. These large cubic capacity cars originally didn't need a high tonnage rating.

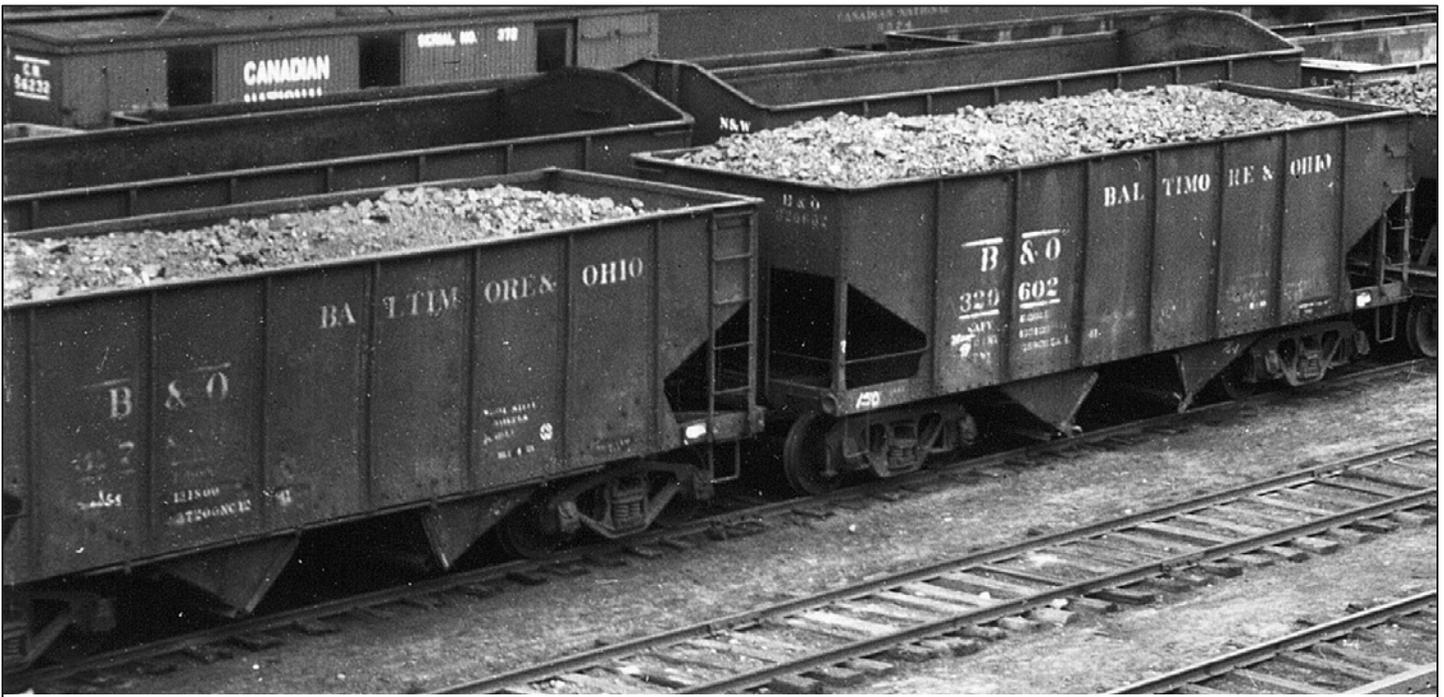
As coke production moved towards more efficient plants to capture additional by-products, these large cars received structural upgrades and higher capacity trucks for coal service. By 1926, the W-1 and W-1a cars were rated at 60-70 ton capacities.

[Westerfield Models](#) has offered an HO-scale W-1 resin kit. As of this June 2019 writing, the kit is slated to be discontinued.

[Bowser Manufacturing](#) produces an HO-scale injection-molded plastic model of the PRR H21 class that can be used as a stand-in for the B&O W-1 cars. Vic Roseman published an article in *Railmodel Journal*, 11/2000 on modifying the Bowser H21 with old style (PRR nomenclature, aka “clamshell) doors into a “stand-in” for the W-1. Vic replaced the sill steps with metal ones and the corner grabs with ladders but did not “clip the bottom dip” of the platform end sills or replace the end verticals with channels. He was apparently unaware of the Westerfield W-1 kit.

N-17 and subclasses

3194 cars, 9% of the hopper fleet



For years the attitude among modelers seemed to be “most two bay hoppers were all alike.” More discerning modelers recognize and see the subtle differences in body dimensions. Moreover, there are unmistakable differences in the ends, in particular the lack of a “platform” end sill on the N-17.

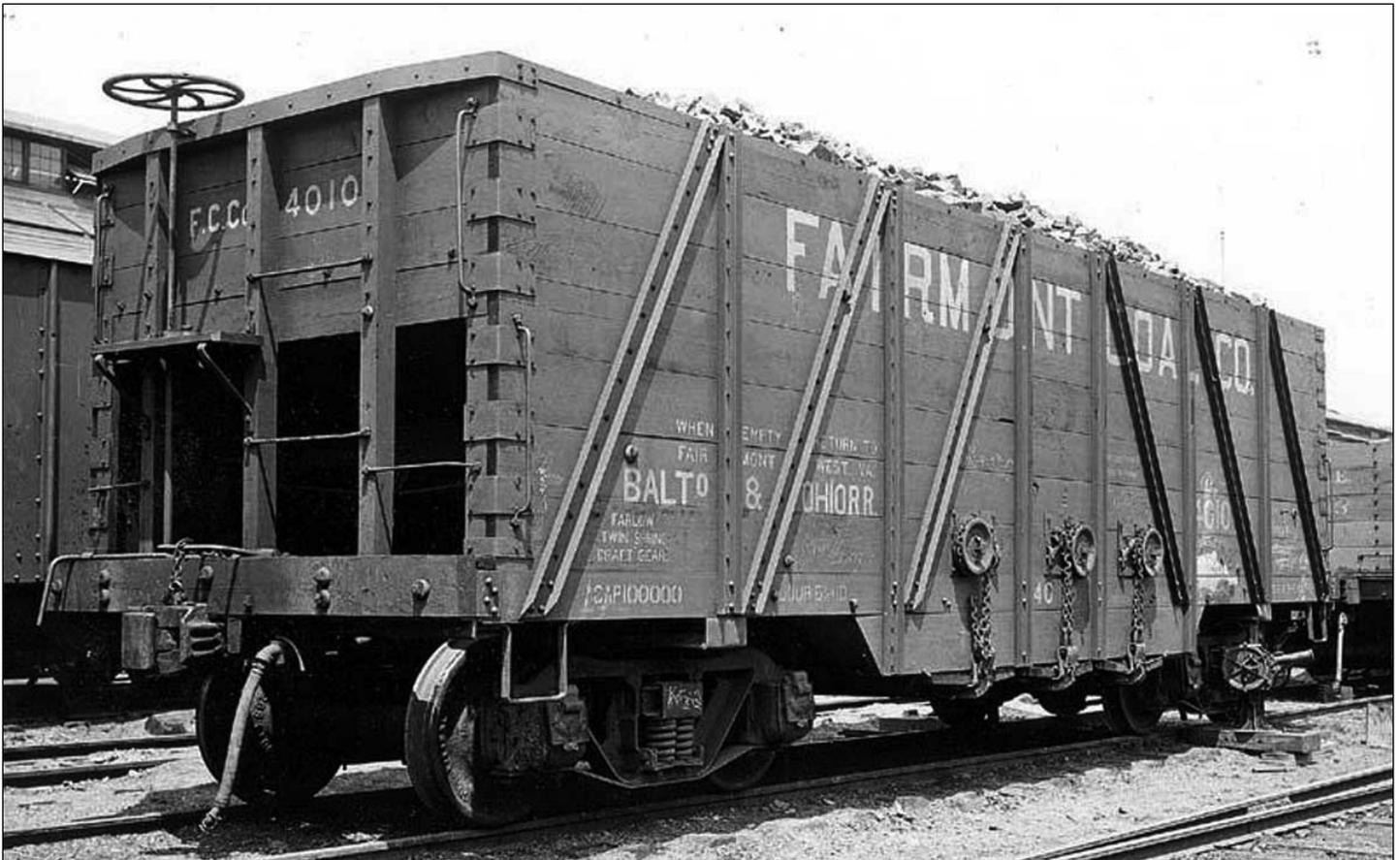
Class	Car Series	Cubic Capacity	Number of Cars	Built	Notes
N-17	320000 - 320999	1880	1000	1919	
N-17	321000 - 321599	1880	597	1919	
N-17	321600 - 321899	1880	299	1919	
N-17	324000 - 324999	1880	998	1919	ex-Morgantown & Kingwood
N-17a	426000-426299	1880	300	1919	ex-Bertha Consumers (BERX)

The N-17 class follows the USRA Specification 1005-B: 55-ton Steel Twin Hopper design. The USRA originally assigned 1900 of these cars to the B&O. An additional 1000 cars came when the Morgantown & Kingwood shortline was purchased. Another 300 hoppers came onto the 1926 roster from Bertha Consumers.

Over the years about the only fairly accurate twin hopper you could get in any scale was the USRA car; it's been produced in O, S, HO, and N by Accurail, MTH, Tichy, Walthers and undoubtedly others. It's a pity they didn't choose the N-12 because the N-17 was a trivial fleet class (Megow actually did a wood and printed cardboard side kit for the N-12 in the early 1950s!). Most modelers have way too many N-17s in their fleet no matter what year they are modeling.

N-11 and subclasses

1598 cars, 4% of the hopper fleet

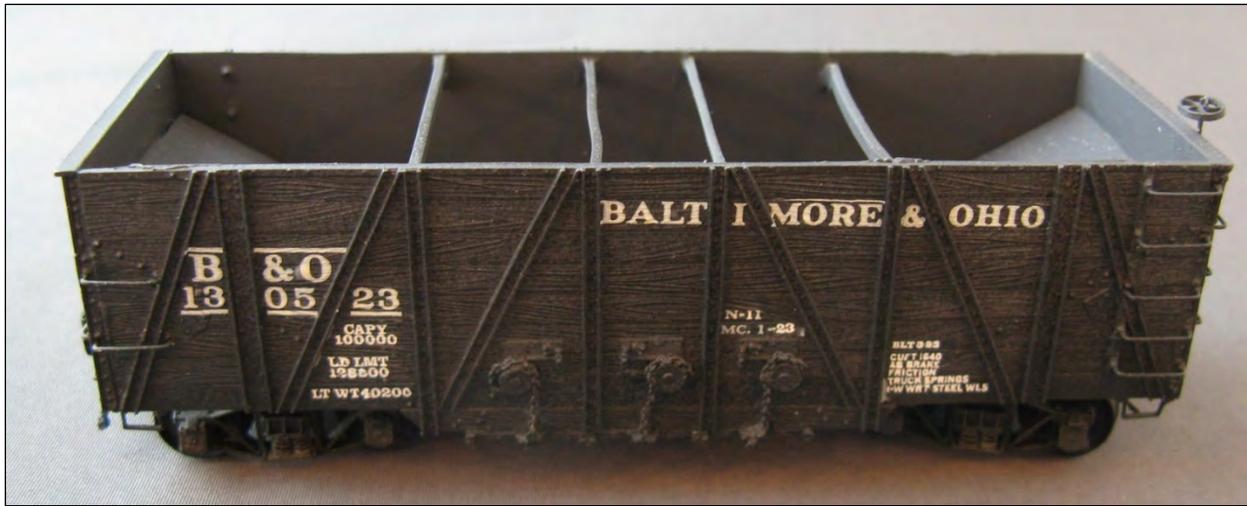


Fairmont Coal 4010 became a B&O N-11 class hopper and first appear in the July 1908 Summary of Equipment. Note the lack of ladders and grabs that would be mandated by the 1911 amendments to the Safety Appliance Act of 1893.

Class	Car Series	Cubic Capacity	Number of Cars	Built	Notes
N-11	30000 - 30254	2100	223	1907	
N-11	130020 - 131999	1723	1375	1906-07	ex-Fairmont Coal and Sandy Creek Coal

The N-11 wood hoppers follow one of many Seley hopper designs that were popular in the 1900-1920 years. The B&O cars surviving into the mid-1920s would have received steel centersills and updated ladders and grab irons to follow safety appliance requirements. The difference of capacity between these two car series is odd as the *ORER* details for length, width, and height of cars listed for each of the car series are just a few inches off. The Fairmont cars may have had a different slope sheet arrangement resulting in different volume.

Currently, there are no HO-scale models available for these specific B&O prototypes. [Funaro & Camerlengo](#) produce HO-scale resin kits following Southern Railway prototypes that are similar to the B&O N-11 cars. Note the difference between the ends on the N-11 and the Southern Seley car, especially the protruding “platform” end sill on the N-11.



F&C kit for Southern Seley hopper as stand in for B&O 130323 from John Schletzer collection.



Remaining Coal Hoppers

The remaining 4% of the 1926 B&O hopper fleet covers 1,728 cars in six car classes. All of them came from other owners.

- N-14 - 29 cars, ex-Jamison Coal & Coke, original cars built in 1904
- N-15 - 42 cars, ex-Jamison Coal & Coke, original cars built in 1905
- N-16 and N-16a - 996 cars, ex-Fairmont Coal and Sandy Creek Coal companies, original cars built in 1918
- N-18 - 541 cars, ex-NECX and (possibly) Bethlehem Steel, original cars built in 1912-14
- W-3 - 120 cars, ex-Bertha Consumers, original cars built in 1921-22



B&O N-14 No. 233088 Westerfield PRR G1b resin kit—Standard Steel Car prototype with structural shape components as opposed to pressed steel. John Schletzer collection.



B&O N-15, No. 233547 Bowser PRR GLa. Now that Rapido has announced their version of the PRR GLa, maybe they will do a B&O N-15. John Schletzer collection.



B&O W-3, No. 335033 from Bowser PRR H21a; center two bays have been flipped so they face each other. John Schletzer collection



The N-16 and N-16a cars were distinctive, as you see above. They were wood construction with steel underframes and truss members following a Seley design. The B&O was rebuilding these cars in the mid-1920s with steel hoppers, steel ends and open sides under the slope sheets at the end sills.

I recommend the following resources to further understand the evolving B&O coal hauling fleet and hopper cars in general.

Ben Hom - *"Modeling B&O Open Hoppers, 1919 to 1963 – an overview"*
The B&O Modeler Vol. 2, No. 3, May/June 2006

Martin Robert Karig - *Coal Cars, the first three hundred years*
 University of Scranton Press

The 1926 B&O freight car fleet summary has been an ongoing project. Several modelers and historians have assisted and it would not have progressed without their assistance. I owe a debt of gratitude to James Mischke, Bob Witt, Ed Kirstatter, and Ray Breyer for sharing details, photos, and proofreading as the project has lurched forward.

FAIRMONT ENGINE TERMINAL ON THE B&O'S PIEDMONT DIVISION

BY BRUCE ELLIOTT

Many modelers get satisfaction from modeling a particular stretch of the B&O. This typically includes the main line as well as stations, terminals and industries contained on their chosen section of the railroad. One of the drawbacks of trying to model a continuous stretch of the line is that things inevitably have to be omitted because of space limitations, and the distance between stations becomes frustratingly short for running trains. Additionally, you find yourself standing in one section of the layout room and being able to see terminals or other features that in real life are miles apart and not at all visible from where you are standing. Of course, compromise is necessary in most all model railroad designs, but I chose to take a different approach in modeling the fictional Piedmont Division. Rather than modeling an actual division on the railroad, I chose to model five different locations around the former B&O during 1950 - 1955. Certainly, there is a main line connecting these locations to be able to run trains. This connecting track will possess identifiable B&O characteristics, but the emphasis will be on modeling convincing representations of the five specific locations. The first of these locations was Point of Rocks. This was featured in *B&O Modeler* Nos. 44, 45 and 48. Now we will look at Fairmont. The timing for this article conveniently is just a year or so after the publication of Book Three in the formidable historical series by Terry Arbogast' entitled *West of Cumberland—A History of the Baltimore & Ohio Railroad in the Mountain State West of the Queen City*, (we'll refer to it as "Book 3") This volume weighs about five pounds and is dedicated to the Fairmont Terminal.

I chose to model Fairmont for two reasons: 1) I had already built a 17-stall roundhouse, with a 115' turntable and 2) I wanted a location that had a single-track mainline junction within its confines. In reality the roundhouse that I built was a compromise compared between the original roundhouse and the second one that was built in 1954. (The 1954 roundhouse is thought to be the last newly built railroad roundhouse in the US.) The locomotive facilities were located immediately west of Buffalo Creek. The yards were located just west of Gaston Jct. and east of Buffalo Creek. The locomotive facility, as modeled here, is approximately 15' wide x 8' deep. Yes, that's sizeable, but despite this size, as usual with model railroading a lot of selective compression was necessary. The goal was to capture the flavor of the terminal, by modeling its notable features including the roundhouse, turntable, fuel storage, boiler house, stores house, penstocks, fire hose houses, diesel fueling track, coal tower, inspection pits and ash pits. Some of these features had to be rearranged. The coal tower was a size compromise due to space limitations. I could easily have used another five feet of real estate in the locomotive facilities alone. The entire Fairmont yards elsewhere on the layout covers 40 real feet.

How basic can one get? The "givens" in planning this section of the layout were the roundhouse and turntable. These were "grafted" over as a complete assembly from the layout that I had started over at Cass. The roundhouse was built from six Walthers kits. The one long stall extension from each kit were combined and are on the right side of the structure. This extension was necessary to house EL-3a's and EM-1's and still be able to close the doors during those West Virginia winters, described chillingly in Terry's book. The track was laid out as close to the track plan as space allowed with the actual "planning" as shown here being done on the table top as opposed to on a drafting table or computer. All turnouts are #6's. Minimum radius is 40". The turntable itself is from Diamond Scale and it spins via a New York Railway Supply drive, with a stepper motor that has 14,400 positions in 365 degrees.

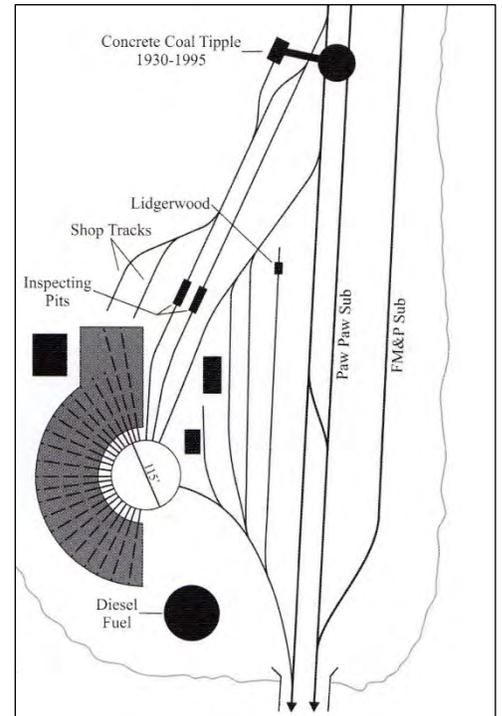




This was early in the planning. A lot of planning went into the placement of the roundhouse and turntable in the layout as there would be no second guessing. The six stall extensions for larger steam locomotives are visible. The small Walthers coal tower seen here was a fill-in, mostly to give me an idea of where I wanted to place it in relation to reality. Obviously no concrete track plan was in place yet. Many model railroaders have a plan of some sort on paper, some even have CAD drawings. My approach was more along the lines of by the seat of my pants based on photographs and track plans. I find you can only do so much on paper. A future installment will show what I feel is a reasonably close facsimile of what the rest of Fairmont looked like.



Mainline tracks and service tracks were finally located and the coal tower was under construction. The ash pit/hoist was from Overland and was another compromise due to available space.



Fuel delivery and storage was starting to take materialize. The silo for the coal tower was also taking shape. It was built from a 4" PVC coupling that was expanded 1/2" to give it a larger diameter. The styrofoam in the foreground would be sub-terrain for texture—some relief instead of just flat surface. Note the red fire hose houses. The mountain in the background is a scenery divider between Fairmont and Point of Rocks on the layout. In real life, of course, there is no tunnel at this location. In reality we're looking west at the beginning of the FM&P and the line going to Rivesville. This layout has NO "painted backdrops" in the typical fashion—this is West Virginia and we have hillsides and mountains. Notice all the "subroadbed" (plywood) has been painted black; the "cinders" will appropriately show through any thin ballast and landscaping.

The prototype track arrangement graphic by Scott Seders, page 307, Book 3



This is a 1954 photo of the prototype engine terminal. O.V. Nelson photo, E.O. Malone collection, Book 3, page 327.



The fuel storage tanks and retaining wall have been located. Three of the five outside storage tracks are seen here. The fuel delivery track and rack are at the right. Under the brown paint in the foreground is the styrofoam, plaster cloth and Sculpt-A-Mold that will eventually be coated with ground cover



Buffalo Creek is the big attraction here, as it flows into the Monongahela River. My depiction of Buffalo Creek is just over 9 ft. long. In this photo the project at hand was the deck plate bridges. Each track had two bridge spans. Three of them had the same height girders. As can be seen, the girders on the near track on the right were shorter. There is no known explanation for this oddity but I thought it was important to capture it in the model. The river bottom and a lot of the scenery in this area was done by the late "Woody" Higginbotham. Rock, tunnel and pier castings were compliments of the late Harry Clark. The coal tower is now taking more of its appearance. In the upper left is the start of the CC&L branchline which in reality would be the Old Main Line west to Moundsville. Two tenders can be seen that are on the Maintenance of Way track that was located on the east side of Buffalo Creek.



With the ground cover finished, it was time to pour a river. This pour took a gallon of resin to complete. The bridges were permanent by this time, so it was a bit challenging to pour and avoid the decks.



The scenery now surrounds the locomotive facilities. The train at the left is on the CC&L branch, which in reality would be the Old Main Line. Buffalo Creek is between the train and the roundhouse. The roundhouse extensions can be seen from this angle.



On the hill near the top can be seen a concrete water tank. This was made from a 4" PVC coupling and cap. The roundhouse is at the left. A boiler house was fabricated from Design Preservation panels and has a Walthers tall stack. To the right of the fuel tank and the left of the mostly finished coal tower is the Stores Room. This was a scratch-built plaster model by the late Harry Clark. The red truss rod refrigerator car was built from a Roundhouse kit and lettered for company ice service.



In laying out the locomotive facilities a lot of study of the prototype track plan was necessary, then size and space were the next considerations. Obviously a 17-stall roundhouse capable of handling articulated locomotives eats up a lot of real estate on its own. When you add support structures and keep in mind the large radius necessary for these big locomotives, well, your space starts to disappear quickly. Five more feet of width would have been a blessing. At this time support structures were placed where they fit best, with the space allowed. The small brick DPM structure would eventually be replaced with a scratch-built fuel pump house.



Visitors to Pocahontas County, West Virginia may be surprised to see this sign.

B&O N-0 HOPPER

DATED APRIL 1ST, 2020

BY THOMAS GOERNIG

The Prototype

After reading the intriguing article about the B&O Class N-0 wagon top hopper by Bob Chapman in the March/April 2011 issue of *The B&O Modeler*, I tried to search for more information about this interesting car. But the more I searched, the more my frustration grew. Despite the wonders of the Internet, it seemed impossible to find any prototype information on this unique car design. I thought it hard to imagine that there was only one prototype of this car built. I was under the impression that often several prototypes were built, possibly by different car shops, each with slight variations. Assuming that the N-0 632200 was built on April 1st, 1935 at the Mt. Clare shops in Baltimore, might it not be likely that a 2nd prototype could have been built around the same time at, say, Keyser, WV? I was simply thinking along the lines of the I-16 cabooses. So, I thought, why couldn't there have been, say, an N-0a 632201 which showed slight variations from 632200? No photos of the car ever showed up, and it seemed most likely that this car operated in obscurity in West Virginia's coal fields, like its sister car 632200.

The Base Model

OK, Bob, you got me—when I put the pieces together and recognized the article was in the April issue of *the B&O Modeler*. Yes, *Model Railroader* plays this prank every year. April Fool's joke or not, I was still fascinated with the concept, so I decided to build my own model of the Class N-0 Wagon Top Open Hopper. But there was another slight problem: there were no piles of the ancient Cannonball Car Shops plastic kits on vendor tables at Bavarian train shows whose owners were trying to foist them off at outrageous prices. Actually, I found *none* available at *any* price. [Maybe someday when the world gets back in order Thomas can come to the train show at Timonium, MD—or even West Springfield, MA. JT] I do have quite a few B&O hoppers (59) and some B&O wagon top box cars, but I felt it a pity to butcher one of my viable fleet members for this project. Fortunately, I was able to find an old Life Like cement hopper on eBay [sounds like the ancient Varney "USRA" shell with the "pop-off" roof with hatches JT], which served as a base for my model.

Construction

I removed the top of the cement hopper and all the cast on ladders, grab irons and the truck bolsters. The new center sill was built from a Central Valley Floors and Frames kit. I added the complete brake rodding and levers and completed it with Kadee #58 scale couplers. The air reservoir, valve and brake cylinder were also taken from the Central Valley Floors and Frames kit. On the top of hopper sides, I glued a tube which was a left over from the Walther's Ashland Blast Furnace. The tube was cut into a 90° section to simulate the round edges of the wagon top design. Small Evergreen scale strip pieces were used to simulate the seven side panel joints on each side. I also added two reinforcements inside of the hopper body. Some scrap brass was glued between the slopes from the underside; it is not visible but gives some additional weight to the car. This became necessary as I discarded the original weight that was inside the cement hopper as I also wanted to model the inside of the hopper. After painting the body, I added decals, following the pictures of the *B&O Modeler*. This was quite a challenge as I had to use single numbers and letters to get the right markings and lettering. When it was completed, I gave it a flat finish and some weathering, to make it look like as it has been in hard service for some years.

Bill of Materials

Manufacturer	Part Number	Description
Life Like	8514	Erie Cement Hopper
Central Valley	CVM #1000	40' Floors & Frames
Kadee	KD058 KD500 KD523 KD2040	Scale Coupler Bettendorf Trucks <u>33' Ribbed Back Wheels</u> Ajax Brake Wheel
A-Line	29000	Stirrup Steps Style A
Atlas/BLMA	BLMA4512	18" Straight Grab Irons
Tichy	n.a.	Ladder Stock
Evergreen	120 142 122 123 124 148 291	square .020 x .020 square .040 x .040 strip .020 x .040 strip .020 x .060 strip .020 x .080 strip .040 x .188 angle .060
Cal Scale	190-501	Lift Rings
Albon Alloys	BW04	Brass Rod 0.4mm
Walthers	Ashland blast furnace leftover	Tube

References

Chapman, Bob, "Modeling B&O's Class N-0 Wagon Top Hopper", *The B&O Modeler* March/April 2011
 Jones, Dwight, *Encyclopedia of B&O Caboose*, Volume 4, I-5 and I-16 Cars





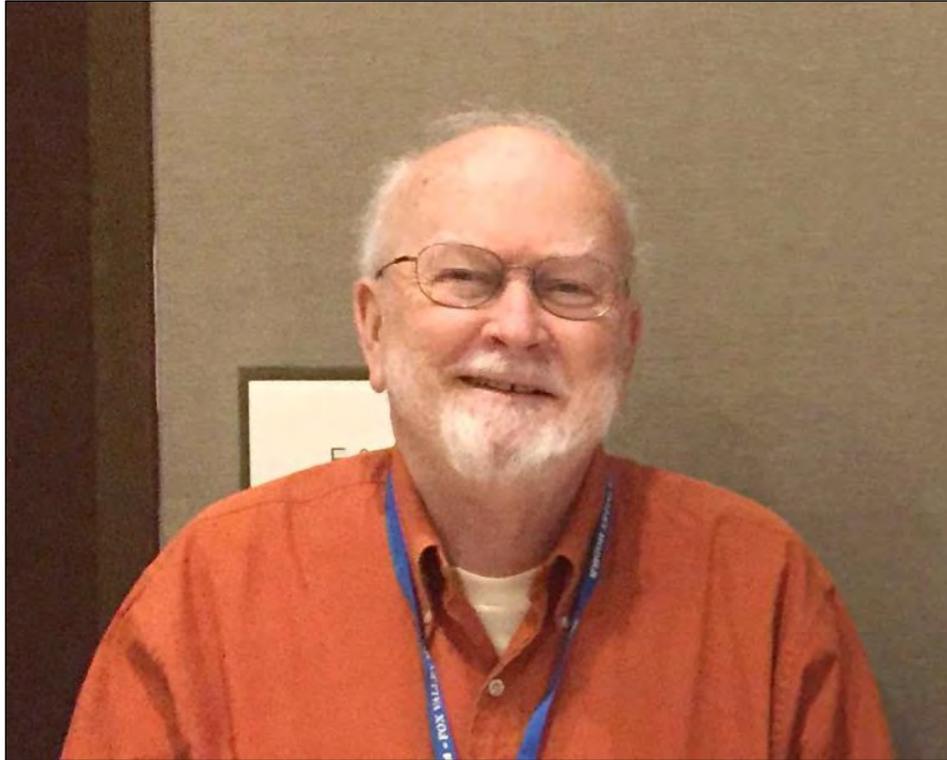
P.S. Information Wanted

I am still looking for a dimensional/clearance diagram for one or more of the electric “shunts” or “mules” used in the Curtis Bay coal dumper and ore loader yards in order to build a model. See my mockup on page 16 of *Modeler* No. 52. I would be happy to come and search in the B&ORRHS archives, but I can’t find any cheap flights from Bavaria to Eldersburg and understand that once I got there I would probably find the doors locked due to the virus. Hopefully one of our readers has such a diagram in his personal collection and can send me a scan.

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REMEMBERING BILL WELCH

BY JOHN TEICHMOLLER



Bill Welch died of pancreatic cancer on November 15, 2020. Bill was one of the leaders in the Prototype Modelers movement and a frequent clinician at meets. I attended an early PM meet that was held for a dozen or so modelers in his living room in Northern Virginia. Two of Bill's articles appeared in *The Modeler*, one in No. 50 on upgrading a Red Caboose M-26 boxcar, the other on Fruit Growers Express refrigerator cars in the Vol. 7 No. 1 issue. The Fruit Growers Express story was Bill's passion for many years, and he was working on a two-volume book on the subject. Arrangements had been made for Ted Culotta to carry this project to completion (see the [Speedwitch Media website](#) for more information). Bill was a Unitarian minister and had a very interesting life and diversified interests. A well-done memorial service was conducted for Bill via Zoom on December 9, 2020.