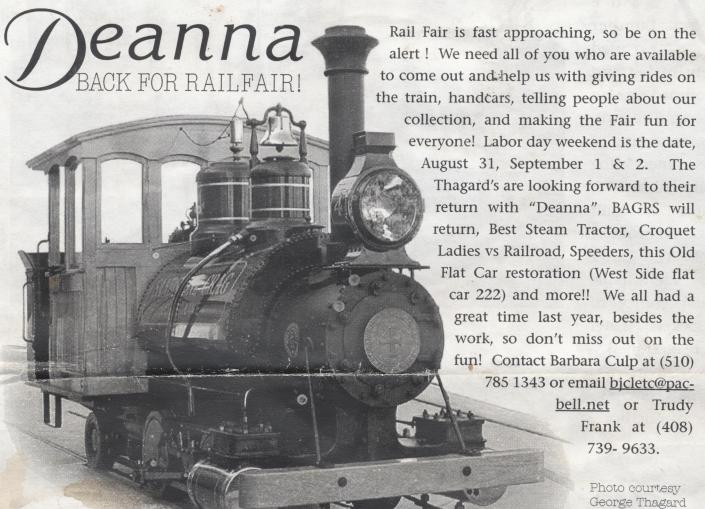
CARTER NARROW GAUGE CHRONICLES

THE NEWSLETTER OF THE SOCIETY FOR THE PRESERVATION OF CARTER RAILROAD RESOURCES



FLATCARS "F" US

Flatcars are the most basic of freight cars. Most early California narrow gauge lines had only flatcars and boxcars. It was common to add various, usually temporary structures to flatcars for specialized service, including short sides to make

them into gondolas to carry dirt or coal, tall slatted sides to convert them into stock cars, iron or wood tanks for water and oil, or seats and sides, and sometimes roofs for use in picnic trains. At Ardenwood we now have four flatcars, with fragments

from several more. With the arrival of West Side Lumber Co. 222, our current restoration project we now can show the range of wooden flatcar development in California from the 1880 to 1950. This issue is devoted to SPCRR flatcars!

Summer 2002

A History of our

he West Side Lumber Co used a variety of log and other railroad cars on its railroad. The earliest cars, consisting of 80 "disconnect" log cars followed by 16, 24' flatcars all built by the Carter brothers in 1899. The Carter cars are identifiable by the presence of stake pockets. Later cars were built by I. S. Hammond's California Car Works (builder of our horse



Above: West Side Lumber about 1910. Photo from Russ Simpson collection.

Below: West Side Lumber train nearing Tuolumne in 1960. Photo by Jack MacGregor

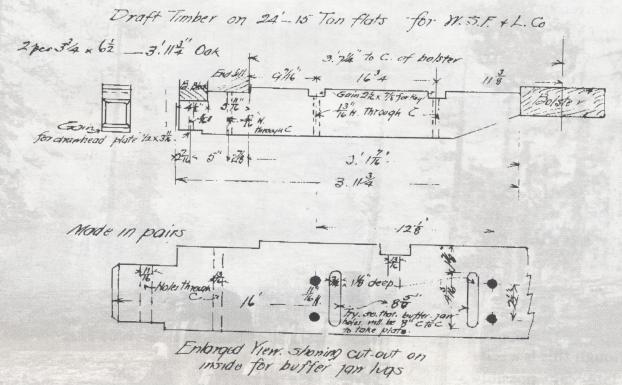
car, Oakland Railroad 12) and by the West Side's own shop forces.



The disconnect log cars were not very successful, and were sold in 1903. The line now relied on approximately 150, 24' flatcars. West Side did experiment with other styles of log cars, purchasing a few Russel "pattern 40 cars" in 1902, and 12, 4-bunk Pacific Car and Foundry cars in 1917. Neither style of car replaced the basic 24' flatcar in logging service. By 1930 there were 275 logging flatcars in use on the line.

There are two styles of flatcars on the line. The earlier cars have side sills which are larger

Jewest Flatcar HEES



Above: Original drawings of oak draft timbers for Carter Bros. West Side Flatcars, 1898. Courtesy Ken Ruble.

than the end beams, and wrap under the end beam, much like Carter built North Shore 1725 and Holman built D&C 64 in our collection. The later cars have side sills which are the same height as the end beam, and end flush with into the end beam. Car 222, built in 1928, is of this second style. All of these cars were probably substantially rebuilt many times between 1910 and 1959.

In 1940 the West Side Lumber Co. bought 99 skeleton (Length) log cars, along with other equipment from the Swayne Lumber Co., reducing the flatcars to secondary status. The West Side shop then rebuilt the older Pacific Car & Foundry cars to match, and built an additional cars until they had 170 of these cars.

With the arrival of the new, heavier skeleton cars, most of the flatcars were displaced from logging service. A few flats received log bunks,

others received additional decking, to carry heavy equipment such as donkey engines and caterpillar tractors, and a few received side boards.

According to Mallory Ferrell, car 222 was a one of 45 flatcars remaining on the West Side property in 1966. Car 222 was a "basic" flatcar, without log bunks, or additional decking to handle various logging equipment. As such it had no stake pockets, and is equipped with link and pin couplers, air brakes. The car was probably used in utility service after 1940, carrying railroad ties, and other bulk cargo in company service.

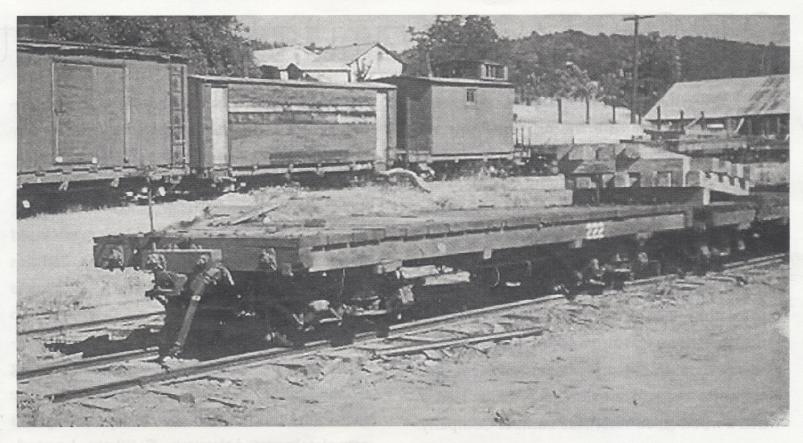
As we worked to disassemble this car, we were surprised to find that there was only one set of nail holes in the side sills, strongly suggesting the car was never re-decked (flatcar decks don't last very long, and it is typical to find as many as three sets of nail holes in the sills). The car was

built with malleable rather than cast washers, again unexpected, suggesting a very late rebuild, and finally, the draft timbers were reinforced with steel plates, a relatively modern, probably post 1940 Our observaupgrade. tions were proven correct when we located a photo taken in 1959, showing a stencil, "59" meaning the car had been rebuilt in 1959, only 2 years before the West Side stopped operations.

Even though this is a relatively late car, possibly even younger than our Plymouth DL 2 locomotive, it still fits well into our collection. It is still a wooden flatcar, and is of a technology that Thomas and Martin Carter would have understood. It is narrow gauge, equipped with link and pin couplers, and is compatible with our railroad and other cars. In many ways, this car proves the viability of the concept of wooden railroad cars operating over narrow gauge. It is simple, cheap to build and rebuild, yet

Right: West Side 1st generation 24 foot flatcar - similar to 222. (Not to scale.) Courtesy of Russ Simpson.





West Side Flatcar 222 pictured in 1959 (above), and in 1961 (below). Photos courtesy Russ Simpson

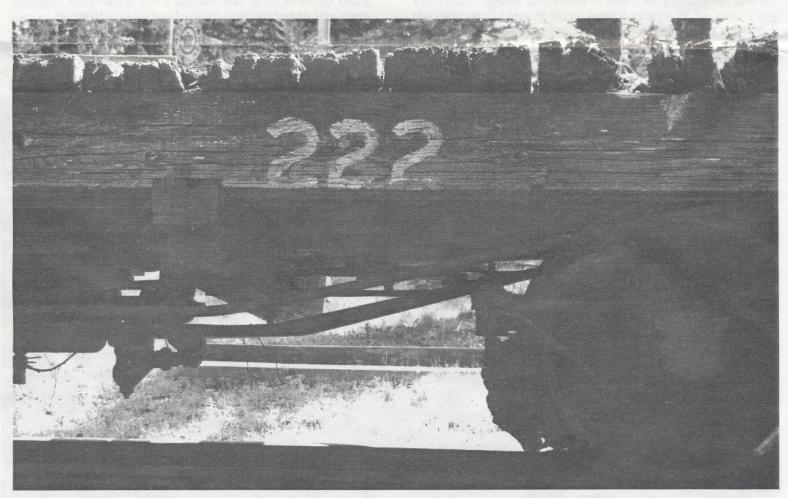


SPCRR Acquires West

tioned the strong possibility of acquiring a West Side flatcar as a means of expanding our "working fleet" of passenger-hauling cars. One key reason was the need to accommodate larger crowds-sometimes over a thousand visitors a day- who put a strain on the limited hauling capacity of our existing fleet of two cars. However, at the same time, there was also a strong motivation to preserve the l9th century wooden car focus that constitutes the real mission of SPCRR. Hence when a wood-silled West Side Lumber Company

flatcar became available for sale, there was general agreement that both goals could be met by acquiring- and restoring- this historic car.

Since then, negotiations with the car's owner, Earl Failla of Merlin, Oregon, had made rapid progress. For more than thirty years, Earl has collected West Side "everything", including a caboose and a skeleton log car, in addition to 24' flatcar 222. But his rolling stock, stored outdoors, had begun to show signs of weathering by the late 1990's. For example, three of the main sills, and both bolsters in flatcar 222, had completely rotted through. Earl knew he need-



West Side Flatcar 222. 2002 Photo by Bruce MacGregor

Side Flatcar 222 BRUCE MACGREGOR

ed to concentrate on the most important car in the collection, the caboose, in order to save it from a similar fate. In May, he committed to selling flatcar 222 to SPCRR. We checked the car out pretty thoroughly. The vast majority of its wooden parts needed complete replacement, but its running gear was in remarkably good condition.

SPCRR then faced the challenge of moving flatcar 222 to Ardenwood. We considered the move a "basket case", likely to deposit a jumble of disintegrated parts when the truck reached Ardenwood with the remains of the flatcar. But

thanks to the skills of Brook Rother and Dave Squires, the flatcar rolled intact onto a truck bed, and survived the 500 mile trip as a complete unit.

On Sunday, June 16, the newest artifact in SPCRR's growing collection arrived Ardenwood, and rolled smoothly off Brook's low-bed truck.

The next step: get 222 ready for a "reassembly party" at Rail Fair, in September (see related articles, on the Hoefer Foundation grant).



Dave Squires unloads West Side Flatcar 222 at Ardenwood Historical Farm. June 2002 Photo by Bruce MacGregor

Diamond & Caldor 64

More than you wanted to know about D&C flats: or as some say "Car 64 who are you?"

WRITTEN BY
RANDY HEES
RESEARCH BY
DON MARENZI

his car, the first to run on our railroad, has been subject to more than a little debate as to its builder, and original owner. When it arrived on the farm it was assumed to have been built by the Carter Brothers. When it was originally restored in 1983, it was lettered "SPC 439". Since that time more research has been done, and more state records have been made available, and the car's history has been rewritten.

When the car was first located on the old D&C line, outside of Placerville, it had Carter Brothers journal box covers. The lettering on the sills was in very poor condition, but our restoration crews found evidence of what might have been "SPC" on the sills. In the absence of original SPC disposition records (now available) it was assumed that the car was an ex SPC car sold used to the railroad.

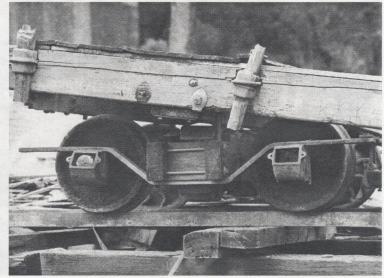
The Diamond & Caldor was a lumber company, operating between today's Highways 50 and 88 in the Sierra Nevada Mountains. Originally, they had a sawmill at Diamond Springs. Originally, the railroad was used both to bring logs to the mill and to haul rough cut lumber to the planing mill and door and sash factory at Caldor, just to the south of Placerville. After the woods mill burned in 1923 it was rebuilt at Caldor, and the railroad became a logging railroad.

The D&C's railroad was organized as a common carrier, meaning it was regulated by the California Railroad commission. This gave the line the right to acquire right of way by condemnation, and as a "railroad" (rather than an industrial tram) they were able to participate in rate splits with other railroads, such as the Southern Pacific. As a common carrier there were various reports which were supposed to be filed with the railroad commission. Apparently the D&C was somewhat lax in its reporting style, and as a result, the Railroad Commission sent one of its employees to inspect the line, and its equipment. This report, filed in 1913, was unusually detailed. It is clear that the state inspector was more that a little angry, and was determined to investigate every inch of the railroad. In this revised report the inspector slams the D&C's version, and includes many more details than a typical report, filed by a railroads own employees. This inspector even detailed the fate of the scrapped California.Door Co. equipment found, including information such as "one frame lying behind the blacksmith shop." According to the inspector's VERY detailed analysis of the equipment included in California Railroad Commission report for 1913 there are no Carter cars listed, nor spots for them on the roster. The report does list ten Holman 24' flats, 10 ton capacity with swing bolster trucks. It also lists six 24' Holman flats 10 ton w/swing bolster trucks that were originally 36 foot, 15 ton, but were overloaded by crews at the mill, so were cut down by the D&C shop to 24'. The inspector notes that the 2 car series are for all practical purposes identical now. All these had 24" wheels. These cars were numbered between 51 and 69 (but only 16 of those #'s). If the cars were numbered in the order received, our car, 64, is one of the cut down 36' cars.

The other cars on the Diamond and Caldor are well detailed in the report. There is no mention of any other cars similar to these. The D&C did not start until 1904 (after Carter was gone) so if any Carter's built cars made it to the D&C they would have had to be second hand. The only other 24' flat on the roster was, D&C #50, built by D&C using trucks purchased used from the California & Nevada railroad, which ran from Emmeryville north through Berkeley and Richmond into Contra Costa County. (The SPCRR has a set of C&N trucks, salvaged from the site of their yard in Emmeryville.)

The report details 2nd hand & new cars purchased, and by the date of the report there were 2 groups of 36' cars, 1 for logs, + 1 of "lumber Flats" Soon after the report the D&C got many more large cars. I think it's doubtful that by then they would have needed any more small 2nd hand cars (which if Carter, would have been a minimum of about 15 years old by then). Once the mill moved to Diamond Springs they would have needed more Log cars, not more flatcars.

It seems with this detailed documentation, and no matching 24' Carter cars that could have "snuck in later", that it is unlikely that #64 is Carter.



Diamond & Caldor flatcar 64, before rescue, 1981.

Photo by Bruce MacGregor

North Shore Railroad 1725

WRITTEN BY
RANDY HEES
AND
BRUCE MACGREGOR

f thousands of wooden freight cars Carter Bros. Built during their active lifetime (1874 - 1902) only a few are known to have survived into the 1980's as reasonably intact cars, complete with most working hardware. The life expectancy of a flatcar was only 15 years. Hard work, overloading, and weather all conspired to use up and destroy wooden cars.

Our car 15 ton, 28' flatcar was built by the Carter Brothers in Newark Ca, for the South Pacific Coast. It is one of a group of 15 ton flats built between 1888 and 1890. The original SPC number is unknown, but the class was numbered 581-869 (odd numbers only).

From this class 13 cars were sold to the North Shore Railroad in Marin County in 1906/07, (SPC numbers 585, 617, 637, 647, 715, 719, 731, 741, 761, 785, 829, 847, and 867), We assume our car is one of these 13. Unfortunately there is no record of how these cars were renumbered when sold, but our car has 3 axle sets of original Whitney, Philadelphia wheels, dated 3-1-1888 and 2-4-1888, suggesting the car is one of the lower numbered cars.

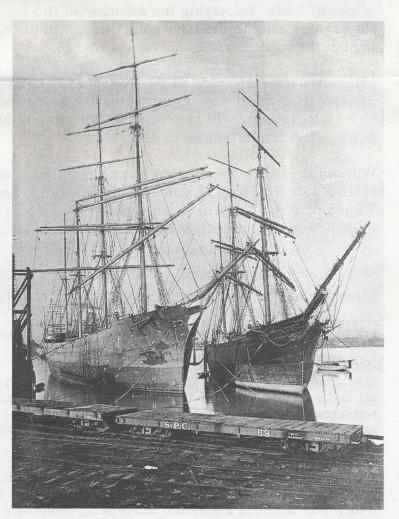
At some point soon after arriving on the NS, car 1725 was shopped for a major rebuilding. The car was nearly 20 years old, and had already exceeded its life expectancy. During this rebuilding it received new side sills of a different size. We believe that the center and intermediate sills were reused. Our evidence is that while the side sills only had wire nails to hold the deck on, the center and intermediate sills had evidence of cut (square) nails. At the same time the inner truss rods were changed. Originally the car had 4 truss rods with no queen posts, as rebuilt, the outer truss rods were as God and the Carter's intended, but during this rebuilding, the inner set was changed, the truss rods lengthened and short 4" queen posts inserted. The Carters had used "upset" truss rods, (the same as a "butted" bicycle spoke) where the ends of the truss rods are forged to a larger diameter so that when the threads are cut into the truss rods the minimum diameter stays the same. On car 1725, only the outer truss rods are upset. We assume that the car received safety couplers and air brakes at the same time. These couplers were probably knuckle type, although at Ardenwood we chose to use "Sams" safely link and pin couplers from our collection, a popular coupler used on several west coast narrow gauge lines.

One of the biggest mysteries involves the trucks. When built these were classic Carter 4' wheel base, 26" wheel, swing motion trucks. Most of the cars which were rebuilt lost their Carter trucks in favor of a NPC standard rigid motion truck with body hung brake beams, but our car

retained a strange set of rebuilt Carter trucks. During the rebuilding some of the Carter style freight journal boxes were replaced with what appear to be passenger car journal boxes (although, similar journal boxes are found on the remains of the California and Nevada flatcar parts in the SPCRR collection.) These have lift lids, and ears on the side for use with sprung pedestals. We assume that the journal boxes were salvaged from cars burned in the paint shop fire. The body repairs included the blocks for hanging the brake beams, but the holes have no wear, strongly suggesting that they never supported brakes.

The car was renumbered 5499 with the NWP takeover. It was used and maintained for another 20 years on the NWP, as evidenced air brake test dates stenciled on the

(continued on next page)



Carter 28 foot flatcars at Alameda Point, CA 1890. 15 ton capacity flatcar on left built ca. 1888. 10 ton capacity flatcar on right built ca. 1878.

Hoefer Foundation | MACGREGOR Grant: a reality!

n June, the Hoefer Foundation announced the award of \$10,000 to SPCRR for the purpose of producing a video on California narrow gauge, Carter, and SPCRR's mission to preserve the history of both.

The grant will retain the services of Boone Morrison to film and produce a one hour video on California narrow gauge, Carter, SPCRR, and the larger context of railroad preservation. Sound like an ambitious project? It is! But Boone has a proven track record at producing historic documentaries, notably a feature length video on Sturgeon's sawmill in Sonoma County. Based on the success of this documentary, Boone's video was instrumental in raising interest, volunteers and funds for the long-term preservation of Sturgeons mill.

The motivation for crafting a feature length video on California narrow gauge is similar. The video is intended to directly boost SPCRR's image in the preservation and rail fan communities, as well as to educate the public in the basics of Carter's fascinating and historic role. The video will be filmed in late August and early September, and will include major segments from SPCRR's Labor Day "Rail Fair" event at Ardenwood. This event will give Boone a framework in which to film our latest flatcar restoration project- West Side 222. True, this car is not a Carter product, but it is exemplary of the kind of wooden sill, link and pin flatcar that Carter originally built. By staging the assembly of this car during Rail Fair, Boone will be able to film many of the stages that Carter would have gone through in the early 1870's, with modern day volunteers and visitors acting out the roles of traditional car craftsmen.

Ultimately, the video will tell the story of early California narrow gauge development, and of the movement to preserve its living history in museums like Ardenwood some hundred and thirty years later. Portions of the video sales revenue will help fund SPCRR projects, and the potential for educational uses in schools, and on public television, is enormous.

Without the Hoefer Foundation grant, there simply would have been no way to undertake this project. SPCRR extends a sincere thanks to the Foundation, and to Boone Morrison, for giving us our "moment in the movies". Want a personal moment in the movies? To stand a good chance of appearing in Boone's video, all you have to do is volunteer to help at Rail Fair. No screen tests required.

North Shore Railroad 1725 (continued from previous page)

cylinder. We suspect the car may have been in work service because of the strange rebuild.

Car 5499 was set aside by the NWP on May 19, 1930. The NWP's scrapper, United Commercial Co. sold the car to the West Side Lumber Co. at a still unknown date. It may have been in fire wood service early on, but was soon converted to a camp car and renumbered 8. During the conversion, the brake wheel was moved into the car body, the stake pockets were rearranged to accommodate the new body and the elliptical truss rod end washers were replaced with rectangular ones. Also on the West Side it was involved in an accident. The A end was hit, requiring the truck to be rebuilt and the end beam replaced.

The car was still in service when West Side closed down in 1960. We bought it from Resorts International when they liquidated the West Side equipment. It arrived at Ardenwood in 1985 on its own wheels (but with several broken sills) and for a short time in use as a work car, before being completely rebuilt in 1987. It has been the primary passenger car on our horse drawn railroad since then.

NARF III Grant: A Reality!

PCRR has won its third consecutive grant from the North American Railway On July 16, Foundation. Director Philip Sullivan notified SPCRR that it had received a grant of \$29,268, to be spent in two equal allotments over a two year period. This grant supports a continuation of a project begun under NARF I and NARF II, in which funding for wheel patterns and castings enabled SPCRR to replace badly worn 24" and 26" wheels with historically accurate, all-steel replicas. The new grant will allow SPCRR to recreate, down to the last detail. Carter Brothers ten ton capacity freight trucks using the wheel patterns from the earlier grants.

To recap the goals of the new grant, we quote from a brief summary of the original proposal:

SPCRR's mission, "to restore, preserve and interpret early West Coast narrow gauge rolling stock", took a major step forward with the recent discovery of the only known example of a Carter Brothers ten ton capacity freight truck. Providing important details of this 1877 technology, the buried remains of this historic truck became the prototype for NARF-funded wheels during the period 2000-2002. With additional NARF funding, SPCRR will be able to recreate a working prototype of the entire truck, providing patterns for the accurate replication of trucks required for four historic narrow gauge cars in the Society's collection. Cast in modern steel alloys, the wheel sets and other

parts will also be operable, enabling all of SPCRR's restored rolling stock to operate for public interpretation.

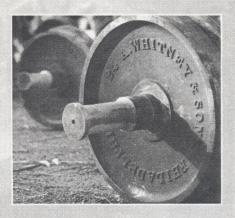
The "recent discovery" referred to in the grant proposal was the exhumation of a narrow gauge flatcar from a site near Waterman's Gap in the Santa Cruz Mountains, during the Summer of 2000. Examination of the remains resulted in a once-in-a-lifetime discovery. While extensively rebuilt by a logging company, the flatcar showed evidence of parts from a Carter ten ton freight car- the only known example of the once-common narrow gauge running gear. The proposal gave credit to two individuals for key contributions at this early stage: to Fred Keesaw, caretaker of the site, for his permission to recover parts from the site, and retain them as part of SPCRR's permanent collection; to Curtis Ferrington, for carefully measuring and drawing the parts, enabling accurate documentation of the ten ton Carter freight truck. These two contributions, and additional design work by John Stutz, allowed accurate reproduction of wheels, journal boxes and brasses as NARF I and II funding became available. The results are already in service at Ardenwood today: a complete set of new 24" steel wheels under flatcar 64, plus a set of four 26" steel wheels "in reserve" for flatcar 1725.

When NARF III work is completed, SPCRR will not only have finished the only fully functional replica of a Carter ten ton truck, but have the patterns and the know-how to

duplicate this truck for any future restoration. The design provided a nearly universal truck for Carter freight cars of the period 1877-1886. (See photo of 10 ton flatcar in photo of tall ships located in North Shore Railroad 1725 article.) This truck was found not only under its box cars and flat cars, but with small variations under its cabooses as well.

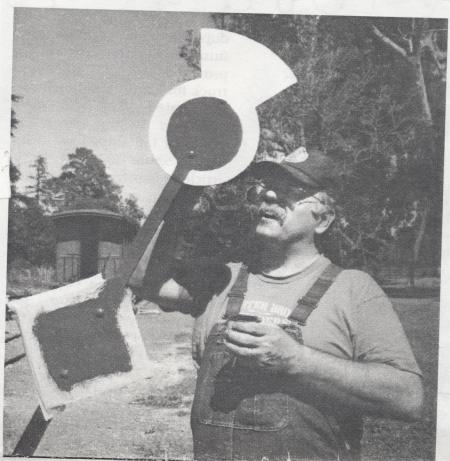
Currently, SPCRR's collection has four cars that could be appropriately equipped with this truck, or with small variations of this truck: boxcar 472 (now the Museum Store), boxcar 444, caboose 47, and combine 1010. Energy, time and money invested in a single prototype pair of these trucks will result in numerous opportunities to apply them to additional cars in the future, truly allowing SPCRR to accurately restore cars in its collection.

SPCRR is indebted to N.A.R.F. for its unbroken support of a truly unique restoration project. By 2004, four years after funding first began, it should be possible to ride on the results!



New NARF funded steel wheels, Ardenwood 2002. Photo by Bruce MacGregor

AS SSTANSSDAR



Workdays: Each Tuesday night, starting at about 5:30 • July - August: The second Saturday of each month • Labor Day Weekend

The other flatcars at Ardenwood

There are other cars and fragments of flatcars in our collection. Our smallest flatcar, at 12' long, is known as the Mary Jane car. It is a replica based on a single photograph. It was built as part of our first This Old Flatcar project at our first Rail Fair in 1994. We also have fragments from two flatcars found in the Sierras, one from Texas Hill, and the othe from Sardine Valley. From Emmeryville we have the trucks and a few other fragments from a Nevada & California flat, and last summer we recovered most of the iron parts from a Carter 10 ton lumber flatcar from the woods near Saratoga Gap.

The Carter Narrow Gauge Chronicles is a publication created by The Society for the Preservation of Carter Railroad Resources (SPCRR). You can contact us at P.O. Box 783, Newark, CA 94560. Visit our website at www.spcrr.org. Membership is \$20.00 per year and is tax deductible.

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