

July 2020

Volume 13, Number 7

Sunrise Division Officers

In the Herald

Next Meeting	I
Layout of the Month	1
From the Editor	
July Meeting Notes	2
Modules	
Upcoming Clinics for 2020	
Upcoming Tool Times for 2020	
Upcoming Show 'n Tell Themes for 2020	
URL of the Month	
Show & Tell	
Tool Time	
Monster Modelworks Returns	
Clinic	
I'm Not Cheap, I'm Frugal	
Upcoming Events	
Trackside Photos	

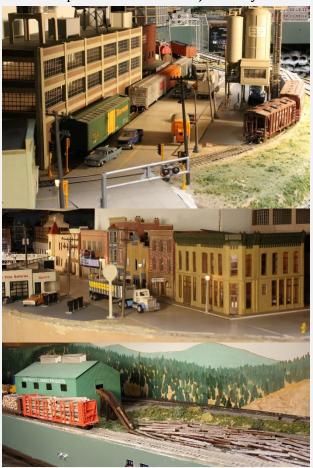
The Denver Library digital content. http://digital.denverlibrary.org/cdm/

Next Meeting

Our next Division meeting is going to be via Zoom until the Covid-19 guide lines allow us back in to Holy Love Lutheran Church.

Layout of the Month

Three photos from Stewart Jones Layout.



Layout photos from other members can be seen in the Members' Layouts page at: http://trainweb.org/SunriseDivision/layouts.html

From the Editor

When I logged in to Zoom to join at 6:45 I was presented with thirty minutes of computer frustration, finally joining the meeting at 7:15. Next time, the laptop gets powered up an hour before the meeting.

Two important clinics for the DCC crowd are on tap for the next two months. If you want to view these clinics, it's time to get on board with Zoom.

As a reminder, the blue **In the Herald** text is a hyperlink to the article. Just click on the text.

July Meeting Notes

July's meeting was held via Zoom. William introduced us and asked us to talk about our trains. Any subject. During the introductions Alan Esler had a question on power for his layout. The results of this chat was he needed to run separate power for his lights and for his track. On the outside of his layout he had an Aurora Model Motoring HO car track.

Stu did a short demo on a ground throw he is working on.



David Clifford has a unique idea for homes on his layout. He is going to model homes he had lived in on a street in his layout.

Rich Flammini gave a semiannual report. It began with \$2307.45. It is now at \$2139.45, with the biggest expense being the plates for the Sunrise trailer.

Modules

The modules are in hibernation until the Covid-19 situation is over. The number one problem is; we now need a place to work on them. If you have a garage that has space for at least two of the modules standing on end (about 30" by 34" each), we would love to have you join the module group. Even a walkout basement would work. Any other ideas on where we could work on/store them?

Upcoming Clinics for 2020

Clinics are back on schedule and will be shown via Zoom.

To be scheduled yet is:

5th Annual Sunrise Division Model Railroad Auction - Rich Flammini

August – Open Source DCC - Thomas Wilcox **September** – Layout Command Control - Detlef Kurpanek

October - TBD

November - TBD

December - Movie

Upcoming Tool Times for 2020

Tool Time is back on schedule and will be shown via Zoom.

August – Corrugated Roofs & Siding - Dennis Hagen

September – Plate Glass as a Tool -Larry Stephens

October-December - TBD

Upcoming Show 'n Tell Themes for 2020

August – RR Artifacts & Relics September – Refrigeration October – Dwelling Structures November – Express Cars December – Holiday Theme

URL of the Month

Tshiuetin: A First Nations-Owned Railway in Quebec, Canada. (This is on my bucket list, although a very deep bucket, of which I have not seen the bottom.)

Black and white video from CBC https://www.youtube.com/watch?v=95w4dpCVBko

Sept Isles Toward Schefferville QC, 1 Sep 2016 https://www.youtube.com/watch?v=C-TVQpPLRlY Schefferville Toward Sept Isles QC, 2 Sep 2016 https://www.youtube.com/watch?v=hi4LWtQDc6A

Show and TellRailroad Structure



Bob Hochstetter presented his start of a kit bash for his representational model of the Little Rock Union Station.



Gary Myers' structure was telephone poles. These are Walthers, painted and assembled. He first used a glossy Testors white acrylic on the insulators, then used a metallic pearl green enamel to get the glass look. Then they were dry brushed a grey acrylic on the south side of the pole for a faded look from the sun. Wires, with a slight bend, will be added later after static grass is applied.

Tool Time

Tim Siml presented a hemostat of an unusual style. There was some discussion on what it was called and what its intended use is. (Now I have to have one--ED.)

It is called an Ear Polypus Alligator Clamp.

Ear Polypus Alligator Clamps were invented as surgical tools for working in the ears of patients. Unlike hemostats, only the clamp's serrated jaws open making it ideal for reaching objects in hard-to-reach places.



Need one? https://www.pjtool.com/4363-3-1-2-ear-polypus-alligator-clamp.html

EBay or Amazon under Ear forceps.

Larry Stephens showed a video about using the Excel Index Finger Knife (from the Editor column April 2020 Herald).

Monster Modelworks Returns

David - Milepost Editor

John Emmot brought news to my attention that I thought you might have interest in.

A few of you may remember the meeting in February 2018 when Jimmy Simmons of Monster Modelworks presented his line of Laser cut/etched building kits. There were extraordinary old time buildings. However, shortly after that we learned that he was going to close business and drop the line. That was sad news for many.

Well, we were recently informed that Jimmy is back and has the line of building kits and many laser etched building materials for scratch builders available. He has a new website where you can see and order his products. We are pleased to see him return and wish him good fortune with the endeavor. He has a new name and website to which we invite your attention.

His site is at

https://www.larkspurlaserart.com/

Give him a look. I'm sure you will be impressed.

Clinic History of American Railroads

Stewart Jones

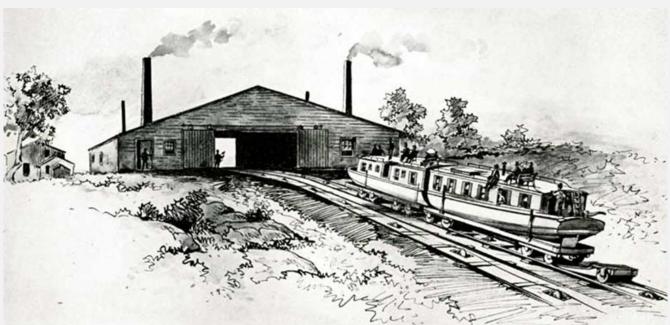
Stu Jones presented a clinic on early American Railroads for the July Sunrise Division meeting. The presentation began with an explanation of the critical need for improved transportation to support the growing economy of the post-colonial United States. The traditional horse and wagon mode was too slow for the vast country. Coastal shipments by sailing ships was also too slow with reliability problems due to shipwrecks. The initial development included canals, primarily in the northeast. While canal boats could carry far heavier loads and facilitated east-west transportation, they still had to be powered by horses or mules that didn't travel faster than wagons.

The Erie Canal was the first east-west canal opened across central New York state. It provided access from the port of New York to Lake Erie and from there across three Great Lakes to Chicago and other cities along Lake Michigan. An Illinois-Michigan Canal provided transportation from Lake Michigan to the Mississippi River. The Chesapeake & Ohio Canal was built from Baltimore westward but could not cross the Alleghenies and never reached the Ohio River. Our focus then shifted to the

Pennsylvania Canal that did successfully cross the Alleghenies and extended commerce to Pittsburgh and the Ohio River.

The Pennsylvania Canal included both rail and water transportation. It developed some of the first railroads to carry canal boats between water ports. Canal boats could be separated into two halves and loaded onto primitive flat cars and drawn by horse teams between ports. One segment went from Philadelphia to the Susquehanna River, eliminating a long trip down to the Chesapeake Bay and back upriver. A second segment crossed the spine of the Alleghenies from Altoona, PA (actually Hollidaysburg) to Johnstown, PA where boats could be relaunched into the Allegheny River system to complete the trip to Pittsburgh and the Ohio River.

At Hollidaysburg, the boats were again separated into halves, loaded onto flat cars and carried over the mountain. This required five inclined planes on either side of the summit when stationary steam engines hauled the boats upgrade (or down). Horse teams pulled the boats on level stretches between the inclines.



A drawing of boats being pulled upgrade. I'm not sure I would want to sit on the roof if a cable broke.



The National Park Service has reconstructed segments of the railroad. Note that the "rail" here is wood beams capped by iron straps to reduce wear and friction.



Another segment of the railroad has been preserved at the Summit. The structure in the background is the Lemon House where canal patrons could receive refreshments. Note that iron rail has replaced the wood beams and is chaired not on wood ties but on stone blocks sunk into the earth.



Toward the west end, the company constructed the first U.S. rail tunnel, Staple Bend, to avoid a long river oxbow detour. The National Park Service has replaced the tracks with a trail as part of a walking tour.

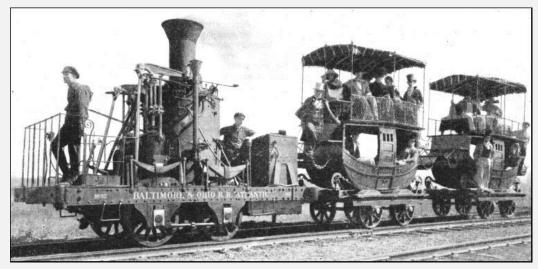
The Pennsylvania Canal opened in 1834 and operated for twenty years. Travel speed was still limited by the speed of horses and mules. The Pennsylvania Railroad eventually replaced the canal, basically following the same route, but travelling at least ten times the speed of the boats and carrying significantly more tonnage.

In 1807, Robert Fulton developed the first steam boat which was perhaps the first experiment to utilize steam power on a moving vehicle. His North River Boat, later renamed the Clermont, could travel 150 miles from New York to Albany in 32 hours at an average speed of 4-5 miles per hour.

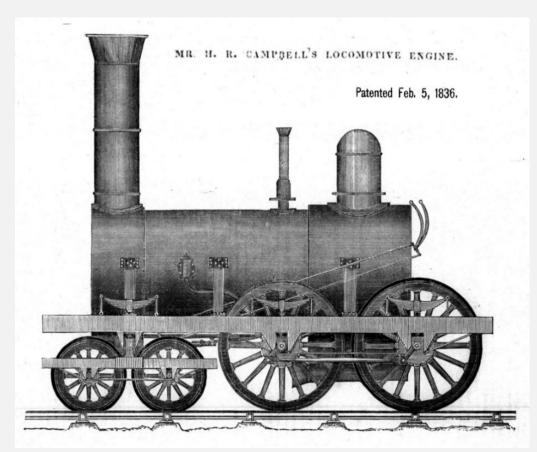
It wasn't until 1829 that a steam engine was first developed to travel on rails, first in Britain, and then in the US. This clinic presented a number of locomotive examples that were developed over the next ten years, most quite primitive, but proved the concept of steam engine travel.

In 1830 the
Baltimore and Ohio
Railroad developed
the Tom Thumb.
The design was
primitive, offering
no protection for
the engineer and
fireman and no
provision for
providing water for
the boiler is evident
in this photo.

Passenger accommodations

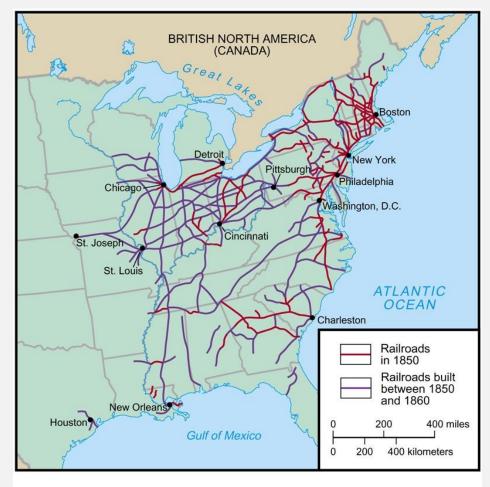


were equally crude: the carriages were little more than glorified stage coaches mounted on flanged wheels. The men standing on each coach are the brakemen who had to apply braking individually on each car. Accidents were frequent and often fatal.



Refinements to locomotives developed quickly and by 1836 M.R. Campbell developed a locomotive with four lead pilot wheels and four driving wheels. This design was widely adopted by American railroads and the 4-4-0 came to be known as the "American Locomotive". This innovation of adding swiveling pilot wheels greatly improved the tracking ability of the locomotive, greatly reducing derailments that plagued earlier designs.

Other improvements included equalizing levers or springs that kept the locomotive weight equally distributed over the pilot wheels and drivers on uneven track. Other innovations included swiveling trucks on freight and passenger cars, headlights for nighttime operations and the invention of the "T" rail.



RAILROADS, 1850 AND 1860

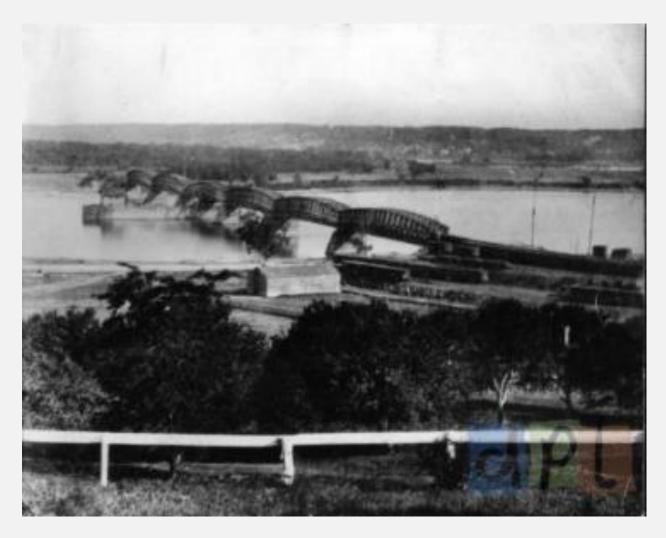
This map shows the extent of American railroads from 1850 (red) to 1860 (purple).

Clearly railroads were becoming dominant for of transportation in the country, particularly in the northeast. However, none crossed the Mississippi River. Where rails are shown west of the river, all crossings had to be made by ferry boat.

The final segment of the clinic described Abraham Lincoln's contribution to the development of American Railroads. Although he is better known for other things today, the development of western railroads would have been much delayed without his efforts. Lincoln was early involved in river traffic, but was convinced that the future of American commerce depended on east-west transportation, whereas the Mississippi River system offered primarily north-south transportation. By 1850 there was an extensive steamboat transportation system, but it was hampered by many obstacles: rivers

had many hazards including shoals, sandbars and rapids; because of these hazards, boats could not operate at night; and northern rivers were frozen for at least four months in winter.

The Chicago and Rock Island Railroad proposed and built the first railroad bridge over the Mississippi River between Rock Island, IL and Davenport, IA, opened in 1856. The bridge had been on operation a mere two weeks before a steamboat, the Effie Afton, crashed into the draw piers and burned to the waterline, also burning part of the bridge. The bridge was rebuilt and reopened two months later, but a consortium of steamboat operators banded together with the St. Louis Chamber of Commerce and filed a lawsuit condemning the bridge as a navigational hazard. The Railroad retained Lincoln, among others, as its defending lawyer.



The Rock Island bridge shown above, over the Mississippi River was a six-span Howe Truss. The center span was a swing bridge centered on the middle pier of three piers. River boats had to navigate the "draw" between two of the piers. A bridge tender was housed on the center pier and only "closed" the span when a train was ready to cross.

The trial was a watershed event in American transportation and would determine the immediate future of western transportation.

Testimony during the trial revealed that the Effie Afton collided with a cross river ferry when departing Rock Island where she had harbored during the night. No assessment of any damage or repairs were made. The Effie continued upstream toward the bridge and apparently raced another boat to arrive first. As she entered the draw, it was reported that one paddlewheel stopped twice, possibly from a broken rod, and the boat collided with the pier. Small fires in

passenger cabins erupted from overturned wood stoves but were quickly extinguished. The major fire that broke out started about an hour after the collision and there was speculation that it had been deliberately set.

Testimony from the bridge tender, who kept a log of all boat passages, established that 951 boats had passed the bridge since the Effie disaster and only 7 had collided with any pier. In at least one instance the boat's pilot had been seriously inebriated. Also, during this period 12506 freight cars had crossed the bridge carrying 125860 tons of freight and 74179 passengers had crossed. Despite the fact that rails had not penetrated far into Iowa, it demonstrated the worth of the bridge. All transcripts of the trial were lost in the Chicago Fire, but the facts have been reconstructed from the many newspaper reports.

The trial verdict was 9-3 in favor of the railroad, but the plaintiffs appealed to the Iowa Supreme court that reversed the decision. Eventually it was reviewed by the U.S. Supreme Court which upheld the original decision. Lincoln continued to be a primary advocate for a transcontinental railroad and was responsible for many decisions, including the rail gauge and the ultimate route. The transcontinental railroad was completed in April 1869 at Promontory, Utah with almost complete

government funding. Of interest is that after twenty-five years, four additional transcontinental railroads had been completed all financed with private money.

American railroads continued to be the dominant mode (often the only mode) of mass transportation into the early twentieth century when the automobile and public highways began to compete. The vast network of rails was essential to the economic growth of the country.

I'm Not Cheap, I'm Frugal

No train-related frugal idea this month. My frugal efforts were tied up in do-it-yourself landscaping for the last two months. Frugal? Cheap? Tell my aching muscles frugal and cheap were worth it!!!

Upcoming Events

July 30 – August 2 Joint Lines to Pueblo, 2020 Rocky Mountain Region, NMRA Convention -- CANCELLED

No Events for August

Sep 19 -- Sat 9AM to 11:30AM Model RR & Toy Train Swap Meet (303)361-9370 Green Mountain Presbyterian Church 12900 W. Alameda Pkwy, Lakewood

Track Side



Photos

Photos by Larry Stephens

Photos taken just east of Quebec. I saw this maintenance train one day and never saw it again. These were scanned in from slides taken about 2005.

