



Maricopa Live Steamers

STACK TALK

OCTOBER, 2020

The official newsletter of the Adobe Mountain Railroad in Phoenix, Arizona.
Operated by the Maricopa Live Steamers Railroad Heritage Preservation Society.



President's Page

Well, we now have the approval from the County to hold a Fall Meet with campers on the property spaced 20 feet apart. We also anticipate having all tracks open and running for the Meet with steam engines being the one exception. Because of the weeds being so close to the track, (see page 9 bottom) a steam engine firebox could very easily start a big brush fire. I have worked on many spots to get the 4-foot easement clear of weeds on each side of the track. The County has not lifted the fire ban yet, and with all the dry brush and wildfires in the state, I do not know if the fire ban will be lifted in time for the Meet. I will tell you that steam engines will be limited to the routes that are clear of weeds on each side. I still have over 2500 feet of East Werner to clear, between Fisher and Racewatch, to make it safe for a firebox to pass through there.

If you would care to help to get a route open for steam engines, please grab a landscape rake and shovel and help out. Pick your favorite route. The weedeaters can run down one side of the track and back up the other side to where you started, and will cut down low enough to make a path next to the track that will not be easily set on fire by a steam engine. The rakes and shovels are in front of the switch barn for club use. Please, just be sure to return them immediately when you are done, so the next person can utilize the tools to the club's advantage. The weedeaters are next to the first container behind the air compressor. Please bring a little gas, or find me and I will gas it up for your use. If the fire ban is lifted, I would really like to have Werner, Bobberg and Pottsville clear of weeds enough to run steam on, so I am asking for everyone's help. Please do not forget to bring your water with you

Vice President's Page



whenever you come out to the Park. It is still very hot in the sun, even the rattlesnakes do not come out during the hottest part of the day.

I want to **THANK YOU ALL SO MUCH**, all of the people who have made donations of time and/or money (during this pandemic that is keeping the Park closed) to keep the club in materials needed for track repairs and maintenance. Wherever I have had a sun kink or found termite damage, I have been able to put concrete ties in those areas, and the progress is noticeable and should last for many years to come. Let those little buggers try and eat 3500 psi concrete. We have also started replacing switches with plastic ties and steel rails, and this upgrade should also last for many years. After replacing the two at New Diehl City, they sure give a smooth ride through the switches now. I hope to get 4 more replaced before the Meet, along with finishing South Arntchoo at Wiebolts Woods and Far Flung between Brown Bear and Gamble before the Meet. The Pardee yard is near completion. Volunteers have been working to restore it and, as of this week, it is very near complete from what I saw. Now we just need rain to wet things down. That brings me to this item. As you move around the park on the dirt roads, **please go slow so as not to raise too much dust.** Pray for rain.

October is here and dues are due starting now until December 31st. The form is in the Stack Talk, and there are a few in the clubhouse by the Treasurer's desk. I have noticed a few new members, for whom I have sent off a request for name badges, so at least we are growing more than what we are losing. This is all I have to write about, and no real complaints this month.

— Joe

COVID-19 RESTRICTIONS are still in place.

For members' health and safety, until further notice, all social activities at the Park have been cancelled.

State mandates are still in place prohibiting gatherings of more than 10 people, and everyone must stay at least 6 feet apart.

ONLY members / immediate family can be at the Park. NO parties or gatherings of any type may take place.

From the Desk of: Terry Liesegang – Road Signal Superintendent

Subject: Signal Status – Adobe Western Subdivisions

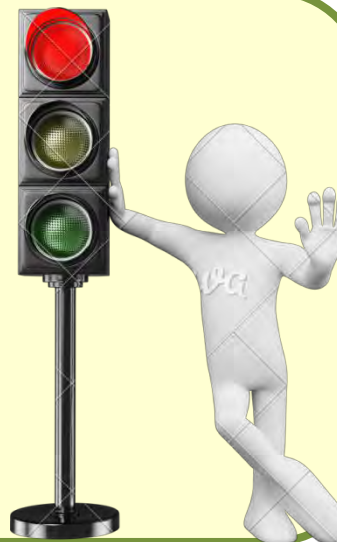
Werner, Pottsville, Bobberg and Arntchoo signals are functioning normally.

Far Flung is still dark, so you must use radios. Far Flung will be dark until all track construction is completed, hopefully before the OPS Meet in January.

Massie and Racewatch:

remote control route selection switches are working normally.

Pottsville mainline road crossing flashers are working normally. However, the track is dirty, so it will take a couple of trains running on the mainline to make train detection consistent.



From the Desks of: Donna Hohm – Nominating Committee

Rich Moch – Nominating Committee

Subject: Nominations for 2021 Board of Directors

Election: Ballots for the 2021 Board of Directors election will be tallied at the November 14th membership meeting. Please submit your name and position desired, and/or a desired nominee to Rich Mock (janrich72@gmail.com) or Donna Hohm (donnahohm@yahoo.com). If submitting someone else's name, they will be contacted to insure they would like to be on the ballot.

No names will be accepted after October 26th. Ballots require your name be printed on it, however your name will be removed before the ballots are counted. Ballots will be available on the website, in the clubhouse and in your November 2020 Stack Talk approximately two weeks prior to the election.

Pete Pennarts
President

Joe Schnyder
Vice President

Mick Janzen
Secretary

Bob Douglas
Treasurer

Bill Cobb Dave Griner Terry Liesegang
Members at Large

Cliff Fought
Superintendent
Construction

Hank Gallo
Superintendent
Operations

Dave Kulman
Maintenance of Way
Superintendent

Matt Rockwell
Sawmill
Superintendent

Terry Liesegang
Road Signal
Superintendent

Dakota Clemens
Tower Signal
Superintendent

Bill Pardee
Boiler Inspector

Joe Fego
1-inch Operations
Superintendent

Joe Schnyder
Safety

Jim Zimmerman
Engineer Test
Administrator

Perry McCully
Facility Administrator

John Broughman
Public Run Crew
Coordinator

John Draftz
Advertising

Donna Hohm
Membership
Committee Chairman

Matt Rockwell
Holiday Lights
Committee Chairmen

John Bergt
Timothy Freeman
Web Masters

Ken Giordano
Stack Talk Editor

Send emails / photos to:
[MLNewsroom](mailto:MLNewsroom@gmail.com)
[@Gmail.com](mailto:MLNewsroom@gmail.com)

From the Desk of: Joe Schnyder – Consignee

Subject: Rolling Stock and Engine FOR SALE

This is all 2.5" scale equipment, 7.5" gauge.
All have RMI trucks and couplers.

Engine -- Phoenix sound, Electric drive,
Custom made in Houston, Texas.

Please call for prices. **Joe Schnyder 623-332-0238**





2 TRAIN RACKS FOR SALE

These racks are:

- ❖ 12 feet long
- ❖ full rack should hold eight 6 foot cars
- ❖ cut-out rack should hold six 6 foot cars
- ❖ fits only 1.5 inch scale equipment, with 7.5 inch gauge wheels
- ❖ all aluminum frames
- ❖ very well built with tie downs for the cars
- ❖ came out of Terry Cummings' toy hauler trailer

The club is asking \$500 each.

Pete Pennarts is in charge of selling these racks.

Please contact him at penn620@cox.net.



From the Desk of: Bruno Platzer– Engineer

Subject: **Entire Steam Train for Sale**

This is 2.5" scale equipment, 7.5" gauge. All items are D&RGW.
K-27 steam locomotive, coal or propane, super detail.
Includes 7 freight cars and 1 long caboose.

All for \$155,500 Bruno Platzer 702-371-6397



MEMBER CONTRIBUTIONS!



[Home](#)
[Search](#)
[Events](#)
[Jobs](#)
[Classifieds](#)
[Games](#)
[Webcams](#)
[Amtrak](#)
[Records](#)
[Advertising](#)
[About](#)

Train Movies & Railroad Films on DVD & Blu-ray

From classic comedies to thrillers, this train movies guide includes 151 feature-length movies with railroad/subway plots or notable scenes. A description of filming locations is provided with many titles, including historical railroad and locomotive data where available. All titles in this guide are available on DVD or Blu-ray using the links below. If you have questions, corrections, or suggested additions, please [let us know](#).

Shared by
John Draftz

Documentaries and specialty videos catered to rail enthusiasts and model railroaders are **NOT** included on this page and may be ordered from our sponsors [MCM Rail Videos](#) and [Yard Goat Images](#).

CLICK: <https://drive.google.com/file/d/1i9DrOxxPr826ZxUPBz9mE36467CwxqgZ/view?usp=sharing>

151 Railroad Movies Descriptions like the one shown below



#1 - The Train (1964)

Cast: Burt Lancaster, Paul Scofield, Jeanne Moreau, Michel Simon
Director: John Frankenheimer (replaced Arthur Penn upon firing)
Format: English, Black & White, Mono
Runtime: 133 minutes
IMDB User Rating: 7.8 (of 10)
Amazon.com DVD Price: [Click Here For Current Pricing](#)
Amazon.com Blu-ray Price: [Click Here For Current Pricing](#)

Synopsis: With the Allied army approaching Paris in August 1944, German commander and art fanatic Colonel Von Waldheim (Paul Scofield) steals a collection of paintings from the Musée du Jeu de Paume and loads them on a train bound for Berlin. Labiche (Burt Lancaster), a railway inspector and member of the Resistance, is at first more concerned with weapons than art. But when a friend is murdered trying to sabotage the colonel's scheme, Labiche vows to stop the art train at any cost. Labiche and his fellow railway men unleash a torrent of devastation but must use skill and deception to protect the train's prized cargo. The story was inspired by an actual art looting and France's successful delay of the German train until the Allies arrived.

Filming Locations: *The Train* was primarily filmed on location in France, featuring authentic train derailments, wrecks, and air attacks staged in "full scale" without models and with limited sets. Period equipment was donated by French National Railways (SNCF) during their transition from steam to diesel, and full access was provided to seldom used routes and yards. As a result, *The Train* is widely considered to have the most authentic railroad scenes in a feature film.

Except for the interior museum shots which were filmed with a studio set, other early scenes including the loading of the art train were shot near Paris at the docks of St. Ouen. The rail yard (Vaires) destroyed by an air raid (filmed using A-26s from the French Air Force) was actually staged west of Paris at Gargenville, and required four months to plant and wire nearly two tons dynamite. The Spitfire attack on the daytime light engine return to Rive-Reine (filmed using a Spitfire Mark V) was shot just south of the Château de Robert-le-Diable, near Moulineaux, where the tunnel and viaduct are still used today in freight service. The stations shown during the run to Germany were filmed for about 25 straight nights east of Paris at Troyes, Longueville, and Provins.

The station, crash, and hotel in the fictional Rive-Reine were actually filmed at Acquigny, approximately 60 miles northwest of Paris. The scenes immediately before the crash were shot on the track heading south from Acquigny. The idea of a circuitous route returning to Rive-Reine was not part of the original script, but was improvised to maximize filming opportunities at Acquigny. Director John Frankenheimer felt the village was superior to the initially intended filming locations. Passenger service to Acquigny ended four years prior to filming, providing the opportunity to stage the crash sequence without interrupting rail service. The line is still active as an industrial branch as of 2008, serving the Georgia Pacific mill near Hondouville. The station is now used for offices, and the hotel where Labiche stayed the night was converted to a private residence.

The steam locomotives are Class 230Bs #739 (leads the military train Paris to Vaires), 517 (art train until Rive-Reine crash), 855 (rear engine in Rive-Reine crash), and 711 (art train post-crash). The "armored" locomotive was just another conventional steam engine with exterior casing built by the filmmakers. The air raid at Vaires included several Class 141R locomotives at the engine shop, though perhaps unintentionally as this locomotive class did not begin delivery until 1945. Additionally, a Class 030C #757 was used for the initial derailment at Rive-Reine that blocked the art train. The derailment of #757 was intended to occur much slower, but the stuntman pulled the throttle too far before jumping and caused a high speed crash that took out 9 of 10 cameras and suspended shooting for two days. The unharmed (buried) camera captured a stunning track-level shot for the film. The art train served not only as a key prop in the film, but also to transport the filmmakers' equipment between shooting locations.

How To Prevent Train Accidents | Built From Disaster – 50 mins.

How some of the worst accidents of the past have helped to improve the technology of today.

<https://www.youtube.com/watch?v=9571zV6TkQA>

LINKS OF THE MONTH

Engineering Connections - Bullet Train | Science Documentary – 50 mins.

Looking at Japan's Bullet Train – high-speed wheel design, pantograph, banking on turns and earthquake-proofing.

<https://www.youtube.com/watch?v=xA4aaSzqT9s>

Extreme Trains: Longest Running Steam Train (S1, E5) | Full Episode – 45 mins.

Union Pacific 844 from Cheyenne WY to Denver CO.

<https://www.youtube.com/watch?v=rCb7fgbvmT0>

Extreme Trains: World's COOLEST Train (S1, E4) | Full Episode – 45 mins.

Union Pacific Refrigerated Train – its 2,700 mile trip from Washington State to New York State.

https://www.youtube.com/watch?v=xQLf201R_JU

Extreme Trains: FASTEST TRAIN in the USA (S1, E3) | Full Episode – 45 mins.

Amtrak's Acela High-Speed Train from Washington DC to Boston MA.

<https://www.youtube.com/watch?v=W1JCWnDtVAQ>

Extreme Trains: OUTRAGEOUS FREIGHT TRAIN (S1, E2) | Full Episode – 45 mins.

BNSF Freight Train from Los Angeles CA to Fort Worth TX.

<https://www.youtube.com/watch?v=RtIEuk7fDnE>



WERNER TROLLEY STATION

story and photo by Geronimo Vidales

10/3 – This evening I went to the park and saw a few members running trains (great weather today!) so I wanted to share this picture of the Trolley Station at night.



TRACKING TRACKSIDE PROGRESS

2020

ARNTCHOO

story and photo by Joe Schnyder

9/19 – This is Frank Behrle using his locomotive to push the watercar. This section of track is from Harnish Valley curve to the crossovers at Arntchoo Junction on the outbound Arntchoo. This section had old wood ties with small screws and was replaced with concrete ties for a length of 185 feet using 370 concrete ties. The inbound side was replaced earlier this year with plastic ties. With each type being across from one another, we will be able to see which holds up better, the plastic or concrete.

Many, many THANKS to all who made the ties and for Perry McCully who came out and picked up all of the old rotten termite infested ties and took them to the dumpster for disposal. After Scott Mack and I got it all dug out and the new ties set in the hole, Terry Liesegang took a leave of absence from his job with signals to come over and screw all these ties down, allowing me to follow behind and fill in the ballast, level and tamp. Then, good old Frank Behrle came along to help me get the water down on it so that it would take a set. To the people who donated money for concrete and rebar for these ties, you can get out and run on it now on your way to West Werner, and enjoy what you helped us to get done, while we had the advantage of the summer sun. This is only one spot that has been done. You will run across many more of these spots where we had kinks that were fixed (hopefully for good) using concrete ties.

On East Werner, where we did all the curves a few years ago, we now have come back and replaced the tangent track sections (still had wood ties and small screws) with concrete ties. As you run along, you will see these spots and should feel the difference in the ride as you run on it. About 600 feet of the tangent track sections that got concrete ties also got steel ribbon rail to add many years of life to the track. This is the track that we use for the Holiday Lights Christmas runs and is in very good shape now, except for the eastbound main at Geronimo, which is still the old track and has yet to be done.

The section of South Arntchoo where we have been working in short phases is going to get attention now so we can have it open for the Fall Meet. We still have to get the track replaced from Winchester to Daveellen Glen, and then the outbound side will be good out to Pardee point. We still have to get about 10 more panels down, hooked up and level, ballasted, tamped and watered before the Fall Meet, and another 15 panels ballasted, leveled, tamped and watered north of Wiebolts Woods before we can run on it. Joe Fego and Rich Moch from the 1" scale layout are building the new panels for us, and I really want to thank them for all of their help. With all they have been doing to the 4-3/4" gauge track, they have taken time out to help me get the 7-1/2" track rebuilt. **THANK YOU guys.** I appreciate you taking time out to help me. Also on that note, we are hoping that the 1" scale layout will be seeing some new faces this Fall Meet with all of the additions Joe and Rich have done to make it a place for 1" scalers to meet and run. If you do not have 1" scale equipment to run, at least go look at all they have done to enhance the visitor's experience to the Railroad Park. They have done a really commendable job. Thanks, guys, it looks great.



TRACKING TRACKSIDE PROGRESS 2020



POTTSVILLE

story and photo by Joe Schnyder

9/20 – Here, at the southwest corner of the museum at Pottsville, we had a kink that popped up behind the motorcar shed. After looking at it, I decided to take the ties out and replace them with concrete on this portion of the curve, and went an extra 10 feet on each side of the kink. After the wood ties were dug out and hauled away, the concrete ties were installed and spiked down. During the hottest part of the day, I pushed the curve out, filled in the ballast, tamped it down and watered it. Here's hoping I do not have this problem here again. This spot took 60 ties, which were spaced out on 6 inch centers covering 30 feet of track. The museum curator Jerry Oyler was there to assist in the watering to set the ballast. One more down and, if it would finally cool off, it would then be only 2 more kinks to go. But I do not see it cooling off any time soon. It has been a very hot summer and, with the record breaking number of days over 100, 110 and 115, together with nighttime temperatures over 90° F, the rails had to go somewhere. Here's hoping we don't have another summer like this one any time soon.



KNORRTONN SWITCH

story and photo by Joe Schnyder

9/28 – Here is a picture of the Knorrtonn switch to Brown Bear that is getting concrete tie replacement because of termite damage in the area. This area will be done before the Meet, and you will also see ties spread out between West Gamble and Pieter Pass to be replaced after the Meet. Our goal is to finish before the Operations meet in January. Please note that they will be laying right next to the track, so please be careful if you are off your train walking around in the area of the ties.



STEAM LOCOMOTIVES

BOILER Appliances and Attachments

Injectors

by Dave Griner

Hello once more. Our consignment to Purgatory may be close to ending . . . it's a hope anyway!!

Our discussions will deal with locomotive appliances and the injector in particular. It is seldom remarked regarding its history and function.

Here we find a drawing of the *very first* injector invented by Henri Jacques Giffard in May of 1858. A significant aspect of this is that Mr. Giffard had NEVER seen an injector and having one built to his specifications, it WORKED THE FIRST TIME!!! After reviewing the drawing, we must ask "just how incredible this event really is" and exactly how did he decipher its intricacies to have it work the first time. Most amazing in the extreme!!!!

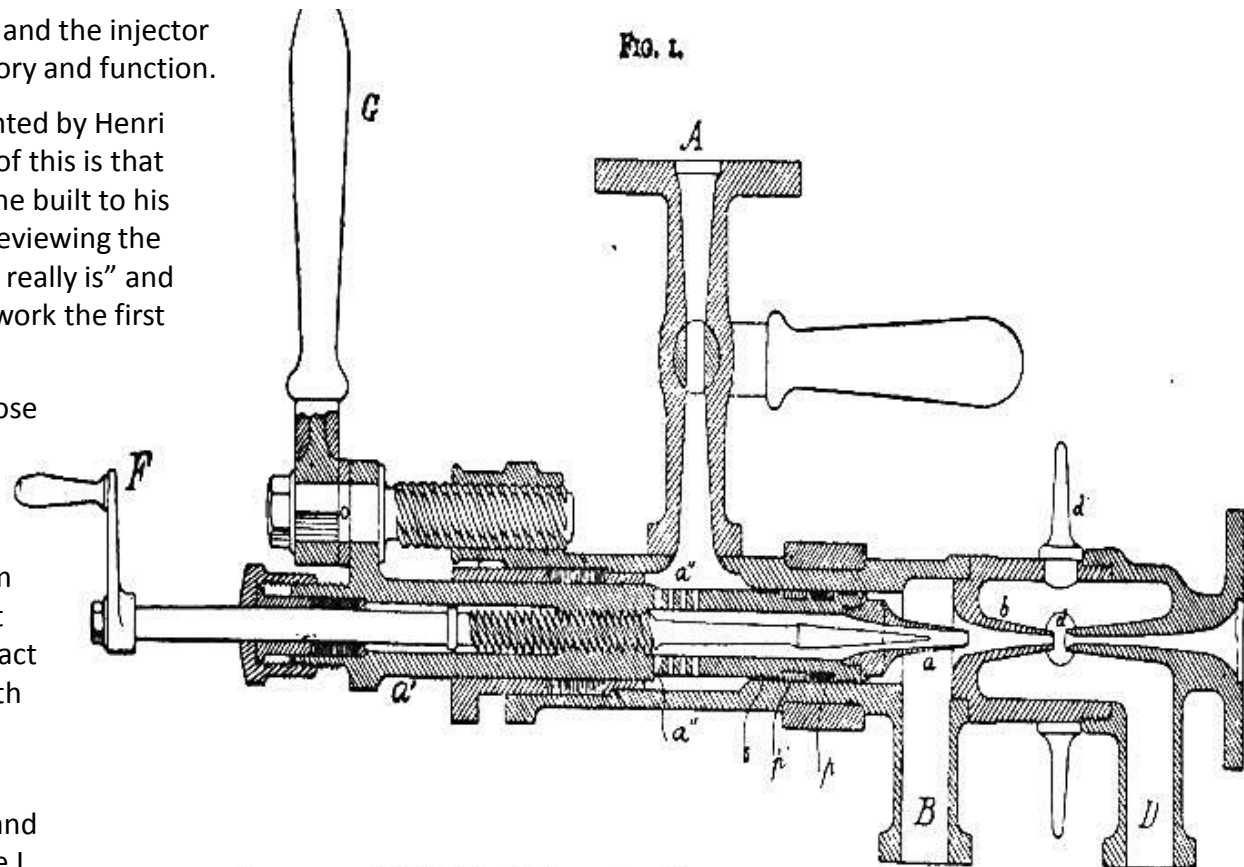
So, taking time to examine the drawing in detail, a close study is important now since much of the following discussion will refer to the various parts.

The significance of this device is that it takes steam at boiler pressure and delivers water using that steam to overcome boiler pressure. It's easy to believe that we may have stumbled on perpetual motion, but in fact it is not. However, in the beginning it was viewed with distinct skepticism and was not trusted.

The book shown on the next page is one of the most detailed references for the workings of the injector, and I can see no reason not to plagiarize its content, since I could never give better verbalization to the subject.

Here is the book in digital form for your complete review:

<https://drive.google.com/file/d/1BvwkQNFktS9id6vvl-h9xsnYPXQj0A8d/view?usp=sharing>



EARLIEST FORM OF THE GIFFARD INJECTOR.

(continued next page)

INJECTORS (cont'd)**PRACTICE and THEORY**
of the
INJECTOR

BY STRICKLAND L. KNEASS, C.E.,

MEMBER OF THE AMERICAN SOCIETY OF MECHANICAL ENGINEERS, FRANKLIN INSTITUTE, ENGINEERS' CLUB OF PHILADELPHIA.
NEW YORK: JOHN WILEY & SONS, 53 EAST TENTH STREET. **1894.****THE GIFFARD INJECTOR****CHAPTER I****EARLY HISTORY**

To HENRI JACQUES GIFFARD, an eminent French mathematician and engineer, belongs the honor of having invented the simplest apparatus for feeding boilers that has ever been devised, utilizing in a novel and ingenious way the latent power of a discharging jet of steam.

From the time of his graduation from L' Ecole Centrale in 1849, Giffard had directed his energies to the study of aeronautics and had spent much time in developing a light steam motor for propelling balloons; it is, therefore, not strange that he should also have attempted to devise a compact and convenient substitute for the steam pumps then in use. Already a number of patents had been granted him for the application of the steam engine to aerial navigation and for other correlated inventions when, on May 8, 1858, letters patent were issued for L' Injecteur Automoteur. His early technical education and wonderful ingenuity well fitted him for breaking away from the old beaten paths and starting out on a new line of discovery; and in view of the originality of his work he fully deserved the unqualified praise accorded him by his contemporaries.

Upon purely theoretical grounds the method by which he proposed to force a continuous stream of water into the boiler appeared to be entirely feasible and would, if practicable, possess many advantages over the intermittent systems. The difficulty seemed to lie in fulfilling the peculiar conditions required for the condensation of the steam and the subsequent reduction of the velocity of the moving mass. Giffard carefully considered the various phases of the question and made a

working drawing embodying his ideas. A model was made by M. Flaud & Cie., of Paris, who found, however, considerable difficulty in forming the tubes in the peculiar shapes required. But in the shape and proportions of the nozzles lay the element of success, and the first instrument constructed entirely fulfilled the expectation of the designer.

There have been few other inventions in which the underlying principles have been so thoroughly worked out by the original inventor. Giffard seems to have made a very complete survey of the possibilities of the Injector prior to placing it before the public, and in his patent specification, describes a number of improvements that have since been made. In 1860 he published a small brochure entitled "A Theoretical and Practical Paper on the Self-acting Injector," in which he says: "Of all the necessary accessories of a Steam Engine, perhaps the most important is the one used for feeding water to the boiler; upon its proper working depends not only the regular running of the engine, but the safety, the very existence of those who approach the boiler; . . . nevertheless, by a kind of fatality, the apparatus employed up to the present time for feeding is, of all others, that which leaves most to be desired." After reviewing the disadvantages of the various methods in use, he continues, "It is important, therefore, to create a new method, free from the imperfection and inconvenience pointed out," and modestly adds, "Such is, it appears to me, the result obtained by the apparatus to which I have given the name of Injector, because it produces a veritable continuous injection. Its mode of action, extra ordinary in appearance, contrary to that which we are in the habit of seeing or supposing, is explained by the simplest laws of mechanics and has been foreseen and calculated in advance." He describes his invention in detail and explains

(continued next page)

INJECTORS (cont'd)

very fully the best proportions for its various parts, and also the mechanical theory, substantially as advanced by him in 1850, eight years before the construction of his experimental Injector.

And yet, in common with all new inventions and radical improvements, great difficulty was at first experienced in obtaining a fair trial of its merits, and in many cases the exaggerated claims of its friends interfered as much with its early adoption as the openly expressed criticism of its enemies. The great advantages of the new method were appreciated, however, by the Academie des Sciences of France, who awarded Giffard the Grand Mechanical Prize for 1859. This was all the more complimentary as it was entirely unsolicited. Prominent engineers presented before the principal scientific societies analytical demonstrations of the theory of the injector and allayed to a great extent the suspicion in the popular mind that the inventor was encroaching dangerously near the claim for perpetual motion. Combes, Bougere, Reech, Villiers, Zuber and Pochet are among the most prominent scientists who made a special study of the subject, and the demonstration of Pochet is still frequently used in modern text books.

It must not be supposed that Giffard was alone in his efforts to utilize the power of a discharging jet. For exhausting and pumping purposes we have record that a crude ejecting apparatus had been used as early as 1570 by Vitrio and Philebert de Lorme. But the first device that bears any similarity to the principle of the Injector was patented August 15, 1818, by Mannoury de Dectot, who describes "sundry motors or means for employing the power of fire, of steam, of air, etc., to start the movement of machines." He applied his invention for raising water and for propelling boats by utilizing the expansion and condensation of steam in connection with jets of water.

Ravard followed in 1840 with improved forms, but the greatest advance was made by Bourdon, the celebrated inventor of the metallic steam gauge, who approached very near the results obtained by Giffard. Two patents were issued to Bourdon, one in 1848 and one in 1857, but it is to the latter that special reference will be made. This contained numerous

combinations of convergent and divergent tubes for transforming the energy of a moving jet, or for discharging large or small quantities of liquids or gases. The similarity of the form of the apparatus to that of Giffard was so marked that the question of priority at once arose and was exhaustively discussed by the "Société des Ingenieur Civils." It was shown that Giffard was wholly unaware of the last improvement of Bourdon when he applied for his patent, and as he had publicly presented the theory of his invention nearly seven years in advance of Bourdon, full credit was given him for the conception of the Injector and originality in the application of the principle.

The introduction of the injector into England by Sharp, Stewart & Co., of Manchester, is thus described by one thoroughly familiar with its history and to whom its early success in that country was in great measure due: "In the autumn of 1859 when our representative in Paris sent over to me a No. 4 Injector as a curiosity and engineering anomaly, he told me simply what it did, but gave no instructions for fixing or working. At about the same time the Paris representative of Messrs. Robert Stephenson & Co., Newcastle, sent over to them a similar Injector. I set to work at once, and by good luck coupled up the correct pipes to their proper flanges, but was a great deal bothered what to do with the overflow flange. After a few nights' work I got my Injector fixed and got up steam, and to some extent began clumsily experimenting as the pressure rose to 60 pounds, the full working pressure of the boiler. I had the Injector fixed over a tank fed by a ball tap and closed by the boiler. I turned steam on and was staggered by the rush of water into the tank from the overflow pipe, and thought something was wrong. However, I continued to turn the steam spindle, and the escape from the overflow sensibly diminished until I could turn no further. In the mean time the ball tap started running furiously into the tank, showing me that water was going somewhere and I knew it could go nowhere else but into the boiler. I then began to operate with the four thread screw at the side, and found that it adjusted the water supply, and succeeded in getting the overflow "dry." I then opened the peep-holes opposite the space between the combining and the receiving nozzles, and saw the white stream passing

(continued next page)

INJECTORS (cont'd)

from one to the other on its way to the boiler. I then ceased operations, and had a pipe of tobacco, and let some water out of the blow-off cock; then I tied a piece of spun yarn round the glass water gauge to prepare for another start, and shortly after, the senior partner came round for a stroll and found me operating. I stopped it, started it, and regulated it so much to his satisfaction that within one week the monopoly of its manufacture in England was secured by the firm. Unfortunately for Stephenson & Co., they coupled their sample Injector up incorrectly, and it would not work."

For stationary service the Injector did not at first become popular; possibly on account of the mystery that seemed to surround its working, and the general skepticism as to its practical wearing powers. Some of the contributions and queries published in the engineering papers of the day, are very amusing, and a certain writer in one of the most prominent weeklies proves most conclusively to his own and probably to some of his readers' satisfaction, that the new method of feeding boilers was an absolute impossibility. The injector was, however, adopted in many places and continued to give satisfaction. In the first trip of the "Great Eastern" Injectors were used in place of pumps, but for some reason not explained, they were subsequently removed; this may have been owing to the temperature of the feed water being too warm for efficient service, as this was the weak point of the first injectors constructed.

The first injector applied to a locomotive in England was by Mr. J. Cross, Superintendent of the St. Helens Railway. It was successful from the start, although not large enough for the purpose and therefore a No. 8 was substituted, which proved to be entirely satisfactory.

The English railroads opened a wide field for the Injector; upon most of the locomotives, the earliest feeding pumps were worked by hand, but afterwards coupled to a special eccentric or to the crosshead. Stretton, in his recent work on the Locomotive, says that it was a common occurrence for engines with a single pair of driving wheels, to stand on well greased rails with tender brakes fast locked and drivers revolving, in order to fill the boiler full of water. But even though the old methods

were very crude, engineers in England were much prejudiced against any change, even for the better. By way of illustration the following incident may be given of a successful attempt to convince an obstinate engineer against his will of the advantages of the injector: "Permission had been obtained from the Locomotive Superintendent of one of the principal Railway Companies in 'Great Britain to try one on a goods engine, and for me to accompany it on its trial trip, with a loaded goods train, about 70 miles out and 70 miles back. On the outward journey I was only permitted by the driver to make short intermittent trials of the Injector, he depending for his water supply upon his pumps. When we got to the end of our outward journey, and while driver and firemen were having their mid-day meal at a local public house, I went to the running shed, filled up the boiler with the injector and took out the balls from the two suction clacks and put them in my pocket. We had not gone many miles on our return journey when water was wanted in the boiler, but upon the pumps being tried, first on one side, then on the other, and naturally refusing to work without suction check clacks, I was appealed to, to put my Injector on, with the result that we completed our journey without delay or hitch of any kind, depending solely on the one No. 8 Injector. The driver consequently reported 'Pumps out of order and could not have got along without that Injector.' This was a grand testimonial, but I got into a jolly row for my temerity in removing the clack balls."

The Injector was introduced in the United States by Wm. Sellers & Co., who commenced its manufacture in 1860 at their works in Philadelphia. Of locomotive builders, Matthias Baldwin, was the first to use the new instrument, applying, in September 1860, a No. 8 Injector to an engine designed for the Clarksville and Louisville R. R. The following month the Detroit and Milwaukee R. R. put the Injector in use on one of their locomotives, and the Pennsylvania and the Philadelphia and Reading followed in the latter part of the same year.

To Jos. R. Anderson & Co., Richmond, Va., a No. 4 Injector bearing progressive number 1, was shipped in October 1860. As indicative of the wearing qualities of these early instruments Messrs. Wm. Sellers & Co. state that there was returned to them, in 1887, a No. 4 Injector,

(continued next page)

INJECTORS (cont'd)

progressive No. 7, after a nearly continuous service of 27 years, and having required but few repairs; it further is interesting to note, that, owing to improvements recently introduced, American Injectors are now extensively used in France, and have been adopted as a standard type by several of the government railroads in the country of its inventor.

It need hardly be said that the Injector is the most popular boiler feeder now in use. There have been more than 500,000 manufactured in

this country for the various kinds of service, and there is scarcely a locomotive in the world that is not equipped with one or two Injectors. Compact, reliable and economical, it still deserves the high encomium bestowed upon it in 1859, by M. Ch. Combes, Inspector General and Director L'Ecole des Mines, "It is without doubt better than all devices hitherto used for feeding boilers, and the best that can be employed, as it is the simplest and most ingenious."

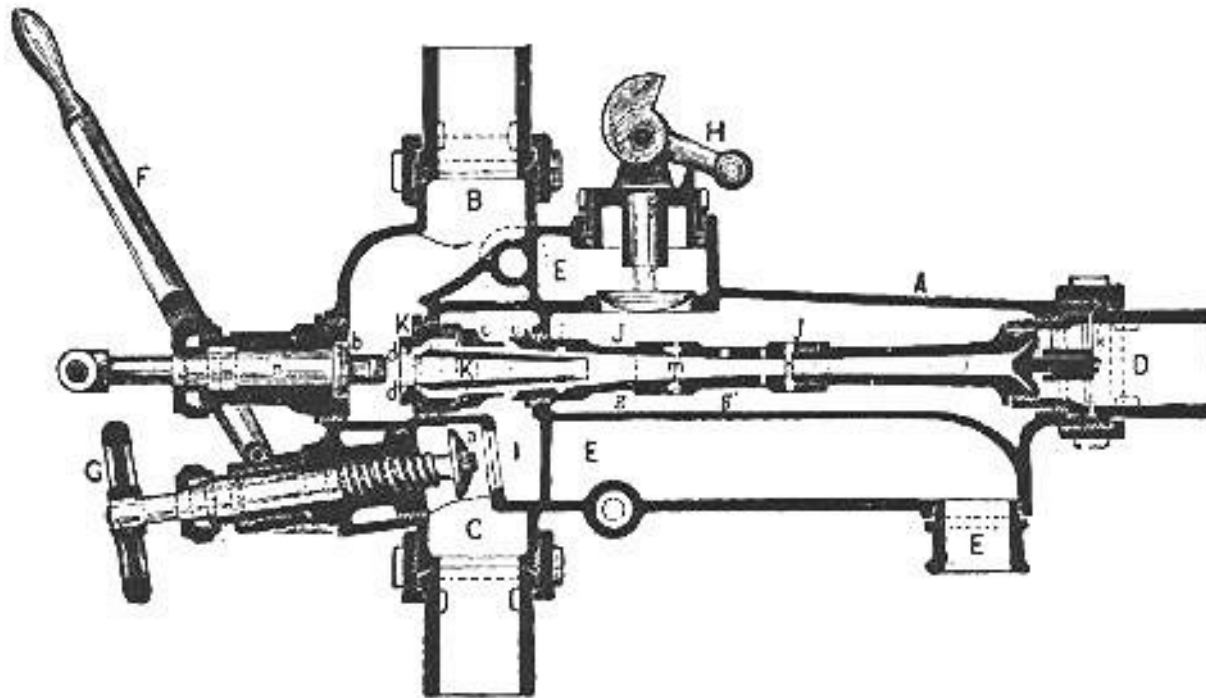


FIG. 2.

Now, the drawing above is a common Sellers lifting injector, even in use today on some locomotives.

It should be appreciated how little the basic design has changed from the first. An extraordinary device!!

Apologies for the lack of pictures and drawings in this segment, but I felt that it was important to know the depth of this device that is so common on locomotives throughout the world.

Take care, **Dave**

HAPPENING SOON!



MINI-OPERATIONS SWITCHING SESSION

Tues, Oct. 27 and Wed, Oct. 28

John Draftz

jdraftz@cox.net

Maricopa Live Steamers 2020 Fall Meet

Meet dates are
Oct. 27th through Nov. 1st 2020

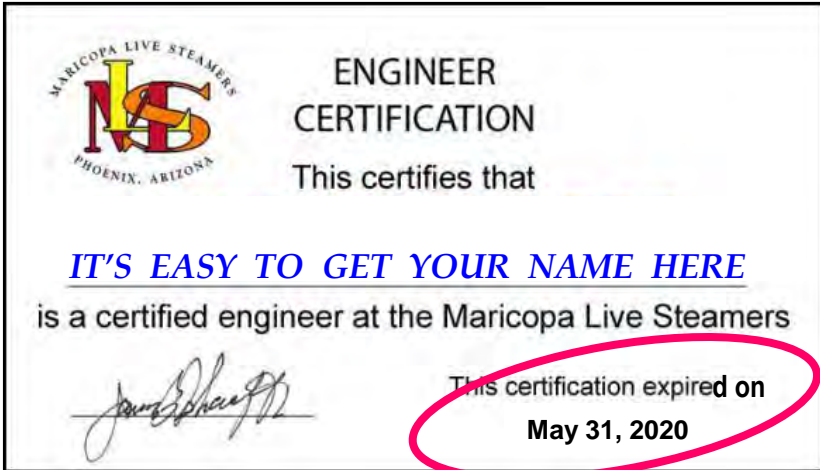
Based on feedback from guests, an operations segment will be part of our Fall Meet again this year. The goal of the 2-day segment is to give guests/members experience switching cars on a branch following prototype procedures, i.e. not moving cars by hand. The segment would be challenging enough so that veterans of Operational Meets would still enjoy participating, but simple enough for those learning what operations is all about.

The Adobe Yard has 2-car cuts ready for spotting on a branch. On the branch are two other cars to be brought to the yard. Additionally, there is one car on the branch that is to be moved from point A to B. Since crews work with only five cars, it enables smaller engines to be used. An added "wrinkle" to the switching is that it is done in "dark territory", i.e. the signals are off on the branch thus crews must use radio communication while switching.

The switching session is Tuesday, Oct. 27, and Wednesday, Oct. 28, from 9am – 5pm. The branch is otherwise open to anyone. All engineers must view one safety/orientation briefing prior to participation. Briefings are offered on Tuesday and Wednesday at 8am.



Please don't forget this, if you are coming to run trains.



Engineers

TIME TO RENEW YOUR CERTIFICATION

for the 2020 – 2021 railroading season

CLICK: [MLS Safety and Operating Rules - rev2018](#) (printable PDF format)

CLICK: [MLS Online Engineer's Test](#) (online entry, auto-submission)

NO COMPUTER? NO PROBLEM –

See any Board Member at Ford Station for a paper copy.



MARICOPA LIVE STEAMERS

2020 FALL MEET

Covid-19 Reminder

This is for those who may be planning on attending our Fall Meet.

Before choosing to attend we strongly encourage that you read this in its entirety.

As I'm sure you are all aware these are interesting and difficult times, but that doesn't mean we can't have a little fun! But in doing so we must be cognizant that there is a virus that is spreading throughout the land and that we must be diligent to try to minimize its spread. As the CDC has stated, "In general, the more people you interact with, the more closely you interact with them and the longer that interaction, the higher your risk of getting and spreading COVID-19. Indoor spaces are more risky than outdoor spaces..." So as we gather we would like to remind and recommend to you some things you can do to minimize the risk of spreading this virus.

1: If, at any time after October 5th, you or anyone that you interact with, become ill in any way or have a fever, or have been exposed to the virus, or you believe for any reason that you are at an elevated risk of carrying the virus, please do not attend. WE REALLY HATE TO HAVE TO SAY THIS BUT FOR EVERYONE'S SAFETY THIS YEAR WE MUST.

2: Maintain appropriate social distance whenever possible. Doing this is one of the best ways to minimize the spread. Being outside on 140 acres will help this and being diligent about proper distancing will help accomplish this goal.

3: When in close quarters with others you should properly utilize a mask. That being said, Maricopa Live Steamers will not be "policing" the premises and we ask that everyone take whatever precautions they deem necessary to protect themselves and others. We also ask that you do not "police" others as well nor should you discourage, chastise, or make fun of others who may be using a mask as well or practicing social distancing to protect themselves. I understand there are strong opinions on this issue but in the spirit of having fun we ask that you keep your opinions to yourselves. So, recognize that there may be a considerable number of individuals who choose to not wear a mask so please take that into consideration before choosing to attend.

"CDC recommends that people wear cloth face coverings in public settings and when around people who don't live in their household, especially when other social distancing measures are difficult to maintain."

4: Wash your hands frequently and clean off surfaces before and after your use. We will attempt to supply the appropriate soap but please assume that there may not be an adequate supply and bring your own sanitary materials (not talking about toilet paper!).

Last, but not least, recognize that anyone choosing to attend this meet and/or bringing under age family members or other minor children to this year's Fall Meet is taking full, complete and undeniable responsibility for their choice in doing so and should anyone, during or after the meet, become infected with the virus, that they understand that the choice to attend and/or bring others is yours as are the risks of doing so. The Maricopa Lives Steamers Board of Directors as well as all members are in no way liable should you or anyone at the event contract this virus. **If you find this document in any way unacceptable, please do not attend.**



TOM BEE ONLINE

THE ONLY AUTHORIZED SELLER OF TOM BEE PRODUCTS



We're coming to you! Let us know what you need.

**Save On Shipping.
Let Us Bring Tom Bee
Products To You.**

Maricopa Live Steamers

Oct 28th – Nov 1st

2020 FALL MEET

Email us your pre-orders to tombeonline@gmail.com or give us a call at 216-486-0900.

You can view a complete list of our products and pricing on our website. Go to tombeonline.com.

E: tombeonline@gmail.com W: tombeonline.com P: 216-486-0900



**Maricopa Live Steamers
2020 Fall Meet**

Registration Form

Meet dates are October 27th through November 1st 2020
Work week is Monday October 19th through October 26th 2020

Your name and the number of people in your party. (We will not be providing badges; this is only to get a count of people who plan to attend). _____

E-mail address: _____ Cell number: _____

*Please check the box if you are bringing any equipment to be run on our 1500ft of 4 3/4" gauge track

*Please check the box if you are planning on participating in the switching session (details on page 2)

THE COUNTY WILL NOTIFY US IN SEPTEMBER IF CAMPERS WILL BE ALLOWED

NO MEALS WILL BE SERVED

THERE ARE MANY LOCAL EATERIES AND GROCERY STORES

THERE WILL BE NO REGISTRATION FEE, HOWEVER ALL DONATIONS WILL BE GREATLY APPRECIATED

***DRINKS WILL BE AVAILABLE FOR \$1.00* .**

We are inviting everyone to come ride trains and enjoy

Maricopa Live Steamer's 2020 Fall Meet

There will be NO scheduled safety briefings

However a Switching Session Safety/Orientation Briefing will be at 8:00am Tuesday and Wednesday

ALL COUNTY RULES IN EFFECT. ALL DOGS MUST BE LEASHED!

Please mail this form along with any donation payable to Maricopa Live Steamers to:

Donna Hohm
10705 North 109th Way
Scottsdale AZ, 85259

Any questions contact:

Belinda Kulman: bkulman09@gmail.com

Donna Hohm: donna Hohm@yahoo.com



2021 MLS Annual Membership Form

Please complete this application and mail it to:

Maricopa Live Steamers
Attn: Membership Committee
22822 N. 43rd Ave
Glendale, AZ 85310
donnahohm@yahoo.com



2021 dues can be paid between October 1st 2020 and December 31st 2020.
They must be paid by December 31st 2020 to be included in the 2021 Roster.

Anyone with **personal equipment stored on MLS property** must pay Resident Membership dues.

We are now accepting PayPal. If using PayPal please add the \$10.00 processing fee at the bottom of this form.

Renewal: Has your information changed from last year? YES NO

New Membership:

Name: Primary Member: _____ \$170 _____

Address: _____ Email: _____ Cell: _____

Name: Spouse: _____ \$35 _____

Name: Junior Members (\$10 per child): _____ X \$10 _____

Non-Resident Membership (more than 75 miles from Phoenix)

Name: Primary Member: _____ \$40 _____

Name: Spouse: _____ \$10 _____

Name: Junior Membership (\$10 per child): _____ X \$10 _____

Stand-alone Junior Membership (must have a sponsor). Name of Sponsor: _____

Name of Junior Member: _____ \$10 _____

Container, if applicable:

Container # _____ Own? _____ Rent? _____ Rental fee: _____ \$ _____

Optional Fees:

Club Locomotive Use Fee (First Year Only) _____ \$150 _____

Annual Locomotive or Rolling Stock Use Fee _____ \$50 _____

Name Badges can be purchased for \$10.00 each _____ X \$10 _____

MLS is in the process of upgrading the track and switches to steel rail and plastic ties.

Please consider a tax deductible:

Donation to the Track Maintenance Fund _____ \$ _____

Donation to the General Fund _____ \$ _____

* PayPal fee if applicable _____ \$10.00 _____ \$ _____

TOTAL PAYMENT \$ _____