

Pennsylvania Railroad System



BOOK OF RULES

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2023

No. **145619**

PENNSYLVANIA RAILROAD SYSTEM

**THE PENNSYLVANIA RAILROAD COMPANY
WEST JERSEY AND SEASHORE RAILROAD COMPANY
PENNSYLVANIA AND ATLANTIC RAILROAD COMPANY
WAYNESBURG AND WASHINGTON RAILROAD COMPANY
THE OHIO RIVER AND WESTERN RAILWAY COMPANY**

OPERATING DEPARTMENT

RULES

FOR CONDUCTING TRANSPORTATION

Approved by the Boards of Directors.

Effective April 26, 1925.

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The rules herein set forth govern the operation of all railroads in the Pennsylvania Railroad System.

They are effective April 26, 1925, and supersede all previous rules and all instructions inconsistent therewith.

Special instructions may be issued by proper authority.

T. B. HAMILTON
Regional Vice-President
and General Manager.

R. V. MASSEY

M. W. CLEMENT

I. W. GEER
General Managers.

P. F. SMITH, JR.
Works Manager.

GENERAL NOTICE.

Safety is of the first importance in the discharge of duty.

Obedience to the rules is essential to safety.

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

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

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

o

GENERAL RULES.

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

Employees whose duties are in any way affected by the time-table must have a copy of the current time-table with them while on duty.

B. Employees 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. Employees must pass the required examinations.

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

E. Employees must render every assistance in their power in carrying out the rules and special instructions and must report to the proper official any violation thereof.

F. Accidents, failure in the supply of water or fuel, defects in track, bridges, signals, or any unusual conditions which may affect the movement of trains, must be promptly reported by wire to the Superintendent.

G. The use of intoxicants by employees 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 employees 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. Employes and others authorized to transact business at stations or on or about trains must be orderly and avoid annoyance to patrons.

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

M. Employes while on duty connected with trains on any division are under the authority and must conform to the orders of the officers of that division.

N. Employes must exercise care to avoid injury to themselves or others by observing the condition of equipment and the tools which they use in performing their duties and when found defective will, if practicable, put them in safe condition, reporting defects to the proper authority.

They must inform themselves as to the location of structures or obstructions where clearances are close.

They must expect trains to run at any time, on any track, in either direction.

They must not stand on the track in front of an approaching engine or car for the purpose of boarding the same.

GENERAL DEFINITIONS.

ENGINE.—Any self-propelled unit used for the movement of trains.

ENGINEMAN.—The employe in charge of and responsible for the operation of an engine as prescribed by the rules.

TRACK CAR.—A self-propelled car or truck which may be manually moved to or from the track.

DRIVER.—The employe in charge of and responsible for the operation of a track car as prescribed by the rules.

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 must be designated as—

Extra—for any extra train except passenger train extra or work train extra;

Passenger extra—for passenger train 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 given precedence by time-table.

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

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 railroad assigned to the supervision of a Superintendent.

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

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

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

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

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

STATION.—A place designated on the time-table 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.

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 rules, or special instructions.

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

PILOT.—An employe assigned to a train when the engineman or conductor, or both, are not fully acquainted with the physical characteristics or rules of the railroad, or portion of the railroad, over which the train is to be moved.

TRAIN-ORDER SIGNAL.—A signal displayed in the place provided therefor, in addition to a fixed signal, when there are orders either to hold or to be delivered to a train.

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

HOME SIGNAL.—A Fixed-signal at the entrance of a route or block to govern trains in entering and using said route or block.

DISTANT SIGNAL.—A Fixed-signal used in connection with one or more signals to govern the approach thereto.

DWARF SIGNAL.—A low Home-signal.

TRAIN RULES.

NOTE.—UNLESS OTHERWISE SPECIFIED, THESE RULES ARE APPLICABLE WITHOUT RESPECT TO THE NUMBER OF TRACKS.

STANDARD TIME.

1. United States Eastern Standard Time, or United States Central Standard Time, as specified on time-tables, is the standard, and will be transmitted, daily, to all points at 12.00 noon and 12.00 midnight, Eastern Time, and at 11.00 A. M. and 11.00 P. M., Central Time, at which time clocks must be adjusted to show correct time.

2. Conductors, enginemen and other designated employes must use reliable watches.

3. Conductors, enginemen and other designated employes must, before starting on each daily run or trip, compare their watches with a clock designated by time-table as a standard clock and adjust them to show correct time.

Conductors, enginemen and other designated employes, not having access to a standard clock, must compare their watches daily with those of conductors or enginemen who have standard time and adjust them to show correct time.

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 at the leaving time at their initial station on such 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 date from their initial stations on such division.

Not more than one schedule of the same number and day shall be in effect on any 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.

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.

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 symbol.

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.

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

S—Regular stop;

F—Stop on signal to receive or discharge • passengers.

Time-tables may provide additional letters to indicate specific instructions.

SIGNALS.

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

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

9. Day signals must be displayed from sunrise to sunset, but when day signals cannot be plainly seen, night signals must be used in addition.

Night signals must be displayed from sunset to sunrise.

10.

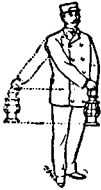



COLOR SIGNALS.

COLOR.	INDICATION.
(a) Red.	Stop.
(b) Yellow.	Proceed with caution, and for other uses prescribed by the Rules.
(c) Green.	Proceed, and for other uses prescribed by the Rules.
(d) Green and white.	Flag stop. See Rule 28.
(e) Blue.	See Rule 26.
(f) Purple.	Stop.
(g) White.	As prescribed by Rules 18, 21, 21a, 24, 24a, 80, and other Rules.

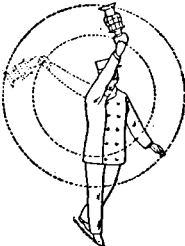


11. A train finding a fusee burning on or near its track must stop and extinguish the fusee, and then proceed with caution prepared to stop short of train or obstruction.

12. HAND, FLAG AND LAMP SIGNALS.

NOTE.—THE HAND, OR A FLAG, MOVED THE SAME AS THE LAMP, AS ILLUSTRATED IN THE FOLLOWING DIAGRAMS, GIVES THE SAME INDICATION, EXCEPT THAT IN THE OBSERVANCE OF RULE 12(a) THE HAND OR FLAG MOVEMENT WILL BE ABOVE THE SHOULDER.

MANNER OF USING.	INDICATION.	
(a) Swung across the track.	} STOP.	
(b) Held horizontally at arm's length, when the train is moving.	} REDUCE SPEED.	
(c) Raised and lowered vertically.	} PROCEED.	
(d) Swung vertically in a circle at half-arm's length across the track when the train is standing.	} BACK.	

HAND, FLAG AND LAMP SIGNALS.—CONTINUED.

MANNER OF USING.	INDICATION.
(e) Swung vertically in a circle at arm's length across the track when the train is running.	TRAIN HAS PARTED. 
(f) Swung horizontally above the head when the train is standing.	APPLY AIR BRAKES. 
(g) Held at arm's length above the head when the train is standing.	RELEASE AIR BRAKES. 

12h. When a train has one engine, signals to the engineman must be given according to the way the engine is headed. When a train has more than one engine and they are headed in opposite directions, the conductor must have a proper understanding with his crew.

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

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	Apply brakes. Stop.
(b) — —	Release brakes. Proceed.
(c) — o o o	Flagman protect rear of train.
(d) — — — —	(SINGLE AND DOUBLE TRACK.) Flagman may return from west or south, as prescribed by Rule 99.
(e) — — — — —	(SINGLE AND DOUBLE TRACK.) Flagman may return from east or north, as prescribed by Rule 99.
(f) — — —	When running, train parted; to be repeated until answered by the signal prescribed by Rule 12 (e).* Answer to Rule 12 (e).*
(g) o o	Answer to any signal not otherwise provided for.
(h) o o o	When train is standing, back. Answer to Rule 12 (d)† and Rule 16 (c). When train is running, answer to Rule 16 (d).
(j) o o o o	Call for signals.
(k) — o o	(SINGLE TRACK.) 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.

* Illustrated by diagram on page 16.

† Illustrated by diagram on page 15.

ENGINE WHISTLE SIGNALS.—CONTINUED.

SOUND.	INDICATION.
(l) — — o o	Approaching public crossings at grade, and, when view is obscured by weather and other conditions, approaching interlocking plants, stations, yards or other points where men may be at work on tracks.
(^m m) —————	Approaching stations, junctions and railroad crossings at grade.
(ma) — o	(DOUBLE, THREE, OR MORE TRACKS, WHEN RUNNING AGAINST THE CURRENT OF TRAFFIC.) (1) Approaching stations, curves, or other points where view may be obscured. (2) Approaching passenger or freight trains, and when passing freight trains. (3) Preceding the signal prescribed by Rules 14 (d) and (e), and (da) to (eh) inclusive, flagman for train against the current of traffic on that track may return as prescribed by Rule 99.
(o) o —	Inspect train line for leak.
(p) Succession of short sounds.	Alarm for persons or live stock on the track.

ENGINE WHISTLE SIGNALS.—CONTINUED.

SOUND.	INDICATION.
	(THREE, OR MORE TRACKS.)
(da) ————	Flagman for passenger track may return from west or south, as prescribed by Rule 99.
(db) ———— o	Flagman for freight track may return from west or south, as prescribed by Rule 99.
(dc) ———— o o	Flagman for ———— track may return from west or south, as prescribed by Rule 99.
(dd) ———— o o o	Flagman for ———— track may return from west or south, as prescribed by Rule 99.
(ee) ———— —	Flagman for passenger track may return from east or north, as prescribed by Rule 99.
(ef) ———— o	Flagman for freight track may return from east or north, as prescribed by Rule 99.
(eg) ———— o o	Flagman for ———— track may return from east or north, as prescribed by Rule 99.
(eh) ———— o o o	Flagman for ———— track may return from east or north, as prescribed by Rule 99.

14w. EMERGENCY WHISTLE AND HORN SIGNALS AT INTERLOCKING PLANTS.

SOUND.	INDICATION.
—	All trains within interlocking limits stop immediately.
o o	Resume normal movement after receiving the proper signal or permission from signalman.
o o o	Whistle or horn test.
o o o o	Call signal repairman.
o o o o o	Call electric traction maintainer.

15. The explosion of two torpedoes is a signal to reduce speed and look out for a train ahead or obstruction. The explosion of one torpedo will indicate the same as two, but the use of two is required.

15a. Torpedoes must not be placed near stations, road crossings, main track switches or in yards, where persons are liable to be injured by them.

16. COMMUNICATING SIGNALS.

NOTE.—THE SIGNALS PRESCRIBED ARE ILLUSTRATED BY "o" FOR SHORT SOUNDS; "—" FOR LONGER SOUNDS.

SOUND.	INDICATION.
(a) o o	When standing—start.
(b) o o	When running—stop at once.
(c) o o o	When standing—back the train.
(d) o o o	When running—stop at next passenger station.
(e) o o o o	When standing—apply or release air brakes.
(f) o o o o	When running—reduce speed.
(g) o o o o o	When standing—recall flagman.
(h) o o o o o	When running—increase speed.
(j) o o o o o o	When running—increase train heat.
(k) —	When running—brakes sticking—look back for hand signals.

16 (L). When a train has one engine, signals to the engineman must be given according to the way the engine is headed. When a train has more than one engine and they are headed in opposite directions, the conductor must have a proper understanding with his crew.

TRAIN SIGNALS.

17. The headlight will be displayed to the front of every train by night.

17a. When rules require the headlight to be displayed, electric headlights will be dimmed:—

(a) In yards.

(b) At meeting points or when on sidings.

(c) Approaching stations at which stops are to be made or where trains are receiving or discharging passengers.

(d) When stopped.

(e) On two or more track portions of the railroad when approaching trains running in opposite direction.

(f) When approaching a block station where a Train-order signal is displayed.

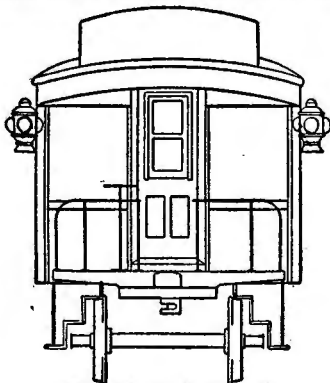
18. Yard engines will display the headlight to the front and rear by night. When not provided with a headlight at the rear, a white light must be displayed. Yard engines will not display markers.

19. The following signals will be displayed, one on each side of the rear of every train, as markers, to indicate the rear of the train.

NOTE.—THE DIAGRAMS ARE INTENDED TO ILLUSTRATE THE GENERAL LOCATION OF THE TRAIN SIGNALS, NOT THE EXACT MANNER IN WHICH THEY ARE TO BE ATTACHED.

COMBINATION LAMPS WITH FOUR ILLUMINATED COLORED FACES ARE REPRESENTED IN THE DIAGRAMS FOR MARKERS, AND WITH TWO ILLUMINATED FACES DISPLAYED FOR CLASSIFICATION LAMPS.

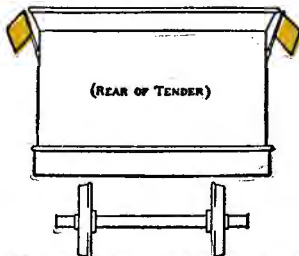
**FIGURE
1**



REAR OF TRAIN BY DAY.

Marker lamps, not lighted; except on cars not equipped for the display of marker lamps, when yellow flags will be displayed.

**FIGURE
2**

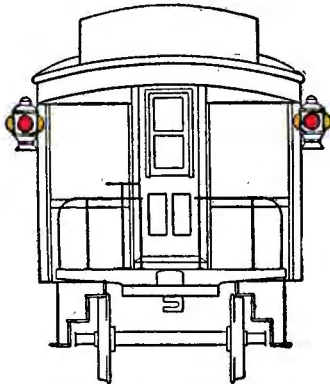


ENGINE RUNNING FORWARD BY DAY, WITHOUT CARS, OR AT THE REAR OF A TRAIN PUSHING CARS.

Yellow flags.

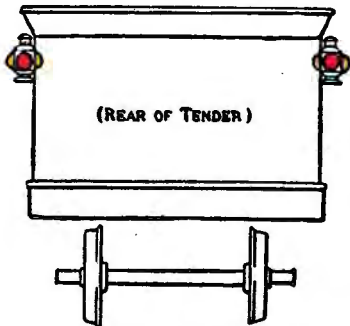
NOTE—For markers on engines running backward see Figures 9, 10, 13 and 14.

**FIGURE
3**



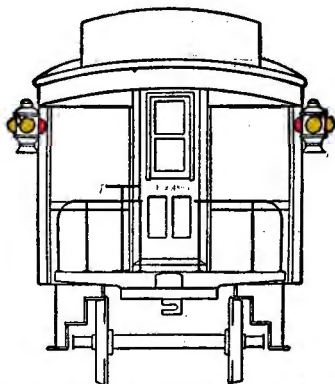
**REAR OF TRAIN BY NIGHT;
ON SINGLE TRACK.
DOUBLE TRACK WITH THE CURRENT OF TRAFFIC.
THREE, OR MORE TRACKS.
ON PASSENGER TRACKS WITH THE CURRENT OF TRAFFIC.**
Lights showing yellow to the front and side, and red to the rear.

**FIGURE
4**



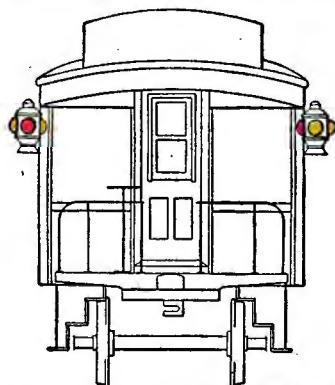
**ENGINE RUNNING FORWARD BY NIGHT, WITHOUT CARS,
OR AT THE REAR OF A TRAIN PUSHING CARS;
ON SINGLE TRACK.
DOUBLE TRACK WITH THE CURRENT OF TRAFFIC.
THREE, OR MORE TRACKS.
ON PASSENGER TRACKS WITH THE CURRENT OF TRAFFIC.**
Lights showing yellow to the front and side, and red to the rear.

**FIGURE
5**



**REAR OF TRAIN BY NIGHT WHEN CLEAR OF MAIN TRACK.
Lights showing yellow to the front, side, and rear.**

**FIGURE
6**



**DOUBLE TRACK. REAR OF TRAIN BY NIGHT WHEN TURNED
OUT AGAINST THE CURRENT OF TRAFFIC.**

Lights showing yellow to the front and side, yellow to the rear on the side next to the main track on which the current of traffic is in the direction the train is moving, and red to the rear on the opposite side.

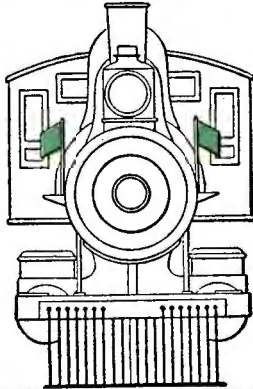
**THREE, OR MORE TRACKS. REAR OF TRAIN BY NIGHT ON
FREIGHT TRACK WITH THE CURRENT OF TRAFFIC, OR ON
ANY TRACK AGAINST THE CURRENT OF TRAFFIC.**

Lights showing yellow to the front and side, yellow to the rear on the side next to the passenger track on which the current of traffic is in the direction the train is moving, and red to the rear on the opposite side.

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.

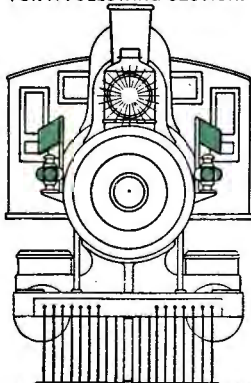
20a. (DOUBLE, THREE, OR MORE TRACKS.) On portions of the railroad so specified on the time-table, the display of green flags and green lights, as prescribed by Rule 20, will be omitted.

**FIGURE
7**



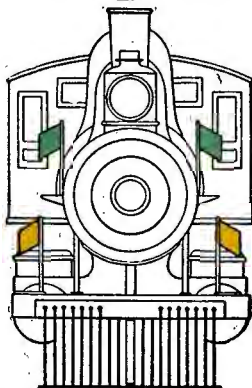
**ENGINE RUNNING FORWARD BY DAY DISPLAYING SIGNALS
FOR A FOLLOWING SECTION.**

**FIGURE
8**



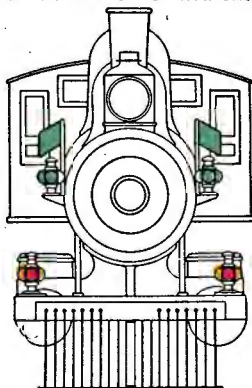
**ENGINE RUNNING FORWARD BY NIGHT DISPLAYING SIGNALS
FOR A FOLLOWING SECTION.**

**FIGURE
9**



ENGINE RUNNING BACKWARD BY DAY, WITHOUT CARS, OR AT THE REAR OF A TRAIN PUSHING CARS, AND DISPLAYING SIGNALS FOR A FOLLOWING SECTION.

**FIGURE
10**



ENGINE RUNNING BACKWARD BY NIGHT, WITHOUT CARS, OR AT THE REAR OF A TRAIN PUSHING CARS, AND DISPLAYING SIGNALS FOR A FOLLOWING SECTION;

ON SINGLE TRACK.

DOUBLE TRACK WITH THE CURRENT OF TRAFFIC.

THREE, OR MORE TRACKS.

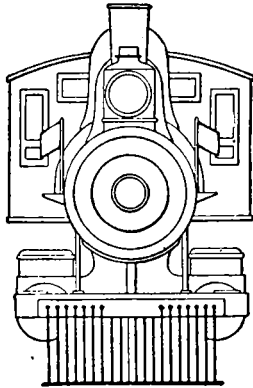
ON PASSENGER TRACKS WITH THE CURRENT OF TRAFFIC.

Marker lamps lighted showing yellow at side and in direction engine is moving, and red in opposite direction.

NOTE—Markers will display colors prescribed by Figures 5 and 6 when conditions require them.

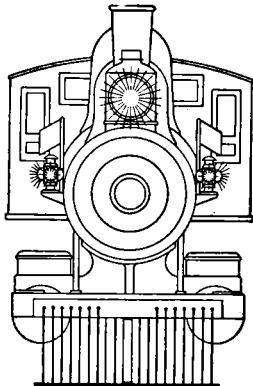
21. Extra trains will display two white flags, and, in addition, two white lights by night, in the places provided for that purpose on the front of the engine.

**FIGURE
11**



ENGINE RUNNING FORWARD BY DAY AS AN EXTRA TRAIN.

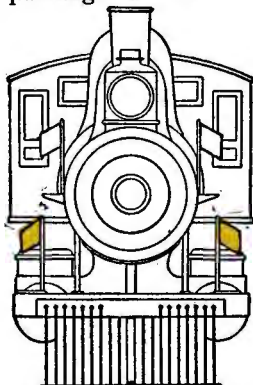
**FIGURE
12**



ENGINE RUNNING FORWARD BY NIGHT AS AN EXTRA TRAIN.

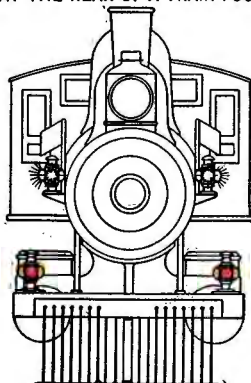
21a. (DOUBLE, THREE, OR MORE TRACKS.) On portions of the railroad so specified on the time-table, the display of white flags and white lights, as prescribed by Rule 21, will be omitted on all extra trains, except passenger extras.

**FIGURE
13**



ENGINE RUNNING BACKWARD BY DAY AS AN EXTRA TRAIN WITHOUT CARS, OR AT THE REAR OF A TRAIN PUSHING CARS.

**FIGURE
14**



ENGINE RUNNING BACKWARD BY NIGHT AS AN EXTRA TRAIN, WITHOUT CARS, OR AT THE REAR OF A TRAIN PUSHING CARS; ON SINGLE TRACK.

DOUBLE TRACK WITH THE CURRENT OF TRAFFIC.

THREE, OR MORE TRACKS.

ON PASSENGER TRACKS WITH THE CURRENT OF TRAFFIC.

Marker lamps lighted showing yellow at side and in direction engine is moving, and red in opposite direction.

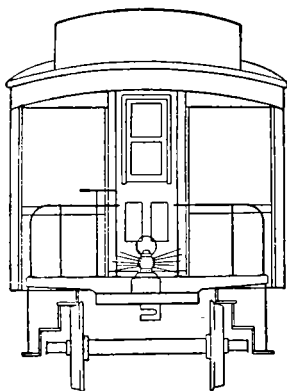
NOTE—Markers will display colors prescribed by Figures 5 and 6 when conditions require them.

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 when one or more helping engines are used over a portion of the division only, the signals will be displayed by the leading helping engine and the leading through engine.

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

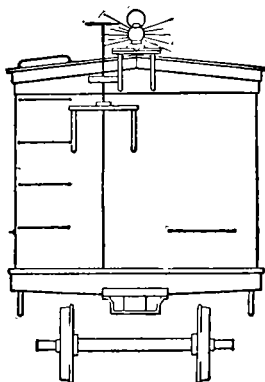
24. When cars are pushed by an engine (except when shifting or making up trains in yards) a white light must be displayed on the front of the leading car by night.

**FIGURE
15**



**PASSENGER CARS BEING PUSHED BY AN ENGINE BY NIGHT.
White light on front of leading car.**

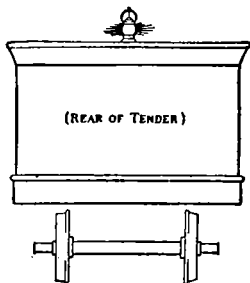
**FIGURE
16**



**FREIGHT CARS BEING PUSHED BY AN ENGINE BY NIGHT.
White light on front of leading car.**

24a. When an engine is running backward without cars, or at the front of a train pulling cars, a white light must be displayed by night on the rear of the tender if not equipped with a headlight.

**FIGURE
17**



**ENGINE RUNNING BACKWARD BY NIGHT, WITHOUT CARS,
OR AT THE FRONT OF A TRAIN PULLING CARS.
White light on tender.**

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

26. A blue signal 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. Each class of workmen will display the blue signals and the same workmen are alone authorized to remove them. Other equipment must not be placed on the same track so as to intercept the view of the blue signals, without first notifying the workmen.

When emergency repair work is to be done under or about cars in a train and a blue signal is not available, the engineman and fireman will be notified and protection must be given those engaged in making the repairs.

USE OF SIGNALS.

27. A train or engine finding a signal imperfectly displayed, or no signal at a place where a signal is usually shown, must regard it as the most restrictive indication that can be given by that signal for that train or engine, except that after a train has been stopped by an imperfectly displayed night signal from which a light is absent it will be governed by the day indication when it is plainly seen.

When light failures in a Position-light signal do not prevent correct reading of the signal, it will not be regarded as an imperfectly displayed signal.

Conductors and enginemen using a switch where the switch light is imperfectly displayed or absent, must, if practicable, correct or replace the light.

Imperfectly displayed signals must be reported to the Superintendent.

28. A green and white signal is to be used to stop a train only at the flag stations indicated on its schedule.

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; when running through tunnels; while approaching and passing public crossings at grade, and when passing a train standing on an adjacent track.

31. The whistle must be sounded at all places where required by rule or by law.

32. The unnecessary use of either the whistle or the bell is prohibited.

33. Watchmen stationed at highway crossings must use Stop-signals when necessary to stop trains. They will use prescribed signals to stop highway traffic.

33a. Switch Tenders in charge of main track switches, who are required to give signals to trains moving on main tracks, will use a green flag by day and a green light by night to give proceed signals.

34. Immediately upon seeing a Fixed-signal affecting the movement of their train, the engineman and fireman must, and when practicable the trainmen will, call its indication by name to each other.

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.

Superiority by direction is limited to single track.

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.

73. Extra trains are inferior to regular trains.

GENERAL ORDERS.

75. Conductors and enginemen when reporting for duty must exhibit to the Bulletin Board Attendant the time-table of the divisions over which they are qualified to run.

General Orders in sticker form pertaining to such divisions will be placed in the proper time-tables, which will be receipted for on card form furnished by the Bulletin Board Attendant, and the receipt forwarded to the Superintendent of their Home Division.

Conductors and enginemen of trains beginning their run from points where Bulletin Boards are not located will ask the Superintendent for information as to the last General Order issued, and if any have been issued for which they have not receipted, they will be instructed by train-order for that trip.

Time-tables furnished to replace loss and damage must contain all General Orders then in effect.

Conductors or enginemen absent from duty for prolonged periods must satisfy the Head of their Department that they are fully qualified to resume duty.

MOVEMENT OF TRACK CARS.

80. On portions of the railroad so specified on the time-table, track cars will be operated as follows:

They will be numbered for identification and designated as Track Car Extra ———.

They will be in charge of a qualified employe and, except as hereby provided, all rules and special instructions governing the movement of trains will apply to the movement of track cars.

They must not be used in Automatic Block System territory unless special provision is made for Manual Block protection. Attention is called to the fact that track cars will not operate Automatic signals.

They will not be authorized to represent or run as a section of a schedule; and under Manual Block System Rules will be operated as a "train other than a passenger train."

All movements will be made without displaying the signals prescribed by Rules 19 and 21.

When night signals, as prescribed by Rule 9, are required, a white light must be displayed to the front and rear of track cars.

They may be equipped with a portable telephone, in connection with the use of which they may be removed from and replaced on the main track at any point within a block by complying with Block System Rules.

Lookout must be maintained in both directions.

When track cars are approaching road crossings at grade, the trackman's whistle must be sounded before reaching the crossing, and the track cars must approach all such crossings prepared to stop.

They must not be attached to trains in motion, nor follow trains or other track cars closer than 500 feet.

MOVEMENT OF TRAINS.

81. (DOUBLE, THREE, OR MORE TRACKS.) Trains must run with the current of traffic, unless otherwise directed by proper authority.

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

Regular trains more than 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. (SINGLE TRACK.) A train must not leave its initial station on any division, 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.

83a. (DOUBLE, THREE, OR MORE TRACKS.) A train must not leave its initial station on any division, or a junction, or other starting point, until it has been ascertained whether all superior trains due have left, unless otherwise provided.

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

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

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

85a. (SINGLE AND DOUBLE TRACK.) A section may pass and run ahead of another section of the same schedule, first exchanging train orders, signals, and numbers with the section to be passed. The leading train must notify opposing trains affected by a change of sections.

The change in sections must be reported from the next available point of communication.

85b. (THREE, OR MORE TRACKS.) A section may pass and run ahead of another section of the same schedule; signals must be properly arranged.

86. Unless otherwise provided, an inferior train must clear the time of a superior train, in the same direction, not less than five 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.

87. (SINGLE TRACK.) 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 will be governed by train orders, with respect to opposing extra trains.

88. (SINGLE TRACK.) 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. (SINGLE TRACK.) 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. (SINGLE TRACK.) Trains must stop at schedule meeting points, 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 point, 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.

90a. Trains using a siding must proceed with caution, expecting to find it occupied by other trains, and on a siding used by trains in both directions, must run expecting to meet opposing trains.

90b. Sidings to be used in an assigned direction must not be used in reverse direction unless authorized by the Superintendent or, in emergency, under protection as prescribed by Rule 99.

91. Unless some form of block signals is used, trains in the same direction must keep at least five minutes apart, except in closing up at stations, and a train following a train carrying passengers must keep at least ten minutes behind it.

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. (SINGLE TRACK.) Within yard limits the main track may be used clearing first-class trains as prescribed by the rules and protecting against other regular trains. Extra trains must move within yard limits prepared to stop unless the main track is seen or known to be clear.

NOTE.—YARD LIMITS WILL BE INDICATED BY YARD LIMIT BOARDS.

93a. (DOUBLE, THREE, OR MORE TRACKS.) Within yard limits the main tracks may be used clearing first-class trains as prescribed by the rules and protecting against other regular and extra trains.

NOTE.—YARD LIMITS WILL BE INDICATED BY YARD LIMIT BOARDS.

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 available point of communication, 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 available point of communication.

94a. (SINGLE TRACK.) When a train, unable to proceed against the right or schedule of an opposing train, is overtaken between communicating 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 understanding with the following train, precede it to the next available point of communication, 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.

94b. A train must not proceed on a signal displayed for a preceding movement; however, a train overtaking another train which is stalled or requires assistance, or a train called upon in emergency, will, in the absence of other instructions, render such assistance as may be necessary after having a proper understanding with the train involved, and with the signalman if the movement is to be made past a block station.

When a train is coupled to or assisting a train ahead it will be considered part of the train to

which coupled, so far as observing fixed signals is concerned.

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 Rules 85, ^{a and b} without orders from the Superintendent or such officer as he may designate.

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

97. (SINGLE TRACK.) Extra trains must not be run without train orders.

97a. (DOUBLE, THREE, OR MORE TRACKS.) Extra trains, other than passenger extras, may be run without train orders.

Unless otherwise provided, passenger extras will not be run without train orders.

98. Trains must approach the end of double track, junctions, railroad crossings at grade, and

drawbridges, prepared to stop, unless the switches are properly lined, signals indicate proceed, and track is clear. Where required by law, trains must stop.

99. When a train stops under circumstances in which it may be overtaken by another train, the flagman must go back immediately with flagman's signals a sufficient distance to insure full protection, placing two torpedoes, and when necessary, in addition, displaying lighted fuses.

When signal 14 (*d*), 14 (*e*), 14 (*ma*, 3), or 14 (*da*) to 14 (*eh*) inclusive, has been given to the flagman and safety to the train will permit, he may return. When the conditions require he will leave the torpedoes and a lighted fusee.

The front of the train must be protected in the same way when necessary by the fireman.

When a train is moving under circumstances in which it may be overtaken by another train, the flagman must take such action as may be necessary to insure full protection. By night, or by day when the view is obscured, lighted fusees must be thrown off at proper intervals.

When day signals cannot be plainly seen, owing to weather or other conditions, night signals must also be used.

Conductors and enginemen are responsible for the protection of their trains.

Flagman's signals :

Day signals—A red flag,
Torpedoes and
Fusees.

Night signals—A red light,
A white light,
Torpedoes and
Fusees.

100. When the flagman goes back to protect the rear of his train, the next brakeman must take his place on the train. On passenger trains the baggageman must take the place of the brakeman when necessary.

100a. Flagmen signaling trains having two or more engines in front will notify each engineman why he has been flagged.

101. Trains must be fully protected against any known condition which interferes with their safe passage at normal speed.

When conditions are found which may interfere with the safe passage of trains at normal speed and no protection has been provided, such action must be taken as will insure safety.

101a. Conductors of trains using steam derricks, ditchers, rail unloaders or similar equipment, must get permission from the signalman, before obstructing adjoining main tracks. The signalman must obtain permission from the Superintendent, who will notify all trains using tracks so

obstructed. Other tracks must not be obstructed until full protection has been provided. Prompt report must be made to signalman and Superintendent when tracks are cleared. Wreck masters and foremen must know that full protection has been provided before obstructing adjacent tracks.

Yard tracks must not be obstructed without permission from the Yard Master.

Engine whistles must not be used to recall flagmen in such cases; understanding must be had by the conductor and flagman as to which tracks need no longer be protected.

101b. When a sudden or severe application of the brakes takes place or an equipment failure occurs that may obstruct adjoining tracks, all tracks must be protected immediately.

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

The front portion will then go back, to recover the detached portion, running with caution and following a flagman. The detached portion must not be moved or passed until the front portion comes back, except that when the front portion cannot be backed, the conductor may arrange for recoupling, using the greatest caution.

The engineman and trainmen of the detached portions must give the Train-parted signal to trains running on adjacent tracks. A train receiving this signal, or being otherwise notified that a train on an adjacent 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 another track, trains on that track must be stopped.

103. When cars are pushed by an engine, a trainman must take a conspicuous position on the front of the leading car.

If signals from the trainmen cannot be seen from the engine it must be stopped immediately.

When trains are frequently pushed, a back-up hose equipped with brake valve and alarm whistle must be used. When so equipped and enginemen so advised they are relieved from stopping when signals cannot be seen from leading car. When cars are equipped with communicating signal appliance, it must be used when necessary.

103a. When a train is shifting over a crossing where there is no watchman, a trainman must be stationed on the crossing to give warning to persons using same.

104. Conductors and flagmen are responsible for the position of switches used by them and their trainmen, except where switch tenders are

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

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

When practicable, the engineman must see that the switches nearest the engine are properly set.

While a train or engine is waiting to make a movement to another track, and during the approach or passage of a train on that track, all switches and derails involved in the movement must be secured in the normal position.

Trains must not be reported clear of a track at hand-operated switches until after the switch is set and secured in its normal position.

105. Both the conductor and the engineman are responsible for the safety of the train and the observance of the rules, and, under conditions not provided for by the rules, must take every precaution for protection.

106. Trains must use caution in passing a train receiving or discharging passengers at a station, and, except where proper safeguards are provided or the movement is otherwise protected, must not pass between it and the platform at which the passengers are being received or discharged.

106a. When an extra train is receiving or discharging passengers, or a regular train making other than schedule stops, or making schedule stops on other than its assigned track, or

is delayed at points where passengers may alight on the track, the conductor and engineman must see that passengers are protected against other trains.

107. In case of doubt or uncertainty the safe course must be taken.

108. Messages or orders respecting the movement of trains or the condition of tracks, bridges or signals must be in writing.

150. (**DOUBLE TRACK.**) Trains must keep to the right, unless otherwise provided.

151. (**THREE, OR MORE TRACKS.**) The use of these tracks, both as to the class and the current of traffic, will be designated on the time-table or special instructions.

152. When a train crosses over to, or obstructs, another track, unless otherwise provided it must first be protected as prescribed by Rule 99.

A train must not cross over when a superior train is due except to avoid delay to superior trains following.

In permitting trains to pass after crossing over, preference must be given to the train of greatest importance.

153. Should a train carrying mail be diverted from its regular track, so that mail cannot be caught from crane, or delivered with safety, the

train must stop to receive or deliver the mail, and the trainmen give the necessary assistance to mail clerks.

MOVEMENT BY TRAIN ORDERS.

201. For movements not provided for by timetable, train orders will be issued by authority and over the signature of the Superintendent. They must contain neither information nor instructions not essential to such movements. They must be brief and clear; in the prescribed forms when applicable; without erasure, alteration or interlineation.

Figures in train orders must not be surrounded by brackets, circles or other characters.

201a. When switch numbers are used in train orders, the word "Switch ——" will precede the name of the station.

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

203. Train orders must be numbered consecutively each day, beginning 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 employe 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 Superintendent; and with it recorded the names of those who have signed for the order; the time and the signals which show when and from what offices the order was repeated and the responses transmitted; and the train dispatcher's initials. These records must be made at once, and never from memory or memoranda.

206. In train orders regular trains will be designated by number as "No. 10," and sections as "Second 10," adding engine numbers of inferior trains. Extra trains will be designated by engine numbers and the direction, as "Extra 798, 'East' or 'West'," for steam engines; "E.L. Extra 798, 'East' or 'West'," for electric engines; "M. U. Extra 798, 'East' or 'West'," for multiple unit engines; "Gas Extra 798 'East' or 'West'," for gas engines. For the movement of an engine of another company the initials as well as the engine number will be used.

Even hours as "10.00 A. M." must not be used in stating time in train orders.

In transmitting train orders by telegraph or telephone, time will be stated in figures and duplicated in words.

In transmitting train orders by telephone the names of stations must be plainly pronounced, and then spelled, letter by letter, thus: Aurora, A-u-r-o-r-a; all numerals must first be pronounced and then followed by spelling, thus: 1-0-5, O-n-e N-a-u-g-h-t F-i-v-e. The letters duplicating names of stations and numerals, except time, will not be written in the order book nor upon train orders.

When train orders are transmitted by telegraph, the train dispatcher must underscore each word and figure in the body of the order at the time it is repeated. When transmitted by telephone, he must write the order as he transmits it and underscore as prescribed above.

When engine numbers are used in train orders they must specify as follows:

C. & E. Eng.	for steam engines.
C. & E. E.L. Eng.	for electric engines.
C. & E. M.U. Eng.	for multiple unit engines.
C. & E. Gas Eng.	for gas engines.

Train orders issued to track cars must be addressed to Driver, Track Car ———.

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, each office taking its proper address. When not sent simultaneously to all, the order must be sent first to the superior train.

A train order must not be sent to a superior train at the meeting point if it can be avoided. When an order is so sent, the fact will be stated in the order and special precautions must be taken to insure safety.

209. Operators receiving train orders must write or typewrite them in manifold during transmission. If the requisite number of copies cannot be made at one writing, they must make others from the original copy and repeat to the train dispatcher from the new copies each time additional copies are made. They must retain a copy of each train order. The time complete, and the signature of the operator must be in his hand-writing.

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 must observe whether the others repeat correctly.

Those to whom the order is addressed must read it to the operator and then sign it, and the operator will send their signatures preceded by the number of the order to the Superintendent. The response "complete" and the time, with the initials of the Superintendent, will 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.

Enginemen must show train orders to firemen and when practicable to forward trainmen. Conductors must show train orders when practicable to trainmen.

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 the initials of the

Superintendent, 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.

When a "19" train order restricting the superiority of a train is issued for it at the point where such superiority is restricted, the train must be brought to a stop before delivery of the order.

Enginemen must show train orders to firemen and when practicable to forward trainmen. Conductors must show train orders when practicable to trainmen.

212. When so directed by the train dispatcher, a train order may be acknowledged before 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. _____.

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 train order office, or at one at which the office is closed, must be addressed to

C and E (Train Number) at (Station) care of
(Person delivering)

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 Superintendent.

Orders so delivered to a train must be compared by those receiving them with the copy held by

the person delivering, and 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 Superintendent.

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. An operator must not repeat or give the "X" response to a train order for a train which has been given a signal permitting it to proceed, or the engine of which has passed his Train-order signal, until he has displayed the Stop-signal and the conductor and engineman have reported for orders.

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

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

When a conductor or engineman, or both, is relieved before the completion of a trip, all train

orders and instructions held must be delivered to the relieving conductor or engineman. Such orders or instructions must be compared by the conductor and engineman before proceeding.

221. A Fixed-signal must be used at each train-order office, which will indicate Stop when there is an operator on duty, except when changed to Proceed to allow a train to pass after getting train orders, or 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.

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 available point of communication.

221a. When a train order is to be delivered to a train, the Fixed-signal must be displayed at Stop for the track and in the direction of the approaching train, and a Train-order signal must be displayed in the place provided for the purpose, a red Train-order signal indicating "31" orders, or "19" orders that restrict the superiority of the train at that point, a yellow Train-order signal indicating other "19" orders.

Operators must not clear these signals for an approaching train unless they know that the train is not the one to which orders are addressed.

This combination of signals must be acknowledged by the engineman by two short sounds of the engine whistle.

In delivering "19" orders that restrict the superiority of train addressed at that point, the Fixed-signal must remain at Stop until such orders have been delivered, and in delivering "31" orders the Fixed-signal must remain at Stop until the engineman and conductor have signed the orders.

In delivering "19" orders, without stopping a train, the operator must, after the signal has been acknowledged, leave the yellow Train-order signal displayed until the orders have been delivered, place the Fixed-signal at its proper position, go on the ground and hand the orders to the engineman and conductor. For freight trains the conductor's copy must be handed on cabin car. When the yellow Train-order signal is displayed, the speed of the train must be reduced sufficiently to enable the operator to deliver the order. If the engineman fails to catch the order the train must be stopped, and not proceed without a proper train order.

221b. When a train is to be held by holding order "Form J," the operator must display the

Fixed-signal at Stop for the track and in the direction of the approaching train, and must also display a red Train-order signal in the place provided for the purpose.

221c. The operating lever must be blocked with a standard blocking device by the operator, leverman or signalman, to indicate that the operation of the lever is restricted—

When train orders are received either to hold trains, or which restrict the movement of trains.

When tracks, switches or signals are undergoing repairs, or when tracks are obstructed.

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

They must observe trains and report at once to the Superintendent if the proper signals are not displayed.

223. The following signals and abbreviations may be used :

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

C & E.....for Conductor and Engineman.

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

O STrain Report.

No.....for Number.

Eng.....for Engine.

Sec.....for Section.

Psgr.....for Passenger.

Frt.....for Freight.

Mins.....for Minutes.

Jct.....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.

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

FORMS OF TRAIN ORDERS.

NOTE.—IN THE FORMS OF TRAIN ORDERS, THE WORDS AND FIGURES IN *ITALICS* ARE EXAMPLES, INDICATING THE MANNER IN WHICH THE ORDERS ARE TO BE FILLED OUT.

Form A. (SINGLE TRACK.) Fixing Meeting Points for Opposing Trains.

EXAMPLES.

(1.) *No 2 meet No 1 Eng 981 at B.*

Second 4 meet No 3 Eng 946 at B.

No 5 meet Extra 95 east at B.

Extra 652 north meet Extra 231 south at B.

(2.) *No 2 and Second 4 meet No 1 Eng 981 and No 3 Eng 946 at C and Extra 95 west at D.*

No 1 Eng 981 meet No 2 at B Second 4 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.

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

Both trains will run according to rule to the designated point and there arrange for the rear train to pass promptly.

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

Both trains will run according to rule until the second-named train is overtaken and then arrange for the rear train to pass promptly.

(3.) *Extra 594 east* run ahead of *No 6 M to B*.

The first-named train will run ahead of the second-named train between the points designated.

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

The first-named train will run ahead of the second-named train from the designated point until overtaken, and then arrange for the rear train to pass promptly.

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

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. Unless some form of block signals is used, the following train will run with caution, looking out for the designated train ahead until the order is fulfilled.

Form C. (SINGLE TRACK.) Giving Right Over an Opposing Train.

(1.) *No 1 Eng 814* has right over *No 2 G to X*.

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. If the first-named train is met between the designated points, the conductor of the second-named train must inform it of his arrival.

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

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.

These orders give 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.

Form E. Time Orders.

(1.) *No 1* run *50 fifty mins* late *A* to *G*.

This makes 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.

(2.) *No 1* run *50 fifty mins* late *A* to *G* and *20 twenty mins* late *G* to *K*, etc.

This makes 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.

(3.) *No 2* wait at *H* until 9 59 *nine fifty nine a m* for *No 1 Eng 418*.

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.

(4.) *Nos 1 and 3* wait at *N* until 9 59 *nine fifty nine a m*.

P until 10 30 *ten thirty a m*.

R until 10 55 *ten fifty five a m*, etc.

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.

Form F. For Sections.

(1.) *Eng 20* display signals and run as *First 1 A* to *Z*.

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

(2.) *Eng 25* run as *Second 1 A* to *Z*.

(3.) *No 1* display signals *A* to *G* for *Eng 65*.
Second 1 display signals *B* to *E* for *Eng 99*.

(4.) *Engs 20 25* and *99* run as *First Second*
 and *Third 1 A* to *Z*.

To add an intermediate section, (5) will be used.

(5.) *Eng 85* display signals and run as *Second 1 A* to *Z*. Following sections change numbers accordingly.

The engine named will display signals and run as directed, and following sections will take the next higher number.

To drop an intermediate section, (6) will be used.

(6.) *Eng 85* is withdrawn as *Second 1* at *H*. Following sections change numbers accordingly.

The engine named will drop out at *H*, and following sections will take the next lower number.

To substitute one engine for another on a section, (7) will be used.

(7.) *Eng 18* instead of *Eng 85* display signals and run as *Second 1 R* to *Z*.

The second-named engine will drop out at *R*, and be replaced by the first-named engine.

Following sections need not be addressed.

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

To discontinue the display of signals, (8) will be used.

(8.) *Second 1* take down signals at *D*.

The train named will take down signals as directed, and a following section must not proceed beyond the designated point.

To pass one section by another, (9) will be used.

(9.) *Eng 99* and *25* reverse positions as *Second* and *Third 1 H* to *Z*.

Conductors and enginemen of the trains addressed will exchange orders and signals. Following sections, if any, need not be addressed.

Each section affected by these orders 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.

When sections are run to an intermediate point of a schedule, the train orders must specify which section, or sections, shall assume the schedule beyond such point.

Form G. Extra Trains.

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

(2.) *Eng 99* run Passenger extra *A* to *F*.

(3.) *Eng 99* run extra *A* to *F* and return.

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

Under (3) and (4) the extra must go to *F* before returning.

Form H. (SINGLE TRACK.) Work Extra.

(1.) *Eng 292 works extra 6 45 six forty five a m until 5 45 five forty five p m between D and E.*

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

This may be modified by adding:

(2.) *Not protecting against eastward extra trains.*

The work extra will protect only against westward extra trains. The time of regular trains must be cleared.

(3.) *Not protecting against extra trains.*

Protection against extra trains is not required. The time of regular trains must be cleared.

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

(4.) (a) *Work extra 292 clears Extra 76 east between D and E after 2 10 two ten p m.*

(b) *Work extra 292 protects against Extra 76 east between D and E after 2 10 two ten p m.*

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.) (a) *Work extra 292 protects against No 55 between D and E.*

(b) *Work extra 292 protects against——
class trains between D and E.*

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. 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 7 15 seven fifteen p m until 1 15 one fifteen a m.*

This gives the work extra the 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 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.

Hold *No 2*.

Hold *all trains*.

Hold ————*ward trains*.

Hold *all trains clear of* ————*track between A and B*.

Hold *all* ————*ward trains clear of* ————*track between A and B*.

These orders will be addressed to the operator and acknowledged in the usual manner.

Conductor and engineman of a train which has been given a signal permitting it to proceed, or the engine of which has passed the Train-order signal, must be required to report for orders before opposing trains are given right over it.

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

————— *may go*.

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

Form K. Annuling a Schedule or a Section.

No 1 due to leave *A Feb 29th* is annulled *A* to *Z*.

Second 5 due to leave *E Feb 29th* is annulled *E* to *G*.

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

Form L. Annuling an Order.

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. Annuling Part of an Order.

That part of Order *No 10* reading *No 2* meet *No 1 Eng 981* at *B* is annulled.

That part of Order *No 12* reading *No 3* pass *No 1 Eng 981* at *S* is annulled.

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

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

(1.) *No 2* meet *No 1 Eng 981* at *C* instead of *B*.

(2.) *No 3* pass *No 1 Eng 981* at *D* instead of *C*.

(3.) *No 1 Eng 814* has right over *No 2 G* to *R* instead of *X*.

(4.) *No 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.

When a train is directed by train order to take siding for another train, such instructions apply only at the point named in that order, and do not apply to the superseding order unless so specified.

Form R. (DOUBLE, THREE, OR MORE TRACKS.) Providing for a Movement Against the Current of Traffic.

(1.) *No 1* has right over opposing trains on ——— track *C* to *F*.

(2.) After *No 4 Eng 981* arrives *No 1* has right over opposing trains on——— track *C* to *F*.

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

Under these orders the designated train must use the track specified between the stations named.

Standard Train Order Blank for 31 Order.
The mode of filling the blank is indicated by small type.

FORM 31	PENNSYLVANIA RAILROAD SYSTEM	FORM 31			
TRAIN ORDER No. ¹⁰					
Superintendent's Office January 1 1924					
To	At				
X (Initials,) Opr.; 1 45 A M					
EACH EMPLOYEE ADDRESSED MUST HAVE A COPY OF THIS ORDER					
Repeated at ^{2.10 A} M					
Conductor	Engineman	Train	Made	Time	Operator
Jones	Brown	45	Complete	2 20 a m	Black

Standard Train Order Blank for 19 Order.
 The mode of filling the blank is indicated by small type.

FORM

19

PENNSYLVANIA RAILROAD SYSTEM

FORM

19

TRAIN ORDER No. 11

Superintendent's Office..... January 1 1924

To At

X..... (Initials.) Opr.; 1130 PM

EACH EMPLOYEE ADDRESSED MUST HAVE A COPY OF THIS ORDER

Made Complete time 1131 PM Black Opr.

**RULES GOVERNING THE MOVEMENT OF TRAINS WITH THE
CURRENT OF TRAFFIC ON TWO OR MORE TRACKS
BY BLOCK AND HOME SIGNALS.**

251. On portions of the railroad so specified on the time-table, trains will run with the current of traffic by Block and Home signals whose indication will supersede time-table superiority, or may enter a block between block stations to do work or run with the current of traffic by permission of the signalman, which permission will supersede time-table superiority.

252. _____.

253. A train having work to do between two passing stations must conform to Rule 86 and, in addition, in Manual Block System territory Rule 365b, between such stations, unless otherwise instructed.

254. Except as affected by Rules 251 and 253, all Block Signal Rules and Train Rules remain in force.

SIGNAL RULES.**STANDARD SIGNAL ASPECTS.**

275.



FIG. 1



FIG. 2

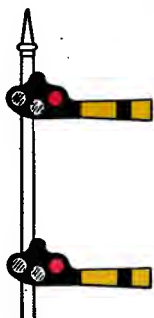


FIG. 3



FIG. 4

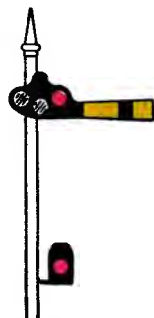


FIG. 5



FIG. 6



FIG. 7

**INDICATION—STOP.
NAME—STOP-SIGNAL.**

STANDARD SIGNAL ASPECTS.—CONTINUED.

276.



FIG. 1

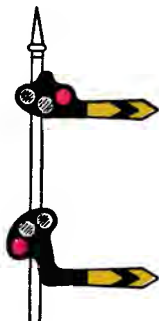


FIG. 2



FIG. 3

INDICATION—STOP—THEN PROCEED IN ACCORDANCE WITH
RULE 509 OR 660.

NAME—STOP-AND-PROCEED-SIGNAL.

STANDARD SIGNAL ASPECTS,—CONTINUED.**277.****FIG. 1****FIG. 2****FIG. 3**

INDICATION—FOR TONNAGE FREIGHT TRAINS PROCEED NOT EXCEEDING 15 MILES PER HOUR, EXPECTING TO FIND A TRAIN IN THE BLOCK, BROKEN RAIL, OBSTRUCTION OR SWITCH NOT PROPERLY SET.

FOR OTHER TRAINS, STOP THEN PROCEED IN ACCORDANCE WITH RULE 509.

NAME—GRADE-SIGNAL.

STANDARD SIGNAL ASPECTS.—CONTINUED.

278.



FIG. 1



FIG. 2

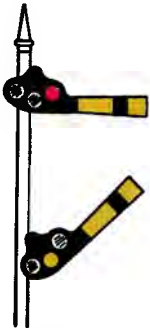


FIG. 3



FIG. 4



FIG. 5

INDICATION—PROCEED AT NOT EXCEEDING 15 MILES PER HOUR
WITH CAUTION PREPARED TO STOP SHORT OF TRAIN OR
OBSTRUCTION.

NAME—CAUTION-SLOW-SPEED-SIGNAL.

279.

STANDARD SIGNAL ASPECTS.—CONTINUED.

FIG. 1



FIG. 2

**INDICATION—PROCEED AT NOT EXCEEDING 15 MILES PER HOUR
PREPARED TO STOP AT NEXT SIGNAL.**

NAME—SLOW-SPEED-SIGNAL.

280.



FIG. 1



FIG. 2

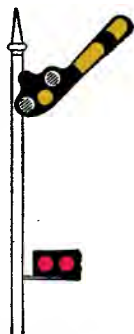
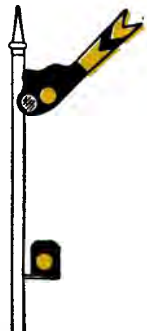


FIG. 3

**INDICATION—FOR PASSENGER TRAINS STOP AND REPORT IN
ACCORDANCE WITH RULE 362 OR 462.**

**FOR OTHER TRAINS PROCEED WITH CAUTION PRE-
PARED TO STOP SHORT OF TRAIN OR OBSTRUCTION.**

NAME—PERMISSIVE-BLOCK-SIGNAL.

STANDARD SIGNAL ASPECTS.—CONTINUED.**281.****FIG. 1****FIG. 2****INDICATION—PROCEED AT NOT EXCEEDING 15 MILES PER HOUR.****NAME—CLEAR-SLOW-SPEED-SIGNAL.****282.****FIG. 1****FIG. 2****FIG. 3**

INDICATION—APPROACH NEXT SIGNAL PREPARED TO STOP. WHERE A FACING SWITCH IS CONNECTED WITH THE SIGNAL, APPROACH THAT SWITCH PREPARED TO STOP. A TRAIN EXCEEDING ONE-HALF ITS MAXIMUM AUTHORIZED SPEED AT POINT INVOLVED MUST AT ONCE REDUCE TO NOT EXCEEDING THAT SPEED.

NAME—CAUTION-SIGNAL.

STANDARD SIGNAL ASPECTS.—CONTINUED.

283.



FIG. 1



FIG. 2



FIG. 3



FIG. 4



FIG. 5



FIG. 6



FIG. 7



FIG. 8

INDICATION—APPROACH NEXT SIGNAL PREPARED TO STOP. A TRAIN EXCEEDING ONE-HALF ITS MAXIMUM AUTHORIZED SPEED AT POINT INVOLVED MUST AT ONCE REDUCE TO NOT EXCEEDING THAT SPEED.

NAME—APPROACH-SIGNAL.

STANDARD SIGNAL ASPECTS,—CONTINUED.

284.



FIG. 1



FIG. 2

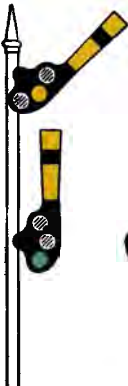


FIG. 3



FIG. 4



FIG. 5

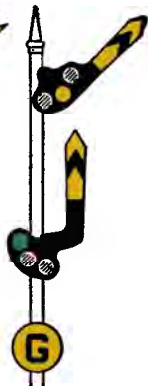


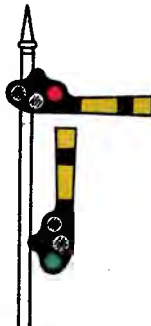
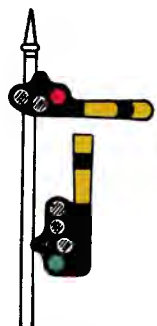
FIG. 6

INDICATION—TRAIN APPROACH NEXT SIGNAL AT NOT EXCEEDING ONE-HALF ITS MAXIMUM AUTHORIZED SPEED AT POINT INVOLVED BUT NOT EXCEEDING 30 MILES PER HOUR.

NAME—APPROACH-RESTRICTING-SIGNAL.

STANDARD SIGNAL ASPECTS.—CONTINUED.

285.

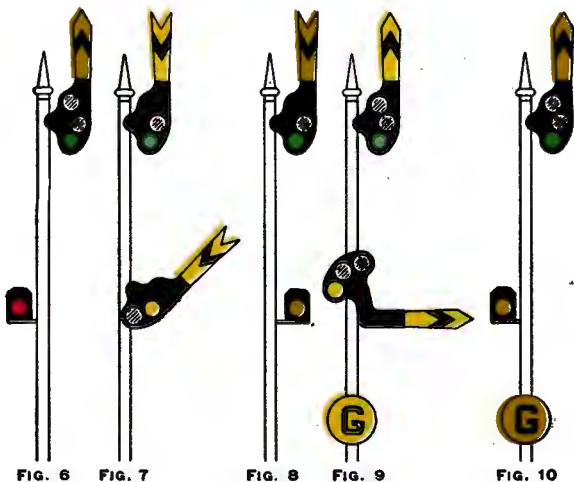
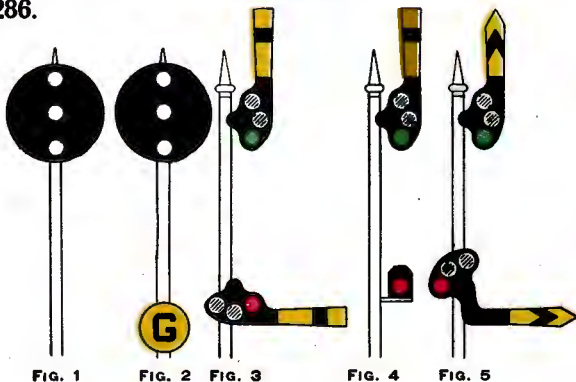
**FIG. 1****FIG. 2****FIG. 3**

**INDICATION—TRAIN PROCEED AT NOT EXCEEDING ONE-HALF ITS
MAXIMUM AUTHORIZED SPEED AT POINT INVOLVED BUT NOT
EXCEEDING 30 MILES PER HOUR.**

NAME—CLEAR-RESTRICTING-SIGNAL.

STANDARD SIGNAL ASPECTS.—CONTINUED.

286.



INDICATION—PROCÉÉD.
NAME—CLEAR-SIGNAL.

STANDARD SIGNAL ASPECTS.—CONTINUED.

287.



FIG. 1



FIG. 2

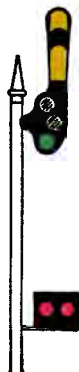


FIG. 3

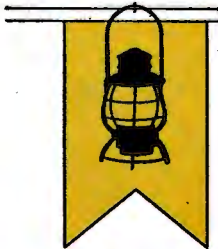
INDICATION—PROCEED—MANUAL OR CONTROLLED MANUAL
BLOCK CLEAR.

NAME—CLEAR-BLOCK-SIGNAL.

288.



INDICATION—TAKE SIDING.
NAME—TAKE-SIDING-INDICATOR.

STANDARD SIGNAL ASPECTS.—CONTINUED.**289.****INDICATION—ORDERS.****NAME—RED-TRAIN-ORDER-SIGNAL.****NOTE:—By day the red lamp is not displayed.****290.****INDICATION—ORDERS.****NAME—YELLOW-TRAIN-ORDER-SIGNAL.****NOTE:—By day the yellow lamp is not displayed.**

NOTE:—POSITION LIGHT SIGNALS WHOSE MOST RESTRICTIVE INDICATION IS MORE FAVORABLE THAN STOP ARE NUMBERED, EITHER ON THE SIGNAL MAST OR IN A LOCATION ADJACENT THERETO AS SEEN FROM AN APPROACHING TRAIN.

BLOCK SIGNAL RULES.

DEFINITIONS.

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

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

BLOCK SIGNAL.—A fixed signal at the entrance of a block to govern trains in entering and using that block.

BLOCK SYSTEM.—A series of consecutive blocks.

MANUAL BLOCK SYSTEM.—A series of consecutive blocks, governed by block signals operated manually, upon information by telegraph, telephone or other means of communication.

CONTROLLED MANUAL BLOCK SYSTEM.—A series of consecutive blocks governed by block signals, controlled by continuous track circuits, operated manually upon information by telegraph, telephone or other means of communication, and so constructed as to require the co-operation of the signalmen at both ends of the block to display a Clear or a Permissive Block Signal.

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

MANUAL BLOCK SYSTEM.

Rules 301 to 375, inclusive, will not be effective except by special instructions.

301. (SEE STANDARD SIGNAL ASPECTS.)

302. _____.

303. _____.

304. _____.

305. Block signals govern the use of the blocks, but, unless otherwise provided, do not supersede the superiority of trains; nor dispense with the use or the observance of other signals whenever and wherever they may be required.

306. When a block station is open at an irregular hour, trains must be notified by train order or by special instructions, and special precautions must be taken to call the attention of trains approaching such block station to the indications of the block signals.

307. When a train is turned out against the current of traffic, Manual Block Signal Rules must be observed, Rules 317a or 317b to apply as may be designated by Special Instructions.

Signalmen.

311. Signal levers must be kept in the position displaying the most restrictive signal indication, except when signals are to be cleared for an immediate train or engine movement.

MANUAL BLOCK SYSTEM.—CONTINUED.

312. Levers and instruments must be operated carefully and with a uniform movement only by those charged with that duty, and as directed by the rules. If any irregularity indicating disarranged connections is detected in their working, the signals must be restored so as to display their most restrictive indication and their operation discontinued until repaired.

313. Signalmen must observe, as far as practicable, whether the indications of the signals correspond with the positions of the levers.

314. Signalmen must not make nor permit any unauthorized repairs, alterations or additions to the apparatus.

If any electrical or mechanical appliance fails to work properly, the Superintendent and the signal repairman must be notified.

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

316. COMMUNICATING CODE.

NOTE.—WHEN THE TELEPHONE IS USED, THE CODE WILL BE USED WITHOUT THE NUMERALS.

- 1—Display Stop-signal.
- 13—I understand.
- 17—Display Stop-signal. Train following.
- 2—Block clear.
- 3—Block wanted for train other than passenger.

MANUAL BLOCK SYSTEM.—CONTINUED.

36—Block wanted for passenger train.

4—Train other than passenger has entered block.

46—Passenger train has entered block.

5—Block is not clear of train other than passenger.

56—Block is not clear of passenger train.

7—Train following.

8—Opening block station. Answer by record of trains in the extended block.

9—Closing block station. Answer by 13.

When two or more tracks are used in the same direction, signalmen in using the communicating code must also specify the track.

NOTE.—WHERE A BLANK IS SHOWN AFTER A CODE SIGNAL IN RULES 317a, 317b, 318a AND 318b, THE DESIGNATION OF THE TRAIN AND THE DIRECTION OF EXTRA TRAINS MUST BE INCLUDED IN GIVING THE SIGNAL.

317a. (FOR ABSOLUTE BLOCK FOR FOLLOWING AND OPPOSING MOVEMENTS ON THE SAME TRACK.)

To admit a train to a block, the signalman must examine the block record, and if the block is clear, give “1 for ——” to the next block station in advance. The signalman receiving this signal, if the block is clear, must display the Stop-signal to opposing trains and reply “2 for ——.” If the block is not clear, he must reply “5 of ——,” or “56 of ——.” The signalman at the entrance

MANUAL BLOCK SYSTEM.—CONTINUED.

of the block must then display the proper signal indication.

A train must not be admitted to a block unless it is clear, except as provided in Rules 326, 332, or by train order.

317b. (FOR ABSOLUTE BLOCK FOR OPPOSING MOVEMENTS AND PERMISSIVE BLOCK FOR FOLLOWING MOVEMENTS ON THE SAME TRACK.)

To admit a train to a block, the signalman must examine the block record, and if the block is clear, give "1 for———" to the next block station in advance. The signalman receiving this signal, if the block is clear, must display the Stop-signal to opposing trains and reply "2 for———." If the block is not clear, he must reply "5 of———," or "56 of———." The signalman at the entrance of the block must then display the proper signal indication.

A train must not be admitted to a block which is occupied by an opposing train or by a passenger train, and a passenger train must not be admitted to a block which is occupied by any train, except as provided in Rules 326, 332, or by train order.

To permit a train other than a passenger train to follow a train other than a passenger train into a block, the signalman must give "17 for———" to the next block station in advance. The signalman receiving this signal, if there is no passenger train in the block, must reply "5 of

MANUAL BLOCK SYSTEM.—CONTINUED.

———13 for———.” The approaching train will then be admitted to the block under Permissive Block-signal.

317c. When, as prescribed by Rule 317a or 317b, a signalman gives or receives “2” or “13,” this information, with the train number and time given or received, must be entered on the block record at both offices.

317d. (SINGLE TRACK.)

Within yard limits when trains other than passenger trains are approaching under Permissive Block-signal, signalmen may permit other than passenger trains to make yard movements under Permissive Block-signal, and may permit other than passenger trains to enter the block under Permissive Block-signals while such yard movements are being made.

318a. (FOR ABSOLUTE BLOCK FOR FOLLOWING MOVEMENTS ONLY.)

To admit a train to a block, the signalman must examine the block record, and if the block is clear, give “3 for———,” or “36 for———,” to the next block station in advance. The signalman receiving this signal, if the block is clear, must reply “2 for———.” If the block is not clear, he must reply “5 of———,” or “56 of———.” The signalman at the entrance of the block must then display the proper signal indication.

MANUAL BLOCK SYSTEM.—CONTINUED.

A train must not be admitted to a block unless it is clear, except as provided in Rule 332 or by train order.

318b. (FOR PERMISSIVE BLOCK FOR FOLLOWING MOVEMENTS ONLY.)

To admit a train to a block, the signalman must examine the block record, and if the block is not occupied by a passenger train, give "3 for——," or "36 for——," to the next block station in advance. The signalman receiving this signal, if the block is clear, must reply "2 for——." If the block is not clear, he must reply "5 of——," or "56 of——." The signalman at the entrance of the block must then display the proper signal indication.

A train must not be admitted to a block which is occupied by a passenger train, and a passenger train must not be admitted to a block which is occupied by any train, except as provided in Rule 332 or by train order.

A train other than a passenger train may be permitted to follow a train other than a passenger train into a block under Permissive Block-signal without giving "3" to the next block station in advance.

318c. When, as prescribed by Rule 318a or 318b, a signalman gives or receives "2," this information, with the train number and time given

MANUAL BLOCK SYSTEM.—CONTINUED.

or received, must be entered on the block record at both offices.

319. When a train enters a block, the signalman must report the train and the time to the next block station in advance. When a train has passed the Home-signal or Block-signal and the signalman has seen the markers he must display the Stop-signal, and when the rear of the train has passed 300 feet beyond the Home-signal or Block-signal, he must report the train and the time to the next block station in the rear, except that where a Distant-signal is provided the report will be made as soon as the rear of the train has passed the Home-signal or Block-signal.

This information must be entered on the block records.

319a. Where there is a Home-signal located in the rear of a Block-signal, and both signals controlled by the same block station, the signalman must not admit a train to the route between these signals while it is occupied without first stopping the train, and then only by signal aspect indicating "Proceed at not exceeding 15 miles per hour with caution prepared to stop short of train or obstruction," or by train order.

320. Unless otherwise provided, signalmen must not ask for the block until they have received a report of the train from the next block station in the rear.

MANUAL BLOCK SYSTEM.—CONTINUED.

321. Signalmen must observe all passing trains and note whether they are complete and in order, and the markers properly displayed.

322. Should a train pass a block station with any indication of conditions endangering the train, or a train on another track, the signalman must immediately notify the signalman at the next block station in advance, and each must display Stop-signals to all trains that may be affected, and must not permit any train to proceed until it is known that its track is not obstructed.

323. _____.

324. Should a train pass a block station without markers or in two or more parts, the signalman must give Train-parted signal to all of the detached parts and must display Stop-signal for all trains moving in the same direction, and notify the signalman at the next block station in each direction. If all of the train has not passed his block station, he must display Stop-signal for all trains moving in the opposite direction. The signalman in advance, having received notice of a train entering a block without markers or in two or more parts, must stop any train moving in the opposite direction. The Stop-signal must not be displayed to the engineman of the divided train if the train can be admitted to the block in advance under Block Signal Rules, but the Train-parted

MANUAL BLOCK SYSTEM.—CONTINUED.

signal must be given. The signalman in the rear must stop all trains moving in the same direction as the parted train.

Should a train in either direction be stopped from this cause, it may be permitted to proceed when it is known that its track is not obstructed.

325. A signalman informed of any obstruction in a block must immediately notify the signalman at the other end of the block, and each must display Stop-signals to all trains that may be affected, and must not permit any train to proceed until it is known that its track is not obstructed.

326. When a train clears a block at or between block stations, the signalman, when he knows that it is clear, must report the train and the time to the signalman at the other end of that block.

The signalman must obtain control of the portion of the block to be used before permitting a train to enter that block between block stations. He may accept information from conductor or engineman of train to be admitted regarding the movements of other trains, and then apply the rules to the portion of the block to be used.

When a train enters a siding at a block station, clearing a block at a switch operated by the signalman, the conductor or engineman is not required to report clear.

MANUAL BLOCK SYSTEM.—CONTINUED.

327. To permit a passenger train to cross over or return, the signalman must examine the block record, and if all the blocks affected are clear of approaching trains he must arrange with the signalman at the next block station in each direction to protect the movement, and when the proper signals have been displayed permission may be given. Until the block is clear no train must be admitted in the direction of the cross-over switches.

To permit a train other than a passenger train to cross over or return, the signalman must examine the block record, and if all the blocks affected are clear of approaching trains that have been admitted to the blocks under a Clear-Block-signal, he must arrange with the signalman at the next block station in each direction to protect the movement, and when the proper signals have been displayed permission may be given. Until the block is clear no train must be admitted in the direction of the cross-over switches, except as provided in Rules 317b or 318b.

All cross-over movements must be entered on the block records.

328. When coupled trains are separated, as prescribed by Rule 364, the signalman must regard each portion as an independent train.

MANUAL BLOCK SYSTEM.—CONTINUED.

329. If necessary to stop a train for which a Fixed-signal, other than a Distant-signal, permitting it to proceed has been displayed and accepted, the signalman must give hand signals in addition to displaying the Stop-signal.

330. A signalman having train orders for a train, or to hold a train, must display the Home-signal at Stop, and in addition the Train-order signal. He may permit trains to proceed under Block Signal Rules after complying with rules for movement by train orders.

331. If from the failure of Block-signal apparatus the Block-signal cannot be changed from its most restrictive indication, a signalman having information from the signalman at the next block station in advance that the block is clear, or that it is clear of an opposing train, but is occupied by a train which may be followed by another train in the same block, may admit a train to the block by the use of Clearance Card (Form C.)

331a. If from the failure of Home-signal apparatus the Home-signal cannot be changed from its most restrictive indication, the signalman having information that the route governed by it is clear, may admit a train to that route by the use of Clearance Card (Form C.)

332. If from any cause a signalman is unable to communicate with the next block station in

MANUAL BLOCK SYSTEM.—CONTINUED.

advance, he must stop all trains approaching in that direction. Should no cause for detaining a train be known, it may then be permitted to proceed with a Caution Card (Form D) and as therein provided.

333. 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 block signals, except as prescribed by Rules 329, 343, or 374. When hand signals are necessary they must be given from such a place and in such a way that there can be no misunderstanding on the part of engineman or trainmen as to the signals, or as to the train or engine for which they are given.

334. Block signals for a track apply only to trains moving with the current of traffic on that track. Signalmen will use hand signals for blocking trains moving against the current of traffic.

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

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

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

MANUAL BLOCK SYSTEM.—CONTINUED.

338. If a train over-runs a Stop-signal, the fact must be reported to the Superintendent.

339. If a Stop-signal is disregarded, the fact must be reported to the next block station in advance and then to the Superintendent.

340. To open a block station the signalman must give "8" to the next block station in each direction and record the trains that are in the extended block. He must then display the most restrictive signal indication and notify the next block station in each direction that the block station is open.

When trains, which were in the extended block when the block station was opened and which had passed his block station before it was opened, clear the block in advance, he must repeat the record to the block station in the rear.

340a. Unless otherwise directed, trains must not be admitted to a block in the direction of a closed block station after the time specified for it to be opened until Rule 340 has been complied with.

341. A block station must not be closed except upon authority of the Superintendent.

342. To close a block station, the signalman must give "9" to the next block station in each direction, with a record of trains in the extended block, and when he receives "13" enter it on his

MANUAL BLOCK SYSTEM.—CONTINUED.

block record with the time it is received from each block station. The signalman at the block station in each direction must not give "13" to the closing station and the station must not be closed until the block in each direction is clear of trains moving under a block indication that would not be proper for the extended block.

The block wires must be arranged to work through the closed block station.

Where the semaphore is used the block and home signals must be secured in the Clear position.

Where Position-light signals are used light signals must be extinguished.

If closed during the time night signals are displayed, night signals and all other lights must be extinguished.

343. When a block station is open at an irregular hour, signalmen must use hand signals, in addition to block signals, to give the required indications until all trains have passed which have not been notified by train order or by special instructions that the block station is open. Signalmen must take special precautions to call the attention of trains approaching the block station to the indications of the block signals.

344. Signalmen must not permit unauthorized persons to enter the block station.

MANUAL BLOCK SYSTEM.—CONTINUED.**Enginemen and Trainmen.**

361. Block signals for a track apply only to trains moving with the current of traffic on that track. Hand signals will be used for blocking trains moving against the current of traffic.

361a. A train approaching a block station on a track for which there is no block signal must stop and ascertain from the signalman the condition of the block ahead, unless a signal to proceed is given by the signalman with a green or yellow flag by day or a green or yellow light by night.

362. Trains must not pass a Stop-signal without receiving a Caution Card (Form D), a Clearance Card (Form C) or a train order authorizing them to do so.

A passenger train must not accept a Permissive Block-signal. If, from any cause, a passenger train receives a Permissive Block-signal, the engineman must at once report the fact to the Superintendent by wire.

362a. An engineman holding a Caution Card (Form D) must deliver it to the signalman at the next block station and personally obtain from him permission to proceed.

363. Trains must not proceed on hand signals as against block signals.

364. Unless otherwise directed, when two or more trains or engines have been coupled and so

MANUAL BLOCK SYSTEM.—CONTINUED.

move past any block station, they must be separated only at a block station and the signalman notified.

365 When a train clears a block between block stations, the conductor or engineman must report clear to the signalman, but they are not required to do so when entering a siding at a block station clearing a block at a switch operated by the signalman. A train must not enter a block nor cross from one track to another at a block station, or between block stations, without proper block signals or permission from the signalman.

In the absence of a block signal, the conductor or engineman must ascertain from the signalman the condition of the block and obtain permission from him to enter it. If information concerning the block is received by the conductor, he must personally give it to the engineman.

365a. A train having passed a block signal, or beyond the limits of a block, must not back past that signal nor into that block without permission from the signalman.

365b. Inferior trains, in clearing superior trains as required by the rules, must, in addition, clear the block for regular passenger trains.

366. When it is necessary for a train to cross over, the conductor or engineman before crossing or returning must notify the signalman and

MANUAL BLOCK SYSTEM.—CONTINUED.

obtain permission to do so. Shifting movements may be made on another track after having proper understanding with the signalman.

366a. A train must not cross over between block stations and proceed from that point on another track with the current of traffic, without permission from the signalman, nor against the current of traffic, without orders from the Superintendent and permission from the signalman.

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

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

369. _____.

370. If there is an obstruction between block stations notice must be given to the nearest signalman.

371. If a train is detained by a Block or Home-signal, the conductor or engineman must immediately ascertain the cause.

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

MANUAL BLOCK SYSTEM.—CONTINUED.

373. A block station must not be closed until the block in each direction is clear of trains moving under a block indication that would not be proper for the extended block.

A block station must not be considered as closed, except as provided for by time-table or special instructions.

374. When a block station is open at an irregular hour, the required block indications will be given by hand signals, in addition to block signals, until all trains have passed which have not received a train order or special instructions that the block station is open.

375. Trains in an extended block at the time specified for an intermediate closed block station to be opened, must identify their train to the signalman before accepting a signal to proceed at that station.

CONTROLLED MANUAL BLOCK SYSTEM.

Rules 401 to 473, inclusive, will not be effective except on portions of the railroad so specified on the time-table, or by special instructions.

401. (SEE STANDARD SIGNAL ASPECTS.)

405. Controlled manual block signals govern the use of the blocks, and, unless otherwise provided, their indications supersede time-table superiority and take the place of train orders; they do not dispense with the use or the observance of other signals whenever and wherever they may be required.

406. _____.**Signalmen.**

411. Signal levers must be kept in the position displaying the most restrictive signal indication, except when signals are to be cleared for an immediate train or engine movement.

412. Levers and instruments must be operated carefully and with a uniform movement only by those charged with that duty, and as directed by the rules. If any irregularity indicating disarranged connections is detected in their working, the signals must be restored so as to display their most restrictive indication and their operation discontinued until repaired.

CONTROLLED MANUAL BLOCK SYSTEM.—CONTINUED.

413. Signalmen must observe, as far as practicable, whether the indications of the signals correspond with the positions of the levers.

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

If any electrical or mechanical appliance fails to work properly, the Superintendent and the signal repairman must be notified.

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

416. COMMUNICATING CODE.

NOTE.—WHEN THE TELEPHONE IS USED, THE CODE WILL BE USED WITHOUT THE NUMERALS.

- 1—Display Stop-signal.
- 13—I understand.
- 17—Display Stop-signal. Train following.
- 2—Block clear.
- 4—Train other than passenger has entered block.
- 46—Passenger train has entered block.
- 5—Block is not clear of train other than passenger.
- 56—Block is not clear of passenger train.
- 7—Train following.
- 52—Train has passed switch. Answer by repeating.

CONTROLLED MANUAL BLOCK SYSTEM.—CONTINUED.

55—Hold train. Answer by 13.

When two or more tracks are used in the same direction, signalmen in using the communicating code must also specify the track.

NOTE.—WHERE A BLANK IS SHOWN AFTER A CODE SIGNAL IN RULES 417a AND 417b, THE DESIGNATION OF THE TRAIN, AND THE DIRECTION OF EXTRA TRAINS, MUST BE INCLUDED IN GIVING THE SIGNAL.

417a. (FOR ABSOLUTE BLOCK FOR FOLLOWING AND OPPOSING MOVEMENTS ON THE SAME TRACK.)

To admit a train to a block the signalman must examine the block record, and if the block is clear, give “1 for——” to the next block station in advance. The signalman receiving this signal, if the block is clear, must display the Stop-signal to opposing trains, reply “2 for——” and unlock. If the block is not clear, he must reply “5 of——,” or “56 of——.” The signalman at the entrance of the block must then display the proper signal indication.

A train must not be admitted to a block unless it is clear, except as provided in Rule 432 or by train order.

417b. (FOR ABSOLUTE BLOCK FOR OPPOSING MOVEMENTS AND PERMISSIVE BLOCK FOR FOLLOWING MOVEMENTS ON THE SAME TRACK.)

To admit a train to a block the signalman must examine the block record, and if the block is clear,

CONTROLLED MANUAL BLOCK SYSTEM.—CONTINUED.

give "1 for———" to the next block station in advance. The signalman receiving this signal, if the block is clear, must display the Stop-signal to opposing trains, reply "2 for———" and unlock. If the block is not clear, he must reply "5 of ——," or "56 of———" The signalman at the entrance of the block must then display the proper signal indication.

A train must not be admitted to a block which is occupied by an opposing train or by a passenger train, and a passenger train must not be admitted to a block which is occupied by any train, except as provided in Rule 432 or by train order.

To permit a train other than a passenger train to follow a train other than a passenger train into a block, the signalman must give "17 for———" to the next block station in advance. The signalman receiving this signal, if there is no passenger train in the block, must reply "5 of———13 for ——." The approaching train will then be admitted to the block under Permissive Block-signal.

417c. When, as prescribed by Rule 417a or 417b, a signalman gives or receives "2" or "13," this information, with the train number and time given or received, must be entered on the block record at both offices.

CONTROLLED MANUAL BLOCK SYSTEM.—CONTINUED.**418a.** _____.**418b.** _____.

419. When a train enters a block, the signalman must report the train and the time to the next block station in advance. When a train has passed the Home-signal or Block-signal and the signalman has seen the markers, he must display the Stop-signal and when the rear of the train has passed 300 feet beyond the Home-signal or Block-signal, he must report the train and the time to the next block station in the rear, except that where a Distant-signal is provided the report will be made as soon as the rear of the train has passed the Home-signal or Block-signal.

This information must be entered on the block records.

419a. Where there is a Home-signal located in the rear of a Block-signal, and both signals controlled by the same block station, the signalman must not admit a train to the route between these signals while it is occupied, without first stopping the train, and then only by signal aspect indicating "Proceed at not exceeding 15 miles per hour with caution prepared to stop short of train or obstruction," or by train order.

420. Unless otherwise provided, signalmen must not ask for the block until they have received a report of the train from the next block station

CONTROLLED MANUAL BLOCK SYSTEM.—CONTINUED.

in the rear, nor unlock the next block station in the rear until the block is asked for by that block station.

421. Signalmen must observe all passing trains and note whether they are complete and in order, and the markers properly displayed.

422. Should a train pass a block station with any indication of conditions endangering the train, or a train on another track, the signalman must immediately notify the signalman at the next block station in advance, and each must display Stop-signals to all trains that may be affected, and must not permit any train to proceed until it is known that its track is not obstructed.

423. _____.

424. Should a train pass a block station without markers or in two or more parts, the signalman must give Train-parted signal to all of the detached parts and must display Stop-signal for all trains moving in the same direction and notify the signalman at the next block station in each direction. If all of the train has not passed his block station, he must display Stop-signal for all trains moving in the opposite direction. The signalman in advance, having received notice of a train entering a block without markers or in two or more parts, must stop any train

CONTROLLED MANUAL BLOCK SYSTEM.—CONTINUED.

moving in the opposite direction. The Stop-signal must not be displayed to the engineman of the divided train if the train can be admitted to the block in advance under Block Signal Rules, but the Train-parted signal must be given. The signalman in the rear must stop all trains moving in the same direction as the parted train.

Should a train in either direction be stopped from this cause, it may be permitted to proceed when it is known that its track is not obstructed.

425. A signalman informed of any obstruction in a block must immediately notify the signalman at the other end of the block, and each must display Stop-signals to all trains that may be affected and must not permit any train to proceed until it is known that its track is not obstructed.

426. When a train clears a block at or between block stations, the signalman, when he knows that it is clear, must report the train and the time to the signalman at the other end of that block.

The signalman must obtain control of the block before permitting a train to enter the block between block stations.

When a train enters a siding at a block station, clearing a block at a switch operated by the signalman, the conductor or engineman is not required to report clear.

CONTROLLED MANUAL BLOCK SYSTEM.—CONTINUED.

427. _____.

428. When coupled trains are separated, as prescribed by Rule 464, the signalman must regard each portion as an independent train.

429. If necessary to stop a train for which a Fixed-signal other than a Distant-signal, permitting it to proceed, has been displayed and accepted, the signalman must give hand signals in addition to displaying the Stop-signal.

430. A signalman having train orders for a train, or to hold a train, must display the Home-signal at Stop, and in addition the Train-order signal. He may permit trains to proceed under Block Signal Rules after complying with rules for movement by train orders.

431. If from the failure of Block-signal apparatus the Block-signal cannot be changed from its most restrictive indication, the signalman will be governed by instructions from the Superintendent. If, at the same time, the signalman is unable to communicate with the Superintendent, he will be governed by Rule 432.

431a. If from the failure of Home-signal apparatus the Home-signal cannot be changed from its most restrictive indication, the signalman having information that the route governed by it

CONTROLLED MANUAL BLOCK SYSTEM.—CONTINUED.

is clear, may admit a train to that route by the use of Clearance Card (Form C).

432. If from any cause a signalman is unable to communicate with the next block station in advance, he must stop every train approaching in that direction, and be governed by instructions from the Superintendent. If, at the same time, the signalman is unable to communicate with the Superintendent, he will, after any train for which "2" or "13" had been given to the next block station in advance has cleared the block, permit regular trains to proceed with a Caution Card (Form F) and as therein provided.

433. 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 block signals, except as prescribed in Rule 429. When hand signals are necessary they must be given from such a place 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 or engine for which they are given.

434. _____.

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

CONTROLLED MANUAL BLOCK SYSTEM.—CONTINUED.

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

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

438. If a train over-runs a Stop-signal, the fact must be reported to the Superintendent.

439. If a Stop-signal is disregarded, the fact must be reported to the next block station in advance and then to the Superintendent.

440. _____.

441. _____.

442. _____.

443. _____.

444. Signalmen must not permit unauthorized persons to enter the block station.

Enginemen and Trainmen.

461. Block signals for a track apply only to trains moving with the current of traffic on that track.

462. Trains must not pass a Stop-signal without receiving a Caution Card (Form F), a Clearance Card (Form C), or a train order authorizing them to do so, nor must an engine returning to its train in the block pass a Stop-signal without Clearance Card (Form C).

CONTROLLED MANUAL BLOCK SYSTEM.—CONTINUED.

A passenger train must not accept a Permissive Block-signal. If, from any cause, a passenger train receives a Permissive Block-signal, the engineman must at once report the fact to the Superintendent by wire.

462a. An engineman holding a Caution Card (Form F) must deliver it to the signalman at the next block station and personally obtain from him permission to proceed.

463. Trains must not proceed on hand signals as against block signals.

464. Unless otherwise directed, when two or more trains or engines have been coupled and so move past any block station, they must be separated only at a block station and the signalman notified.

465. When a train clears a block between block stations, the conductor or engineman must report clear to the signalman, but they are not required to do so when entering a siding at a block station clearing a block at a switch operated by the signalman. A train must not enter a block nor cross from one track to another at a block station, or between block stations, without proper block signals or permission from the signalman.

In the absence of a block signal, the conductor or engineman must ascertain from the signalman the condition of the block and obtain permission

CONTROLLED MANUAL BLOCK SYSTEM.—CONTINUED.

from him to enter it. If information concerning the block is received by the conductor, he must personally give it to the engineman.

465a. A train having passed a block signal, or beyond the limits of a block, must not back past that signal nor into that block without permission from the signalman.

466. When it is necessary for a train to cross over, the conductor or engineman before crossing or returning must notify the signalman and obtain permission to do so. Shifting movements may be made on another track after having proper understanding with the signalman.

466a. A train must not cross over between block stations and proceed from that point on another track with the current of traffic, without permission from the signalman, nor against the current of traffic, without orders from the Superintendent and permission from the signalman.

466b. A train having entered a block on a track used in both directions, must not run in the opposite direction on that track without permission from the signalman.

CONTROLLED MANUAL BLOCK SYSTEM.—CONTINUED.

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

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

469. _____.

470. If there is an obstruction between block stations notice must be given to the nearest signalman.

471. If a train is detained by a Block or Home-signal, the conductor or engineman must immediately ascertain the cause.

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

473. _____.

AUTOMATIC BLOCK SYSTEM.

Rules 501 to 514, inclusive, will not be effective except by special instructions.

501. (SEE STANDARD SIGNAL ASPECTS.)

505. Block signals govern the use of the blocks, but, unless otherwise provided, do not supersede the superiority of trains; nor dispense with the use or the observance of other signals whenever and wherever they may be required.

505a. On portions of the railroad so specified on the time-table, trains will run by block signals whose indications will supersede time-table superiority and will take the place of train orders.

505b. When a train is turned out against the current of traffic, Manual Block Signal Rules must be observed, Rule 317a or 317b to apply as may be designated by special instructions.

505c. A train having passed beyond the limits of a block, must not back into that block without orders from the Superintendent, except that while shifting at an Interlocking station movements may be made against the current of traffic beyond the Home-signal by permission of signalman and under protection as prescribed by Rule 99. Signalmen must not give permission for such movement when there is a train between the point where the move is to be made and the next block station in the rear where a signalman is located,

AUTOMATIC BLOCK SYSTEM.—CONTINUED.

or if permission has been given for a train to enter the block at the rear.

When permission has been given for the reverse movement the signalman in the rear must know that it has been made before admitting any other train to the block, either at his station or at any intermediate point.

505d. Signalmen will not permit a train to enter a block at a hand-operated switch between block signals without permission from the Superintendent if there is a train between the switch where the train is to enter the block and the next station in the rear where the signalman is located, or if such movement has been authorized.

When a train has been given permission to enter a block at a hand-operated switch between block signals, the signalman in the rear must know that it has entered the block before admitting any other train to the block, either at his station or any intermediate point.

Signalmen will arrange with conductors or enginemen of trains desiring to enter an automatic block at a hand-operated switch between block signals to give him information regarding passing trains on the main track, and will also arrange with them, after having received permission for

AUTOMATIC BLOCK SYSTEM.—CONTINUED.

their train to enter a block, to advise him when such movement has been made.

505e. When a train clears a block between block signals, conductor or engineman must report clear to the signalman. A train must not enter a block between block signals without permission from the signalman, and after receiving such permission may proceed as prescribed by Rule 509.

505f. When it is necessary for a train to cross over, the conductor or engineman before crossing or returning, must notify the signalman and obtain permission to do so. Shifting movements may be made on another track after having proper understanding with the signalman.

505g. A train must not cross over at any point and proceed from that point on another track with the current of traffic, without permission from the signalman, nor against the current of traffic, without orders from the Superintendent and permission from the signalman.

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

AUTOMATIC BLOCK SYSTEM.—CONTINUED.

507. Signalmen must not admit a train to an occupied track between Home-signal and next signal in advance without first stopping the train.

Enginemen and Trainmen.

508. Block signals for a track apply only to trains moving with the current of traffic on that track, unless otherwise provided.

508a. Engines or trains assisting a train ahead, and trains being assisted by another engine or train pulling, may pass Stop and Proceed-signals in Stop position without stopping.

509. When a train is stopped by a Stop-signal it must stay until authorized to proceed, or in case of failure of means of communication it may proceed when preceded by a flagman to the next signal displaying a Proceed indication.

When a train is stopped by a Stop and Proceed-signal it may proceed:—

(A) On single track when preceded by a flagman to the next signal displaying a Proceed indication.

(B) On two or more tracks at once not exceeding 15 miles per hour expecting to find a train in the block, broken rail, obstruction or switch not properly set.

NOTE.—WHEN A TRAIN IS STOPPED BY AN AUTOMATIC BLOCK STOP-SIGNAL WHERE MEANS OF COMMUNICATION HAVE FAILED, THE PERMISSION TO PROCEED PRECEDED BY A FLAGMAN TO THE NEXT SIGNAL DISPLAYING A PROCEED INDICATION, AS PRESCRIBED BY RULE 509, DOES NOT APPLY TO INTERLOCKING AND OTHER STOP SIGNALS.

AUTOMATIC BLOCK SYSTEM.—CONTINUED.

510. When a train is stopped by a block signal which is evidently out of order, the fact must be reported to the Superintendent.

511. Both switches of a cross-over must be open before a train starts to make a cross-over movement, and the movement must be completed before either switch is restored to normal position.

512. Where switch indicators are used, the indications displayed do not relieve enginemen and trainmen from protecting their train as required by the rules.

513. Unless otherwise directed, when two or more trains or engines have been coupled and so move past any block station, they must be separated only at a block station and the signalman notified.

514. Excessive use of sand at any point is prohibited, and its use must be restricted to actual necessity in Automatic Block Signal territory.

INTERLOCKING RULES.

DEFINITIONS.

INTERLOCKING.—An arrangement of switch, lock and signal appliances, so constructed 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 interlocking plant.

INTERLOCKING**601. (SEE STANDARD SIGNAL ASPECTS.)**

605. Interlocking signals govern the use of the routes of an interlocking plant, and as to movements within Home-signal limits that are protected by a Home and Distant-signal, their indications supersede the superiority of trains and enginemen and trainmen are relieved from observing Rule 152, but otherwise such signals do not dispense with the use or the observance of other signals whenever and wherever they may be required. Movements against the current of traffic beyond Home-signal limits must be protected as prescribed by Rule 99.

Signalmen.

611. Signal levers must be kept in the position displaying the most restrictive signal indication, except when signals are to be cleared for an immediate train or engine movement.

612. Levers and operating appliances must be operated carefully with a uniform movement, and only by those charged with that duty as directed by the rules. If any irregularity indicating disarranged connections is detected in their working, the signals must be restored so as to display their most restrictive indication and their operation discontinued until repaired.

INTERLOCKING.—CONTINUED.

613. When the route is set the signals must be operated sufficiently in advance of approaching trains to avoid delay.

614. Signals must be restored so as to display their most restrictive indication as soon as the train or engine for which they were cleared has passed the signal.

615. 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, or until Rule 661a has been complied with.

616. A switch or lock must not be moved when any portion of a train or an engine is standing on, or closely approaching the switch, detector bar, or circuit.

617. _____.

618. During cold weather the levers must be moved as often as may be necessary to keep connections from freezing.

619. During storms or while snow or sand is drifting, 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

INTERLOCKING.—CONTINUED.

required, the fact must be reported to the Superintendent.

620. If a signal fails to work properly its operation must be discontinued and until repaired the signal secured so as to display its most restrictive indication.

621. Signalmen must observe, as far as practicable, whether the indications of the signals correspond with the positions of the levers.

622. Signalmen must not make nor permit any unauthorized repairs, alterations or additions to the plant.

Any defects in the interlocking plant must be promptly reported to the Superintendent and the signal repairman.

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 display their most restrictive 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, derail, detector bar, or its equivalent, or a lock, all switches or derails affected must be safely secured.

625. When switches or signals are undergoing repairs, signals must not be displayed for any

INTERLOCKING.—CONTINUED.

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.

626. Signalmen must observe all passing trains and note whether they are complete and in order; 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.

627. If a signalman has information that an approaching train has parted he must, if possible, stop trains or engines on conflicting routes, clear the route for the parted train, and give the Train-parted signal to the engineman.

628. Signalmen must have the proper appliances for hand signaling ready for immediate use; when hand signals are necessary they must be given from such a place 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 or engine for which they are given. Proceed hand signals must not be given that conflict with indication of interlocking signals.

629. If from the failure of interlocking apparatus an Interlocking-signal cannot be changed from its most restrictive indication, and should no cause for detaining a train be known, a signalman

INTERLOCKING.—CONTINUED.

may admit it to the interlocking by the use of Clearance Card (Form C), but before issuing such card must know that the signals governing routes that conflict with the one indicated on the card display their most restrictive indication. If the signal is also a Block-signal, Rule 331 or 431 must be observed for movement into the block; if at the same time means of communication fail, Rule 332 or 432 must be observed for movement into the block.

630. A signalman having train orders for a train, or to hold a train, must display the Home-signal at Stop, and in addition the Train-order signal. He may permit trains to proceed under Interlocking Rules after complying with rules for movement by train orders.

630a. Signalmen will be held responsible for the care of the interlocking station, lamps and supplies; and, unless otherwise provided, of the interlocking plant.

631. Lights in interlocking stations must be so placed that they cannot be seen from approaching trains.

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

INTERLOCKING.—CONTINUED.

633. If a train or engine over-runs a Stop-signal, or a Stop-and-Proceed signal, the fact must be reported to the Superintendent.

634. Signalmen must not permit unauthorized persons to enter the interlocking station.

Enginemen and Trainmen.

660. (DOUBLE, THREE, OR MORE TRACKS.) In Automatic Block System territory, when a train is stopped by a Stop-and-Proceed-signal that governs its movement into or within an interlocking, it may proceed at once not exceeding 15 miles per hour to the next signal expecting to find a train ahead, broken rail, obstruction, or switch not properly set.

661. If a signal, permitting a train to proceed, 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.

661a. A train stopped or delayed after passing a clear Distant-signal must approach the Home-signal prepared to stop. When a train stops under such circumstances enginemen must inform signalmen, or have them notified, that they will approach Home-signal prepared to stop.

662. Trains or engines must be run to but not beyond a signal indicating Stop, except as provided in Rule 663.

INTERLOCKING.—CONTINUED.

663. Trains or engines must not pass an Interlocking Stop-signal without receiving Clearance Card (Form C) or train order.

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

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

666. In recoupling a parted train the switches must not be obstructed by any portion of the train without permission from the signalman.

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

667. Sand must not be used over movable parts of an interlocking plant, nor between Home-signal limits except in emergency.

Excessive use of sand at any point is prohibited.

During freezing weather, engines must not be permitted to stand over movable parts of interlocking plants if possible to avoid it.

668. _____.

669. Trains or engines stopped by the signalman in making a movement through an interlocking plant, must not move in either direction until they have received the proper signal or permission from him.

INTERLOCKING.—CONTINUED.

670. A reverse movement within the limits of an interlocking plant, or a forward movement after making a reverse movement, must not be made without the proper Interlocking-signal or permission from the signalman.

Repairmen.

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

682. When 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.

683. When any part of an interlocking plant is to be repaired a thorough understanding must first 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 a switch, derail, detector bar, or its equivalent, or a lock, all switches or derails affected must be safely secured before any train or engine is permitted to pass over them.

685. Alterations or additions to an interlocking plant must not be made unless properly authorized.

FORM

C

PENNSYLVANIA RAILROAD SYSTEM CLEARANCE CARD

FORM

C

 Station, M. 19

 To Conductor and Engineman: Train on track.

1. (FOR BLOCK-SIGNAL)—Proceed into the block as though signal was displayed.
2. (FOR INTERLOCKING-SIGNAL)—Proceed through the interlocking over route from track to track.
3. (FOR HOME-SIGNAL, NON-INTERLOCKED, REFERRED TO IN RULES 319a AND 419a)—Proceed over route from track to track.

Conductor and engineman of train addressed receiving this card signed by the signalman may proceed as directed by the numbered paragraphs that are properly filled out; however, through interlockings and routes, and at points where switches are connected with Home or Block-signals, trains must run expecting to find track obstructed, broken rail or switch not properly set.

In filling out this card the signalman will be governed as follows:

When signal is a Block-signal, non-interlocked, fill out paragraph 1 only.

When an interlocking-signal is also a Block-signal, for movement through the interlocking and into the block, fill out paragraphs 1 and 2; for movements within the interlocking only, fill out paragraph 2; for movements into the block only, fill out paragraph 1.

When signal is an interlocking-signal and not a Block-signal, fill out paragraph 2 only.

When signal is a Home-signal, non-interlocked, referred to in Rules 319a and 419a, fill out paragraph 3.

This card must be used only in case of failure of Block-signal, interlocking-signal or the Home-signal referred to in paragraph 3.

Paragraph 1 will be used only when block has been duly reported clear by the signalman at the block station in advance, or that it is clear of opposing trains, but is occupied by a train which may be followed by train addressed in the same block.

(To be printed on pink paper, size 6 x 4½.)

FORM

D

PENNSYLVANIA RAILROAD SYSTEM

FORM

D

CAUTION CARD

Station, _____ M. _____ 19____

To Conductor and Engineman: Train _____ on _____ track.

Means of communication have failed:

1. (FOR NON-INTERLOCKED BLOCK-SIGNAL AND INTERLOCKING BLOCK-SIGNAL THAT DOES NOT GOVERN MOVEMENTS WITHIN INTERLOCKING)—You may proceed with caution under Stop-signal expecting to find track obstructed.
2. (FOR OTHER INTERLOCKING-SIGNALS)—The Interlocking-signal displayed governs movements within the interlocking only; movements into the block must be made with caution, expecting to find track obstructed.

Conductors and enginemen receiving this card properly filled out and signed by the signalman will be governed as follows:

At non-Interlocked Block signals, and Interlocking Block signals that do not govern movements within interlocking, trains may proceed with caution under Stop-signal prepared to stop short of any obstruction. At other interlocking signals, in making a movement within the interlocking, be governed by the Interlocking-signal for such movements only; trains may proceed into the block with caution, prepared to stop short of any obstruction.

When this card is used at interlockings, it must be delivered to the engineman before a signal to proceed is displayed for his train.

Signalman. _____

(To be printed on blue paper, size 6 x 4½.)

FORM

F

PENNSYLVANIA RAILROAD SYSTEM

FORM

F

CAUTION CARD

Station, _____ M. _____ 19 _____

To Conductor and Engineman: Train _____ on _____ track.

Means of communication have failed:

1. (FOR NON-INTERLOCKED BLOCK-SIGNAL AND INTERLOCKING BLOCK-SIGNAL THAT DOES NOT GOVERN MOVEMENTS WITHIN INTERLOCKING)—Regular trains may proceed with caution under Stop-signal expecting to find a train in the block, broken rail or switch not properly set.
2. (FOR OTHER INTERLOCKING-SIGNALS)—The Interlocking-signal displayed governs movements within the interlocking only; regular trains making movements into the block must run expecting to find a train in the block, broken rail or switch not properly set.

Signalman.

Conductors and enginemen receiving this card properly filled out and signed by the signalman will be governed as follows:

At non-Interlocked Block-signals, and interlocking Block-signals that do not govern movements within Interlocking, regular trains may proceed under Stop-signal on their time-table authority and as directed above. At other interlocking signals, in making a movement within the interlocking, be governed by the interlocking-signal for such movement only; regular trains may proceed into the block only on their time-table authority and as directed above.

When this card is used at Interlockings, it must be delivered to the engineman before a signal to proceed is displayed for his train.

(To be printed on yellow paper, size 6 x 4 $\frac{3}{4}$.)

MISCELLANEOUS RULES.

700. TRAINS STANDING ON GRADES.—When engine is detached or air brakes are inoperative the train must be protected by hand brakes, and if necessary the wheels blocked.

701. COAL AND WATER.—When a freight train having more than 15 cars is stopped for coal or water, engine must be detached from the train; where coal or water stations are located within interlocking limits, engines of all freight trains must be detached before passing Home-signal.

Enginemen and firemen after taking coal and water must know that the apparatus used is clear of tracks and properly secured.

Coal must not be loaded on tenders while passenger trains are passing on adjacent track. Enginemen must see that coal is trimmed to prevent it falling from tenders while in transit. Coal boards and tools must be so placed as to prevent their projecting over sides or falling from tenders.

Track troughs in service will be marked:

- | | |
|----------------|--|
| At entrance | —By day: White target. |
| | By night: Lunar white light. |
| At exit | —By day: Yellow target. |
| | By night: Yellow light. |
| At middle | |
| (when used) | —Same as at entrance. |
| Out of service | —By day and night, all yellow targets and yellow lights. |

In addition enginemen must be notified when troughs are out of service.

At all track troughs the engineman will tell the fireman when to drop the scoop and when to raise it.

The fireman will be responsible for raising the scoop when the tank is filled. Engine crews must exercise care to prevent unnecessary overflow of the tank.

When two engines are hauling a train, the one next to the train will drop the scoop as soon as it reaches the trough and the leading engine when half way over.

When there is one engine on the front of a train and one on the rear as a pusher, the front engine will drop the scoop one-third of the way over and the pusher as soon as it reaches the trough.

While engines are passing over track troughs, poker or scraper must not be used, grates shaken nor coal put on fire.

702. EQUIPMENT FAILURES.—A car having air brakes inoperative must not be the rear car of a passenger train unless authorized by the Superintendent.

Cars with defective safety appliances may be hauled from point where defect is discovered to the nearest repair point.

Cars loaded with live stock or perishable freight,

developing defective drawbars in transit, may be hauled by chains to nearest repair point.

Other cars that cannot be hauled on rear end of train without the use of chains must be set off at the nearest point, and may then be hauled to the nearest repair point by light engine, work or shop train, or any train composed of cars being at the time used for the exclusive business of the railroad (non-revenue). Defective cars may be associated together and moved to the nearest repair point as a shop train, but must not be moved on a revenue train, or in connection with cars being at the time commercially used, which includes empty cars not employed at the time in exclusively company service.

Stops made necessary by equipment failures must, if possible, be made at block stations, or other communicating points, and reported promptly.

Cars uncoupling without apparent cause must be reported to first available car inspector or Yard Master.

Defective parts of equipment must, if possible, be loaded on engines or cars from which removed; if for any reason they cannot be safely loaded they should be placed at side of road a safe distance from the track. Superintendent must be notified as to disposition.

Extension nipples are applied to ends of air

pipes to lengthen hose and prevent hose parting, and must not be removed.

Defective hose removed en route must be tagged to show train number, initial and number of car or engine, date and place of removal. Enginemen to send hose from engine to enginehouse foremen. Conductors to send hose from passenger equipment cars to foremen car inspectors at terminals; from freight cars to be delivered to first available car inspector who will furnish a new one. Indicate on the tag of freight car hose whether removed from the "A" or "B" end of car. The "B" end of car is the end on which the brake shaft is located, and when there are two brake shafts on a car it is the end toward which the cylinder push rod travels.

When personal injury occurs to employes, or others, immediate inspection of equipment must be made by persons in charge, and by inspectors if available, testing working parts if necessary to determine cause of failure, if any, and the conditions reported.

In case of serious injury, a special inspection must be made by two inspectors at the first division terminal unless otherwise directed; record of inspection to include name of person injured, date, place, circumstances of accident, and detailed report of condition of equipment involved, to be forwarded to the Superintendent.

Defective parts involving personal injury must

be plainly marked for identification and if removed from equipment forwarded to the Master Mechanic.

703. TRAIN INSPECTION BY CREWS.—Engine and train crews must frequently inspect engines and cars en route, moving and standing, to detect hot journals, sticking brakes, shifted lading, bulged cars, swinging doors, flat wheels, etc.

Passenger conductor must notify car inspector or Station Master at terminal, and freight conductor notify car inspector or Yard Master in yards, of any cars in train that need attention.

Close attention must be given to flat wheels; trains must not exceed a speed of 20 miles per hour when flat spots are between two and three inches; when more than three inches on a dead engine or a car it must be set off at first convenient point and promptly reported to Superintendent.

Doors of refrigerator, box and stock cars in transit, must be closed and fastened, except where ventilation is needed to prevent damage to contents of cars under load, the doors should then be fastened in required position.

When trainmen or others are required to remain inside of box cars, the doors must be secured to prevent damage and personal injury.

The drop bottoms of cars, lids on feed boxes of stock cars, dome covers of tank cars, covers on ice bunkers of refrigerator cars, must be in place and secured with the fasteners provided.

Gates or slats on coke cars must be secured to prevent extending outward.

When train or engine crews rerail cars or engines they must inspect them for bent axles and other defects and, in addition, arrange for inspection by inspectors at the first opportunity.

When a passenger train is handled roughly, conductor will inform engineman and action must be taken to correct it. If they cannot remedy it, conductor must notify car inspector at the first regular stop where they are available, stating whether it occurred in stopping or starting. All cases must be reported to the Superintendent.

704. HOURS OF SERVICE LAW.—Employees whose legal hours of service are restricted by the hours of service law must take action through the proper officer to avoid excess service.

Conductors must report, two hours in advance, the time limit for each member of the train crew and the engineman for the engine crew.

Employees called for service before expiration of full legal "off duty" period must report the fact to the proper officer before going on duty.

705. VISION, GLASSES, GOGGLES.—Employees whose vision requires the use of glasses and whose duties require them to distinguish the position or color of signals, must while on duty have with them the proper glasses. Proper glasses—for reading only, one pair of glasses (any type), but if of the nose

glass variety they must be attached to the person by proper guard. For distant vision, two pairs of spectacles. Where glasses are required for both distant vision and reading, two pairs of distant spectacles and one pair of reading glasses or two pairs of bifocal spectacles.

They may wear goggles, approved by the medical examiner, for protection against dust, cinders, etc.

Goggles of green, blue, amber or other colored glass are prohibited.

706. UNIFORMS.—Designated uniformed employes will change to summer uniform May 15th, and to winter uniform October 15th.

Standard mohair coats may be worn by designated employes May 15th to October 14th, both inclusive.

Coats must be buttoned except when trainmen are actually engaged in lifting transportation.

707. SIDE AND TRAP DOORS ON VESTIBULE PASSENGER CARS.—At stations they must be opened on the platform side only. When approaching stations trainmen must station themselves to open as many doors as can be protected by the train crew. Side and trap doors will be opened on adjoining cars when necessary to obtain the maximum number of exits, and when done trainmen must, immediately following the station announcement, add, "this way out, please," then open the side and trap doors on one of the cars, guard it until train makes

station stop, then open side and trap doors on the other car.

On through passenger trains, and local passenger trains making infrequent stops, side and trap doors must be kept closed between stations.

Side and trap doors must be closed when approaching and passing through tunnels.

Side and trap doors must not be opened except by employes in the discharge of duties connected with the operation of the train, en route, or at stations.

When employes open side and trap doors of Pullman cars while in discharge of their duties they must close them.

Pullman employes must comply with these instructions.

When a coach with end gates is next to the engine on a train, the gate next to the engine must be in position.

A passenger train with vestibule car on rear must not be permitted to leave a terminal without having rear of train protected by safety gates or chains in proper position.

A vestibule car in service must not be permitted to leave a terminal or originating point with vestibule door or trap missing, and if a vestibule door or trap becomes defective en route, it must be closed and secured until car reaches destination.

The vestibule platform opposite the blind side of kitchen end of passenger equipment must be kept clear of boxes or any other thing that will interfere with the operation of the trap or door and the giving of signals.

708. REFUSE NOT TO BE THROWN FROM MOVING TRAINS.—

Employees are forbidden to throw garbage, bottles, ashes or refuse of any kind from moving trains, and passenger trainmen must not permit the throwing of such matter from any cars, including dining, sleeping, parlor, business or private cars.

709. STATION ANNOUNCEMENTS.—At terminals and stations trainmen must, while loading passengers, frequently announce the names of the principal stations at which the train will stop, and before departure from terminals make the announcement in all coaches.

On trains, when approaching a station at which the train is to stop, the name of the station must be announced at least twice inside all coaches and dining cars, the announcement to be the name of the station only. When a local train is running on other than its assigned track, the train crew when approaching a station at which stop is to be made will announce as follows:

“The next stop is (name of station) passengers must not alight until told to do so by train crew.”

At junction points, information regarding change of cars should be given to passengers when they present transportation, and approaching junction points the principal stations for which passengers should change cars must be announced in all cars.

On through trains, announcement must be made sufficiently in advance of the station to enable passengers to be ready to leave the train promptly.

In Pullman cars, announcement must be made by the Pullman employes, in the body of cars and in the smoking rooms, except in sleeping cars at night.

710. SLEEPING PASSENGERS NOT TO BE DISTURBED.—To prevent passengers being disturbed when occupying sleeping cars on night trains or in stations, the following instructions must be observed:

Station employes and others must do their work as quietly as possible, avoiding unnecessary noise in the station.

Enginemen in applying brake or in starting or stopping train, must be extremely careful to do so with as little jerk or jar as possible, also, in shifting at stations or when coupling and uncoupling cars, extreme care must be used.

Conductors, trainmen and Pullman employes in passing through or working in sleeping cars

must do so quietly, and avoid unnecessary or loud conversation.

711. STARTING PASSENGER TRAINS, TWO OR MORE ENGINES.—

The engine from which the air brake is operated will use steam first and the other engine will not use steam until necessary to supplement the engine from which the air brake is operated.

When a passenger train is being hauled by two or more engines and it is necessary to take the slack in order to start, the slack will be taken by the engine from which the air brake is operative.

712. SLEEPING CAR GUARD.—Conductors must make frequent trips through sleeping cars at night to see that a Pullman employe is on guard in each car that is in service.

713. DOORS CLOSED, COLD WEATHER.—During cold weather, passenger trainmen must keep coach doors closed when not actually in use. When making station stops, doors must not be left open before train stops, and not then unless it is known that passengers will use them.

714. KEEP AISLES CLEAR.—Passenger trainmen must not permit hand baggage or other effects to obstruct the aisles or washstand apartments in passenger cars.

715. PASSENGERS, SEATING OF, AND RIDING REAR PLATFORM.—Trainmen will permit passengers to ride on the rear platform of the rear car when there are side

doors and end gates in position. Chains will not be considered as a substitute for gates.

When backward movements are made with trains carrying passengers, the passengers, except occupants of business cars, must be prohibited from riding on the front platform of the leading car.

After all passengers have been provided with seats, passenger conductors may exercise their judgment in permitting the turning of seats.

716. BLIND PERSONS, CARE OF.—Blind persons and those of mental infirmities, who are not capable of traveling alone, will not be carried, unless accompanied by a caretaker. Blind persons who are known to be capable of traveling alone, will not require a caretaker, and may purchase tickets and will be given such assistance by station employes and trainmen in getting on or off trains, or while on trains, as may be necessary for their safety.

717. EJECTMENTS.—When ejecting persons from trains, the ejectment must be made at a station close to a town or settlement. When the person to be ejected is a woman or child, or a person who is under the influence of intoxicants or otherwise incapacitated, the ejectment must be made at a station where an agent is at the time on duty, and the attention of the agent must be drawn to the fact that the person has been put off the train.

718. PASSENGER SERVICE DISARRANGED, INFORM PASSENGERS.—

When passenger train service is disarranged, the Station Master or Station Agent will inform the public by posting in a conspicuous place at the station (or otherwise, where posting of notice is not practicable) and by announcement to passengers when purchasing tickets, the probable length of time of interruption, and when it is expected that service will be restored.

When unusual or serious delay occurs to a passenger train, the conductor must notify the passengers, either direct or through the agency of trainmen and Pullman employes, regarding the cause and the approximate time the train will be delayed, except at night, when, of course, passengers should not be awakened to give them this information.

When an accident occurs, a passenger train should not be permitted to go to the point of accident, but must be held by the flagman at a sufficient distance to prevent passengers from walking to the point of accident. When a passenger train stops to give hot boxes or other defects attention, conductor and trainmen will as far as possible prevent passengers getting off the train and on adjoining tracks. When delays occur at points where it is safe for passengers to get out for exercise, luncheon, etc., they must be given such information as will enable them to take advantage of the opportunity.

Special arrangements must be made when, on account of delays to passenger trains not having dining cars, passengers would otherwise be materially inconvenienced.

In case a passenger train is to be detoured, Station Masters, Agents or conductors will cause announcement to be made in all cars in train used by passengers, giving detour route and names of stations on normal route train will not reach, so that passengers for those stations may arrange to take other train to destination.

719. ENGINEMAN PILOT, RUN ENGINE.—When an engine-man is provided to pilot a train he will run the engine, unless otherwise instructed by the Superintendent or Road Foreman of Engines.

720. ELECTRICALLY LIGHTED CARS, TRAIN LINE WIRES.—Cars that are electrically lighted by means of axle generators, must not have their train line wires coupled together, excepting Pullman cars which may be so coupled when required by the Pullman Company. Pullman cars must not, however, have train line wires coupled to other than their own cars. Conductors will be governed accordingly on trains in their charge.

721. THEATRICAL EFFECTS; DOORS SECURED; REPORT IRREGULARITIES.—Yard Masters, Agents and others must give particular attention to cars loaded with theatrical effects to see that the contents are properly safeguarded and the cars securely locked after being loaded.

Conductors of trains on which such cars are hauled must personally see that all doors are locked or secured before leaving, and on arrival at terminals.

Any irregularities should be reported promptly to proper authority.

722. CARS CONSIGNED TO "ORDER".—Yard Masters must not authorize, and conductors must not place on industrial, private or outlying sidings, including non-agency points, cars consigned to "Order" except on instructions of Agent under whose jurisdiction siding is located.

723. FLAGS AND LAMPS CARRIED ON ENGINES.—Enginemen and firemen must carry a red flag by day, and a red lamp and white lamp lighted by night, on engines for immediate use in case of emergency.

724. ELIMINATE EMISSION OF SMOKE BY ENGINE CREWS.—Enginemen and firemen will handle and fire engines to eliminate the emission of smoke as far as practicable. When approaching stations or points where it is known that throttle will be closed, they will have the water at a height in the boiler that will permit using the injector, if necessary, while standing, and the fire in a condition that will make it possible to prevent blowing off steam.

725. HEAVY ROAD MACHINERY AND FARMING IMPLEMENTS AT GRADE CROSSINGS.—To provide against possible accident to railroad property, and insure the safe passage

of heavy road machinery and farming implements at grade crossings, special provision should be made to protect such movements over the Railroad Company tracks.

Agents and foremen should keep closely in touch with such matters and give the Track Supervisor advance information to enable him to make proper arrangements with the owners or those in charge of the equipment to insure full protection is afforded when the tracks are to be crossed.

726. BAGGAGE TRUCKS.—Baggage trucks left on station platform, when not in use, must be placed to avoid inconvenience to patrons, and must be secured against unauthorized use, or movement by storms.

727. SPITTING IN CARS AND STATIONS.—Station employes and passenger trainmen will politely call the attention of patrons who violate the law prohibiting spitting in the cars, or on the floors at stations.

728. PASSENGER TRAINS MAKE-UP.—Wooden coaches or wooden combined cars occupied by passengers, must not be hauled between steel cars or between steel cars and the engine.

Wooden express cars, baggage cars or other cars not occupied by passengers may be hauled between steel cars or between steel cars and the engine.

MP-54 coaches or MPB-54 combined cars occupied by passengers, must not be hauled

between heavier steel cars or between heavier steel cars and the engine.

Cabin cars, other than those having two four-wheel trucks, must not be moved in passenger trains.

729. CARS ON SIDINGS NEAR PUBLIC CROSSINGS.—When placing cars on sidings adjacent to running tracks where there is a public road crossing, trainmen must place the cars as far from the road crossing as conditions will permit, in order that persons using the crossing will have an unobstructed view of approaching trains for as great a distance as possible.

730. PASSENGER TRAINS EXTEND BEYOND STATION PLATFORM.—When a station platform does not accommodate all the exits of a passenger train, trainmen must direct passengers to pass through the train to a location where they can leave the train with safety, preferably at the station platform.

731. KEEP STATION CROSSINGS CLEAR.—Handling matter to or from baggage, express or mail cars, will be regarded the same as receiving or discharging passengers.

Freight trains stopping at stations must not block crossings used by Agents for mail, baggage, express or freight. Also at stations not provided with overhead or undergrade crossings, the crossing used by passengers must not be blocked.

732. TRACK FENCE GATES LOCKED.—At stations where track fences are installed, Agents will see that

gates are kept closed and locked when not being used for the purpose intended.

733. PUBLIC CROSSINGS, TEAMS.—Trains stopping with engine at overhead, grade or undergrade public crossings, should, if practicable, stop a sufficient distance from the crossings to avoid teams being frightened.

734. WARNING BEFORE MOVING CARS.—Before cars are moved on station sidings, or on tracks where loading or unloading is done, trainmen must see that persons working about the cars are warned, and that transfer boards, if used, are removed.

Persons handling lading must be required to leave the cars while being shifted. If they refuse, report circumstances, and names if obtainable; if not, report numbers and initials of cars on which they were working.

735. FLYING SWITCHES AND INSPECTION OF CARS CONTAINING EXPLOSIVES, ETC.—Flying switches (or swinging of cars) should be avoided if possible. Such movements must not be made with cars containing live stock, explosives, inflammables, acid, chlorine gas or poison gas, or cars occupied by persons, except employes on duty, or to tracks occupied by such cars, or to short tracks leading to trestle or buildings. Cars occupied by passengers, and cars placed on tracks occupied by such cars, must be handled by engines with air brakes in service.

Conductors of trains with cars containing explosives, etc., will make frequent inspection

en route, and their particular attention is called to the provisions contained in the instructions for their transportation.

736. HAND SWITCHES AND DERAILS.—Employes throwing hand switches must examine the switch points and know they fit the rail properly and where a derail is in service, they must know it is in proper position before and after operating it.

737. MARKER LAMPS AND OTHER SIGNS OR LIGHTS ON REAR OF TRAINS.—Business cars equipped with electric marker lamps should be shifted with light engine when practicable. If this cannot be done the electric marker lamps must be removed to avoid damage and not again placed in position until shifting is completed. Every precaution must be taken to avoid damage to the wiring in removing the lamps.

On passenger equipment cars with open platforms or observation ends, the markers must be displayed from the sockets located on the eave facing of the hood. On passenger equipment cars, other than cars with open platforms or observation ends, the markers must be displayed from the sockets located on the corner posts of the car. If the corner post is equipped with two sockets, the top socket must be used, and if equipped with a combination casting with two sockets, the inside socket must be used.

No signs or lights will be displayed on the rear of trains, except such markers and signal lights as are prescribed by the Rules or authorized by proper authority.

738. ACETYLENE GAS.—Cars equipped with acetylene gas for lighting or other purposes must not be accepted for movement. If a car charged with

acetylene gas is authorized for movement by proper authority, the gas tanks must be drained before such car is accepted.

739. SNOW-BURNING OIL.—Gasoline motor cars or trains having cars loaded with explosives, inflammables, acids, chlorine gas or poisonous gas, will approach carefully all points where snow-burning oil is being burned, and must not pass over such places until the burning oil is extinguished; those engaged in using the oil must take necessary precautionary measures.

740. AUTOMOBILE CAR END DOORS SECURED.—Automobile car end doors open, and projecting beyond side clearance of car, must be secured, when car is placed for loading or unloading, in such a manner as to offer no obstruction to passing trains on adjacent tracks. This must be done under the direction of Yard Master, Agent or their representative. Trainmen must see that these doors are securely fastened while such cars are en route.

741. ATTENDANTS WITH LIVE STOCK OR OTHER FREIGHT.—Freight conductors must carefully examine waybills for live stock or other freight to see that persons who accompany same are entitled to be carried. If the names of the attendants are not shown on the waybills they should be secured from proper authority and shown thereon. When attendants desert shipments en route, place, date and time of such desertion must be noted on the waybill.

742. PASSENGER CAR BUFFER PLATES.—When passenger equipment cars with continuous buffer plates, with or without vestibule, are to be moved in connection

with freight cars, they must not be coupled between freight cars that are equipped with an uncoupling rigging having a center projecting arm which is liable to come in contact with the buffer plates of the passenger cars. When this cannot be avoided, the continuous buffer plate must be removed and placed inside the car and replaced before the car is again used in passenger service.

Freight cars moved in passenger train service must not be equipped with an uncoupling rigging having center projecting arm which is liable to come in contact with the buffer plates of the passenger cars.

743. TRACK SCALES.—At track scales where semaphore signals are in service, indications will be as follows:

Caution (yellow light at night), scale is set to weigh and engines must not be run over it.

Clear (green light at night), engines may run over the scale.

Where light signals are in use indications will be:

No light—scale is set to weigh and engines must not be run over it.

One green light—engines may run over the scale.

Enginemen must not apply sand or the injector when the engine is standing on or passing over the scale.

744. REFRIGERATOR CAR DOORS.—Refrigerator cars with hinged doors opening outward, loaded or empty, or in process of loading or unloading, standing on a track parallel with and next to a main track,

must have the doors next to the main track closed and secured and when possible sealed, when the distance between centers of main and side track is less than sixteen feet.

Conductors must notify the Superintendent promptly of any refrigerator cars loaded under refrigeration set off in transit so that cars may be examined and re-iced if necessary.

745. WOODEN FLAT CARS.—All wooden flat cars must be placed on the rear of freight trains just ahead of cabin cars, regardless of classification. On parts of the division where pusher engines are used, wooden flat cars must be placed behind the pusher to the point where the pusher is cut off, and then placed on the rear of the train ahead of the cabin car.

746. LONG CARS WITHOUT PIVOTED HEAD COUPLERS.—Cars seventy (70) feet or more in length, measured over the buffers of the cars, and which are not equipped with pivoted head couplers, must not be coupled to freight cabin car for road movement as they are liable to lift cabin cars off the track. One double truck freight car must be placed between such cars and the cabin cars.

747. INFORMATION CONCERNING SHIPMENTS UNLAWFUL.—It is unlawful for any employe to give any person other than the shipper, consignee or a duly authorized public officer, any information concerning shipments of freight, which information may be used to the detriment of such shipper or consignee or which may improperly expose his business transactions to a competitor. Requests for information that may be used to the detriment of

the Company's interests should be courteously referred to the proper officials.

748. COMMERCIAL TELEGRAMS, DELIVERY OF.—Station and train employes must co-operate with messengers to effect delivery of commercial telegrams to passengers en route on trains, messengers to be permitted to pass through trains if time to do so safely; if not, and it is addressed to care of train or conductor and no charges to be paid, the conductor shall receipt for and deliver it to the addressee if located. If delivery cannot be made the conductor must endorse the envelope "unable to deliver" and turn it over to Station Master, Agent or Operator at the end of his trip, or other accessible point. It should then be promptly delivered to the nearest office of the telegraph company over whose lines it was sent, or the originating telegraph office advised of its non-delivery.

749. CARS STORED ON TRACKS, CROSS-OVERS OR TURN-OUTS EQUIPPED WITH TRACK CIRCUITS.—When cars are stored on track protected by automatic block signals, the signalman handling the movement will notify the signal repairman, advising him of the limits of track on which traffic will be suspended as a result of the stored cars. The signal repairman must disconnect the track relays and track feeds within these limits as promptly as possible and also the control circuits of all high and restricted speed signals within the limits specified.

When the cars have been removed, the signal repairman must assure himself that the relays shunt properly and that the signals function as desired, before restoring normal operation. Any trains using the track before same has been restored to normal operation by the signal repairman must be operated under Manual Block System Rules.

When cars are stored within the limits of an interlocking, the signalman must, with the required devices, secure the levers controlling the track functions and signals affected in their proper position, and also the levers of such other functions as may be necessary to insure that a signal cannot be given leading to the track or tracks involved. The signal repairman must be notified as promptly as possible and must disconnect the track relays and feed wires to the track circuits, if used, and also the control wires to all high and restricted speed signals governing to such tracks.

When cars are being removed from the plant the signalman must arrange for sufficient movements over the bonded section to insure the proper shunting of the circuits. After the signal repairman has assured himself by careful inspection that normal conditions have been restored he must so notify the signalman who may then remove the lever blocking devices and make such reports as are required.

Where stored cars will affect the circuits of highway crossing protection, approach locking, annunciators, etc., the signal repairman must take all necessary precautions to safeguard the highway crossing affected and to insure safe operation. When cars are removed, the signal repairman must restore normal working conditions as promptly as possible after assuring himself that all the apparatus affected functions properly.

When crossovers or other portions of track within interlocking limits are so infrequently used as to interfere with the safe operation of track circuits the levers involved must be secured in their proper positions and arrangements made for sufficient train movements over such points as to insure the proper shunting of the circuits. The signalman and signal repairman must be watchful to detect such conditions and co-operate in remedying the trouble.

750. DEAD ENGINES IN FREIGHT TRAINS, DISABLED ENGINES AND FOREIGN ENGINES MOVING UNDER OWN POWER.—A dead engine moved on its own wheels in a freight train must have side rods connected and in proper working order.

An engine and tender, hauled dead in train, must have the air brakes cut in and operative.

The engine must be moved headed forward, except as provided in the following paragraph unless otherwise instructed by the Superintendent.

A dead freight engine with engine truck

removed must not be handled in freight trains, but may be hauled in a work train, at a speed not to exceed fifteen miles per hour, to the nearest terminal where repairs can be made. Whenever possible, on engines which are equipped with an engine truck equalizer, the equalizing beam should be blocked, thereby giving better distribution of weight on the spring rigging without making the boxes and front frames any more rigid than necessary. When the equalizing beam goes through the saddle casting, this should be done by blocking between the beam and the casting; when it does not, the front end of the beam should be chained up to a railroad tie or other support thrown across the front frames.

A passenger engine, except the D-16 type, with the engine truck removed may be moved under steam or in a work train, at a speed not to exceed fifteen miles per hour, to the nearest terminal where repairs can be made. A D-16 type engine cannot be moved, either dead or under steam with the engine truck removed.

A freight engine under steam, with engine truck removed, may proceed at a speed not to exceed fifteen miles per hour, to the nearest terminal where repairs can be made.

An attendant, or caretaker, must travel with dead engines, except engines of this company, to attend to lubrication, etc., and may direct that engines in his charge be set off en route if running

hot, but will have no other control of the movement. If moved in pairs or groups, but one attendant is required for each group, not exceeding three engines. Such attendants are not subject to the hours of service law.

Foreign engines moving light under their own power must not be used in service, except upon instructions from the Superintendent, and when so used conductors must note on waybills the character of service performed, points between which used, time consumed and date.

751. FOREST AND GRASS FIRES.—Employees must use every precaution to prevent, as far as possible, the occurrence of forest and grass fires.

Enginemen must not permit burning waste, hot cinders, or inflammable material to be thrown or dropped from the engine. The ash pan or front end must be cleaned only at points designated, except in emergency cases, and in such cases all hot cinders and live coals must be extinguished before proceeding. Defects in devices on engines designed to prevent the throwing of sparks or dropping of live coals must be promptly reported. Burning waste removed from journal boxes must be immediately extinguished.

Trainmen must not place fusees where there is danger of fire spreading from them.

Trainmen discovering fire must notify the first section gang and report to the Superintendent from the nearest available point. Freight trainmen must, when practicable, stop and extinguish

small fires. Other employes will take the necessary steps to notify the Superintendent and trackmen of such fires as come to their notice.

Agents, Operators and Signalmen will transmit without charge, as company business, over company lines, all messages relative to forest, woodland or grass fires which are on or near company property, or are likely to affect company property.

752. CONTAGIOUS AND INFECTIOUS DISEASES.—Persons suffering from smallpox, Asiatic cholera, yellow fever, bubonic plague, diphtheria, scarlet fever and typhus fever will not be accepted for transportation.

Persons suffering from typhoid fever, glanders, anthrax, leprosy, puerperal fever, erysipelas and measles may be accepted for transportation, provided an entire car is set aside for the afflicted person and that the individual sick be accompanied by a competent attendant with ample facilities for disinfecting excreta prior to disposing of same through the usual train closet.

Permission must always be obtained from the local representatives of the State Health Department in advance, and complete arrangements must be made for disinfection of the car at the end of the journey. The State holds the carrier responsible for any neglect of these provisions.

753. UNION NEWS AGENTS.—Agents of the Union News Company must not enter a train at a terminal within two minutes of its scheduled

departing time unless authorized to accompany the train. If they do not accompany the train, they must leave it within one minute of the scheduled departing time.

When in and about stations, they will be under the jurisdiction of the Station Master or Agent and on moving trains under the jurisdiction of the train conductor.

They must be neat and clean in personal appearance, wearing the full uniform adopted by the Union News Company, and unless so clothed must not be permitted to solicit sales.

They must not be permitted to deposit newspapers, periodicals, books, candies, etc., on the seats of cars or in the laps of passengers, and while soliciting sales must not importune or annoy passengers, but may announce, in a moderate tone of voice, in each car the article offered for sale.

They must be courteous and polite to passengers. Each news agent when accompanying a train must be provided with the necessary transportation, and must place his trunk in the location designated by the conductor. If possible this should be done not less than ten minutes before the departure of the train. At the end of the run it must not be removed until the passengers have been discharged from the train.

754. SELLING ARTICLES UNAUTHORIZED.—The selling of books, pamphlets or other articles not authorized to be sold on trains, soliciting of alms, distribution

of hotel cards, advertising matter, or literature of any description not directly connected with the business of the company is prohibited.

755. PERSONAL INJURIES.—When reporting cases of personal injury, the name, age, color, whether employe, trespasser or non-trespasser, whether married or single, residence, extent of injuries, the time, place and manner in which accident occurred, together with any other information obtainable, must be given promptly by wire, stating whether treatment was given. A full report on C. T. 75-A or C should be made to the head of the department within twenty-four hours after injury and should contain the names, addresses and statements of all witnesses, particularly such witnesses as are not employes.

Conductors are required to report promptly by wire all accidents to passengers which may come to their notice; this to include initial point and destination of passenger and kind of transportation, followed by a full report on C. T. 75-A.

Employes in all cases of personal injury, including those who have been discharged from an hospital are required to call upon the nearest Medical Examiner or Company Surgeon at the earliest opportunity, so that required reports may be prepared and any necessary treatment provided.

All cases of personal injury must be immediately reported to the head of department and, if surgical service was rendered, the name of the attending Surgeon must be given.

When death results from personal injury to employes or others, immediate notice by proper officer must be given to the Coroner of the County in which it occurred, and body must not be removed from such County without his permission.

If the Medical Examiner or Company Surgeon is not available, the first aid facilities provided by the company, i. e., First Aid Rooms, First Aid Cabinets, and First Aid Packets, should be given the widest possible use by employes.

FIRST AID BOXES.—In order that all concerned will be familiar with the proper handling of first aid boxes, the following instructions will be adhered to:

Inspection will be made monthly by persons designated by Division Superintendent.

Report of any boxes missing must be made to the authorized inspectors.

When the seal of first aid box has been broken, for any cause, the box must be sent to the nearest storehouse to be replaced by one properly filled and sealed.

RESUSCITATION.—Artificial respiration may be required in electric shock, persons apparently drowned, asphyxiated by gases, fumes or noxious vapors, shock or collapse, exposure to extremes of heat or cold, cases of poisoning, etc., in other words, in all cases in which breathing is temporarily suspended.

The increasing use of electricity about the shops, stations and all other property of the Company, makes it necessary that employes be qualified to render intelligent assistance in case of electrical accidents. To this end employes must be instructed in methods to be followed and the precautions to be observed. (1) In the safe removal of the victim from contact with live wires and third rails; (2) In the approved method of resuscitating persons apparently dead; (3) In the care of the victim when natural respiration has been restored.

It is highly important that some one, thoroughly familiar with the methods to be followed and the precautions to be observed, take charge and direct operations when an accident happens. The person in charge should select as assistants only those who are most likely to remain cool in such an

emergency, and who may be depended upon to give most intelligent assistance.

RELEASE OF VICTIM FROM CONTACT WITH LIVE CONDUCTOR.—Extreme care must be exercised by the operator in releasing the victim from contact with a live conductor to avoid receiving a shock. A piece of dry non-conducting material, such as a piece of wood, rope, a coat, or rubber hose, etc., may be used with care in handling the live conductor, or the victim while in contact with the live conductor. The use of conducting material, such as metal, moist or damp cloth, etc., is extremely dangerous. Many persons, by their carelessness in such matters, have been severely shocked or burned.

CIRCUITS EXCEEDING 750 VOLTS.—In order to break contact with the victim and the live conductor, use a treated wooden pole as provided at Substations, trolley sectionalizing switches and on certain multiple unit cars and electric engines, with hands not less than six feet from victim or wire. If such pole is not available, get current off line as promptly as possible by notifying the power director, the nearest signalman, or electrician before attempting to remove victim, which should then be done by using a dry piece of wood, rope, a coat or rubber hose, etc.; when handling a live conductor, or in handling the victim, be careful

to see that the free end of the live conductor does not come in contact with either the victim, yourself, or bystanders.

If the victim is in a pool of water in any part of which there is a live wire, do not step into the water, as this would probably result in a shock to yourself; remove the victim or the live wire with the pole.

Extra precaution must be taken in dealing with circuits of these high voltages, material having sufficient insulating qualities for handling circuits of lower voltages not being sufficient for high voltages.

Send for a physician promptly, preferably a company physician, and put the case in his hands upon arrival.

ARTIFICIAL RESPIRATION.—If the victim can be made to breathe, and to continue to breathe, the major part of resuscitation has been accomplished and recovery is practically assured. Having freed the victim from contact with the live conductor, start artificial respiration immediately; do not wait for the physician. Artificial respiration may be delayed or discontinued only long enough to carry the victim to a convenient spot where fresh air is abundant, or to remove him to or from a train and then only for the shortest possible time. Bystanders must not be permitted to collect closely about the victim; this prevents his getting fresh air.

If the accident happens on a train carrying a baggage car, remove the victim to the baggage car, or if it happens on the right-of-way between stations, flag a train and place the victim in the baggage car if the train carries a baggage car. Open the doors and ventilators to admit fresh air. Upon the arrival of the train at the first station where a physician is at hand, turn the case over to him together with whatever assistance he may require to continue artificial respiration.

Quickly feel with your fingers and remove from the victim's mouth and throat any foreign body, such as tobacco, false teeth, etc.

Do not stop to loosen the victim's clothing at this time; every moment of delay is serious.

METHOD OF ARTIFICIAL RESPIRATION.— Lay the victim on his belly, with arms extended forward, as shown in Figure No. 1. The face should be turned to one side in such a manner that the nose and mouth will be free for breathing. An assistant should draw the victim's tongue forward.

The operator should straddle the thighs and face the head, placing the hands on the lowest ribs with the thumbs and fingers turned well out at right angles to the spine, paralleling and touching each other. The expanse of the hands should be confined to the last two ribs, making vertical

pressure near the outer ends of these ribs, thus obtaining the maximum leverage with the least effort.

First movement—Lean forward, arms straight, weight from the shoulders and gradually bring the weight of your body on your hands compressing the chest gradually. This act should occupy three seconds.

Second movement—Rock backward to release pressure. The release of pressure is more sudden and covers two seconds. When pressure is released retain the hands in position.

Artificial respiration should be kept up for two or three hours without interruption, or until breathing has been restored, avoiding roughness. If breathing stops after having been restored, again resort to artificial respiration.

Do not give any stimulant or drugs; the principal requirements are internal and external heat by means of hot coffee, hot milk, and other hot drinks and the application of heat by means of blankets, hot water-bottles, hot bricks, etc.

CARE OF THE VICTIM.—In handling the victim, do not touch or irritate burned parts if possible, and during respiration see that pressure is not brought to bear upon burns.

**FIG. 2—EXPIRATION;
PRESSURE ON.**

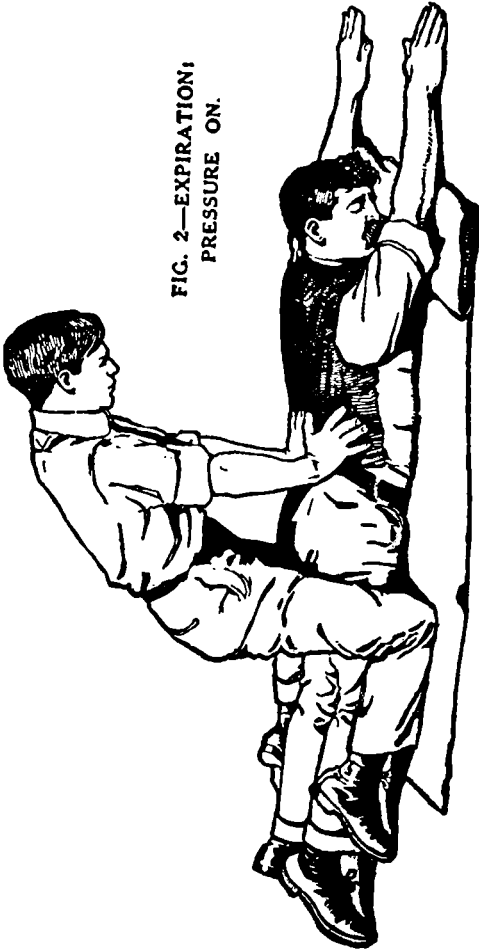


FIGURE No. 2

GENERAL REGULATIONS FOR EMPLOYES.

Train Masters.

801. The Train Master reports to and receives his instructions from the Superintendent.

It is his duty to take charge of the movement of traffic; he is responsible for the discipline and supervision of the men employed on trains and in yard service; see that they understand and observe the rules. In case of accident or obstruction, go to the place if necessary, take general charge of clearing the railroad and see that proper precautions are taken to insure the safety of trains and property.

An Assistant Train Master, in the district assigned him, has the same authority and performs the same duties as the Train Master.

Station Masters.

802. The Station Master reports to and receives his instructions from the Superintendent or such officer as he may designate.

He has charge of the passenger station where he is located and, unless otherwise provided, of the persons employed therein.

It is his duty to see that the station and various apartments are kept in proper condition, preserve order about the station, prevent confusion and delay in seating passengers and receiving and delivering baggage, mail and express; attend courteously to the comfort and wants of

passengers and see that employes do the same. He must see that the cars in trains starting from his station are inspected and properly equipped, cleaned, heated and lighted; that the trainmen are ready for duty at the appointed time, with the necessary signals and other appliances, and that the trains are properly made up and dispatched at the proper time.

An Assistant Station Master, in the duties assigned him, has the same authority as the Station Master.

Passenger Conductors.

803. The Passenger Conductor reports to and receives his instructions from the Train Master. He must obey the orders of Station Masters and Yard Masters, and conform to instructions issued by the Accounting, Passenger and Treasury Departments.

He must report for duty in uniform at the appointed time, and see that the trainmen are ready for duty; assist in making up his train when necessary; see that the engine and train are provided with full sets of signals; ascertain that the cars have been inspected and properly equipped, cleaned, heated and lighted, and that the brakes and other appliances are in proper order.

He must have a reliable watch and a copy of the time-table; examine the bulletin-board when reporting for duty. Compare time with the engineman before starting, and see that he has a

copy of the time-table. He will see that subordinates are familiar with their duties, ascertain the extent of their experience, and instruct them in the performance of their work.

He is responsible for the movement, safety, and proper care of his train, and for the vigilance and conduct of the men employed thereon, and must report any misconduct or neglect of duty.

It is his duty to assist passengers getting on and off trains, see that they are provided with proper transportation, collect fare from those who are not, and put off, at a convenient station, any who refuse to pay fare; attend courteously to the comfort and wants of passengers, and see that his trainmen do the same; see that passengers are properly seated, and not allow them to ride on the platforms, except as prescribed by the rules, or in the baggage, express or mail cars, or violate, in any respect, the regulations provided for their safety; maintain good order and not allow intoxicated or disorderly persons to get on the train. On arrival at terminal stations, he will remain on duty in uniform to render passengers assistance in getting off trains.

Passenger Brakemen.

804. The Passenger Brakeman reports to and receives his instructions from the Train Master. He must obey the orders of Station Masters and

Yard Masters. While on duty he is under the direction of the conductor.

He must report for duty in uniform at the appointed time; assist in making up his train when required; give polite attention to the wants of passengers, avoiding unnecessary conversation. When passing through sleeping cars, do so quietly so as not to disturb passengers; at each station stop announce distinctly the name of the station; where trains are to stop for meals, make such announcement and the length of stop.

It is his duty to attend to the brakes when necessary; be provided with, take care of, and properly display train signals; attend to the lighting, heating and ventilation of the cars, open and close the car doors, and assist the conductor in the proper disposition of passengers, in preventing them from riding on the platforms, except as prescribed by the rules, or in any way violating the regulations provided for their safety; in preserving order; and in all things requisite for the safe and prompt movement of the train and the comfort of passengers.

He must immediately go back to protect the train, where the rules require it, without waiting for signal or instructions to do so. When more than one brakeman is used on a train the rear brakeman must perform this duty, and the front brakeman must in like manner protect the front of the train when the fireman cannot leave the engine.

Train Baggage-men.

805. The Train Baggage-man reports to and receives his instructions from the Train Master. He must obey the orders of Station Masters and Yard Masters. He must conform to instructions issued by the Accounting and Passenger Departments. While on duty he is under the direction of the conductor.

He must report for duty at the appointed time; handle baggage carefully; be civil and obliging to passengers, and remain in the baggage car while on duty, except when required to take the place of a trainman.

It is his duty to receive, take care of and correctly deliver baggage carried on the train, U. S. mail and express carried in the baggage car; check baggage at stations where there are no baggage agents; take charge of and promptly deliver letters and packages forwarded on railroad business or addressed to officers or agents; and attend to the light and heat in the baggage cars while on duty.

He must report all loss, damage or irregularity in handling baggage, U. S. mail, express, letters and packages promptly to the Train Master of the division on which it occurred.

He must not carry letters, packages, money or other valuables not authorized by the regulations, and must not permit any one to ride in the

baggage car except mail agents, express agents, and news agents, in the discharge of their duties, and authorized officers.

General Yard Masters.

806. The General Yard Master reports to and receives his instructions from the Train Master.

He has charge of yards, of the men employed and movement of trains therein, and distribution and movement of cars within assigned districts.

It is his duty to see that train crews and engines are ready for duty at the appointed time; that trains are properly made up and dispatched at the proper time; conductors are furnished with waybills for cars leaving; waybills are received for cars arriving; doors of cars are properly secured; cars are inspected and proper disposition made of those needing repairs; cars are not unnecessarily delayed in yards, and records and reports are made in accordance with instructions.

He must be familiar with the rules governing and the duties of employes connected with train service, require efficient discharge of such duties in yards, and report all violations of the rules coming under his notice.

An Assistant General Yard Master, a Yard Master or an Assistant Yard Master, in the district assigned him, has the same authority and performs the same duties as the General Yard Master.

Freight Conductors.

807. The Freight Conductor reports to and receives his instructions from the Train Master. He must obey the orders of Yard Masters.

He must report for duty at the appointed time, and see that the trainmen are ready for duty; see that he has the proper waybills for the cars to be moved; assist in making up his train when necessary, see that the engine and train are provided with full sets of signals; the couplings and brakes are in good order before starting, and inspect them as frequently as opportunity permits; see that trainmen occupy their proper places on the train; handle freight with care, using every effort to prevent loss or damage; see that doors of cars are properly secured, and not permit unauthorized persons to enter the cars, handle freight or to ride upon the train.

He must have a reliable watch and a copy of the time-table; examine the bulletin-board when reporting for duty. Compare time with the engineman before starting and see that he has a copy of the time-table. He will see that subordinates are familiar with their duties, ascertain the extent of their experience and instruct them in the performance of their work.

He is responsible for the movement, safety, and proper care of his train, and for the vigilance and

conduct of the men employed thereon, and must report any misconduct or neglect of duty.

He must not move cars from stations or sidings without proper waybills or proper authority, and must see that cars are in safe condition to be moved. When necessary to move cars on station or loading tracks, or to place cars thereon, he must first see that all persons loading or unloading cars thereon are notified, and when cars are left on a siding he must see that they are properly secured by hand brakes and every precaution taken to prevent them from being improperly moved.

Freight Brakemen.

808. The Freight Brakeman reports to and receives his instructions from the Train Master. He must obey the orders of Yard Masters. While on duty he is under the direction of the conductor.

He must report for duty at the appointed time and assist in making up his train.

It is his duty to attend to the brakes; be provided with, take care of, and properly display train signals; assist the conductor in loading or unloading freight, in inspecting the cars, and in all things requisite for the safe and prompt movement of the train.

When not engaged in duty elsewhere, he must occupy the post assigned to him. The post of the rear brakeman (or flagman) is on the last car. He must immediately go back to protect the train,

where the rules require it, without waiting for signal or instructions to do so. The front brakeman must in like manner protect the front of the train when the fireman cannot leave the engine. An assisting engine on the rear is a part of the train and the flagman will be governed accordingly.

Switch Tenders.

809. The Switch Tender reports to and receives his instructions from the Train Master. In yards he reports to and is under the direction of the Yard Master or Station Master.

It is his duty to operate the switches under his charge for trains using them; to keep the switches in good condition and clear of snow or other obstruction, and promptly report defects.

He must keep the switches secured for the main track, except when passing trains to or from another track, and must watch for approaching trains and give a signal to proceed if all is right.

A switch tender to be relieved by another must not leave his post until relieved, and the one going off duty must inform the one coming on, of trains due which have not passed.

Supervising Agents.

810. The Supervising Agent reports to and receives his instructions from the Superintendent.

Unless otherwise provided, he has charge of the

Station Agents and Baggage Agents, and is responsible for the discipline and proper discharge of their duties.

Station Agents.

811. The Station Agent reports to and receives his instructions from the Supervising Agent or such officer as the Superintendent may designate. He must conform to the instructions issued by the Accounting, Passenger, Freight and Treasury Departments.

At first-class agencies he is required to devote his time exclusively to the business of the Company. At less important agencies he may, when authorized by the Superintendent, engage in other business when it does not interfere with the proper discharge of his duties.

He has charge of the Company's books and papers, and of the buildings, sidings and grounds at his station; and must preserve order in and about the station, keep the buildings and grounds in proper condition, and give proper attention to fire protection. He must see that no unauthorized person has access to the ticket and freight offices, baggage and freight rooms.

It is his duty to attend to the sale of tickets and the receiving, delivering and forwarding of baggage and freight, and collections for the same; see that cars are promptly loaded or unloaded and forwarded; keep the accounts, and make reports and remittances, in the manner prescribed.

He has charge of the employes at the station and must see that they perform their duties properly; promptly report any misconduct or violation of the rules, and anything that is observed that is prejudicial to the Company's interests or may interfere with the safe and economical working of the railroad.

He must report all local matters which may affect the interests of the Company.

He must not sell tickets to persons who are not in a condition to take care of themselves, or whose conduct might endanger their lives or make them a source of annoyance to others on trains.

He must see that cars left at the station have the hand brakes applied and are not moved by unauthorized persons, or shifted so as to interfere with the safety of trains.

Baggage Agents.

812. The Baggage Agent reports to and receives his instructions from the Supervising Agent or such officer as the Superintendent may designate. He must obey the orders of the Station Master or the Station Agent, and conform to the instructions issued by the Accounting, Passenger and Treasury Departments.

It is his duty to receive and check baggage, and deliver it to the baggageman on trains; take charge of baggage unloaded at his station; handle baggage carefully; be civil and obliging to

passengers, and require them to show proper transportation before checking their baggage. He must not permit unauthorized persons in the baggage room unless they are accompanied by himself or his representative.

He must promptly report all loss, damage or irregularity in handling baggage, U. S. mail, letters, packages and baggage checks.

Division Operators.

813. The Division Operator reports to and receives his instructions from the Superintendent.

He is responsible for the assignment and the operation of the wires and instruments, the prompt transmission of messages, and the economical use of office supplies.

He has charge of operators, and, unless otherwise provided, levermen, and is responsible for the discipline and proper discharge of their duties; see that they understand and obey the rules. He will see that the necessary office supplies are provided.

An Assistant Division Operator, in the district assigned him, has the same authority and performs the same duties as the Division Operator.

Train Dispatchers.

814. The Train Dispatcher reports to and receives his instructions from the Superintendent and such officer as he may designate.

It is his duty to issue orders for the movement of trains in the name of the Superintendent; see that they are transmitted and recorded in the manner prescribed; have a record kept showing the time each train passes designated stations or offices; the time the train dispatcher and the operators in his office go on and off duty, and important incidents which occur while he is on duty.

A train dispatcher, to be relieved by another, must not go off duty until so relieved, and must explain in writing, to the train dispatcher relieving him, the train orders in force and give other information necessary for his guidance.

Operators.

815. The Telegraph, Telephone and Signaller Operator reports to and receives his instructions from the Division Operator, unless otherwise provided. An operator at a station must conform to the instructions of the Station Master or Station Agent, when they do not interfere with his duties as operator.

He is required to be constantly on duty during the hours assigned him, and must not leave his office without permission or until relieved, and the one going off duty must inform the one coming on duty respecting unfinished business in writing, and the location of trains. Unless otherwise provided, the office is in charge of the day

operator. Where two or more operators are employed during the same period, there must be always one on duty.

He must not leave his office when a train is at the station, unless required by business connected with the train.

He must keep a record of the time at which trains pass his office, and such other offices as may be required.

He must give particular attention to the adjustment of the instruments; exercise care in the use of telephones, and be ready at all times to receive train orders.

He must take students when authorized. He must not permit employes or others to frequent his office. He must not receive messages to be transmitted free unless signed by an officer, agent, employe, or other authorized person. On each message sent and received must appear the date, the time, the office call and the signal of the operators who sent and received it.

He must preserve messages sent, and promptly deliver those received, and must consider all messages confidential and not permit them to be read by any person except those to whom they are addressed, nor make their contents the subject of conversation or remark.

Telegrams written by an officer of the Company at points on line of the road must, after transmission, be placed in an envelope and sent to

his office; operators must retain copies of same which will be preserved for reference. Telegrams for delivery to officers on trains must be enclosed in sealed envelopes.

If the means of communication fail he must test the wires and report, if possible, on which side of his office the failure is. If it is at a point which the maintainer cannot reach promptly, he must immediately notify the track foreman.

Road Foremen of Engines.

816. The Road Foreman of Engines reports to and receives his instructions from the Superintendent. He must confer with the Master Mechanic relating to the mechanical requirements and efficiency of engines.

It is his duty to frequently ride upon the engines, instruct enginemen and firemen in regard to the proper performance of their duties, the economical use of fuel and supplies; see that engines are in good working order and properly equipped; know the proper tonnage rating for each class of engines; familiarize himself with the qualifications of enginemen and firemen, and is responsible for the discipline and the proper discharge of their duties; see that they understand and observe the rules.

The Road Foreman of Engines must consult and advise with the Engine House Foremen, respecting the condition and requirements of the engines.

An Assistant Road Foreman of Engines reports to and receives his instructions from the Road Foreman of Engines. In his territory and in

connection with his assignment of engines, he will have the same authority and perform the same duties.

It will be his duty to see that the engines in his assignment are properly handled by enginemen on the road, and that the repairs they require are properly reported at engine houses.

He will report to the appropriate Engine House Foremen all cases in which work reported has been improperly done.

He will consult and advise with Engine House Foremen to the end that the engines in his respective assignment will be kept in good serviceable condition at all times for a minimum cost.

He will be jointly responsible with Engine House Foremen for both the performance and the cost of running repairs of the engines assigned to his care.

Enginemen.

817. The Engineman reports to and receives his instructions from the Road Foreman of Engines. He must obey the orders of the Train Master. He must obey the orders of Station Masters and Yard Masters as to shifting and making up trains, and those of conductors as to starting, stopping and general management of trains, unless they endanger the safety of the train or require violation of rules. When at the engine house he is under the direction of the Engine House Foreman.

He must report for duty at the appointed time; see that the engine is in good working order and

furnished with the necessary signals and supplies; give checks for fuel and supplies received, and assist in shifting and making up the train.

He must have a reliable watch and a copy of the time-table; compare time before starting, and, if necessary, adjust his watch to show correct time; examine the bulletin-board when reporting for duty, and compare time with the conductor of his train before starting. He will see that firemen are familiar with their duties, ascertain the extent of their experience, and instruct them in the performance of their work.

He must exercise caution and good judgment in starting and stopping the train, and in moving and coupling cars, so as to avoid disturbance to passengers and injury to persons or property; keep a constant lookout on the track for signals and obstructions; acknowledge all signals except fixed signals; stop and inquire respecting any signal not understood; when necessary see that the train is protected; use every precaution against fire, and not permit burning waste, hot cinders or any other thing to be thrown or dropped from the engine; clean the ash pan or front end only at points specially designated; report the condition of the engine at the end of each trip, assist in making repairs when necessary, and must report any misconduct or neglect of duty.

He must not permit any person to ride on the engine without authority, except division staff officers, their assistants and trainmen in discharge of their duty.

He must not leave the engine during a trip except in case of necessity, and must then leave the fireman in charge.

Firemen.

818. The Fireman reports to and receives his instructions from the Road Foreman of Engines. He must obey the orders of the Train Master, and when at the engine house he is under the direction of the Engine House Foreman. When with the engine he must obey the orders of the engineman.

He must report for duty at the appointed time; examine the bulletin-board when reporting for duty, assist in shifting and making up the train; see fixed signals affecting the movement of his train, assist the engineman in keeping a lookout on the track for obstructions and other signals; take charge of the engine during the absence of the engineman; assist in making repairs when required. He must not run an engine in the absence of the engineman unless in some emergency he is directed to do so by the conductor, or some one in authority. He must be familiar with the rules that apply to the protection of trains and the use of signals.

He must when necessary protect the train.

Master Mechanics.

819. The Master Mechanic reports to and receives his instructions from the Superintendent. He must obey the instructions of the Superintendent of Motive Power.

He is responsible for the proper and economical management of the shops and power plants, and

for the discipline, and proper discharge of the duties, of persons employed therein; for the economical use of material, fuel and stores, and for keeping the proper account of those supplied to engines and cars; and for engines and cars being in proper condition for efficient service, and for the proper maintenance of tools and machinery in his charge.

He must adhere to the authorized standard in construction and repairs.

He must not permit work to be done in the shops at night or on Sunday, unless absolutely necessary; nor permit lights in the shops after working hours, except those required by the watchmen on duty; and must not allow visitors in the shops without permits, nor allow them to converse or interfere with the workmen.

He must consult and advise with the Road Foreman of Engines respecting the economical performance of engines, and their mechanical requirements and efficiency.

An Assistant Master Mechanic, in the district assigned him, has the same authority and performs the same duties as the Master Mechanic.

Engine House Foremen.

820. The Engine House Foreman reports to and receives his instructions from the Master Mechanic. He must obey the orders of the Road Foreman of Engines with regard to the assign-

ment of engines and the disposition of enginemen and firemen.

He has charge of the engine house and the workmen employed therein. It is his duty to see that the engine house is kept clean and in good order; that the workmen perform their duties properly; that the supplies are economically used; that the engines are prepared for service promptly and are in good working order and properly equipped, and that they are inspected and cleaned at the end of each trip, and reported for repairs when necessary; and that enginemen and firemen are ready for duty at the required time.

An Assistant Engine House Foreman, in the duties assigned him, has the same authority as the Engine House Foreman.

Foremen of Car Inspectors.

821. The Foreman of Car Inspectors reports to and receives his instructions from the Master Mechanic. He must obey the orders of Station Masters and Yard Masters.

It is his duty to see that all cars coming within his jurisdiction are inspected; make needed repairs, and send to the shop cars not fit for service.

He must see that cars in passenger trains are properly equipped, cleaned, heated and lighted; that all fixtures are clean and in good order and ready for use; that the load on all cars is properly

placed and does not exceed the safe capacity, nor the authorized quantity, and that neither car nor load exceeds standard dimensions.

He must require the men under his charge to exercise great care in displaying the signals as prescribed by Rule 26.

Car Inspectors.

822. The Car Inspector, in the absence of a foreman, will perform the same duties as the foreman in the district assigned him.

When inspecting or repairing cars he must protect himself by displaying the signals as prescribed by Rule 26.

Division Engineers.

823. The Division Engineer reports to and receives his instructions from the Superintendent.

He has charge of the maintenance of road-bed, culverts, bridges, track and buildings, and all other matters pertaining to the maintenance of way and structures, and is responsible for the discipline and proper discharge of the duties of persons employed thereon.

He must adhere to the authorized standards in construction and repairs.

An Assistant Division Engineer, in the district assigned him, has the same authority and performs the same duties as the Division Engineer.

Master Carpenters.

824. The Master Carpenter, unless otherwise provided, reports to and receives his instructions from the Division Engineer.

He has charge of the inspection and repairs of bridges, culverts, buildings and other structures and of the men employed in the maintenance thereof. He must know that these men are qualified for the duties to which they are assigned.

He must adhere to the authorized standards in construction and repairs.

He will arrange with the Supervisor for the distribution of material and for assistance he may require.

Carpenter Foremen.

825. The Carpenter Foreman reports to and receives his instructions from the Master Carpenter.

He must be familiar with the use and meaning of signals; see that they are understood and properly used by the persons employed under him; see that materials are safely kept and economically used.

He must have a reliable watch and compare time each day with the clock at the nearest telegraph or telephone office, or with the conductor of a train; a copy of the time-table; and must carefully observe signals displayed by trains.

Before breaking or obstructing a main track in

any way that will interfere with the safe passage of trains to renew or repair bridges or other structures, he will secure permission from Superintendent in writing; when permission is received he must provide flag protection in both directions as per Rule 99 before starting work.

Supervisors of Telegraph and Signals.

826. The Supervisor of Telegraph and Signals, unless otherwise provided, reports to and receives his instructions from the Division Engineer.

Unless otherwise provided he has charge of the Telegraph, Telephone and Signal maintenance and construction forces employed in his district.

He is responsible for the proper working of all interlocking apparatus and signals in connection therewith, automatic and other signals, and for the condition and proper working of the telegraph, telephone and other communication wires and instruments.

He must make all repairs to telegraph, telephone and signal wires, but must not make nor permit any alterations without proper authority.

He must adhere to the authorized standards in construction and repairs.

He must know that the persons under his charge understand and obey the rules and understand the use and meaning of signals, and that they are qualified for the duties to which they are assigned; he will arrange for the necessary telegraph,

telephone and signal materials, and see that they are properly taken care of and economically used.

An Assistant Supervisor of Telegraph and Signals, in the district assigned him, has the same authority and performs the same duties as the Supervisor of Telegraph and Signals.

Telegraph and Signal Foremen.

827. The Telegraph and Signal Foreman reports to and receives his instructions from the Supervisor of Telegraph and Signals.

It is his duty to keep all telegraph, telephone, interlocking and signal apparatus in working order; to keep the poles in proper position, the wires connected, insulated and clear of all obstructions, and make all necessary repairs, calling on the track foreman for assistance he may require. He must keep up-to-date diagram and record of the wires and equipment in the district assigned him.

He must make frequent inspection of communication wires and signal lines and apparatus, and must arrange for necessary repairs and renewals in accordance with authorized standards.

He must at all times keep headquarters informed as to his whereabouts.

An Assistant Telegraph and Signal Foreman, in the district assigned him, has the same authority

and performs the same duties as the Telegraph and Signal Foreman.

Supervisors.

828. The Supervisor, unless otherwise provided, reports to and receives his instructions from the Division Engineer.

He has charge of the track forces employed on his sub-division, and must see that they perform their duties properly, and keep account of and report their time in the manner prescribed. He is responsible for keeping the track, fences, road-bed, bridges, culverts, and everything pertaining to the roadway in repair, also, unless otherwise provided, for seeing that the telegraph, telephone, signal lines, poles and wires are maintained in proper position.

He must frequently pass over his sub-division; observe the condition of the track and bridges; see that the proper slopes and ditches are preserved, and that culverts and drains are kept open; note anything liable to obstruct the track, and have it removed; and do everything necessary to secure the safety of the railroad.

He must know that the persons under his charge understand and obey the rules and understand the use and meaning of signals, and that they are qualified for the duties to which they are assigned; see that materials are properly taken care of and

economically used ; attend in person to the removal of slides, snow or other obstructions ; in case of accident take the necessary force to the place, and use every effort to clear the railroad ; give attention to the water supply and report any defect or deficiency ; keep an oversight of work performed by contractors or mechanics, and see that they do not endanger trains, and make careful inquiry, and report fully in writing, respecting any accident, on his sub-division.

He must adhere to the authorized standards in construction and repairs.

An Assistant Supervisor, in the district assigned him, has the same authority and performs the same duties as the Supervisor.

Track Foremen.

829. The Track Foreman reports to and receives his instructions from the Supervisor.

He has charge of the repairs of his section, and is responsible for the safety of the track, bridges and culverts.

He must see that the track is in good line and surface, and properly spiked ; that it is in true gauge ; that the cross-ties are properly spaced, lined and tamped ; that the road-bed is in good order ; and that the proper slopes, ditches and drainage are preserved.

He must engage in work personally, and see that watchmen and other workmen under his charge faithfully perform their duties.

He must have a reliable watch and compare time each day with the clock at the nearest telegraph or telephone office, or with the conductor of a train; a copy of the time-table; and must carefully observe signals displayed by trains.

He must watch points where obstructions are likely to occur; examine the slopes of cuts, and remove anything liable to fall or slide; remove combustible material from the vicinity of the track, bridges and buildings; extinguish fires that may occur along the railroad; watch the telegraph, telephone and signal lines and, unless otherwise provided, keep the poles and wires in proper position; report promptly any derangement of the wires and assist in repairing when necessary; see that water stations are kept in order and report any failure in the water supply; see that fences are kept in repair; prevent encroachment on the right-of-way and other grounds of the Company; render prompt assistance in cases of accident, or delay to trains; and see that old material is gathered up and that his section is kept in neat and proper condition.

In emergency cases, he may renew broken rails, frogs or switches in the main track, having provided full flag protection in both directions.

In making repairs he may use the track to within ten minutes of the time of a first-class train, but must never so use or otherwise obstruct the track without necessary protection in both directions.

He must not permit hand cars or trucks to be used unless he accompanies them, nor to be attached to trains in motion, and must properly clear regular trains.

He must not permit self-propelled track cars to be operated except as prescribed by Rule 80, when so provided on the time-table.

He must not run his hand car without at least one man facing in each direction, nor without full protection. He must see that trucks, when used, are never so loaded as to prevent prompt removal on approach of a train, and that they are at all times fully protected. When track cars, hand cars or trucks are not in use they must be kept locked, and so secured that they cannot be so moved as to endanger the safety of trains.

He must run hand cars and trucks with great caution, always keeping a lookout for extra trains.

He must not permit his switch key to pass out of his possession, and must personally attend to the opening and closing of switches.

He must caution his men to exercise great care to avoid injury to themselves and others and will himself take special care under all conditions to guard against injury to them.

He must not permit anything to be placed where it will endanger trains or employes, and during heavy storms he must detail sufficient force to watch the railroad and take every precaution to prevent accident.

Any work or condition that interferes with the safe passage of trains at full speed is an obstruction, and must not be attempted without permission from the Superintendent in writing. After permission from the Superintendent is received, protection as prescribed by Rule 99 in both directions must be provided before the work is started. If automatic signals are in use they must be placed and held to display their most restrictive indication, until the tracks are ready for service and signals in working order. The Superintendent will instruct the signalman and control the movement.

Track and Bridge Watchmen.

830. Track and Bridge Watchmen report to and receive their instructions from the Track Foreman.

The track watchman must carefully examine the track and see that it is in safe condition; that the switches are set and locked for the main track; that cars left on sidings fully clear the main track, and that the doors of loaded cars are secured. He must examine buildings and other property of the Company, and protect them from fire and other damage.

Should an obstruction to the track occur, the watchman must at once display Stop-signals in both directions and immediately send word, if possible, to the Track Foreman. Night watchmen, before going off duty, must notify the Track Foreman of the trains due which have not passed, and of any other matters requiring attention.

The bridge watchman must keep a supply of water on the bridge and be prepared to immediately extinguish fire or hot cinders that may have fallen from the engine; keep the coping of the abutments and piers clean; remove combustible matter from near the bridge; and frequently examine the timber and iron work of the bridge and report any decay or defect; and prevent all persons, except employes, from crossing the bridge.

The watchman must observe the speed of passing trains and report any violation of the

rules. When his time is not wholly occupied with watching, he will attend to such other duties as may be assigned him.

Captains of Police.

831. The Captain of Police reports to and receives his instructions from the Superintendent. He must conform to the instructions of the Superintendent of Police and the Inspector.

He is responsible for the proper guarding against depredation, fire or trespass, of the Company's property or that entrusted to its care, and is responsible for the discipline and supervision of the men thus employed.

He shall, at the request of the conductor, assist in maintaining order on trains, and shall maintain order at stations and in yards, and so far as possible protect the Company's patrons from annoyance by disorderly persons.

When so directed, he will have supervision over crossing watchmen and will see that they properly understand their duties, and fulfill them.

The Lieutenant of Police, in the duties or district assigned him, has the same authority and performs the same duties as the Captain of Police.

Instructions to Highway Crossing Watchmen and Gatemen.

832. Unless otherwise provided, Crossing Watchmen and Gatemen will report to and receive

instructions from the Track Foremen, and must not absent themselves from duty until properly relieved.

Crossing watchmen or gatemen must provide themselves with proper appliances and keep them in good order and ready for immediate use. The signal equipment for each watchman will be:

A standard STOP sign.

A Red Lamp which has been approved as standard for the purpose.

A Red Flag.

The signal equipment for each gateman will be:

A standard STOP sign.

A Red Lamp which has been approved as standard for the purpose.

A Red Flag.

One Red Lamp for each gate which has been approved as standard for the purpose.

When a train or engine is approaching, watchmen must place themselves in the middle of the highway, near the track, and will display a STOP sign by day, holding it in an upright position so that the flat side will plainly appear to any person approaching on the highway. By night, or when STOP sign cannot be plainly seen, they will take the same position and protect crossing with Red Lamp, displayed toward the highway in both directions, care being used not

to show the red light in the direction of the track, except when necessary to display Stop-signal to an approaching train or engine.

Where there are two or more tracks, the watchmen will, when practicable, take a position near the opposite track from the one on which train or engine is approaching where they can best protect the public from trains or engines approaching on other tracks.

When it is safe for vehicles or pedestrians to cross the track, crossing watchmen will so indicate by saying "all right" and beckoning to cross.

Where gates are provided, crossing gate lamp will be attached to the gate arm at night showing "Red" toward the highway and no light toward the track.

The gates must be completely lowered on both sides of track in ample time before approaching train or engine reaches the crossing, and must be kept lowered until such train or engine has passed and until the gateman is sure that no other train or engine is approaching.

When gates are, for any reason, out of order, the gatemen must protect crossing as provided in the third paragraph of these instructions for crossings not provided with gates.

When a train is switching over a crossing or in case a freight train has stopped and cut the train so as to avoid blocking crossing, the watchmen

must be especially careful and co-operate with the train crew in the safe movement of pedestrians or vehicles over the track.

In case of accident, watchmen or gatemen must endeavor to obtain the name and address of the person or persons injured and of as many witnesses as possible. They will also obtain the license numbers and the name of the State by which issued of vehicles involved.

They must obtain the same information, as far as possible, in regard to persons driving recklessly or carelessly over the crossing.

The reading of books, papers or periodicals by crossing watchmen or gatemen while on duty, or permitting visitors or unauthorized persons to enter or loiter about cabins or towers is prohibited.

They must observe passing trains and when practicable notify the train crew and the Superintendent of hot boxes or other defects.

They must report failure of enginemen to sound the whistle and ring the bell for crossing where required.

They must keep the cabins or towers and surroundings clean, and foot walks, and space between the rails and crossing planks, on the crossing, clear of snow, ice and other matter, doing such work at times as to not interfere with the proper protection of the crossing.

