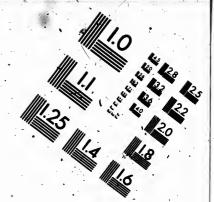
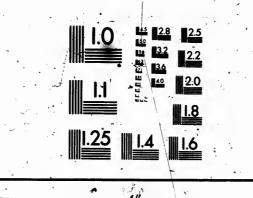
IMAGE EVALUATION TEST TARGET (MT-3)





Photographic Sciences Corporation

23 WEST MAIN STREET WEBSTER, N.Y. 14580 (716) 872-4503

CIHM Microfiche Series (Monographs)

ICMH
Collection de microfiches (monographies)



Canadian Institute for Historical Microreproductions / Institut canadian de microreproductions historiques



### Technical and Bibliographic Notes / Notes techniques et bibliographiques

The to

The post of film

Ori beg the sio oth firs sio or

> The sha TIN wh

Ma diff ent beg rigil req me

	22X 26X 30X
	22.X. 26X 30X
is item is filmed at the reduction ratio checked below/ document est filmé au teux de réduction indiqué ci-dessous.	•
in income to different an after an attraction.	
Commentaires supplémentaires:	-
Additional comments:/	
	Centeridae (benionidaes) de 19 (1419)20(1
	Masthead/ Générique (périodiques) de la livraison
pas été filmées.	Marthard/
mais, lorsque cela était possible, ces pages n'ont	Titre de départ de la livraison
lors d'une restauration apparaissent dans le texte,	Caption of issue/
Il se peut que certaines pages blanches ajoutées	
been omitted from filming/	Page de titre de la livraison
within the text. Whenever possible, these have	Title page of issue/
Blank leaves added during restoration may appear	
,	Le titre de l'en-tête provient:
distorsion le long de la marge intérieure	Title on header taken from:/
La reliure serrée peut causer de l'ombre ou de la	Complete un test mess
along interior margin/	Includes index(es)/ Comprend un (des) index
Tight binding may cause shadows or distortion	Includes indev/se\/
Relié avec d'autres documents	Pagination continue
Bound with other material/	Continuous pagination/
Planches et/ou illustrations en couleur	Qualité inégale de l'impression
Coloured plates and/or illustrations/	Quality of print varies/
Encre de couleur (i.e. autre que bleue ou noire)	Transparence
Coloured ink (i.e. other than blue or black)/	Showthrough/
T certes Anofrehindres erronnen	rayes detections
Coloured maps/ Cartes géographiques en couleur	Pages detached/ Pages détachées
Coloured mane/	Company described/
☐ Le titre de couverture manque	Páges décolorées, tachetées ou piquées
Cover title missing/	Pages discoloured, stained or foxed/
	<b>10</b>
Couverture restaurée et/ou pelliculée	Pages restaurées et/ou pelliculées
Covers restored and/or laminated/	Pages restored and/or laminated/.
	< W
Couverture endommagée	Pages endommagées
Covers damaged/	Pages damaged/
	1 ages de couleur
Couverture de couleur	Pages de couleur
Coloured covers/	Coloured pages/
	ci-dessous.
cked below.	dans la méthode normale de filmage sont indiqués
nificantly change the usual method of filming, are	reproduite, ou qui peuvent exiger une modification
he images in the reproduction, or which may	bibliographique, qui peuvent modifier une image
y available for filming. Features of this copy which y be bibliographically unique, which may alter any	lui a été possible de se procurer. Les détails de cet exemplaire qui sont peut-être uniques du point de vue

The copy filmed here has been reproduced thanks to the generosity of:

Library of the National Archives of Canada

The images appearing here are the best quality possible considering the condition and legibility of the original copy and in keeping with the filming contract specifications.

Original copies in printed paper covers are filmed beginning with the front cover and ending on the last page with a printed or illustrated impression, or the back cover when appropriate. All other original copies are filmed beginning on the first page with a printed or illustrated impression, and ending on the last page with a printed or illustrated impression.

The last recorded frame on each microfiche shall contain the symbol — (meaning "CONTINUED"), or the symbol ▼ (meaning "END"), whichever applies.

Maps, plates, charts, etc., may be filmed at different reduction ratios. Those too large to be entirely included in one exposure are filmed beginning in the upper left hand corner, left to right and top to bottom, as many frames as required. The following diagrams illustrate the method:

32 X

L'exemplaire filmé fut reproduit grâce à la générosité de:

La bibliothèque des Archives nationales du Canada

Les images suivantes ont été reproduites avec le plus grand soin, compte tenu de la condition et de la netteté de l'exemplaire filmé, et enconformité avec les conditions du contrat de filmage.

Les exemplaires originaux dont la couverture en papier est imprimée sont filmés en commençant par le premier plat et en terminant soit par la dernière page qui comporte une empreinte d'impression ou d'illustration, soit par le second plat; selon le cas. Tous les autres exemplaires originaux sont filmés en commençant par la première page qui comporte une empreinte d'impression ou d'illustration et en terminant par la dernière page qui comporte une telle empreinte.

Un des symboles suivants apparaîtra sur la dernière image de chaque microfiche, selon le cas: le symbole → signifie "A SUIVRE", le symbole ▼ signifie "FIN".

Les cartes, planches, tableaux, etc., peuvent être filmés à des taux de réduction différents. Lorsque le document est trop grand pour être-reproduit en un seul cliché, il est filmé à partir de l'angle supérieur gauche, de gauche à droite, et de haut en bas, en prenant le nombre d'images nécessaire. Les diagrammes suivants illustrent la méthode.

			·		•	<b>*</b>		_
1		2	3				1	
	,	*		<b>1</b> ·	•	,	2	1
• ,						,	3	
•	in .	1	2	- ,	3			
	•	A	. 5		6		l.	

Danie Barnet

# CODE OF RULES

Governing the Condition of, and Repairs to, Freight Cars

# FOR THE INTERCHANGE OF TRAFFIC,

ADOPTED BY THE

Master Car-Builders' Association.

Revised at Niagara Falls, N. Y., June, 1886.

. THE WITHIN RULES AND RATES HAVE BEEN ADOPTED BY

## THE GRAND TRUNK RAILWAY COMPANY,

AND TAKE EFFECT ON AUGUST 1, 1886.

All claims for wheels and axles furnished to replace those broken, also for cars damaged or destroyed, should be sent to Mr. Herbert Wallis, Mechanical Superintendent, Montreal, for the Grand Trunk Division, and to Mr. C. K. Donville, Mechanical Superintendent, Hamilton, for the Great Western Division; to whom please supply reports of this Company's cars damaged or destroyed on your line.

JOSEPH HICKSON,

Gen'l, Manager Grand Trunk R'y:



## CODE OF RULES

# GOVERNING THE CONDITION OF, AND REPAIRS TO, FREIGHT CARS FOR THE INTERCHANGE OF TRAFFIC

ADOPTED BY THE MASTER CAR-BUILDERS' ASSOCIATION.

Bevised at Niagara Falls, N. Y., June, 1886.

#### GENERAL.

RULE 1-Each Railway Company shall give to foreign cars, while on its line, the same care as to oiling and packing that it gives to its own cars.

DELIVERING AND RECEIVING CARS AT INTERCHANGE POINTS.

Rule 2—Cars must be delivered in good running order, and condition returned in as good general condition as when received.

Rule 3-Cars may be refused for any of the following defects:

#### DEFECTS OF WHEELS.

- a. Worn or slid flat, exceeding 2½ inches in length or diameter.
- b. Worn flange, flanges less than one inch thick, or having flat vertical surfaces, extending more than 7 inch from tread.
- c. Wheels cracked or broken in any manner.
- d. Shelled out; Wheels with treads defective on account of circular pieces shelling out, leaving round, flat spots

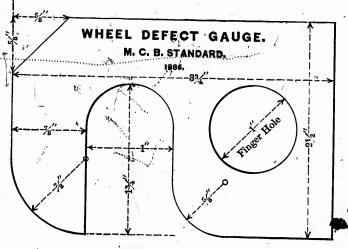
Care of for-

of cars delivered.

Defects for which cars may be refused.

deepest at the edge, with a raised centre. Wheels must not be condemned from this cause, unless the spots are over  $2\frac{1}{2}$  inches in length, or diameter, or are so numerous as to endanger the safety of the wheel.

- e. Wheels chipped on the rim, leaving tread less than  $3\frac{3}{4}$  inches in width when measured from the flange at a point  $\frac{5}{8}$  inches above tread.
- f. Wheels with flanges chipped, so that they are unsafe to run.
- g. The determination of flat spots, sharp flanges, thin flanges and chipped treads shall be made by a gauge of the following form:



DEFECTS OF AXLES.

- h. Axles bent or with journals cut.
- i. Axles with journals of less diameter than the following limits:

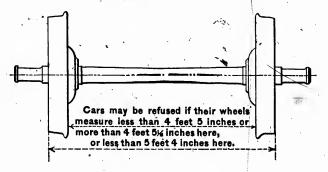
<b>60,000</b>	lbs.	car]	imit,	35	in.
<b>50,000</b>	"	"	"	31	"
40,000	66	"	"	31	"
30,000	"	" (or less)	"	23	66

DEFECTS OF MOUNTING WHEELS ON AXLES.

j. Loose wheel.

Ŋ

k. Out of gauge, or wheels that measure less than 4 feet 5 inches or more than 4 feet 5½ inches between flanges, or less than 5 feet 4 inches over treads.



OTHER DEFECTS.

- l. Brakes in bad order.
- m. Brake wheels, steps, ladders or running boards in bad order, or insecurely fastened.
- n. Drawbars or attachments in bad order.
- o. Draft sills or draft timbers spliced.
- p. Intermediate or outside sills recently spliced in a manuer not prescribed by the Rules.
- q. Leaky roofs on merchandise or grain cars.
- r. Doors which are not sufficient protection against fire or storms.
- s. Special or general defects of bodies or trucks, which render cars unsafe to run.

RULE 4—A car with defects which do not render it unsafe to run must be accepted, but in such cases the Company to whom such car is offered may require that a defect card shall be securely attached to the car, preferably on the inside of cross-tie timber.

Defect cards, use of. Defect cards, Form of. RULE 5—Defect cards shall be 4½ inches by 6½ inches, and of the form shown below. They shall be printed on both sides, and shall be filled in on both sides with ink or indelible pencil.

. ;	(Name of Road.)
- Car No	
Initial	Line
Will be receive	at any point on this company's line, with
<u>~</u>	
Norz.—Fill in de- ferts on both sides with ink or indelible pencil. Attach this card securely to the lastice cross-tie tim-	Inspector at

Making repairs noted by defect card

Rule 6—Any Company finding a car with a defect card attached may make the repairs noted by the card, and render bill for same to the Company attaching card; the card to accompany bill as youcher for the work done.

#### DEFECTS FOR WHICH OWNERS ARE RESPONSIBLE.

Defective roofs, responsibility for. Rule 7—Roofs lost from cars on account of faulty construction, shall be replaced at the expense of the owners.

Locks, resonability for.

Rule 8-Locks on cars are at owner's risk

Wheels and axles damaged by fair usage, responsibility for. Rule 9—Wheels and axles used to replace those broken or worn out under fair usage will be charged to the Company owning the car. Wheels made flat by sliding, or wheels with treads or flanges chipped, are not to be considered as worn out under fair usage; such wheels must be replaced by the Company sliding or chipping them at its own expense.

Wheels loose and out of gauge. Rule 10—Loose wheels may be replaced, or wheels out of gauge may be refitted, and charged to owners.

Rule 11—In the case of cars belonging to private parties or corporations, other than Railway Companies, or that are not cared for or controlled by a railroad company, the repairs of such parts as fail under fair usage, or from faulty construction, may be made by Railway Companies, and shall be paid for by the owners.

Individual cars, repairs of.

Wheels and axles, prices for.

# BILLS FOR WHEEL AND AXLE WORK.

Rule 12—Bills rendered for wheels and axles shall be in accordance with the following schedule of prices for material, with the proper debits and credits:

1	-		
N	EW.	SECOND-HAND.	SCRAP.
One 36-inch wheel	3 00	<b>\$9</b> 00	\$5 00
One 33-inch wheel 1	0 00	7 00	4 50
One 30-inch wheel (or less)	9 00	6 00	4 00
One axle	10 00	7 00	4 00

and with an additional charge of \$1.50 for all labor, for each pair of wheels and axle removed from the truck. If new wheels and axles are substituted for second-hand wheels and axles, proper charges and credits shall be allowed, although such substitution be made on account the one loose or defective wheel, or a defective axle.

Rule 13—Bills for wheels and axle work shall be in the following form:

1-

af

er ıg

of

Wheels and axles, form of bills.

For Wheels and Axles put under.  Number of Car.  Number of Car	Company,  Address,  Address,  Month of  Cars, Month of	Камочев.	Date Num. Case of Remond. 10 Whosis Maker. Cast by: Name Num of Material Liber. Total	Received payment, \$	188
For Wheels of Number of Cur.	nd Axles p		Maker	~	
	For Wheels a	Initial, Kind, and	Number of Car.	· in	е.

•

y • 1

y .

Bills for wheel and axle work must make specific mention of each wheel and axle removed or applied:

Bills which do not embody all the information called for by the headings of the columns, may be declined until made to conform to the requirements of the rule. If no marks are found on wheels or axles removed, a notation to that effect must be made on face of bill.

Rule 14—In noting on bills the cause of removal of wheels and axles, the following terms shall be used:

Worn Flat—Flat spots exceeding 2½ inches in length or diameter. Care must be taken to distinguish this defect from "slid flat."

Worn Flange—Flanges less than 1 inch thick, or having flat vertical surface extending more than 7 inches from the tread.

Cracked Plate—Cracks in plate when not extending through hab to axle. Length of crack must be stated.

Oracked Hub—Cracks extending from axle outwardly through hub. Length of crack must be stated.

Cracked Brackets—Bills should state the number of brackets cracked.

Broken in pieces-

Shelled Out—Wheels with treads defective on account of circular pieces shelling out, leaving round flat spots, deepest at the edge, with a raised centre. Wheels must not be condemned from this cause, unless the spots are over 2½ inches in length or diameter, or are so numerous as to endanger the safety of the wheel.

Loose Wheel

Out of Gauge—Bills should state the variation from limits prescribed in Rule 3.

Small Journal—Journal smaller than prescribed by Rule 3-Diameter of journal must be stated.

#### REPAIRING AND SETTLING FOR FOREIGN CARS.

Rule 15—Foreign cars if damaged shall be promptly repaired by the Company eausing the damage; such repairs shall be

Wheels and axles, terms to be used in rendering bills.

Foreign cars dam aged, repairing thoroughly made, and the work shall conform in detail to the original construction (provided it can be determined from the car itself), and with the same quality of material originally used; new standard parts may, however, be used if agreed to.

Precautions in mounting wheels.

Spliced sills. RULE 16—Wheels on the same axle must be of the same circumference.

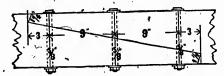
New Wheels must not be mated with second-hand wheels.

Prick-punching or shimming the wheel fit must not be allowed.

Wheels applied must be marked on inside with date of appli-

The wheel seats of foreign axles must not be reduced to fit wheels; but the wheels must be bored to fit axles.

Rule 17—The sills other than centre sills to which draw timbers are attached, may be spliced once and held by three 5-inch bolts, as shown below.



The splice may be located either side of body bolster, but the nearest point of any splice must not be within 12 inches of same.

Repairing cars with wrong material. Rule 18—Any Company repairing foreign cars with wrong material, and not in compliance with Rules 15, 16 and 17, shall be liable for the cost of changing such car to the original standard, or to the requirements of Rule 17.

Repairing cars with wrong materials, defect cards

RULE 19—A Company using wrong materials in such repairs, shall place upon the car, at the time and place that the work is done, a defect card, which defect card shall pass the car back to the owning road.

Foreign cars destroyed, repairing, etc. RULE 20—When either the bodies or trucks of cars are destroyed on a foreign road, the owners must be notified immediately.

The Company destroying bodies or trucks shall have its option whether to rebuild or settle for same.

Rule 21—If the Company destroying the car elects to rebuild, either body or trucks, or both, the original plan of construction must be followed, and the original kind and quality of materials used. The rebuilding must be completed within 60 days from the original date of damage or destruction. In such cases no allowance shall be made for betterments.

Foreign cars rebuilding, manner of doing work.

Rule 22—The settlement prices for new cars and trucks shall be as follows:

Foreign cars destroyed, basis of settlement

	,				_		^ ^
Box car, eight-	wheel, 32 t	feet long and	over		\$	450	00
	nne	ler 32 feet long	<u>o</u>		:	<b>43</b> 0	00
Stock car, eigh	1 -1 26	foot long and	lover			450	00 .
Stock car, eign	t-wneel, o	2 feet long and		••••	• • • •	425	00
Stock car, eigh	t-wheel, u	nder 32 leet 10	ng	• • • •		100	00
Gondola car, ei	ght-wheel	Droputtom	, 20 ton	s or	over	400	00
"	ິ " 🦿 📜	· d· · b ·	15	., 01	· 1688.	313	w
. "	· "	hopper botto	m, 25 to	ns or	over	<b>45</b> 0	00
"	"	" / /	20	"	over	425	00
•	"	j					
"							
. "	".	plain, 32 feet	; long of	r ove	r	990	00
ic .	"	plain, under	32 feet.		• • • •	325	00
Flat car, eight-	wheel pla	in. 32 feet lon	g or ove	er		300	00
Tiat car, eight	" ·	" under 32 f	eet			290	00.
Box ear, four-	1 1	A district of the				230	. 00
Box ear, four-	wneer			•••			
Coal car, four-	wheel, ord	inary			• • • • •		
Gondola car, f	our-wheel,	drop bottom		· · · ·	• • • • •		
Trucks, ear, fo	our-wheel.	1 pair				200	00
# : MOILD, OM, - 1		•					

Depreciation due to age shall be estimated at 6 per cent. per annum, upon the yearly depreciated value of bodies and trucks, provided, however, that allowances for depreciation shall in no case exceed 60 per cent. of the value new.

Refrigerator cars and other freight cars designed for special purposes, not specifically referred to above, shall be settled for at special rates, as may be agreed to by the parties in interest, but the deduction for depreciation due to age shall be on the same basis as for regular freight equipment cars.

Foreign cars destroyed, returning trucks. RULE 28—If only the body of a car is destroyed and the Company destroying it elects to return the trucks, they shall be put in good order and delivered free of freight or other charges to the nearest point on the road of the Company owning the car.

## FURNISHING MATERIAL AND BILLING WORK DONE.

Furnishing material. Rule 24—Companies shall promptly furnish to each other upon requisition, and forward free over their own road, material for repairs of their ears injured upon foreign lines. Requisitions for such material shall state that it is for repairs of ears, and give numbering and lettering of such ears when possible.

Bills for work done, basis. Rule 25—Bills for work done on defect cards or for material furnished on requisition shall be on the basis of the following charges and credits:

Material.	CHARGES.	. CREDIT.
Cast Ironper lb.	2c.	3.íc.
Malleable Iron "	5.	16.
Bolts, Nuts and Forgings "	4.	1.
Cast Steel	9.	34.
Brass Journal Bearings "	16.	9.
Phosphor Bronze Bearings "	18.	10.
Pine (Yellow, White or Norway) per ft.	8.	<del></del> .
Oak "	3.	
Labor	20.	
1 Box or Stock Car, Side Door	<b>\$5.00.</b>	
1 Box or Stock Car, End Door	3.00.	

No percentage to be added for either material or labor.

#### MISCELLANEOUS.

Leased cars, treatment of in bills. Rule 26—In rendering bills leased cars shall be treated as belonging to Railway Companies whose name or initials they bear.

RULE 27—16, he mutual advantage of Railway Companies interested, the settlement for a car damaged or destroyed on a private track shall be assumed by the Railway Company delivering the car upon such track.

Cars
destroyed
on private
sidings,
settlemen
for.

Conditions of participation in Code of

Rules.

Rule 28—Any Railway Company may become a party to this Code of Rules by giving notice through one of its General Officers to the Secretary of the Master Car-Builders' Association.

Any Railway Company which is a party to this Code of Rules shall be bound by same through its successive revisions, until one of its general officers files with the Secretary of the Master Car-Builders' Association its notification of withdrawal.

al

Acceptance or rejection of this Code of Rules must be as a whole, and no exception to an individual rule or rules shall be valid.

Rule 29—The Executive Committee of the Master Car-Builders' Association shall receive and consider all changes, amendments and additions to this Code of Rules which may be proposed to them during the year, and shall report all such proposals to the Association at the time of the Annual Convention and revision, with their recommendations in reference to same. In case of any dispute or question arising under these rules the same may, by mutual consent, be referred to the Executive Committee, whose duty it shall be to decide the case. This decision shall be final and binding upon all parties concerned.

Rules, revision of, duties of Executive Committee, M. C. B.

Rule 30—In the revision of these Rules by the Association, each Railway Company shall be entitled to one vote for each 1000 8-wheel cars (or major part thereof) owned, or in process of purchase. Two 4-wheel cars shall count as one 8-wheel car. A two-thirds vote shall be necessary for adoption.

Rules, revision of basis of voting.

Rule 31—This Code of Rules shall take effect August 1, 1886, and shall be introduced for discussion and revision at one session of the Master Car-Builders' Association Convention each year.

Ru'es, in effect Ang. 1st, 1886.

### LIST OF RAILROAD COMPANIES

Which have Adopted the Code of Rules Governing the Condition of, and Repairs to, Freight Cars for the Interchange of Traffic.

The following is as complete a list as can now be made of the companies which have adopted the above code. If the names of any railroad companies which have adopted the rules are not included in the following list, the officers of such companies are requested to notify the Secretary of the Master Car-Builders' Association, so that the names of such companies may be included in the list hereafter:

Atchison, Topeka & Santa Fé. Baltimore and Ohio. Boston & Albany. Boston & Maine. Boston, Hoosac Tunnel Western. Buffalo, New York & Phila. Burlington, Cedar Rapids & Northern. Canada Southern. Central Iowa. Central Vermont. Champaign & Havana. Chesapeake, Ohio & Southwestern. Chesapeake & Ohio. Chicago, Burlington & Kansas City. Chicago, Burlington & Quincy. Chicago, Milwaukee & St. Paul. Chicago, Rock Island & Pacific. Chicago, St. Louis & Pittsburg. Chicago, St. Louis & Western. Chicago, St. Paul, Minneapolis & Omaha. Chicago & Alton.

Chicago & Grand Trunk. Chicago & Iowa. Cincinnati, Washington & Baltimore. Cleveland, Columbus, Cincinnati & Indianapolis. Cleveland, Mt. Vernon & Delaware. Cleveland & Marietta. Cincinnati Southern. Connecticut River. Cumberland Valley. Delaware, Lackawanna & Western. Delaware & Hudson Canal Co. Detroit, Grand Haven & Milwaukee. Detroit, Lansing & Northern. Des Moines & Fort Dodge. East Tennessee, Virginia & Georgia. Fitchburg. Flint & Pere Marquette. Grand Trunk & Great Western Division. Gulf, Colorado & Santa Fé.

Hannibal & St. Joseph. Hartford & Connecticut Western. Housatonic. ·Houston & Texas Central... Illinois Central. Indiana, Bloomington & West-Indianapolis & St. Louis. Intercolonial of Canada. International & Great North-Kansas City, Fort Scott & Gulf. Kansas City, St. Joseph & Council Bluff. Lake Erie & Western. Lake Shore & Michigan South-Lehigh Valley. Louisville, Evansville & St. Louis. Louisville, New Albany & Chicago. Louisville & Nashville. Maine Central. Marquette, Houghton & Ontonagon. Mexican Central. Michigan Central. Milwaukee, Lake Shore & Western. Missouri Pacific. Minneapolis & St. Louis. Minnesota & Northwestern. New York Central & Hudson River. New York City & Northern. New York, Chicago & St. Louis. New York, Lake Erie & West-New York, New Haven & Ilartford. New York, Ontario & Western. New York, Pennsylvania New York, West Shore & Buffalo.

of

he

es

a

r-

New York & New England. New York, Susquehanna & Western. Norfolk & Western. Northern Pacific. Old Colony. Ohio & Mississippi. Ogdensburgh & Lake Champlain. Pennsylvania Company. Pennsylvania Railroad. Pennsylvania & New York Canal and Railroad Co. Peoria, Decatur & Evansville. Petersburg. Pittsburg, Cincinnati & St. Louis. Pittsburg & Lake Erie. Philadelphia & Reading. Providence & Worcester. Richmond, Fredericksburg Potomac. Richmond & Danville. Rochester & Pittsburg. Rome, Watertown & Ogdensburg. St. Paul & Duluth. St. Joseph & Grand Island... Saginaw Valley & St. Louis. Seaboard & Roanoke. Shenango & Allegheny. Southern Central: Terre Haute & Indianapolis. Texas Pacific. Toledo, Cincinnati & St. Louis. Toronto, Gray & Bruce. Troy & Boston. Union Pacific. Virginia Midland. Western Car Co. Western Maryland. Wilmington, Columbus & Angusta. Wilmington & Northern. Wilmington & Weldon. Wisconsin Central. West Jersey.

