HISTORY COLORADO

COLORADO STATE REGISTER OF HISTORIC PROPERTIES NOMINATION FORM

SECTION I			
Name of Property			
Historic Name Denver & Rio Grand	de Western Railro	oad Flanger OT	
Other Names			
Address of Property]] address not for publication
Street Address Silverton Northern to	rack on Cement S	treet between 7th a	nd 10th streets
City Silverton	County	San Juan	Zip <u>81433</u>
Present Owner of Property (for multiple ownership, list the names a	and addresses of e	each owner on one o	or more continuation sheets)
Name Lindsey Ashby, for Loco Le	ease II, LLC		
Address Box 397, 1304 Main St		Phone	
City Georgetown	State <u>CO</u>		Zip <u>89444</u>
Owner Consent for Nomination (attach signed consent from each o	wner of property -	see attached form)	
Preparer of Nomination			
Name George F Niederauer (for o	owner)	Date <u>30</u>) May 2014
Organization Durango Railroad Hi	storical Society		
Address Box 654		Phone	
City <u>Durango</u>	State <u>CO</u>		Zip <u>81302</u>
FOR OFFICIAL USE:		Site Number <u>5S</u>	SA.1526
5/30/2014 Nomination Received			
9/19/2014 Review Board Recommends Approval Denial	ation	9/25/2015	HC Board State Register Listing Approved Denied
		Listing Criteria 🗵	A □B ⊠C □D □E
Cartification of Listing: Vice-President of D	traceryation Program		ADO Date

COLORADO STATE REGISTER OF HISTORIC PROPERTIES

Property Name <u>Denver & Rio Grande Western Railroad Flanger OT</u>
SECTION II
Local Historic Designation
Has the property received local historic designation?
[X] no
[] yes []individually designated [] designated as part of a historic district
Date designated
Designated by (Name of municipality or county)
Use of Property
Historic Transportation: railroad
Current Historical display
Original Owner Denver & Rio Grande Railroad, then Denver & Rio Grande Western Railroad
Source of Information Robert Sloan, A Century + Ten of D&RGW Narrow Gauge Freight Cars, 1871–1981, 2nd ed. (BHI Publications: 2008); Jerry Day, Narrow Gauge Pictorial, Vol. VII, Denver and Rio Grande Western Work Equipment – OA to OZ, 1989; Mike Conder and Tim Mulina, D&RGW Flangers In Color, Vol. 2: OC, OD, OF, OT, 2012.
Year of Construction circa 1890s; rebuilt 1943
Source of Information Victor Stone, Taking Stock, 1992; Robert Sloan, A Century + Ten of D&RGW
Narrow Gauge Freight Cars, 1871-1981, 2nd ed. (BHI Publications: 2008)
Architect, Builder, Engineer, Artist or Designer unknown, but likely D&RG, who patented the design in 1885 and built ten for itself in its Burnham shops in Denver.
Source of Information Stone, Taking Stock; Sloan, A Century + Ten D&RGW Narrow Gauge Freight Cars
Locational Status
[] Original location of structure(s)
[X] Structure(s) moved to current location
Date of move: Moved from Colorado Railroad Museum (Golden) to Silverton in May 2014.
SECTION III

Description and Alterations(describe the current and original appearance of the property and any alterations on one or more continuation sheets)

COLORADO STATE REGISTER OF HISTORIC PROPERTIES

Property Name_	Denver & Rio Grande Western Railroad Flanger OT	

Sig	gnificance of Property				
	Nomination Criteria				
	[X] A - property is associ	ated with events that have made a	significant contribution to history		
	[] B - property is conne	cted with persons significant in hist	ory		
	[X] C - property has distin	C - property has distinctive characteristics of a type, period, method of construction or artisan			
	[] D - property is of geo	graphic importance			
	[] E - property contains	the possibility of important discove	ries related to prehistory or history		
	Areas of Significance				
[] []	prehistoric Archaeology – historic Art Commerce Communications Community Planning and Development	[] Economics [] Education [X] Engineering [] Entertainment/ Recreation [] Ethnic Heritage [] Exploration/ Settlement [] Geography/ Community Identity [] Health/Medicine [] Industry [] Invention	[] Landscape Architecture [] Law [] Literature [] Military [] Performing Arts [] Politics/ Government [] Religion [] Science [] Social History [X] Transportation		
Sig	gnificance Statement (explain the significance	e of the property on one or more co	ontinuation sheets)		
Bib	oliography (cite the books, articles, one or more continuatio	and other sources used in prepari in sheets)	ng this form on		
	CTION V				

USGS Topographic Quad Map Silverton, 1955, SW 1/4 of Section 17, Twp 35N 9W, 37.8081 - 107.6635

Verbal Boundary Description of Nominated Property

(describe the boundaries of the nominated property on a continuation sheet)

Lot(s) N/A Block N/A Addition

COLORADO STATE REGISTER OF HISTORIC PROPERTIES

Property Name Denver & Rio Grande Western Railroad Flanger OT

SECTION VI

Photograph Log for Black and White Photographs

(prepare a photograph log on one or more continuation sheets)

SECTION VII

ADDITIONAL MATERIALS TO ACCOMPANY NOMINATION

Owner Consent Form

Black and White Photographs

Color Prints or Digital Images

Sketch Map(s)

Photocopy of USGS Map Section

Optional Materials

Use of Nomination Materials

Upon submission to the Office of Archaeology and Historic Preservation, all nomination forms and supporting materials become public records pursuant to CRS Title 24, and may be accessed, copied, and used for personal or commercial purposes in accordance with state law unless otherwise specifically exempted. History Colorado may reproduce, publish, display, perform, prepare derivative works or otherwise use the nomination materials for History Colorado and/or State Register purposes.

For Office Use Only
Property Type: [] building(s) [] district [] site [X] structure [] object [] area
Architectural Style/Engineering Type: Railroad car/ Flanger car
Period of Significance: <u>ca. 1890-1943; ca. 1890-1968</u>
Level of Significance: [X] Local [] State [] National
Multiple Property Submission:
Acreagen/a
P.M. NM Township 41N Range 7W Section 17 Quarter Sections SE NW SW
UTM Reference: Zone 13 Easting 265503 Northing 4187858 NAD83

DESCRIPTION and ALTERATIONS

DESCRIPTION

Denver & Rio Grande Western Railroad (D&RGW) Flanger OT was built in the 1890s and was rebuilt by D&RGW in 1943 to clear snow and ice out of tracks and spread it away from the sides of tracks. It has a 19' x 6' steel frame and weighs 33,500 pounds. The width of the snow blades, located between the trucks and below the frame, is 9'-8". The frame is supported by steel body bolsters, which are pinned to the truck bolsters. The body rides on two D&RGW 4-wheel arch bar trucks spaced 11' between the center pins, with four coil springs at the ends of each truck bolster. The car is equipped with Westinghouse automatic air brakes on the rear truck only (B end) and automatic knuckle couplers. The air brake cylinder and reservoir are mounted on the deck for lack of space below. An extra air brake cylinder, air reservoir, and K-1 triple valve are mounted in the center to provide air pressure to move the blades. A flanger is normally pulled behind a locomotive and controlled from the cab. Metal snow shields attached to the handrails and between them protect the operating mechanism from flying snow and ice. The blades can move from 3" above to 1" below the top of the rail (Grandt, pp. 152–153).

A single steel rod braces each blade at a fixed angle. A 22" circular disc target high at the top of the mast lets the crew know whether the blade is up (target face on) or down (target edgewise). The mast stands about 8.5' tall above the floor on the right side at the center of the car. The wood deck planks of the flanger car are plain, not shiplap as is typically used for rail car decks. The brake wheel is located at the left rear corner per standard practice on D&RGW flangers (Conder, pp. 15, 49–56). Weight boxes sit on top of the metal frame over each truck and below the wood decking. Scrap metal is loaded in the boxes to add weight to help the flangers bear down on the track (Day, email). An iron stirrup step hangs from the sill at each corner of the car. The flanger is mainly painted gray. Blades are red in front and black in back. The target is red. Air cylinder, reservoir, and operating mechanism are black. Paint on the wood deck planks and sideboards has weathered away to faint traces of gray with black lettering.

ALTERATIONS

The original construction of this flanger was an 18' x 5'-6" wood frame that rode on two Thielsen swingmotion 4-wheel trucks spaced 10'-6" between the center pins. The spread of the blades was 9'-8" as it is today. The weight of the relatively short car was 27,100 pounds and its capacity was 27,500 pounds. It was lettered for the Crystal River Railroad (CR) with the name "AB-1" (colors and style unknown; Grandt, p. 152). It did not have snow shielding over the mechanism (Day, email). CR narrow gauge cars had link-and-pin couplers and straight air brakes (McCoy, pp. 61, 92).

D&RG used link-and-pin couplers until the Interstate Commerce Commission (ICC) issued regulations in 1903 that required automatic knuckle couplers as safety upgrades. However, CR, as a twelve-mile company railroad that serviced its own coal mine and the town of Redstone, crossed no state line, and was therefore not subject to ICC regulations.

When D&RG leased the car from CR in 1916 it would have made safety upgrades to comply with ICC requirements: automatic air brakes, automatic knuckle couplers, and additional steps and hand grabs. After D&RG purchased the flanger in 1920 the car would have been painted in red iron oxide with white lettering and the new name of "OT." A 1939 photo (see Historic Photo 1) of the wood frame flanger reveals a few differences from the car as rebuilt in 1943. In 1939 the flanger air reservoir was mounted on the left side of the frame. The flanger blade had a different shape, more like that on Flanger OK in the drawings of the different shapes of blades (see Figure 3). Large letters "D&RGW FLANGER" and

Page <u>6</u> Section IV

"OT" were on the side sills, and smaller lettering for car data was on the substructure. It still had the Thielsen trucks. At some unknown time a snow shield was added around the flanger mechanism and a box for tools was placed in front of it (Day, email).

In July 1943, D&RGW rebuilt Flanger OT with a 19' x 6' steel frame and painted it gray with black lettering, the standard color for its work cars beginning in 1939. D&RGW replaced the Thielsen trucks with its own arch bar trucks with coil springs at the end of each truck bolster. Apparently this was when the larger blade was installed, as shown in a 1954 photo, which is still present. Flanger OT now weighed 32,500 pounds (Grandt, pp. 150–153).

In circa 1971 the tool box was removed and never replaced (Day, email). When Lindsey Ashby, the current owner, bought Flanger OT in November 1971 he moved it to Central City, Colorado, for use on the Colorado Central Narrow Gauge Railway. In the late 1970s he moved it to Silver Plume, Colorado, for use at the Georgetown Loop Railroad. He replaced "D & R G W" with "G B & L". The blades were painted red in front and black in back. Two control valves were added to the two front outside corners of the snow shield.

INTEGRITY

Flanger OT is a typical example of a series of D&RGW narrow gauge flangers after they were rebuilt. Although D&RGW kept upgrading and modernizing its standard gauge lines from the 1930s onward, it aimed to abandon the narrow gauge lines. Narrow gauge equipment was neglected and maintenance was minimal. Thus, Flanger OT retains a high degree of integrity in its structural design and intactness of materials from 1943. It has suffered from exposure and lack of maintenance, so the wood floor and sideboards need restoring or replacing, and it needs new gray paint and white lettering from the 1940s. Steps should be black to contrast with gray body (and white snow) for safety. Having moved the car to the Silverton Northern track with a potential to run on Durango & Silverton Narrow Gauge Railroad track gives it a high degree of integrity in its association and setting, because flangers were used throughout the D&RG, later D&RGW, lines and branches and because it is typical of any flanger used on the Silverton Branch.

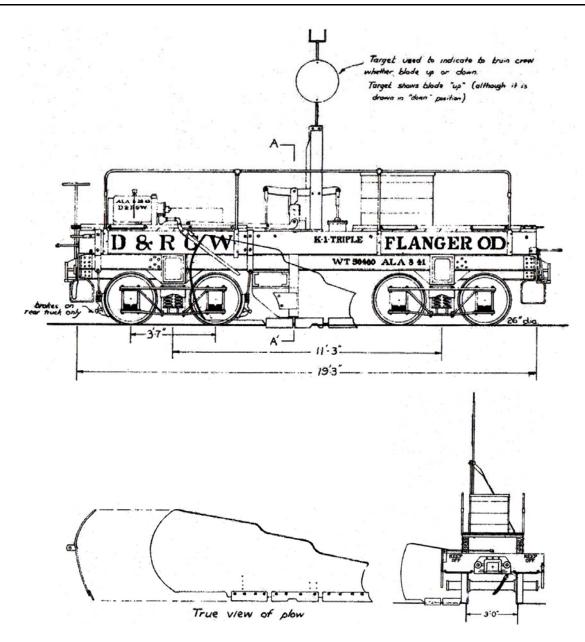


Figure 1. Drawings of the side and front views and the blade of Flanger OD after D&RGW rebuilt it in 1941 with steel frame and D&RGW arch bar trucks. Note that only one blade is shown in the top and front views. Flanger OT differed from Flanger OD in the blade and box shapes and in having a metal snow shield for the linkage in the center (Sloan, p. 291).

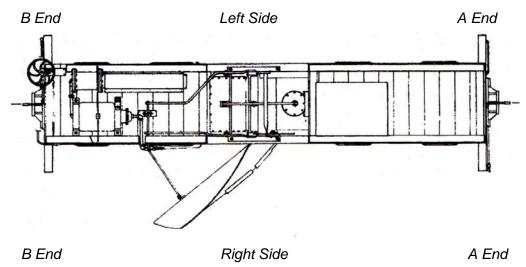


Figure 2. Drawing of the plan view of Flanger OD after D&RGW rebuilt it in 1941. Flanger OT differed in the blade and box shapes and in having a metal snow shield for the linkage in the center (Sloan, p. 291).

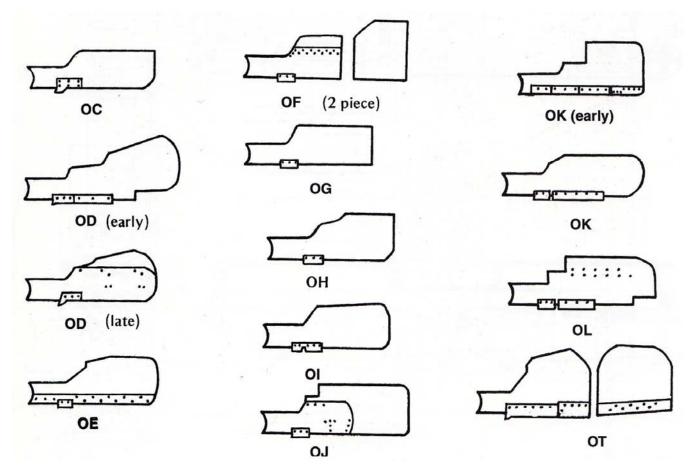


Figure 3. Drawings by Eric Bracher of many of the various blade designs found on D&RGW narrow gauge flangers. The current blade shape for OT is different from any of these but shares design elements - compare with photo of current blade in Photo No. 3 - and also different from the blade in 1939 – compare with Historic Photo 1 (Sloan, p. 289).

Page 9 Section IV

SIGNIFICANCE STATEMENT

D&RGW Flanger OT is locally significant under Criterion C for Engineering from circa 1890, when it was originally built, to 1943, when it was rebuilt. It is locally significant under Criterion A for Transportation from ca. 1890 to 1968 for its service on the Crystal River Railroad (CR) and D&RG (later D&RGW) lines by clearing snow and ice away from the tracks and keeping them open.

ENGINEERING

In its original method of keeping rail lines clear, D&RG had used small, notched blades in front of the leading locomotive wheels that were angled to fit over rail heads and clear snow off and away from the rails. These flangers worked well in normal snow, but not in snow that was compacted and had formed ice. Snow plows on the front of engines would leave a few inches of snow on the tracks, which the engines would pack down so hard that the engine could ride above the rail high enough that the wheel flanges would not catch the rail, causing derailments. Digging snow and ice out of the tracks required large teams of men, e.g., fifty men on Marshall Pass alone, incurring a large expense to the railroad. A man known only as Mr. Omerot, foreman of the locomotive power shops in Leadville, invented a small, heavy rail car with a large flanger that cleared snow from between the rails a couple inches below the rail, cleaned snow and ice off the rail, and shoved it a few feet away from the track. D&RG patented this design as "the snow flanger" in 1885 and made the first test runs with the flanger car in November 1885 (Day, "Flanging", p. 21).

Below the middle of the flanger, between the two trucks, the two blades come together at the center of the track to form a V at a fixed angle. The blades are raised and lowered via air pressure from the locomotive and are operated from the locomotive. They could travel from 3" above the rail to 1" below. The blades have extensions outside the rails to push the snow away from the track. A disc target at the top of a mast indicates whether the blades are in the up or down position. Ballast, such as scrap iron, is added to the car to increase the weight to press the blades down on the track (Day, "D&RGW Flangers"). A simple, clean front and no brake gear on the front truck eliminated places for snow and ice to get caught and hang up on gear (Conder, p.59).

D&RG built ten flangers at its Burnham Shops in Denver between 1885 and 1887, originally numbered 1–10 and renumbered OC–OL in 1907. Work cars were designated by their prefixes: O for outfit, W for water, X for special work cars that could only be at the end of a freight train. What is now Flanger OT was originally built for the narrow gauge branch of the Crystal River Railroad (CR) and numbered AB-1. While there are no records of its construction, it is believed D&RG built this car for CR because it followed D&RG's patented design (Day, "D&RGW Flangers").

As ICC issued regulations for safety improvements D&RG would incorporate such changes in the flangers. D&RG made a number of technical improvements to several of their flangers in 1913. As shown in the drawing of blade designs above and photos in Grandt, D&RG tried different sizes and shapes of blades not only on different flangers but also on the same flanger at different times. Two flangers, OF and OL, had an extra blade on each side to extend their reach. With all the repairs, rebuilds, and changes each flanger was a little different from another. Accordingly, operating weights of flangers varied from 32,200 pounds to 33,900 pounds (Day, "D&RGW Flangers").

In 1929 D&RG realized "It is dangerous to handle the present wooden under frame machines between two of the large engines as there is always the possibility of the flanger car bucking and killing the enginemen – then too, the wooden frames are expensive as it is necessary to frequently renew them

Page 10 Section IV

Property Name Denver & Rio Grande Western Railroad Flanger OT

and this necessitates holding the machine out of service for repairs, and generally just when it is most needed. Another feature of the matter is that the enginemen being afraid of the wooden frames militates against giving us as good a job of snow bucking as we would otherwise get. If the plow outfit gets stuck it is almost impossible to pull it out without breaking the wooden sills" (Day, "D&RGW Flangers", p. 9). D&RGW rebuilt the first flanger in steel in 1929, but did not rebuild the last one (OT) until 1943.

Flanger OT is representative of that special class of snow removal equipment invented by D&RG in 1885 and improved over the years by both D&RG and D&RGW for use in the mountains and valleys of southwest Colorado – the evolution from a wood frame in the nineteenth century to a steel frame and safety upgrades in the twentieth century. The current flanger blade on OT is the result of D&RGW trying blades of different sizes and shapes on various flangers over the years.

TRANSPORTATION

Development of the mining industry and general commerce in southwest Colorado would not have been possible on a large scale without the narrow gauge railroads built by General William Jackson Palmer (D&RG, later D&RGW), Otto Mears (Silverton Railroad [SRR], Silverton Northern Railroad [SN], and Rio Grande Southern [RGS]), and the Gold King Mining Company (Silverton Gladstone & Northerly [SG&N]).

D&RG struggled with snow removal in the mountains, narrow canyons, and valleys of its rail lines from the beginning of the railroad. Railroads were critical to supplying large quantities of coal, mining supplies, and other necessities of life to the mountain communities and mines, as well as shipping ore and concentrates from mines to keep miners employed (Day, "Flanging"). Even if the railroad wanted to delay opening a line for a non-life threatening train of ore cars because of the expense of snow clearance, the Colorado Public Utilities Commission required the railroad to open the line because it was a public utility (Norwood, *Recollections*, p. 48). Major storms and avalanches could close mountain railroads for up to several weeks, creating life-threatening shortages of food and coal. For example, in 1884 Cumbres Pass was closed and Durango had no train service for 94 days (Norwood, *Rio Grande*, p. 226), and in 1931 the measured snowfall on Cumbres Pass was 41'-4" (Dorman, *Chama*, p. 5). In 1905 the snow was so deep and packed from an avalanche in the Animas Canyon south of Silverton a tunnel was dug through the slide to open the line from Durango (Dorman, *Durango*, p. 114, 226).

In the early days 'digging out' was the only way to clear snowbound passes. During breaks in the weather, trains of outfit cars with sleeping and kitchen cars would be provisioned for gangs of workers to stay until the work was done. With drifts up to 30' or 40' deep, gale force winds blowing snow back into cleared areas, and sub-zero temperatures, the work was difficult and exhausting (Norwood, *Rio Grande*, p. 226, 228). The other early means for removing snow was a large wedge plow attached to the front of a locomotive. A locomotive would make repeated runs at deep snow in an attempt to push its way through. This was a dangerous procedure that resulted in derailments on occasion and was hard on the locomotive (Day, "Flanging", p. 18).

Developing the flanger in 1885 was a great leap forward for snow removal; however, it still depended on a locomotive snowplow or 'diggers' to clear bulk snow in front of a train. A locomotive with a plow attached to its pilot would pull the flanger directly behind it along with a caboose for crew; this would make a special flanger train. The blade had to be lifted to go over switches and crossings, which were cleared of snow and ice by hand. Sometimes a flanger would be between two locomotives so that the rear one could try to pull the front back if it got stuck. A flanger may be part of a rotary snowplow train with the rotary in front of the first locomotive, the flanger behind the locomotive, and more locomotives

Page <u>11</u> Section <u>IV</u>

to provide sufficient power. A flanger may also be part of a freight train; however, the railroad required the engine and flanger to be separated from the rest of the train when the flanger was being operated.

The next leap was developing the rotary snowplow (actually a huge snow blower), first built in 1883–84 by Cooke Locomotive Works in Patterson, New Jersey. D&RG bought two rotaries from them in early 1889, another in 1890, and a fourth in 1923 (Sloan, p. 264). A rotary is a steam engine powering a huge snow blower. It has its own tender for coal and water. A rotary does not propel itself; one or more locomotives behind push it forward. Rotaries were restricted to those parts of the lines that had relatively deep snow but no avalanches. Avalanches brought trees, rocks, and ice along with snow down steep slopes and packed it hard at the bottom, sometimes tearing up track. In 1905 D&RG attempted to clear the Silverton Branch with a rotary and damaged the relatively fragile blades (Day, "Flanging", p. 21).

D&RG tried a new trick in 1923. It converted a 40' gondola into a very large wedge plow. The gondola was loaded with rocks to keep snow from lifting it off the track. It was used in the low country in the Gunnison area for several decades and improved over the years, but only one was ever built (Sloan, pp. 271–272). The twentieth century also brought bulldozers as the best means to handle avalanche runs. Today, the Durango & Silverton Railroad uses bulldozers and backhoes for clearing avalanches.

Flanger OT began life as Flanger AB-1 on the Crystal River Railroad. CR was a short twelve-mile company line between its mine at Coal Basin to Redstone (LeMassena, p. 94). The mine and railroad closed in 1909, and D&RG leased this flanger from November 1916 to December 1920, then bought it that month and retained the CR lettering and numbering for a year or so. It was used on the Lake City Branch in the 1920s and 1930s. When that branch was abandoned, it was used on the Ouray Branch and as a backup to Flanger OD on the line between Cerro Hill and Cimarron. In 1943 it became the last narrow gauge flanger to be rebuilt with a steel frame. In the late 1940s and 1950s it was moved to Crested Butte for backup duty. When the Gunnison-to-Salida line was abandoned in 1955, the flanger car was moved to Chama, New Mexico, for backup duty. It was retired in September 1970 and sold to the scrap dealer, Floyd Reed, in Alamosa, who in turn sold it to Lindsey Ashby in November 1971, who took it to the Colorado Central Railway in Central City. When that line closed in 1980, the flanger was moved to Silver Plume for use on the Georgetown Loop Railroad (Day, "D&RGW Flangers", p. 17; Grandt, p. 153). In about 2004 the car was moved to the Colorado Railroad Museum (CRRM) in Golden for storage. In May 2014 the car was moved to the Silverton Northern track along Cement Street in Silverton as a favor to CRRM, which needed the space, and to Ashby, who is reserving the car for future purchase by the Durango Railroad Historical Society.

Flanger OT is significant to transportation because it represents the class of flangers used on the entire D&RG and D&RGW narrow gauge system from the mid 1880s until the end of narrow gauge operations in 1968. These cars were essential to keeping lines open in the winter so that trains could continue to haul passengers and freight. Reflecting their importance to the railroad, they were rebuilt several times, and eight remained in service until the abandonment of the San Juan Extension.

Of the eleven D&RGW narrow gauge flangers, seven or eight still exist: one each at the Colorado Railroad Museum, Gunnison, Durango, and in Silverton. Three are in Chama. One that had been in La Jara, Colorado, may exist or may have been scrapped.

Property Name Denver & Rio Grande Western Railroad Flanger OT

BIBLIOGRAPHY

Ashby, Lindsey, Telephone conversation with George Niederauer, February 2014.

Conder, Mike, and Tim Mulina. *D&RGW Flangers In Color, Vol. 2: OC, OD, OF, OT.* Cottleville, Missouri, BHI Publications, 2012.

Day, Jerry, Email correspondence between Jerry Day and George Niederauer, from January 31, 2014, through July 14, 2014.
"D&RGW Narrow Gauge Flangers," <i>The Prospector</i> , Vol. 11, No. 2, 2012, pp. 6-17
"Flanging on The Silverton," <i>The Prospector</i> , Vol. 11, No. 2, 2012, pp. 18-23.
Dorman, Richard L. Chama/Cumbres with a Little Chili. Santa Fe, R. D. Publications, 1993.
Durango: Always a Railroad Town. Santa Fe, R. D. Publications, 1987.
LeMassena, Robert A. <i>Colorado's Mountain Railroads</i> , Revised edition. Denver, Sundance Publications, 1984.
McCov Doll The Crystal Diver Distorial Denver Sundanes Dublications 1072

McCoy, Dell. *The Crystal River Pictorial*. Denver, Sundance Publications, 1972.

Norwood, John B. *Rio Grande Narrow Gauge Recollections*. River Forest, Illinois, Heimburger House Publishing, 1986.

. *Rio Grande Narrow Gauge*. River Forest, Illinois, Heimburger House Publishing, 1983.

Grandt, Robert L. Narrow Gauge Pictorial, Vol. VII: Denver and Rio Grande Western Equipment – OA to OZ. Robert Grandt, 1989. (Text by Jerry Day)

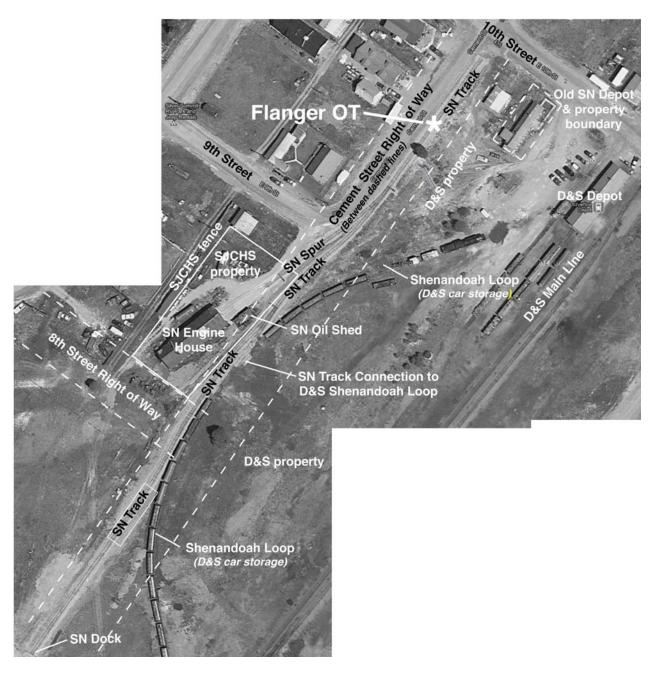
Sloan, Robert E. A Century + Ten of D&RGW Narrow Gauge Freight Cars, 1871 to 1981, 2nd ed. Winona, Minnesota, R.E. Sloan, 2008.

GEOGRAPHICAL DATA

VERBAL BOUNDARY DESCRIPTION

Flanger OT – indicated by the large asterisk in the image below – is located on the Silverton Northern (SN) track in Silverton within the Cement Street right of way between 7th and 10th streets – labeled with dashed lines in the image below. No real property is associated with this nomination.

Sketch Map Photo from Google with annotation by George Niederauer, July 2014.



Page <u>14</u> Section <u>VI</u>

PHOTOGRAPH LOG

Name of Property: D&RGW Flanger OT

Location: Colorado RR Museum, Golden, Jefferson County & Silverton,

San Juan County

Photographer: George F. Niederauer

Date of Photographs: 7 May 2014 for photos 1-4,

31 May 2014 for photo 5 Digital color TIF files on CD

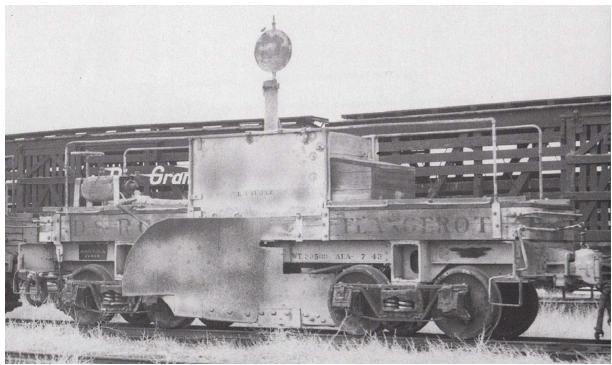
Photo No. Photographic Information

- 1 Right side (referenced to A end as the front)
- 2 A end
- 3 Left side (referenced to A end as the front)
- 4 B end (location of hand brake)
- 5 Flanger OT car on the Silverton Northern track in Silverton

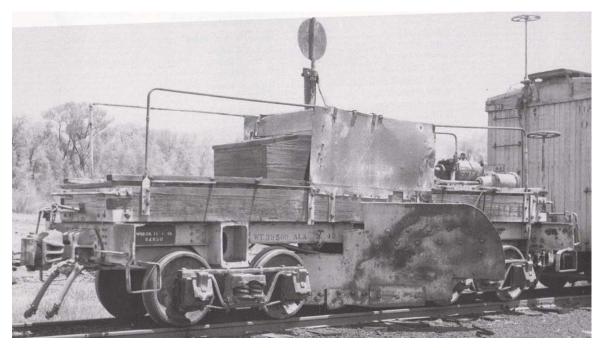
HISTORIC PHOTOGRAPHS



1. Photo by Paul Darrell of the left side of Flanger OT in Montrose in 1939 with wood construction, Thielsen trucks, and different blade than current (Grandt, p. 149).



2. Flanger OT in Gunnison, 1954. Photo by Robert Richardson (Grandt, Vol. VII, p. 150).



3. Flanger OT in Chama, 1960. Photo by John Maxwell (Grandt, Vol. VII, p. 151).



4. Flanger OT in Central City, 1972 - note box is missing. Photo by Jerry Day (Day, Email).

USGS TOPOGRAPHIC MAP

Quadrangle, Colorado

Silverton Quadrangle, 7.5 minute, 1955

Flanger OT is on the display track that is marked with the red dot on the map below.

