

FREIGHT CARS

JOURNAL

②



- 19th Century P & R 8-WHEEL COAL CARS
- MODERN SULFURIC ACID TANK CARS
- ROSTERS
- DRAWINGS
- NEWS
- DATA
- NOTES

9 DECEMBER 1983

CONTENTS

Issue # 2 December 9, 1983

P & R EIGHT WHEEL COAL CARS.....3	
<i>Eric A. Neubauer</i>	
EDITOR'S NOTES.....17	
MODERN SULFURIC ACID TANK CARS.....18	
<i>David G. Casdorff</i>	
FREIGHTCAROLOGY	
Data-News-Notes-Projects.....20	

Freight Cars Journal is published by MTHS with the intent that once established it will become a separate freight car historical & technical group. Topics to be covered by this publication include the following:

- Freight Car Design and Technical Evolution
- Manufacturers histories & production
- Data Collection & exchange
- MODELING
- Logos & Liveries
- Rosters
- News
- Operations
- Commodities transported
- ALL ERAS- ANY ROAD

FRONT COVER:

SP 63108 100 ton tank car. Very few railroads today have tank cars in revenue service. The Southern Pacific is one of these few. This particular car is one of a series used in the transportation of sulfuric acid. The car was originally built by Richmond Tank Car in 2-65. Its shown here just after a fresh paint job in 1983. More sulfuric acid tankers on page 18 of this issue. (D.G. Casdorff)

EDITORS:

David G. Casdorff

Eric A. Neubauer

ASSOCIATE EDITORS:

None presently

CORRESPONDING EDITORS

Cid J. Beraldo

E. John Coyle

Copyright © 1983 MTHS

All Rights Reserved

Published by the Freight Car Historical Section, MTHS.

\$10.00 per year. Issued 4 times per year (approximately quarterly) Please make checks payable to the "MODERN TRANSPORT TECHNICAL & HISTORICAL SOCIETY" and send to:

David G. Casdorff/ MTHS
P.O. Box 1458
MONROVIA, California 91016

Please send items for PUBLICATION (such as articles, Freightcarology news, notes etc.) to David G. Casdorff, P.O. Box 1458, Monrovia, CA 91016. Items of value should be sent registered or insured. Photographs, slides etc. will be returned.

Please send individual freight car SIGHTINGS and DATA to Eric Neubauer, 268 Russell Road, Princeton, New Jersey 08540.

P & R 8-WHEEL COAL CARS

By ERIC A. NEUBAUER

The 8-wheel coal car gained prominence on the Philadelphia & Reading Railroad at a relatively early date. Cars of the same general design were built from the 1850's until the 34-foot hopper bottom gondola was introduced in 1887.

The first 8-wheel coal car was built from sheet iron in 1845. It had a light weight of 4.7 tons (1 ton = 2240 lbs) and a capacity of 11 tons. Although this car wasn't duplicated, it was in service until at least 1887. Two more 8-wheel iron coal cars were built in 1859 and 1861, possibly similar to the contemporary pot hoppers on the Baltimore & Ohio Railroad.

In 1852, the first wooden 8-wheel coal cars were introduced. The following is an excerpt from Caruthers, C.H., "The Evolution of the Coal Car", The Railroad Gazette, 1905, pp. 372-374.

Between 1854 and 1860 the Philadelphia & Reading Railroad Company built large numbers of eight-wheel coal cars of the design shown in Fig. 8. This car contained several peculiarities. First, its line of draft was co-incident with the center line of the body framing. While this arrangement may have been satisfactory on the home road, it proved otherwise elsewhere when the practice of later years brought the cars into service on lines where the general practice of placing the body framing above the line of draught caused these higher bodies to often over-ride the P. & R. car with disastrous results. The coupling was also effected by a large eyebolt at one end of the car which carried a three-link coupling chain and faced a hook of English type attached to one end of the next car, and the outer end of this chain was thrown upon this hook. It will be seen that such an arrangement necessitated keeping all such cars with the blind end of one car facing the hook of another, and caused no little "remark" on the part of trainmen when these cars passed on to other roads where the "Y" shaped approaches to sidings often turned a car end for end. Each of these cars carried two numbers, as at the time of their construction and subsequent early service it appears that the Reading and a number of other railroads considered each four wheels a car. Through some error difficult to understand, two of the largest companies in the Western Pennsylvania Bituminous coal field placed an order in 1861 for 350 coal cars of almost exactly this pattern, and including all the objectionable features except that draught hooks were placed at each end, and single

numbers only, were used on each car. Yet these 350 coal cars were intended for use on the Pennsylvania Railroad and its allied lines where car construction differed so radically from that of the Reading, where these coal companies sent but few of their cars in those days. The error soon became apparent, and after about three years service the entire lot was sold and replaced partly by a somewhat similar car built on lines conforming to Pennsylvania Railroad standards, and equipped with drawheads and cast iron dead blocks. The sills were also above the line of draught as at present, and the bodies were wider and shorter than the Reading car. The remainder of the new lot was filled with gondolas, as just at that time a demand for such cars seemed to have arisen in the coal trade.

During 1861, a joint operation was established with the Pennsylvania Railroad for handling Broad Top and Allegheny coal trade. The P&R and PRR each contributed equally to a pool of cars. By 1866, the P&R had 685 cars in this service. These cars were painted yellow while the other P&R coal cars were painted black.

A photograph exists of P&R 5031 which was built 12-68. It is similar to the earlier cars except for having a single number, arch bar trucks with india rubber springs and complete coupling hardware at both ends.

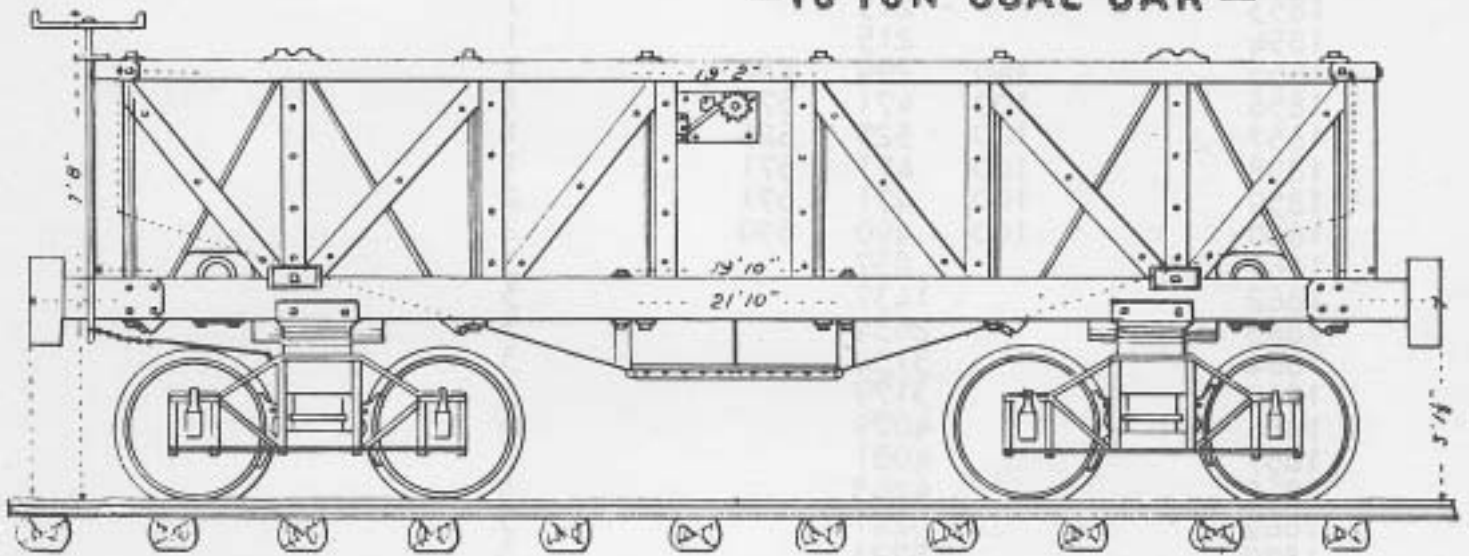
Construction of the 10-ton wooden coal car continued until 1873 when 7762 cars were in service. In 1880, coal breakers were modified to allow larger cars to be used. At least 5239 of the 10-ton cars had their sides extended in order to increase capacity to 12.5 tons.

In 1881, construction of a 16-ton coal car began. From 1881 to 1886, 3103 cars of this type were built. In addition, there were 3 cars added in 1880 and 128 in 1887 which may have been of this type. Drawings of this car appeared in The Railroad Gazette, July, 18 1884 and also in The Car Builders Dictionary in 1888.

By 1885, all 8-wheel coal cars were numbered 15001-30000 and 40001-40100. The first series was later reduced to 15001-26087, and it is likely that the remaining numbers were never used. Numbers 40001-40100 were 16-ton cars. Number 40000 was a 16-ton car which appeared by 1890, but neither the origin nor the construction have been determined.

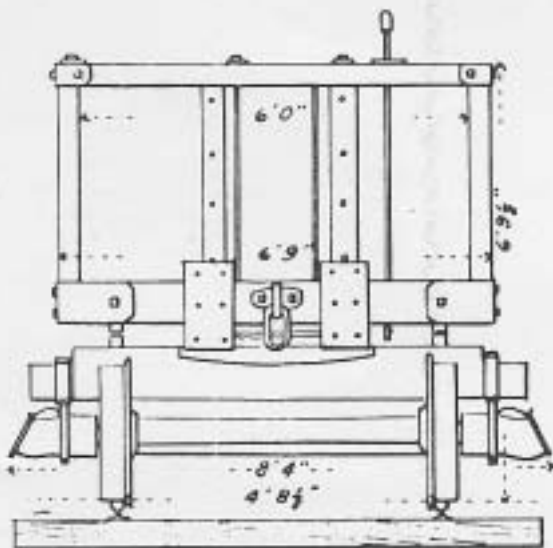
1879 Drawings, 8-Wheel Coal Car- This drawing was among several thought to have been drawn about 1879 depicting typical cars of the time. This car was similar to P&R 5031 except that the body bolster has been strengthened. All later photographs of 10-ton cars show a strengthened body bolster, so it is likely that earlier cars were retrofitted.

- 10 TON COAL CAR -



13940 lbs. -

- SCALE -



Tabulation of 8-Wheel Coal Cars on the P&R

Date	Wooden Coal Cars			Iron Coal Cars
	(2)	(1)	(3)	(5)
Nov. 30, 1844				
1845				1
1846				1
1847				1
1848				1
1849				1
1850				1
1851				1
1852		2		1
1853		215		1
1854		215		1
1855	140	294	434	1
1856	100	471	571	1
1857	100	525	625	1
1858	100	471	571	1
1859	100	471	571	2
1860	100	490	590	2
1861		837		3
1862		1437		3
1863		2634		3
1864		3134		3
1865		3179		3
1866		4079		3
1867		4081		3
1868		4243		3
1869		5241		3
1870		5723		3
1871		5963		3
1872		6985		3
1873		7762		3
1874		7762		3
1875		7762		3
1876		7762		3
1877	(4)	7762		3
1878		7762		3
1879		7812		3
1880	647	7815		3
1881	2112	8584		3
1882	4090	9565		3
1883	4730	10194		3
1884	5239	10894		3
1885		10894		3
1886		10894		3
1887		11022		3
1888		10818		2

- (1) Owned wooden cars
- (2) Leased wooden cars
- (3) Total wooden cars
- (4) Wooden cars of 12.5 tons capacity
- (5) Total iron cars

Date	15001-30000	40000	40001-40100
1-90	10680	1	100
	15001-26085		
1-95	6377	1	100
	15001-26087		
6-97	3222	1	83
1-98	3222	1	83
8-98	3222	0	83
	15001-21999		
11-98	2116		75
12-99	740		47
5-00	488		47
	15610-19724		
6-00	393		47
7-00	70		47
8-00	62		47
9-00	62		33
11-00	30		33
1-01	21		33
4-01	21		19
5-01	0		5
1-02			2
7-02			1
7-05			1
1-06			0

The data from 1844 to 1888 was compiled from annual reports. Beginning in 1889, totals are not available.

The cars listed under (2) from 1855 to 1860 include 100 leased from the Chester Valley Railroad which were purchased in 1861.

The data from 1890 to 1906 was compiled from The Official Railway Equipment Guide, where totals usually are from an earlier date. There is no separate listing for iron cars.

Annual Changes in 8-Wheel Wooden Coal Cars

Year	Net Change	Specific Items
1852	+2	2 added
1853	+213	213 added
1855	+79	79 built replacing 158 4-wheel coal cars
1856	+177	40 added 137 built replacing 196 4-wheel coal cars
1857	+54	54 built replacing 71 4-wheel coal cars
1858	-54	
1860	+19	19 built replacing 38 4-wheel coal cars
1861	+347	200 added for Broad Top Bituminous Coal 100 purchased from Chester Valley Railroad These 300 cars added for \$129514.50.
1862	+600	400 added for \$166096.00, 200 cars for Broad Top coal trade 75 added 32 added
1863	+1197	1100 added for \$512954.00 83 added for \$24900.00
1864	+500	471 added for \$283637.11 1 added for \$400.00
1865	+45	29 added for \$13605.00
1866	+900	900 added for \$672297.55
1867	+2	2 added for \$1249.00
1868	+162	162 built by P&R for \$100101.82
1869	+998	938 built by P&R for \$560730.69
1870	+482	300 built by P&R for \$166367.31
1871	+240	200 built by P&R for \$108927.15 7 rebuilt for \$3574.30
1872	+1022	1000 built by P&R for \$561304.82
1873	+777	750 built by P&R for \$497320.82
1879	+50	50 acquired from North Penn and Delaware & Bound Brook Railroads in 5-79
1880	+3	647 enlarged from 10 to 12.5 tons
1881	+769	1000 cars ordered about Mar. 19, 1881 769 built by P&R of which 50 were to replace 121 4-wheel cars and cost \$25050.00
1882	+981	1465 enlarged from 10 to 12.5 tons 981 built by P&R of which 52 were to replace 104 4-wheel cars and cost \$13652.87, and 27 were to replace a like number of 10-ton cars and cost \$10925.22
1883	+629	1978 enlarged from 10 to 12.5 tons 344 built by P&R of which 44 were to replace older cars and cost \$13451.16 1500 more cars authorized after shops transferred to Coal and Iron Co. 300 built by P&R, owned by the Coal and Iron Co. 640 enlarged from 10 to 12.5 tons

1884	+700	700 built by F&R. Work was stopped 5-84 after 1000 of the 1500 cars authorized in 1883 had been completed.
		509 enlarged from 10 to 12.5 tons
1885	0	3 built by F&R replacing older cars
1886	0	6 built by F&R replacing older cars
1887	+128	
1888	-204	

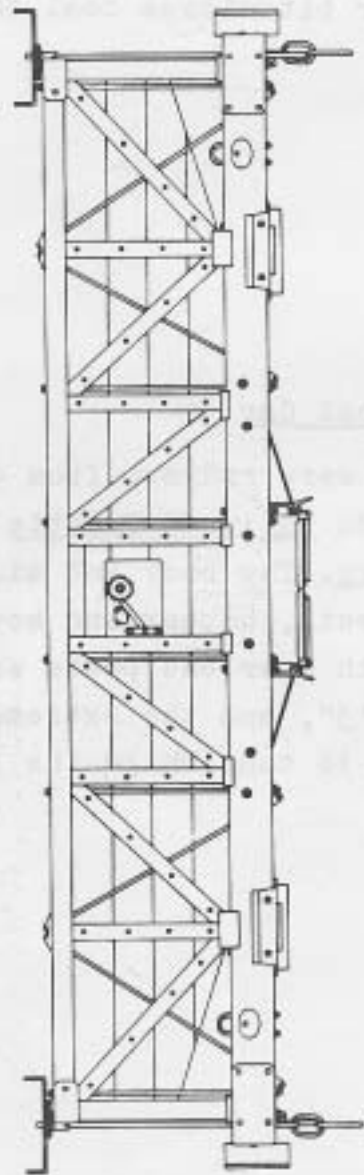
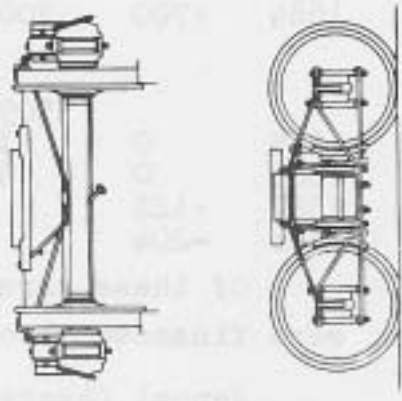
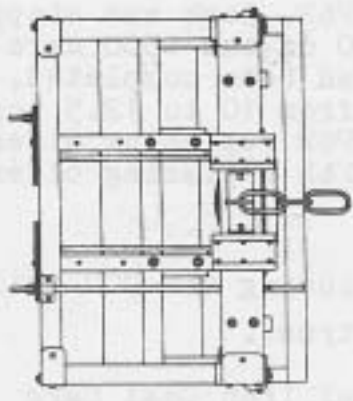
Of these cars, 2650 including the 700 built in 1884 were financed through a car trust.

Annual Changes in 8-Wheel Iron Coal Cars

Year	Net Change	Specific Items
1845	+1	1 added
1859	+1	
1861	+1	1 added for bituminous coal for \$587.37
1888	-1	

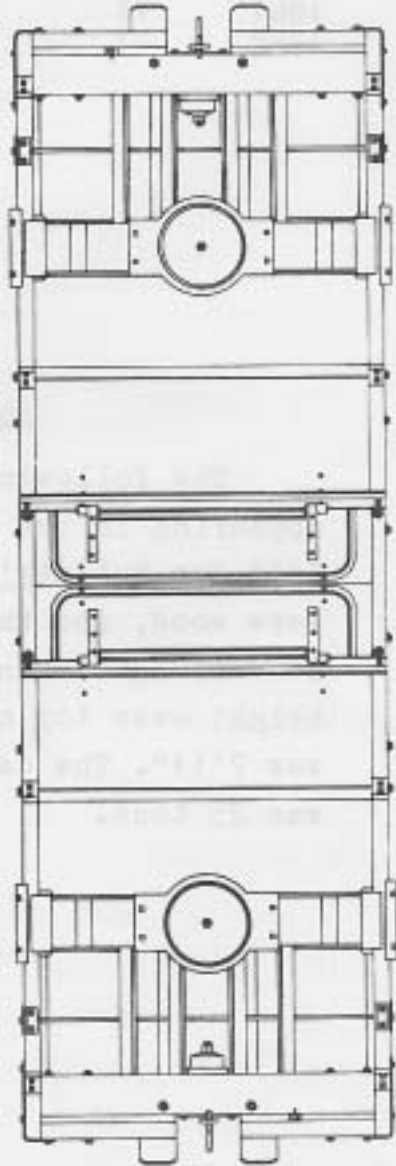
F&R 16-Ton Coal Car

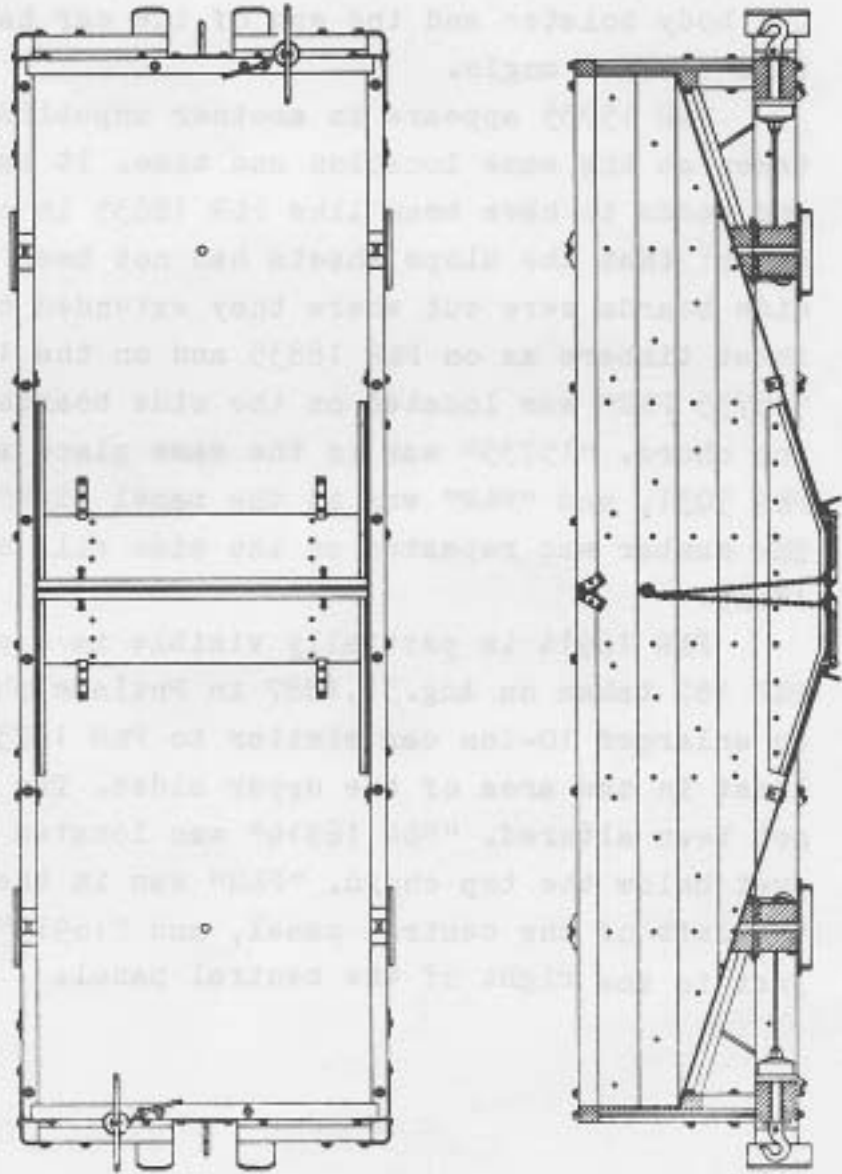
The following drawings were redrawn from drawings appearing in the July 18, 1884 Railroad Gazette and in the 1888 Car Builder's Dictionary. The body and side boards were wood, and the slope sheets, hopper and hopper doors were wrought iron. The length over end posts was 22', the height over top chord was 7'3", and the extreme height was 7'11". The capacity was 16 tons while the load limit was 25 tons. →



EAN

COAL HOPPER CAR, 16 TON CAPACITY, LIGHT WEIGHT 16480 LBS.





EAN

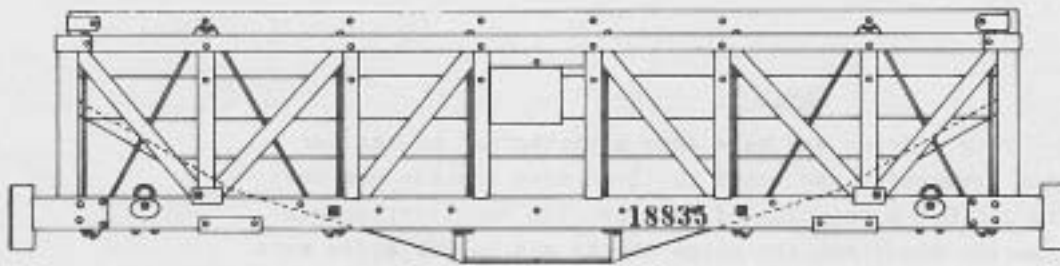
P&R 18835 (15735,16914)

The drawing of P&R 18835 was taken from a photograph which appeared on July 21, 1893 in The Railway Age and Northwestern Railroader. The end view is fully detailed, but the side view is only partially so. It appears to have been similar to P&R 5031 in the other details including trucks. There appear to have been reporting marks on the side boards below the top chord similar to P&R 5031, but the exact position can not be determined. P&R 18835 was a 10-ton car which had been enlarged to 12.5 tons capacity in the 1880's. In addition, the slope sheet between the body bolster and the end of the car had been changed to a steeper angle.

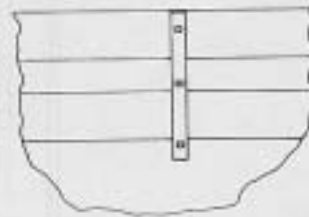
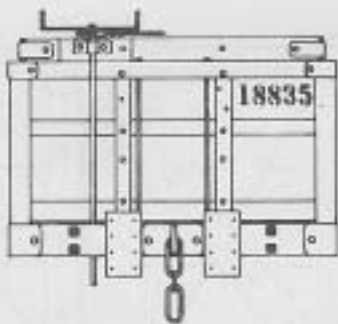
P&R 15735 appears in another unpublished photograph taken at the same location and time. It had been enlarged and seems to have been like P&R 18835 in other respects except that the slope sheets had not been altered. The side boards were cut where they extended beyond the slope sheet timbers as on P&R 18835 and on the 16-ton coal car. "15735 P&R" was located on the side boards just below the top chord. "15735" was in the same place as the number on P&R 5031, and "P&R" was in the panel directly to the right. The number was repeated on the side sill exactly like P&R 18835.

P&R 16914 is partially visible in a photograph of P&R 187 taken on Aug. 31, 1887 in Philadelphia. This is also an enlarged 10-ton car similar to P&R 15735 or 18835 at least in the area of the upper sides. The slope sheets had not been altered. "P&R 16914" was located on the side boards just below the top chord. "P&R" was in the panel just to the left of the central panel, and "16914" was in the panel just to the right of the central panel.

COAL HOPPER CAR ENLARGED FROM 10 TO 12½ TON CAPACITY



E. A. NEUBAUER 7-93

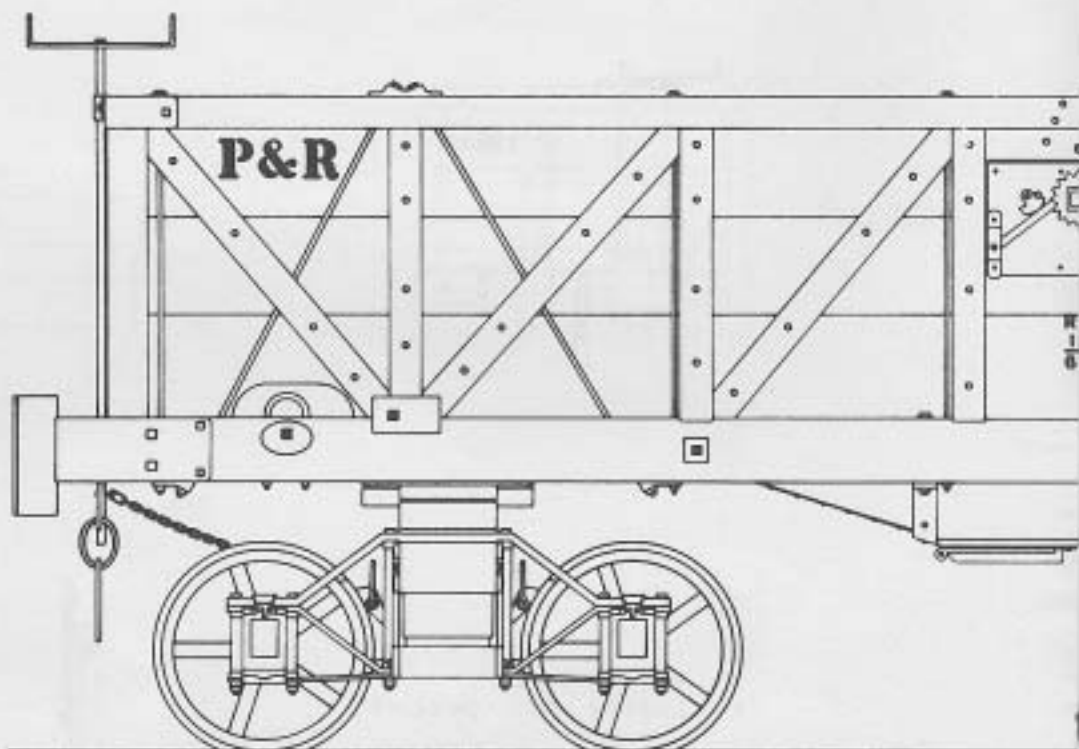


DETAIL OF SIDE
EXTENSION ATTACHMENT

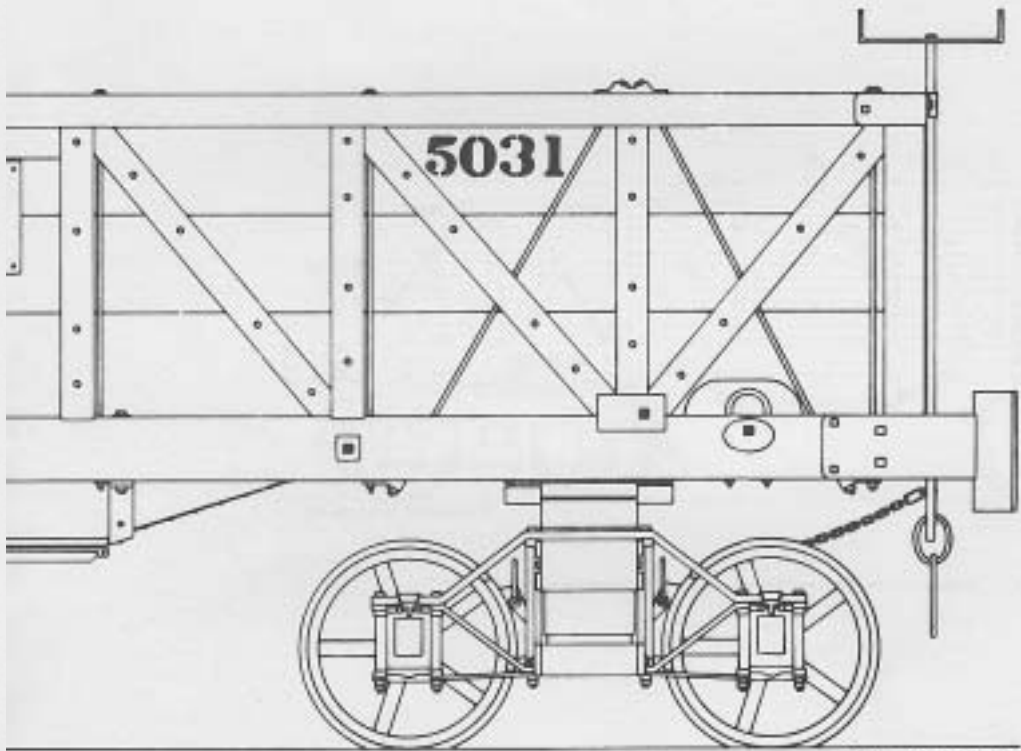


P&R 5031

This drawing was made from a photograph of the car which apparently was taken in 12-68 when the car was new. This car had a capacity of 10 tons. The construction was primarily wood, but the slope sheets and hopper sides were wrought iron. The wheels were cast iron, and the springs were india rubber. It differed from earlier cars in having coupling hooks and chains at both ends and handbrakes on both trucks.

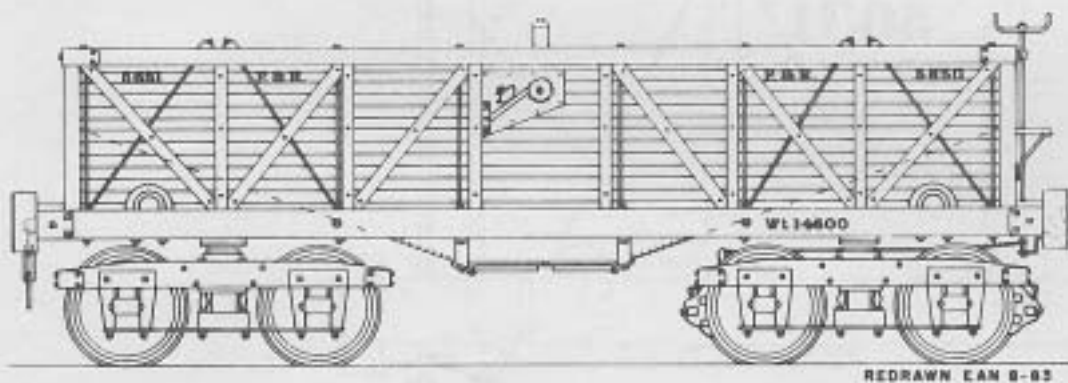


6-83



E. A. NEUBAUER

1854-1860 8-Wheel Coal Car- This drawing shows a car built by the P&R between 1854 and 1860. It was redrawn from Fig. 8 in "The Evolution of the Coal Car" by C.H. Caruthers appearing on pp. 372-374 of The Railway Gazette in 1906. The car carried two numbers, because the P&R considered each four wheels a car. There was a draft hook at one end of the car and a three link coupling chain at the other. Brakes were applied to only one of the two wood beam trucks.



EDITOR'S NOTES

Right off the top I must say how pleased I am at the response to FCJ. Not only for the members joining, but for the many excellent comments, suggestions and constructive criticisms. I thank those who did make comments and hope that with this issue you'll see some of the suggestions you made come to light. I was also pleased to see a great diversity of interests among freight car enthusiasts. Most people listed their interest by either era or railroad...only one or two mentioned specific types of freight cars without regard to era or road. Approximately a 1/4 of the members are interested in pre- 1930 era, another 1/4 are interested in the 1930-1955 era and finally about 1/2 mentioned their interest in the "modern" post 1955 era. This may or may not be a true representation of interests. I do wish to see all eras of freight car history represented in FCJ and hope that with the help of the members we can accomplish this task.

This brings me to the subject of contributions. First, Please we need articles for FCJ. Please if you have some special interests and knowledge in freight car history please share it. The best way to further others interests is by sharing yours. If you are able to write an article please try to do the following:

1. Make copies of your text. If possible type it double spaced..handwriting is okay but be as legible as possible. If you have illustrations such as drawings or photographs please send good clear copies of drawings and 5x7 or 8x10 B&W prints if possible. Negs and original and duplicate slides are okay too, but I would prefer to not have non replacable items sent through the mail. If you do send non replacable types of items through the mail, please insure or register it. I will assume that all prints, slides etc. sent are to be returned unless we are on some kind of a trade arrangement on a personal basis. I will return prints, slides etc. at least by insured mail. Be sure to keep a copy of the text and please give proper credit where credit is due.
2. Regarding subject matter...I'm pretty open on this..just about anything goes if it relates to freight car history. If its under 3-4 pages (including illustrations) there should be no problem...but please drop me a line in advance if its much more than that. This will help me organize the contents of each issue better this way. If you have any questions about length or content-subject matter of an article you want to do...please feel free to drop me a line.

Next,...we could sure use some additional staff...more editors etc. I'd like to arrange the editorial staff by era, region and car type. If you have any interest to be an associate editor we would really appreciate it...please let me know.

Lastly, this issue is a little larger than most will be this year mainly because of the article by Eric. Most issue will be (at least until we hit the 150+ member number) about 16-20 pages depending on content. Also the subject of improving the physical quality of FCJ has been mentioned...it seems that members want to see 1) better photo reproduction, 2) more photos, 3) semi- or glossy paper and 4) more pages in that order. We'll start with #1 as soon as possible....

- David G. Casdorff

MODERN SULFURIC ACID TANK CARS

by DAVID G. CASDORPH

Sulfuric Acid, H_2SO_4 , also known as "oil of vitriol" is a colorless, oily liquid. Approximately 100 million tons of sulfuric acid are produced each year. The United States accounts for about a third of this total.

The production of sulfuric acid takes nearly 90% of all sulphur consumed. This sulfuric acid production is then used in the manufacture of other goods in the following percentages:

Fertilizers	50%
Chemicals	20%
Pigments	5%
Iron & Steel	3%
Rayon films	3%
Petroleum process.	2%
Misc.	17%

Sulphuric acid is a high density liquid (14+ lbs/gal) that today is transported in modern 100 ton, 13,350 gallon tank cars. Historically, 50 ton, 7000 gallon and 70 ton 9800 gallon tank cars were used. Photos and illustrations (including some technical drawings)

of these older sulfuric acid tankers can be found in the 1922 Car Builders' Cyclopedia pp.264-265 (GCX 7500); 1925 Car Builders' Cyclopedia p. 258 (MCCX 108); 1937 Car Builders' Cyclopedia, p 343 (PSMX 184); 1940 Car Builders' Cyclopedia p. 313 (CCIX 153), p. 317 (GATX 38196); and 1943 Car Builders' Cyclopedia p 311 (SHPX 7096).

Cars used for sulphuric acid service today are non insulated and lined (usually PL 3066 or LC 24 linings). DOT class is 111A100W2 (ICC 103A on older cars). Modern designs are non-pressure domeless 40 to 45 foot (over the striker) length cars.

The most common cars used in sulphuric acid service today appear to be those built by General American Transportation Corporation and Union Tank Car Company such as those illustrated in this article.

In HO scale, the Roller Bearing GATX 14,000 gal. tank car is very similar to the GATX car illustrated here (differences in manway and valves). However, the Roller Bearing Models car appears to be identical to the drawing of the sulphuric acid car on p. 207 of the 1980 Car and Loco. Cycl.

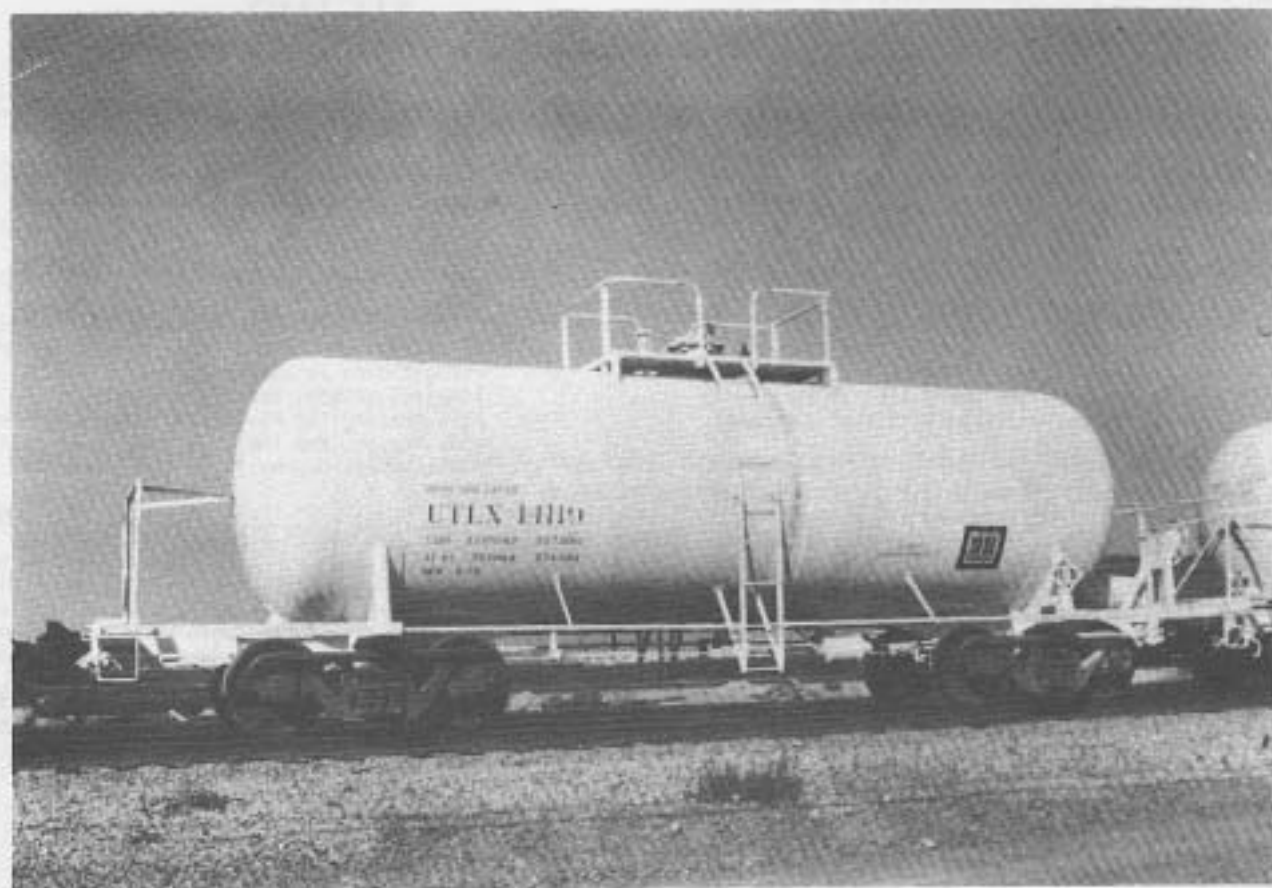


(ABOVE) The Scholle Corporation's # 101 is of the Union Tank Car design and identical to the MTLX 14119 car also shown in this article. Color is basic black.



(ABOVE) GATX 42434, Leased to Stauffer Chemicals sits in the SP Compton Yard, CA. Colours are black and white.

(BELOW) UTLX 14119, Leased to Stauffer Chemicals was built by the Union Tank Car Company at their East Chicago shops in May 1973. Color is overall white with black lettering.



FREIGHTCAROLOGY

DATA • NEWS • NOTES • PROJECTS

FROM THE EDITOR....

A few notes on how *Freightcarology* is set up and how to use it etc. With this issue we are dividing it into three major sections- News, Historical Notes, and Special Projects.

The News section will contain news items from the freight car industry as well from the railroads and car owners. Also in this section will be new equipment sightings (starting with 1982 because this is where Railway Age left off) and new car series descriptions.

Historical Notes will at present consist of four sections- A General section, a section called Behemoths, Articulated Skeletons and other Strange Creatures, a third section called Secondary Reporting Marks and last a Builders Production section.

The General section of Historical Notes will include short notes on car series, railroad car pools, shorter rosters, misc. data etc. of the past (pre-1982)

Behemoths, Articulated Skeletons and other Strange Creatures will include some of the odd-ball cars sighted. This includes special and heavy duty flats, center depressed flatcars, aircraft wing cars, extra-large gondolas and tank cars, and the new articulated COFC/TOFC cars recently introduced.

Secondary Reporting Marks will cover cars sporting second, third-hand etc. reporting marks and numbers. This includes those cars not ordered, bought or originally leased from the builder when built. Cars in this category are those sold by one owner to another or re- leased etc.

The last section of Historical Notes, Builders Production will list production by year and month of the various smaller builders and factory locations. Entries will not necessarily have to include a complete listing of a builder's production, but rather will probably include only some of their production as sightings, data etc. are reported. Larger builders production lists will probably be listed under Special Projects.

The third major section of *Freightcarology* is Special Projects. This section is a "free contents" section intended for larger, on going projects and research. Items here may include a list of cars built by the larger builders, or maybe a list of cars that carry a specific commodity etc.

At this point I would like to say a few things about the purpose and intent of this *Freightcarology* section. The most important thing, I think, is to realize the nature of dealing with huge amounts of data-errors, additional information etc. are bound to occur. The primary intent of *Freightcarology* is to discuss and present various data on freight cars that is either too short or incomplete to be used as an article. By doing this we hope to encourage others to participate in our own specific interests as well as to increase our knowledge on freight car history.

ENTRIES- Regarding the organization and use thereof. The first thing that should be noted is the entry number. This is accumulative from issue to issue. That is, if issue #1 ends with entry #0017, then the second issue will pick up with entry #0018. These numbers

are for reference purposes. They will aid in letters to the editors, exchanging information, adding, correcting etc. As an aid to speedy reference we should refer to entries by both the issue number and the individual entry number written as such: 1-0017 (issue 1, entry number 0017). Each entry will have a title sentence. If the entry is to provide additional information on a previously listed entry or article it will say "ADD INFO" and then refer to the entry or article name. If the new entry is to correct previous data from a previous entry or article it will be listed as "CORRECT" then refer to the item it is correcting. At the end of each entry will be listed the name(s) of the person(s) and/or publication(s) submitting the material.

Special Projects will have their own individual reference code followed by the issue number. For example, the first one on Pullman-Standard Lot Numbers is PSLOT 1. Additions and corrections etc. for Special Projects will be listed only under the Special Projects section.

Well, I hope the above helps clarify a little what *Freightcarology* is doing. I would appreciate any questions or suggestions from the readers that in some way may eventually help improve in any way the readability and reference aspects of this section.

NEWS

0018. PULLMAN STANDARD OPERATIONS SOLD TO TRINITY
 Pullman Transportation Co. announced it will substantially withdraw from the railcar manufacturing business and sell its railcar operations to Trinity Industries Inc., Dallas, Texas for \$15 million in cash and notes. Apparently Trinity will still use the Pullman Standard name. The sell includes the production plants at Butler, PA and Bessemer, ALA.

Pullman Standard has been a major producer of freight cars and a large percentage of the freight cars in use today are of Pullman Standard origin. Notable designs include the PS-1 boxcar, the PS-2 covered hopper, the PS-3 open hopper, and the PS-4 intermodal flatcar. (Wall Street Journal/E.A. Neubauer/ D.G. Casdorff)

0019. NEW "ROADRAILER" TRAIN TO BEGIN OPERATION IN 1984
 ON THE BURLINGTON NORTHERN RAILROAD. The B N and Road-Rail Transportation Co. agreed to begin a service between Chicago and Houston, called the South West Xpress using the new 48' highway/rail trailers with retractable rubber tires and steel wheels. (Wall Street Journal/ E.A. Neubauer)

0020. TOFC's; NEW TRAILER SIZES-NEW SLOGANS. With the recent introduction of the new 45' piggyback highway trailers comes new TOFC Flatcar conversions and new slogans. Some of these new slogans are noted as follows:

Trailer Train	"Twin- 45s"
Southern Pacific	"Two 45"
ATSF	"Dual 45"

0026. NEW AND RECENT DELIVERY SIGHTINGS

Reporting Marks	Date Built	Copy & AAR	Probable Series	Quantity	Builder	Notes
ACFX 36115	1-82	194 LO	n.a.	n.a.	ACF HTG	5700 cube, s/n 74176
ACFX 79537	1-82	191 T	79441-79590	148	ACF MILT	21074 gal., Hunt Wesson Lessee
ADMX 25020	3-82	184 T	n.a.	n.a.	ACF MILT	25305 gal.
ADMX 25060	4-82	184 T	n.a.	n.a.	ACF MILT	25341 gal.
ADMX 75116	2-82	192 LO	75051-75140	90	ACF HTG	5700 cube, s/n 74413
ADMX 85036	3-82	196 LO	85001-85250	250	ACF STL	5250 cube
CPIX 3000	4-82	197 LO	1000-3000	3	ACF MILT	5250 cube, 5135 outlets
DDMX 7944	1-82	200 T	7931-7999	69	UTC ECH	20755 gal. Hydrochloric Acid serv.
DRGW 12541	5-82	199 HT	12514-12686	173	BSC JTK	
FCP 18033	7-82	154 XM	17855-18036	182	CNCF	
GATX 52370	1-82	179 T	50040-54949	n.a.	GATX SHN	24831 gal. Insulated
MP 794668	1-82	167 RBL	794650-794799	150	PCF RN	
NAHX 94678	6-82	205 LO	94668-94687	20	NACC MURF	2785 cube Press. Diff. car
NAHX 488248	2-82	200 LO	488111-488808	698	ING PAS	4750 cube
NAHX 488215	1-82	200 LO	488111-488808	698	ING PAS	4750 cube
NAHX 489148	3-82	200 LO	489141-489797	657	ING PAS	4750 cube
NATX 73894	3-82	194 T	73800-73975	175	UTC ECH	20735 gal., UTC Lot# 3219-N
NdeM 106110	2-82	154 XM	105000-106899	1900	CNCF	
N&W 143429	3-82	200 HT	142001-144475	2475	N&W RD	3570 cube., class H-12A
OILX 30638	5-82	193 T	30600-30699	100	RTC HO	30671 gal., Ocelot Ind. lessee
RTMX 2925	2-82	190 T	2878-2946	69	RTC HO	20701 gal.
RTMX 2947	3-82	202 T	2947-2979	33	RTC HO	20581 gal., Muriatic Acid
RTMX 13402	6-82	187 T	13400-13480	81	RTC HO	23473 gal., DOW Chem. lessee
TIMX 21003	6-82	189 T	21000-21010	11	TRN LGVW	21015 gal.
UP 32421	1-82	198 GR	32401-32699	299	UP AT	
UP 32493	2-82	198 GR	32401-32699	299	UP AT	
UP 32607	3-82	198 GR	32401-32699	299	UP AT	
WFIX 217	10-82	189 T	201-230	29	ACF MILT	21076 gal.

BN 376518	4-83	184 XP	376500-376649	150	U-AC CRTS	see also #1-0002
BN 624424	5-83	199 FBS	624400-624475	76	TC CH	Center-Beam flats (E.A.N.)
BN 624509	6-83	199 FBS	624477-624517	41	TC CH	Center-Beam flats
BN 624632	8-83	199 FBS	624603-624643	41	TC CH	Center-Beam flats
GATX 18220	8-83	192 T	n.a.	n.a.	GATX SHN	20580 gal., Emery Ind. lessee
GATX 28234	7-83	184 T	n.a.	n.a.	GATX SHN	23659 gal. TANK TRAIN, Shell Oil
NAHX 94605	1-83	205 LO	n.a.	n.a.	NACC MURF	2785 cube, Press. Diff. car
RLSX 1002	7-83	198 T	n.a.	n.a.	GATX SHN	17682 gal.
UTLX 24533	6-83	200 T	n.a.	n.a.	UTC ECH	14152 gal. Clay Slurry
UTLX 66667	6-83	200 T	n.a.	n.a.	UTC ECH	17555 gal. Corn Syrup
UTLX 66680	5-83	200 T	n.a.	n.a.	UTC ECH	17553 gal. Corn Syrup

*all spottings are D.G. Casdorff except for E.A.N.=E.A. Neubauer. We could sure use some help here!

0021. ATSE, LITTLE WHITE FCs AND OTHER COFC/TOFC NOTES
 A lot of changes going on this year in Santa Fe's COFC/TOFC roster etc. Many of the older 89' FCs are being converted to "Dual-45s" status and repainted, repaired etc. Apparently the Santa Fe has a shortage of COFC/TOFC cars- recently spotted were gondolas carrying containers. Also the Santa Fe has converted a bunch of their older wallboard bulkhead flat cars to single 45' trailer capacity FCs. Each of the former bulkhead flats were stripped of their bulkheads and special equipment, hitches etc added and painted white. There are four classes involved, all outshopped by the Santa Fe at their Topeka Shops. The new FCs retain the old class numbers, but the reporting numbers have changed. Some details of the classes are as follows:

Class Ft-28: # 293000-293094, from series 96125-96224, originally built 11, 12-63 and newly outshopped as FCs 8-83.

Class Ft-32: # 293095-293238, originally from series 95800-95901. Built 12-64 to 4-65, and newly outshopped as FCs 5 to 8-83.

Class Ft-33: # 293239-293335, originally from the series 95700-95799. Built 1 to 4-66 and newly outshopped as FCs 4 to 7-83.

Class Ft-45: # 293336-293433, originally from the series 95600-95699. Built 1 to 3-67 and newly outshopped as FCs 3 to 9-83.

All of the cars are 57'6" I.L. except for class Ft 28, which are 55'10" I.L. Also all classes are equipped with Santa Fe 20" Shock Control except for Class Ft-28 which has Keystone 20" Shock Control. All cars are rated as 65000 FCs. All the cars have fixed hitches and no bridge-plates. These cars make a nice contrast set in with the usual 89-footer piggyback cars and would certainly make a nice modeling project in either HO or N scales. (D.G. Casdorff)

0022. C&O ADD INFO EX-RAILBOX (See also 1-0010). The Chesapeake and Ohio can be added to the growing list of ex-RBOX cars going under new reporting marks. Details of these and other ex-RBOX cars will appear in a future issue of FCJ. (E.A. Neubauer)

0023. JTTX/UP. Trailer Trains Class F-890H series 900000*. Various numbers of these series are being repaired and painted by CC ML (Cal Pro, Mira Loma, California) and restenciled as 117 FBS's. The cars are also being reweighed at UP Albina and UP Omaha in August 1983. Many are formerly 159 FA's. The Union Pacific leases these cars to carry truck bodies. Without the special racks the

0023. JTXX/UP. (CONT'D) cars look like oversized bulkhead flatcars with ratchets. Cars have been spotted in the Los Angeles area around the Toyota Truck Body facility on Paramount Blvd. in Long Beach, CA. Cars being used here carry up to 14 stacks of 5 high racks. Each rack carries one truck bed body for a total capacity of 70 truck bed bodies per car. (D.G. Casdorff)

0024. MONX. The Monsanto Company recently placed in service 5 new 50-ton tank cars for Chlorosulfonic Acid service. The cars bear the reporting marks MONX 8300-8304. The 8100 gallon 40,000 lb. light weight tank cars were built by Union Tank Car in March 1983. (D.G. Casdorff)

0025. SBD. NEW PIGGYBACK TERMINAL IN NASHVILLE. Nashville's new piggyback terminal at Radnor Yard is a model for piggyback yards of the future.

Located just off Interstate 65 in southeast Nashville, the complex covers 82 acres and has parking spaces for 740 trailers. There is ample room for expansion when the need arises.

Built at the cost of \$6.5 million, the yard sits on what was formerly a rock ridge and a deep valley. The hill was leveled, providing the fill for the valley. Some 905,000 cubic yards of material were moved.

Oman Construction Company was the contractor for the yard, the same company that built the original Radnor Yard in 1954. Amazingly, Oman charged the same price per cubic yard of material moved that it charged when the Radnor Yard was built 30 years ago.

The piggyback yard has 19 acres of paved asphalt and 15,000 cubic yards of concrete went into the aprons that provide the runway for the huge gantry crane. There are 26,500 linear feet of track, totaling 800 tons, and 13,250 crossties were placed.

The crane is the centerpiece of the piggyback yard. Built by MiJack Products of Hazel Crest, Ill., it stands 34 feet-10 inches high and is 69 feet-4 inches wide. Horizontal clearance between the legs of the crane is 60 feet.

The crane can lift up to 100,000 pounds and moves along the aprons on rubber tires the size of a large airliner's. It travels 4.5 miles an hour in either direction.

The yard office contains 2,176 square feet and features a computerized inventory and billing system tied directly to Jacksonville. There are three lanes for incoming trucks on one side of the office building and two exit lanes on the opposite side to keep traffic moving.

The yard already is averaging 125 trailers a day some weeks and is capable of handling many more.

The facility operates around the clock from 7 a.m. Monday till 11 p.m. Friday. Saturday hours are 7 a.m. till 11 p.m. and Sunday 7 a.m.-3 p.m.

There are currently nine incoming piggyback trains a day and 12 departures, to and from points throughout the South and Midwest and connections throughout the country.

(Seaboard System News, October 1983)

HISTORICAL NOTES

GENERAL

0027. CR-PC-PRR-RDG 100 Ton OPEN HOPPERS.

Numbers	Quan	Class	Builder	Date	Cu.Ft.
---------	------	-------	---------	------	--------

Conrail (CR)

486801-487300	500	H1A	NW RO	4-6,10-12/78	3570
487301-489800	2500	H1B	BSC JTN	8-12/78	3422
489801-490800	1000	H1C	PS BUT	10-12/78	3420
490801-490875	75	H1B	BSC JTN	12/78	3422
490876-491039	164	H1D	NW RO	9,10/79	3570
491040-491259	220	H1E	GSC GV	12/79,1/80	3420
491260-491589	330	H1B	BSC JTN	11/79	3422
491590-491889	300	H1E	GSC GV	8-10/79	3420
491890-492425	536	H1G	C&O RA	10/79	3433

Penn Central (PC)

479451-481970	2520	H43D	BSC JTN	9/71-1/72	3433
482000-483499	1500	H43D	BSC JTN	3-5/72	3433

Pennsylvania Railroad (PRR)

180000-181999	2000	H43	PRR SR	3-9/64	3418
225000-226499	1500	H43A	PRR SR	4-6/65	3418
226500-229499	3000	H43B	PRR SR	7/65-1/66	3418
229500-230499	1000	H43C	PRR SR	12/66-2/67	3418

Reading Company (RDG)

40001-40400	400	HTZ	BSC JTN	2-4/62	2868
41250-41649	400	HTD	RDG RDG	11,12/66, 3/67	3418
41650-41849	200	HTE	BSC JTN	7/71	3433
483501-484600	1100	HTG	BSC JTN	11/75-1/76	3487

Notes:

1. Only original car numbers are listed
2. According to the Official Railway Equipment Register there were only 2420 cars built in the CR 487301-489800 series.

(E.A. Neubauer)

0028. CR. ADD INFO CONRAIL FREIGHT CARS (See #1-0004) The following are some additional dates built on some of the Conrail series:

Series:	Class:	ADD these dates built:
283786-283816	863D	7-80
283817-283851	863D	8-80
376001-376190	865A	5-77
628001-628300	652A	12-77

(Richard J. Burg)

0029. KCS ADD INFO FMC 5347 (See article FMC 5347, pp 6, FCJ #1). KCS series 753301-754293 (100 cars) are ex Lamoille Valley RR (LVRC) series 3000-3099. (E.A. Neubauer)

0030. L&N (SBD). CAR POOL DESIGNATIONS. A few recently spotted cars:

Design.	"Return to"	# of car
AA	L&N, Appliance Park, KY	12150
AA	L&N, Appliance Park, KY	410035
CF	L&N, Flomaton, Alabama	101835
CF	L&N, Flomaton, Alabama	101828

0030. L&N Car Pools continued:

DJ	L&N, Holt, Alabama	102811
IX	L&N, Evansville, IND	101400
KH	K&IT, Louisville, KY	104820
MC	L&N, Beatrice, ALA	450098
MT	L&N, Bloomington, IND	410091

0031. PC, SERIES 167000-167999.

This group of 1000 cars delivered to the Penn Central in 1972 is one of the few, if not the only, sizable order of boxcars built by the Fruehauf Railcar Division (ex-Magor) at Clifton, New Jersey. The cars were delivered as 50' single-door 154 XM boxcars with a cubic capacity of 5030. Doors used were Youngstown 10-foot 5/6/6 type, Penn Central (and later CR) class is 'X74'. The cars are now being renumbered, painted, etc., and some are appearing with new AAR mechanical designations under the Conrail system. The new number groups include the following:

CR 157001-157652	154 XM
CR 163550-163551	154 XM
CR 209220-209331	154 XP
CR 215001-215215	154 XP (Newsprint Service)

Only a few cars remain under PC reporting marks.
(D.G. Casdorff)

0032. PHD, ADD INFO FMC 5347 (See article FMC 5347, p.6 FCJ #1). Add the following to PHD 2000-2199 in the FMC 5347 roster:

154 XM	62200 New 10-77	SSI lessor	EOC
--------	-----------------	------------	-----

(E.A. Neubauer)

0033. UMP/ UMPX, ADD INFO DATES BUILT TO SERIES 6000-6599 and 6600-7557 (see #1-0017). I've noted the following dates built to these series:

6000-6599	(NW RD)	3 to 7-79
6600-7432	(C&O RA)	7 to 9-79 & 11, 12-79
7433-7557	no record	

The Upper Merion and Plymouth also has a leasing company with C&O built hoppers. The numbers are the same as the railroad's numbers (6600-7557), except they are prefaced by UMPX reporting marks.
(E.A. Neubauer)

0034. VGPX, SERIES 1001-1015 (ENTIRE ROSTER).

The following are some details of Valley Grain Products (San Francisco, CA) covered hoppers.

VGPX Number:	Light Weight New:
1001	62900
1002	62700
1003	63000
1004	62600
1005	62600
1006	62800
1007	62400
1008	62000
1009	62200
1010	62200
1011	62800
1012	62000
1013	62000
1014	62100
1015	62700

All cars are 200 L0 covered hoppers built by Trinity Industries (QC FW) in October 1979 in their 4750 cube design. (D.G. Casdorff)

BEHEMOTHS, ARTICULATED SKELETONS AND OTHER STRANGE CREATURES

0035. NEW AND RECENT COFC/TOFC DESIGNS COMPARISON.

ATSF 298989-298997, class Ft-93, 10-unit articulated 650 FC. Length: 465.3 feet. Approximate average light weight: 213,300 lbs. Built by ATSF TS in 1978. "10 Pack Fuel Foller."

ATSF 298946-298987, class Ft-101, 10-unit articulated 650 FC. Length: 465.3 feet. Approximate average light weight: 213,300 lbs. Built by ATSF TS in 1980. "10 Pack Fuel Foller."

SSW 90050-90058, 4-unit articulated 256 FCA. Length: 190.3 feet. Approximate average light weight: 93700 lbs. Built by FMC-P in 1983. "Inpack"

SP 513302-513343, 5-unit articulated 546 FCA. Length: 268'1". Approximate average light weight: 199,000 lbs. Built by ACF STL in 1981.

TTFX 60000-60100, 4-unit articulated 260 FC. Length: 190'11". Approximate average light weight: 125,000 lbs. Built by ACF STL in 1981. "4-Runner."

From the above listed series, its interesting to compare some figures:

Series	Builder	Year	Lbs/lin.ft.	#Axles	Lbs/axle
ATSF	ATSF TS	1978	458	22	9695
SSW	FMC P	1983	492	10	9370
SP	ACF STL	1981	742	12	16583
TTFX	ACF STL	1981	655	8	15625

(D.G. Casdorff)

0036. ACFX, SERIES 85299-85301. An example of this series is ACFX 85299. This huge tank car has eight-axes to carry some 26,688 gallons of motor fuel anti-knock compound. Light weight is 184,400 lbs. The car is cork insulated and LC 24 lined. Built by ACF MILT in September 1969, the car is DOT classed 105A-300W and rated at 341,000 lbs capacity. Overall colour is bright blue.
(D.G. Casdorff)

0037. CR, ADD INFO CR ROSTER'S FDs (See #1-0004) Conrail class FR63A (CR 766000,766001) are actually ex- AQCX 100,101 built by Berwick in 7, 8-68.
(C.T. Bossler)

0037. DCCX, ROSTER:SERIES 1001-1006.

The McDonnell Douglas Corp. owns six special large gondolas for transporting wings. Individual data is as follows:

DCCX #	Lt.Wt.New	Copy/type	Date Built
1001	124900	62 GWS	10-69
1002	124900	60 GWS	10-69
1003	124900	60 GTS	11-69
1004	125140	60 GTS	11-69
1005	130100	79 GWS	1-71
1006	129800	60 GWS	1-71

All cars were built by The Maxson Corp.(TMC STP) with a cubic foot capacity of 7640. The cars have an inside length of 88.3 feet. They have drop ends open top, well hole and special wing tie-down arms. The cars are on assigned service from the Long Beach, California aircraft plant. Cars are painted dark olive drab with small white lettering.
(D.G. Casdorff)

0038. UP, SERIES 229580-229587, AIRCRAFT WING BONS,
Cars of this series are nearly identical to the OCCX 1001-1006 series (see 0037). Union Pacific class is G-50-15. A couple of examples are UP 229585 (130500 LT NEW 5-71) and UP 229582 (128800 LT NEW 3-71). Cars are built by the Maxson Corp. and have freight saver 12" cushioning.

SECONDARY REPORTING MARKS

0039. The following lists the old then new reporting marks spotted recently:

NSL 155061 + CNW 719079	SIECO AC	6-78	XM
NSL 155253 + ICG 501745	SIECO AC	10-78	XM
NSL 156138 + ICG 501543	RFC GN	11-81	XM
NSL 157112 + ICG 501535	StL Norfolk	11-81	XM
PC 281391 + KELX 281391	TC CH	6-73	XL
PT 201173 + MISS 201173	GT PICK	3-79	XM
PT 205234 + ICG 501673	SIECO AC	7-79	XM
RI 16341 + UP 492413	GATX	6-67	RBL
RI 36847 + CNW 721031	PS BESS	5-73	
ROCK301993 + CNW 718045	PS BESS	7-79	
ROCK306980 + B&M 306980	USEX BI	1-78	XM

(E.A. Neubauer, D.G. Casdorff)

BUILDER'S PRODUCTION

0040. BERWICK FORGE & FABRICATING, RENOVA, PA PLANT

1975	NdeM	100000-101999	2000	154	XM
1977	D&M	2400-2499	100	154	XF

The above are only two series built by BFF RV. Additional series will be listed as they become known. (D.G. Casdorff)

0041. BETHLEHEM STEEL, SPARROWS POINT SHIP YARD (BSC SPSY)

The following is a list of known production for this plant:

YEAR	MONTHS	REPORTING MARKS	#	CAPY/TYFE	CUBE
1979	10,12				
1980	1 to 5	PBNE 800-969	170	146 GB	2920
1979	11,12	SH 100-129	30	146 GB	2920

(E.A. Neubauer)

0042. CAMBRIA & INDIANA, CORNWALL, PA.

The following is the only known production from this builder:

1979	9 to 12				
1980	1 to 7	PBR 200-349	100	154 GB	1995

Also the following are known to have been REbuilt by C&I CR:

1980	11,12				
1981	4 to 7	PBNE 300-349	50	68	1779
1982	4	PBR 325-348	24	154 GB	1700

(E.A. Neubauer)

0043. SOUTHERN IRON & EQUIPMENT CO., ASHLAND CITY, TN.

A few series of the many series built by SIECO AC:

1980	10	RILX 100-124	25	200 LO	4780
1981	6,7	LPN 61000-61099	100	182 FBS	

(D.G. Casdorff)

OR JUST ONE OF THOSE BASIC GUIDES FOR THE FREIGHT CAR ENTHUSIAST, CAR SPOTTER AND/OR DATA COLLECTOR. One of the main purposes of this group, I feel, is to share our knowledge of freight car history with others. Since freight car history as a subject is so diverse, its rather difficult for any one person to know all its many aspects. I for one will certainly not pretend to be the omniscient freight car historian, but I do wish to share with others what I have learned.

In this limited series we (myself and others) hope to provide a basic guide to freight car data collection both presently and historically as well as present some insights to what freight cars are, what they do, different types etc. Though primarily aimed at the "beginner" we do hope others will find it useful as well. The series will emphasize current and modern cars as examples to work with basically because "they're here." Please note however, that this is not meant to set policy of this editor or group over which is more important-the modern cars or the "historical" cars.

In this part we'll examine some of the basic stuff the data collector will want to look for. In future episodes we'll detail specific car types, AAR designations overview, boxcar loaders, methods of historical research etc.

THE BASIC STUFF

First of all, many have asked, "Why collect this data off the cars?", "Why not just refer to the ORER or write the railroad?" There are several reasons why I do....

- 1) In order to get this information from the cars..it requires that one goes "out in the field"and make actual observations. In my line of thinking, this gives me more of a sense of reality on the subject. Thus, I'm able to "associate" more with the subject as a whole that I'm studying...I can relate more to the cars of the past that I research and read about. It takes time to stand there and write down a bunch of numbers and abbreviations...and while I'm doing it I'm able to observe the differences and likenesses of the cars. Unless one photographs the car in detail, the most time one spends observing a car during normal photographic procedures is less than 30 seconds.
- 2) The Official Railway Equipment Register (ORER) lacks two prime ingredients of interest to the freight car historian-the builder and the date built. Also, the railroads have other things to do than be bothered with giving out bits and pieces here and there of information regarding their equipment. There are many other items that cannot be acquired by just looking into an ORER which we'll go into in other parts of this article.
- 3) Well, I hate to say this...but, the ORER, the railroads, the builders and ourselves make e-r-r-o-r-s in compilation and presentation of data. Its bound to happen and only by cross-checking and comparison of other data can we lessen our chances of making an error.
- 4) Making observations, writing down data etc, doesn't really cost anything, require special equipment or super intelligence and knowledge. By doing so your capturing "something" of that car that maybe (and probably) no one else has. This is information you have collected and like a colour slide...has historical significance.

So, basically what kind of information should we be looking for?

Being very general we should look for and note the following:

- a) Reporting marks and car number
- b) Stencilled capacity
- c) AAR mechanical designation
- d) Light weight IF "new"
- e) Builder (if possible)
- f) Date built
- g) Cubic capacity or gallons
- h) Railroad or owner class
- i) reconditioned date (optional)
- j) rebuilt date
- k) Lot number and/or serial number if present

In addition, there may be special logos, colour schemes, pool information or assigned service marks, specific commodities loading as well as other specific notes for the various types of cars which will be discussed in more detail later.

For the most part, on North American freight cars, these data will appear on the car from left to right as we read. With the exception of tank cars and a few other special types, the stencilling on the left will read:

	N.P.		(Reporting Mark)
	794668		(Car number)
CAPY	167000	RBL	(Capacity & AAR Desig.)
LD LMT	169200		(Load Limit)
LT WT	93800	NEW 1-B2	(Light weight when new)

On the right side of the car will be the "black box" (AAR servicing and FRA inspection records) as well as dimensional data including cubic capacity. Some railroads (notably the BN and the BTW) have all these data on the left side of the car (except the black box), but still retains the same relationship (reporting marks etc. on left side; dimensional data etc. on right column).

**NOTE: It is important to distinguish between the original stencilling when the car was new and any stencilling that may have been changed. Unless the car has been completely repainted, changes in the stencilled data can be detected by noting different shades or different colours of paint in the area changed. If this is the case, it is suggested that the data collector "Square-In" (draw a square around) the items changed in one's notation.

Otherwise if the car is new we suggest using the method of notation shown by the figure at the bottom of this page.

As I mentioned before, one of the more important items of information not found in the ORER is BUILDER.

How does one determine the builder of a car?

So far as I've been able to find there are three ways:

- a) The "Black box"
- b) Builder's logo
- c) Visual identification features

"Black box method." This method yields the best results if one is careful to follow a few rules of using this method. The black boxes contain vital information regarding servicing, inspection etc. of the cars. Included is the date built, air brake data/servicing, lubricating dates, dates reconditioned etc. If the car isn't too old one can look under "COTS" and if the cots date is the SAME as the date built then read and note the abbreviations listed. Usually the abbreviations will consist of three parts- 1) builder abbreviation, 2) plant location abbrev., and 3) railroad abbreviation which the plant is located on. In this issue there is a list of these abbreviations.

There are always exceptions to the rules for one reason or another. A case comes to mind where the "COTS" said it was "PCF RM" built. The car was a Southern Pacific box, which is common for its PCF cars...but, the car was notably a Thrall built car both from visual I.D. and the builder's logo. Why? I'm not really sure, but it was an error on somebody's part, as I went to the other side and read the COTS which read TC CH (the proper abbrev. for Thrall).

Builder's logo. This is pretty much self explanatory...just look for the builder's logo in the form of a stencil, sticker or plate. However, these can be misleading too. Case in point is many of the USEX BI built RBL's etc. Some of the cars have builder's stickers saying built at some other of Evans' plant when they haven't been. Evans built cars are the only ones off-hand I can think of that do this. Also some builder's logos do not show the plant location at all. Some of these instead show their main offices location, Trinity Industries being an example of this. Lastly be sure the car you spot this builder's logo on hasn't been RE-built by them and if it has it should be noted as such.

Visual I.D. features. This we'll get into more with the more specific articles later on. But, as one looks more and more at the cars, certain patterns will begin to be realized. This method is useful when all other methods fail.

Of course many times one simply cannot determine the builder of the car from actually looking at the car for clues. Sometimes as one's data accumulates, another car spotted of the same series may provide the answer as to what company built the car. Lastly, advertisements in the railroad trade magazines, railroad employee magazines or the Car and Locomotive Cyclopedias may also be one's source for the builder.

SUGGESTED METHOD FOR DATA NOTATION

RBOX 43734	154 XM	62900	5-80	PS BESS	5277	XPF208	1100-78
+	+	+	+	+	+	+	+
Reporting marks and car number	Capacity times 1000 and AAR design.	Light weight. Delete if NOT new	Date NEW Show built date if car has been reweighed	Builder and plant location abbreviations	Cubic Capacity	RR or owner class if present	Lot and serial number if present

...or as I like to say, "When was it born." This usually is one of the easier tasks of the freight car data collector. There are several ways. The most common and reliable is by looking under "BLT" in the black box. Secondly, if the car's light weight says it was weighed when "NEW" then this date may also be used. In addition, some railroads will also stencil the date built somewhere on the side of the car, usually near the dimensional data.

Sometimes it isn't that easy (of course)...a couple of cases. Case one is a tank car that bears the logo of RTC HD built 1-73 and the logo of MFC HD built 12-72. To further make matters worse, the black box's "BLT" date was obscured on both sides...so which is it? I've seen similar cases happen a few other times on tank cars. The second case deals with FA's or automobile rack cars. In almost all cases the light weight "NEW" data stenciled on the rack will have a different date than the "BLT" on the flat car's black box. Most of the time this date will vary by as much as 3 or 4 months. This happens because the flat is built first and then sent to the builder of the rack where the whole car (flat and rack) are weighed. Thus the "NEW" date appearing on the rack is in my opinion a more "realistic" new date. Of course sometimes the builder is the builder of both the flat and the rack and in which case the "NEW" date and the "BLT" date are the same.

So, again in the end the moral of the story is use caution and observe...

Is the car REBUILT?

Many of the older pre-mid sixties cars spotted on the rails today have been rebuilt or reconditioned. Some of these rebuildings can be quite extensive...to the point of a practically whole new car emerging. Other times the car's change is less radical. This area is still a little fuzzy to me. It appears that on some cars "RCD" (in the black box) or reconditioned may be used to indicate rebuilt. Other times REBLT or RBLT will appear in the black box. However, I can say that most of the time when I see stenciled on the car side "Rebuilt X-XX", the "RCD" date will be the same. Many times a "RCD" date will appear with no indication that the car was rebuilt. For now I would suggest one note any indication of a rebuilt date and the "RCD" date as well.

Painting and repainting...which is it?

It's also important to note if the car you are looking at is in its original "new" paint or if it's been entirely repainted. If the car is in its original paint scheme there is less likelihood that it has been renumbered or come from another owner (noting also if there are any paint changes in just the number itself...shade differences in back of the numbers, different colors etc.)

Nearly every railroad or builder will indicate somewhere on the car when the car has been painted and who painted it. This will appear in the form of some type of abbreviation of the type of paint used, the date and where it was painted at. In the case of Southern Railway cars this will usually appear in the upper left hand corner near the roof on the car side. On Southern Pacific cars this is usually found on the car side near the bottom close to the center of the car. If the date there is the same as the date built then it's most likely in its original paint. If not the same then the car has been repainted on that date.

For notation purposes, I usually note only if the car has been repainted. This is also important historically as it dates the logo and livery displayed by the car.

(End Part I)

- David G. Casdorff

RICHARD BURG, 18 S. Normal, Ypsilanti, MI 48197 would like to hear from anybody interested in helping to get and preserve what may be one of the oldest freight cars in North America still around. Built sometime between 1869 and 1876. Its a tank car body and Richard has been offered the car at a very good rate. Shipping however will be more than the cost of getting it.

CRAIG T. BOSSLER, 1212 North 6th Street, Reading PA 19601 needs individual car data, photos etc. on any heavy duty flats, depressed centers, well holes and schnabels.

FREIGHT CAR DATA EXCHANGE. For those who haven't joined up with this group please write to Todd Sullivan 25 Oakwood Blvd., Poughkeepsie, NY 12603. Please include a self addressed stamped envelope. Todd has devised an interesting and unique way of exchanging, storing and retrieving information on freight cars of North America. Please drop him a line...

ERIC NEUBAUER, 26B Russell Rd., Princeton, N.J. 08540, needs any serial number from any ACF Huntington built Center Flow covered hopper. Numbers are usually stamped on the car side near the ladder on the left side of the car. Please also note reporting marks, date built, size, light weight etc.

DAVID G. CASDORFF, P.O. Box 1458, Monrovia, CA 91016 is interested in any individual car data, photos, slides etc. of any modern Grand Trunk Western car or any foreign car assigned to any GTW car pool

SPECIAL PROJECT. As a group participated project for FCJ, I would like to present a "catalog" of U.S. and Canadian freight car builders. What I'm asking is if members interested in participating would pick one or a few builders and describe briefly. Generally this would be from one to four paragraphs and should include beginning date, ending date, mergers, plant locations, if it became part of another builder, types of cars made etc. I'm sure the amount of information obtained will be highly variable. We'll present it in FCJ with each entry giving proper credit to the researcher. The basic idea is to present a very concise list of all the freight car builders. Please drop me a line...let me know your thoughts on this matter...D.G. Casdorff

BUILDER/ PLANT LOCATION ABBREVIATIONS

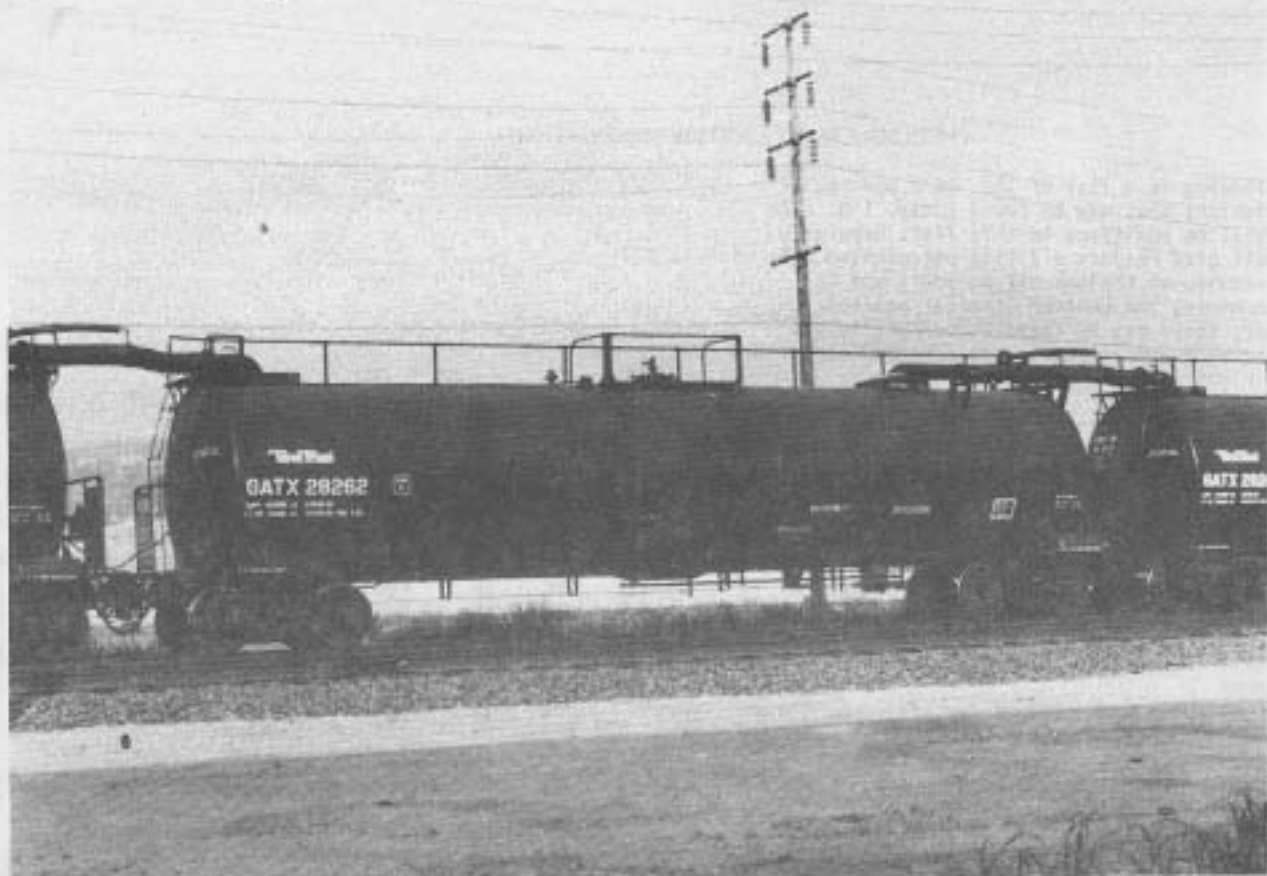
The following is a list of the more common abbreviations that may be found today. I'm sure there will be additions to this list. Hopefully this will give readers a little perspective on the diversity of freight car builders and help in determining the builder of a car spotted. Remember, these may be found under COTS in the car's service and inspection "black box" stencilled on the right side of the freight car body.

ACF	BER	American Car & Foundry, Berwick, PA	MP	DES	Missouri Pacific RR
*ACF	HTG	American Car & Foundry, Huntington, WV	MTC	HO	Marathon Tank, Houston, TX
*ACF	MILT	American Car & Foundry, Milton, PA	NACC	MURF	North American Car
*ACF	STL	American Car & Foundry, St. Louis, MO	NACC	TX	North American Car, Beard, TX
AMF	B	AMF, Beard, TX	NSC	NSC	National Steel Car, Hamilton, ONT, Canada
ATSF	TS	Santa Fe RR, Topeka Shops	NM	RO	N&W RR, Roanoke, Virginia
*BFF	BWK	Berwick Forge & Fabr., Berwick, PA	OFC	COV	Ortner Freight Car, Covington, Ohio
BFF	RV	Berwick Forge & Fabr., Renova, PA	PC	SR	Penn Central, Samuel Rea Shops
B&O	MC	B&O RR, Mt. Clare, MD	*PCF	RN	Pacific Car & Foundry, Renton, WA
*BSC	JTN	Bethlehem Steel, Johnstown, PA	PFE	TUC	Pacific Fruit Express, Tucson, AZ
BSC	SPSY	Bethlehem Steel, Sparrows Point Ship Yard	PDX	NMI	Paragon Ops, Novi, Michigan (Portec)
BUT	MURF		PRR	SRS	Pennsylvania RR, Samuel Rea Shops
CFC	CHGO	Chicago Freight Car, Chicago, Ill.	*PS	BESS	Pullman-Standard, Bessemer, ALA
CNCF	SAHAGUN	CNCF, Sahagun, Mexico	*PS	BUT	Pullman-Standard, Butler, PA (Also PS BU)
C&I	CR	Cambria & Indiana, Cornwall, PA	PS	HAM	Pullman-Standard, Hammond, IND
C&O	RA	C&O RR, Raceland, KY	PS	MC	Pullman-Standard, Michigan City, IND
CR	SR	Cornell, Samuel Rea Shops	QC	FW	Quick Car, Fort Worth, TX (Trinity Ind.)
DSI	ER	Despatch Shops Inc., East Rochester, NY	RDG	RDG	Reading Co., Reading, PA
ERC	YK	Emmons Railcar, York, PA	RFC	GN	Railfleet Corp., Greenville, SC
ETX	OZ		RMC	SQ-BC	Railwest Manuf. Co., Squanish, B.C., Can.
*FGE	AX	Fruit Growers Express, Alexandria, VA	RTC	HO	Richmond Tank Co., Houston, TX
FMC		FMC, Charleston, WV	SIECO	AC	Southern Iron & Equip. Co. Ashland City, TN
*FMC	P	FMC, Portland, Oregon	SIECO	ATL	Southern Iron & Equip. Co. Atlanta, GA
FRD	CLFTN	Fruehauf Rail Division, Clifton, NJ	SIECO	CHMB	Southern Iron & Equip. Co. Chamblee, GA
GATX	EC	General American Transp., East Chicago	SOD	FN	Soo Line RR, Fond Du Lac, WIS
GATX	HRNE	GATX, Hearne, TX	StL	Norfolk	St. Lawrence Shops, Norfolk, NY (N.R.U.C.)
*GATX	SHN	GATX, Sharon, PA	*TC	CH	Thrall Car, Chicago Heights, ILL
GATX	SHRN	GATX, Sharon, PA (Alternate form)	*TCMFG	CH	Thrall Car Manuf., Chicago Heights, ILL
*GBEC	P	Gunderson Brothers Engineering, Portland, OR	TMC	STP	The Maxson Corporation, St. Paul, MINN
*GI	P	Gunderson Industries, Portland, OR	TRN	FW	Trinity Industries, Fort Worth, TX
GNATT	GN	GNATT, Greenville, SC	TRN	HOU	Trinity Industries, Houston, TX
GRO	WGA	Georgia Rail Op., Winder GA (Portec)	TRN	LGWV	Trinity Industries, Longview
*GSC	GV	Greenville Steel Car, Greenville, PA	TRN	OKC	Trinity Industries
GSI	GC	General Steel Industries, Granite City, IL	TRN	TULS	Trinity Industries
GT	PICK	Golden Tye, Pickens, SC	U-AC	CRTS	United American Car, Cartersville, GA
HST	HST	Hawker Siddeley, Trenton, NS, Canada	UP	AT	Union Pacific RR, Albina, Oregon
ICC	KTN	International Car, Kenton, OH	UP	OM	Union Pacific RR, Omaha, NEBR
ICG	CE	ICG RR	*USEX	BI	U.S. Railway Equipment, Blue Island, IL
ING	PAS	Ingalls Shipbuilding, Pascagoula, MISS	USEX	JC	U.S. Railway Equipment, Junction City, KS
JJF	DULGA	JJ Finnigan, Duluth, GA	USEX	WA	U.S. Railway Equipment, Washington, IN
LOX	LIV		*UTC	E CH	Union Tank Car Co., East Chicago, IN
MAGOR	CLFN	Magor, Clifton, NJ	W&K		Whitehead & Kales
MFC	CLIL	(Portec), Clinton, IL			
MIL	MIL	Marine Industries, Sorel, Que., Canada			

*- those abbreviations most likely to be encountered on the average (will vary with locale)

NOTES:

1. A few of the above entries are incomplete because identification has not been confirmed yet. Also I'm sure there will be additional entries as information becomes available.
2. At the present time, EVANS logos will appear in the following: SIECO AC, SIECO ATL, SIECO CHMB, USEX BI, USEX JC and USEX WA



(ABOVE) GATX 28262, part of General American Transportation's new TankTrain series is leased to Shell Oil to haul crude oil from Carson, CA to Bakersfield, CA a distance of nearly 200 miles by rail. This set of TankTrain cars was built in July 1983 and is seen here entering the SP Industry, CA yards. (D.G. Casdorff)

(BELOW) ATSF 293289, one of Santa Fe's 57'6" piggyback flats being rebuilt from former wallboard bulkhead flats. The cars are equipped to carry one trailer. See Freightcarology #0021 for more details on these series, (D.G.Casdorff)

