

The Mud Ring

The Official Newsletter of the Cinder Sniffers, Inc.
Home of the Original CliShay!

www.cindersniffers.org



Celebrating 64 Years



June 2020

Trouble With A New Burner

By Chuck Balmer

On Saturday Jan. 11, Carl Schwab came up to the Balmer Locomotive Works to run the first performance test on his new propane burner for his CliShay "Trouble".

Carl, Jim and I ran tests at different gas pressures to determine the limits to the operation. It looks like it should perform well, but a steaming test will ultimately prove its performance.

We also ran tests with a reactor screen and found that it greatly improves combustion so Carl may design a mounting for a stainless steel screen.

Carl hopes to have this test ready for this summer's running season. We will all look forward to the first test.



CSI COVID-19 UPDATE

It has been asked if we can now "go back to work?" The Executive Committee agrees that we can go back to working on the track/facility based on recent updated State and Federal guidelines. At your own comfort level of course, as the vast majority of our members are in the highest risk category. We will still need to observe the gathering and social distancing guidelines.

The Executive Committee has also approved a members-only run on the second Saturday of June—again with gathering and social distancing guidelines in mind.



Member Calendar

May 23	Work Session	9am
	Express Meeting	12pm
June 13	"Father's Day" Run	10am
	— MEMBERS ONLY, NO GUESTS —	
June 27	Work Session	9am
	Express Meeting	12pm
July 11	"Independence" Run	10am
	— TENTATIVE, WITH GUESTS —	
July 25	Work Session	9am

Comments on the CSI Unloader

By Carl Schwab

The year is 2002 when we were having one of our run days in the Fall. A gentleman brought an SW 1500, like the club's engine. If you remember our old unloader, it worked, but was not the most friendly for large engines. That day proved a point in needing a new unloader.

There are many designs of unloaders around the country. From using service station hoists, push around transfer tables, drive through un-loaders, and many more I'm sure.

The big problem with most unloaders is how do you get lined up perfectly for easy roll out of your equipment? If you are by yourself it is almost impossible.

With the above problem, the question arises how do we solve the precision backing/aligning situation plus the general ease of using?

The third axis is the key to the solution so that the vehicle can get to within twelve inches, plus or minus, and have the movable table reach in/out to close the gap. Note: You are still required to get your vehicle straight with the un-loader for best results.

There was design criteria. It had to go low for the lowest trailer and high for the tallest pickup where there would be very little ramp up or down for loading or unloading from a vehicle. It would have three axis's (x y & z) for convenience. It would be capable of lifting 2,000 pounds.

Bob's design was for a hydraulic scissor lift as I remember, Ed's design was for a cable lift using an A.C. winch for the power. A meeting was held at the track in the winter of '02/'03 with Bob Maynard, Ed Habel, Jim Keith and myself to decide on the design. Ed's design won out basically for one reason: with the scissor lift the x's had to be machined to close tolerance for smooth operation. My dad's shop did not have that capability. Ed's design was pretty much cut and weld.

In January of 2003 construction started on the unloader in my father's shop on Wednesdays with a crew of H.O. Kyler, Ed Habel, Jim Keith and myself. Testing was completed and 2,000 lbs. of salt was borrowed from our church, First Baptist Hamilton for the test. Keep in mind that the winch is cabled with a four to one reduction. So with 2,000 pounds, the winch is seeing only a 500 lb. load. After the test temporary wheels were installed and it was loaded on Ed's trailer for transport to the track. The first use of the unloader at the track was at the June 2003 run.



Sixteen years pass and the winch acts up on New Year's Day 2020. Luckily by tapping on the winch motor the winch would operate and all engines were loaded. We tried to get the old winch repaired with no luck. A new winch was voted on and has been installed. It is a Warn AC 1500. Warn being the major manufacturer of these type winches. Ed noted that the new winch cost less than the first winch.

Original cost of the unloader: near \$2,000. Cost of the new winch: priceless (well, actually less than \$500).

The Mud Ring is the official newsletter of the
Cinder Sniffers, Inc.

Copyright © 2020, All Rights Reserved

The Mud Ring Editor

Donald Frozina

Executive Committee

President

Donald Frozina

Vice President

Bill Mense

Recording Secretary

Dorothy Keith

Treasurer

Ed Habel

Corresponding Secretary

Dave Sams



Contact Us

corrsec@cindersniffers.org

Roy, The Sequel

By Denis Larrick

In my initial article, I had been told that the chassis of my new Chloe had been built by Jim Gould of Arizona. But I knew Jim was from Michigan, so I emailed him and found out that he was not the culprit. I emailed the Arizona clubs and no one knew of a Jim Gould there either. One day I was thumbing through *Narrow Gage and Shortline Gazette* and saw a beautiful computer rendering of a fire truck by Bill Gould of New Mexico. Hmm... I emailed Gould Studios and he said "guilty as charged". Bill was one of the guys that made dies for some of the early Kemtron and PFM On3 brass engines and has been a professional model and medical device maker all his life. For a while, he sold HO model kits as the Gould Company, including an amazing 200 ton crane. He knew Ward Kimball, Ollie Johnston, Cliff Grandt, and all the gang I've read about for fifty years. Gene Allen personally helped him with the Chloe kit. What an honor to own some of Bill's work! He is also a fellow inductee with Chuck Balmer in the Internet Craftsmanship Museum. Check him out at:

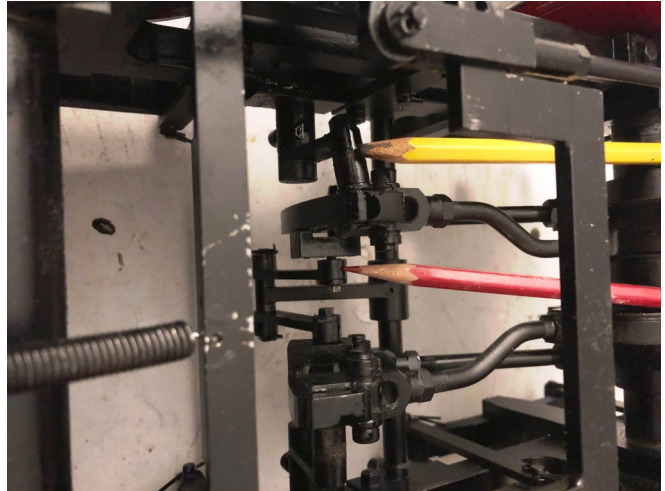
<http://craftsmanshipmuseum.com/Gould.htm>

Bill's work is spectacular. He owned the finest machine tools during the period he built the Chloe. He was also an experimenter. Not only did he add a Fitchburg Northern air brake kit (not a standard for a Chloe), he also designed and built balanced valves with a longer valve face than on the Allen prints. That one worried me, but I fed the dimensions into Charlie Docksteder's valve gear program, and it should work fine. Then Bill's work life took over and he laid Chloe aside while saving to have a boiler made. He decided to sell it when he moved from California to New Mexico.

I am the fourth owner, and I think the second owner did some messing with it. The left cylinder blew like crazy. I found out why. No rings on that side!!! Not being confident that I could make quality rings, I worried for a few nights. I had used Honda quad runner rings in the mogul, and they gouged me for fifty bucks a pair. Not long after I bought those, I stumbled upon a vendor that specializes in hit and miss gas engine restoration rings. What are the chances that twenty years later he would still be in business? I must just be living right. Dave Reed at Otto Gas Engine in Maryland was not only still in business, but he

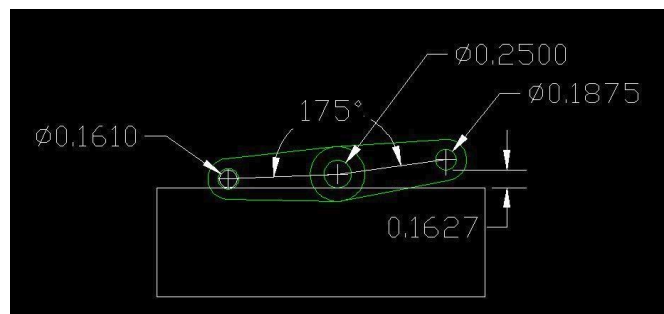
called and spent a half hour on the phone with me. Three days later, I had my rings at five bucks each.

I cranked up the Chloe on air and it ran great for, well, a few minutes. Then it went lame and the Johnson Bar locked up. I got out the Bell and Howell deer blinding flashlight and found a problem, a big problem.



A bolt had backed out from the link lifting saddle and had caught on the one on the other side. The lower (inner) rocker arm was soft bronze and had bent like a pretzel. Tear down time. There was no fixing that, so I made two new lower arms out of 3/8" steel, not elegant but hidden between the frames, and they will NEVER bend.

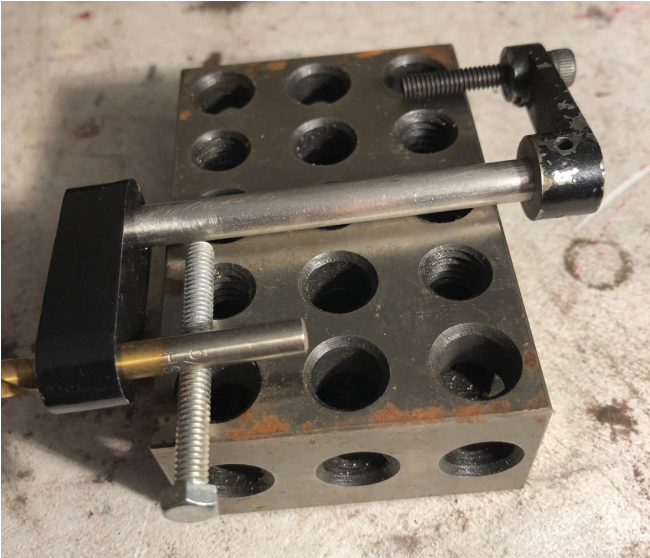
The upper and lower rockers are set at 175 degrees, so I had to figure out how to Loctite the new rockers on the new shafts at exactly the right offset. Thanks to being able to draw up the problem in AutoCAD and asking it to convert from an angular deflection to a linear deflection, it wasn't that difficult.



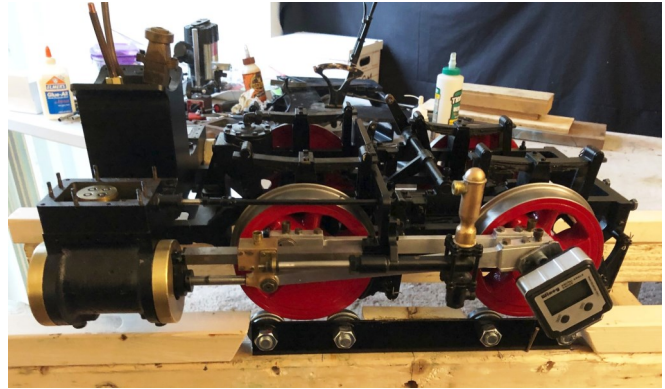
(Continued on page 4)

Roy (Continued from page 3)

Using a 1-2-3 block for a ground flat surface and a 10-32 bolt as a 0.162" shim to get the offset it went smoothly.

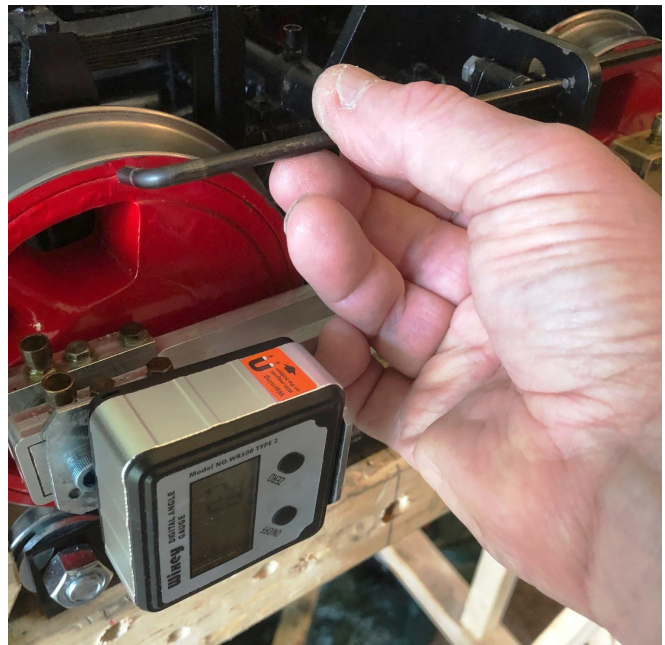


Now it ran as square and sweet in reverse as any engine I've ever known. But in forward, not so much. I pulled the main drivers and put them between centers on the lathe so I could use the dial indicator to find the apex of the eccentrics, marking the locations on the tires in relation to the crankpins. It was clear that the eccentrics had been moved from their original locations.



A few years back at White Creek, Larry Kepner showed me a valve gear setting trick he thought up. He mounted a piece of steel angle on the end of the crankpin and attached a magnetic digital angle finder used to set the angle of the blade of a table saw.

They are accurate to 0.1 degrees and cost only thirty bucks at Rockler Woodworking in Tri-County. I have used it on the last valve setting of the Mogul and it worked so much better than my own method (a caliper depth probe measuring the piston location) that I will never use anything else.

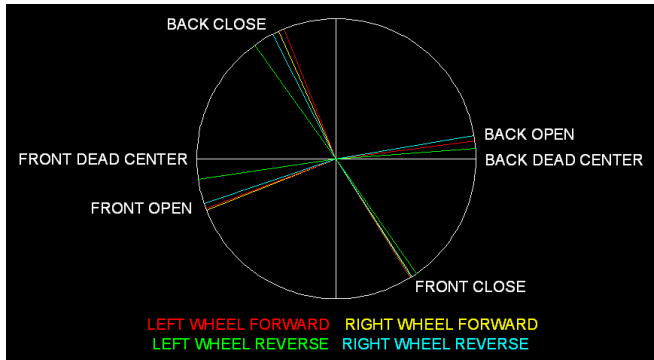


I pulled the dial indicator off my lathe and attached it to the crosshead to find both front and back dead centers in both forward and reverse, then used 1/8" rod to make a

(Continued on page 5)

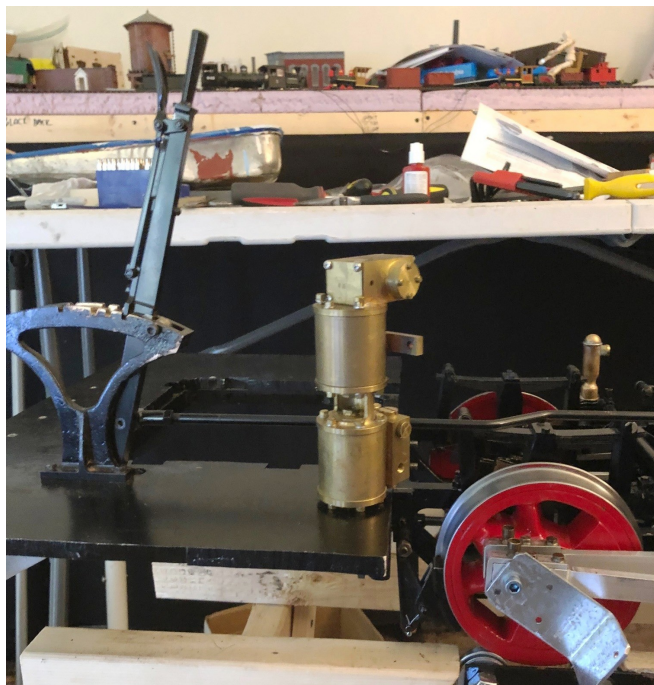
Roy (Continued from page 4)

trammel to punch mark the dead centers on the tire of the main drivers.



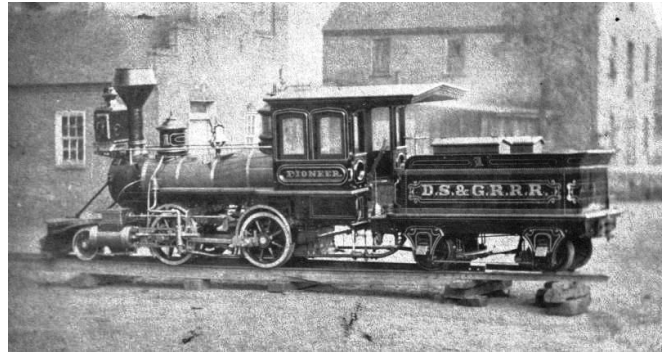
I then pulled the steam chest tops off and recorded the angle from dead center that the valves opened and closed. I took three readings at each location and averaged them, a total of 96 readings. Those were transferred to AutoCAD so I could see graphically where the valve events were happening.

Now I am totally perplexed. Even though reverse runs sweet as a Swiss watch, it is the left reverse eccentric (the green lines in figure 7) that is the outlier. And the left forward (red), which lines up nicely with the other readings, is the lame stroke when pulling. No, I don't have the two switched. I've looked at everything, so it is time to do a "seat of the pants" tentative setting on the left forward



eccentric and just experiment. But for now, I'm ready to take a rest from it and see if a frying pan hits me up side of the head telling me what is going on.

Meanwhile, I will do some dreaming. Lou Lockwood will have a big mark on this engine. He is selling me a lubricator for it, and a few years ago he sold me a water pump



Taylor Trestle Repair

Photo by Carl Schwab

Carl and Ed, along with some others from the Wednesday Group, have prepared Taylor Trestle for the upcoming work session this Saturday to replace decaying ties, etc. Until all work on the trestle is complete, only the upper loop will be open for running.

