Coast Mail

News from the San Luis Obispo Railroad Museum

Issue Number 59 – Spring 2017 San Luis Obispo, California www.slorrm.com

The Museum is open every Saturday from 10 am to 4 pm. It opens other times for groups by arrangement. Contact media@slorrm.com.

Recent History

Union Pacific R.R. crews in early February replaced ties along the tracks at San Luis Obispo. In the photo at left, they're working just south of the Museum's display track. They're using "off-line" equipment, which interferes less with train movements than equipment that occupies the track. The maintenance effort was scheduled to continue south during the spring.

Photo by Laura Emerson

Carpenter's wooden wheeled tool box from the San Luis Obispo roundhouse, donated by Owen Betts. Photo by Glen Matteson

Meet Our Docent of the Year

On January 7, Chuck Kinzer was recognized for his service to the Museum, which has included welcoming and informing visitors, and processing many donated items for fundraising. Below is Chuck's photo of boxes ready to ship to customers.

Grant For Display Received

A grant from the Harold J. Miossi Charitable Trust will help the Museum complete a new exhibit on connecting San Luis Obispo to the national rail system, featuring Cuesta Grade and the Gaviota Coast.

Visitor Survey Results

Last Fall visitors were asked to note their favorite aspects, and things the Museum should add or change. The model railroad, and docents and staff, topped the list of enjoyed features. Suggestions for improvement included more interactive exhibits, and general information in introductory talks, a printed pamphlet, or audio recordings. We're working on all of these.

Woodworkers, Too

Curator Brad LaRose recently secured donation of, and carefully restored, the carpenter's wooden wheeled tool box shown above. Railroad shop locations such as S.L.O. employed carpenters into the 1950s. Even though by then nearly all structural items were steel, steam locomotive cab floors and ceilings were often covered with wood, and the railroad had many wood structures ranging from small sheds to buildings like the Freight-house. As with the mechanic's wheeled tool box noted in the Fall 2016 *Coast Mail*, this one's cast metal wheels have gracefully curved spokes to reduce stress as the casting cools.

March 21 marks 80 years since the start of Southern Pacific's streamlined Coast Route *Daylight*, "the most beautiful train in the world." It was a big departure from all-black locomotives and dark green cars, and a big bet on optimism in the face of the Great Depression. *From an SP photo.*

The Museum is in the heart of the Railroad Historic District, close to the Amtrak station, in a city designated a Train Town by Union Pacific R.R.

Also in this Issue

Don't have Internet access? Don't miss out. See if a relative or friend can help. Also, nearly all public libraries have access, and staff who can help you get started.

Our Mission:
Preserving California's Central Coast Railroad History

The San Luis Obispo Railroad Museum is a non-profit educational institution. Founded to preserve and present California Central Coast railroad history by collecting, restoring, displaying, and operating relevant railroad artifacts, photographs, models, and documents, its goal is to facilitate a better understanding of railroads' impact on our area's social, cultural, and economic history.

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Contact

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e-mail: info@slorrm.com
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San Luis Obispo, CA 93401

DOCUMENTS AVAILABLE

Any member may access or receive a copy of the Museum's *By-laws*, *Collections Policy*, or *Development & Operations Plan* by going to the website noted above or by sending a #10, self-addressed, stamped envelope to the address above.

Laying Off

Founding member Brad LaRose and long-serving members John Marchetti and Duane Powell have stepped down from the Board of Directors, as required by our new Bylaws' term limits. They can "mark up" again after a year. We're counting on them to keep working on our many tasks while not on the board.

Become a member

Membership provides opportunities for anyone interested in current railroad activity, railroad history, train travel, or model railroading to learn and experience more, and to share with others.

Individual members pay $36 per year. A family can join for $60 yearly, and a sustaining member pays $100 per year. Application forms can be downloaded from the Museum's web-site and mailed with payment, or you can join online (mailing and web addresses below left) by clicking on MEMBERSHIP and using PayPal.

Membership benefits include free admission to the Museum and access to Members Only features of the website, including current issues of *Coast Mail*.

Renew your membership

The Museum exists thanks to continued member support. All annual memberships expire **December 31**. If you have not already renewed, please provide your payment and any changes to your contact information. You can renew online through the Museum's website (via Paypal) or checks may be mailed to the Museum. If renewing online you can provide updated contact information by phone message or email (contacts listed at left). The Museum never shares your contact information.

TIMETABLE

These are the scheduled meetings of the Board of Directors, held on the second Tuesday of each month at 6:00 p.m., at 1940 Santa Barbara Avenue, San Luis Obispo.

March 14 – Public presentation meeting: La Cuesta
April 11 – Board action meeting
May 9 – Board action meeting

For dates, times and locations of committee meetings, contact the Museum through the number or email at left.

In the next *Coast Mail*

Are you a fan of switch stands?
An oddity in Steinbeck country
More details – little blue book
Glendale by way of Los Banos?

SAN LUIS OBISPO TRAIN DAY

It's time to mark your calendars for the Museum's Spring fling: ***May 13***, 10 am to 4 pm.

There will be new and improved displays, special presentations, food, music, free outdoor children's play tables, discounts in the Museum Store, swap meet, free magazines, and more.

As the date gets closer, "From the Freighthouse" emails and the Museum's website will list schedule details.

Our Biggest Reward

Some comments from our guest register:

"Great place." –R.B. of S.L.O. on August 20, 2016.

"Very enjoyable." –N. & N. S. from Redwood City on July 9, 2016.

"Wow." –V.H. of Los Osos on March 19, 2016.

"Just gets better and better." – L.R. of S.L.O. on October 3, 2015.

Member's Book Published

Museum member Matthew G. Vurek's book California's Capitol Corridor has been published by Arcadia Publishing. The title refers to the former Southern Pacific route from San Jose to Sacramento via Oakland and Martinez, now owned by Union Pacific with passenger service operated by Caltrans and Amtrak. The book covers 1991 to 2016, including freights and steam specials, and has many color photos.

Museum Store

To raise funds, the Museum offers several items for sale. T-shirts, baseball caps, belt buckles, mugs, enameled pins, embroidered patches, engineer hats, and videos are available through the Museum website www.slorrm.com

Click on **Company Store.**

2016 ANNUAL REPORT

Visitors

There were 53 regular open days and two extended weekends, allowing about 3,500 people to pass through. In addition, the Museum hosted eight events arranged by groups, ranging from young children to public works professionals and to Amtrak personnel.

Our website averaged 156 visits per day, with a one-day high of 369. Visitors came from 25 different countries. A presence on social media (Facebook) was established.

Membership

With some joining and some leaving, total membership remained at a little more than 200.

Volunteers

About 50 volunteers, including docents, put in over 7,800 hours on all aspects of the Museum.

Governance

New Bylaws were adopted. The *Development & Operations Plan* was approved, updating the vision laid out in the 2004 *Master Plan* and expanding material from the 2015 *Strategic Plan*.

Publications

Eighteen editions of "From the Freighthouse" emails were provided. Four editions of the *Coast Mail* newsletter totaling 16 print pages, and 54 digital pages, were published. Also, children's coloring and activity books and an introduction to the model railroad were designed and printed.

Events & Presentations

The spring Train Day and fall Railroad Festival returned and were well attended. Several special events were hosted and presentations made, including our first Movie at the Museum.

Restoration

The interior of our Southern Pacific bay window caboose got new upholstery for its seats and bunk, fresh paint, and authentic details ranging from a stove to a cup holder. Efforts to obtain and restore individual components were projects in themselves.

Volunteers continued to work on *La Cuesta*, our 1926 Pullman café-lounge car, repairing windows, removing some non-original features, and replacing missing metalwork.

The peaked roof that had been added to our Pacific Coast Railway 1200-series boxcar when it was a ranch storage shed was removed in preparation for installing authentic roof covering on the original rafters, and the car was tarped in anticipation of winter rains.

Facilities & Exhibits

A freestanding sign using semaphore signal parts was installed, and dedicated in memory of Arnold Jonas. Building wall signs were designed, fabricated, and installed. Fencing for Emily Street Yard was relocated to accommodate a neighbor's project. Parts of the Freighthouse exterior were painted and a rain gutter was installed. Doors and the roof were repaired. Upgrades for display cases were begun.

An AED was installed and docents were trained in its use in case of cardiac emergencies.

Annual Report continues next page.

2016 ANNUAL REPORT Continued

Model Railroad

Modelers completed an operating loop and passing tracks on the lower level, finished the lower level backdrop painting and the Avila area scenery, constructed the Betteravia sugar-beet unloading structure, made the Stenner trestle operational, completed the upper level benchwork, and installed the inter-level helix.

Acquisitions

Our major 2016 accomplishment was obtaining and moving to the display track a Southern Pacific 1903 tank car, probably the only intact example of this "pressed steel" and riveted type.

Among many acquisitions of smaller items were SP passenger department and early Amtrak documents providing details on Coast Line routes and fares.

Financial Status

Beginning funds balance		$63,852
Income		$185,937
Memberships	$10,586	
Admissions	$9,293	
Events & Excursions	$11,112	
Museum Store Sales	$10,260	
Grants and Donations		
Restricted	$133,129	
Unrestricted	$7,993	
Expenses		$95,078
Operating	$50,578	
Capital	$44,500	
Year-end funds balance		$154,711

All exclude the Model Railroad. The Museum has no paid staff.

From the Archives by Glen Matteson

Too Much Excitement

Most people would not regard your archivist as being overly excitable. But when he found a certain brittle newspaper clipping from the front page of an October 1940 edition of the Arroyo Grande Herald-Recorder, he was practically jumping up and down and waving his arms. It had been a slow news day in the archives, but the headline read "P. C. Passenger Train Held Up, Desperados Sought By Posse." The article continued on page eight. A photocopy was duly made. Plans immediately began to brew to upstage Curator Brad LaRose's carefully compiled account of the subtle and almost sophisticated 1904 burglary of a Southern Pacific train near San Luis Obispo.

But 1940 was quite late for a daring train robbery, and the headline language seemed a bit flowery for that date as well, though not for 1904.

"Following a bold daylight holdup of the special Pacific Coast passenger train near here Sunday, posses are scouring the country…" and "Railroad detectives reported today that the desperados were unable to steal any gold dust or bullion from the express car." The article went on to report the curiously colorful and specific names of the suspects.

If this sounds like a staged event at a tourist railroad, you're catching on quicker than your archivist did. The first red flag was that if the PCRy had any detectives, they were a well kept secret. By 1940 the company could barely afford men in the shops or to maintain the track. And "gold dust and bullion" should have been a giveaway.

Several breathless paragraphs later: "This is about how the story should have been written to carry out the Gay Nineties welcome which Arroyo Grande folk to the number of about 250 gave Sunday to the 286 members of the Railroad Boosters Association of Los Angeles, who stopped here on an inspection tour of the historic Pacific Coast Railway." The article notes that "nearly two score" Arroyo Grande residents in period costumes greeted the train. The boosters had traveled by chartered Southern Pacific train to San Luis Obispo, where they boarded the special PCRy train. The PCRy train consisted of seven gondolas, a coach, and a caboose. This trip has been documented in still photos and movie film. The views stir envy in today's railfans, but the scenes of people riding in open cars and climbing all over both PCRy and Southern Pacific equipment make risk managers and safety-conscious train masters cringe.

The PCRy train went as far as Santa Maria. The boosters then rode the Santa Maria Valley Railroad to Guadalupe, where their chartered train was waiting to take them back to Los Angeles.

Sorry: no gold, no posse, and no desperados raising dust on swift horses.

More From the Archives on page 5 and following.

More From the Archives by Glen Matteson

Plug Your Ears
and wait for the fog to clear

In the previous *Coast Mail* we looked at the "14-inch/50 Railway Guns" that caused some excitement along the California coast during the 1930s, including at the Southern Pacific Railroad location of Naples, near Goleta. They must have been a case of the Army saying "The Navy gets to use really big guns, so we should, too." Or maybe the concept was "If a battleship could fire really big guns at our coast, we need to be able to return fire with equally big guns." While these particular railway guns had an inherent disadvantage at hitting a moving target, even a very slowly moving target, their true job may have been to strike fear into the hearts of those who didn't understand the whole situation. In the last issue we saw how they did just that for their crews and for some visiting brass during the Naples demonstration. We again draw on Charles S. Small's 1984 book California's Railway Guns for an account of what happened, this time at the earlier firing from the Santa Fe Railway's line near San Clemente.

This little tale may appeal to those having a fondness for the Southern Pacific location of Surf, now on the Union Pacific line and the name of the Amtrak station serving Lompoc and Vandenberg Air Force Base. If any place along the Central Coast is foggy at a particular time, it's likely Surf. The rest of the route may be clear, but at Surf it can be hard to see the trackside signals until you're upon them.

So, it's the summer of 1934 and we're at the Santa Fe location of Don. To direct and observe firing, seven spotters miles apart from each other have been emplaced with 50-magnification theodolites (surveyor's instruments with telescopes mounted on tripods, with calibrated brackets allowing horizontal and vertical angles between distant points to be closely determined). Telephones link the various sites. The railway guns have been set up, a job that took several days, and crews are standing by, waiting for the fog to clear.

Safety Officer Oldfield is seated on a platform from which he can observe the target area. The target is simply a spot on the ocean, with no object to receive fire and free of any boats. The fog clears at the guns' location, and at the second of the two observation sites that can watch the target. But the other site says the target is still fog-bound.

When all stations except the one report clear conditions after nearly four hours of waiting, Col. Oldfield decides that the contrarian observer must be mistaken, and gives the command to fire. His command is obeyed.

The contrarian captain immediately yells "Stop the fire!" into his phone, and says that the fog at his location has momentarily cleared, revealing a fishing boat. The shot has been aimed for maximum range of about 25 miles, giving 90 seconds between the 1,400-pound shell leaving the barrel and it dropping vertically into the ocean.

It must have been a long minute-and-a-half.

The distraught captain reports a direct hit on the fishing boat. The boat has disappeared. (Earlier, a fishing boat had been reported in the vicinity, and a high-speed boat had been sent to warn it away.) Prospects for Col. Oldfield's continued career are not good at this point.

After another few minutes the captain's voice again comes over the phone, saying he can see the fishing boat making rapid progress out of the area.

When the observations of the various sites have been collated, this picture emerges: The shell did indeed drop into the ocean close to the fishing boat, sending a splash column about 230 feet into the air. That mass of water falling back sent up a re-bounce of about 75 feet, followed by a third that was 35 feet tall. It took two or three minutes for the ocean surface to return to its pre-impact condition. What the captain had seen from several miles away was the splash blocking his view of the boat.

According to author Small, similar guns emplaced in the Philippines were still viewable when he wrote his book, but the big rail-borne shooters of the California coast had all been melted down as scrap.

Mystery Photo Answer

The Winter 2016 *Coast Mail* mystery photo was taken in December 1987 by editor emeritus Bill Pyper. It shows a Southern Pacific water car [*Coast Mail* Winter 2015 and Summer 2016] on the house track at San Luis Obispo. That's a rough looking Freighthouse at right rear. The whole house track was removed soon after.

The Museum's display track was built in its place by Museum volunteers, using material salvaged from the Camp San Luis branch (article coming in the Winter 2017 *Coast Mail*).

Your editor is also the Museum's Weed Control Guy, and is glad to report that both railroad and museum (actually city) property look better these days.

More From the Archives by Glen Matteson

Wild Speculation

A favorite activity nationwide from the 1860s to about 1900 was peculating in, and on, railroads. Would the Newly Incorporated & Essential be a gold mine, or a money pit? Would the new line come through Pikeville, bringing modernity and prosperity, or set a route through Rivaltown, leaving Pikeville to wither? Many sources, including this column, have reported on the hopes and fears surrounding the Pacific Coast Railway and whether the Southern Pacific, having reached San Luis Obispo County, but not the city, in 1887, would head for the coast via Reservoir Canyon and Arroyo Grande, then Casmalia, or even Gaviota (which Highway 101 now uses), to meet its line coming up from Los Angeles via Santa Barbara. It's hard now to appreciate the importance of such questions in those days, or the equally exciting issue of whether a region would be subject to the monopoly of one railroad or join the ranks of cosmopolitan communities served by two.

On February 2, 1937, the Santa Maria Daily Times published a column headed "Pickups and Comment," by G. A. Martin, recalling some speculation from 50 years before that date.

"*Santa Maria might have been on –or near– the Santa Fe instead of the Southern Pacific railroad… [T]he San Francisco papers printed a story that they could see 'in a recent contract in England by the Atchison, Topeka & Santa Fe railroad [sic] company for sufficient steel rails to be delivered in San Francisco this season to build four or five hundred miles of road, a sure pointer that the company will extend it's line rapidly along the coast to a junction with its main line at Los Angeles.'*

According to the Daily Times article, another San Francisco paper chimed in:

"*Railroad officials generally think that such is the intention of the* [AT&SF]*, and also report that the Atchison has bought the Pacific Coast railroad and thus gained control of Gaviota pass. On the other hand, the Southern Pacific officials assert that they posses the right of way through the pass and will utilize it."*

So much for unnamed sources.

The Daily Times article says that the Southern Pacific had completed surveys through Santa Maria, Garey, Sisquoc and Foxen Canyon, and that the planned route would have gone through Buellton and the Nojoqui and Gaviota passes. "Perhaps the Nojoqui hill stopped them, for a long tunnel would have been necessary."

Of course the Santa Fe never approached the Central Coast. From Oakland it built easterly through Franklin Canyon, then down the San Joaquin Valley via Fresno and Bakersfield. It acquired trackage rights on the Southern Pacific's existing line over the Tehachapis, then turned east to Barstow and eventually entered the Los Angeles Basin via Cajon Pass. Somewhat ironically, the Santa Fe acquired the Southern Pacific's Mojave Desert line to the Arizona boarder, but engaged in skirmishes with the Southern Pacific when trying to cross the SP's Sunset Route near Colton, as part of the Santa Fe's efforts to connect San Diego… which the SP also managed to reach but via the Imperial Valley, by picking up the distressed San Diego and Arizona Eastern, originally bankrolled by the sugar magnate Spreckles (who had a lower Salinas Valley location named after him, served by the Southern Pacific). All while the Santa Fe reached San Diego by way of Fullerton and a coastal route through San Juan Capistrano and Carlsbad. Confused yet?

The passions of the day faded. The Santa Fe and the SP tried but failed to merge in the mid-1980s. In the mid-1990s the Santa Fe became part of the Burlington Northern Santa Fe, now known simply as BNSF, and the Union Pacific absorbed the Southern Pacific. And Santa Maria, which started community life as Grangerville and changed to Central City, continues to be served by the independent Santa Maria Valley Railroad, connecting with the UP at Guadalupe.

This never happened. The modified image by Tom Fassett (via The Railroad Forum *online) shows how a locomotive would have been painted if the Southern Pacific and the Santa Fe had merged as proposed in the mid 1980s.*

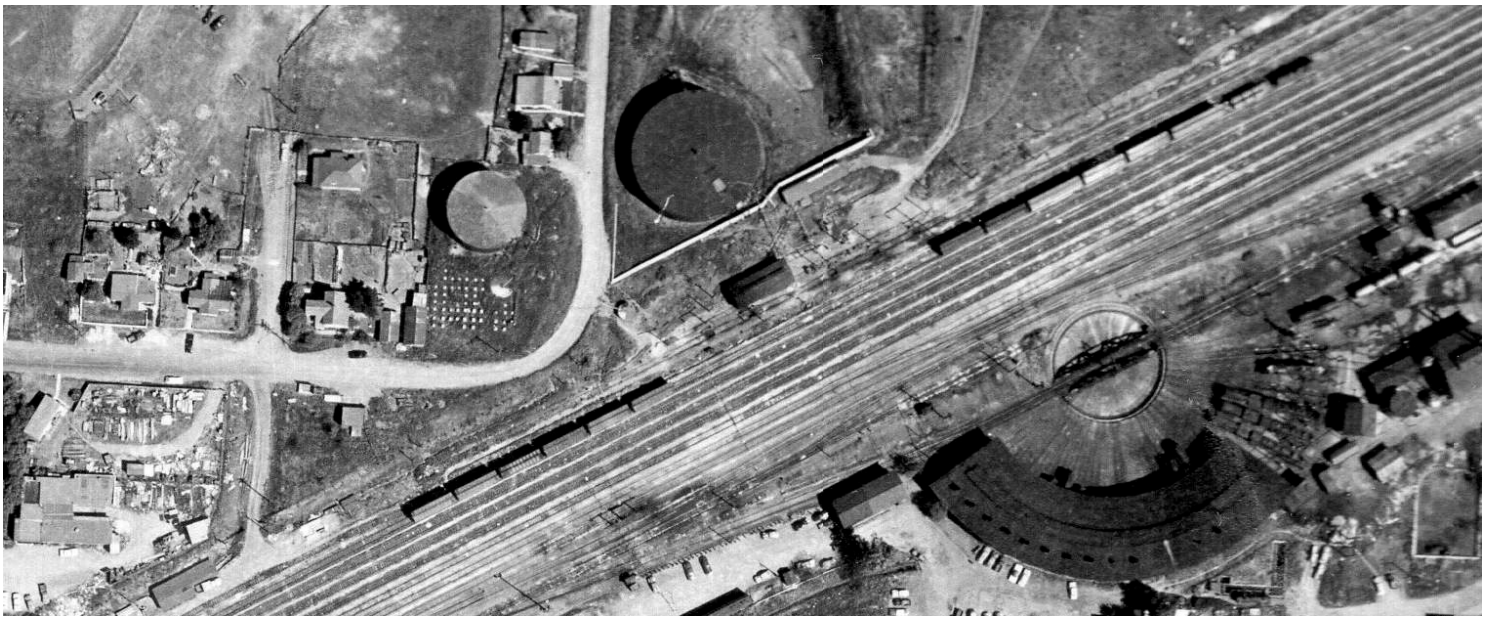
A New Mystery Photo

What and where are these? The answers will be in the next *Coast Mail*. Hints:

A competitor involved something pure from Hawai'i.

There are very few left. (Curator Brad LaRose has been working to obtain one for display at the Museum.)

Those wood-plank sides were preferred, especially for the ones that came up from the Imperial Valley through Beaumont Pass. *Photo by Glen Matteson*



S.L.O. had major facilities to fuel locomotives. This 1955 aerial view shows the 55,000-barrel oil tank between the yard and Terrace Hill. The roadway curving between the tanks is where Rachel Street becomes Florence Avenue. The oil tank, on the right, was not as tall as the water tank near the depot, but it was wide. A water tank is left of the road. The turntable and roundhouse are at lower right.

The Willamette Hot Oil Show

Your archivist started kindergarten about the time Southern Pacific ran its last steam locomotives. His Little Golden Books and cast-rubber toy locomotive depicted coal-filled tenders, so it sounded very exotic when visiting Griffith Park's Travel Town a few years later to hear that certain engines on display were "oil burners." Nearly all SP locomotives in the western part of the system were oil fired after about 1900. For the next half-century or so the archivist-to-be assumed that compared with coal, oil was so much cleaner and easier to handle that locomotive firemen using it should have been paid less … or something.

While the appetites of big coal-burners could be fed with the aid of corkscrew-like automatic stokers rather than shoveling, sometimes using steam jets to spread the coal evenly in the firebox, all you needed to feed an oil fire was to turn a valve, right? And coal left lots of ash and clinkers, chunks of partially burned coal sometimes with fused impurities. All oil could leave is a smudge.

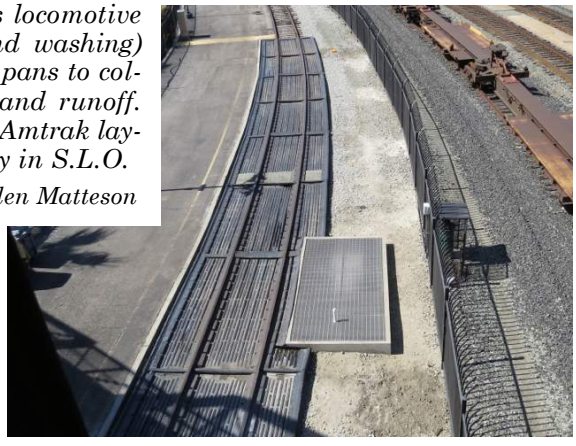
Then came the day in the Museum library when an article by John E. Davis in the September 1993 issue of *Mainline Modeler* magazine tuned up. Mr. Davis had had the good fortune to oil-fire locomotives for the SP between Eugene and Klamath Falls via the Cascades of southeastern Oregon. As with coal, the properties of fuel oil could vary with the source and the season, so Mr. Davis' experience cannot be taken as the ultimate truth everywhere. But his account is informative.

According to the article, the "Dubbs Process" oil used to fire SP locomotives was a blend of the gooey leftovers of crude-oil refining with whatever lighter fractions were available that might make it less like molasses on a cold day. It wouldn't burn in open air, but needed to be somewhat confined, maybe for the small volatile component to linger rather than waft away. Davis describes holding a flat shovel close above a pool of oil on the ground. Directly under the shovel, the oil would burn; away from it, not so. The flame would follow the slowly moving shovel. So getting the oil to burn could be tricky. And according to Davis, it left clinkers, at least when the latest directive from on high was followed. ***Text continues on page 8.***

Don't try this at home. Engine lubricating oil is very different from fuel oil, but both cause problems when they go where they're not supposed to.

Coal was messy every step of the way. Locomotive fuel was generally smaller pieces than in this pile, but if they were too small the draft sucked them out of the firebox and they went out the smokestack mostly unburned.

Three small photos adapted from stock images.



These days locomotive fueling (and washing) areas have pans to collect spills and runoff. This is the Amtrak layover facility in S.L.O.

Photo By Glen Matteson

Hot Oil Show continued

Oil-burning locomotive tenders had a tank for water and a tank for oil, with a steam pipe connected to the boiler. One branch of the pipe fed a closed coil near the tender's oil outlet, to enable heating the oil in cold weather, so it would flow to the firebox. Another branch could vent steam into the space occupied by the oil to heat it quickly and to encourage mixing of the thicker and thinner parts. And if you're remembering the old adage about oil and water not mixing, it was only partly right. Water from the steam could travel into the firebox with the fuel. As you would guess, too much water in the firebox was not a good thing. Kind of negates the idea of a fire.

It was a matter of pride, and job security, for firemen to have clean exhaust. And by clean we mean white to gray rising billows, as opposed to apocalyptic black sinking to the ground. One fireman in Davis' district had a knack for getting up the hill without "smoking the birds out of the sky." The secret was to keep the oil no warmer than necessary to have it flow. If the oil was already hot when it reached the firebox, the added heat there immediately cooked off the volatiles, which went up the smokestack, leaving the unburnable goo behind.

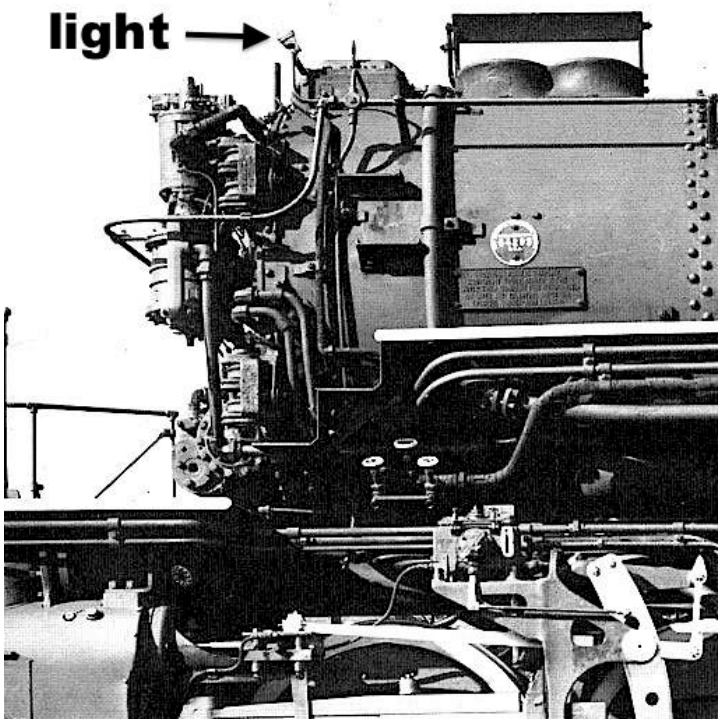
Mr. Davis says that in 1947 a new burner design was introduced, the burner being the arrangement of tubes and openings inside the firebox that are supposed to create a happy blending of oil, air, and heat. The engineering staff at Sacramento insisted that the new burner would perform optimally with the incoming oil much hotter than past practice. (Sacramento was the location of SP's primary shop for rebuilding and modifying locomotives.)

So, one of the first locomotives fitted with the new burner chugged out of Portland with the fireman following the new directive. Down the Willamette Valley they proceeded. Things did not go as planned. By the time they got to Salem, the locomotive "was low on steam and water, with a huge clinker in the firebox." (It seems that with oil, considering the likely sounds, it should be called a "clumper" rather than a "clinker." But the story continues.)

The roundhouse crew at Salem "slashed out the clinker" and a supervising engineer tried to help by cooking the tender some more. Then the train continued to Albany (near Corvallis) where it again limped into town with a growing clinker in the firebox.

As the locomotive reached Eugene things had gone from bad to worse. Davis, preparing to start his run, could see in the tender's oil tank only "foam and a swirling mess." A supervising engineer himself was to regulate the flow of fuel going up the grade to Oakridge. His solution, you must have guessed: "more heat for the tender." Upon reaching Oakridge, trailing a greasy plume and with "a nearly dead engine," said supervisor decided he'd prefer not to continue on through the tunnels ahead. His parting words, according to Davis, "heat that oil!"

Davis, firing now, turned off the tender heater. He and his engineer reached Cascade Summit with a clean firebox, all the clinker having been burned away. When they pulled into Crescent Lake, a roundhouse crew was standing by with slash bars to attack the expected clinker, but had a pleasant surprise. Minimal heating had saved the day. Upon returning to the west side of the mountains the next day, the supervising engineer was told of the cure. He decided not to challenge the Sacramento experts with this new information. But there must have been similar experiences and lessons learned throughout the SP. The new burner design was widely used without hastening the demise of steam locomotives.



Firemen judged the efficiency of their work by the color of the fire in the firebox and by the amount and color of smoke coming out the stack. SP cab-forward locomotives (among others) had an electric light near the smokestack so at night the firemen could get a better view to base their judgments on. The two round objects under what looks like a black horizontal bar are the dual stacks. The bar is actually V-shaped, and split the exhaust columns so their force wouldn't break loose tunnel linings or snow-shed bits. The devices mounted on the front of the smoke box are pumps for air and hot water. Part of a cylinder and the top of a driving wheel are visible at lower left.

This image is based on a photograph, likely the locomotive builder's record, reproduced in the book Cab-Forward by Robert J. Church, revised edition (Central Valley Railroad Publications), 1982.

If anyone has a recollection or a picture of a "slash bar," let us know (newsletter@slorrrm.com).

The search for cleaner and more economical fuels continues. Railroads have tested natural gas, and even fuel cells that employ hydrogen and do not involve combustion (as spacecraft have used). The California High Speed Rail Authority is building an electrified "bullet train," and intends to use mainly solar and wind power.

Focus on Artifacts

What is that dot?

The Museum may have an artifact smaller than this one, another pin.

The dot being examined with the magnifying glass is an enameled pin, shown actual size (if your viewer is set for the proper degree of zoomitude).

Railroads often provided insignia for their employees, showing names and logos of their companies. This is probably not one of those. More likely, despite its quality and apparent age, it's one of many made for fans of all the various railroads.

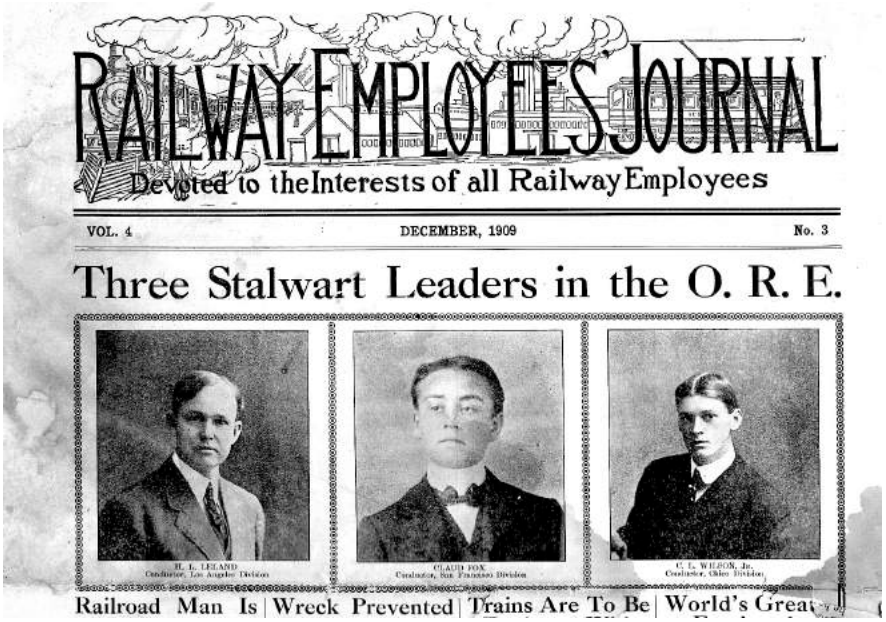
This is a widely recognized emblem of the Southern Pacific. Aspects of the design have been incorporated into versions of the Museum's logo, and in images used by other organizations. The whole image was the property of SP, so it became the property of the Union Pacific Railroad when it acquired SP, and UP's permission should be obtained to use it for any commercial purpose.

The red half-circle with radiant lines represents the setting sun. The "Sunset Route" was a key part of the SP system, extending from Louisiana to Los Angeles via the wide-open spaces of southern Texas, New Mexico, and Arizona. The converging lines with crossbars are of course tracks showing the perspective of distance. There was a train named the *Sunset Limited* that for a while used an extended route between Los Angeles and San Francisco, with a stop at San Luis Obispo.

Use of the word "Lines" was deliberate. That corporate title rests in history between "Southern Pacific Railroad" and "Southern Pacific Transportation Company" ("Trains, Trucks, Piggyback, Pipelines"). "Lines" reflected SP's control of other corporate entities such as the Saint Louis Southwestern ("Cotton Belt") and the Texas and New Orleans, for which locomotives and cars were separately titled –in both the legal sense and stenciling with paint.

Predicting the future is hard, scaredy heads.

Here is the top of the front page of the *Railway Employees Journal*, publication of the Order of Railway Employees (Los Angeles Division) which provided health and accident insurance for railroad workers, December 1909 edition. *Three images from SLORRM collection.*



RAILWAY EMPLOYEES' JOURNAL

Devoted to the Interests of all Railway Employees

VOL. 4 DECEMBER, 1909 No. 3

Three Stalwart Leaders in the O. R. E.

H. L. LELAND
Conductor, Los Angeles Division

CLAUD FOX
Conductor, San Francisco Division

C. L. WILSON, Jr.
Conductor, Chico Division

Railroad Man Is | Wreck Prevented | Trains Are To Be | World's Great

Below the three photos are four articles, partial titles shown here. Articles 1 and 3, from left to right, are interesting for their time-warp aspect.

The man at left is "Judge Robert Scott Lovett, the new President of the Southern Pacific and Union Pacific, and successor to the late Edward H. Harriman…" Despite his best efforts to combine the SP and the UP of the early 1900s, in 1913 the U.S. Supreme Court ordered UP to sell all it's SP stock. [*Coast Mail* Summer 2016] During the period of UP control many improvements to SP lines were made, including strengthening of bridges along the Coast Route.

Apparently reporters of that era had a reputation for badgering public figures until they got some juicy quotes. The article reports that while Mr. Lovett was on his western tour "representatives of all the big papers called upon him to talk along the lines that would give them substance for scarehead articles." They were disappointed. According to the article, he received them warmly and revealed nothing sensational.

The third article is titled "Trains Are To Be Equipped With Telephones." On reading just that, your reporter assumed this was an early experiment in radio-telephones for engineers and conductors, but it seemed too early in comparison with facts known from the 1950s.

Instead, "An important improvement in the Southern Pacific train service has been announced… Hereafter… all trains are to be fitted with telephones that can be connected with the wires of the telephone company of every city on the Pacific Coast." The lines, literally wire-to-wire connections, would be in operation from 30 minutes before departure to one minute before departure. With this advance, following similar progress in the eastern U.S., "…business men, arriving at the station a few minutes before the train leaves … having forgotten something" would not need "to rush out of the station to telephone to their office." Note: Not simply leave the train, but leave the station to find a telephone.

Article continues next page.

Predicting the future continued

Land of opportunity (from page 7 of the O.R.E. 1909 publication):

TOO MANY RAILROAD MEN RUSH TO MEXICO

GAMBOA, Oax.—There is a greater number of unemployed men here and at Tonala than probably at any other time in the history of the Pan-American Railway. The influx is of conductors and engineers who are arriving daily in search of employment and not on account of any reduction of forces on the road. The supply of trainmen far exceeds the demands.

"Oax." is an abbreviation for the Mexican state of Oaxaca (wuh HAW kuh), which lies near the southern end of the country and has a long Pacific coast facing south (like the California coast from Point Concepcion to Ventura). But your reporter cannot find a location in Mexico named "Gamboa," past or present. The nearest is in Panama, and was a main staging area for building the Panama Canal Railway.

There are apparently eight places in Mexico named Tonalá, plus one each in El Salvador and Nicaragua. One hopes the railroad men knew where they were going.

According to the Texas State Historical Association website:

"The Pan American Railway Company, chartered on October 27, 1891, by Boston capitalists, was an ambitious project to connect Victoria, Texas, with Rio de Janeiro, Brazil. The residents of Victoria, anxious to have an independent rail outlet to compete with the Southern Pacific-controlled lines radiating from the city, offered $150,000 in bonus to the company. By August 1892 the line had been completed from Victoria to the Guadalupe River, a distance of ten miles, but funds were not available to bridge the river. Victoria refused to pay any installment on the bonus until additional mileage had been constructed. No regular trains were ever operated on the Pan American, and the track was soon abandoned."

According to a 1926 report "Central American Railways and the Pan-American Route" in the Annals of the Association of American Geographers, "…a project for a railway to traverse the isthmus [of Panama] from continent to continent was proposed." And, "In the 1880's various bills were presented to the Congress of the United States in furtherance of such a scheme." The article refers to "the Pan-American Railway of Mexico" as an active enterprise. But the region is seen, accurately, as unfavorable for railway construction.

The O.R.E. article probably referred to then-current enthusiasm for extending railroads in southern Mexico, which had been building in fits and starts just like their U.S. counterparts, to Guatemala.

An 1896 survey found a 10,471-mile route between New York City and Buenos Aires, 6,702 miles already in operation, leaving 3,769 miles to be built. Still to be reckoned with were the various track gauges and operating, political, and economic conditions along the route.

These days, a relatively short "Pan Am Railway" operates in New England. Due to a strange corporate history, that company acquired and uses the logo of the former Pan American World Airways.

A true pan-American railroad has not been built.

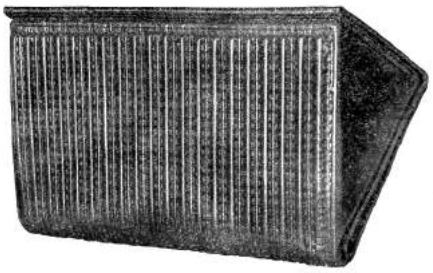
Then there's this, from the back page of the *Railway Employees Journal*. Your reporter was puzzled by the photo –a ventilated backrest, a wall heater?

Every person who joined the O.R.E. during December 1909 through February 1910 would "receive, free of charge, a handsome pocketbook similar to the one" shown. It's "lined with silk and leather [and] contains three pockets, one of which will be fitted with the O.R.E. membership card of the owner." As "the books are very expensive [this] opportunity should not be overlooked."

-Glen Matteson

RAILWAY EMPLOYEES JOURNAL

TO BE GIVEN AWAY FREE



Valuable Prize for New Members of the Order

You don't get a prize like this for joining the Museum, but think of all the great history you get to read about, while it's fresh!

Additional Recent History

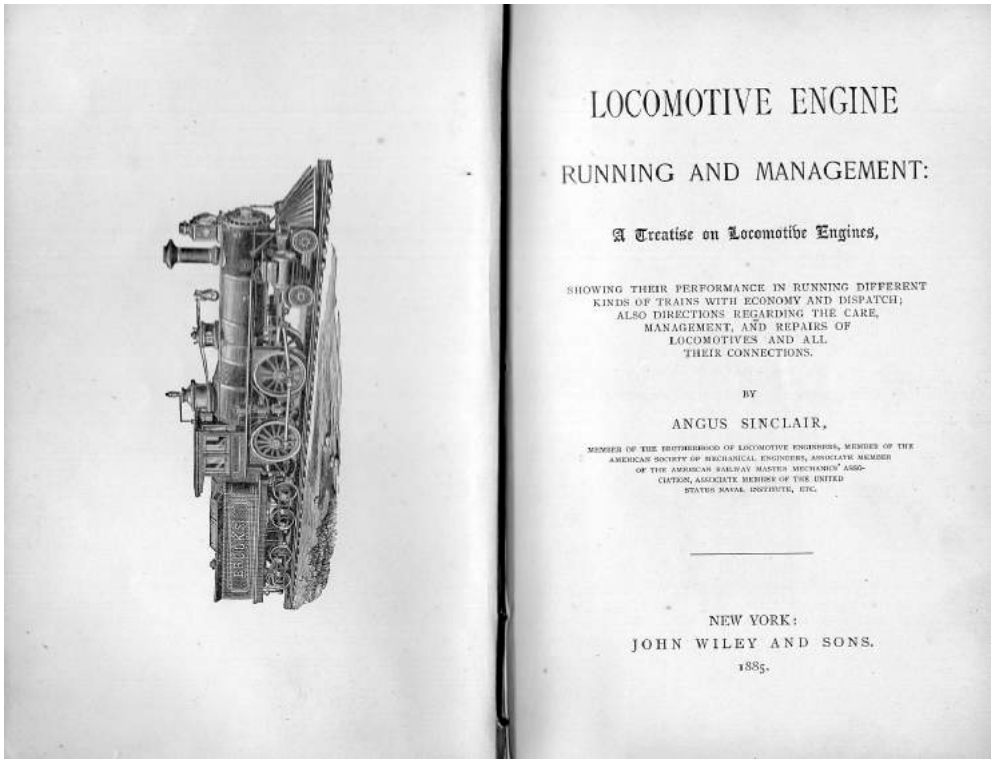
In January U.P.R.R. operated ballast trains along the Coast Route. Here, a colorful set of maintenance contractor Herzog's hopper cars head north at Chorro siding. Another train of hopper cars with a conveyor belt all along the bottom and special distributors at each end was parked awhile at San Luis Obispo. *Photo by Glen Matteson*

Dissension and Conflict in the Organization

One of the great things about working with and for an all-volunteer organization is that nearly everyone, all the time, is doing what they want to be doing. Even if it drives someone else crazy.

No, seriously, it's fairly easy to have everyone involved with the Museum agree on the overall goals, but nearly impossible to have everyone agree on all the details to reach the goals. Combine that with each serious railfan's tendency to be expert in a specialized aspect of railfandom, and you have a recipe for the kind of conflict described in the column at right.

The Curator wants the Museum to publish his carefully researched account of a dastardly deed involving a Southern Pacific train going over Cuesta Grade in 1904. The Archivist thinks the booklet would have an appropriate old-timey flavor if it had a main title followed by a long-winded subtitle setting out some of the particulars of the dastardly deed (but not enough to give away the ending, of course). The Curator thinks the proposed title is too long. One day the Archivist finds this book in the Museum's collection.



LOCOMOTIVE ENGINE

RUNNING AND MANAGEMENT:

A Treatise on Locomotive Engines,

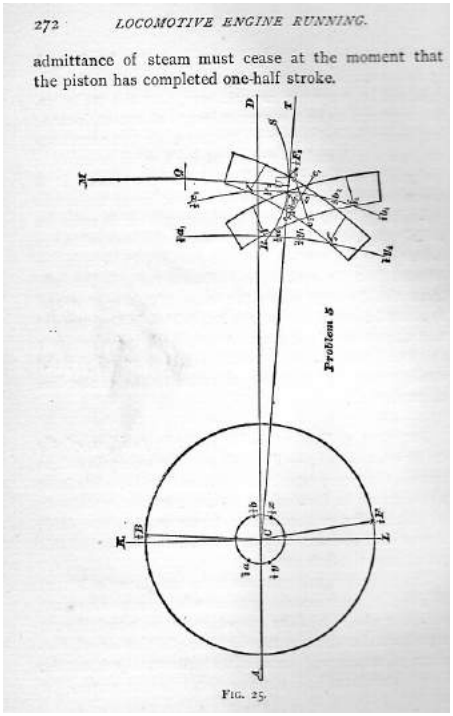
SHOWING THEIR PERFORMANCE IN RUNNING DIFFERENT KINDS OF TRAINS WITH ECONOMY AND DISPATCH; ALSO DIRECTIONS REGARDING THE CARE, MANAGEMENT, AND REPAIRS OF LOCOMOTIVES AND ALL THEIR CONNECTIONS.

BY

ANGUS SINCLAIR,

MEMBER OF THE BROTHERHOOD OF LOCOMOTIVE ENGINEERS, MEMBER OF THE AMERICAN SOCIETY OF MECHANICAL ENGINEERS, ASSOCIATE MEMBER OF THE AMERICAN RAILWAY MASTER MECHANICS' ASSOCIATION, ASSOCIATE MEMBER OF THE UNITED STATES NAVAL INSTITUTE, ETC.

NEW YORK:
JOHN WILEY AND SONS.
1885.



272 LOCOMOTIVE ENGINE RUNNING.

admittance of steam must cease at the moment that the piston has completed one-half stroke.

Problem 8

FIG. 25.

"Locomotive Engine Running and Management: A Treatise on Locomotive Engines, showing their performance in running different kinds of trains with economy and dispatch; also directions regarding the care, management, and repairs of locomotives and all their connections. By Angus Sinclair, member of the Brotherhood of Locomotive Engineers, member of the American Society of Mechanical Engineers, associate member of the American Railway Master Mechanics' Association, associate member of the United States Naval Institute, etc."

And below the line: "New York: John Wiley and Sons. 1885."

Yes, it was published exactly that way, with the frontispiece illustration turned 90 degrees from the title page, probably so the reader can better appreciate the engraving of the locomotive. Besides subtitles posing as a table of contents, the use of multiple fonts on title pages was also in fashion during the 1800s. Score one for the Archivist.

But the Curator gets a point, too. In his account, he had used the word "locomotive" rather than "engine." They're not truly interchangeable. In steamers, the "engine" consists of the cylinders and pistons, their valves and valve gear, and with a stretch, the connected driving rods. The locomotive embodies the engine plus the frame, firebox, boiler, air compressor, the driving and any non-driving wheels, springs, brakes, controls, and appurtenances from whistle to headlight. Articulated locos, like SP's cab-forwards, had two engines (sets of pistons and driving wheels) in one locomotive. The author of this book, not taking any chances, uses "Locomotive Engine." "Diesel engine" sounds fine, but one could argue that the engine is only the cylinders and pistons of the engine block, their valves, and the crankshaft, while for a locomotive you need the frame, electric motors, gears, axles, wheels, and so on.

In case the full text on the title page is hard to read (it's nearly all in capitals, before that form become known as "shouting") it's reformatted in quotes at left.

This 400-page work is among the oldest published items in the Museum's collection. It has several diagrams like the one at far left. With the pistons able to travel only back and forth a certain maximum distance, how did the engineer set the locomotive to go forward or backward, or apply power most effectively when starting a heavy train slowly as opposed to rolling along at speed (there being no "transmission" in the sense most know it today)? It was a tricky business, like running a museum.

Too Many Railroads

From about 1850 to about 1950, if a town did not have a railroad, it didn't amount to much. And the more railroads that served a city, the better. Peaking around 1900, if you wanted to ship something or travel, the train was the way to go. This overall reality attracted a lot of investment in railroads, not all of it well placed or well timed. But once a railroad was up and running, usually a lot of people depended on it.

Mobilizing for the First World War (1914-18) put a huge strain on the country's rail system, to the point the federal government stepped in to largely run things. The following decades saw a surge in innovation and wealth. But some of it was propped up by heavy borrowing. As the 1920s drew to a close, even before the onset of the Great Depression, there was concern about many "weak lines." Their existence was essential to smaller communities and they provided competition within larger ones, but they were not earning their cost of capital. That situation leads to deferred maintenance, operating problems, and loss of revenue in a self-reinforcing downward spiral.

The Interstate Commerce Commission (ICC) had been established by act of Congress in 1897. By the 1920s it was regulating freight rates and often deciding on the creation, dissolution, and combination of railroads. There was not a lot of creation or dissolution by then, but combinations (acquisitions) had been happening from the beginning. Most had been "end-to-end," allowing a company to reach more customers directly and enabling economies of scale, such as having one major repair shop or one lead attorney instead of two. Some were "side-by-side" merger that, along with similar empire building in oil, steel, meatpacking, and grain milling led to at least regional monopolies and drew the ire of "trust busters." The latter refers not to people being dishonest but to paper companies (trusts) set up to own the multiple enterprises that actually made and moved things. The whole business was very complicated, with cases such as Railroad A owning a large block of Railroad B's stock, while Mr. X owned large blocks of both railroads' shares. At what point would RR A and RR B become colluders to fix rates rather than competitors?

Many states also had regulatory bodies for railroads, and the courts spent a fair amount of time deciding who could regulate what. Into the 1960s, the California Public Utilities Commission was telling railroads when they could or could not eliminate passenger trains. The Southern Pacific ran a spitefully short train on its Sunset Route, among other resistance to government regulation.

But back to 1929. Essentially, Congress had anticipated that there would be continuing requests to combine railroad companies, each raising similar questions about competition, rates, and service levels. Rather than treating each as a new dilemma, the ICC was directed to prepare a scheme for railroad combinations that would allow stronger lines to acquire weaker ones while preserving competition within regions. The scheme would not *require* any combinations. However, based on an overall assessment by an objective party, it would at least allow starting from a presumption that RR A acquiring RR B would be acceptable, while RR A acquiring RR C and RR D would not be. As a basis for their decisions, the ICC had long collected data on railroads' mileage, traffic types and levels, and revenues and costs.

This may be interesting in a general way, but what does it have to do with the Museum's mission? By choice and necessity, our Museum focuses on Central Coast railroading. This area was served by one railroad that was connected to the continental system, with the western United States notably lacking the kind of dense network that had Midwestern and Eastern railroads nearly tripping over each other. In clearing space on the Museum's shelves for items fitting our focus, we recently disposed of some bound volumes of ***Railway Age*** magazine (the primary industry journal for 160 years) with faded and brittle pages from the 1920s

An article in the December 28, 1929 issue, titled "I.C.C. Consolidation Plan," was scanned because it offered an intriguing snapshot of that era. The Summer 2016 *Coast Mail* had a greatly simplified "Southern Pacific – Union Pacific Family Tree," which briefly noted the ongoing debate over railroad mergers now that we're down to four major U.S. systems and a handful of umbrella companies operating often widely separated short lines.

According to the 1929 article, the ICC had published "a 68-page pamphlet … containing a plan for allocating approximately a thousand railroads among 21 systems…" So, even at the extreme of combinations envisioned in the late 1920s, there would have been five times as many major carriers as remain today. From the lists in the article, the ICC plan would not have supported the particular combinations that resulted in today's Union Pacific, BNSF, CSX, or Norfolk Southern. Their constituents would have been grouped in other ways. But in a delightful irony, for some reason the little Genesee & Wyoming (a salt-hauling line in New York state) would have been shared financially by five railroads each having an undivided interest. One of the umbrella companies that now owns and operates short lines throughout the country, including former SP lines in California, Oregon, and Arizona, is Genesee & Wyoming, Inc.

Continues on page 13.

Too Many Railroads continued

The ICC proposed that Kansas City Southern, about the only one of the thousand that remains independent, become part of the Union Pacific. And that the Denver and Rio Grande Western (which bought SP in 1988) and the Western Pacific (acquired by UP in 1981) be part of an expanded Missouri Pacific (which itself became part of UP in the 1980s). In the 1920s the D&RGW, the WP, and the MP were in one of those relationships like that of RR A, RR B, and Mr. X mentioned above. Yep, harder to keep track of than the characters in a Russian novel.*

At right is the ICC proposal for the Southern Pacific. Note that the Pacific Coast Railway and the Santa Maria Valley Railroad were seen as fair game for absorption. So were the Pajaro Valley Consolidated Railroad Company (a 42-mile narrow gauge built by Claus Spreckles to haul sugar beets from his fields in the Salinas-Watsonville area) and the Mt. Tamalpais and Muir Woods Railway (a tourist line located in Marin County, "the crookedest railroad in the world," done in by a 1930 fire).

Your reporter is also a bit of a rockhound, so the name "Rio Grande Micolithic and Northern Railway" caught his eye. You'll have to admit, the ICC was thorough. Here's a summary of the RGM&N, provided by the Texas State Historical Association website:

The line was chartered on May 17, 1926, and opened the following year. The 6.4-mile road was located near the eastern border of Hudspeth County and served no population centers. It ran from a connection with the Galveston, Harrisburg and San Antonio (later Texas and New Orleans) at Mica to Micolithic, where the Micolithic Company of Texas had a quarry and crushing plant... The project was unsuccessful, and the railroad handled only forty-one cars before the quarry and crusher shut down in early 1929. With no remaining business the RGM&N also closed, sold its only locomotive (a twenty-five-ton gasoline unit), and remained idle for ten years. In 1939 the railroad was abandoned and the track removed. The RGM&N did not offer passenger service.

* Further, the Pacific Coast Railroad, not the recreational one in Santa Margarita but the Pacific Coast Railway's sister line in the Pacific Northwest, could have been part of Union Pacific.

Report and illustration by Glen Matteson

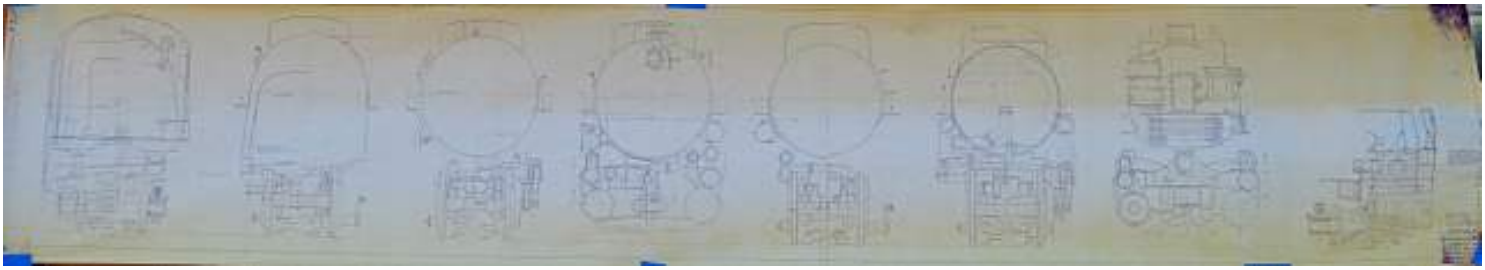
[Railway Age magazine] **December 28, 1929**

Nezperce and Idaho Railroad Company (undivided one-half interest).
Craig Mountain Railway Company (undivided one-half interest).
The Great Western Railway Company (undivided one-half interest).
The Big Creek and Telocaset Railroad Company.

System No. 16—Southern Pacific

Southern Pacific Company.
Holton Inter-Urban Railway Company.
Nevada-California-Oregon Railway.
Texas and New Orleans Railroad Company.
Northwestern Pacific Railroad Company.
San Diego and Arizona Railway Company.
Sunset Railway Company (undivided one-half interest).
Amador Central Railroad Company.
Angelina and Neches River Railroad Company.
Aransas Harbor Terminal Railway.
Arcata and Mad River Railroad Company.
Arizona Southern Railroad Company.
Bucksport and Elk River Railroad Company.
The California and Oregon Coast Railroad Company.
California Central Railroad Company.
California, Shasta and Eastern Railway Company.
California Western Railroad and Navigation Company.
Camino, Placerville and Lake Tahoe Railroad Company.
Carlton and Coast Railroad Company.
Caro Northern Railway Company.
Cement, Tolenas and Tidewater Railroad Company.
Diamond and Caldor Railway Company.
East Texas and Gulf Railway Company.
Fredericksburg and Northern Railway Company.
Groveton, Lufkin and Northern Railway Company.
Lufkin, Hemphill & Gulf Railway Company.
Louisiana Southern Railway Company.
Magma Arizona Railroad Company.
Mascot and Western Railroad Company.
McCloud River Railroad Company.
Minarets and Western Railroad Company.
Moscow, Camden and San Augustine Railroad.
Mt. Tamalpais and Muir Woods Railway.
The Nacogdoches and Southeastern Railroad Company.
Nevada Copper Belt Railroad Company.
Nevada County Narrow Gauge Railroad Company.
Oregon, Pacific and Eastern Railway Company.
Pacific Coast Railway Company.
Pajaro Valley Consolidated Railroad Company.
Peninsular Railway Company.
Port Isabel and Rio Grande Valley Railway.
Ray and Gila Valley Railroad Company.
Rio Grande Micolithic and Northern Railway.
San Joaquin and Eastern Railroad Company.
Santa Maria Valley Railroad Company.
Texas Southeastern Railroad Company.
Tonopah and Goldfield Railroad Company.
Uvalde and Northern Railway Company.
Virginia and Truckee Railway.
Trona Railway Company.
Waco, Beaumont, Trinity and Sabine Railway Company.
Tucson, Cornelia and Gila Bend Railroad Company.
Valley and Siletz Railroad Company.
Ventura County Railway Company.
Willamette Valley and Coast Railroad Company.
Yosemite Valley Railroad Company.
Bay Point and Clayton Railroad Company (undivided one-third interest).
Eureka-Nevada Railway Company (undivided one-half interest).
The Nevada Central Railroad Company (undivided one-half interest).
Nevada Northern Railway Company (undivided one-half interest).
Oregon, California and Eastern Railway Company (undivided one half interest).
Yreka Railroad Company.

Logos of some of the many railroads eligible for absorption by the Southern Pacific, according to the ICC in 1929.



We're On a Roll

The Museum is custodian of many historical plan drawings, ranging from sites and buildings to whole locomotives and some of their many parts. Shown above is a series of sectional views of a Southern Pacific articulated steam locomotive. At bottom is an Alco PA passenger diesel, dated 1963, a type once common along the coast and throughout the SP system. Both drawings would be referred to at shops where locomotives were maintained and repaired.

Our archivist has been building storage racks for both flat drawings (below right) and for rolled ones (right and directly below), and digitally cataloging them.

A few months ago the archivist was asked if the Museum had maps that showed the Pacific Coast Railway in detail. The answer was, "No, for most places only USGS topographic maps." It turns out that we did have detailed right-of-way drawings, and now that they're cataloged and filed we can find them. More recently, we discovered that digital versions are available through a San Luis Obispo county government website (http://www.slocounty.ca.gov/PW/County_Surveyor/Pacific_Coast_Railway_Right_of_Way_Maps.htm).

Having these resources is great. Being able to find them is even better.

Photos by Glen Matteson

This drawing is 30 inches wide and 14 feet long. The one at bottom is 32 inches wide and about 10 feet long. The scale is 1.5 inches to the foot (the size of the Bitter Creek Western miniature railroad near Arroyo Grande). The only feasible way to move and store such items is rolled.