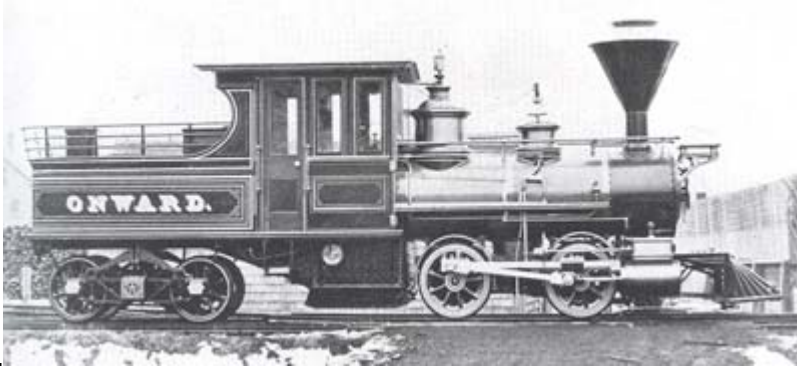


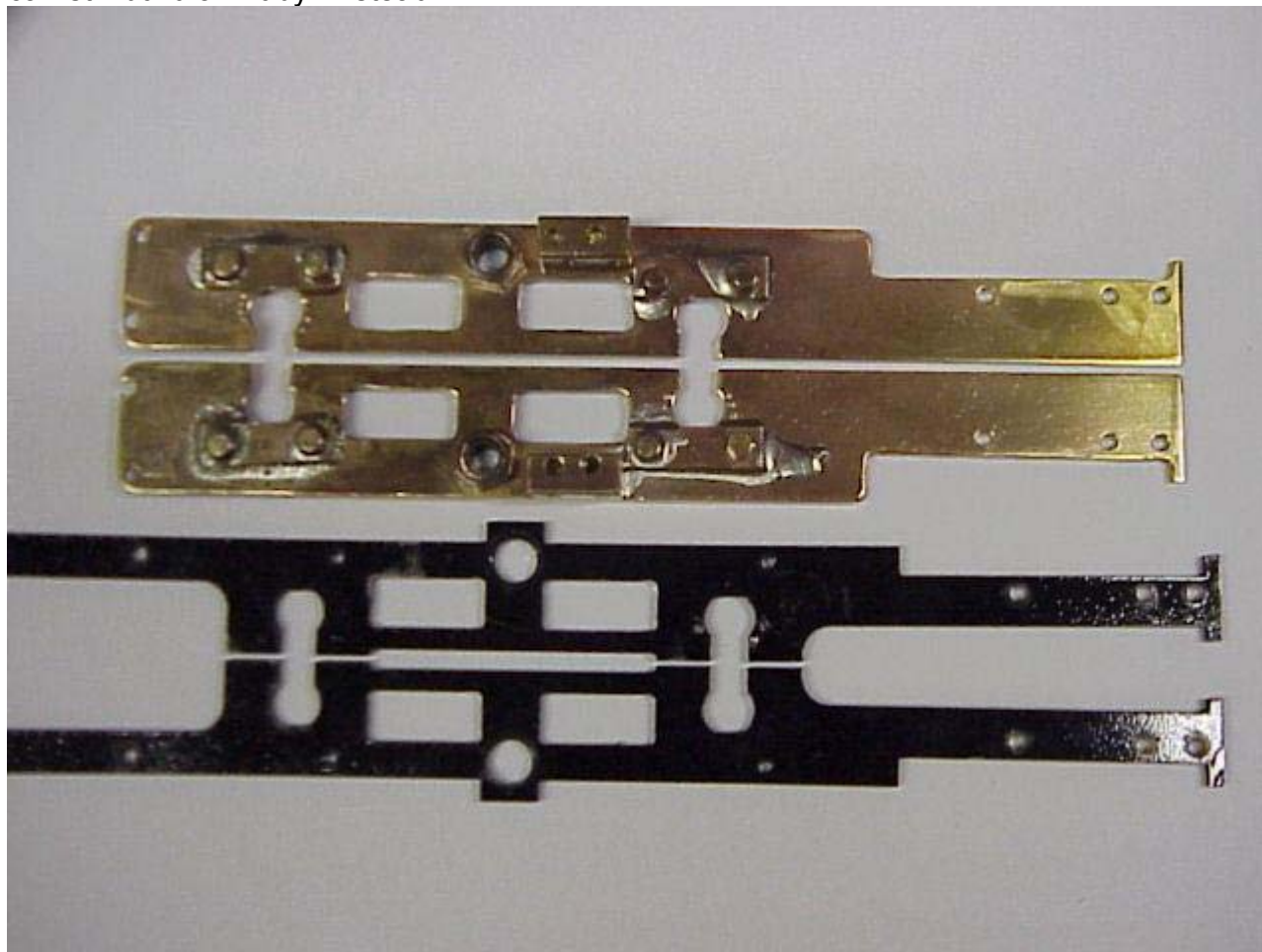
Hello everybody,

I am redbear (AKA Larry) and I am going to try and post a builders log of my Ruby to Mason bogie project. I bought my Ruby kit shortly after Diamondhead this year. Diamondhead is a superb steam-up if you have not been! This is my first engine of any type and I do not have any machine tools. (YET!) So I chose the Onward as my prototype since it has fairly small drivers, and was before Mason switched to the Walsschaert linkage. Onward is listed as the first Mason Bogie and it is also one of the smallest. This made it a good prototype for a Ruby bash without any machining tools. Here is a picture of the

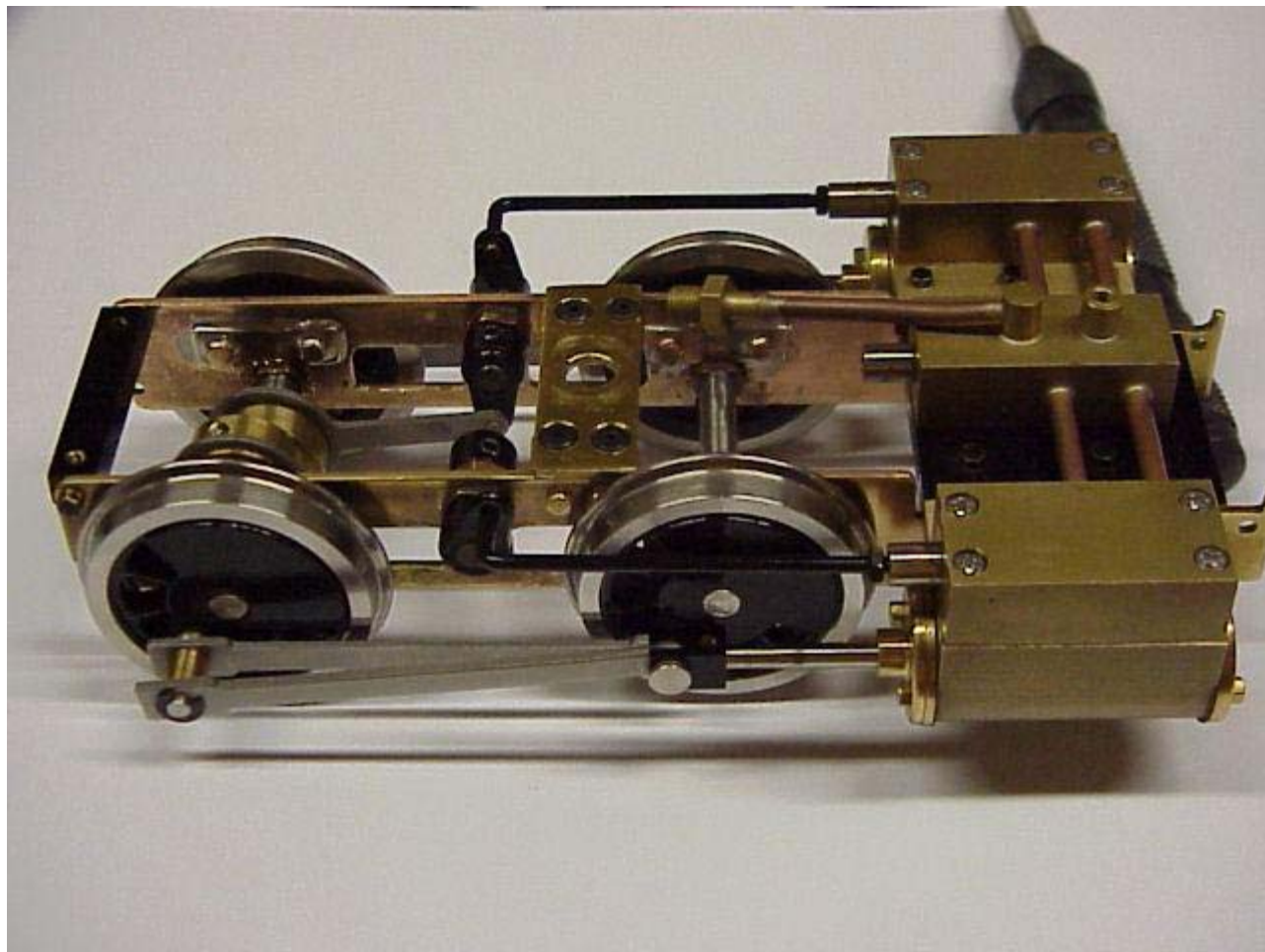


prototype.

The first thing I did was to make front frame rail sections so that if I have overstepped my ability to build this I can still build a "Ruby" instead.



Due to the long time period from starting this project to finding out about MLS a lot of work has been done. I have finished the "steam bogie" and have run it on air. I reversed the steam admission as per Dave Hottmann's article here on MLS. Everything works great and I am ready to start on the next phase.



I want to thank all of you who are willing to take the time and effort to post these articles. They are great for "newbies" like myself.
More Later Redbeard

From Allan Cash July 1, 2007

Just caught up with this post - as you are new to the forum you may not be familiar with my Ruby-Mason bash that I did a couple of years ago. Turned out to be a worthwhile project and it runs well.



Here is the link to my building log which may give you a few pointers for your build.

http://www.mylargescale.com/forum/topic.asp?TOPIC_ID=31955&whichpage=1

Look forward to watching your progress!
Allan.

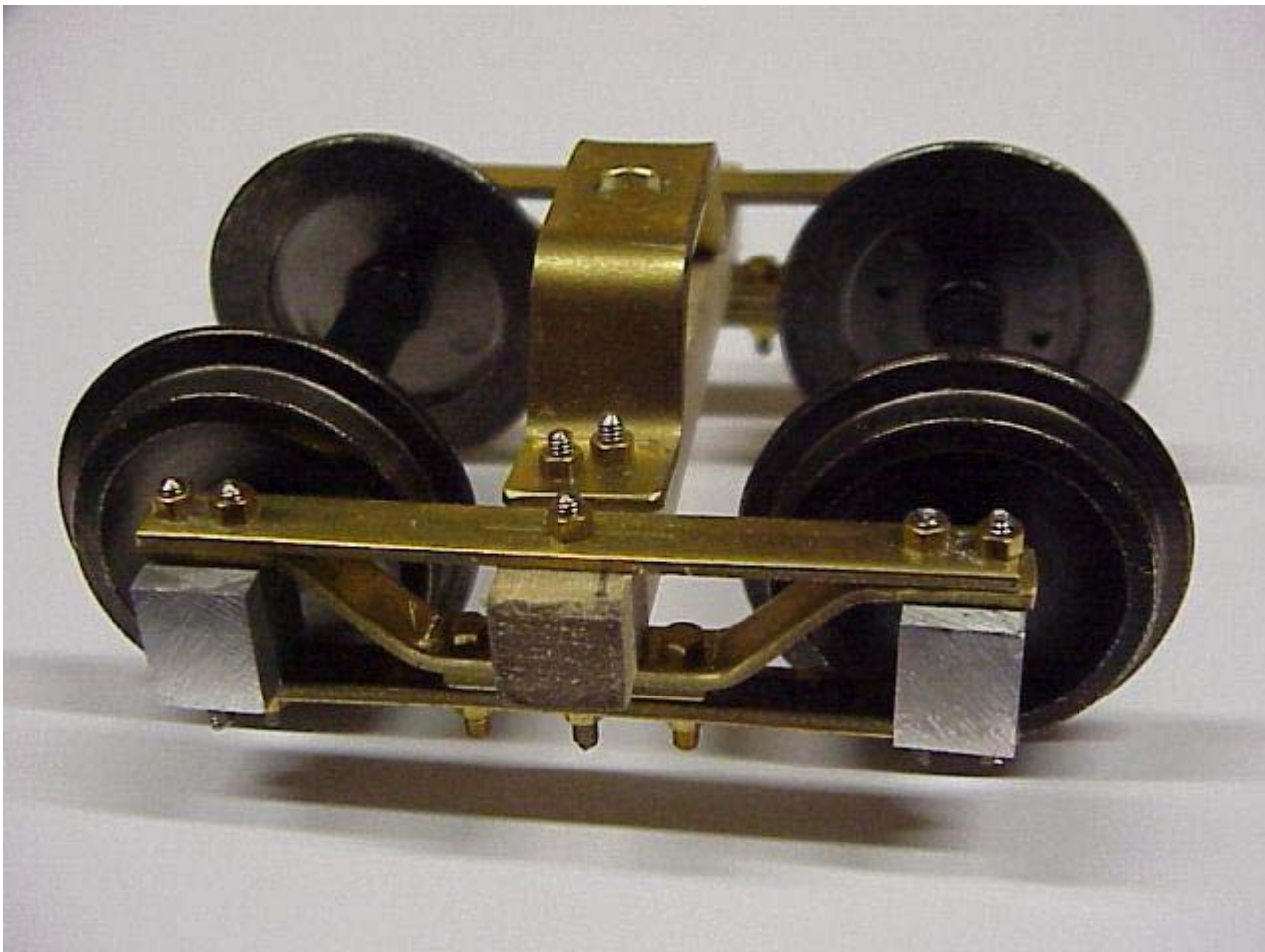
From wchasr July 2, 2007

Anything new over the weekend Larry (Redbeard)?

Chas

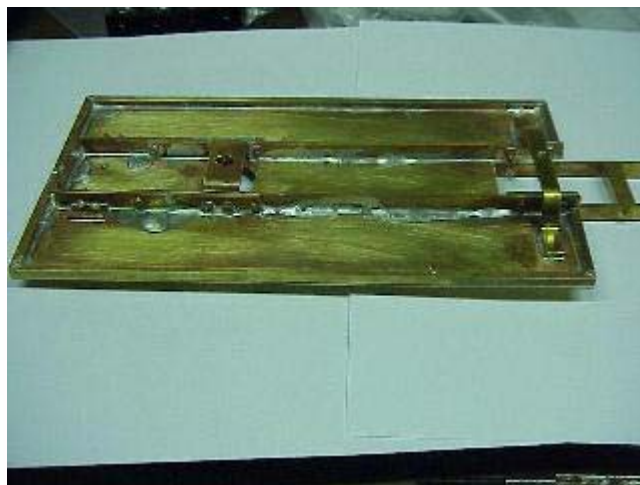
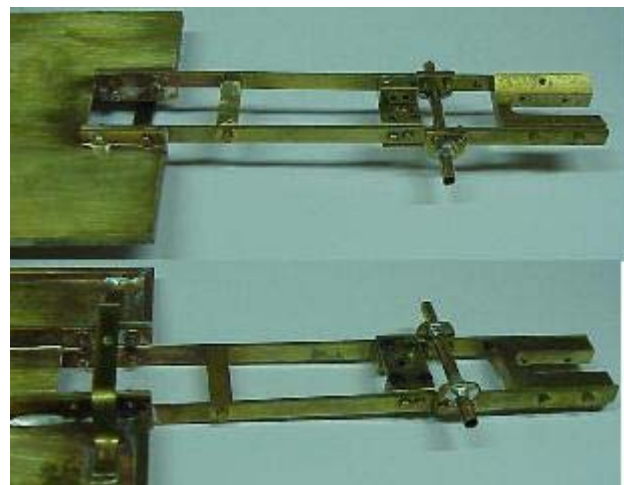
Well,

I worked on my house for the last four days, so not much was done on the Ruby-Mason. (I am still repairing damage from Hurricane Ivan several years ago) I was quite a bit further along than the first post showed, so I will play catch-up here today. I built the rear bogie from brass stock, hardwood, and aluminum. This picture is the truck as a functional piece, MUCH more detail work to

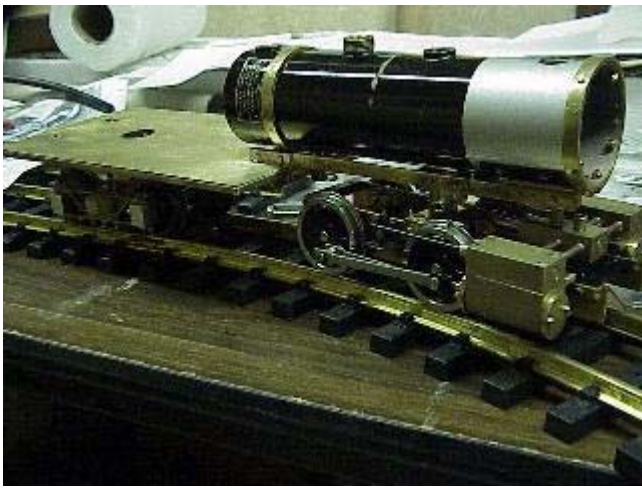


come.

I was about halfway through the frame section when I found Al's log on his Ruby-Mason. Great looking engine Al, thanks for putting the log up as it has been very helpful to me. I wish I had found it much sooner, as I can see a couple of things I would do differently but that's water under the trestle now. It is interesting how we paralleled on some of our thinking. I planned on a flexible steam line section to connect the boiler to the cylinder assembly. In fact I did not start the project till I had a line in my hand. I ordered a piece of 1/8 inch flexible Viton line from Small Parts. After reading Al's log I also have found a suitable "sheild" for the line from a piece of co-ax as another member suggested. The biggest thing that I grabbed from Al's log was the basic idea of how to connect the Johnson bar to the "moving" reversing valve. My linkage will be very different in appearance and is in front of the pivot. But I needed that nudge for a direction. Thanks Al ! I am using the orginal Ruby front saddle for the boiler although I tuned it around since I will be cutting the front out for the exhaust pipe to move. Here is my frame as it is today.



And here is the frame on all eight wheels with the boiler sitting in place. Boiler mounts are finished but I am still going to insulate and "jacket" the boiler. The overly heavy bands on the boiler will support the jacket, but are really there to allow secure hand rail mounting points.

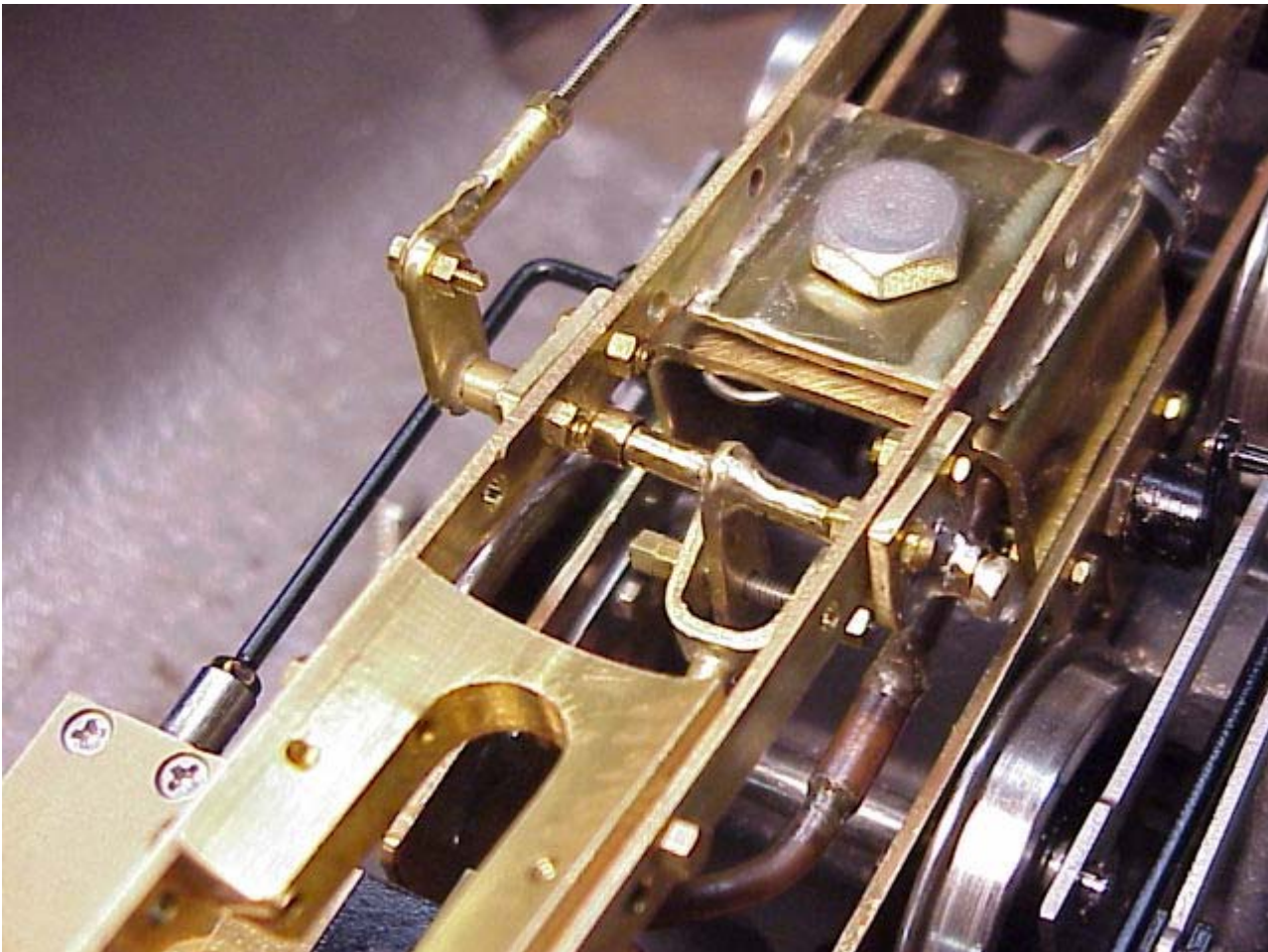


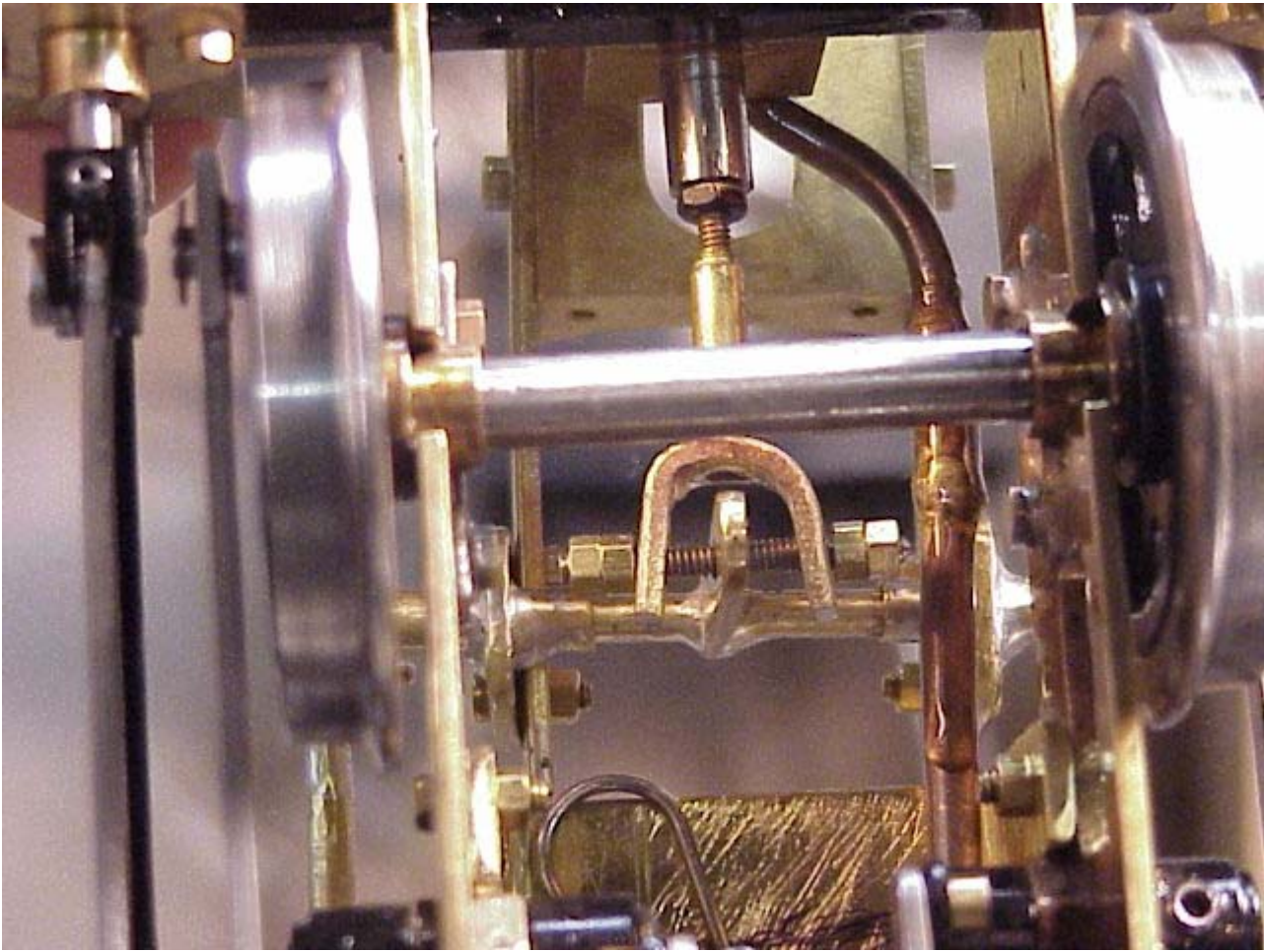
This is where I am on the project now. I will be out of town this coming week so no more will be done till after July 9th. Thanks for the encouraging words from everybody. I will try to answer as many questions as I can. Sorry about the small pictures, I have a fairly slow dial-up connection. More to come!

Redbeard (Larry)

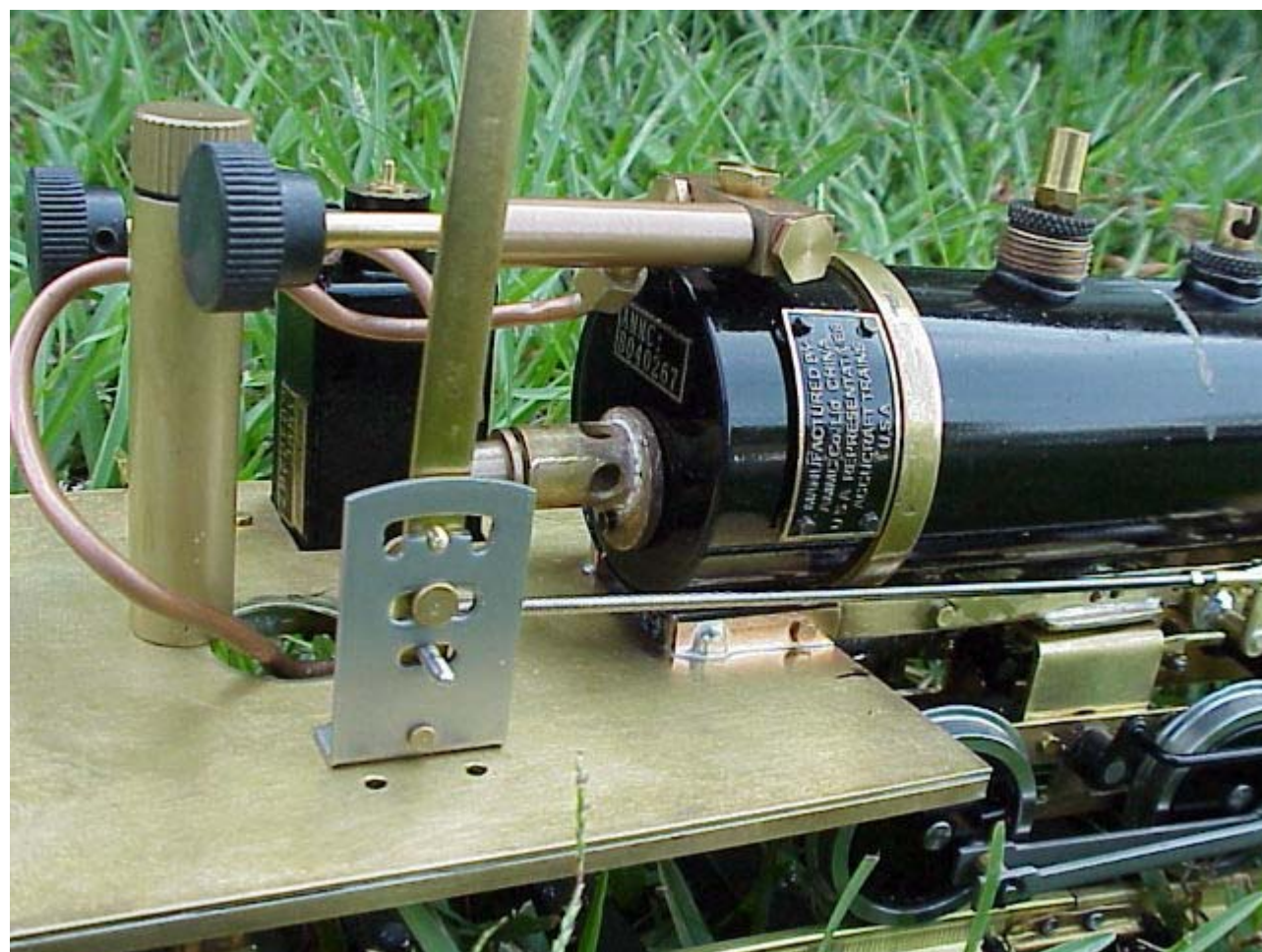
August 17, 2007

Lots of catching-up done this week. I was gone a lot of the last month and when I came back and started back on the project I found I had to back up a bit and redesign a couple of things. For the sake of simplicity I put my swivel for the driver chassis just forward of the centerline between the drivers. This kept me from having to work around the linkage rockers from the eccentrics, but caused a nightmare of geometry for the reverser valve linkage. It also crowded the space that has to have a steam line running back to the lubricator. So I revisited Al's build log and borrowed another idea or two. Again many thanks to Al for posting you log on this forum. So I built a new swivel and new linkage for the reverser.

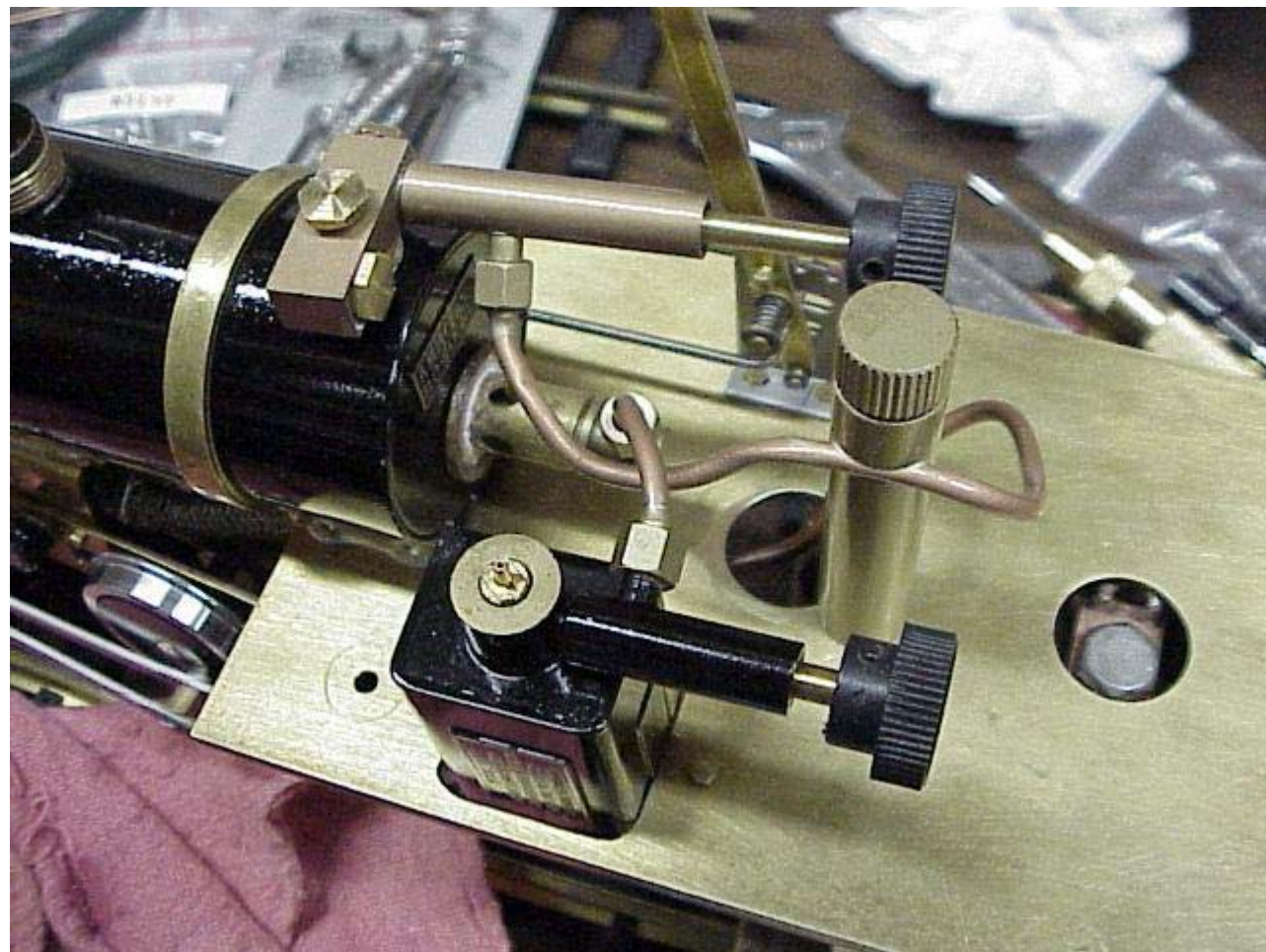




I realized that the Ruby johnson bar was going to be hard to grab down inside the cab I plan to build, so I made it a tad taller.



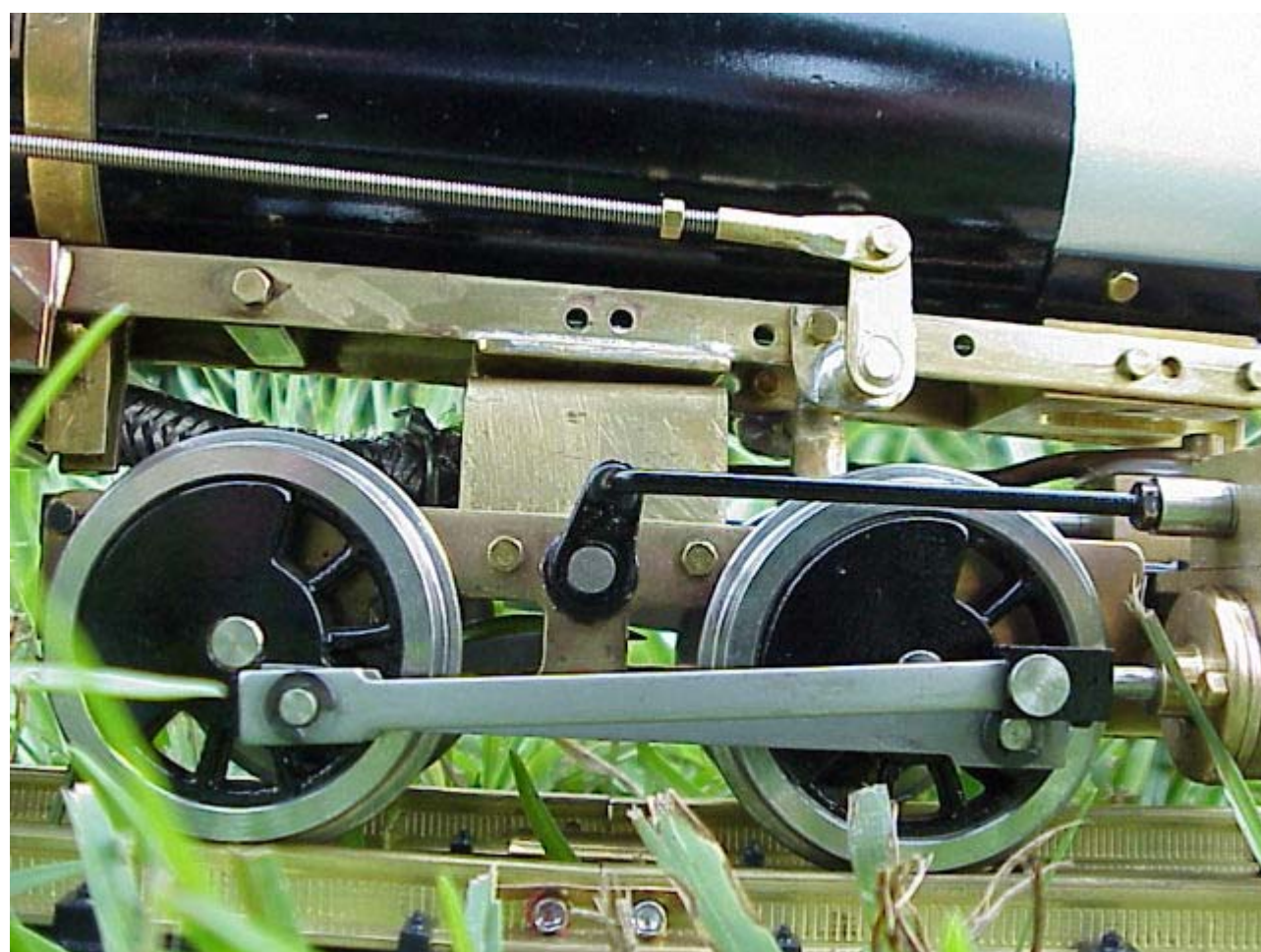
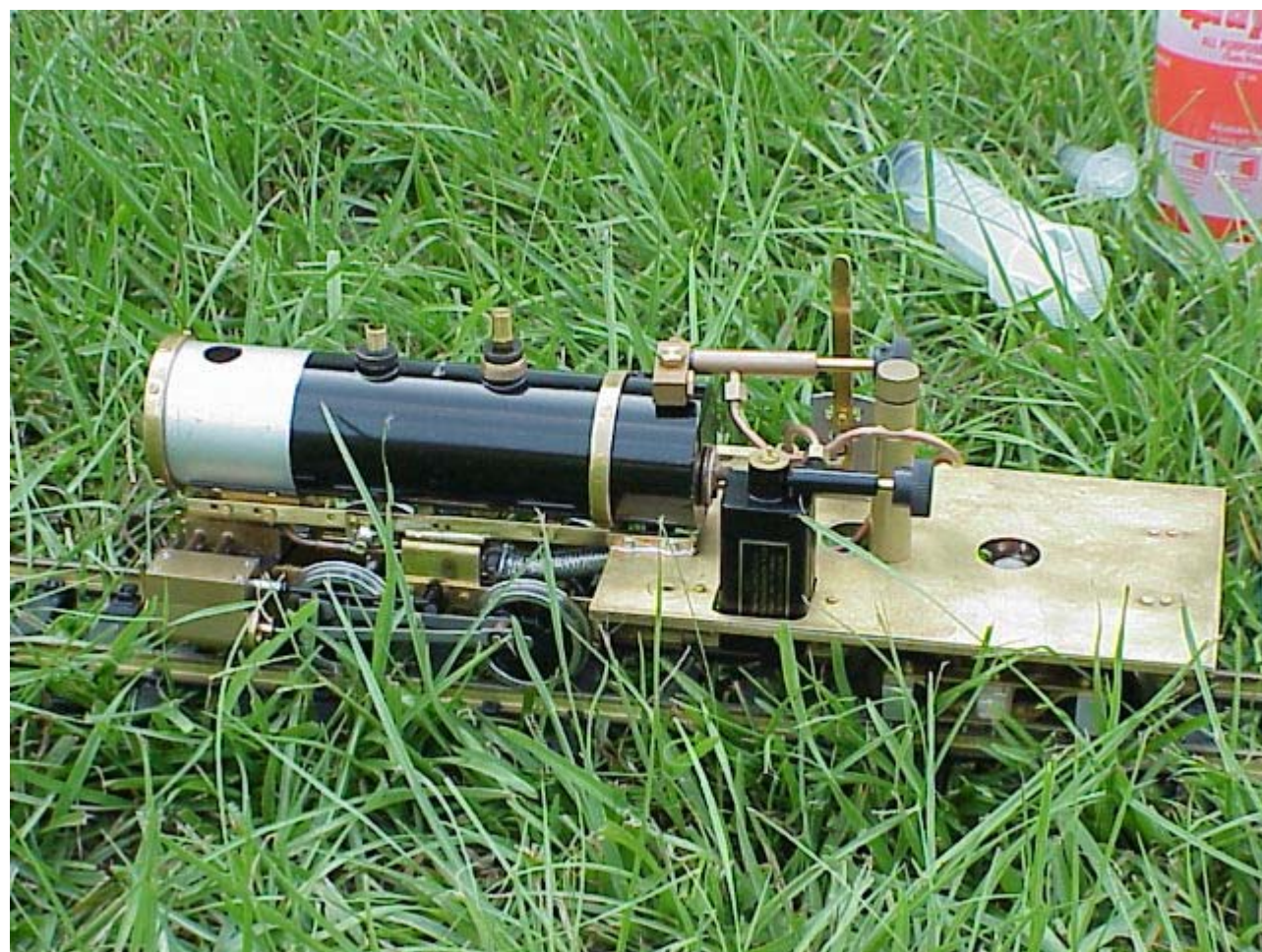
Once I got these things done I mounted the lubricator (twice so far and it still has to move again) and ran the 1/8 inch Viton flex line. Have not yet found suitable clamps so twisted wire is holding it now. Also mounted the fuel system and checked it out.



Now I was getting excited as I was really ready to put some heat in the boiler. So I filled the lubricator with steam oil, the boiler with distilled water, and the fuel tank with fuel. I lit the boiler and waited for the pressure to come up to the safety valve setting. I have a gauge but decided to wait until the cab is built so I won't have to install it more than once. As soon as the safety went off, I slipped it in forward (I forgot to mention it was on blocks at this point) and cracked the throttle valve. A spin or two to clear the water from the cylinders and she purred like a hot steam powered kitten! (I had run it quite a bit on air)

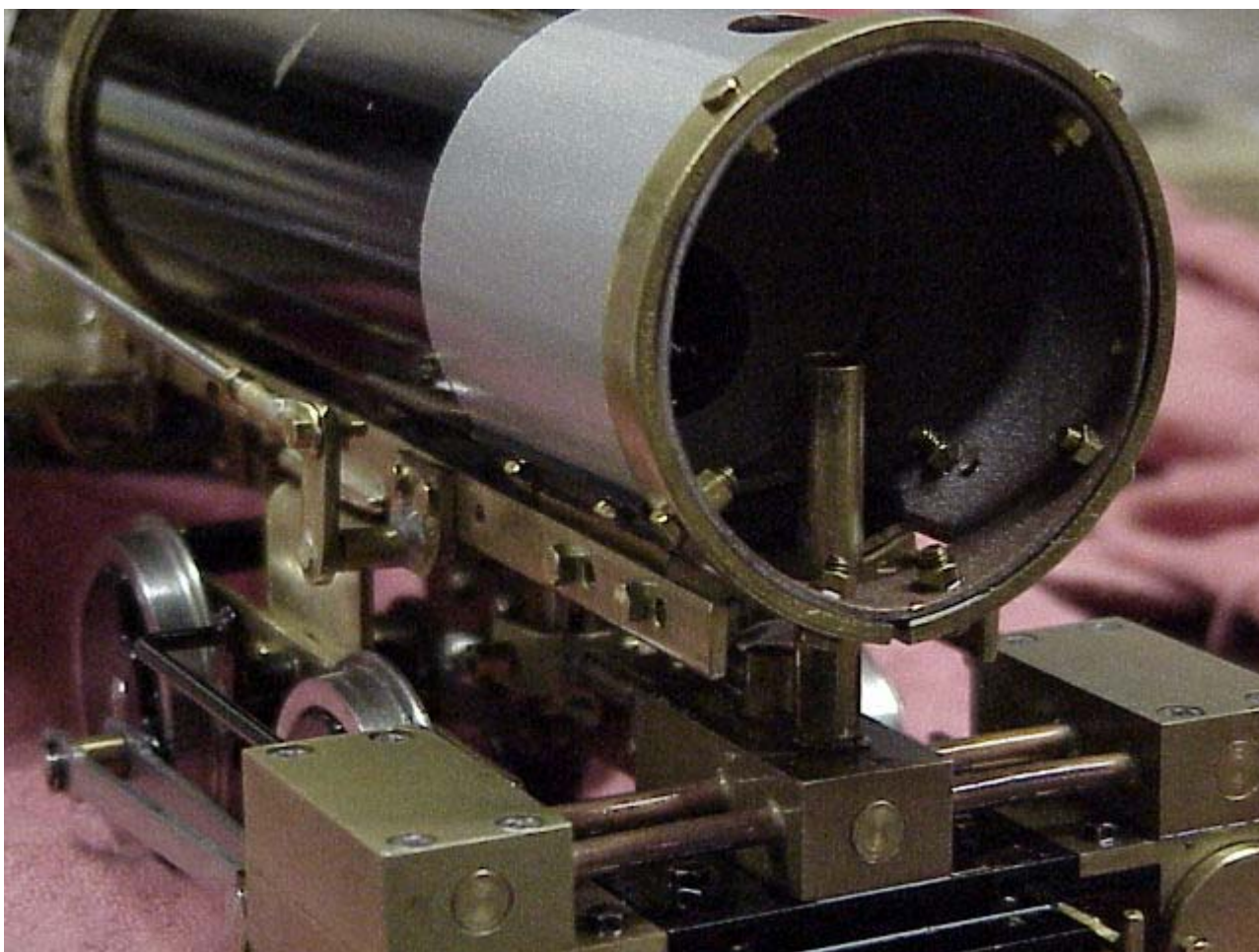


I ran it in both forward and reverse till I lost steam and let everything cool off, refilled everything and ran it some more. WOW- I love the smell of hot steam oil! I had to call my "Steam Daddy" Will Davis and tell him the news (since he set this whole thing in motion several years ago by taking me to Diamondhead). While talking to him I decided to put my little bit of track together and run the engine. Took a couple of pictures while the steam was coming up,



but then I just chased and adjusted and enjoyed two boilers worth of "round and round" steaming.

A few problems presented themselves, the opening for the steam exhaust tube in the bottom of the boiler needs opening up a bit more as it is restricting the turning radius of the drivers.



This also suggests to me that I need some type of stops for the swiveling unit so that the exhaust tube is not put in jeopardy (especially when lifting the engine). Maybe chains like on the rear truck of the prototype. The lubricator needs to move a little to the left to clear the throttle shaft. Fuel valve and throttle valve need real handles instead of little knobs. The swivels on both ends of the engine need less movement. There is a little too much "roll" and the cab is not there yet. But overall I am VERY pleased. I have not even touched the ground yet! Redbeard's Ruby bash runs! Next will be the stack and petticoat, the boiler door, and then.....

By Rich Schiffman August 19, 2007
Hmmm,

An 0-4-4T Mason is sort of like the San Rafael of the NPC. You think?

Rich S

August 20, 2007

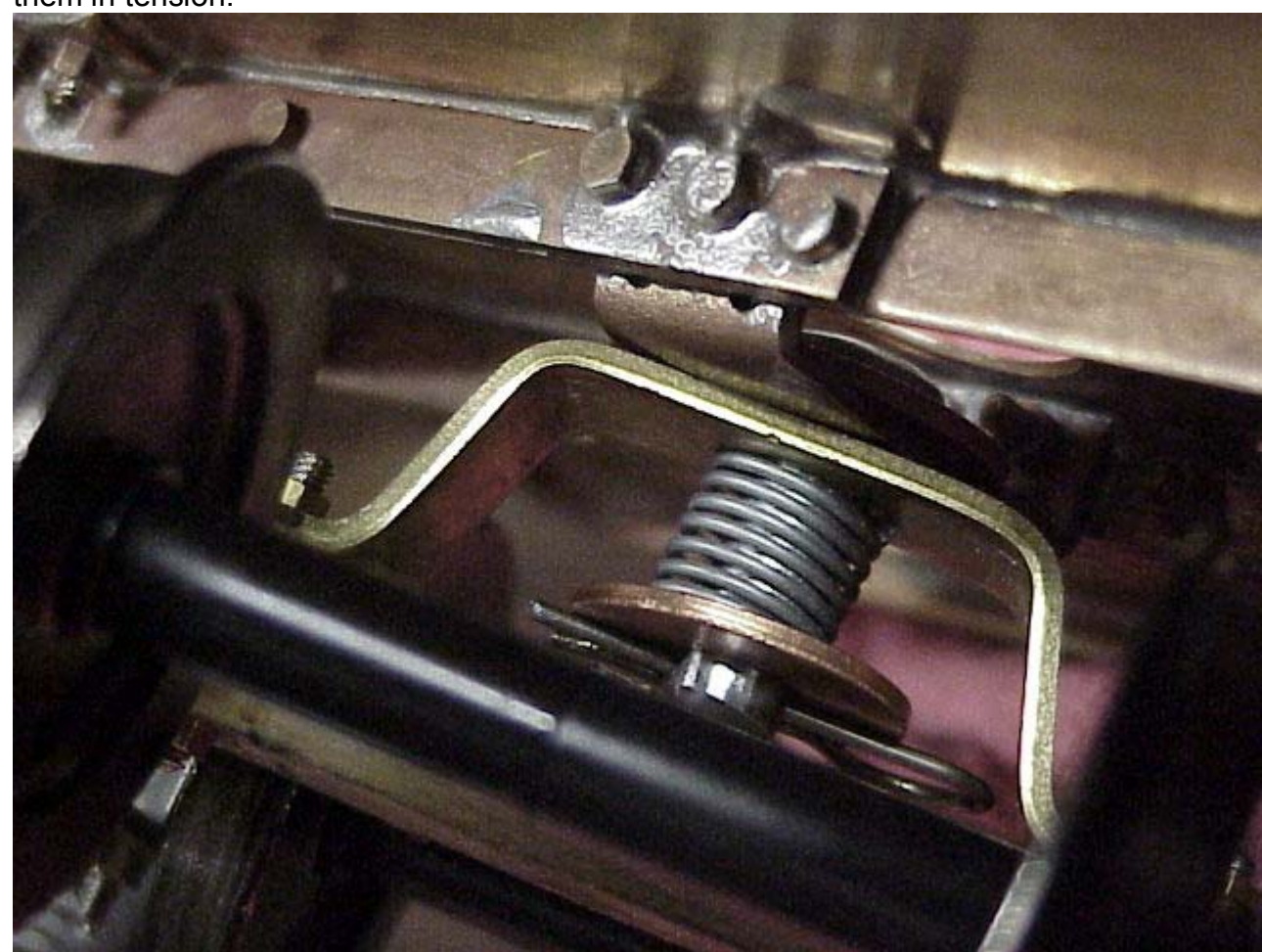
Hi Rich,
I chose the Onward partially because she was listed as the "first Fairlie-Mason to be built" , partially because she had smaller drivers than most of the later Masons (scaled easier to the Ruby drivers), and partially because I like the shorter cab with the curved rear panel that reminds me of an old "C" cab truck. I think she may have been the smallest of the Mason Bogies.

redbeard AKA Larry Newman

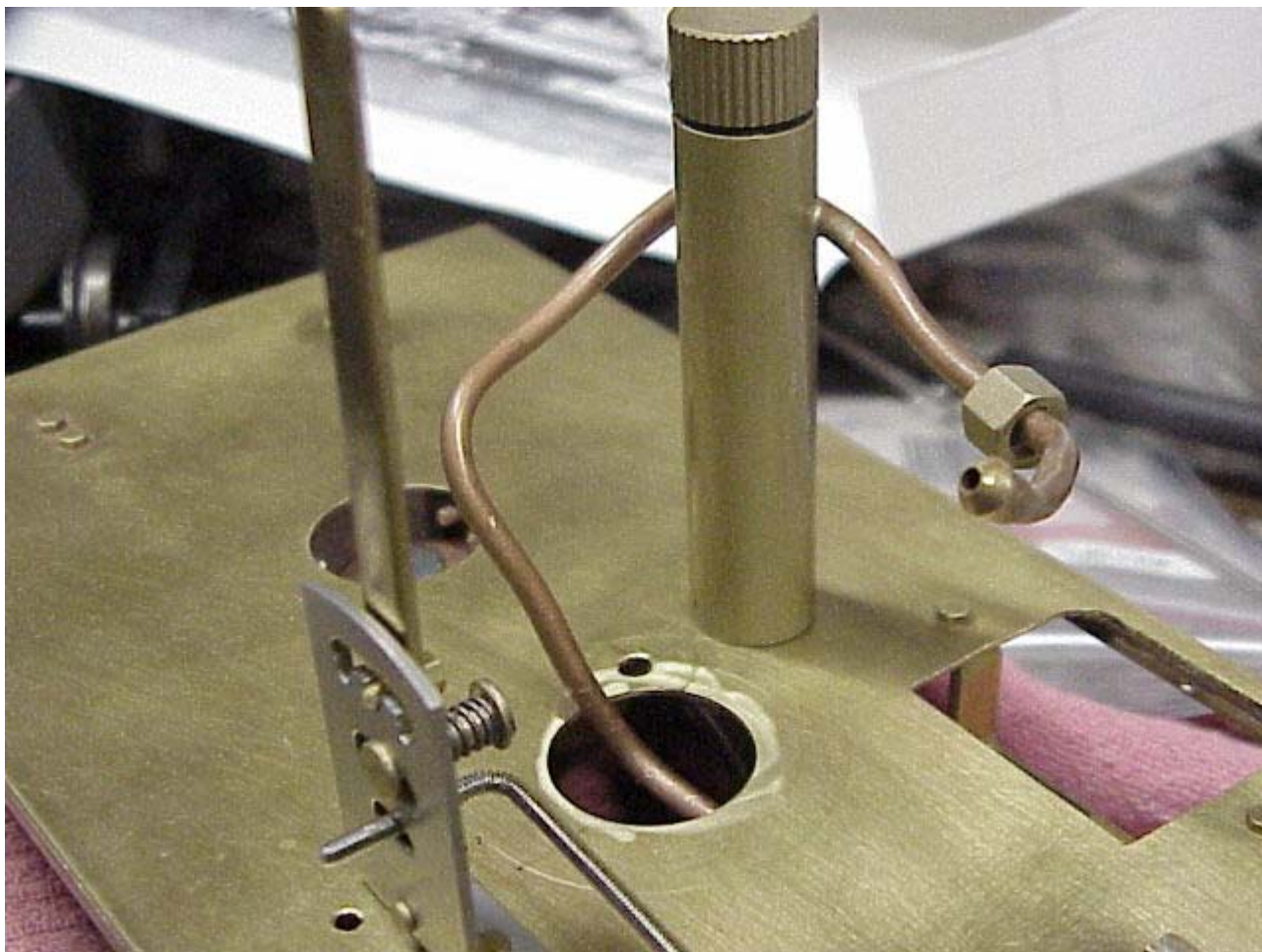


August 30, 2007

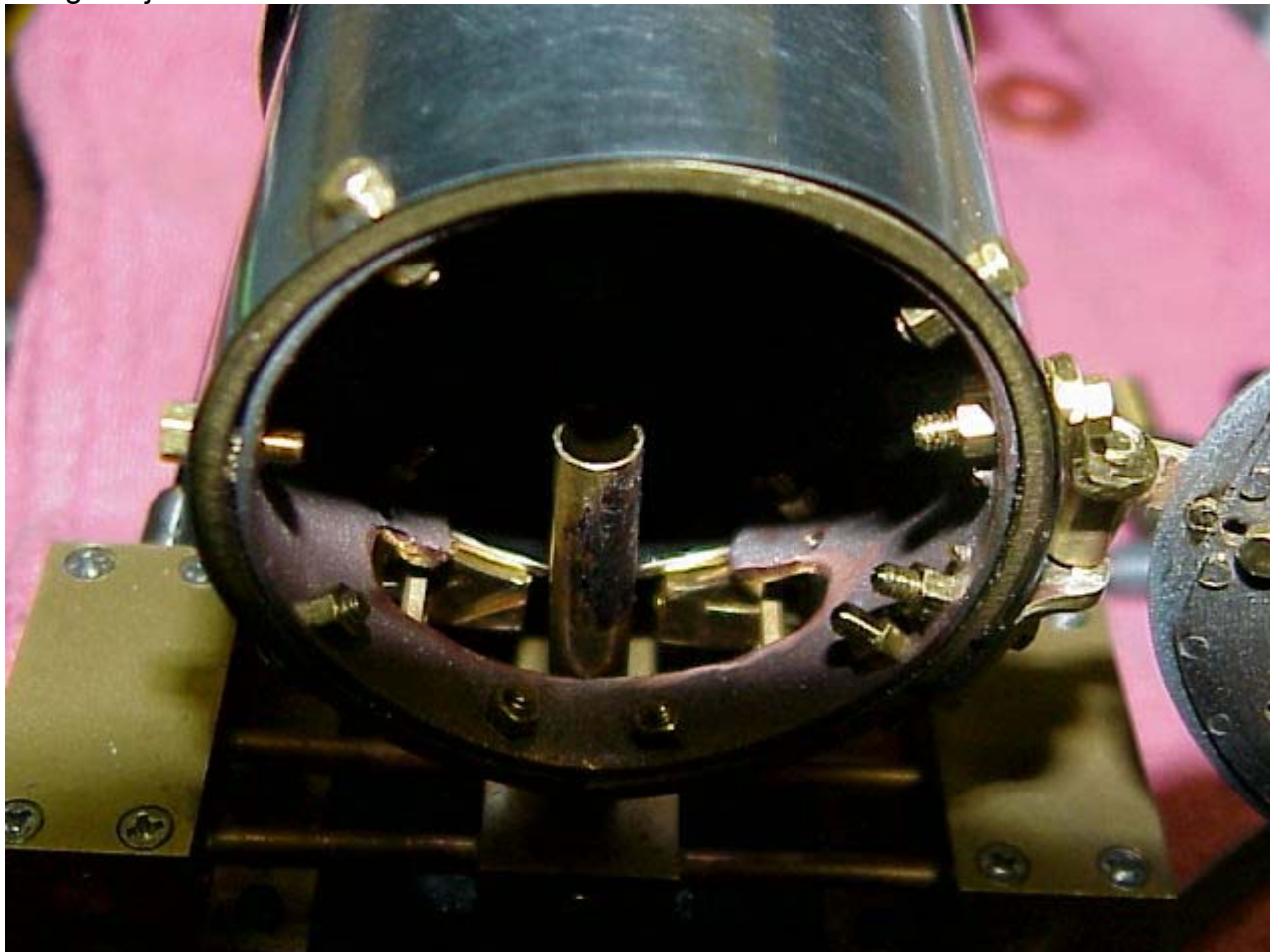
It sure feels like I never get enough time to work on the locomotive. I have snuck in a little time now and then. I built new pins for both the rear and front swivels and added some springs to keep them in tension.



I moved the lubricator to give more clearance for the steam valve.

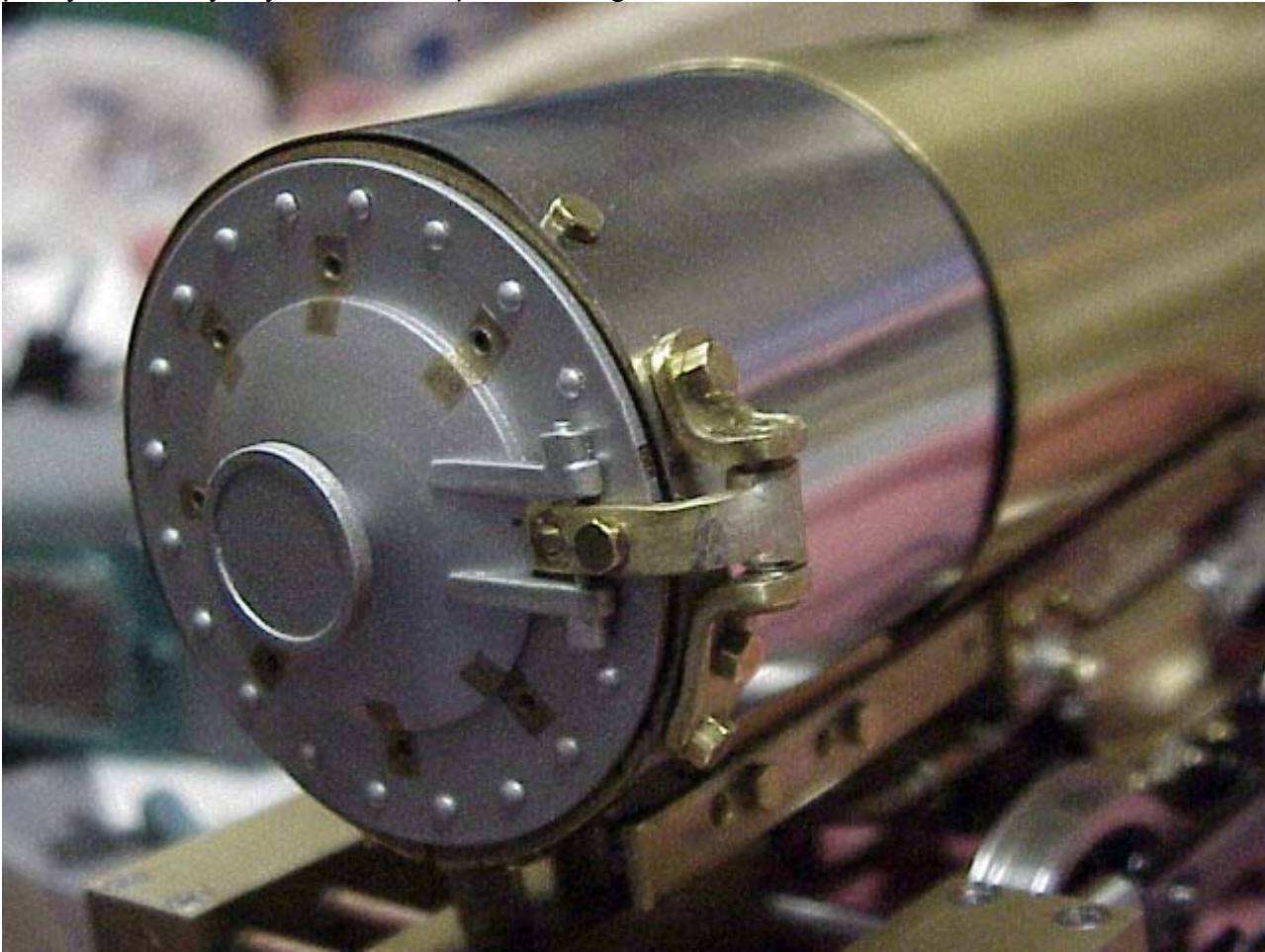


I opened up the slot for the exhaust steam tube, still need to figure some stops as the tube is doing the job now.

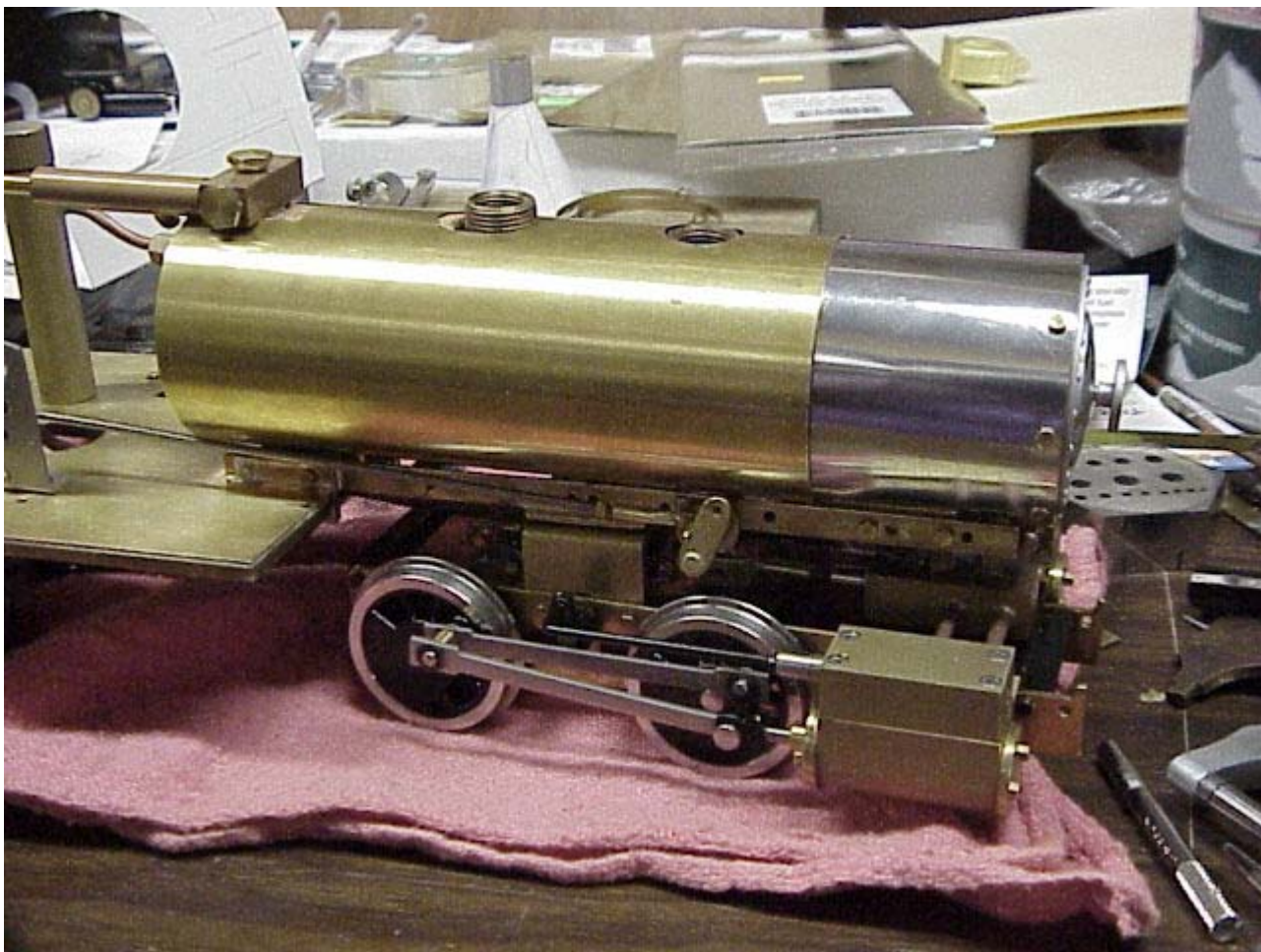


I built a new hinge for the smoke box door since I am "wrapping" the boiler and the old one was

pretty weak anyway. All the trim pieces will go back on the door.



I have started the boiler wrap. The boiler is insulated and I used an available wrap for the Ruby, (thanks Will!) and made the smoke box wrap from .010 tin. I stopped here because I needed some metal for the straps. Also have not cut the stack hole in the boiler wrap.



Well I have to go try and make some money this weekend so it will be a few days before I can look at the engine again. Lots more work but it is coming along. Hope to run her at Diamondhead if not before then. redbear AKA Larry

By Allan Cash August 30, 2007

Larry, see you have been working on the pivots - I found that a '3 point' suspension gave the best results.

Let the rear truck move in all directions, a washer between the bolster and the bearing strip on your model should work fine.

At the front pivot fit a bearing strip on each side so the power bogie cannot rock side to side but can still rock front to back, this allows the bogies to track through the dips etc., but the superstructure will not rock about. Mine looks very smooth with this set up.

Allan.

September 3, 2007

Hi Al,

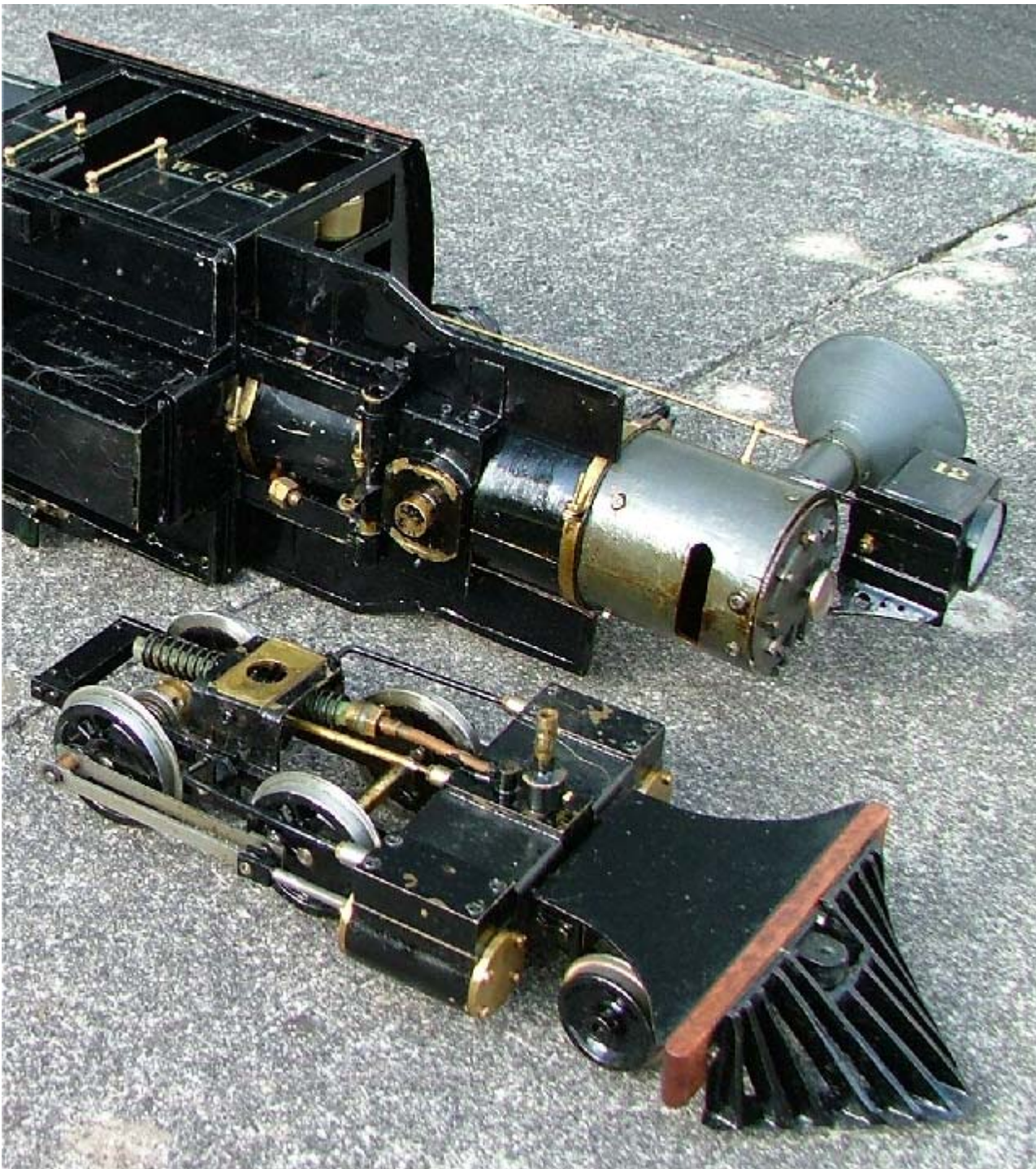
Thanks for the input, I went back through your log and could not see the bearing strips. (figure you may have added them later) Are they simply strips on the outer edge of the pivot plate?

redbeard (Larry)

September 3, 2007

Larry,

this shot should show how I did mine, the horizontal part of the bracket on the chassis is purposely made with a slight bow in it so the bearing only touches on the outside - you can see the wear marks on the pivot attached to the loco frame.



I have also fitted a shim to the chassis to level the loco better, thats why you can see a narrower strip in this shot. Even with this fairly large bearing the power bogie will still rock front to back when following the track irregularities.

Hope that makes it clearer for you,
Allan.

September 4, 2007

Thanks Al!

I can't tell you thanks enough for the help you have given me. Live steam is such a friendly place to play.

Larry

September 5, 2007

Had a little time on the engine this week. I finished the boiler and smoke box wrappers and

straps. Then I built a stack around the original Ruby stack.



This picture shows the progress so far plus a card stock mock-up of the cab.

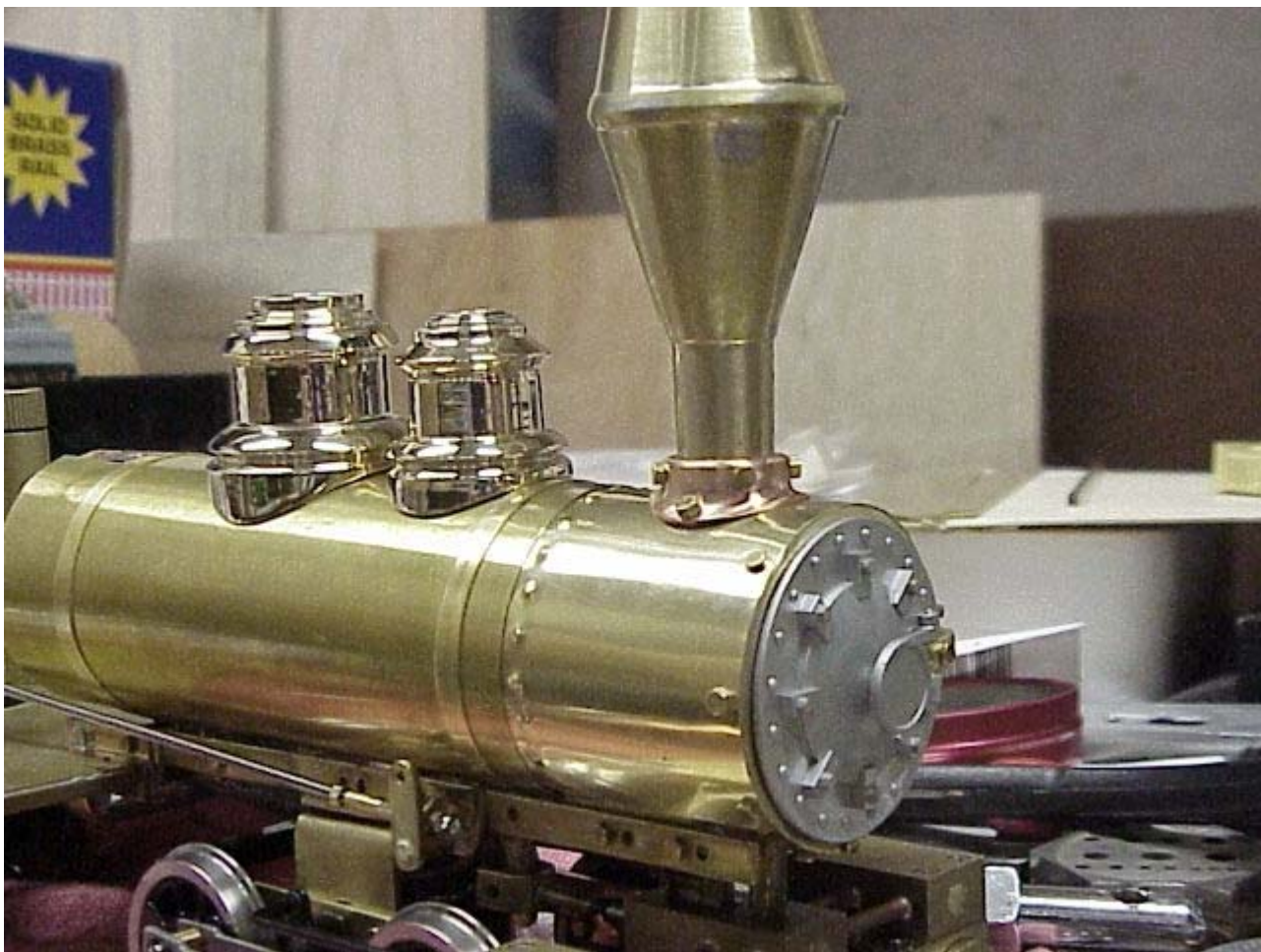


I sent my registration in for Diamondhead, so finished or not the Ruby-Mason will be there!
 redbear AKA Larry



September 8, 2007

I stole a little more time when I should have been sleeping and did a little re-work. I decided that the smokebox wrapper looked terrible and made a new one. This time I took the time to build a jig to get the rivet details straight. I also decided that sometimes scale doesn't look right when made very small, so I only put in half the number of rivets. (they rivets are too large so they looked crowded) Then I thought of the one thing that most makes a Ruby look like a Ruby.....the dome location and the round top domes. I am not ready to chop up a boiler yet, so I am stuck with dome location. Thankfully the domes on the Onward were smaller than the Ruby domes (when the Mason is scaled to 1:20.3). Also the Ruby domes are VERY thick, so I chucked them up in my trusty drill press and went at them with hacksaw blades and files. I am very pleased with the results. So, does this look like a Ruby boiler?



Here is a comparison of the two styles of domes with only the sand dome finished. Note that I also shorted the steam dome the thickness of the wrapper and insulation so that more than one thread engages the relief valve bung on the boiler. I also sanded new radius on the bottoms of both domes to fit the wrapped boiler.



Still trying to figure out a mount for the sand dome, it's too pretty to let it fall off all the time. I am using a goodall valve instead of the stock plug so the "clip" in the dome does not have a groove to grip anymore. Any ideas?
redbeard AKA Larry

From Winn Erdman September 8, 2007

Larry, I can't believe you turned those domes on a drill press with hack saw blades and files!! They are beautiful. I can't do any better than on my lathe. You are really coming along very nicely, I hope you can make it in time for Diamond Head. Unfortunately I won't be there, I'm going to have to make it some day, maybe when I finish my Bogie.



September 9, 2007

Winn,

Coming from you, that is a wonderful compliment! I am so impressed with your Mason Bogie log. When I started this project most of the decisions about how and what I would build, were based on the lack of a mill and lathe. I have been a jeweler for twenty something years and most of my tools for the first ten years were either home built or modified from something else. So shaping the domes did not seem like a big deal to me. Thanks so much for the compliment, I wish you were able to get to Diamondhead this year. I am taking the engine no matter where it is in the construction process. Wow I guess I am committed now !

Thanks again! Larry



From Vance Bass September 9, 2007

OK, that explains a lot. When I saw the finish on those domes, I thought "man, that guy put some serious effort into those!" Most of us wouldn't have bothered to get that kind of finish on them, frankly, and it's impressive to see that.

Hmmm, I wonder if they'll take paint as well? I guess we'll find out! I look forward to seeing you in DH.

September 10, 2007

Hi Vance,

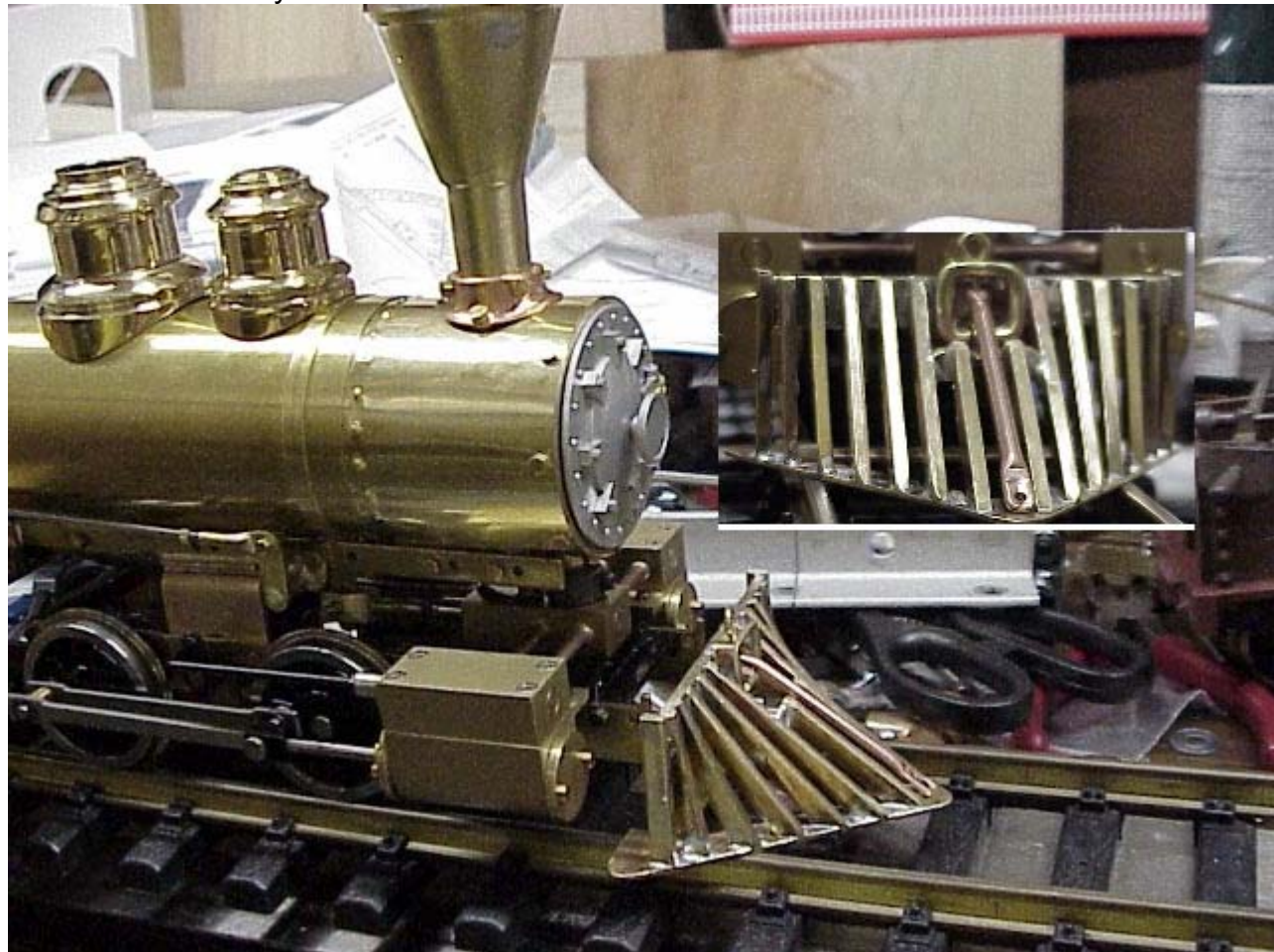
I guess I may get carried away with the polishing now and then..... but it's always easier to rough up a smooth surface for paint than it is to polish a rough surface between two painted ones. I plan on painting the domes but leaving the large flat bands in the middle polished. Thanks for the comments!

redbeard

September 17, 2007

Just a short update this time. I just finished the pilot, so far the most time consuming single component on the engine. Design is based on the 2002 MasterClass Mason Bogie pilot. (Except I built it from brass instead of styrene.) Lots of filing and fitting and even more tricky multiple solder joints. Now to build mounts for it.....

redbeard AKA Larry



From Jay Kovac September 18, 2007



Larry - Great looking pilot, what did you use to heat the pilot, looks like a really clean soldering job.

Jay



From Dwight Ennis September 18, 2007
You do gorgeous work Larry!!! VERY nice!



September 19, 2007

Hi,

Thanks for the compliments, they really help at the end of a long day! Jay, you may have read that I am a jeweler by trade so I have a few torches to choose from. However I had never worked with this type of soldering before I began the engine project. In jewelry we actually "weld" the pieces together with solder that is very close to the same alloy as the metal (high temperature). So all my "jeweler's" torches were too hot and too concentrated. I used a hardware store Bernzomatic torch to assemble the pilot. Where I did get help from my other life is using LOTS of heat sinks and third hands. I used several aluminum plates on the pilot which draw excess heat away from the soldering point, but ALSO stay hot to keep the entire piece hot. This allowed me to use third hands to keep from affecting previous joints and adding new pieces.

redbeard AKA Larry

September 20, 2007

Hi Gene,

While I am not trying to inspire anyone, I really appreciate the kind words as I build this engine. My friend Will Davis kept taking me to Diamondhead till the steam and oil got to me and I started seeing the engines differently. I wanted something not out of a cookie cutter, but knew I had some limitations. (both financial and experience) This year at Diamondhead I asked everyone I could, what they thought was a good start, and they all said "A Ruby!". So I found a Ruby kit and started looking at what other people had done with them. I am testing myself as much as anything else to see how far I might want to go with live steam. Don't know that yet, but the Ruby-Mason is not the only engine in my future. Good luck with whatever you do with your Ruby! Redbeard

Today I mounted the pilot and put all the pieces back together because I have been invited to go over to Tallahassee this weekend to run steam trains with the Tallahassee group. Hoping the weather doesn't go crazy for us. I will try and get some pictures. Here is a picture of the pilot mounted. Excuse the oil and water

spots, I had to make sure I had it all back together! redbeard AKA Larry



from Bob Pope September 23, 2007

Larry,

Thanks for making the trip to Tallahassee yesterday to run with the Tallahassee Live Steamers at Sal's track.

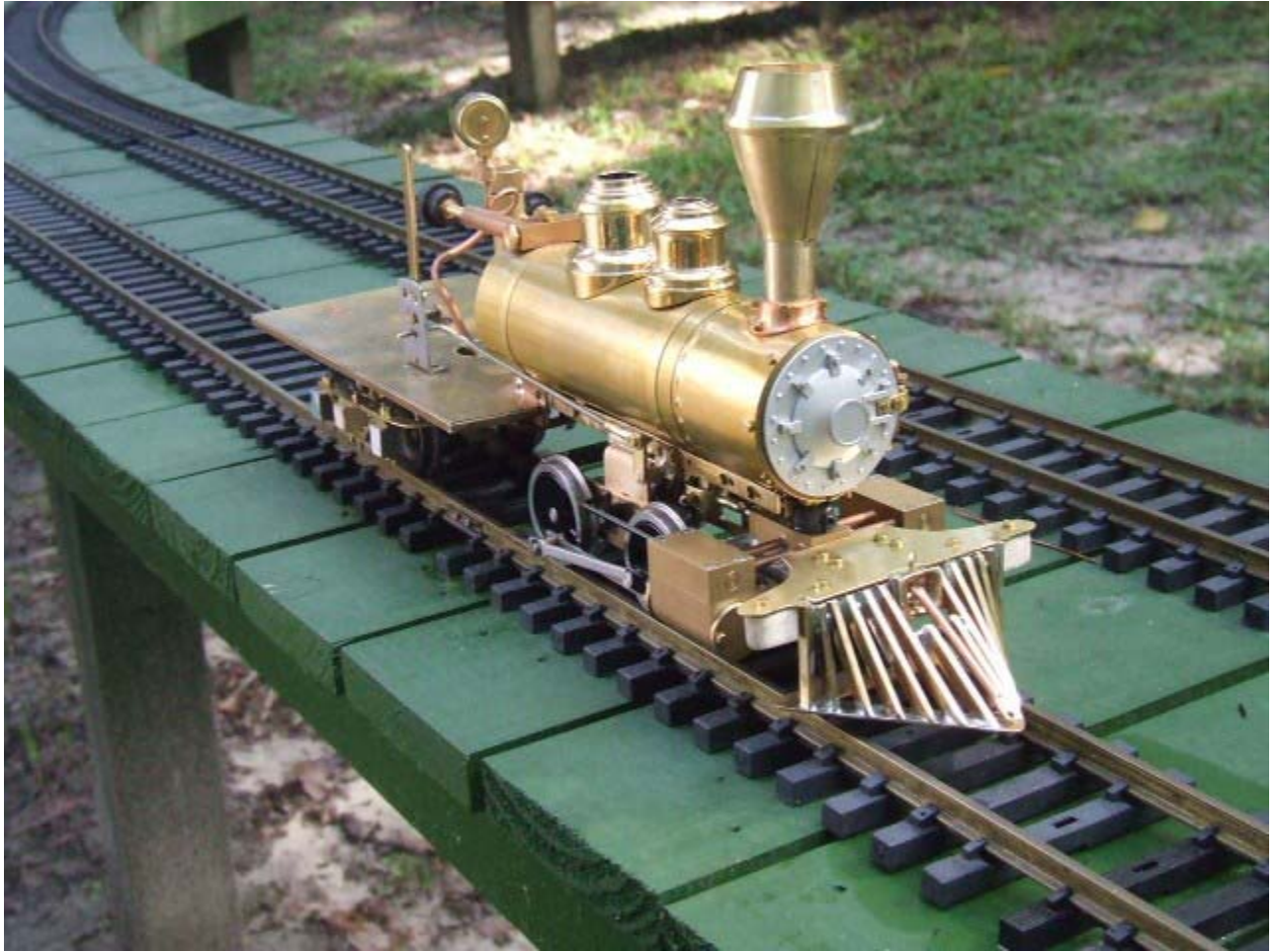
Your locomotive is even more impressive in person and it was great to hear some of your tricks for soldering and turning the domes on a drill press. I especially liked seeing the mounting tool you made out of a bolt and some wood to turn the domes on the drill press.

It was good to see you again and I look forward to seeing the completed locomotive!

Bob Pope



Here is a photo of Larry's locomotive on Sal's track:



From Vance Bass September 23, 2007

Hey, it looks like it's a fully functional locomotive. Congrats!



September 24, 2007

Thanks!

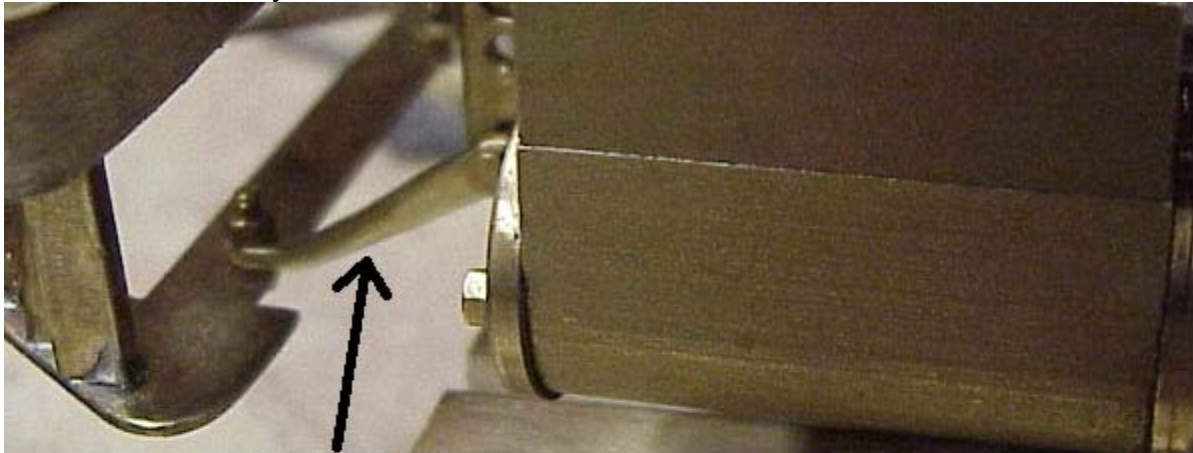
As I expected a few "bugs" turned up running the engine on a real track, but I am very pleased that she ran around the track the first time I tried. Thank you Sal for inviting me over to your groups steam-up! Your track is wonderful and your hospitality even better. I think everyone had a great time, I know I did! Thanks Bob for posting the photo, I was about to do just that. Now I am even more anxious to get the Mason finished so I can start another engine! Thanks Will for making my weekend such a blast!
redbeard (Larry)

October 2, 2007

Well things are progressing but they sure seem slow. The most recent work included tracking down glitches found while running the engine in Tallahassee. Seems that the plate that the cylinders mount to, has very large holes in it from Accucraft, allowing a sixteenth of an inch travel fore and aft. When I reassembled the engine to run it in Tallahassee, I apparently did not tighten it down in the same position as it was previously. There is probably some feature of the Ruby kit that aligns this, but since I am not using the original frame it was semi floating. This had the timing out of whack and several of us had adjusted on it before I figured out what was wrong. Anyway, I now have an extra set of bolts through the mount to keep it in alignment. The next thing I did was build a couple of

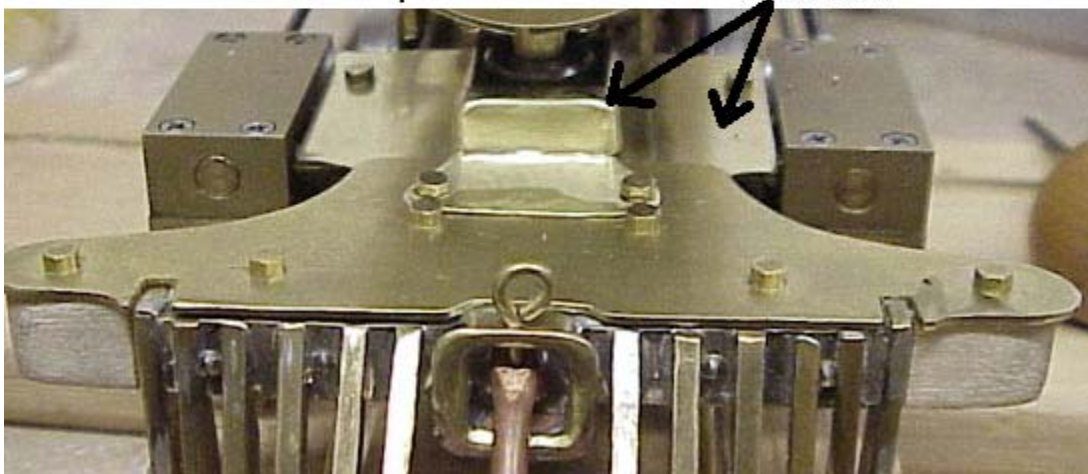
braces to the pilot bottom as it flexed a little when using the pilot to lift the engine. Then I made some covers to go over the lines from the reverser valve to the steam chests. Next I made a mount for my headlight. These are all little items that hardly show but take a good bit of time to make. I am almost ready to start on the cab, I want to build a rear pilot beam and link and pin coupler first and change the lubricator to an adjustable one with a drain cock. Then the cab.....

redbeard AKA Larry



Braces to pilot

covers

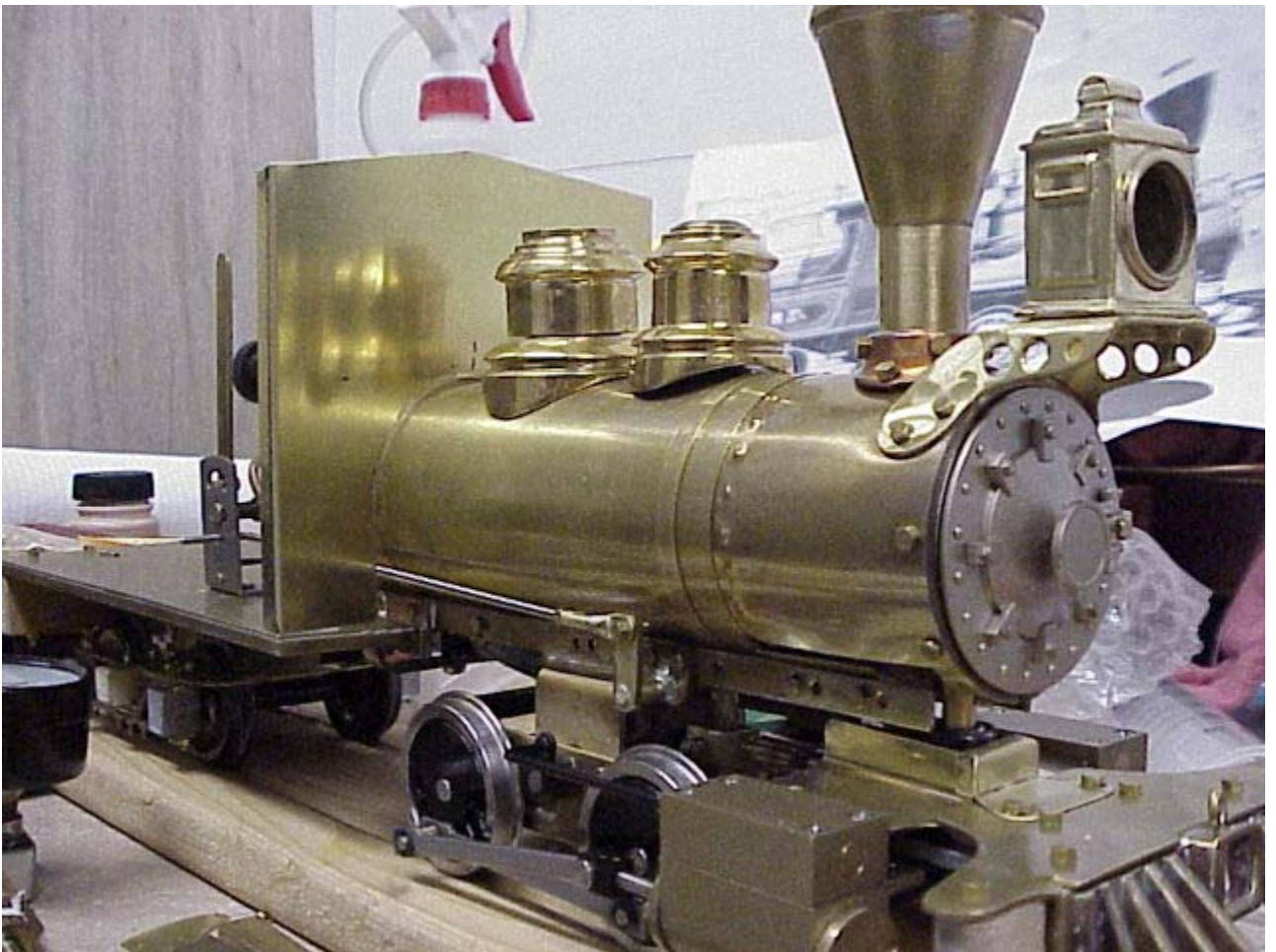




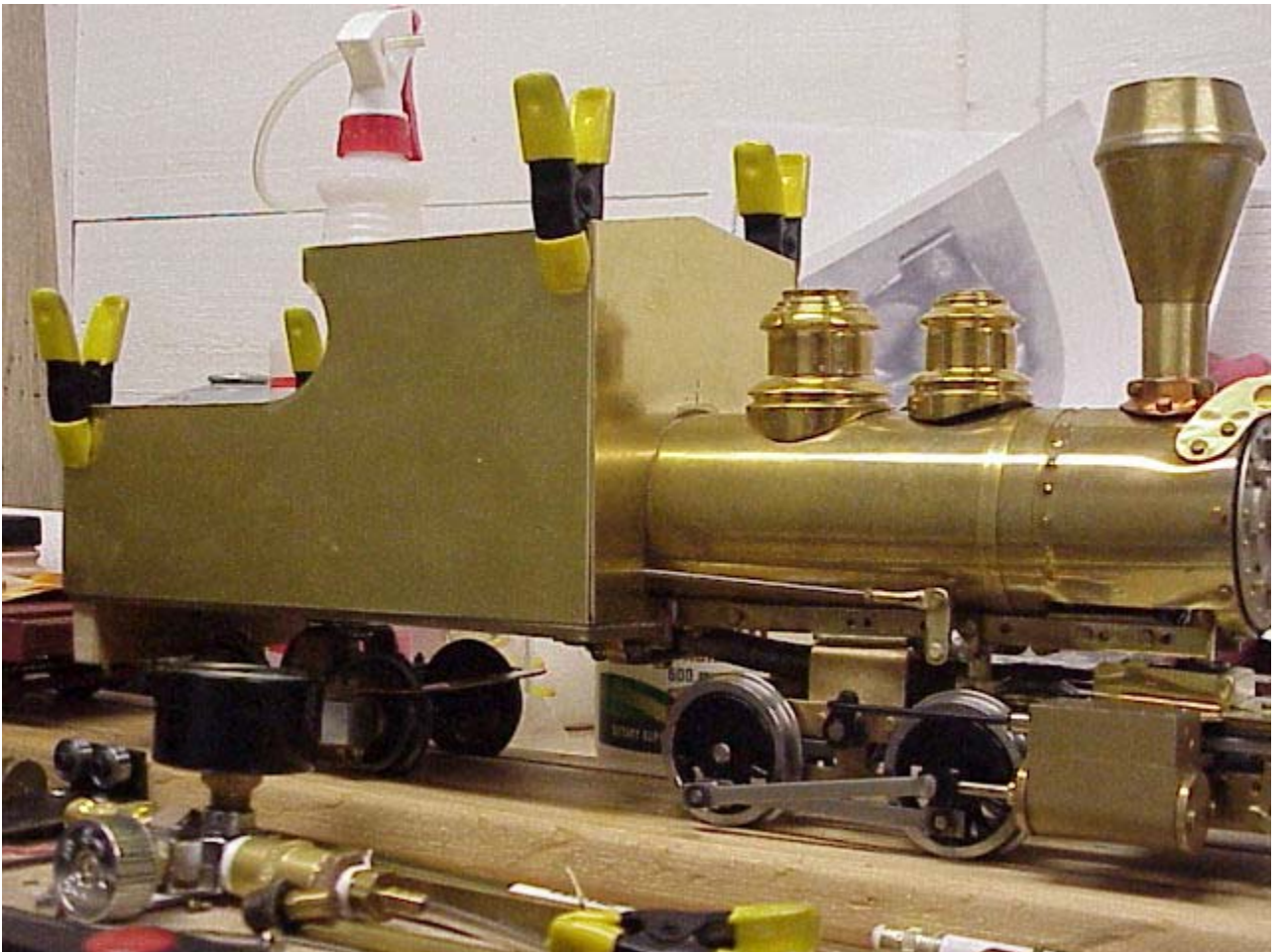
October 25, 2007

Hi everybody,

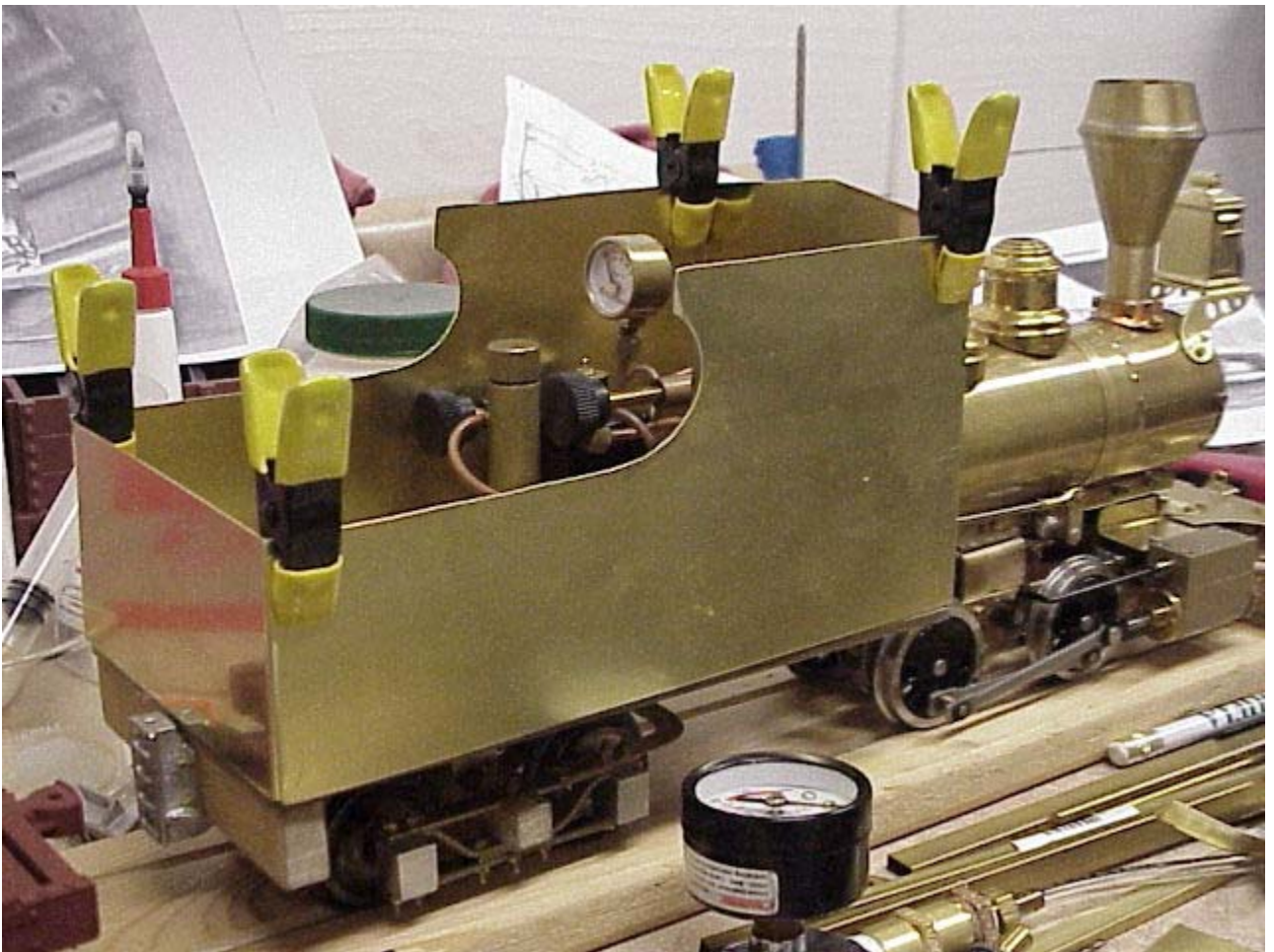
Seems like forever since I have worked on the engine. I "squeezed" in a little time to start on the cab. The first picture is the front of the cab.



The second is a front view of the four basic walls of the cab and tender.



The third is a rear view of the same.



The plan is to bolt these together for fitting and alignment and then add braces and solder everything to make the cab and tender walls one piece. This was all the time I could sneak in this week, I am leaving in an hour to go work out of town.
 redbear AKA Larry

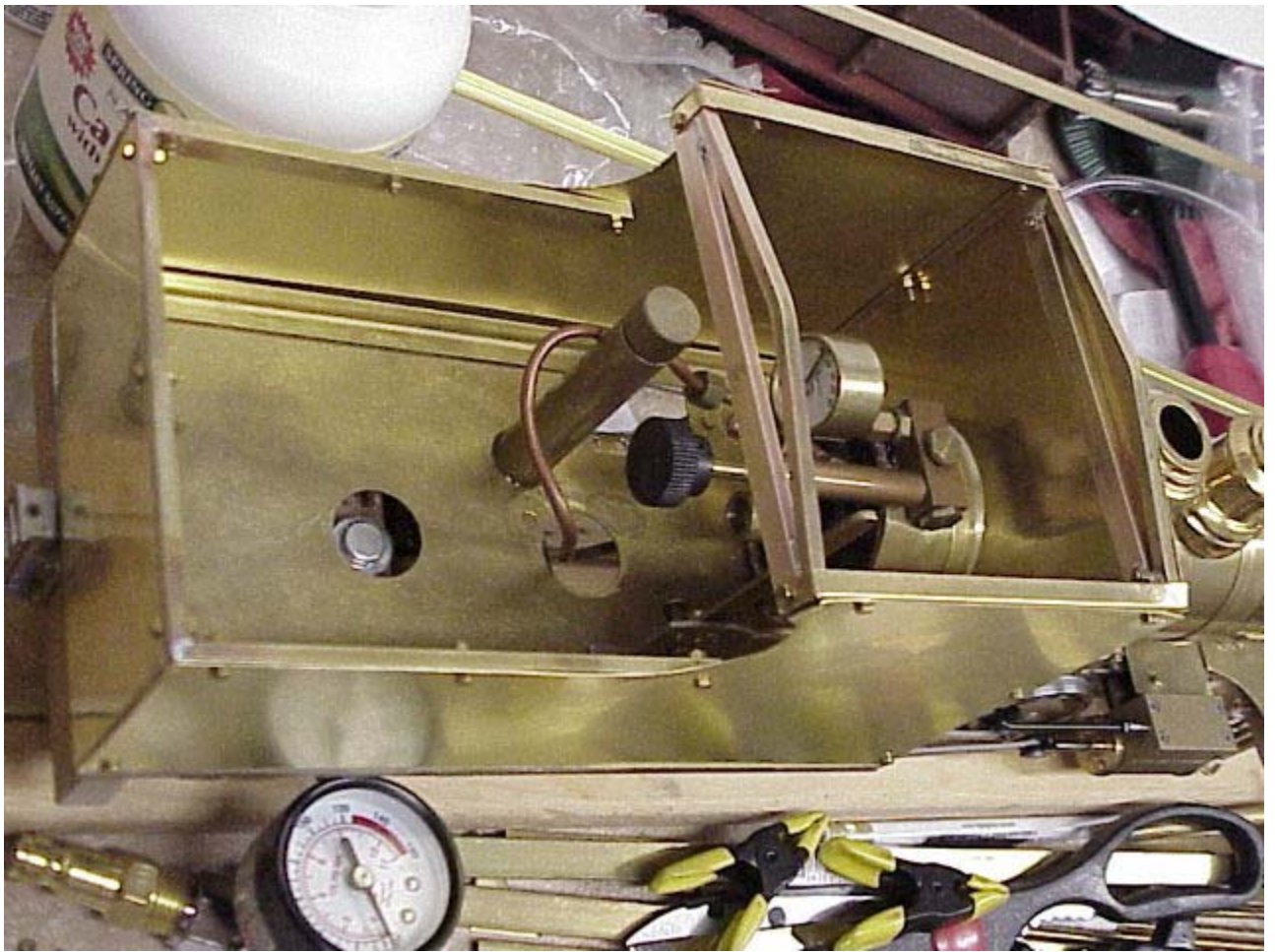
From Bill Boyle October 26, 2007

Larry, great work! 😊 You are moving along really fast since I ran with you at Sal's a few weeks back. I know you'll have it ready for Diamondhead. See you there!
 Bill Boyle
 SA#767



November 1, 2007

Thanks for the encouraging words Bill, I seem to be at a stage where everything takes 2 or 3 times longer than I expect. So I am feeling a bit of a "crunch" in getting finished by Diamondhead. But wherever I am the Mason will be there and hopefully running. Since this is the first brass model I have built, I am feeling my way along as to methods.(actually the first model of any kind since before high school!) I think my best approach is to get the structural parts together first and then turn to the detailing. I have a couple more braces to build and the structure should be sound. Then I will lay out doors and windows, and build a roof. I plan on using layering to accent the door openings. Here is where I am today. I need a week of other work now so this will be it for a bit.
 redbear AKA Larry Newman

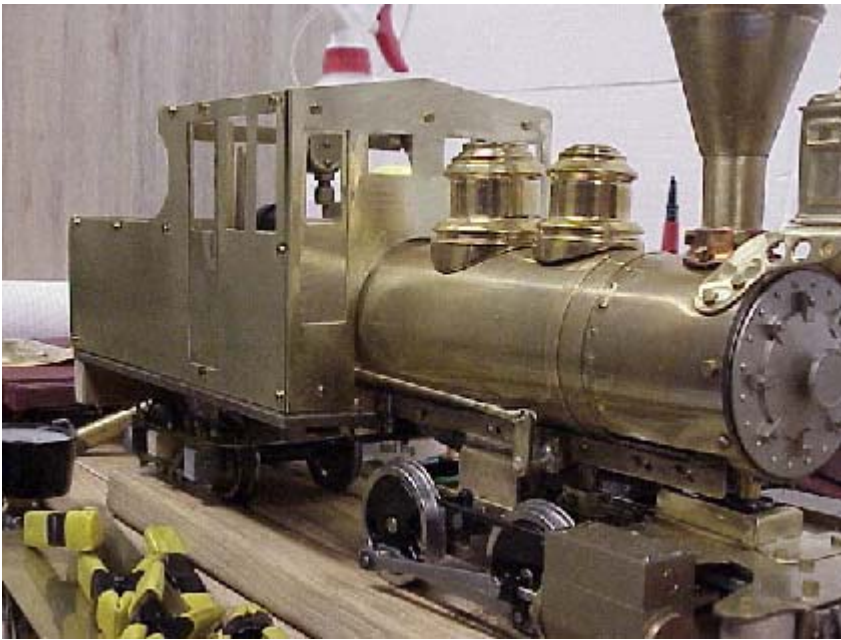


November 8, 2007

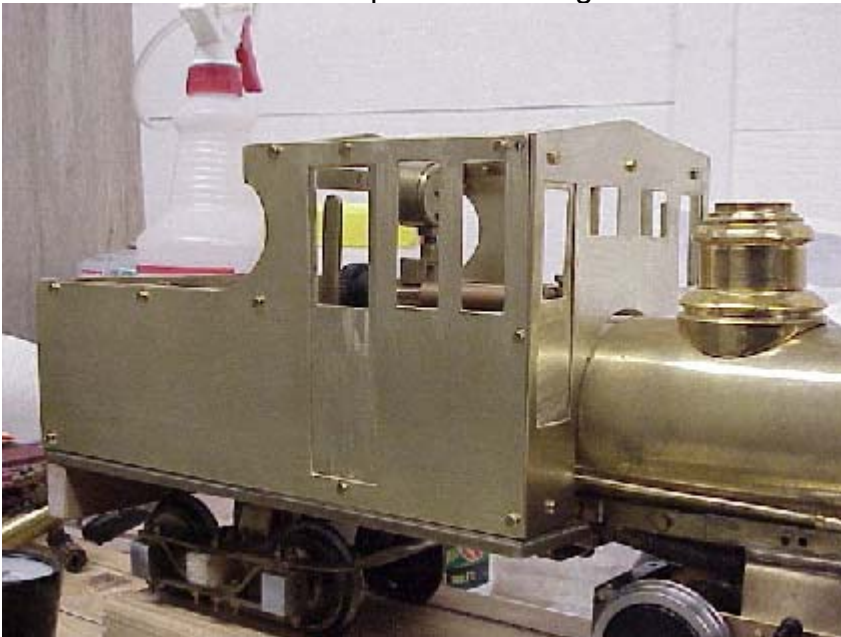
Hello all,

I got my work caught up enough to spend a little time on my engine, so here is my latest update. First, after reading the last few posts I need to explain that I figured out that I needed to have the cab in place before I changed lubricators. The new lubricator has a drain on the bottom so I need to have both the filler and the drain handle accessible. It was also pointed out to me that when I took the engine to Sal's and ran it, I had the stack on backwards! 😞

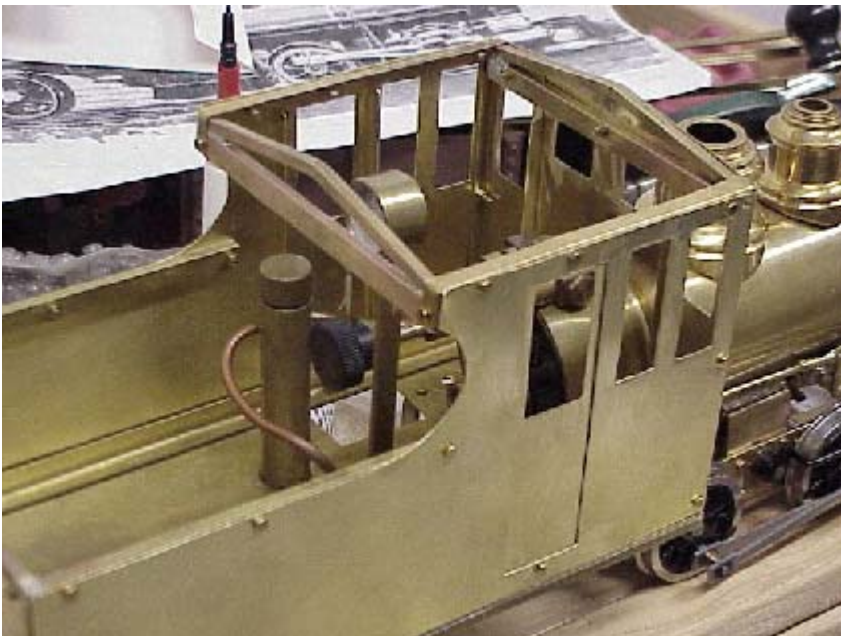
I have cut out the window and door openings and used separate pieces for the doors to give the openings a little definition. I also broke some lips on them to stiffen the sides and the front. Here is a picture showing most of the engine.



And here is a bit closer in picture showing the doors.



And a picture from the top showing the lips on the doors. They really firmed up the cab.

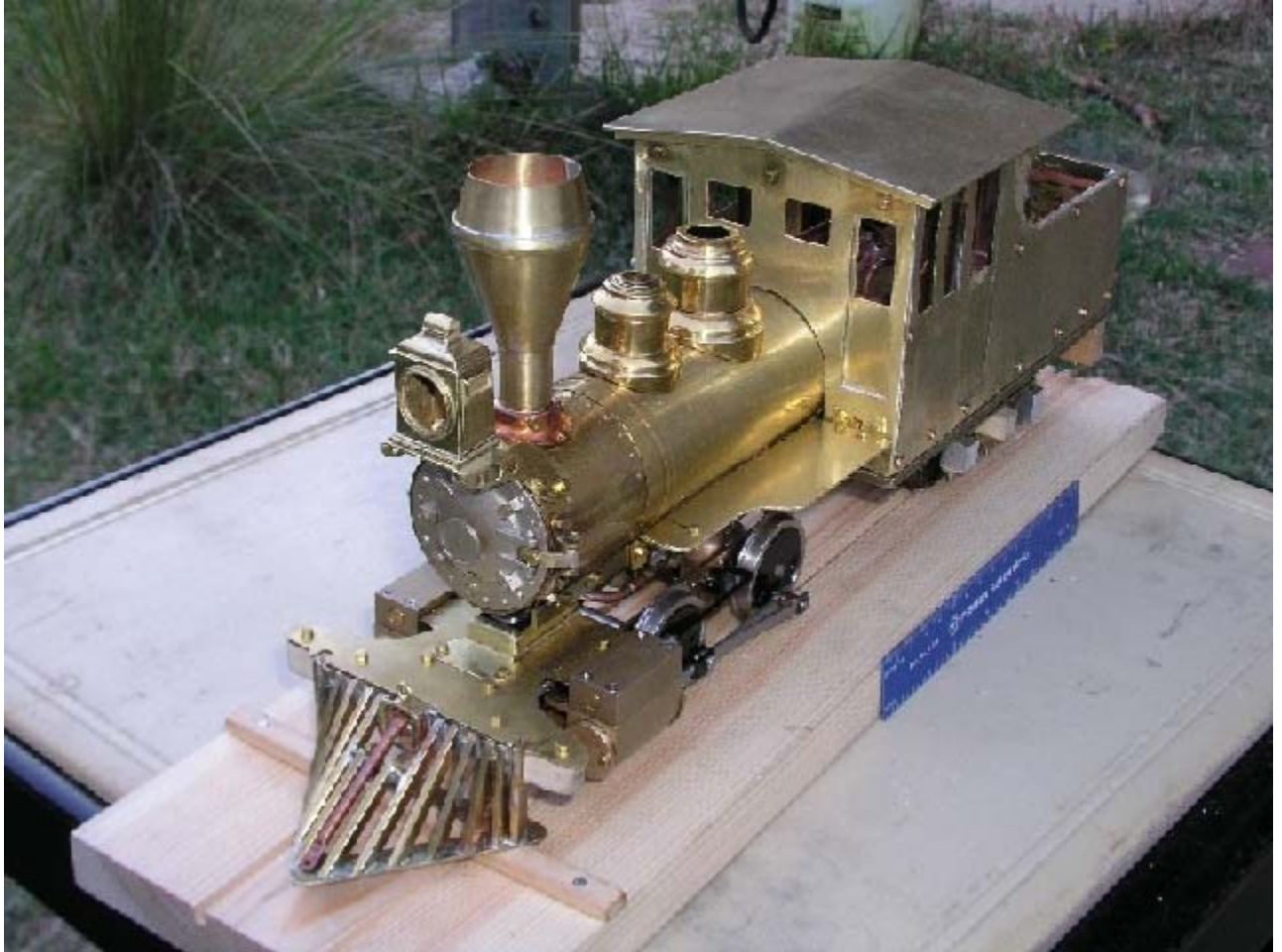


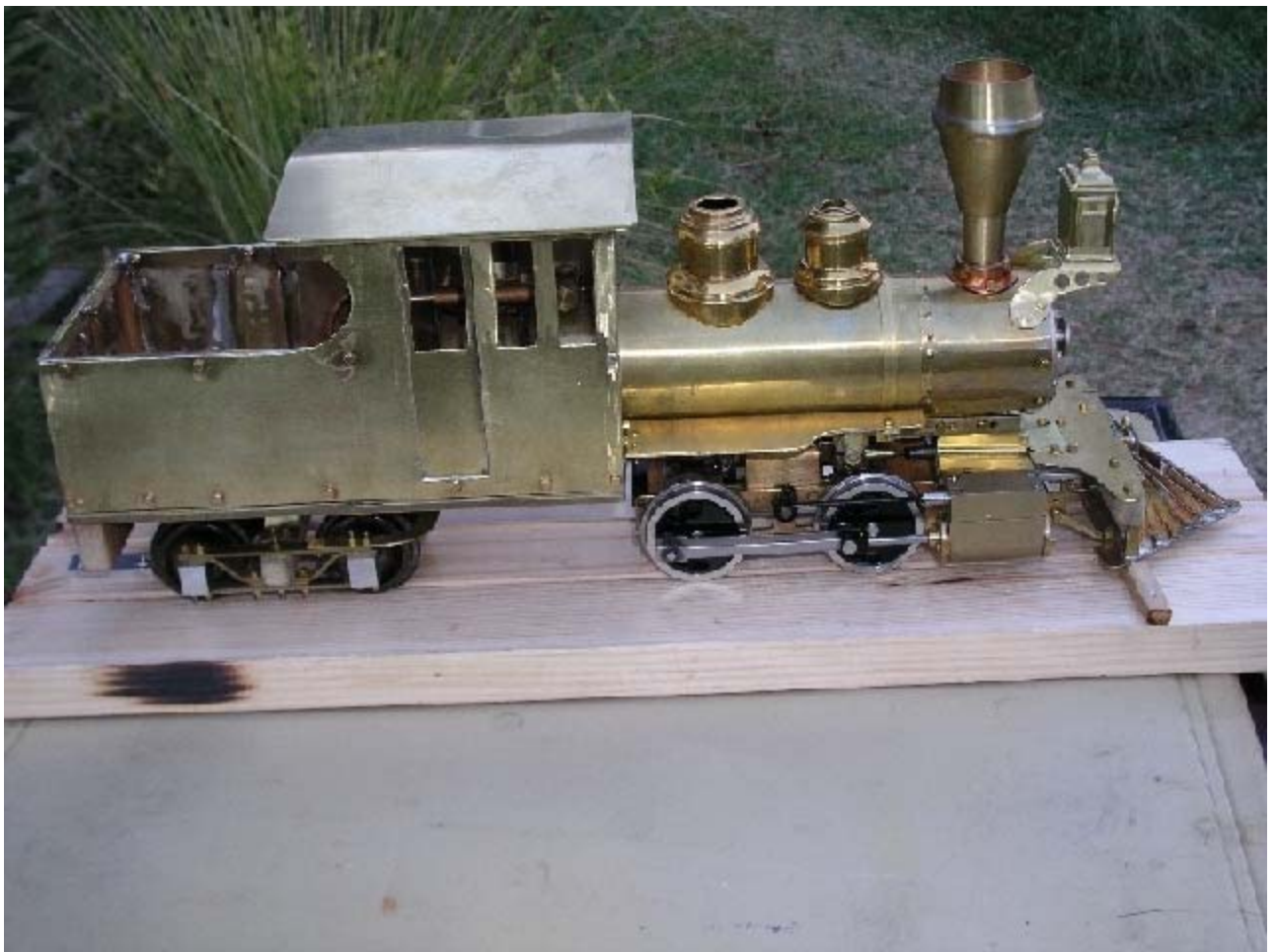
I still have not decided if the roof will lift off or be hinged. I have not paid any attention to the hinges on any of the engines I looked at. I also have no pictures of the prototype showing the divider (if there was one) between the tender and the cab. I find several pictures of newer Mason Bogies from the rear but not of Onward. Well I better get back to the engine.
redbeard AKA Larry

December 12, 2007

Hello all,

I had a couple of work weekends on the road, and in between I stayed at Will Davis' house. Three of the days I was there I holed up in his shop and worked on the cab. I got the final pieces for the cab itself finished and soldered the entire cab together. Then I built the roof and the running boards. Here are a couple of pictures that Will took before I left.





THANKS WILL!

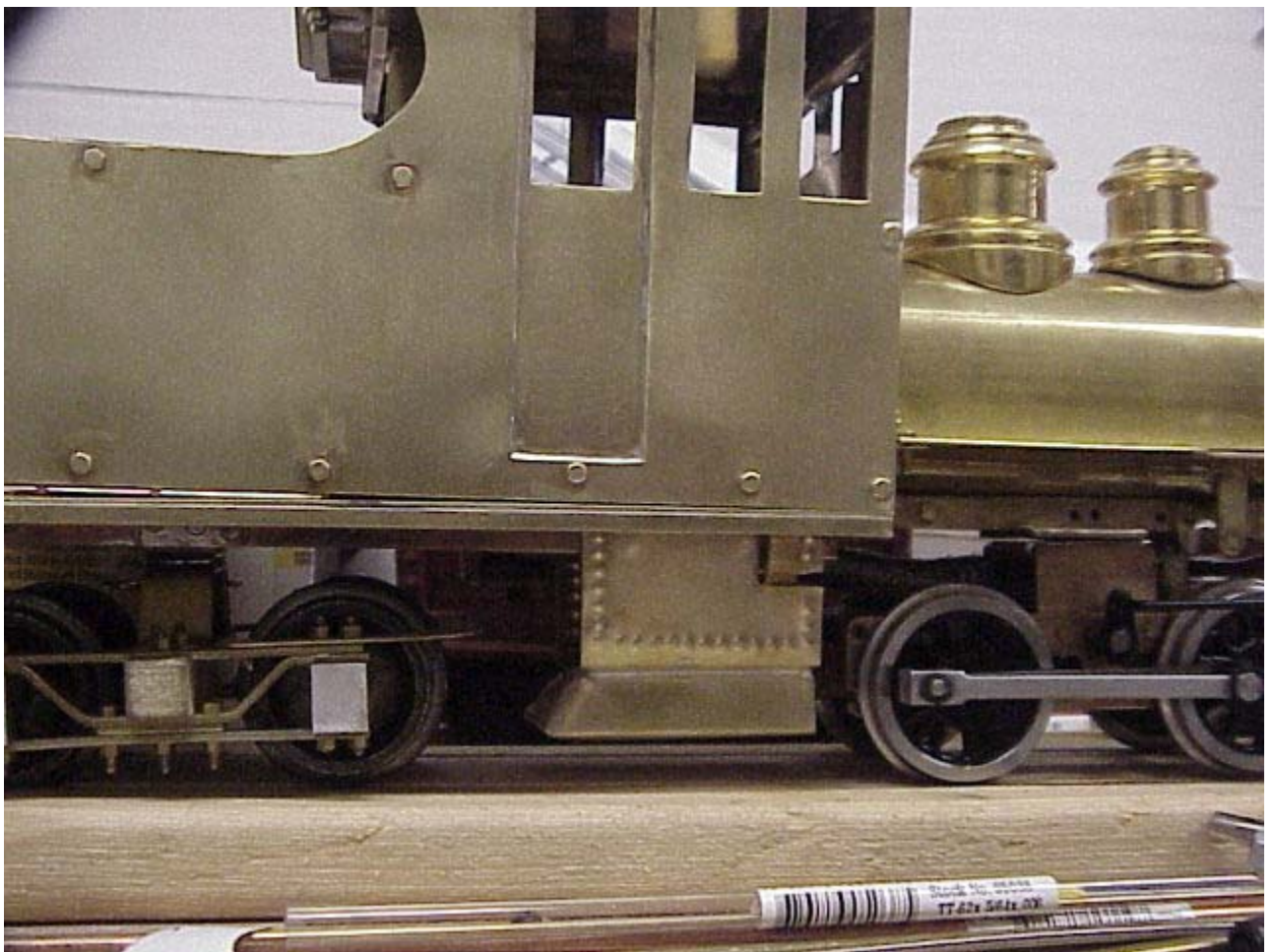
As soon as I catch up from this trip I will get busy on the next steps.

Larry AKA redbeard

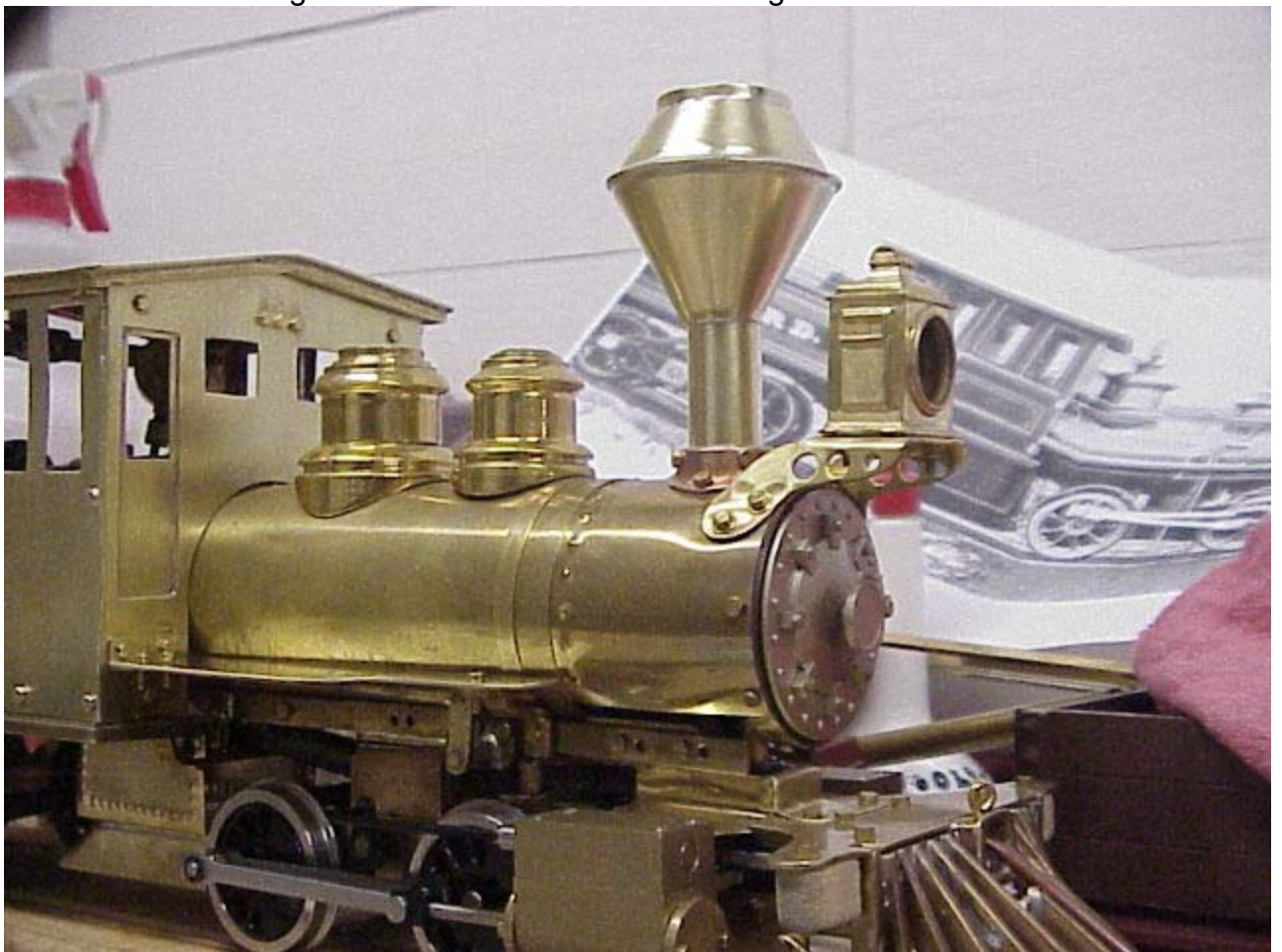
December 16, 2007

Hello all,

Took some time out from "life" and worked on the engine some over the last three days. First I smoothed out all the rough edges left from my marathon fabrication week at Will Davis' last week. Then I built the fire box under the cab.



I decided a while back that I had to build a new stack. The first one was crooked, too small, and too short. I have done a lot more brass fabrication since I built it and felt I could make a better looking one. I finished it a few minutes ago.

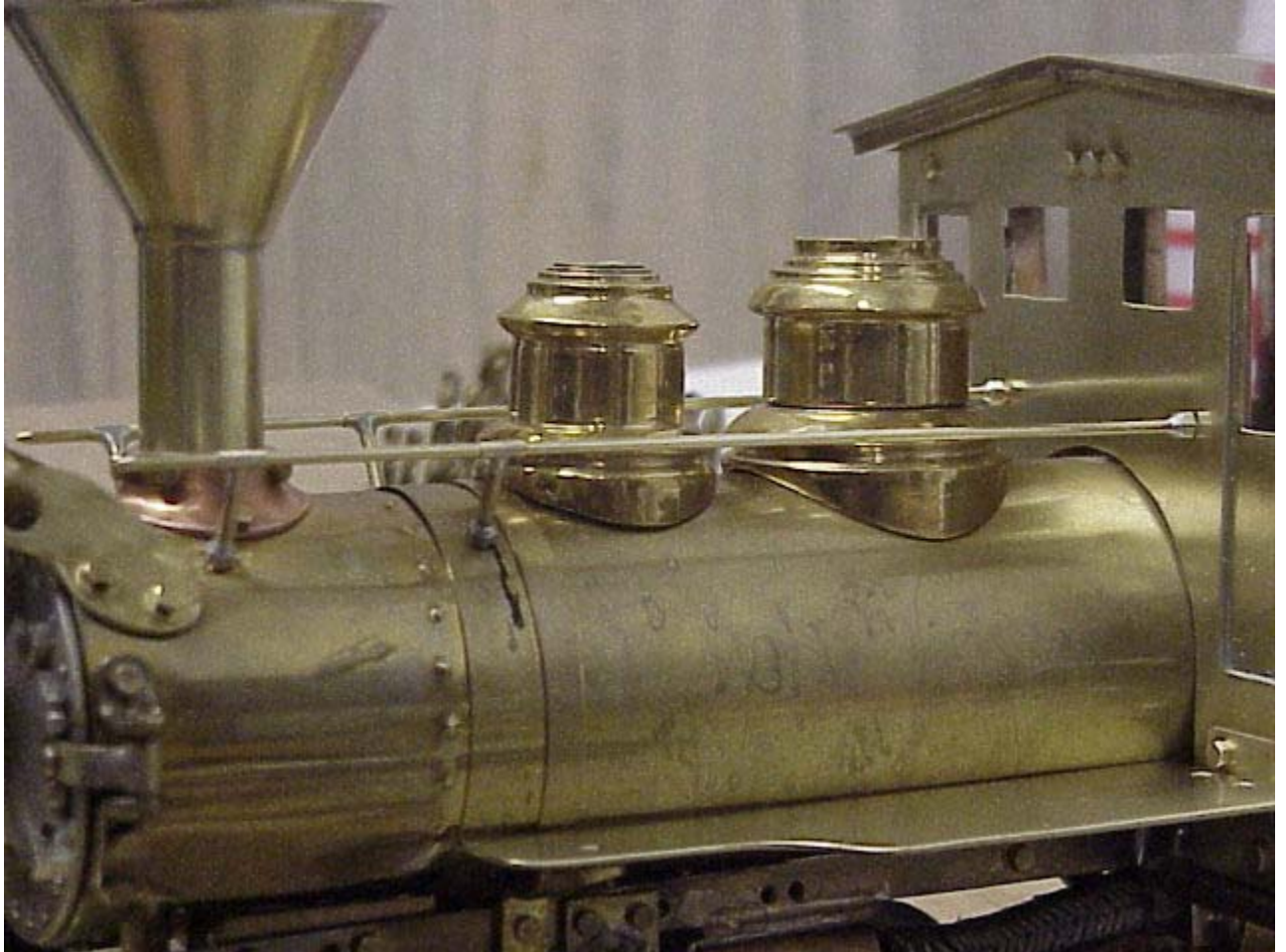


Next on my list is building handrail stanchions and handrails. More pics as items are added. Diamondhead is sneaking up quickly, and I can hardly wait!
redbeard AKA Larry



December 17, 2007

Today I built the handrails and stanchions. This meant taking the wrapper off the boiler and then re-installing it. The second set of stanchions are threaded onto one of the heavy bands I put around the boiler. The front ones have nuts inside the smoke box.

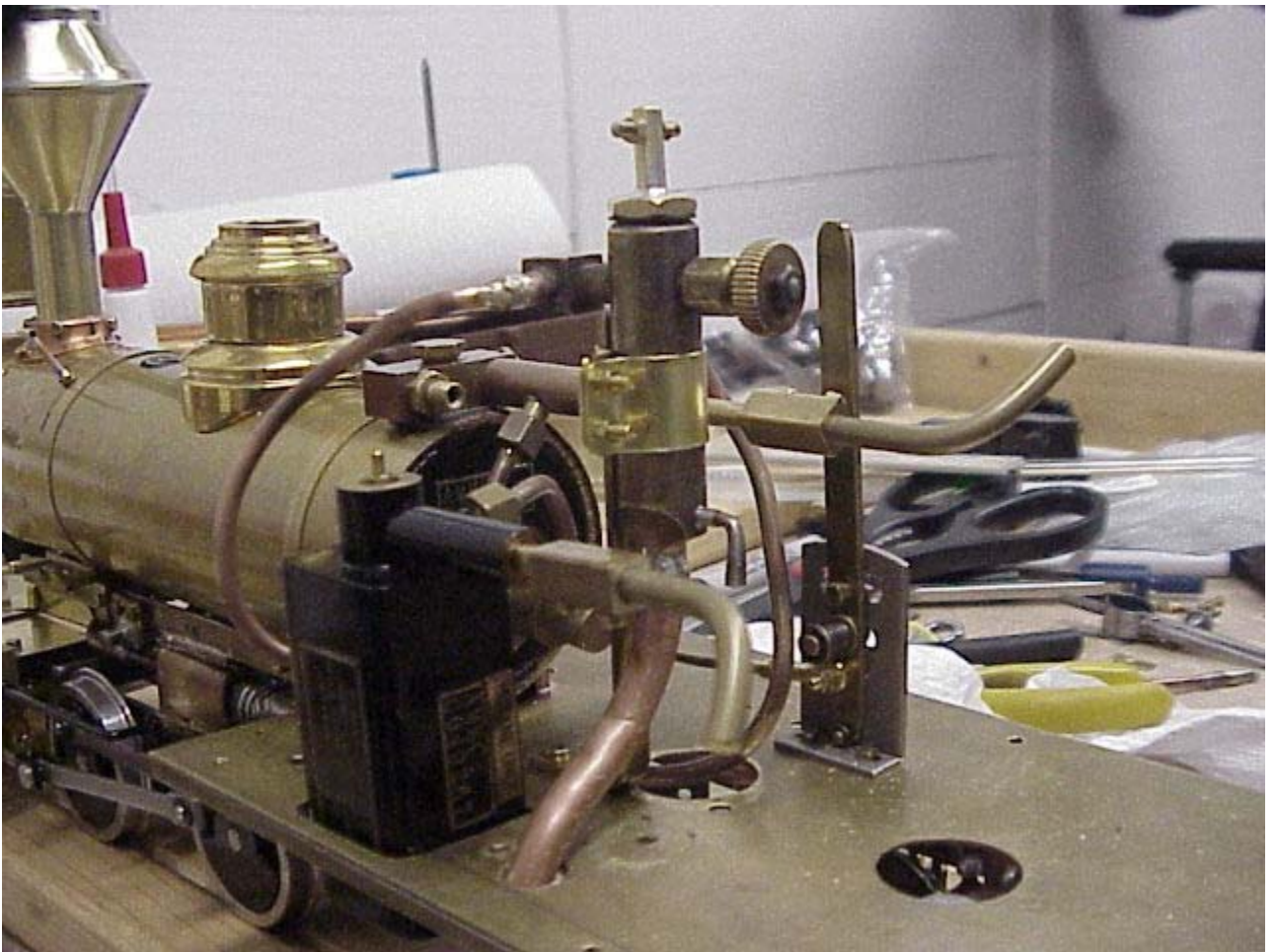


Right now I am too tired to decide what will be next.
redbeard AKA Larry

December 20, 2007

Hello all,

Today I mounted and plumbed a "new" old lubricator I got from Will Davis. The original one was using too much oil, so I changed to an adjustable lubricator. Also has a drain cock which now runs through the floor to the outside of the cab. I also built extended fuel and throttle handles.



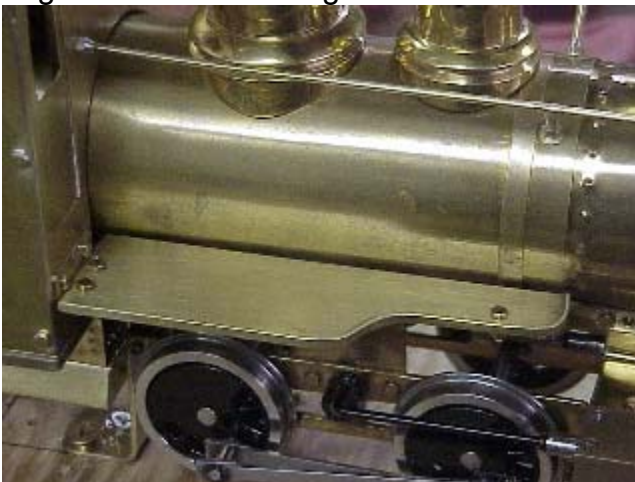
I think I am ready to start reassembling to get ready for Diamondhead but I am not sure that I'm ready to stop yet.....?

Got an e-mail from Will, something about a cricket chirping on his deck! redbear AKA Larry

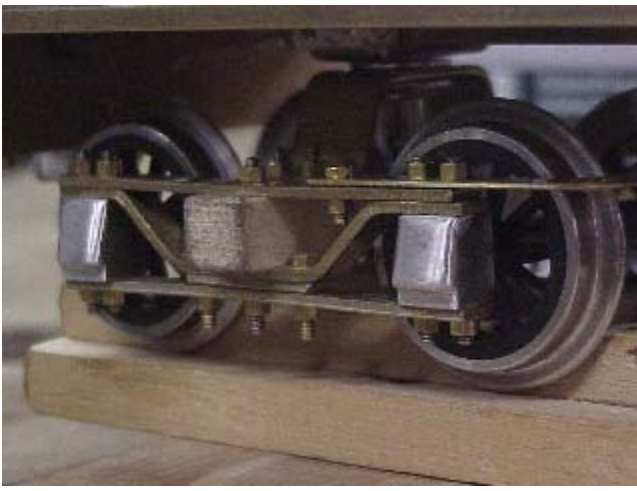


December 29, 2007

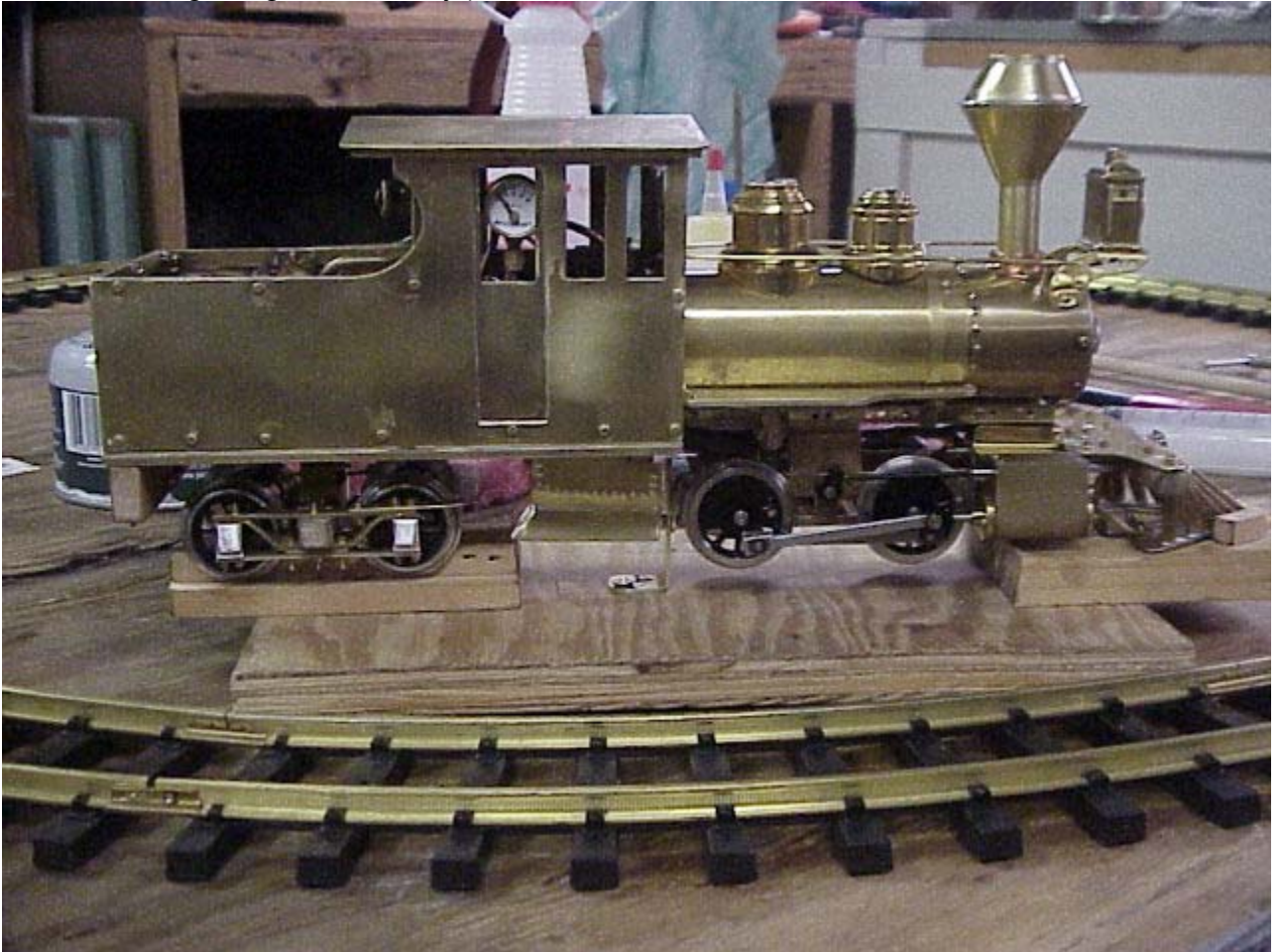
Well I HAD to get a few more things done before Diamondhead. Here goes; I added some edge trim to the running boards.



Then I cleaned up the rear truck and installed some spoked wheels. Still a lot of little trim pieces to be done on the rear truck.



Then I wanted to run her a little to be sure that she would at least move when I get to Diamondhead. I failed to take pictures , but I reworked the burner using info from an older Ruby post by Dave Hottman. Calmed the burner down so much I keep checking to see if it's lit. I also had to re-mount my johnson bar linkage as I was getting too much movement and causing problems. I simply moved it back behind the bogie pivot and made a tighter linkage. Then while tuning on air I realized that a tuning/warm-up board would be great since I can not get her to run on rollers. So this is what I came up with. (not pretty but I won't mind it getting wet and oily!)



Then I decided that this had to be enough for now. I have to attend to my other life before Diamondhead also. Here is Redbeard's Mason as she will be at Diamondhead. Hope to see you all there! redbeard



December 30,2007

Thanks for the comments!

I wish all of you could be at Diamondhead this year. It has been my focus for the most of the year to get this engine ready to run there. I said I was not going to work on the engine any more before Diamondhead.....but I just had to have something to pull! I have 5 Hartland mining gondolas that need a lot of detailing work, but I wanted to be able to pull them, so I built one coupler pocket and draw bar on one car. The others still have the plastic "hook" couplers but at least I can pull them. So I HAD to hook them up and see if the Mason would drag them around in a circle.(I only have a four foot circle of track - set up in my shop as it is a stormy weekend here) Here is a picture of the TRAIN under steam! FINALLY!



Once she is cooled off I am going to clean everything up and pack her away for the trip to Diamondhead. If I don't I am sure I will think of something else that HAS to be done.....
 redbear AKA Larry

From Allan Cash

Yes! Another Ruby bash is up and running!

That's looking good Larry, be interested in the response you get once people see it running, the few who have seen mine can't believe it started out as a Ruby and want to know how it was put together so I think you will be doing a lot of talking at Diamondhead!

Like the pic on the four foot circle, shows what I have said all along that articulation is the way to have larger loco's on small layouts.

Keep up the good work,
 Allan.



January 1, 2008

Well

Once again I have led myself astray! I can't stop working on this thing! I am unveiling my railroad line and a bit of myself!



See you at Diamondhead!
redbeard

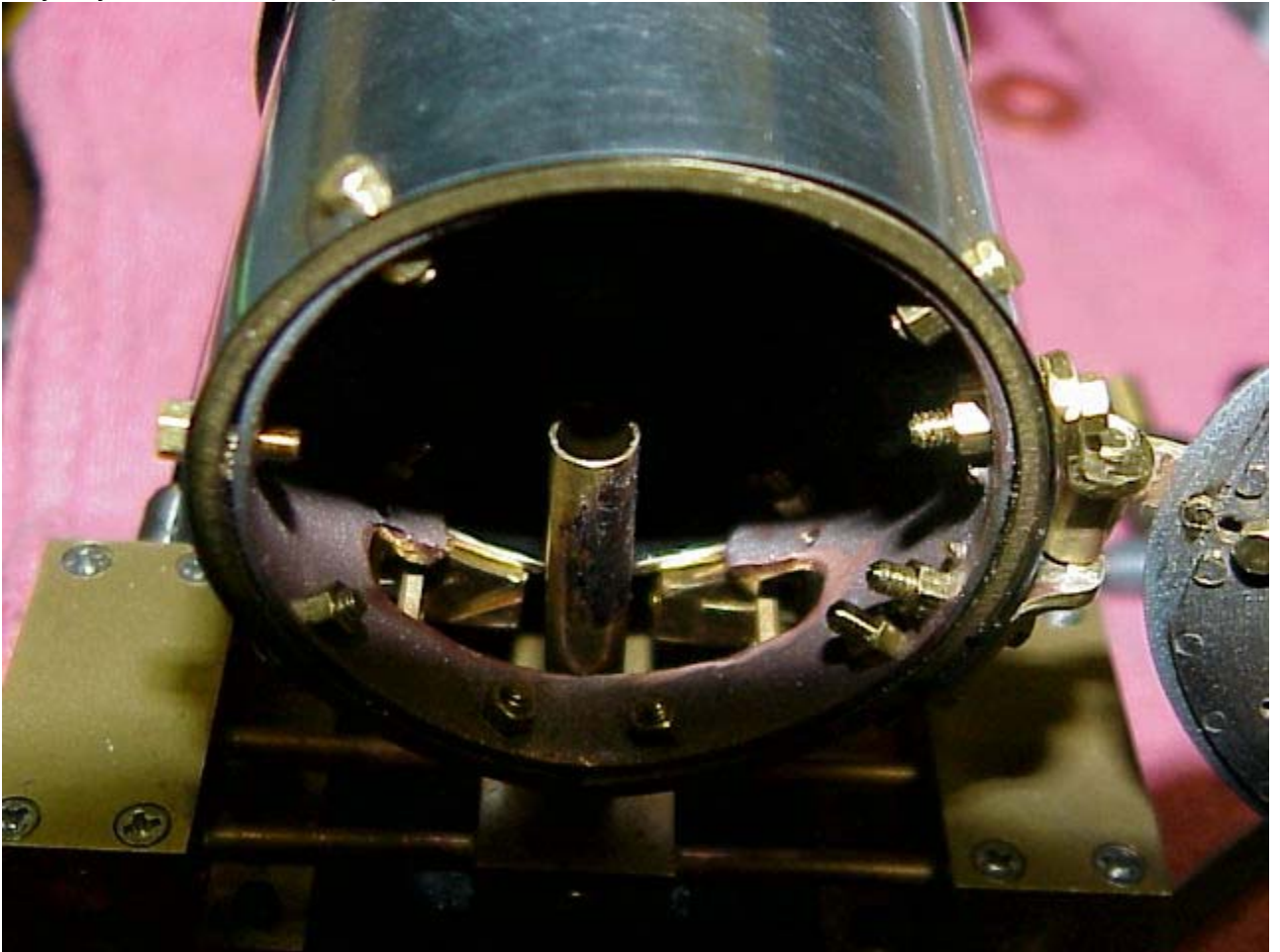
From Winn Erdman January 9, 2008
Wow! I am amazed that you can get around a 4 foot circle. I can't remember if you showed how you did the exhaust, looks like it would almost be outside the limits of the smoke box. Have fun an DH.

09 Jan 2008 04:42 PM

Hi Winn,

One of the reasons I chose this particular Mason to model is that it is one of the few 0-4-4's. So the reason it turns tighter is likely just the difference in a four driver bogie compared to a six driver bogie. Plus no lead truck. I saw a recent post that stated a Ruby would run on a 2 foot curve, I don't know because I never put mine together as a Ruby. Any way it is at it's limits on a 4 foot curve. Here is a picture I pulled up from the original post showing the exhaust. It has changed a little, as it now is a small tube inside a larger floating tube to cut down on "cooking" the "spit-ups" while running. I never heard these sounds till I quieted down the howling burner. But the slots and basics are still the same. I

have found that it likes to run clockwise better than counterclockwise, bugged me till I figured out that the flexible steam line running down the left side limits the motion in that direction. Not enough to worry about as I don't anticipate running a lot in 4 foot circles- It Makes My Head Spin!
Anyway here is the old picture;

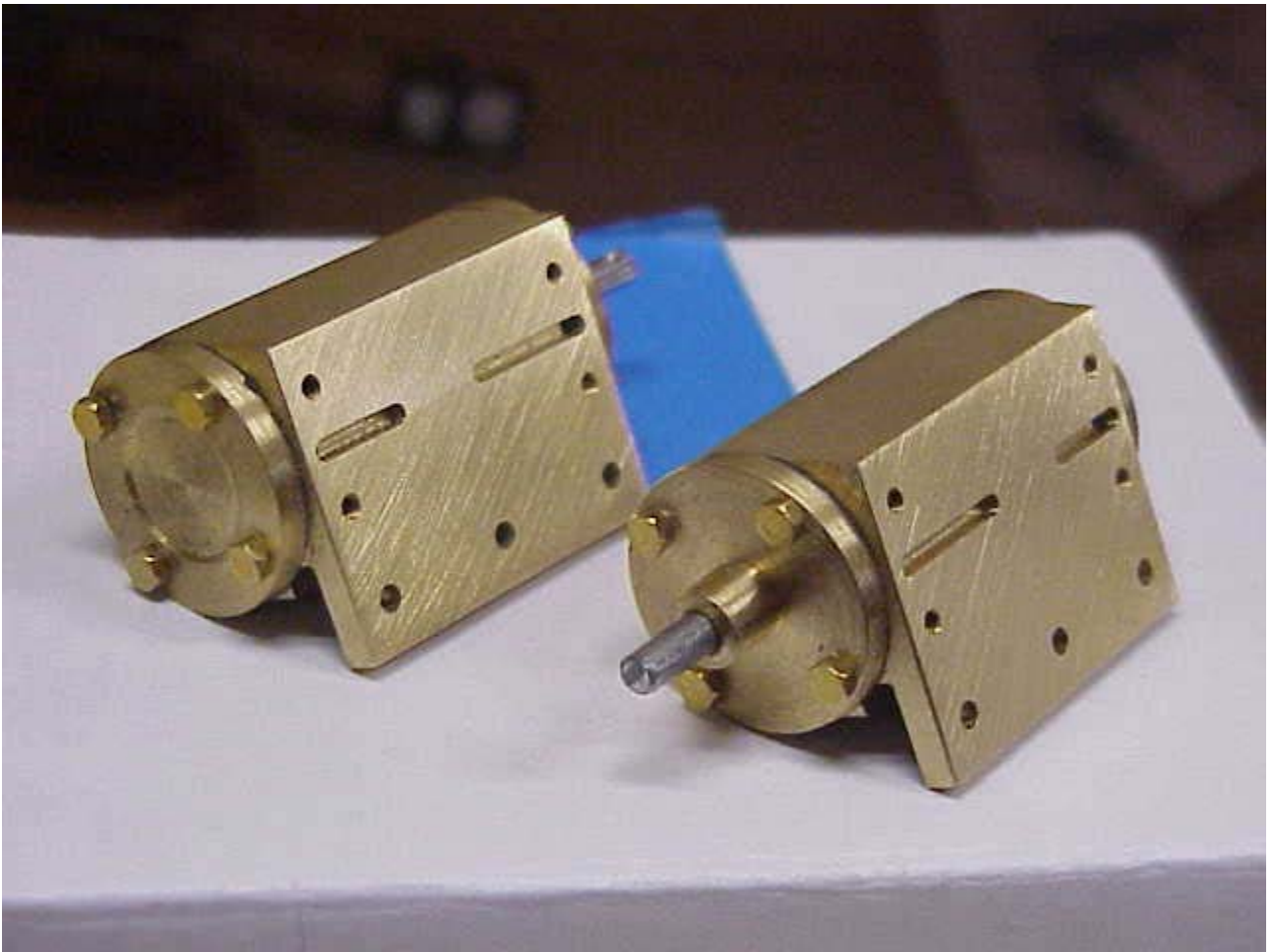


redbeard AKA Larry

12 Jan 2008 09:06 AM

Oh Boy!

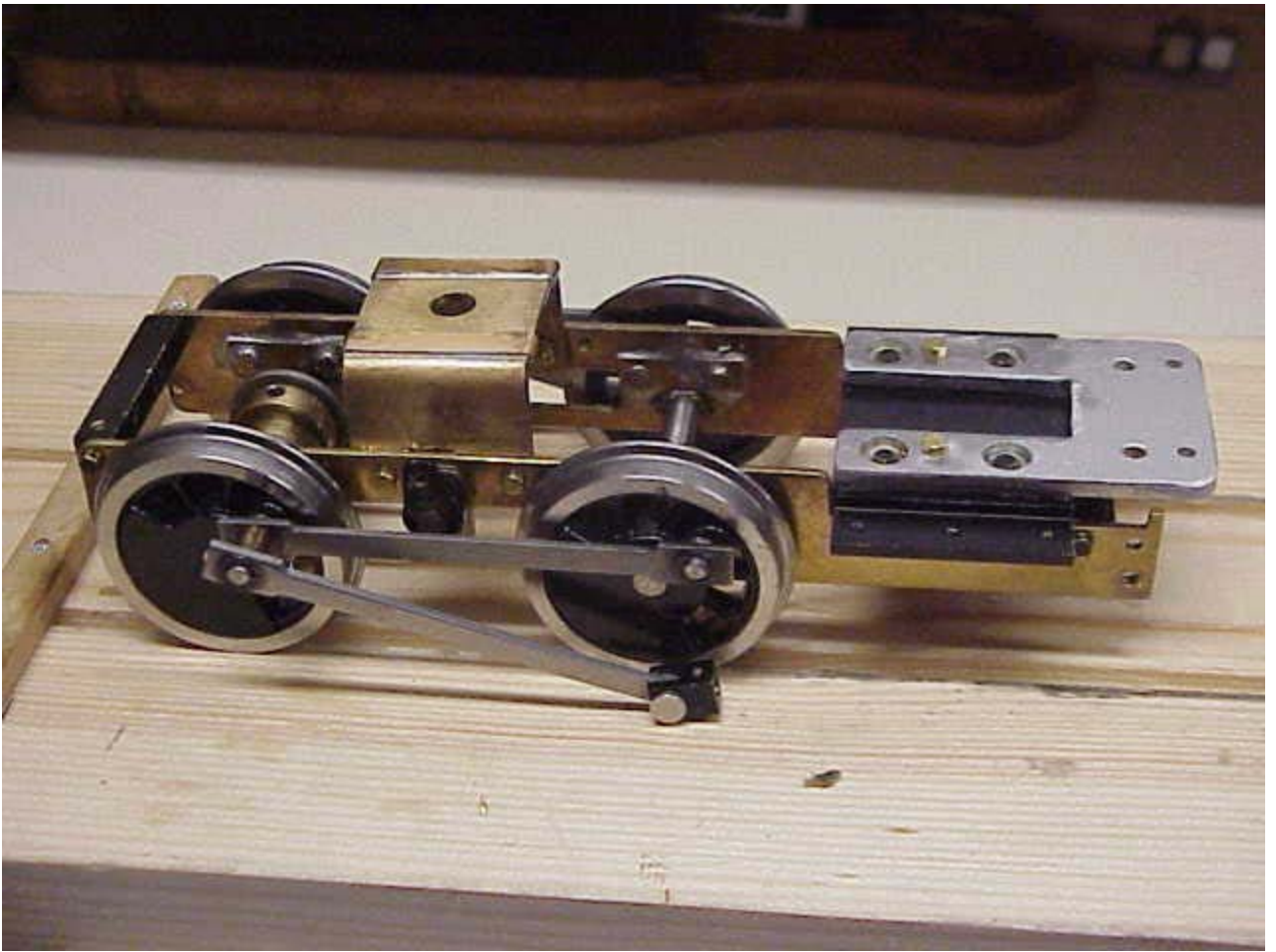
Just returned from the post office with a package from Royce! The 1/2 inch cylinders are in and they look real good. Nice little detail on the front heads that was not on the prototypes shown on an earlier post. Now I have to get them on and try them out!
redbeard AKA Larry



January 12, 2008

Hi All,

Well it WAS ready to go to Diamondhead! I just can't leave well enough alone
Here is how far apart I had to go to install the new cylinders.

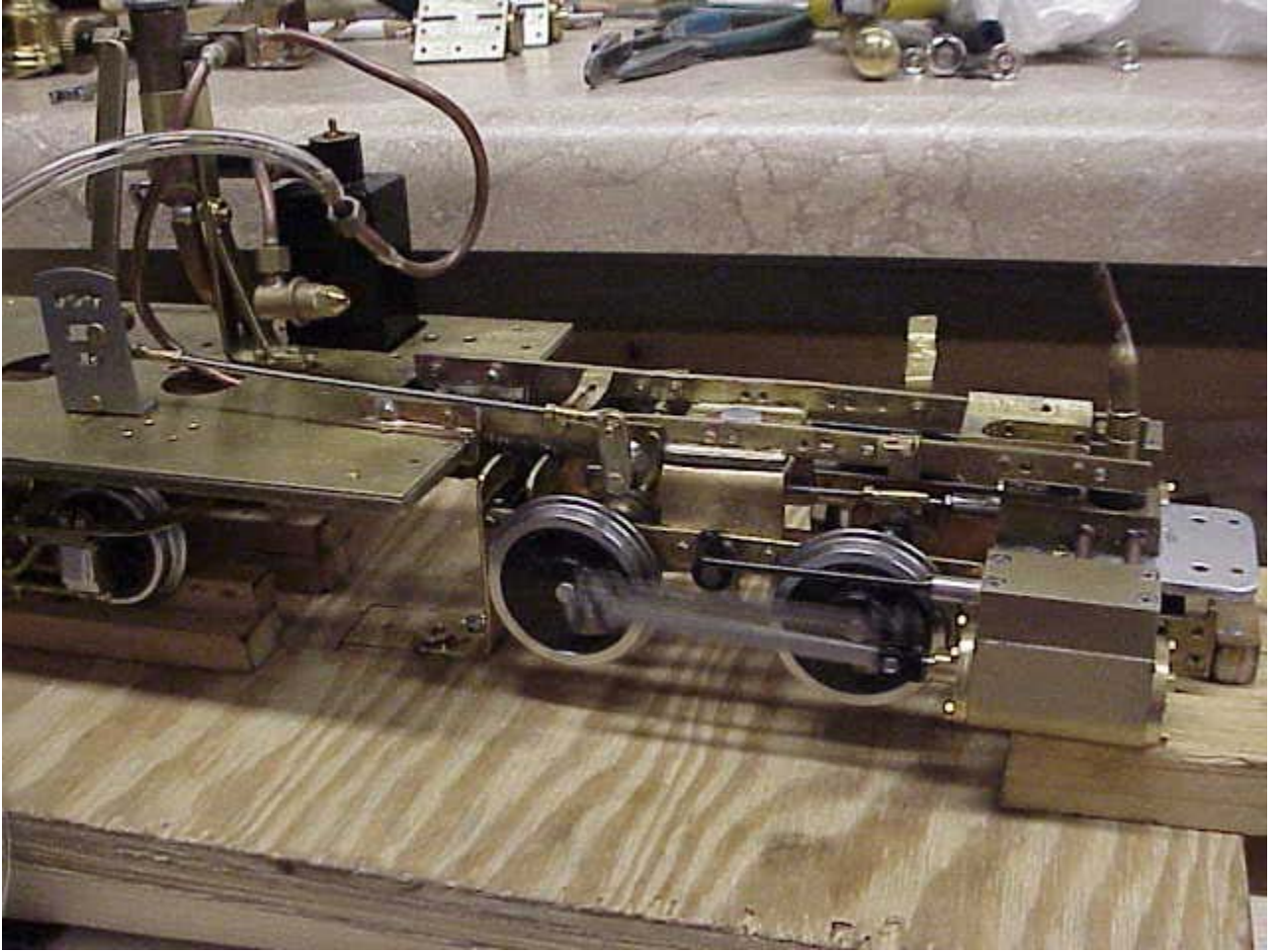


I guess I can't read a dial caliper either....I was sure I measured my piston rods at 1/8th inch, but they are 3MM. So I had to drill out the crossheads to fit the bigger 1/8th inch rods. If you are doing this I advise that you use only hand power and a NEW drill bit. I used a #30 drill in my "special" tool. (a drill chuck screwed onto a

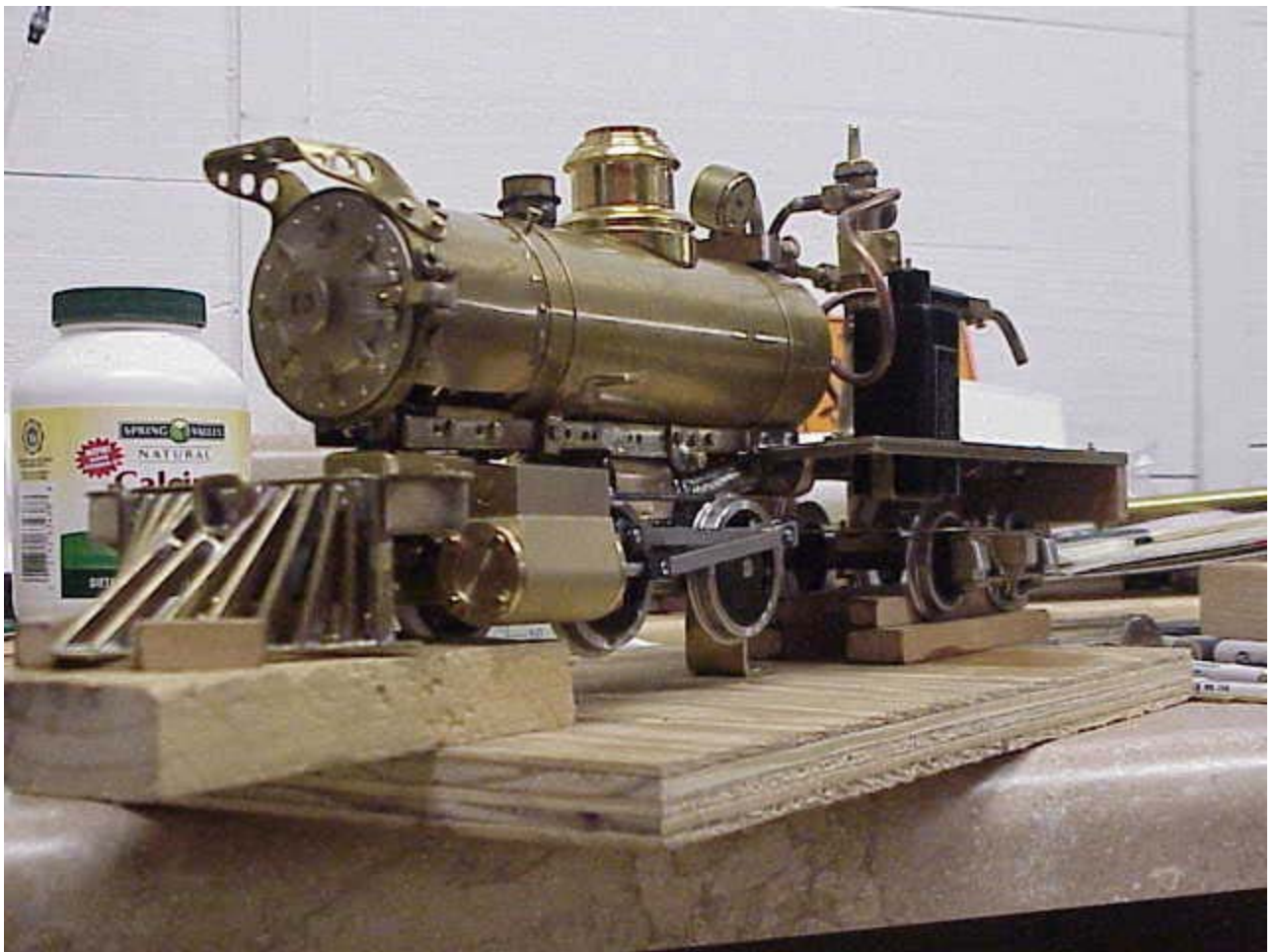
hood pin off my old 65 Chevy) Brass drills and works nicely with SHARP tools.



Installed the cylinders with no problems, everything fit well and soon I was running on air!



I reinstalled the boiler and fired her up to check things on steam. Man these cylinders run good! I can control the throttle much better than with the smaller cylinders. I had a very small leak from around a rear head bolt, so I stopped after one boiler full. I called Royce and talked to him about the leak. I have applied a little RTV to the bolts and will let that sit over night and then see how it goes. Here is where she is for tonight.



redbeard AKA Larry

13 Jan 2008 05:31 PM

Well Alright! A little RTV took care of my small leak and my "Pirate Loco" is reassembled and has been run. I have run a total of six boilers of steam through it and it runs better with each run. BUT enough is enough- I am stopping and packing for Diamondhead now. Thanks Royce for the shipment and for the advice. The cylinders are great! Here is a picture of the loco running in my driveway.



And if I can make this work here is a poor quality short video of the same run. I do not have a great camera for video and I am not a good photographer.....but my loco RUNS!

www.youtube.com/watch

Thanks for all the comments. Dwight I am not sure I should be grouped with the guys you mentioned in the Diamondhead post. Maybe after two or three more engines! But Thanks! I look forward to meeting everyone in person.
redbeard AKA Larry

21 Jan 2008 04:58 PM

The pirate loco (loco pirate?) went to Diamondhead and had a wonderful time. Being there with an engine to run is so much better than just looking on. I met a lot of the people I share this post with, and learned a lot about steam and steamers. Saw a lot of really great engines and rolling stock, got a lot of ideas to work with and things to look for. Several people helped me to get the redbear running better, thanks Jim, John, and Norm! It was great to swap ideas with folks in person and get more questions into my head. I bought some "stuff" at the "flea market tables" and have lots of new things to work on. Now I am going to ask for a little help from all of you! I am looking for pictures of any of the first Mason Bogies, in particular the first group of smaller 0-4-4 engines like Stockton, New Brunswick #7, North & South of Georgia #2, Shoo Fly, and of course my prototype - Onward. I am looking for pictures beyond what is found on the Mason Bogie Archive pages. I need front and rear pictures for details. So far I have found one other picture of Onward under the "hanging rock" on the American Fork line. Onward was sold to the American Fork Railroad in American Fork, Utah in the early 1870's and was renamed "American Fork". ANY help would be appreciated. Dwight it was great to meet you in person, I sure wish you could have brought your engine. I have seen a couple of pictures of my engine on John

Fuller's Diamondhead post, but here is one that I took of redbear running late at night (as pirates oft do).



Then the 2nd picture that I found of the prototype engine.



**Locomotive at Hanging Rock in
American Fork Canyon, 1870's.
Utah State Historical Society..**

As you can see this one does not give me much detail. One last thing for today, Royce the cylinders performed flawlessly and when they seated in at about 1:30 AM Thursday, she became a very sweet running engine. Lots of interested folks! Thanks Royce!

redbeard AKA Larry

from Dwight Ennis 21 Jan 2008 08:08 PM

I had the privilege of seeing Larry's Mason up close and personal. With the new cylinders, she runs like no Ruby I've ever seen, and she looks beautiful doing it!!! Larry's workmanship is excellent!

Great to meet you Larry. I enjoyed every second of it!

19 Feb 2008 07:03 PM

Well I am finally working on the Mason again! After running at Diamondhead, several things became apparent - fuel tank and lubricator both needed to be moved, some slight binding on the steam bogie when turning clockwise, gauge needs to be seen from either side, and the burner needs to be reworked. Some of these things were partially dealt with at Diamondhead with the advice and guidance of some of the long time steamers. Thanks again to all who helped and advised me! The burner was partially reworked at the motel and allowed for much better running, but the lug in the back of the boiler needs to be opened up to allow a "tent" to be put over the burner. This would have taken her down too far at the steam-up so I put it off til I came home. So now I am starting all of these changes at the same time since most involve a total dis-assembly of the loco. I started with moving the fuel tank away from the cab, and relocating the lubricator to the old tank location. This tank location was originally chosen because I wanted to drop the tank down and this was the only clear place for it to go through the cab floor. After getting the engine mostly together I began to hate the "big black box" hanging down where nothing should be. Plus it was getting too warm from the closeness to the lubricator steam line. So the tank goes to the back of the tender and the lubricator moves forward and left enough to stop draining it on the rear wheels. (another bad location choice) This also had the advantage of shortening the steam line from the boiler to the lubricator.

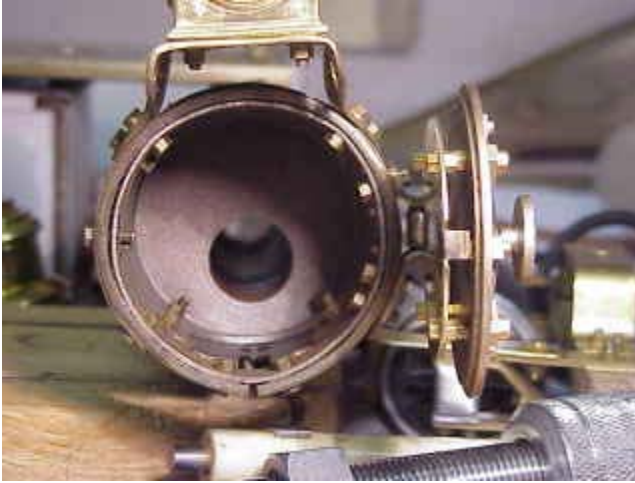


This is all for tonight, but hopefully work will be a little more regular on the engine now. There are still a lot of detail pieces to make and having everything apart will make some of them easier to deal with. (sure am glad I have not painted her yet !) Having a place to work where I don't have to put everything away each night will help a lot as well. More to come !
redbeard AKA Larry Newman

21 Feb 2008 09:39 PM

Last night and tonight I got several small but time consuming things done. First I corrected a design flaw in my stack. This was all internal and I could not even get a picture to come out. Basically what I had done was to mount the stack using

bolts through the flange into the smoke box. When I did this I did away with the Ruby mount completely. What I did not do was to run a tube down through the opening in the smoke box. This has been letting condensate and oil run down between the smoke box and the wrapper. So I turned a collar and soldered it to a tube that extends into the smoke box. I added an "air-gap insulation" to the inside of the smoke box door. Also did away with the "pocupine" of long bolts in the smoke box.



Then I addressed the burner. This is what I am using right now.



At some later date I may try and build a complete new burner rod, but not now. This seems to work quite well.

Next I built a couple of steps below the cab doors.



And now I am feeling the effects of a couple of extra long days, so I am calling it a night.

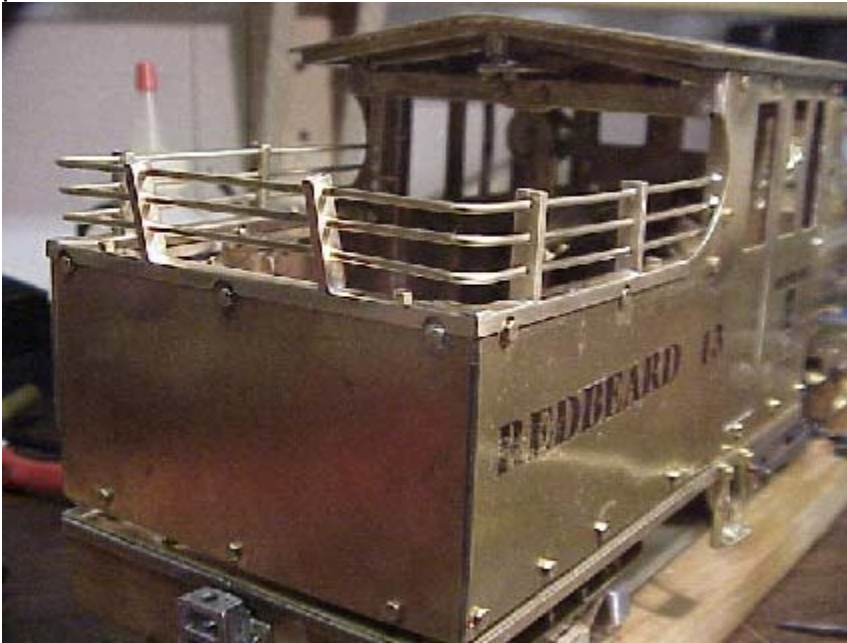
redbeard AKA Larry

27 Feb 2008 11:32 AM

I got some more done on the pirate loco. While I had the boiler loose and the stack off the boiler I mounted a Trackside Details bell.



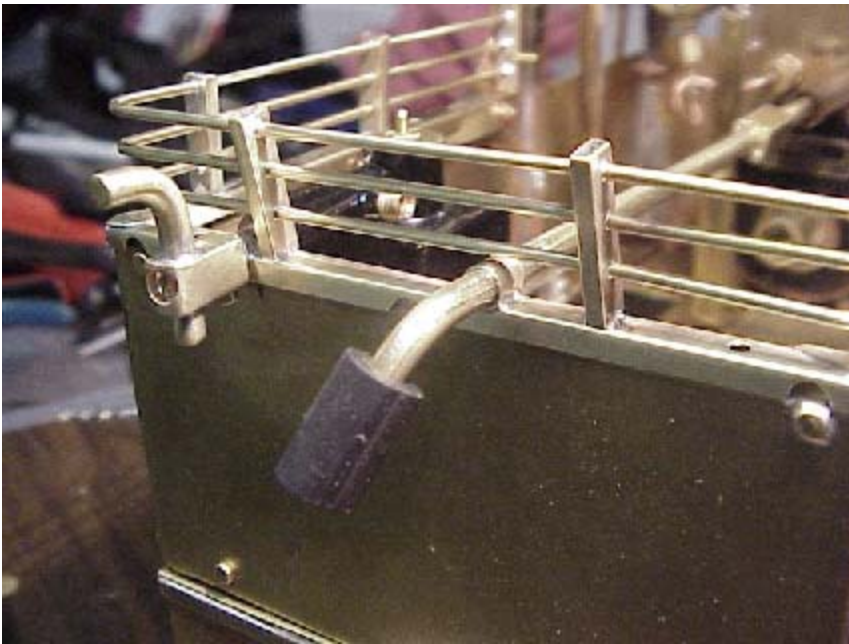
Then I started work on the hungry boards, or in this case the hungry bars. I just finished soldering the bits together and cleaning everything up. Thought I would post this now so that if I mess it up installing the control mounts (which will pass through between the cab and the first bar) I can at least prove I built a pretty piece to start with!



Thats it for now, as soon as I mount the controls I will post a picture of them to explain what the heck I am talking about.
redbeard AKA Larry

28 Feb 2008 05:37 AM

Got the control mounts soldered in without destroying the whole thing! Yipee!
At some point I will put a wood load over the top and cover the tender portion of the cab. This way the fuel and steam controls are easy to get to.



Next up will be door pull bars and door knobs!

redbeard AKA Larry

05 Mar 2008 07:02 AM

I got the door pull bars made. I have to stop for a day or four because I am going to a steam-up at Norm Saley's this weekend. I will try and post pictures when I come back. For now here are the pull bars.

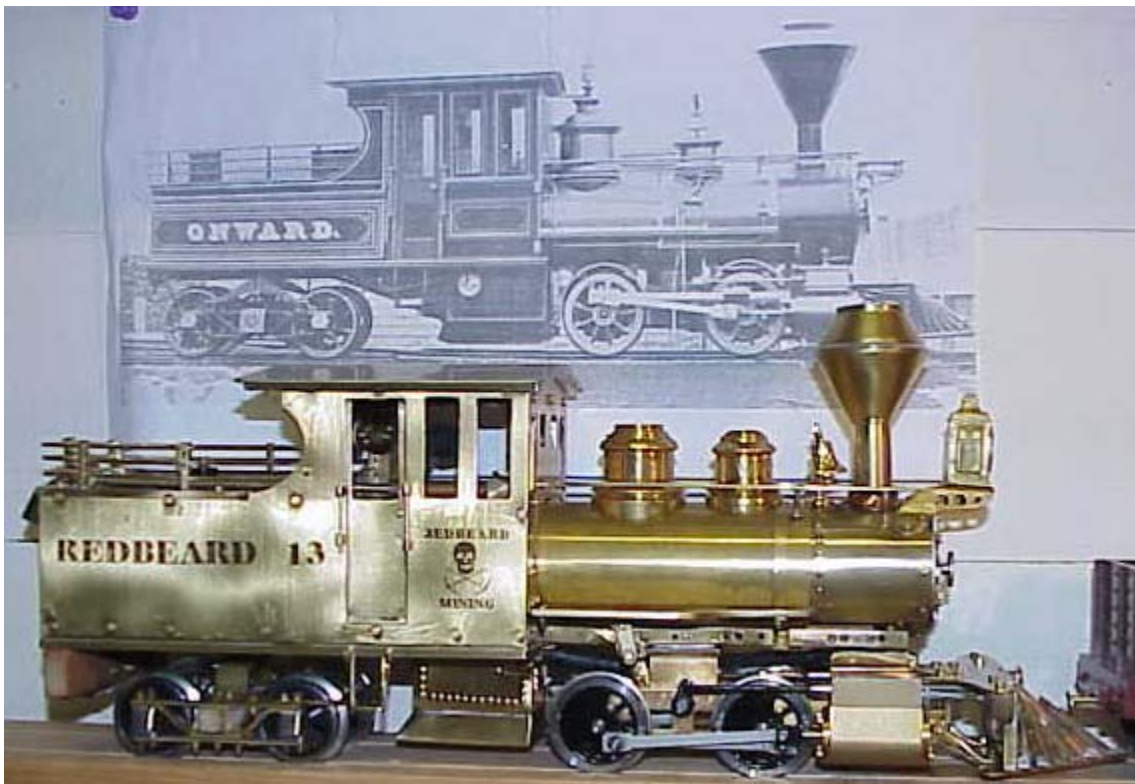


More later!

redbeard AKA Larry

05 Mar 2008 03:58 PM

Put everything back together so I can go run trains this weekend. Here is a picture showing the engine in front of a picture of my prototype. I also got the doorknobs made and mounted.



I will try and get some running shots posted when I get back home.
redbeard AKA Larry

10 Mar 2008 03:31 PM

I just got home from a steam-up at Norm and Ruth Saley's home in Orlando.

What a great time we had!

Thanks Norm and Ruth for hosting a wonderful day of steaming.

The weather had threatened for days but cleared early Saturday morning and stayed clear (but a little windy) all day! Just cool enough for good steam plumes. I am struggling a little with a computer that was put together the day before I left, so I will only post one photo right now. I will try to start a new thread on the steam-up when I get my photo program "play nice" with my new system. For now here is my Mason bogie pulling a mixed load of cars on the Lake Margaret & Conway Railroad.

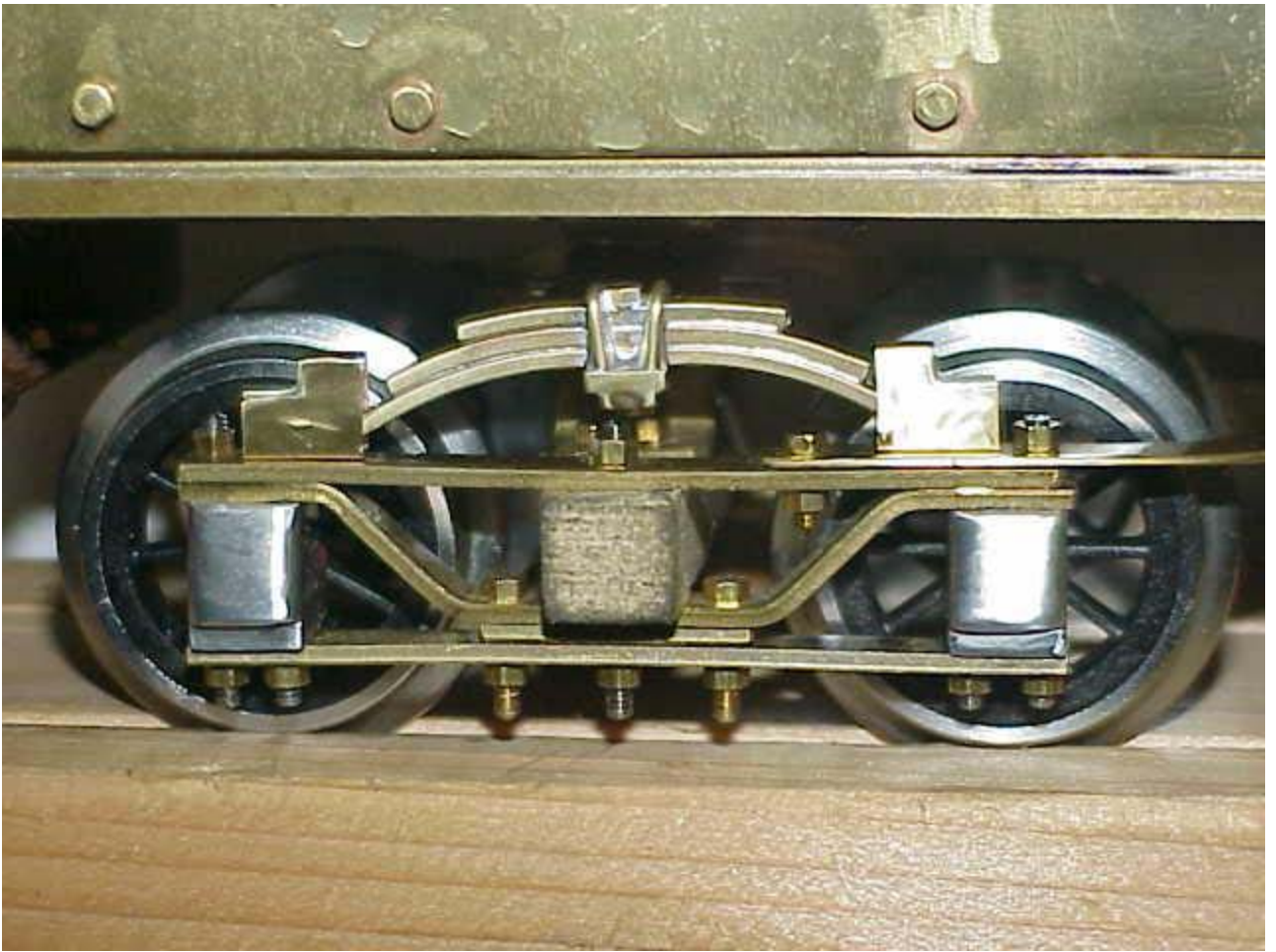


I'll try and get my system worked out by tomorrow and post pictures of a nice group of loco's.
redbeard AKA Larry Newman

15 Mar 2008 09:48 PM

Hello all,

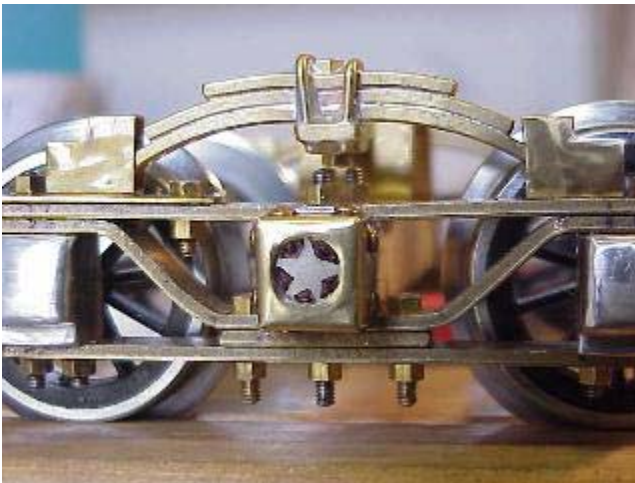
I built the springs and hangers on the rear truck today. I have put this off for a while because it is "decor" only and is fairly difficult to make. I am very close to painting the Mason now. I think just one more detail part, but that may change when I consider it with a fresher point of view. Today is going on 15 hours and I am sure I am overlooking something. Here is a picture of the springs-



That's it for tonight.
 redbear AKA Larry

18 Mar 2008 03:58 PM

In between mowing the grass (ah Florida!) and making jewelry, I made the covers for the beam on the rear truck.



I think I am down to two more pieces, a wood load for the tender and a "spit-elator" (sorry Bruce I am unsure of the spelling of this "word") or condensate tank for the exhaust to stop the popping and spitting in the smoke box. Can any of you tell me how large a tank for this purpose needs to be? Thanks in advance!
 redbear AKA Larry

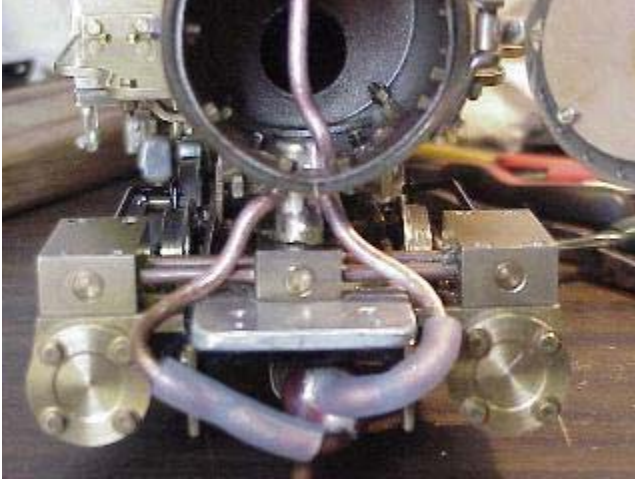
Larry - Think spit eliminator - hence, SPITINATOR!

Bruce Gathman, President
Eldorado Timber & Mining Company
Tall Trees - Deep Shafts
Recreating the past with live steam Shay locomotives and lots of log cars.

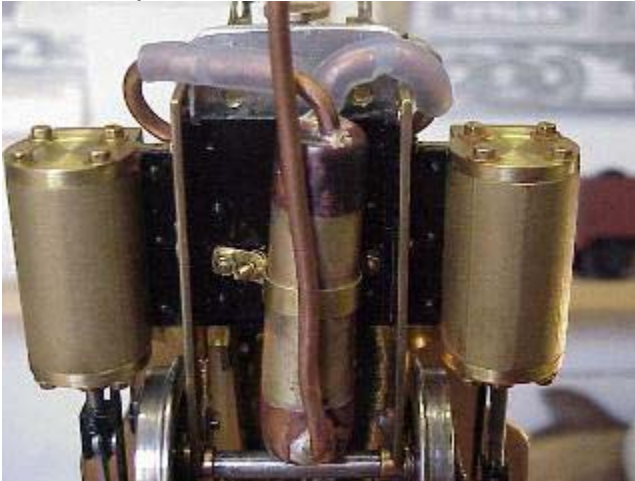
30 Mar 2008 04:14 PM

Hi everybody!

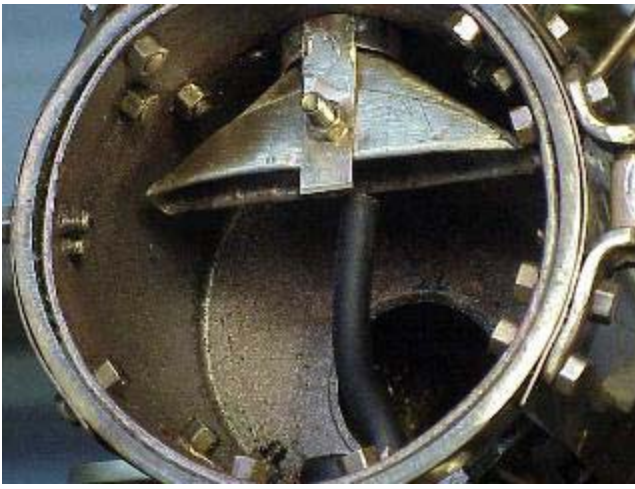
I got my "Spitinator" built ! (Thanks Bruce for the info !) The first picture shows the diverter tube and the return exhaust tube.



The next picture shows the tank mounted between the cylinders.



The tube coming forward is the drain for the tank. It runs into the pilot and will drip in the center of the triangle of the pilot. The next picture shows the new petticoat I built to try and get as much of the steam as I can up the stack. I have not done any finishing on this part since I have not steamed up to see how it all works.



I will need to build a new cover over the original Ruby 'reversing valve to cylinders' steam lines since the lines out of and back into the smokebox will not fit the first cover. As soon as I raise some steam and check everything I will build this, remount the pilot and take another picture.
redbeard AKA Larry

from Winn Erdmann 30 Mar 2008 09:20 PM

Wow!! That is some kind of plumbing job! I'll be anxious to hear how it works and if you get any chuff.

Winn Erdman Steamaholic 291

31 Mar 2008 10:18 AM

Hi Winn,

Good to hear from you. I got the "spitinator" finished and steamed up several times while adjusting this and that. The thing works very well.....BUT my loco now sounds like a sewing machine. No chuff at all. Now I have to decide whether the popping with a fair amount of chuff is more acceptable than the almost silent engine. Also with the condensing tank there is no waiting, as soon as you crack the steam valve she starts. But its sounds so wimpy. I will think about it before I decide, but I am leaning towards removing the condensing unit so my steam engine sounds like a steam engine. More later.

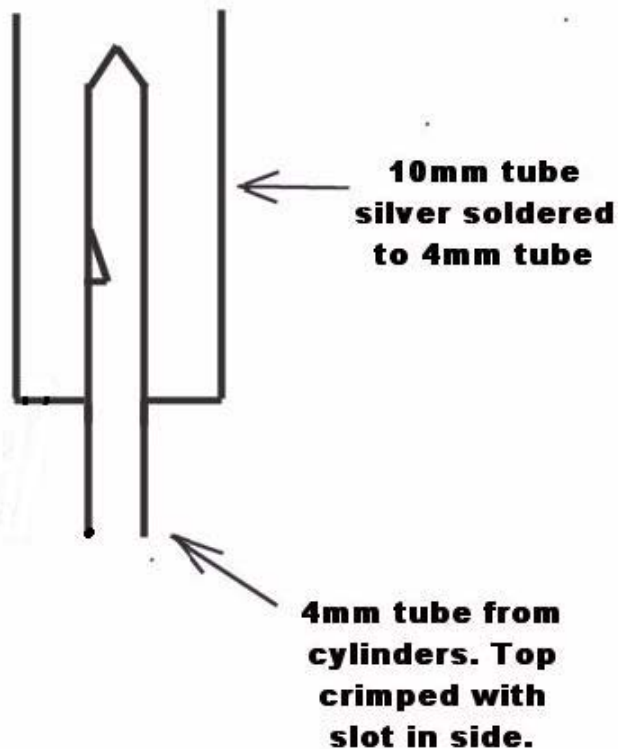
redbeard AKA Larry SA #1956

from Allan Cash 31 Mar 2008 04:32 PM

Larry,

you might like to try something similar to what I have made on my Ruby Mason. Stops the spitting and also acts like a mini resonator box, it is certainly better than a straight pipe. Any condensate tends to stay in the chamber and is evaporated by the heat in the smokebox once you have the initial start up out of the way and the cylinders are warmed up.

Allan.



09 Apr 2008 04:47 PM

Hi everybody!

I finally got a video up on You Tube of the Mason bogie running at Diamondhead. This was taken by my good friend Jim Sanders at about 10:30 one night.

<http://www.youtube.com/v/K-spBqz4LTk>

More pics soon.

redbeard AKA Larry SA #1956

from wchasr 12 Apr 2008 04:45 PM

It also gives those of us that will be following in your footsteps some insight as to what we might encounter too!

Thanks!

Chas

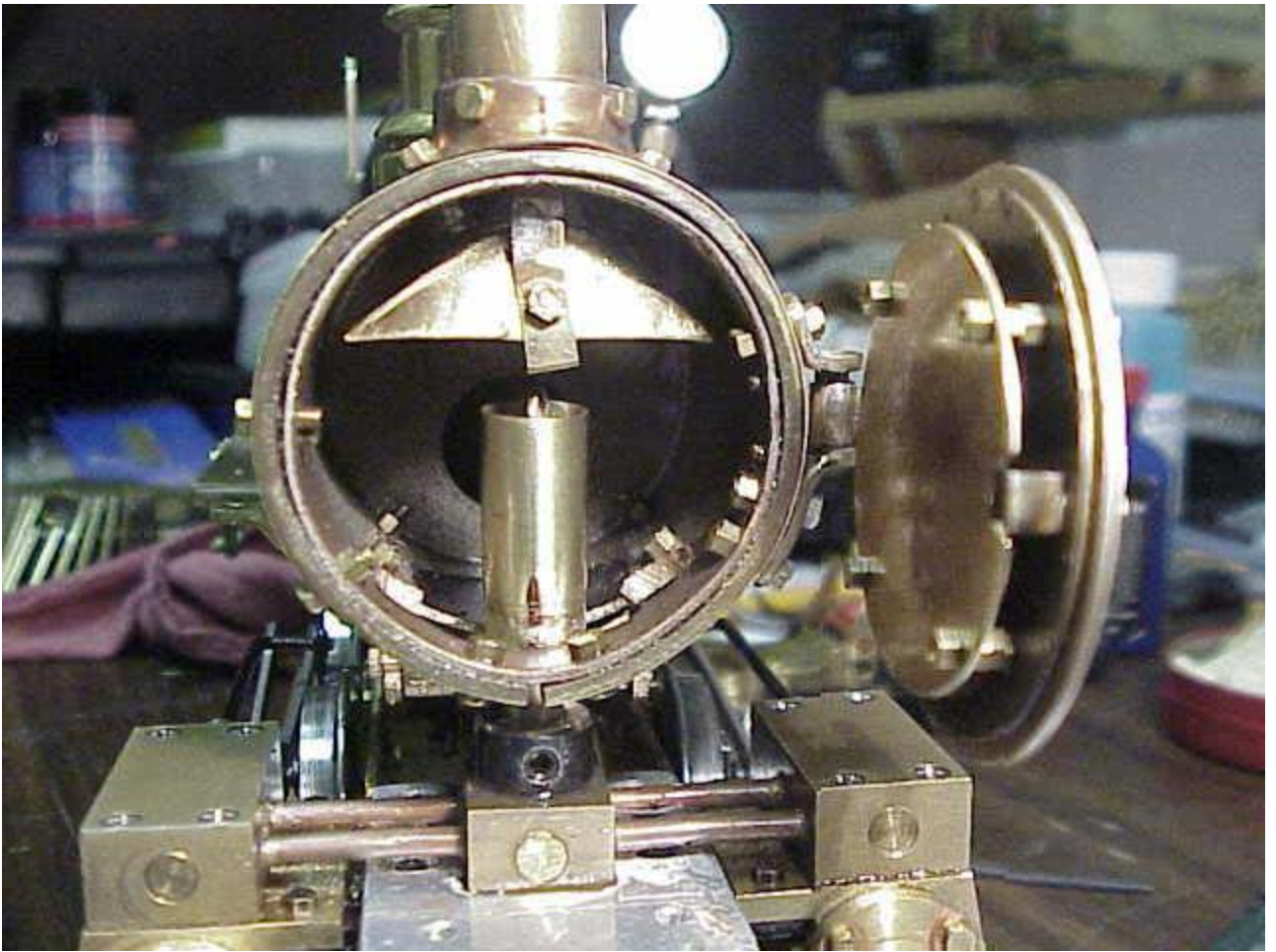
April 12, 2008

Hi Chas,

I know exactly what you mean.....if it were not for the goodness of the live steam community I would not be where I am on this loco. I need to thank all who have replied here and given suggestions, especially Al Cash! Al once again you have given me aa idea that I am running with. In order to use a tube in tube like you are, I had to move my stack. Part of the problem was that the exhaust port was not lined up with the stack. So any thing I did was complicated by the side to side movement PLUS had to step back about a half inch. So I moved my stack opening forward to line up with the exhaust, here is a picture of the new location with the old location shown in the inset.



This meant blocking off the old location with a piece of brass, and making a new wrapper for the smoke box. Then I used Al's exhaust tube idea with my petticoat. Here is a picture.

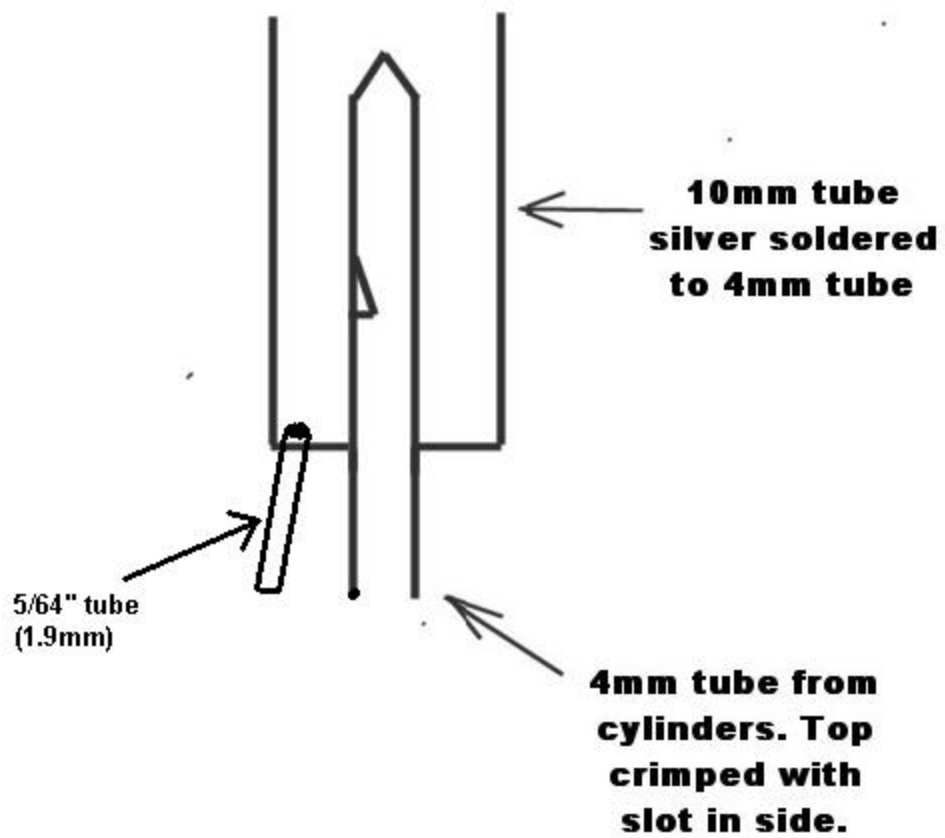


Just steamed her up, I think this will work out OK. Hard to tell on the bench.....I really need a track here. Thanks again for the comments and more later!
redbeard AKA Larry SA #1956

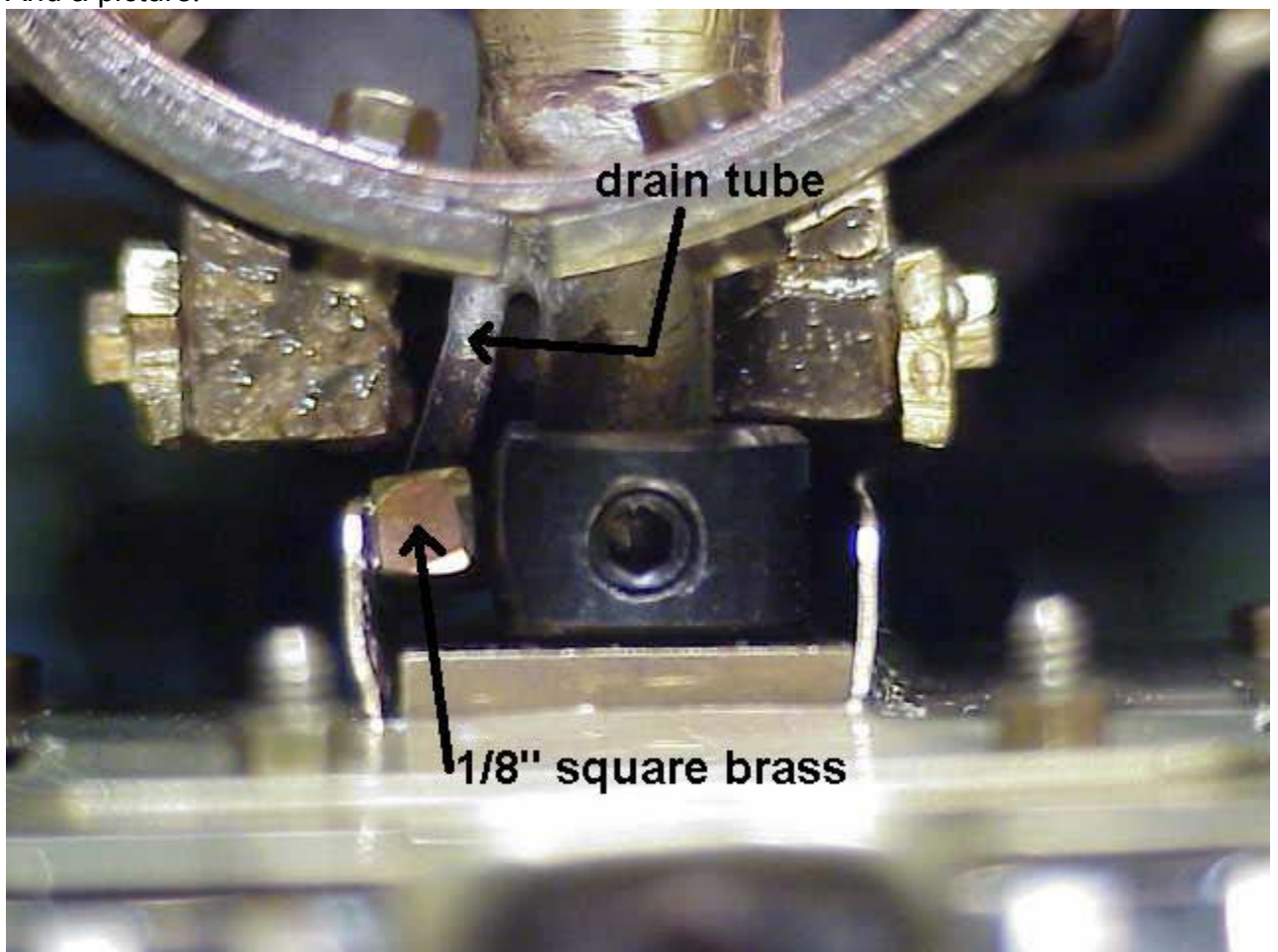
14 Apr 2008 06:21 PM

Hi everybody,

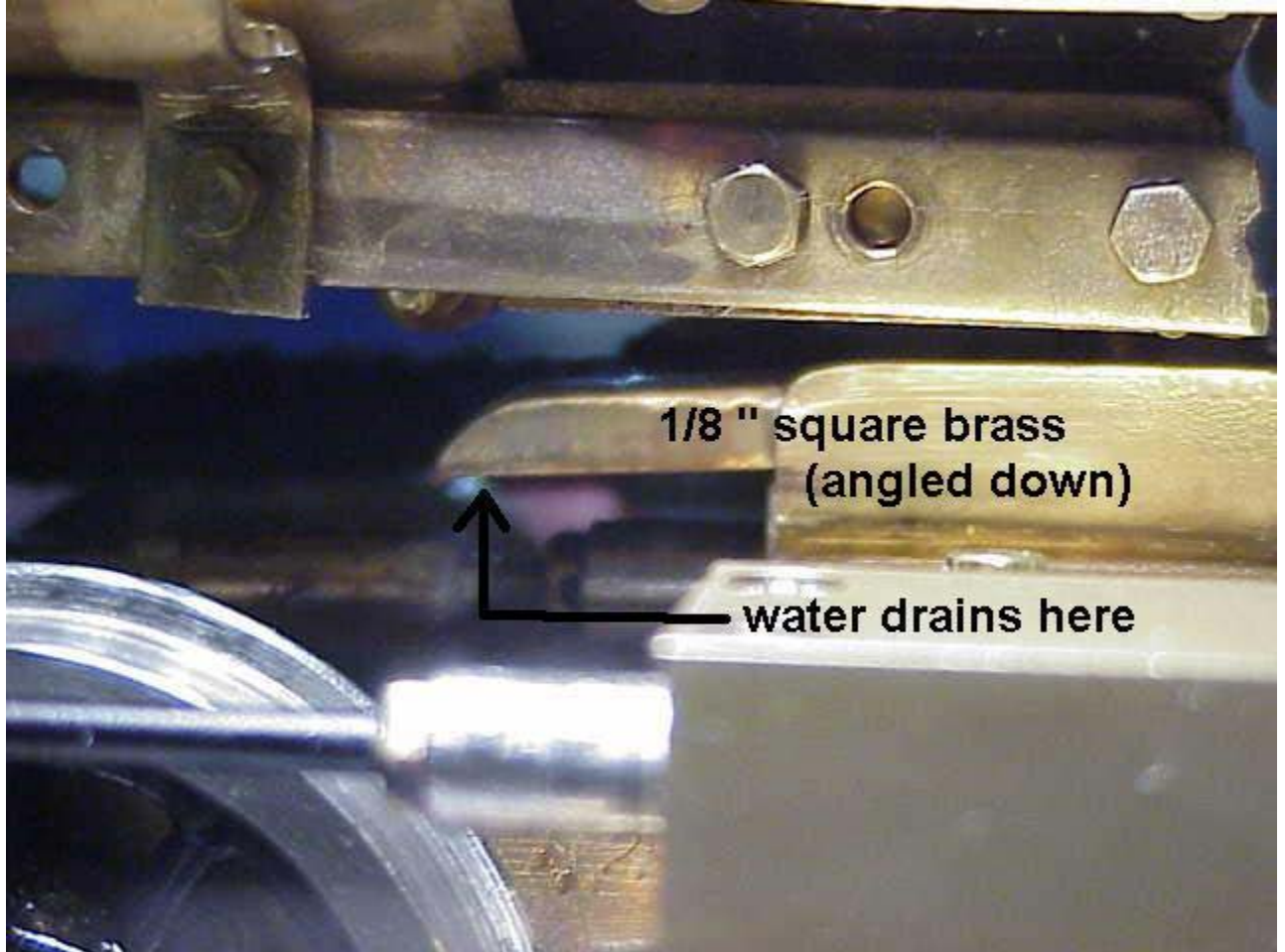
Added a small drain tube to the exhaust tube. Al, you said try things, well this REALLY quieted down the spits and pops even when first starting up. As I said in earlier post, I think the chuff is good. On rollers it is really hard to tell. I added the tube to your drawing here.



And a picture.



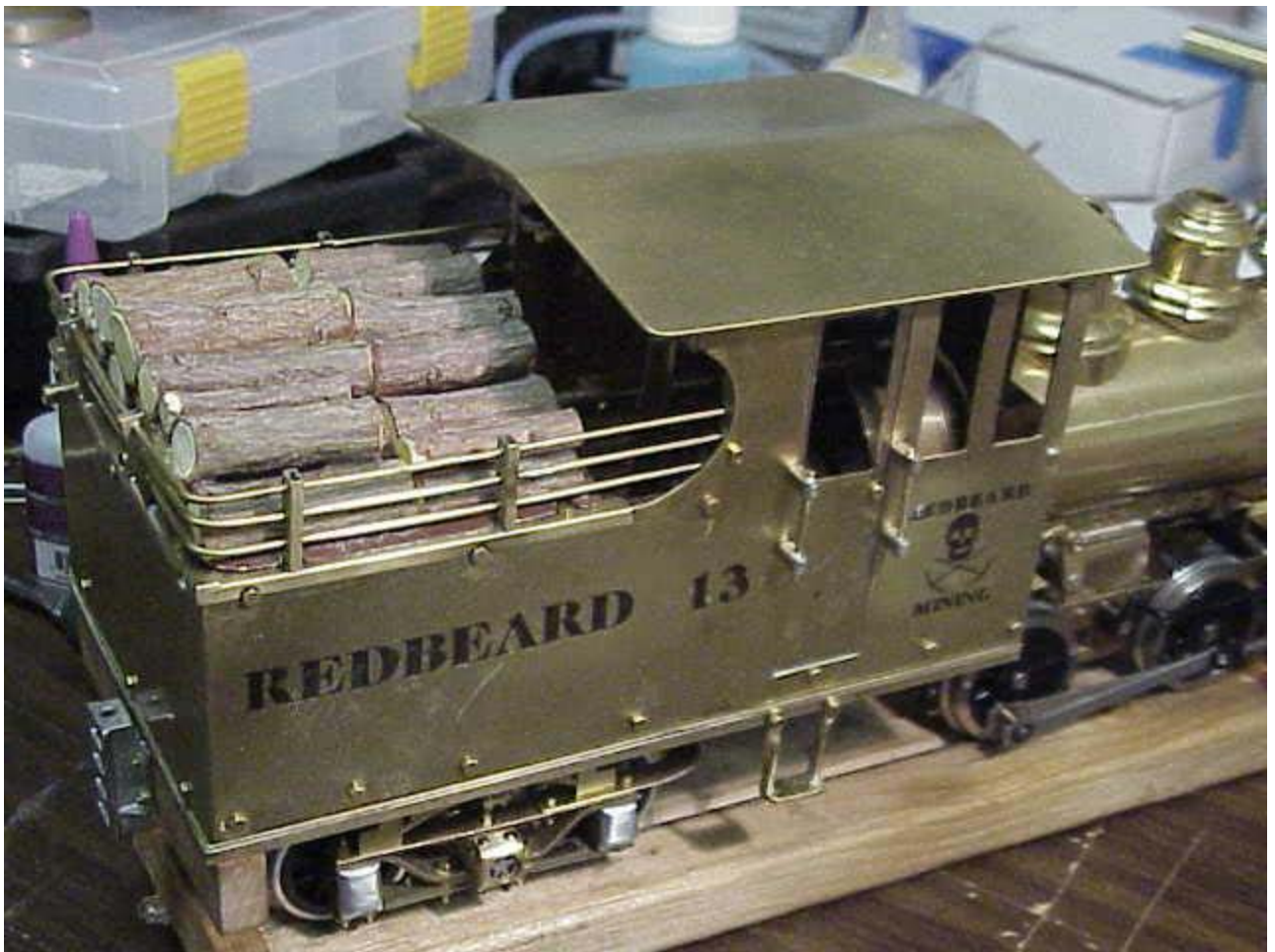
Instead of the condensate evaporating when the smoke box gets hot, I added a small drain tube to the bottom of the larger tube. I was able to solder a piece of 1/8" square brass to the inside of the cover I built to hide the Ruby reverser valve and copper tubes. The small tube drops into a hole in the top of the square tube and everything drips out on the middle of the track.



No more water on the drivers or on top of the locomotive ! Now maybe I am real close to painting her! More to come redbear AKA Larry SA #1956!

18 Apr 2008 10:02 AM

I got the wood load made for the tender section of the Mason. I finished it a couple of days ago, but I have been making some changes to my computer and was offline for a day or so. Anyway here is a picture of the wood load.



This was the last thing on my list of things to do before I disassemble the engine for painting. There are a few things that need to be done that were best put off till the disassembly begins. No big things, a lot of unfinished edges that need smoothing up. I am also going to modify a couple of things while they are out of the loco. I am also considering adding a sight glass to the back of the boiler. I'm not sure if it would be visible enough to be worth the effort. So she is soon to have color!

redbeard AKA Larry SA #1956

from Allan Cash 19 Apr 2008 05:35 PM

Larry,

glad the exhaust tube is working for you, I think half the fun is in working round these little problems and coming up with a solution - keeps the mind going!

I fitted a gauge glass to my Ruby boiler but there were a couple of problems and it has never been very reliable. Main thing to do is have a separate tapping into the boiler for the top glass fitting. I originally tapped into the end of the manifold but the way the manifold is fitted to the Ruby boiler with the hollow bolt, which has a very small steam passage, means that when the throttle is opened the easiest route for the steam is via the much larger gauge glass. This results in the throttle sucking all the water from the boiler and the loco not running very well!! As you suggest, the glass is not that easy to see inside an enclosed cab and I found it not much practical use.

I have recently fitted an electronic water level indicator to mine which lights up a red LED when the probe is uncovered so you know it is time for a water top up, mine is made in the UK but is similar to the Bill Ford system available in the US - the BF system can also include an electric pump which is triggered by the probe so the water level is taken care of automatically. Several people have posted on

this system and I think it is the way to go.

Looks like you are on the last lap now, guess you will have to think of another project soon!

Allan.

14 May 2008 10:13 AM

Hi Everybody!

I am still here! I have had a time with business in this economy and have not worked on the pirate loco very much. Took a little time this weekend and began the disassembly to prepare for painting. She sure doesn't look the same as a pile of parts! The box is full of labeled bags of screws to try and keep things straight.



Now I have to figure out which pieces need a bit more work, decide which pieces will be what color, clean and degrease everything, prepare surfaces, and paint everything. Then I will have a painted pile of parts!

More Later!

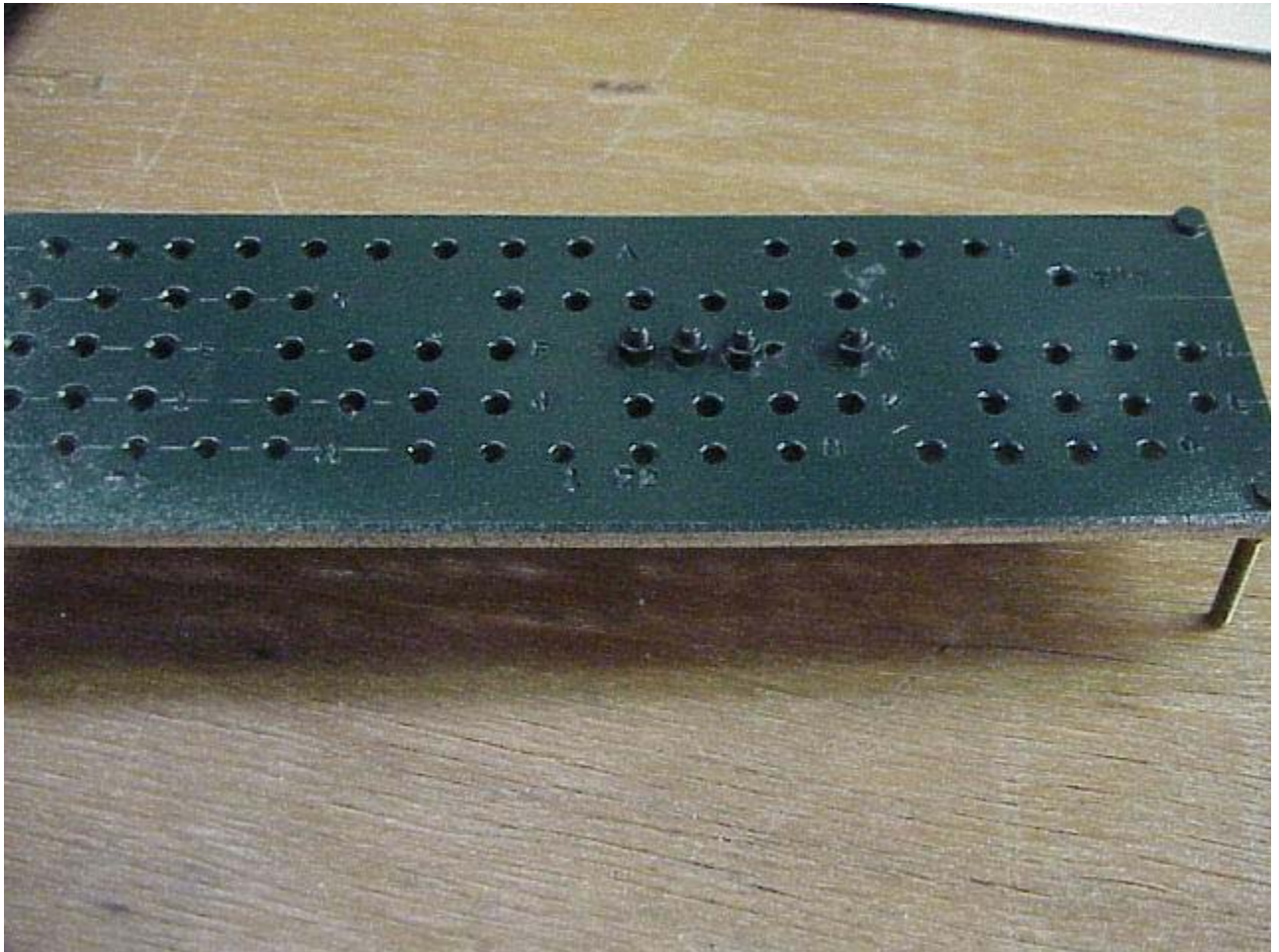
redbeard AKA Larry SA #1956

20 May 2008 12:58 PM

I have to admit, as I took the locomotive apart I thought how easy it would be to leave it in brass. But I really want to see it finished so here I go. First was to sort parts into groups based on the final color. Most parts will be Hunter Green, but there will be a few black parts, and the boiler jacket will be ????. Have the idea but not the name! And a small number of pieces will not be painted. Then I have to degrease (or de-steam oil) every thing. Next I will soak brass parts in white vinegar. Finally I will prime, let dry, color coat and bake.

OK Bruce, I am painting ALL the nuts and bolts! I made this plate to hold onto

them while painting and baking. This is the first group, very small group that is only painted on one side. These are the door knobs and they are polished brass. But the threads and nuts are painted to blend in with the inside of the cab. I made the plate large enough that I can do all of the green bolts in two batches. Then all of the black bolts can be done in one batch. Even so its a long process. So it may be a while before the next posting.
redbeard AKA Larry SA #1956



26 May 2008 06:32 AM
FINALLY !

The first major piece of the loco is now GREEN! Doesn't seem like much of a start, but it's the procedure that it represents. Now all the other parts can be done the same way.

redbeard AKA Larry SA#1956



26 May 2008 04:30 PM

Hello all,

Well here is the next batch of parts fresh out of the oven. This represents a full days work - cleaning, prepping, priming, painting, and baking. The next batch needs a little "body work" before paint so it will take a bit longer.

redbeard AKA Larry SA#1956

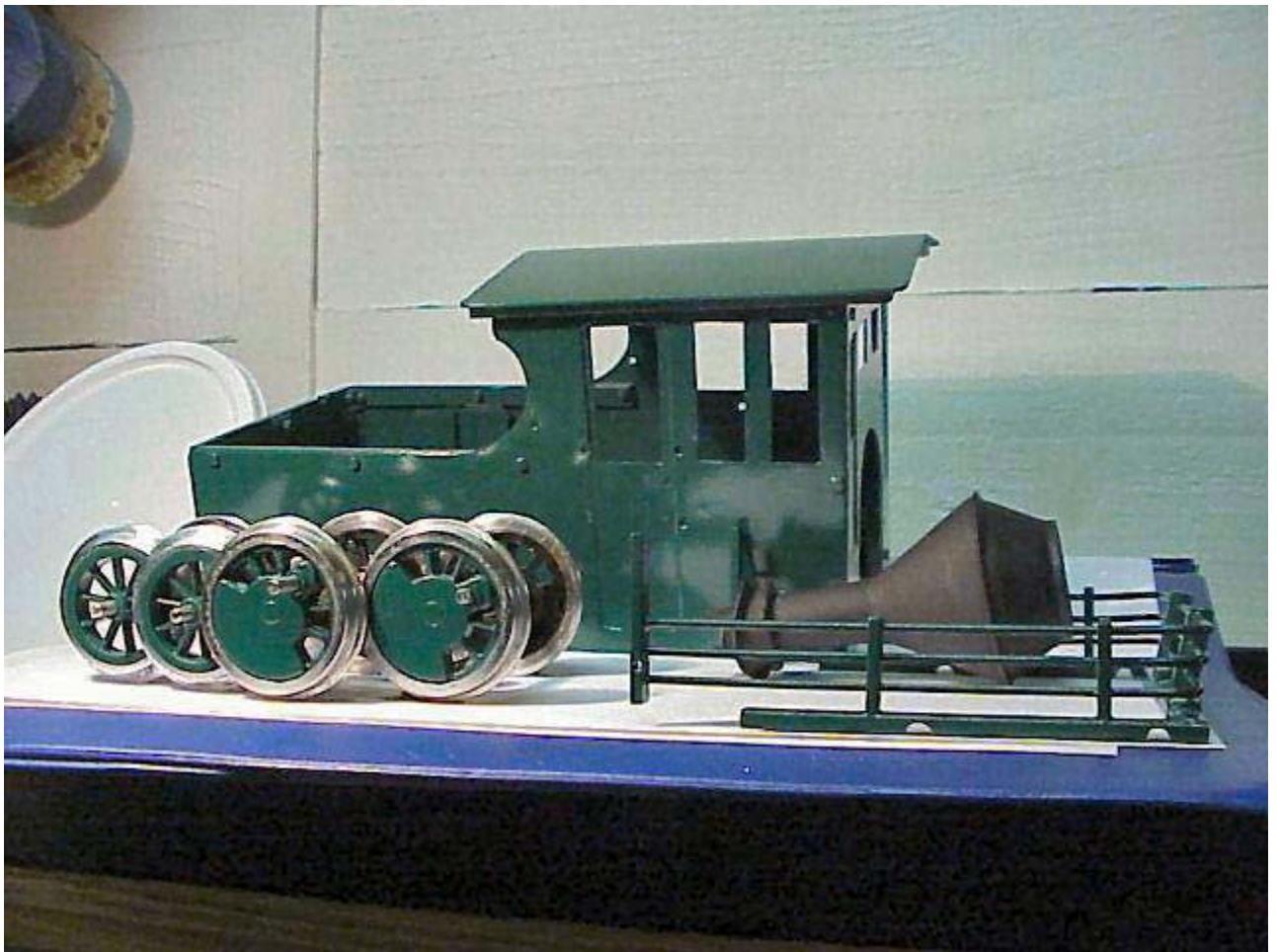


27 May 2008 03:13 PM

Hello all,

Well here is the next batch of parts fresh out of the oven. The first part that's not green.....the stack is flat black.

redbeard AKA Larry SA#1956



from Vance Bass 27 May 2008 08:07 PM
You're going to do that loco proud, Larry!

Vance
<http://www.nmia.com/~vrbass>

From modlmkr 28 May 2008 04:18 PM
Are these parts being power coated, or are you baking the paint? Could you give some details of your painting process?

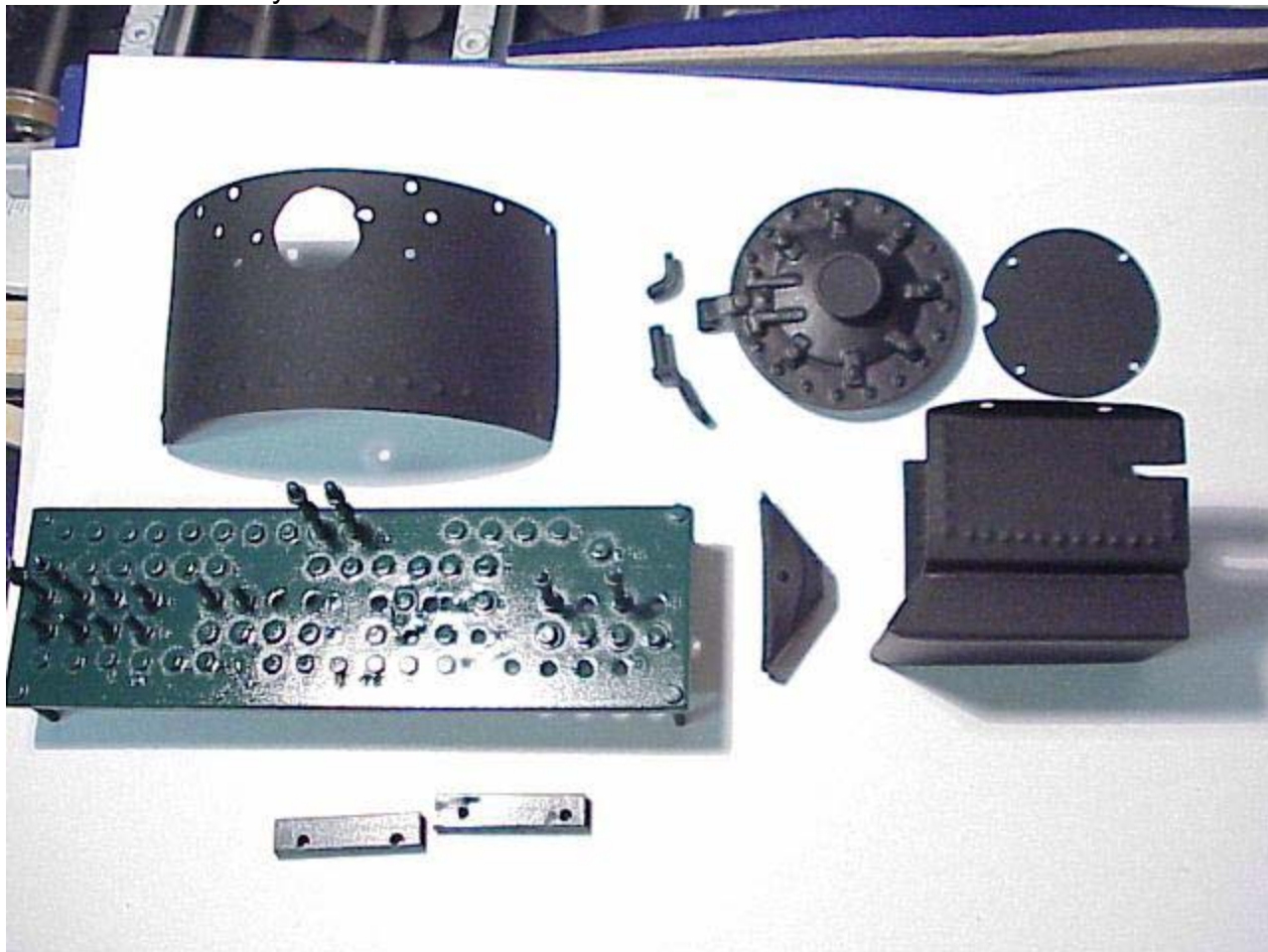
28 May 2008 08:23 PM
Hi modlmkr,

The bare brass pieces are scuffed with a scotch-brite pad during the fitting and soldering stage. Since the engine has been run a good bit there is a lot of cleaning to do. First I clean with plain old dish detergent and water. Then I scrub with a concentrated household degreaser.(right now I'm using ZEP) Rinse well. Then a dip in white vinegar, rinse and dry with clean towel. (and very clean hands!) I stack the parts on a sheet of aluminum and put a 100 watt light down over them for about 20 minutes. This insures no drops of water sneaking out as you paint. I am using regular Krylon spray cans. I prime one side, (grey primer) let it sit for 12 minutes, turn it over and prime the other side. After twelve minutes I spray a color coat. I use the same process to put on two coats of color. Then I bake the parts in a small kiln (I am a jeweler by trade) at 295 degrees Fahrenheit for two hours. I turn the oven off and let it cool down to room temperature before I open it. Sounds real good, but this is the first time I have painted brass so it will

be a while before I know anything about durability. The stack and smoke box are done the same way with Krylon flat black.
redbeard AKA Larry SA#1956

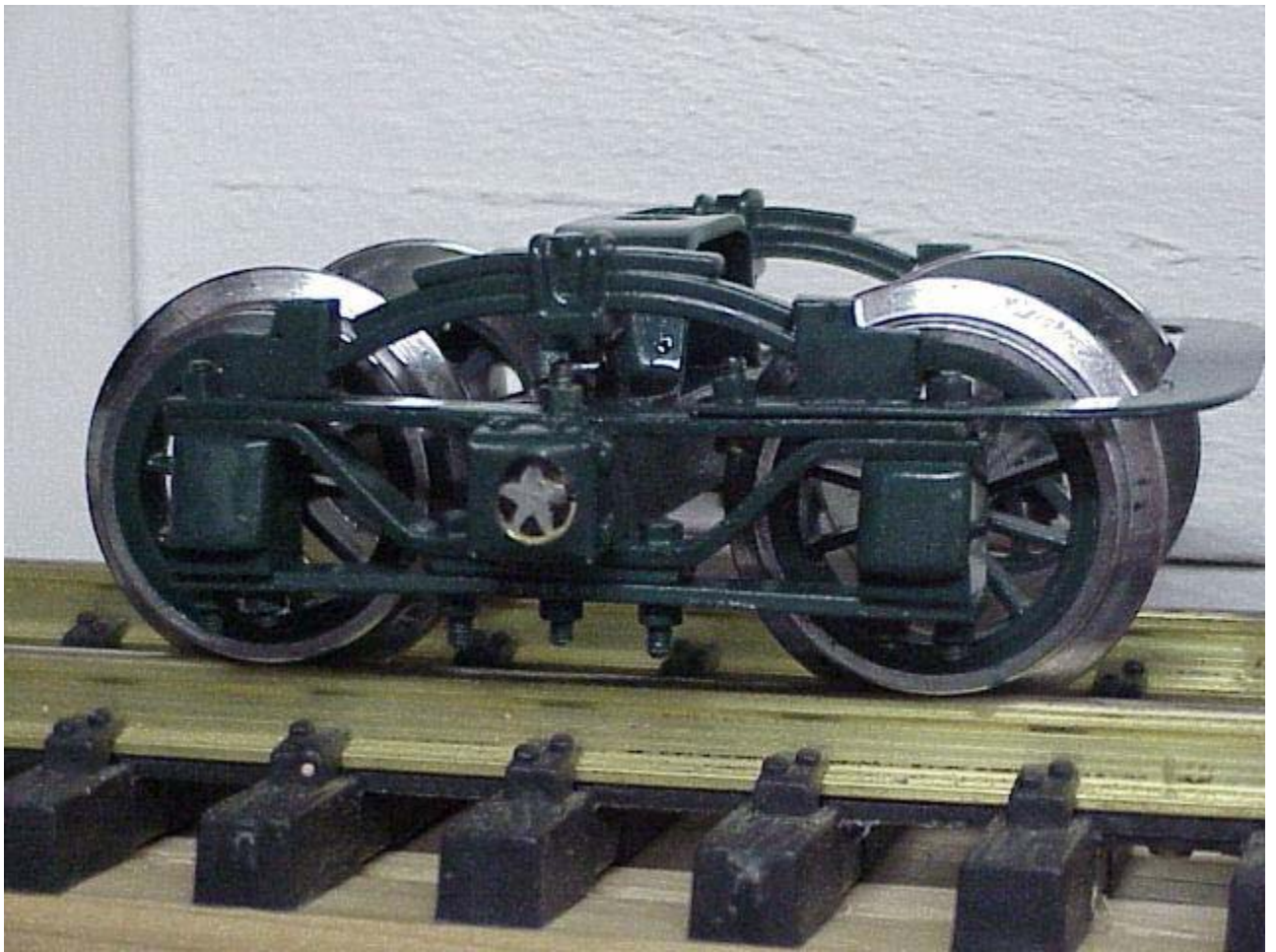
29 May 2008 05:25 PM

Today's batch of painted parts is mostly flat black. This is the smoke box door and hinges, smoke box wrapper, the ash box, the petticoat for the stack, a large batch of green bolts and a couple of spacer blocks. More to come!
redbeard AKA Larry SA #1956



01 Jun 2008 01:33 PM

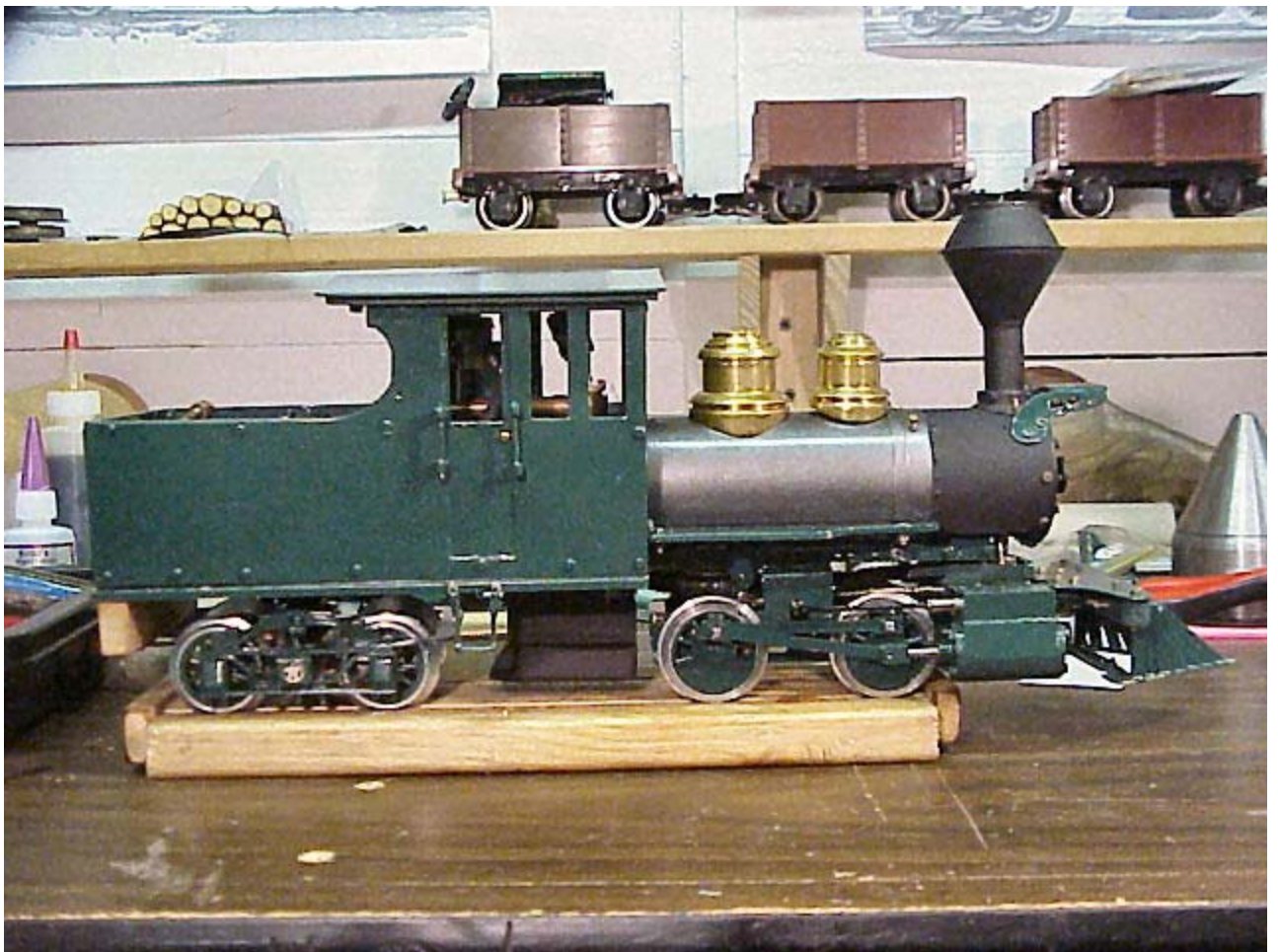
Wow! Getting access to my web space was tough! Anyway I will try and post a single picture now. The re-assembly HAS BEGUN!
redbeard AKA Larry SA #1956



17 Jun 2008 09:18 PM

I'm Back!

I have been working on the road with no computer to post with, but I had the pirate loco with me to work on the reassembly. Here is where I am right now.



I am pushing myself so I can take her to a show in Tallahassee, FL this weekend.
So far so good!
redbeard AKA Larry SA #1956

from Dwight Ennis 18 Jun 2008 12:48 AM
She look GREAT Larry!!!

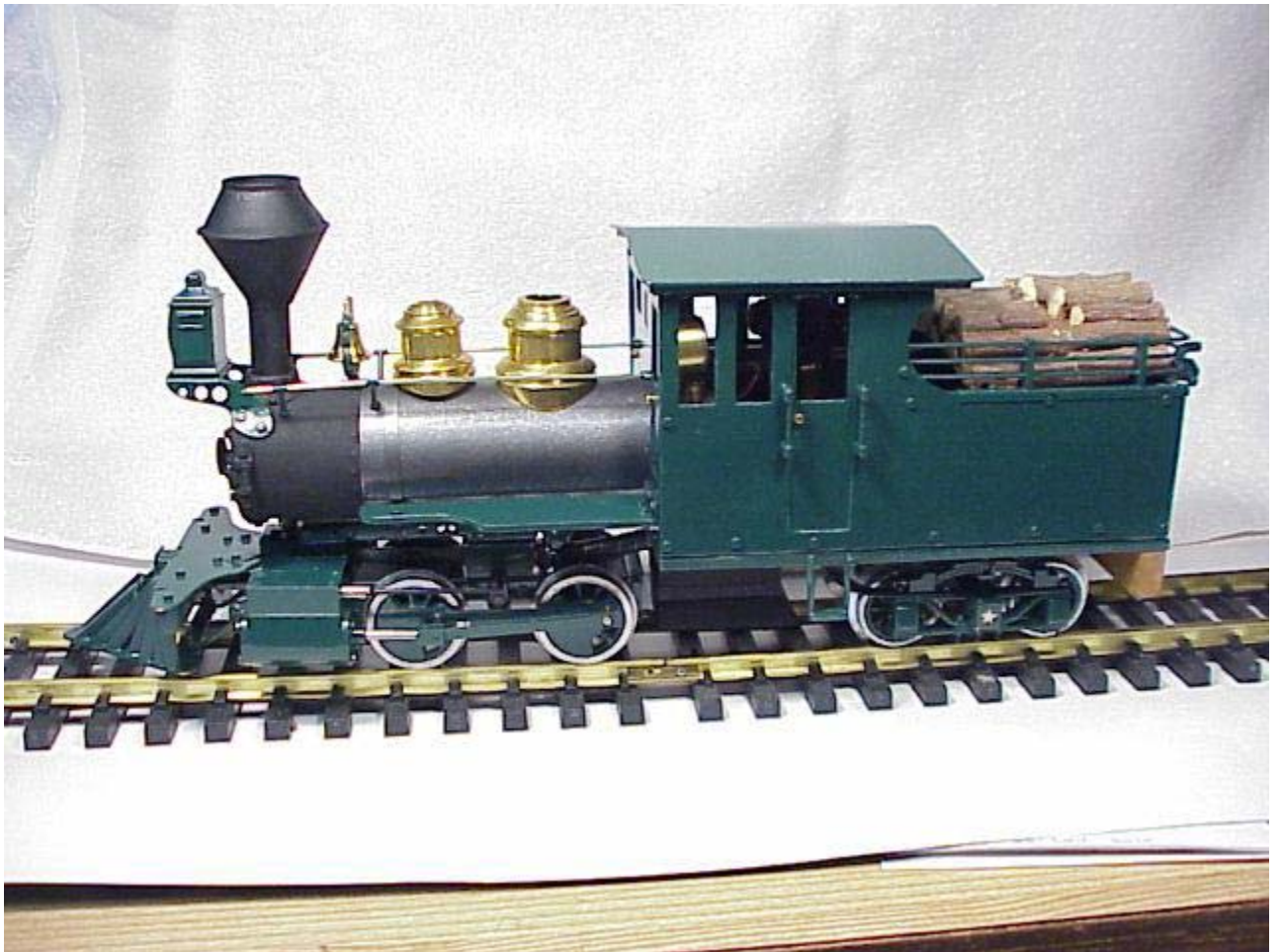
Dwight Ennis
Milpitas, CA
SA #21

<http://www.SantaCruzLumberCo.com>

18 Jun 2008 07:23 PM

Oh Yeah!

I have all the pieces back on the loco and none left over! I guess that means it is finished.....well not quite- no lettering yet. But I am going to take the pirate loco to Tallahassee whether it is lettered or not. Here are some pictures of "my Ruby!"





Here I come Tallahassee club!

redbeard AKA Larry Newman SA #1956

19 Jun 2008 06:33 AM

Talk about the last minute!

The logos are on and I am packing everything to head for Tallahassee.



I hope to get pictures of the pirates doing their thing in Tallahassee!

redbeard AKA Larry Newman SA #1956

22 Jun 2008 06:40 PM

The pirates ran the locomotive this weekend at the Tallahassee Model Railroad Show this weekend. The show was great and all that came had to enjoy the large variety of scales and other railroad items. I know I did! Thank you Big Bend Model Railroad Association for putting on a great show and inviting me to show off I mean run my locomotive. Special thanks to Harold, Mike, and Will for letting me pull their cars. I guess I need to start working on my own rolling stock. Thanks Bill, Bob, Mike, Sal, and Will for inviting me over. I had a GREAT time! Here are a couple of pictures of the pirates pulling some of Harold Dunsford's beautiful work cars.



27 Jun 2008 03:43 PM

Hello everybody!

As much as I have enjoyed this post, this will be my last post on this locomotive build. I am FINISHED with my first locomotive!! AND it runs well!

So I am going to post this today and I will be back soon with my next addition to the pirate railroad. Since I did not have a high speed connection when I posted the movie from Diamondhead, I only posted part of it to you-tube. Here is the entire video from Diamondhead, Mississippi in January. Please note that it is fairly long.

<http://www.youtube.com/watch?v=ISCfgtrO4p4>

Many thanks to Jim Sanders for staying up late to record this and then put it on a cd for me. Lots and lots of thanks to all the good friends I have met through building this locomotive. You are all responsible for infecting me with live steam! (And I couldn't be happier!) Here is a final picture of my Ruby to Mason Bogie conversion.



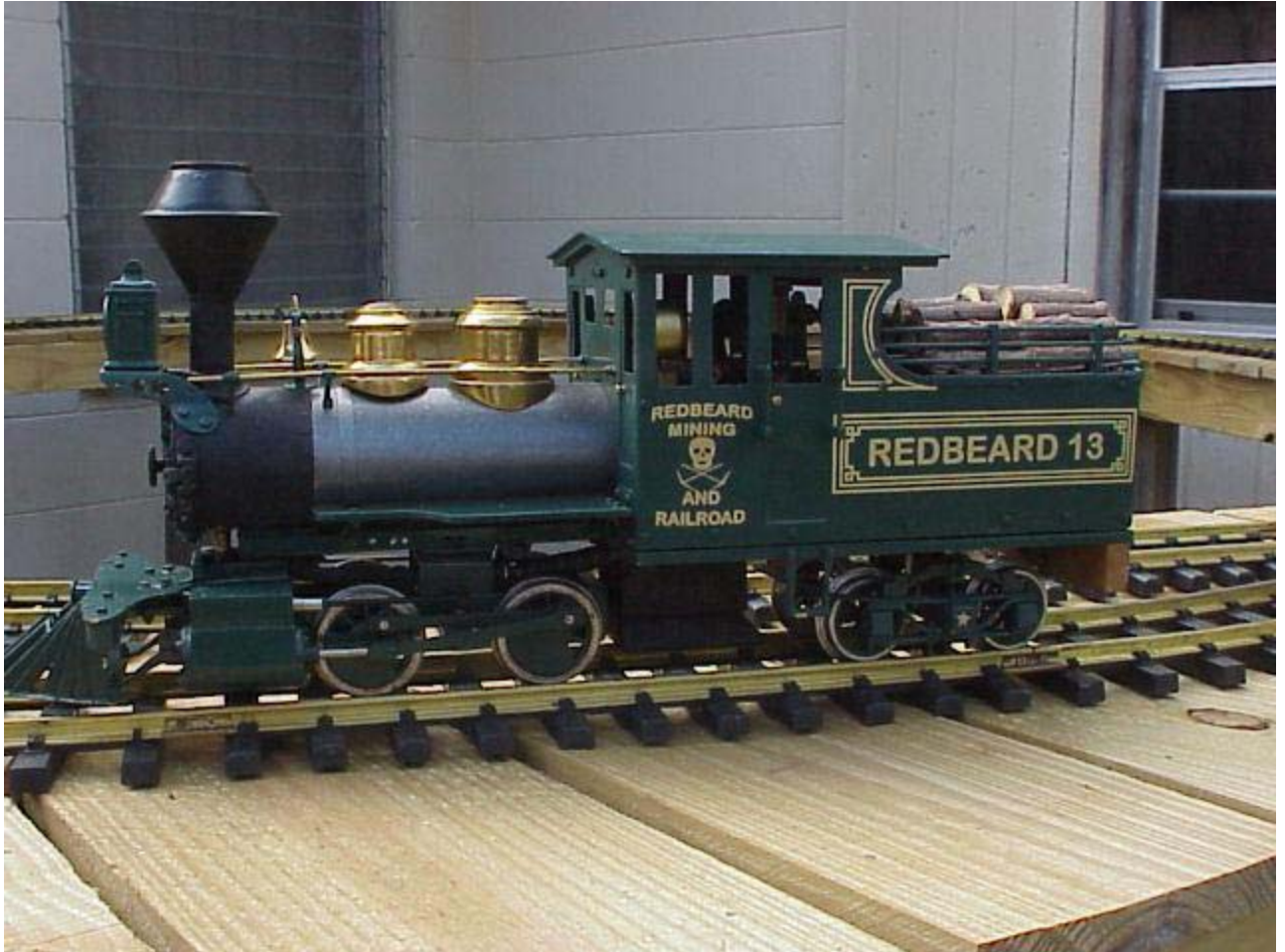
I am sure that I may change a few things in the future and I may post a picture or two if I change anything big, but it's time for me to move on to the next steamer. To all the Diamondhead crowd... I'll see you in 2009 and I will bring the finished Mason to run. I have decided that my "weathering" process is going to be running it until it looks weathered. Thanks for all the online suggestions and answers to questions. Talk to you all soon!

redbeard AKA Larry Newman SA#1956

06 Mar 2009 07:39 PM

Ha!

Fooled you! Bet you thought you wouldn't see this post again! I finally decided to see about some "real" decals for the Mason. So I e-mailed Stan Cedarleaf and asked him a bunch of questions, got a bunch of answers by e-mail, then a phone call and a very thorough tutorial on how to do what I wanted. Man, what a nice guy! THANK YOU Stan! So here are the new decals on the Mason, what a difference!



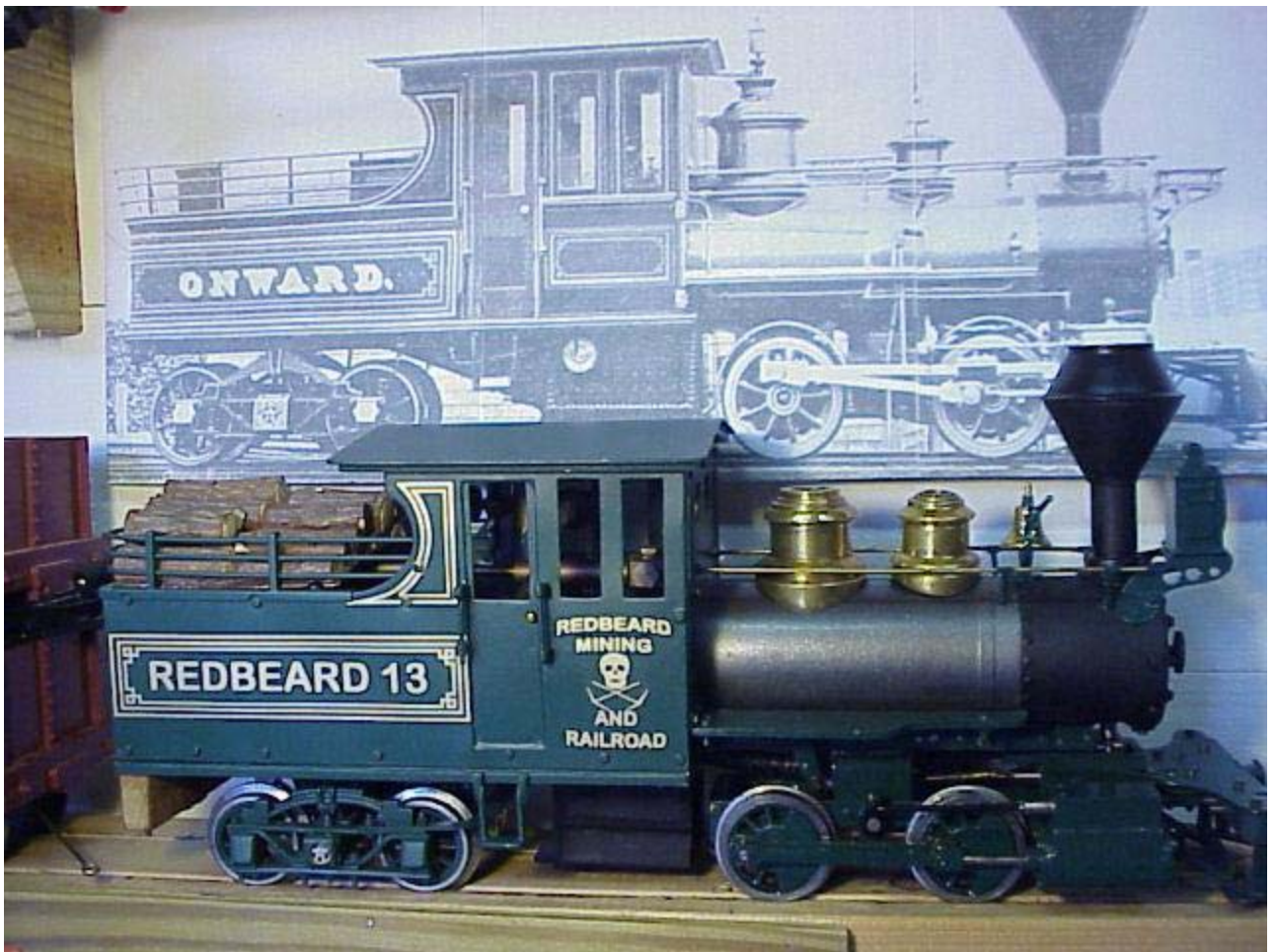


I can't tell you guys how helpful Stan was, my only regret is that I did not do this when I first painted the engine. And I also have new decals for the railtruck.
(installed soon I hope)
Thanks Stan!

redbeard AKA Larry Newman SA # 1956

07 Mar 2009 01:36 PM

And one more in front of a picture of the prototype.



redbeard AKA Larry Newman SA #1956

from Carl Weaver 08 Mar 2009 08:37 AM
Larry,
Your most recent picture says it all.
What a beauty !!!

Carl Weaver
SA#138
Big Bear Steam Railway