



Maricopa Live Steamers

STACK TALK

April, 2021

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



President's Page

There **will** be a Board meeting on March 10.

Great news has come across my email. The county has backed down from the 50 person limit. We can start planning our Fall meet in Oct. and having campers in the park, plus giving rides in the fall. I know that the county can change these rules back again at any time, so be prepared for change along the way.

On about Feb. 16, I got an email from a lady wanting to donate about 3700 ft. of rail and 6 switches. Some of the rail was never put on the ground. March 10, 11 and 12 was all the time we had to get the rail up and loaded on trailers and the place cleaned up. I put out a blast and asked for help. On March 10th at 8 am, I had three flat bed trailers and two smaller trailers to carry the rolling stock out of a huge car barn. After all of the cars were in trailers, the volunteers starting fanning out on the railroad to take up the screws from the ties. Lucky for us most of the rail joiners were slip joiners. That saved us from unscrewing all of the joiners. All the rail was only 10 ft. long and, with all of the plastic ties, it was all we could do to pick up a 10 ft. section of rail and put it on a trailer. The next day, Bill Pardee brought his small tractor with a bucket and forks and made it a lot easier loading trailers. Some of the track was so far away from a trailer that Mike Grant brought his four wheeler. He attached pipe to the four wheeler and carried sections of the track to a trailer. I cannot possibly thank everyone enough for putting out 110% to get this track pulled up and put on trailers and unloaded at the park.

Here are links to Raymond's 45-minute memorial service with added photos and a 12-minute slide show put together by Betty (Kyle's wife). If you'd like to share with others, feel free to do so. Thank you all.

Charlotte Hughes

I counted 21 members that came out and worked their behinds off to get the job done. Bill Cobb, Mike Russell, John Draftz, Joe Fego, Cliff Fought, Gary Gorman, Mike Grant and his brother Bill, Larry Messing, Paul Lator, Dave Kulman, Terry Liesegang, Perry and Betty Ann McCully, Rich Mock, Bob and Sandy Rauperstrauch, Stan Ferris, Joe Schnyder, Mick Janzen, Jim Zimmerman and Bill Pardee. I'm sorry if I forgot anyone, and sincerely **THANK YOU, THANK YOU, THANK YOU.** There is some rolling stock which will be sold by way of a silent auction. If you bid, please put your name, your bid amount and the item number that you are bidding on from the picture onto a sheet of paper and into an envelope and mail it to me: Perry McCully, 208 E. La Crescenta, Goodyear, AZ 85338. All bids must be in my hands before May 7th. Bids will be opened at the May 8 meeting.

The Fire Ban has been a hot topic. Sorry for the pun. I have had it up to my ears with this topic. We have beat this horse past death. Bottom line, I don't think anyone in this club wants to accidentally start a wild fire in this pristine park. Not only burning the place down, but then having to pull up all the track and move out. The county head honcho has told us we will not have any more fires in the park. I take this to mean that we will lose our contract soon after we burn the place down. It appears to me that if you really wanted to run your solid fuel engine, then you would come out frequently and keep the weeds cleared 8 ft. away from the track. The head of safety has given you an idea on what can be done. End of discussion! Safety first. — Perry

Slide Show:

<https://youtu.be/kBkIZUYsBQk>

Memorial Service:

<https://youtu.be/rr2B4tYQTDk>

Celebrating The Blessed Life of

Raymond Leon Hughes
6-3-1945 to 1-24-2021





Vice President's Page

Well, here it is April already, and one fourth of 2021 is already gone. I would like to **THANK ALL** of the club members and volunteers who came out to help recover a whole lot of track and plastic ties along with some rolling stock. By the time you read this, we will have installed 18 plastic tie panels in the track and 2 of the switches that we were able to get. Seven of the panels are in the Adobe yard track next to the car barn and we intend to keep using the plastic ties and rail to rehab the yard. It is our intention to use this job of yard rehab whenever someone wants to come out and learn. I will have a few of the yard tracks ready for helpers to work on until we replace the parts of the yard where the ties are 20 years old and all tracks are straight and level. All of the switches in Adobe Yard were replaced about 4 years ago, so that we just start behind the switch and go to the other end of the yard. A couple of the tracks coming into the yard will be upgraded to steel rail curves and plastic ties. When it comes time for our next Meet, we will have better yard tracks to use. At the sawmill, one of the fixtures is set up to make panels with the plastic ties, and these will be installed where we need them. With what we were able to get from that donation, we will be set for a large rehab of our tracks where the wood is drying out and not holding the screws that hold the rails in gauge. All of the people who came out and helped recover this donation for MLS should be proud of what you have done to help the club keep our tracks usable for the future. Between the concrete ties and these plastic ties and all of the switches we are replacing with plastic ties, this will result in some very hungry termites. I plan to change 3 switches to plastic in the next 2 weeks where the wood ties have dried out such that the screws are not holding and are now letting the rails spread in the turnouts.

As of last week, the county dropped the fire ban, but, with the two new brushfires in Maricopa County, this probably will not last long. We are working toward getting tracks cleared back so that the solid fuel steam locomotives can run. You can come out and grab a shovel and start where others have left off on Pottsville. If you have been out running, you will see where there are spots where the weeds are within just inches of the side of a locomotive and a firebox with flames could start a fire. Our biggest threat is when we have a fire like the last time and the fire trucks come onto the property. When a 30 ton truck goes over the track, the track loses in the confrontation. This is what happened both times in the past when the fire department was here to put out a fire. Damage to our tracks is not their priority, putting

(continued next page)

In memory of MLS member Jerry Smolyk

<https://www.youtube.com/watch?v=HGHEQ0zts8o>



If you wish to be removed from this email distribution list,
please "REPLY" to this email with a request to "UNSUBSCRIBE."
Please, DO NOT tag this email as JUNK.

Perry McCully
President

Joe Schnyder
Vice President

Mick Janzen
Secretary

Bob Douglas
Treasurer

Bill Cobb **Mike Grant** **Tom Harrington**
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

Pete Pennarts
Facility Administrator

John Broughman
Public Run Crew
Coordinator

John Draftz
Advertising

Donna Hohm
Membership
Committee Chairman

Matt Rockwell
Holiday Lights
Committee

John Bergt
Timothy Freeman
Web Masters

Ken Giordano
Stack Talk Editor

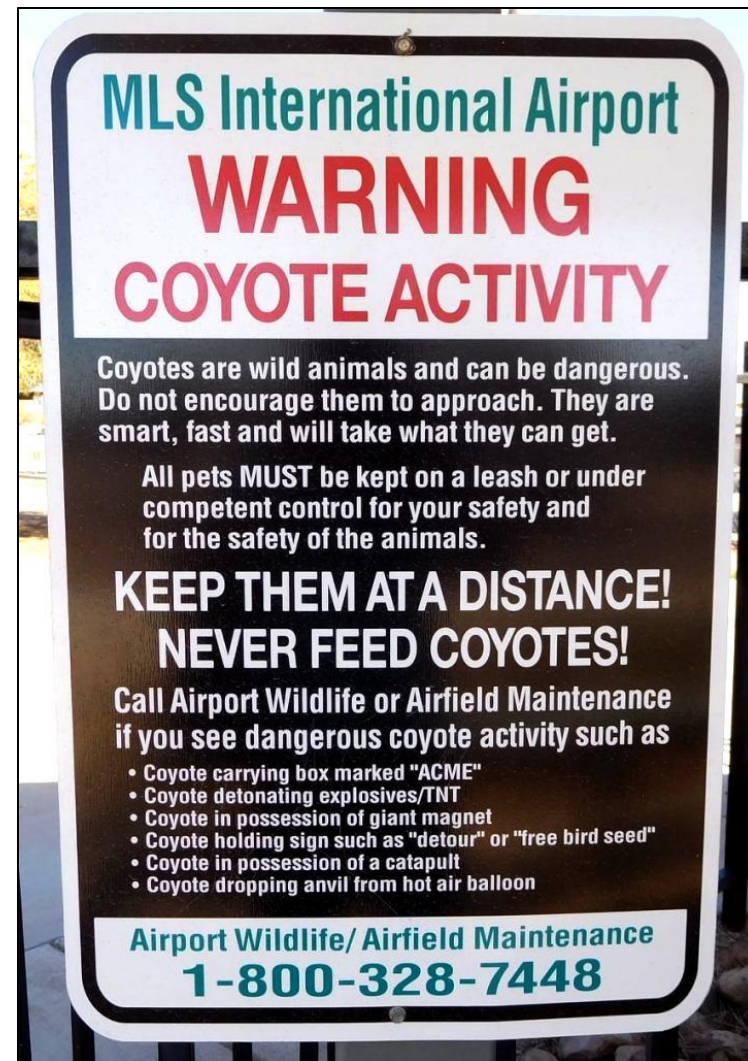
Send emails / photos to:
[MLNewsroom](mailto:MLNewsroom@gmail.com)
[@Gmail.com](mailto:MLNewsroom@gmail.com)

VICE PRESIDENT'S PAGE (cont'd)

the fire out is. With the weeds dried out so much now, they are just like pine needles in the forest – a quick source of fuel for a fire. When we had the last fire, I watched it travel from Massie out to Pinnacle Peak Rd. in just a matter of minutes and, with such a hot fire, we could not get within 100 feet of the fire. As those weeds burnt, it set mesquite trees on fire within a matter of just a few seconds. So I hope everyone understands why we need to clear the weeds back from the track. The weeds are here to stay and we will be dealing with them as long as we are on this property. Our answer is the same as what the forest service tells homeowners. We must create defensible space around our tracks such that there is no fuel close to the tracks. The tractor will be clearing a six foot wide space on both sides of the track where it can fit. The rest will be up to us to remove all the fuels back away from the tracks with shovel and rakes. We are working on Pottsville first because it is the shortest route, and then we will move to Bobberg and then East Werner, until we get some routes clear enough to operate safely without starting a fire. We were very lucky last year when the fire started west of the golf course. They brought in air tankers for slurry drops to put the fire out, and we had the green grass of the golf course between us and the fire. We are starting to move signs and other things further away from the track to 8 feet so that we can get the tractor in to clean out the weeds. One of the things we have to be aware of is that, when we are moving weeds, we cannot block the drainage ditches that help to keep the rain from washing out the ballast. But, if it never rains again, that will be too soon for me.

I heard some complaints about the money spent on the concrete tie project instead of replacing Christmas lights and decorations. When a person donates money to a specific project, it is our responsibility to use those funds for what they were donated. Also, all the money spent for both concrete and plastic ties was donated for that specific project and we don't want to anger the members that donate for a project by not using the money for what they requested we use it. **AS STATED IN OUR BYLAWS, NO CLUB DUES MONEY IS EVER USED TO BUY CONCRETE, PLASTIC TIES, OR STEEL RAIL.** Only donations are used for track projects, whether they are repairs, replacements or new installs, by law.

On the white board at the station, we have started to post any restrictions necessary in addition to using the outside route board. You will see that we would prefer that you not take a steam engine fired by propane on the Serpentine or West Werner because the weeds are just too close to the tracks. I will be trying to get Saturday workers started to clean the weeds back with shovels and rakes where the tractor cannot get close enough. But you can come out any day and grab a shovel and rake from the switch-barn rack and work any place on Pottsville or Bobberg that you feel like. Just remember to take water for drinking and wear a hat to shade your head from the sun. A map will be posted on the clubhouse whiteboard with where the weeds need to be raked back from the tracks. **THANKS.** — Joe



From the Desk of: Perry McCully

Subject: **SILENT AUCTION**

Please mail your bids to:

Perry must have all bids by May 7.

PERRY McCULLY

208 E. La Crescenta

Goodyear AZ 85338

Bids MUST include your NAME, bid AMOUNT and item # (1-9)

Only one ITEM bid per page please.

	Minimum Bid
#1 Steel GONDOLA with seats, Tom B trucks, air brakes	700
#2 Steel GONDOLA with seats, Tom B trucks, air brakes	700
#3 Steel GONDOLA with seats, Tom B trucks, air brakes	700
#4 Steel GONDOLA with seats, Tom B trucks, air brakes	700
#5 Mountain Car BOXCAR, Mtn. Car trucks, air brakes	900
#6 Steel GONDOLA, one coupler, air brakes	500
#7 LOCOMOTIVE, photos and details to follow in a Blast	TBD
#8 2-1/2" scale FLATCAR with seats, sideboards, air brakes	1,000
#9 Mountain Car FLATCAR, Mtn. Car trucks, air brakes	500



From the Desk of: Gail Woodward
Subject: **Bob Woodward Estate Sale**

RJGW1409@yahoo.com

Please mention that you are from MLS

Cash or Cashier Check

View/Pick Up at home or LALS – California

1" Scale – 3 FLAT cars w/containers \$500 each OBO
GONDOLA \$500 OBO
Diesel Engine \$8,000 OBO



COVID-19 RESTRICTIONS are relaxed but are still in place.
For members' and visitors' health and safety, follow these new rules.



EASTER GATHERINGS

Safety Tips For Those Fully Vaccinated



Can visit with other fully vaccinated people indoors without wearing masks or practicing physical distancing.



Can visit with low-risk unvaccinated people from one household at a time without wearing masks or practicing physical distancing.



Can't safely visit with unvaccinated, higher-risk people without wearing masks and practicing physical distancing.



Can't safely visit with unvaccinated people from several households at once without wearing masks and practicing physical distancing.



Everyone should continue to wear masks and physically distance in public places for now.



Vaccinated person



Unvaccinated low-risk person



Unvaccinated high-risk person



Unvaccinated person (from a separate household)

MEMBER CONTRIBUTIONS!

photos by Hank Gallo



Sorry, it's been a slow month at the Park,
and these photos came without stories.



Thanks to Bill Myers for this link

Electric Trains in an Albanian Mine - 2 mins.

<https://www.youtube.com/watch?v=unhXEQQk8G8>

Thanks to Perry McCully for these links

Million Dollar Model Railroad - 4:30 mins.

<https://biggeekdad.com/2016/03/million-dollar-railroad/>

How Freight Trains Connect the World - 10:30 mins.

<https://biggeekdad.com/2019/03/how-freight-trains-work/>

How the Panama Canal Works - 11:30 mins.

<https://biggeekdad.com/2019/07/how-the-panama-canal-works/>

NEWS FROM OUR NEIGHBORS!

YUMA TERRITORY LIVE STEAMERS

stories by John Schwartz



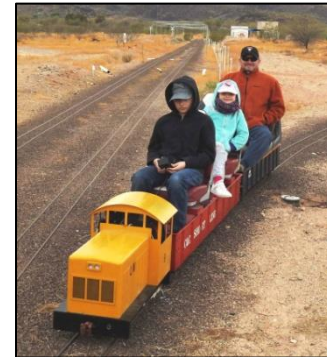
03-23-2021 MLS Day Trip

Chuck, Roger, Eli & Tatiana along with Leonard, John, and Dick Finn took a road trip to Phoenix to spend the day at Maricopa Live Steamers. It was a perfect day to train two new engineers, Eli and Tatiana. They had Leonard's Little Yellow Diesel with their dad as Conductor. Leonard had his red diesel and Chuck, Dick, and John rode along. I think we covered more than 75% of their layout.

Dick Finn was able to check out their 4-3/4" gauge track and could see how they made their track and installed it.

Fun and educational day at MLS.

John Schwartz, YTLS President



John Schwartz would like you to support [New Engines](#) by making a donation and spreading the word.

Want to join me in making a difference? We are a 501(c)3 non-profit organization trying to educate children and adult about the importance railroads played in our history and future. I'm raising money to benefit Yuma Territory Live Steamers, and any donation will help make an impact. Thanks in advance for your contribution to this cause that means so much to me: to educate the public and children about railroad history, safety and to promote junior engineer programs for children; to use riding railroad equipment at a park facility under current agreement with the City of Yuma.

The engines that we have been using are wearing out and, to continue the public rides, we need two new engines. Recently, COVID-19 has kept us from having public rides, but now we need help.



(continued next page)

YTLS Locomotives (cont'd)

3/27 – WOW, WOW, we did it today. The station and north loop have been connected. No, we didn't run over it, yet. Needs tamping, leveling and ballasting. This all happened thanks to Chuck, Dick Finn, John, Dave Haraway, Carlos Santos, Eli & Roger Sanford. Frank was bringing in dirt and ballast so we can finish it next week. While we were doing this, Theresa was spraying for weeds while Jeff did some work on the GP-38. It has a few minor problems, but it is running.

The north loop is connected. Yes, I am excited, if you couldn't tell.

— **John Schwartz**

3/28 – Hats off to Leonard for taking the north loop over the finish line, and all the help he got from the hard working crew. Get someone to start laying the bricks and it will be open for rides before you know it.

I've been asked a lot about why our club trains are at the yard, but not running on ride weekends? The answer comes down to money. The 45 has a new motor thanks to club members and the trucks have been rebuilt. The rest is surplus parts that were mismatched, but we got to work in order to finish the ride season before covid. Money was so tight, we dug through old cans and bins to find the bolts and nuts needed to get it on the track. Something is slipping in the drive unit now. It will need exploratory surgery to find the problem. It really needs to be finished with the correct parts. It will take more time and money.

The 38 is a much different story. John and I worked on it all summer long. To save money we bought raw materials and machined all the parts we needed, buying only what we had to. It can be a hard working ride train but, there are three things on the list that need to be finished.

1. The motor has to be rebuilt or buy a replacement. I don't think you can buy one new. 2. Buy a C.W. rotation charge pump for the KPL-13 piston pump and install it. I have not found this part yet. Everyone tells me to order a whole new pump that is set up for clockwise rotation. They are about \$1400, but we bought the one we have for \$69 surplus. You get what you pay for and I jury-rigged it to work for testing. It has no pressure reliever on it, just a bleed off line. 3. The final thing is a

\$20 item. After the motor and pump are fixed, we need to change the sprocket on the chain drive to get the speed we want to run at. Until those 3 items are addressed, you will just be doing patch work, maybe we can get it running for a day of fixing. I've taken the locomotive as far as I can or want to. This has been so far out of my wheel house and I hate doing it so much, it makes me lose sleep. I'm good at a lot of things, but this isn't one of them. The club needs a mechanic for the current ride trains and the new ones. He or she needs a place to work out of the sun, out of the wind, up off the ground and some place to work on them that is not in everyone's way. It's not from a lack of trying. We just didn't have, never had the money to finish it right.

— **Jeff Shelby**

3/28 – This makes an OLD, LONG-TIME RR club member (joined LALS in 1965) wonder why all the hoopla about laying track when there will only be insufficient and inadequate equipment to run on it. If you don't have reliable hauling status, you will soon be a simple display of rails and ties. There has to be more to this.

— **Babe Netz**

3/29 – I have finally gotten GoFundMe setup properly so the money goes directly into the club's checking account. So, I am going through my addresses and sending it out to everyone. If you have already donated, THANK YOU. We can use the help to get a couple new engines so we can really expand our ridership numbers. THANK YOU.

— **John Schwartz, President YTLS**



TRACKING TRACKSIDE PROGRESS 2020

LIZZARD LIP

story and photos by Joe Schnyder

Here we have the west-bound side of Lizard Lip where there was a pretty good spot of bad ties and we are looking to continue the concrete tie replacement of the major routes. By doing only one side at a time, we can remain open for use while we work on the other side.



BROWN BEAR

story and photo by Joe Schnyder

Here we have finished the west-bound side of Brown Bear and will soon be moving westward in the program



TRACKING TRACKSIDE PROGRESS 2020

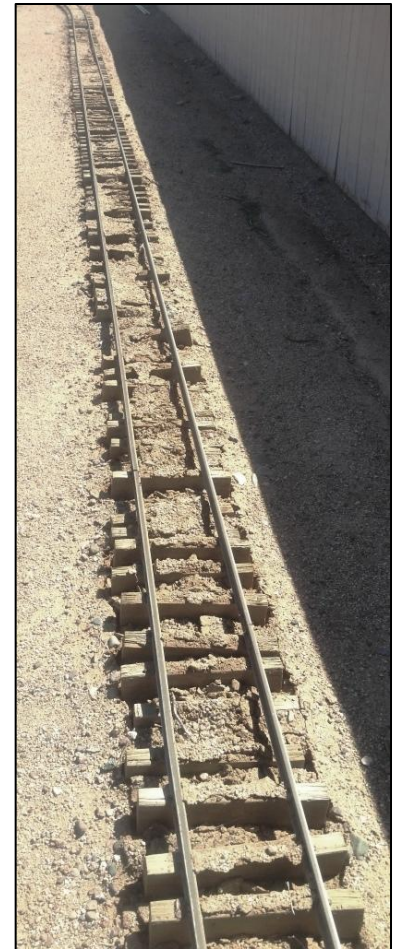
This is track 7 in the Adobe yard, and notice that over 30 feet of rail is not held by ties. These ties have been in the dirt since 2001, so you got your money's worth out of them. The only thing holding the rail in place was the weight of the train going over it. Being it is tangent track, there are no lateral forces to open the track wide enough for the wheels to fall in yet, but it was soon to happen. With the influx of plastic ties and new rail from the recovery project, we will be replacing the Adobe yard tracks one at a time until we are done with the complete yard and the tracks leading into the yard. When people come out and want to help, they will be directed to these yard tracks and down to the sawmill where we will have ties and rail to start building new panels for the Adobe Yard. With all the new steel rail switches in the yard, and now the straight tracks being repaired, our yard will soon be set for many years to come. It was asked of me if we were still going to make concrete ties and the answer is yes. These plastic ties will work well in the yard on straight track. We are still going to do the mainline tracks in concrete ties and steel rails for longevity, and especially in the curves where the aluminum rails have suffered significant wear over the years. I will not be replacing these tracks again in my lifetime, unlike Pottsville where we have replaced the track panels three times since 2000. That is not the most effective use of labor and material when we have concrete and steel at our disposal. I was asked if we are still going to use aluminum rail and the answer is yes in straight track. We have places in the straight track where the rail has been there since 2003 and, because the track is straight and shows no wear to the rail, I see no cost effectiveness to replacing it with 2 dollar per foot steel if it does not need it. Now you will see curves in steel because of wear, even in the yard tracks where we will be replacing with steel in the curves. We intend to use the club resources to the best benefit of the club.

EAST ADOBE YARD

story and photos by Joe Schnyder



Sunshine under the rails instead of ties



TRACKING TRACKSIDE PROGRESS 2020

DONATION TO THE CLUB story and photo by Joe Schnyder

Here is a picture of some of the ties and rail we recovered from the house in Scottsdale. Again, I wish to thank all of the members who came out to help us pick up this donation of track and equipment. Part of the pile is already down at the sawmill being made into panels with our tie spacing and rail offset, so as to make it bolt up without having to cut the rails. 15 panels are already in our track

and another 5 are sitting at the place they will be put in. One of the two switches we received is in service already, because it was steel rail and plastic ties and all we had to do was drop it in. This donation will keep our club in tie material for a long time, and the aluminum rail will be put into straight track panels. All the curves that we will be relaying will have steel rail for extended wear.



story and photos by Perry McCully

Mike Grant bringing track to a trailer and Bill Pardee loading plastic ties into the bed of a truck. This is at the north Scottsdale home of our generous donor.





STEAM LOCOMOTIVES

BOILER Appliances and Attachments

Feedwater Heaters

by Dave Griner

Hello, again. This time we're going to finish up with feed water heaters, in particular the Worthington systems.

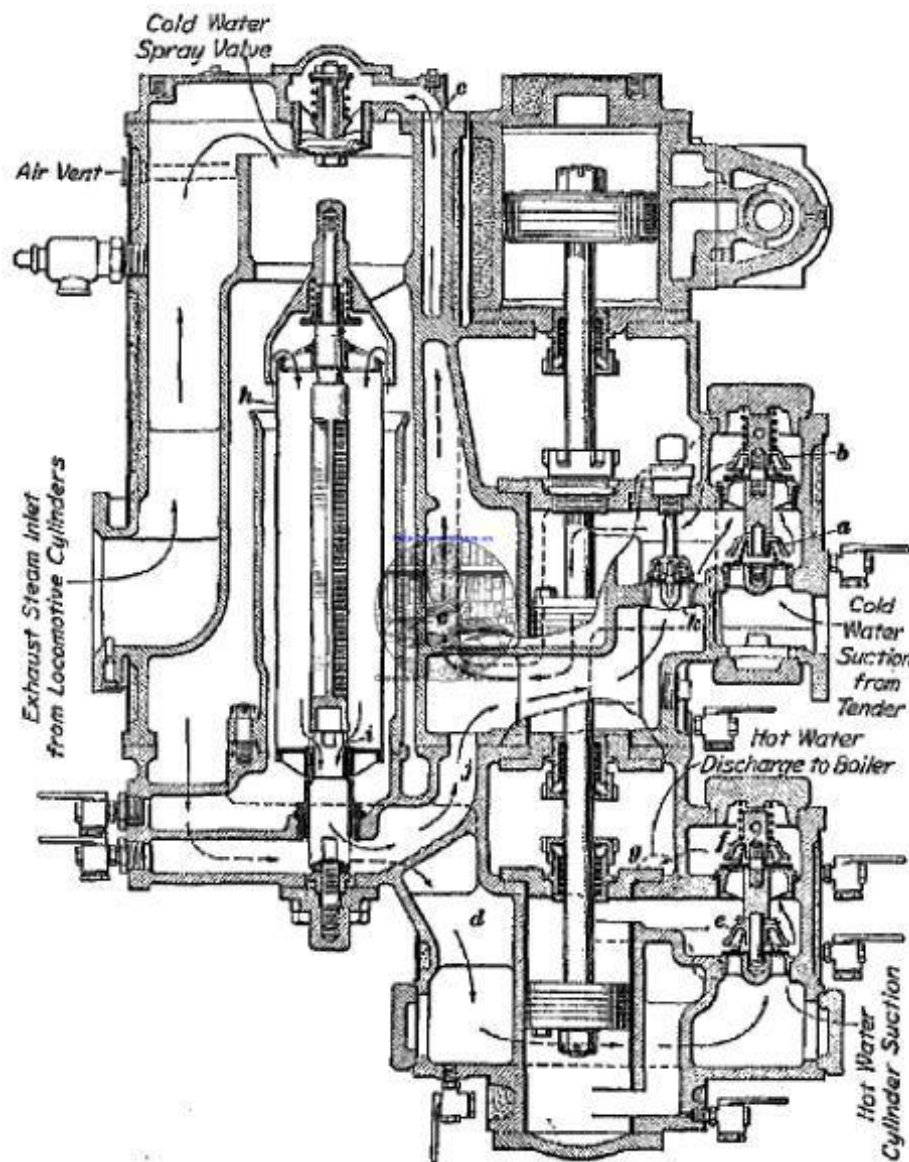
First there is type BL, and we'll revisit the ICS material for a description:

WORTHINGTON TYPE BL FEEDWATER HEATING EQUIPMENT

GENERAL DESCRIPTION

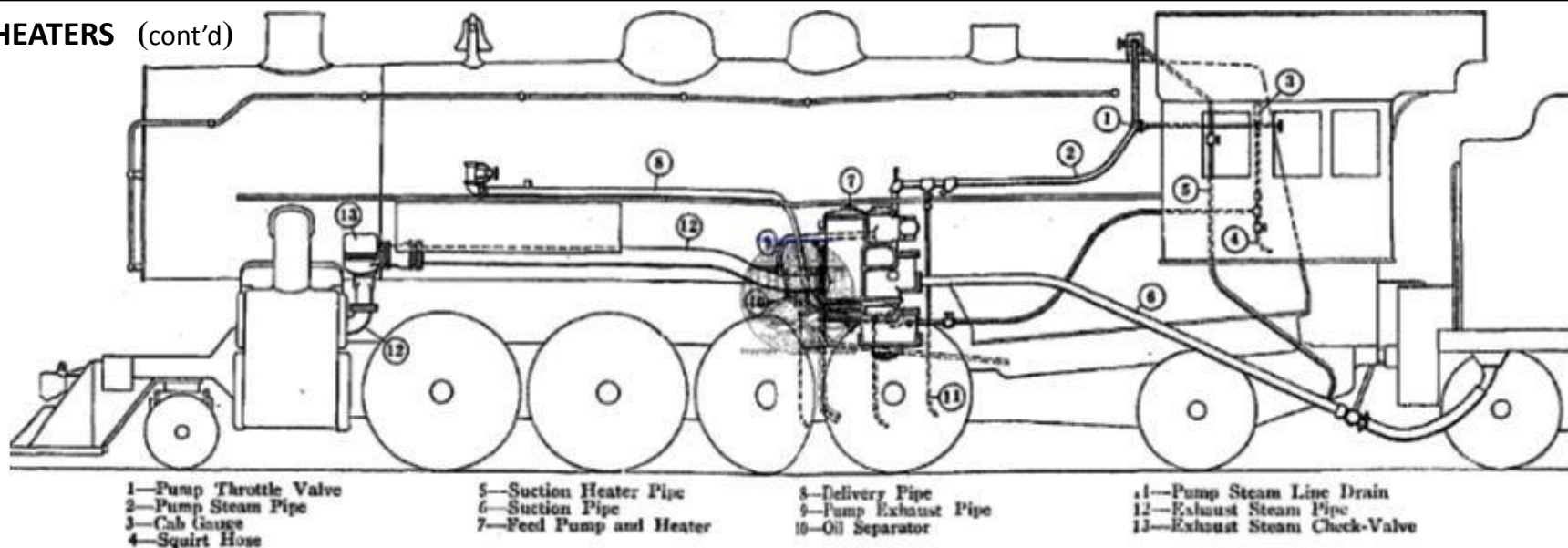
20. The Worthington feedwater heater is of the open type, whereas the Elesco heater is of the closed type. The exhaust steam with an open heater ~~mingles~~ directly with the feedwater; with a closed heater the exhaust steam does not come into direct contact with the water, the steam and the water being separated by tubes.

The arrangement of the Worthington feedwater heater apparatus is shown in Fig. 11. The principal part of the apparatus is a heater, the type BL being shown, which is made up of a cold-water pump, a heater, and a hot-water pump, with a steam cylinder for the operation of both pumps, the complete assembly being contained in a casting attached to the side of the boiler. An exhaust-steam pipe in which is installed an exhaust-steam check-valve, conveys exhaust steam from the cylinders to the heater compartment of the feedwater heater. A suction pipe leads from the tank to the cold-water cylinder of the pump and a discharge pipe leads from the hot-water pump to the boiler check-valve. The cab equipment comprises a pump throttle, an indicator gauge to show the speed at which the pump is working, and a connection to the lubricator. Other details will be evident from the illustration.

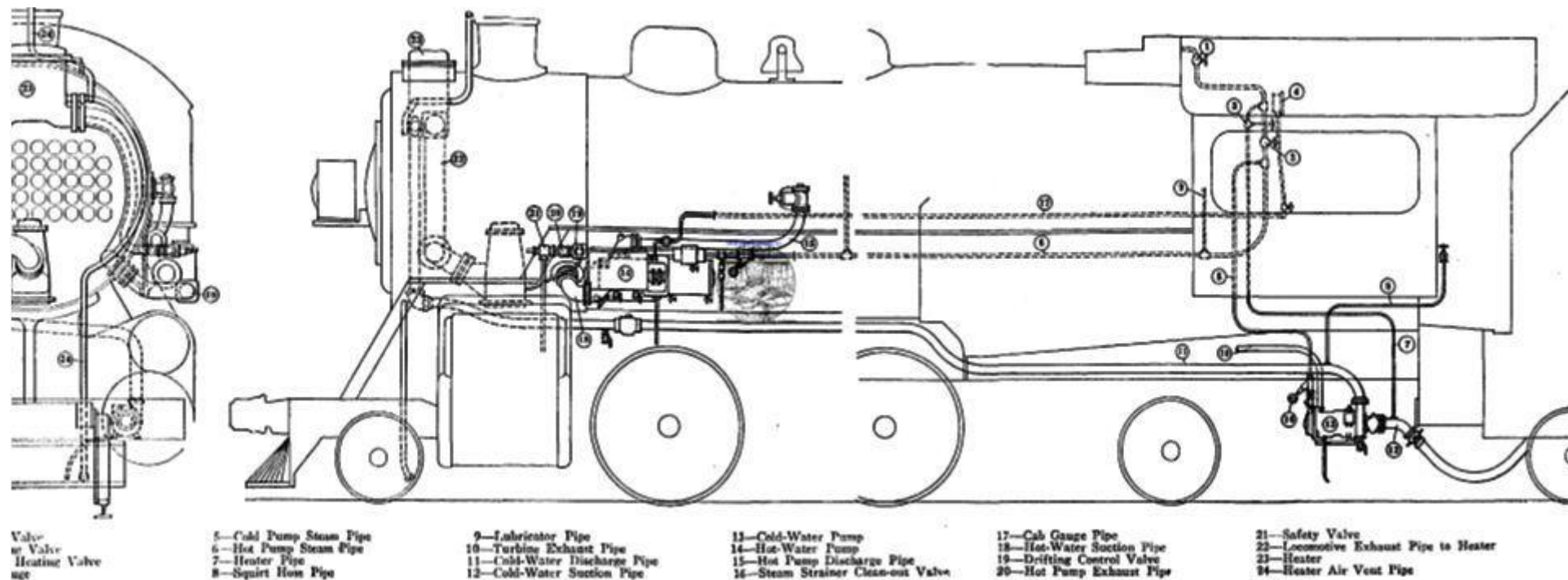


(continued next page)

FEEDWATER HEATERS (cont'd)



WORTHINGTON TYPE BL FEEDWATER HEATING EQUIPMENT



WORTHINGTON TYPE S FEEDWATER HEATING EQUIPMENT

(continued next page)

FEEDWATER HEATERS (cont'd)

Next is type S, and revisiting the ICS material again:

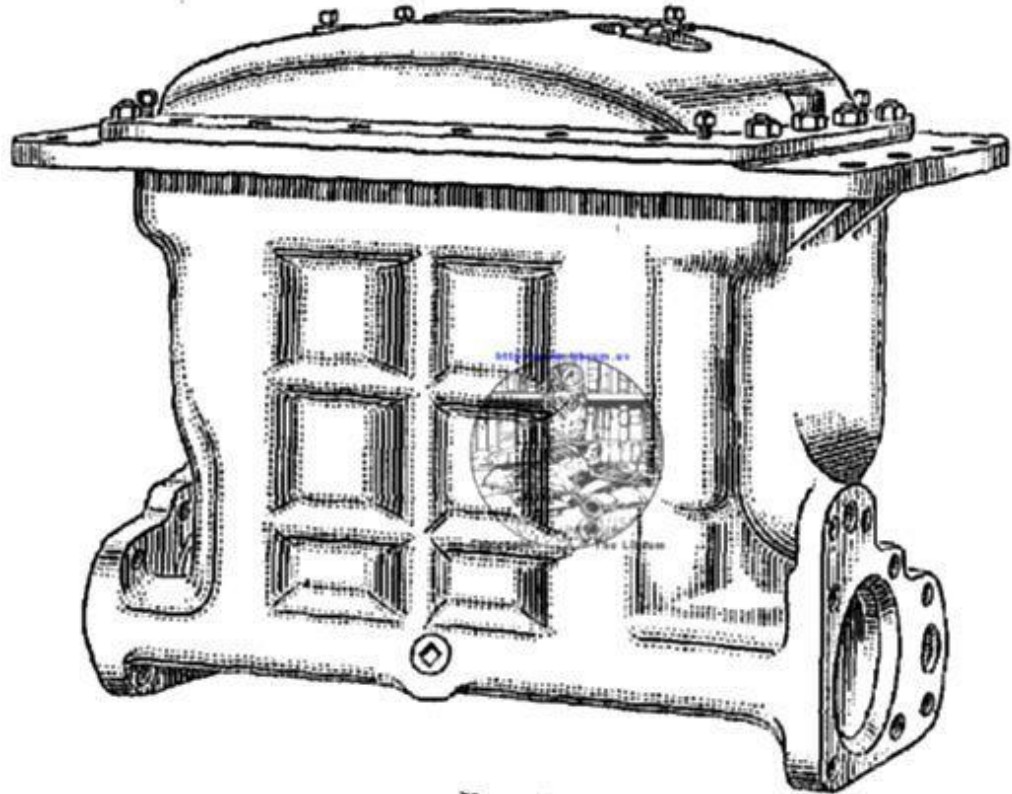
WORTHINGTON TYPE S LOCOMOTIVE FEEDWATER HEATING EQUIPMENT**ARRANGEMENT AND OPERATION**

32. General Description.—The Worthington type S locomotive feedwater heating equipment, Fig. 20, consists of three distinct elements; the cold-water pump, the hot-water pump, and the heater. These parts can be located on the locomotive to secure the best arrangement compatible with the available space, the distribution of the weight, convenience of operation and maintenance, and the general appearance of the locomotive.

Cold water from the tender is supplied to the heater by a constant speed, low discharge pressure, turbo-centrifugal pump, operated by a Pyle-National steam turbine and is located directly in front of the tender hose. The heater, into which exhaust steam from the locomotive cylinders is vented through a pipe, is located on or in the smokebox either in front of or back of the stack, and is equipped with a spray valve and a heating chamber. The water level in the heater is regulated by a float valve located in the cold-water inlet, hence the cold-water pump will deliver as much or as little water to the heater as is permitted by the opening of the control valve.

The hot-water pump as well as the cold-water pump is driven by steam from the locomotive turret, the operating handle of the throttle valve being conveniently located near the engineer or fireman. The exhaust steam from the hot-water pump is piped into the heater, where it assists in heating the feedwater.

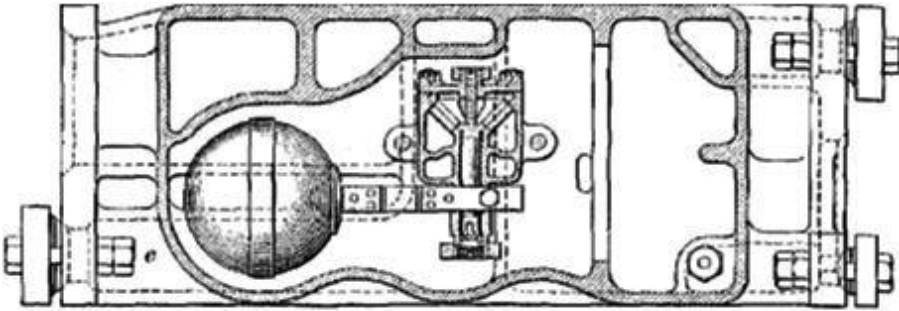
The heater found at the top, front of the smokebox:



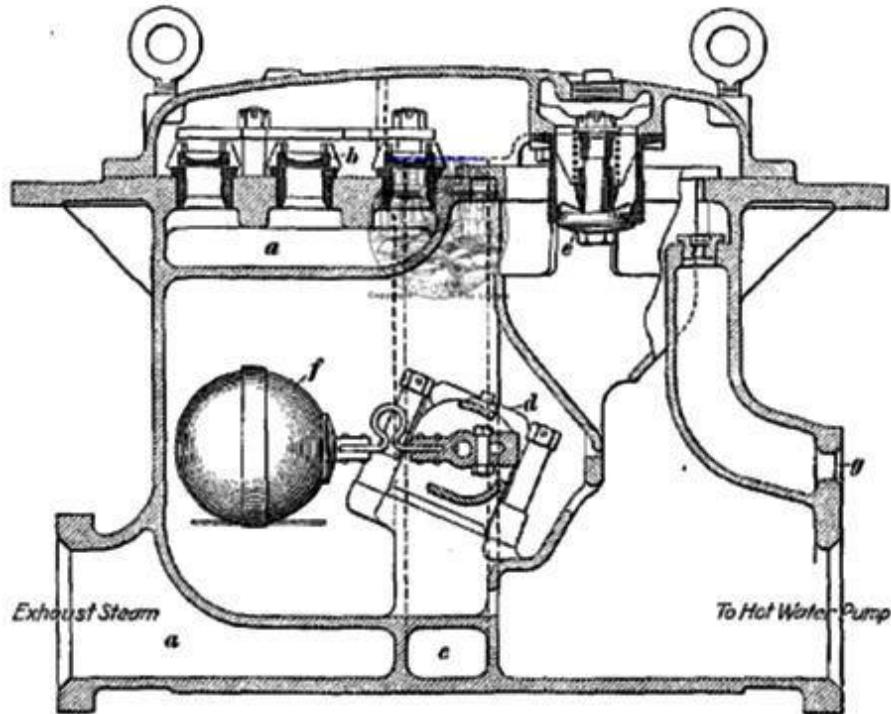
(continued next page)

FEEDWATER HEATERS (cont'd)

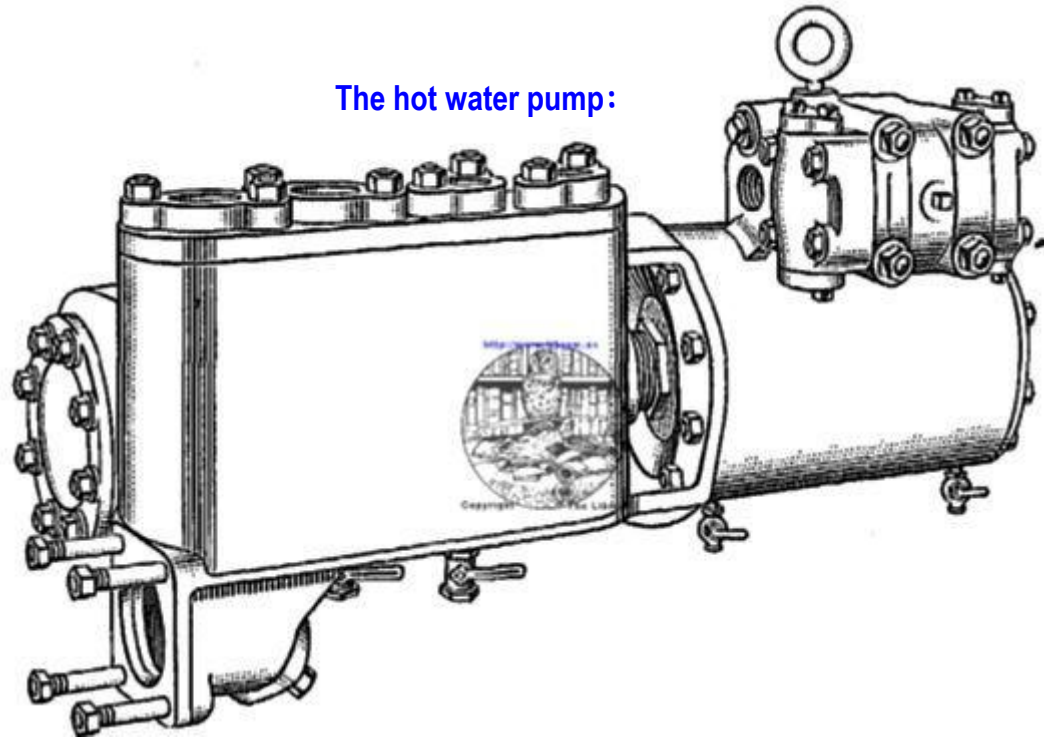
Sectional view of the heater, looking down from above:



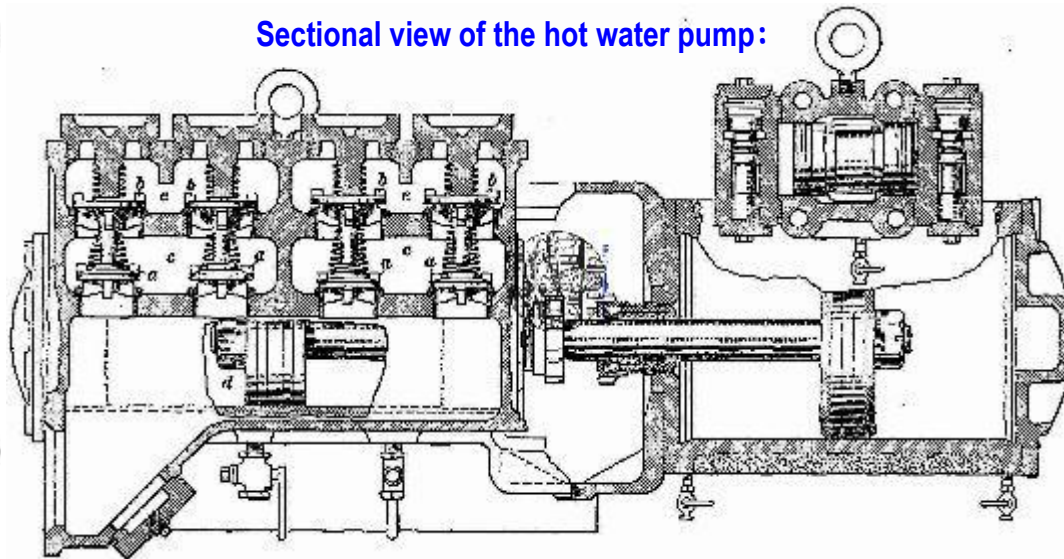
Sectional view of the heater, looking at it from front:



The hot water pump:



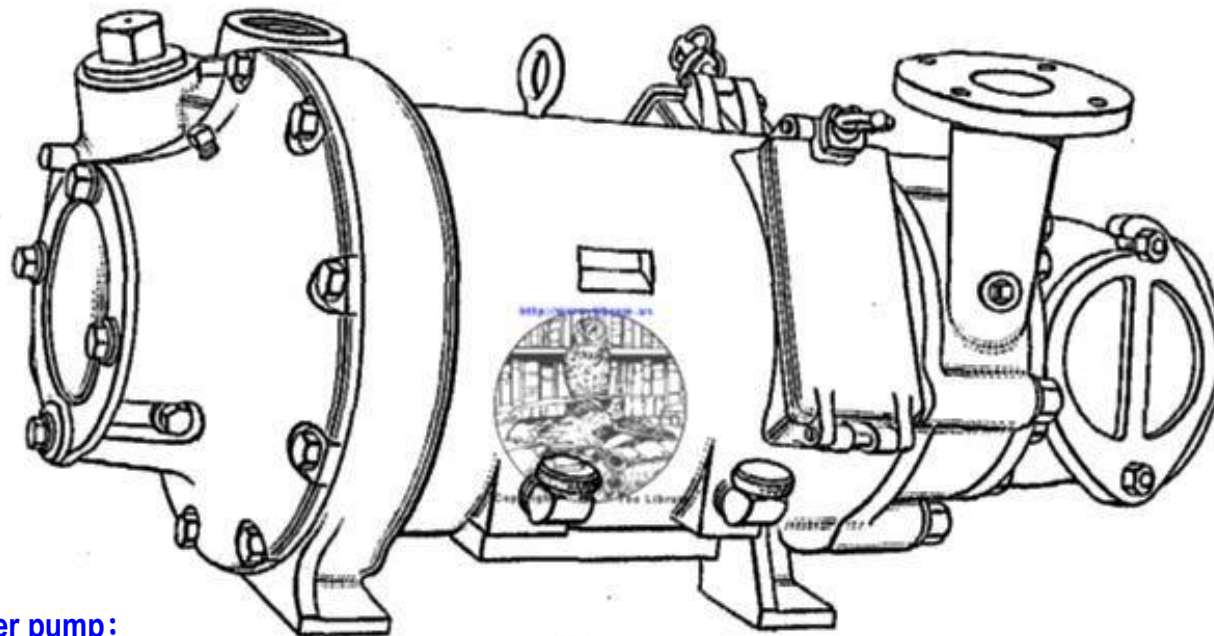
Sectional view of the hot water pump:



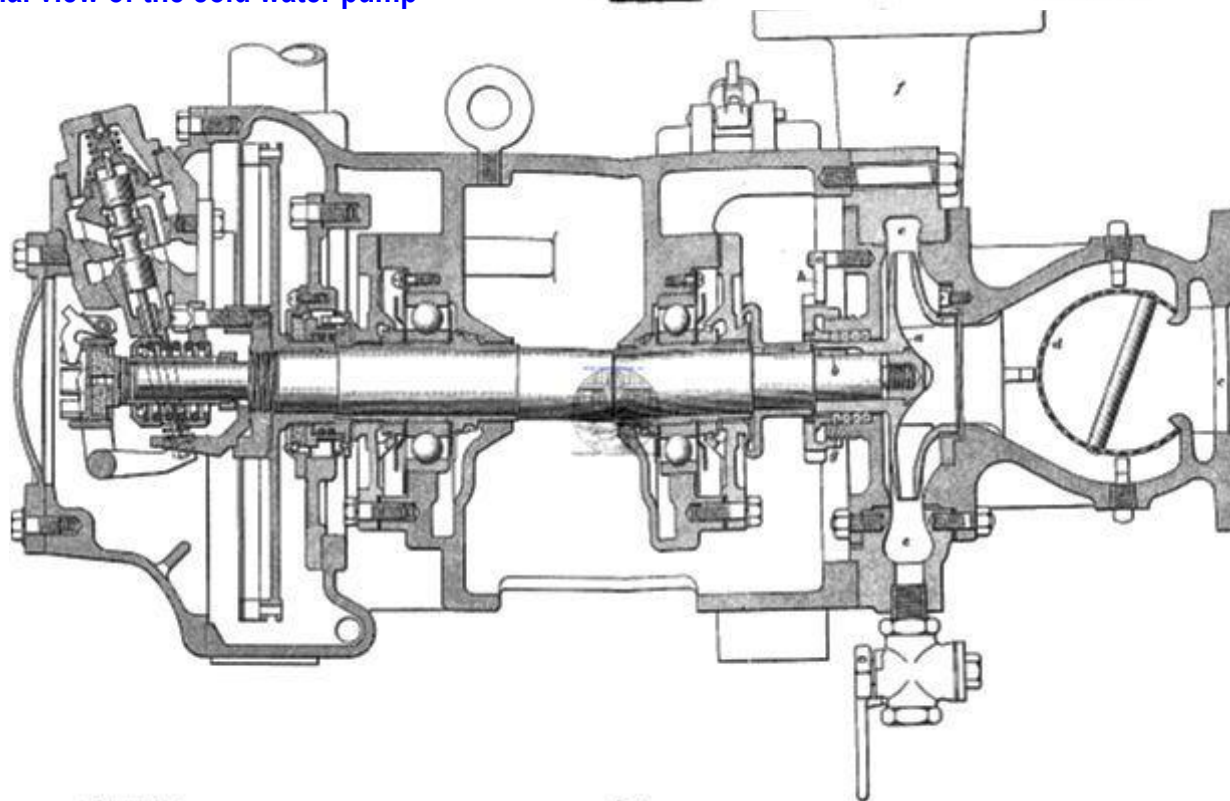
(continued next page)

FEEDWATER HEATERS (cont'd)

The cold water pump:



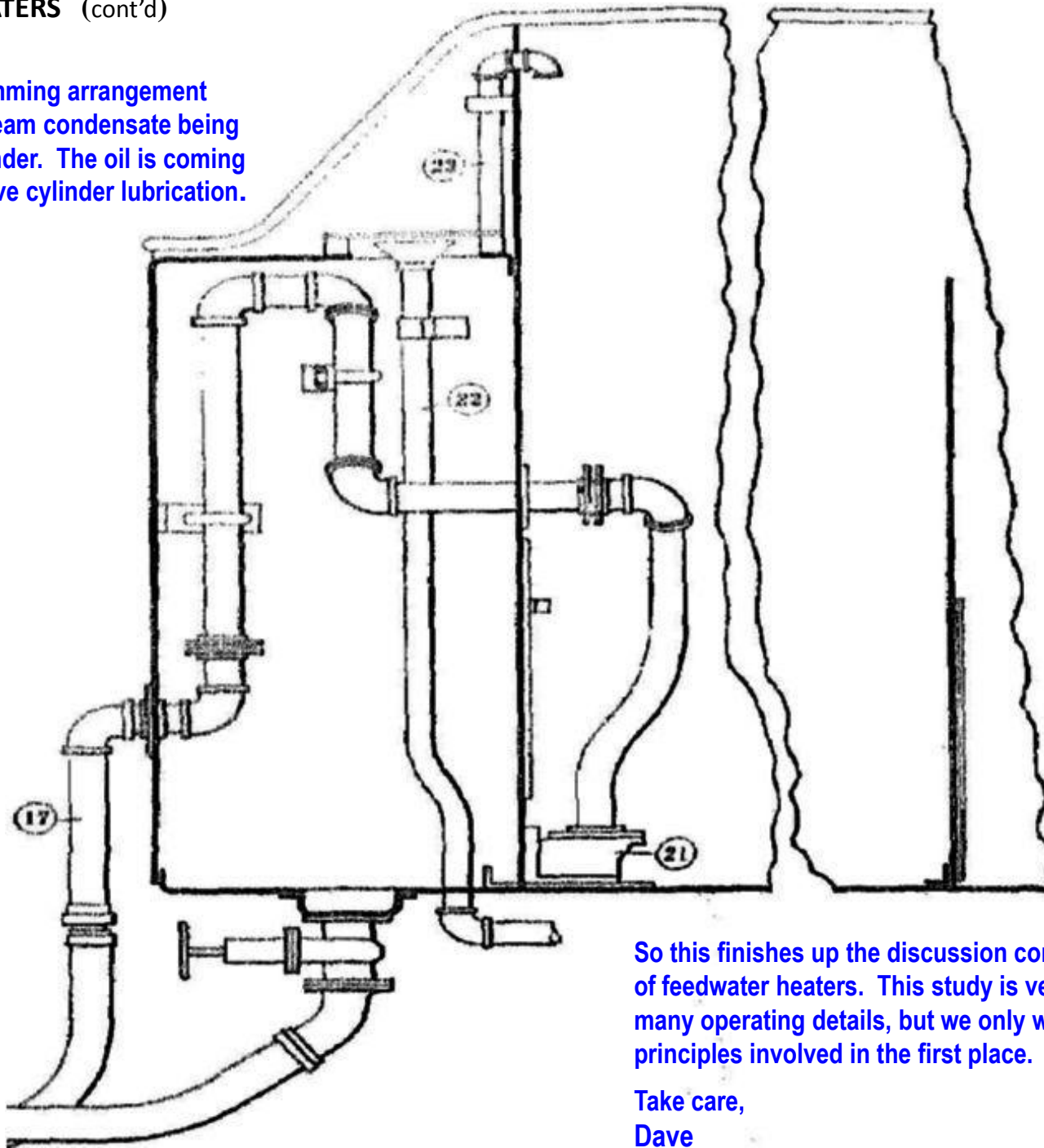
Sectional view of the cold water pump:



(continued next page)

FEEDWATER HEATERS (cont'd)

This is the oil skimming arrangement for the exhaust steam condensate being returned to the tender. The oil is coming from the locomotive cylinder lubrication.



So this finishes up the discussion concerning the four basic types of feedwater heaters. This study is very fundamental, leaving out many operating details, but we only wanted to know the basic principles involved in the first place. So until next time . . .

Take care,
Dave