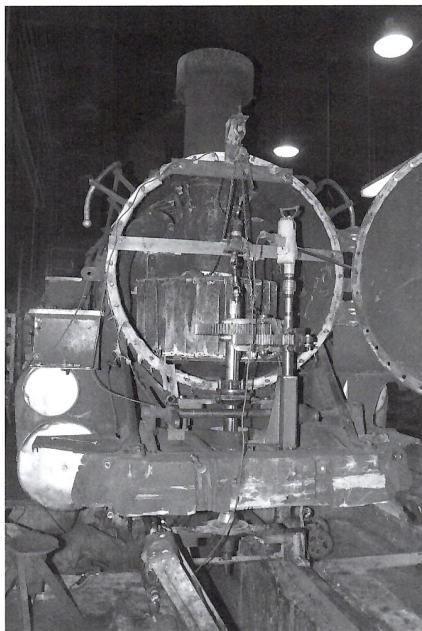


Winter Shop Work on the Cumbres and Toltec Scenic Railroad, 2005 - 2006

by Steve Montano
Photographs by Tom Cardin

When the 2005 season ended at the Cumbres and Toltec Scenic Railroad, plans for the winter work on locomotives 484, 487, and 488 were already in place. We winterized all three locomotives, all track equipment, and put things away for the winter months to come. In October a lot of things changed in management, but the Chama shop crew continued working. We were laid off on November 1st. After a lot of talking with the Commission of the importance of keeping the crew working we went back to work a week later. All has been going well in the shop since then. We have been doing a lot of tear down and inspecting of various parts on the locomotives. There is minimal wear on the parts we rebuilt, so there is proof that rebuilding is better than repairing.



Boring out the pilot truck bearing (Bissell post bearing) using shop-built boring fixture.

We are also working on a couple of special projects. We found some unusual wear on the lead trucks and after further inspection we discovered that the Bissell post¹ and sleeves were in very bad shape. For those not familiar with locomotive design, the Bissell post assembly steers the locomotive. We built a fixture to mount a boring bar and repaired the hole. We made a new sleeve and machined the Bissell post. This repair will cut down on wear and cut down on costly derailments. As far as I know, this part of the locomotives has never been repaired.

Another special project is a quartering fixture that we built. We found that some of the drivers are out of quarter. We found no reason why we could not do this job ourselves. The quartering fixture has been set up on our large horizontal mill. We will soon use it for the first time. We are also working on making a new main driver axle for the 484.

With all that we are doing, such as the special fixtures described above, we will be capable of doing all the work we need right here in our own shop. This also will keep a few more of our people working. This sums up what the shop crew in Chama has been doing. We assure everyone that we will have three locomotives ready to roll on opening day.

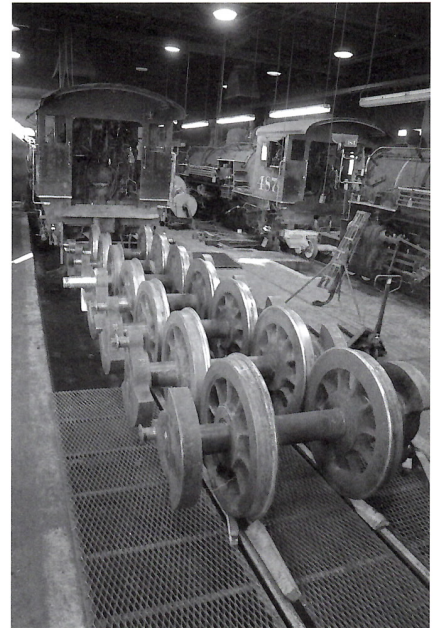
Steve Montano is Chama Shop Foreman

¹ Editor's Note:

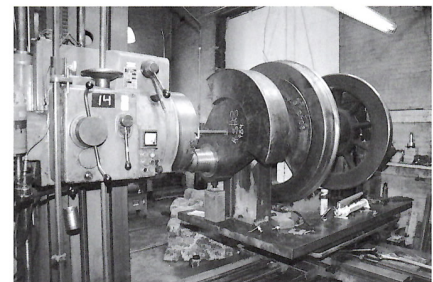
Early locomotives had four wheel leading trucks. The swivel pins were located at the centers of the trucks, similar to freight car trucks.

While these trucks were an improvement over the rigidly mounted leading wheels of very early locomotives, they were blamed for many derailments due to inability to properly lead the locomotive into curves.

Levi Bissell proposed moving the swivel pin behind the truck by extending the truck frame to the rear. This shortened the rigid wheelbase of



Drivers on shop track awaiting checking.



Drivers mounted on horizontal mill for check of quartering.

the locomotive and also allowed the truck to better follow a curve. Bissell patented his design on August 4, 1857 (No. 17913).

Bissell was also responsible for the first two-wheel, or pony, leading trucks which he patented in 1858.

For more information on the design of locomotive trucks see *American Locomotives, An Engineering History, 1830 - 1880* by John H. White, Jr., The John Hopkins Press, 1968

A New Caboose for the Cumbres and Toltec: Conversion of Car 05635

by Bob Tully and David Lee
Photographs by Tom Cardin

The last issue of the Dispatch, Winter, 2005, reported on the progress that was made during the 2005 work sessions on conversion of stock car 05635 to a caboose. This project is a unique effort for the Friends and deserves additional explanation. The uniqueness of this project is that it is not a restoration, as all other work on cars has been. Rather, the Friends are converting an unusable car into a useful caboose that will fill specific needs for the railroad. In doing this, attention is being given to assuring that the resulting caboose generally follows the designs in use by the D&RG and will thus be credible in a train.

In 1975 the C&TSRR converted 30 foot stock car 05635, originally built in 1902 and rebuilt for heavier loads in 1926, to a work and passenger caboose. The side door areas were filled in, the interior was enclosed and doors put into each end. However, on the outside all horizontal boards were removed leaving the frame exposed. This unit served "the new railroad" for nearly 25 years when it was removed from service because of split,



Terry Boardman grinds flash from the steel brackets that attach the caboose structure to the new steel center sills.



John Sutkus fits the first piece of sheathing on the cupola.

broken, and decaying frame timbers, especially the outside sills.

In 2004 the Friends, supported by the RGRPC, decided to rebuild this car into an old-time-looking three-window caboose with rounded roof and cupola with windows on all sides. This is similar to the original D&RG cabooses of the 1920's, some of which were converted from boxcars.

The all wood construction of the car would severely limit its use by the railroad. Present-day rules would require that it always be at the end of the train. This requirement would complicate its use at locations such as Osier, requiring additional switching movements.

Thus, it was decided to replace the two wood center sills with steel beams, but the intermediate, outside, and end sills would remain wood. This will allow increased flexibility in use of the car. It will be able to be used within a steel car consist, not necessarily at the end of the train.

Art Randall developed specifications and a design for rectangular steel tubes to go within the space envelope of the original two timber center sills.

All other parts of the car are fastened to these as they were with the wood sills.

The specific work that was accomplished on the conversion has been described in the 2004 and 2005 issues of the Dispatch. We are looking forward to completion of this ambitious project in 2006, if possible.

What remains to be done? Framing for the ends, window sills, windows, doors, and the remaining siding as well as all fascia must be installed. The sub-floor needs to be planed and sanded and oak flooring installed. Interior siding of hickory will be installed. Interior framing and walls for the water closet area and cupola benches and cabinets must be constructed. Interior sealing and polyurethane floor, wall and ceiling finish coatings will be applied. Exterior painting must be completed. Various door, window and wall trim must be installed. The stove, fresh water and

Continued on page 9



Michael Camara drives "the golden nail." Weathertight for the winter, the caboose will be completed during the 2006 work sessions.

Interpretation Projects for 2006

At Cumbres: The setting of concrete markers at the locations of the historic station, bunkhouse, water tank and covered turntable was one of the several interpretation plan goals for the Cumbres Pass site started last year. In 2004 we published a Cumbres Walking Tour brochure that describes the present structures and these four significant ones from the past. The markers assist visitors to find those locations and visualize the structures.

An intermediate goal between the brochure and installation of interpretive exhibits in the section house is an information kiosk. The location that has been chosen is near the tree in the parking lot so that the historic vista of the trains passing by the section house and water spout will be preserved. The display panels will include a map of the site, information on the history of the railroad, current operations, snow-fall at the Pass and snow fighting equipment, the Pass as staging area for freight trains going east, and the preservation activities of the Friends.

If you have skills in concrete and rock masonry or wood and pole construction, consider signing up for assisting in the building of the Kiosk at Cumbres, project C17, scheduled for sessions C and D.

At Chama: A Friends' crew will rehabilitate the interior of the Gov. Richardson (formerly Hinman) coach, retaining its Victorian look. This car will house an interpretive display to introduce visitors to the railroad and the railroad yard in Chama. The subjects presented will include: trails and roads between the Chama Valley and the San Luis Valley, information about the building of the line and narrow gauge, the preservation by the states, the activities of the Friends, movies made at the railroad, historic buildings and equipment on view in the Chama yard, and images of the scenic beauty the railroad passes through. Maintenance on the Richardson car will be accomplished during June, project CC24.

The same display, with a panel about the site of the Antonito yard, will be installed in the Antonito depot.

Also at Chama, work will continue on conversion of concession car 451 back to its original 1926 conformation as boxcar 3533. Started last year, this project will be completed during 2006 sessions C and D, project CC12. This car is earmarked for exhibits. The theme of the displays will be freight. We will use a combination of an Sn3 model freight consist, maps, photos, drawings, simulated freight containers, typical cargo, and simulated shipping documents to tell the story of the commodities transported on the railroad and the communities in the Chama and San Luis Valleys that were served.

Another exciting project is the construction and furnishing of a telegraph display in the Chama depot. The shelf, which was present at the east window of the waiting room to hold the telegraph key, sounder, receiver and other equipment, will be replaced. The area will be protected with a glass partition as the display will contain a working telegraph key and other tools and artifacts from bygone years. We have a need for a small, old office safe; D&RG train orders, bills of lading, an oil lamp for the deck, green

eye shade and a variety of items used by the station agent. Still another project is the replacement of at least a dozen missing telegraph/telephone poles and stringing new number nine line through the Chama yard. Both of these efforts are scheduled for August. We need several volunteers to sign up for pole setting work, project CH22

At Antonito: A new project which is starting with a detailed inspection and survey this year is the restoration of RPO express and baggage car 054. This will be accomplished over the next few years at the Friends new car restoration facility in Antonito.

We are anxious to obtain interior furnishing and items used in an RPO car. This includes cast lamp brackets, oil lamps, railroad type coal stoves, iron safe and a heavy locking express box. Leather and canvas mail bags are needed (if someone could provide a sample we would sew re-creations). We could also use mail bag hooks found in the car, an old water cooler and wash stand, and an appropriate post office-type desk.

Want to help? If you have skills in masonry or woodworking, we'd like to have you sign up for the crews to build the kiosk at Cumbres or work on the



Terri Shaw and Dick Ross discussing photos for interpretation projects over a table in the Chama Depot during work session E, last August. (Andy Ross)

car projects. Please contact Bob Tully at bobtully@att.net or phone 303-428-2322. Also contact Bob Tully if you have photos of the interior of a working narrow gauge RPO car or historic fixtures, equipment, and supplies for an RPO unit or the telegraphy area of a Depot.

Please contact Terri Shaw at terrishaw1@verizon.net or 909-621-5140 if you'd like to involve yourself in one of the following:

- Researching and securing permission to use historic photos.
- Researching, taking, or selecting scenic photos.
- Constructing models for the freight consist.
- Helping us draw maps.
- Supplying items of freight that might have been shipped in the 1930s or 40s as listed above.
- Researching manufacturers' packaging graphics for goods in the 1930s and 40s.
- Designing and reproducing packaging graphics on containers and shipping crates.

— Terri Shaw and Bob Tully

New Caboose (continued from page 7)

black water storage tanks, toilet, and other fixtures must be installed. All end railing, ladders, grab irons, brake staff, and other appliances remain to be installed. Chairs and benches will be installed. Finally, leaf spring caboose trucks will be constructed.

When complete the C&TSRR will have a useful caboose, meeting modern standards, but retaining the overall appearance of a D&RG caboose of the 1920s. Unlike the typical interior green color of the historic work caboose our new passenger unit, available for charter and special trains, will be a "varnish car." Most of the interior hardwood floor, siding and trim, as well as the knotty pine ceiling will have a clear protective finish so the beautiful colors and grains of the several species of wood can be enjoyed, together with the tremendous splendors along the line. This project is an excellent example of the ability of the Friends to undertake complex projects requiring a wide variety of engineering, mechanical, and craft skills.

Bob Tully is a member of the Friends' Board of Directors and Chairman of the Project Committee

Left or Right, East or West

A car usually remains in one location during a work session, and may remain in that location through several work sessions or even over more than one year. With this lack of movement it is easy to refer to the sides of a car as the east side or the west side. On occasion this terminology has found its way into the Dispatch. Is there a better way to identify the sides of a railroad car? The February, 2006 issue of *Model Railroader*, in its Information Desk column, offers this answer.

Car ends are designated as A and B. B stands for brake and is the end with the brake wheel. A does not stand for anything other than it is not the B end. If you stand at the B end, looking toward the A end, the left side of the car will be on your left and the right side on your right. As we begin our 2006 projects, let us try to adopt this nomenclature. It will make the work session reports more understandable, especially to those who have not seen the placement of the cars in the yard.

— David Lee



This team is working on the car's left side, August 5, 2002. (David Lee)

From the Editor

We are looking for new authors and contributors for the C&TS Dispatch. Do you have a story to tell about a narrow gauge adventure? Have you been engaged in historical research on narrow gauge railroads or the communities they served? Do you have information on current railroad preservation activities? Do you have photographs that you would like to share with other Friends members?

Articles, long or short, are always welcome. If you just have a concept, we can help put it together. Let me know if you have something you would like to share with your fellow members.

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leedavidg@msn.com