

## SUSQUEHANNA SIDETRACKS



An Official Publication of the Susquehanna Division 11 Mid-Eastern Region of the NMRA

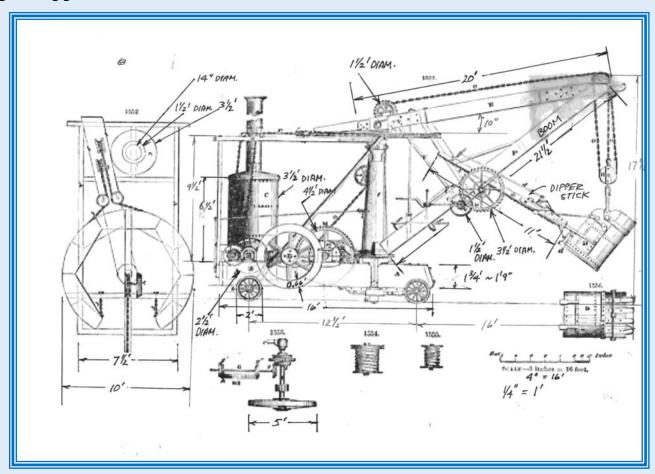
Number 3

# Modeling the Central Pennsylvania Scotia Iron Works in the 19th Century, Part 2

#### Jerry Lauchle, MMR

In the last issue of <u>Sidetracks</u> Jerry Lauchle, MMR shared the history and regional impact of the Scotia Iron Works. His feature continues with the step-by-step construction of a steam powered excavator.

The excavators purchased by Andrew Carnegie for Scotia were invented by William S. Otis in 1839. His patent drawings are shown here. William Otis was the brother of Elisha Otis the inventor of the elevator. Evidently, both men were engineering geniuses.



Feature continued on page 15

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The Railroad Museum of Pennsylvania recently announced their 50th Anniversary as the premier railroad museum in the United States. If you haven't visited this historical treasure be sure to add it to your bucket list.

### **Superintendent's Desk**

On March 15<sup>th</sup>, we had our joint meet with the Philadelphia Division in Allentown. I believe it was well received. We had two clinics; the first one was by Steve Wysowski who presented: "What Can We Do To Increase Participation In The Hobby." Steve offered suggestions and the opinions of others, discussing what others have already done and continue to do. Our second clinic was presented by Jim Herzog "Exploring the Reading's Shamokin Division." He gave a brief history of the prototype and explained why he chose to model it during the transition era of the 1950's. His photographs were superb.

We had several models for our Modeler Showcase. Jim Mattern brought a mock-up of the Cornwall RR's yard office. Jim Hertzog brought two models: his New Haven depressed center flat car with a gear load and a Lehigh Valley cement gondola made from an old Athearn kit. And yes, I brought two scratchbuilt steam engines that Dave Ellis will be taking to the National convention in Novi, Michigan. I must apologize for not recording the name of the Philly Division member who brought an N scale display. It ran throughout our meet.



Once again, I remind all of you that the election for our Board of

Directors is on the horizon. Please refer to the schedule in March/April 2025 issue of *Susquehanna Sidetracks*. We currently have five people who have chosen to run.

On March 8<sup>th</sup>, Dave Ellis and I attended the Harrisburg Train Show at the Scottish Rite Cathedral. We handed out NMRA literature and several back issues of the *NMRA Magazine*. We will "show the flag" again in August at the Railroad Museum of Pennsylvania in Strasburg.

**News Flash!** We have a new editor for *Susquehanna Sidetracks*. Kevin Macomber has agreed to step up and allow Rich Wurst to retire. Rich and I will help Kevin transition into the role.

On another note, we had a Zoom meet on Saturday April 12<sup>th</sup> with eight attendees. Even though our numbers were small, the feedback we received was all positive. At our next board of director's meeting, we will discuss what we can do to improve attendance. Then on June 21st we'll have another live meet at Zion Lutheran Church in Dauphin, PA. Details will follow soon.





### In Memoriam – Brian Kampschroer

On April 1, 2025, NMRA lost one of it's quiet, but most ardent supporters. Brian Kampschroer, known to many of us as simply "The Elf," spent over 40 years actively working on behalf of the Susquehanna Division, Mid-Eastern Region, and NMRA in many, many roles.

His early NMRA activities involved helping to form the Susquehanna Division, writing the bylaws and serving as a founding Director. He then developed the paperwork required for charitable status and determinedly followed it through the labyrinthine federal tax system to obtain the division's (and later the MER's) 501-c-3 incorporation as a tax-deductible charity.



Brian's first involvement in National happenings was his service on the 1980 Washington National Convention Staff. This success led to his participation on the National Train Show staff from its inception to his ultimate retirement as NMRA's Executive Convention Chairman in 2001. His years of involvement in NMRA national and regional conventions, along with his professional educational efforts resulted in his recognition by the Professional Convention Management Association as a Certified Meeting Planner or CMP. To my knowledge, he is the only *volunteer* individual ever to earn this professional qualification from PCMA. It was a distinction of which he was quietly proud.

Brian also served two terms as Mid-Eastern Vice President of NMRA. For his many services he earned NMRA's Meritorious Service Award, and in 1994 President Eric Lundberg presented Brian with a President's Award.

The Mid-Eastern Region has been well served by Brian. While accomplishing much for the National organization, he was also busily at work for the region. Elected an MER Director in 1985, he served two terms until 1989. He served as a convention treasurer for regional conventions in Carlisle, 1980, the Harrisburg quad-regional in 1985, Richmond 1988, Harrisburg 1990, Valley Forge National Convention 1993, and Harrisburg in 2017. He also served the region as Assistant Treasurer for some 8 years, culminating in election as Treasurer, serving in that capacity from 2017 to 2023 when declining health demanded he resign.

In 2022 the Mid-Eastern Region Board of Directors voted to recognize a lifetime of service to NMRA and the region. The **MERitorious Lifetime Service Award** was created, proposed by the President and approved by the Board for deserving members. At the 2024 convention in Durham, Brian was the first member to be so recognized by the Board in a unanimous vote. Sadly, he was unable to attend to receive it in person.

During all these myriad commitments, Brian did not neglect modeling, the main reason we are all here. He participated in the Achievement Program, earning Association Volunteer in 1985, Author – 1987, Official – 1988, Civil Engineering – 1990, Dispatcher – 1991, Electrical Engineering – 2017, and Scenery – 2019. Now you may ask, "With 7 certificates, why does he not qualify for MMR?" Brian only needed Motive Power or Cars to fulfill his objective, but unfortunately time and ill-health won out.

Brian may have been diminutive in stature, but in his accomplishments as both a modeler and a man he stood very, very tall. He was extremely intelligent, extraordinarily empathetic, hugely humble and a joy to be around. Rest in peace, little brother. You were well loved and will be sorely missed.

Bob Charles, MMR

#### **Second Section**

#### Susquehanna Sidetracks

Official Newsletter of the Susquehanna Division 11 Mid-Eastern Region, NMRA

Contributing to <u>Sidetracks</u> are always welcome. Division members wishing to contribute articles, photos or features may do so by emailing items to the Editor at the e-mail address listed below.

Submissions should be in WORD format with photos sent under separate cover. Photos which are part of the submission should be identified as to their location in the WORD document.

The deadline for submission for the next issue is June 15, 2025.

#### **Officers and Directors**

<u>Superintendent</u>: Alan Mende super@susquehannanmra.org

Asst. Superintendent: Chris Kier assist-super@susquehannanmra.org

Chief Clerk: Dean Johnson treasurer@susquehannanmra.org

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**Director:** Ken Roth kroth@susquehannanmra.org

**Committee Chairmen** 

**Achievement Program Chair:** 

Bob Charles, MMR achievement@susquehannanmra.org

**Model Showcase Chair:** 

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Rich Wurst editor@susquehannanmra.org

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Mid-Eastern Region:

www.mer-nmra.com

National Model Railroad Association

#### Greetings!

With this issue our Division proceeds to the biannual election of Division Directors. Each member is urged to vote so your voices can be acknowledged.

Kevin Macomber has stepped forward to volunteer as our newsletter editor. As the transition occurs, please support Kevin as he takes over the reins of <u>Sidetracks</u>. Further details about upcoming changes will be sent out as the revised platform unfolds.

One of the major concerns for our hobby is retaining and growing membership. Recently I became aware of The Choo Choo Barn Foundation headquartered in Strasburg, PA. Many of you know the Choo Choo Barn as an 'O' scale attraction with animated features. The new owner, Gary Russell, has started a nonprofit foundation to educate school children and the general public about the joys of model railroading. His program will be highlighted in future issues of this newsletter. Pictured below is his traveling public relations extravaganza seen at local fairs, PA Farm Show and schools.

Happy Modeling,

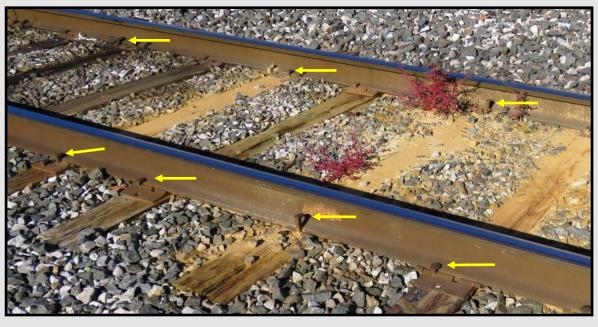
Rich



## **Susquehanna Division 2025 Calendar of Events**

#### Tentative Susquehanna Division Upcoming Meetings 2025

Month — Date	Location	Type of Meeting or Event		
Мау		Nothing planned		
June 6/21/25	Dauphin,PA Zion Lutheran Church	In-person Membership Meeting- Confirmed		
July 18-20	Mount Union, PA Central Pennsylvania Shortlines RPM	Division Information Table Local division members have layouts open on July 18, 1-4 PM		
August 8/16/25	Strasburg, PA Railroad Museum of Pennsylvania	In-person Membership Meeting		
September	Northeast Subdivision Invitation will be emailed to all	Trial Hybrid Membership Meeting- Tentative		
October 10/16—10/19	King of Prussia, PA	Attend or volunteer MER Regional Convention		
November 11/15/2025	Mechanicsburg, PA Good Hope Fire Company	In-person Membership Meeting		
November	Model Railroad Open Houses	On your own model railroad visits. We will publicize the link when ready		
December	Invitation will be emailed	Virtual Membership Meeting on Zoom		



Maintenance, Maintenance, Maintenance....

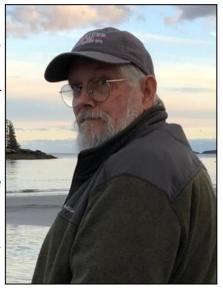
#### **Division Board of Directors Election**

#### **Candidates for the Susquehanna Division Board of Directors**

As of May 1, 2025, there are five candidates for four Board of Directors seats.. The deadline for nomination submissions is May 24, 2025. If any member would like to add their name to th list of candidates you must submit your photo and bio (200 word maximum) to Alan Mende at super@susquehannanmra.org

The candidates are listed in alphabetical order:

Dave Ellis -- I joined the NMRA twenty years ago when I joined the 4D HO Modular group of the PNR. After retiring from teaching, I moved back to my hometown in Northwest Pennsylvania in 2015. There, I helped form one of the NMRA's newer divisions, Division 12, the Alleghany Western Division of the MCR, serving as the clerk/treasurer and initiating their website and newsletter. My wife and I moved to Tobyhanna in the fall of 2021 to be closer to her family, and I became a member of the Susquehanna Division. As a relatively new member, I don't know the history of the division, but I do sense some challenges that we face such as a membership spread over a large geographic area. Having been part of the leadership of another NMRA division and having actively served one term as director here in the Susquehanna Division, I hope I have shown the experience and willingness to work to continue serving as director.



**Dave Ellis** 

James Mattern -- Trains have been a fascination ever since I was young. I remember my first model railroad back in the late seventies. It was a Lionel figure eight set that came with a barrel loader and log loader. This was set up on an old door with metal legs. I remember it had the hole for the door knob still in it. Sometimes, I would drop figures down the hole to see if they would survive. The figures did a lot better than the plastic logs and barrels that went through the hole. I got a bit more serious in the mid-eighties getting into making scale models. Then early nineties I got into prototype modeling and have been practicing in it ever since. I decided to focus on the Cornwall Railroad. It ran iron ore from Cornwall to Lebanon. This little railroad still holds my interest today. I enjoy helping other people out with their layouts anywhere I can. I want to help the Division and this is why I am seeking a director position. Thank you for considering me for the position.



Jim Mattern

### **Division Board of Directors Election (continued)**

Kenneth S. Roth -- I am running for Director of the Susquehanna Division. I am an Army Vet; graduated Honor grad from Aberdeen Proving Grounds in 1976. I was machinist/gear cutter/Quality control and Lead Auditor with Philadelphia Mixers for 27 years. I left there and went to ABB Instrumentation as a Buyer and Supervisor for 5 years. I am currently a nuclear component Buyer for ITT Engineered valves. I'm getting ready to retire. I have been in HO (DC) since 1969 with my brothers and father; a 60'x 30' basement layout. I had several HO layouts in my house; a 40' x 20' and a 13' x 16' currently. I have worked on 2 NMRA conventions. As well as held the director position. I'm just starting with DCC.



Ken Roth

Barry Schmitt— My 54-year aviation career limited my model railroading activity to reading model railroad magazines and visiting hobby shops. That all changed in 1999 while visiting Ft Myers FL. The local newspaper had an excellent article about the weekend Scale Rails of Southwest Florida Model Railroad Club open house. Unfortunately, I could not attend due to a scheduled trip so I called the club president and asked if I could visit another time and he enthusiastically offered a visit the next day. Upon entering their large clubowned building I was hooked. An amazing layout, great welcoming members, and they proposed I join their all NMRA Member Club while fully accepting my limited availability issues. That day I joined under NMRA's RailPass program and last month received my 25-year NMRA Membership Certificate.

I'm a longtime Susquehanna Div member, served as Superintendent 2012-2016, and was MER Convention Clinic Chairman for both our Division sponsored Harrisburg 2017 and Altoona 2023 conventions. My goal in running for Susquehanna Division Director is to advocate for and help develop more annual membership events and present a comprehensive annual event schedule in the NLT November-December Sidetracks of the proceeding effective year.



**Barry Schmitt** 

Rich Wurst -- I came to model railroading late in life. While volunteering at the Railroad Museum of Pennsylvania I spent many hours constructing buildings, work sites, scenes, etc. on their 'Pennsylvania Landscapes' DCC HO model railroad display. This activity put me in touch with the Susquehanna Division. I became involved with organizing Model Railroad Day at the RR Museum 2013, serving on the staff for the 2017 MER Harrisburg Convention, presented clinics at the local and regional level. I also spent several years as the President of the Shortline Model Railroad Club in Ephrata, PA. More recently, I have served as the editor of the Division newsletter Susquehanna Sidetracks for six years and acted as Assistant Division Superintendent for two years. I am running for the position of Director to promote activities and events for members throughout the Division. With COVID restrictions in the past, in-person events would bolster interaction with current and prospective members. Learning from others' experiences is a great way to further our hobby.



**Rich Wurst** 

# **Division Board of Directors Election (continued)**

	uehannanmra.org no later than Friday, I	dom order). Please submit your ballot by email to the Chief Clerk Dean May 31 <sup>st</sup> . If you write in a member for office be sure the individual will
2025 Divisi	ion Board of Director  Kenneth Roth  James Mattern  David Ellis  Barry Schmitt  Richard Wurst	rs Ballot (vote for <u>four</u> candidates)
Write-in		
Write-in		
Write-in		
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### **Allentown Joint Event Recap**

A joint meet with the Philadelphia Division held on March 15th at the Bridgeworks Enterprise Center in Allentown demonstrated many of the features of our in-person meets. In addition to camaraderie, the meets are an opportunity to learn and share. At this one, Steve Wysowski of the Philadelphia Division presented on "What Can We Do to Increase Participation in the Hobby?" focusing on different ways to attract interest from the public, particularly young people and families. Mike Dettinger from the Philadelphia Division shared their Kato Mini Diorama layout as one example of a way of engaging new modelers through an easy, first modeling experience.

Model Showcase took place next. Three modelers brought their projects for viewing and the Philly Division displayed a switching challenge and a table top layout. Alan Mende shared two scratch built HO scale locomotives, James Mattern shared the drawings of brickwork and the building he is working on for his Cornwall Railroad, and Jim Hertzog shared two pieces of highly detailed rolling stock from his railroad. Details can be found on pages 11-13.

Jim Herzog, from our division, presented a clinic, "Exploring the Reading's Shamokin Division." His presentation gave a brief overview of the prototype and numerous photos of his beautiful model railroad focusing on the projects and upgrades he worked on during the Covid pandemic while operations on his railroad shut down.

After the gathering, members had an opportunity to visit two impressive model railroads. One was the Lehigh & Keystone Valley Model Railroad Museum in downtown Bethlehem. Their multi-level club layout is very impressive. We added a link to them on the Events page on our website under Model Railroad Clubs, so you can learn more about them or visiting them at one of their open houses. Scott Unger also opened his Chessie System PA Division at his home in Allentown. His basement-filling railroad continues to expand featuring hand laid turnouts and immaculate track work.

On April 12, the Susquehanna Division held a virtual meet on Zoom. While we had eight members attend, and they seemed enthusiastic, we had hoped for more participation. Having a gathering on Zoom allows folks to participate in

a division gathering without driving long distances. We had two clinics and an opportunity for the members who did attend to provide feedback on what they would like to see in future clinics (whether in-person or online). If you chose to not attend, *please* let one of the officers or directors know what held you back! Without feedback from the membership, we can't fine-tune our offerings. Is it the timing of the meeting, unfamiliarity with the Zoom application, not enough notification, or expected content of the meeting?



Article by Dave Ellis

### **Model Showcase**

The Allentown, PA Division Event which was scheduled in February had to be postponed due to snow. The Event took place on March 15th and was a joint effort of the Philly and Susquehanna Divisions. One segment of the programming was Model Showcase. The following models were featured by their creators:



**Alan Mende**- Alan displayed a Central of New Jersey Railroad 0-4-0T Camelback locomotive. The model was scratchbuilt in HO scale.



**Alan Mende**- Alan showcased another of his HO scale, scratchbuilt gems. Here is Chimney Rock Quarry's #3 Class A Shay, two truck, geared locomotive.

## **Model Showcase (continued)**



**Jim Hertzog-** Jim presented (above photo) a modified Athearn gondola in HO scale. This Lehigh Valley Railroad cement carrier was detailed and finished using real limestone and cement powder. Jim based his reproduction on an original car pictured below.

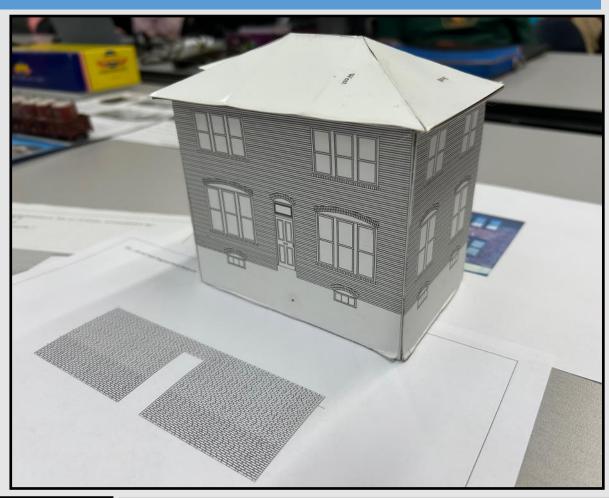




**Jim Hertzog**- Jim shared his New Haven transformer flatcar with heavy gear load. The kit was manufactured by Red Ball but detailed, weathered and finished in a dramatic fashion.

### **Model Showcase (continued)**

Jim Mattern-The Cornwall Railroad Yard Office stood at the crossing Cornwall RR and the Reading RR. Jim spoke about the special pattern of brickwork on the building which he is attempting to recreate in HO scale. The photo (right) depicts the mock-up the structure while original photo (below right) details the brickwork.







Pictured here is a Timesaver Switching Layout. It wasn't part of the Modelers Showcase but it was brought by the Philly Division for anyone to try their hand at switching with the fewest moves.

Photos courtesy of Alan Mende and Dave Ellis

#### **NMRA Event**



This year's Mid-East Region of the NMRA will host their annual convention in King of Prussia, PA. The convention is sponsored by the Philadelphia Division 3.

On the right is the first information distributed to all members. Planning, organizing and gathering volunteers is starting to ramp up. As more details are announced registration and programming will be shared.

For current information you can check out the Philly Division's website:

https://www.phillynmra.org/

Mark your calendar and set your sights on a great model railroading event!



### Coming Soon!

Check back at phillyexpress.org often for updates regarding all the exciting events planned for PHILLY EXPRESS

Welcome to the



2025 NMRA/MER
Convention

October 16-19, 2025

Crowne Plaza Hotel – King of Prussia, PA

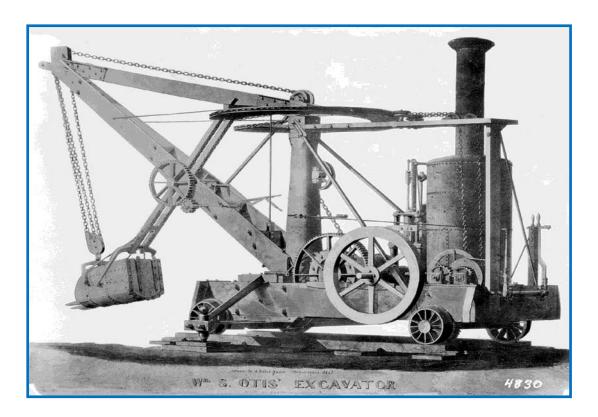
Clinics, Prototype Tour, Home Layouts

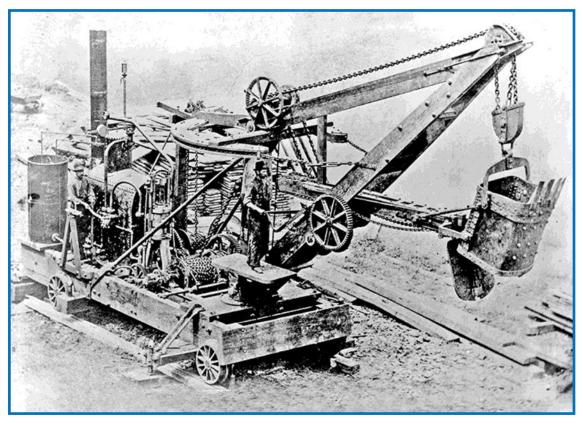
Vendors, Operating Layouts on Site

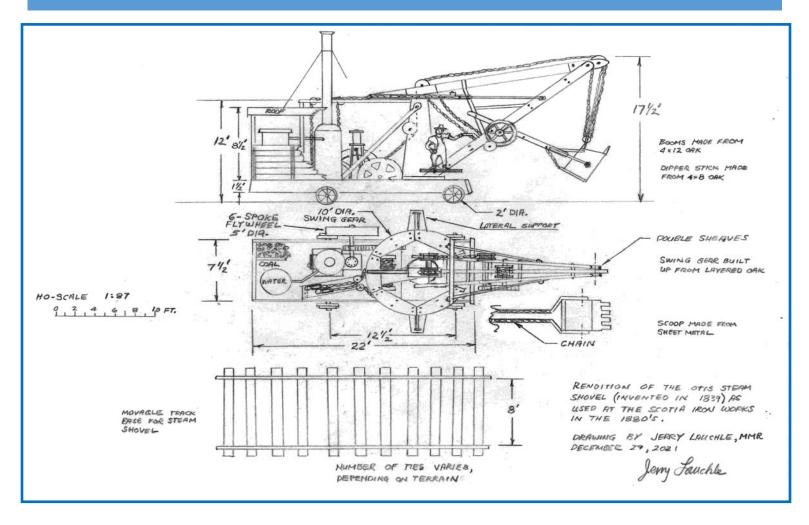
Ops Sessions

 Hosted by the Philadelphia Division NMRA

Shown below are two vintage photos of the Otis Steam Excavator. Note the railway wheels that allowed movement over either wooden or steel rails..





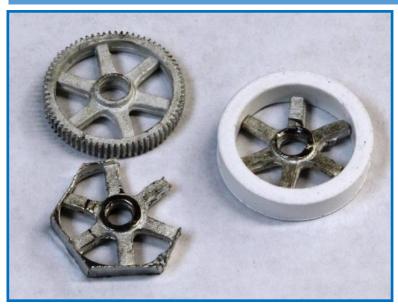


Above is the author's scale drawing of a Scotia excavator based on original photos and Otis patent drawings of 1839.





Above are commercially-available parts that were used in the construction of the model excavators.





The steam engine fly wheels were built in the steps shown here. The rim is cut from polystyrene tubing.





The excavator chassis were made from scale basswood lumber. The wheels are 24" diam. narrow-gauge locomotive pilot wheels.





Five 10" sheaves were needed for each excavator; they were turned from 1/8" polystyrene rod.





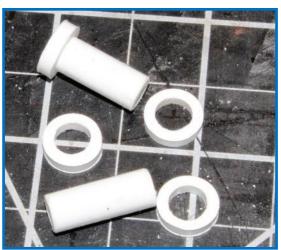
The 20" sheaves were made by laminating a small fiber washer between two larger brass flat washers. The pillow blocks are from Tichy Train Group. The chain has 27 links per inch.





There is a double sheave on the end of the boom. It was made by laminating fiber washers of different sizes. The polystyrene core with shaft hole was epoxied into the washer.

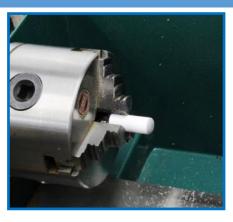




The main chain drum connected to the steam engine was turned from solid polystyrene rod.



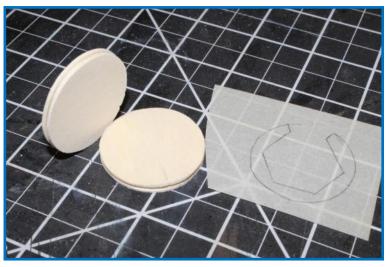
Attaching the gear and shaft to the steam engine.



Water tank being turned on a lathe.



The pylon was 3D printed, a slot was milled in it to accept a 20" sheave, and then a brass and styrene base was added.



The swing gear was made from three laminated discs of 1/32" thick basswood. After cutting them to shape, scribe lines were added at joints, and bolt-nut-washer casting added.



Early stages of assembly.



Swing gear chain sheaves installed on wooden support structure.



After cutting, fitting, and cementing the boom in place, the double sheaves were attached.



The metal plates on the boom are .010" styrene. The swing gear chains are in place. Because of the walls and roof on this excavator, I did not attach the ends of the chains to any drums that would be next to the engine. These drums would never be seen in the model.





The dipper stick gears were pre-assembled on the bench. The joined bevel gears serve as the pinion associated with the link chain rack on the bottom of the dipper stick, as seen in the Otis patent drawing. In production, I believe that a regular spur gear and roller chain was used.



Boom supports and dipper stick gearing installed.



The pylon support pipe was made from 1/16" brass tubing. The excavator cabs were built board-by-board. A coal bin and shovel were set inside and a rear door added.









Dipper sticks used the scoops from Jordan kit #303 Erie B-2 Steam Shovel.

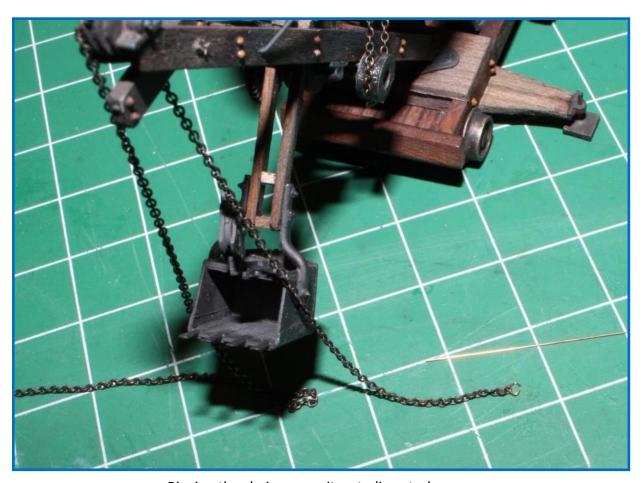


Roofs are in place and dipper sticks are ready for installation. Note the lateral support braces with adjustable shoes that help support the excavator on uneven ground.





The models are ready for chain rigging and lateral support braces. The braces were made from Plastruct channel.



Rigging the chain was quite a tedious task.



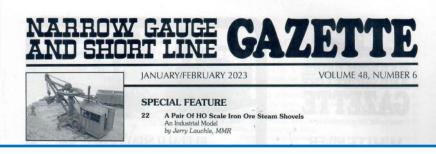


The excavator support rails were made from 4x4 wood. Some may have set on metal rails. The tread is 8' so ties were cut accordingly. It is presumed that the excavators were moved using mules.







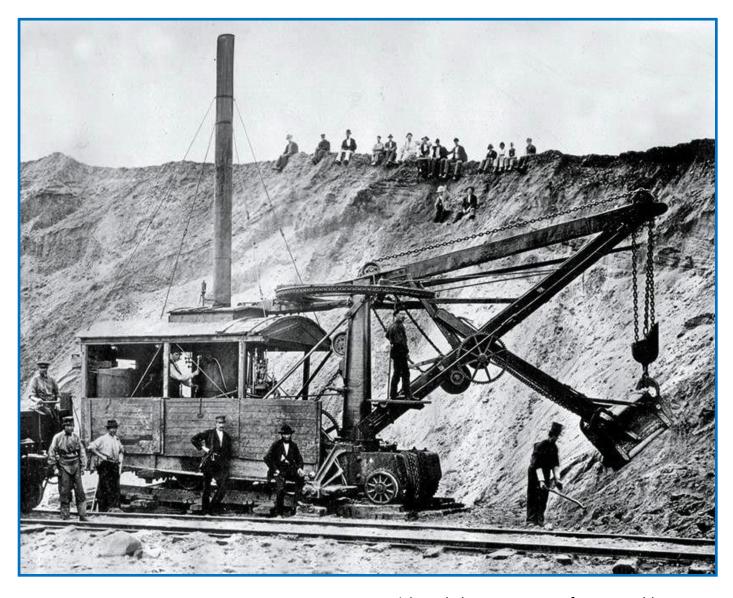


The historical research, planning and construction of the Otis Steam Excavators used at the Scotia Iron Works was published by the Narrow Gauge and Short Line Gazette in 2023. Those who seek additional details should consult the aforementioned journal.





Models set in detailed dioramas.



Article and photos courtesy of Jerry Lauchle, MMR