

**CIHM
Microfiche
Series
(Monographs)**

**ICMH
Collection de
microfiches
(monographies)**



Canadian Institute for Historical Microreproductions / Institut canadien de microreproductions historiques

© 1995

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 end/or laminated/
Couverture restaurée et/ou pelliculée | <input type="checkbox"/> Pages restored end/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 checked="" type="checkbox"/> Coloured plates end/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"/> Continuous pagination/
Pagination continue |
| <input checked="" 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"/> Includes index(es)/
Comprend un (des) index |
| <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. | Title on header taken from: /
Le titre de l'en-tête provient: |
| <input type="checkbox"/> Additional comments: /
Commentaires supplémentaires: | <input type="checkbox"/> Title page of issue/
Page de titre de la livraison |
| | <input type="checkbox"/> Caption of issue/
Titre de départ de la livraison |
| | <input type="checkbox"/> Masthead/
Général (périodiques) de la livraison |

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

10X	12X	14X	16X	18X	20X	22X	24X	26X	28X	30X	32X
				✓							

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

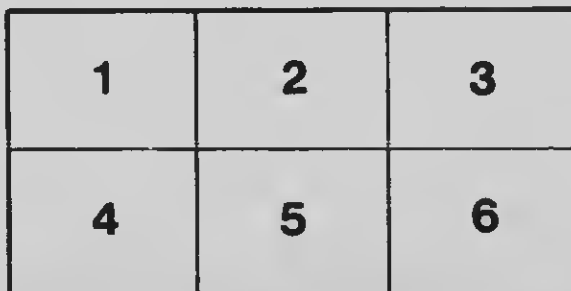
National Library of Canada

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 sheet contains 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:

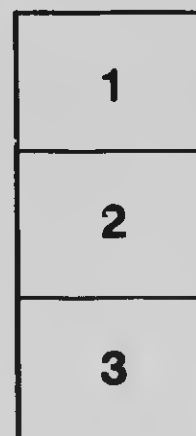
Bibliothèque nationale du Canada

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.

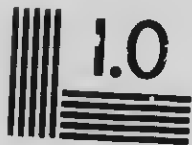
Un des symboles suivants apparaît sur la dernière image de chaque microfiche, selon le cas: le symbole \rightarrow signifie "A SUIVRE", le symbole ∇ signifie "FIN".

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.



MICROCOPY RESOLUTION TEST CHART

(ANSI and ISO TEST CHART No. 2)



1.0

4.5



2.8



2.5

5.0



3.2



2.2

5.6

6.3



3.6

7.1



4.0



2.0

8.0

9.0

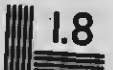
10.0

11.2

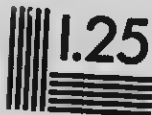
12.5



1.1



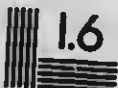
1.8



1.25



1.4

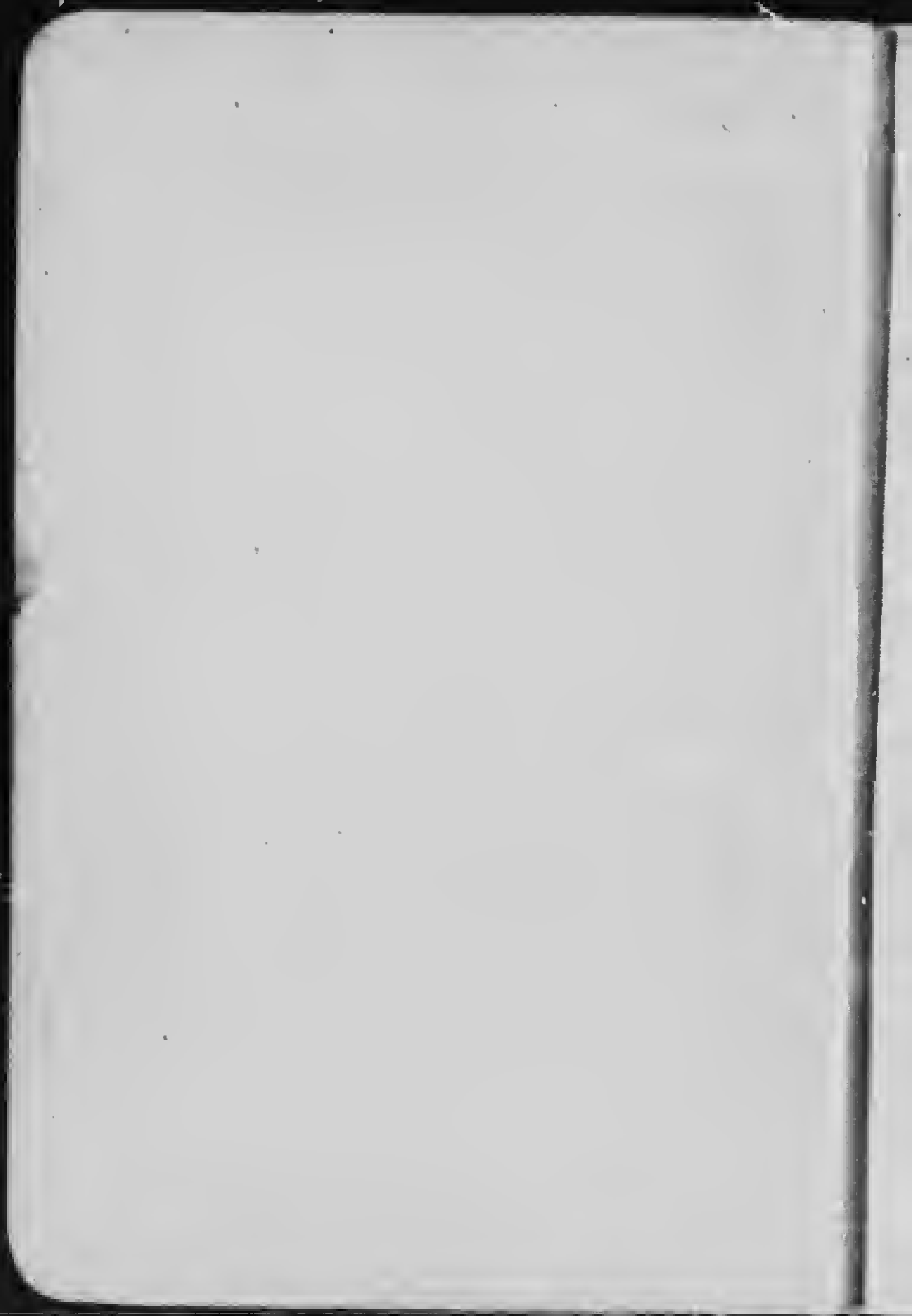


1.6

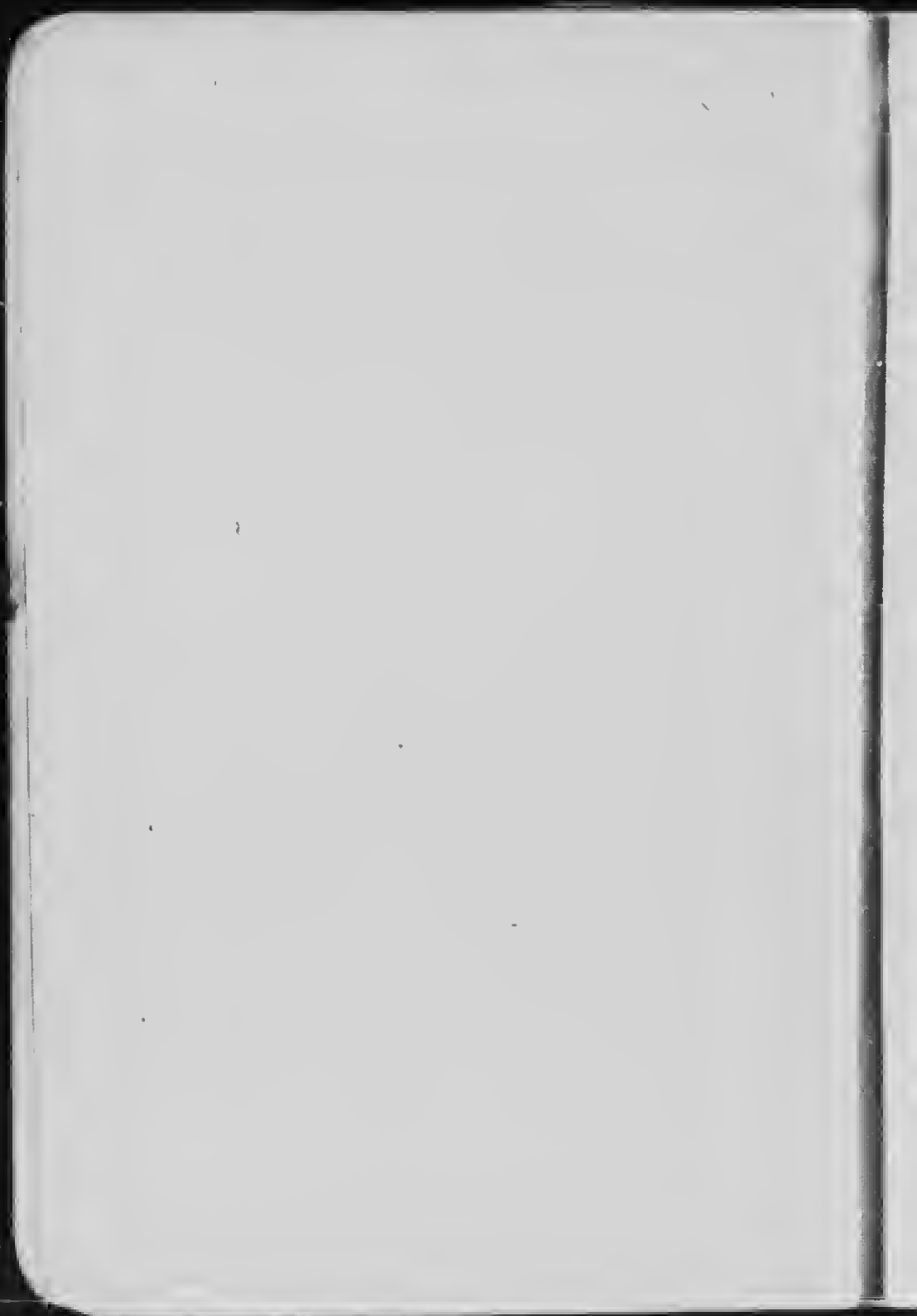


APPLIED IMAGE Inc

1653 East Main Street
Rochester, New York 14609 USA
(716) 482-0300 - Phone
(716) 288-5989 - Fax







(BK. 205)

**GRAND TRUNK RAILWAY
SYSTEM**

**OPERATING RULES
AND
GENERAL REGULATIONS**

051102 0

1911
px

0 901170

INDEX

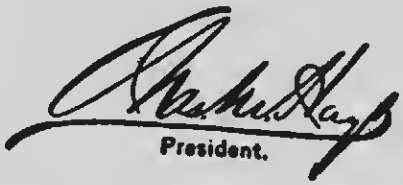
	Page
General Notice.....	4
General Rules.....	5
Definitions.....	7
Train Rules for Single Track.....	10
Standard Time.....	10
Certificate of Watch Inspector.....	10
Time Tables.....	12
Signals.....	14
Visible Signals.....	14
Color Signals.....	14
Hand, Flag and Lamp Signals.....	15
Audible Signals.....	15
Engine Whistle Signals.....	15
Communicating Signals.....	17
Train Signals.....	17
Use of Signals.....	19
Movement of Trains by Time Table and Train Order	22
Superiority.....	22
Rules for Train Movement.....	22
Rules for use of Train Orders.....	34
Forms of Train Orders.....	42
Train Rules for Double Track.....	56
Standard Time.....	56
Certificate of Watch Inspector.....	56
Time Tables.....	58
Signals.....	60
Visible Signals.....	60
Color Signals.....	60
Hand, Flag and Lamp Signals.....	61
Audible Signals.....	61
Engine Whistle Signals.....	61

	Page
Communicating Signals.....	63
Train Signals.....	63
Use of Signals.....	65
Movement of Trains by Time Table and Train Order	68
Superiority.....	68
Rules for Train Movement.....	68
Rules for use of Train Orders.....	78
Forms of Train Orders.....	86
Movement of Trains by Fixed Signals.....	98
Superiority.....	98
Rules for Train Movement.....	98
Fixed Signals.....	107
Definitions.....	107
Rules.....	108
Automatic Block Signals.....	109
Definitions and Indications.....	109
Automatic Block System.....	110
Rules.....	110
Station Protection Signal.....	112
Rules.....	112
Flag Stop Signals.....	113
Interlocking Signals.....	114
Definitions and Indications.....	114
Rules.....	115
Signalmen.....	115
Engineers and Trainmen.....	119
Forms of Clearance.....	122
Train Order Blanks.....	126
Diagrams of Hand, Flag and Lamp Signals.....	129
Note.....	130
Diagrams of Train Signals.....	133
Notes.....	134
General Regulations.....	145
Conductors, Baggage-men and Brakemen.....	146
Engineers.....	149
Station Agents.....	151
Telegraph Employes.....	157
Chief Train Despatchers.....	158
Operators.....	158
Ordinary Signals.....	164
Bridge and Section Foremen.....	164

Page
63
63
65
68
68
68
78
86
98
98
98
107
107
108
109
109
110
110
112
112
113
114
114
115
115
119
122
126
129
130
133
134
145
146
149
151
157
158
158
164
164

The rules herein set forth govern the railroads operated by the Grand Trunk Railway System. They take effect June 18, 1911, superseding all previous rules and instructions inconsistent therewith.

Special instructions may be issued by proper authority.


President.

GENERAL NOTICE

To enter or remain in the service is an assurance of willingness to obey the rules.

Obedience to the rules is essential to the safety of passengers and employes, and to the protection of property.

The service demands the faithful, intelligent and courteous discharge of duty.

To obtain promotion, capacity must be shown for greater responsibility.

Employes, in accepting employment, assume its risks.

GENERAL RULES

A. Every employe whose duties are prescribed by these rules, must have a copy of them accessible when on duty.

Every employe whose duties are connected with the movement of trains must have a copy of the current Timetable accessible when on duty.

B. Employes must be conversant with and obey the rules and special instructions. If in doubt as to their meaning, they must apply to proper authority for an explanation.

C. Employes must pass the required examinations.

D. Persons employed in any service on trains are subject to the rules and special instructions.

E. Employes must render every assistance in their power in carrying out the rules and special instructions.

F. Any violation of the rules or special instructions must be reported.

G. The use of intoxicants by employes while on duty is prohibited. Their use, or the frequenting of places where they are sold, is sufficient cause for dismissal.

H. The use of tobacco by employes while on duty in or about passenger stations, or on passenger cars, is prohibited.

J. Employes on duty must wear the prescribed badge and uniform and be neat in appearance.

K. Persons authorized to transact business at stations or on trains must be orderly and avoid annoyance to patrons.

L. In case of danger to the Company's property, employes must unite to protect it.

M. Employes must always be vigilant to protect, and must promptly report anything detrimental to the Company's interest.

N. When an employe leaves the service, all equipment supplied by the Company must be returned. The Company reserves the right to withhold from the wages due the employe the value of such equipment not returned.

O. Equipment, supplies and material must be properly and economically used and cared for. Scrap and other material of value must be turned in to the Company.

P. Unless authorized to do so, employes must not receive or pay out money on the Company's account or use the Company's credit.

Q. All accidents involving injuries to persons, or damage to track, structures or rolling stock, must be reported promptly by telegraph to the proper officer, and confirmed by mail. In cases of injury to persons, the names and addresses of as many witnesses as possible must be obtained.

DEFINITIONS

TRAIN.—An engine, or more than one engine coupled, with or without cars, displaying markers.

REGULAR TRAIN.—A train authorized by a time-table schedule.

SECTION.—One of two or more trains running on the same time-table schedule, displaying green signals or for which green signals are displayed.

EXTRA TRAIN.—A train not authorized by a time-table schedule. It may be designated as:—

“**WORK EXTRA**”—for a work train.

“**PASSENGER EXTRA**”—for an extra passenger train.

“**EXTRA**”—any other extra train.

SUPERIOR TRAIN.—A train having precedence over another train.

TRAIN OF SUPERIOR RIGHT.—A train given precedence by train order.

TRAIN OF SUPERIOR CLASS.—A train given precedence by time-table.

TRAIN OF SUPERIOR DIRECTION.—A train in the direction in which regular trains are superior to trains of the same class in the opposite direction, as specified in the time-table.

NOTE.—Superiority by direction is limited to single track.

TIME-TABLE.—The authority for the movement of regular trains subject to the rules. It contains the classified schedules of trains, with special instructions relating thereto.

TIME-TABLE SCHEDULE.—That part of a time table which prescribes class, direction, number and movement for a regular train.

DIVISION.—That portion of a railway assigned to the supervision of a Superintendent.

DISTRICT.—That portion of a railway assigned to the supervision of a Superintendent or Trainmaster.

SUBDIVISION.—A part of a division so designated on a time-table.

MAIN TRACK.—A track extending through yards and between stations, upon which trains are operated by time-table or train order, or the use of which is controlled by block signals.

SINGLE TRACK.—A main track upon which trains are operated in both directions.

DOUBLE TRACK.—Two main tracks, upon one of which the current of traffic is in a specified direction, and upon the other in the opposite direction.

THREE (OR MORE) TRACKS.—Three (or more) main tracks, upon any of which the current of traffic may be in either specified direction.

CURRENT OF TRAFFIC.—The movement of trains on a main track, in one direction, specified by the rules.

STATION.—A place designated on the time-table or by a sign-board by name, at which a train may stop for traffic; or to enter or leave the main track; or from which fixed signals are operated.

INITIAL STATION.—A station at which a regular train is first timed on any sub-division is an initial station for that train.

PASSING TRACK.—A track auxiliary to the main track for meeting or passing trains, limited to the distance between two adjoining telegraph stations.

SIDE TRACK.—A track auxiliary to the main track, used for purposes other than for meeting and passing trains.

FIXED SIGNAL.—A signal of fixed location indicating a condition affecting the movement of a train.

YARD LIMIT BOARD.—A signal board of fixed location, indicating the limits of a yard.

YARD.—A system of tracks within limits defined by yard limit boards, or indicated by time-table, provided for the making up of trains, storing of cars and other purposes, over which movements not authorized by time-table or by train order, may be made subject to prescribed signals and rules.

YARD ENGINE.—An engine assigned to yard service and working within yard limits.

PILOT.—A person assigned to a train when the Engineer or Conductor, or both, are not fully acquainted with the physical characteristics, or running rules of the road, or portion of the road, over which the train is to be moved.

TRAIN RULES FOR SINGLE TRACK.

Standard Time.

1. Standard Time obtained from McGill Observatory will be telegraphed to all points from designated offices at 11 o'clock a.m. daily.

2. Watches that have been examined and certified to by a designated Inspector, must be used by Train Masters, Road Foremen of Locomotives, Locomotive Foremen, Road Masters, Bridge and Building Masters, Conductors, Engineers, Firemen, Motormen, Train Baggage-men, Brakemen, Yard Masters and Yard Foremen and such other employes as the Railway Company may direct. The certificate in prescribed form must be renewed and filed with the Superintendent or Train Master every January and July.

(Form of Certificate.)

Certificate of Watch Inspector.

This is to certify that on.....19.....
the watch of.....
employed as.....
on the
Railway, was examined by me. It is correct and reliable
and in my judgment will, with proper care, run within a
variation of thirty seconds per week.

Name of maker.....
Brand.....
Number of movement.....
Open or hunting case.....
Metal of case.....
Stem or key winding.....

Signed,

.....Inspector.

Address.....

3. Watches of Conductors, Engineers and Motormen must be compared before starting on each trip, with a clock designated as a Standard Clock. The time when Watches are compared must be registered on a prescribed form.

Employees who are required to use Standard Watches must submit them to a designated Inspector for comparison and record during the first and third week of every month, or if no designated Inspector is accessible, during any such period as soon as possible thereafter.

They must not regulate them, or unless they stop owing to failure to wind, set them themselves.

If a Standard Clock is not accessible, standard time must be obtained from Train Despatcher, or by comparing time with a Conductor, Engineer or Motorman who have had access to a Standard Clock and registered.

TIME TABLES.

4. Each time-table, from the moment it takes effect, supersedes the preceding time-table. A train of the preceding time-table which has left its initial station, on any sub-division before the new time-table takes effect, must retain its train orders and complete the run by using the schedule of the train of the same number of the new time-table, unless that train is scheduled to leave its initial station on that sub-division within twelve hours after the new time-table takes effect, in which case, the train of the preceding time-table loses both right and schedule at the moment the new time-table takes effect, and thereafter may proceed only by train order.

A train of the preceding time-table must not leave its initial station on any sub-division after the hour the new time-table takes effect.

A train of the new time-table which has not the same number on the preceding time-table, must not run on any sub-division until it is due to start from its initial station on that sub-division after the new time-table takes effect.

5. Not more than two times are given for a train at any station; where one is given, it is, unless otherwise indicated, the leaving time; where two, they are the arriving and leaving time.

Unless otherwise indicated, the time applies to the switch where an inferior train enters the siding; where there is no siding it applies to the place from which fixed signals are operated; where there is neither siding nor fixed signals, it applies to the place where traffic is received or discharged.

Schedule meeting or passing stations are indicated by figures in full-faced type.

Both the arriving and leaving time of a train are in full-faced type when both are meeting or passing times, or when one or more trains are to meet or pass it between those times.

When trains are to be met or passed at a siding extending between two adjoining stations, the time at each station will be shown in full-faced type.

Where there are one or more trains to meet or pass a train between two times, or more than one train to meet a train at any station, attention is called to it by small figures showing numbers of trains to be met or to pass

6. The following signs in the time-table indicate:

"*"—See foot-note.

"s"—Regular stop.

"f"—Flag stop to receive or discharge passengers or freight.

"M"—Stop for meals.

"L"—Leave.

"A"—Arrive.

"D"—Day telegraph station.

"N"—Night telegraph station.

"T"—Telephone station.

"W"—Water station.

"C"—Coaling station.

SIGNALS.

7. Employes whose duties may require them to give signals, must provide themselves with the proper appliances, keep them in good order and ready for immediate use.

8. Flags of the prescribed color must be used by day, and lamps of the prescribed color by night.

9. Night signals are to be displayed from sunset to sunrise. When weather or other conditions obscure day signals, night signals must be used in addition.

VISIBLE SIGNALS.**10. Color Signals.**

COLOR.	INDICATION.
(a) Red.	Stop.
(b) Green.	Proceed, and for other uses prescribed by the rules.
(c) Yellow.	Proceed with caution, and for other uses prescribed by the rules.
(d) Green and white.	Flag stop. See Rule 28.
(e) Blue.	See Rule 26.

11. A fusee on or near the track burning red must not be passed until burned out. When burning yellow it is a caution signal.

12. Hand, Flag and Lamp Signals.
(Illustrated by diagram.)

MANNER OF USING.	INDICATION.
(a) Swung across the track.	Stop.
(b) Raised and lowered vertically.	Proceed.
(c) Swung vertically in a circle at half arm's length across the track when the train is standing.	Back.
(d) Swung vertically in a circle at arm's length across the track when the train is running.	Train has parted.
(e) Swung horizontally above the head when the train is standing.	Apply air brakes.
(f) Held at arm's length above the head when the train is standing.	Release air brakes.

13. Any object waved violently by any one on or near the track is a signal to stop.

AUDIBLE SIGNALS.

14. Engine Whistle Signals.

NOTE.—The signals prescribed are illustrated by "o" for short sounds, "—" for longer sounds. The sound of the whistle should be distinct, with intensity and duration proportionate to the distance signal is to be conveyed.

SOUND	INDICATION.
(a) o	Stop. Apply brakes.
(b) — —	Release brakes, or ready to proceed.
(c) — o o o	Flagman go out to protect rear of train.
(d) — — — —	Flagman return from west or south.
(e) — — — —	Flagman return from east or north.
(f) — — — —	When running, train parted; to be repeated until answered by the signal prescribed by Rule 12 (d).
(g) o o	Answer to 12 (d).
(h) o o o	Answer to any signal not otherwise provided for.
(j) o o o o	When train is standing, back.
(k) — o o	Answer to 12 (c) and 16 (c).
(l) — — o o	When train is running, answer to 16 (d).
(m) — — — —	Call for signals.
(n) o —	To call attention of extra trains and of trains of the same or inferior class or inferior right to signals displayed for a following section.
(o) o o —	Approaching public road crossings at grade and at whistle posts.
	Approaching stations, and as prescribed by Rule 31.
	When double heading, air brakes have failed on leading engine and second engine is to take control of them.
	Answer to 14 (n); to be given by second engine as soon as it has control of air brakes.
	Answer to 14 (k).

A succession of short sounds of the whistle is an alarm for persons or animals on the track.

15. The explosion of one torpedo is a signal to stop; the explosion of two not more than 200 and not less than 100 feet apart is a signal to reduce speed, and look out for a stop signal.

Torpedoes must not be placed near stations or public crossings, nor where persons are liable to be injured by them.

16. Communicating Signals.

SOUND.	INDICATION.
(a) Two.	When train is standing, start.
(b) Two.	When train is running, stop at once.
(c) Three.	When train is standing, back.
(d) Three.	When train is running, stop at next station.
(e) Four.	When train is standing, apply or release air brakes.
(f) Four.	When train is running, reduce speed.
(g) Five.	When train is standing, call in flagman.
(h) Five.	When train is running, increase speed.
(i) Six.	When train is running, increase steam heat.
(j) Seven.	When train is running, release air brakes, or sticking brake.

TRAIN SIGNALS.

17. A headlight will be displayed to the front of every train by night, but must be concealed when the train turns out to meet another and has stopped clear of main track, with switches closed, or is standing to meet trains at the end of double track, or at junctions, and switches properly set for the approaching train.

18. Yard engines will display the headlight on the front and rear by night. When not provided with a headlight at the rear, two white lights must be displayed. Yard engines will not display markers.

Under conditions not requiring display of markers, road engines without cars will display a white light on the rear of tender by night.

(Illustrated by diagram.)

19. The following signals will be displayed, one on each side of the rear of every train, as markers to indicate the rear of the train; by day, green flags; by night, green lights to the front and side and red lights to the rear, except when the train is clear of the main track, when green lights must be displayed to the front, side and rear.

(Illustrated by diagram.)

Where the cupola of a caboose is provided with indicators for designating the train, the proper indication must be shown and must be removed as soon as the run is completed.

20. All sections except the last will display two green flags, and in addition, two green lights by night, in the places provided for that purpose on the front of the engine.

(Illustrated by diagram.)

21. Extra trains will display two white flags, and in addition, two white lights by night, in the places provided for that purpose on the front of the engine.

(Illustrated by diagram.)

22. When two or more engines are coupled, the leading engine only shall, unless otherwise directed, announce the signals as prescribed by Rule 14, and display the signals as prescribed by Rules 20 and 21.

23. One flag or light displayed where in Rules 19, 20 and 21 two are prescribed will indicate the same as two; but the proper display of all train signals is required.

24. When cars are pushed by an engine (except when shifting or making up trains in yards) a white light must be displayed on the front of the leading car by night.
(Illustrated by diagram.)

25. Each car on a passenger train must be connected with the engine by a communicating signal appliance.

26. A blue flag by day and a blue light by night, displayed at one or both ends of an engine, car or train, indicates that workmen are under or about it; when thus protected, it must not be coupled to or moved, and other cars must not be placed on the same track so as to intercept the view of the blue signals, without first notifying the workmen.

Workmen will display the blue signals and the same workmen are alone authorized to remove them.

USE OF SIGNALS.

27. A signal imperfectly displayed, or the absence of a signal at a place where a signal is usually shown, must be regarded as a stop signal, and the fact reported to the proper officer.

28. A combined green and white signal is to be used to stop a train only at the flag stations indicated on its schedule. When it is necessary to stop a train at a point that is not a flag station on its schedule, a red signal must be used.

29. When a signal (except a fixed signal) is given to stop a train, it must, unless otherwise provided, be acknowledged as prescribed by Rule 14 (g) or (h).

30. The engine bell must be rung when an engine is about to move, and while moving about stations.

31. Signal 14 (l) must be sounded at least 80 rods ($\frac{1}{4}$ mile) from every public road crossing at grade, and the engine bell be kept ringing until the crossing is passed.

Signal 14 (l) must be sounded at every whistle post.

Signal 14 (m) must be sounded one mile from stations, watering and fueling points, junctions, the end of double track, drawbridges and railway crossings at grade.

Signal 14 (k) must be sounded by a train displaying green signals for a following section, to call attention of extra trains or trains of the same or inferior class or inferior right to signals displayed, and must hear the answer 14 (o), or stop and notify them of green signals displayed.

32. The unnecessary use of either the whistle or the bell is prohibited. They will be used only as prescribed by rule, or statute, or to prevent accident.

33. Watchmen stationed at public road crossings must use green signals to prevent persons and vehicles from crossing the track when trains are approaching. Red signals must be used by them only when necessary to stop trains.

34. In emergency cases when track is suddenly found defective, any employe shall by the use of flags, lights, torpedoes, fuses or other signals, use every effort possible to stop trains in both directions.

35. A yellow flag or a yellow light placed beside the track on the same side as the Engineer of an approaching train, indicates that the track 3,000 feet distant is in condition for speed of but six miles an hour unless otherwise instructed, and the speed of a train will be controlled accordingly. A green flag or a green light, placed beside the track, on the same side as the Engineer of an approaching train, at a point beyond the slow track, indicates that full speed may be resumed.

A "SLOW" sign placed beside the track on the same side as the Engineer of an approaching train, may be used to mark a point where a slow order is in effect.

36. A red or yellow fusee, as the case may require, will be used for protection of a train which is not making the speed required by schedule or train order and is liable to be overtaken by a following train.

MOVEMENT OF TRAINS BY TIME-TABLE AND TRAIN ORDER.

Superiority.

71. A train is superior to another train by right, class or direction.

Right is conferred by train order; class and direction by time-table.

Right is superior to class or direction.

Direction is superior as between trains of the same class.

72. Trains of the first class are superior to those of the second class; trains of the second class are superior to those of the third class; trains of the third class are superior to those of the fourth class.

Trains in the direction specified by the time-table are superior to trains of the same class in the opposite direction.

73. Extra trains are inferior to regular trains.

RULES FOR TRAIN MOVEMENT.

82. Time-table schedules, unless fulfilled, are in effect, for twelve hours after their time at each station.

Regular trains twelve hours behind either their schedule arriving or leaving time at any station, lose both right and schedule, and can thereafter proceed only as authorized by train order.

83. Trains must be registered at the register stations designated in the time-table.

A train must not leave its initial station on any subdivision or a junction, or pass from double to single track, until it has been ascertained whether all trains due, which are superior, or of the same class, have arrived or left.

A train must not leave its initial station on any subdivision nor pass from double to single track without a Terminal Clearance, unless otherwise directed.

At bulletin stations designated in the time-table, Conductors and Engineers must read and sign for the bulletins posted before starting. All bulletins affecting the movement of trains will be re-issued the first of each month.

84. A train must not start until the proper signal is given.

85. When a train of one schedule is on the time of another schedule of the same class in the same direction, it will proceed on its own schedule.

Trains of one schedule may pass trains of another schedule of the same class, and extras may pass and run ahead of extras.

86. An inferior train must clear the time of a superior train in the same direction not less than five minutes; but must clear the time of a first-class train in the same direction ten minutes, unless it is clear before the first-class train is due to leave the next station in the rear where time is shown.

87. An inferior train must keep out of the way of opposing superior trains and failing to clear the main track by the time required by rule, must be protected as prescribed by Rule 99.

Extra trains must clear the time of regular trains not less than five minutes, unless otherwise provided, and will be governed by train orders with respect to opposing extra trains.

88. At meeting points between trains of the same class, the inferior train must clear the main track before the leaving time of the superior train.

At meeting points between extra trains, the train in the inferior time-table direction must take the siding unless otherwise provided.

Trains must pull into the siding when practicable; if necessary to back in, the train must first be protected as prescribed by Rule 99, unless otherwise provided.

89. At meeting points between trains of different classes the inferior train must take the siding and clear the superior train at least five minutes, and must pull into the siding when practicable. If necessary to back in, the train must first be protected as prescribed by Rule 99, unless otherwise provided.

90. Trains must stop at schedule meeting stations, if the train to be met is of the same class, unless the switch is right and the track clear.

When the expected train of the same class is not found at the schedule meeting station, the superior train must approach all sidings prepared to stop, until the expected train is met.

Trains must not pass any meeting point without knowing positively that the train or trains met are those which had right to track over them.

The Conductor of every train except passenger trains, must, one mile from every station at which it is not required to stop, give proceed signal to Engineer, who must, if he does not receive such signal, approach the siding cautiously and stop clear of the switch that an opposing train would use in taking the siding.

Conductors and Engineers of freight, mixed and work trains will see that Brakemen be in position to exchange signals while approaching and passing junctions, railway-crossings, draw-bridges, points where trains may be required to stop, and on heavy grades, and to do whatever is required for safety and expedition, and must exchange signals when passing and leaving stations.

Trainmen will not be required to ride on top of trains unless it is necessary for safety.

There must be a trainman on the last car of such train while in motion.

The Conductor of every passenger train must, between one and three miles from every station at which it is to meet a train by train order arrangement, or which is superior to it, either by class or direction, give communicating signal 16 (d) and receive steam whistle signal 14 (g) and the Engineer will immediately make running test of brake.

Trains must stop clear of the switch used by the train to be met in going on the siding.

91. Unless some form of block signals is used, trains in the same direction must keep at least five minutes apart, except in closing up at stations, but a train must not follow

a train carrying passengers or operating a snow plow until a report is received of its arrival at a station ahead, except that a train may follow twenty minutes after the departure of a train carrying passengers or operating a snow plow, when either the station from which it is to follow or the next station ahead is not a telegraph station, or when communication with the Train Dispatcher is interrupted, and the wire failure is noted on the Clearance.

The train order signal will be used by Operators to maintain the intervals required by this rule.

Schedule speed must not be exceeded by sections of trains other than the first section, nor may a train following a train carrying passengers, exceed the schedule speed of such train unless clearance shows arrival at a station ahead.

92. A train must not arrive at a station in advance of its schedule arriving time.

When only the leaving time is shown, a first-class train must not arrive at a station more than five minutes in advance of its schedule leaving time.

A train must not leave a station in advance of its schedule leaving time.

93. Within yards defined by yard limit boards, the main track may be used, keeping clear of first and second-class trains.

The main track must not be so used within yard limits until it is known that all sections of overdue first and second-class trains have arrived.

All trains except first and second-class trains must, unless otherwise directed, approach and pass through yard limits prepared to stop, unless the main track is seen or known to be clear.

Yellow lights must be attached to the yard limit boards to be kept lighted from sunset to sunrise.

94. A train which overtakes another train so disabled that it cannot proceed will pass it if practicable, and if necessary will assume the schedule and take the train orders of the disabled train, proceed to the next open telegraph office, and there report to the proper authority. The disabled train will assume the right or schedule and take the train orders of the last train with which it has exchanged, and will, when able, proceed to and report from the next open telegraph office.

When a train, unable to proceed against the right or schedule of an opposing train, is overtaken between telegraph stations by an inferior train or a train of the same class having right or schedule which permits it to proceed, the delayed train may, after proper consultation with the following train, precede it to the next telegraph station, where it must report to the Superintendent or Train Master. When opposing trains are met under these circumstances, it must be fully explained to them by the leading train that the expected train is following.

95. Two or more sections may be run on the same schedule.

Each section has equal time-table authority.

A train must not display signals for a following section without train orders.

96. When signals displayed for a section are taken down at any point before that section arrives, the Conductor will, if there be no other provision, arrange in writing with the Operator or if there be no Operator, with the Switch-tender, or in the absence of both, with a Flagman left there for that purpose to notify all opposing inferior trains or trains of the same class leaving such point, that the section for which signals were displayed has not arrived.

97. Extra trains must not be run without train orders.

98. Trains must approach the end of double track, junctions, interlocked railway crossings at grade, and interlocked drawbridges, prepared to stop, unless the switches and signals are right, and the track is clear.

At railway crossings at grade and drawbridges not interlocked, trains must stop and not proceed until the proper signal has been given.

When clear signals are shown where one railway crosses another at grade, the speed of passenger trains must be reduced to thirty-five miles an hour and freight trains to twenty miles an hour, until the entire train has passed the crossing.

When clear signals are shown where a railway crosses a drawbridge, the speed of passenger trains must be reduced to twenty-five miles an hour and the speed of freight trains to fifteen miles an hour, until the entire train has passed the drawbridge.

99. When a train stops or is delayed on the main track under circumstances in which it may be overtaken by another train, the Flagman must go back immediately with stop signals, a sufficient distance from the train to insure full protection, at least:

In day time if there is no down grade toward train within one mile of its rear, and there is a clear view of its rear of 2000 yards, (40 telegraph poles) from an approaching train. } 500 yards, 10 telegraph poles.

At other times and places, if there is no down grade toward train, within one mile of its rear. } 1,200 yards, 24 telegraph poles.

If there is a down grade toward train, within one mile of its rear. } 1,800 yards, 36 telegraph poles.

The Flagman, must after going back a sufficient distance from the train to insure full protection, take up a position where there will be an unobstructed view of him from an approaching train of, if possible, 500 yards (10 telegraph poles), first placing two torpedoes not more than 200 or less than 100 feet apart on the rail on the same side as the Engineer of an approaching train, 100 yards (2 telegraph poles) beyond such position. The Flagman must remain in such position until recalled or relieved.

If recalled before another train arrives he must at night, or when weather or other conditions obscure day signals, or when snow plows or flangers may be running, in addition to the two torpedoes, leave a fusee burning red at the point he returns from and at such other points on his return as may be necessary to insure full protection.

The front of a train must be protected in the same way when necessary by the front Brakeman, or if there be none, by the Fireman.

Flagmen must always on the approach of a train display stop signals, and if not already done, place two torpedoes

on the rail as before described, and then return 100 yards (2 telegraph poles) nearer the protected point.

Flagmen must each be equipped for day time with a red flag and four torpedoes, and for night time and when weather or other conditions obscure day signals, with a red light, a white light and four torpedoes, three red fusees, and a supply of matches.

A train should not stop between stations at a place where the view from following trains is obstructed.

100. When the Flagman goes out to protect the train his place will be filled by the person designated by the Conductor.

101. If a train should part while in motion, trainmen must, if possible, prevent damage to the detached portions. The signals prescribed by Rules 12 (d) and 14 (f) must be given.

When for any reason an engine leaves its train or a part of its train on the main track, every precaution must be taken to protect the train against the returning engine. Torpedoes must be placed in advance of the train, and at night, or during stormy weather, a red light must be prominently displayed on the forward car. The Conductor and Engineer will be held equally responsible for this rule

The detached portion must not be moved or passed until the front portion comes back.

102. When cars are pushed by an engine (except when shifting and making up trains in yards where there are no

public highway crossings at rail level) a Flagman must take a conspicuous position on the front of the leading car.

Whenever in any city, town or village, cars are passing over or along a highway at grade not headed by an engine moving forward, in the ordinary manner, a man must take a conspicuous position on the foremost car or tender, if that is in front, to warn persons on the highway.

No part of a car or engine may be allowed to occupy any part of a highway for a longer period than five minutes and a highway must not be obstructed by switching operations for more than five minutes at a time.

Whistle posts will be placed at least 80 rods ($\frac{1}{4}$ mile) from every public road crossing at grade, except at public road crossings within the limits of towns or cities.

103. Messages or orders respecting the movement of trains or the condition of track or bridges must be in writing.

104. The target of a switch parallel with the main track or a green light, indicates the switch is set for the main track; the target at right angles to the main track or a red light indicates the switch is set for a diverging track.

Switches must be left in proper position after having been used.

Except where Switchtenders are stationed, Conductors are responsible for the position of the switches used by them and their Trainmen. This will not relieve Trainmen of responsibility for the proper position of switches used by their train.

Main track switches must be locked and other switches secured. After a switch is turned, the points must be examined to know that they are in proper position.

Employes must stand on opposite side of track and keep at least 20 feet from the stand while a train is closely approaching, or passing over a switch.

A switch must not be left open for a following train unless in charge of a Switchtender or a Trainman of such train.

When a train is standing on a passing track to meet or to be passed by a train, the Engineer and Fireman must see that switches at the front of their train are in proper position.

Trainmen of a train occupying the main track at a meeting or passing point, will, when practicable, open the switch for the expected train and protect the switch until relieved by a Switchtender or a Trainman of the other train.

Derails on side tracks must be set and secured to protect the main track.

If a switch has been run through, it must be protected, the Section Foreman notified and the fact reported to the proper authority by telegraph, immediately.

105. Trains will run under the direction of their Conductors, unless such directions conflict with these rules, or involve any danger, in which case, all persons participating will be held responsible.

When a train is run without a Conductor, the Engineer will perform the duties of the Conductor.

Both Conductors and Engineers are responsible for the safety of their trains, and under conditions not provided for by the rules, must take every precaution for their protection.

Immediate precaution must be taken to protect all trains against any obstruction or defect in the track.

106. In all cases of doubt or uncertainty the safe course must be taken, and no risks run.

107. Conductors and Brakemen must know that the cars in their trains are in good order before starting, and inspect them whenever they have an opportunity to do so, particularly when entering or leaving sidings or waiting for other trains. All cars taken in their train at intermediate stations must be examined with extra care.

108. A train must not be detached while in motion. When necessary to make running switches the train must first be stopped.

109. When stopping to take water, freight trains of more than fifteen cars, must stop not less than fifty feet before reaching the water tank or standpipe and the engine must be cut off before water is taken. The brakes must not be released on the train until the engine is again coupled on and ready to proceed.

RULES FOR USE OF TRAIN ORDERS.

201. For movements not provided for by time-table, train orders will be issued by authority and over the signature of the Superintendent or Trainmaster. They must contain neither information nor instructions not essential to such movements.

They must be brief and clear; in the prescribed forms when applicable; and without erasure, alteration or interlineation.

The different forms of train orders may be combined in one, provided there is no movement in such combination which does not directly affect the train first named in the order.

202. Each train order must be given in the same words to all persons or trains addressed.

203. Train orders will be numbered consecutively each day, beginning with No. One at midnight.

204. Train orders must be addressed to those who are to execute or observe them, naming the place at which each is to receive his copy.

Train orders addressed to trains must be regarded as addressed to Conductors, Engineers and Pilots. A copy for each person addressed must be supplied by the Operator. Train orders addressed to Operators, restricting the movement of trains, must be respected by Conductors and Engineers, the same as if addressed to them.

Conductors and Engineers must require Brakemen and Firemen to know the contents of all train orders.

205. Each train order must be written in full in a book or on a printed form provided for the purpose at the office of the Train Despatcher, and with it recorded the names of those who have signed for the order; the time and the signals which show when and from what offices the order was repeated and the responses transmitted; and the Train Despatcher's initials. These records must be made at once, and never from memory or memoranda.

206. Regular trains will be designated in train orders, by their numbers and the numbers of their engines: as "No. 10 Eng. 715," or "second No. 10, Eng. 725." If the number of the engine cannot be ascertained, the word "Unknown" will be used; as "No. 10, Eng. Unknown." Extra trains will be designated by engine numbers and direction, as "Extra 795 East." Other numbers and time will be stated in words followed by the figures.

207. To transmit a train order, the signal "31" or the signal "19" followed by the direction must be given to each office addressed, the number of copies being stated, if more or less than three—thus, "31 West copy 5," or "19 East copy 2."

208. A train order to be sent to two or more offices must be transmitted simultaneously to as many of them as practicable.

The several addresses must be in the order of superiority of trains, and when practicable, must include the Operator at the meeting or waiting point, each office taking its proper address.

When not sent simultaneously to all, the order must be sent first to the Operator at the meeting or waiting point and then to trains in the order of their superiority.

Copies of the order addressed to the Operator at the meeting or waiting point must be delivered to all trains affected until all have arrived from one direction.

Train orders should not be sent an unnecessarily long time before delivery, or to points unnecessarily distant from where they are to be executed. No orders (except those affecting the train at that point) should be delivered to a train at a point where it has much work until after the work has been done.

209. Operators receiving train orders must write them in manifold during transmission and if they cannot at one writing make the requisite number of copies, must trace others from one of the copies first made.

210. When a "31" train order has been transmitted, Operators must (unless otherwise directed) repeat it at once from the manifold copy in the succession in which the several offices have been addressed, and then write the time of repetition on the order. Each Operator receiving the order should observe whether the others repeat correctly.

The Conductor of the train addressed will read the order aloud to the Operator and sign it. The Operator will then send the signature, preceded by the number of the order, to the Train Despatcher. The response "Complete," and the time, with the initials of the Superintendent or Trainmaster will then be given by the Train Despatcher. After receiving this response, the Operator will write on each copy, the word, "Complete," the time, and his last name in full, and deliver a copy to each person addressed, except Engineers. The copy for each Engineer must be delivered to him personally by the Conductor, who will require the order to be read aloud for comparison, and Engineer will then sign Conductor's copy.

211. When a "19" train order has been transmitted, Operators must (unless otherwise directed) repeat it at once from the manifold copy in the succession in which the several offices have been addressed. Each Operator receiving the order should observe whether the others repeat correctly. When the order has been repeated correctly by the Operator, the response "Complete," and the time, with the initials of the Superintendent or Train Master will be given by the Train Despatcher. The Operator receiving this response will then write on each copy the word "Complete," the time, and his last name in full, and personally deliver a copy to each person addressed, without taking his signature. But when delivery to Engineer will take the Operator from the immediate vicinity of his office, the Engineer's copy will be delivered by the Conductor.

A "19" order must not be used when by its use the rights of a train are to be restricted.

212. A train order may, by the direction of the Train Despatcher, be acknowledged without repeating, by the Operator responding "X; (Number of train order) to (Train)" with the Operator's initials and the office signal. The Operator must then write on the order his initials and the time.

213. "Complete" must not be given to a train order for delivery to an inferior train until the order has been repeated or the "X" response sent by the Operator who receives the order for the superior train.

"Complete" must not be given to an order for delivery to a train advancing it against a train carrying passengers, until the signature of the Operator at the meeting or waiting station, or the signature of the Conductor of the passenger

train has been received, except that when an order is sent for delivery to such passenger train at the meeting point the signature of both Conductor and Operator must be received, except at the initial station of that train.

214. When a train order has been repeated or "X" response sent, and before "Complete" has been given, the order must be treated as a holding order for the train addressed, but must not be otherwise acted on until "Complete" has been given.

If the line fail before an office has repeated an order or has sent the "X" response, the order at that office is of no effect and must be there treated as if it had not been sent.

215. The Operator who receives and delivers a train order must preserve the lowest copy.

216. For train orders delivered by the Train Dispatcher, the requirements as to the record and delivery are the same as at other offices.

217. A train order to be delivered to a train at a point not a telegraph station, or at one at which the telegraph office is closed, must be addressed to ".....at..... care of.....," and forwarded and delivered by the Conductor or other person in whose care it is addressed. When form "31" is used, "Complete" will be given upon the signature of the person by whom the order is to be delivered, who must be supplied with copies for the Conductor and Engineer addressed, and a copy upon which he shall take their signatures. This copy he must deliver to the first Operator accessible, who must preserve it, and at once transmit the signatures of the Conductor and Engineer to the Train Dispatcher.

Orders so delivered must be acted on as if "Complete" had been given in the usual way.

When Form "31" is sent, in the manner herein provided, to a train, the superiority of which is thereby restricted, "Complete" must not be given to an inferior train until the signatures of the Conductor and Engineer of the superior train have been sent to the Superintendent or Trainmaster.

218. When a train is named in a train order by its schedule number alone, all sections of that schedule are included, and each must have copies delivered to it. Particular sections must be specified when it is known the schedule is, or is to be, in sections.

219. Unless otherwise directed, an Operator must not repeat or give the "X" response to a train order for a train which has been cleared or of which the engine has passed his train-order signal until he has obtained the signature of the Conductor and Engineer to the order.

220. Train orders once in effect, continue so until fulfilled, superseded or annulled. Any part of an order specifying a particular movement may be either superseded or annulled.

Orders held by, or issued for, or any part of an order relating to, a regular train, become void when such train loses both right and schedule as prescribed by Rules 4 and 82, or is annulled.

When Conductors or Engineers change off, they must transfer all orders affecting their trains. Each must know that the orders transferred are correctly understood by the

other, and obtain his written receipt therefor. Before either train proceeds, the Engineer must read his orders to the Conductor.

221. A fixed signal must be used at each train order office, which shall indicate "stop" when trains are to be stopped for train orders. When there are no orders, the signal must indicate "proceed," except as provided in Rule 91.

When an Operator receives the signal "31" or "19" followed by the direction, he must immediately display the "stop" signal for the direction indicated, and then reply "stop displayed," adding the direction; and until the orders have been delivered or annulled, the signal must not be restored to "proceed" except by train order.

A train stopped by a train order signal must not proceed without a Clearance Card Form "A" or a Caution Card Form "C," although train orders may have been received.

Operators must have the proper appliances for hand signalling ready for immediate use if the fixed signal should fail to work properly. If a signal is not displayed at a night office, trains which have not been notified must stop and ascertain the cause, and report the facts to the Superintendent from the next open telegraph office.

222. Operators will promptly record and report to the Train Despatcher the time of arrival and departure of all trains.

223. The following signs and abbreviations may be used.

Initials for signature of the Superintendent or Train Master.

Such office and other signals as are arranged by the Superintendent.

X—Train will be held until order is complete.

Com.—for Complete.

O.S.—for Train Report.

No.—for Number.

Eng.—for Engine.

Psgr.—for Passenger.

Frt.—for Freight.

Mins.—for Minutes.

Jct.—for Junction.

Despr.—for Despatcher.

Opr.—for Operator.

Cy.—for Copy.

S. D.—for "Stop displayed."

B. C.—for Block Clear.

9—To clear the line for train orders and for Operators to ask for train orders.

The usual abbreviations for the names of the months and stations.

FORMS OF TRAIN ORDERS.

Form A—Fixing Meeting Points for Opposing Trains.

- (1).....meet.....at.....
 (2).....meet.....at.....at.....
 (and so on).

Trains receiving these orders will run with respect to each other to the designated points and there meet in the manner provided by the rules.

A meeting order must not be sent for delivery to a train at the meeting point if it can be avoided. When it cannot be avoided, the following addition to the order will be made, and is notice to the opposing train to approach the meeting point with care and under control.

“This order to.....at.....”

EXAMPLES.

- (1) No. 1 meet No. 2 at B.
 No. 3 meet second No. 4 at B.
 No. 5 meet Extra 95 east at B.
 Extra 652 north meet Extra 231 south at B.
- (2) No. 2 and second No. 4 meet Nos. 1 and 3 at C and
 Extra 95 west at D.
 No. 1 meet No. 2 at B, second No. 4 at C, and
 Extra 95 east at D.

Form B—Directing a Train to pass or run ahead of another train.

- (1).....pass.....at.....
 (2).....pass.....when overtaken.
 (3).....run ahead of.....to.....
 (4).....run ahead of.....,.....until overtaken.
 (5).....pass.....at.....and run ahead
 of.....to.....

When an inferior train receives an order to pass a superior train, right is conferred to run ahead of the train passed from the designated point.

EXAMPLES.

- (1) No. 1 pass No. 3 at K.

When under this example a train is to pass another, both trains will run according to rule to the designated station, and there arrange for the rear train to pass promptly.

- (2) No. 6 pass No. 4 when overtaken.

Under this example, both trains will run according to rule until the second named train is overtaken, and then arrange for the rear train to pass promptly.

- (3) Extra 594 East run ahead of No. 6, M to B.

Under this example, the second named train will run with such caution as will prevent accident with the first named train.

- (4) Extra 95 west run ahead of No. 3, B, until overtaken.

Under this example, the first named train will run ahead of the second named train from the designated station until overtaken, and then arrange for the rear train to pass promptly.

(5) No. 1 pass No. 3 at K, and run ahead of No. 7, M to Z.

Form C.—Giving Right to a Train Over an Opposing Train.

.....has right over.....to.....

This order gives right to the train first named over the other train between the points named.

If the trains meet at either of the designated points the first named train must take the siding, unless the order otherwise prescribes.

If the second named train before meeting, reaches a point within or beyond the points named in the order, the first named train must be notified of the fact by the Conductor.

EXAMPLES.

(1) No. 1 has right over No. 2, G to Z.

Under (1), if the second named train reach the station last named before the other arrives, it may proceed, keeping clear of the opposing train as many minutes as such train was before required to clear it under the Rules.

(2) Extra 37 east has right over No. 3, F to A.

Under this example, the regular train must not go beyond the point last named until the extra train has arrived, unless directed by train order to do so.

Form E.—Time Orders.

- (1).....run.....late.....to.....
 (2).....run.....late.....to.....and
late.....to.....etc.
 (3).....wait at.....until.....M for.....
 (4).....wait at.....until.....M.
until.....M.
until.....M.

This form may be used in connection with an extra train created by example (3) of Form G, and the times at each station stated in that example have the same meaning as schedule times in the following examples.

EXAMPLES.

- (1) No. 1 run twenty 20 mins. late A to G.
 (2) No. 1 run twenty 20 mins. late A to G, and fifteen 15 mins. late G to K, etc.

Examples (1) and (2) make the schedule time of the train named between the stations mentioned as much later as stated in the order, and any other train receiving the order is required to run with respect to this later time, as before required to run with respect to the time-table schedule time. The time in the order should be such as can be easily added to the schedule time.

- (3) No. 2 wait at H until ten 10.00 A.M. for No. 1.

Under this example the train first named must not pass the designated station before the time given, unless the other

train has arrived. The train last named may use the specified time to reach the designated station, or any intermediate station, clearing time of first named train as required by Rule.

- (4) Nos. 1 and 3 wait at:
 - N until ten 10.00 A.M.
 - P until ten-thirty 10.30 A.M.
 - R until ten-fifty-five 10.55 A.M., etc.

Under this example the train (or trains) named must not pass the designated stations before the times given.

Other trains receiving the order are required to run with respect to the time specified at the designated stations or any intermediate station where schedule time is earlier than the time specified in the order, as before required to run with respect to the schedule time of the train (or trains) named.

Form F.—For Sections.

- (1).....display signals and run as.....
to.....
- (2).....run as.....to.....
- (3).....display signals.....to.....for.....
- (6).....is withdrawn as.....&T.....
- (7).....instead of.....display signals and run
as.....to.....
- (8).....take down signals at
- (9).....and.....reverse position as.....and
.....to.....

The character of a train for which signals are displayed may be stated.

Each section affected by the order must have copies, and must arrange green signals accordingly.

To annul a section for which green signals have been displayed over a division, or any part thereof, when no train is to follow the green signals, Form K must be used.

EXAMPLES.

(1) Eng. 20 display signals and run as first No 1, A to Z.

This example is to be used when the number of the engine for which green signals are displayed is unknown and is to be followed by example (2), both being single order examples.

(2) Eng. 25 run as second No. 1, A to Z.

Under this example, engine 25 will not display green signals.

(3) No. 1 display signals A to G for Eng. 65, or, second No. 1 display signals B to E for Eng. 99.

Under these examples engine 65 (or engine 99) will not display green signals.

These examples may be modified as follows:

(4) Engs. 20, 25 and 99 run as first, second, and third. No. 1, A to Z.

Under this example engine 99 will not display green signals.

For changing sections.

To add an intermediate section the following modification of example (1) will be used:

(5) Eng. 85 display signals and run as second No. 1, N to Z. Following sections change number accordingly.

Under this example, engine 85 will display green signals and run as directed and following sections will take the next higher number.

To drop an intermediate section, the following example will be used:

(6) Eng. 85 is withdrawn as second No. 1 at H. Following sections change numbers accordingly.

Under this example, engine 85 will drop out at H and following sections will take the next lower number.

To substitute one engine for another on a section, the following will be used:

(7) Eng. 18 instead of Eng. 85 display signals and run as second No. 1, R to Z.

Under this example, engine 85 will drop out at R and engine 18 will run as directed. Following sections need not be addressed. If engine 85 is last section, the words "display signals and" will be omitted.

To discontinue the display of green signals, the following example will be used:

(8) Second No. 1 take down signals at D.

Under this example, 2nd No. 1 will take down green signals as directed and a following section must not proceed beyond the station named.

To pass one section by another, the following will be used:

(9) Engs. 99 and 25 reverse positions as second and third No. 1, H to Z.

Under this example, engine 99 will run ahead of engine 25, H to Z, exchange train orders, and, if necessary, arrange green signals accordingly. Following sections need not be addressed.

Form G.—Extra Trains.

- (1) Eng.....run extra.....to.....
 - (2) Eng.....run extra.....to.....
and return to.....
 - (3) Eng.....run extra leaving.....on.....
- as follows, with right over all trains:
- Leave.....M.
 -M.
 -M.
 - Arrive.....M.

EXAMPLES.

- (1) Eng. 99 run extra A to F.
- (2) Eng. 99 run extra A to F and return to C.
Under (2), the extra must go to F before returning to C.
- (3) Eng. 77 run extra leaving A on Thursday, Feb. 17th, as follows, with right over all trains:
Leave A eleven-thirty, 11.30 P.M.
C twelve-twenty-five 12.25 A.M.
E one-forty-seven 1.47 A.M.
Arrive F two-twenty-two 2.22 A.M.

This order may be varied by specifying the character of the extra and the particular trains over which the extra shall or shall not have right. Trains over which the extra is thus given right must clear the time of the extra five minutes.

Form H.—Work Extra.

- (1) Eng.....work.....M to.....M between.....and.....

Work extras must give way to all trains as promptly as practicable.

Whenever extra trains are run over working limits, they must be given a copy of the order sent to the work extra.

Should the working order instruct a work extra to not protect against extra trains in one or both directions, extra trains must protect, as prescribed by rule, against the work extra; if the order indicates that the work extra is protecting itself against other trains, they will run expecting to find the work extra protecting itself.

The working limits should be as short as practicable, to be changed as the progress of the work may require.

Conductors of work extras must report each evening by telegraph to the Train Despatcher the time when their trains are laid up for the night and their working limits for the following day.

EXAMPLES.

(1) Eng. 292 work seven 7 A.M. to six 6 P.M. between D and E.

Under this example the work extra must, whether standing or moving, protect itself against extras within the working limits in both directions, as prescribed by rule. The time of regular trains must be cleared.

This may be modified by adding:

(2) Not protecting against eastbound extras.

Under this example the work extra will protect only against westbound extras. The time of regular trains must be cleared.

(3) Not protecting against extras.

Under this example, protection against extras is not required. The time of regular trains must be cleared.

When a work extra has been instructed by order to not protect against extra trains, and afterward, it is desired to have it clear the track for (or protect itself against,) a designated extra after a certain hour, an order may be given in the following form:

(4) Work extra 292 clears (or protects against) extra 76 east between D and E after two-ten 2.10 P.M.

Under this example, extra 76 east must not enter the working limits before 2.10 P.M., and will then run expecting to find the work extra clear of the main track (or protecting itself) as the order may require.

To enable a work extra to work upon the time of a regular train, the following form will be used:

(5) Work extra 292 protects against No. 55 (or..... class trains) between D and E.

Under this example, the work extra may work upon the time of the train (or trains) mentioned in the order, and must protect itself against such train (or trains) as prescribed by rule. The regular train (or trains) receiving the order will run expecting to find the work extra protecting itself.

When a work extra is to be given exclusive right over all trains, the following form will be used:

(6) Work extra.....has right over all trains between.....and.....M to.....M.

(6) Work extra 292 has right over all trains between D and E, seven 7 P.M. to twelve 12 night.

This gives the work extra the exclusive right between the points designated between the times named.

A train holding an order to meet a work extra must proceed to the designated point and there arrange to meet without regard to any time limit held by the work extra.

Form J.—Holding Order.

Hold.....

This form will be used only when necessary to hold trains until orders can be given, or in case of emergency.

These orders will be addressed to the Operator and acknowledged in the usual manner, and will be delivered to Conductors and Engineers of all trains affected.

EXAMPLES.

Hold No. 2.

Hold all (or eastbound) trains.

When a train has been so held it must not proceed until the order to Hold is annulled, or an order given to the Operator in the form:

".....may go."

Form K.—Annulling a Schedule or a Section.

(1).....of.....is annulled.....to.....

(2).....due to leave.....is annulled

.....to.....

The schedule or section annulled becomes void between the points named and cannot be restored.

EXAMPLES.

(1) No. one 1 of Feb. 29th is annulled A to Z.

(2) Second No. five 5 due to leave A Feb. 29th, is annulled E to G.

Form L.—Annulling an Order.

Order No.....is annulled.

An order which has been annulled must not be re issued under its original number.

EXAMPLE.

Order No. ten 10 is annulled.

If an order which is to be annulled has not been delivered to a train, the annulling order will be addressed to the Operator, who will destroy all copies of the order annulled, but his own, and write on that:

"Annulled by Order No....."

Form M.—Annulling Part of an Order.

That part of Order No.reading.....is annulled.

EXAMPLES.

(1) That part of order No. ten 10 reading Extra 263 west pass No. one 1 at S is annulled.

(2) That part of order No. ten 10 reading No. 1 meet No. 2 at S is annulled.

Form P.—Superseding an Order or Part of an Order.

This order will be given by adding to prescribed forms, the words "instead of....."

(1).....meet (or pass).....at.....instead of.....

(2).....has right over.....to.....instead of.....

(3).....display signals for.....to.....instead of.....

An order which has been superseded must not be re-issued under its original number, and the original order must not be superseded more than once.

A superseding order must not be delivered prior to the delivery of the order which is superseded.

EXAMPLES.

- (1) No. 1 meet No. 2 (or pass No. 3) at C instead of B.
- (2) No. 1 has right over No. 2, G to R instead of X.
- (3) No. 1 display signals for Eng.85, A to Z instead of G.

Form T.—Line Clear Order.

Line clear to.....for.....

EXAMPLE.

Line clear to C for No. 3 (or extra 597 east).

This order gives the train named the right to track over all trains from the station at which the order is received to the station named, but it must, when necessary, be protected as prescribed by Rule 99, and must follow trains as prescribed by Rule 91. The order must be addressed to the train named and also to the operator at the Station to which the line is clear, and he must repeat it, and then hold all trains in the opposite direction until the train named has arrived. "Complete" must not be given to the order for the train until "Complete" has been given to the order for the Operator at the station to which the line is clear. This form of order must not be used unless authorized by the Superintendent.

Form U.—Protection Against Following Trains.

- (1) Opr.....hold all trains following
(except.....) until.....M.
- (2) Opr.....hold all trains following
(except.....) until.....arrives at.....

This order must be addressed to the Operator at G and to the train to be protected, and the Operator will deliver copies to all trains affected; and it gives the train to be protected, right to occupy the main track without rear flag protection until the order is fulfilled.

EXAMPLES.

(1) Opr. G hold all trains following No. 64 (or extra 301 east) (except No. 6) until ten 10 A.M.

(2) Opr. G hold all trains following No. 4 (or extra 306 east) (except No. 6) until No. 4 (or extra 306 east) arrives at F.

Form V.—Specifying the Speed of a Train.

(1) Do not exceed.....miles per hour.....to.....

(2) Run.....miles per hourto

EXAMPLES.

(1) Do not exceed six 6 miles per hour, A to B.

This order will be used when main track is reported unsafe for usual speed.

(2) Run forty 40 miles per hour, A to B.

Under 2 the train addressed will not run at the speed specified unless safe to do so.

TRAIN RULES FOR DOUBLE TRACK.

NOTE. Double Track rules marked "D" differ in language from corresponding Single Track rules, or are applicable only to Double Track.

Standard Time.

1. Standard Time obtained from McGill observatory will be telegraphed to all points from designated offices at 11 o'clock A.M. daily.

2. Watches that have been examined and certified to by a designated Inspector must be used by Train Masters, Road Foremen of Locomotives, Locomotive Foremen, Roadmasters, Bridge and Building Masters, Conductors, Engineers, Firemen, Motormen, Train Baggage-men, Brakemen, Yard Masters and Yard Foremen and such other employees as the Railway Company may direct. The certificate in the prescribed form must be renewed and filed with the Superintendent or Train Master every January and July.

(Form of Certificate.)

Certificate of Watch Inspector.

This is to certify that on.....19.....
the watch of.....
employed as.....
on the..... Railway was examined by me.
It is correct and reliable and in my judgement will, with
proper care, run within a variation of thirty seconds per
week.

Name of Maker.....

Brand.....

Number of movement.....

Open or hunting case.....

Metal of case.....

Stem or key winding.....

Signed,

.....Inspector.

Address.....

3. Watches of Conductors, Engineers and Motormen must be compared, before starting on each trip, with a clock designated as a Standard Clock. The time when watches are compared must be registered on a prescribed form.

Employees who are required to use Standard Watches must submit them to a designated Inspector for comparison and record during the first and third week of every month, or, if no designated Inspector is accessible during any such period, as soon as possible thereafter.

They must not regulate them, or, unless they stop owing to failure to wind, set them themselves.

If a Standard Clock is not accessible, Standard time must be obtained from Train Dispatcher, or by comparing time with a Conductor, Engineer or Motorman who have had access to a Standard Clock and registered.

TIME TABLES.

4. Each time-table, from the moment it takes effect, supersedes the preceding time-table. A train of the preceding time-table which has left its initial station, on any sub-division before the new time-table takes effect, must retain its train orders and complete the run by using the schedule of the train of the same number of the new time-table, unless that train is scheduled to leave its initial station on that sub-division within twelve hours after the new time-table takes effect, in which case, the train of the preceding time-table loses both right and schedule at the moment the new time-table takes effect, and thereafter may proceed only by train order.

A train of the preceding time-table must not leave its initial station on any sub-division after the hour the new time-table takes effect.

A train of the new time-table which has not the same number on the preceding time-table, must not run on any sub-division until it is due to start from its initial station on that sub-division after the new time-table takes effect.

D5. Not more than two times are given for a train at any station; where one is given, it is, unless otherwise indicated, the leaving time; where two, they are the arriving and leaving time.

Unless otherwise indicated, the time applies to the switch where an inferior train enters the siding; where there is no siding it applies to the place from which fixed signals are operated; where there is neither siding nor fixed signals, it applies to the place where traffic is received or discharged.

Schedule passing stations are indicated by figures in full-faced type.

Both the arriving and leaving time of a train are in full-faced type when both are passing times, or when one or more trains are to pass it between those times.

When trains are to be passed at a siding extending between two adjoining stations, the time at each station will be shown in full-faced type.

Where there are one or more trains to pass a train between two times, attention is called to it by small figures showing numbers of trains to pass.

6. The following signs in the time-table indicate:

“*”—See foot-note.

“s”—Regular stop.

“f”—Flag stop to receive or discharge passengers or freight.

“M”—Stop for meals.

“L”—Leave.

“A”—Arrive.

“D”—Day telegraph station.

“N”—Night telegraph station.

“T”—Telephone station.

“W”—Water station.

“C”—Coaling station.

SIGNALS.

7. Employees whose duties may require them to give signals, must provide themselves with the proper appliances, keep them in good order and ready for immediate use.

8. Flags of the prescribed color must be used by day, and lamps of the prescribed color by night.

9. Night signals are to be displayed from sunset to sunrise. When weather or other conditions obscure day signals, night signals must be used in addition.

VISIBLE SIGNALS.

10. Color Signals.

COLOR.	INDICATION.
(a) Red.	Stop.
(h) Green.	Proceed, and for other uses prescribed by the rules.
(c) Yellow.	Proceed with caution, and for other uses prescribed by the rules.
(d) Green and white.	Flag stop. See Rule 28.
(e) Blue.	See Rule 26.

11. A fusee on or near the track burning red must not be passed until hurned out. When hurning yellow it is a caution signal.

12. **Hand, Flag and Lamp Signals.**
(Illustrated by diagram.)

MANNER OF USING.	INDICATION.
(a) Swung across the track.	Stop.
(b) Raised and lowered vertically.	Proceed.
(c) Swung vertically in a circle at half arm's length across the track when the train is standing.	Back.
(d) Swung vertically in a circle at arm's length across the track when the train is running.	Train has parted.
(e) Swung horizontally above the head when the train is standing.	Apply air brakes.
(f) Held at arm's length above the head when the train is standing.	Release air brakes.

13. Any object waved violently by any one on or near the track is a signal to stop.

AUDIBLE SIGNALS.

14. **Engine Whistle Signals.**

NOTE.—The signals prescribed are illustrated by “o” for short sounds, “—” for longer sounds. The sound of the whistle should be distinct, with intensity and duration proportionate to the distance signal is to be conveyed.

SOUND	INDICATION.
(a) o	Stop. Apply brakes.
(b) — —	Release brakes, or ready to proceed.
(c) — o o o	Flagman go out to protect rear of train.
(d) — — — —	Flagman return from west or south.
(e) — — — — —	Flagman return from east or north.
(f) — — —	When running, train parted; to be repeated until answered by the signal prescribed by Rule 12 (d). Answer to 12 (d).
(g) o o	Answer to any signal not otherwise provided for.
(h) o o o	When train is standing, back. Answer to 12 (c) and 16 (c).
(j) o o o o	When train is running, answer to 16 (d).
(k) — o o	Call for signals.
(l) — — o o	To call attention of extra trains and of trains of the same or inferior class or inferior right to signals displayed for a following section.
(m) — — — —	Approaching public road crossings at grade and at whistle posts.
(n) o —	Approaching stations, and as prescribed by Rule 31.
	When double heading, air brakes have failed on leading engine and second engine is to take control of them.
(o) o o —	Answer to 14 (n); to be given by second engine as soon as it has control of air brakes. Answer to 14 (k).

A succession of short sounds of the whistle is an alarm for persons or animals on the track.

D
tra
sta
jun

15. The explosion of one torpedo is a signal to stop; the explosion of two not more than 200 and not less than 100 feet apart is a signal to reduce speed, and look out for a stop signal.

Torpedoes must not be placed near stations or public crossings, nor where persons are liable to be injured by them.

16. Communicating Signals.

SOUND.	INDICATION.
(a) Two.	When train is standing, start.
(b) Two.	When train is running, stop at once.
(c) Three.	When train is standing, back.
(d) Three.	When train is running, stop at next station.
(e) Four.	When train is standing, apply or release air brakes.
(f) Four.	When train is running, reduce speed.
(g) Five.	When train is standing, call in flagman.
(h) Five.	When train is running, increase speed.
(i) Six.	When train is running, increase steam heat.
(j) Seven.	When train is running, release air brakes, or sticking brake.

TRAIN SIGNALS.

D-17. A headlight will be displayed to the front of every train by night, but must be concealed when the train is standing to meet trains at the end of double track, or at junctions, and switch properly set for the approaching train.

18. Yard engines will display the headlight to the front and rear by night. When not provided with a headlight at the rear, two white lights must be displayed. Yard engines will not display markers.

Under conditions not requiring display of markers, road engines without cars will display a white light on the rear of tender by night.

(Illustrated by diagram.)

D—19. The following signals will be displayed, one on each side of the rear of every train as markers, to indicate rear of train; by day green flags; by night to the front and side green lights; by night to the rear, if the train is running with the current of traffic, red lights; if standing, on passing track clear of main track, green lights; if running against the current of traffic, a green light on the inside and a red light on the opposite side. The lights displayed to the rear must be changed from green to red before a train fouls the main track when leaving a passing track, or returns to the main track with the current of traffic.

(Illustrated by diagram.)

Where the cupola of a caboose is provided with indicators for designating the train, the proper indication must be shown and must be removed as soon as the run is completed.

20. All sections except the last will display two green flags, and in addition, two green lights by night, in the places provided for that purpose on the front of the engine.

(Illustrated by diagram.)

21. Extra trains will display two white flags and, in addition, two white lights by night, in the places provided for that purpose on the front of the engine.

(Illustrated by diagram.)

22. When two or more engines are coupled, the leading engine only shall, unless otherwise directed, announce the signals as prescribed by Rule D. 14, and display the signals as prescribed by Rules 20 and 21.

23. One flag or light displayed where in Rules 19, 20 and 21 two are prescribed will indicate the same as two; but the proper display of all train signals is required.

24. When cars are pushed by an engine (except when shifting or making up trains in yards) a white light must be displayed on the front of the leading car by night.

(Illustrated by diagram.)

25. Each car on a passenger train must be connected with the engine by a communicating signal appliance.

26. A blue flag by day and a blue light by night, displayed at one or both ends of an engine, car or train indicates that workmen are under or about it; when thus protected, it must not be coupled to or moved, and other cars must not be placed on the same track so as to intercept the view of the blue signals without first notifying the workmen.

Workmen will display the blue signals, and the same workmen are alone authorized to remove them.

USE OF SIGNALS.

27. A signal imperfectly displayed, or the absence of a signal at a place where a signal is usually shown must be regarded as a stop signal, and the fact reported to the proper officer.

28. A combined green and white signal is to be used to stop a train only at the flag stations indicated on its schedule. When it is necessary to stop a train at a point that is not a flag station on its schedule, a red signal must be used.

29. When a signal (except a fixed signal) is given to stop a train, it must, unless otherwise provided, be acknowledged as prescribed by Rule D. 14 (g) or (h).

30. The engine bell must be rung when an engine is about to move, and while moving about stations.

D—31. Signal D. 14 (l) must be sounded at least 80 rods ($\frac{1}{4}$ mile) from every public road crossing at grade, and the engine bell be kept ringing until the crossing is passed.

Signal D. 14 (l) must be sounded at every whistle post.

Signal D. 14 (m) must be sounded one mile from stations, watering and fueling points, junctions, the end of double track, drawbridges and railway crossings at grade.

Signal D. 14 (k) must be sounded by a train displaying green signals for a following section, to call attention of trains in the same direction to signals displayed, and must hear the answer, D. 14 (o), or stop and notify them of green signals displayed.

32. The unnecessary use of either the whistle or the bell is prohibited. They will be used only as prescribed by rule or statute, or to prevent accident.

33. Watchmen stationed at public road crossings must use green signals to prevent persons and vehicles from crossing

the track when trains are approaching. Red signals must be used by them only when necessary to stop trains.

34. In emergency cases when track is suddenly found defective, any employe shall by the use of flags, lights, torpedoes, fusees or other signals, use every effort possible to stop trains in both directions.

35. A yellow flag or a yellow light placed beside the track on the same side as the Engineer of an approaching train, indicates that the track 3000 feet distant is in condition for speed of but six miles an hour, unless otherwise instructed, and the speed of a train will be controlled accordingly. A green flag or a green light, placed beside the track on the same side as the Engineer of an approaching train, at a point beyond the slow track, indicates that full speed may be resumed.

A "SLOW" sign placed beside the track on the same side as the Engineer of an approaching train, may be used to mark a point where a slow order is in effect.

36. A red or yellow fusee, as the case may require, will be used for protection of a train which is not making the speed required by schedule or train order, and is liable to be overtaken by a following train.

MOVEMENT OF TRAINS BY TIME-TABLE AND TRAIN ORDER.

Superiority.

D—71. A train is superior to another train by right or class.

Right is conferred by train order; class by time-table.
Right is superior to class.

D—72. Trains of the first class are superior to those of the second class; trains of the second class are superior to those of the third class; trains of the third class are superior to those of the fourth class.

73. Extra trains are inferior to regular trains.

RULES FOR TRAIN MOVEMENT.

82. Time-table schedules, unless fulfilled, are in effect for twelve hours after their time at each station.

Regular trains twelve hours behind either their schedule, arriving or leaving time at any station lose both right and schedule, and can thereafter proceed only as authorized by train order.

D—83. Trains must be registered at the register stations designated in the time-table.

A train must not leave its initial station on any subdivision or a junction, until it has been ascertained whether all superior trains due have left.

A train must not leave its initial station on any subdivision without a Terminal Clearance, unless otherwise directed.

At bulletin stations designated in the time-table, Conductors and Engineers must read and sign for the bulletins posted, before starting. All bulletins affecting the movement of trains will be re-issued the first of each month.

84. A train must not start until the proper signal is given.

D—85. When a train of one schedule is on the time of another schedule of the same class, it will proceed on its own schedule.

Trains of one schedule may pass trains of another schedule of the same class.

A section may pass and run ahead of another section of the same schedule, first exchanging orders, signals and numbers with the section to be passed. Extras may pass and run ahead of extras.

D—86. An inferior train must clear the time of a superior train not less than five minutes, but must clear the time of a first-class train ten minutes unless it is clear before the first-class train is due to leave the next station in the rear where time is shown.

87. Omitted. (Not applicable to Double Track.)

88. " " " " " "

89. " " " " " "

D—90. Conductors and Engineers of freight, mixed and work trains will see that Brakemen be in position to exchange signals while approaching and passing junctions, railway-crossings, drawbridges, points where trains may be required to stop and on heavy grades, and to do whatever is required for safety and expedition, and must exchange signals when passing and leaving stations.

Trainmen will not be required to ride on top of trains unless it is necessary for safety.

There must be a trainman on the last car of such train while in motion.

91. Unless some form of block signals is used, trains in the same direction must keep at least five minutes apart, except in closing up at stations, but a train must not follow a train carrying passengers or operating a snow plow until a report is received of its arrival at a station ahead, except that a train may follow twenty minutes after the departure of a train carrying passengers or operating a snow plow, when either the station from which it is to follow or the next station ahead is not a telegraph station, or when communication with the Train Dispatcher is interrupted and the wire failure is noted on the Clearance.

The train order signal will be used by Operators to maintain the intervals required by this rule.

Schedule speed must not be exceeded by sections of trains other than the first section, nor may a train following a train carrying passengers, exceed the schedule speed of such train, unless Clearance shows arrival at a station ahead.

92. A train must not arrive at a station in advance of its schedule arriving time.

When only the leaving time is shown, a first-class train must not arrive at a station more than five minutes in advance of its schedule leaving time.

A train must not leave a station in advance of its schedule leaving time.

93. Within yards defined by yard limit boards, the main track may be used, keeping clear of first and second-class trains.

The main track must not be so used within yard limits until it is known that all sections of overdue first and second-class trains have arrived.

All trains except first and second-class trains must, unless otherwise directed, approach and pass through yard limits prepared to stop, unless the main track is seen, or known, to be clear.

Yellow lights must be attached to the yard limit boards, to be kept lighted from sunset to sunrise.

D—94. A train which overtakes a superior train, so disabled that it cannot proceed, will pass it, if practicable, and, if necessary, will assume the schedule and take the train orders of the disabled train, proceed to the next open telegraph office, and there report to the proper authority. The disabled train will assume the right or schedule and take the train orders of the last train with which it has exchanged, and will, when able, proceed to and report from the next open telegraph office.

D—95. Two or more sections may be run on the same schedule.

Each section has equal time-table authority.

A train must not display signals for a following section, except as prescribed by Rule D—85, without train orders.

96. Omitted. (Not applicable to Double Track.)

D—97. Extra trains must not be run without train orders.

Work extras must move with the current of traffic unless otherwise directed.

98. Trains must approach the end of double track, junctions, interlocked railway crossings at grade, and interlocked drawbridges, prepared to stop, unless the switches and signals are right, and the track is clear

At railway crossings at grade and drawridges not interlocked, trains must stop and not proceed until the proper signal has been given.

When clear signals are shown where one railway crosses another at grade, the speed of passenger trains must be reduced to thirty-five miles an hour and freight trains to twenty miles an hour, until the entire train has passed the crossing.

When clear signals are shown where a railway crosses a drawridge, the speed of passenger trains must be reduced to twenty-five miles an hour and the speed of freight trains to fifteen miles an hour, until the entire train has passed the drawridge.

99. When a train stops or is delayed on the main track under circumstances in which it may be overtaken by another train, the Flagman must go back immediately with stop signals, a sufficient distance from the train to insure full protection, at least:

In day time, if there is no down grade toward train within one mile of its rear, and there is a clear view of its rear of 2000 yards, (40 telegraph poles) from an approaching train.	}	500 yards, 10 telegraph poles.
---	---	-----------------------------------

At other times and places, if there is no down grade toward train, within one mile of its rear.	}	1,200 yards, 24 telegraph poles.
---	---	-------------------------------------

If there is a down grade toward train, within one mile of its rear.	}	1,800 yards, 36 telegraph poles.
---	---	-------------------------------------

The Flagman, must after going back a sufficient distance from the train to insure full protection, take up a position where there will be an unobstructed view of him from an

approaching train of, if possible, 500 yards (10 telegraph poles), first placing two torpedoes not more than 200 or less than 100 feet apart on the rail on the same side as the Engineer of an approaching train, 100 yards (2 telegraph poles) beyond such position. The Flagman must remain in such position until recalled or relieved.

If recalled before another train arrives he must at night, or when weather or other conditions obscure day signals, or when snow plows or flangers may be running, in addition to the two torpedoes, leave a fusee burning red at the point he returns from and at such other points on his return as may be necessary to insure full protection.

The front of a train must be protected in the same way when necessary by the front Brakeman, or if there be none, by the Fireman.

Flagmen must always on the approach of a train display stop signals, and if not already done, place two torpedoes on the rail as before described, and then return 100 yards (2 telegraph poles) nearer the protected point.

Flagmen must each be equipped for day time with a red flag and four torpedoes, and for night time and when weather or other conditions obscure day signals, with a red light, a white light and four torpedoes, three red fusees, and a supply of matches.

A train should not stop between stations at a place where the view from following trains is obstructed.

100. When the Flagman goes out to protect the train his place will be filled by the person designated by the Conductor.

D.—101. If a train should part while in motion, Trainmen must, if possible, prevent damage to the detached portion. The signals prescribed by Rules 12 (d) and 14 (f) must be given.

When for any reason an engine leaves its train or a part of its train on the main track, every precaution must be taken to protect the train against the returning engine. Torpedoes must be placed in advance of the train, and at night, or during stormy weather, a white light must be prominently displayed on the forward car. The Conductor and Engineer will be held equally responsible for this rule.

The detached portion must not be moved or passed until the front portion comes back.

The Engineer and Trainmen with the front portion must give the train-parted signal to trains running on the opposite track. A train receiving this signal or being otherwise notified that a train on the opposite track has parted, must immediately reduce speed and proceed with caution until the separated train is passed.

When a train is disabled so it may obstruct the opposite track, trains on that track must be stopped.

102. When cars are pushed by an engine (except when shifting and making up trains in yards where there are no public highway crossings at rail level) a Flagman must take a conspicuous position on the front of the leading car.

Whenever in any city, town or village, cars are passing over or along a highway at grade, not headed by an engine moving forward, in the ordinary manner, a man must take a conspicuous position on the foremost car or tender, if that is in front, to warn persons on the highway.

No part of a car or engine may be allowed to occupy any part of a highway for a longer period than five minutes, and a highway must not be obstructed by switching operations for more than five minutes at a time.

Whistle posts will be placed at least 80 rods ($\frac{1}{4}$ mile) from every public road crossing at grade, except at public road crossings within the limits of towns or cities.

103. Messages or orders respecting the movement of trains or the condition of track or bridges must be in writing.

D.—104. The target of a switch parallel with the main track or a green light, indicates the switch is set for the main track; the target at right angles to the main track or a red light indicates the switch is set for a diverging track.

Switches must be left in proper position after having been used.

Except where Switchtenders are stationed, Conductors are responsible for the position of the switches used by them and their Trainmen. This will not relieve Trainmen of responsibility for the proper position of switches used by their train.

Main track switches must be locked and other switches secured. After a switch is turned, the points must be examined to know that they are in proper position.

Employees must keep at least 20 feet from the stand while a train is closely approaching or passing over a switch.

A switch must not be left open for a following train unless in charge of a Switchtender or a Trainman of such train.

When a train is standing on a passing track to be passed by a train, the Engineer and Fireman must see that switches at the front of their train are in proper position.

Trainmen of a train occupying the main track at a passing point, will, when practicable, open the switch for the expected train and protect the switch until relieved by a Switchtender or a Trainman of the other train.

Derrails on side tracks must be set and secured to protect the main track.

If a switch has been run through, it must be protected, the Section Foreman notified and the fact reported to the proper authority by telegraph, immediately.

105. Trains will run under the direction of their Conductors, unless such directions conflict with these rules, or involve any danger, in which case, all persons participating will be held responsible.

When a train is run without a Conductor, the Engineer will perform the duties of the Conductor.

Both Conductors and Engineers are responsible for the safety of their trains, and, under conditions not provided for by the rules, must take every precaution for their protection.

Immediate precaution must be taken to protect all trains against any obstruction or defect in the track.

106. In all cases of doubt or uncertainty the safe course must be taken, and no risks run.

107. Conductors and Brakemen must know that the cars in their trains are in good order before starting, and inspect them whenever they have an opportunity to do so, particularly when entering or leaving sidings or waiting for other trains. All cars taken in their train at intermediate stations must be examined with extra care.

108. A train must not be detached while in motion. When necessary to make running switches the train must first be stopped.

109. When stopping to take water, freight trains of more than fifteen cars, must stop not less than fifty feet before reaching the water tank or stand-pipe and the engine must be cut off before water is taken. The brakes must not be released on the train until the engine is again coupled on and ready to proceed.

D.—151. Trains must keep to the right unless otherwise provided.

D.—152. When a train crosses over to, or obstructs the other track, unless otherwise provided, it must first be protected as prescribed by Rule 99, in both directions on that track.

D.—153. Trains must use caution in passing a train receiving or discharging passengers at a station, and must not pass between it and the platform at which the passengers are being received or discharged.

RULES FOR USE OF TRAIN ORDERS.

201. For movements not provided for by time-table, train orders will be issued by authority and over the signature of the Superintendent or Trainmaster. They must contain neither information nor instructions not essential to such movements.

They must be brief and clear; in the prescribed forms when applicable; and without erasure, alteration or interlineation.

The different forms of train orders may be combined in one, provided there is no movement in such combination which does not directly affect the train first named in the order.

202. Each train order must be given in the same words to all persons or trains addressed.

203. Train orders will be numbered consecutively each day, beginning with No. One at midnight.

204. Train orders must be addressed to those who are to execute or observe them, naming the place at which each is to receive his copy.

Train orders addressed to trains must be regarded as addressed to Conductors, Engineers and Pilots. A copy for each person addressed must be supplied by the Operator. Train orders addressed to Operators, restricting the movement of trains, must be respected by Conductors and Engineers, the same as if addressed to them.

Conductors and Engineers must require Brakemen and Firemen to know the contents of all train orders.

205. Each train order must be written in full in a book or on a printed form provided for the purpose at the office of the Train Dispatcher, and with it recorded the names of those who have signed for the order; the time and the signals which show when and from what offices the order was repeated and the responses transmitted; and the Train Dispatcher's initials. These records must be made at once, and never from memory or memoranda.

206. Regular trains will be designated in train orders by their numbers and the numbers of their engines: as "No. 10 Eng. 715," or "second No. 10, Eng. 725." If the number of the engine cannot be ascertained, the word "Unknown" will be used; as "No. 10, Eng. Unknown." Extra trains will be designated by engine numbers and direction, as "Extra 795 East." Other numbers and time will be stated in words followed by the figures.

207. To transmit a train order, the signal "31" or the signal "19" followed by the direction must be given to each office addressed, the number of copies being stated, if more or less than three—thus, "31 West copy 5," or "19 East copy 2."

D.—208. A train order to be sent to two or more offices must be transmitted simultaneously to as many of them as practicable. The several addresses must be in the order of superiority of trains, each office taking its proper address. When not sent simultaneously to all, the order must be sent first to the superior train.

Train orders should not be sent an unnecessarily long time before delivery, or to points unnecessarily distant from where they are to be executed. No orders (except those affecting the train at that point) should be delivered to a train at a point where it has much work until after the work has been done.

209. Operators receiving train orders must write them in manifold during transmission and if they cannot at one writing make the requisite number of copies, must trace others from one of the copies first made.

210. When a "31" train order has been transmitted, Operators must (unless otherwise directed) repeat it at once from the manifold copy in the succession in which the several offices have been addressed, and then write the time of repetition on the order. Each Operator receiving the order should observe whether the others repeat correctly.

The Conductor of the train addressed will read the order aloud to the Operator and sign it. The Operator will then send the signature, preceded by the number of the order, to the Train Despatcher. The response "Complete," and the time, with the initials of the Superintendent or Trainmaster will then be given by the Train Despatcher. After receiving this response, the Operator will write on each copy, the word, "Complete," the time, and his last name in full, and deliver a copy to each person addressed, except Engineers. The copy for each Engineer must be delivered to him personally by the Conductor, who will require the order to be read aloud for comparison, and Engineer will then sign Conductor's copy.

211. When a "19" train order has been transmitted, Operators must (unless otherwise directed) repeat it at once

from the manifold copy, in the succession in which the several offices have been addressed. Each Operator receiving the order should observe whether the others repeat correctly. When the order has been repeated correctly by the Operator, the response "Complete," and the time, with the initials of the Superintendent or Train Master will be given by the Train Dispatcher. The Operator receiving this response will then write on each copy the word "Complete," the time, and his last name in full, and personally deliver a copy to each person addressed, without taking his signature. But when delivery to Engineer will take the Operator from the immediate vicinity of his office, the Engineer's copy will be delivered by the Conductor.

A "19" order must not be used when by its use the rights of a train are to be restricted.

212. A train order may, by the direction of the Train Dispatcher, be acknowledged without repeating, by the Operator responding "X"; (Number of train order) to (Train)" with the Operator's initials and the office signal. The Operator must then write on the order his initials and the time.

D.—213. "Complete" must not be given to a train order for delivery to an inferior train until the order has been repeated or the "X" response sent by the Operator, who receives the order for the superior train.

214. When a train order has been repeated or "X" response sent, and before "Complete" has been given, the order must be treated as a holding order for the train addressed, but must not be otherwise acted on until "Complete" has been given.

If the line fail before an office has repeated an order or has sent the "X" response, the order at that office is of no effect and must be there treated as if it had not been sent.

215. The Operator who receives and delivers a train order must preserve the lowest copy.

216. For train orders delivered by the Train Dispatcher, the requirements as to the record and delivery are the same as at other offices.

217. A train order to be delivered to a train at a point not a telegraph station, or at one at which the telegraph office is closed, must be addressed to ".....at..... care of.....," and forwarded and delivered by the Conductor or other person in whose care it is addressed. When form "31" is used, "Complete" will be given upon the signature of the person by whom the order is to be delivered, who must be supplied with copies for the Conductor and Engineer addressed, and a copy upon which he shall take their signatures. This copy he must deliver to the first Operator accessible, who must preserve it, and at once transmit the signatures of the Conductor and Engineer to the Train Dispatcher.

Orders so delivered must be acted on as if "Complete" had been given in the usual way.

When Form "31" is sent, in the manner herein provided, to a train, the superiority of which is thereby restricted, "Complete" must not be given to an inferior train until the signatures of the Conductor and Engineer of the superior train have been sent to the Superintendent or Trainmaster.

218. When a train is named in a train order by its schedule number alone, all sections of that schedule are included, and each must have copies delivered to it. Particular sections must be specified when it is known the schedule is, or is to be, in sections.

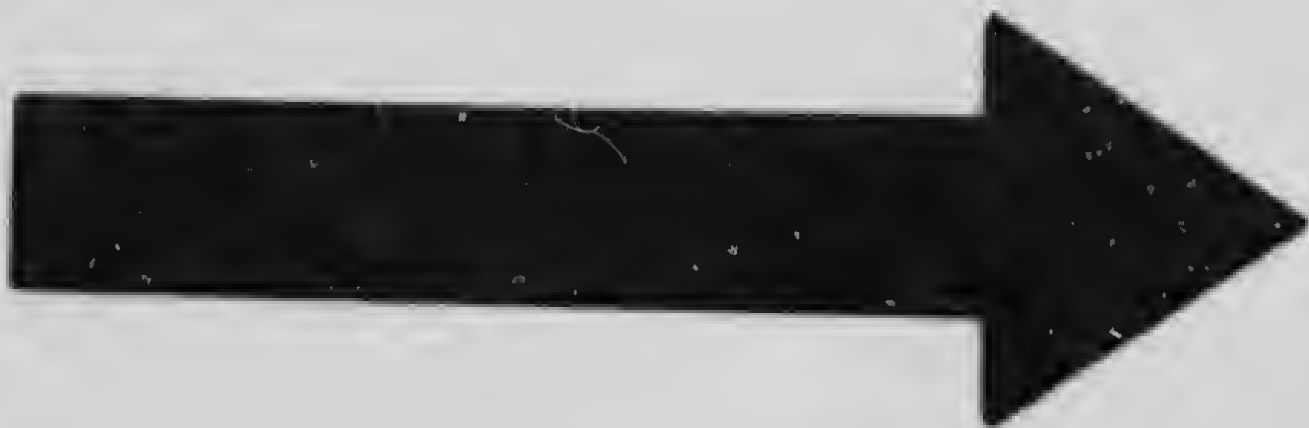
219. Unless otherwise directed, an Operator must not repeat or give the "X" response to a train order for a train which has been cleared or of which the engine has passed his train-order signal until he has obtained the signatures of the Conductor and Engineer to the order.

220. Train orders once in effect continue so until fulfilled, superseded or annulled. Any part of an order specifying a particular movement may be either superseded or annulled.

Orders held by, or issued for, or any part of an order relating to, a regular train become void when such train loses both right and schedule as prescribed by Rules 4 and 82, or is annulled.

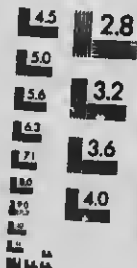
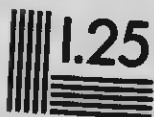
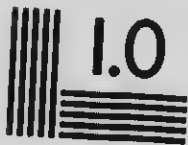
When Conductors or Engineers change off, they must transfer all orders affecting their trains. Each must know that the orders transferred are correctly understood by the other, and obtain his written receipt therefor. Before either train proceeds, the Engineer must read his orders to the Conductor.

221. A fixed signal must be used at each train order office, which shall indicate "Stop" when trains are to be stopped for train orders. When there are no orders, the signal must indicate "Proceed," except as provided in Rule 91.



MICROCOPY RESOLUTION TEST CHART

(ANSI and ISO TEST CHART No. 2)



APPLIED IMAGE Inc

1653 East Main Street
Rochester, New York 14609 USA
(716) 482 - 0300 - Phone
(716) 288 - 5989 - Fax

When an Operator receives the signal "31" or "19" followed by the direction, he must immediately display the "Stop" signal for the direction indicated and then reply "Stop displayed," adding the direction; and until the orders have been delivered or annulled, the signal must not be restored to "Proceed," except by train order.

A train stopped by a train order signal must not proceed without a Clearance Card Form "A" or a Caution Card Form "C" although train orders may have been received.

Operators must have the proper appliances for hand signalling ready for immediate use if the fixed signal should fail to work properly. If a signal is not displayed at a night office, trains which have not been notified must stop and ascertain the cause and report the facts to the Superintendent from the next open telegraph office.

222. Operators will promptly record and report to the Train Despatcher the time of arrival and departure of all trains.

223. The following signs and abbreviations may be used.

Initials for signature of the Superintendent or Train Master.

Such office and other signals as are arranged by the Superintendent.

X—Train will be held until order is complete.

Com.—for Complete.

O.S.—Train Report.

No —for Number.

Eng.—for Engine.
Psgr.—for Passenger.
Frt.—for Freight.
Mins.—for Minutes.
Jct.—for Junction.
Despr.—for Despatcher.
Opr.—for Operator.
Cy.—for Copy.
S. D.—for "Stop Displayed."
B. C.—for Block Clear.

9—To clear the line for train orders and for Operators to ask for train orders.

The usual abbreviations for the names of the months and stations.

FORMS OF TRAIN ORDERS.

Form A.—Fixing Meeting Points for Opposing Trains.
Omitted (Not applicable to Double Track.)

Form B—Directing a Train to pass or run ahead of another train.

- (1).....pass.....at.....
 (2).....pass.....when overtaken.
 (3).....run ahead of.....to.....
 (4).....run ahead of..... until overtaken.
 (5).....pass.....at.....and run ahead
 of.....to,.....

When an inferior train receives an order to pass a superior train, right is conferred to run ahead of the train passed from the designated point.

EXAMPLES.

- (1) No. 1 pass No. 3, at K.

When under this example, a train is to pass another, both trains will run according to rule to the designated station and there arrange for the rear train to pass promptly.

- (2) No. 6 pass No. 4 when overtaken.

Under this example, both trains will run according to rule until the second named train is overtaken, and then arrange for the rear train to pass promptly.

- (3) Extra 594 East run ahead of No. 6, M to B.

Under this example, the second named train will run with such caution as will prevent accident with the first named train.

- (4) Extra 95 west run ahead of No. 3, from B, until overtaken.

Under this example, the first named train will run ahead of the second named train from the designated station until overtaken, and then arrange for the rear train to pass promptly.

(5) No. 1 pass No. 3 at K, and run ahead of No. 7, M to Z.

Form C.

(Omitted.—Not applicable to Double Track.)

D-Form E.—Time Orders.

- (1).....run.....late.....to.....
 (2).....run.....late.....to.....and
late.....to.....etc.
 (3) Omitted—(Not applicable to Double Track.)
 (4).....wait at.....until.....M.
 until.....M.
 until.....M.

This form may be used in connection with an extra train created by example (3) of Form G, and the times at each station stated in that example have the same meaning as schedule times in the following examples.

EXAMPLES.

- (1) No. 1 run twenty 20 mins. late A to G.
 (2) No. 1 run twenty 20 mins. late A to G, and fifteen 15 mins. late G to K, etc.

Examples (1) and (2) make the schedule time of the train named between the stations mentioned, as much later as stated in the order, and any other train receiving the order is required to run with respect to this later time, as before required to run with respect to the time-table schedule time. The time in the order should be such as can be easily added to the schedule time.

(4) Nos. 1 and 3 wait at:

N until ten 10.00 A.M.

P until ten-thirty 10.30 A.M.

R until ten-fifty-five 10.55 A.M., etc.

Under this example the train (or trains) named, must not pass the designated stations before the times given.

Other trains receiving the order are required to run with respect to the time specified at the designated stations or any intermediate station where schedule time is earlier than the time specified in the order, as before required to run with respect to the schedule time of the train (or trains) named.

D-Form F.—For Sections.

- (1).....display signals and run as.....
to.....
- (2).....run as.....to.....
- (3).....display signals.....to.....for.....
- (6).....is withdrawn as.....at.....
- (7).....instead of.....display signals and run
as.....to.....
- (8).....take down signals at.....
- (9).....:nd.....reverse position as.....and
.....to.....

The character of a train for which signals are displayed may be stated.

Each section affected by the order must have copies, and must arrange green signals accordingly.

To annul a section for which green signals have been displayed over a division, or any part thereof, when no train is to follow the green signals, Form K must be used.

EXAMPLES.

- (1) Eng. 20 display signals and run as first No. 1, A to Z.

This example is to be used when the number of the engine for which green signals are displayed is unknown and is to be followed by example (2), both being single order examples.

- (2) Eng. 25 run as second No. 1, A to Z.

Under this example, engine 25 will not display green signals.

- (3) No. 1 display signals A to G for Eng. 65, or, second No. 1 display signals B to E for Eng. 99.

Under these examples engine 65 (or engine 99) will not display green signals.

These examples may be modified as follows:

- (4) Engs. 20, 25 and 99 run as first, second and third, No. 1, A to Z.

Under this example engine 99 will not display green signals.

For changing sections.

To add an intermediate section the following modification of example (1) will be used:

- (5) Eng. 85 display signals and run as second No. 1, N to Z. Following sections change numbers accordingly.

Under this example, engine 85 will display green signals and run as directed and following sections will take the next higher number.

To drop an intermediate section, the following example will be used:

- (6) Eng. 85 is withdrawn as second No. 1 at H. Following sections change numbers accordingly.

Under this example, engine 85 will drop out at H and following sections will take the next lower number.

To substitute one engine for another on a section, the following will be used:

(7) Eng. 18 instead of Eng. 85 display signals and run as second No. 1, R to Z.

Under this example Engine 85 will drop out at R, and Engine 18 will run as directed. Following sections need not be addressed.

If engine 85 is last section, the words "display signals and" will be omitted.

To discontinue the display of green signals, the following example will be used:

(8) Second No. 1 take down signals at D.

Under this example, 2nd No. 1 will take down green signals as directed and a following section must not proceed beyond the station named.

Form G.—Extra Trains.

(1) Eng.....run extra.....to.....

(2) Eng.....run extra.....to.....and
return to.....

(3) Eng.....run extra leaving.....on.....
as follows, with right over all trains:

Leave.....M.

.....M.

.....M.

Arrive....M.

EXAMPLES.

(1) Eng. 99 run extra A to F.

(2) Eng. 99 run extra A to F and return to C.

Under (2), the extra must go to F before returning to C.

(3) Eng. 77 run extra leaving A on Thursday, Feb. 17th, as follows, with right over all trains:

Leave A eleven-thirty, 11.30 P.M.

C twelve-twenty-five 12.25 A.M.

E one-forty-seven 1.47 A.M.

Arrive F two-twenty-two 2.22 A.M.

This order may be varied by specifying the character of the extra and the particular trains over which the extra shall or shall not have rights. Trains over which the extra is thus given right must clear the time of the extra five minutes.

D-Form H.—Work Extra.

(1) Eng.....work on.....track.....M
to.....M between.....and.....

Work extras must give way to all trains as promptly as practicable.

Whenever extra trains are run over working limits, they must be given a copy of the order sent to the work extra.

When it is desired to move a train against the current of traffic over the working limits, provision must be made for the protection of such movement.

The working limits should be as short as practicable, to be changed as the progress of the work may require.

Conductors of work extras must report each evening by telegraph to the Train Despatcher, the time when their trains are laid up for the night and their working limits for the following day.

EXAMPLES.

(1) Eng. 292 work on eastbound track (or both tracks) seven 7 A.M. to six 6 P.M., between D and E.

Under this example the work extra must, whether standing or moving, protect itself within the working limits, against extras moving with the current of traffic on track (or tracks) named, as prescribed by rule. The time of regular trains must be cleared.

This may be modified by adding:

- (3) Not protecting against extras.

Under this example, protection against extras is not required. The time of regular trains must be cleared.

To enable a work extra to work upon the time of a regular train, the following form will be used:

- (5) Work extra 292 protects against No. 55 (or..... class trains) between D and E.

Under this example, the work extra may work upon the time of the train (or trains) mentioned in the order, and must protect itself against such train (or trains) as prescribed by rule. The regular train (or trains) receiving the order will run expecting to find the work extra protecting itself.

When a work extra is to be given exclusive right over all trains, the following form will be used:

- (6) Work extra.....has right over all trains ontrack between.....and.....M to.....M.

EXAMPLE.

- (6) Work extra 292 has right over all trains on east-bound (and westbound) track, between D and E seven 7 P.M. to twelve 12 night.

This gives the work extra the exclusive right to the track (or tracks) mentioned between the points designated between the times named.

Form J.—Holding Order.

Hold.....

This form will be used only when necessary to hold trains until orders can be given, or in case of emergency.

These orders will be addressed to the Operator and acknowledged in the usual manner, and will be delivered to Conductors and Engineers of all trains affected.

EXAMPLES.

Hold No. 2.

Hold all (or eastbound) trains.

When a train has been so held it must not proceed until the order to hold is annulled, or an order given to the Operator in the form:

".....may go."

Form K.—Annulling a Schedule or a Section.

(1).....of.....is annulled.....to.....

(2).....due to leave.....is annulled
.....to.....

The schedule or section annulled becomes void between the points named and cannot be restored.

EXAMPLES.

(1) No. one 1 of Feb. 29th is annulled A to Z.

(2) Second No. five 5 due to leave A Feb. 9th is annulled E to G.

Form L.—Annulling an Order.

Order No.....is annulled.

An order which has been annulled must not be re-issued under its original number.

EXAMPLE.

Order No. ten 10 is annulled.

If an order which is to be annulled has not been delivered to a train, the annulling order will be addressed to the Operator, who will destroy all copies of the order annulled, but his own, and write on that:

Annulled by Order No.....

D-Form M.—Annulling Part of an Order.

That part of Order No.reading.....
is annulled.

EXAMPLES.

That part of order No. ten 10 reading Extra 263 west pass No. one 1 at S, is annulled.

D-Form P.—Superseding an Order or Part of an Order.

This order will be given by adding to prescribed forms, the words "instead of....."

- (1).....pass.....at.....instead of.....
- (2) Omitted. (Not applicable to Double Track.)
- (3).....display signals for.....to.....
instead of.....

An order which has been superseded must not be re-issued under its original number and the original order must not be superseded more than once.

A superseding order must not be delivered prior to the delivery of the order which is superseded.

EXAMPLES.

- (1) No. 1 pass No. 3 at C instead of B.
- (2) Omitted. (Not applicable to Double Track.)
- (3) No. 1 display signals for Eng. 85, A to Z instead of G.

D-Form R.—Providing for a Movement Against the Current of Traffic.

.....has right over opposing trains on..... track.....to.....

A train must not be moved against the current of traffic until the track on which it is to run has been cleared of opposing trains.

EXAMPLE.

(1) No. 1 has right over opposing trains on No. 2 (or eastbound) track, C to F.

Under this order the designated train must use the track specified between the stations named, and has right over opposing trains on that track between those stations. Opposing trains must not leave the station last named until the designated train arrives.

An inferior train between the stations named moving with the current of traffic in the same direction as the designated train must receive a copy of the order, and may then proceed on its schedule, or right.

This order may be modified as follows:

(2) After.....arrives at.....has right over opposing trains on.....track.....to.....

EXAMPLE.

After No. 4 arrives at C, No. 1 has right over opposing trains on No. 2 (or eastbound) track, C to F.

Under (2), the train to be moved against the current of traffic must not leave the first named station until the arrival of the first named train.

D-Form S.—Providing for the Use of a Section of Double Track as Single Track.

.....track will be used as single track between
.....and.....

(Adding, if desired).....M. to.....M.

Under this order, all trains must use the track specified between the stations named, and will be governed by rules for single track.

Trains running against the current of traffic on the track named must be clear of the track at the expiration of the time named, or protected as prescribed by rule.

EXAMPLE.

No. 1 (or westbound) track will be used as single track between F and G.

(Adding, if desired,) one 1 P.M. to three 3 P.M.

Form T.—Line Clear Order.

Omitted. (Not applicable to Double Track.)

Form U.—Protection Against Following Trains.

(1) Opr.....hold all trains following.....
(except.....) until.....M.

(2) Opr.....hold all trains following.....
(except.....)until.....arrives at.....

This order must be addressed to the Operator at G and to the train to be protected, and the Operator will deliver copies to all trains affected; and it gives the train to be protected, right to occupy the main track without rear flag protection, until the order is fulfilled.

EXAMPLES.

(1) Opr. G hold all trains following No. 64 (or extra 301 east) (except No. 6) until ten 10 A.M.

(2) Opr. G hold all trains following No. 4 (or extra 306 east) (except No. 6) until No. 4 (or extra 306 east) arrives at F.

Form V.—Specifying the Speed of a Train.

- (1) Do not exceed.....miles per hour.....to.....
- (2) Run.....miles per hour.....to.....

EXAMPLES.

(1) Do not exceed six 6 miles per hour, A to B.

This order will be used when main track is reported unsafe for usual speed.

(2) Run forty 40 miles per hour, A to B.

Under (2) the train addressed will not run at the speed specified unless safe to do so.

MOVEMENT OF TRAINS BY FIXED SIGNALS.

(Applicable to track designated in the time-table.)

Superiority.

S—71. On portions of the road so specified in the time-table, trains will run with the current of traffic by signals whose indications will supersede time-table superiority.

The movement of trains will be supervised by the Train Dispatcher, who will issue instructions to Signalmen when required.

RULES FOR TRAIN MOVEMENT.

82. Omitted. (Not applicable.)

S—83. Trains must be registered at the register stations designated in the time-table.

A train must not leave its initial station on any subdivision, until permission or signal is received from the Signalman. This permission must not be given without authority from the Train Dispatcher.

Regular trains will be cleared without such authority when communication with the Train Dispatcher is interrupted.

At Bulletin Stations designated in the time-table, Conductors and Engineers must read and sign for the bulletins posted before starting. All bulletins affecting the movement of trains will be re-issued the first of each month.

84. A train must not start until the proper signal is given.

85. Omitted. (Not applicable.)

S—86. When permission or signal to proceed has been given, a train may proceed until instructed by signal or message to take passing track.

Such instructions will, when practicable, be given at a preceding station. Operators will display signal and deliver the message in the same manner as prescribed for the delivery of "19" train orders.

When instructed to take passing track a train must do so with the least possible delay. The Conductor will report to the Signalman as soon as his train is clear of main track, and he must not allow his train to proceed until permission or signal has been given by the Signalman. The Signalman must get authority from the Train Dispatcher before allowing a train to proceed after taking passing track. Where telephones are provided, the Conductor may use them in communicating with the Signalman.

Where a signal controlled by the Signalman is placed at the exit of a passing track, no train may leave the passing track until the signal indicates proceed, except on written authority of the Signalman.

- 87. Omitted. (Not applicable.)
- 88. Omitted. (Not applicable.)
- 89. Omitted. (Not applicable.)
- 90. Omitted. (Not applicable.)
- 91. Omitted. (Not applicable.)

S—92. A train must not arrive at a station in advance of its schedule arriving time.

A train must not leave a station in advance of its schedule leaving time.

S—93. Within yards defined by yard limit boards, the main track may be used, keeping clear of first and second class trains.

The main track must not be so used within yard limits until it is known that all sections of overdue first and second class trains have arrived.

All trains except first and second-class trains must, unless otherwise directed, approach and pass through yard limits prepared to stop, unless the main track is seen, or known to be clear.

Yellow lights must be attached to the yard limit boards to be kept lighted from sunset to sunrise.

S—94. A train which overtakes another train so disabled that it cannot proceed, may pass it, if practicable, proceed to the next open telegraph office, and there report to the Train Despatcher.

95. Omitted. (Not applicable.)

96. Omitted. (Not applicable.)

S—97. Work extras must move with the current of traffic unless otherwise directed.

Conductors of work extras must report each evening by telegraph, to the Train Despatcher the time when their trains are laid up for the night, and their working limits for the following day.

Any train having work to do or is liable to be delayed by any cause, will report to the Train Despatcher and will not occupy the main track on the time of first-class trains, without orders.

98. Trains must approach the end of a double track, junctions, interlocked railway crossings at grade, and interlocked drawbridges, prepared to stop, unless the switches and signals are right, and the track is clear.

At railway crossings at grade and drawbridges, not interlocked, trains must stop and not proceed until the proper signal has been given.

When clear signals are shown where one railway crosses another at grade the speed of passenger trains must be reduced to thirty-five miles an hour and freight trains to twenty miles an hour until the entire train has passed the crossing.

When clear signals are shown where a railway crosses a drawbridge the speed of passenger trains must be reduced to twenty-five miles an hour and the speed of freight trains to fifteen miles an hour until the entire train has passed the drawbridge.

99. When a train stops or is delayed on the main track under circumstances in which it may be overtaken by another train, the Flagman must go back immediately with stop signals, a sufficient distance from the train to insure full protection, at least:

In day time, if there is no down grade toward train within one mile of its rear, and there is a clear view of its rear of 2000 yards, (40 telegraph poles) from an approaching train.	} 500 yards, 10 telegraph poles.
---	-------------------------------------

At other times and places, if there is no down grade toward train, within one mile of its rear.	} 1,200 yards, 24 telegraph poles.
---	---------------------------------------

If there is a down grade toward train, within one mile of its rear.	} 1,800 yards, 36 telegraph poles.
---	---------------------------------------

The Flagman must, after going back a sufficient distance from the train to insure full protection, take up a position where there will be an unobstructed view of him from an

approaching train of, if possible, 500 yards (10 telegraph poles), first placing two torpedoes not more than 200 or less than 100 feet apart on the rail on the same side as the Engineer of an approaching train, 100 yards (2 telegraph poles) beyond such position. The Flagman must remain in such position until recalled or relieved.

If recalled before another train arrives he must at night, or when weather or other conditions obscure day signals, or when snow plows or flangers may be running, in addition to the two torpedoes, leave a fusee burning red at the point he returns from and at such other points on his return as may be necessary to insure full protection.

The front of a train must be protected in the same way when necessary by the front Brakeman, or if there be none, by the Fireman.

Flagman must always on the approach of a train display stop signals, and if not already done, place two torpedoes on the rail as before described, and then return 100 yards (2 telegraph poles) nearer the protected point.

Flagmen must each be equipped for day time with a red flag and four torpedoes, and for night time and when weather or other conditions obscure day signals, with a red light, a white light and four torpedoes, three red fusees, and a supply of matches.

A train should not stop between stations at a place where the view from following trains is obstructed.

100. When the Flagman goes out to protect the train, his place will be filled by the person designated by the Conductor.

101. If a train should part while in motion, Trainmen must, if possible, prevent damage to the detached portions. The signals prescribed by Rules 12 (d) and 14 (f) must be given.

When for any reason an engine leaves its train or a part of its train on the main track every precaution must be taken to protect the train against the returning engine. Torpedoes must be placed in advance of the train, and at night, or during stormy weather, a white light must be prominently displayed on the forward car. The Conductor and Engineer will be held equally responsible for this rule.

The detached portion must not be moved or passed until the front portion comes back.

The Engineer and Trainmen with the front portion must give the train-parted signal to trains running on the opposite track. A train receiving this signal, or being otherwise notified that a train on the opposite track has parted must immediately reduce speed and proceed with caution until the separated train is passed.

When a train is disabled so it may obstruct the opposite track, trains on that track must be stopped.

102. When cars are pushed by an engine (except when shifting and making up trains in yards where there are no public highway crossings at rail level) a Flagman must take a conspicuous place on the front of the leading car.

Whenever in any city, town or village, cars are passing over or along a highway at grade not headed by an engine moving forward in the ordinary manner, a man must take a conspicuous position on the foremost car or tender, if that is in front, to warn persons on the highway.

No part of a car or engine may be allowed to occupy any part of a highway for a longer period than five minutes, and a highway must not be obstructed by switching operations for more than five minutes at a time.

Whistle posts will be placed at least 80 rods ($\frac{1}{4}$ mile) from every public road crossing at grade, except at public road crossings within the limits of towns or cities.

103. Messages or orders respecting the movement of trains or the condition of track or bridges, must be in writing.

S—104. The target of a switch parallel with the main track or a green light, indicates the switch is set for the main track. The target at right angles to the main track, or a red light, indicates the switch is set for a diverging track. Switches must be left in proper position after having been used.

Except where switchtenders are stationed, Conductors are responsible for the position of the switches used by them and their Trainmen. This will not relieve Trainmen of responsibility for the proper position of switches used by their trains.

Main track switches must be locked and other switches secured. After a switch is turned, the points must be examined to know that they are in proper position.

Employes must keep at least 20 feet from the stand while a train is closely approaching or passing over a switch.

A switch must not be left open for a following train unless in charge of a Switchtender or a Trainman of such train

When a train is standing on a passing track to be passed by a train, the Engineer and Fireman must see that switches at the front of their train are in proper position.

Trainmen of a train occupying the main track at a passing station, will, when practicable, open the switch for the expected train and protect the switch until relieved by a Switchtender or a Trainman of the other train.

Derails on side tracks must be set and secured to protect the main track.

If a switch has been run through, it must be protected, the Section Foreman notified, and the fact reported to the proper authority by telegraph immediately.

105. Trains will run under the direction of their Conductors, unless such directions conflict with these rules, or involve any danger, in which case, all persons participating will be held responsible.

When a train is run without a Conductor, the Engineer will perform the duties of the Conductor.

Both Conductors and Engineers are responsible for the safety of their trains and, under conditions not provided for by the rules, must take every precaution for their protection.

Immediate precaution must be taken to protect all trains against any obstruction or defect in the track.

106. In all cases of doubt or uncertainty, the safe course must be taken and no risks run.

107. Conductors and Brakemen must know that the cars in their trains are in good order before starting, and inspect them whenever they have an opportunity to do so, particularly when entering or leaving sidings, or waiting for other trains. All cars taken in their trains at intermediate stations must be examined with extra care.

108. A train must not be detached while in motion. When necessary to make running switches the train must first be stopped.

109. When stopping to take water, freight trains of more than fifteen cars must stop not less than fifty feet before reaching the water tank or stand-pipe and the engine must be cut off before water is taken. The brakes must not be released on the train until the engine is again coupled on and ready to proceed.

S—151. Trains must keep to the right unless otherwise provided.

S—152. When a train crosses over to, or obstructs the other track, unless otherwise provided, it must first be protected as prescribed by Rule 99 in both directions on that track.

S—153. Trains must use caution in passing a train receiving or discharging passengers at a station and must not pass between it and the platform at which the passengers are being received or discharged.

FIXED SIGNALS.

Definitions.

SEMAPHORE.—A device consisting of a movable arm supported on a pole. The signal indications are given by the position of the arm. At night an additional indication is given by lights of prescribed colors, corresponding to the positions of the arm. The arm is displayed to the right of the pole as seen from trains approaching in the direction in which it governs.

BLADE.—That part of a semaphore arm which, by its position, gives the signal indications.

ARM CASTING.—That part of a semaphore arm which by its position determines the color of the light which gives the additional night indications.

DISC SIGNAL.—A device consisting of a disc so supported that it may be displayed to view or withdrawn. The indications are given by the position of the disc. At night, an additional indication is given by lights of prescribed color, corresponding to the positions of the disc.

POLE.—The upright to which a signal is directly attached.

BRACKET POST.—An arrangement of main post with crossbeam upon which two or more poles are supported.

TARGET SIGNAL.—A disc supported in such a way that it may stand either parallel with or at right angles to a track on which it governs movements. The indications

are given by the position of the disc. At night, an additional indication is given by lights of prescribed colors corresponding to the positions of the disc.

Whenever a fixed signal is used of any form other than those herein described, the rules governing its observance will be found in the time-table.

RULES.

401 Engineers must know the indication of all fixed signals before passing them. At railway crossings, draw-bridges, junctions, or train order offices, they will require the Fireman to observe and communicate the indications of signals.

402. A signal imperfectly displayed, or the absence of a signal at a place where a signal is usually shown, must be regarded as a stop signal, and the fact reported to the proper officer.

403. Lights must be used upon all fixed signals from sunset to sunrise, and whenever the signal indications cannot be clearly seen without them.

Revised Rules, Home Block Signal, Station Protection Signal and Train Order Signal as authorized by the Board of Railway Commissioners, Order No. 14271, dated July 27th, 1911.

AUTOMATIC BLOCK SIGNALS.

Definitions and Indications.

BLOCK.—A length of track of defined limits, the use of which by trains, is controlled by Block Signals.

BLOCK SIGNAL.—A fixed signal controlling the use of a block.

HOME BLOCK SIGNAL.—A fixed signal at the entrance of a block to control trains entering and using the block.

A semaphore arm standing horizontal, or a disc displayed, indicates "stop." When in this position at night, a red light is displayed.

A semaphore arm 60 degrees below or 90 degrees above the horizontal, or a disc withdrawn, indicates "proceed." When in this position at night, a green light is displayed.

DISTANT BLOCK SIGNAL.—A fixed signal used in connection with a Home Block Signal to regulate the approach thereto.

A semaphore arm standing 45 degrees above horizontal, or a disc displayed, indicates "proceed, prepared to stop at next signal." When in this position at night, a yellow light is displayed.

A semaphore arm 60 degrees below or 90 degrees above the horizontal, or a disc withdrawn, indicates "proceed." When in this position at night, a green light is displayed.

INDICATOR.—A device (usually employed in connection with a switch) used to show the position of a signal to which it refers. A miniature arm or disc is displayed, which assumes the stop position when the home signal protecting the block is in the stop position or a train is closely approaching it. At main track crossovers, the indicators at the switch in each track relate to the signal protecting the block on the other track.

AUTOMATIC BLOCK SYSTEM.—A series of consecutive blocks in which the signals are operated by electric, pneumatic or other agency, actuated by a train, or by certain conditions affecting the use of the block.

RULES.

502. Block signals control the use of the blocks, but do not affect the movements of trains under the time-table or train rules, nor dispense with the use or the observance of other signals whenever or wherever they may be required. The protection afforded by the automatic signals does not relieve trainmen from protecting their trains as required by Rule 99.

503. Block signals apply only to trains running in the established direction.

504. When a train finds a distant signal indicating caution, it must proceed under such control as to be able to stop before reaching the home signal. When a train finds a home signal indicating stop, it must stop before reaching the signal, and not more than 200 feet from it. It may then proceed at once with caution, prepared to find the track occupied, a car foul, a switch open, a broken rail, or other obstruction in the block.

505. When a signal is out of service, the fact will be indicated by bulletin. Trains finding a signal out of service must, unless otherwise directed, proceed with caution to the next signal.

506. Signals and switch indicators which are in service and are evidently out of order, must be reported by wire to the Superintendent. Signals must be designated by the number on the signal pole if possible, otherwise by their location, and reports must state the time at which it was observed.

A signal or indicator indicating stop or caution, when it should indicate proceed, must be reported from the first telegraph office where the train stops. A signal indicating proceed, when it should indicate stop or caution, must be reported from the next open telegraph office.

507. Engineers should, whenever practicable, observe the position of all discs and semaphore arms by night and endeavor to see that they correspond with the indications given by the lights.

508. In order to avoid holding main track signals in the stop position, cars or engines must not be allowed to stand between a fouling block and a main track switch.

509. Both switches of a crossover between main tracks must not be closed while a car or engine occupies the connection between the switches of the crossover.

510. Switches at which indicators are in service must not be opened while the indicator is in stop position, except under flag protection.

511. A switch must not be used except under protection if the indicator fails to assume the stop position when the switch is opened.

512. When a crossover is to be used, the switch in the track on which the train is standing must be opened first.

513. Where no switch indicators are provided, a train which is to enter a block from a siding or crossover, may do so only under protection; and unless it is known that the track between the switch and the next block signal in advance is clear, it must proceed with caution to that signal.

Revised Rules, Home Block Signal, Station Protection Signal and Train Order Signal as authorized by the Board Railway Commissioners, Order No. 14271, dated July 27th., 1911.

STATION PROTECTION SIGNAL.

A signal used to protect trains occupying the main track at a station or in a yard, the normal indication of which is "proceed."

A semaphore arm standing horizontal, or a disc displayed, indicates "stop." When in this position at night, a red light is displayed.

A semaphore arm 60 degrees below or 90 degrees above the horizontal, or a disc withdrawn, indicates "proceed." When in this position at night, a green light is displayed.

RULES.

551. A train finding a station protection signal indicating stop, must stop before passing it, and may proceed with extreme caution, sending a Flagman ahead if necessary for complete protection, and expecting to find a train moving in either direction.

552. Conductors of trains protected by such a signal must also send out a Flagman as an additional protection to the train if the condition of the weather, location of the train, with regard to grades or curves, makes it necessary for the absolute protection of the train.

FLAG-STOP SIGNALS.

561. When flag-stop signals are of the semaphore type the arm in a horizontal position, or a green and white light displayed, indicates that trains in either direction, scheduled to stop on signal, will make station stop.

Revised Rules of Interlocking Signals, Home Signal and Distant Signal, as authorized by the Board of Railway Commissioners, Order No. 14271, dated July 27th, 1911.

INTERLOCKING SIGNALS.

Definitions and Indications.

INTERLOCKING.—An arrangement of switch, lock and signal appliances so inter-connected that their movements must succeed one another in a pre-determined order.

INTERLOCKING PLANT.—An assemblage of switch, lock and signal appliances interlocked.

INTERLOCKING STATION.—A place from which an interlocking plant is operated.

INTERLOCKING SIGNALS.—The fixed signals of an interlocking plant.

HOME SIGNAL.—A fixed signal governing movements over a certain route or routes, and located at the point where trains are required to stop when the route is not clear.

A semaphore arm standing horizontal indicates "stop." When in this position at night a red light is displayed.

A semaphore arm 60 degrees below or 90 degrees above the horizontal indicates "proceed." When in this position at night a green light is displayed.

DISTANT SIGNAL.—A fixed signal used in connection with a home signal to regulate the approach thereto.

A semaphore arm standing 45 degrees above horizontal indicates "Proceed, prepared to stop at the next signal." When in this position at night, a yellow light is displayed.

A semaphore arm 60 degrees below or 90 degrees above the horizontal indicates "proceed." When in this position at night, a green light is displayed.

DWARF SIGNAL.—A low, small signal of semaphore type, used as a home signal, governing one or more diverging or unusual routes.

POT SIGNAL.—A small revolving signal, used to indicate the position of a switch or as a substitute for a dwarf signal.

ROUTE.—The course of way taken by a train in passing from one point to another, especially a customary or pre-determined course, or any one of several possible combinations of turn-outs or crossovers by which a train may travel through an interlocking plant.

RULES.

602. Interlocking signals, unless otherwise provided, do not affect the movements of trains under the time-table or train rules; nor dispense with the use or the observance of other signals whenever and wherever they may be required.

Signalmen.

611. The normal indication of home signals is "Stop."

612. Levers, or other operating appliances, must be used only by those charged with the duty.

613. Signal levers must be kept in the position giving the normal indication, except when signals are to be cleared for an immediate train or engine movement.

Signals must not be set for any route when cars or engines are standing between the derails of a conflicting route.

614. When the route is clear the signals must be cleared sufficiently in advance of approaching trains to avoid delay.

Levers must be tested before each regular train is due, to ascertain if the plant is in working order.

615. A signal must be restored so as to give the normal indication as soon as the train or engine for which it was cleared, has passed it.

The changing of any signal permits only one train or engine to pass that signal. The signal must be changed to "stop" after the passage of each train, and a following train must not proceed until the signal is again changed to "proceed."

616. If necessary to change any route for which the signals have been cleared for an approaching train or engine, switches and derails must not be changed or signals cleared for any conflicting route until the train or engine for which the signals were first cleared, has stopped in rear of its signal.

617. A switch or facing point lock must not be moved when any portion of a train or an engine is standing on, or closely approaching, the switch or detector bar.

618. Levers must be operated carefully and with a uniform movement. If any irregularity indicating disarranged connections, is detected in their working, the signals must be restored so as to give the normal indication and the connections examined.

619. During cold weather, the levers must be moved as often as may be necessary to keep connections from freezing.

The use of salt is forbidden, except as authorized by the Superintendent.

620. If a signal fails to work properly its operation must be discontinued and the signal secured so as to give the normal indication until repaired.

621. Signalmen must observe as far as practicable, whether the indication of the signals corresponds with the position of the levers.

622. Signalmen must not make nor permit any unauthorized alterations or additions to the plant.

623. If there is a derailment, or if a switch is run through, or if any damage occurs to the track or interlocking plant, the signals must be restored so as to give the normal indication, and no train or switching movement permitted until all parts of the interlocking plant and track liable to consequent injury have been examined and are known to be in a safe condition.

624. If necessary to disconnect a switch from the interlocking apparatus, the switch must be securely fastened and protected.

625. During storms or drifting snow, special care must be used in operating switches. If the force whose duty it is to keep the switches clear, is not on hand promptly when required, the fact must be reported to the Superintendent

626. If any electric or mechanical appliance fails to work properly, the Superintendent must be notified and only duly authorized persons permitted to make repairs. All glasses in signals must be kept clean and any cracked or broken, promptly renewed.

627. When switches or signals are undergoing repairs, signals must not be given for any movements which may be

affected by such repairs, until it has been ascertained from the Repairman that the switches are properly set and secured for such movements.

628. Signalmen must observe all passing trains and note whether they are complete and in order; should there be any indication of conditions involving danger, the Signalman must take such measures for the protection of trains as may be practicable.

629. If a Signalman has information that an approaching train has parted he must, if possible, stop trains or engines on conflicting routes, clear the route for the parted train, and give the train-parted signal to the Engineer.

630. Signalmen must have the proper appliances for hand signaling ready for immediate use. When hand signals are necessary for switch movements, they must be given only after the switches have been properly set and fastened, and from such a point and in such a way that there can be no misunderstanding on the part of Engineers or Trainmen as to the signals, or as to the train or engine for which they are given.

NOTE TO RULE 630.—Hand signaling includes the use of lamp, flag, torpedo and fusee signals.

631. If necessary to discontinue the use of any fixed signal, hand signals must be used and Superintendent notified.

Whenever a home signal cannot be cleared trains will be forwarded on Clearance form.

632. Signalmen will be held responsible for the care of the interlocking station, lamps and supplies; and of the interlocking plant, unless provided for otherwise.

633. Lights in interlocking stations must be so placed that they cannot be seen from approaching trains.

634. Lights must be used upon all fixed signals from sunset to sunrise, and whenever the signal indications cannot be clearly seen without them.

635. If a train or engine overruns or disregards a stop signal, the fact, with the number of the train or engine, must be at once reported by telegraph to the Superintendent.

In all cases of apparent disregard of signals, the Signalman must at once inspect the signals and see if correct indication was given.

636. Only those whose duties require it shall be permitted in the interlocking station.

When a Signalman is relieved, he must make a transfer on the prescribed form and obtain thereon the signature of the Signalman relieving him.

Engineers and Trainmen.

661. Trains or engines may be run to, but must not be run beyond a signal indicating stop.

Dwarf signals (and lower arm of two arm high signals) frequently govern more than one route. When the right to proceed is given by such signals, Engineers must observe carefully which route is set.

When a distant signal indicates caution, a train passing must be under control and prepared to stop before reaching the home signal.

662. If a clear signal, after being accepted, is changed to a stop signal before it is reached, the stop must be made at once. Such occurrence must be reported to the Superintendent.

663. Engineers and Trainmen must not accept clear hand signals as against fixed signals until they are fully informed of the situation and know that they are protected. Where fixed signals are in operation, Trainmen must not give clear hand signals against them.

Hand Signals may be accepted for switching movements if given in such a way that there can be no misunderstanding as to the train or engine for which they are intended. Whenever the home signal cannot be cleared, trains will be forwarded on Clearance Form "D."

664. The Engineer of a train which has parted must sound the whistle signal for "train-parted" on approaching an interlocking station.

665. An Engineer receiving a train-parted signal from a Signalman must answer by the whistle signal for "train-parted."

666. When the train has been re-coupled, the Signalman must be notified.

667. Grates must not be shaken, ash pans cleaned, nor sand used over any part of an interlocking plant.

668. Conductors or men in charge of yard engines must report to the Superintendent any unusual detention at interlocking plants.

669. Trains or engines stopped in making a movement through an interlocking plant, must not move in either direction until they have received the proper signal from the Signalman.

670. Running switch movements must never be made within an interlocking plant.

671. Engineers should, whenever possible, observe the position of all semaphore arms by night and endeavor to see that they correspond with the indications given by the lights.

672. When an interlocking plant is out of service temporarily, trains must be brought to a stop before reaching the home signal, and will proceed only when the switches and derails are known to be properly set, and upon receiving hand signal from the Signalman on the ground, that the way is clear.

673. When a train is run against the current of traffic, it must stop before crossing any railway crossing or draw-bridge, designated in the time-table, even though interlocking devices are used; and not proceed until the way is known to be clear.

(Print on green paper.)

FORM—(A.)

GRAND TRUNK RAILWAY SYSTEM. CLEARANCE.

(B) 6.45 A. M. June 5, 189.....

Train No. 12

I have orders (5-7 and 9) (Nil) for your train.

The next train ahead is (Extra 751) It left this station at
8.35 a. m., and arrived at at 8.55 a. m. . Signal is
displayed for (Block) and does not now affect you.

John Jones.

Operator.

This does not affect any train orders you may have received.

Conductors and Engineers must each have a copy, and see that their train is correctly designated in the above form.

NOTE.—The numbers of orders for the train must be filled in in figures. When there are no orders the word "nil" must be written in. If the next train ahead has not reached the next telegraph office the words "not yet" must be written in the blank space provided for the time of arrival at the next telegraph office. The other blank spaces are to be filled in as indicated by small type. Operators must keep the lowest copy.

Where the Automatic Block Signals are in service instead of Station Block the information relative to the train ahead may be omitted.

spaces are to be filled in the blank space provided for the time of arrival at the next telegraph office. The other blank spaces are to be filled in as indicated by small type. Operators must keep the lowest copy.

Where the Automatic Block Signals are in service instead of Station Block the information relative to the train ahead may be omitted.

(Print on green paper.)

FORM—(B.)

GRAND TRUNK RAILWAY SYSTEM TERMINAL CLEARANCE

Dover Station 9.15 A. M. March 25 19 11
(hour)

I have order..... No.s 16 and 19 for No. 9
Train Order Signal displayed is for Extra 452 and does not now affect you.
All trains having right to track over you, and all trains of the same class
due to arrive and leave, have arrived, and left, except No. 6
The next train ahead is Extra 691 It left this station at 8.35 a. M.
and arrived at Paris at not yet M.
This Clearance does not interfere with or countermand any orders received
by you.

W. A. Jones Operator.

Every person addressed (see rule 204) must have a copy, and see that the train is correctly designated.
This Clearance does not relieve the Conductor from personally checking Train Register and knowing that all trains which have right to track over his train have arrived or left.

NOTE.—The numbers of orders for the train must be filled in in figures. When there are no orders the word "nil" must be written in. If the next train ahead has not reached the next telegraph office the words "not yet" must be written in the blank space provided for the time of arrival at the next telegraph office.
If the train order signal is not displayed at stop the word "nil" must be written in.
If all trains having right to track and all trains of the same class due to arrive or leave, have arrived or left respectively the word "nil" must be written in.
The other blank spaces are to be filled in as indicated by small type. Operators must keep the lowest copy Green paper will be used for terminal clearances.

(Print on yellow paper.)

FORM—(C.)

GRAND TRUNK RAILWAY SYSTEM

CAUTION CARD No. 9

Station..... D ; 9.15 A. M. April 1, 19 11
 Conductor and Engineer No. 26 on Eastbound Track
 No. Further orders for your train.

Proceed with caution expecting to find track obstructed.

John Jones Signalman.

This card does not interfere with or countermand any orders you may have received. It is authority to pass the signal and proceed prepared to stop within the range of vision.

Engineer and Conductor must each have a copy and see that it is properly filled out and signed and that their train is correctly designated.

(Print on white paper.)

FORM—(D.)

GRAND TRUNK RAILWAY SYSTEM CLEARANCE CARD.

.....(C)..... 9.05 a.m. June 3, 19..... 11.....

Train..... No. 12.....

Signal is Inoperative. Proceed.

..... John Jones.

..... Signalman.

This does not affect any train order you have received.

NOTE.—Forms A and C may be combined in one form.

Train Order Blank for 31 Order.

FORM 31		FORM 31		
<p>GRAND TRUNK RAILWAY SYSTEM TRAIN ORDER No......10..... March 21, 19 11.</p>				
<i>To</i>		<i>At</i>		
<i>x</i> (Initials).....		<i>Opr.;</i> 1.45 A. <i>M.</i>		
<p>..... Conductor and Engineer must each have a copy of this Order. </p>				
<p><i>Repeated at 2.20 A. M.</i></p>				
Conductor.	Train.	Made.	Time.	Operator.
Jones	45	Complete.	2.20 a.m	Black.

Specifications for Train Order Form and Books for Operators for "31" Orders.

Form as here shown. Blank space for order (4) inches with lines. The mode of filling the blanks is indicated by small type.
 Form (6½ x 9½) inches beyond perforated lines. Book (6½ x 10½) inches.
 300 leaves. Glued at top or side. Manilla cover on faces and stiff back Paper opaque,..... sized, and of such thickness as to admit of making (9) good manifold copies with stylus and double carbons.
 To be used with double Carbon Paper (6½ x 9) inches and a stiff tin. same size, corners rounded.

Train Order Blank for 19 Order.

FORM
19

FORM
19

GRAND TRUNK RAILWAY SYSTEM

TRAIN ORDER No. 10

March 11, 19 11.

To | At

x (Initials) Opr.; 1.45 A. M.

.....
Conductor and Engineer must each have a copy of this Order.

Made Complete time 1.16 P. M. Black Opr

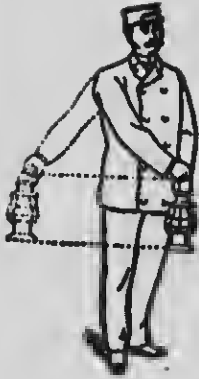
Specifications for Train Order Form and Books
for Operators for "19" Orders.

Form as here shown Blank space for order (4) inches with lines.
The mode of filling the blanks is indicated by small type.
Form (6 1/2 x 6) inches beyond perforated line. Book (6 1/2 x 7 1/2) inches.
300 leaves. Glued at top or side. Manilla cover on face and stiff
back.
Paper opaque,, sized, and of such thickness as to admit of
making (9) good manifold copies with stylus and double carbons.
To be used with double Car on Paper (6 1/2 x 7) inches, and n stiff tin,
same size, corners rounded.

DIAGRAMS
OF
HAND, FLAG AND LAMP
SIGNALS

NOTE

The hand, or a flag, moved the same as the lamp, as illustrated in the following diagrams, gives the same indication.



Stop—Swung across the track.

See Rule 12 (a)

Proceed—Raised and lowered vertically

See Rule 12 (b).



Back—Swung vertically in a circle at half arm's length across the track.

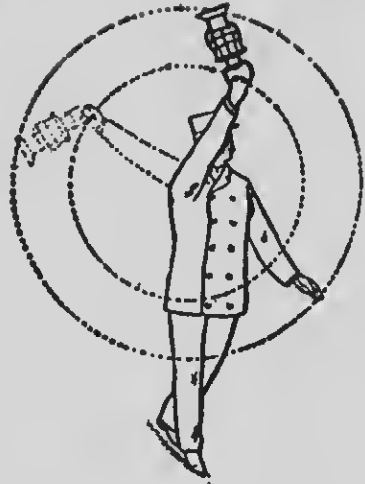
See Rules 12 (c) and 14 (h).



p, as
dica-

Train has Parted—Swung vertically in a circle at arm's length across the track.

See Rules 12 (d) and 14 (f)



Apply Air Brakes—Swung horizontally above the head.

See Rule 12 (e).

Release Air-Brakes—Held at arm's length above the head.

See Rule 12 (f).



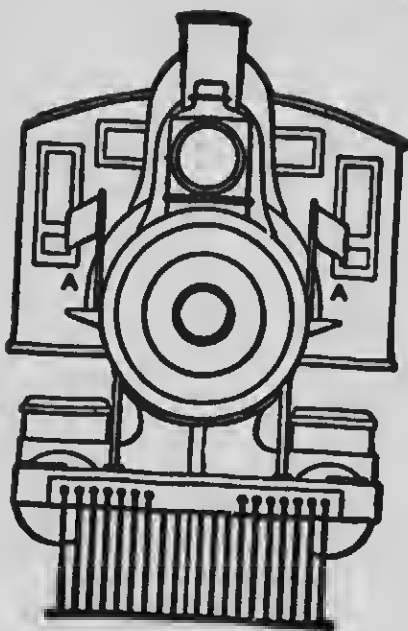
ZON

DIAGRAMS
OF
TRAIN SIGNALS

NOTES

The diagrams are intended to illustrate the general location of the train signals, not the exact manner in which they are to be attached.

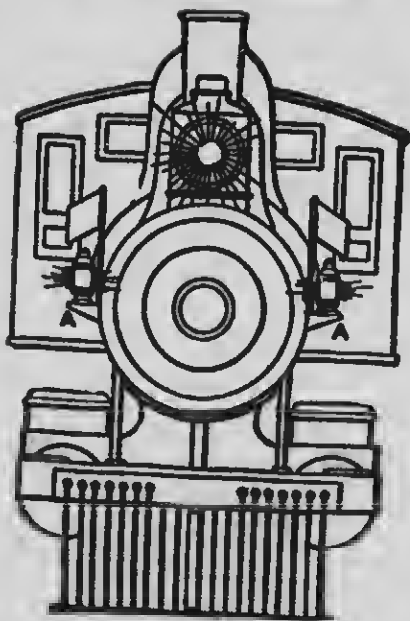
Combination lamps with four illuminated colored faces are represented in the diagrams.



Engine running forward by day as an extra train.

White flags at A A.

See Rule 21.



Engine running forward by night as an extra train.

White lights and white flags at A A.

See Rule 21.

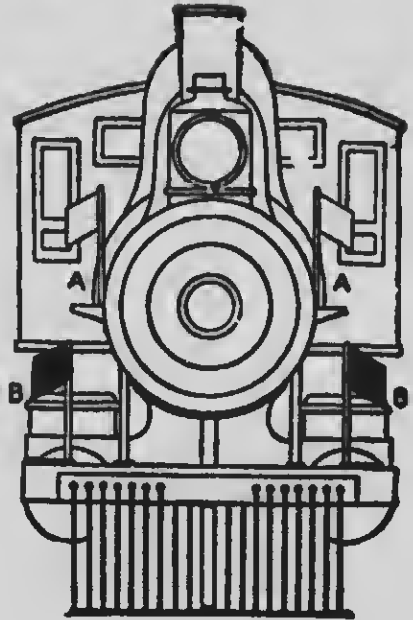
Engine running backward by day as an extra train, without cars or at the rear of a train pushing cars.

White flags at A A.

See Rule 21.

Green flags at B B, as markers.

See Rules 19 and D 19.



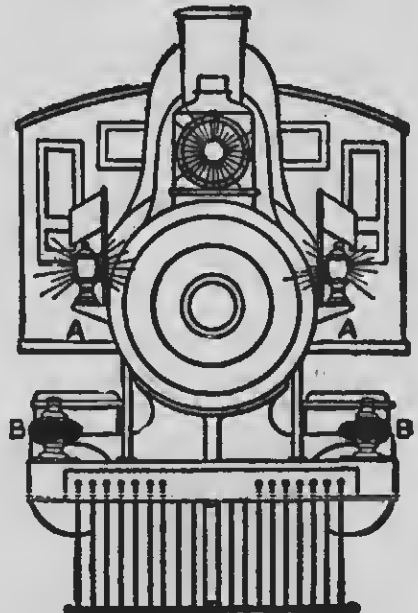
Engine running backward by night as an extra train, without cars or at the rear of a train pushing cars.

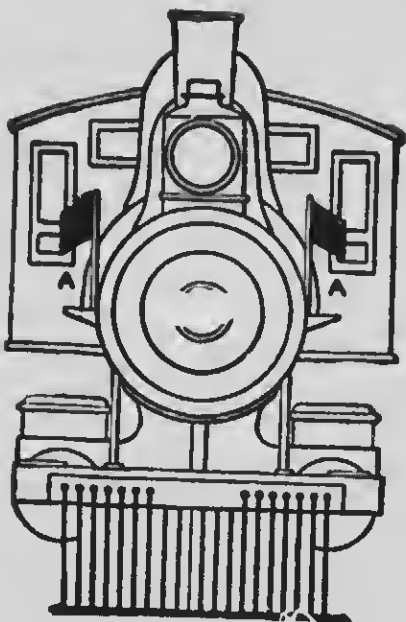
White lights and white flags at A A.

See Rule 21.

Lights at B B, as markers, showing green at side and in direction engine is moving, and red in opposite direction.

See Rules 19 and D 19.

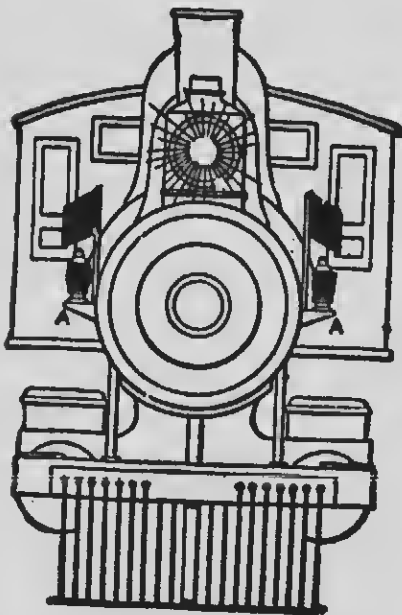




Engine running forward by day displaying signals for a following section.

Green flags at A A.

See Rule 20.



Engine running forward at night displaying signals for a following section.

Green lights and green flags at A A.

See Rule 20.

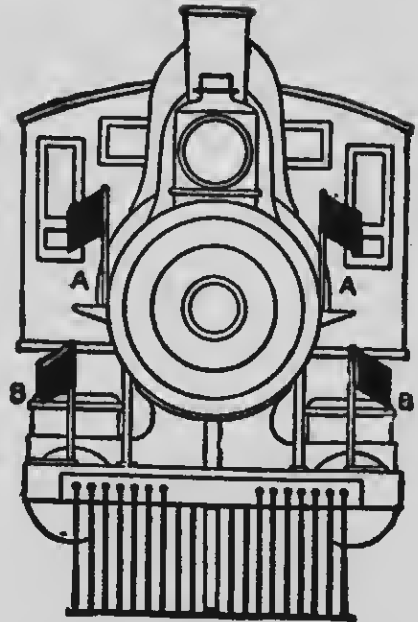
Engine running backward by day, without cars or at the rear of a train pushing cars, and displaying signals for a following section.

Green flags at A A.

See Rule 20.

Green flags at B B, as markers.

See Rules 19 and D 19



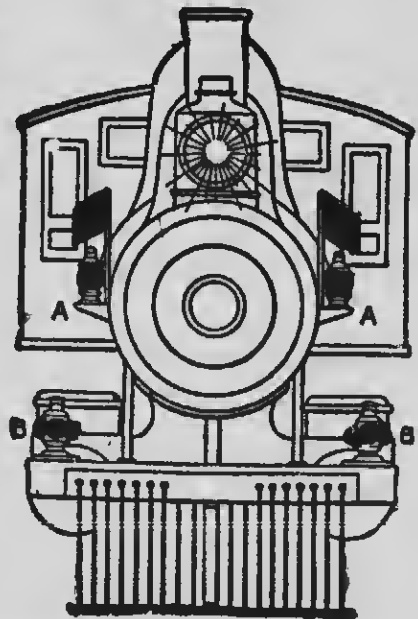
Engine running backward by night, without cars or at the rear of a train pushing cars, and displaying signals for a following section.

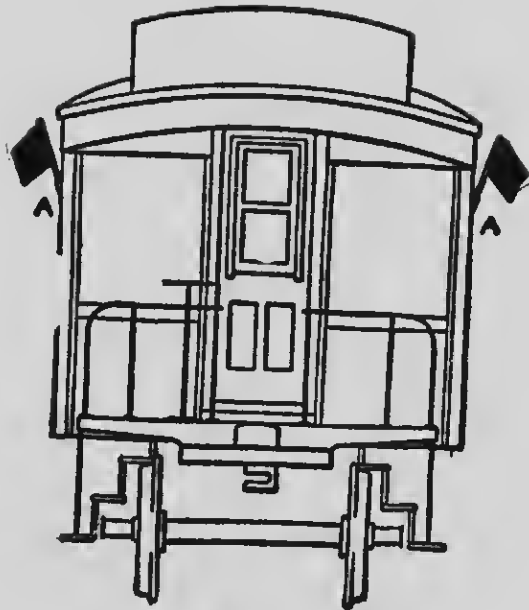
Green lights and green flags at A A.

See Rule 20.

Lights at B B, as markers, showing green at side and in direction engine is moving, and red in opposite direction.

See Rules 19 and D 19.

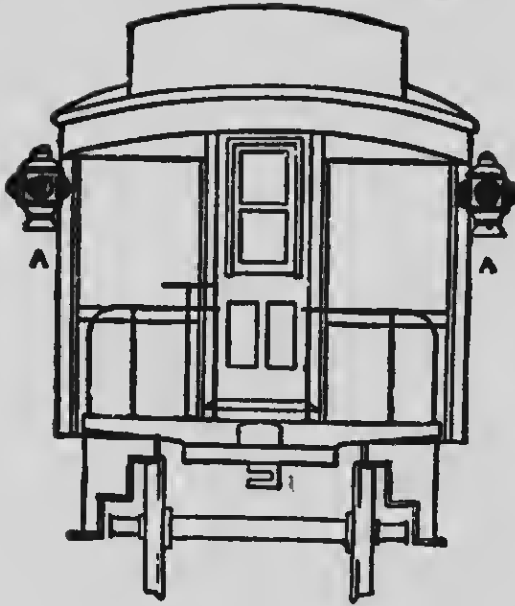




Rear of train by day.

Green flags at A A, as markers.

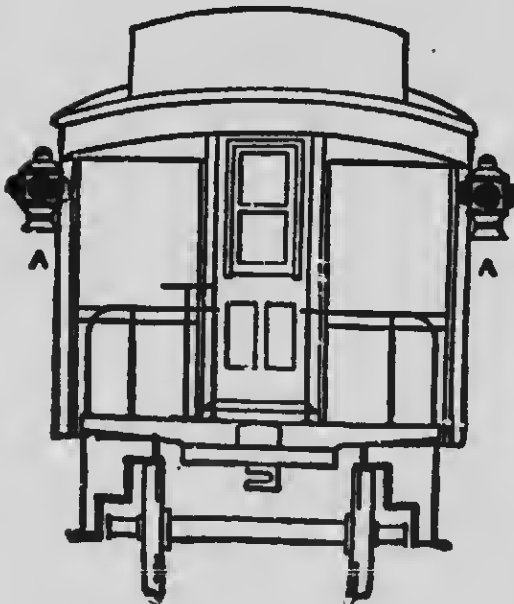
See Rules 19 and D 19.



**Rear of train
by night while
running.**

Lights at A A, as
markers, showing
green toward en-
gine and side and
red to rear.

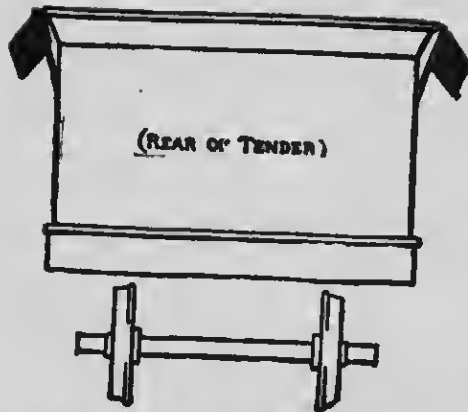
See Rules 19 and D 19



**Rear of train
by night when
on siding to be
passed by an-
other train.**

Lights at A A, as
markers, showing
green toward en-
gine, side, and to
rear.

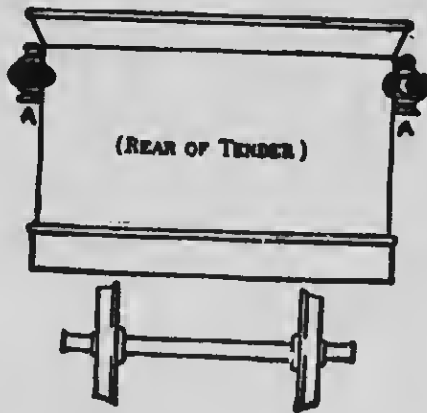
See Rules 19 and D 19.



Engine running forward by day, without cars or at the rear of a train pushing cars.

Green flags, as markers.

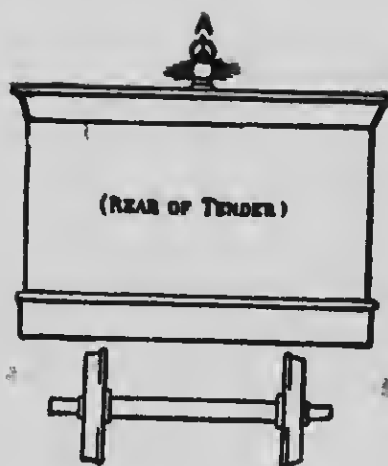
See Rules 19 and D 19.



Engine running forward by night, without cars or at the rear of a train pushing cars.

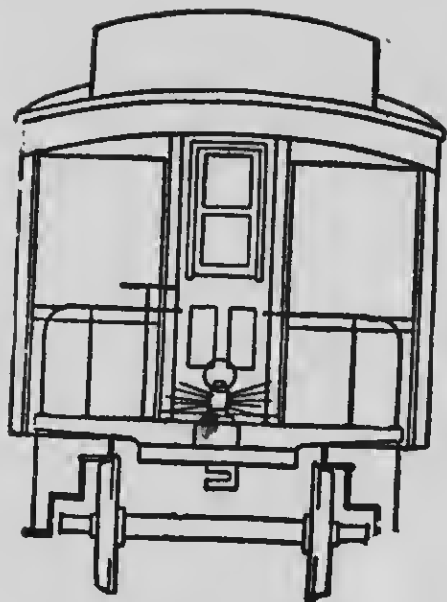
Lights at A A, as markers, showing green to the front and side and red to the rear.

See Rules 19 and D 19



Engine running backward by night, without cars or at the front of a train pulling cars, or as per Rule 18.

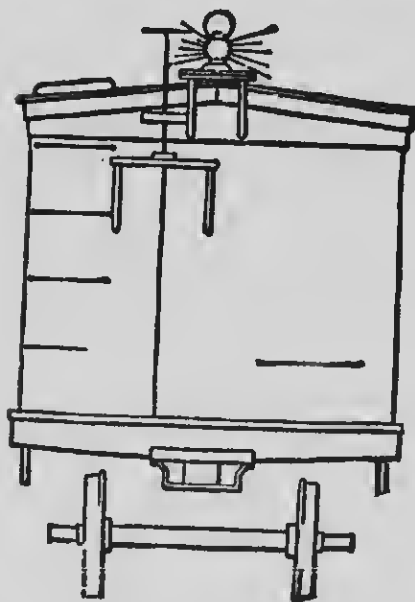
White light at A.



Passenger cars being pushed by an engine by night.

White light on front of leading car.

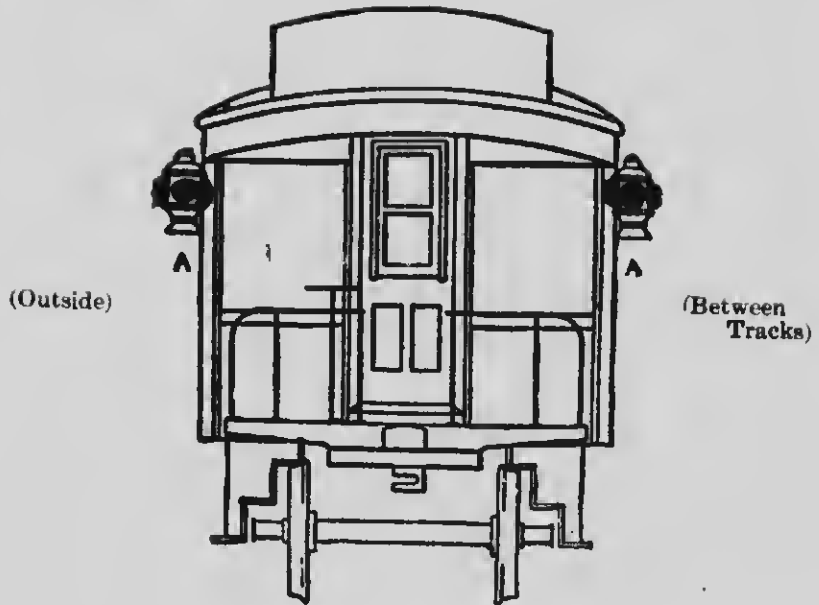
See Rule 24.



Freight cars being pushed by an engine by night.

White light on front of leading car.

See Rule 24.



Rear of train by night running against the current of traffic.

Lights at A A, as per Rule D 19.

GENERAL REGULATIONS

250. When a person is discharged from one department of the Company's service, he will not be employed in another department without the consent of the officer who dismissed him, or that of the head of the department to which he belonged.

251. No employe (whatever may be his rank) will be allowed to be absent from duty without permission from the proper officer of his department.

252. Any employe subjecting the Company a second time to the service of a "saisie-arrêt" or garnishee order on his pay will be liable to immediate dismissal, and will be held responsible for all expense incurred by the Company in connection therewith.

253. Great care must be exercised by all persons when coupling cars, that inasmuch as the coupling apparatus of cars and of engines cannot be uniform in style, size and strength, and is liable to be broken and from various causes to render it dangerous to expose the hands, arms or person of those engaged in coupling between them, all employes are enjoined, before coupling cars or engines, to examine, so as to know the kind and condition of the coupling apparatus, and are prohibited from placing in the trains any car with a defective coupling until they have first reported its condition to the Yard Master or Conductor. Sufficient time is allowed, and may be taken by employes in all cases, to make the examination required.

254. Every employe is required to exercise the utmost caution to avoid injury to himself or to his fellows;

and especially in switching or other movement of trains. Jumping on or off trains or engines in motion, entering between cars in motion to couple or uncouple them and all similar recklessness is forbidden. Train Masters, Yard Masters, Conductors, Station Agents, Foremen and all others in authority are instructed to enforce this Rule, and to punish all violations of it. No person who is careless of others or of himself will be continued in the service of the Company.

255. Every employe is required to keep the property and premises subject to his control in neat and cleanly condition. Disorder and dirt indicate laziness and incompetency. All materials for the use of the Company must be piled in regular order, not nearer than 8 feet to any track, and never within any public highway.

CONDUCTORS, BAGGAGEMEN AND BRAKEMEN

256. Conductors report to and receive their instructions from the Train Master.

257. They must report for duty thirty minutes before leaving time, and when necessary assist in the switching and making up of their trains.

258. If compelled by accident or other cause to move at an unusually slow rate of speed or to stop their train on the main track, they must take immediate action to insure the safety of their own train and trains approaching in either direction. They must constantly keep in mind that **NOTHING WILL JUSTIFY A COLLISION BETWEEN TRAINS, AND THAT THE PROMPT USE OF SIGNALS ACCORDING TO THE RULES WILL PREVENT IT.**

After they have taken every precaution to insure the safety of their own and approaching trains, they will then report to the Train Master from the nearest telegraph station, giving a full and clear understanding of the case, and what assistance is required.

259. In case a train is delayed at a station where there is no Night Operator, Conductor will call the Day Operator to get orders for him.

260. Passenger Conductors at terminal stations must obey the orders of the Station or Yard Master. They must obey the orders of the General Passenger Agent, Auditor and Treasurer in matters pertaining to their respective departments.

261. They must pay particular attention to the heating and ventilating of cars, be respectful and attentive to passengers, and use every endeavor to contribute to their comfort consistent with the Rules and the rights of other passengers. **THEY WILL ALSO SEE THAT TRAINMEN UNDER THEIR CONTROL STRICTLY OBSERVE THIS RULE.**

262. They must see that all unnecessary noise in sleeping cars and coaches and around their train at night, is avoided.

263. They must maintain good order on their trains, and will not permit rudeness or profanity, and must not allow drunken or disorderly persons on their trains, or allow passengers to stand upon the platforms of the cars, nor violate any other rule of the Company. They will exercise care to see that all passengers alight from trains at proper stations before train starts.

264. Freight Conductors at terminal stations must obey the orders of the Yard Master.

265. They must be sure that no cars have become detached from their trains on the main track. When cars are left on a siding they must see that the brakes are properly set to prevent them from being moved. They must leave at telegraph station, with the Agent or Operator, report on form prescribed, giving the number of train, number of cars and time of arrival and departure.

266. They must know that cars put into their train as empties are empty.

267. In doing work at stations, Conductors will carry out the instructions of the Agent in placing cars, etc. If the Agent's orders are unreasonable, they will be obeyed, and the facts may then be reported to the Train Master.

268. In switching at stations and in yards where it is necessary to disturb cars that are being loaded or unloaded, great care must be taken to warn all persons in the vicinity of the same, and opportunity given them to get away from the cars and out of danger before the cars are moved. Where cars are so moved, they must be returned to the same position as found, or placed in an equally convenient place for loading or unloading.

269. Great danger of fire arises from hay in boxes on top of stock cars being left exposed by loaders and shippers. Conductors must not take such cars from any station until they have ascertained, by personal examination, that hay is covered and boxes closed.

270. Train Baggage men report to and receive their instructions from the Train Master. While on trains they are under the direction of the Conductor. They will comply with instructions issued by the General Baggage Agent.

271. They must report for duty at the appointed times; remain in their car while on duty; receive, handle carefully and correctly deliver all baggage, mail pouches, etc., entrusted to their care; attend to the lights and heating apparatus; and see that the communicating signal connections are in good working order through their car.

272. They will permit no one to ride in their car except those connected with the train or officers of the Road, without permission from competent authority.

273. They must see that baggage and express matter is stowed in cars to give proper distribution of the weight; keep cars clean and contents so arranged as to be convenient for proper handling and delivery, and remain in their cars at the end of a trip until all baggage and other matter in charge is delivered, or transferred to a connecting Train Baggage man.

ENGINEERS

274. Engineers in all matters pertaining to the condition or care of their engines will report to and receive their instructions from the Master Mechanic or his proper representatives. In all matters pertaining to the movement of trains, they will be subject to the orders of the Superintendent, Assistant Superintendent or Train Master.

275. They must report for duty at least thirty minutes before the time for starting, and see that their engines are

in good working order, supplied with the necessary stores and tools, fuel and water, and when necessary, assist in the switching and making up of their trains.

276. They must obey the orders of the Station Master or Yard Master in regard to switching and making up of trains. They must obey the orders of the Conductor of the train in regard to starting, stopping, switching cars, speed and general management of the train, unless they endanger the safety of the train or require violation of the Rules.

277. They will not permit any persons to ride on their engines without authority from the proper official, except the Fireman, Road Foreman of Engines, Train Masters, Road Masters, Bridge and Section Foreman on their respective divisions, and Conductors and Brakemen in the discharge of their duty.

278. They must obey all signals given, even if they think such signals are unnecessary. When in doubt as to the meaning of a signal, they must stop and ascertain the cause, and if a wrong signal is shown they must report the fact to their Conductor.

279. They must start and stop their trains cautiously, and use special care in coupling and switching cars, to avoid injury to Trainmen or disturbing passengers. The whistle must not be sounded while passing a passenger train, except in case of emergency or danger, or when required by the Rules.

280. Engineers on passenger and freight trains leaving a terminal, or at any point where the make-up of their train has been changed, must, after starting, but before

running one thousand (1,000) feet, apply the air brake sufficiently to know that it is in good working order.

281. They must use every precaution against fire, and must not permit sticks of wood, burning waste or hot cinders to be thrown from the engine. They must not clean ash pans on interlockers, frogs, switches or cattle guards, and must also see that the dampers of their ash pans are closed when crossing bridges, trestles, or other wooden structures.

282. They must not leave their engines during the trip except in case of necessity, and then the Fireman or some competent person must be left in charge of same.

283. Engineers of work or other engines, located at isolated stations, must in all cases obtain permission of the Superintendent or Train Master before absenting themselves, as they are liable to be called upon at unusual hours.

284. They must report condition of their engines to the Master Mechanic or Engine House Foreman at the end of each trip and will assist when called upon to make repairs when necessary.

STATION AGENTS

285. Station Agents are under the direction of the Superintendent or Train Master. They will comply with instructions issued by the Passenger, Freight and Accounting Departments, and by all general officers in matters connected with their official duties.

286. They are required to make themselves familiar with all Rules of the Company, particularly those which

may in any way relate to their duties, and the Company's business affairs must not be divulged, except to the proper officers. All proper information, however, must be cheerfully given to the public.

287. They will have charge of the Company's books, papers, buildings, sidings and grounds at their stations, see that all records, tariffs, etc., are properly filed for convenient reference, and will be held responsible for the safety and care of all property intrusted to the Company in the transaction of its business, the courteous behaviour and proper deportment of all employes and the maintenance of good order at their stations. They will daily inspect all buildings, grounds, outhouses, etc., under their charge, and see that they are kept clean, tidy and in proper condition for use.

288. They must regulate the places where hacks, omnibuses and other vehicles shall be allowed to stand, and where drivers thereof, and persons representing hotels or other persons not in the employ of the Company, shall remain while on the Company's premises; and any person not conforming to such regulations must be removed.

289. All loiterers, or disorderly and riotous persons interfering with the comfort or convenience of passengers or with the employes of the Company in the performance of their duties, and all unauthorized persons who may offer for sale on the Company's premises, tickets, goods, or merchandise of any description, must be removed.

290. Agents must practice and enforce economy in the use of supplies; be prompt in making all required reports, remittances or other returns, and in answering correspon-

dence, tracers and telegrams. In furnishing copies of any papers on request from a proper official, such copies must be plainly marked "Copy" or "Duplicate."

The use of pencil on business documents or papers is strictly forbidden. Pen and ink must be used.

291. They must see that the freight and passenger tariffs, time-tables and all notices to passengers are neatly posted in conspicuous places in their station. The posting of other advertising matter on the Company's premises is prohibited, except when specially authorized by proper authority; and such matter must be put up only at places designated for the purpose.

292. They will not absent themselves from duty or leave their stations in charge of others without special permission from the Superintendent or Train Master. They are required to know that Operators are at their posts at the proper time, conduct themselves becomingly, attend to their duties, and that they keep at hand the necessary signals in order and ready for use.

293. They must have their ticket offices open at least thirty minutes before the leaving time of any passenger train, or freight train permitted to carry passengers, and keep them open until the departure of such trains, and they should make every proper effort to prevent passengers getting on the trains without tickets.

294. They must not sell tickets to points at which trains do not stop; nor for extra trains without instructions to do so, nor to persons who are not in a condition to take care of themselves (unless accompanied by a proper person), or whose conduct might endanger their own lives or jeopardize the safety or protection of other passengers on the train.

295. They must take pains to give passengers all the information they can as to route, changes of cars and time of trains; and should keep themselves fully informed upon these matters.

296. They will, except where Yard Masters are employed, be held responsible for the proper position and security of switches and safety appliances at their stations, and must PERSONALLY KNOW that all switches are set and locked on the main track at least ten minutes before any regular train is due, and before leaving their stations at night. This is not intended to relieve Conductors and others from the care of switches they may use. Agents must know that their tracks are clear and unobstructed, and stop approaching trains unless all is right.

297. They must know that all cars standing on the side tracks have their doors closed and fastened except while loading or unloading, that they are entirely out of the way of passing trains, and in no case without the brakes being properly applied. If the brakes are out of order the wheels must be blocked.

298. They must see that the doors and windows of all loaded cars are closed, securely fastened and sealed before being placed in trains, and, when loaded with powder, hay or like combustible articles, batten doors and windows as protection against fire. It is their duty to report to the Superintendent and Train Master any neglect, carelessness or wilful disregard of orders on the part of employes or others that may come to their knowledge, when such act is calculated to endanger the safety of the road or trains.

299. They will give Conductors directions for the placing of cars, and will see that cars placed for loading

are in proper position and condition to receive freight. Care must be taken as far as possible to furnish cars of sufficient capacity to carry the freight offered for shipment, without exceeding their marked capacity. Cars must not be loaded beyond ten per cent. in excess of their marked capacity, and when cases do occur where shippers load, or connecting lines deliver, cars in excess of this standard, such cars must not be put in trains without a special order from the Superintendent or Train Master, to whom such cases must be reported by wire at once, and when practicable to obtain a report of Car Repairer's examination of the condition of such cars, it must go with the Agent's report, or as soon thereafter as practicable to obtain it.

300. They must handle freight promptly, and prevent undue detention of cars at their stations.

301. When a car is left at any station short of its destination on account of defects, notice must be sent to the Superintendent or Train Master at once by wire, giving car number, contents, destination and nature of defect.

302. When possible, regular way bills must accompany cars. When forwarded by passenger train, they must be sent by registered baggage package. Agents making way bills for cars that are to be stopped off in transit to unload a part of contents, or to finish loading, or for cars that are loaded with corn to be shelled, or grain to be cleaned, will enclose them in envelopes, placing bills for only one car in each envelope.

303. They will be responsible for the proper checking of all freight forwarded or received.

304. Oils, naphtha, benzole, gasoline and tar, in barrels, will not be loaded in box cars. Stock cars must be used for this purpose and thoroughly cleaned of all litter before loading. Such freight must not be loaded or unloaded through a freight house except in day time. A particular place should be designated for it, and other property liable to injury by contact with it must, under no circumstances, be piled in or on that particular place. Lights must in no case be allowed near the packages, either in or outside of cars. Empty oil barrels (old) should be loaded in stock cars when such cars are available.

305. In shipping grain, coal, coke, ore and other freight that would naturally come in contact with the outer door, and thus be in danger of loss, the grain doors must be turned down. If, in the discretion of the forwarding Agents, this is not necessary, the doors must be carefully thrown back out of the way, and not used. When cars are used for merchandise, grain doors must be put up out of the way, that they may not interfere with loading or unloading.

306. Agents must prevent the unnecessary and injurious practice of cleating the doors of cars, which are provided with proper fastenings to keep them closed securely when desired, and nothing else is needed for the purpose. They will also see that no advertising matter of any kind, either posters or boards, is allowed to be placed on freight equipment, except by special permission from the Superintendent.

307. Agents will be charged personally with the care of temporary grain doors and grain door boards received in cars, empty or loaded, if the load is taken out at their

station, as well as grain doors and boards received from the supply department on requisition. These must be stored in the freight house for safe keeping. Temporary grain doors and boards must be taken out as soon as the car arrives or is unloaded, and accounted for to the Superintendent at the end of each month. At stations where grain is unloaded into elevators or transferred, surplus grain doors and boards should be reported to and held for orders from the Superintendent.

308. Agents must see that stock yards are always in good condition for use, and that the gates of pens and chutes are kept closed and fastened securely when not in use. Company stock yards must not be used as feeding or storing pens.

309. Stock car bedding must not be thrown out of cars between tracks at station. When cleaning cars they should be unloaded on the outside of the station tracks.

310. Great danger of fire arises from hay in boxes on top of palace stock cars being left exposed by loaders and shippers. Agents loading such cars must see to it personally that hay is packed in boxes and covers made fast before billing.

311. All orders for sealing material must be sent to the Superintendent two months in advance, as the seals are manufactured to order and no supply kept on hand. Six months' supply should be ordered at a time.

TELEGRAPH EMPLOYEES

312. The management of the telegraph lines and all other electrical business of this Company will be in the hands of the Superintendent of Telegraph, subject to the orders of the General Manager or General Transportation Manager.

CHIEF TRAIN DISPATCHERS

313. Chief Train Dispatchers will be appointed by the Superintendent.

They will be responsible for the proper working of the wires, the prompt transmission of messages, and the economical use of supplies; will have immediate charge of the Operators and joint employes of the telegraph and other departments so far as their telegraphic duties are concerned; and in all matters relating to the telegraph department, will see that the Rules are understood and observed by the employes under their control.

314. They will see that Operators are provided with the necessary supplies for the proper operation of the telegraph department, arrange the regular and extra office hours for Operators, and will have immediate charge of the Linemen upon their divisions and direct them in regard to making temporary repairs. In case of accident, they will see that telegraph communication is opened at the most suitable point at the earliest moment possible.

315. They will test the wires upon their divisions, and see that a competent person performs this duty in their absence, except where by agreement the wire testing is performed by authorized parties at the commercial office of the Telegraph Companies.

OPERATORS

316. Telegraph Operators on each District will be under the immediate charge of the Chief Dispatcher, and will respect the authority of Station Agent.

317. The first duty of an Operator is to make himself thoroughly familiar with the Rules, and obey them.

318. Operators having other duties in connection with the telegraph must attend to those of the telegraph first

319. They will use great care in adjusting, especially in damp weather, never opening the key until positive that the wire is not being used. Ground wires must never be used except to notify terminal, testing or dispatching offices that the wire is in trouble, or by request of the Train Dispatcher in charge. After reporting trouble, remove the ground wire at once unless otherwise ordered.

320. In addition to the office call, Operators will sign their own private signal in sending or receiving telegrams, and such letters, with time of sending, must be shown upon each telegram. Each telegram received must show on its face the office call from which it was sent, the time received, and the signal of sending and receiving Operators.

321. Telegrams addressed to officials must be put in an envelope, sealed and properly addressed in each and every case. The contents of all telegrams must be held as confidential.

322. None but officers of the Company and employes of the office are to be allowed within it. Students will not be allowed in offices without written permission from the Superintendent, and they must not be allowed to practice upon the main wires, answer calls, or transact business until authorized to do so by the Chief Dispatcher.

323. The greatest care must be exercised in sending or receiving orders regarding the movement of trains by telegraph.

324. Operators are required to keep a record of the time trains pass their stations, inform themselves in regard to approaching trains, and be prepared to furnish information promptly to such persons as should receive it.

325. Telegrams should be brief, and addressed and signed with full names, except that, when limited to one division, initials may be used. Railroad business must be received upon railroad blanks.

326. Operators will refer to the Superintendent of Telegraph (after sending) telegrams that in their opinion should have been sent by train mail as per blank 104. When corrections of way bills or other errors are made by telegraph, a copy of the original telegram shall be sent by the originating office of the Superintendent of Telegraph.

327. Operators must read all messages carefully before sending to prevent delay in sending. No message will be transmitted from dictation or otherwise than from legible copy. When difficult words occur in messages, transmission must be slow and distinct.

328. All messages must be delivered as promptly as possible. When answers to messages cannot be obtained, the sending office should be promptly notified of the reason.

329. In case of fog or severe storms liable to affect the movement of trains, track or bridges, the Chief Dispatcher must be promptly notified, that he may take precautions for the safety of trains.

330. Verbal messages regarding the safety of trains, tracks or bridges must not be sent when possible to avoid it. Communications of this character must be made in writing to avoid mistakes.

331. In case of accident upon the road, Operators will see that no information or account of the same is given to any but those connected with the management, and they will neither ask nor answer questions by wire or otherwise, except from or to Train Dispatchers or other officers of the Company, nor converse about the accident in any way.

332. Contention for circuit, and profane or obscene language upon the wires is forbidden. When the circuit is broken by any proper signal it must be done at the end of a message and the sending office allowed to receive its "O.K." before the circuit is broken.

333. Operators should never refuse to take the business offered by another office. They should explain that it may suffer delay, etc., if such be the case, but take it, send it as far towards its destination as possible, and refer the matter to the Superintendent of Telegraph by letter.

334. When there is but one Operator in an office, he must not leave the office for any length of time, nor close up for the night without permission from the Train Dispatcher.

Where there are both Day and Night Operators, the office must not be left without an Operator, except by like permission. Sundays and holidays not excepted. They are not permitted to exchange places with each other, or to leave their office in charge of substitutes, without permission from the Chief Dispatcher. When permitted to do so they must make the substitute fully acquainted with the business of their office and all the duties before leaving.

335. Upon being relieved, they will take a receipt (in a book provided for that purpose) from the relieving

Operator for all important business. Unless absolutely necessary, no arrangements will be allowed between a Day and Night Operator by which either will be required to be on duty longer than twelve consecutive hours.

336. Each telegram that is delayed must be noted on its margin or back with the cause of delay, and a similar notation made every fifteen minutes until it is forwarded. When the delay is prolonged, a copy of the telegram should be referred to the Chief Dispatcher.

337. Operators must notify Agents and Night Watchmen where they reside or may be found if needed, and post in their offices the addresses of all Section or Bridge Foremen whose sections end at or near their stations, that time may not be wasted in calling them in case of emergency.

338. Operators must keep their tables and instruments clean, must know that all connections, binding posts, screws, etc., are firmly connected, and that wires or crossings over buildings, etc., about their stations are clear and safe.

339. The local battery must be kept clean and in good working order. The liquid should always cover the zinc, the loss by evaporation being replaced with clean water. A portion of the solution must be dipped off occasionally and replaced with water. The blue solution should always cover the copper, but never reach the zinc. It is much easier to keep a local battery in good order if the vitriol is supplied in small quantities as it is consumed. As a deposit of copper is constantly forming, the accumulation should be removed when necessary.

340. Operators will send to the stationed Linemen each month any old zinc or copper they may have on hand.

341. All instruments necessary for the transaction of the Company's business, at each office, will be furnished by the company, and no other instrument will be allowed therein; and no private lines shall connect with the office of the Company without permission from the Superintendent of Telegraph.

342. No change in poles, connections with main wires, or changes in instruments or office connections will be allowed without special instructions from the Superintendent of Telegraph.

343. Correct time will be sent daily at 11 o'clock A.M., Eastern Time; all business will be suspended on the time circuits and connections made with the McGill Observatory clock at Montreal for two minutes. This signal clock will break the circuit once every second, except the 50th second, when line will remain open for ten seconds, the signals again being transmitted from 10.59 to 10.59 and 50 seconds, when there will be another pause of 10 seconds, the line closing at 11 o'clock A.M.

Operators will note and record each day the variation in the time of Standard clocks and report any variation of thirty seconds in the time immediately to the Chief Train Dispatcher.

344. The following signals will be honored on any circuit, and preference given:—

9. Signal for train orders.

93. President's, Vice-President's, General Manager's, General Transportation Manager's business.
(To be used only by his authority.)

94. Superintendent's business. (To be used only by his authority.)

ORDINARY SIGNALS

1. Wait a minute.
4. Where shall I go ahead?
5. Have you anything for me?
10. Keep your key closed. (To be used by Chief Dispatcher or testing Operators only.)
12. How do you understand?
13. I (or we) understand.
18. What is the trouble?
21. Deliver immediately and get answer.
23. Telegram for all offices. All attend and take this telegram.
25. Busy on other wires.
44. Answer quick.
77. Telegram for you.
134. Who is at the key?

345. The printed instructions upon the telegraph forms of this Company constitute Rules, and should be obeyed the same as though they were contained in the foregoing.

BRIDGE AND SECTION FOREMEN

346. Bridge and Section Foremen will receive instructions from the heads of their respective departments.

347. They must carefully observe the signals displayed by trains and be sure that all schedules trains have passed before obstructing the track. They must never obstruct the main track in any way whatever, without first conspicuously displaying all danger signals in accordance with the Rules.

348. They will, in cases of unusually severe rain or wind storms that are liable to affect the safety of the road, pass over their sections ahead of trains, and KNOW that the track, bridges and culverts are in safe condition, and report to the Superintendent and Train Master. When necessary the entire force should be detailed to watch the road.

349. They must remove all combustible material from the vicinity of the tracks, bridges and buildings, and promptly extinguish any fires that may occur along the road.

350. They must observe the condition of the telegraph lines, and when wires are found crossed or broken or laying on the ground, make temporary repairs, and report to the Superintendent and Train Master from the first telegraph office as to instructions.

