



**CIHM/ICMH
Microfiche
Series.**

**CIHM/ICMH
Collection de
microfiches.**



Canadian Institute for Historical Microreproductions / Institut canadien de microreproductions historiques



© 1986

Technical and Bibliographic Notes/Notes techniques et bibliographiques

The Institute has attempted to obtain the best original copy available for filming. Features of this copy which may be bibliographically unique, which may alter any of the images in the reproduction, or which may significantly change the usual method of filming, are checked below.

L'Institut a microfilmé le meilleur exemplaire qu'il lui a été possible de se procurer. Les détails de cet exemplaire qui sont peut-être uniques du point de vue bibliographique, qui peuvent modifier une image reproduite, ou qui peuvent exiger une modification dans la méthode normale de filmage sont indiqués ci-dessous.

- | | |
|--|--|
| <input checked="" type="checkbox"/> Coloured covers/
Couverture de couleur | <input type="checkbox"/> Coloured pages/
Pages de couleur |
| <input type="checkbox"/> Covers damaged/
Couverture endommagée | <input type="checkbox"/> Pages damaged/
Pages endommagées |
| <input type="checkbox"/> Covers restored and/or laminated/
Couverture restaurée et/ou pelliculée | <input type="checkbox"/> Pages restored and/or laminated/
Pages restaurées et/ou pelliculées |
| <input type="checkbox"/> Cover title missing/
Le titre de couverture manque | <input checked="" type="checkbox"/> Pages discoloured, stained or foxed/
Pages décolorées, tachetées ou piquées |
| <input type="checkbox"/> Coloured maps/
Cartes géographiques en couleur | <input type="checkbox"/> Pages detached/
Pages détachées |
| <input type="checkbox"/> Coloured ink (i.e. other than blue or black)/
Encre de couleur (i.e. autre que bleue ou noire) | <input checked="" type="checkbox"/> Showthrough/
Transparence |
| <input type="checkbox"/> Coloured plates and/or illustrations/
Planches et/ou illustrations en couleur | <input type="checkbox"/> Quality of print varies/
Qualité inégale de l'impression |
| <input type="checkbox"/> Bound with other material/
Relié avec d'autres documents | <input type="checkbox"/> Includes supplementary material/
Comprend du matériel supplémentaire |
| <input type="checkbox"/> Tight binding may cause shadows or distortion
along interior margin/
La reliure serrée peut causer de l'ombre ou de la
distorsion le long de la marge intérieure | <input type="checkbox"/> Only edition available/
Seule édition disponible |
| <input type="checkbox"/> Blank leaves added during restoration may
appear within the text. Whenever possible, these
have been omitted from filming/
Il se peut que certaines pages blanches ajoutées
lors d'une restauration apparaissent dans le texte,
mais, lorsque cela était possible, ces pages n'ont
pas été filmées. | <input type="checkbox"/> Pages wholly or partially obscured by errata
slips, tissues, etc., have been refilmed to
ensure the best possible image/
Les pages totalement ou partiellement
obscurcies par un feuillet d'errata, une pelure,
etc., ont été filmées à nouveau de façon à
obtenir la meilleure image possible. |
| <input type="checkbox"/> Additional comments:
Commentaires supplémentaires: | |

This item is filmed at the reduction ratio checked below/
Ce document est filmé au taux de réduction indiqué ci-dessous.

10X	14X	18X	22X	26X	30X
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12X	16X	20X	24X	28X	32X

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

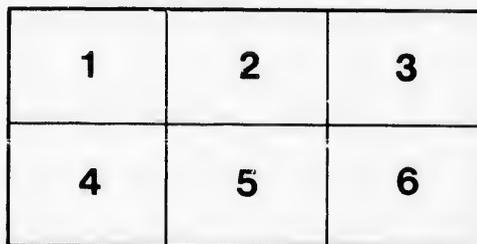
Library of the Public
Archives of Canada

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 \rightarrow (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:



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

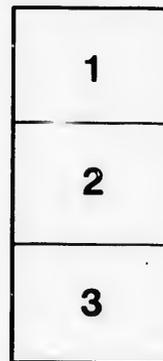
La bibliothèque des Archives
publiques du Canada

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 en conformité 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 \rightarrow 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.



Grand Trunk Railway.



SPECIFICATION

OF

PLATFORM CARS.



GRAND TRUNK RAILWAY.

SPECIFICATION

OF

PLATFORM CARS.

GAUGE 4 FEET 8½ INCHES.

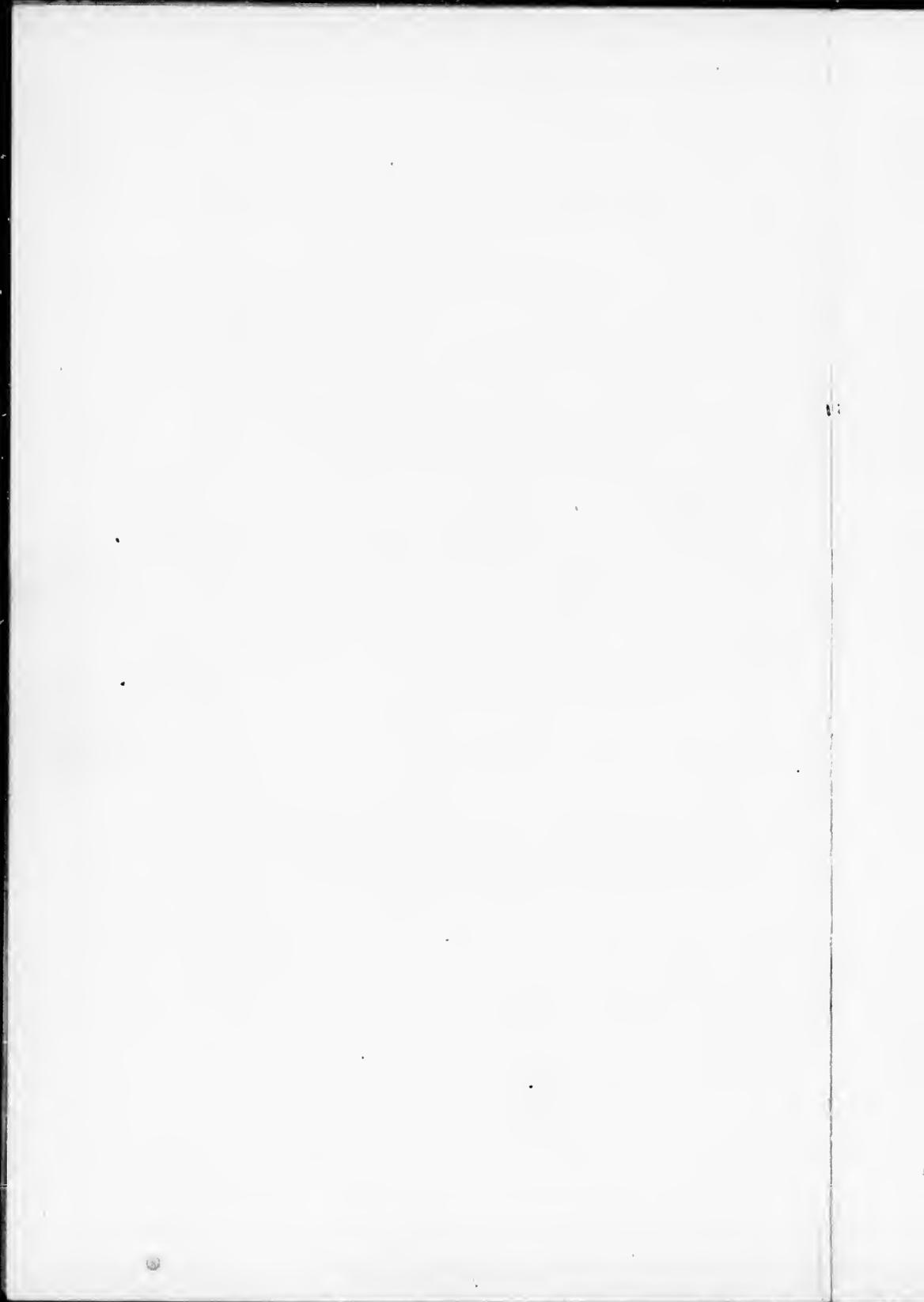
GENERAL CONDITIONS.

The cars must be made to the dimensions given in the following Specification, and according to the drawing and samples furnished. The timber used must be of first quality, dry, sound, well-seasoned, and accurately fitted together. The wrought iron must be of best "Staffordshire," or of equal and approved quality. The castings must be made from tough grey pig iron, and must be sound, smooth, and perfect in all respects. All the bolts and nuts must be screwed to "Whitworth's" thread.

The cars must be fitted and finished in the most complete manner to the entire satisfaction of the Company's Mechanical Superintendent, or his Agent, who shall be allowed to inspect the work with power to reject any part found to be defective in quality or workmanship, or not in accordance with the Specifications, &c.

The wheels, axles and springs, must be warranted for twelve months after being set to work. Any failure during that period—except such as results from accident—must be made good by the Contractor.

MECHANICAL SUPERINTENDENTS' OFFICE, }
MONTREAL, April 15th, 1873. }



GRAND TRUNK RAILWAY.

FRAMING.

No.		FT.	IN.
	Length.....	29	0
	Breadth.....	8	6
2	Side Soles—White Oak.....		5 x12
2	Intermediate Longitudinals, — Tamarac or Red Pine.....		4½x9
2	Centre Longitudinals—Oak....		4½x9
2	Headstocks—White Oak.....		5 x9
	“ Length.....	8	2
2	Body Bolsters—White Oak....		5 x14
	“ “ Length.....	8	6
2	Transoms—White Oak or White Ash.....		5 x9
	“ Length.....	8	6
2	Packing Blocks.....		7 x7¼
	“ “ Length.....	2	0

Central and Intermediate longitudinals are framed into headstocks with 2, 1½ in. tenons and secured by ½ joint bolts. Headstocks tenoned into side sole with 2, 1½ in. tenons and secured by 2, ½ in. joint bolts at each end, Body bolster checked into all longitudinals and secured to each by 2, ½ in. joint bolts—except centre longitudinals which are ¾ in. dia. and carry crown plate. Transom checked into each longitudinal and secured by 1, ½ in. bolt, and to side sole by 1, ½ in. joint bolt.

FLOORING.

Description—Pine laid transverse y.

Width of Boards....		7 to 10
Thickness “		2
Length “	8	8
18 Nails to each.		
“ Length.....		4½

Battens Planed on one side, Tongued and Grooved.

No.		FT.	IN.
20	Stake Holders—Cast Iron.		
20	Stirrups. dia.		$\frac{7}{8}$

BUNTER.

*Description—Cast Iron, with Rubber Springs;
Specimen supplied complete.*

2	Springs—dia. 6 inches; length.	7
2	Outer Seats—Cast Iron; thick- ness	$1\frac{3}{4}$
2	Inner Seats—Wrought Iron; thickness	$1\frac{1}{2}$
24	Bolts—Cradle and Glands; dia. 2 nuts and $\frac{3}{16}$ inch split pin..	$\frac{3}{4}$
2	Tail Pins. dia. With flat gib headed cotter, 2 x $\frac{5}{16}$ secured by $\frac{3}{8}$ inch split pin.	2

DEAD-HEADS.

*Description—Oak or Ash faced with Wrought
Iron Plate.*

4	Plates—Thickness $\frac{1}{4}$, size.	9 x 10
16	Rivets, dia.	$\frac{3}{8}$
4	Bolts “	1
	2 Bolts to Headstock, and 2 to Bolster.	

TRUSS-RODS

Description—Wrought Iron whole Length of Car.

2	Rods dia.	$1\frac{1}{2}$
	Screwed ends “	$1\frac{3}{8}$

Truss to pass over bolster, under transom and through headstock, close to outside of intermediate. Shoes and washer to be cast iron.

BRAKE.

Description—Outside, on one Truck, having Oak beam and cast iron Shoes.

No.		FT.	IN.
4	Slings,dia.		1
4	Carrying Pins..... "		1 $\frac{1}{8}$
4	Safety Links..... "		$\frac{3}{4}$
4	Toggle Pins, length 1ft. 1 $\frac{1}{2}$ in "		$\frac{5}{8}$
2	Beams " 5 ft. 2 $\frac{1}{2}$ in. "		3 $\frac{1}{2}$ x 6 $\frac{1}{2}$
4	Shoes, surface.....		3 x 1 $\frac{5}{8}$
2	Brake Rods.....dia.		$\frac{5}{8}$
1	" Shaft..... "		1
1	" Wheel..... "	1	3

TRUCKS.—PATTERNS WILL BE SUPPLIED.

Description—4 Wheeled Side-bearing Composite Frame.

Wheels to be of G. T. R. standard, well chilled, cast from best Salisbury, or Three Rivers Charcoal Iron, or of equal and approved quality.

8	Wheelscentres.	4	4
"	"dia.....	2	9
"	"tread..		4 $\frac{1}{2}$
4	Transverse Beams.....	7	6
"	Section " "		4 $\frac{1}{2}$ x 8 $\frac{1}{2}$
4	Blocking Pieces, length 9 $\frac{3}{4}$ inch.		3 x 6 $\frac{1}{4}$
4	Bolts for samedia.		$\frac{5}{8}$
4	Sole Plates, (cast)... thickness.		$\frac{3}{4}$
2	Centre Block over cross beams.	1 $\frac{1}{2}$	6 x 14
2	Crown Plates, thickness.....		1
16	Bolts.....dia.		$\frac{3}{4}$
4	Spring Seats, Oak.....	1 $\frac{1}{2}$	3 x 12
"	" " Plates $\frac{1}{4}$ thick, dia.		10
3	Stirrups..... "		$\frac{3}{4}$
8	Bridge Plates, length 6 inches.		3 x $\frac{5}{8}$
8	Bolts—To hold frames together,		
dia.		$\frac{3}{4}$

8 Bars 5 ft 1" 1 x 3

11 " 3 ft 10 1/2" 1 x 3

No.		FT.	IN.
16	Bolts—Axle Box, dia. $\frac{7}{8}$, length	1	$2\frac{1}{2}$
	“ To have 2 nuts and $\frac{3}{16}$ inch split pins.		

The thread of Bolts must not be carried up into tie bar more than $\frac{1}{8}$ inch.

Trucks when turned out, must have axle-Boxes packed with cotton waste, saturated with best Petroleum Oil, as used by Grand Trunk Railway.

SPRINGS.

Description—Hebbard Spiral, of approved make, of Four Coils per Spring; 2 Springs on each Truck.

Height, 8 inches..... dia.	8
8 Shoes for Spring, Cast Iron... “	$9\frac{1}{4}$

AXLES.

Half to be from the Patent Shaft and Axletree Company (England), of their best make.—and branded with their name, and half of “Moisie” Iron, branded with maker's name, or of equal and approved quality.

2 Outside Journals.....centres.	6	4
“ “dia.		$3\frac{1}{2}$
“ “length.		6
Wheel Seat.....dia.		$4\frac{1}{2}$
Centre of Axle..... “		4
8 Journal Bearings of best Brass.		

Axle Boxes of cast iron with rubber or leather washer on back end of box (as per sample sent).

PAINTING.

Tenons and mortices to be thickly coated with white lead. Outside of Car to have 3 coats best oil paint,—2 of white lead and 1 of buff permanent colour. Trucks to have 2 coats of paint (approved colour) made from best white lead. All Iron work to have one coat good black paint.. Further particulars will be given as to lettering.

Platform

FORM OF TENDER.

.....do hereby agree to supply the Grand
Trunk Railway Company with
Platform ~~Box~~ Cars, in accordance with the Specification,
&c., for the sum of,
for each Car.

Signed,

.....Witness.

To be delivered at Stratford, Toronto or
Montreal, free of charges, on or before

- Form of Tender -

do hereby agree to supply
the Grand Trunk Railway
Company with

Platform Car
trucks in accordance
with the Specifications
for the sum of
for each truck -

Signed
Witness

To be delivered at Stratford
Toronto or Montreal free
of charge on or before

