The Crossbuck

THE OSWEGO VALLEY RAILROAD ASSOCIATION

Newsletter, July 2024, Volume 2, #3, Kent Dristle editor

PO. Box 205, New Haven, New York 13121-0205

Spring Show Success

On May 4th and 5th 2024, OVRRA held their Spring Time Express Model Train Show. By nearly every measure it was a great success. After expenses were taken into account, we netted $2046.72. This was a $766 increase over last year's spring show. Attendance for the two days amounted to 427 people which was 21 more than the previous year. This year we sold a record number of tables to vendors (66) which required us to shorten our layout from its usual 32 feet to 28 feet in order to create extra space for the tables. This is the fifth year we've sponsored a spring show and the numbers prove that it's become well established. Many thanks are in order to all who helped make this year's spring show a success from those who helped set up and take down tables & layouts, brought food, handled publicity, managed money, and helped keep track of all the details that make things run like a well-oiled locomotive. ■

Welcome OVRRA to Mt. Pleasant Grange #349

by Pamela Mossotti

I know we have only recently met but it would seem our storied histories span over 150 years together!

Mt. Pleasant Grange #349 received its charter on September 25th, 1875. Our building, "The Grange" was built in 1908 for a mere $4500. At that time we had over 200 members. Prior to our current hall, the Grangers of #349 met across the street in the location of the former cheese factory and mill, 2nd floor. The reason for the farming members of the Mt. Pleasant community to seek out and receive their charter in 1875? Well, it was to band together to fight against falling crop prices and to stop the excessive **railroad fees** to ship their crops to market. The oppression and dominance of the railroads led to the eventual creation of the first Grange in 1867. Fredonia Grange #1, New York State. We became; "The Patrons of Husbandry" or "P of H".

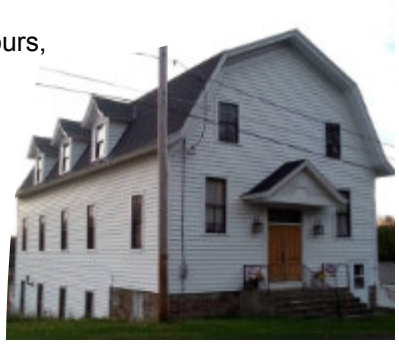
Eventually, the resulting organized revolt of the Grangers nationwide at that time, led to the first regulations of railroads and monopolies alike. Through the years, Grange at local, state and national levels has had a ripple effect on laws and services that we take mostly for granted today. Telephones, electricity and even postal delivery all happens to rural areas because of Grange! Proudly, to this day, Grange lobbies for legislation at both state and national levels aimed to protect farms, families, health and necessary amenities for everyone.

Forward to now, 2024. How serendipitous that it was decided last year that the upstairs of the Grange hall was to be renovated. To be honest, with not much intention of use. Even so, the knowledge that the plaster walls had started to fall in massive sheets every winter made it time to renovate. How ironic that we would be approached by OVRRA, a railroad enthusiast club for lease of the upstairs. Back in the day, every meeting held by the Grange in that very upstairs was cloaked in secrecy. Why? To keep the railroad spies away!

Happily, OVRRA and Mt. Pleasant Grange #349 has forged a mutual agreement to make the Grange hall your new home. The intent is to have you as our guests for the long term. Already, your club has chipped in and brought a fantastic and dramatic change to the 116 year old building. Next year will mark our 150th anniversary as a Grange. We hope every milestone to come will also involve the OVRRA club by our side. We will forever recognize and associate "serendipity" with the Oswego Valley RailRoad Association.

For those interested, you are invited to join Mt. Pleasant Grange #349 as an "Associate Member". The past few years has seen our numbers dwindle mostly due to passings but some demits (removal for non payment of dues). The fee is $35 per year with a kick back directly from Mt. Pleasant Grange of $10. In essence, $25 per year. This is billed yearly by the State Secretary of NYS Grange. If you are interested in becoming an Associate Member, please contact Charles Hewlett or Kent Dristle for an application. Again, we welcome OVRRA and very much look forward to meeting you all.

Serendipitously Yours,
Pamela Mossotti
President



Update on Renovations to Our New Home

OVRRA is working cooperatively with the **Mt. Pleasant Grange** on renovations to their building, in particular the first floor main hall, so it can become OVRRA's new home. When finished, all the original plaster on the walls of the first floor rooms will be replaced with gypsum wallboard (sheetrock), the walls and ceiling will be insulated, and the electrical system will be updated. Also to be installed will be a new ceiling and a new heating system. Finally, the floors will be refinished. Out front, a wheelchair ramp will be installed to make access to the first floor much easier. Yes, it's a lot of work, but OVRRA is already off to a great start.

Figure 1: Plaster removal

June 1st was "demolition day", the first of several "work days" in which the goal was to remove the aged, crumbling plaster. The day began with a wonderful Belgian waffle breakfast served to us by Pam Mossotti, Grange president. By day's end, our workers had removed plaster from all of the walls of the main hall, and one of the three smaller entry rooms at building's front. Much of the plaster crumbled at the slightest touch, but we discovered a number of places where it was rock hard and needed to be struck with many hammer blows before yielding. We also found a few old wallboard patches as well. There was dust everywhere, but we were smart enough to mask up to protect our lungs. The last couple of hours involved cleaning up huge piles of powdery plaster (and dust) and moving it into the dumpster outside.

A large, heavy mosaic of grains and corn kernels that had been created years ago, specifically

Figure 2: Removing the grain mosaic

for this Grange, had to be removed from the east wall of the main hall in order to get to the plaster beneath. It was not an easy operation given its age and fragility, but we were able to move it downstairs with minimal damage.

It's important to note that prior to the actual day of demolition, much prep work had already been done. Protective paper and plastic had been layered down over the floors, and a number of heavy pieces of furniture were moved out. Scaffolding and ladders were set up. The kitchen area and the downstairs eating hall were cleaned and prepped by Grange officers Pam and Wendell. Pam provided breakfast on the big day and Colleen Dristle (wife of OVRRA president Kent Dristle) provided lunch.

Additional work done either on or before that day included Kent's effort to remove wainscot boards below the three north facing windows, installing fiberglass insulation in the wall cavities there and then carefully replacing the beaded wainscot back where it had originally been. Charlie obtained brown spray paint and began painting the electrical wiremold conduit so it will blend in with the existing wainscot. Pam's brother Bob also worked hard to layout the locations of wiremold and electrical boxes, and put down many yards of protective floor coverings as well as obtaining and

assembling scaffolding. Todd, Steve, and Tina worked on lawn mowing and weed whacking.

In the weeks that followed, more work has been done. Bob has mounted wiremold around the perimeter of the big hall and has started pulling wire through it. Lath boards have been removed from the north, south, and west walls that will be

Figure 3: Lath board removal

getting insulation by a variety of people including Shawn, Kayla, Bill, Kent, and Bob. Pam and Bill have cleaned out the attic space and placed plywood over the attic floor joists to make the surface safe to walk on. We are examining several options for insulating the wall above the wainscot– options that would include fiberglass batts and/or spray foam insulation. OVRRA also plans to insulate the areas behind the wainscot. Options for this would include blown-in cellulose or pour-in types. Removal of left-over lath nails from the wall studs is ongoing. Holes are being drilled in strategic locations, not only to accommodate new electrical wiring but also to make it possible to blow or pour in insulation into wall cavities.

Figure 4: locating future electrical outlets

Figure 5: Six members of the crew

Many thanks to all who participate in this on-going effort including Pam Mossotti and her husband as well as her brother Bob, and Wendell, and OVRRA members & associates Charlie, Mike, Dolores, Bill, Steve, Tina, Shawn, Kayla, Todd, Jim, Secil, Colleen, and Kent. ■

OVRRA Train Show Schedule for 2024

May 4-5…..Spring Time Express Train Show...Volney

*Sept. 7-8….Thousand Islands Train show….Clayton

Nov. 2-3 …..Great NYS Model Train Fair...Syracuse

Nov 9-10… Holiday Express Train Show……Volney

*Dec 7-8…..… Christmas in Mexico……....Mexico

*Tentative Dates

OVRRA Officers for 2024

President……Kent Dristle
president@ovrra.org

Vice-President……Steve Rogers
vp@ovrra.org

Secretary……Charles Hewlett
secretary@ovrra.org

Treasurer……..Secil Brown
treasurer@ovrra.org

Using the Cricut Machine for Model Railroading

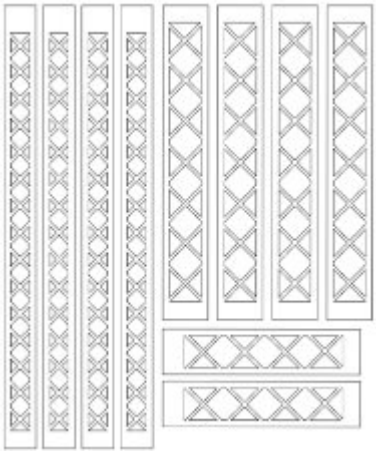
by Kent Dristle

Quite a few model railroaders have the need and desire to produce a number of exact copies of the same shape or component for a particular project they are working on. Fortunately, there are manufacturers who have anticipated modelers' greatest needs. We can order ladders, grab irons, grills, steps, chimneys, windows, and doors, usually finding something that will fit our needs. But once in a while, we encounter a situation where stock items simply will not fit or are otherwise not appropriate. We could buy some sheet stock of styrene (Evergreen or Plastruct) or pieces of basswood (Northeastern Scale Lumber) and carefully cut out as many copies as we need, but that can be quite time consuming, and if we're not careful, there will be noticeable differences from one copy to the next. And then, some of us are into scratch building or kit-bashing models in order to model a favorite prototype for which there is no commercial model or kit on the market, and we need custom cut parts. A search of the Internet will reveal a number of people with a laser cutting machine or a 3D printer who can make whatever you want for a price, usually a rather steep price, and little wonder. Those machines themselves can be quite pricey. Fortunately, there is a less expensive alternative. They are called **die-cutting machines**. These machines have been mostly marketed to crafters who want to cut out vinyl, paper, fabric and card stock for scrap booking, making labels & signs, and other personalized items. Model railroaders have now taken notice of them.

Two such die-cutting machines are the Cricut Explore 3 and the Silhouette Cameo 5. Each are priced at about $300, although you can buy earlier generation models for much less. I use the Cricut Explore Air 2, which presently can be purchased for as little as $140. Even the current models cost a small fraction of the price of a laser cutting machine or 3D printer. But are these die-cutting machines worth it? Well, let me show you what I've been able to accomplish with my Cricut machine.

Figure 6: Cricut Explore Air 2

Most of you are familiar with the Onondaga Lake Parkway bridge model that I scratchbuilt, in early 2020, but during the year prior to that, I built model of a vertical lift bridge for my home model railroad that spans five feet across the picture window in our hobby room, that's over 400 feet in HO scale! It's loosely based on the vertical lift bridge built by the New Haven Railroad over the Cape Cod Canal. There was no commercially available model of that length on the market, so I had to design and build my own model. Central Valley styrene bridge girders are wonderful things. Each piece consists of a laced side with an adjacent solid side. Two such pieces glued up to make a single box girder about 6 inches long. I knew I could make good use of them as part of the truss work, but I couldn't rely on them alone for such a long span, especially in the bottom chords of the bridge which needed to be very strong. The solution was to use long continuous pieces of aluminum U-channel in combination with the styrene bridge girders. What to do about the open side of the U? That's where the Cricut machine came in. I determined that I could have the Cricut machine cut out a pattern in styrene to match the Central Valley bridge girder's laced side and use those cut-outs to cover the open side of the aluminum U-channel.



This is the process I used to create that parts I needed. I carefully measured the lace pattern on the Central Valley bridge girders and then recreated it in a vector drawing program on my computer. I made a drawing for every one of the different kinds of lengths and shapes I needed. Then, I exported the drawings to an SVG file (scalable vector graphics). I started up the software that came with my Cricut machine and uploaded the SVG file into it. I used the software to make as many digital copies of each shape as I needed. The Cricut software then asked for me to set some parameters for the type of material I would cut (styrene), the cutting pressure, kind of blade, and the size of the cutting mat. I pressed the plain piece of styrene onto the sticky side of the cutting mat, aligned it with the feed rollers and then pressed "GO". It took just a few

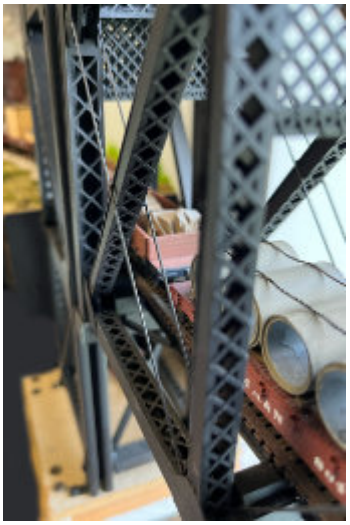


Figure 7: Laced Bridge Girders

minutes for the Cricut machine to score all the shapes into the styrene.

Really thin styrene (such as 0.005" to 0.010") can be cut all the way through. Thicker styrene is simply scored by the machine's blade. I would then use my hobby knife to finish the cut. In a few cases, the Cricut's blade had cut almost all the way through and I could just pop out the shapes with little effort. Look at the photo in Figure 7 and see if you can tell the difference between the Central Valley laced bridge girders and the aluminum U channel girders with the Cricut cut outs applied over the open side of them. Once painted uniformly, they all blend in together very well.

A more recent Cricut project involved the creation of a new station platform next to the outside mainline track on one of OVRRA's traveling layout modules. The existing station platform that served tracks off the inside main, was a Walther's product. Unfortunately, it would not fit in the limited space we had next to the outside mainline. That meant I would have to design and scratchbuild a station platform that actually did fit, but also looked enough like the existing one so that it looked like it belonged there.

I started by carefully measuring the support columns and top brackets of the Walther's station platform. Then I opened up my computer's drawing program drew a new column with narrower brackets with the same general design as the original. I exported it as an SVG file, which I then imported into the Cricut software. As before, I copied and pasted

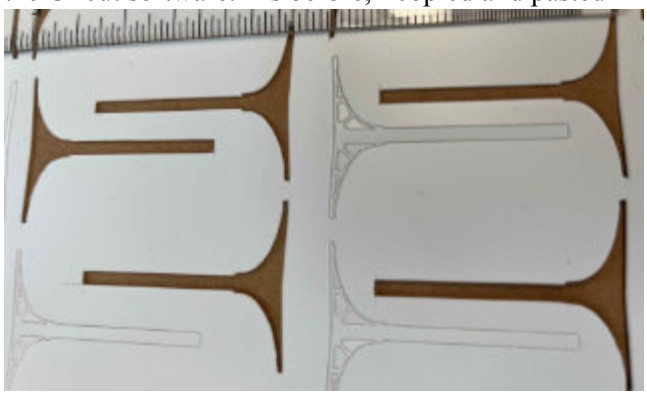


Figure 8: Station platform posts cut out on the Cricut machine

the design within the software as many times as needed until I had all the posts and brackets I would need (and a few extras, just in case). Figure 8 shows the piece of sheet styrene into which the Cricut cut the design. There are a few leftover posts and brackets on the sheet that are scored but not completely cut out yet. Those are the extras I referred to.

Some other projects I have used the Cricut machine for are as follows: Cutting out the window openings on the Industrial Supply building on my own layout. Cutting out laced bridge girder patterns for the Onondaga Parkway bridge model. Cutting out parts for the industrial chiller (Figure 9) mounted on the side of the big warehouse building on my own layout, and cutting out dwarf signals (which were made from laminated layers) for my own layout.

Figure 9: Industrial chiller

A few other notes: You do not have to use a separate drawing program on your computer. You can use Cricut's drawing program, but it is a bit more limited. If you do use your own drawing program, it doesn't necessarily have to output SVG files. Cricut can import other file types. The level of precision of the cuts on a Cricut machine is not as good as what you'll get with a laser cutting machine. You can cut out window openings on a Cricut, but don't expect good results if you try to cut out the actual window sashes that have a delicate muntin pattern. Cricut is just not precise enough for work that fine. You will not get sharp inside corners; they will be slightly rounded. You can touch it up with a file as you wish. If you do a lot of cutting in styrene, you will have to replace the Cricut's blade often, and they are not at all as cheap as hobby knife blades. Cricut can cut card stock quite well, as long as the blade is sharp. Otherwise, you'll tear the fibers, but that's not any different than if you used a dull hobby knife.

All things considered, the Cricut machine has worked well for me. If you are a "rivet counter" type, then you may not be satisfied, but if you are a modeler who wants to take things one step farther than the basic level, then this might just be the thing for you. I hope the examples I've given have peaked your imagination and maybe have given you some ideas you can bring to life.■

Coming Soon—A Crossover Between the Outside Mainline and Inside Mainline

by Kent Dristle

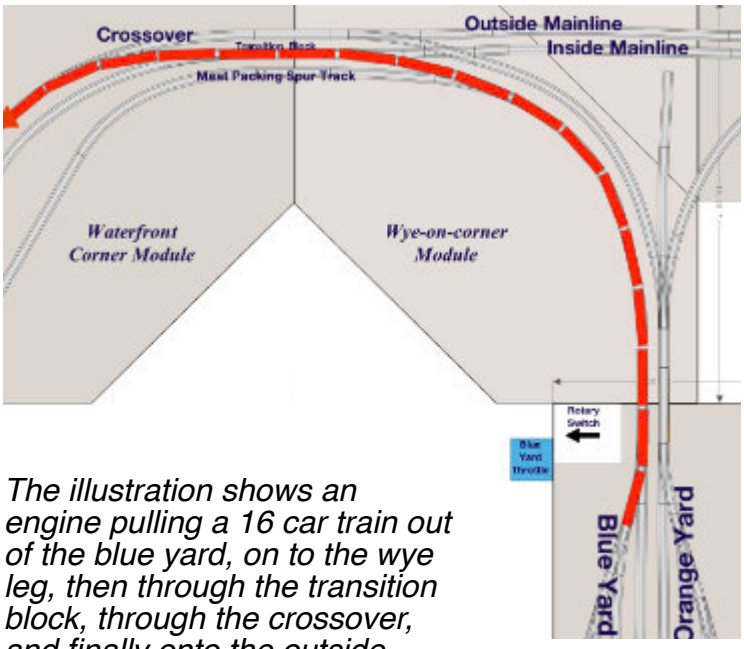
A crossover between the outside mainline and inside mainline has been long requested and soon will become a reality. Plans for this have been in the works for well over a year. It is our hope that crossover will be available for use on both the traveling layout and on the stationary layout we wish to set up in the Grange building. We will publish a full article on the use of the crossover in a future edition of *The Crossbuck*, but for now, here's an update on where we currently stand.

The crossover can be found on the new "waterfront corner" module that will take the place of the "meat packing corner" module in the traveling layout. This lies next to the wye connection to the interior yards. Presently, train consists that are made up in the orange yard can exit that yard to either the inside mainline or outside mainline tracks, however, trains exiting the blue yard could only directly enter the inside main. *Once the crossover is in place, trains exiting the blue yard will now have the additional option to enter the outside mainline track.*

Here's how that will work: The operator will move the train on local power onto the wye leg and then stop just short of the inside main. Then, a new electrical rotary switch will be turned to the "outside main" position. Once the turnouts are correctly set, the operator will move their train onto a short section of the inside main that lies between the wye leg turnout and the crossover (called the transition block), using the outside mainline throttle. The train will pass through the crossover and out onto the outside main. Once the train clears the crossover, the turnouts will be reset to the mainline, and the rotary switch will be reset to any position other than "outside main". This will restore inside mainline power to that short transition block of track on the inside main.

How far along are we? So far, the new waterfront corner module with its crossover has been built and is ready to go. We are in the process of wiring in the new rotary switch in place of the existing DPDT electrical switch for the blue yard side of the interior yard module. We also need to cut some insulating rail gaps into the inside mainline track on the "wye on corner" module in order to electrically isolate the transition block from the rest of the inside main. Labels and diagrams are being generated to take the mystery out of how to use the new rotary switch during train movements. We hope to have this work done before the Clayton Show in September.

Once we are able to move into the main hall of the Grange, we'd like to set up a stationary layout there on which we can do operating sessions. We haven't settled on a track plan for it yet, but all the options we've looked at so far include the four old big yard modules (which have been completely rewired) and the new waterfront corner module with its crossover. We anticipate being able to use the crossover so that trains coming out of the large multi-track portion of the old yard can get to the inside main directly or the outside main via the crossover. Again, we will have an article in a future issue of *The Crossbuck* that will explain how all of this will work. In the meantime, be assured that we are making good progress. ■

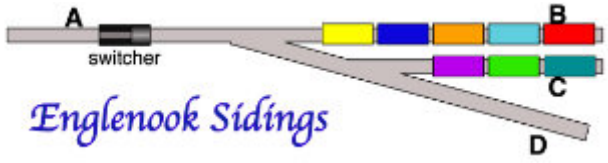


The illustration shows an engine pulling a 16 car train out of the blue yard, on to the wye leg, then through the transition block, through the crossover, and finally onto the outside mainline track.

Switching Puzzle #5
The Inglenook

There are two kinds of switching puzzles that are considered to be "classics": the Inglenook and the Timesaver. In this issue of *The Crossbuck*, we'll look at the Inglenook.

The trackplan used in Inglenook switching puzzles is deceptively simple. As shown below, it consists of three stub-end sidings and a track leading up to them called the headshunt. There is a total of 8 rail cars (or "wagons" as they say in the UK) on the sidings and one switcher engine available to you.



Here's how the puzzle works: Five of the rail cars are chosen at random. The order in which they are chosen determines the order in which they must appear in the train. (An easy way to do this is to write down the numbers one through eight on slips of paper (or write down the colors of the cars on those slitps), put them in a box and then draw out five of them, one by one to determine how your trains is to be made up. Then, figure out the sequence of switching moves you need to make. When you finally have all the chosen cars in the correct order, your train exits to the main line, which is just off the left edge of the diagram. Remember not to foul the mainline by moving your engine or cars past the left edge of the diagram until your entire trains is ready to go. The headshunt track (A in the diagram) only has room for the engine plus 3 rail cars. Here's the capacity of the other sidings: for B it's 5 cars, for C and D it's only 3 cars each.

The Inglenook sidings puzzle was originally created by UK modeler Alan Wright (1926-2005). As the story goes, Wright created it from odds and ends of track and rolling stock and then set it up at a train show. The spectators would call out to him the kind of movements they wanted to see and he would oblige. Later, he came up with the idea of drawing random combinations to stand in for those requests he got from the onlookers. Mathematical analysis of the puzzle shows that there are 6720 possible combinations. The puzzle is both simple in concept and addictive.

Here's a challenge for you: See if you can make up a train with the following colored cars in order from front to rear:

purple, yellow, red, lt. blue, orange.

Much of this article is based on information found on the website: http://www.wymann.info/ShuntingPuzzles/sw-inglenook.html ■

Solution to Switching Puzzle 4

(puzzle 4 appeared in the April issue of *The Crossbuck*)

First, train B must back up far enough to allow train D to execute its drop off and pick up orders. Engine D must now move forward far enough to clear the switch to the interchange track. Then, it will back up on the interchange track, coupling on to car E. D moves forward with E back on to the mainline. After clearing the switch, it backs up and couples onto cars D1 and D2. Moving forward, it stops when car D2 has cleared the switch to the interchange track. Now engine D backs up its train onto the interchange track and keeps going until the engine clears the mainline. Train C may need to back up in order to make this possible. Now, the north-south main is clear for train B to continue across the diamond and be on its way. Once train B has cleared, train D can move forward far enough so that it can drop off car D2 on the interchange track where it can be picked up later by eastbound train A. Once free of car D2, train D which now consists of car E and D1 can continue north on its way.

Train A now moves forward across the diamond and stops when its last car clears the switch to the interchange track. (Remember that train C backup earlier to allow room train movements around the interchange track.) Train A now backs onto the interchange track and picks up car D2 which train D left there for it earlier. Engine A moves forward with cars A1, A2, and D2 back onto the mainline. Then, it backs up and stops after the engine clears the diamond. Then, car A1 is uncoupled from A2 and then engine A moves forward with just car A1 behind it until that car clears the switch to the interchange track. Next, engine A backs car A1 into the interchange track and drops it off. Now engine A moves forward back onto the east-west mainline and stops to reset the switch to the main. It backs up and couples onto cars A2 and D2, then moves forward with them past the switch. Engine A backs up again into the interchange track, this time with cars A2 and D2 and pushes car A1, which it left off earlier on the interchange track far enough back so the engine clears the switch. The switch is set back to the mainline so that trains C can finally move forward across the diamond and be on its way. Finally, engine A pulls the three cars forward, pausing to uncouple from car A1 which it leaves on the interchange track. Engine A pulls forward with cars A2 and D2 onto the mainline and continues on its way after resetting the switch back to the main. Done! ■

AAR Classification Codes

Ever wonder what those letters on the lower right corner of freight cars mean? Those letters such as BX, GT, XM or LO? The AAR (Association of American Railroads) developed these codes as a way of identifying specific kinds of freight cars in order to make it easy to match them up with the needs of particular shippers. The first letter stands for the general type of freight car as in G for gondola, F for flat car, T for tank car and X for box car. The second letter indicates specific modifications of each car, many of which may not be obvious from the outside. For example, TA represents a tank car suitable to carry acid, whereas TG is for a tank car with one or more glass lined containers. To print out all the codes would require many more pages than there are in this newsletter. You can find code listings for three different eras: 1932, 1958, and 1987 at the following web address: https://www.opsig.org/files/resources/AARFreightCarCodes.pdf.

Here are some AAR code examples from freight cars on my own layout. You can find the codes near the bottom of the car, near the right truck. ■

GB means gondola, open top, fixed, sides, solid bottom.

HM means hopper car with open top, fixed sides, and a bottom with two bays (hoppers) with hinged doors that dump between the rails.

The Oswego Valley Railroad Association, Inc
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