

UNION PACIFIC RAILROAD COMPANY

RULES AND REGULATIONS
OF THE
TRANSPORTATION DEPARTMENT.

REVISED EDITION AUGUST 1st 1907.

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. Employes whose duties are prescribed by these rules must provide themselves with a copy.

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.

DEFINITIONS.

ENGINE.—A locomotive propelled by any form of energy.

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 schedule displaying signals or for which signals are displayed.

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

Extra—For any extra train, except work extra;

Work Extra—For work train extra.

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 give precedence by time-table.

TRAIN OF SUPERIOR DIRECTION.—A train given precedence in the direction specified in the time-table as between trains of the same class.

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.

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.

SUBDIVISION—DISTRICT.—A part of a division so designated on the 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.

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 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.

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

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

YARD.—A system of tracks within defined limits 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 regulations.

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

PILOT.—A person assigned to a train when the engineman 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.

UNDER CONTROL.—To be able to stop within the distance track is seen to be clear.

STANDARD TIME.

1. Standard time obtained from official observatory will be telegraphed daily to all points from designated offices at 12 o'clock, noon, at Naval Observatory, Washington, D. C.

2. Watches that have been examined and certified to by a designated inspector must be used by conductors, enginemen, flagmen, brakemen, firemen, yardmasters, engine foremen, agents, operators, section and bridge foremen and such other employes as may be designated by rule or special instructions. The certificate in prescribed form must be renewed and filed with Superintendent every three months.

(Form of Certificate.)

CERTIFICATE OF WATCH INSPECTOR.

This is to certify that on.....19.....
the watch of.....
employed as.....
on the.....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 and enginemen 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.

TIME-TABLES.

4. Each time-table, from the moment it takes effect, supersedes the preceding time-table, and its schedules take effect on any division (or sub-division) at the leaving time at their initial stations on such division (or sub-division). But when a schedule of the preceding time-table corresponds in number, class, day of leaving, direction, and initial and terminal stations with a schedule of the new time-table, a train authorized by the preceding time-table will retain its train orders and assume the schedule of the corresponding number of the new time-table.

Schedules on each division (or sub-division) date from their initial stations on such division (or sub-division).

Not more than one schedule of the same number and day shall be in effect on any division (or sub-division).

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 the 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 signal, 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 end of the siding 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 a heavy dash under figures, thus; 5:45.

D-5. When there are one or more trains to pass a train between two times, attention is called to it by a heavy dash under figures, thus: 5:45.

6. The following signs when placed before the figures of the schedule indicate:

- “s” —regular stop;
- “f” —flag stop to receive or discharge passengers or freight;
- “M” —stop for meals;
- “L” —leave;
- “A” —arrive.

6 (A). The following signs when placed at left of station name indicate:

“DN”—day and night telegraph office;

“D”—day telegraph office;

“N”—night telegraph office;

“R”—register.

The following signs when placed at left of page indicate:

“W”—water station;

“F”—fuel station;

“I”—interlocking plant;

“T”—turn-table;

“Y”—wye;

“O”—track scales;

“P”—telephone;

Bracket opening to the right—block signals;

Bracket opening to the left—double track.

SIGNAL RULES.

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 must 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.

D-11. When a red signal is displayed on double track and no person is attending the signal, train should move under flag protection until clear signal is seen in advance.

11 (A). Fusees must not be placed on bridges, roadway crossings, sign boards, in center of track, or at places where fire can be communicated to structures or cars.

12. HAND, FLAG AND LAMP SIGNALS.

MANNER OF USING.	INDICATION.
(a) Swung across the track.	<p>} <i>Stop.</i></p> 
(b) Raised and lowered vertically.	<p>} <i>Proceed.</i></p> 
(c) Swung vertically in a circle at half arm's length across the track when the train is standing.	<p>} <i>Back.</i></p> 
(d) Swung vertically in a circle at arm's length across the track, when the train is running.	<p>} <i>Train has parted</i></p> 

MANNER OF USING	INDICATION
(e) Swung horizontally above the head when the train is standing.	<p>} <i>Apply air brakes.</i></p> 
(f) Held at arm's length above the head, when the train is standing.	<p>} <i>Release air brakes.</i></p> 

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.
(c) — o o o	Flagman go back and protect rear of train.
(c-a) o o o —	Flagman go ahead when head right expires or trains are stopped at automatic block signals on single track.
(d) — — — —	Flagman return from west.
(e) — — — — —	Flagman return from east.
(f) — — — —	When running, train parted; to be repeated until answered by the signal prescribed by Rule 12
(g) o o	(d) Answer to 12 (d) Answer to any signal not otherwise provided for.

SOUND.	INDICATION.
(h) o o o	When train is standing, back. Answer to 12 (c) and 16(c). When train is running, answer to 16(d).
(j) o o o o	Call for signals.
(k) — o o	To call the attention of yard engines, extra trains or trains of the same or inferior class or inferior right to signals displayed for a following section.
(l) — — o o	Approaching public crossings at grade.
(m) — — —	Approaching stations, junctions, railroad crossings at grade, and mail cranes located between stations.
(n) o o o o o	Air brake sticking.
(o) o o —	Transfer of air.
(p) o o o o	Second engineman to assist in recharging the air.
D-14. (k) — o o	To call the attention of yard engines or of trains moving in the same direction to signals displayed for a following section.

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

14 (A). Should a train fail to answer whistle signals as provided in 14 (k) and D-14 (k), the train displaying the signals will stop at once and personally notify them, and will report all such failures.

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

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 the train.
(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.

Note—When a passenger train approaches a station at which it is to stop for an opposing train, the conductor must give one short blast of the air whistle immediately after passing the station whistling post, which the engineman must acknowledge by two short blasts of the steam whistle.

TRAIN SIGNALS.

17. The headlight will be displayed to the front of every train by night, but must be con-

cealed when a train turns out to meet another and has stopped clear of main track, or is standing to meet trains at the end of double track or at junctions.

D-17. The headlight will be displayed to the front of every train by night, but must be concealed when a train is standing to meet trains at the end of double track or at junctions.

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.

19. Lamps will be displayed one on each side of the rear of every train as markers to indicate the rear of the train; by day, unlighted, showing green lenses to the front and side and red lenses to the rear; by night, lighted, showing green lights to the front and side and red lights to the rear; except when train is clear of the main track, when by night green lights must be displayed to the front, side and rear.

D-19. Lamps will be displayed one on each side of the rear of every train as markers to indicate the rear of the train; by day, unlighted, showing green lenses to the front and side and red lenses to the rear; by night, lighted, showing green lights to the front and side and red lights to the rear; except when the train is clear of the main track, when by night green lights must be displayed to the front, side and rear, and except when a train is turned out against the current of traffic, when by night green lights must be displayed to the front and side, and to the rear a green light toward the inside and a red light to the opposite side.

19 (A). By night freight trains will in addition display a light in cupola of the caboose, showing green to the front and red to the rear.

except when a freight train is clear of the main track when green light must be displayed to the rear.

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.

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.

22. When two or more engines are coupled, the leading engine only shall display the signals as prescribed by Rules 20 and 21, except that helping engines will duplicate signals of the engine they doublehead. Whistle signals will be sounded by the leading engine.

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.

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

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 Superintendent.

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.

31. The engine bell must be rung on approaching every station, public road crossing at grade, tunnels and snow sheds, and until they are passed; and the whistle must be sounded at all whistling posts.

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

33. Watchmen stationed at public road and street crossings must use red signals only when necessary to stop trains.

SUPERIORITY OF TRAINS.

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.

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.

72. Trains of the first class are superior to those of the second; trains of the second class are superior to those of the third; and so on.

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

D-72. Trains of the first class are superior to those of the second; trains of the second class are superior to those of the third; and so on.

73. Extra trains are inferior to regular trains.

MOVEMENT OF TRAINS.

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. A train must not leave its initial station on any division (or 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.

83 (A). A train must not leave its initial station on any subdivision without a clearance card (Form No. 2643).

83 (B). Train registers will be provided at stations designated on the time-table. The information called for must be properly inscribed thereon by those acting in the capacity of conductor, unless relieved of such duty by rule or train order, in which case registering tickets, Form 2642, may be accepted by operator, who will personally certify to the registering. Enginemen, before leaving register stations, except the initial point of their run, will require from the conductor a memorandum on prescribed form showing the numbers of all superior trains, and stating he has checked the register and that they have all arrived or departed, as the case may be.

D-83. A train must not leave its initial station on any division (or subdivision), or a junction, until it has been ascertained whether all superior trains due have left.

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

84 (A). On freight trains approaching sidings, conductors, if everything is all right, will signal enginemen to proceed. This will be answered by 14 (g).

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.

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.

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

D-86. An inferior train must clear the time of a superior train not less than ten minutes; but must be clear at the time a first class train in the same direction is due to leave the next station in the rear where time is shown. Extra trains must clear the time of regular trains ten minutes unless otherwise provided.

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 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 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 ten minutes apart, except in closing up at stations.

91 (A). Trains must approach all stations where the view is obscured (not included in block signal limits—see Rule 302) at a rate of speed that will enable them to stop should an emergency arise.

Responsibility for collision rests with the following train, but this does not relieve the leading train from protecting itself.

D-91. Unless some form of block signals is used trains must keep at least ten minutes apart, except in closing up at stations.

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.

93. Within yard limits the main track may be used, protecting against first class trains.

All trains and engines must move within yard limits prepared to stop, unless the main track is seen or known to be clear.

D-93. Within yard limits the main tracks may be used, protecting against first class trains.

All trains and engines must move within yard limits prepared to stop, unless the main track is seen or known to be clear.

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 Superintendent. 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. 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.

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 superintendent. The disabled train will assume the 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.

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 orders from the train dispatcher.

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 orders from the train dispatcher.

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 flag-man left there for that purpose, to notify all opposing trains leaving such point, that the section for which signals were displayed has not arrived.

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

D-97. Extra trains must not be run without orders from the train dispatcher.

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

98. Trains must approach the end of double track, junctions, railroad crossings at grade, and drawbridges, prepared to stop, unless the switches and signals are right and the track is clear. Where required by law, trains must stop.

99. When a train stops or is delayed under circumstances in which it may be overtaken by another train the flagman must go back immediately with stop signals a sufficient distance to insure full protection. One-fourth of a mile from the rear of the train he will place one torpedo on the rail, continuing back one-half mile from the rear of his train, he will place two torpedoes on the rail, two rail lengths apart. He may then return to the single torpedo where he must remain until relieved by another flagman or is recalled by the whistle of his engine. When recalled, if he does not see or hear an approaching train, the single torpedo will be removed (and not before), if conditions warrant, a red fusee will be displayed to protect his train while returning.

During foggy or stormy weather, in the vicinity of obscure curves or descending grades, or if other conditions require it, the flagman will increase the distance.

Should a train be seen or heard approaching before flagman has reached the required distance, he must, at once place one torpedo on the rail, and, if by night or during foggy or stormy weather, display a red fusee, continuing in the direction of the approaching train.

If the flagman is recalled before reaching the required distance he will, if necessary, place two torpedoes on the rail two rail lengths apart by day, and by night display a red fusee in addition, to protect his train while returning.

When a train is flagged, the engineman must obtain a thorough explanation of the cause, stopping if necessary.

The front of a train must be protected in the same manner when necessary.

Conductors are responsible for the full protection of their trains in both directions and under all conditions.

100. When the flagman goes back to protect the rear of his train, the conductor must, in the case of passenger trains, and the next brakeman, or the conductor, in the case of other trains, take the flagman's place on the train.

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.

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

D-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.

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

The engineman and trainmen of 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) a flagman must take a conspicuous position on the front of the leading car.

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

104. Switches must be left in proper position after having been used. Conductors are responsible for the position of the switches used by them and their trainmen, except where switchtenders are stationed.

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

104 (A). All main line switches and those required by rule and special instructions to be locked must be left in that condition. If a lock is defective, the employe last using must supply one or report the absence to the Superintendent.

104 (B). If a rigid split switch is run through it is thereafter unsafe and must be protected.

If an engine or a car is run partially through a split switch, the entire movement must be continued; to reverse would result in derailment.

Split switches damaged in this way must be spiked unless the section foreman is on hand and takes charge. Such occurrences must be reported to the Superintendent by telegraph.

104. (C). Trainmen and other employes must not unlock main track switches nor stand within twenty feet of such switches until trains to

be met or passed, or all of the trains for which switch was opened have cleared the entire switch. If practicable, they will take position on the opposite side of the track from switch stand while trains are passing.

Neither switch to a cross-over between main tracks must be unlocked during the passage of a train on either track.

104 (D). Enginemen must know that switches are properly set before they pull in or out of sidings or other tracks. When a train backs in on a siding to be met or passed by another train, the engineman, when his engine is clear, must see that the switch is properly set for the main track. This does not relieve the trainmen from responsibility as to the proper position of the switch.

104 (E). Flying switches will only be made when absolutely necessary, in which case train must be brought to a stop before movement is commenced.

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

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

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 not pass on either side of a train which is receiving or discharging passengers, mail or express at a station.

RULES FOR MOVEMENT BY TRAIN ORDERS.

201. For movements not provided for by time-table, train orders will be issued by authority and over the signature of the train dispatcher. 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.

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. 1 at midnight.

204. Train orders must be addressed to those who are to execute them, naming the place at which each is to receive his copy. Those for a train must be addressed to the conductor and engineman, and also to any one who acts as its pilot. A copy for each person addressed must be supplied by the operator.

Orders addressed to operators restricting the movement of trains must be respected by conductors and enginemen the same as if addressed to them.

205. Each train order must be written in full in a book provided for the purpose at the office of the Chief 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 office 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 engine numbers, as "No. 10 Eng. 1832" or "Second No. 10 Eng. 1833." Extra trains will be designated by engine numbers, and the direction as "Extra 798 'East' or 'West'." Other numbers and time will be stated in words and 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 superior train.

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.

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.

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, repeating same back to dispatcher and receiving his "OK."

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.

Those to whom the order is addressed, except enginemen, must then sign it, and the operator will send their signatures preceded by the number of the order to the train dispatcher. The response "complete," and the time, with his initials, will then be given by the train dispatcher. Each operator receiving this response will then write on each copy the word "complete," the time, and his last name in full, and then deliver a copy to each person addressed, except enginemen. The copy for each engineman must be delivered to him personally by conductor.

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 an operator, the response "complete," and the time, with his initials, 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 engineman will take the operator from the immediate vicinity of his office, the engineman's copy will be delivered by conductor.

NOTE—A "19" train order must not be sent to a train, the superiority of which is thereby restricted.

212. A train order may, when so directed by the train dispatcher, be acknowledged without repeating, by the operator responding: "X (Number of Train Order) to (Train Number)," with the operator's initials and 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.

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 fails 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

"C. and E.——(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 engineman 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 engineman to the train dispatcher.

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

For orders which are 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 engineman of the superior train have been sent to the train dispatcher.

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.

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 engineman 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.

221. A fixed signal must be used at each train order office, which shall indicate "stop" when there is an operator on duty, except when changed to "proceed" to allow a train to pass for which there are no orders. A train must not pass the signal while "stop" is indicated. The signal must be returned to "stop" as soon as a train has passed. It must be fastened at "proceed" only when no operator is on duty.

Trainmen and enginemen will be governed by the position of the train order signal at telegraph stations during all hours of the day and night. When any station train order signal is fastened at "proceed" position in both directions by day, and in addition the light shows "proceed" by night, it indicates that no operator is on duty, and the trainmen and enginemen will be governed accordingly.

Operators must have the proper appliances for hand signaling 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.

Where the semaphore is used, the arm indicates "stop" when horizontal and "proceed" when in an inclined position.

221 (A). Clearance Card (Form 2643) will be issued to all trains stopped by train order signal, and will show numbers of orders, if any, for that train.

Enginemen in approaching a telegraph station, after whistling for station, if signal can be seen, will sound four short blasts of the whistle (14j) for "proceed" signal, and will acknowledge receipt of same by two short blasts of the whistle (14g), and proceed, unless required to stop for other purposes. If "proceed" is not received, train must come to a stop and not proceed without a clearance card. If signal is at "proceed" when engineman comes in sight of it, he will not whistle for "proceed" but must stop and get a clearance.

Trainmen and enginemen will be governed by the position of the train order signal at telegraph stations during all hours of the day and night. When any station train order signal is fastened at "proceed" position in both directions by day, and in addition the light shows "proceed" by night, it indicates that no operator is on duty, and the trainmen and enginemen will be governed accordingly.

Operators in changing position of the train order signal from "stop" to "proceed," should do so only when the movement can be seen by the engineman. If engineman fails to see the movement of arm or light, he must stop and not proceed until after receiving a clearance card. He must always instantly acknowledge the change in signal to "proceed" by two short blasts of the whistle (14g).

Unless some form of block signals is used operators must space trains ten minutes apart, using the train order signal for that purpose. They must show on clearance card time train will be allowed to depart.

Conductors and enginemen must respect time marked in clearance card and follow preceding train as per Rule 91.

222. Operators will promptly record and report to the train dispatcher the time of departure of all trains and the direction of extra trains. They will record the time of arrival of trains and report it when so directed.

222-A. Operators in relieving each other must make transfer of outstanding train orders, all overdue trains and undelivered messages on prescribed form (No. 2954).

223. The following signs and abbreviations may be used:

Initials for signature of the train dispatcher. Such office and other signals as are arranged by the Superintendent.

C & E—for Conductor and Engineman.

X—Train will be held until order is made "complete."

Com—for Complete.

O S—Train Report.

No—for Number.

Eng—for Engine.

Sec—for Section.

Psgr—for Passenger.

Frt—for Freight.

Mins—for Minutes.

Jet—for Junction.

Dispr—for Train Dispatcher.

Opr—for Operator.

31 or 19—to clear the line for Train Orders, and for Operators to ask for Train Orders.

S D—for "Stop Displayed."

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

FORMS OF TRAIN ORDERS.

Form A. Fixing Meeting Points for Opposing Trains.

EXAMPLES.

- (1.) *No 1 Eng 1 meet No 2 Eng 2 at "B."*
No 3 Eng 3 meet Second No 4 Eng 5 at "B."
No 5 Eng 6 meet Extra 95 east at "B."
Extra 200 east meet Extra 201 west at "B."
- (2.) *No 2 Eng 7 and Second No 4 Eng 8 meet*
Nos 1 Eng 9 and 3 Eng 10 at "C" and
Extra 95 west at "D."
No 1 Eng 9 meet No 2 Eng 2 at "B" Second
No 4 Eng 5 at "C" and Extra 95 east
at "D."

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.

Form B. Directing a Train to Pass or Run Ahead of Another Train.

EXAMPLES.

- (1.) *No 1 Eng 1 pass No 3 Eng 3 at "K."*
- (2.) *Extra 203 east run ahead of No 6 Eng 10*
"M" to "B."
- (3.) *No 1 Eng 1 pass No 3 Eng 2 at "K" and*
run ahead of No 7 Eng 3 "M" to "Z."

When under (1) a train is to pass another both trains will run according to rule to the designated point and there arrange for the rear train to pass promptly.

Under (2), the second-named train must not exceed the speed of the first-named train between the the points designated.

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.

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

EXAMPLES.

- (1.) *No 1 Eng 1 has right over No 2 Eng 2 "G"*
to "X."
- (2.) *Extra 37 east has right over No 3 Eng 3*
"F" to "A."

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.

Under (1), if the second-named train reaches the point 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.

Under (2), 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.

EXAMPLES.

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

(3.) *No 1 Eng 1 wait at "H" until ten 10 a m for No 2 Eng 2.*

(4.) *Nos 1 Eng 1 and 3 Eng 3 wait at "N" until ten 10 a m.
"P" until ten thirty 10 30 a m.
"R" until ten fifty-five 10 55 a m, etc.*

(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 regular schedule time. The time in the order should be such as can be easily added to the schedule time.

Under (3), the train first named must not pass the designated point before the time given, unless the other train has arrived. The train last named is required to run with respect to the time specified, at the designated point 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 first named.

Under (4), the train (or trains) named must not pass the designated points before the times given.

Other trains receiving the order are required to run with respect to the time specified at the designated points 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.

All of these examples may be used in connection with an extra train created by example (3) of Form G and the times at each

point stated in that example have the same meaning as schedule times in the foregoing examples.

Form F. For Sections.

EXAMPLES.

- (1.) *Eng 20 display signals and run as First No 1 "A" to "Z."*
- (2.) *Eng 25 run as Second No 1 "A" to "Z."*
- (3.) *No 1 Eng 1 display signals "A" to "G" for Eng 65. Second No 1 Eng 65 display signals "B" to "E" for Eng 99.*

These examples may be modified as follows:

- (4.) *Engs 20 25 and 99 run as First Second and Third No 1 "A" to "Z."*

Example (1) is to be used when the number of the engine for which signals are displayed is unknown and is to be followed by example (2), both being single order examples.

Under example (2) the engine named will not display signals.

Under (3) and (4) the engine last named will not display 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 (5) Engine 85 will display 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 (6) 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 (7) Engine 85 will drop out at "R" and Engine 18 will run as directed.

If Engine 85 is last section the words "display signals and" will be omitted. Following sections need not be addressed.

To discontinue the display of signals the following examples will be used:

- (8.) *Second No 1 Eng 85 take down signals at "D."*

Under example (8) Second No. 1 will take down signals as directed and a following section must not proceed beyond the point 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 (9) Engine 99 will run ahead of engine 25 "H" to "Z," and if necessary, both engines will arrange signals accordingly. Following sections, if any, need not be addressed.

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 signals accordingly.

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

Form G. Extra Trains.

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 kind of 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.

EXAMPLES.

- (1.) *Eng 292 works seven 7 a m to six 6 p m between "D" and "E."*

Under (1), 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 (eastward) extras.*

(3.) *Not protecting against extras.*

Under (2), the work extra will protect only against (westward) extras. The time of regular trains must be cleared.

Under (3), 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, afterwards, it is desired to have it clear the track for (or protect itself after a certain hour against) a designated extra, 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 (4), 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 Eng 202 (or.....class trains) between "D" and "E."*

Under (5), 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 99. 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 292 has right over all trains between "D" and "E" seven 7 p m to twelve 12 night.*

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

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 99, 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.

Form J. Holding Order.

EXAMPLES.

Hold No 2 Eng 101.

Hold all (or.....ward) 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."

These orders will be addressed to the operator and acknowledged in the usual manner, and will be delivered to conductors and engine-men of all trains affected.

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

Form K. Annulling a Schedule or a Section.

EXAMPLES.

No 1 Eng 1 of Feb 29th is annulled "A" to "Z."

Second No 5 Eng 5 of Feb 29th is annulled "E" to "G."

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

Form L. Annulling an Order.

EXAMPLE.

Order No 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.-----

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

Form M. Annulling Part of an Order.

EXAMPLE.

That part of order No 10 reading No 1 Eng 1 meet No 2 Eng 2 at "S" is annulled.

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

EXAMPLES.

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

An order which has been superseded must not be reissued under its original number.

DOUBLE TRACK FORMS OF TRAIN ORDERS.

D-Form B. Directing a Train to Pass or Run Ahead of Another Train.

EXAMPLES.

- (1.) *No 1 Eng 1 pass No 3 Eng 2 at "K."*
- (2.) *Extra 594 east run ahead of No 6 Eng 5 "M" to "B."*
- (3.) *No 2 Eng 1 pass No 3 Eng 2 at "K" and run ahead of No 7 Eng 3 "M" to "Z."*

When under (1) a train is to pass another both trains will run according to rule to the designated points and there arrange for the rear train to pass promptly.

Under (2), the second-named train must not exceed the speed of the first-named train between the points designated.

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.

D-Form E. Time Orders.

EXAMPLES.

- (1.) *No 1 Eng 1 run twenty 20 mins late "A" to "G."*
- (2.) *No 1 Eng 1 run twenty 20 mins late "A" to "G" and fifteen 15 mins late "G" to "K," etc.*
- (3.) *Nos 1 Eng 1 and 3 Eng 3 wait at "N" until ten 10 a m.
"P" until ten thirty 10 30 a m.
"R" until ten fifty-five 10 55 a m, etc.*

(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 regular schedule time. The time in the order should be such as can be easily added to the schedule time.

Under (3), the train (or trains) named must not pass the designated points before the times given.

Other trains receiving the order are required to run with respect to the time specified at the designated points 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.

All of these examples may be used in connection with an extra train created by example (3) of Form G and the times at each point stated in that example have the same meaning as schedule times in the foregoing examples.

D-Form F. For Sections.

EXAMPLES.

- (1.) *Eng 20 display signals and run as First No 1 "A" to "Z."*
- (2.) *Eng 25 run as Second No 1 "A" to "Z."*
- (3.) *No 1 Eng 20 display signals "A" to "G" for Eng 65. Second No 1 Eng 65 display signals "B" to "E" for Eng 99.*

These examples may be modified as follows:

- (4.) *Engs 20 25 and 99 run as First Second and Third No 1 "A" to "Z."*

Example (1) is to be used when the number of the engine for which signals are displayed is unknown and is to be followed by example (2), both being single order examples.

Under example (2) the engine named will not display signals.

Under examples (3) and (4) the engine last named will not display 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 (5), Engine 85 will display 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.) *Engine 85 is withdrawn as Second No 1 at "H." Following sections change numbers accordingly.*

Under (6), 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 (7), Engine 85 will drop out at "R" and Engine 18 will run as directed.

If Engine 85 is last section the words "display signals and" will be omitted. Following sections need not be addressed.

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

(8.) *Second No 1 Eng 85 take down signals at "D."*

Under example (8) Second No. 1 will take down signals as directed and a following section must not proceed beyond the point named.

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 signals accordingly.

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

D-Form G. Extra Trains.

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.*

This order may be varied by specifying the kind of 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 ten minutes.

D-Form H. Work Extra.

EXAMPLES.

- (1.) *Eng 292 works on eastward track (or both tracks) seven 7 a m to six 6 p m between "D" and "E."*

Under (1), the work extra must, whether standing or moving, protect itself within the working limits against extras moving with the current of traffic on the track or tracks named, as prescribed by Rule 99. The time of regular trains must be cleared.

This form may be modified by adding:

- (2.) *Not protecting against extras.*

Under (2), protection against extra trains 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 may be used:

- (3.) *Work extra 292 protects against No 55 Eng 202 (or.....class trains) between "D" and "E."*

Under (3), the work extra may work upon the time of the train (or trains) mentioned in the order and must protect against such train (or trains) as prescribed by Rule 99.

The regular train (or trains) receiving the order will run expecting to find the work extra protecting itself.

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.

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

(4.) *Work extra.....has right over all trains on.....track between.....and.....m to.....m.*

(4.) *Work extra 275 has right over all trains on eastward and westward tracks between "G" and "H" seven 7 pm 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.

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

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

D-Form M. Annulling Part of an Order.

EXAMPLE.

That part of Order No 10 reading Extra 263 west pass No 1 Eng 1 at "S" is annulled.

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

EXAMPLES.

(1.) *No 1 Eng 1 pass No 3 Eng 2 at "C" instead of "B."*

(2.) *No 1 Eng 1 display signals for Eng 85 "A" to "Z" instead of "G."*

An order which has been superseded must not be reissued under its original number.

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

EXAMPLE.

(1.) *No 1 Eng 1 has right over opposing trains on No 2 (or eastward) track "C" to "F."*

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.

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

An inferior train between the points 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 Eng 5 arrives at "C" No 1 Eng 1 has right over opposing trains on No 2 (or eastward) track "C" to "F."

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

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

EXAMPLE.

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

Adding if desired: *from one 1 p m to three 3 p 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 99.

TELEPHONE INSTRUCTIONS.

250. Where the telephone, instead of the telegraph, is used for the movements of trains, the rules and regulations governing the movement of trains by telegraph will be complied with, and in addition thereto, in every instance, the following will be observed:

251. In transmitting or repeating a train order by telephone, it must be spelled letter by letter, and where figures are used they must be duplicated, naming each figure separately; for example "f-i-f-t-y f-i-v-e" (followed by the words "five" "five"), "s-i-x-t-y f-i-v-e" (followed by the words "six" "five"), "o-n-e h-u-n-d-r-e-d a-n-d f-i-v-e" (followed by the words "One" 0 "five"). Where two ciphers

occur, as in 100, the duplication shall be "one double 0;" 1000 shall be "one triple 0."

252. To relay a 31 train order, the train dispatcher must transmit it to the relaying point, where it must be transmitted to destination. The receiver must repeat it to the relaying point, and each word must be underlined by the receiver at that point. It must then be repeated to the train dispatcher and, if correct, the train dispatcher will respond "O. K." After the parties addressed at the point of destination have signed the order, the signatures must be transmitted to the relaying office, and from there to the train dispatcher, and "complete will be given by the train dispatcher, as per Rule No. 210, and relayed to destination.

253. To relay a 19 train order, the train dispatcher must transmit it to the relaying point, where it must be transmitted to destination. The receiver must repeat it to the relaying point, and each word must be underlined by the receiver at that point. It must then be repeated to the train dispatcher and, if correct, "complete" will be given by the train dispatcher, as per Rule 211, and relayed to destination.

254. When a train order is to be copied by one of a train crew, the dispatcher must send the order separately to each train, and when repeated to the relaying office, the train and engine number must accompany it and be relayed to the train dispatcher.

255. A copy of every completed order must be filed at the point received, bearing the name of the person receiving and repeating the order.

256. All telephone booths are equipped with switch locks and, after being used, must be locked securely. Care must be taken to see that receiver is properly replaced on hook in order that circuit will not be interfered with.

Form 2643.

CLEARANCE CARD.

STATION 191

Conductor and Engineer No.

Orders for { Form "19"
Your Train { Form "31"
Are

(If no orders form "19" or "31" endorse "NONE" in space provided for order numbers.)

TIME, M OPR.

This does not interfere with or countermand any orders you may have received.
Conductors must sign orders form "31," before accepting from Operator.
Conductors and Enginemen must each have a copy and see that there train is correctly designated in the above form, also see that the numbers of all train orders received correspond with numbers inserted above

FORM 31	SCHEDULE TRAIN ORDER.	FORM 31
-------------------	------------------------------	-------------------

Train Order No. 10 March 27, 190

To

At Station. X (Initials) Opr.; 1:46 A. M.

WESTBOUND Time to be in words and figures	A. M. OR P. M.	STATIONS AND CALLS	EASTBOUND Time to be in words and figures	A. M. OR P. M.

Conductor and Engineman must each have a copy of this order.

Repeated at 2:20 A. M.

CONDUCTOR	TRAIN	MADE	AT	RECEIVED BY
Jones	45	Complete	2:30	Black

FORM 19	SCHEDULE TRAIN ORDER.	FORM 19
-------------------	------------------------------	-------------------

Train Order No. 10 March 27, 190

To

At Station. X (Initials) Opr.; 1:45 A. M.

Conductor and Engineman must each have a copy of this order.

Made Complete Time 2 16 P. M. Black Opr.

(To be printed on yellow, manifold paper.)

TRAIN INDICATORS.

A. A train so equipped must not leave its initial station without the indication properly displayed.

B. When the identity of a train is changed, the indicators must be changed to correspond. Before making such change, the safety of other trains must be fully considered.

C. Upon arrival at destination, the indicators must be removed.

D. The upper row must indicate the train, and the lower row the "only section," "last section" or "engine number."

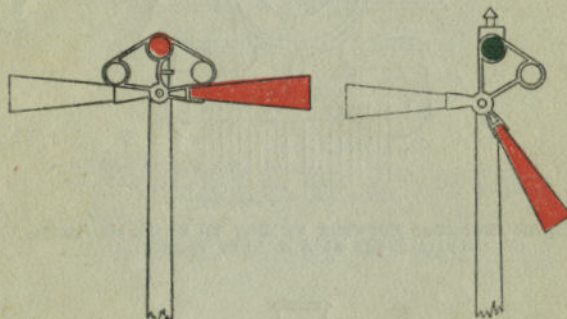
E. (a) COMMON STANDARD—SINGLE ROW.

2 for Train No. 2.
1-2 for First No. 2.
X-162 for Extra 162.

(b) PARSONS INDICATOR—TWO ROWS

$\frac{2}{OS}$ for Train No. 2, only section.
 $\frac{53}{1st.}$ for Train No. 53, first section.
 $\frac{55}{LS}$ for Train No. 55, last section.
 $\frac{X}{1696}$ for Train Extra 1696.

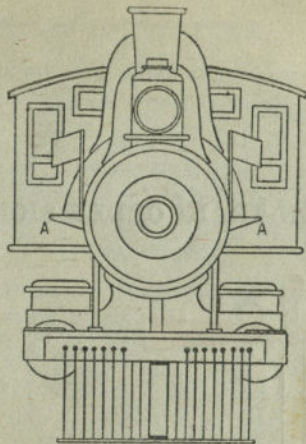
STATION TRAIN ORDER SIGNALS.



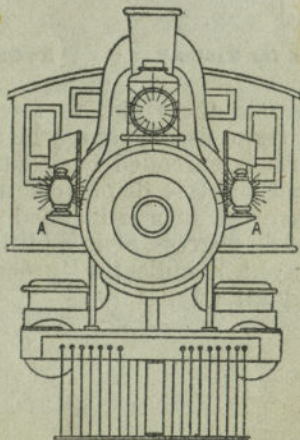
STOP—"Orders for Trains."

"No Orders."

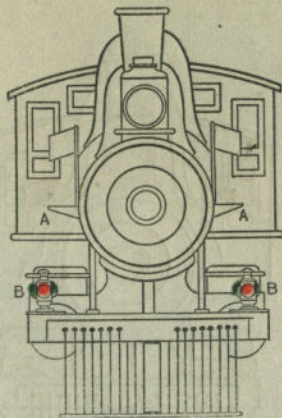
8. The arm to the right, as seen from an approaching train, is the one which governs. When the Arm is extended horizontally, or in addition a red light is displayed, it indicates "stop." When the Arm is inclined downward at an angle of 60 degrees, or in addition a green light is displayed, it indicates "proceed." See Rules 221 and 221 (A).



Engine Running Forward by Day as an Extra Train.
White Flags at A.A. See Rule 21.

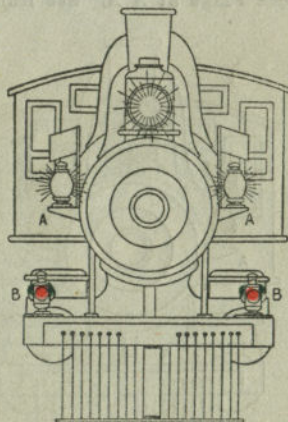


Engine Running Forward by Night as an Extra Train.
White Lights and White Flags at A.A. See Rule 21.



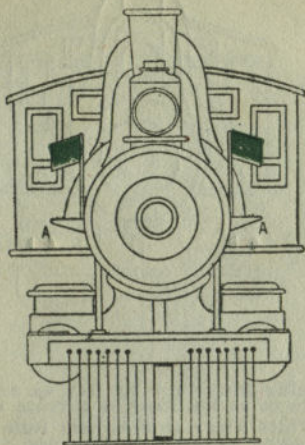
Engine Running Backward by Day as an Extra Train,
without Cars or at the Rear of a Train Pushing Cars.

White Flags at A.A. See Rule 21.
Unlighted Lamps at B.B. as Markers, showing Green
Lens at side and in direction engine is moving and Red
Lens in opposite direction. See Rules 19 and D-19.



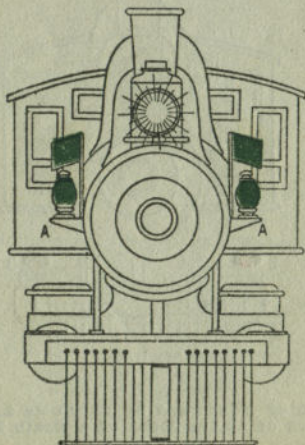
Engine Running Backward by Night as an Extra Train,
without Cars or at the Rear of a Train Pushing Cars.

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.



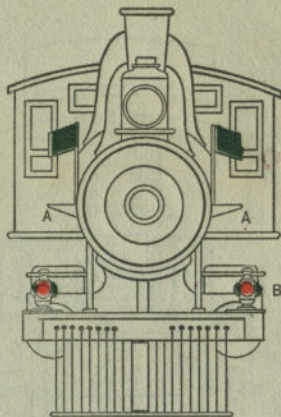
Engine Running Forward by Day Displaying Signals for a Following Section.

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.

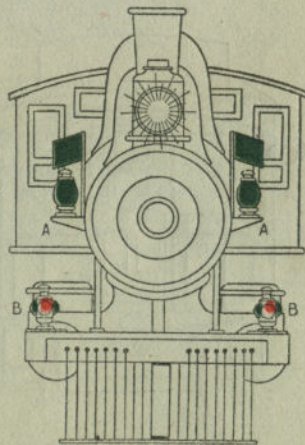


Engine Running Backward by Day, without Cars or at the Rear of a Train Pushing Cars, and Displaying Signals for a Following Section.

Green Flags at A A. See Rule 20.

Unlighted Lamps at B B, as Markers, showing Green Lens at side and in direction engine is moving and Red Lens in opposite direction.

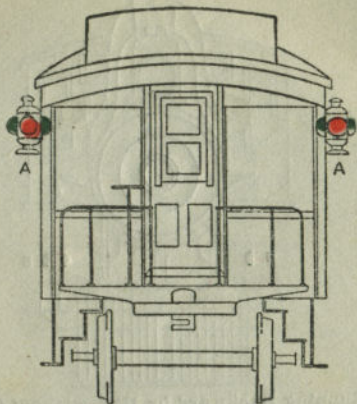
See Rules 19 and D-19.



Engine Running Backward at Night, without Cars or at the Rear of a Train Pushing Cars, and Displaying Signals for a Following Section.

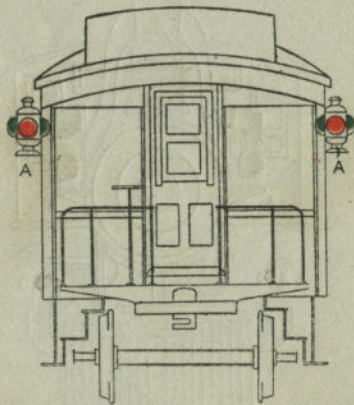
Green Lights and Green Flags at A A. See Rule 20.

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



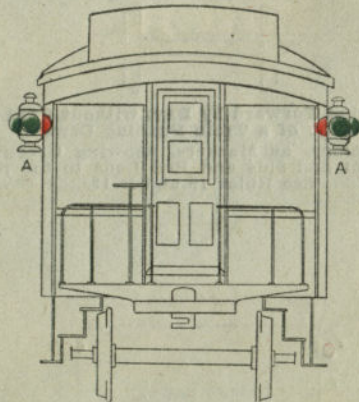
Rear of Train by Day.

Unlighted Lamps at A A, as Markers, showing Green Lens toward engine and side and Red Lens to rear.
See Rules 19 and D-19.



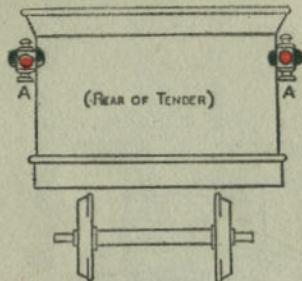
Rear of Passenger Train by Night while Running.

Lights at A A, as Markers, showing Green toward Engine and side and Red to rear. See Rules 19 and D-19.

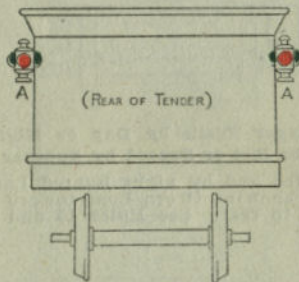


Rear of Passenger Train by Day or Night when on Siding to be Met or Passed by Another Train.

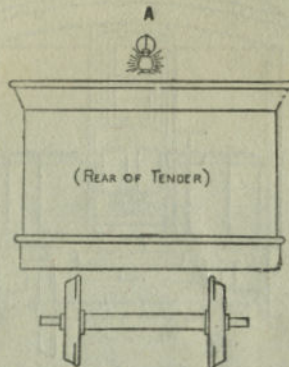
By day unlighted and by night lighted Lamps at A A, as Markers, showing Green Lens toward Engine, side and to rear. See Rules 19 and D-19.



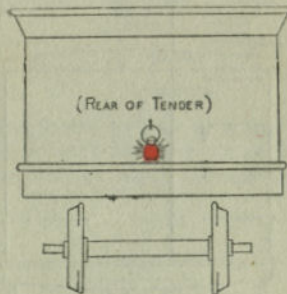
Engine Running Forward by Day, without Cars or at the Rear of a Train Pushing Cars.
 Unlighted Lamps, as Markers, showing Green Lens to the front and side and Red Lens to the rear.
 See Rules 19 and D-19.



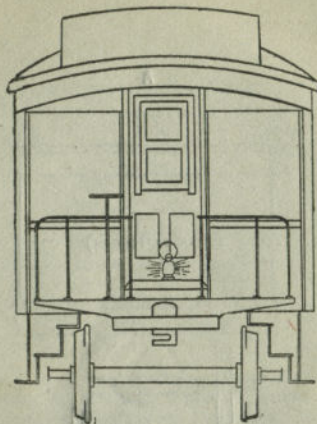
Engine Running Forward by Night, without Cars or at the Rear of a Train Pushing Cars.
 Lights at A A, as Markers, showing Green to the front and side and Red to the rear. See Rules 19 and D-19.



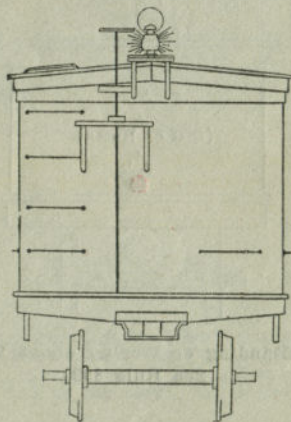
Engine Running Backward by Night, without Cars or at the Front of a Train Pulling Cars.
 White Light at A.



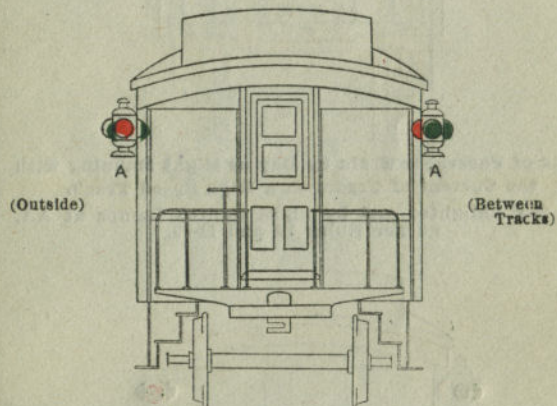
Locomotive Standing or Moving about Yard by Night.
 See Rule 892.



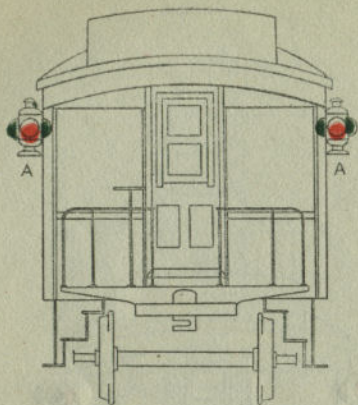
Passenger Cars being Pushed by an Engine by Night.
 White Light on front of Leading Car. See Rule 24.



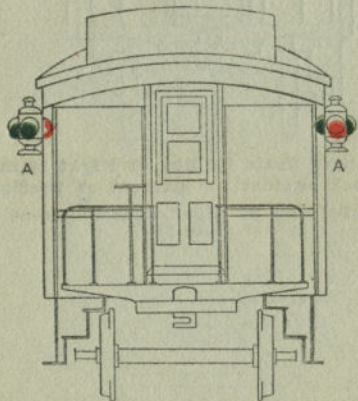
Freight Cars being Pushed by an Engine by Night.
 White Light on front of Leading Car. See Rule 24.



**Rear of Passenger Train by Day or Night Running on
 any Track against the Current of Traffic.**
 By day unlighted and by night lighted Lamps at AA,
 as per Rule D-19.

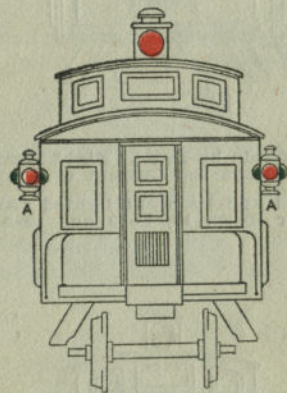


**Rear of Passenger Train by Day or Night Running with
the Current of Traffic on a High Speed Track.**
By day unlighted and by night lighted Lamps at AA,
as per Rules 19 and D-19.

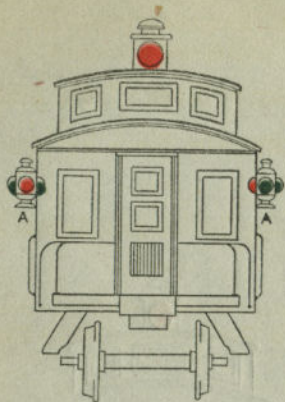


(High Speed
Track)
A A

**Rear of Passenger Train by Day or Night Running with
the Current of Traffic on a Slow Speed Track.**
By day unlighted and by night lighted Lamps at AA,
as per Rules 19 and D-19.



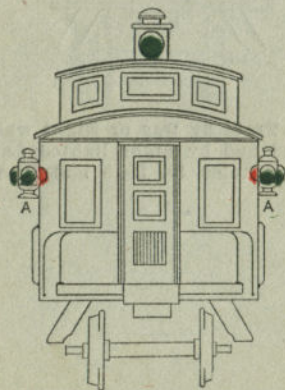
Rear of Freight Train by Day or Night while Running.
By day unlighted and by night lighted Lamps at AA,
as per Rules 19, D-19 and 19-A.



(High Speed
Track)
A A

Rear of Freight Train by Day or Night Running on any Track against the Current of Traffic.

By day unlighted and by night lighted Lamps at AA, as per Rules 19, D-19 and 19-A.



Rear of Freight Train by Day or Night when on Siding to be Met or Passed by Another Train.

By day unlighted and by night lighted Lamps at AA, as per Rules 19, D-19 and 19-A.

GENERAL DESCRIPTION OF SIGNAL
USED IN CONNECTION WITH
Controlled Manual Block (Train Staff System)
Automatic Block System

....AND....

Interlocking Switch and Signal Plants

....AND.....

Rules and Instructions Governing the Movement of Trains Controlled by Such Signals.

BLOCK SIGNALING.

Definitions.

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

BLOCK STATION.—A place from which block signals are operated.

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 in entering and using said block.

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

ADVANCE BLOCK SIGNAL.—A fixed signal used in connection with a home block signal to subdivide the block in advance.

BLOCK SYSTEM.—A series of consecutive blocks.

CONTROLLED MANUAL BLOCK SYSTEM.—(Train Staff System). A block system in which the signals are operated manually, and so constructed as to require the co-operation of the signalmen at both ends of the block to display a clear signal.

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

INTERLOCKING.

Definitions.

INTERLOCKING.—An arrangement of switch, lock and signal appliances so interconnected that their movements must succeed each other in a predetermined 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 at the point at which trains are required to stop when the route is not clear.

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

DWARF SIGNAL.—A low fixed signal.

GENERAL DESCRIPTION OF SIGNALS.

1. See Figs. 1, 2, 3, 4, 5, 6, 7, 8, 9 and 10.

2. Fixed signals, as a rule, will be of two prescribed forms; the Semaphore which consists of a post with an arm projecting outward to the right as viewed from an approaching train; and the Disc type of signal which displays a disc in a banjo-shaped case mounted on a post.

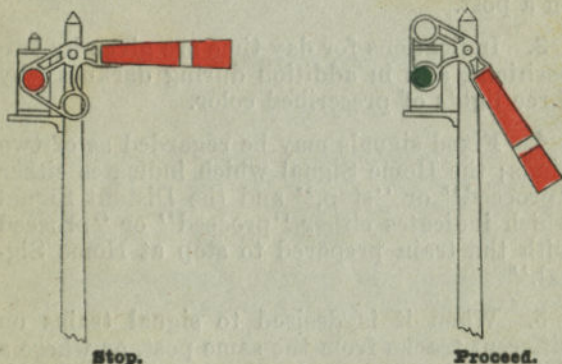
3. Indications for day time are given by two positions, and in addition during darkness, by three lights of prescribed color.

4. Fixed signals may be regarded as of two kinds; the Home Signal which indicates either "proceed" or "stop," and the Distant Signal which indicates either "proceed" or "proceed with the train prepared to stop at Home Signal."

5. When it is desired to signal trains on different tracks from the same post, or where a track intervenes between the post and the track which it is intended to signal, signal bridges or bracket posts shall be used. So far as practicable, they will be placed over or upon the right of and adjoining the track to which they refer. The relative position of the uprights on the bracket post shall correspond to the relative position of the tracks on the ground. A blue light will be displayed at night to indicate the position of the stub posts or uprights.

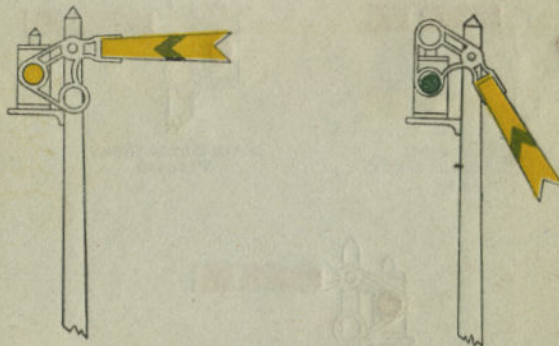
GENERAL MEANING OF SIGNALS.

Fig. 1. Home Semaphore Signal.



1. When the Arm is extended horizontally, or in addition a red light is displayed, it indicates "stop." When the Arm is inclined downward at an angle of 60 degrees, or in addition a green light is displayed, it indicates "proceed."

Fig. 2. Distant Semaphore Signal.

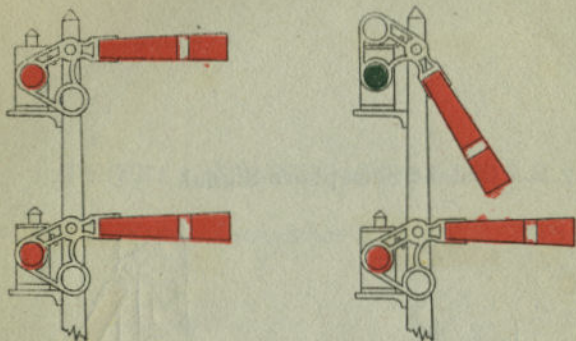


Caution—Home Signal at Stop.

Home Signal at Proceed.

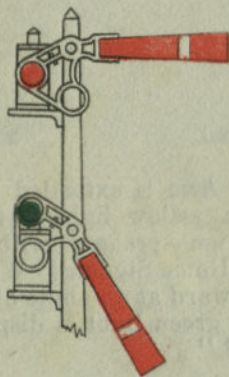
2. When the Arm is extended horizontally, or in addition a yellow light is displayed, it indicates "Caution—proceed with train prepared to stop at Home Signal." When the Arm is inclined downward at an angle of 60 degrees, or in addition a green light is displayed, it indicates "proceed."

Fig. 3. Two Arm Home Semaphore Signal.



Stop.

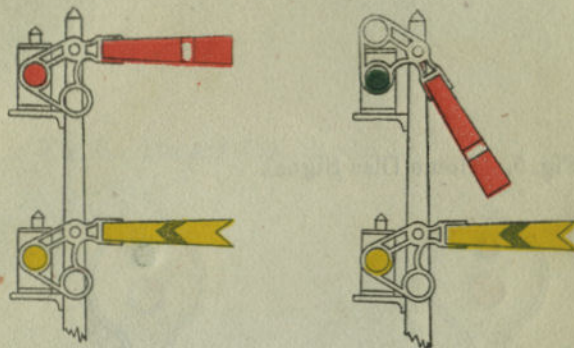
Main Route Clear;
Proceed.



Diverging Route
Clear; Proceed.

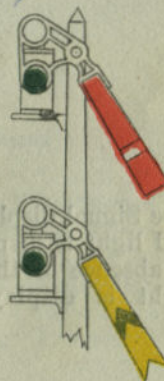
3. When more than one Home Signal is on one post or mast, the upper Arm will govern the main or superior route, and the lower Arm the inferior or diverging routes.

Fig. 4. Home and Distant Semaphore Signal.



Stop.

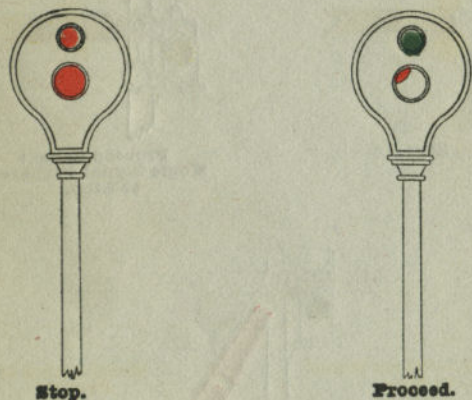
Proceed to next
Home Signal Prepared
to Stop.



Proceed, the
two blocks ahead
are clear.

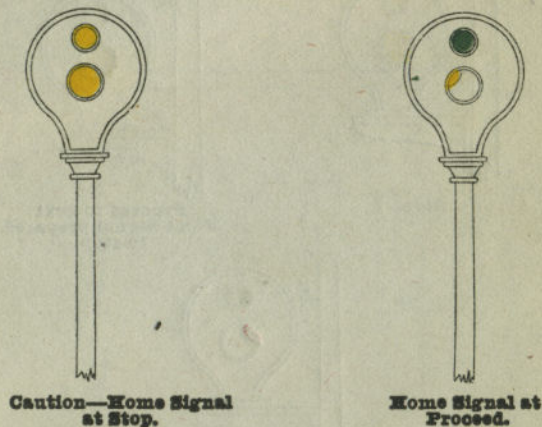
4. When a Home and Distant Signal are on one post or mast, the Home Signal controls the block ahead; the Distant Signal indicates the position of the next Home Signal.

Fig. 5. Home Disc Signal.



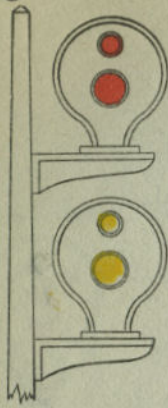
5. When the Disc Signal displays a red disc, or in addition a red light is displayed, it indicates "Stop;" the absence of the red disc, or when a green light is displayed, indicates "Proceed."

Fig. 6. Distant Disc Signal.



6. When the Disc Signal displays a yellow disc, or in addition a yellow light is displayed, it indicates "Caution—proceed with train prepared to stop at Home Signal." The absence of the yellow disc, or when a green light is displayed, indicates "Proceed."

Fig. 7. Home and Distant Disc Signal.



Stop.



Proceed to next Home Signal prepared to stop.



Proceed, the two blocks ahead are clear.

7. When a Home and Distant Signal are on one post or mast, the Home Signal controls the block ahead; the Distant Signal indicates the position of the next Home Signal.

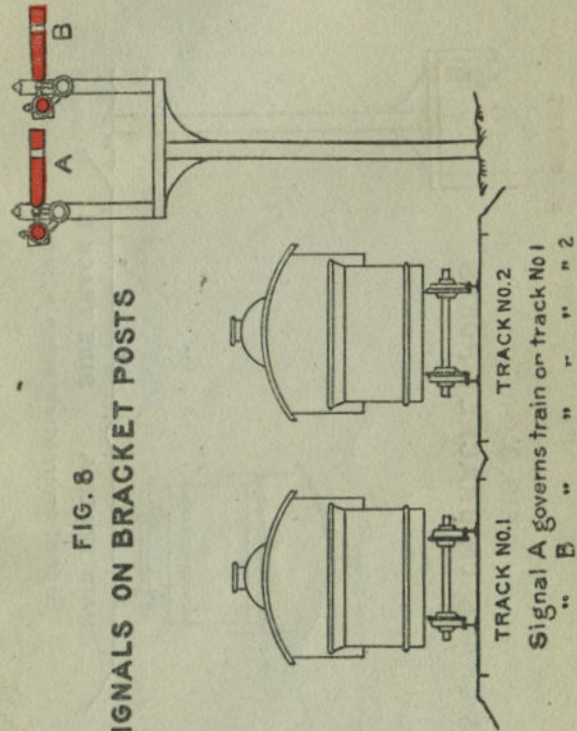


FIG. 8
SIGNALS ON BRACKET POSTS

FIG. 9
SIGNALS ON BRACKET POSTS

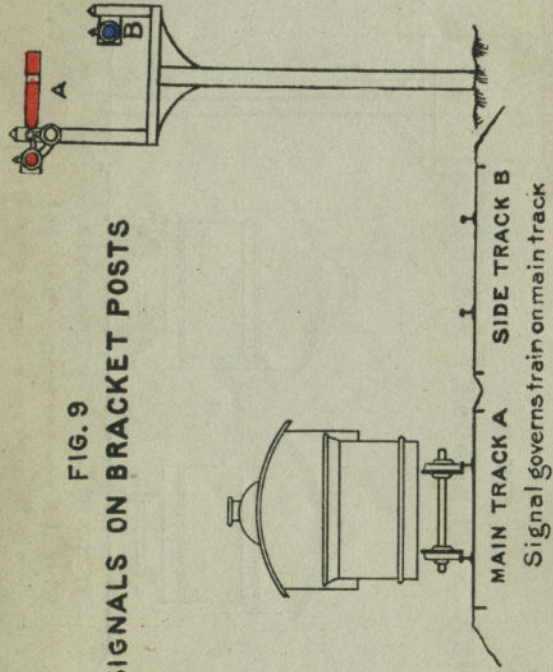
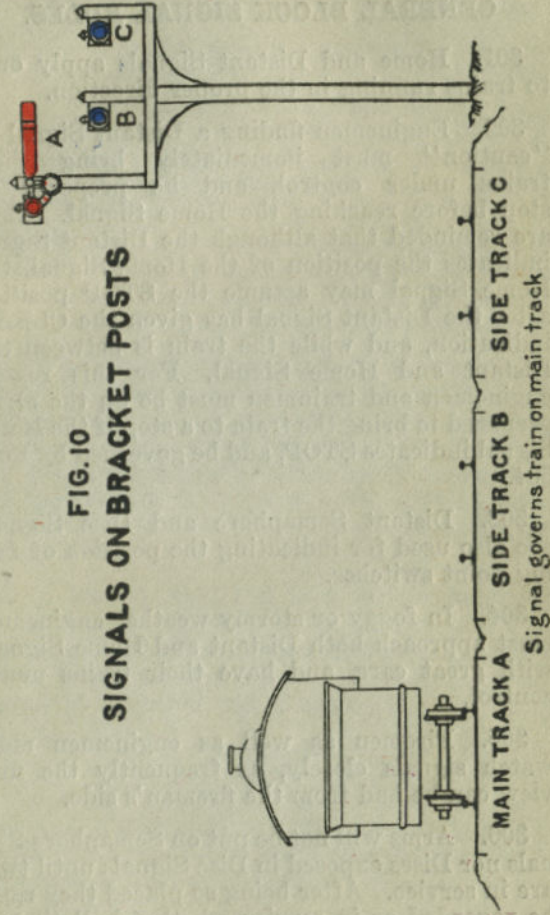


FIG. 10
SIGNALS ON BRACKET POSTS



GENERAL BLOCK SIGNAL RULES.

301. Home and Distant Signals apply only to trains running in the proper direction.

302. Enginemen finding a Distant Signal at "caution" must immediately bring their trains under control, and be prepared to stop before reaching the Home Signal. They are reminded that although the Distant Signal indicates the position of the Home Signal, the Home Signal may assume the STOP position after the Distant Signal has given the CLEAR indication, and while the train is between the Distant and Home Signal. For this reason enginemen and trainmen must be on the alert, prepared to bring the train to a stop if the Home Signal indicates STOP, and be governed by Rule 504.

303. Distant Semaphore and Disc Signals are also used for indicating the position of facing point switches.

304. In foggy or stormy weather enginemen must approach both Distant and Home Signals with great care, and have their trains under control.

305. Firemen as well as enginemen must watch signals closely, as frequently the first view can be had from the fireman's side.

306. Arms will not be put on Semaphore Signals nor Discs exposed in Disc Signals until they are in service. After being so placed they must be regarded as in service whether bulletin has been issued or not.

CONTROLLED MANUAL BLOCK SYSTEM.

(TRAIN STAFF SYSTEM.)

DESCRIPTION AND METHOD OF OPERATION.

1. All rules relating to the protection of trains are in force, and are only modified by the general instructions herein.

2. Special instructions and rules on the time-table will govern the movement of trains in the observance of Semaphore or Disc Signals where the staff block system is in operation.

3. The work of the staff block system is effected by the erection, in the block offices at each end of the block, of staff block instruments which are in charge of the signalmen on duty. The two instruments are electrically connected, and one cannot be operated without the knowledge and co-operation of the signalman in charge of the other.

4. When one staff has been withdrawn from an instrument, another staff cannot be withdrawn from either until the staff already withdrawn is replaced in the same instrument, or the one at the other end of the block.

5. The absolute staff system permits but one staff to be withdrawn from any pair of instruments at the same time. In case a staff should be lost, the instruments controlling that block are inoperative. Under such circumstances, all concerned will be governed by Rule 434.

RULES.

Signalmen.

411. The normal indication of Home Block Signals is "Stop."

412. Signals must be operated carefully and with a uniform movement. 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.

413. Signalmen must observe, as far as practicable, whether the indication of the signals corresponds with the position of the levers.

414. Signalmen must not make nor permit any unauthorized alterations or additions to the apparatus.

415. If any electrical or mechanical appliance fails to work properly the Superintendent and Signal Supervisor must be notified, and only duly authorized persons permitted to make repairs.

416. A block record must be kept at each block station.

417. Block signal instruments and bells must be used only by signalmen and as directed by the rules.

418. Bells must not be used for any purpose other than to give the prescribed signals.

419. Bell signals must be given deliberately and distinctly, and answered promptly. All signals must be repeated until answered.

420. At offices where block signal instruments are used the following bell signal code will be observed:

1: (Long stroke.) Answer telegraph or telephone call.

2: All right. Yes.

3: Block wanted. Or unlock my lever. Answer by unlocking or by 5, or 3-1.

4: Train has entered block.

5: Block is not clear.

6: Has a train entered this block? Answer by 2, or 2-1.

1-2: Clear. Train has cleared block.

2-1: No.

2-2-2: Previous signal given in error. Answer by 2.

2-4: Has train cleared block? Answer by 5, or 3-1.

3-1: Have unlocked. Block is clear. (It must not be used unless the block is known to be clear.)

3-3: Train in block will take intermediate siding. Answer by repeating.

1-2-3: Train has gone on siding or crossed over to opposite track. Main track is clear and switches closed. Answer by repeating.

5-5-5: Obstruction in block. Stop all trains approaching this station. Answer by repeating.

6-6-6: Testing. Answer by repeating.

421. To receive and forward a train from A to B, the block being clear, the manipulation of the instruments is as follows:

The signalman at A will press bell key (A, Fig. 1) three times, which rings bell at B. The signalman at B will unlock A by pressing his bell key, and holding it closed, thereby deflecting the "current indicating needle" (F, Fig. 2) at A to the right. This informs A that B has furnished A current, and he will proceed to remove the staff by turning the preliminary spindle handle (B, Fig. 1) to the right as far

as it will go, and then permit it to automatically return to its normal position. This unlocks the instrument, and indicates the fact by displaying a white instead of a red disc in the indicator at A (H, Fig. 2).

The signalman will now move the end staff (E, Fig. 1) up the vertical slot into engagement with the outer guard (N, Fig. 2) it having first been turned to the right position, revolve the latter through one-third of a turn, using the staff as a handle, and finally withdraw the staff through the opening (M, Figs. 1 and 3).

In making the one-third of a turn, the "staff indicating needle" (G, Fig. 3) at A moved from "STAFF IN" to "STAFF OUT." Immediately on withdrawing the staff, the signalman at A once more will press his bell key (A, Fig. 1) which indicates to the signalman at B, by moving his needle from "STAFF IN" to "STAFF OUT." that the operation is completed.

When a staff has been withdrawn from the instrument, it may be delivered to the train about to enter the block as hereinafter instructed. On arrival of the train at B, the staff will be delivered to the signalman in charge, who will, AFTER SEEING THE MARKERS, place the staff in the opening (M, Figs. 1 and 3) of instrument, having first turned the outer guard (N, Fig. 2) to place, move the staff into engagement with and revolve latter through one-third of a turn, using the staff as a handle, and allow staff to roll down the spiral. He will then press his bell key twice, thus notifying A that the train is out of the block, which operation also moves the "staff indicating needle" at A from "STAFF OUT" to "STAFF IN."

The signalman at A will press his bell key twice in acknowledgment, and by so doing

moves the "staff indicating needle" at B from "STAFF OUT" to "STAFF IN."

The instruments are now synchronized, and another staff can be obtained from either in the manner above outlined.

422. Block signals must be restored to the normal indication as soon as the train for which they were cleared has passed 300 feet.

423. Unless otherwise provided, signalmen must not give "3" until they have received "4" from the next block station in the rear, nor unlock the next block station in the rear before receiving "3."

424. Signalmen must observe all passing trains and note whether they are intact and the markers properly displayed. Should there be any indication of conditions endangering the train, or a train on another track, he must notify the signalman at the next block in advance. A signalman having received this notice must display Stop-signal in both directions. Should a train going in the opposite direction be stopped it may be permitted to proceed when it is known that the track on which it is running is not obstructed.

425. Should a train pass a block station without markers, the signalman must notify the next block station in each direction, and must not report that train clear of the block until he has ascertained that the train is complete.

429. When a train takes a siding the signalman must know that it is clear of the block before giving "1-2" or display a Clear-signal for that block.

A signalman, after having unlocked the next block station in the rear or given "3-1." must

not permit train or switching movements that will endanger an approaching train.

431. When, as provided for in Rule 464, coupled trains have been separated, the signalman must regard each portion as an independent train.

434. In case of failure of staff apparatus, all concerned must be notified, and trains will be moved by train orders until it has been repaired. In such event, the train order takes the place of the staff through only one block on each train order and this order must be given jointly to the conductor and engineman of the train and the signalmen at both ends of the block. When a staff apparatus has been repaired, it will not be put into use until authorized by Superintendent. Before issuing train orders, substituting staff system, the train dispatcher must ascertain that block is clear.

437. Signalmen must have the proper appliances for hand signaling ready for immediate use. Hand signals must not be used when the proper indication can be displayed by the fixed signals. When hand signals are necessary they must be given from such a point and in such a way that there can be no misunderstanding on the part of enginemen or trainmen as to the signals, or as to the train for which they are given.

438. Signalmen will be held responsible for the care of the block station, lamps, and supplies; and of the signal apparatus, unless provided for otherwise.

439. Lights in block stations must be so placed that they cannot be seen from approaching trains.

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

441. If a train over-runs a Stop-signal, the fact, with the number of train, must be reported to the Superintendent.

442. If a Stop-signal is disregarded, the fact, with the number of train, must be reported to the block station in advance and then to the Superintendent.

443. Unless otherwise directed by train order, signalmen may at any time "staff" a train when the block in advance is clear and it is apparent that no opposing train will thereby be delayed at the next station. When an opposing train of the same grade of importance will be delayed not exceeding five minutes, signalmen may also "staff" trains without question, but passenger trains must not be delayed by freight trains without the authority of the train dispatcher. When in doubt signalmen at telegraph stations will call train dispatcher and say "3," signing his office signal, which will mean:

"Which train shall I 'staff'?"

The dispatcher will reply (for example):

"'Staff' No. 218."

444. Signalmen will remain in view until the rear of a train has passed and will give a "proceed" signal to the conductor or brakeman on rear of train to indicate that a staff has been delivered to engineman.

445. Signalmen, unless otherwise instructed by train dispatchers, will "staff" the train of superior time-table right, and sidetrack the inferior train when a meeting point develops at their station.

Enginemen and Trainmen.

450. A train will not pass into a block until it has a staff in its possession and the signals indicate "proceed".

451. The possession of a staff is authority for the train to proceed regardless of opposing trains, provided the station train order signal is at clear.

452. The delivery of the staff to the engine-man will be either by staff crane, hand of block signalman, or the conductor or head brakeman of his own train, and the engineman must not accept delivery of a staff from any other person. Signalmen will not deliver staff to any other than one of these employes.

453. The staff will be delivered by engine-man on arriving at staff station at designated spot, or, in case of taking siding and it cannot be personally delivered by engineman, it will be sent to signalman by head brakeman or conductor. Under no circumstances must a staff be transferred from one train to another. It must invariably be delivered to the signalman and placed in the machine before delivered to another train. It will be the duty of the signalman to see that all of the train clears the block before he inserts staff in the instrument.

454. When a staff has been secured by the engineman, he will announce the fact by sounding one short, one long, and one short blast of the whistle (o — o). See Rule 444.

455. When two or more engines are coupled, the engineman of the leading engine will handle the staff; but the engineman of the other engine, or engines, must know that he has the staff before proceeding.

456. In case a train parts or it is necessary to "double," the staff must be retained by the engineman until all the train is clear of the block. A pushing engine will be considered as the rear end of a train and must run the entire length of the block.

457. Conductors and enginemen, before entering staff limits, will obtain a train order, designating their train by number, section or extra for identification.

458. A work train, after obtaining train orders authorizing its existence, may occupy a block upon the delivery of staff, until same is surrendered at block station at either end of the block before the expiration of the time specified in its orders, unless otherwise instructed.

459. In case of unexpected delay to a train to which a staff has been delivered, same can be recalled by signalman, and on return of staff to the instrument this will cancel the authority given to such train to proceed.

464. Unless directed by special instructions, when two or more trains have been coupled and so run past any block station, they must be uncoupled only at a block station and the signalman notified.

465. When a train takes a siding it must not again enter the block without permission of the signalman.

466. When it is necessary for a train to cross over, the conductor, before crossing or returning, must notify the signalman and obtain permission to do so.

467. Enginemen and trainmen must not accept "proceed" hand signals as against block signals.

468. The engineman of a train which has parted must sound the whistle signal for "Train-parted" on approaching a block station.

469. An engineman receiving a "Train-parted" signal from a signalman must answer by the whistle signal for "Train-parted."

470. When a parted train has been recoupled the signalman must be notified.

472. If the track is obstructed between block stations, notice must be given to the nearest block signalman.

473. If a train is held by a block signal to exceed five minutes, the conductor must ascertain the cause.

474. Conductors must report to the Superintendent any unusual detention at block stations.

AUTOMATIC BLOCK SYSTEM.

1. Track circuits are used to control automatic and semi-automatic block signals, and include all turn-outs up to the fouling points.

2. Switches in main tracks and switches of cross-over to main tracks set signals to "stop" when moved from their normal positions.

3. When an indicator (small signal) is placed opposite or near a main line switch, it is so controlled that when there is a train or an open switch within the block in which the switch in question is located, it will indicate "stop."

4. The signal connections and operating mechanisms are so arranged that a Home Block Signal shall indicate "stop," and a Distant Block Signal "caution" after any part of a train shall have passed it.

5. High speed interlocking signals coming within the block signal limits may be made a part of the Block Signal System, and when so arranged they will be semi-automatic.

6. All automatic block signals will be designated by numbers indicating approximately the distance in miles and tenths according to mile posts. Signals governing east-bound trains to have even numbers and signals governing west-bound trains odd numbers.

RULES.

501. The normal indication of Distant and Home Block Signals is "Proceed."

502. Block signals control the use of the blocks, but, unless otherwise provided, do not effect the movements of trains under the time table or train rules; nor dispense with the use or the observance of other signals whenever they may be required.

504. When a train is stopped by a block signal, it may proceed when the signal is cleared. On single track, send a flagman in advance immediately; wait the full time indicated by special rules on the time-table after the flagman has started; and then proceed under control to the next clear signal, or, if the signal next in advance is in plain view and the track ahead is seen to be clear, proceed under control not exceeding six miles per hour. On double track, a

train may proceed after waiting one minute, running under control.

505. When a number plate is reversed showing yellow, or signal blade is removed, it will indicate that the signal is out of service, and, unless otherwise directed, trains will proceed with caution to the next signal.

506. When a train is stopped by a signal, the conductor must report the fact on Form 3104.

508. An engineman of a train entering a block as provided for by these rules, will be held responsible in case of accident caused by overtaking the preceding train.

509. Trainmen must be careful to set trains or cars on sidings beyond the wooden insulated joints which are placed in the track at the fouling points; otherwise if set upon or over the fouling point toward the main track, the signal protecting the block will remain at "stop" and cause detention to trains.

510. Trains on sidings or diverging routes desiring to come out on the main track must be governed by signals at sidings or signal controlling movement of trains from branch or spur. If signal is at danger, switch can be used only under protection of flagman.

511. A train on double track before crossing over from one track to another, must be governed by the indicator at the switch of the cross over in the track upon which the train stands. If the indicator shows "proceed," the train may cross over. If, however, the indicator displays "stop," the train may cross over only under protection of a flagman.

512. When it is desired to move a train through a cross-over from one track to another, the switch in the track the train is occupying must be thrown first.

513. Both switches of a cross-over between two main tracks, or between a main track and a side track, must not be closed while a train, an engine or a car occupies the connection between the switches of such cross-over.

514. After a movement is made through a cross-over, both switches must immediately be thrown to their normal position.

515. Switch engines and extra trains, unless otherwise provided, must clear the block at least five minutes in advance of regular scheduled trains.

516. After using switch, brakeman must see that the point rail is closed against the stock rail.

517. If necessary to clean the ash-pan or cinders from the smoke arch on the main track inside of block signal limits, the ashes and cinders must immediately be removed by fireman if no one else is available for the purpose.

INTERLOCKING SIGNALS.

REQUISITES OF INSTALLATION.

1. The apparatus so constructed that the failure of any part directly controlling a signal will cause it to give the normal indication.

2. The normal indication of Home Signals—"Stop," Distant Signals—"Caution."

3. The interlocking of signals with switches, locks, railroad crossings, or drawbridges, so

that a "proceed" signal cannot be given unless the route to be used is clear and stop signals displayed for all conflicting routes.

4. The apparatus so constructed that the failure of any part directly controlling a switch or lock will prevent the display of the "proceed" signal.

5. The established order of interlocking such that:

A "proceed" signal cannot be displayed until derails or diverging switches, if any, in conflicting routes are in their normal position and the switches for the required route set and locked.

The display of a clear Home Signal shall lock all switches and locks in the route as far as the point to which such signal gives permission to proceed, locking all opposing or conflicting signals and releasing the corresponding Distant Signal, where such signal is used.

Where distant signals are used, the display of a proceed distant signal shall lock the home signal in the "proceed" position.

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 they may be required.

Signalmen.

611. The normal indication of Home Signal is "Stop."

612. Levers, or other operating appliances, must be used only by those charged with the duty and as directed by the rules.

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.

614. When the route is clear the signals must be cleared sufficiently in advance of approaching trains to avoid delay.

615. Signals must be restored so as to give the normal indication as soon as the train for which they are cleared has passed the home signal limits of the interlocking plant, except that where electric locking is in use, signals will be restored to normal indication as soon as rear end of train has passed them.

616. If necessary to change any route for which the signals have been cleared for an approaching train or engine, switches 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.

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.

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.

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 electrical or mechanical appliance fails to work properly the Superintendent and Signal Supervisor must be notified and only duly authorized persons permitted to make repairs.

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

repairmen that the switches are properly set for such movements.

628. Signalmen must observe all passing trains and note whether they are intact; should there be any indication of conditions endangering the train, or any other train, 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 routes for the parted train, and give the "Train-parted" signal to the engineman.

630. Signalmen must have the proper appliances for hand signaling ready for immediate use. Hand signals must not be used when the proper indication can be displayed by the fixed signals. When hand signals are necessary they must be given from such a point and in such a way that there can be no misunderstanding on the part of the enginemen or trainmen as to the signals, or as to the train or engine for which they are given.

In giving hand signals for a train to move through interlocking limits against fixed signals, the signalman must be on the ground and use a yellow flag by day, and a yellow light by night.

631. If necessary to discontinue the use of any fixed signal, hand signals must be used and the Superintendent and Signal Supervisor notified.

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 over-runs a Stop-signal, the fact, with the number of train or engine, must be reported to the Superintendent.

636. Only those whose duties require it shall be permitted in the interlocking station.

637. At all interlockings where there is a signalman on duty a signal must be given for each train movement made.

638. At interlocking plants where there is a station signal or block signal operated by the signalman, such signals must not be cleared until after the interlocking signals governing the same route have first been cleared.

639. Signals may be taken away from a train at any time, if anything is discovered that might endanger the safety of the train, and every effort must be made to avoid accident.

640. When it is safe to do so, switches and signals must be operated on the request of sectionmen or inspectors.

Enginemen and Trainmen.

661. Trains or engines must be run to, but not beyond, a signal indicating "stop."

662. If a "proceed" 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. Enginemen and trainmen must not accept a "proceed" signal as against fixed signals until they are fully informed of the situation and know that they are protected. When hand signals are given as above for trains to pass fixed signals at STOP, in cases where such signals govern the movement of trains over railroad crossings and drawbridges, the conductor or person in charge of engine or train must send a man ahead to such crossings or drawbridges before passing of same with his train. Where fixed signals are in operation trainmen must not give "proceed" signal against them.

664. The enginemen of a train which has parted must sound the whistle signal for "Train-parted" on approaching an interlocking station.

665. An engineman receiving a "Train-parted" signal from a signalman must answer by the whistle signal for "Train-parted."

666. When a parted train has been re-coupled the signalman must be notified.

667. Sand must not be used over movable parts of an interlocking plant.

668. Conductors must report to the Superintendent any unusual detention at interlocking plants.

669. No train or engine must act on a signal given for a preceding train, nor, having passed over a route in one direction must it return over the same route without receiving the proper signal to do so.

670. Flying switches must not be made within the limits of an interlocking plant.

671. An engineman receiving a hand signal, as per Rule 663, must understand that such

signal is good only through the interlocking limits and does not extend through the automatic block.

672. All enginemen and trainmen must obey promptly the signals and orders of signalmen within interlocking limits.

Repairmen.

681. Repairmen are responsible for the inspection, adjustment and proper maintenance of all the interlocking plants assigned to their care.

682. Where the condition of switches or track does not admit of the proper operation or maintenance of the interlocking plant, the fact must be reported to the Superintendent and Signal Supervisor.

683. When any part of an interlocking plant is to be repaired, a thorough understanding must be had with the signalman, in order to secure the safe movement of trains and engines during repairs. The signalman must be notified when the repairs are completed.

684. If necessary to disconnect any switch, it must be securely fastened before any train or engine is permitted to pass over it.

685. Alterations or additions to an interlocking plant must not be made unless authorized by the Signal Supervisor.

686. Repairmen when on duty, or subject to call, must keep the Signal Supervisor and signalmen advised as to where they can be found, and respond promptly when called.

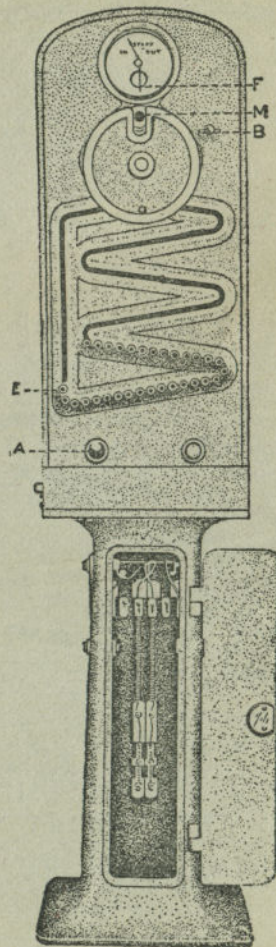


Fig. 1.
ELECTRIC HIGH SPEED TRAIN STAFF—Model No. 2.
Front View of Instrument with all Staffs in.

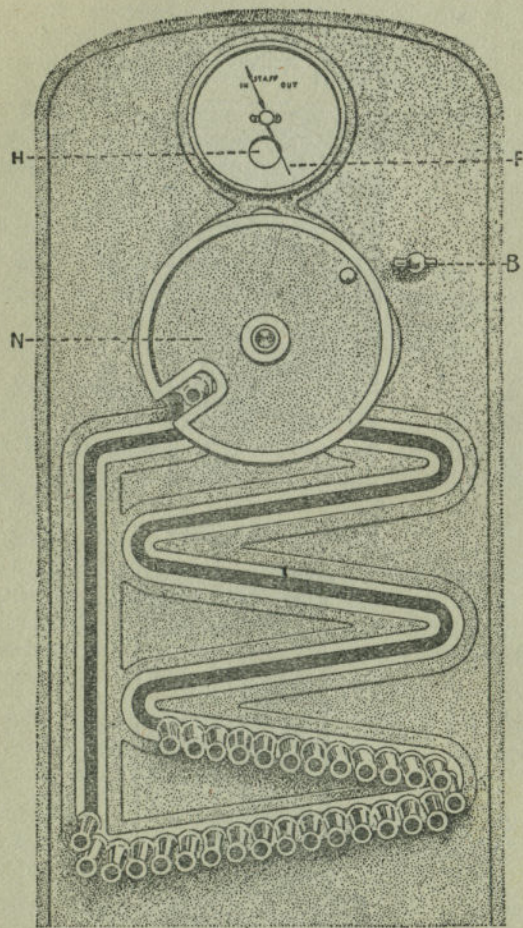


Fig. 2.
ELECTRIC HIGH SPEED TRAIN STAFF—Model No. 2.
Front View of head when instrument is in condition
for the removal of a staff.

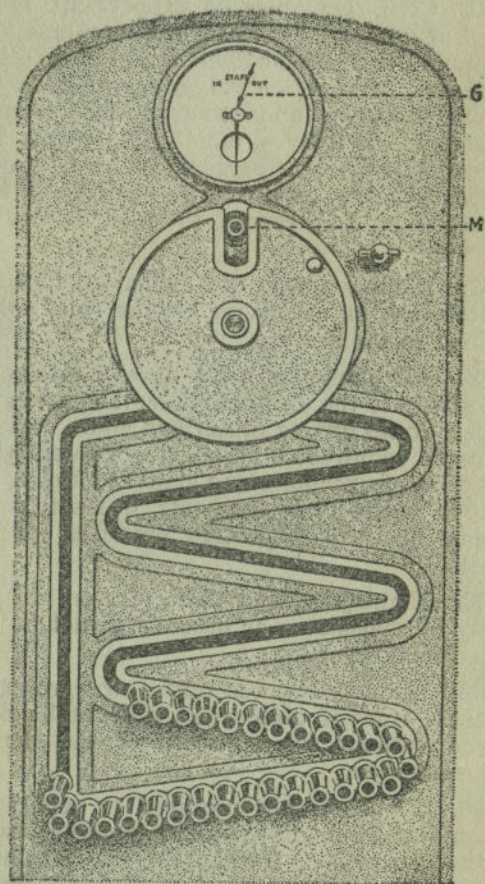


Fig. 3.
ELECTRIC HIGH SPEED TRAIN STAFF—Model No. 2.
Front view of head when a staff is released, or
about to be inserted.

GENERAL REGULATIONS.

700. Civil, gentlemanly deportment is required of all employes in their intercourse with the public, their subordinates, and each other. Boisterous, profane, or vulgar language is forbidden. Courtesy and attention to patrons is demanded. Employes must not enter into altercation with any persons, no matter what provocation may be given, but will make note of the facts and report to their immediate superiors.

701. Employes who are dishonest, immoral, quarrelsome, or otherwise vicious, will not be retained in the service.

702. All employes must devote themselves exclusively to the Company's service, attending to their duties during prescribed hours, residing wherever required, and obeying promptly instructions of executive and general officers, and those of heads of departments, in matters pertaining to their respective branches of the service.

703. Employes who are careless of the safety of themselves or others will not be continued in the service.

704. Employes whose duties are prescribed by these rules if discharged will not be reemployed without the approval of the General Superintendent.

705. Employes are required to report any misconduct or negligence affecting the interest of the Company. Withholding such information will be considered proof of negligence or indifference, and treated accordingly.

706. No appointment or promotion to the position of conductor or engineman will be made

until after the applicant has been examined as to knowledge and understanding of all rules which relate to his duties and has received a certificate of qualification signed by the proper official.

707. All other persons employed in train service must, before being assigned to duty, pass a satisfactory examination of the rules governing the duties of the position in which they are to be placed.

708. Employes will be regarded as in line of promotion, advancement depending upon the faithful discharge of duty and capacity for increased responsibility.

709. Employes whose duties require service on more than one division or subdivision are under the jurisdiction of the officers of the division or subdivision on which the service is being performed.

710. Unless specially authorized, employes must not use the Company's credit and must neither receive nor pay out money on the Company's account. Property of the Company must not be sold or in any way disposed of except by proper authority.

711. Employes must return property entrusted to their care, when leaving the Company's service, or upon demand by proper authority.

712. Employes are forbidden to offer testimonials to their superiors either directly or indirectly, and those in authority will not accept such presents or testimonials. The acceptance of gratuities or rewards from passengers or other patrons of the Company is forbidden.

713. Employes must not remove any of the appliances of an engine or cars for convenience

in switching, endangering the safety of themselves or others; coupling apparatus must be examined and if out of order must not attempt to make coupling. They are warned not to get on the front or rear of an engine or the end of a car as it approaches them, or to go between cars in motion to uncouple, open, close, or arrange knuckles of couplers or follow other dangerous practices.

714. Train and enginemen are prohibited from going to meals, or otherwise delaying their trains from any cause without permission.

715. Employes must not remain near the track when trains are passing, as coal, stone, car doors or other articles are liable to fall from the train. On double track, employes must stand outside and clear of both tracks while trains are passing. All employes are further warned that they must not rely on others to notify them of the approach of a train.

716. It is the duty of employes to report by telegraph defects discovered in track, bridges and equipment, or obstructions of any kind, to the Superintendent, and, when practicable, to the nearest section or bridge foreman. When necessary, proper signals must be used to stop trains, and when there is reason to believe that the safety of the track or any structure is endangered through flood, fire or other cause, every employe, before attempting its use, must make a personal inspection, using all precautions in the interest of life and property.

717. Bridge and section foremen, track walkers, pumpers, and watchmen will observe trains closely and if anything dangerous is noted, such as a loose wheel, defective coupling, brake rod or brake beam dragging, or if trains

are running too closely together, in violation of Rule 91, must call attention of train and enginemen to the fact, by signal. Train and enginemen should always observe trackmen, bridgemen, and other employes as they pass, and look out for signals from them.

718. In emergencies, or obstruction by accident or other cause, suggestions based upon observation of the actual situation are useful and required, and frequent report of progress must be made. Prompt action is insisted upon, and in the absence of designation, the employe upon whom the responsibility most naturally falls will assume authority.

719. In case of damage to trains or structures, wherein the security of Company property or freight is involved, it is the duty of all concerned to see that watchmen are immediately stationed, and that arrangements are promptly made for the protection of such property against thieving or loss from other causes.

720. Minors will not be employed in yard, train or engine service; when employed in other service it must be with the written consent of parent or guardian, on prescribed form, which must be filed with application for employment.

721. Derail switch must be set to derail and locked in that position, whether there are any cars on the track it protects or not, except while cars are being shifted in or out. Trainmen must be on the lookout for derail switches on all side tracks and spurs.

722. Agents, conductors and others entrusted with the books, way-bills or the statistics of the Company must, under no circumstances, permit unauthorized persons to have access thereto nor

verbally or otherwise divulge any of the Company's affairs.

723. Employees whose duties connect them with the movement of trains must not absent themselves from, exchange duties with, nor substitute others in their place without proper authority.

724. Employees will not be permitted to engage in other business without permission of the General Superintendent.

725. Employees must not use the wires unnecessarily. Messages referring to their personal affairs or comfort are not to be offered for transmission on railroad wires, except in case of accident or sickness. Letters of a personal nature must not be sent by train mail; to do so is a violation of the U. S. Postal Laws. Attention of the Superintendent must be called to violation of this rule by those having knowledge thereof.

726. Passengers will not be carried on freight trains, unless authorized by instructions on the current time-table or stock contracts, and only between points at which trains stop.

727. Employees traveling on Company business, may be carried on freight trains between points at which trains stop, upon presentation of proper transportation. Trainmen will warn passengers riding on freight trains of the liability of personal injury incident to starting and stopping at stations and require them to remain seated until train has been brought to a standstill.

728. No person will be permitted to ride on an engine, or in baggage, mail, or express cars (except employees in discharge of their duties),

without a written order from the Superintendent.

729. Dead engines, or disabled engines, with one or both side rods taken down, should not be hauled in fast freight trains when it is possible to avoid it. Under no circumstances must such engines be hauled at a speed exceeding one mile in three and one-half minutes.

DUTIES OF EMPLOYEES.

750. Bulletin boards, or books, will be provided at localities accessible to conductors, enginemen, yardmen and others concerned in the movement of trains. They must be examined before the commencement of each trip or before going on duty. Failure to do so will not be accepted as an excuse for neglect, or violation of instructions contained thereon. Information pertaining to the safety of trains will not be furnished to train or enginemen on bulletin boards.

751. Conductors, enginemen, train and yardmen, signalmen, operators and others whose duties are connected with the movement of trains, must familiarize themselves with the rules governing the duties of others as well as their own and must be prepared, in case of emergency, to act in any capacity to protect the safety of trains.

752. Conductors and enginemen are required to show their train orders to the brakemen and firemen who must read and return them, and should there be occasion to do so, they will remind the conductor or enginemen of their contents. Conductors must not verbally inform enginemen of the contents of train orders, but should obtain from them an understanding of all

train orders restricting their rights, if practicable, before they are acted upon.

753. When a flagman is sent out with specific instructions affecting the rights of trains, such instructions must be written in duplicate, one copy to be given to the flagman and the other to be retained by the conductor, who will send it to the Superintendent with his train orders. When a flagman is sent to a siding on a train, he will ride on the engine and the engineman must stop and let him off at the initial switch.

754. Notice of new time-table must be bulletined at least twenty-four hours prior to its taking effect; for six days thereafter Superintendent must, by train order, require each conductor and engineman to acknowledge receipt of new time-table.

755. Before starting on any district upon which they have not been running, or when absent for six days or over, train and enginemen must inquire for and know that they have the current time-tables and supplements.

756. Conductors and enginemen, whose duties prevent them from having access to a Standard Clock, must compare daily with and regulate their watches by those of conductors and enginemen who have standard time and have registered as provided.

757. Trains must not be permitted to stand across another railroad, at grade, if possible to avoid it.

758. Trains must be opened to clear all public crossings while standing at stations, and in no case block a crossing longer than five minutes. While passenger trains are at stations,

freight trains must be opened to allow passage way.

759. Cars must not be backed, nor cut loose and allowed to run over a street, highway, or private crossing, without a flagman on the front of, or preceding the leading car. By night, a white light must be displayed.

760. In switching, where it is necessary to disturb cars that are being loaded, or unloaded, notice must first be given to all persons in or about the cars that are to be moved. When cars are so moved, they must be returned to the same position as found.

761. On all grades, when stopping on the main track or on a siding, when cutting an engine off a train at stations to do work, or at any stops of unusual length, the air must be released and a sufficient number of hand brakes set to hold the train. Both conductors and enginemen will be held responsible for failure to comply with this rule.

Yardmasters.

800. At stations where yard force is employed, trains, or engines without trains, will be under control of the yardmaster, and all employes in train or engine service will be subject to his direction. Road crews of trains entering such stations will be responsible for their respective trains and engines until same are taken charge of by the yardmaster or his representative.

801. Yardmasters will be responsible for the proper position and security of all yard switches. Main line switches in yards, except when in use, must invariably be locked for the main track.

802. Yardmasters will keep advised of important trains, such as stock, fruit and manifest and make every effort to get them through the yard with the least possible delay. Freight assigned to particular trains must be forwarded in such trains. In the absence of other instructions, trains may be filled out with non-manifest in order of its importance. They must see that cars loaded with explosives and inflammable material are placed in the train the prescribed distance from the engine and caboose.

Conductors.

813. The general direction and government of a train is vested in the conductor, and all persons employed on the train will obey his instructions. Should there be any doubt as to authority or safety of proceeding, from any cause, he will consult the engineman and be equally responsible with him for the safety and proper handling of the train and for such use of signals and other precautions as the case may require. He must be vigilant and cautious, not trusting alone to signals or rules for safety. Will obey the instructions of yardmasters within yard limits and be governed by the direction of agents in doing work at stations. Conform to the instructions issued by the traffic and accounting departments.

814. Conductors must report for duty at least thirty minutes before the time set for departure of their trains, and see that their crews are on hand.

815. Before leaving initial points, conductors must see that their trains are provided with proper tools and sufficient supplies of all kinds. Know that the cars in their trains have been inspected, and that the brakes are in proper

working order. Compare time with their enginemen before starting on run, and with their brakemen, flagmen and baggagemen, as soon thereafter as practicable.

816. Conductors must see that subordinates are familiar with their duties, ascertain the extent of their experience and knowledge of the rules; instruct them, if necessary, in the proper performance of their work, and caution them as to its risks. Incompetence must be reported.

817. Conductors must not allow other duties to interfere with the proper protection of their train, and invariably require their flagmen to act with the utmost promptness and in strict accordance with the rules. A flagman must always be stationed on the rear car of every train while in motion; on passenger trains the flagman will get on and off of the head end of the last car, and must not, except in case of emergency, disturb the occupants; and must have in his possession the necessary flagging equipment, ready for immediate use.

818. In case of extraordinary rain storm or high water, trains must be stopped, and bridges, trestles, culverts and other points liable to damage, examined by conductors before passing.

819. Conductors must make careful inquiries at all stopping places and when thought advisable, make extra stops to ascertain the extent and severity of storms, taking no risk. In case of doubt as to the safety of proceeding, place train upon the siding and remain there until certain it is safe to proceed.

820. Conductors must inspect the running gear and brake and draft rigging of trains as often and as closely as practicable while on the road, require their men to assist in such inspec-

tion, remedy as far as possible any defects discovered and remove from the train cars that are unsafe to run. Special attention must be paid to hot boxes.

821. In leaving cars on side tracks, conductors must see that they are left clear of any street, highway or private crossings. Must not leave cars on passing tracks when there is room for them on other tracks; if so left, immediately notify train dispatcher by wire. See that a sufficient number of hand brakes are set to hold the cars on side tracks. If brakes are inoperative, cars must be properly secured. When the side track is on grade, if practicable, couple the cars together, and in addition to setting the brakes, block the wheels. When doing work at stations, where the grade is such that cars will start if brakes are released, a trainman must always be left in charge of the train.

822. In case of injury to persons, loss of life or damage to property, conductors must furnish a full and exact statement of all the facts, with the names and addresses of all persons who witnessed or have information concerning the accident; written statements to be obtained whenever possible. In case of death on their trains from accident or otherwise, or of the killing of any person on the track by their trains, see that the properties are observed and that the body receives appropriate care and is removed as soon as possible to a proper place and left in charge of a public officer or an agent of the Company.

823. If a conductor discovers any defect in track, bridges or culverts, which might cause an accident, he must not rely wholly upon the telegraph to notify other trains, but must leave a flagman.

824. When starting from stations, brakemen must watch closely to see that brakes are fully released, and will immediately signal enginemen to stop if wheels are found sliding. Each brakeman will be held responsible for any wheels slid flat under the part of the train in his charge. Conductors in reporting flat wheels will give the name of brakeman in charge.

Passenger Service.

835. Conductors must not allow passengers to carry in the coaches bulky packages or other articles which obstruct the aisles, seats, or the space between the seats, to the inconvenience of other passengers.

836. Conductors must not allow drunken or disorderly persons to get on their train, nor permit obscene, profane or other ungentlemanly language, damage to Company property, or other misconduct in any of the cars.

837. Side and trap doors of vestibules must be kept closed while train is in motion.

838. When examining tickets, conductors must notify passengers destined to points on branch or connecting lines, where they are to change cars, also where they will find the trains of such lines.

839. As far as possible, conductors must see that passengers are provided with seats, and that no one is allowed to occupy more than a single seat to the exclusion of others. When there are not seats enough in the coaches and there are vacant seats in any parlor or sleeping car (except chartered cars) passengers may be seated therein and train conductors will arrange with parlor or sleeping car conductors accord-

ingly. Such seats must be surrendered as soon as there is room in the coaches or whenever they are wanted for regular use. Seats in the sleeping cars must not be so assigned or occupied at night after the regular passengers have retired.

840. Train employes must not occupy seats with passengers, nor enter into conversation with them further than is required in the discharge of their duty, but will contribute as far as possible, without being unduly officious, to the convenience and comfort of passengers, and give particular attention to women and children who are unattended, and to all persons who are ill, infirm, inexperienced, or otherwise unable to care for themselves. They must not solicit business for any hotel or transportation company.

841. Conductors must look out for confidence men, monte players, prize package vendors and other swindlers; have them watched, personally warn passengers and if any attempt be made to defraud them, must prevent it and report case by wire to the Superintendent. They must not permit beggars or unauthorized peddlers to practice their vocations on the train, nor allow advertising matter to be distributed.

842. The proper announcements necessary for the information and guidance of passengers must be made by trainmen approaching stations, junction points and eating houses, and at terminals and junctions before the departure of the trains. Conductors will see that employes of sleeping or parlor cars advise their passengers when they are to leave the train.

843. Conductors must use discretion if necessary for any reason to eject a passenger from the train. They will be governed by local rules,

State Laws and the proprieties. If in doubt as to the right of a passenger to continue on transportation presented, or as to the proper course to pursue, the facts in the case will be reported by wire to the Superintendent. In case a passenger is ejected from the train, the names and addresses of all witnesses should be obtained and their statements in writing if possible.

844. Articles found on trains must be delivered to station baggageman at terminal or junction stations, and his receipt obtained on form provided for that purpose.

845. Upon delivery of their trains to relieving conductors, inform them of any facts which it may be necessary or proper for them to know in taking charge. Care must be exercised to properly transfer transportation with the passengers. Passenger trainmen will remain by their trains at terminals to answer inquiries and assist passengers until the train is vacated.

846. Conductors will see that all telegrams entrusted to their care are promptly delivered. Receipts will be taken for commercial telegrams. If for any reason they cannot be delivered, conductors will endorse this fact upon the envelope and hand it off at the next telegraph station.

847. Conductors must give particular attention to the safety and comfort of their passengers, to the heating, lighting and ventilation of cars, and the supply of water in tanks.

848. No gunpowder, dynamite, nitro-glycerine, or similar explosive will be transported in any car attached to a passenger train.

849. No person will be allowed to ride free except as specially provided. Conductors must collect fare from all persons traveling without a ticket, being allowed no discretion.

Freight Service.

857. Freight conductors are responsible for the security of all freight carried by their trains while in their charge, and for its delivery, with the necessary way-bills or manifests, at its destination or at terminals. They must examine the fastenings of cars and keep such record as will enable them to answer all inquiries.

858. Comply with instructions of agents in placing cars and doing other station work. In case instructions are unreasonable, the facts must be reported to the Superintendent; but the instructions must be executed, if practicable, without endangering or delaying first-class trains.

859. Conductors must give proper attention to the handling of live stock and its attendants, being governed by special instructions relating thereto.

860. The doors in empty cars in trains must be kept closed. The doors of loaded cars must be closed and properly secured, unless left open for ventilation. The instructions relative to ventilation of perishable commodities must be closely observed.

861. Conductors must see that their crews are so distributed over the train as to control it most effectually and to be able to pass signals from any part of it to the engineman. In cold or inclement weather they may allow their men to ride in the caboose or on the engine, so far as is consistent with safety, but in descending long grades, at all points where trains are met or passed, before reaching the whistling posts, approaching and passing telegraph and other timetable stations, railroad crossings and other points where train may be required to stop,

trainmen must all be in proper position on top of the train.

862. Conductors must see that their cabooses are kept in a clean and tidy condition and that the floors and windows are washed as often as may be necessary. The use in caboose of stoves, other than those furnished by the Company is forbidden.

863. Conductors will see that the words "Bad Order" are written with chalk on both sides of bad order cars left at stations, and defective parts marked with a cross. They will also attach damaged car card, Form 2427, and report damage by wire to the Superintendent giving initial and number, and if loaded, contents and destination.

864. Conductors must familiarize themselves with all the rules pertaining to the loading, unloading and handling of freight. They will not allow unauthorized persons to examine way-bills.

865. Conductors must not take freight, either in car-load or less-than-carload lots, from a station where there is an agent, without the regular way-bills or card-bills, nor if the cars are in his opinion unsafely loaded, in which case report must be promptly made to the Superintendent.

Enginemen.

875. Report for duty at least thirty minutes before the time set for the departure of train; see that fireman is on hand, and remain on duty with engine until it is delivered at the designated place at end of trip, or until properly relieved.

876. When there is no conductor, or when the conductor is disabled, the engineman will,

unless otherwise directed, have charge of the train and will be governed by the rules prescribed for conductors. When more than one engine, the senior engineman will assume these duties.

877. See that firemen are familiar with their duties, ascertain their knowledge of the rules, instruct them, if necessary, in the proper performance of their work and caution them as to its risks. Incompetency must be reported.

878. Examine bulletins, provide themselves with current time-tables, and see that engine has the necessary signals, tools and supplies before starting on each trip.

879. See that all connections between the engine and the train, also between engines when double headers are used, are properly and securely made.

880. Give special attention to the care and condition of signals prescribed in Rules 20 and 21, and to markers when used on engines, and see that proper train signals are correctly displayed. Flags must be kept clean and the lamps kept burning brightly when in use.

881. If headlight fails, use a lantern in its place, notifying Superintendent. Headlight of forward engine must not be concealed while engines are moving.

882. While switching, the engineman and fireman must remain on the engine. Exercise great care in handling engine while yardmen or others are making couplings and give close attention to signals.

883. Allow no one to handle engine, except the fireman, when competent.

884. Exercise great care to prevent water being thrown from smoke stack when starting,

and do not open cylinder cocks nor permit overflow from injector at station platforms.

885. Require the firing to be done in such a manner as to avoid dense smoke, and use the blower gently to prevent smoke trailing when at stations.

886. Never interfere with the safety valves or allow the boiler pressure to be above the limit at which the valves are set. Steam pressure must be regulated to avoid the escape of steam from safety valves.

887. If a train makes an improper station stop, it must not be moved until the conductor gives the proper signal to do so. If, after making stop at a water station, it should be necessary to move the engine to take water, it must not be done while passengers are leaving or entering the train.

888. On passenger trains immediately after leaving an initial station, or at any point where the train line may have been broken, and on freight trains at least one mile before reaching a railroad crossing at grade, drawbridge or other stopping place, or before descending a heavy grade, the air must be applied and the brakes tested sufficiently to ascertain if they are in working condition.

889. Keep a constant and vigilant lookout; carefully note all signals; see whether other trains are displaying signals, and observe the position of switches while running, also watch for obstructions and defects of track, and frequently look back, especially while rounding curves, to see whether the train is intact, and require the fireman to do the same.

890. Be alert in all matters pertaining to safety, and when it becomes evident that rear

of train requires protection, immediately sound whistle signal for flagman, and, if necessary, repeat the signal until protection is assured.

891. Engine must be supplied with flag, lamp, torpedo and fusee signals, and enginemen must know that their firemen are conversant with and properly understand the application of rules relating to protection of trains.

892. While running by night, have in cab, where it cannot be seen by passing trains, a red light, with sufficient torpedoes attached thereto, and, in case of danger, signal approaching trains. By night, when standing or moving about yards, detached engines must display a red light to the rear. Keep in mind the number and location of switches at each point, so as to know before reaching them whether all are lighted; and if they are not, reduce speed until track is known to be clear. Report all such failures.

893. During foggy, or stormy weather do not attempt to recover lost time; take extraordinary precautions, both at switches and at all places where authority to proceed depends upon signals.

894. During and immediately after severe storms run with caution over track likely to be damaged.

895. If reason to believe that their train has passed over any dangerous defect of track or roadway, stop at once and notify the conductor.

896. Read all rules, special instructions and notices involving the movements or safety of trains and see that they are read and understood by fireman.

897. Report to Master Mechanic any defect or improper condition of engine, and, at the end

of each trip enter on the work book the repairs required.

898. When a train has more than one engine the air will be handled by the leading engine; any other requirements of the rules apply alike to all enginemen, except that the use of the engine bell and whistle shall be limited to the leading engine. Special instructions governing the use of the air brake, steam heat, etc., must be observed.

899. Engines must not be left without man in charge, except at designated places; and must not be left standing in such position as to block movements on adjoining tracks. Never allow engine to stand on main track unless properly protected under the rules.

900. Must not permit engines to stand nearer than 100 feet to a street or highway crossing, or under any bridge, when it can be avoided; nor in the vicinity of waiting rooms, telegraph offices or near cars occupied by passengers where the noise or smoke will disturb the occupants.

901. Exercise caution and good judgment in starting and stopping trains to avoid violent or sudden movements which might cause discomfort or injury to passengers, or damage to property.

902. Use great care to avoid striking stock, stopping if necessary. When stock is inside of right of way fence notify sectionmen, also Superintendent. Should any be killed or injured, make report on prescribed form.

903. Must not sand or clean ash pans or front ends on switches, frogs or interlocking fixtures. Fire must be promptly and thoroughly extinguished at points where ash pans are

cleaned. Dampers of ash pans must be closed and grates must not be shaken when passing over bridges and trestles. Do not allow anything to be thrown from engine that may cause injury to persons or damage to property.

904. Know by personal examination that tools, signal appliances, etc., carried on the engine, are in good and serviceable condition, also that there is a full supply of fuel and water, dry sand and other necessary stores.

905. Render necessary assistance in switching and making up train. Use great care in backing to take train, or backing into sidings to take or leave cars, approaching slowly enough to allow coupling without injury to person or property. Be sure that engine is under control when approaching switches which are to be thrown. Look out for derailing switches on side tracks.

906. Enginemen must know their time on the road, and will not start from a station, even though they receive a signal from the conductor, unless they can reach the next station in time to properly clear superior trains.

907. Irregular trains and regular trains behind time must sound the whistle repeatedly in obscure places to warn section and bridge men. The same precautions must be used in fogs and snow storms.

908. Enginemen must use every precaution to prevent setting fires along line. They must carefully and frequently inspect netting or other apparatus provided for arresting sparks and see that it is in good order. They must know that sand used for cleaning flues contains no foreign substance whatever, and as far as

practicable will sand flues in the vicinity of section gangs.

Station Agents.

916. Agents must not be absent from their stations, grant leave of absence to their subordinates, or make any change in their forces without permission.

917. At stations where yardmasters are not employed, agents will be held responsible for the proper security and position of switches, which must be locked for the main track. They will in no case allow them to remain turned from the main track, except when in actual use, and they must know before leaving the station at night that switches are secure and that everything is in order for the safe passage of trains. They will also be held responsible for the proper position and locking of derailing switches.

918. Agents must make daily inspections of yards, platforms, offices, buildings and surroundings, and co-operate with supervisors and roadmasters in maintaining the neat and tidy appearance of same. See that the station platforms and walks are properly cleared of snow, ice, or dirt, and that rubbish is not allowed to accumulate about any of the buildings.

919. Agents have charge of employes at stations, see that they properly perform their duties and are courteous and considerate in their intercourse with the public.

920. Agents must acquaint themselves with the business interests of the people among whom they are situated, use all proper means to secure traffic and act with the view of accommodating the public, and promoting the best interests of

the Company, notifying the Superintendent and heads of departments of anything affecting their departments, prejudicial thereto, or conducive to its good, present or prospective.

921. All cases of attempted robbery, theft of property belonging to or in charge of the Company, damage to property by fire or storm, personal injury and other extraordinary occurrences at or in the vicinity of station, must be promptly reported by wire to the Superintendent.

922. Agents must see that the freight and passenger tariffs and all notices to the public are neatly posted in conspicuous places in the station; other advertising matter must not be posted on the premises, except when properly authorized, and then only at places designated for the purpose. Where train bulletin boards are provided, see that proper entries are made thereon.

923. Agents must preserve order in and about the station, exclude from the station and platforms intoxicated and disorderly persons or loungers who interfere with the comfort or convenience of patrons or obstruct the station work, and all persons engaged in unauthorized occupations.

924. Agents must indicate the places where hacks, omnibuses and other vehicles shall be allowed to stand at the station, and where the persons in charge thereof, hotel runners and other solicitors shall remain while engaged in their duties on the Company's premises, and remove therefrom any such person who does not comply with these directions. Do not permit bicycle riding on station platforms.

925. Agents must see that waiting rooms and other apartments for the accommodation of passengers are thoroughly cleaned and properly heated, ventilated and lighted. When stations are open for business after dark, see that the platforms are adequately lighted, when practicable. Waiting rooms, ticket offices and baggage rooms must be open at least thirty minutes, or other period required by law, before the departure of passenger trains scheduled to stop, and at such other times as may be necessary.

926. Agents whose duties are in any way connected with the handling of United States mails must be familiar with and governed by the "Instructions and Information relative to the Transportation of United States Mail" issued by Superintendent of Mail Service.

927. Give prompt attention to correspondence; keep the books and accounts promptly and neatly written up, in the manner prescribed by the accounting and other departments to which they relate, and submit them to the traveling auditor or other authorized officer for examination as may be required.

928. Agents must not allow shippers to leave decayed fruits or vegetables in cars or on station grounds.

929. Agents must never throw a switch for a trainman, except where, by special instructions, it is made their duty. Agents must see that stations are furnished with necessary signal equipment, and ready for use. Should anything endanger the safety of trains on main tracks, see that proper signals are immediately displayed.

930. Agents must not permit bill-boards to be erected nor material placed in such position as to prevent a plain view of approaching trains, and see that cars on sidings are not left where they will obstruct view of the main track and have their brakes securely set, and when such sidings are on grade, or if the brakes are defective, that the wheels are securely blocked. When there are indications of heavy winds, see at once that cars are so secured that they will not move.

931. Agents must make every effort to obtain cars for shippers at the time desired, but must not promise to furnish them within a specified time, unless so advised. Order daily, or oftener when necessary, from the chief train dispatcher, stating the kind of freight, and destination, also the route when for points off the line. Endeavor to furnish cars of proper capacity to accommodate freight and, except when evidently not in condition to make it safe, all cars should, when practicable, be loaded to ten per cent above marked capacity. Should not forward cars loaded beyond ten per cent in excess of their marked capacity. See that all cars furnished for loading are in proper condition for the class of freight to be loaded and report to the chief train dispatcher cars received that are unfit for the purpose required. When the demand for cars exceeds the supply distribute the available cars in proportion to the actual requirements of shippers, their ability to load properly, and with due regard to sequence of their orders. See that cars are loaded and unloaded promptly, and that the rules for the collection of car service are rigidly enforced.

932. When unloading of cars is delayed by refusal of consignees to accept freight, or from

any other cause, agents must report the matter to the proper officer and obtain disposition therefor. Immediately upon arrival of cars containing Company material, the party to whom the shipment is consigned should be notified, and if on hand over twenty-four hours, notify the Superintendent.

933. Agents must not allow advertisements to be placed on any freight car, other than a notice relating directly to the business of the shipper by whom the car is loaded, to be printed on cloth, paper or coardboard, not exceeding in size two feet square, which must be attached to the car with cleats or tacks; paste or glue must never be used. Such notices must not be placed over car numbers, initials or other inscriptions relating to the service of the car.

934. Remove all advertisements not provided for in this rule before forwarding the cars, and the signs which are permitted to be used must be removed on arrival of cars at destination.

935. Agents must furnish conductors switch list. Make every effort to avoid delay in the movement of cars, both loaded and empty; see that they are promptly forwarded by the proper trains.

936. When cars are left short of destination report by wire to the chief train dispatcher, stating their contents, destination and why left. Also report the date and train upon which forwarded. Prompt notice must be sent to the chief train dispatcher of the completion of repairs to disabled cars.

937. Inflammable oils and explosives will be received only in daylight. The packages must be substantial and in good condition.

They must not be handled through freight houses when it can be avoided. Freight of this character must be kept by itself and separate from other freight, so far as practicable both at stations and in cars. The regulations of the general freight department must be carefully observed. See "High Explosives."

938. Agents must see that all freight loaded is safely and properly stowed and, when necessary, is securely fastened by braces, blocks, cleats, stakes, chains, or other means, as the nature of the freight may require to prevent loss or damage by falling, shifting, chafing, breaking, or by contact with any contaminating substance. In loading way cars, stow freight in station order. Allowing nothing to be loaded on the roof of a car.

939. The loading of lumber, timber and other freight on open cars, must be in general conformity with the specifications and diagrams of the Master Car Builders' Rules, printed copies of which will be furnished to agents for use of shippers upon application to the Superintendent.

940. For shipments to points on other roads, strict conformity to the Master Car Builders' Rules of Inspection is required.

941. Apply the required cards to cars as indicated by the special instructions relating thereto and remove all old cards, except home route and M. C. B. defect or repair cards, before cars are forwarded.

942. Local freight to be loaded or unloaded must be checked by the conductor and agent together and anything irregular noted on the way-bill.

943. Agents must see that all less-than-car-load shipments of freight are plainly marked, showing consignee and destination, and that all old marks are erased.

944. Agents must see that all freight which requires shelter is promptly placed in freight house or in cars.

945. Freight houses must be locked, and cars containing freight, which can be closed, must be sealed or locked at all times, except when the agents or other authorized persons are in immediate charge thereof.

946. Freight, baggage, or express must not be left between main tracks, nor within six feet of the edge of main track platforms.

947. Skids, trucks and scales when not in use should be placed in baggage room or warehouse; if necessary to leave them on platforms, they should be lined up at the end or in the rear of station building, and must be locked or otherwise secured.

948. Unless otherwise instructed, agents must not use cars on hand nor order cars for partial loads of freight that can be loaded in local freight trains.

949. Before loading stock, agents must examine cars carefully to see that they are in good order. After loading, doors must be closed and all fastenings firmly secured.

950. Agents must see that stock-yards are kept in good condition, and that the gates of the pens and chutes are closed and securely fastened when not in use.

951. They must, when authorized to act as agents of any express or other company, give preference to the business of the railroad.

952. Agents must familiarize themselves with the boundaries of the Company's property at their stations, and must not permit any encroachment thereon.

953. Unless provided for by lease, they must not allow any commodities to be placed on grounds or right of way at their stations for the purpose of storage without written permission from the Superintendent, and then only after release on prescribed form has been executed by the owner.

Operators.

968. Chief Train Dispatchers are division operators on their respective districts, unless otherwise arranged, and will represent the Superintendent of Telegraph, have immediate supervision and control of the operators and linemen (except where otherwise specially arranged), and of tests and repairs of wires, and will report to the Superintendent of Telegraph in all matters pertaining to the telegraph service, keeping him promptly and fully advised as to the conditions of wires and interruptions, and to enforce the rules and instructions of the telegraph department. Will see that wire interruptions are promptly tested and definitely located, so linemen will not lose time in finding and removing cause. Interrupted wires must be tried frequently, in order that they may again be placed in service as soon as possible after trouble has been removed.

969. Operators will devote themselves to the telegraph service first; those who have additional duties as agents or clerks must be within hearing of their instruments, when possible, and such additional duties must not conflict with the utmost promptness in the discharge

of all telegraph business. Are expected to assist in clerical and other station services when called upon, their telegraph duties permitting.

970. They are required to be constantly on duty during the hours assigned them and must not leave their offices for the night, without permission from the dispatcher on duty.

971. Must not in any way make public the fact or particulars of accidents, or communicate them to any person whatever, except the proper officers of the Company. Contents of all messages must be held strictly confidential, and in no manner be made known to any person, except the one addressed, nor be made the subject of remark along the line. Violations are punishable under state laws.

972. Operators will advise the Superintendent promptly as to severity of all storms and extent of damage. When there are indications of heavy winds, cloudbursts, or abnormal weather conditions, they must see at once that cars at their stations are so secured that they will not move and obstruct main line.

973. Operators must notify yardmasters of special passenger, or other important extra trains, so they can expedite movement through yards.

974. Transfer, consisting of record of outstanding train orders, all overdue trains and undelivered messages, must be made by the operator, on Form 2954. A copy of all train orders issued must be filed in the station records; each month's business should be labeled and tied in a package showing month and year. When a year's business accumulates it will be enclosed in one package and properly labeled.

It is important that a copy of all train orders be preserved so they can be produced at any time required.

975. Operators must never throw a switch for a trainman, except where, by special instructions, it is made their duty.

976. Operators will be held responsible for the prompt delivery of messages at their stations. When answers are required, they must make every reasonable effort to obtain them. In case the person to whom the message is addressed cannot be found, they must notify the office at which it originated, without delay.

Station and Train Baggage-men.

980. Station and Train Baggage-men will have charge of the baggage entrusted to the care of the Company for transportation. They will obey the instructions of the Superintendent and comply with those of the General Baggage Agent, Passenger and Accounting Departments. Their duties are defined by "Manual of Instructions to Station and Train Baggage-men."

Car Inspectors.

986. They must inspect all cars passing their stations and make such repairs as are necessary, giving special attention to cars running in first class trains. In inspecting passenger cars at terminal stations, see that they are properly washed, equipped and warmed; that all fixtures are clean, in good order and ready for use; that all lighting and heating apparatus is in proper condition, are supplied with fuel, water and ice; the running and draft gear in good condition, and that the air signals, also air and hand brakes are in working order. At other stations,

inspect all trains upon their arrival and see that the running gear, brakes and other fixtures are in good condition, and be prepared to make any light repairs that may be required; should a car need repairs which will occupy much time it must be promptly carded for set-out and conductor, agent, or yardmaster notified.

987. Assist switchmen and trainmen to couple and uncouple all air and steam connections on first class trains and carefully examine the couplings after the trains are made up. Uncouple the air hose and bleed the auxiliary reservoirs on all freight cars left at division stations, or arriving at terminals. When freight trains are made up ready to go out, it will be their duty to see that all hose couplings are properly made in such trains and see that the air brakes are properly connected through the train and all valves in auxiliary reservoirs are closed.

988. When inspecting or repairing cars which they do not wish moved, they must protect themselves by placing conspicuously a blue signal on both ends of the car, as provided in Rule 26.

989. When necessary to make repairs on a car in a train, they must place blue signals upon both ends of the train before commencing work. If an engine is attached to it, they will place a blue signal upon the engine where it can be plainly seen by the engineman and fireman.

990. Be conversant with and conform to the Master Car Builders' Rules of Inspection, for all shipments, and must familiarize themselves with the clearance in all bridges, tunnels, snow sheds, etc., on this line, and not permit cars to go for-

ward loaded in such manner as to be damaged by these obstructions.

991. Be familiar with the rules for the inspection of safety appliances and shall see that all cars are in conformity with the National law on this subject before the cars are forwarded.