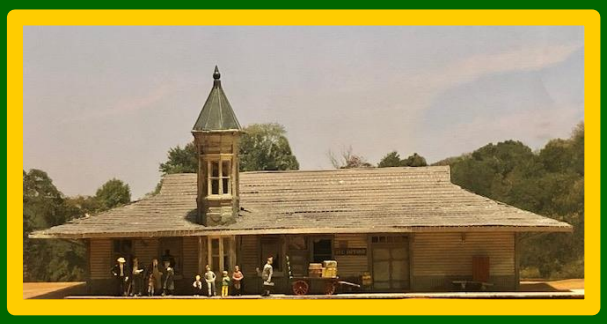
Chicago & North Western Historical Society

MODELER

Volume 13, Number 1 July 2021

Non-CNW Issue!



CGW

M&StL

FDDM&S

C&NWHS MODELER Volume 13, No. 1

July, 2021

Bill of Lading

An Invitation to join the CNW Historical Society

The CNWHS is an independent non-profit educational corporation. The Society's purpose is to foster interest, research, preservation, and the distribution of information concerning the C&NW and related roads. Its membership is spread throughout the United States and numerous foreign countries, and its scope includes all facets of the CNW. Currently the Society has close to 3000 registered members. Members regularly receive a variety of information including a quarterly publication: NWL.

North Western Lines (NWL) is dedicated to the publication of articles and news items of historical significance. Other Society publications include monographs, calendars, equipment rosters, and reprints of original CNW source material. This publication makes 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 CNW with a legitimate, respected voice in the railroad and historical communities. By working together, individuals interested in CNW 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 CNW and affiliated railroads.

The Archives Committee of the C&NWHS is very active and maintains a large collection of the C&NW and related roads. For more information see the CNWHS web site.

Merchandise related to the C&NW, as well as back issues of NWL, Car kits and structure kits for modeling are offered through the CNWHS web site.

Chicago and North Western Historical Society Modeler is a publication of the CNW Historical Society (CNWHS) for the purpose of disseminating CNW modeling information.

An Illinois not-for-profit Corporation dedicated to preserving the legacy of the C&NW and its predecessor & successor roads since 1973.

Manuscripts and photographs submitted for publication are considered to be gratis and no reimbursement will be made to the author or the photographer(s) or his/her representative(s). Please contact the Editor with comments and corrections and for submission guidelines. Statements and opinions made are those of the authors and do not necessarily represent those of the CNWHS.

Editor
Michael Mornard
Publications Editor
Ron Christensen
Technical Advisor
Ron Christensen
Layout Design
Jon Beard
Layout
Jean Mornard
Webmaster
Jeff Eggert
Official Office Cat
Freddie Fluffbuns

Apologies if I have inadvertently omitted anyone. Any person left out is entirely the fault of the editor.

FORTUNE BRINGS IN SOME BOATS THAT ARE NOT STEERED

by Michael Mornard

-- Shakespeare, “Cymbeline,” Act 4, Scene 3

Or in other words, I got lucky.

My inability to get my act together has provided an unexpected benefit; that is, I’ve received enough submissions to do a “Non- CNW” issue. This issue has articles about models from the FDDM&S, the CGW, and the M&STL.

Don’t get me wrong, I’m very fond of the C&NW. Our society covers several other railroads, though, and I welcomed the chance to show off some of them through the projects of our members.

What I would love to be able to do is dedicate issues to each railroad; an issue exclusively to the C&NW, an issue exclusively to the Omaha Road, an issue exclusively to the Great Western, and so forth.

To do this, I need your help. I can only publish the articles I receive. The good news is, I keep receiving articles, and really good ones. So please continue submitting! And I make this plea especially to those of us modeling the “other” railroads under the banner of the CNWHS.

And, as always, I want to know what you think. The more feedback I get, the more I will be able to tailor this magazine to the tastes of the readership – which is you!

Please send all submissions in Microsoft Word doc or docx format, with pictures included or separate as jpegs.

Though this issue is labeled “July 2021,” honesty compels me to conclude with “Happy Holidays!”

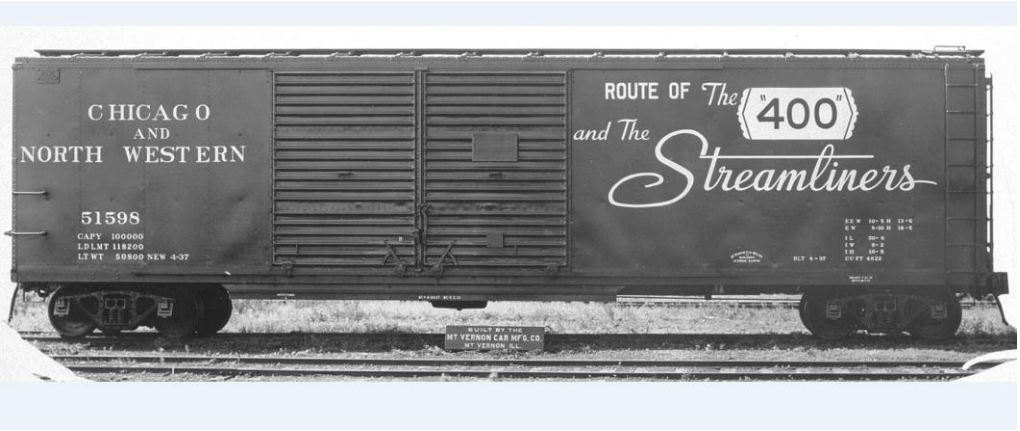
NEW PRODUCT ANNOUNCEMENT

Protocraft has announced its latest import of 24 different 50-foot automobile and express cars from master builder Boo-Rim Precision of Korea. None of these cars have been produced in O scale before.

All models are built using copies of original linen builder drawings supplied by the Pullman Library of Union, Illinois, the National Museum of Transportation in St. Louis, the California State Railroad Museum in Sacramento, and a number of other sources. Hundreds of builder and in-service 8x10 photographs supporting these drawings were supplied by Bob Liljestrand, Arnold Menke, Richard Burg, Ed Hawkins, the John Barriger National Library at the University of Missouri St. Louis, the Smithsonian Institution in Washington DC, and the National Archives of Canada.

No effort has been spared in developing these individual models to be as accurate as the prototypes, even to the individual rivets. The cars ride on Protocraft's Bettendorf, A-3, National Type B, Vulcan, Dalman 2-level, Allied Full Cushion or Commonwealth BX trucks, all with ball bearings for easy rolling and working journal covers. Over 60 new and appropriate decals have been created to accompany these models and are available at Protocraft Decals. Models are available in either O gauge or Proto:48 and can be ordered on line at www.protocraft.com. and sell for $358.

Models offered will include the C&NW Series 51000-51998 50' automobile car with Viking roof, early square corner 4/5 Dreadnaught ends and Equipco Power hand brake assembly and floor tubes for tie-down chain storage.



FDDM&S VENTILATED REFRIGERATOR CAR 942

By Lester Breuer, MMR

(This article originally appeared on Les' blog,
http://mnrailroadcab100.blogspot.com/2021/05/fort-dodge-des-moines-southern.html
This article used by permission of the author.)

While watching a presentation by Eric Hansmann on ventilated boxcars the Fort Dodge, Des Moines & Southern (FtDDM&S or FDDM&S) appeared on a chart showing it had ten ventilated box cars. I thought I might build one; however, it was not to be as no photos available. After the presentation I checked the 1953 Official Railway Equipment Register (ORER) finding seven ventilated refrigerator cars, class VS, of series 932 - 946 (evens) on the roster. In the 1955 ORER there were still three cars on the roaster in this series. A FtDDM&S ventilated refrigerator became the new build project.

I contacted Eric asking about the ventilated refrigerator series as I was considering building a model of one for service on the Minneapolis & Northland Railroad Company (M&N). Eric provided the information he had and referred me to Ray Breyer who might have information on the ventilated refrigerator series. Ray not only had information, he also provided a photo of FtDDM&S ventilated refrigerator 942. The photo made the build of the FtDDB&S 942 ventilated refrigerator possible.

Ray Breyer Collection
(click or tap on this or any image to enlarge)

Ray's suggested choice as a starting point for the build was an Accurail wood refrigerator kit. I agreed as outside dimensions compared well with those in the ORER for this series. Therefore, I picked a 5th Avenue Car Shops ventilated wood refrigerator from my inventory. A car manufactured by Accurail, a 4800 series wood refrigerator, lettered from Illinois Central (IC) drawings for the IC for 5th Avenue Car Shops. The IC ventilated refrigerator was out of service by my M&N late spring 1955 time period making it available for the build.

I began the build by removing the IC lettering: name, number and reporting marks, from the car with a cotton swab dipped in 91% isopropyl alcohol and a nylon scratch brush. The reweigh date was changed later.


Lettering removed.

Once lettering was removed molded on grab irons, ladders, and brake step (platform) were carved off and sill steps cut off. I used the remaining ladder lines to drill #79 holes for wire grab irons and ladder rungs. I touched up the sides with a Vallejo mix of 2/3 Model Air Gold Yellow 71.078, and 1/3 Model Color Flat Yellow 70.953.

Grab iron and grab iron ladder holes drilled.

After another review of the "B" end on the prototype photo, I knew the fascia on the end of the car body needed to be changed and a new end sill added. I cut the fascia to the shape of the prototype with a #11 scalpel blade in a scalpel blade handle and #17 chisel blade in and Xacto handle.. I scribed the board lines with the back of #11 blade in an Xacto handle. I used a circular saw blade mounted on a mandrel in a Dremel tool to cut away the sill boards to install a new steel end sill cut from Evergreen #273, I-Beam .100." The poling pockets cut off the car prior to the new end sill install were now installed on the new end sill.

New steel end sill with poling pockets installed.

Note brake shaft roof bracket and styrene strip added to top for draft gear to form draft gear casting.

I installed a brake shaft roof/fascia bracket, Sunshine Models resin part from parts box, on the car body. I set the car body aside and I glued a .040" x .040" styrene piece to the top of the draft gear boxes on the under body to form the draft gear casting (casting around coupler on sill). I installed Kadee #148 whisker couplers in the draft gear boxes and

Accurail ARA cast steel with spring plank trucks with InterMountain 33” metal wheels on the underbody. The kit provided weight was installed with Formula 560 Canopy glue bringing the car weight to 4.0 ounces. The weight had to be clamped to the underbody while the glue dried. After glue set the underbody was installed in the car body.

Now I cut three small right triangles from .010” sheet styrene and glued them to the earlier installed .040” x .040” styrene strip to complete the draft gear casting. I also installed the brake shaft sill step that had been cut off the removed sill portion after the molded filled portion was removed by drilling a hole into the mold filled center and cleaned up with a broach.

Note draft gear casting around coupler and reworked brake shaft step.

Next I milled the kit provided running board to a thickness of .020” using a jig and a Dremel #199 cutting bit installed in a Dremel Tool mounted in a Dremel drill press stand. On the top of the running board I made cuts to represent board lengths and installed it on the car body with Testors tube cement.

Running board milled to .020" and installed.

Note board length cuts in running board.

Now the running board end brackets made with Evergreen #8102, 1” x 2” strip styrene and MEK Goop fasteners were installed.

Note running board bracket.

I continued working on the "B" end installing a resin retainer valve from parts box, retainer line and brackets, Tichy Train Group (Tichy) #1100, .008” diameter phosphor bronze wire (PBW) and brake shaft, Tichy #1102, .015” diameter PBW with kit provided brake wheel. Next the car body corner braces, cut from Evergreen .005” sheet styrene, were installed with MEK and MEK Goop used to

form fasteners. “B” end added parts were hand painted Vallejo/MicroMark Model Air Box Car Red, #29015X2.

"B" end details installed.

Wire grab irons and grab irons for ladders I bent from Tichy #1101, .010” diameter PBW were installed. The grab iron fasteners/rivets, cut from Tichy # 3026, 18” ladder rungs, were installed next. Roof grab irons were bent from Tichy #1101, .010” diameter PBW and installed with Yarmouth Model Works eye bolts without shoulder for corner legs. Sill steps, A-Line #29000, were installed.

Corner braces with MEK fasteners/rivets installed.

Grab irons, grab iron ladders, grab iron fasteners/rivets
and sill steps installed and painted.

It was time to work on the underbody. All the molded on brake component mounting brackets were cut off with a #17 Xacto chisel blade mounted in a #5 Xacto handle. The kit provided center fish belly was installed. Now the following underbody details installed were as follows:

- Brake cylinder (kit) on a Sunshine Models resin bracket from parts box
- Control valve (kit) on bracket form Tichy #3013 set
- Air reservoir (kit) on brackets (sill steps cut from another plastic car)
- Brake cylinder lever, Evergreen #8108, 1” x 8” strip styrene
- Brake floating lever, Evergreen #8106, 1” x 6” strip styrene
- Brake piping from air reservoir to control valve, Tichy #1101, .010” dia. PBW
- Brake pipe from brake cylinder to control valve, Tichy #1106, .0125” dia. PBW
- Brake rods, Tichy #1106, .0125” diameter PBW with clevises, MEK Goop
- Chain, A-Line #29219, black 40 links per inch
- Train line, .018" diameter flora wire
- Dirt collector, cast in M&N Shops

With the underbody work completed the detail added parts were hand painted with Vallejo/MicroMark Model Air Box Car Red #29015X2.

Underbody details installed.

Underbody painted.

Built Fort Dodge, Des Moines & Southern 924 ventilated refrigerator was ready for final touch up paint. The yellow a mix: 2/3 Vallejo Model Air Gold Yellow 71.078 and 1/3 Vallejo Model Color Flat Yellow 70.953 and the red/brown Vallejo/MicroMark Model Air Box Car Red #29014X2. Next the car body was sprayed Vallejo Gloss Medium 70.470 to provide a gloss decal base.

Car ready for lettering. Note reweigh date has been changed to MC for Mason City.

I made the decals, except rivets, for the car using Clover House dry transfers applied to decal paper and coated with MicroScale Liquid Decal Film. On the ends, the FtDDM&S and number were made with Railroad Roman Medium - White #9601-11 and on the sides Railroad Roman Condensed Bold #9600-12. I used Archer Rivet Heads, AR88026, 5/8" rivets on the sides. I used a No. 5 lead pencil to go over the door lines to make them stand out as in the prototype photo above.

Decals and Archer rivets applied.

Decals and Archer rivets applied.

When decals were dry the car body was sprayed with Vallejo Gloss Varnish 70.510 to protect decals and better hide their their edges. Again when dry, the car body was sprayed with Model Master 4636 Flat Clear Acryl before weathering.

The final step before putting FtDDM&S 942 ventilated refrigerator in service was to weather the car with Pan Pastels. Pan Pastels used were: Paynes Grey Extra Dark 840.1 on car body and Burnt Sienna Shade 740.3 on trucks. The Pan Pastels were applied with a makeup brush on the sides and roof. And, a Pan Pastel foam pad was used to apply them along the sides sills.

Pan Pastel weathering applied.

Fort Dodge, Des Moines & Southern ventilated refrigerator 942 was now ready for service on the Minneapolis & Northland Railroad Company, The Lakeland Route, “Serving today, Shaping tomorrow.” A car card was made for FtDDM&S 942, the final step to put the cars in service on the Minneapolis & Northland Railroad Company Railroad.

A big “Thank You” to Ray Breyer for data and the photo to help with build of this car and for permission to use photo in this blog post. A “Thank You” to Eric Hansmann for his presentation providing the inspiration for this build. And, a "Thank You" to Jon Habegger for data help by providing a scan of the 1955 ORER page for the FtDDM&S.

FtDDM&S 942 moved off GN Interchange
along the trees to Dawkins siding.

FtDDM& Southern 924 sitting on Chestnut Street yard
track before being moved into "Extra West" freight train.

PHOTO GALLERY

For this issue, Clark Propst was kind enough to show us what he's been up to in the line of M&StL projects. So I'll get out of the way and let Clark speak - and show - for himself!

"I came up with this Red Caboose AAR 1937 design box car decorated as M&StL. The usual modifications were made, Superior handbrake, roping staples, Branchline Barber S-2 trucks, Kadee running board, etc. The reweigh and repack data along with the trust stencil are scraps from old Mark Vaughan decal sets [Mark's M&StL decals are now sold by Gary Roe wabashrr@swbell.net] Chalk marks from sold by Nation Scale Car. According to records provided by Gene Green these car's roofs were unpainted. Looking at photos taken from ground level they appear painted. I believe the answer is the riveted edges and the seam caps were painted with roof cement and a coat of body color. Just my guess, so I painted the roof separately and brush painted Tru-color CNW 40-60s paint over the rivets around the roofs perimeter and the seam caps. I used that paint to touchup added detail parts too. Photos taken 1-15-21"

I was given this F&C USRA DS kit with Wabash decals.Wasn't sure if the Wabash cars were all rebuilt and besides F&C decals are marginal at best. Next thought was to do a Rock Island car. That would require ordering decals. The 25000 series came in two batches of cars retired by the PM When I gave a talk on M&StL pre/post war box cars a couple weekends ago I only had a model of the second batch. So...I made this car from the first batch.

I've never found a way to make paint stick to the resin F&C uses. I was going to try an alcohol wash this time before painting, but forgot when the time came. I ended up detailing the roof, ends and underframe as separate pieces, priming with Tamyia primer and painting with Tru-color black. I painted the sides with tru-color CNW 44-60 freight car color before assembly. The parts didn't fit exactly as planned so some fiddling was required. Once together I could add the side grab irons and decal. I used Westerfield decals with Speedwitch chalk marks and repack data from a scrap box M&StL set. Once the decals were settled in with Solvaset I shot the car with Dullcote with a touch of off white added. When dry I rubbed with some Prismacolor pencils and lastly I brushed on some Pan Pastels. I ran an eraser over the capy data and reweigh, repack and latest route card.

"A good salesman talked me into buying his Atlas HH660. I passed on the engines when released because I believe the stenciling was imitation aluminum, not white. Adding the chains provided was a pain. I glued bits of styrene in the holes in the frame and trucks and looped an end chain link over them. Then I found out Atlas makes special eyebolts available. Scratch built the winter cab windows from styrene and used canopy glue for the glass. Rolled old newspaper for the vent canvas and lightly weathered with Pan Pan Pastels. Photos taken 3-12-21"

"Here's a Chad Boas M&StL 50' flat car. Simple build. Most tedious part was gluing on the stake patches. Plus A-line sill steps, Tichy grab irons and brake wheel, Detail Associates uncoupling lever. I used silicone to stick the bits of lead to the underside. Accurail trucks with Intermountain wheels and Kadee 158 couplers. Mark Vaughan's Decals, now sold by Gary Roe at wabashrr@swbell.net"

UNIQUE DEPOTS ALONG THE CHICAGO GREAT WESTERN RAILROAD
"The Corn Belt Route"

By Robert Baudler/Photos by Author

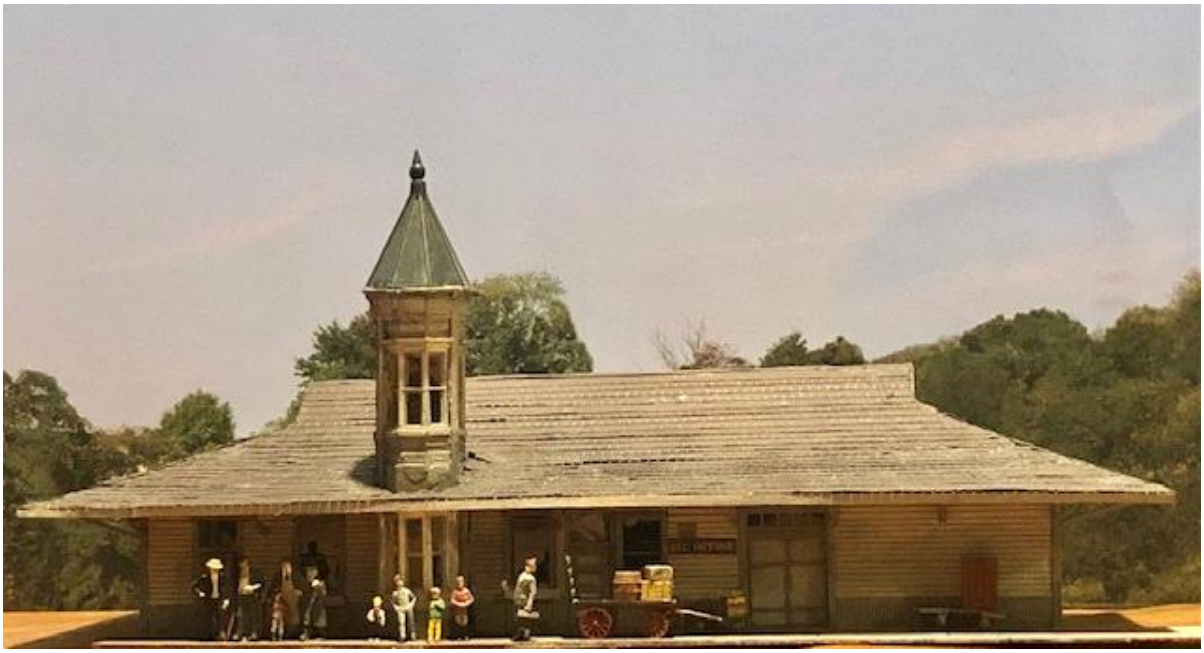
The Chicago Great Western Railroad originated in 1885 as a 110-mile railroad and grew through the merger of various small railroads into a 1,500-mile midwestern railroad in the states of Minnesota, Iowa, Illinois, Nebraska and Missouri. The Chicago Great Western Railroad was commonly known as one of the Granger railroads through its service of the Midwest agriculture market.

During its 83 years of existence, the Chicago Great Western Railroad served highly populous cities and small rural towns along its 1,500-mile railroad track network. Because of the different size communities served by the Chicago Great Western there were over 250 depots located along the Chicago Great Western Railroad. The design of the depot was based on the traffic generated at that location and if any financial contribution to the construction of the depot was made by the community. Also, the depot may have been built by a predecessor railroad that the Chicago Great Western took over. Very few of the Chicago Great Western Depots survive today. Using prototype photos and blueprints I have built some of the unique depots in HO scale.

Along with the various designs of the Chicago Great Western depots, another unique feature of the Chicago Great Western Railroad was its use of quartzite rock as ballast on their railroad beds. The quartzite rock is a very hard which was excellent in maintaining the stability of the railroad track bed. The quartzite rock is also pink in color. The Chicago Great Western Railroad was mainly a single-track railroad line but did have miles long passing sidings that were protected by dual signals.

Atlas HO Code 83 track detailed by the author. Barbwire fence by Woodland Scenics, corn by Bulford and combine is a kitbashed by the author of a Walthers Cornerstone Combine kit.

One of the earliest Chicago Great Western depots was built in the 1890s in McIntire, Iowa, which at the time had a population of 600 residents. The wooden depot was built with a decorative tower and sat at the crossing of the Chicago Great Western Railroad's main line from St Paul, Minnesota to Chicago, Illinois and a branch line from Winona, Minnesota to Osage, Iowa.



Kitbashed by the author from an HRM Laser Models kit and a Walthers Cornerstone Series Merchant Row II kit.

In 1952 the wooden depot at McIntire was in disrepair and an Armco Steel depot was constructed to replace the wooden depot. The steel depot was only 20 feet wide by 33 feet long.

Kitbashed by the author from an HRM Laser Models kit.

Another Armco Steel depot was located in Reinbeck, Iowa, which had a population of 1,200 residents. This depot was the same size as the replacement Armco Steel depot at McIntire, Iowa but the Waiting Room and Baggage Room were switched to be on different ends of the depot unlike the standard design.

Built by the author from an HRM Laser Models Kit.

The Chicago Great Western had a unique brick depot in the small rural town of Baxter, Iowa. This depot may have been built thru the financial contribution of Baxter, Iowa that wanted to make a statement to folks arriving there. As this small rural town with a population less than 400 residents would not have deserved such a large brick depot otherwise. The depot was 22 feet wide by 92 feet long.

Baxter Iowa Depot Northside view. Brick depot at Baxter, Iowa is kitbashed by the author from a Walthers Cornerstone Pella Depot kit.

At Moorland, Iowa the Chicago Great Western Railroad crossed the Minneapolis & St Louis Railroad. The town of Moorland had less than 150 residents but because the Chicago Great Western was the last railroad to come to Moorland, they constructed a wooden depot with interlocking and agent living quarters. The depot was 22 feet wide and 63 feet long.

Moorland, Iowa Depot at the crossing with the Minneapolis & St Louis Railroad. Kitbashed by the author from a HRM Laser Models kit

The depot at Moorland Iowa was one of the few Chicago Great Western Railroad's depots that had an Agents Living Quarters. Agent's car is parked on the platform with the open screen door as entrance to the agent's living quarters.

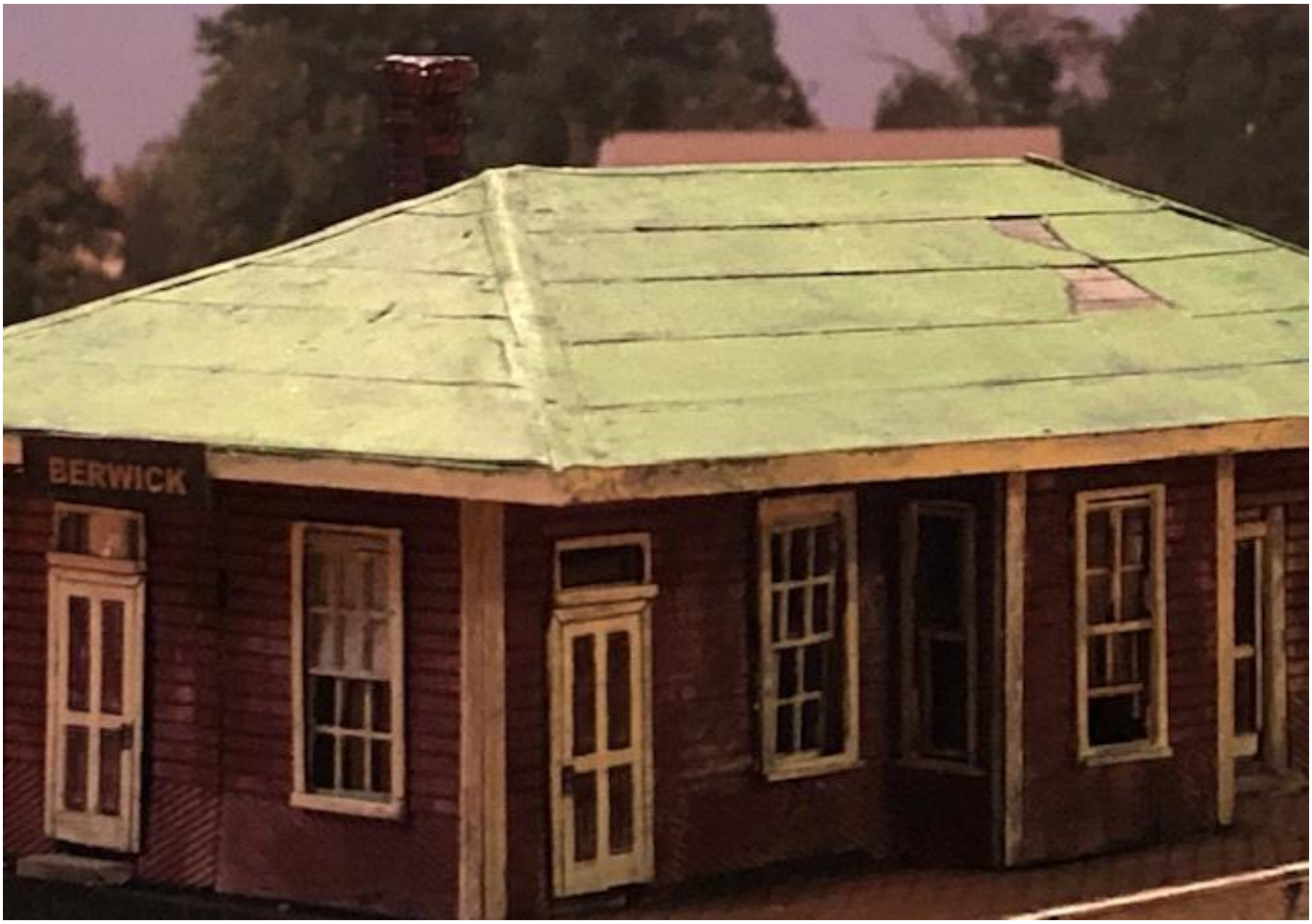
Because of the amount of traffic, the size of the depot may be large despite the depot's location. This was the case for the depot in Cedar Falls, Iowa. Even though this was just a stub branch track from the main line in Waterloo, Iowa, the wooden depot was 22 feet wide by 90 feet long. Cedar Falls, Iowa was served by four railroads and was growing.

The depot in Cedar Falls, Iowa just received a patch job on its roof.

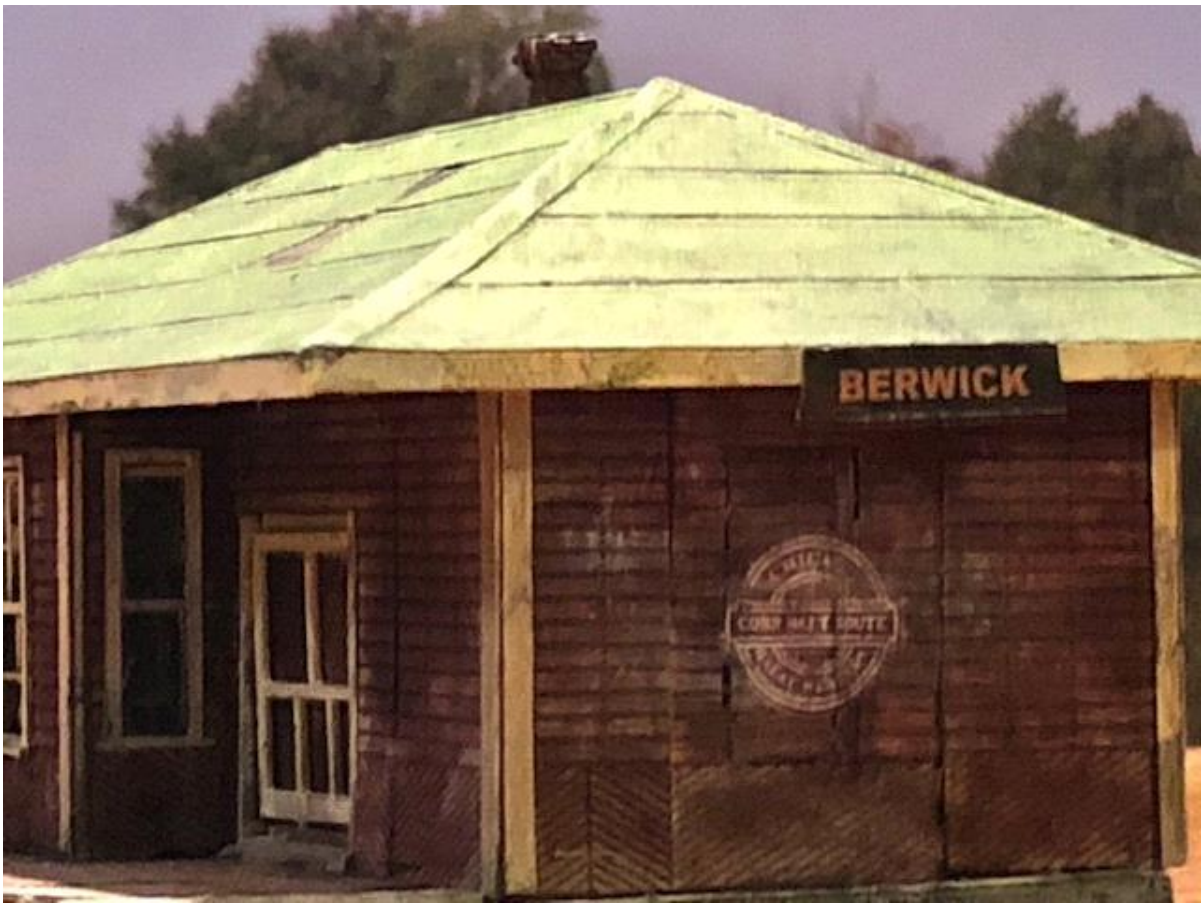
The Cedar Falls depot not only had the branch line from Waterloo, Iowa but also had a storage track behind the depot.

Depot is a kitbashed by the author HRM Laser Models kit.

A smaller wooden depot was located at Berwick, Iowa. The town of Berwick was established because of its proximity to coal mines. The wooden depot measured 16 feet wide by 34 feet long. This depot featured a rare side door entrance along with the standard trackside entrance door. Unfortunately, the traffic generated at Berwick, which never had more than 300 residents, did not warrant keeping the depot and it was retired in 1942 after being closed in 1924.



The second door at the Berwick, Iowa depot was located on the Waiting Room side instead of the usual back wall of the depot. Depot was kitbashed by the author following builder blueprints of the depot.



In the 1930s some of the Chicago Great Western depots had the Corn Belt Route painted on the depot's baggage side (no windows). These Corn Belt Signs lasted until 1950 when the depots were painted red with a yellow mustard color trim.

Another unique small wooden depot existed at Peru, Iowa. The population of Peru was never large as the population at its peak was only around 600 residents. This wooden depot also featured a side door entrance (like the Berwick depot) but it did not have a trackside entrance door. Also, a large bank of windows on the southside wall of the depot made this depot a small attraction.

Peru Iowa depot built by the author from a GLC kit (now out of production).

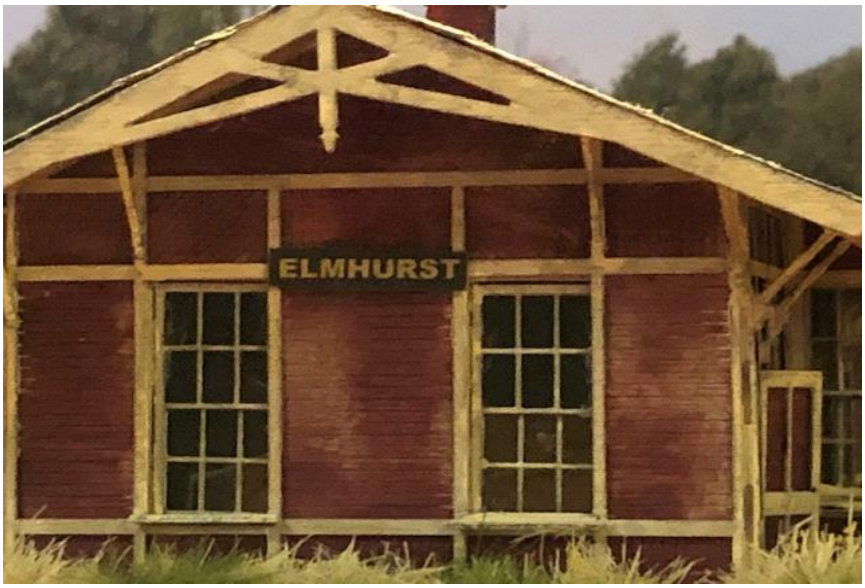
Southside view of Peru, Iowa depot with only door to the depot, Built from a GLC kit (out of production)

Northside view of Peru depot was a storage area for the Bridge Building crew.

Because the Chicago Great Western Railroad served the factory that produced Haydite-concerte block several depots were built with the Haydite-concerte block. In 1956 the wooden depot in Lidderdale, Iowa was replaced by a Haydite-concerte block depot. The concert block depot only measured 10 feet wide by 40 feet long. This small depot was reflective of the amount of traffic generated out of Lidderdale, Iowa which had a population of less than 200 residents.

Haydit-concrete block depot at Lidderdale, Iowa. Depot scratch built by the author.

The Chicago Great Western Railroad depots varied greatly in size and all were not in a standard design. Some of the wooden depots showed great details in the gable and trim work. An example of this extra detail was the wooden depot at Elmhurst, Illinoi, which had a population over 21,000 residents. The wooden depot at Elmhurst, Illinois was 20 feet wide by 44 feet long.



Depot built from a GLC kit (out of production) by the author.

Unfortunately, very few of the over 250 depots that the Chicago Great Western have survived today. By building these HO scale depots, I am able to share with folks that the Chicago Great Western Railroad was a Granger Railroad serving many small towns along its 1,500 mile trackage.