$8.99 U.S.

NARROW GAUGE AND SHORT LINE GAZETTE

Accurate Information for Fine Modelbuilding – Jan/Feb 2023

Check our fully secure website with hot off the press and collector items
www.ronsbooks.com
email us at:
ronsbooks@aol.com

Ron's Books

P.O. BOX 714 N, HARRISON, NY 10528
(914)967-7541 11AM to 10PM EST; FAX (914)967-7492 24HR

YOUR ONE STOP BOOK AND DVD SHOP - *Discount Prices & Never a Shipping Charge within the U.S.**

NARROW GAUGE FAVORITES

A Road to Riches - Randsburg Ry Co and Mining District....27.75
Appalachian Coal Mines and Railroads Vol 1, 2 or 3 each....48.75
Atlas Electric Locomotives Mfrs' Catalog Archive Book 35....35.00
Backwoods RR Branchlines & Shortlines of Western Oregon Rev Ed...55.75
Bethlehem Steel - Arcadia....23.50
Bethlehem Steel Co RR Operations in Color Vol 1 & 2 each....48.75
Beyer-Garratt Articulated Locos Mfrs' Catalog Archive Book 14....35.00
Browning Loco Cranes Mfrs' Archive Vol 1 Book 2 or Vol 2 Book 19 @...35.00
Browning Locomotive Cranes Vol 3 Mfrs' Archive Book 46....35.00
Bucyrus-Erie Co Mfrs' Archive Vol 1 Book 5 or Vol 2 Book 25 Each...35.00
C&Sng RRers' Photos, Memories & More Along Old South Park Line....55.75
California's Lumber Shortline Railroads....30.75
Chama/Cumbres with a Little Chili - Dorman....45.50
Chili Line & Santa Fe The City Different....55.50
Climax No 9 and the Moore, Keppel Survivors....36.75
Colorado & Southern Clear Creek District Memories & Then Some...55.75
Colorado Central Railroad....74.50
Colorado Rail Annual 32 45.75; Vol 33 65.75; Vol 34....75.50
Copper Mines Branch - White Pass Rails into Whitehorse Copper Belt...26.75
Cumbres & Toltec - A Photographic Tribute....45.50
Davenport Locomotive Works Vol 1 Mfrs' Catalog Archive Book 41...35.00
Denver & Rio Grande The Early Years....75.50
Durango & Silverton - Furukawa....45.50
Eastern Oregon Shortline Railroads....30.75
Eureka & Palisade Biggest Little Railroad in the World....75.50
Extra Narrow Gauge Junction - Maine 2 Foot....55.75
Fairmont Ry Motors MOW & Work Equip Mfrs' Cat Archive Book 33...35.00
ForestRails- Georgia Pacific's Railroads....75.50
Franklin County Narrow Gauge Vol 2, 3 or 4 each....50.75
George Mansfield and the Billerica & Bedford Railroad....50.75
Ghost Rails Vol 17 Steel Graveyards USS Ohio Works....60.00
Ghost Rails Vol 18 Mahoning Coal Railroads....40.00
Ghost Rails Vol 19 B&O Lakers....70.00
Ghost Rails Vol 20 Pittsburgh & Western....60.00
Gilpin Railroad Era....78.50
Gregg Railroad Cars - Manufacturers' Catalog Archive Book 10....35.00
Heisler Locomotive 1891-1942 Revised & Expanded 2nd Edition....45.75
Heisler Locos Vol 1 Geared & Fireless Locos Mfrs' Cat Archive Book 8...35.00
Heisler Locos Vol 2 Geared Locomotives Mfrs' Cat Archive Book 37....35.00
H.K. Porter Locomotives Mfrs' Catalog Archive Book 20....35.00
Industrial Brownhoist Corp V 1 Loco Cranes Mfrs' Cat Archive Book 23...35.00
Ingersoll-Rand Locos Mfrs' Cat Archive Vol 1 Book 17 or Vol 2 Book 43...35.00
Jordan Spreader and Russell Snow Plow Mfrs' Catalog Archive Book 1...35.00
Kaiser Steel of Fontana: Together We Build....20.75
Lakewood Cars Industrial Cars & Factory Trucks Manufacturers' Catalog Archive Book 39....35.00
Las Vegas & Tonopah Railroad The Goldfield Route....36.75
Last Winter - Steam Locos Chama, NM 1963-64....38.75
Lost Steel Plants of the Monongahela River Valley....22.50
Marshall Pass Denver & Rio Grande Gateway to Gunnison Country....32.75
McCloud River Railroads....65.75
Military Ry Journey of C&NW Loco Engineer Frank Pelletier 1942-45...68.75
Milwaukee Gasoline Locos & Brookville Locos Manufacturers' Catalog Archive Book 50....35.00
Mining Locos of Ironton & General Electric Mfrs' Cat Archive Book 6....35.00
Minnesota Mining Railroads in Color Vol 2....58.75
More Up Clear Creek (Vol 2)....60.75
Narrow Gauge in the Americas....36.75
Narrow Gauge in the Tropics - The Railways of the Dutch East Indies...40.75
Narrow Gauge Panorama Steaming Along the Rustic and Narrow....75.50
Narrow Gauge to the San Juans....50.75
Ohio Locomotive Crane Co Mfrs' Catalog Archive Book 15....35.00
Panama Railroad....45.75
Plymouth Locos Mfrs' Cat Archive Vol 1 Book 13 or Vol 2 Book 40 each...35.00
Pressed Steel Car C Vol 1 Freight Cars Mfrs' Cat Archive Book 21....35.00
Pride & Glory - The Cimarron & Northwestern Railway Company....27.75
Properties & Plants of Bethlehem Steel Corporation 1925 Manufacturers' Catalog Archive Book 4....35.00
Railroad Cranes Vol 1 Burro, Byers, Lambert and P&H Manufacturers' Catalog Archive Book 36....35.00
Railroad Cranes Vol 2 Atlantic Equip, Orton, Terry, Tractor Shovel Manufacturers' Catalog Archive Book 52....35.00
Railroad Critters in Color Vol 1, 2, 3, 4 or 5 each....48.75
Railways of Jamaica....35.00
Railroads of U.S. Sugar History Through the Miles....27.75
Railway That Helped Win Crimean War - Grand Crimean Central Ry...45.75
Relics of Anthracite in Northeastern Pennsylvania....25.75
RGS #20 Rebirth for the 21st Century & Restoration - 2 Vols....27.75
Rio Grande Narrow Gauge in Color Vol 1 or 2 each....48.75
Rocky Mtn RRs Vol 1 RGS 39.50; Vol 2- Durango to Alamosa & Salida .44.50
Sandy River & Rangeley Lakes RR & Predecessors Vol 3, 4, 5 or 6 ea...55.75
Sandy River & Rangeley Lakes RR & Predecessors Vol 7....65.75
Sawdust on Leatherbark - Mills at Cass, WV....23.75
Southern Pacific's Slim Princess - Arcadia....23.50
Southwestern Pennsylvania's Coal Region....23.50
Steel Mill Railroads in Color Vol 2, 3, 4, 5, 6 or 7 each....48.75
Taconite New Life for Minnesota's Iron Range - History of Erie Mining....60.75
Timber Titans Baldwin's Articulated Logging Locomotives....75.50
Today's Steam on the Sugar Lines of Cuba Vol 2....20.00
Tonopah & Tidewater Railroad - Nevada Short Line....50.75
Tracking the Chili Line Railroad to Santa Fe....23.75
Tracking the Narrow Gauge from Chama to Durango....23.75
Tracks Around Mount Union....45.75
Twilight & Dawn on the East Broad Top 1945-1965....45.75
Virginia & Truckee Railroad: Railroad to Comstock - Arcadia....23.50
Vulcan Locos Vol 1 Mfrs' Archive Book 11 or Vol 2 Book 34 each....35.00
West Virginia Coal Hauling Railroads....23.75
Western Maryland Railway Shay No. 6....23.75
Western Wheeled Scraper Co Western Dump Cars Manufacturers' Catalog Archive Book 12....35.00
Whitcomb Locomotives Manufacturers' Catalog Archive Book 27....35.00

1950's Freight Car Color Guide Vol 1 Box Cars....58.75
A Compendium of Model RR Operations-Design to Implementation....45.75
Alaska Railroad History Through the Miles....19.50
Alco Locomotives Vol 1 Mfrs' Catalog Archive Book 24....35.00
Baldwin-Lima-Hamilton Diesel-Electric Locos Mfrs' Cat Archive Book 30...35.00
Building the Lake Branch - B&O 1835-2021....70.75
Chesapeake & Ohio Maintenance of Way Equipment & Operations 23.75
Chesapeake & Ohio Peninsula Subdivision....23.75
Chesapeake & Ohio Power in Color Vol 1 or 2 each....58.75
Circus & Carnival Trains in Color....58.75
Coast Lines and Valley Freights Santa Fe in Color Vol 6 - California...85.50
Conquest II Crestline-Ft Wayne, GR&I, Toledo, Sandusky & Akron Branches....90.00
Conrail Rainbow Years Vol 4 EL Commuter Region....40.75
Diesel-Electric Locomotives How They Work, Use Energy....40.75
Down by the Feed Mill - Past & Present of America's Feed Mills & Grain Elevators....32.75
Duluth, Missabe & Iron Range Equipment 1883-2004....75.50
Easton & Northern Worth the Wait for the Connection....27.75
Erie/EL Dundee Branch/NYS&W Passaic Branch and Industry of Dundee....36.75
From Gotham to the Berkshires New York Central's Harlem Div....60.75
General Electric Diesel-Electric Locos Mfrs' Catalog Archive Book 32....35.00
How Steam Locomotives Work....26.75
Mahoning Valley Rails in Color 1988-2006....58.75
Minneapolis, Northfield & Southern Railway in Color....58.75
Montana Rails: Mountains to Prairies....22.50
Nebraska Sweet Beets A History of Sugar Valley....21.50
Passenger Cars Vol 1 Bethlehem Steel & Pressed Steel Car Co Mfrs' Catalog Archive Book 31....35.00
Passenger Trains of Texas Burlington Route....65.75
Penn Central and Conrail Trackside with Engineer Chip Syrne...58.75
Pennsylvania RR Cabin Cars Revenue & Work Equipment 1860-1968...60.00
Phillipsburg, NJ Canal/Railroad Hotspot 1832-1976....78.75
Pittsburgh & Lake Erie in Allegheny County Vol 1 Pittsburgh to Esplen....70.75
Railroad Atlas of No. America: GLW; Prairies West, Prairies East, So. East; AZ&NM; So. States each....26.50
RR Atlas of NA-Manitoba, Quebec, W.Canada, Ontario, or CO & UT ea..28.50
Railroads That Ran by Edge of Road- New Hampshire & Vermont....55.75
Railway Prototype Cyclopedia Vol 20....45.00
Roberts & Schaefer Loco Coaling Plants Mfrs' Cat Archive Book 7....35.00
Santa Fe Live Stock Operations: History, Equip, Facilities & Modeling....60.75
Shortline Railroads of Long Island A Compendium....32.75
Soo Line Power in Color Vol 1 or 2 each....58.75
Southern Pacific Los Angeles Division....75.50
Southern Pacific's San Antonio Division 1960-1996....85.50
Speed Graphics & Steam 1959 New Brunswick & Nova Scotia..72.75
Steam Trains of Yesteryear - Monadnock, Steamtown & Northern Story..40.75
Stylish EMD GP30....55.75
Trackside Around New England 1967-2020 with Plant....58.75
Waterfront Railroads of New York Harbor Vol 1, 2 or 3 each....36.75

RON'S DVDS

7Idea - Over Cumbres Pass....27.75
7Idea - Steam and Snow Rotary OY on Cumbres Pass....27.75
Greg Scholl - 481 The Last Coal Burner....27.75
Greg Scholl - China Mainline Steam Parade....23.75
Greg Scholl - Cuba Stronghold of American Steam....23.75
Greg Scholl - East Broad Top Steam Special....23.75
Greg Scholl - German Narrow Gauge....23.75
Greg Scholl - Grand Canyon Steam Spectacular....27.75
Greg Scholl - Narrow Gauge Steam in the 90's....23.75
Greg Scholl - Rio Grande Excursions....23.75
Greg Scholl - Steam in South Africa 1980....27.75
Greg Scholl - Steam Over La Veta Pass....27.75
Greg Scholl - Vintage Doubleheader....23.75
Greg Scholl - Vintage Narrow Gauge....27.75
Kalmbach - Great American Steam Locos: The Pacific in Hist & Today...26.75
Kalmbach - Introduction to Steam Locomotives How They Work....23.75
Kalmbach - Skookum Lives - The Lazarus Locomotive in Action....23.75
Kalmbach - Steaming the Last Baldwin....23.75
Kalmbach - Victorian Iron Horse Roundup....23.75
Sunday River - D&RGW Freights Narrow Gauge in 1950's & 60's....32.75
Sunday River - Two Foot Gauge in Maine....28.75
Sunday River - Geared Steam Locomotives: Six Logging Lines....38.75

WHAT'S NEW!

A Celebration of Chicagoland Railroads 1935-1971....36.75
A Penn Central Acquaintance Here & There in the NE in the 1970s...50.75
American Railscape A Study in Contemporary Railroading....70.00
Amtrak Thru the Rockies....36.75
Baldwin Locomotive Works Mfrs' Catalog Archive Book 51....35.00
Budd RDCs Vol 1 Manufacturers' Catalog Archive Book 45....35.00
Buffalo's Short Line Railroad Legacy....23.75
Burlington Northern Prairie Rails Color Pictorial....65.75
Canadian National Power Vol 5 Modern Road Power....58.75
Canadian Pacific Ships The History of a Company & Its Ships...30.75
Chesapeake & Ohio Color Portfolio....36.75
Chicago & North Western's Many Faces....65.75
Continuity & Change The Lure of North American Railroads....60.75
Crossroads of a Continent: Missouri Railroads 1851-1921....50.75
CSX Cabooses and Shoving Platforms....59.75
CSX Power Vol 5 Locomotives Acquired from Other Railroads...58.75
Diesel Railroad Tugboats Vol 1 East Coast....75.50
El Paso & Southwestern Railroad System....65.75
Fairbanks-Morse Locos Vol 1 Diesels Mfrs' Catalog Archive Book 38....35.00
Forty Years on Santa Fe 1921-1961 An Autobiography by B.M. Naylor...36.75
Four Tracks Across the Mohawk Valley - NYC Albany to Buffalo 85.50
From Grand Central to Albany New York Central's Water Level Route....75.50
General Motors Diesel Locos Vol 2 Mfrs' Cat Archive Book 47....35.00
George Corey's Boston & Maine....32.75
Heavener Sub (KCS) History Through the Miles....32.75
Hoboken Shore Railroad A Unique Railroad in a Prize Location of National Importance....45.75
Hopewell Junction: A Railroader's Town....27.75
Just Geeps in Color Vol 1 GP7 1949-1954....58.75
Kansas City Southern Vol 1 Midwest Division....85.50
Long Island Rail Road Port Washington Branch - Arcadia....23.50
Mobile & Ohio Railroad in the Civil War....36.75
My Other Car is a Pullman - Restoration Story of the Villa Real..36.75
New York, Susquehanna & Western Volume 1 Jersey City to Passaic Junction....40.75
North Shore Line - Arcadia....23.50
Ohio's Interurban Railroad History Golden Spike Edition....55.75
One Hundred Ghost- An Exposition of Rural Grain Elevators Vol 1....92.50
Ontario Northland in Color Vol 2 The Chevron Era....58.75
Passenger Trains of Texas Missouri Pacific....65.75
Penn Central MU Cars in Color....58.75
People Moving People The History of Via Rail Canada....75.50
Pine Trees & Minutemen - MEC & B&M 1971-1988....40.75
Railfanning in the 1960s Best of Ed Johnson....36.75
Railroad Signs Vol 1 or 2 each....36.75
Railroading Handbook....23.75
Railway Electrification Vol 3 GN & Milw Rd Mfrs' Cat Archive Book 48....35.00
San Angelo and Arthur Stilwell's Dream of Steam....22.75
Southern Pacific 4-8-0 Locomotives....45.75
Southern Pacific & The KM Hydraulics....75.50
SP Pictorial Vol 51 Western Oregon Lines Two Tillamook to Coos Bay..26.50
Standard Tank Car Co Vol 1 Mfrs' Catalog Archive Book 49....35.00
Station Agent and the American Railroad Experience....26.75
Tempo: In Tune with the Times....29.50
Tennessee Central railway The First 50 Years - Arcadia....23.50
The Diesel That Did It General Motor's FT Locomotive....45.75
The Only Game in Town: The Locotrol Story....65.75
Tracks of the New York City Subway 2023 Edition....60.75
Travelers Tracks & Tycoons The RR in American Legend & Life -S/C...36.75
Twin Cities Rails Color Pictorial....65.75
Union Pacific First Subdivision Oregon Division Book 1....58.75
Union Pacific Railroad Heritage....30.75
Virginian Railway: Demonstration Heavy Tonnage Hauling Manufacturers' Catalog Archive Book 44....35.00
Walk Through Fire: The Train Disaster That Changed America...26.75

RON'S COLLECTOR'S CORNER

South Buffalo Railway....45.00
Steam in the Redwoods S/C....20.00
Stories From the Two Foot Gauge....30.00
Streets Were Paved With Gold - Klondike Gold Rush....20.00
Sunset on the Sandy River....40.00
Switzerland Trail of America with an Added Chapter S/C....35.00
Trails Among the Columbine 1985....50.00
Utah Ghost Rails....20.00
Vermont's Covered Bridge Road S/C....100.00
Victoria & Sydney Railway 1892-1919....30.00
Victory Branch Railroad of Vermont....35.00
Virginia & Truckee Locomotives....40.00
West Virginia's Last Logging Railroad - Meadow River Lumber..15.00
When Coal Was King....20.00
Whistle Over the Mountain - Tennessee....30.00
White Pass & Yukon Route A Pictorial History....15.00
Why You Can Haul at Least 30% More- Heisler - Reprint....20.00
Wiscasset, Waterville & Farmington....35.00
Yellowstone Branch of the Union Pacific....25.00
Zephyr Through the Rockies - S/C....60.00

***$30.00 MINIMUM order for free shipping in the USA. Orders under $30.00 please add $5.00 shipping.** *All foreign orders must be sent airmail and will be billed accordingly.* Send $3.00 for latest list. All orders must be paid in U.S. funds. NY & CT residents please add correct sales tax. Print your name address and phone number. Credit card users add card number, CVV code and expiration date. Allow 4 weeks for delivery. Make checks payable to Ron's Books. Only inquiries which include a SASE will be answered. Prices subject to change. WE BUY COLLECTIONS

NARROW GAUGE AND SHORT LINE GAZETTE

JANUARY/FEBRUARY 2023 VOLUME 48, NUMBER 6

SPECIAL FEATURE

FEATURES

PLANS

DEPARTMENTS

COVER

Bruce Treloar found this scene at the Colorado Railroad Museum in Golden, Colorado, and enhanced it into this beautiful image of Rio Grande Southern Goose #6.

This magazine is printed on recycled paper with a minimum of 10 percent post-consumer content.

The NARROW GAUGE AND SHORT LINE GAZETTE (ISSN 0148-2122) (USPS No. 011-461) is published bi-monthly in March, May, July, September, November, and January by White River Productions, 24632 Anchor Ave, P.O. Box 48, Bucklin, MO 64631. Periodical Postage Paid at Bucklin, MO and additional mailing offices. Subscription Rates: U.S.A. $42.00 per year, Canada $52.00 per year, International $59.00 per year. Single copies are $8.99 in U.S.A. plus shipping. Payment must be made in U.S. funds. Postmaster: Please send address changes to Narrow Gauge and Short Line Gazette, P.O. Box 48, Bucklin, MO 64631. Send new subscriptions, renewals and change of address (include mailing label if available) to Narrow Gauge and Short Line Gazette, P.O. Box 48, Bucklin, MO 64631 or email subs@whiteriverproductions.com. Allow six weeks for change of address.

NARROW GAUGE AND SHORT LINE GAZETTE

www.NGSLgazette.com

WHITE RIVER PRODUCTIONS
P.O. Box 48 F Bucklin, MO 64631
877-787-2467 F 660-695-4433
info@whiteriverproductions.com
www.whiteriverproductions.com

PUBLISHER
Kevin EuDaly

EDITOR
Robert W. Brown, MMR
gazette@att.net
650-948-9361

EDITORIAL ADDRESS
Robert W. Brown
P.O. Box 26, Los Altos, CA 94024

SUBSCRIPTION INQUIRIES
877-787-2467 F 660-695-4433

SUBSCRIBER ADDRESS CHANGES
P.O. Box 48 F Bucklin, MO 64631
subs@whiteriverproductions.com

ART DIRECTION / PAGE LAYOUT
Sharon Olsen, Just SO Graphic Design

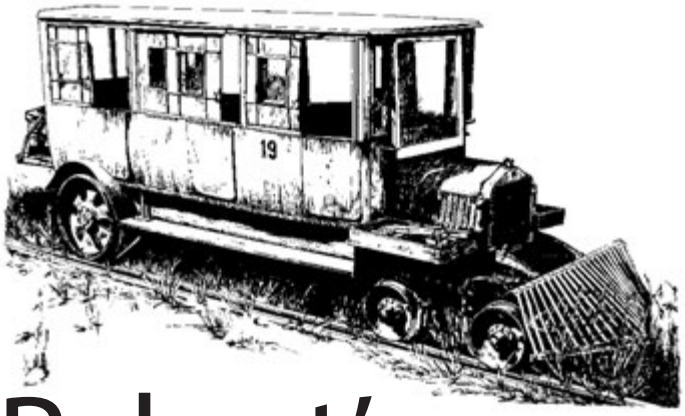
ADVERTISING
Mike Lindsay
ads@whiteriverproductions.com
541-955-1096 F Fax: 541-955-0346

DEALER SALES
dealers@whiteriverproductions.com
Dan Hansen F 866-451-7234
Chris Lane F 303-489-8760

COLUMNISTS
Gregg Condon, MMR F Charlie Getz
Craig Symington, MMR

PLAN MAKERS
David Fletcher F Gary Caviglia
Neil Pfafman

AUTHORS
Articles, photographs, and plans are welcome. When requested we will endeavor to return material in good condition. Payment upon publication.



Robert's Ramblings

NAG, NAG, NAG…

My On3 Tuolumne Forks Lumber Company layout is some 40 years old. Sure, I have made changes over the years and rebuilt things, but most of it is as it has been for a long time. I first hand-laid the track with code 100 rail, but soon tore out much of the code 100 and re-laid it with code 70 rail.

But over the years, things have accumulated that nag at me. You know, stuff poorly done or planned, or just done to get it done. I know several modelers who do everything perfectly, I am not one of them.

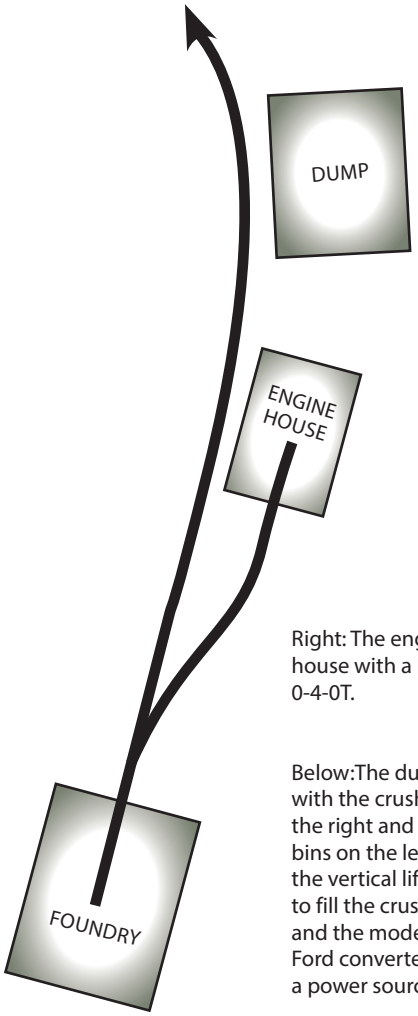
Here are some examples of nags. I have two road crossings that are bad and embarrassing, and I don't have a log loading scene, even though my layout represents a logging railroad. My boat works tarpaper roofing is coming off due to age, and needs some Wild West Scale Model Builders shakes, and one side of the layout is a real mess, but I hope to run an eight- to ten-foot-long western town in the area using Bodie buildings assembled from Neil Pfafman drawings. I now have six buildings ready to go, and there is a real need for a place to park my railbus out of the way.

Right: Here is the Cornishman Foundry with the little vertical boilered locomotive peeking out of its shed.

Below: The waste train on its way to the dump. The dump car was built on an old logging truck. That's one of those poorly done road crossings just ahead of the locomotive.

However, one great big nag was just too much to explain away to visitors and I decided to fix it. Several years ago, I laid what was left of my code 83 On3 flextack on a branch down one side of my layout The branch is about 20 feet long. It is isolated from my DCC layout and is a DC section so I can run several small locomotives given to me by my friend, Sam Furukawa. One of these models is a Backwoods Miniatures vertical boilered 0-4-0 that I just had to run, but was not going to tear apart to install a decoder. I love its wood lagged boiler and plumbing detail, and it is a sweet runner.

So, I laid my track, added a spur to an engine house, and forgot that the track ran to nowhere with no purpose. I eventually added a Keystone Models Danby sawmill at one end, but the trains still had nowhere to go and didn't run very reli-



ably. However, once I added some NO OX (see page 22, July/ August 2022 GAZETTE) and the trains perked up, I decided to do something about this nag.

I had been reading a book about vertical boilered industrial locomotives in England that were used in foundries, water works, quarries and other small industrial locations. So, I thought if I replaced the sawmill with a foundry, I could use the little vertical boilered locomotive to haul a daily waste train out of the foundry to a dump yard where the waste would be crushed into fill or material to surface roads, giving purpose to my little branch line to nowhere.

So, out came the sawmill. I had a stone and wood building under my layout that I had assembled years ago. It has Tom Yorke all over it and must have been one of his early kits. I added a lean-to with a brick chimney and an exten-

Right: The engine house with a Porter 0-4-0T.

Below:The dump with the crusher on the right and storage bins on the left. Note the vertical lift used to fill the crusher and the model T Ford converted into a power source.

sion to house the locomotive and dump car and called it The Cornishman Foundry. Then at the other end of the railroad, I added a platform where the waste could be dumped, moved to a crusher (see page 19) and then into bins for delivery to road crews or people needing fill. The yard is bounded by an aging, rusted corrugated iron fence, and of course I had to build a dump car. I just took and old disconnected log bunk and added a dump body.

Now when I run my vertical boilered locomotive and dump car, they have a place to come from and a place to go to, and one big nag is gone. Now onto those road crossings, tarpaper roof, log loading scene, western town, and a place to park my railbus. All good fun!

Bob Brown

Last Run…

x Peter Barney passed away October 18, 2022: he was 73. Peter was born and raised in New Bedford, Massachusetts, and was active in recording its history, participating in civic activities, and acting as the city's reference librarian. But GAZETTE readers will remember Peter for his 128 titles including articles and books on the 2-foot gauge railroads of Maine. He built an On2 home layout and several dioramas for local history museums. He also founded and operated The Sandy River Car Shops manufacturing O scale 2-foot gauge structures and rolling stock kits. He was a founding member of the Wiscasset, Waterville & Farmington Railroad Museum in Alna, Maine. Peter was also elected to the Narrow Gauge Hall of Fame, and he and his wife, Joan, could be seen at many Narrow Gauge Conventions. Our condolences to Joan and their son. Peter's enthusiasm for all things Maine 2-foot will be missed. Bob Brown.

x Roger Malinowski passed away November 8, 2022: he was 75. GAZETTE readers will know Roger from his wonderful line of O scale Stoney Creek Design (SCD) craftsman structure kits. Since 2001, he designed one kit a year for Mt. Albert Scale Lumber. He was a skilled craftsman and it showed in the design and quality of his kits. I always looked forward to assembling one of Roger's kits. I have his latest SCD stone jail waiting on my workbench. Roger also sold unique tools, adhesives, and paint, and I believe he may have introduced Pan Pastels to the hobby. His website was full of neat kits and products, and images of his On30 home layout. Our condolences to his wife, Irene, their son, Christian, and his family. Roger will be missed. Bob Brown.

x W. Allen McClelland, MMR passed away October 27, 2022: he was 88. Allen was not a narrow gauger, but I am sure you knew of him through his many articles and book about his HO gauge Virginian & Ohio model railroad. Through these articles, book, and many clinics, Allen introduced new ideas into our hobby. He popularized prototype freelance layouts, walk around control, staging yards, and what he called good enough modeling. Allen influenced many model railroaders and will be missed. Our condolences to his wife and family. Bob Brown.

The Pigeon Hole

Dear Bob,

On the weekend of September 16-18, 2022, the Copper Range Historical and Technical Society held its first convention in the Copper Country of Michigan's Upper Peninsula (they have a website). One of the convention activities was a visit to the round house of the Quincy & Torch Lake Railroad.

Q&TL number 6 has been cosmetically restored. It was pulled out of the restored round house for the convention. Notice that during the life of the railroad the headlight was replaced with a vintage truck headlight.

On the right in the second photo is Chuck Pomazal who organized the volunteer effort to save Q&TL artifacts. First was the restoration of #6; restoration of #5 is proceeding. Chuck wrote the Q&TL book Rock Down, Coal Up which is available from the Quincy Mine Hoist Association. In the middle is Pat Thoney whose layout was featured in the September/October 2022 GAZETTE. On the left is Al Peeso who built all six Q&TL locomotives for Pat's layout.

Sincerely,

Gregg Condon, MMR
Via email

Editor's Note: Letters chosen for publication in "The Pigeon Hole" may be edited for length and clarity.

Dear Bob,

I've just viewed and enjoyed the TSG video of your layout. I came across it this morning by accident.

Since about 1970, when I became a reader of Finelines (while at college) I have been a huge fan of your modelling and your approach to modelling. I miss those halcyon days of narrow gauge discovery and the characters who shaped our aspect of the hobby.

Your layout offers a fine view covering more than half a century of fine narrow gauge model building. It was also fun to see Bill Coffey's engine house and little lokey. Always loved these models.

Here are a few photos of some of my complete 1/35 English narrow gauge models.

All the best and thank you.

Sincerely,

Peter Mesheau,
Via email

Dear Bob,

I was sorry to hear of Peter Barney's passing. To say he was an important influence on my Maine 2-foot modeling would be an understatement. His many books and magazine articles published over the years helped drive my passion to model this niche segment of the hobby.

I met Peter in person at the 2014 National Narrow Gauge Convention in Kansas City. I showed Peter a few photos of my in-process Wiscasset waterfront scene. He was very kind but did point out some errors in the structures. He offered to provide me with a set of drawings he produced when building a display of that scene for the WW&F Ry Museum.

We have corresponded by email since then. In addition to advice, he provided much needed encouragement along my journey.

He will be missed.

Sincerely,

Pete Leach, MMR
Via email

Dear Bob,

Just a note to let you know how long (September 20th) I must wait for my GAZETTE! Today I received the July/August issue. Slow boat to Australia, I guess.

But I must comment on the article about Hangman Creek Lumber Company. There has been a hand full of standout display/convention portable layouts over the years. Hangman Creek Lumber Company is up there with the best. I'm happy to see it still active and much admired. Some of these standout layouts need to be revisited just to inspire us all to push just that little bit harder with our modelling. Well done to all those involved.

Sincerely,

Bruce Treloar
Via email

Dear Bob,

After collecting information on narrow gauge "Americans" from the GAZETTE, I built this 2½-inch scale model of one. It weighs 750 pounds, is 11 feet long and is powered by two 350-watt 24-volt DC gearhead motors. During the Covid shutdown I fabricated all the cab interior details.

I am also finishing up a 2½-inch scale Class A Climax and will soon be starting a 2½-inch scale 14-ton Heisler.

Thank you for a great magazine.

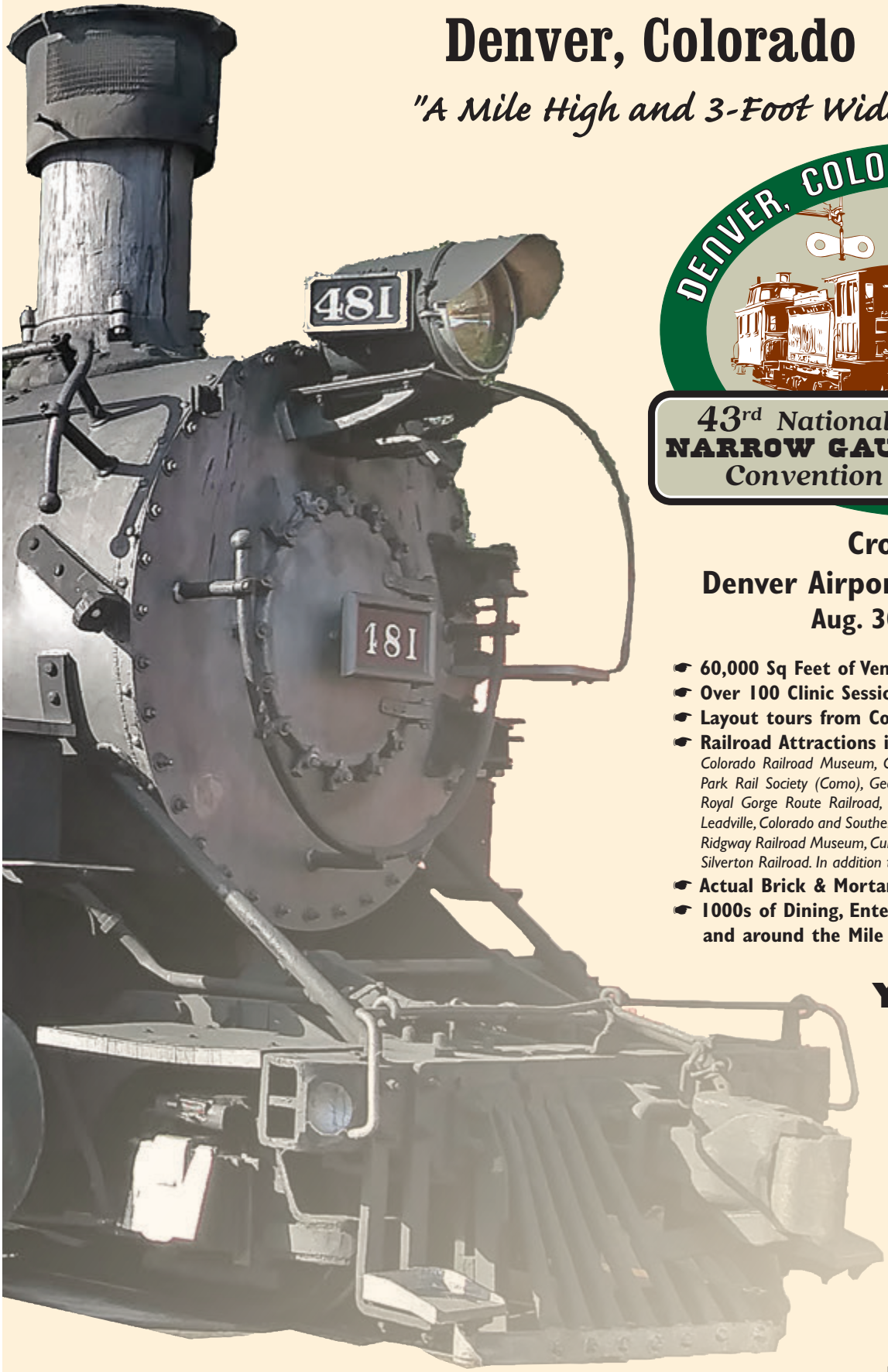
Sincerely,

Ken Roeh
Via email

43rd National Narrow Gauge Convention

Denver, Colorado

"A Mile High and 3-Foot Wide"



DENVER, COLORADO 2023

43rd National NARROW GAUGE Convention

Crowne Plaza
Denver Airport Convention Center
Aug. 30-Sept. 2, 2023

- **60,000 Sq Feet of Vendor & Modular Layout Display Space**
- **Over 100 Clinic Sessions**
- **Layout tours from Colorado Springs to Greeley**
- **Railroad Attractions including:** *Forney Transportation Museum, Colorado Railroad Museum, Colorado Model Railroad Museum (Greeley), South Park Rail Society (Como), Georgetown Loop, Tiny Town, Pikes Peak Cog Railway, Royal Gorge Route Railroad, Cripple Creek and Victor Narrow Gauge Railroad, Leadville, Colorado and Southern Railroad, Moffat Road Railroad Museum (Granby), Ridgway Railroad Museum, Cumbres & Toltec Scenic Railroad AND the Durango & Silverton Railroad. In addition to, of course, Amtrak to and from Denver.*
- **Actual Brick & Mortar Hobby Shops**
- **1000s of Dining, Entertainment & Cultural Experiences in and around the Mile High City**

You Want More? We Have It in Denver!

See you in 2023

Contact Information:

USPS
1737 W Mountain Maple Ave,
Littleton, CO 80129

Email
2023nngc@gmail.com

Facebook
https://fb.me/2023NNGCCommittee

43nngcdenver.com

New in Review

Walthers, 5601 W. Florist St., Milwaukee, WI 53201-3039, 800-487-2467, www.walthers.com, sells HO Merchant's Row VI kits for $44.98. As with previous releases in the Merchant's Row series, this kit builds into multiple adjoining stores, in this case, three mid-block units. This release represents Victorian-era brick stores that have been updated with more modern storefronts which was commonly done in the 1940-50s to "modernize" the appearance of older urban businesses. I appreciated the mid-block design as far too many such kits feature corner locations. This limits their usefulness. I also appreciated the many extras included such as alternate cornices and extra signs, sign frames and entry doors. These will be saved for future projects.

The kit consists of high quality precise-fitting styrene components, decals with matching sign frames, printed signs/window treatments and illustrated instructions. The instructions, while basic, cover assembly well with part numbers used for each part including the pre-cut acrylic windows. The cover picture on the kit box provides excellent coloration ideas. Due to the superior design/fit, this kit can be assembled in a short time, but I urge you to spend the time needed to add detail. By that, I mean painting the components carefully, adding lights and interior details or graphics and maybe extra details. I did so and it took me almost two weeks to assemble the kit. Painting will occupy much of that time. I elected to use a different brick color for each store and added C.C. Crow seamed tarpaper to two of the roofs. The roofs can be left loose, sitting on molded ledges. I added two extra brass smokestacks, firmly glued, which act as handles to lift the roof from the structure for access to the interior. Assembly was straightforward and brushed styrene cement quickly glued the components. All parts fit perfectly, but ensure the mitered corners are tight and paint the interior walls black to limit light leak if you add lights.

Though the box claims that interior graphics are included, they are not. Good quality printed signs and window treatments are included but nothing that would suggest interior details. I elected to use both City Classics interior graphics plus room graphics produced by Roomettes for the three stores as well as the living quarters upstairs. I also added several LED lights as well, testing for light leaks. I used both the kit window graphics as well as my own plus my collection of wall signs for the various commercial uses. More external details could (and one day will) be added, especially to the front. I loved the decal sheet of colorful signs designed to fit the provided plastic sign frames for a variety of different businesses. I only used the two large vertical signs, inserting them into drilled holes and secured with ACC. However, I elected to paint and assemble all the remaining signs, saving those unused for the future. This will save time and ensure the decals are not lost.

Inter-Action Hobbies, P.O. Box 1021, Chase, British Columbia, VOE, 1MO, Canada, 1/888-850-1742, www.interactionhobbies.com sells a series of kits for HO and O scale vending machines and a telephone booth. I assembled the O scale kits. Each kit includes two machines or telephone booths. The kits have instructions with diagrams, but Inter-Action also has a series of short You Tube videos on each kit at www.youtube.com and search for InterAction Hobbies.

The Cigarette machines sell for $12.00 a pair and was the easiest to assemble. The body consists of a 3D printing. You clean off the sprues and paint the body of the machine. There are two rows of nine push buttons on the print. You paint these brass. Then you cut out the provided advertising and place it in the machine. A piece of acetate drops into the front of the machine. A laser-cut piece that you paint silver and add a touch of glue to has two rows of little holes for the push buttons. It presses precisely into place holding everything neatly together. But remember smoking is bad for your health.

The Ice Vending machine was also easy to assemble and sells for $11.95 a pair. It has a back wall and base of thick laser-cut wood onto which you glue laser-cut laser board sides, top, front, and housing on the top. Everything fit perfectly. The two doors are separate laser-cut laser board parts and a decal is provided to make them appear to be metal. After painting the machine, white decals are provided for the lettering. I found the decals on all the machines easy to use and strong, and did not tear.

Inter-Action has two different Coke machines. One is for the 1950s and the other the 1960s. The 1950s kit sells for $10.95 a pair and the 1960s version is $11.50 a pair. I found painting these machines a challenge. The 1950s version is assembled from three pieces of thick laser-cut wood and two pieces of laser-cut laser board and has a round top.

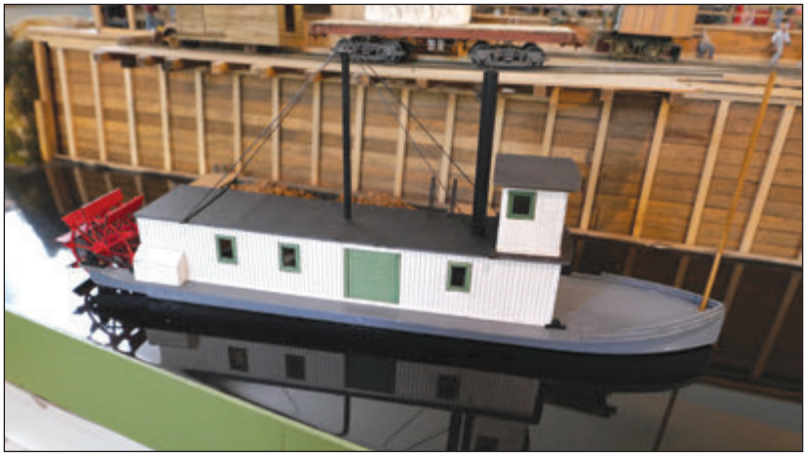
Once assembled, you coat the sides and top of this machine with some sort of filler. I used Squadron White putty and sanded the surface down to hide the laminations of wood. Then the front, sides and top were painted red or white. Some of the parts were painted silver and I ran a silver strip of paper around the top of the machine between the red and white paint. Again, the decals went on with no trouble.

The 1960s Coke machine is also assembled from layers of laser-cut wood and laser board. One of the layers has a channel cut into it for an LED wire to light up the machine. But the kit does not include the LED. The machine, having a square top, does not need sanding. Laser-cut laser board top, front and sides cover up the laminations. You paint the front, top and sides before assembling them and small groves help keep the paint colors apart.

The last kit assembled into a "A Modern Phone Booth" and sells for $13.99 a pair. Remember Tippi Hedren in the movie Birds hiding from those seagulls? This kit assembled into that kind of phone booth. All four of the kit's walls are laser-cut laser board and the fourth wall is folded up as if open. There is acetate for each wall and printed paper graphics, but no decals. The roof is slotted for tabs on the tops of the sides to align everything and the floor has a pattern cut into it. There are lovely little 3D phones onto which you add a phone cord, and even telephone books. But no seagulls. I found this kit a challenge to assemble and keep the paint and glue where it belonged.

All these kits assembled into detailed little models, and I am pleased with them. The Coke machines presented a challenge to paint and the phone booth was fragile. By following the enclosed instructions

Deerfield River Laser, 92 Parkview St., Ludlow, MA 01056, edfillion@cs.com, www.deerfieldriverlaser.com sells an extensive line of laser-cut O scale structures, rolling stock, and boat kits. They have 8 boat kits plus the Mad River Paddle Boat I assembled for this review. The paddle boat is a scale 72-foot-long model and sells for $135.00. It is made-up entirely of laser-cut wood parts except for a styrene smokestack and mast, wood dowel Jack shaft and some thread for rigging.



The hull is made up of a bottom sheet with a keel and outer keels and a top sheet covered with a deck, these parts are tab and slotted together and assembled with a nice snapping sound when tapped into place with a spot of glue. I left my hull under weights all night to make sure it had the correct up and down curve. Then I added the thin plywood sides by placing a weight on the deck and pushing weights against the sides after adding some glue. The result was a neat and easily assembled hull.

The cabin has exterior and interior walls. The window frames come off for painting. I painted my outer walls white and the big side doors, inside the windows and their frames green. This made for a very neat paint job. My kit did not have acetate for the windows, so I added some. I also added a pre-painted scale 1x2 strip of wood along the base of the cabin, so no crack showed where it met the deck.

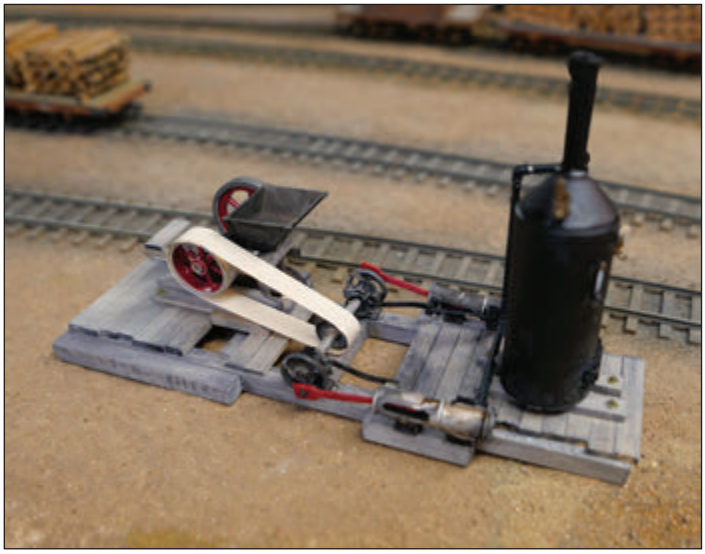
I had sprayed the hull and cabin roof with Rust-Oleum Primer Gray but did not like the look of it on the cabin roof, so I covered the roof with some paper "tarpaper" giving the boat some texture. After painting them, I added the smokestack and mast. They lined up perfectly in their laser-cut holes. The mast was used for towing cables allowing them to pass over the paddle wheels and needed to be wired down to withstand the strain. The kit comes with a laser-cut piece of wood with holes for the cables that attaches to the top of the mast. There are also two laser-cut wood strips with holes that glue across the roof. You are to use the thread to run guy wires from the top of the mast to the strips on the roof. I just could not get the thread to behave so substituted brass wire, and all was perfect.

The wheelhouse has a nice big steering wheel that shows off through the windows.

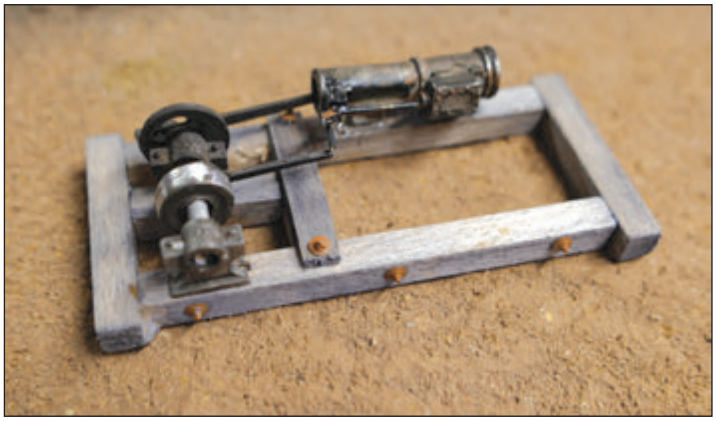
The paddle wheel was easy to assemble using the jig provided. I painted the three wheels and paddles red using a spray can and assembled the paddles. The wheels are held together with a styrene shaft with cranks at each end. The shaft is mounted to the hull with bearing blocks, and main rods reach into little enclosures on each side of the hull.

Rusty Rail, 3426 N. Clover Ave., Fresno, CA 93727, 559/288-5780, rickanmary@rustyrail.com sells a large selection of cast urethane HO and O scale detail parts and vehicles. They seem to bring out new parts every month, have a newsletter, and free videos on assembling their models. I ordered an O scale Bates Crawler to detail my tractor repair facility. It cost $25.00 and comes with one page of illustrated instructions. The kit comes in four pieces with two aluminum tube exhaust vents. The body is in two pieces and there are two castings for the track assemblies. I found very little flash to clean up and merely spray painted the assembled tractor with Rust-Oleum Primer Gray. Then I picked out the floor grates, control handles and exhaust vents and dusted the model with rust, black and white chalks. I found this kit gave me a large piece of detail in very little time and am pleased with my Bates Crawler now nestling in my tractor repair

Crow River Products, P.O. Box 2082, Pawtucket, RI 02861, 401/723-0065, CrowRiver@cox.net sells a large selection of machinery and detail kits in HO and O scale. I recently assembled two O scale kits. The first kit assembled into a Single Cylinder Steam Engine (kit #311) and sells for $22.00. The kit consists of cast pewter parts for a one-cylinder steam engine with a cross shaft, bearings, gears, and belt wheels. There is no wood base or frame, and no boiler. The gears, belt wheels, and bearings must be drilled out for their shaft, but the parts have little flash. The cylinders are in three pieces, with a separate valve chamber, cross head, main rod, valve rod, crank disc, and eccentric lever, making for a detailed model. I colored my single cylinder steam engine with chemical blackener but found doing so made the parts hard to glue together with ACC. The kit with an added base would make a nice flatcar load or look great in the back corner of an engine house.



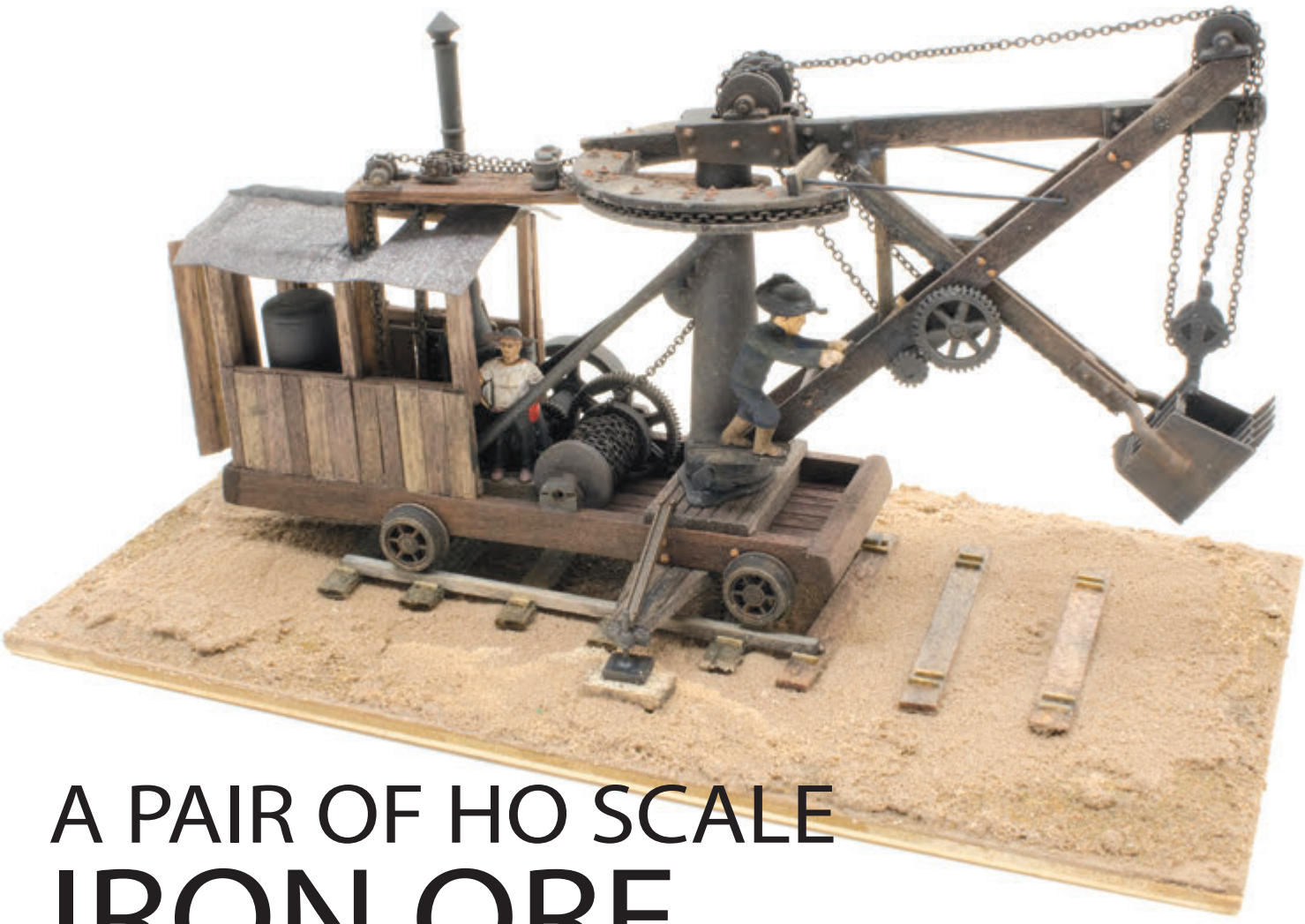
The second Crow River kit I assembled consisted of two cylinders just like the single cylinder steam engine and sells for $55.00. It has two sets of cylinders with all the details of the single cylinder model such as detailed multi piece cylinders, cross shaft with belt wheels, gears and bearings, eccentrics, and crank discs. But it also comes with a beautiful cast urethane vertical boiler (available separately for $27.49.) Like the single cylinder steam engine, this kit has no wood base. The parts are designed to be used as stated in the instructions, "only limited by one's imagination." So that is what I did. I needed a power source for the crusher in the dump on the railway described in Robert's Ramblings in this issue on page 5. So, I mounted the Crow River boiler and engine on a wood frame and added a scratchbuilt crusher. Note the wood frame or crusher in the photo do not come with the Crow River kit. The boiler is cast in urethane and is solid. The smokestack is metal, as are the tri cocks, steam gauge, water level indictor, firebox door, safety valve, and steam connection. You do have to drill holes to mount these details, but their locations are marked on the boiler and the urethane is soft. The metal parts need some cleaning, and several holes need to be drilled out. The metal castings include pipe fittings such as elbows, T-joints, and way more plumbing than you will need for almost any arrangement. A length of aluminum tubing is provided for piping. Both kits come with instructions with two pages of diagrams and suggestions for wood bases.



I love machinery kits like these. They really made adding a detailed interior easy and that's what I like to do,

Conowingo Models, 440 McCauley Rd., Conowingo, MD 21918, http://conowingo-models.com sells HO kits for a Bobber Boxcar for $30.00, and Caboose #3 for $33.00. The kits include LaBelle (Ye Old Huff 'n' Puff) metal castings, plastic wheels, laser-cut wood parts, Conowingo Railroad decals and Kadee couplers. Bob Brown.

Berkshire Valley Models, 438 Morgan Woods Dr., Fenton, MO 63026, www.berkshirevalleymodels.com has added a pair of O scale two-wheeled carts to their extensive line of wagons and vintage automobile kits. Each pair sells for $19.95. The carts are different from one another. One has heavier wheels and a simple box body, and the other has lighter wheels with hub caps, and a more complicated body with railings. Both carts lack springs and merely have cast metal wheels with an axle making them easy to assemble. The heavier cart has a laser-cut laser board two-layer body and curved shafts on which to attach a horse. The lighter cart has a laser-cut wood body and straight shafts and looks like a trap to me, once used to haul people back and forth to the nearest railroad depot. I had no trouble assembling my carts until I colored them. The double sided, one page instruction sheet recommended not painting your carts, but rather use Pan Pastel colors, so I decided to stain mine causing them to warp, but not to worry, I put them under weights, and all was well. Remember to follow the instructions. Carts like the heavy one were often found in bunches on wharfs or around factories.



A PAIR OF HO SCALE IRON ORE STEAM

Title photo: This HO-scale model of an early steam excavator (shovel) is based on an original design patented by William S. Otis in 1839. The model represents one of three that were used in Andrew Carnegie's Scotia Iron Works located in the Barrens of central Pennsylvania in the late nineteenth century.

by Jerry Lauchle, MMR
Photos by the author except as noted

Below: One of the author's steam shovels ready for work.

SOME BACKGROUND

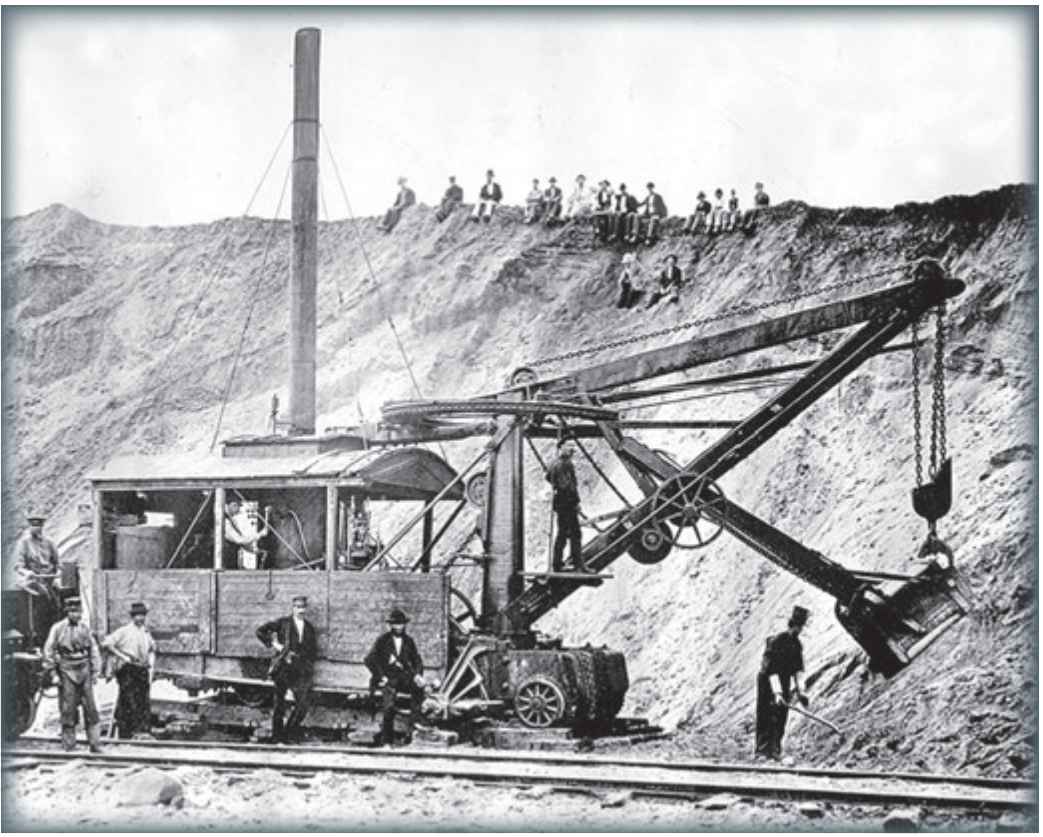
There is a section of central Pennsylvania in Centre County known as the Barrens. It's a wooded area of some 9,000 acres first inhabited by the Shawnee Indians. It is believed that they gave the area its name because their crops would not grow very well in the sandy soil. The Commonwealth of Pennsylvania purchased this and surrounding land from the Shawnees in the 18th century. The Commonwealth explored and surveyed this area of Centre County to define parcels that would be sold to landlords and homesteaders. In 1784, one of

the surveyors discovered an outcropping of iron ore in the Barrens; further searching turned up immense and widespread deposits of the ore. In the late-18th and 19th centuries, iron ore was of greater value than gold to Pennsylvania's ironmasters. There were over a dozen blast furnaces operating in Centre County alone. The Barrens did not have the only ore banks; they were being discovered all over the region. Large and small mining operations and the production of pig iron changed the physical and economic face of the area.

The River Hill bank (open mine) located in the Barrens was the most dependable source of iron ore in the county. In 1880, forty-five-year-old Andrew Carnegie traveled east to secure ore supplies for his expanding Pittsburgh operations. He was impressed with the ore being mined at River Hill and eventually purchased it from Moses Thompson, the ironmaster from Centre Furnace, located just east of present-day State College, Pennsylvania, and Penn State University. Carnegie named the area Scotia, after his native Scotland. Workers, and a community to support them, were needed to run Carnegie's new mining operation called the Scotia Iron Works. By 1883 he had the Lewisburg and Tyrone Railroad (L&T) extend its tracks into Scotia so that heavy equipment and materials could be brought in to build a very large ore washer; one based on the 1842 invention by Abraham Valentine of the Valentine Iron Company located in Bellefonte, Pennsylvania. This design was simple and inexpensive. The washer itself consisted of a steam-driven shaft with attached cast iron spikes. This shaft acted as a screen which was placed in a trough with running water. As the spike shaft revolved, the ore dumped into the trough came out the other end fully cleaned of the clay and sand attached to it when mined. Wells were dug close to the washer to supply the water. Steam-powered pumps were used to lift the water to five elevated water tanks. The tanks on the towers were higher than the washer trough.

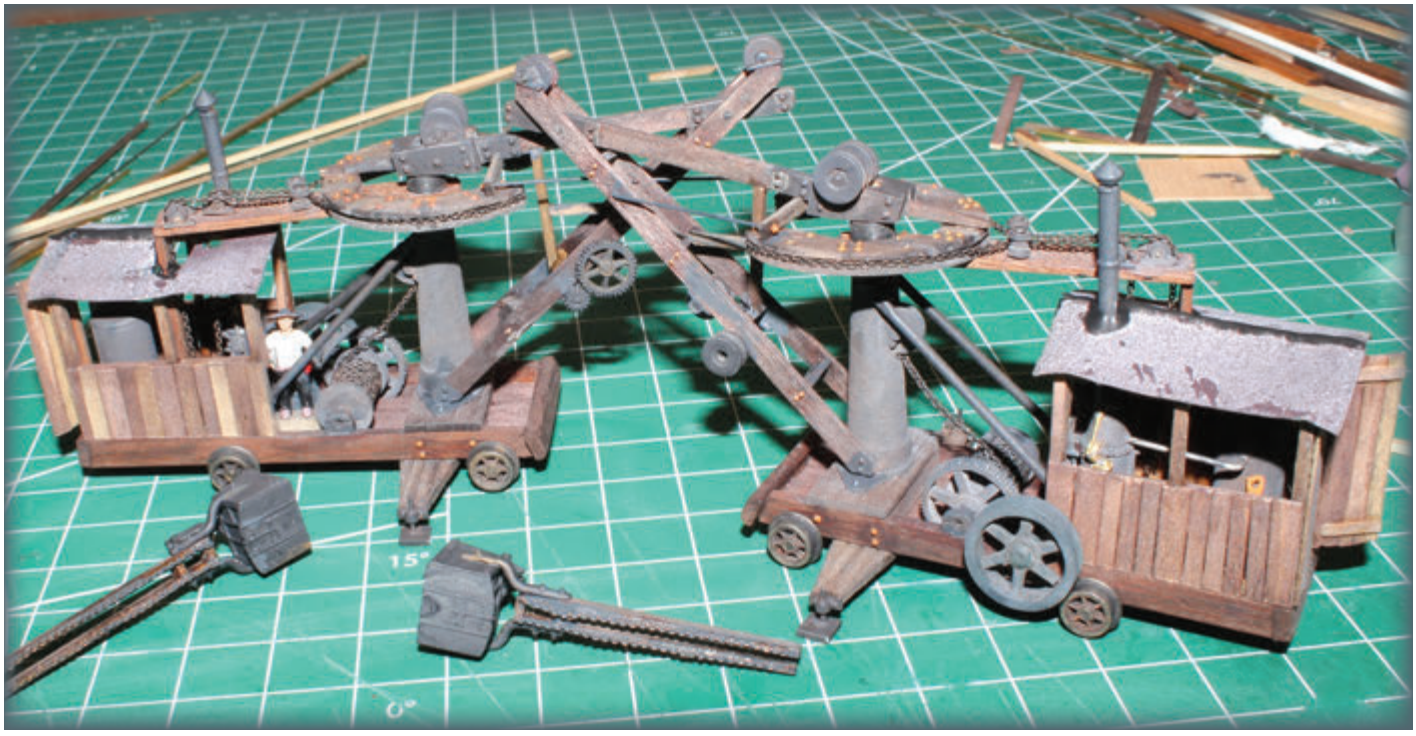
The mines at Scotia were not underground mines, but open mines, or banks. At first, all work was done with picks and shovels and horses and carts. Stock was dug, loaded onto carts, and hauled to the ore washer. The cleaned ore was eventually loaded onto L&T gondolas for transport to Tyrone, Pennsylvania, where the gondolas were transferred to the Pennsylvania Railroad (PRR) for shipment to the Pittsburgh mills. The average output was two railroad cars per day. To increase production, Carnegie purchased three newly invented steam shovels, and built narrow gauge railroads from the ore washer to the open mines. The steam shovel buckets could hold a cubic yard of iron-rich clay and would load from 600 to 1,100 cubic yards per day. The 0-4-0 dinky steam locomotive could haul up to 24 loaded ore cars to the ore washer. The cars were uncoupled at the base of the washer and a steam-driven hoist system was used to pull them one-by-one up an inclined ramp to the washing trough. These technical improvements resulted in an average of 15 to 18 gondola cars full of ore being shipped to Pittsburgh daily.

In the 1880s, there were well over a thousand steel plants in the United States. Bigger companies were buying up the smaller ones. Andrew Carnegie led the conglomeration movement by forming the Carnegie Steel Company in 1882, making Pittsburgh the steel capital of the world. In 1898 J.P. Morgan challenged Carnegie's monopoly by forming the Federal Steel Company in which two Pittsburgh steel companies were included in the buyouts. As Carnegie was ready to retire, and Morgan was undercutting his prices, Carnegie sold The Scotia Iron Works to the Bellefonte Furnace Company in 1899. This company closed the Scotia mines in 1914. The two steel companies owned by Carnegie and Morgan eventually merged to form U.S. Steel in 1901. Charles Schwab

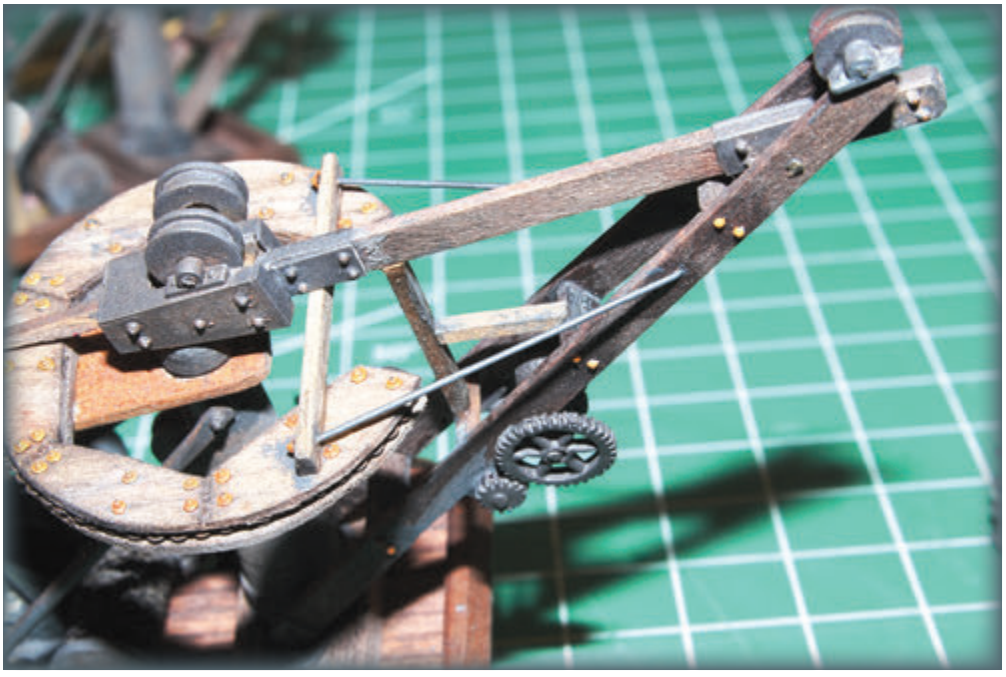


Above: A prototype steam shovel at work with the crew posing for the photo. Note the men at the top of the hill.

Right: The rear of one of the author's models showing the rough board siding and the outriggers to keep it upright.



Above: Here are both of the author's steam shovels while under construction.

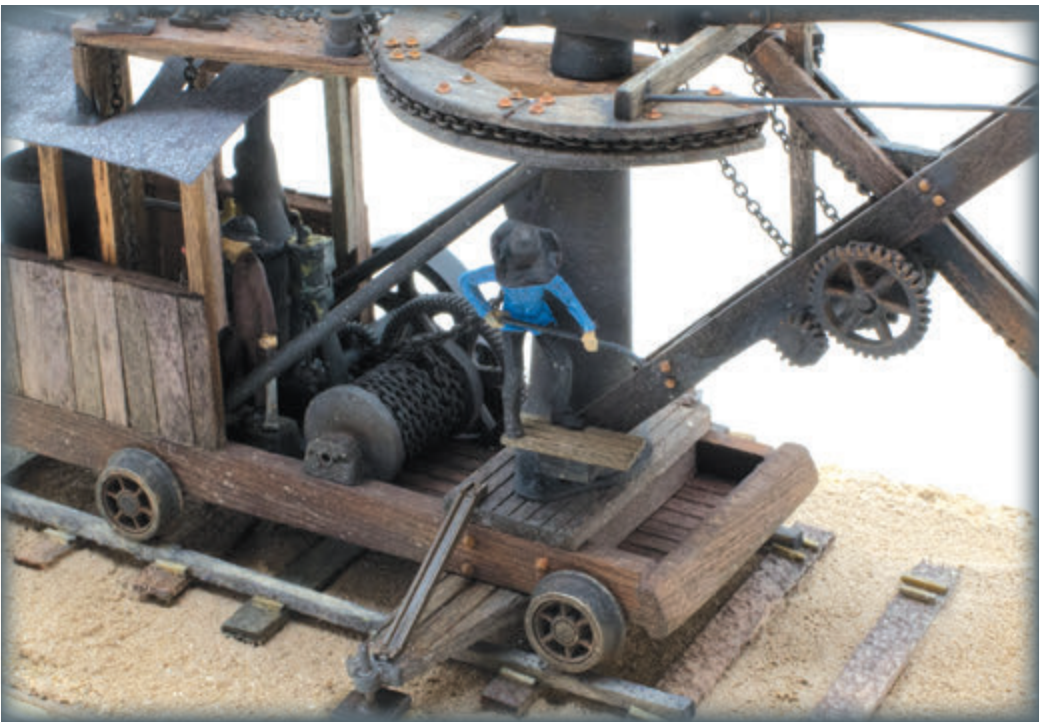


Right: The plating on the boom was made from 0.010-inch-thick styrene, and the Grandt Line nut-bolt-washers placed appropriately. The rear boom extention, as well as a wooden horizontal boom support are seen attached to the swing gear at the rear and front, respectively. Appropriate boom bracing was installed above the dipper stick pinion gears.

was chosen as its first president; two years later, Schwab founded the Bethlehem Steel Company.

The steam shovel played a large part in Carnegie's mine operation at Scotia. The steam shovel, or excavator, was invented by William S. Otis who received a patent for his design in 1839. They were built on a wooden chassis on which the boiler and engine were mounted. The shovel arm was mounted at the other end of the chassis. Four flanged wheels on axles supported the chassis. Temporary rail tracks made from either wood or metal were laid by workers where the shovel was expected to work. It is believed that in Scotia, mules were used to move the excavator on its tracks as well as to position the ore cars for loading on the narrow gauge railroad tracks that were laid nearby.

The Centre County Historical Society, located in State College, began a project in 2019 to build a model replica of Scotia. This model railroad is being built by several local model railroaders in HO scale; the platform is 8- x 12-feet. The Society has a collection of vintage photographs and maps of the Scotia operations and town of some 400 residents. Most of these photographs and maps are given in the book, The Story of Scotia by Henry M. Williams and edited by Betty F. Johnson (https://centrehistory.org/). The vintage maps can also be seen on the Purple Lizard map: Scotia/Pennsylvania State Game Lands 176 (https://www.purplelizard.com/). The modelers are using these photographs to build two models of the Otis-type steam excavators that were used at the Scotia Iron Works. I saw two photographs of this machine in The Story of Scotia. Always up for a challenge, I accepted what appeared to be a daunting



Above: This close up shows the gears used to drive the boom and swivel it around.

task! This article describes the steps I took to complete the models.

CREATING THE PLANS FOR MY SCOTIA STEAM SHOVEL MODELS

The steam shovels used at Scotia were patented by William Smith Otis in 1839. William was the cousin of Elisha Otis who invented the Otis elevator. I needed to create a plan for this shovel before any construction could begin. The only drawings I could find were from the patent found on the internet. The plan view had a scale of 4 inches = 16 feet which of course, is ¼ inch = 1 foot. I used this patent drawing to help me make a full-size drawing for my

Below: The shovels taking shape. The large wheels were made from five segments.

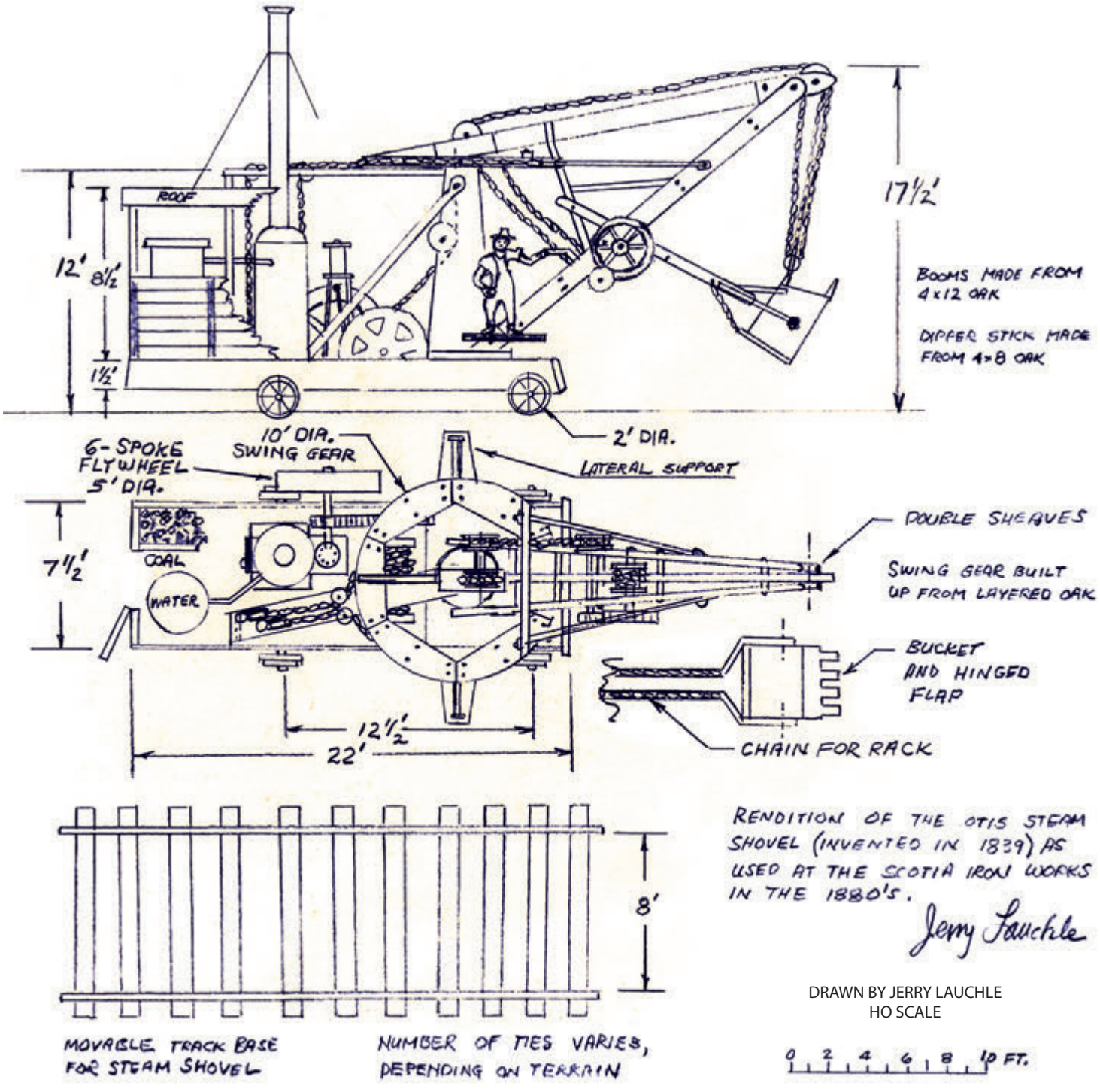
HO scale models. I would build both models at the same time doing the steps consecutively. This procedure allowed me to correct any errors made on the first model while performing the same step on the second.

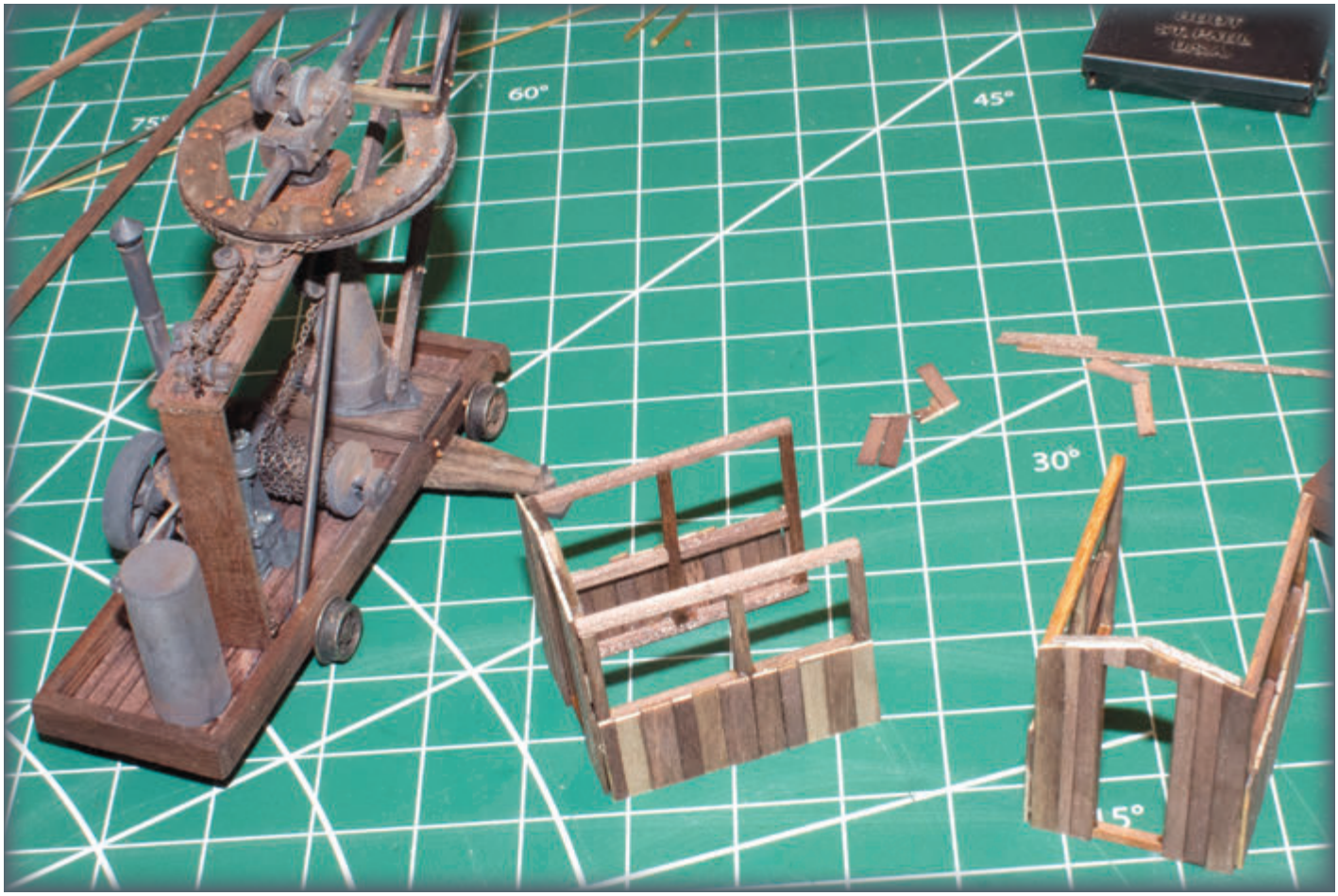
My plan for the models does not follow the Otis patent drawings exactly. The photograph of the Scotia steam shovel clearly shows that it was longer and had a roof. The added length is reflected in my drawing which allows for an onboard water tank, coal bin, and rear door. The wheel track of the excavator is 8 feet, almost twice the distance of standard gauge rail spacing. There is no record of how the machines were transported from Boston to Scotia. They were likely disassembled at the factory and the pieces shipped in railcars to Scotia where they were reassembled at the mines.

THE PARTS FOR MY SCOTIA

STEAM SHOVEL MODELS

Before I joined the Scotia Model Recreation Group, they had found a couple of Jordan Erie B-2 Steam Shovel kits, #303 online, and purchased them. The bucket in this kit is a close match to the one shown on the Otis drawing, so I assembled them for use on my models. The B-2 boom rig-





Above: The housing for each shovel was made from individual strips of stained wood.

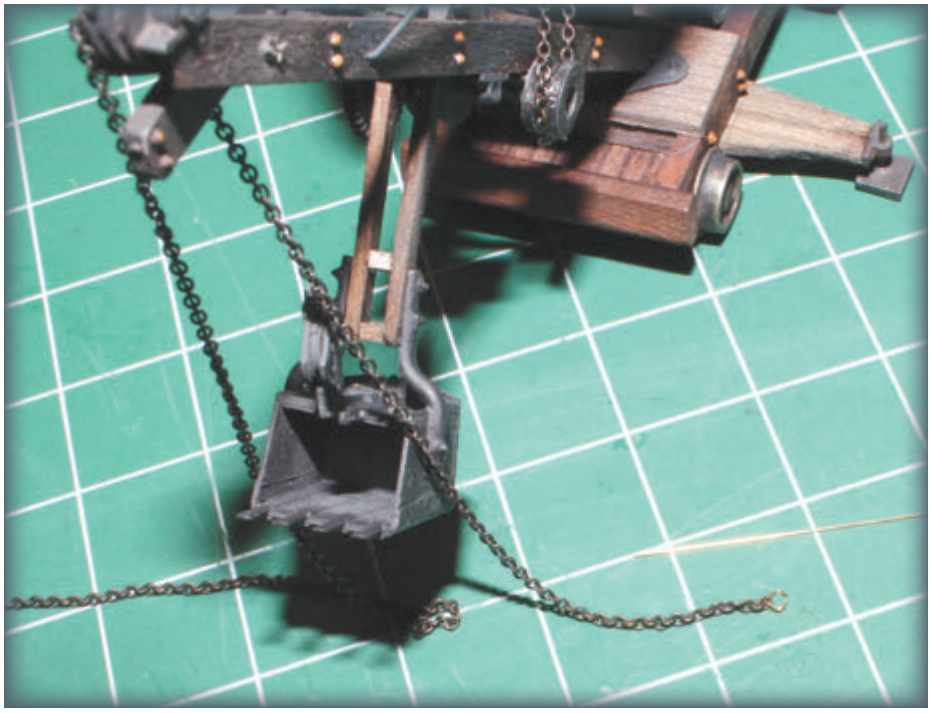
ging pulleys also matched, so they too were retained and used. These were the only parts I could use from the Jordan kits. Commercially made white metal gears from Wild West Scale Model Builders #DP 32 were also purchased. The steam boiler and engine found in Woodland Scenics' Steam Engine and Hammer Mill kit #D229 were a good match to the prototype, so I purchased those as well. Narrow gauge locomotive pilot wheels in 24-inch diameter were obtained from Precision Scale Company, #31937. The wheel track was increased to the required 8 feet by first parting the axle in the middle and then inserting the axle stubs of the wheels into the proper length of brass tubing. The chassis of the steam shovels were made by laminating 4x10 redwood boards for the floor, and then boxing them with 4x18 planks. The 5-foot diameter steam engine flywheels were scratchbuilt from large white metal gears and ABS plastic tubing.

There are two different size sheaves on the excavator: 10- and 20-inch diameter. The smaller diameter sheaves guide the chain from a chain drum behind the steam engine to the 10-foot diameter boom swing gear. I turned these on a lathe from 1/8-inch polystyrene rod. A 0.020-inch axle

Below: On the prototypes, lateral ground support braces were made from wood and ran the full width of the chassis. They were reinforced by steel (plastic on the models) channel. The pads on the supports could be moved to level the machine.

hole was bored through the rod before sawing the individual sheaves off with a jeweler's saw.

The 20-inch sheaves are on the tapered pylon that supports the swing gear, and on the boom itself. The sheaves on the boom are double sheaves. These sheaves guide the chain from the main chain drum that raises and lowers the dipper stick. All 20-inch sheaves were made by sandwiching a fiber washer used in the electronics fabrication industry, between two brass washers, and cementing the bundle with ACC. The washer holes were filled with epoxy and then re-bored to 0.032-inch, the bore size of the Tichy Train Group pillow blocks used (#8313). The main chain drum located directly behind the tapered pylon was made on my lathe using polystyrene rod and tubing. I had the tapered pylon 3D printed in plastic by a local firm. The chain I used has 27 links per inch.



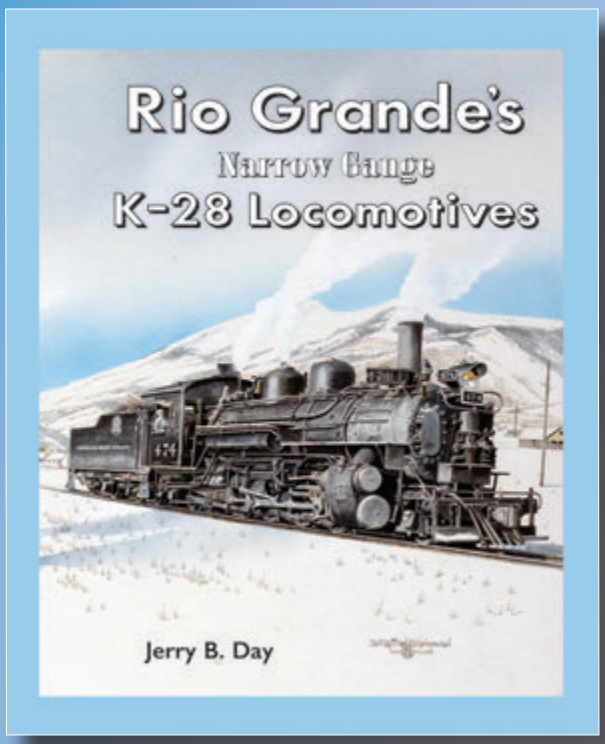
Above: Rigging the chains was one of the most tedious tasks of the entire build of these models. Small connectors were made from 0.005-inch brass wire.

The dipper stick was moved to-and-fro on the boom by a rack and pinion. The drawings and photos of the earliest excavators were not clear on how this was made. The 3D patent drawing suggests that the linear gear (rack) is a linked chain. There is a pair of these, one under each arm of the dipper stick. I used the 27 links per inch chain for these on the models. I would surmise, however, that the manufacturers of these steam shovels used a roller chain for the rack and a spur gear for the pinion. The two pinions are on a shaft underneath the boom that is rotated by a large gear on the right side of the boom; a much smaller gear drives this large gear. The small gear shaft has a sheave on its left-boom-side end. That sheave is chain driven from the main chain drum on the chassis.

An engineer operated the steam shovel next to the steam engine, while a second operator stood on a small platform at the base of the pylon. He controlled a lever that locked or released the hinged flap under the bucket. There was likely a fireman on the excavator too.

ASSEMBLING THE SCOTIA STEAM SHOVEL MODELS

The Complete 100 Year HISTORY OF A LEGENDARY LOCOMOTIVE



Alco built ten locomotives for Denver & Rio Grande Western in 1923, and three of these remarkable machines still call Durango home, powering the iconic "Silverton" trains since the 1950s. Here is the story of the first modern narrow gauge locomotive on Rio Grande and how it is posed to enter its second century of service.

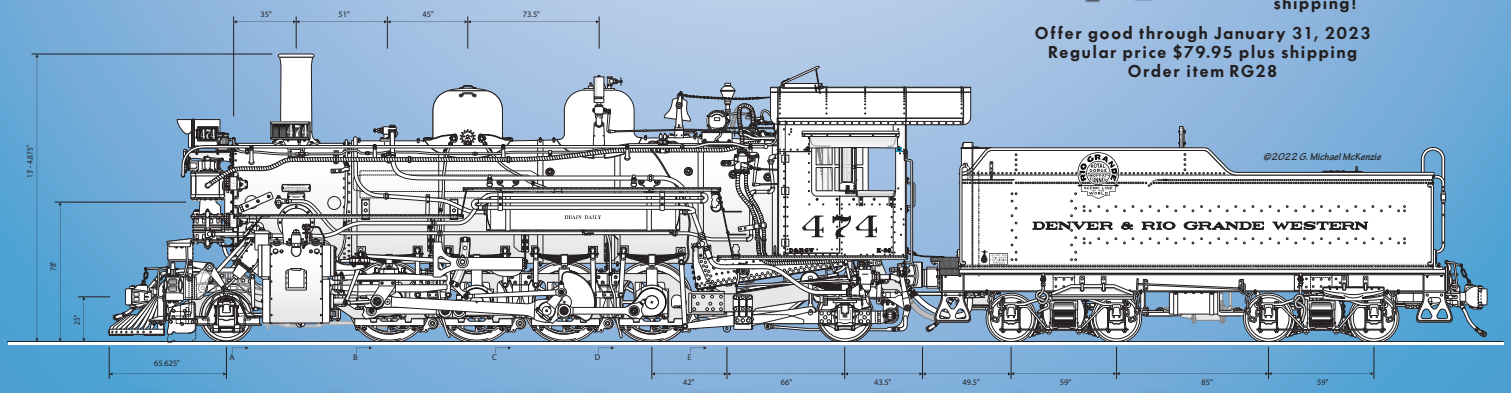
Rio Grande's Narrow Gauge K-28 Locomotives

Author Jerry Day spent 45 years compiling information and more than 300 photos, maps, track folios, drawings, and diagrams, including a three-page foldout drawing created by Mike McKenzie for this 200+ page volume. In addition, you will find the history of D&RGW's purchase of the K-28s, the operational history on the lines they ran, and the history of K-28 snow fighting operations, special passenger runs, wrecks & mishaps, movie appearances, locomotive modifications and changes, and how the K-28s operate today on the Durango & Silverton railroad. Includes an appendix with the complete D&RGW/Alco specs for the locomotives.

Pre-Publication Sale!

$70.00 Plus FREE shipping!

Offer good through January 31, 2023
Regular price $79.95 plus shipping
Order item RG28



Visit shop.WhiteRiverProductions.com

WHITE RIVER PRODUCTIONS
Toll-free (877) 787-2467 • Overseas (660) 695-4433
P.O. Box 48, Bucklin, MO 64631 • info@WhiteRiverProductions.com
WhiteRiverProductions

The Redgate Mill

On30 in the Garden

by William Longley-Cook
Photos by the author

SOME BACKGROUND

Deep down in the canyon between the Cat Shed and the garden fence, in the Condo Canyon, resides the Redgate Ore Processing Mill. This is the story of how it got there.

My Cumbres & Cat Shed Railroad (C&CSRR) is an On30 narrow gauge short line located in a North Yorkshire garden. The system is battery on board (dead rail) with battery powered radio-controlled locomotives. An article in the 2021 edition of Garden Trains Annual (page 84 to 90) describes the railroad as it was in 2020.

The line, like many other narrow gauge and short lines owes its existence to the carriage of minerals. Originally this flow was from an ore tipple at Rockery Ridge, served by an even narrower gauged (On2) tramway out of a mine adit in the garden rockery, north via Donkey Corners yard to the mythical Buck Hollow.

One of the first buildings constructed for the C&CSRR was a Wild West Scale Model Builders' (WWSMB) Black Hawk, Colorado, trackside warehouse.

Whilst searching the WWSMB website I came upon the section on stamp mill parts (https://www.wildwestmodels.com/products/products-o-machines.html). As a former mining engineer, I was immediately attracted to the beautiful items on display. However, back in 2016, I had other priorities for the model railroad budget and US$120.00 for a ten-stamp battery of California stamps was out of range. This discovery was filed away for another day.

In the summer of 2020, we had some trees cut down by the garden fence and the rail tracks were extended beyond Walkabout Gap depot, around a curve and into the space between the fence and the Cat Shed, known now as the Condo Canyon. In the canyon, the tracks fan out with two leading to a turntable and the third acting as a siding. The primary purpose of this extension was to provide enhanced operating potential and a final destination and turning facility for the El Gato varnish train. However, memories of those stamp mill parts began to resurface.

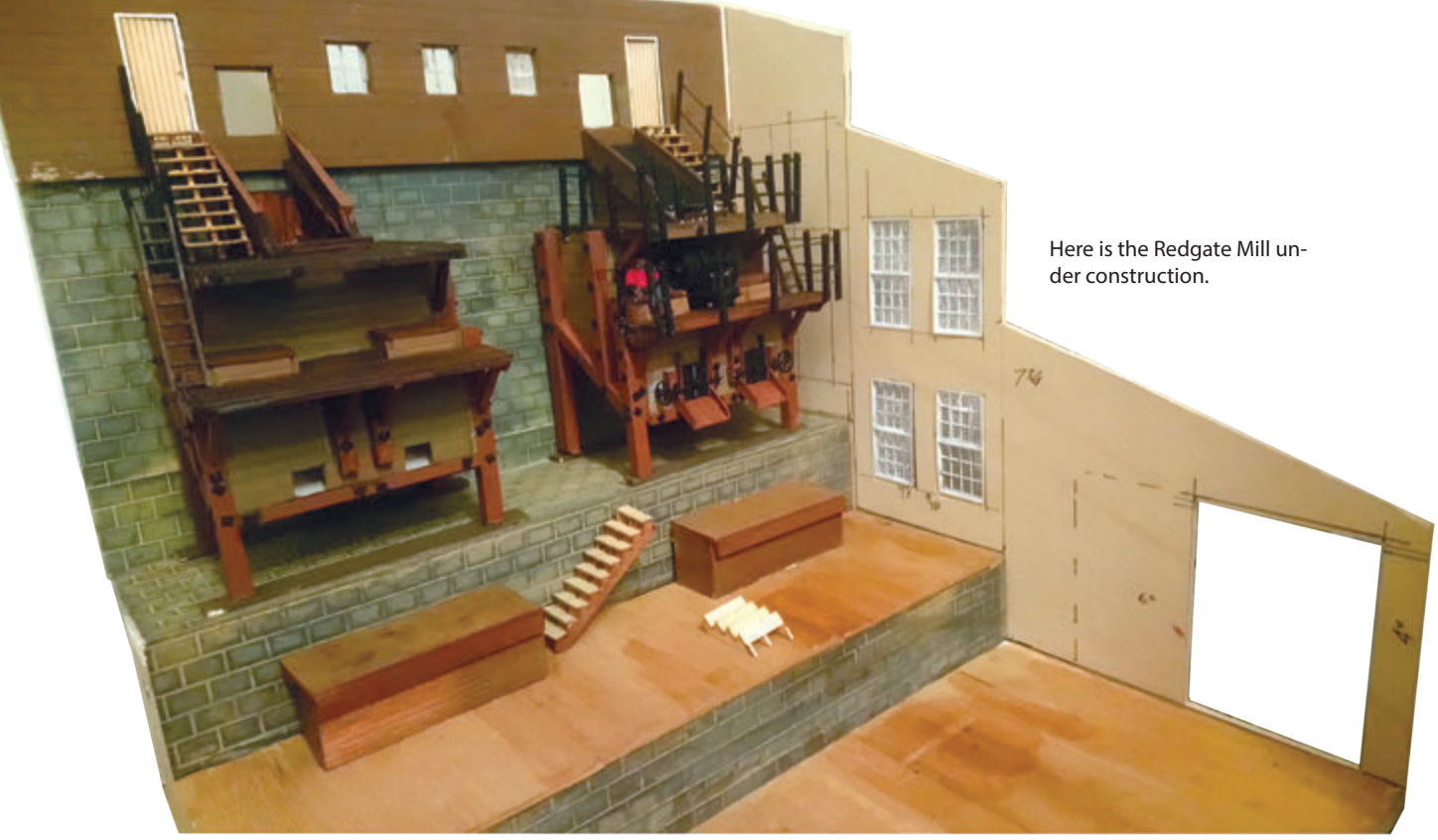
So, I re-visited the WWSMB website and on the structures page, along with the Atlantic Cable Mine which graces our indoor switching layout (On30 Annual 2021, pages 90 to 93), was the Little Red Mill (kit #823). This kit was out of stock but the associated photos gave an idea of what might be. So, I decided to scratchbuild the mill and detail the interior with parts from WWSMB and Wiseman Model Services. The name, Redgate Mill came from a corn

(text continued on page 33)

Title photo opposite:
The Redgate Mill in place. Note how it nestles up to the railway benching so ore can be delivered to the top of the mill.. The standard gauge boxcar provides a comparison with the narrow gauge above the mill.

Right: This view of the author's On30 garden railway shows the plank construction through the garden. That's the tramway to the left of the track.

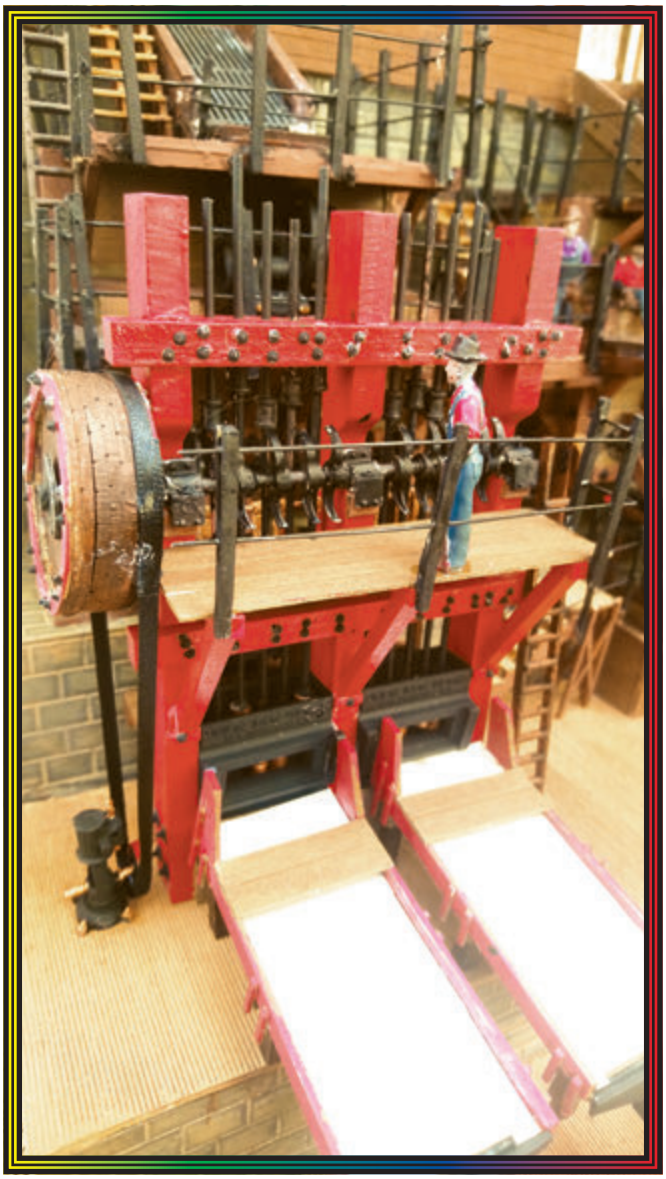
Below: This side view shows one of the metal angles and a wing nut used to attach the mill to a plank. This makes it easy to detach the model and bring it indoors to protect it from Mother Nature.



Here is the Redgate Mill under construction.

Below: A good view of the machinery in a stamp mill. At the top are the grill-like Grizzlies. Ore that is too large to fall through the bars of the Grizzlies is crushed in a crusher. Then it falls into a hopper ready to add to the feeders. The feeders feed ore into the rear of the stamps at a steady rate where it is pulverized, and mixed with water into a slurry on the amalgamation tables. It is next spread out and shaken on the Wilfley tables where the heavier gold is concentrated. It's all here in the author's model.

Right: A close up of a stamp battery and its amalgamation tables.



A grizzly and crusher with the ore bin used to store ore before sending it to the feeders.

Below: Another view of the amalgamation tables and stamp batteries under construction. Note the stairs that add detail to the model.

(text continued from page 30)

mill located in the Weald of Sussex, southern England.

BUILDING THE MILL

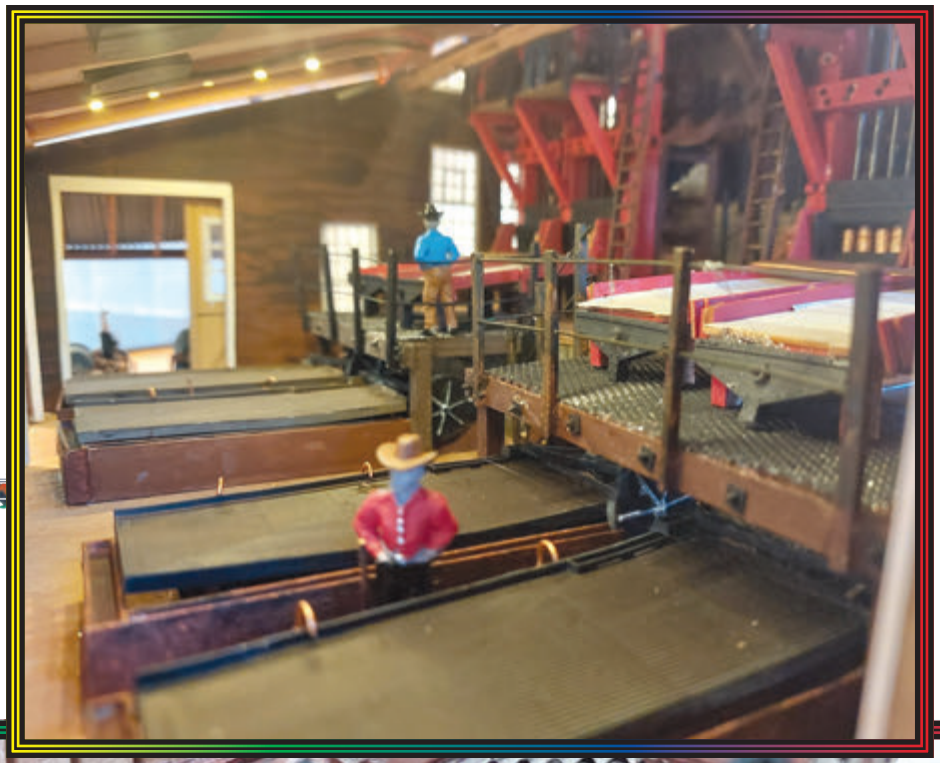
All lineside structures on the C&CSRR are stored indoors and taken out to the garden for operating sessions. So far, the structures have been placed on the ground directly beside the tracks. In the canyon, due to the landform, the tracks run on benching. Old style ore mills were often built on hill sides to allow gravity to help the process flow, so the sixteen inches between the top of the benching and the area below it would allow scope to develop the mill below the line of rail. However, this meant that the mill structure would have to be strong and capable of being attached to the benching.

The base of the mill, is 12-inches long by 13-inches wide with a 3- x 4-inch machinery shack. The rear wall was made

from 5/8-inch-thick plywood braced with strip wood and angle brackets. Coach screws and wing nuts are used to attach the mill to the benching.

The initial plan for the mill was that it was to be a single stream affair with one stamp battery. The process flow sheet was designed to be as realistic as possible and to utilize all the parts available from WWSMB. Mike Pyne, owner of WWSMB was kind enough to send several parts that were not actually available at the time.

Construction commenced by scratch-building an ore bin from Mt. Albert Scale Lumber to store the ore brought to the



Right: The Wilfley tables with a workman looking on.

Below: The machinery shack with its vertical boiler, steam engine, clean-up barrel, and dynamos that provide electricity to the mill.

Above: The Redgate Mill at night, all lit up with LED strips.

mill by rail for processing.

After completing the ore bin, I assembled the WWSMB Challenge Ore Feeders (#M4), ten headed Californian stamp mill (#M6) and two Wilfley shaking tables (#M7).

With the machinery complete, I started on the mill building. Then I realized there was room for another set of stamps.

The sides for the mill building were cut from 3/16-inch plywood, covered on the inside, with scribed sheet wood and on the outside with battens. Window and door openings were cut out using a hobby knife. I cut the openings by first drilling holes in each corner of an opening. Glazing was glued into place with Canopy Glue to avoid the fog effect brought on by super-glue. The wood parts were joined using an aliphatic resin.

Handrails guarding platforms and stairways were made from spent match sticks and wire left over from building rolling stock. Nothing goes to waste on the C&CSRR. Stairs and ladders are from Kitwood Hill Models.

To fit the mill into the canyon, and allow the train operator to pass safely to the turntable, the width of the mill was restricted to thirteen inches. The discharge from the amalgamation tables had therefore to be superimposed over the Wilfley table drives. To allow the detailed drive mechanism to be visible, the walkway around the amalgamation tables was made from mesh.

Power for the mill is generated in the adjacent machinery shack with a stationary boiler to raise steam and a generator to provide electricity for lighting. Stamps, Wilfley tables and the generator are driven by small vertical steam engines.

See https://wisemanmodelservices.com/O-Scale-On3-On30/O-SCALE-SHOP-MINING-MACHINERY/O-SCALE-SMALL-SHOP-VERTICAL-STEAM-ENGINE.

The shack also contains the clean-up barrel, used to reclaim the amalgam, and the boiler feedwater pump.

Lighting within the mill building is provided by battery powered LED strips which are attached to the insides of the roof units.

With all those expensive detailed parts, the total cost of my mill was around $725.00 U.S., close to an On30 Mountain Models MI K-37, so I decided that the three main roofs should be removable allowing all that expensive detail to be appreciated. The roofs, with the exception of the machinery shack, are simple sheets of 3/16-inch plywood covered with corrugated material from Kitwood Hill Models.

The corrugated material was sprayed with acrylic red paint and then toned down with black spray. The roof for the

Above: The mill nice and safe indoors.

machinery shack has trusses, as the underside can be seen, but the main roofs are plain. The boiler smokestack is 8-inches tall and ¼-inch in diameter. Positioning the hole for the boiler stack was tricky, as was the cutting of the hole through the corrugated. I finally used a series of templates, first paper, later card, and a wood drill.

Redgate Mill was my project for the winter of 2021/2022. Work started, building the first pair of Wilfley tables in September 2021, and ended with the second pair in February 2022. Actually, the project isn't really over. More mill staff are to be employed. All figures are from https://www.paintinghistory.co.uk/omen-1-48.

I have also built a standard gauge boxcar that can be placed on a short section of track in front of the mill. The car is an interesting comparison with the narrow gauge up above. x

LOCOMOTIVES OF THE WHITE PASS & YUKON ROUTE

Part 6: Two Pair = Four Of A Kind

by Rob Bell

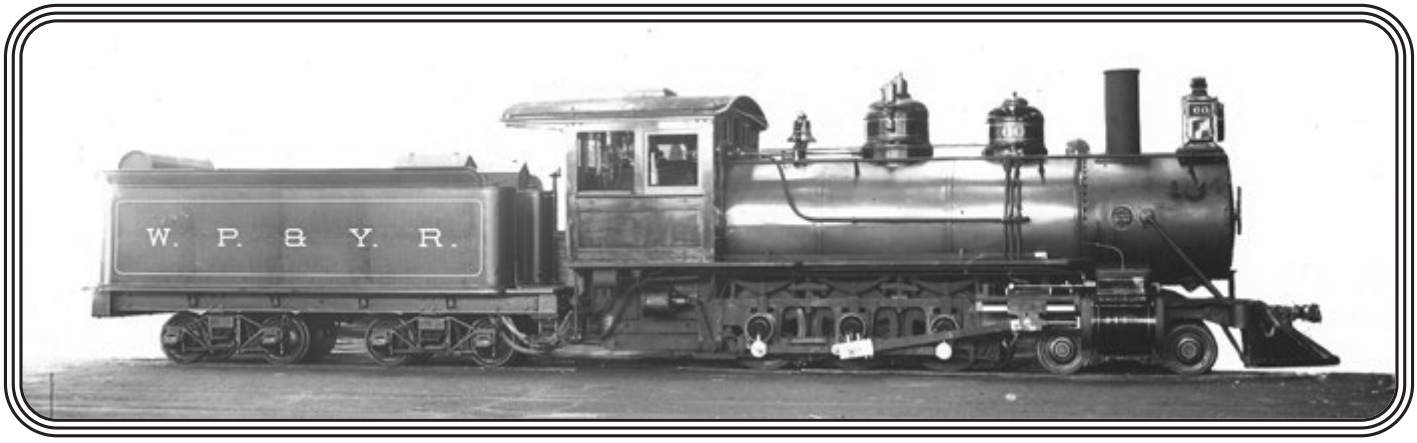
So far in my series, I have covered the first six locomotives that the Pacific Contract Company (PCC) bought second-hand during construction, and the first two new locomotives the White Pass & Yukon Route (WP&YR) bought. The PCC started construction in May of 1898 and steady progress was made. The first eight locomotives were kept busy hauling construction, freight, and passenger trains north from the boomtown of Skagway, Alaska. The future must certainly have looked bright to the investors and management of the company in late 1899 as they were only seven-months or so from completing the first 110 miles. The company had ordered a pair of new locomotives from Baldwin Locomotive Works the year before (numbers 6/56 and 7/57, see the September/October 2022 GAZETTE).

The White Pass & Yukon Route starts in Skagway, Alaska and winds its way up the Coast Range Mountains. The grades approach 4 percent on the way to the summit twenty miles away. These first twenty miles were the test of a locomotive's capabilities on the White Pass. From White Pass summit, ninety miles north to Whitehorse, Yukon Territory, the line is relatively level except for the final drop into Whitehorse. None of the initial second-hand power was well suited for these steep, wet rails. Additionally, consolidations 6/56 and 7/57 with their 38-inch diameter drive wheels while capable of handling the grades, were probably not capable of the sustained speed desired north of the summit. In December of 1899, they went back to Baldwin for more motive power.

An order for four locomotives was placed with Baldwin on the 8th of December 1899. The first two were outside-framed, 4-6-0, ten-wheeler type engines, Baldwin class 10-28D. These two were construction numbers 17749 and 17750, numbered 59 and 60 respectively. Built in May of 1900, both had 58-inch diameter boilers, 17- x 20-inch cylinders, 42-inch diameter drivers, and carried about 75,000 pounds on their drivers when in working order. They used a deep-square (DS) firebox style set behind the three driving axles. These specifications yielded a tractive effort of 21,100 pounds. In later D&RG terminology, they would have been classed a T-21, (T for ten-wheeler and 21 for 21,000 lbs. tractive effort).

Evidently, numbers 59 and 60 handled the steep grades and sharp curves between Skagway and the summit well enough. Longtime WP&YR engineer J.D. True reported that these engines could handle 120 tons each up the grade out of Skagway. In addition, they had the needed speed for the north end of the line. The WP&YR must have been quite satisfied with the performance of these ten-wheelers, as they ordered two more nearly identical engines in November 1900.

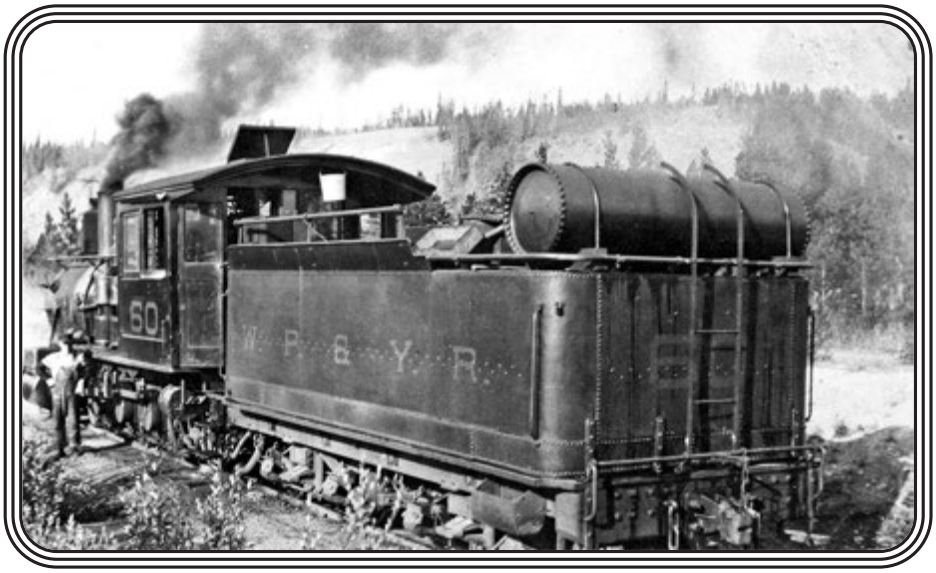
Numbers 66 and 67 were built in May of 1901 with construction numbers 18964 and 18965 respectively. The subtle differences between 66/67 and 59/60 included



Below: The Baldwin Locomotive Works builder's photo of WP&YR #60, construction number 17750. A Baldwin class 10-28D outside-frame 4-6-0 with 42-inch diameter drivers, 17- x 20-inch cylinders, and 58-inch diameter boilers. With over 21,000 lbs. tractive effort, these locomotives were capable of hauling 120 tons up the 20 miles of nearly 4 percent grade north out of Skagway, Alaska. Beyond the summit, they were able to maintain the speed needed to reach Whitehorse, Yukon Territory, in a timely manner. The WP&YR had four of these locomotives. Photo courtesy Railroad Museum of Pennsylvania (PHMC), negative #1320, Rob Bell collection.

Above: WP&YR locomotives #60 (left) and #59 (right) appear brand spankin' new here, and very possibly are. They don't have the snowplow brackets on the smokeboxes yet or the second air pumps. Photo by H.C. Barley, courtesy the Skagway Museum, Talbot-040, high resolution scan by Chuck Morse.

Below: WP&YR #60 shows her backside here. The locomotive has a second air pump and the larger air reservoir on the tender and modified tender flair, but has not received electric lights yet dating the photo to sometime earlier than 1919. Photo courtesy the Skagway Museum, #2006.8.58, high resolution scan by Chuck Morse.



smooth domes and an additional sand dome just forward of the cab, necessitating the bell be mounted forward of the steam dome.

These four locomotives are referred to as the 59-class and were the backbone of the WP&YR fleet for over thirty-five years. They handled freight, passenger, maintenance-of-way, and mixed-consists from tidewater to the interior of the Yukon. Within a short time, all four locomotives had brackets permanently mounted to their smokeboxes for the attachment of snowplows. They also had flangers attached to their four-wheel pony trucks in winter. The next change to these locomotives was the addition of a second air pump to each engine. Following this were modifications to the rear tender flairs and larger air reservoirs being installed on the rear tender decks. All four of these locomotives received electric headlights in 1919. For this to be accomplished, steam powered dynamos (generators) were mounted on top of the boilers just in front of the cabs. On the 66 and 67 this necessitated the removal of the rear sand dome.

On February 12th, 1932, the original Skagway roundhouse burned to the

Above: WP&YR #59 poses at Lake Bennett, Yukon Territory. She has the snowplow brackets on her smokebox, dual air pumps, modified tender flair with large air tank, and electric lights. This photo dates to July 1928 making the engine 28 years old already. Photo courtesy Railroad Museum of Pennsylvania (PHMC), negative #33678, Rob Bell collection.

ground. Several locomotives were inside at the time and 59 and 67 burned in the fire. The WP&YR shop crew rebuilt both and they stayed in service until both were retired in 1940. Number 59 was scrapped that same year. Number 67 evidently lasted on the property until 1951 when she was used as riprap in the Skagway River.

Number 60 was involved in a collision in late February of 1938 that required repairs to the pilot beam, flangers, and brake rigging. Number 60 may have been

Below: Either WP&YR #59 or #60 hauls a mixed train along the shore of Lake Bennett consisting of 1 stockcar, 10 boxcars, 1 flatcar, 1 baggage car, and at least 2 coaches. This photo shows the size of train that these locomotives could handle. This is a relatively early photograph as the locomotive has the snowplow brackets, but only a single air pump. Photo by Case & Draper, Skagway Museum, Talbot-035, high resolution scan by Chuck Morse.

retired sometime late in 1942, but was certainly declared unserviceable in 1947 and written off. She and her tender were dumped in the Skagway River as riprap in 1949. Both were exhumed from their burial in the riverbank in 1990 and left on their sides near the shops, while #60's tender was moved adjacent to the Skagway Museum. Number 60 was pulled back upright in 2003 but remains near the shops at this time.

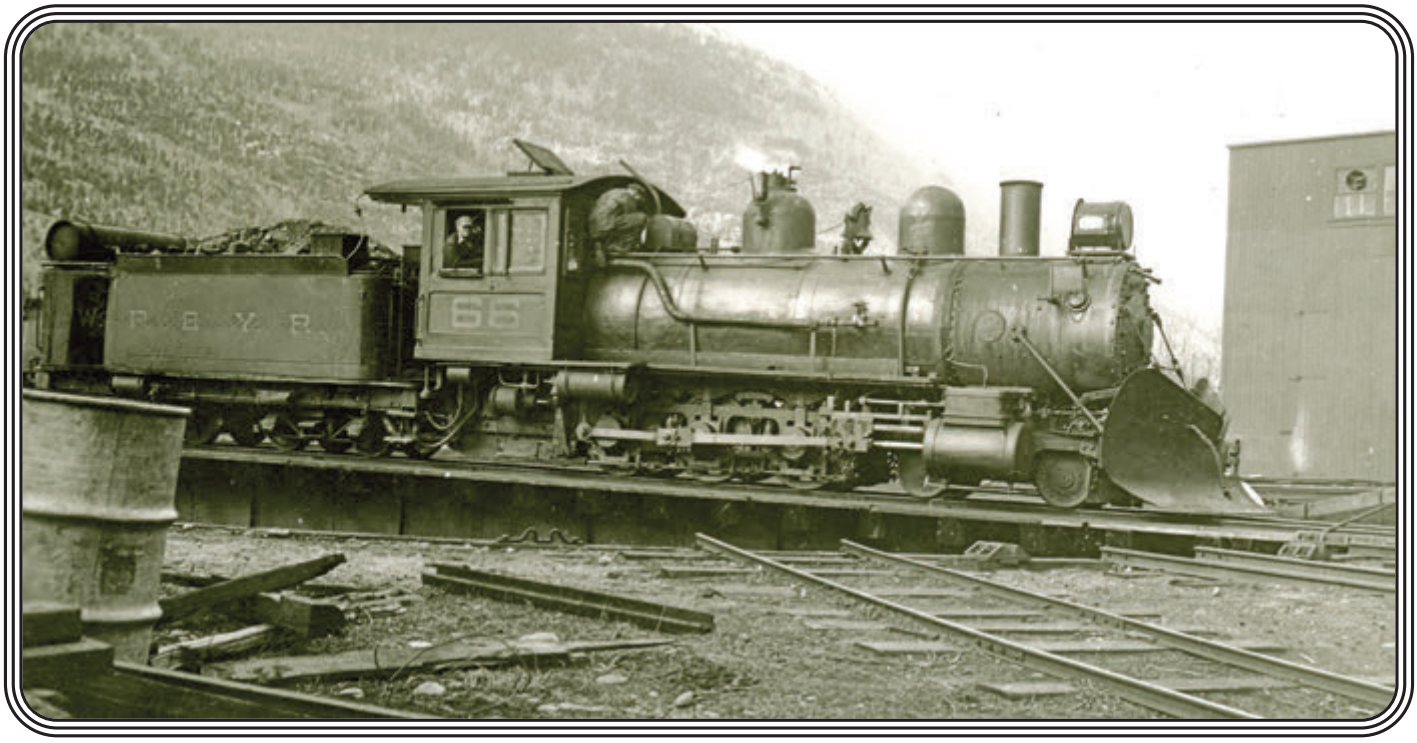
On August 12, 1905, the Whitehorse Star newspaper reported that #66 went thirty feet down the mountainside at mile post 17 on account of a washout. A crew built a temporary track down to the locomotive, righted it, and pulled it back up to the line. Number 66 served the railroad the longest of the four as she was not retired until 1952. Her original tender was wrecked in July 1947 and #66 received the tender from WP&YR #62. In 1951, the tender superstructure from #69 replaced that of the ex-62's on the tender frame. Finally, in 1967 White Pass & Yukon Route #66 was unceremoniously dumped in the Skagway River as riprap like two of her sisters.

Outside frame ten-wheelers were not known in the continental United States. They were, however, quite popular in Central America. The Oahu Railway in Hawaii had five as well. Most of these ten-wheelers did not share the deep-square firebox style. The four 59-class locomotives of the White Pass & Yukon Route were the line's main motive power for almost forty years. Even with the arrival of the first two

(text continued on page 43)

Above: Today the remains of WP&YR #60 rest not far from the shops in Skagway, Alaska. Baldwin Locomotive Works built the engine in 1900 and #60 served the White Pass for over 40 years before being retired. She was dumped in the Skagway River as riprap in 1949. The locomotive was retrieved from the river in 1990 and set back on her wheels in 2003. Photo by Chuck Morse, September 1, 2022.

Below: WP&YR #66 is on the Skagway turntable wearing her snowplow, while a crewman makes an adjustment to the dynamo. Note the smooth domes used on #66 and #67. The very tip of the plow appears to have a small amount of snow stuck to it, but the locomotive doesn't have the winter coal boards or cab curtains installed. The 59-class steam dynamos all seem to have had sheet metal covers; probably a winterization innovation developed by the WP&YR shops. A close look at the pony truck shows the flanger and some of the related linkage. Photo courtesy Skagway Museum, #01.360, high resolution scan by Chuck Morse.



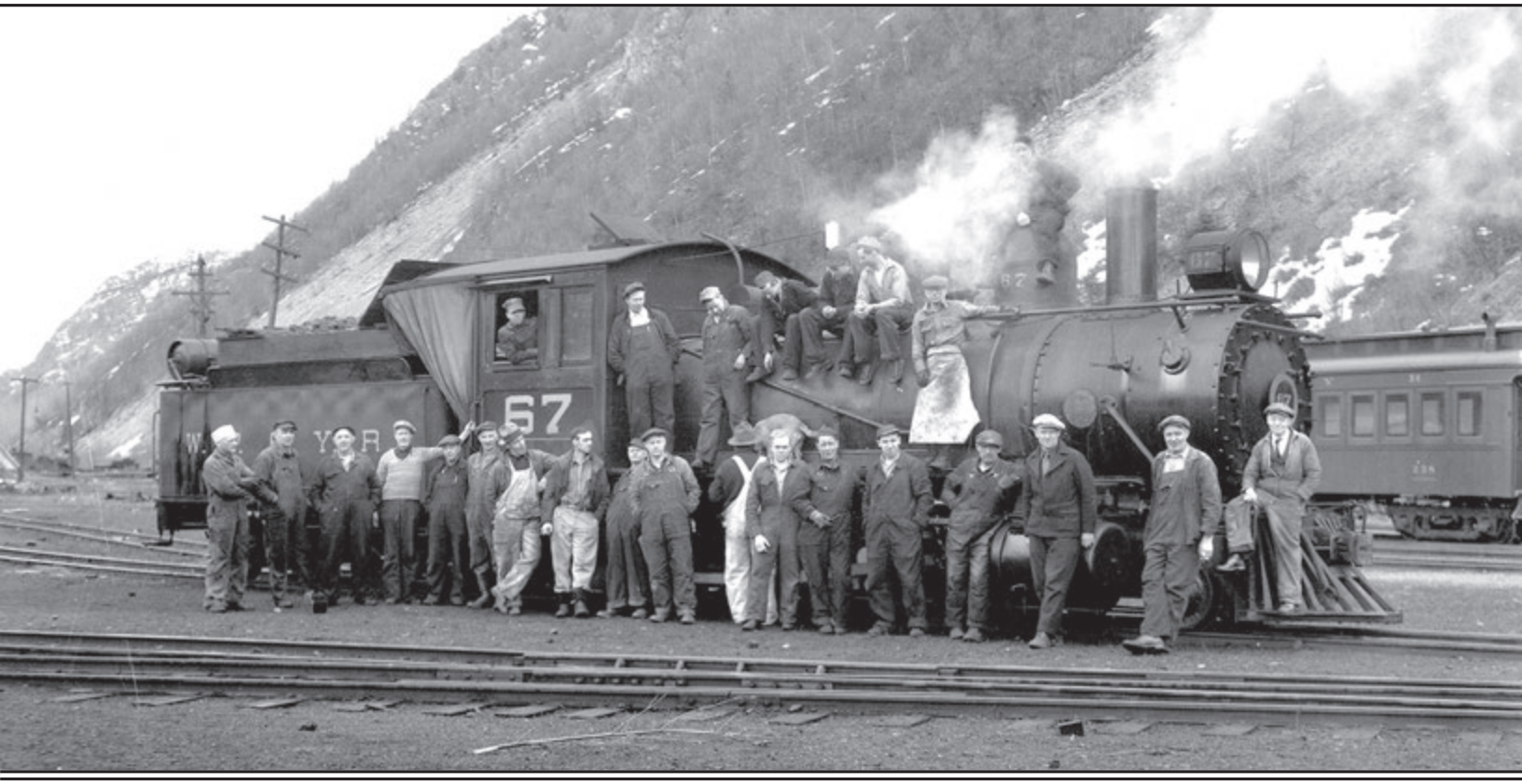
(text continued from page 41)

Opposite top:
WP&YR #66 has stopped near Glacier sometime during the 1920s with 5 coaches and a baggage car. The locomotive sports extra flags and with all the well-dressed gentlemen, one must wonder what the occasion was, and why the one gentleman has his hands thrown up in the air. Unknown photographer, Borries Burkhardt collection.

WP&YR 70-class 2-8-2 locomotives in 1938 and 1939, the 59-class hung on for quite a few more years. It was not until several years after the arrival of the third and fourth 70-class locomotives in 1947 that the last of these 4-6-0s would be retired. Given their longevity, the success of these outside-framed ten-wheelers on the White Pass & Yukon Route cannot be argued.

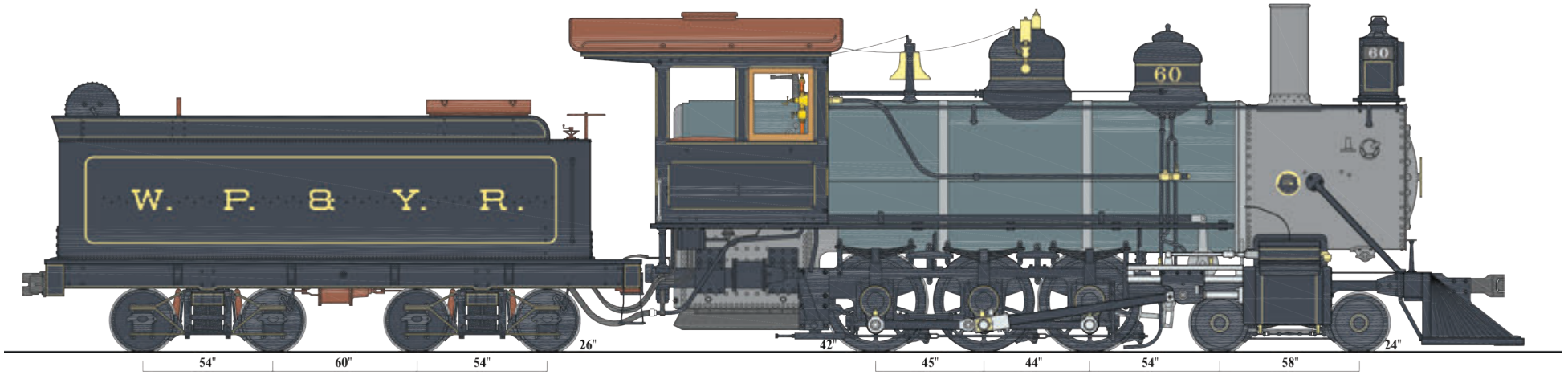
A correction to a previous article needs to be addressed; in part 2 of this series the arrival date of locomotive number 3 was not known. I have since learned that locomotive numbers 1, 2, and 3 all arrived in Skagway together on July 20, 1898 — information is still to be discovered now and again.

As always, I would like to acknowledge Boerries Burkhardt, David Fletcher, Robert Hilton, Chuck Morse, Bruce Pryor, and John Stutz for their assistance and information. In Part 7, I will examine another of the White Pass & Yukon Route's locomotives, one that is currently being resurrected, accompanied by another of David Fletcher's drawings. x



Above: WP&YR #67 poses with the shop crew and shop dog (middle of the running board), probably sometime in the 1920s or 1930s. The locomotive is all dressed up for winter except for her plow. During the winters, the White Pass installed cab curtains on the cab and coal boards on the tenders to cover the coal to keep snow and ice out. Winter temperatures often reached 30 to 40 degrees below zero. Photo courtesy the Skagway Museum, Dedman collection DPC-1498, high resolution scan by Chuck Morse.

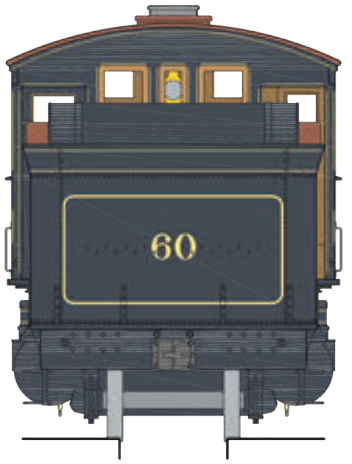
Opposite bottom:
WP&YR #67 with her plow, box headlight, and three smooth domes pauses with a boxcar, a baggage car and 2 coaches. We know this photo is early as she only has one air pump. One interesting detail is the early installation of a side ladder on the tender. The shops installed these when they installed the coal boards for winter operation. This is the earliest use of this type of ladder noted by the author to date. Their use carried over to the permanent installation of steel side ladders when the WP&YR converted its last steam locomotives to burn oil in 1951. Photo by E. J. Hamacher, courtesy the Skagway Museum, Talbot-022, high resolution scan by Chuck Morse.

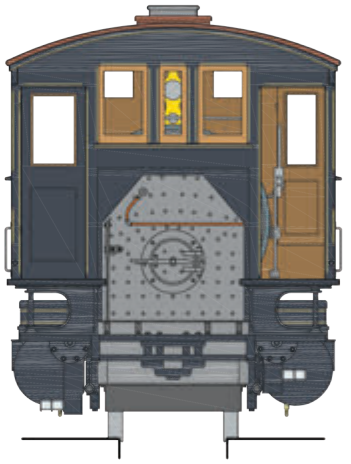


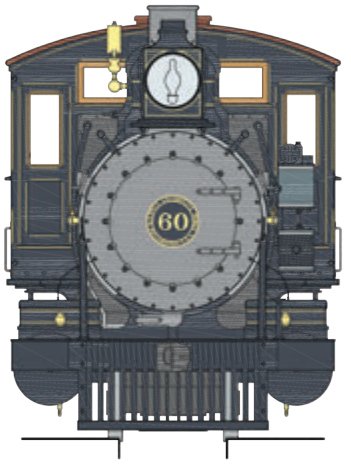
WHITE PASS & YUKON RAILWAY Co. 4-6-0 No.60

TODAY PRESERVED AS A DERELICT IN THE SKAGWAY YARD, ALASKA
BALDWIN CLASS 10-28D 35, DRAWING 12
CONSTRUCTION No. 17750, MAY 1899
TENDER - 8 WHEEL, FRAME 290, BILL 1313, 3000 GALS
36" GAUGE
LIVERY - BLACK & GOLD, STYLE 291

DRAWING RECONSTRUCTED FROM ERECTION DRAWINGS - ERECTING CARD No. 3662 (10-28D34 & 35 DRAWING 12) DEGOLYER LIBRARY, SMU, TEXAS





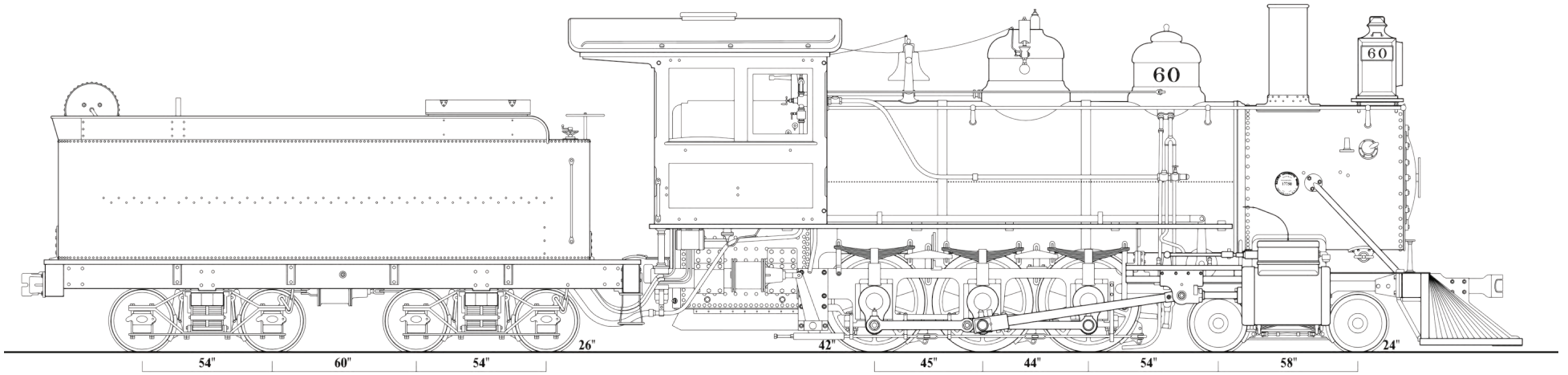


DRAWN BY DAVID FLETCHER
SCALE: 3/16 INCH = 1 FOOT

0 5 10 ft

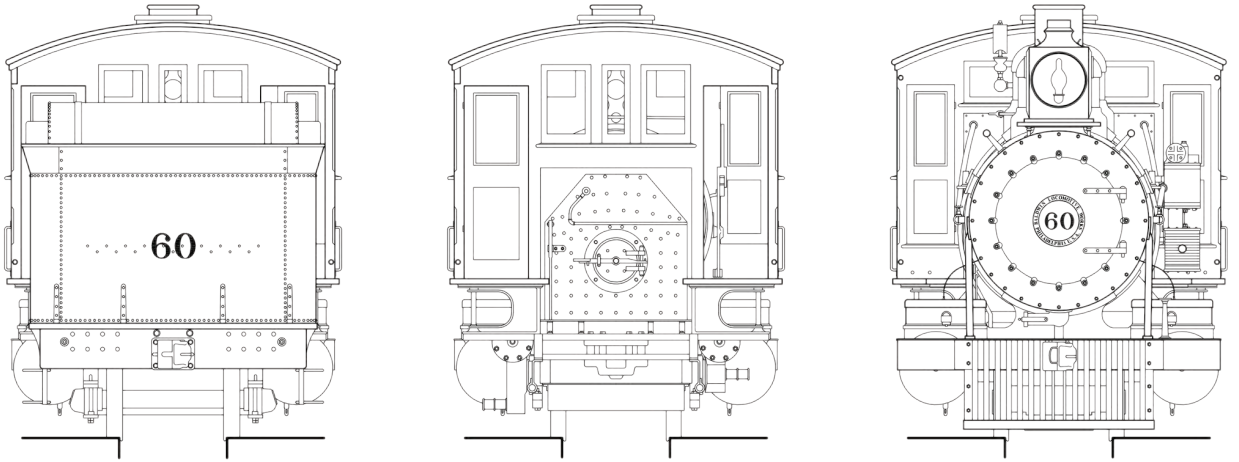
SPECIAL THANKS TO RICHARD WICKETT AND ROB BELL FOR ERECTION CARDS AND FOR DATA ASSISTANCE

DAVID FLETCHER 2021



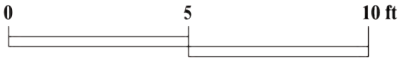
WHITE PASS & YUKON RAILWAY Co. 4-6-0 No.60

TODAY PRESERVED AS A DERELICT IN THE SKAGWAY YARD, ALASKA
BALDWIN CLASS 10-28D 35, DRAWING 12
CONSTRUCTION No. 17750, MAY 1899
TENDER - 8 WHEEL, FRAME 290, BILL 1313, 3000 GALS
36" GAUGE
LIVERY - BLACK & GOLD, STYLE 291



DRAWING RECONSTRUCTED FROM ERECTION DRAWINGS - ERECTING CARD No. 3662 (10-28D34 & 35 DRAWING 12)
DEGOLYER LIBRARY, SMU, TEXAS

DRAWN BY DAVID FLETCHER
SCALE: 3/16 INCH = 1 FOOT



SPECIAL THANKS TO RICHARD WICKETT AND ROB BELL FOR ERECTION CARDS AND FOR DATA ASSISTANCE

DAVID FLETCHER 2021

THE TOM MILLER ICEHOUSE
BODIE, CALIFORNIA

DRAWN BY NEIL A. PFAFMAN
HO SCALE

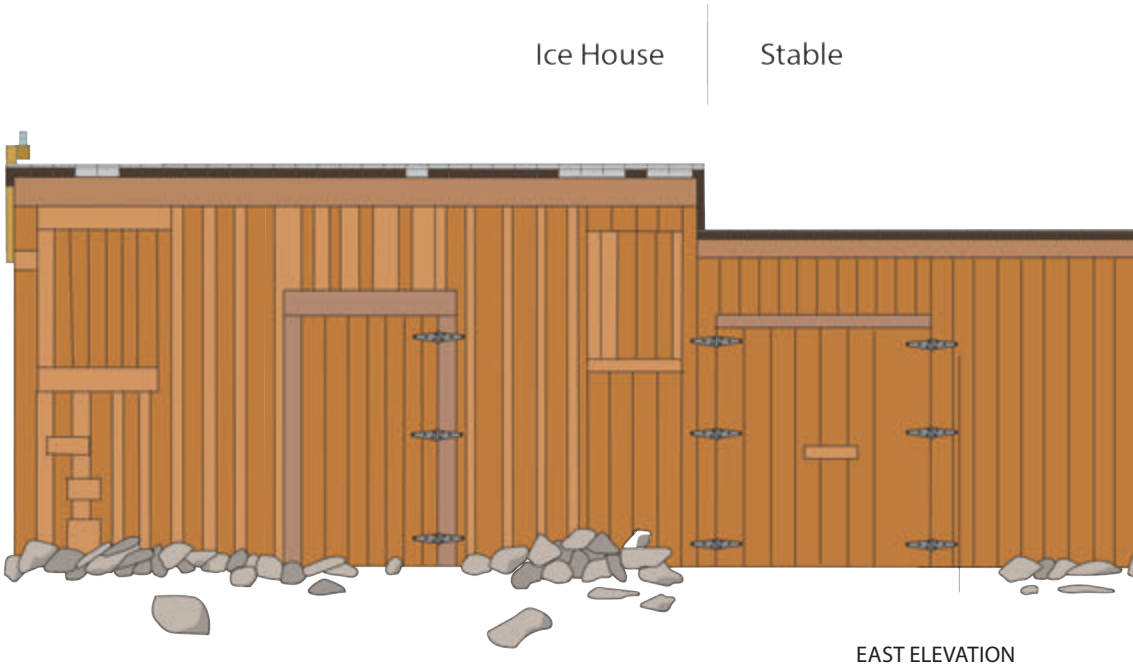
During the hot summer months when people needed ice to put in their ice box to keep foods from spoiling, they would purchase ice from this icehouse.

The first section of this icehouse was built to store ice. The ice would be cut from any one of a few lakes in the area during the winter when the lakes were frozen over. The ice was then hauled by horse and wagon to the icehouse and loaded through the middle door. It would be packed with a little straw between the blocks to insulate them and to keep the blocks from freezing together. During the summer the blocks of ice would be removed from the small door to he left.

The walls of the icehouse are several boards thick to serve as insulation. The roof is built up from several layers of wood with the upper layer sticking out from both the front and back of the building.

The rest of the structure is a horse stable and/or a barn with a tack room at the north end.

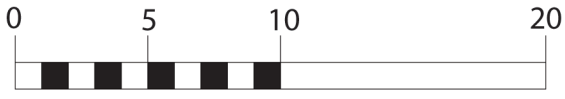
I don't know why all the large rocks are around the base of the building. They might have been to keep critters out, keep the weeds down, or maybe just to keep the building from blowing away. Then again it might have been a good place to store rocks, so people did not trip over them, or maybe they were just in the way when the icehouse was built.

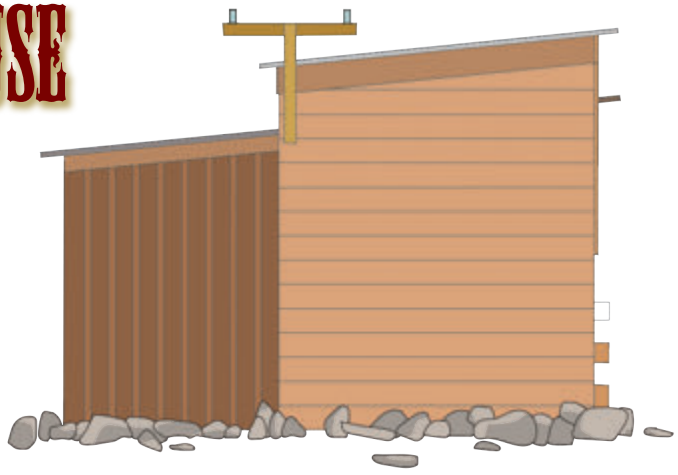


EAST ELEVATION

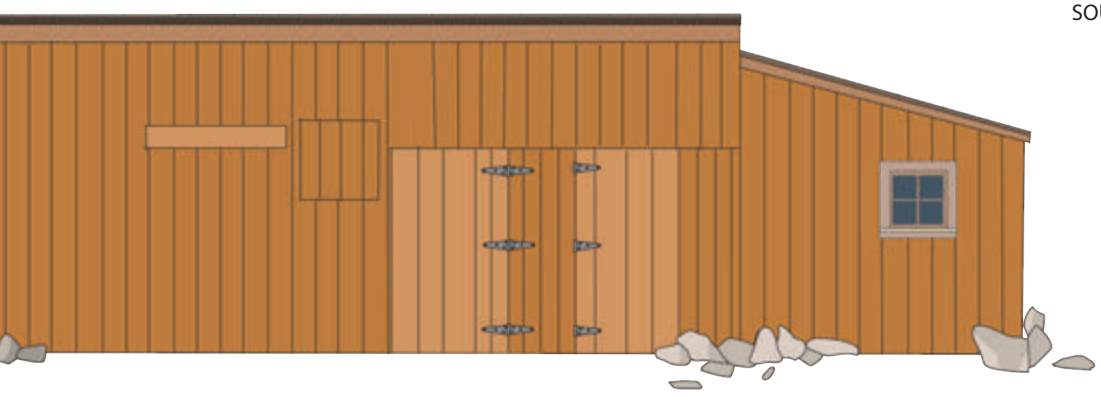
THE TOM MILLER ICEHOUSE
BODIE, CALIFORNIA

DRAWN BY NEIL A. PFAFMAN
HO SCALE





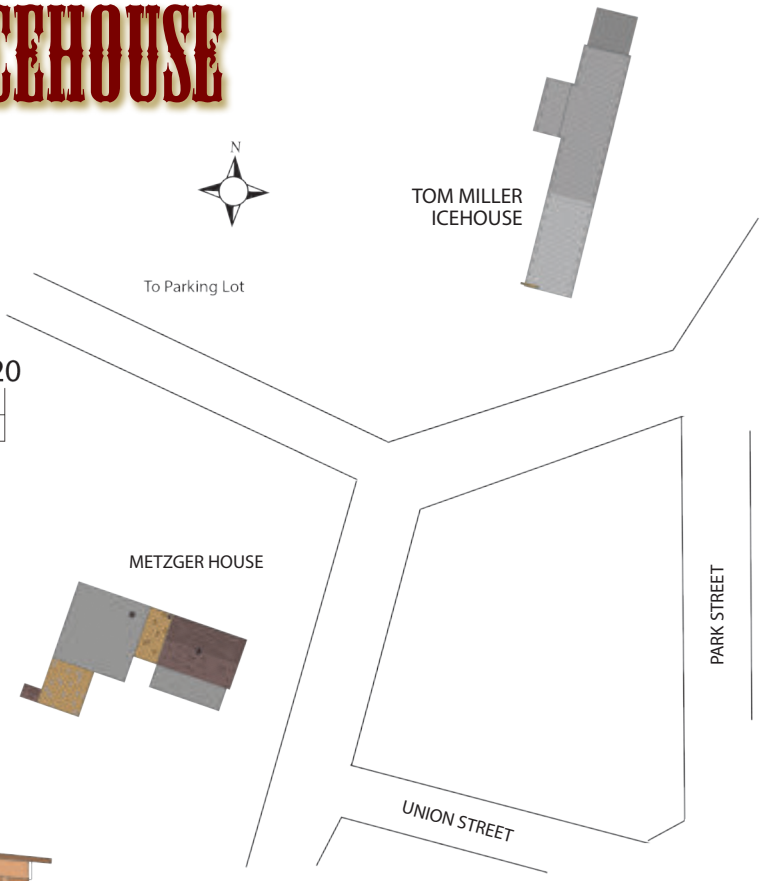
SOUTH ELEVATION

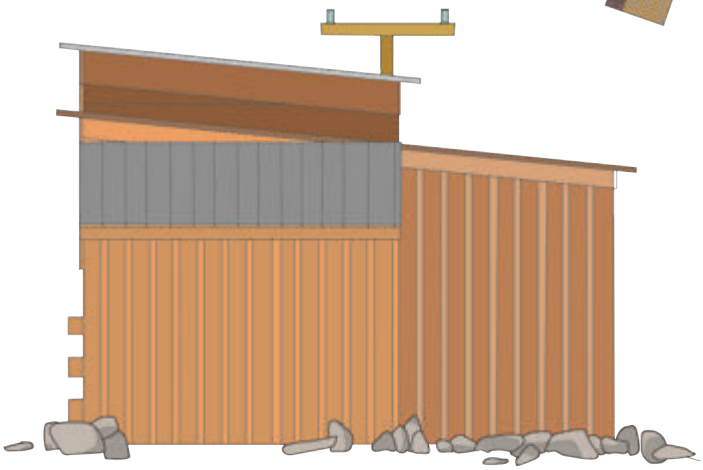


THE TOM MILLER ICEHOUSE
BODIE, CALIFORNIA

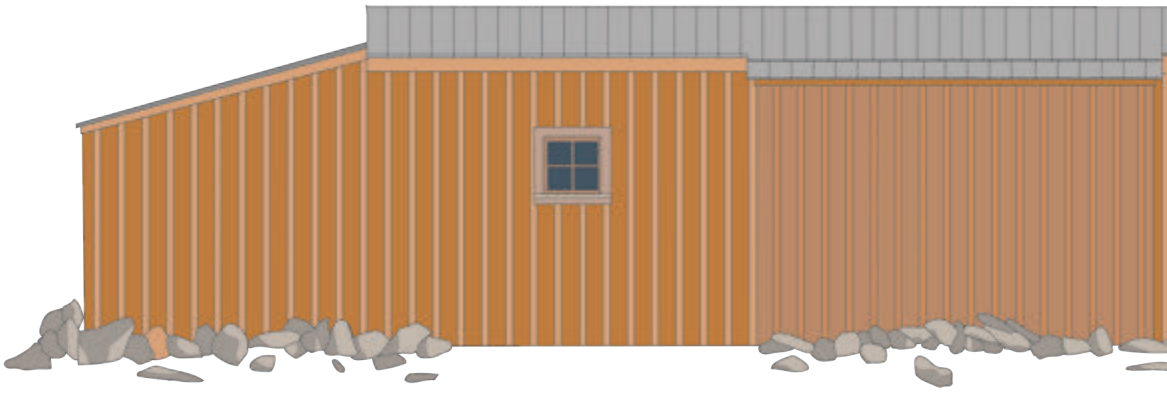
DRAWN BY NEIL A. PFAFMAN
HO SCALE

0 5 10 20





NORTH ELEVATION

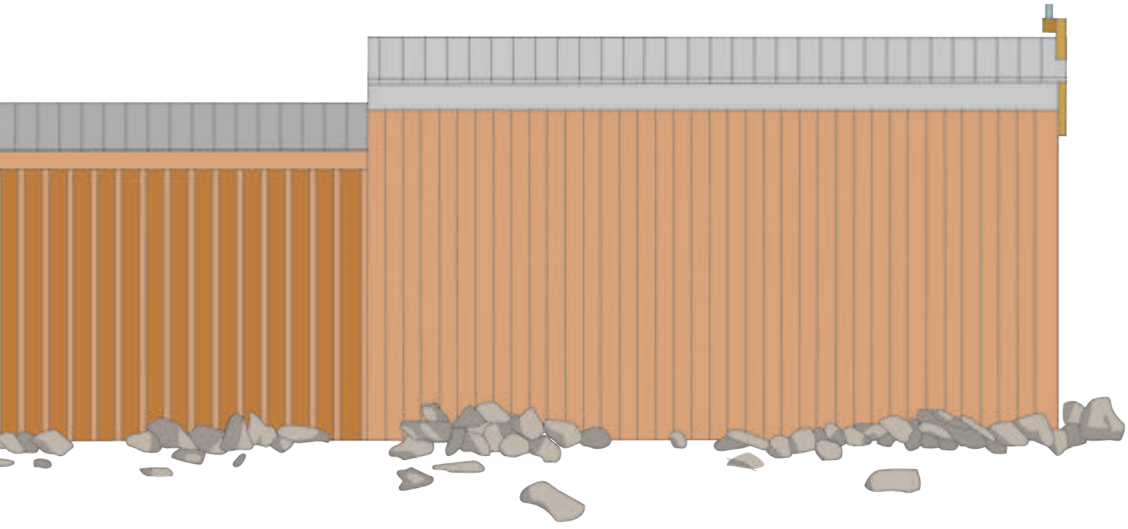


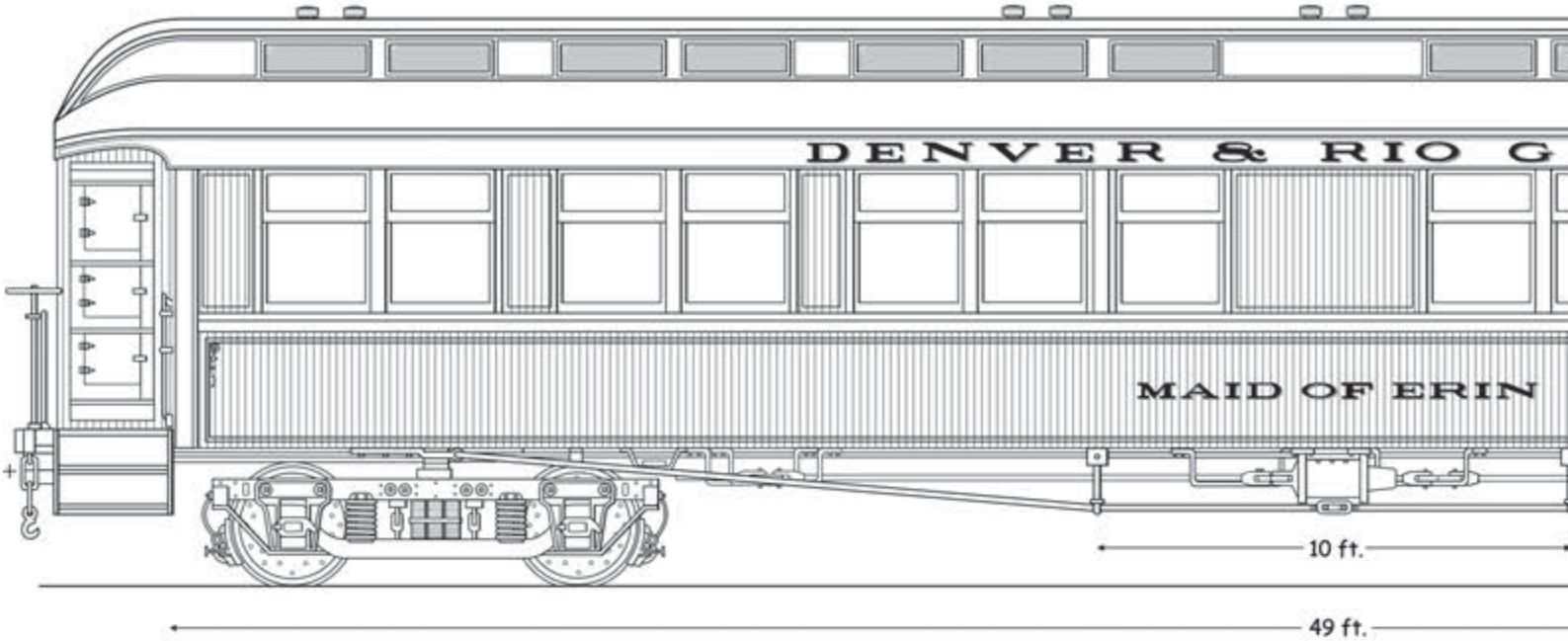
WEST ELEVATION

THE TOM MILLER ICEHOUSE
BODIE, CALIFORNIA

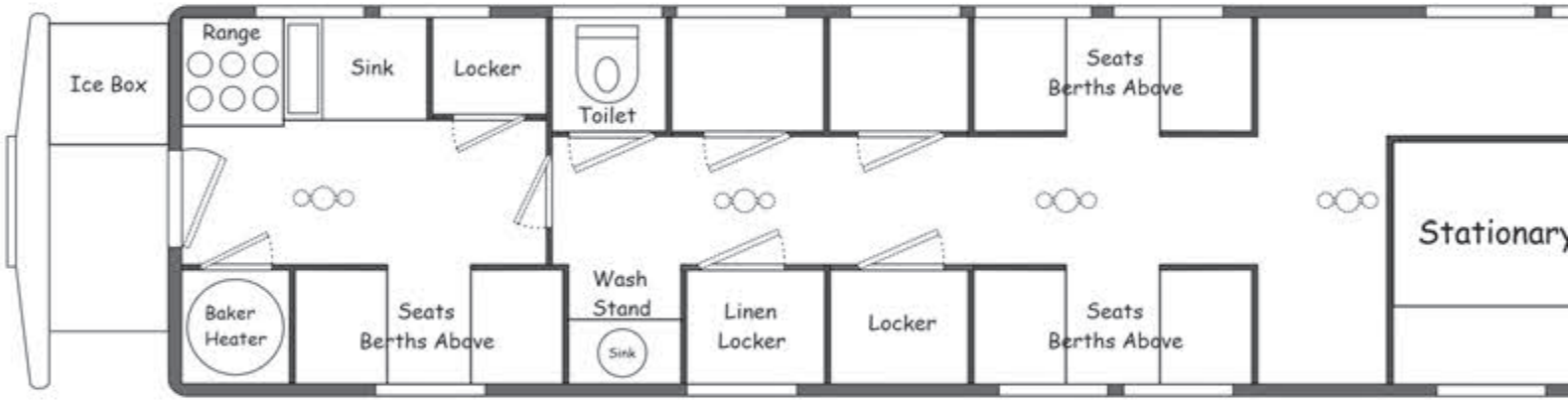
Stable | Ice House

DRAWN BY NEIL A. PFAFMAN
HO SCALE

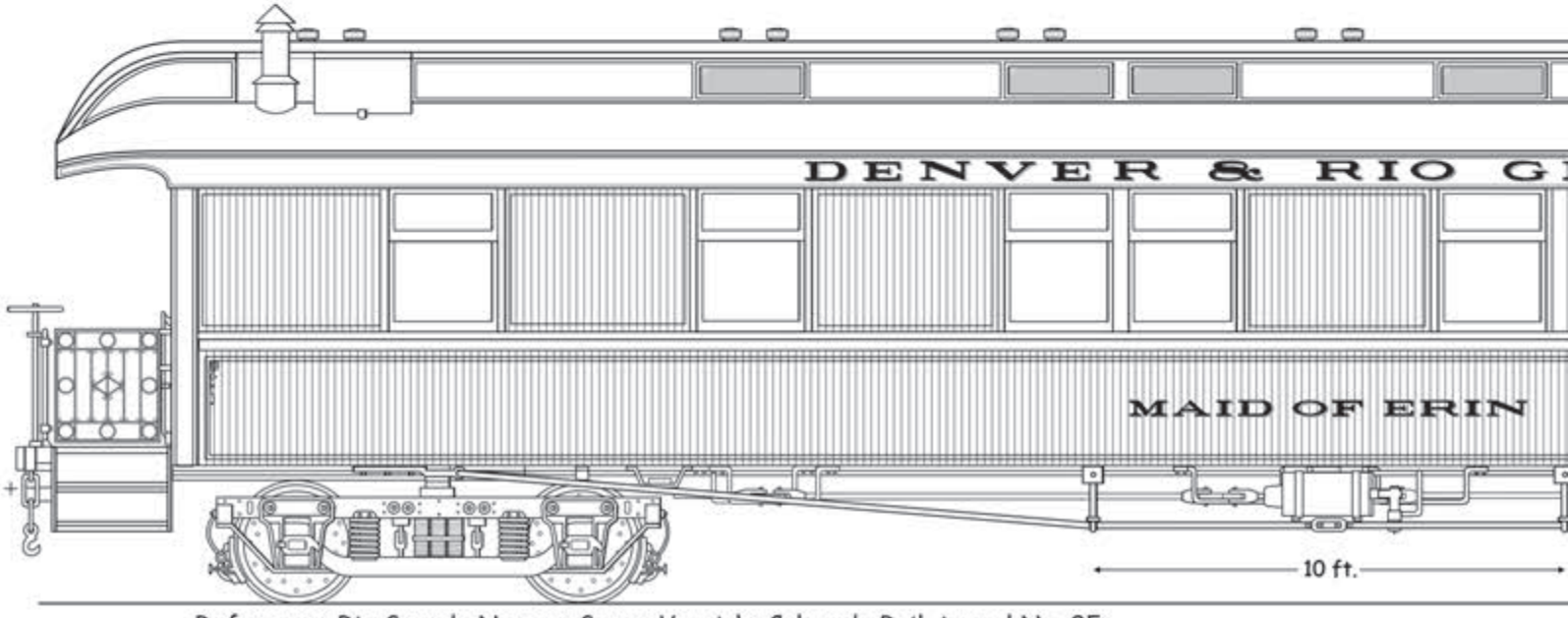




10 FEET

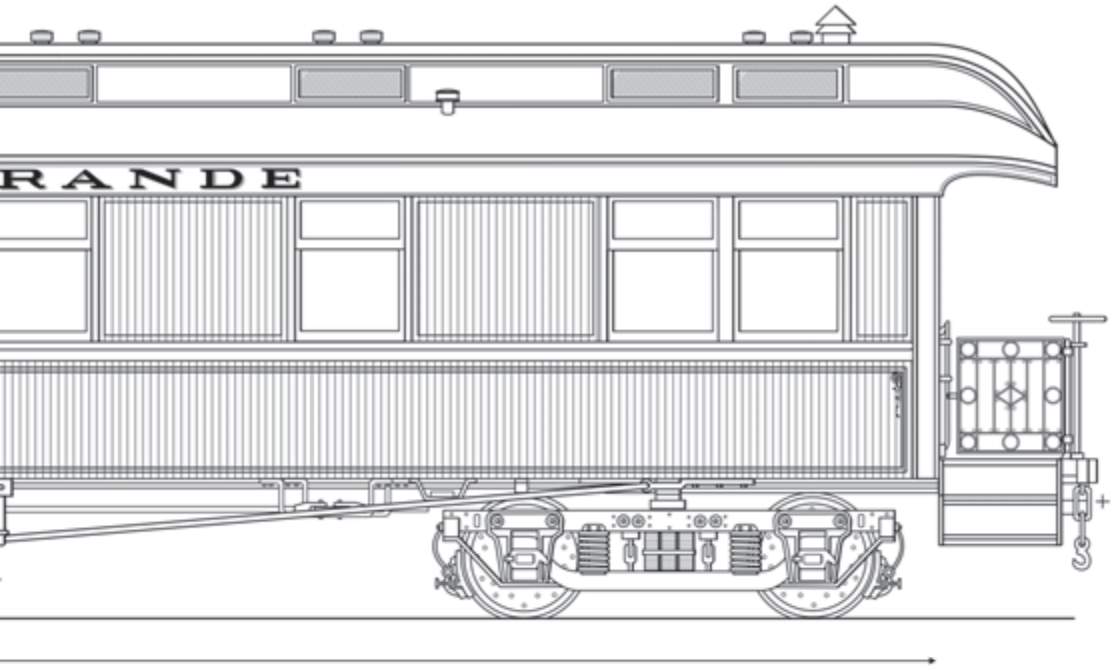


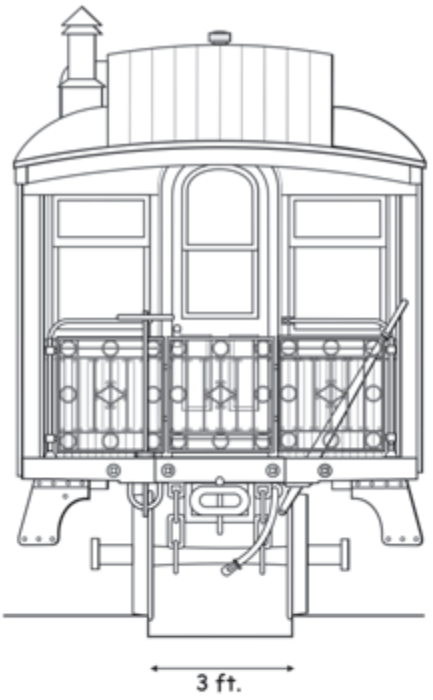
Hypothesized interior arrangement of the Denver & Rio Grande Business Car c.1890

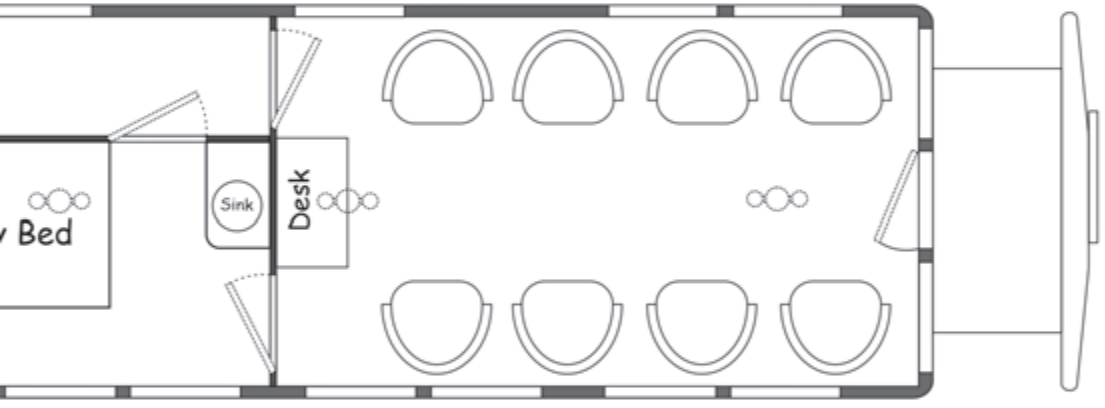


Reference: Rio Grande Narrow Gauge Varnish; Colorado Rail Annual No. 25.

 ISBN 0-918654-75-0

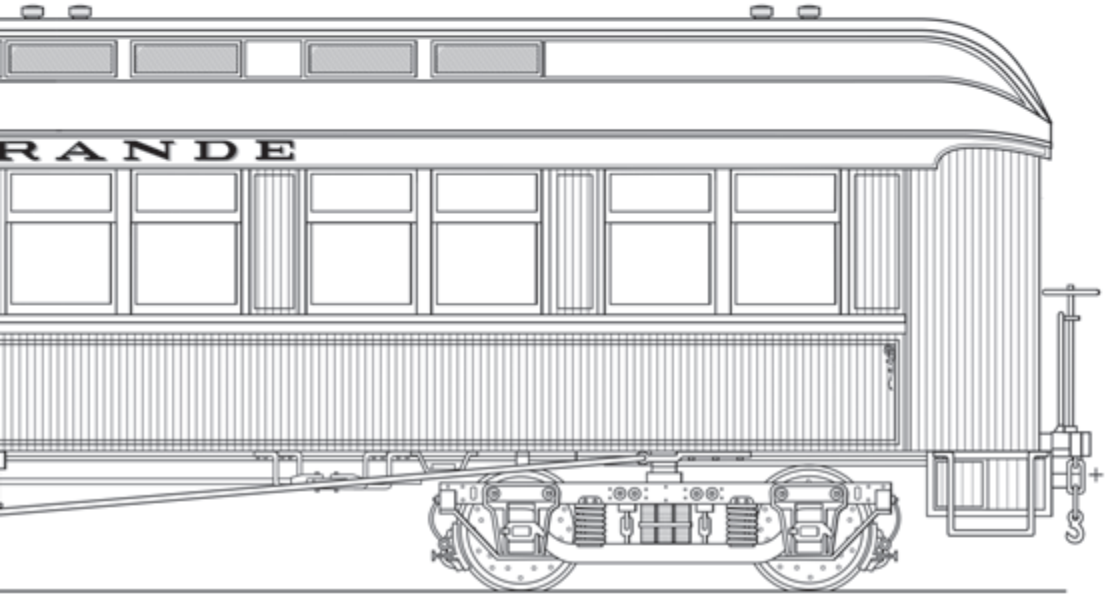


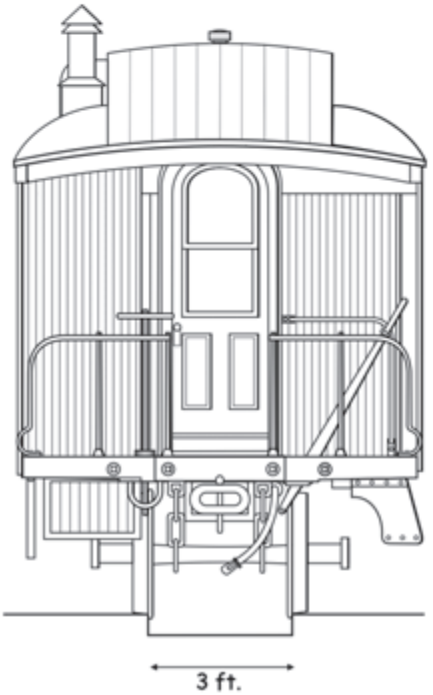




Denver & Rio Grande narrow gauge Business car Maid of Erin c.1890

Maid of Erin was acquired by David Moffat from Pullman in 1886 as private car Mascotte. In 1887 Mascotte was purchased by the D&RG and re-named Maid of Erin. In 1891 the D&RG rebuilt this car to standard gauge and re-named it business car A. In 1906 business car A was loaned to the Western Pacific as a construction business car. In 1914 the car was re-named B-4. In 1916 the B-4 was returned to the D&RG. In 1952 B-4 was dismantled in Grand Junction, Colorado.





THE TWO LARGE STEEL BRIDGES OF THE SIMPSON LOGGING COMPANY OF WASHINGTON STATE

AN ANNOUNCEMENT

by Peter J. Replinger
Photos by the author unless otherwise noted

This announcement appeared in the October 14, 1927, edition of the Mason County Journal:

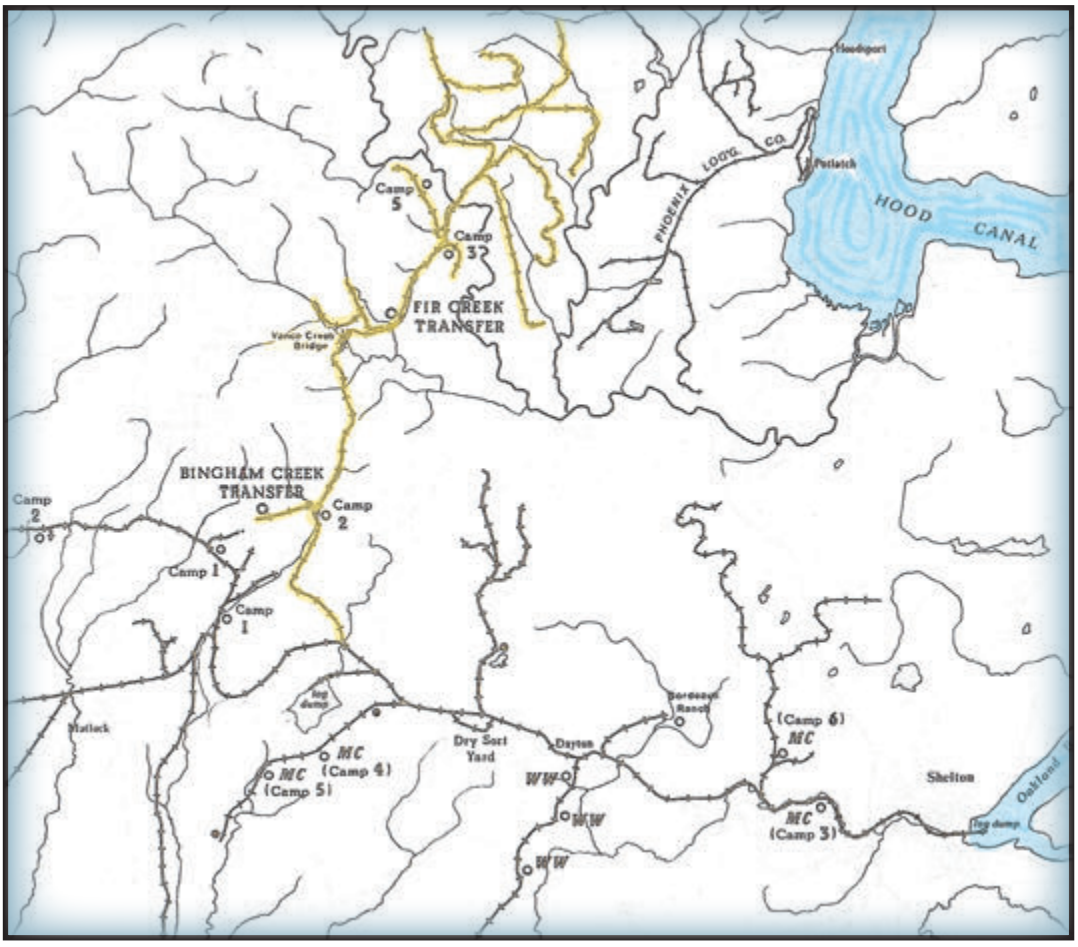
"SIMPSON LOG. COMPANY
LET BIG CONTRACT
Branch Will Extend 18 Miles
into Olympics—
Contractors Now Have
Crews at Work

In advance preparation for opening to Shelton a large body of timber in the upper Skokomish regions of the Olympic mountains the Simpson Logging Company has let the first of several contracts for building an eighteen-mile branch of the Peninsular Railroad. The successful bidder for the first section of 6½ miles of grade was the Allen-Govan Company, recently incorporated for the purpose of carrying through this particular contract and for future operations. The contractors have already started work on their winter's job which includes much rock work and heavy construction found as the foothills are reached. A large shipment of heavy machinery and tools passed through town last week, including two power shovels and camps are being built and crews assembled to rush the work for completion early next summer.

VANCE CREEK BRANCH

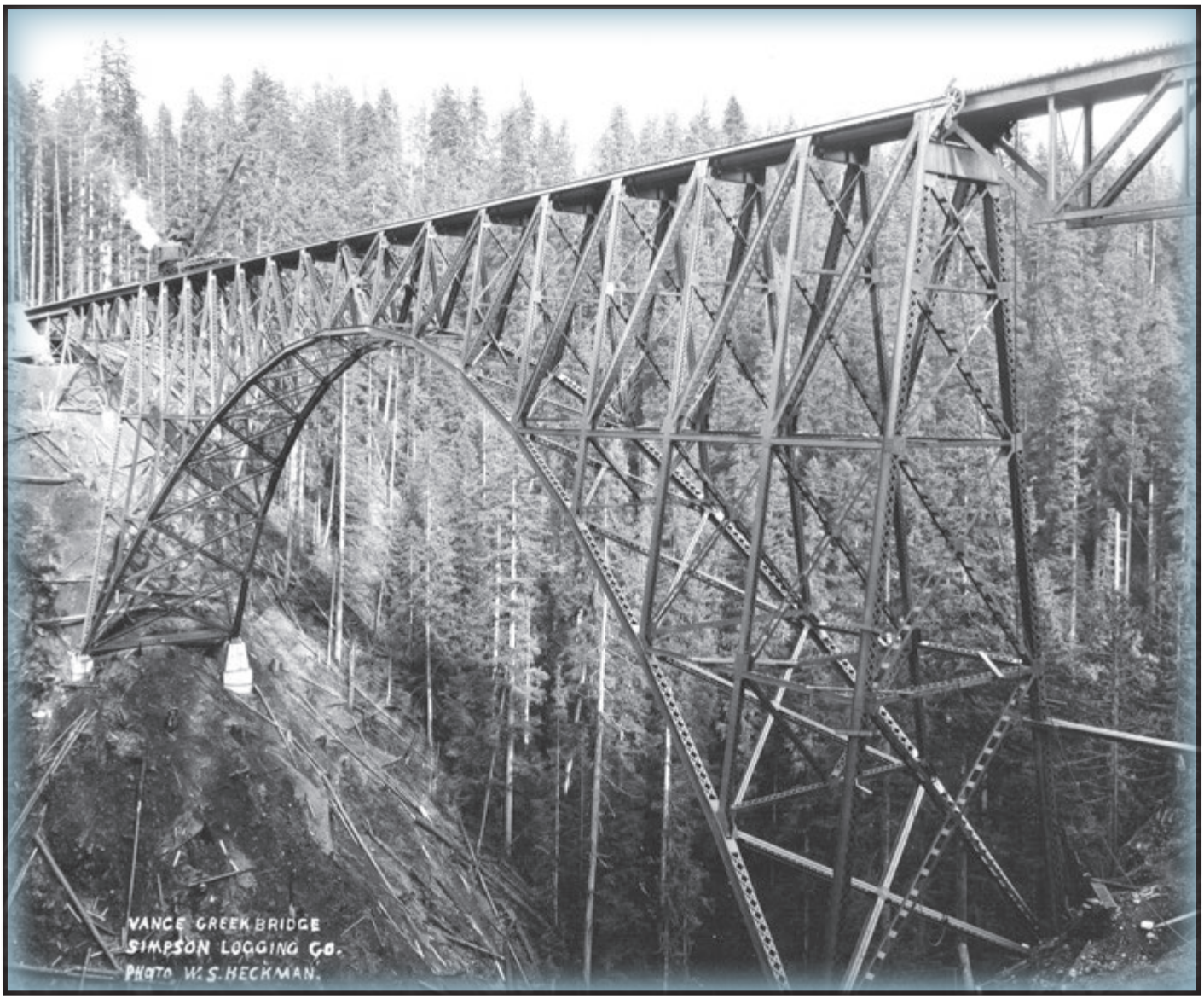
The new branch leaves the Peninsular Railroad near Lake Newatzel and

(text continued on page 54)



This map shows the branch built by the Simpson Logging Company in 1928-1929. The bridge over the South Fork of the Skokomish River was located just one-half mile north of Camp 3. Map by Dale Jost, M.D.

Opposite:
The first canyon to be crossed by the new branch line in 1928 was Vance Creek. The bridge is well under construction in this photo. Photo by W.S. Heckman, Ziegler's Studio and Camera Shop.



(text continued from page 52)

runs northerly toward Vance Creek at the head of the Skokomish Valley but taking a different route than the old feeders used when that section was first logged and keeping higher in the hills. A considerable body of timber will be opened by this first section which can be logged while the remainder of the railroad as planned is being completed, which is expected to be two or more years off. Either a new camp will be added to the operation of the Simpson Company or one of present camps located on the new line, likely the former as the company is gradually expanding in its log production with each year.

The entire line will extend some eighteen miles into the Olympic region and after crossing Vance Creek will turn eastward toward Hood Canal and cross the South Fork of the Skokomish river into the district between the forks where the largest body of timber owned by the Simpson Company is located. It is said that the timber ahead of the branch alone is sufficient for thirty years of ordinary operation.

TWO LONG STEEL SPANS

When the branch is finally completed it is expected that the total cost will be around three-quarters of a million dollars which gives some idea of the magnitude of the project undertaken by a logging concern for a branch line. While the line passes through very rough and rocky country and largely "up and down" more than half the cost will be due to two long and high steel spans crossing the two streams referred to. The main span across Vance Creek gulch will be a 400-foot steel arch, with two approach truss spans making another 400 feet or a total of 800 feet of steel bridge. The

(text continued on page 56)

Above: The final touches are being made to the completed Vance Creek bridge. Photo by W.S. Heckman. Ziegler's Studio and Camera Shop.

Opposite top:
2-8-2 #11 crossing Vance Creek in 1946.

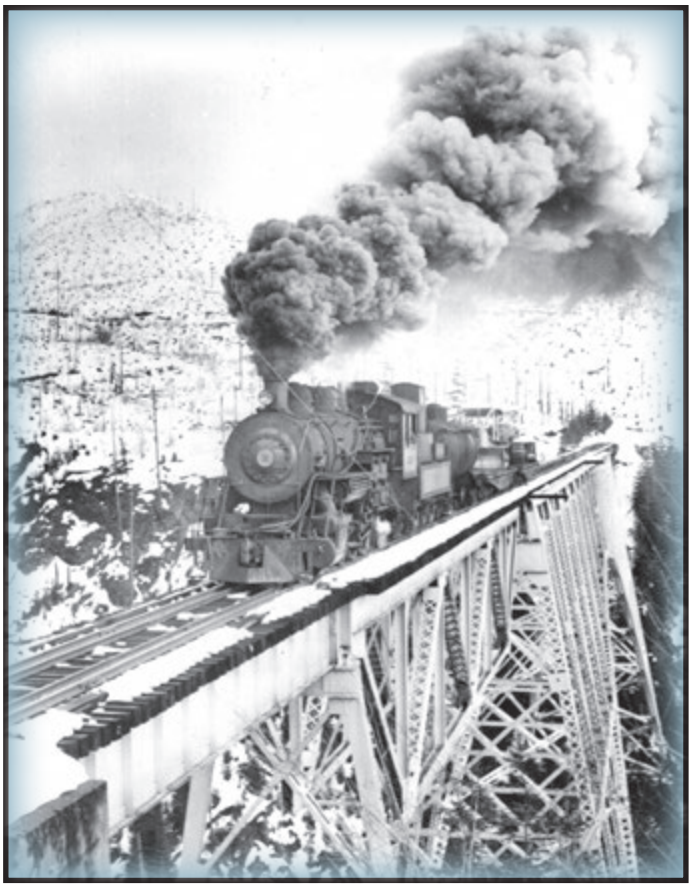
Opposite bottom:
2-6-6-2T #11 crossing Vance Creek in 1950. Photo courtesy of Simpson Archives.

(text continued from page 54)

South Fork bridge will be somewhat smaller, but both will be about 400 feet above the stream beds.

The Vance Creek bridge will be first but because of its now inaccessible location the heavy material cannot be taken in or the work carried on until the Allen-Govan contract is completed and track laid, but it is expected that this, as well the first bridge for which contract has not yet been given, can be finished within the next year after which either contracts can be let in order. This news is of particular interest to Shelton as it means the bringing here of a new and the last large body of timber within reach and out of government ownership, and thus adds another considerable span of life of the local logging and milling operations of which this generation is not likely to see the finish."

The contract for the two big spans was let out to the American Bridge Company of Chicago and the steel was fabricated at the company mills in Trenton, New Jersey. By March of 1929, the first of the two spans, the Vance Creek bridge, had been



Left: Number 3, a 2-8-2, is shown crossing the Vance Creek bridge in 1956. Photo by John Larison.

Below: Since untreated ties were used on the bridge for fire prevention, the Vance Creek bridge had to be redecked every fifteen years. The redecking was just about completed when this photo was taken in 1972. Note that at the time no nets were being used. The Clyde crane operator talked me into climbing up the boom of the crane to get this photo.

Above: The second canyon to be crossed on the new branch line was the South Fork of the Skokomish River that was quite a bit shorter, but somewhat higher than the Vance Creek bridge. It was constructed in 1929 and is shown here with a train loaded with poles pulled by 2-8-2 #11.

completed. The work of designing, fabricating and erecting was so perfect that the arch connected at the contact center within less than half of an inch.

The new bridge is 346 feet above Vance Creek bottom and 827 feet long with its central span of 4232 feet. The grade of three miles long had already been completed and as soon as rail is laid on it, construction of the second span over the South Fork of the Skokomish River would be started.

The second span was completed by September 1929, and stood 365 feet over the riverbed. However, the main arch span was just 366 feet long. This bridge remained in service until 1947 when the upper part of the branch line was abandoned. The bridge was planked over for truck use and the road was later turned over to the U.S. Forest Service, who put a modern concrete deck on the bridge. Today there is easy access to the bridge for those wishing to drive over it.

In the meantime, thanks to a contract with Simpson and the U.S. Forest Service, the Vance Creek bridge remained in operation until 1985 when it was abandoned. By the early 1980s, the bridge was recorded in the Guniniss Book of Structures as the highest railroad bridge in North America. Since then, however, a higher arch span has been located in Mexico. x

Below: Another view of the South Fork of the Skokomish River bridge and a load of poles behind 2-8-2T #12.

FROM THE PUBLISHERS OF Railroad Model Craftsman

Spring is coming and so is the 2022 Garden Trains Annual

Kevin Strong photo

116 Pages of Large Scale and Outdoor Railroading!

Large scale railroading outdoors is magical and our new Annual brings that to you, just in time for Spring. Our second great issue is packed with building and how-to projects along with great layout tours and our Garden Gallery photo feature, filled with great shots from readers like you!
Brimming with information on prototype trains to flights of fancy and whimsy; whatever your large scale modeling style, you'll find the Garden Trains Annual is for you.

Don't miss out. Order your copy today!

$29.95

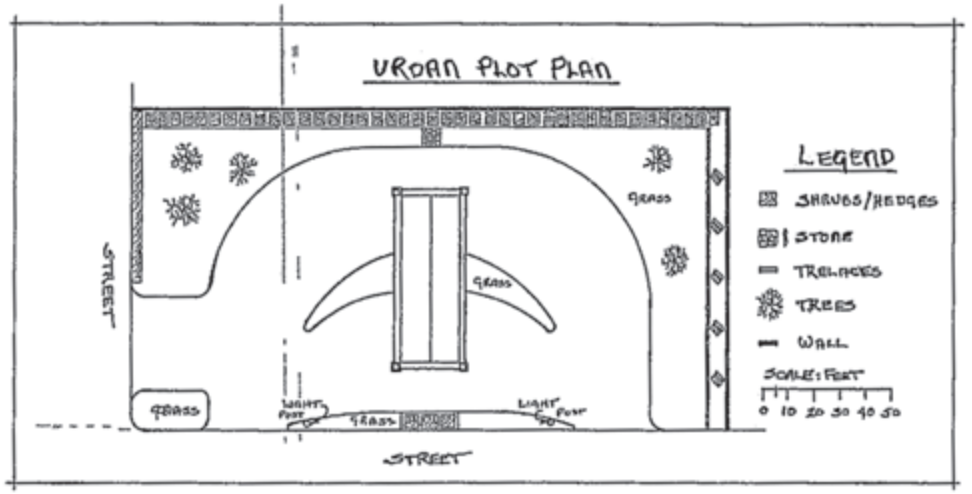
Order item GT22
S/H per book: $8 U.S., $15 Non-U.S.
call or visit our website for
other shipping options

See your dealer or

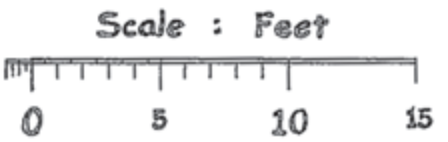
Visit shop.WhiteRiverProductions.com

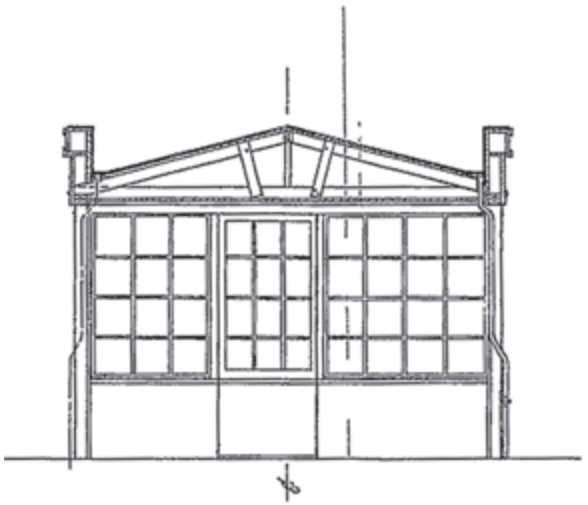
WHITE RIVER PRODUCTIONS
Toll-free (877) 787-2467 • Overseas (660) 695-4433
P.O. Box 48, Bucklin, MO 64631 • info@WhiteRiverProductions.com
GardenTrainsAnnual

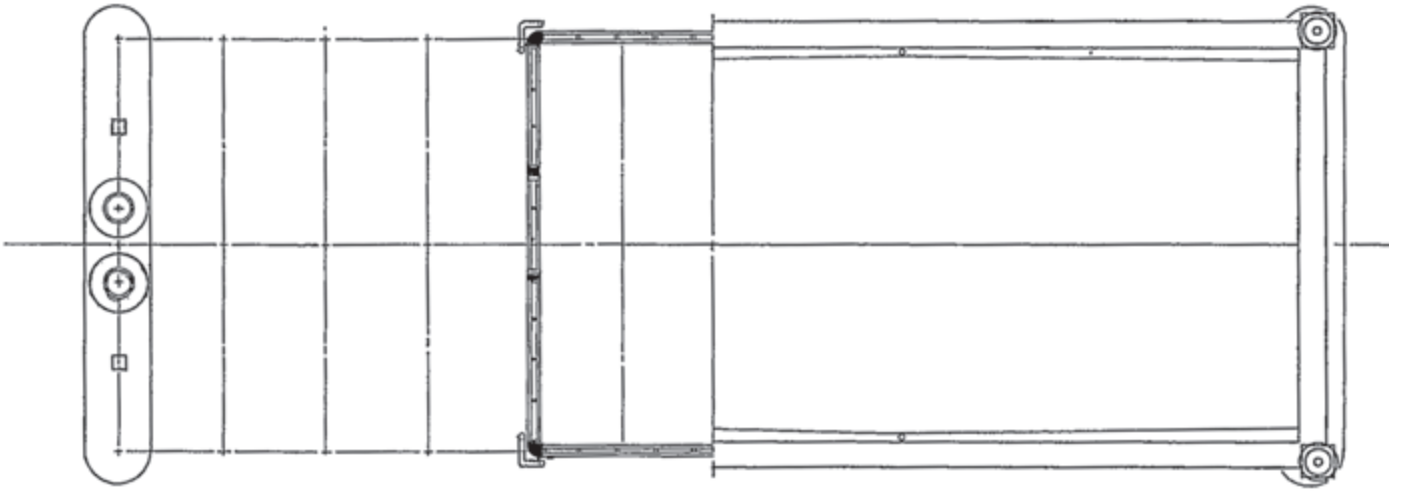
Gas Stations of the 1920s

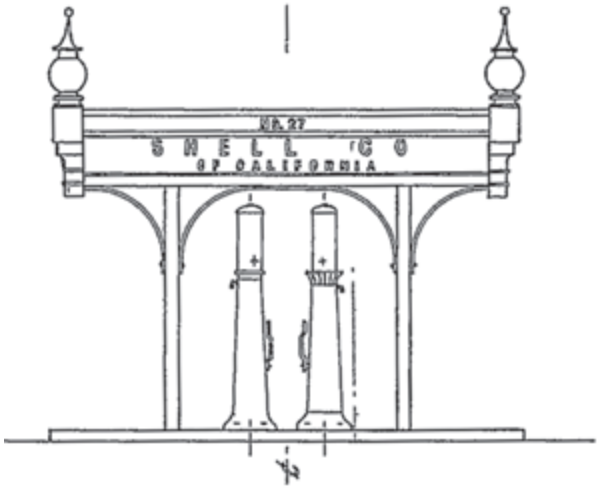


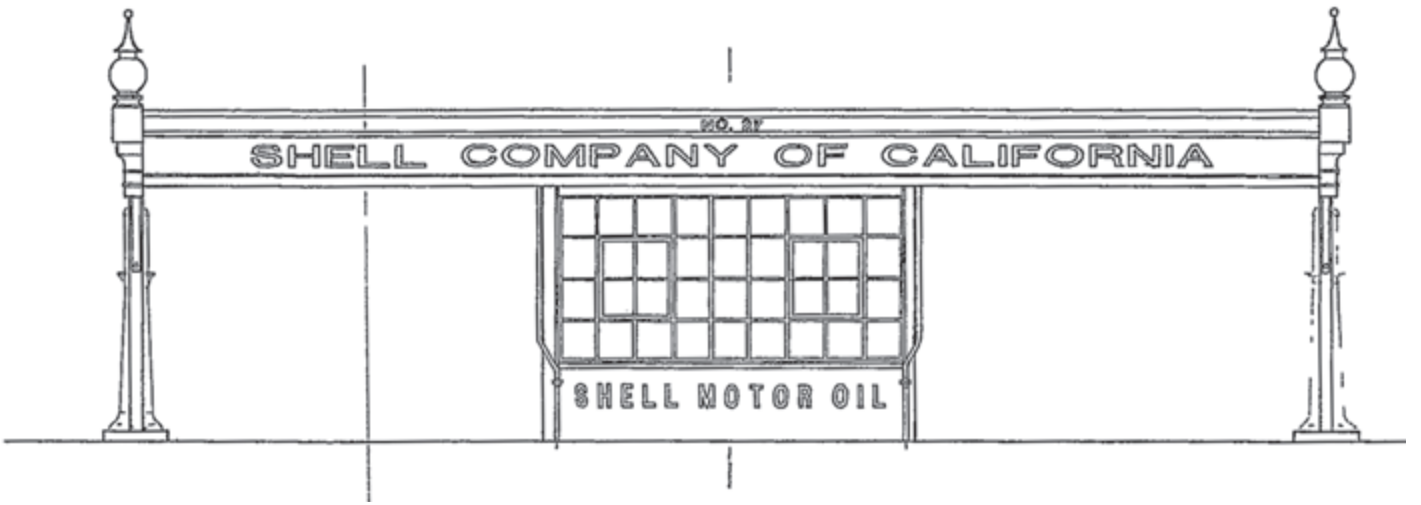
DRAWN BY GARY CAVIGLIA
HO SCALE











PORTABLE

Back in the 1930s–40s in my little town in the Missouri Ozarks, nearly everyone heated with wood stoves or fireplaces. Only the very well-to-do could afford coal as a heat source and the rich had stoker fed central coal furnaces.

As timber was plentiful and the area was dotted with small farms, cutting trees was a cash crop. Except for making railroad ties and a stave mill, stove wood was needed to heat by about 98 percent of the homes and businesses.

Farmers and loggers would cut mostly oak for firewood and deliver it to town by the cord. That is a stack of four-foot logs four feet high by eight feet long. The larger logs were split to a manageable size when it was cut to the length needed for heating stoves. Cook stoves burned wood cut and split from "slabs." This was the side scrap wood left over after a log was run through a sawmill cutting lumber.

These cords of wood were delivered to houses in town by wagon or truck and stacked in the yard so you could see that a full cord was delivered. Even the slab wood, often up to 20 feet long, was delivered.

As a variety of wood stove sizes existed, the four-foot log needed to be cut to a specific size. The old, reliable 2-man crosscut saw was originally used, but by the late 20s, small portable sawmills sprang up to meet this need. They were designed and built by enterprising men all over the country, usually using readily available scrap parts.

A few years ago, I wanted to model one of these portable sawmills for my Sn3 layout and started searching for photos or any information that was available. I contacted the Missouri Conservation Commission, the Missouri Historical Society, and the U.S. Forest Service, but to no avail. I talked to everyone I knew that might have information and came up empty handed.

One of our sons had moved to Idaho several years ago and bought a small acreage off the beaten path between Sandpoint and Cour d' Alene. Talking to him on the phone one time I told him about my search for information on a portable sawmill. He laughed and told me he had one half buried way back in the woods on his property.

Several months later my wife and I flew out to see him and his family and he loaded me up on the back of his ATV and off we went through the woods. A couple of miles from the house we came upon the remains of the sawmill, complete with trees growing up through the frame and lots of half decayed leaves covering it.

We took many photos of it and measurements of the parts. The motor to power it was missing, as was the drive belt, but everything else was intact and the grease fittings were still filled. This enabled me to draw up rough plans for my sawmill.

Not long after I finished my drawings a friend wrote me that there were two videos of portable sawmills on the internet. I quickly looked them up and found that there were two different versions of the feed mechanism of the sawmills. The common thing was they were all powered by a Model T Ford engine.

The version in the woods that I photographed was built on two heavy timbers and looked like it was a skid built to drag through the woods with cast iron pieces that the workings of the sawmill were attached to. The log being cut was laid down in a bed and the log was hinged up into the sawblade.

The ones that I remembered and viewed in one of the videos was entirely built on a Model T frame that had been turned into a trailer with the motor turned sideways. The log was placed on a slide that utilized the model T frame moving into the blade and a coil spring brought the carriage back so the log could be moved over for another cut or replaced with a new log. The saw blade was three to four feet in diameter without any guards. As the operator pushed the log forward, a second man would grab the offcut and throw it into a pile. I don't remember any of the men ever wearing goggles to protect their eyes. Our stoves accepted 18-inch-long wood, so each four-foot log was cut into three pieces. Kitchen stoves, like my grandparents had, usually took 12" long wood and when cutting "slabs" they were cut to this length and then a man would use an axe to split them into narrow pieces.

My job was to quickly clean up the pile of sawdust so it would not kill the lawn grass and then pile the cut wood onto my wagon and haul it to the garage and stack it so it would not get wet or covered with snow. Every day after school I would load my wagon with wood and haul it up a small hill to a covered front porch which was as close to our two stoves as possible. After my father built a fire in the mornings, my mother would keep it going during the day.

The videos on the internet even showed one Model T that looked like it had been a pick-up, the bed removed, and the sawblade and feed attached. The drive shaft would be switched from the differential to a mechanism that would power the blade. The owners of these portable sawmills built up a following of customers and people depended on them to come around every fall and during the winter if they ran out of stove wood. The first one of these trailer-sawmills was pulled by a team of horses. Later a Model T was used to pull it.

Most house fires when I was growing up were caused by chimney fires. Today in that little town most of the houses have their furnaces located in a little structure in the yard behind their house and the heat ducted into the house as a safety measure. Although electricity, oil and gas fired furnaces have replaced coal, many people still heat with wood. Our son in Idaho has electric heat in his home, but still cuts his wood with a chain saw and his wife splits the logs to feed their two wood stoves in their house. x

Above: This is my model portable sawmill. It is mounted on heavy timbers on a Model T chassis. The motor has been turned sideways and powers the open saw blade. Note that there are no safety devises or that the operators are not wearing eye protection. It is interesting to me that there was a coil for each sparkplug just like my Ford Escort today, but they would last for years and all you did was clean the plug occasionally.

Left: Here is the old portable sawmill in Idaho on our son's property in 2017. Trees were growing up through the wood frame designed to drag through the forest. This had the saw mounted on the opposite side than all the ones that I remember and a smaller blade. Instead of a slide to push the log through the blade it has a log holder that lifts into the blade. My son and I had to cut some small trees and bushes to get into the device so I could measure and take photos.

THE SILVER SPUR MILL

FOLLOWING A PROTOTYPE — SORT OF

by Dr. Gregg Condon, MMR
Photos by the author

My wife, Pat, and I stood at the bottom of our basement stairs. To our right was the recently completed crew lounge. To our left was the empty train room—a blank canvas, as it were, upon which to paint a layout. She said to me, "I suppose right here will be the end of a peninsula with the track running around the edge of it!" I replied rather mindlessly, "I suppose so." She said, "Everybody does that; it's a cliché in model railroading! Your peninsula will be nearly 40 feet long; you'll never miss three feet of run, move the turnback loop away from the end of the peninsula and mask it in a cut; narrow the end of the peninsula into a teardrop which will be eye-appealing and improve traffic flow into the aisles. Then build your signature mining scene right here where it will be the first thing visitors see." This from the astute eye of a lady who has never built a layout but has visited many. I had to agree with her on all counts.

While I purport to be modeling the Rio Grande Southern—and mostly I am—this scene is pure fiction. I built it to be representational of mine scenes across Colorado. I named the place Silver Spur. In building the mine and mill I followed a prototype—sort of.

CENTENNIAL MILL

Title photo: The front of the Centennial Mill appealed to the author as a good model-building candidate.

Above: Fortunate repairs to the mill contrast with the original siding and lettering.

Below: Someone wanting a larger model could calculate dimensions based on the size and number of windows.

On a visit to Georgetown, Colorado, in 2010 I noticed again the Centennial Mill at the south edge of town. I'd given it scant attention on many Georgetown visits over the years, but suddenly I realized how rare a Colorado ore-reduction mill has become! The first photos show the mill. It's rare that a mill has been maintained. Apparently about half the corrugated siding has been replaced to the extent that the original lettering is barely decipherable.

I never intended to model the Centennial Mill per se. I didn't bother to take any measurements. I figured I could calculate dimensions off my photos and good guesses would be close enough.

SILVER SPUR MILL

My model mill, Silver Spur Mill, is based upon the Centennial Mill. It's not a scale model of it. My overall objective in building my RGS layout is to capture the spirit of the prototype. I consider the depots to be focal points, and so all five of my RGS depots are as faithful to prototype as I could build them. Beyond the depots, some things are "pure" prototype, and some are representational fiction. I'm trying to portray 30-40 miles of prototype in 3-4 scale miles—something's gotta give, as the old song says.

Three photos show my model of the Silver Spur Mill. To build it, I pawed through my boxes of window castings until I found some that looked like the Centennial windows. I started at the corner of

a sheet of paper and placed the windows in an arrangement that looked like the front of the Centennial. I guessed that the center door was eight feet square. I laid a scale ruler under my row of windows and concluded that a structure width of 36 feet would work. Looking at the prototype photos again and trying to keep a sense of proportion, I quickly concluded that the building's footprint would be 36- by 48-feet.

For structure height I felt that the front wall should be ten feet high. By eyeball, I decided that from ten feet at the front, the roof would slant up to 15-feet above the ground at the base of the clerestory wall, and that it should be 22-feet at the top of the clerestory wall and rise from there to 28-feet at the peak toward the rear. I jotted down those numbers and started cutting out parts. Not only did I not make a scale drawing of the structure, but I also didn't make any pencil marks on the building material. I used to do that: calculate where the ruler should be, pull a pencil along the ruler, and then pull a hobby knife along the pencil line. Then it occurred to me: if the ruler is in the right place, forget the pencil and just pull the knife along it—make the cut and get on with the project!

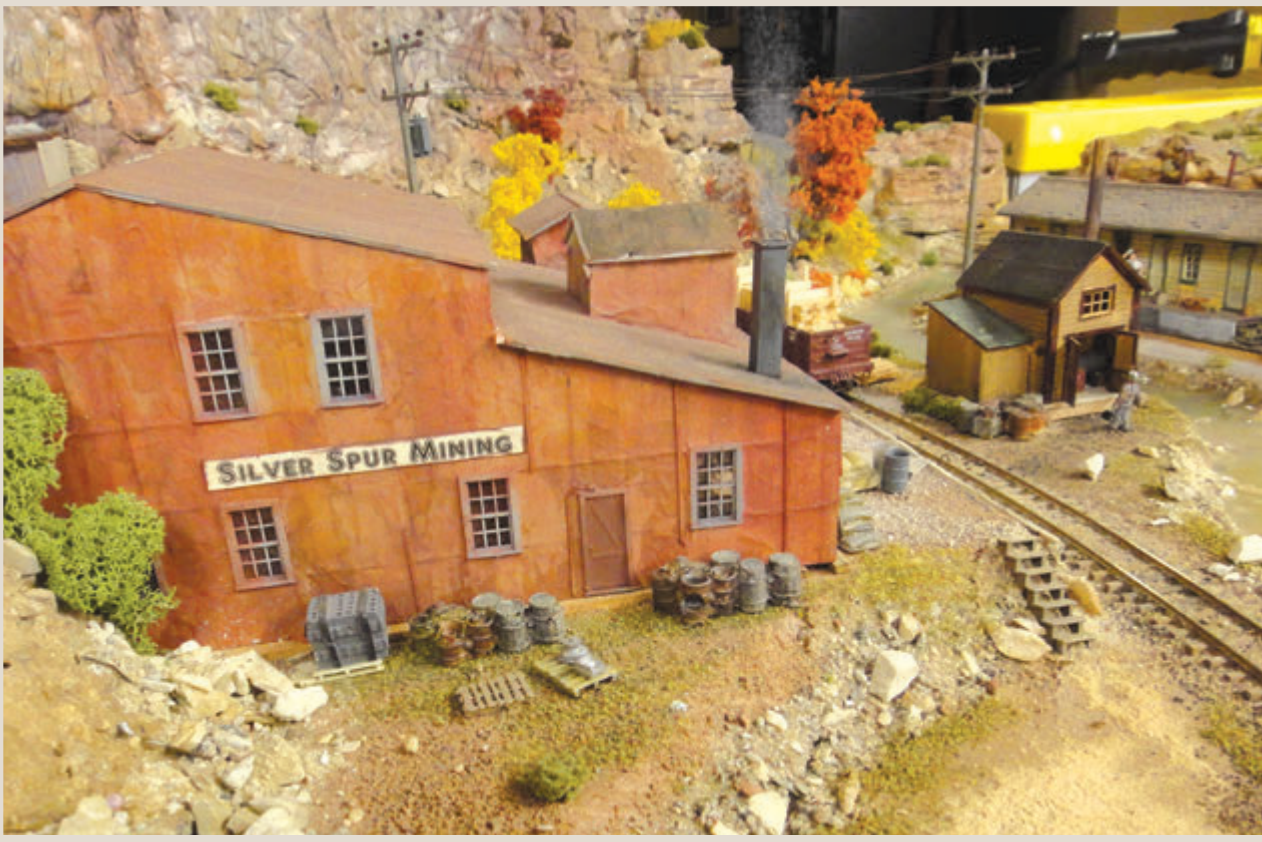
WHAT ELSE AIN'T PROTOTYPE?

While I wanted to make the mill somewhat like the prototype in size and proportions and overall appearance, I also wanted to select components that would be fast and easy to work with. Above all, I wanted to use materials I had on hand. The windows on the model look right to my judgment, but my model has not nearly the number of windows as the prototype. I suppose my model is smaller than the real Centennial and doesn't have room for all those windows. I placed windows in an arrangement that I thought looked logical.

(text continued on page 66)

Below: The model Silver Spur mill seeks to capture the spirit of Colorado mills in general without being an exact model of the Centennial Mill.

Above: The author imagineered an outside stairway leading to the snowshed over the mine track.



Right: A Seuth smoking chimney brings a bit of lively animation to the Silver Spur mill.

(text continued from page 64)

Corrugated metal sheeting is almost universal on Colorado mine structures. I wanted some on my mill and found I had just enough Sylvan plastic material to cover the roof. Another very common siding material for mine structures was tarpaper. After the roof and windows were on, but before the tarpaper siding was applied, I sprayed the all-plastic model with Model-Masters Dark Tan paint from a spray can. That served as the base color of the windows and roof. The paint gave some tooth to the walls so that my paper siding would stick. For tarpaper, I cut scale three-foot-wide strips of tissue wrapping paper. Then I applied Aileen's Tacky Glue over one wall at a time and spread it evenly with my finger, and then pressed the tissue paper onto it. I let the tarpaper strips run long and then trimmed the excess with a hobby knife. Next, I glued scale 1x2 strips over the tarpaper seams. Finally, the siding was brush painted boxcar red.

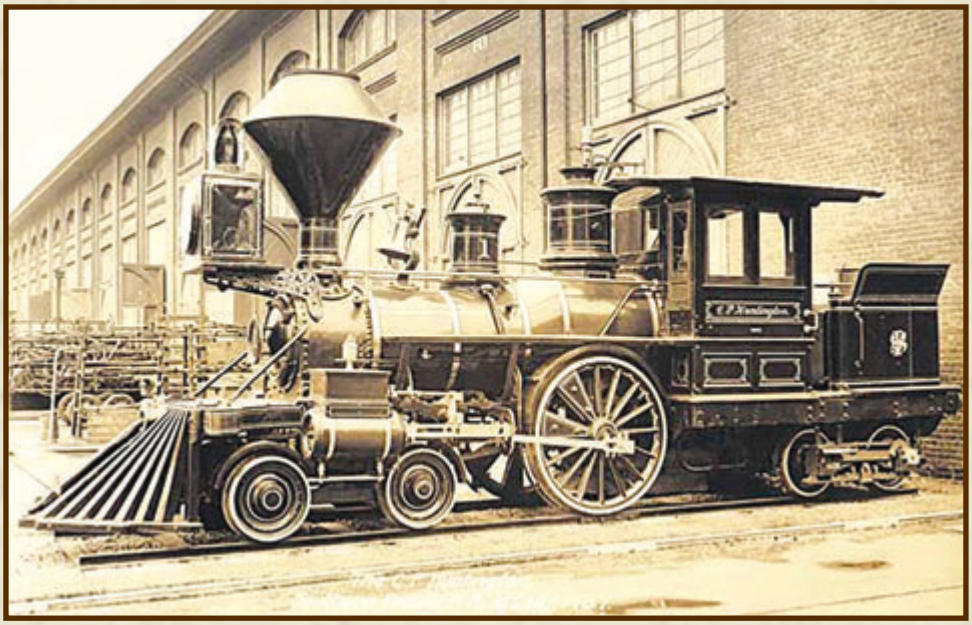
FINISHING

The final finish on a model is most important in imparting character. The roof was given several brushings of either Doc O'Brien's or Bragdon powders (I use them interchangeably) in dark rusty red, and brown, and some black colors. I rubbed on more black around the chimney than other areas. This was followed by brush-painting my standard liquid weathering solution which is sometimes Micro-Mark's gray or my own concoction of rubbing alcohol with a few brushfuls of flat black and a bit of gray swished in it. What proportions? I have no idea; I just experiment until I think it looks right. If you want a worn glazed look on a model, spray on Testor's Dull Cote while the alcohol is still wet. Neat indescribable effect!

For the tarpaper sides, I dry-brushed Doc O'Brien's red and some brown, and along the base of the walls some lighter brown and even some yellow. This was all blended and muted by brush-painting the weathering liquid. The windows were given a soaking of the weathering liquid on top of the Dark Tan spray paint. The real wood door was given the liquid weathering stain.

An appropriate interior was constructed as far as could be seen through the open front door and lighted with grain-of-wheat bulbs. The chimney is a Seuth smoke unit. Behind the mill I carved a poor-rock pile out of two-inch insulation foam. The rock pile has a snowshed over the mine track. The shed runs from the mine adit to nearly the end of the pile where supposedly the newest additions to the pile are out in the open. This snowshed is next to the back of the mill so that mine cars can dump directly into the mill. This is a very common Colorado arrangement. There is no evidence that an aerial tramway delivered buckets of ore to the Centennial Mill nor was there a railroad siding behind it; it must have been fed by wagons or trucks that dumped ore into the back of the structure.

And there it is—my Silver Spur mill and mine. It's not a model of anything specific; it's a model typical of everything commonplace. That's what I was after. I hope you're encouraged to let your imagination wander! x



AN HOn3 "BICYCLE" LOCOMOTIVE

SO LONG AGO

by Gary Bothe
Model photos by the author

THE INSPIRATION

The term "bicycle locomotive" is sometimes applied to a locomotive having only one pair of driving wheels. While a number of such locomotives were built during the early years of railroading, perhaps the most famous is the C. P. Huntington.

Drawing from a number of sources, an article on Wikipedia states that the C. P. Huntington was built by the Cooke Locomotive Works in 1863, purchased by the Central Pacific Railroad in 1864, and was in use during construction of the western part of the transcontinental railroad in the late 1860s. The Southern Pacific bought the locomotive in 1871 and initially used it for light duty in northern California. It was rebuilt several times over the years, and was even used as a line-side weed-burner at one point. In later years it spent much time on the sidelines and was nearly scrapped in 1914, but was rescued and cosmetically restored for display at the Panama-Pacific International Exposition in 1915. It appeared again, running under its own steam, at the opening of the new Los Angeles Union Station in 1939. A home movie of this event shot by Ward Kimball is available on YouTube: https://la.curbed.com/2014/4/21/10111634/union-station-los-angeles-opening-day-film.

The SP eventually donated the C. P. Huntington to the state of California in 1964, and it is currently on static display at the California State Railroad Museum in Sacramento, California.

Title photo: The C. P. Huntington circa 1880s. Public domain photo.

THE MODEL

Decades ago, Bob Davison, an accomplished modeler here in Pensacola, Florida, commissioned me to scratchbuild an HOn3 "bicycle" locomotive based on the C. P. Huntington. HO models of the C. P. Huntington had been imported by M. B. Austin, Key, and perhaps others over the years, but all of these were standard gauge, as was the prototype. Bob, however, wanted a narrow gauge version, which was not commercially available. So, after some discussion, Bob produced a drawing for me to work from. Actually, "scratch-assembly" is probably the best term for what I did on his project, since we agreed that I would use commercial parts wherever possible. I combined these parts, along with a scratchbuilt boiler and frame to produce a one-of-a-kind model. Building of the locomotive proceeded over a period of about six months with consultations on details, the purchase of various parts, and long sessions at the workbench. Finally, the locomotive was delivered to its new owner, and for many years thereafter, I gave it very little thought.

Then, two years ago, when I returned to Florida after spending the summer in my home town in Wisconsin, I was shocked to learn that Bob had unexpectedly passed away. Many of his models and other hobby-related possessions were now at the hobby shop where he had been employed and were in the process of being sold, with all the proceeds going to his estate. Looking through the boxes with very sad feelings, I encountered a collec-

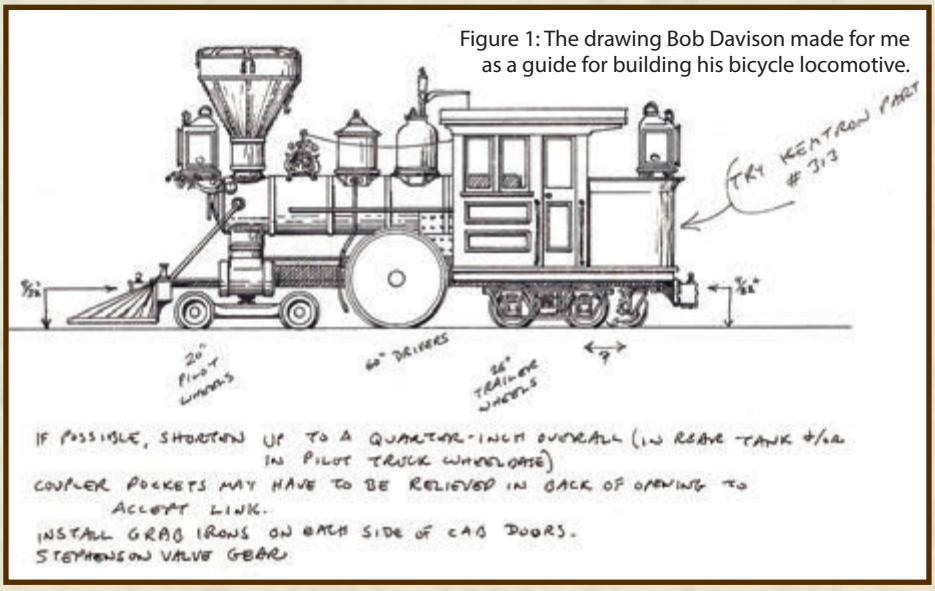
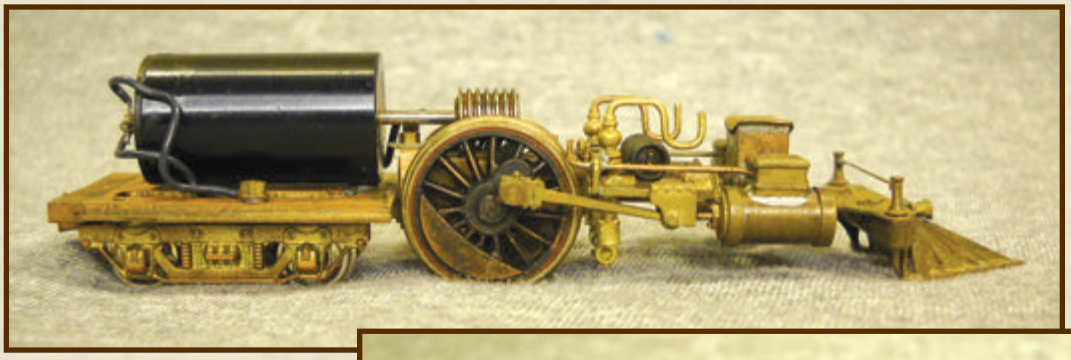
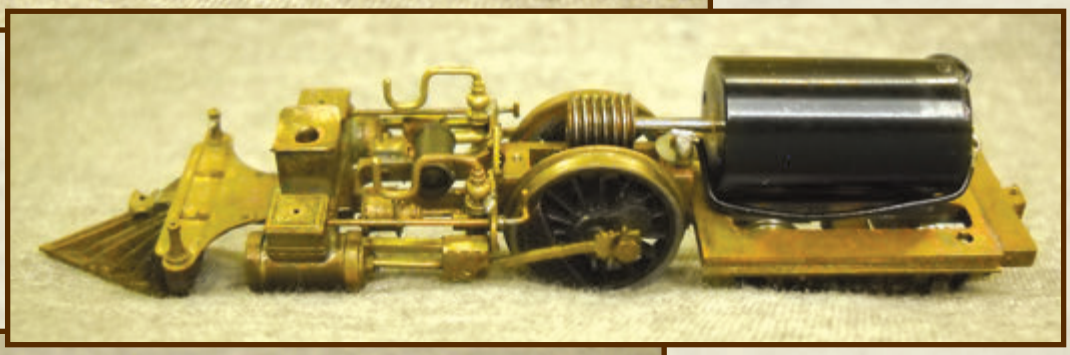


Figure 1: The drawing Bob Davison made for me as a guide for building his bicycle locomotive.

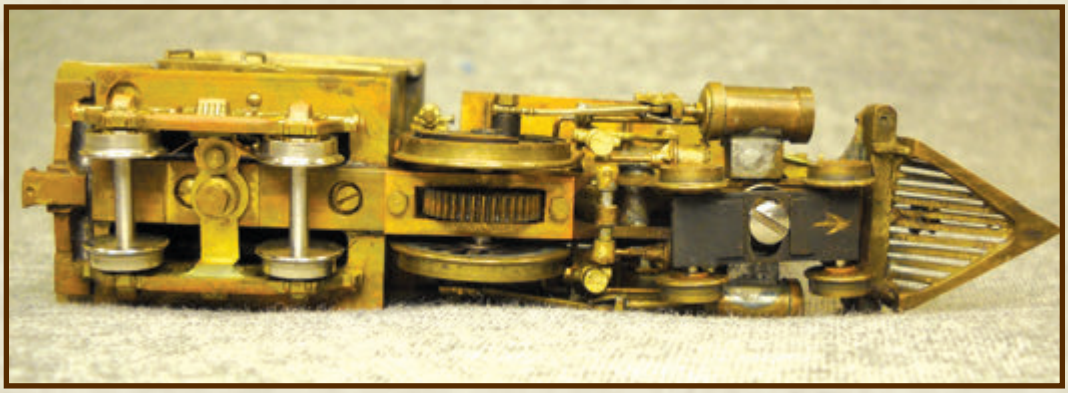


Left and below: Right- and left-side views of the mechanism of the HOn3 bicycle locomotive. Rear truck is from a passenger car. Drivers were narrow-gauged from a standard gauge model with turned down oversize to something close to RP-25 contour.



Left: Left-hand view of the completed locomotive. Boiler was turned from solid brass with a slot milled out of it to clear the drive worm. The cab, fuel bunker, domes, bell, headlight, whistle, and stack are some of the many commercial parts that were used to keep the project from getting out of hand.

Right: Right-hand view of the finished locomotive. More commercial parts, such as the air pump and smokebox front are visible.



Left: Underside of the mechanism. Major frame components were machined from brass bar stock and then screwed or soldered together. The rear truck swivels, and the front truck also have side-to-side movement to ease negotiation of curves.

Right: Two of Bob Davison's superb HOn3 handiwork. Note the swaybacked boxcar. Bob was a true artist, and worked at a local hobby shop. He was a go-to expert on just about anything the store supported: model railroading, Dungeons and Dragons, military models, war gaming, and more. x

Lightweight Pond Development And Detailing

Designed For Moving

by Sam Swanson
Photos by the author

One of several pandemic-duration projects I've completed recently was scenicking a pair of HO Free-mo modules representing a central Ohio shortline in the 1920s. There were several scenic features I wanted to model in a lightweight fashion (but that were sturdy enough to withstand handling during transport, setup, and takedown). The feature this article focuses on is modeling a pond along the right-of-way (like a beaver pond that developed along an abandoned right-of-way that a pair of friends in the Free-mo group photographed on a prototype-detail scouting trip). Steps for painting and texturing water from a pond carved out of foam insulation, painting shore and water details (such as duckweed and clouds), along with adding a fallen tree and the more traditional details of cattails, lily pads, tree remnants, and bank brush are described in the following photos and captions.

Title photo: In late September, motor-truck G&LR 8 ambles along the beaver pond and rock outcropping, which is one of the more scenic corridors along the shoreline.

Right: With the track laid through the center of the 16-inch-wide module and the rock outcropping developed on the far side; the pond was carved out of the 2-inch foam panel on the near side. The bank surrounding the pond was sloped with white lightweight spackling compound and is essentially a triangular fillet between the pond bottom and the scale 3-foot 6-inch vertical cut made into the foam. With this lightweight approach and no material to be poured into the pond, your cut for the pond can be as shallow as the water surface you desire for the scene.

Left: Following the initial ground cover application of soil and fine ground foam forming the pond's bank, the water depth pattern (in deep blue and shallow green shades) was painted with craft acrylics. Painting with flat or matte acrylic allows dips and imperfections to be seen and then filled with lightweight spackling (available at home improvement stores, under a variety of names and produced by Dap). Keep filling and sanding (400 grit paper) until the surface of your pond is flat and smooth.

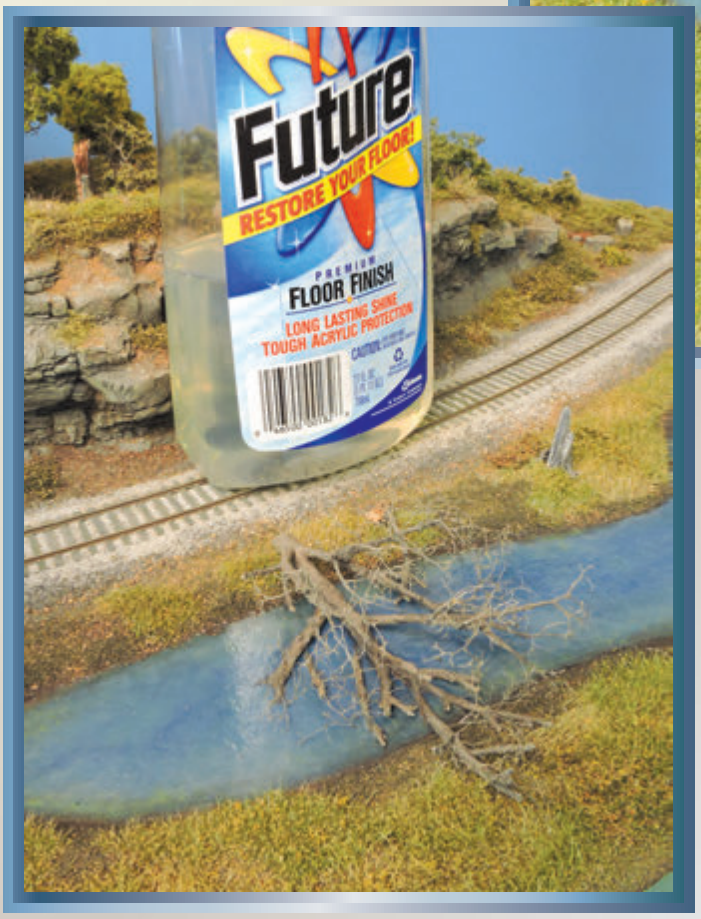
Right: Prior to painting, texturing, and overcoating the pond on your module or layout, it's beneficial to determine these on a test panel (or several panels, as they can help you decide what you find most appealing). I used a piece of foam core board with a bank finished with spackling, fine ground foam, and brown acrylic that simulated mud above and below the water surface. I then experimented with blue and green shades to simulate deep and shallow water, and then washed the entire area with a light blue acrylic stain that looked like reflected clouds. And lastly, to indicate duckweed accumulations along the pond's edges, stippled on some light green acrylic with a stiff brush. The paint was then sealed with five coats of Minwax polyurethane (satin allows seeing any imperfections) and lightly textured using Mod Podge dabbed on with a soft brush to indicate shallow ripples.

Left: The starting point for the fallen tree is a length of sagebrush 6-inches long, which had a trunk diameter that seemed appropriately proportional to the height of the tree. To form the still-rooted portion of the trunk with the broken section, I made a series of 1/8-inch or so vertical cuts a scale 8 feet from the bottom of the trunk, and then used two sets of pliers (wrapped in cloth to minimize bark damage) to break this area. The stump portion was further defined with a hobby knife blade to make it look as though a storm microburst snapped the trunk, and roots were added with epoxy putty. I then used a razor saw to cut off a scale 4-foot 6-inch segment of the trunk, so the scene can include a portion of the fallen tree that was cleared from the ballasted right-of-way.

Right: I gathered some SuperTrees to make fine upper branches, and some additional sage brush to make larger branches. Those elements, along with the stump, were brush-painted an intermediate grey acrylic. I then trimmed down and sanded a portion of the trunk and major branches flat (so they could be glued on top of the pond to simulate being submerged). Once that contouring was completed, I added the fine upper branches by gluing SuperTree twigs into place with Loctite CA and then using thick tube-style acrylic to make the transition (yellow ochre color in this case). To make delicate upper branches, completely strip the seeds and seed-related fuzz from the SuperTrees twigs with tweezers. This may take several attempts to produce useful branches, as often you'll remove a good bit of the branch detail in the process.

Left: During the trimming and sanding process, test fit your tree frequently (at this point of water development, only the paint and urethane layers formed the pond). To ensure the same location between fittings, I softened the pond bank with water and made a lengthwise divot with the tree's trunk. Another way to make the upper and side limbs match up with the water surface is to bend or even break them (but not to the point of separate pieces). Reinforcing the bend with CA after you've found the proper shape will finalize the tree arrangement. Then install and paint the tree's fine branches at your workbench (as you'll likely find that easier, along with eliminating the chance to splatter your pond with grey paint).

Left: Before gluing the tree into place, I added very shallow ripples with gloss Mod Podge to the narrow half of the pond. Originally, I was going to use Mod Podge to secure the truck to the banks and water surface, but went with Aleene's Tacky Glue instead (as it was thick enough for toothpick cleanup of the oozed glue). Pin the trunk and branches as necessary to get the waterline surfaces to match up and use Mod Podge to touch up any glue smears or gaps.

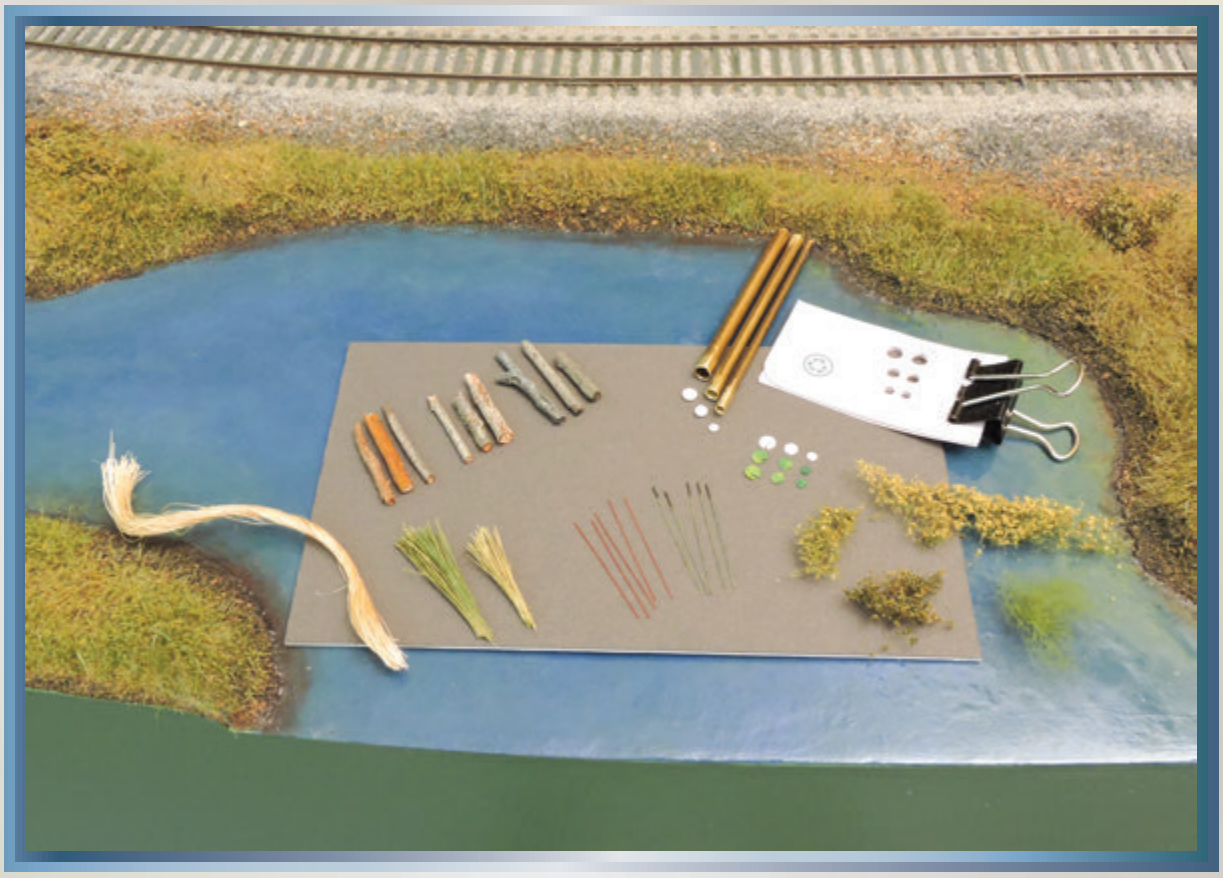


Above: Once you are happy with the basic layout of the tree, add additional limbs emerging from the water. Segments of large branches were cut flat, with smaller branches inserted into holes. Use the bark color to paint submerged branches on top of the water. The slight ripples didn't seem to affect the representation, and be sure to look at a twig underwater to get an idea of how the submergence distorts the above-to-below water alignment. I also glued the cut portion of the trunk (which was placed to make it look as though it was pushed down the bank after cutting).

Left: With all the branches above and below water installed and painted, touch up the water surface by brushing on additional Mod Podge sealer or using an acrylic floor finish like Future (or current Pledge product, Revive It Floor Gloss). I prefer a clear floor acrylic overcoat, as it seals any tacky nature of the Mod Podge (which seems to be particularly evident in high-humidity environments) and allows easy cleanup from dust and fingerprints for those visitors that want to touch the pond or use it to steady their camera or phone during model railfanning shots.

Right: With the fallen tree completed, adding a couple of islands in the wide portion of the pond was the final feature. Painted foam scenicked with static grass and a ring of fine ground foam to simulate bank mud work well for the islands. I completely scenicked each before securing into place with tacky glue. Because the foam was relatively thin, and I used full-strength white glue to hold the static grass, they both slightly warped during the drying stage. But a bit of pressure allowed them to lay relatively flat on the surface. Fill any gaps with a paste made up of diluted white glue and fine ground foam, and then use brown paint to paint in the underwater portion of each island's bank.

Below: Cattail reeds and stems, stumps, lily pads, and bank foliage are the scenic details used to supplement the fallen tree. I made the reeds from jute twine stained and dry brushed with green and yellow acrylics. The cattail stems were cut from Playstreet 0.010-inch rod, which is a red plastic that takes solvent-based paint well. After painting them green, top them off with a length of brown acrylic to form the cattail head. For three sizes of lily pads, I filed the ends of brass tubes sharp and used them to punch circles from stacks of thick paper. After cutting a V-shaped slot in each paper circle, I painted both sides green with swirls of yellow. The stumps are twigs from a variety of shrubs and trees in my yard, and the bank foliage was made from tufts of polyfiber textured with fine ground foam held in place with super-hold hairspray.



Right: With the islands' groundcover completed and surrounding water touched up, the stumps, cattail reeds, lily pads, bank foliage, cattail stems, and island trees were added in that order to select areas of the pond and bank. Carefully punch holes into the water surface to accept the stumps and reed clumps and use a dab of Mod Podge to secure them. Then add the lily pads atop dots of Mod Podge. Check the water surface and make any repairs or adjustments prior to adding the bank foliage (which can be installed to hang out over the water to simulate an overgrown bank near the end of the growing season). And once you are happy with those details, white glue the cattail stems into and around the reed clumps.

Left: Additional details, such as lily pad flowers (using colored coarse foam), saplings, and animals can be added to complete your trackside pond. A few of those features, including saplings on the pond islands, light purple lily pad flowers, and some Busch creatures (frogs, salamanders, and butterflies from their Small Animals HO 1153 set) are visible around the pond, that extends most of the length of the 4-foot-long modules. x

THE ALPINE HOSE #2 FIREHOUSE on my On3 COLORADO CENTRAL & SOUTHERN

A FIREHOUSE FOR ALL ERAS

Title photo: Alpine Hose #2 can be seen today at the edge of Georgetown's central business district, after the addition of the bell tower.

by Dan Windolph
Photos by the author

Fire was a constant threat to the many wood buildings in early Colorado boom towns. Because of this, the firehouse became the most important building in town. Georgetown was no exception, but it had several firehouses and avoided the major fires which almost destroyed other towns.

One of the most unusual firehouses in Georgetown was the Alpine Hose #2. It was a basic utilitarian structure until a local mining magnate donated a bell, and a tower was built to support it. This addition completely changed the look of the building, making it one of the town's most interesting structures.

I first became aware of the firehouse when I modeled Colorado narrow gauge in HOn3. I found plans for it and intended to model the building, but switched to On3 and filed the plans for future use.

Because I want to concentrate mostly on mountain scenery, I only have one town on my On3 Colorado Central & Southern layout. But I knew I had to model Alpine Hose #2. I enlarged the HO plans to O Scale and started construction. I tried to locate the man who drew the plans all those years ago so I could reproduce them for this article but was unsuccessful.

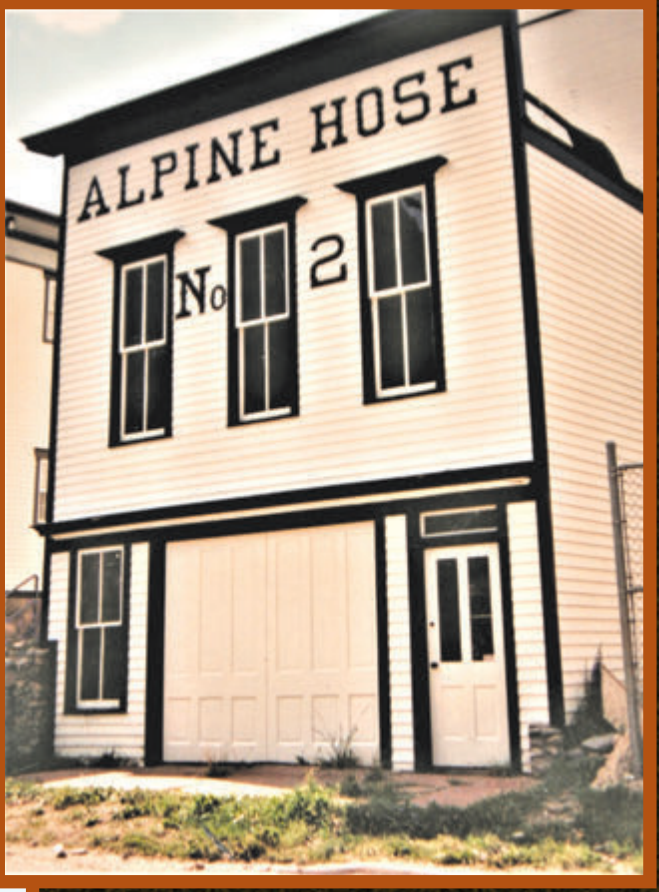
I used Northeastern scribed siding for the entire structure and braced the interior to prevent warping. Grandt Line door and window castings were also used, although some of the window castings were modified to resemble the prototype more closely. I have an ongoing problem with thin wood warping, and I worried the thin main doors would be affected. So, I cut a piece of .032-inch brass sheet to the size of both doors in a closed position, then glued wood strips on it to represent the door panels and trim. This might seem excessive, but the doors certainly won't warp.

The bell tower was the most time-consuming part of the project. The bottom section is regular scribed siding, but the upper part has diagonal siding at an angle to each other and had to line up correctly to look right. The tower roof had the same style of angled siding, although it only shows on the underside. Grandt Line castings were used for the railings.

Even with a telephoto lens I couldn't get a good photo of the actual bell, so I had to guess at its shape. I turned brass rod in my Sherline lathe to a shape and size I thought looked like a bell. I hadn't intended to hollow it out because the bot-

(text continued on page 81)

Right: This classic black-and-white structure has been unchanged for more than a century.

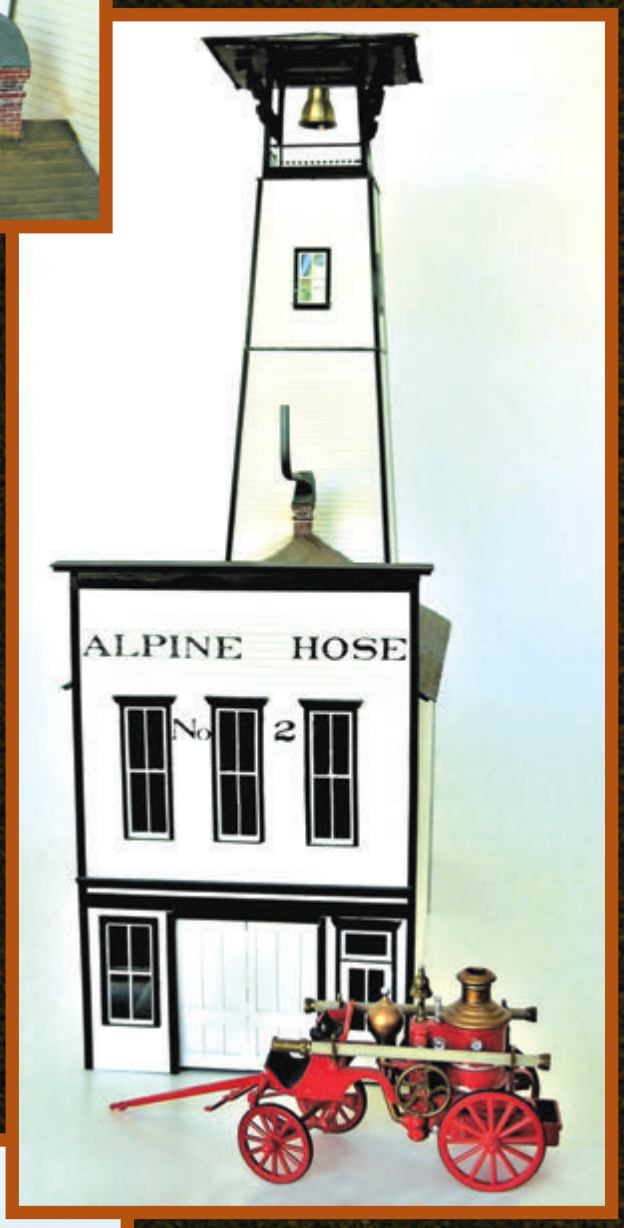


Above: This model of Alpine Hose #2 will be the tallest and most noticeable building in my town, just as in real life.

Right: This side view clearly shows the stone foundation under the bell tower.

Right: The unusual stovepipe addition to the chimney is constructed of brass sheet and tubing soldered together to form a single unit.

Above: Alpine Hose #2 was built against a small hill behind the bell tower. My model will sit on a flat surface, so I added a stairway from Grandt Line.



Above: The addition of a horse-drawn fire apparatus in front of the building shows it in the 1800s.

Left: This horse-drawn fire apparatus is from an old Revell kit manufactured in Brazil, with instructions in Portuguese. It appears to be slightly larger than O scale, but because it's so unique I'll keep using it.

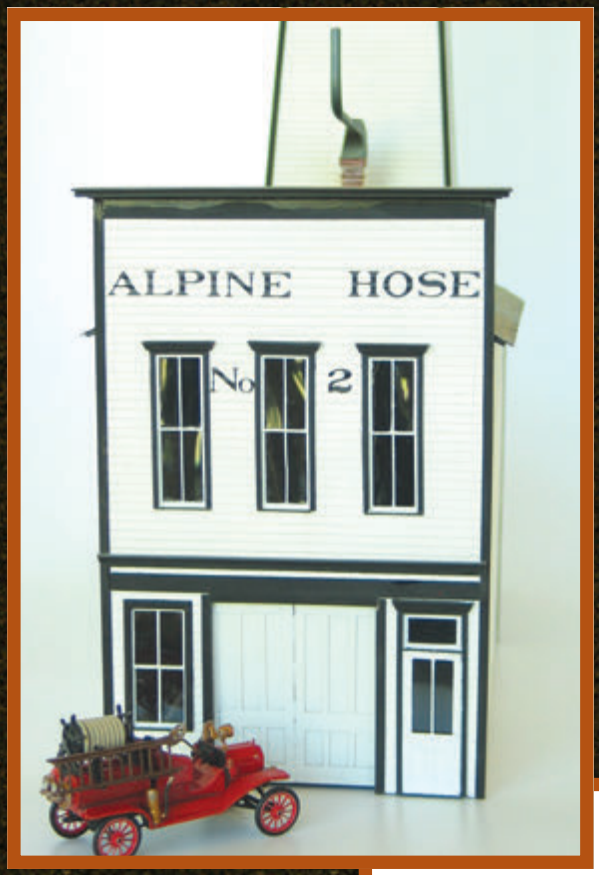
(text continued from page 78)

tom wouldn't be seen when it was hung in position. But I decided to see if I could open the interior, using a boring bar and finishing with mounted stones in my motor tool. I used calipers to keep checking the wall thickness and, much to my surprise, the bell will produce a small "ding" when struck. I decided to quit while I was ahead and didn't try to make a clapper. The actual bell tower was used to hang wet canvas hoses to dry.

I constructed the unusual stovepipe extension on the chimney with brass sheet and tubing soldered together and glued to a Grandt Line chimney. I used Grandt Line shingles on both the main building and the bell tower roofs. I painted them black to resemble the prototype more closely, rather than staining them.

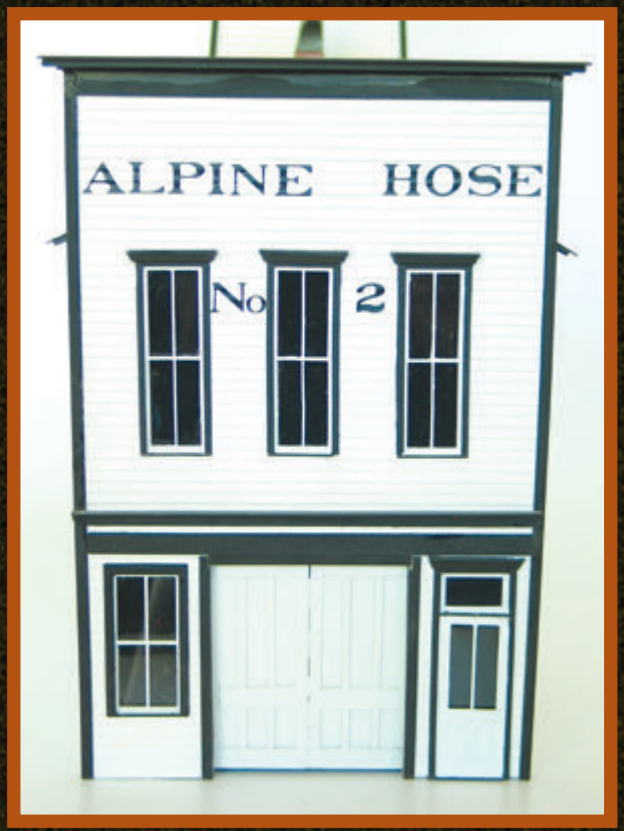
As I was photographing the prototype building, I was struck by the fact that it's virtually unchanged since it was built more than 100 years ago. It's no longer used as a firehouse, but it certainly could be. This makes it an ideal building that can be modeled in any era. I can go from the 1800s to the 1900s just by changing the fire-fighting equipment parked in front of the building, as shown in the photos.

Georgetown is a fun place to visit, having a variety of shops and restaurants, with the Georgetown Loop Railroad a major attraction for railfans. The town center, with its many original wood buildings, especially the iconic Alpine Hose #2, is a must-see for the modeler interested in authentic architecture from such a fascinating era. x



Right: The 1914 fire truck brings the fire station into the 1900s.

Right: This interesting fire truck is from National Motor Co. The company produced a series of white metal kits based on a Model-T chassis that are now available from Wiseman Model Services. The hose is solder wrapped around the reel and painted with craft paint.



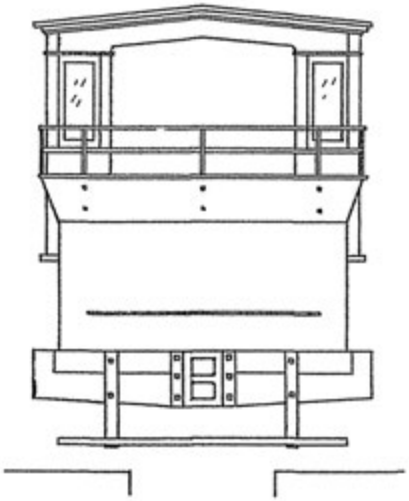
Left: The name on the front of the building is Woodland Scenics dry transfer lettering. The doors and windows are modified Grandt Line castings.

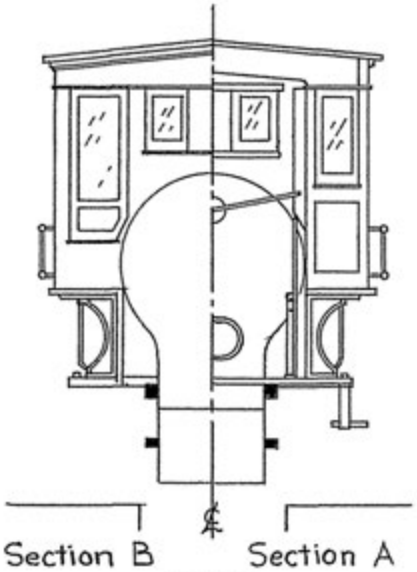
Bodie & Benton Ry 0-4-2T No. 4

Scale: 1/4"= 1'-0" Drn. by: Herman H. Darr 2-10-78 ©

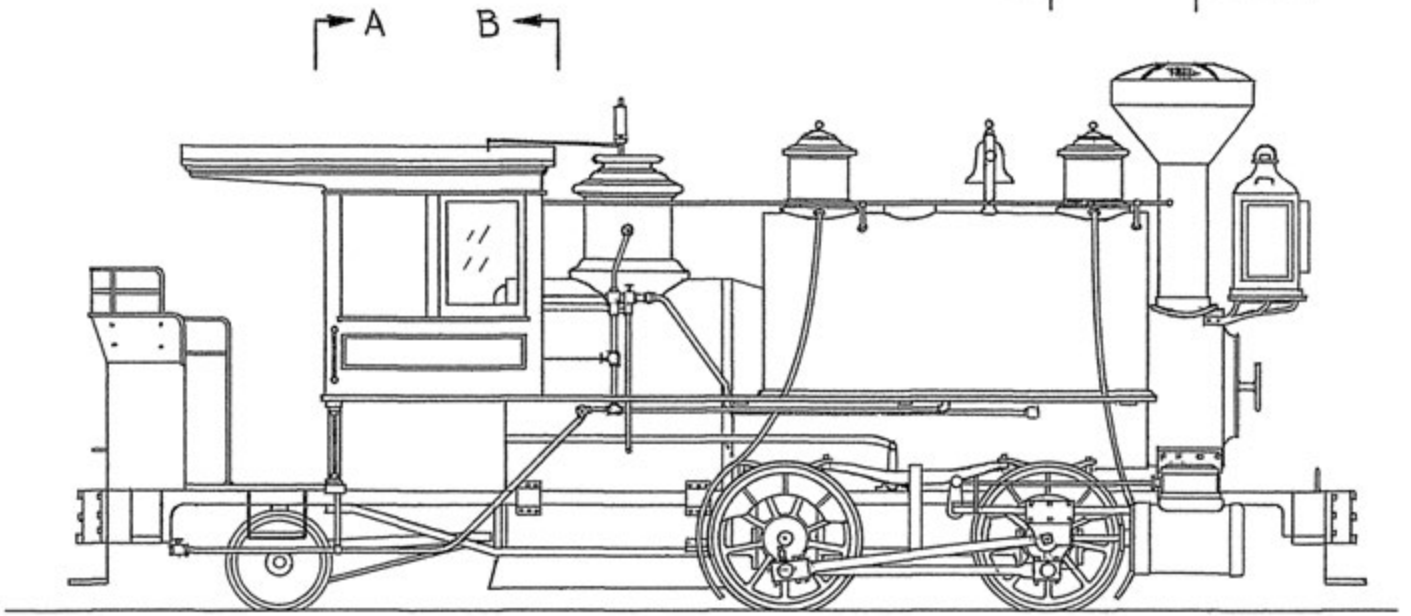
Builder: Porter 1882, c.n. 494; gauge 36"
36" drivers; cylinders 12x18; wt 17-20 tons
scrapped 1918; named "Bodie"

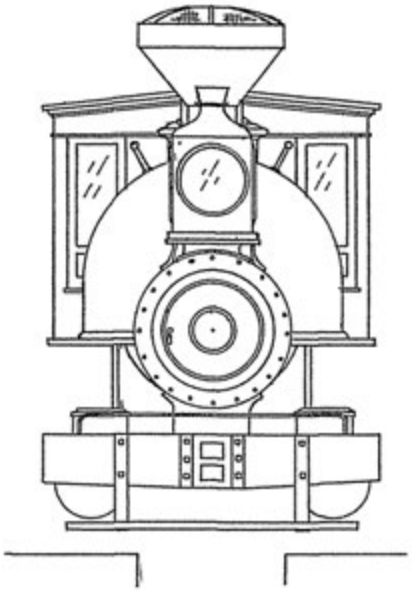
Ownership list.
Bodie & Benton Ry & Comm. Co. #4 (1882-1893)
Bodie Ry & Lumber Co. #4 (1893-1906)
Mono Lake Ry & Lu. Co. #4 (1907)
Mono Lake Ry #4 (1907-1917)





Section B Section A



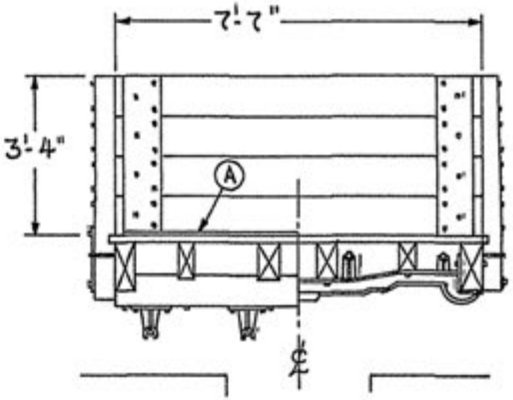


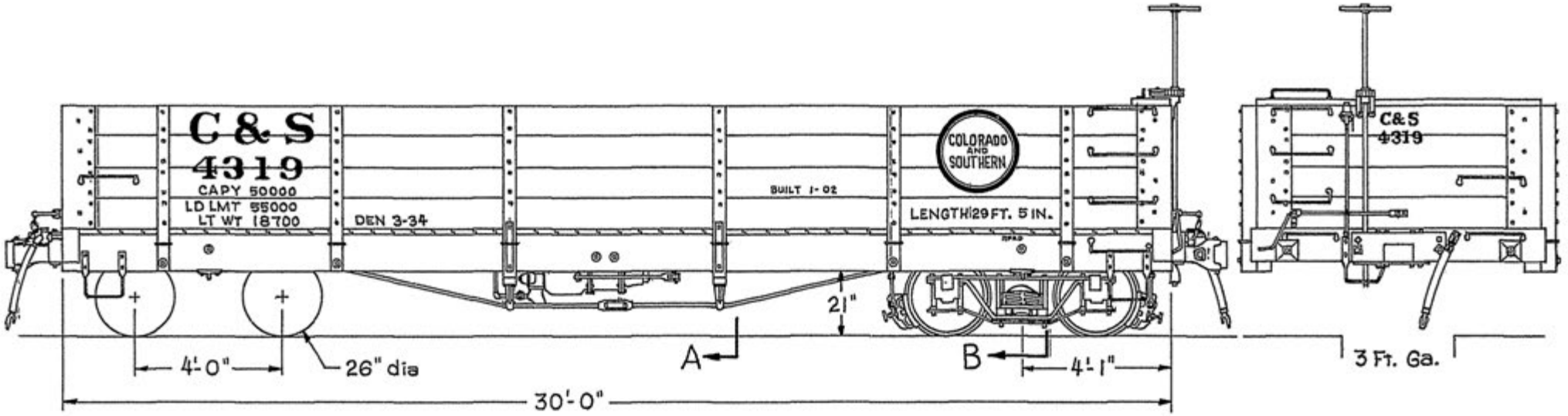
Colorado and Southern
Narrow Gauge Gondola no. 4319

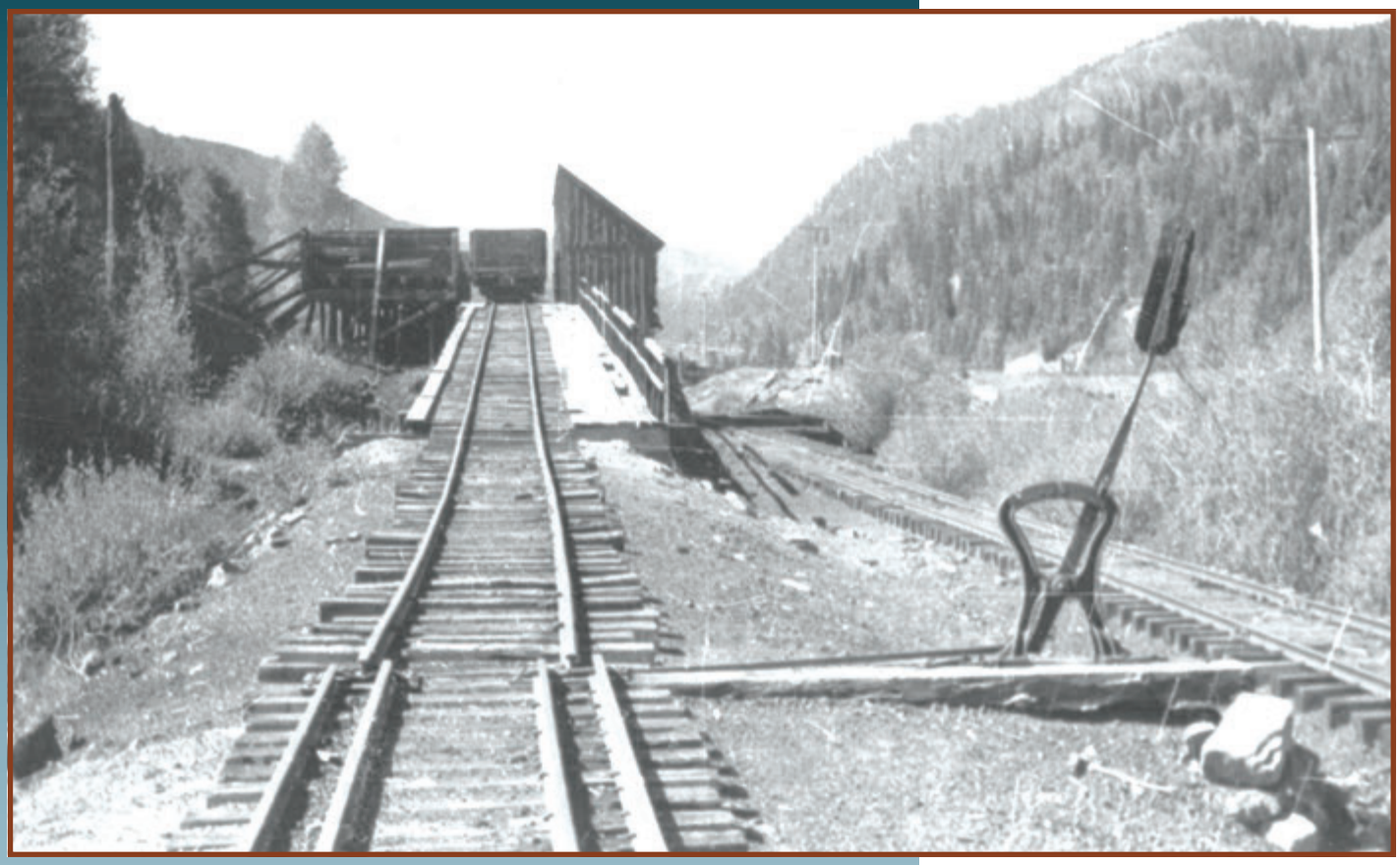
Scale: 1/4" = 1'-0"
Drn. by: Herman H. Darr 28 Nov. 1980 ©

Built by C&S 1902 numbered 4246-4407'. No. 4319 on display Central City, Colorado. Flat cars no. 1078-1098 built by C&S 1902 are identical except no sides and stake pockets at stake locations.
Air brakes: 8x8 cylinder (see dwg CS-100 for brake rigging)
Paint: box car red, white lettering

Note A: Tie rod on two center stakes only







RICO COAL POCKET—PART 3

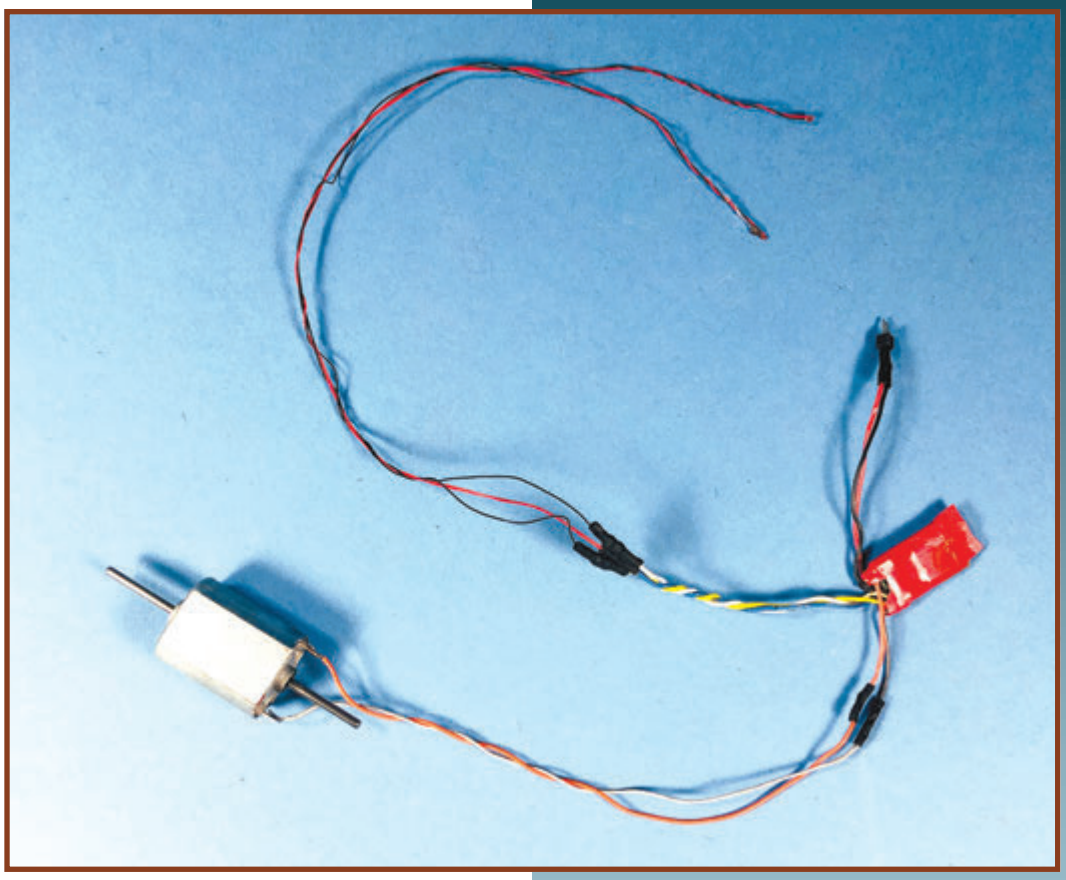
THE FINAL PART

by Craig Symington, MMR
Photos by the author

Title photo: South facing view of the RGS Rico coaling facilities as seen standing behind the derail switch stand between the lead track and the main line. RGS Rico, CO (7/3/1938). Photo credit Friends of the Cumbres & Toltec Scenic Railroad, Richard L. Dorman Collection, John W. Barringer III, RD140-060.

In the July/August 2020 and September/October 2020 GAZETTEs I wrote a two-part series on building an HO scale model of the coal pocket that once existed at Rico, Colorado. This article is the long awaited third and final part to the story. When I originally built the coal pocket, I knew that because of where it would be located on my layout, it would be very difficult to spot cars during an operating session. The grade of the delivery track and the location of the coal pocket being out of reach from my operators meant there was no way to manually stop the coal cars from rolling away. From the beginning, I had planned to install some sort of mechanical mechanism for holding cars on the grade. In this final installment I'll describe how I accomplished this.

As I was thinking about the problem, it became apparent that I'd have to have some sort of moveable car stop in the track that the coal car could rest against. I felt that a wire sticking up through the ties just enough to catch an axle would be the only practical solution. This wire would have to retract to allow cars to be spotted and removed from the coal pocket too. I decided that a switch machine would work, and better yet, a Tortoise Switch Machine would be ideal since it has auxiliary electrical contacts for controlling accessories. A wire sticking up through the tracks



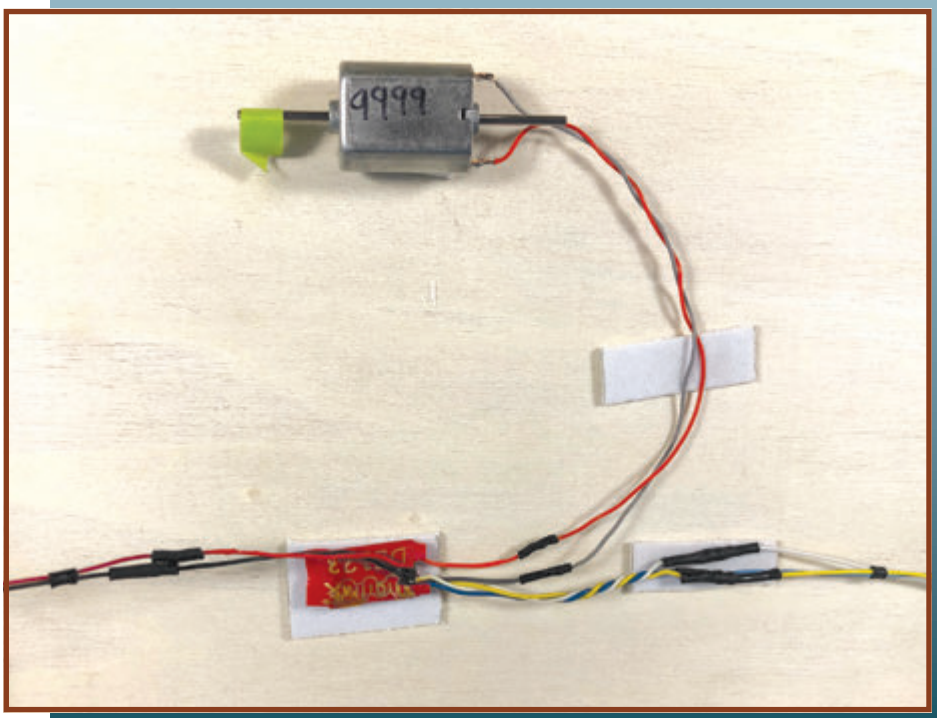
Left: Using a surplus motor-only DCC decoder, DC motor and some 0402 LEDs, I prototyped a circuit to simulate the light from a flickering fusee. The LEDs were coated with Tamiya clear red paint to change their light from white to red. Resistors were added to the LED leads and were independently wired to the forward and reverse headlight functions of the decoder. I programmed the decoder to have both lights on all the time with a firebox flicker effect. The motor was wired to the motor power leads so that I could see it pulse to acknowledge the programming inputs. The decoder was programmed to locomotive number 9999 since I'd never have a locomotive with that number. With this proof of concept successful, I moved forward with installing it on my coal pocket.

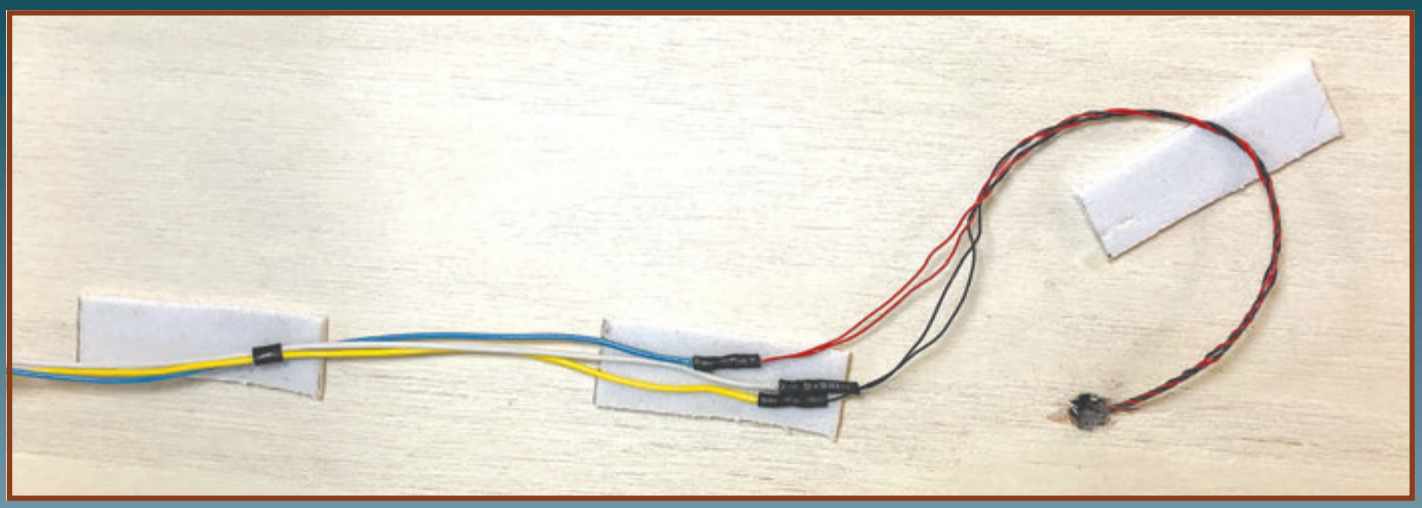
would be very difficult to see, so having some sort of additional lighted indicator could help alert my operators when the wire was raised.

After upgrading many of my early DCC installations to sound, I have a surplus of older motor-only DCC decoders. I used one of these decoders to simulate a fusee on the tracks when the car stop wire is raised. Using the white and yellow headlight wires on the decoder, I lit a pair of 0402 LEDs that were coated in Tamiya clear red paint. Using JMRI and the DCC programming box that I described building in the March/April 2022 GAZETTE, I programmed each of these headlight outputs to always be on with a firebox flicker effect. It was hard to know if the programming was working, so I also wired a motor to the grey and orange decoder outputs. The motor pulses when it accepts a DCC command which helped me know when the decoder accepted its programming.

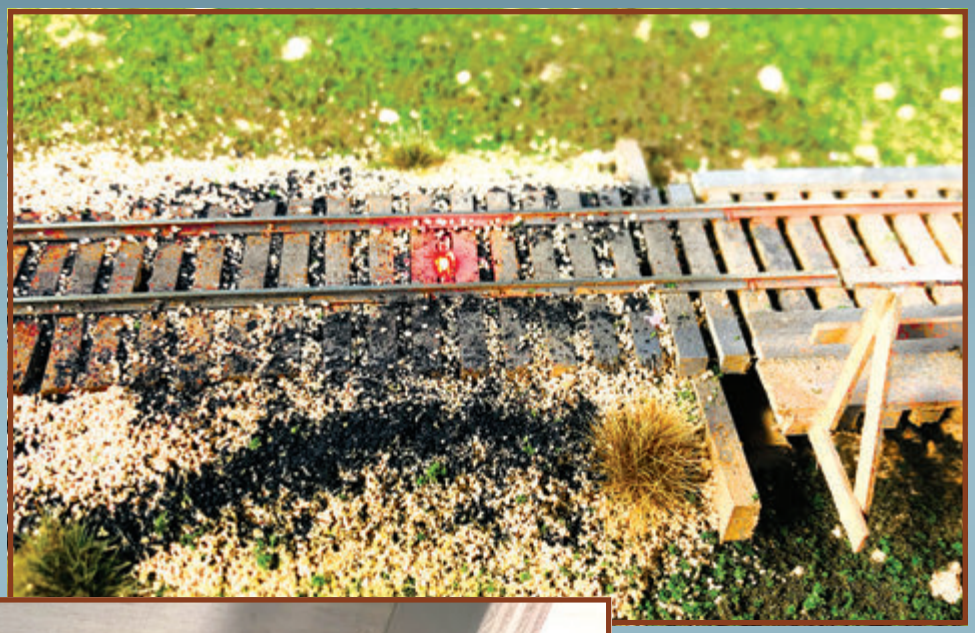
I have now completed the project and future operating sessions will be the determinator of whether this project is successful or not. For now, it has met all my expectations. Please follow along in the photos and captions as I describe how I completed my coal pocket project.

Below: I built my coal pocket on a removable base. The decoder and motor were mounted to the underside of the base using double stick foam tape. I added a masking tape flag to the motor shaft so that I could see and hear the motor running. This has proved helpful for diagnosing problems with the decoder since I can hear the motor turning where it is hidden under my layout. It can be controlled from any of my wireless throttles as if it were installed in a locomotive.





Above: The resistors and 0402 LEDs were installed in the tracks from the underside of the coal pocket base. I used double stick foam tape to mount the wires in place.



Right: The LEDs were placed between the ties on the approach to the coal pocket trestle. These will warn my operators that the car stop is in the up position and to be careful spotting cars at the coal pocket. Combining the two separate firebox flicker effects creates a pleasing effect that simulates a fusee burning. I tried to set the LEDs below the rail height so that they wouldn't get damaged when I'm cleaning the track.

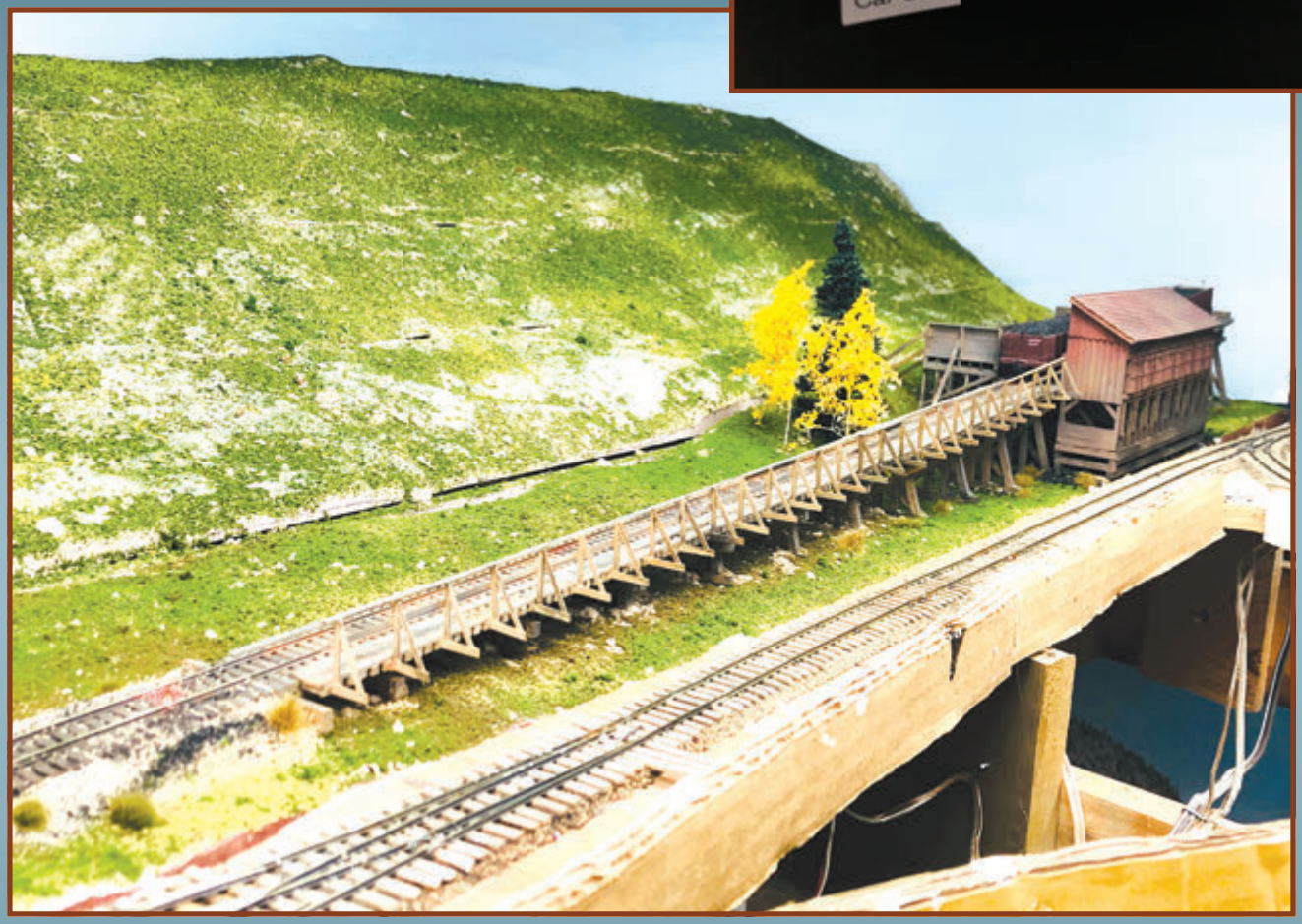
Left: I mounted a Tortoise switch motor on its side to control the rod that will be used as a car stop on the coal pocket trestle. A switch that's built into the Tortoise is used to turn the power to the DCC decoder on and off. When the rod is in the up position, the decoder gets power from my DCC system. When it's down, the power is off. This in turn toggles the fusee LEDs on and off.

Left: When I was building the coal pocket, I had anticipated adding the car stop, so I hid a brass tube in the model so that I could install the moving car stop wire later. This photo shows the wire used to align the brass tube. I later painted it black to hide it.

Below: The finished car stop, in its up position, is just high enough to catch the brake beam or axle on my coal cars. I painted it rust to hide it, but I may go back and paint it fluorescent orange so my operators can see it. I aligned the pin near the edge of the coal pocket bin so that my operators know to not let their locomotives past this point.

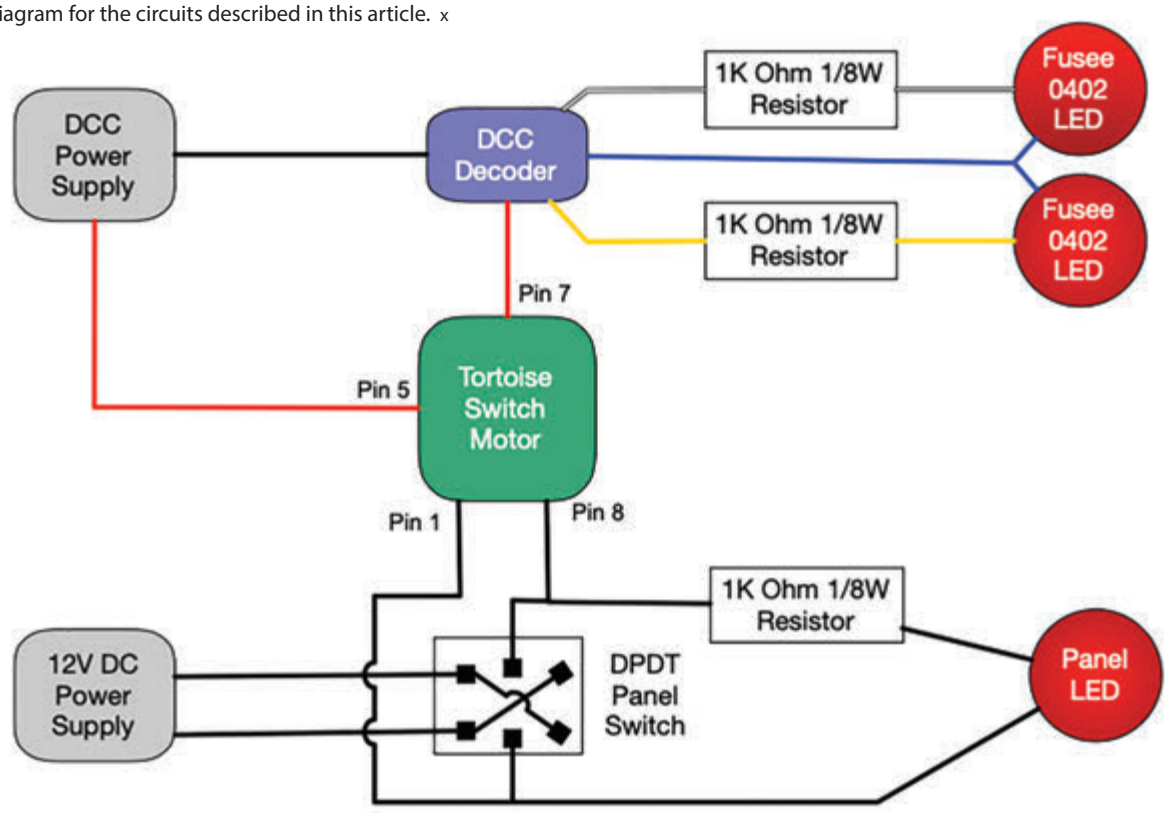
Right: On my layout fascia I installed a DPDT switch to control the car stop. Toggling it up lifts the car stop, turns on the fusee flicker and lights the adjacent LED on the fascia. Toggling down has the opposite effect. This photo also shows how far back into the layout the coal pocket is and how it would be impossible to manually stop the cars on the ramp. From toggle switch to coal car is an actual six feet! Spotting cars will require the use of the delayed coupler action on my Kadee couplers.

Below: This closeup view of the coal pocket shows the lit fusee and some coal cars resting against the car stop. The trestle grade is more than 6 percent which is the reason for the car stop.



Right: This view shows the wiring under the coal pocket before it was installed in my layout. I tried to do as much work at my workbench as possible.

Wiring diagram for the circuits described in this article. x



by Charlie Getz

Photos by the author

E. L. MOORE AND THE VILLAGE SMITHY
Bringing an Old Kit Back to Life

It is no secret that I love structure modeling and therefore relish a new structure project. Like many other model railroaders, I also enjoy a bargain. Some months back, I stopped at one of the two remaining train shops in the Bay Area, and in the bargain-bin was a mint sealed HO scale AHM kit for the Village Smithy, a blacksmith shop in a small wooden barn. Now normally, I would have passed because a plastic kit for a wooden building presents its own challenges in transforming the plastic into wood, at least the appearance of wood. This kit appealed for a few reasons, however. First, it was a classic E.L. Moore design, replicating a structure Moore built as described in an article in the September 1967 Railroad Model Craftsman (RMC). Secondly, it included unique interior and detail castings. Thirdly, it was only $5.00, close to the original price when issued in 1971. Those factors proved irresistible and so home it came.

As luck would have it, I was caught up on review items so actually had time for a little project like assembling this kit. In so doing, I decided to see how far I could go in improving the basic look and detail level of this venerable styrene kit. But first, some words about the remarkable modeler who inspired the kit. To my surprise, Wikipedia has published a lengthy biography of E.L. Moore including a complete chronological index of his published articles in RMC, Model Railroader (MR) and Model Trains magazines, and even his unpublished manuscripts. I used the information from that source as well as retrospective articles in RMC and MR for this column. Some of the information conflicted so I exercised discretion in choosing what I believe to be the most accurate account.

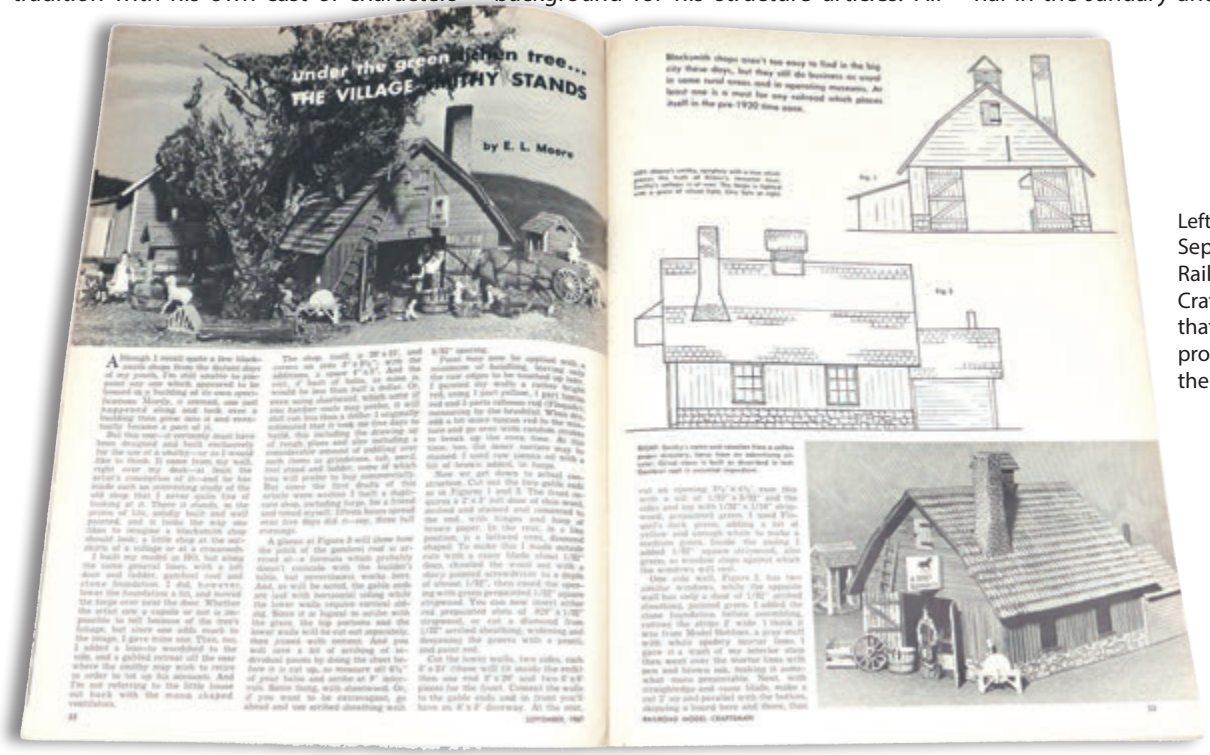
Earl Lloyd Moore was born in 1898 on a farm somewhere in Southeastern Michigan, near Bangor. His father farmed but also was a school treasurer. One night, Moore's father was robbed in his own home and the school money, stored in the family safe, was taken. The thieves made their getaway on a stolen railroad handcar later found abandoned. So, from his earliest age, E.L. was exposed to railroads. Later he served in the U.S. Navy during WWI. Wikipedia notes little is known of Moore afterwards until he appeared in Charlotte, North Carolina, in the late 1930s, "following a girl," as he later explained it, where he spent the rest of his life. Before arriving there, he apparently worked in a paper mill in the Northeast and as a furniture salesman. When the Depression hit, Moore became a self-described vagabond for a while. After settling in Charlotte, Moore worked as a professional photographer, as did John Allen. He specialized in child and baby portraits from the late 1930s into the mid-1960s when his photographic studio burned down. Moore retired, becoming a full-time model railroader/author. Moore had started with Lionel O-27 in his early 50s but moved on to HO fairly soon. He must have been a quick study because by the time he was 57, just a few years after getting into the hobby, he began submitting articles. Between 1955 and 1980, he authored a remarkable 100+ feature articles, mostly structures, in MR and RMC as well as in Kalmbach's Model Trains magazine. He also had photos of his work and small layouts published regularly. Small layouts because remarkably, Moore lived in apartments so there never was room for an elaborate layout. Many of his models were given to friends or traded.

I have fond memories of Model Trains as it was my first model railroad magazine and was geared toward the beginner. Moore's folksy writing style and unusual but approachable modelling techniques appealed to me as a beginner. Moore almost exclusively used balsa wood; an inexpensive material generally scorned by serious modelers as too soft and coarse. Moore's secret was using very sharp cutting instruments, so the balsa was not crushed and by the innovative use of the woodburning pen to create texture and detail in the soft balsa. This unusual technique, unique to Moore, was described in articles in the May 1955 issue of RMC and more completely in the July 1962 issue of MR. Using the woodburning tool and different tips, Moore was able to create weathered siding, shingles and a variety of textures obviating the need for commercial products. But it was an art not easily mastered as I discovered quickly. In 1963, I prevailed upon my parents to buy me a woodburning/soldering set with interchangeable tips. Balsa was and remains, inexpensive so with reckless abandon, I tried my hand at the Moore technique with little success. I discovered that as with any technique, the skill of the individual modeler was an unstated factor in its success. I still recall the smell of burning balsa. Moore also embossed bond paper over Northeastern corrugated wood to create his own paper corrugated roofing/siding and even formed paper pipes over dowels. As did John Allen, Moore created windows from inked mullions on frosted acetate. This was all very useful information for a

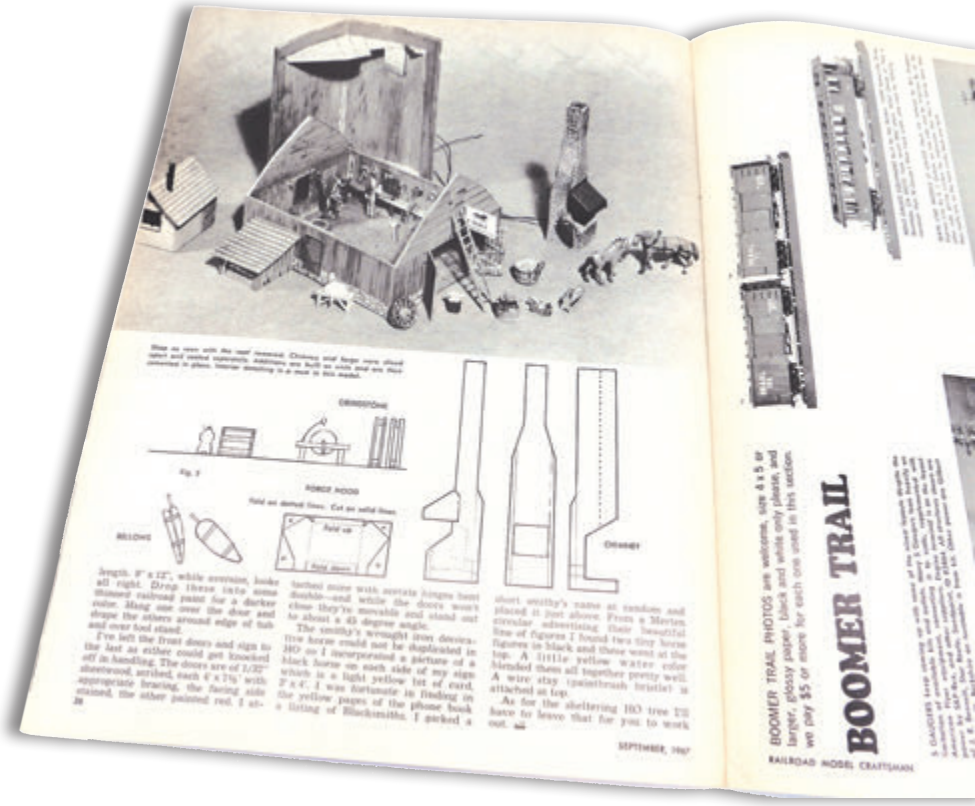
new teen modeler on a tight allowance.

Moore was also known for creating a cast of Southern-oriented mythical characters and storylines for some of his articles. With a folksy tone, Moore employed Cousin Caleb, Grand Pappy Lucifer Penroddy Snooks, Uncle Wilber or P. Pottle, among others, in his stories. Years later, John Coots of SS Ltd. carried on the tradition with his own cast of characters for his HO figure line. My favorite, and a pseudonym he used on a memorable occasion with me for dinner reservations in Reno, was "J. Wolfgang Shagnasty, M.D." Moore elevated his articles with his cast of characters and the title of his structure articles often reflected their names from Ma's Place to Cousin Caleb's Cabbage Plant, a factory not an agricultural product. He also delighted in cutesy names like W.E. Snatchem Undertakers, Grusom Casket Company, Hojpoj Manufacturing, Rhube's Rhubarb Plant and Moe Lass Old Sorghum Mill. Later, noted plastic structure kitbasher Art Curren did the same with the Plaid Paint Company, among many others. Moore often placed an old-time HO photographer figure in the article photographs representing himself. On occasion, Moore would model a real building like RMC's then Ramsey, New Jersey, headquarters, also later memorialized in an AHM kit. Indeed, AHM would create nine kits from Moore designs including Ma's Place and W.E. Snatchem, faithfully replicating the names.

Moore was also interested in narrow gauge creating the 30-inch-square Enscale and Hoentee line, an N model railroad where Moore incorporated his HOn30 home-made equipment. He also created the HOn30 Eagleroost and Koontree Railroad, which existed only in picture form and authored an article on building a narrow gauge coach in the September 1961 RMC. His small home railroad was the HO scale Elizabeth Valley used as a background for his structure articles. All of these layouts were backwoodsy lines, down on their luck. They gave way after Moore married and had a daughter as the apartment had no room for both a family and even a small model railroad. He did much of his modeling on a TV tray. His most ambitious writing effort was Turn Backward O' Time, two articles describing a multi-building old-time engine terminal in the January and March 1967 issues



Left: Here is the September 1967 Railroad Model Craftsman article that inspired AHM to produce their kit of the Village Smithy.



Below: E.L. Moore even showed you how to add an interior to your smithy.

of MR. From approximately 1962 to 1975, Moore averaged a remarkable 6-8 articles a year in RMC and MR, often appearing simultaneously. He claimed he could create a new structure/article every two weeks. This pace was maintained almost until his death in August 1979. He was memorialized in the November 1979 issue of RMC and the February 1980 MR.

The AHM Village Smithy kit represented this proud heritage and faithfully reproduced Moore's 1967 model. Assembly was ridiculously easy overall, but I was determined to upgrade it. The rather thick windows were replaced with finer similar castings from Grandt Line and Timberline. I maintain a large collection of window castings for this purpose and only had to do a small amount of trimming of the openings to obtain a good fit. The rest was stock, although I added additional interior parts, two figures and numerous small details. I also added lights to the interior and a small red bulb in a modified forge. After drilling a hole through the forge's burning coal pile, I painted the remainder of the casting a coal and ash color after gluing pellets from a desiccant pouch. These pouches are normally found in electronics products to keep them dry. Toxic, so handle with care, the small opaque pellets within are perfect to glue onto a red/flame colored bulb so the color shines through, but is diffused. The edges are painted to resemble ash. For more realism, I could have employed a flicker circuit, but the color is enough for my purposes.

There have been many articles on painting styrene to resemble wood. I use a beige color paint as a base coat, later applying stains or thin washes of craft paint to create a weathered wood color. Finally, I dry-brush white or light gray to emphasize the grain. One advantage of styrene is the exaggerated grain molded in. A similar coloring process was applied to the roof shingles with an added layer of green pan pastels to represent moss. The best results come from experimentation. Buy a cheap styrene "wood" kit in any scale next time you are at a swap meet and use the walls/roof to experiment with coloration. The Smithy interior wall surfaces had raised part numbers and plain styrene finishes. I shaved off the numbers (saving the shavings for raised numbers in the future) and laminated discontinued Paper Creek green colored wood siding on the wall interiors. Dead flat, the paper siding creates an interior weathered wood siding look. With lighting, it is important to continually test for light leaks and bleeding where the thin styrene actually glows from the light within. Paint usually cures the bleed-through and here the roof interior was painted black for that purpose. I added scrap wood

Below: The author's detailed AHM Village Smithy.

Above: The author's interior adds a touch of realism to his detailed smithy.

planks, miscellaneous junk, a workbench with tools and the assembled grindstone, quenching tub, and forge from the kit to complete the interior, although it is only visible from the open front doors or through the small side windows.

By the way, even though this is a plastic kit, there are still challenges in assembly. The design includes a gambrel roof; a complicated angled design which the kit resolves with clever scribed/segmented roof halves to be bent and fit to the gable. Similarly, the chimney/forge sides are segmented to fit the complex curves from forge to chimney. Each needs clamping and gluing to hold to shape. I used a combination of Faller styrene cement and ACC plus fingers to accomplish this. I drilled holes for the lighting wires and added some small corner posts to ensure the beveled wall corners were tight. I used the original base with its molded floor adding some scenic elements to hide the plastic edges. Finally, the plastic coal pile in the attached coal shed was overlaid with scale coal and weathered. So even simple kits can provide satisfaction if you elect to fine scale them as much as you can.

For me, the result was as charming as E.L. Moore's scratchbuilt original. I certainly got my $5.00's worth of enjoyment as well as yet another structure for my use. And I honored the memory of a truly unique character in our hobby. So, keep an eye out for the E.L. Moore kits out there from AHM, Campbell and others or better yet, get inspired by an E.L. Moore article and scratchbuild your own, preferably from balsa. Well, that's all for now; until next time — write, if the mood strikes.

Charlie

BOOK REVIEWS

Rio Grande's T-12 Locomotive and the Return of the 168, by Jerry B. Day. Published by the Rio Grande Modeling & Historical Society, P.O. Box 25005, Salt Lake City, UT 84125-0005, https://www.rgmhs.org/store/index.htm. Softcover, perfect binding, 8½ inches wide by 11 inches tall, 72 pages including covers and a two-sided fold out. $25.00 plus shipping.

This book became available sometime between the May 2021 date of the dedication of the newly restored D&RG 4-6-0 #168, and the Victorian Iron Horse Roundup on the Cumbres & Toltec Scenic Railroad that opened on August 21, 2021. It was available for purchase at the later event.

The Introduction includes a folio sheet for the class 47 (later named class T-12) and text with the context for understanding how the six locomotives delivered by Baldwin in 1883, along with another six in 1884, fit into D&RG passenger train operations at the time, and why they were all phased out of regular operations by 1933.

Chapter 1 covers each locomotive from #166 through #177 with two pages of photos and information on each, except #168 with eight pages of coverage and #169 with five pages of coverage. Numbers 168 and 169 are the two surviving members of the class. The information on each engine is derived from newspaper accounts and records of the D&RGW, and make for enjoyable reading.

Chapter 1 includes a double-sided fold out with pages 19 and 20 displaying a painting titled "Cumbres Loop — 1918" showing engine #425 with a work train on the upper part of the loop and engine #168 with a passenger train on the lower part of the loop, both heading in the eastward direction. This painting by J. Craig Thorpe was commissioned by the C&TS. Pages 21 and 22 is a color photo of inside the cab of restored #168 with call outs of the appliances and controls.

Chapter 2 is about the preservation and restoration to operation of #168, told mostly through captioned photographs, the majority of which are in color. For the section titled "Engine #168 Comes to the Cumbres & Toltec Scenic Railroad," half a page of text is included along with captioned photos. This text documents some of the effort involved in getting the permissions needed to make such a restoration possible,
and makes visible that none of this happens without passionate and pragmatic individuals hanging on to a long-term view.

"Restoration Begins" outlines the fundraising, the assembly of the restoration team and the work required on the tender. The tender was then used as a background piece for fundraising. Pages 51 through 57 are photos and captions of some of the locomotive restoration process from June 29, 2018 through the first test run on Sept 30, 2019. Photos of more test runs on October 9 and 14, 2019, follow. Photos and captions resume for the October 1, 2020 test train with the historic passenger consist. This test was in preparation for the Kobalt Tool Company video shoot on October 4, 2020, that is covered by photos and captions, including an exterior and interior photo of RPO #65 and Coach #256. Photos and captions then pick up with a test train on May 28, 2021, and continue with the dedication train of May 29, 2021.

References fill page 70, and Acknowledgments and a little bit about the author make up page 71.

If you are a D&RG/D&RGW fan or a small steam fan, this book needs to be in your collection. Dave Adams.

Ron's Books, P.O. Box 714, Harrison, NY 10528, 914/967-7541, ronsbooks@aol.com, www.ronsbooks.com continues to sell new releases of catalog reprints from Silver Lake Images LLC, Manufacturer's Catalog Archive. Each catalog sells for $35.00.

Lakewood Cars, Industrial Cars & Factory Trucks. This 156 page, 8½- x 5½-inch vertical format catalog is full of all sorts of mine dump cars, tie cars, waste cars, hopper cars and all sorts of cars I have never heard of. It also has wheeled carts used in factories and other industrial facilities. I just wish I had seen this catalog before building the dump car for the railroad I describe in this issue's Robert's Ramblings.

Davenport Locomotive Works Volume 1 is a 140 page, 8½- x 5½-inch horizontal format catalog full of builders photos opposite data sheets showing all sorts of 0-4-0, 0-6-0, 4-4-0 and 2-6-0 Davenport steam locomotives. This catalog is a real find for those of you who love to kit-bash locomotives. Many, many neat ideas and data.

St. Louis Car Company City Cars is a 57 page, 8½- x 11-inch horizontal format catalog with photos and data on eight- and four-wheel street cars. There is also a section on center entrance cars. Not much narrow gauge, but street car modelers will find some great ideas. The four-wheel car section is especially appealing.

Plymouth Locomotives Volume 2 is a gem with 152, 8½ x 11-inch vertical format pages of small internal combustion locomotives. Nothing is hidden. You can see their engines, clutches, fuel tanks, radiators and all the other things you need to build a detailed and authentic model of a small internal combustion locomotive. Bob Brown.

The 50-year collection — NARROW GAUGE AND SHORT LINE GAZETTE 1964–2014

DVD SET

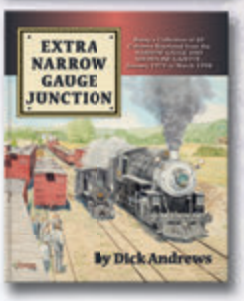
SYSTEM REQUIREMENTS

Windows: Windows XP, Vista, 7, 8 or 10
- 2.33 GHz or faster x86-compatible processor or Intel Atom 1.6 GHz or faster processor for Netbooks
- 1 GB RAM • DVD-ROM drive
- 1152 x 864 minimum screen resolution (1280 x 720 recommended)
- 2 GB of hard drive space for basic install
- 14 GB of hard drive space for full install

Mac: Mac OS X v10.6, 10.7, 10.8 or 10.11. Does not run on 10.15.1.*
- Intel Core Duo or faster processor
- 1 GB RAM • DVD-ROM drive
- 1152 x 864 minimum screen resolution (1280 x 720 recommended)
- 2 GB of hard drive space for basic install
- 14 GB of hard drive space for full install.

*** ATTENTION APPLE MAC USERS:**
The latest release of the Mac Operating System, OS 10.15.1 Catalina, is not compatible with the Gazette DVD Archive. Apple no longer supports 32-bit applications. There are no plans to issue a 64-bit version of the Archive, so don't order it unless you have a Mac running an older OS. The Archive still works fine on Windows PC operating systems.

BOOKS from BENCHMARK PUBLICATIONS



To order, contact:

HAYDEN CONSULTING

Call: 505/466-4970
(9-5 Mountain Time, M-F)

or visit: www.bobhayden.com
(Paypal accepted)

Dealer Inquiries Welcome

or send this form with your payment to: Hayden Consulting, 7 South Hijo de Dios, Santa Fe, NM 87508

AVAILABLE BOOKS/DVD	PRICE + P&H IN U.S.	AMOUNT
☐ *Steel Rails & Silver Dreams.* 183 pages.	$49.95 + $8.00 P&H	$_____
☐ *The Pacific Coast Railway – Central California's Premier Narrow Gauge.* 296 pages.	$60.95 + $8.00 P&H	$_____
☐ *More Up Clear Creek on the Narrow Gauge.* 302 pages.	$63.95 + $8.00 P&H	$_____
☐ *HO NG Railroad You Can Build.* 65 pages.	$20.00 + $8.00 P&H	$_____
☐ *Extra Narrow Gauge Junction.* 225 pages.	$59.95 + $8.00 P&H	$_____
☐ DVD: *Narrow Gauge and Short Line GAZETTE 50-year collection – 1964-2014.* 2 discs.	$139.95 + $6.00 P&H	$_____
Due to skyrocketing postal rate increases, we can no longer ship outside the U.S.	**TOTAL AMOUNT:**	$_____

PAYMENT OPTIONS

☐ Check or money order made payable to Hayden Consulting.
☐ Visa ☐ Mastercard ☐ Discover ☐ American Express

Card number _____

Exp Date _____ Security Code _____

Signature _____

PLEASE SEND BOOK(S)/DVD TO:

Name _____

Street address _____

City _____

State _____ Zip code _____

NEXT ISSUE PREVIEW

AN HO SCALE ABANDONED MINING TOWN

BY JIM GRAY

BROOKS STOVER, MMR, DESCRIBES THE S SCALE SWANDALE PLANING MILL ON HIS BUFFALO CREEK & GAULEY LAYOUT

NARROW GAUGE AND SHORT LINE GAZETTE

SUBSCRIPTIONS, RENEWALS, and ADDRESS CHANGES

Make checks payable in U.S. funds to White River Productions. We also accept Credit Card and PayPal orders.

MAILING ADDRESS:

NG & SL GAZETTE
White River Productions - Subscriptions
P.O. Box 48
Bucklin, MO 64631

IN U.S.A. PHONE:

877-787-2467

INTERNATIONAL PHONE:

660-695-4433

FAX:

660-695-4423

E-MAIL:

subs@whiteriverproductions.com

PAYPAL:

shop.whiteriverproductions.com

I

SUBSCRIPTION PROBLEM?

Send your face sheet or renewal notice and as much information as possible.

You will miss issues of the GAZETTE if you fail to renew your subscription on time!

WHITE RIVER PRODUCTIONS

ADVERTISER INDEX

FAST TRACKS

MT. ALBERT SCALE LUMBER CO.

CONTINUING TRADITION

Manufacturing fine scale lumber for over 35 years!

Mt. Albert Scale Lumber Co. is proud to celebrate over 35 years providing fine scale lumber to enthusiasts around the world and we are committed to continuing that tradition for years to come.

shop online 24/7 handlaidtrack.com 1-888-252-3895

This take-your-breath scene is on **Sn3 Modeler Matt Covington**'s gorgeous layout.. While backpacking with his family in the Sierras he came across this scene that he just KNEW he had to capture as a backdrop for his freelance logging operation.. The perfect perspective, great clouds and... Unfortunately he had only a low resolution camera with him.. So two weeks later he was back with tripod and digital camera and camping gear and, it was like it was waiting for him, with similar clouds and conditions as his previous trip! He shot a panarama, stitched the resulting images together in Photoshop, had them printed on canvas and the result is what you see here.. Matt modestly says that "The scenery was then added and colors blended to match..." All we can say is.. WOW! Sn3: 1:64 Scale Prototype Modeling you can SEE in the space of an HO standard gauge layout!

We're P-B-L ◆ P.O. Box 769 ◆ Ukiah, CA 95482 ◆ 707-462-7680 ◆ Looking for imspiration? We've some GREAT PHOTOS of GREAT Sn3 LAYOUTS on our website at www.p-b-l.com! Come check us out!