

SUPPLEMENT

TO THE

NEW ZEALAND GAZETTE

OF

THURSDAY, MARCH 28, 1907.

Published by Authority.

WELLINGTON, WEDNESDAY, APRIL 3, 1907.

*Rules and Regulations for the Guidance of all Members of the New Zealand Government Railway Service.*

PLUNKET, Governor.

ORDER IN COUNCIL.

At the Government Buildings, at Wellington, this twenty-eighth day of March, 1907.

Present :

THE HON. W. HALL-JONES PRESIDING IN COUNCIL.

IN pursuance and exercise of the powers conferred by "The Government Railways Act, 1900," and "The Government Railways Department Classification Act, 1901," and of all other powers and authorities him enabling in this behalf, His Excellency the Governor of the Colony of New Zealand, acting by and with the advice and consent of the Executive Council of the said colony, doth hereby revoke the rules and regulations made under the authority of "The Public Works Act, 1876," and of an Order in Council made thereunder on the sixth day of January, one thousand eight hundred and eighty-one, which rules and regulations were gazetted respectively on the twenty-eighth day of April, one thousand eight hundred and eighty-one, and on the twenty-seventh day of May, one thousand eight hundred and ninety-seven, and in lieu thereof doth hereby make, for the conduct of the traffic on the New Zealand Government railways and for the guidance and observance of all members of the New

Zealand Government Railways Department, the rules and regulations set forth in the Schedule hereto; and doth hereby declare that this Order in Council and the rules and regulations hereby made shall come into force on the first day of July, one thousand nine hundred and seven.

SCHEDULE.

GENERAL RULES AND REGULATIONS.

For the purposes of these Rules and Regulations the word "Member" shall mean and include every person who is either permanently or casually employed in the Railway Service.

1. THIS Book is the property of the New Zealand Government, and must be delivered up by the holder on his leaving the Service. Every Member supplied with this Book must make himself thoroughly acquainted with, and will be responsible for a knowledge of and compliance with, the whole of the following Rules and Regulations, and such Special Instructions as may from time to time be issued.

2. All persons permanently employed in the service of the Department (except men working exclusively in workshops), and also all persons temporarily engaged on Permanent-way, or Works affecting the Running Lines, or in any way connected with the Train Services, must be supplied with, and have with them when on duty, and produce when required, a copy of these Rules and Regulations. Except as shown below, all persons above referred to must also be supplied with, and have with them when on duty, a copy of the current Work-

ing Time-table for the district, and the Special Instructions governing or relating to the work on which they are employed, and will be responsible for having a thorough knowledge of them.

Exceptions: Labourers on Work-trains, Casual Labourers not connected with Train Running, Tradesmen not in charge of Works.

3. Stationmasters, Goods Agents, Locomotive Foremen, Inspectors of Permanent-way, Foremen of Works, and all Officials in immediate charge, are responsible for seeing that all Members under their charge (except those exempted under Rule No. 2) are furnished with copies of the Rules, General and Special Instructions, and Working Time-tables, and that each man understands the duties assigned to him.

4. Each Member, if not duly supplied with copies of the Rules, General and Special Instructions, and Working Time-table, must apply for them to his Superior Officer. Any Member who may have lost his copy of the Rules, Instructions, or Time-table must immediately obtain another copy from his Superior Officer.

5. THE FIRST AND MOST IMPORTANT DUTY OF EVERY MEMBER IS TO PROVIDE FOR THE SAFETY OF THE PUBLIC.

6. All persons employed by the Railway Department must devote themselves exclusively to the service of the Department; they must reside at whatever place may be appointed, and be subject to removal as required by the Service; attend at such hours as may be required, and consider themselves on duty when on the Line or at a Station, although it may not be their regular time of attendance; pay prompt obedience to all persons placed in authority over them; conform to all the Rules and Regulations of the Department, and endeavour to exact obedience to the By-laws; and not permit anything to be done whereby the Department may suffer loss or damage.

7. Every Member is required to report to his Superior Officer every irregularity or violation of the Rules and Instructions which may come under his notice.

When any charge or complaint is made against a Member his written explanation must be obtained by his immediate Superior.

8. All communications, messages, and reports from Members must be made through their immediate Superior Officer; they are to be made in writing, dated and signed.

9. Any Member who commits any breach of any Rule, Regulation, or By-law of the Department, or who is guilty of any other misconduct, shall be liable to one or more of the following penalties: (1) Suspension; or (2) Caution, Reprimand, or Fine; or (3) Reduction in status or pay; or (4) Dismissal.

10. Any Officer in charge of men has the power to suspend from duty any Member under him when the conduct of the Member is such as to require that course, either with regard to the Safety of the Public or the interests of the Service. He

must, however, report the matter immediately to his Superior Officer.

11. The pay of all Members will be stopped from the moment of their being suspended, and the pay will not be allowed except in the event of entire acquittal of the charge for which they were suspended.

12. Whenever a Member is cautioned, reprimanded, fined, reduced (in rank or pay), or dismissed for any offence, he must be informed in writing by his Superior Officer of the Punishment inflicted, and, at the same time, the reason for infliction of the Punishment must be stated.

13. Should any Member feel himself aggrieved at any time he may appeal in the manner provided in the regulations made under the Government Railways Department Classification Act.

14. Any Member who has cause to complain of or make report against his Superior, or any Member of the Service, shall make such complaint or report within seven days after the occurrence so reported by him, otherwise such report will be regarded as the result of malice, and not from a conscientious desire to advance the interests of the Public Service.

15. The conduct of all Members must be prompt, civil, and obliging. They must at all times afford every proper facility for the business to be performed, be careful to give correct information, and when asked give their names without hesitation.

16. No gratuity is allowed to be taken from Passengers or other persons by any Member.

17. No Member is allowed to trade either directly or indirectly for himself or others, or to act as agent for any person.

18. Members are not to take an active part in Politics beyond recording their Votes.

19. All Members who may become insolvent are liable to be dismissed the Service.

20. The Department reserves the right to deduct from the pay of any Member such sums as may be imposed as Fines, and also to deduct rent in cases where the Member is a tenant of the Department.

21. Any Member occupying a House belonging to the Department does so only during his service, and on leaving must vacate the house without formal notice.

Occupants must not make any Additions or Alterations to Railway Houses without authority.

22. Members are not allowed to run Cattle or Horses on Railway Land unless it is securely fenced off from the Line, and permission obtained.

Members may occupy spare ground alongside the Railway, provided it is not otherwise required, subject to such conditions as the Department may specify.

23. The name and address of each Member employed on the Railway must be registered by the Officer under whom he works, and the Register must be kept in a conspicuous and accessible place, so that if required in cases of emergency the men may be readily found: Each Member

must advise his Superior of any change of address.

24. No Member is allowed to absent himself from duty, to alter his appointed hours of attendance, or to exchange duty with any other Member without the permission of his Superior Officer.

Absence on account of sickness must as soon as possible be notified to the Member's Superior Officer, who may, if he thinks fit, require the production of a medical certificate.

25. Application for leave of absence must be made in writing to the Officer under whose immediate orders the applicant is employed.

26. Every Member employed on the Railway will (as far as practicable) have his ordinary specific duties assigned to him, but the Department retains the right to assign to Members the performance of any other duties which the business may render necessary.

27. In every case where any Member does not understand his duty, he must immediately apply for instruction to his Superior Officer, and no excuse of want of knowledge will be admitted in extenuation of any irregularity or neglect.

28. Every Member employed for any duty on the Line must have a sufficient knowledge of the Rules for the signalling, movement, and protection of Trains, and the mode of carrying such Rules into operation, to enable him to do what is necessary at all times without reference to this Book.

29. All Members are enjoined not to expose themselves or others to danger; to prevent, as far as possible, such exposure on the part of their fellow-members; and to warn those who neglect to take proper care.

30. All Members must exercise due caution in getting between Vehicles for the purpose of coupling or uncoupling them.

31. No Member when on duty or in uniform is allowed to enter any refreshment-room except by permission. Members when on duty are forbidden to consume or to have in their possession any intoxicating liquors, and they will be liable to instant dismissal for any (the slightest) instance of insobriety, as well as to such punishment as the law may direct.

32. Smoking on duty is prohibited.

33. Members, except Trainmen in the execution of their duty, are not allowed to travel on the Railway unless provided with a proper Ticket or Free Pass; nor are they allowed to ride on the Engine or in the Brake-van, or in any Vehicle in which Luggage or Parcels are conveyed, without written or printed permission from a properly authorised Officer of the Department.

34. Trespassing on the Railway must not be allowed, and no person other than a Member of the Department, in the execution of his duty, may be permitted to walk or be upon the Railway, unless provided with written or printed permission to do so, signed by a properly authorised Officer of the Department. In the

event of any person trespassing and refusing to quit when requested to do so, the name and address of such person must be obtained, and the circumstances reported to the nearest Stationmaster or other Superior Officer, or, if necessary, the offender should be detained and handed over to the Police.

35. Members must not walk upon the Railway except when it is necessary for them to do so in the execution of their duty.

36. Members must prevent any interference with the Railway Line, Land, Buildings, or Premises, unless proper authority in writing is shown.

37. Members are empowered by section 29 of "The Government Railways Act, 1900," to arrest and detain and to hand over to the Police, or to take as speedily as conveniently may be before a Justice of the Peace to be dealt with as the law directs, any person who commits any of the following offences:—

- (a.) Trespasses on the Railway and refuses to leave on being warned by any Officer or Servant employed thereon.
- (b.) Is drunk or behaves in a violent or offensive manner to the annoyance of others on the Railway, or at any Station or Platform thereof, or in any Carriage thereon.
- (c.) Does, or attempts to do, or counsels, aids, or assists another person to do, any thing which may endanger the lives of persons employed on or travelling on the Railways.

38. No Engine or Vehicle the property of a private owner must under any circumstances be allowed to enter upon the Main Line, except by permission of the General Manager.

39. No Engine or Vehicle belonging to the Department must be permitted to run on any unauthorised Line.

40. Members are not to show any Document or Book to persons not connected with the Railway Department, nor to communicate to members of the Press or other persons official or other information, except so far as it may be strictly within the official duties of the Member to supply it.

41. No Member is allowed to convert to his own use any article the property of the Railway Department, and the fact of the article appearing waste or useless will not form any excuse for its private appropriation. Every Member must inform his immediate Superior promptly of any property which he may observe exposed and liable to loss or waste, and deliver up to him any found property.

42. No one but the Members examined and certified as fit by the Locomotive Officer must be allowed to have charge of any Steam-boiler, or to temporarily work it.

43. No Member permanently employed is allowed to quit the Service of the Department without giving two weeks' notice; and in case he quits without such notice all pay then due to him may be forfeited.

He will likewise be held liable for any loss, damage, or expense which may be occasioned by his leaving without giving such notice.

44. No Member on leaving the Service is to be paid any money due to him until he shall have delivered up to his Superior Officer the Uniform, Signals, Books, Tools, or other property of the Department with which he has been supplied, and his Pass or Ticket, if provided with such. If any such article shall have been damaged by improper use, a deduction from any pay due to the Member will be made sufficient to cover the damage or supply a new article; or, if the pay be insufficient for such a purpose, he will be liable to make good the loss.

45. Unless specially authorised, Members are not to give Certificates of Service or Character, nor to take from the Public or Contractors articles sent in for trial, nor are they to give any Certificate or Testimonial regarding such articles.

46. Examinations of the Members, to test their acquaintance with the Rules, must be made from time to time as directed. Each Officer in charge will be held responsible for all Members under him knowing the Rules and all Instructions that may from time to time be issued; and, if necessary, he shall read and explain the Rules and Instructions to every Member employed under him.

47. Each Member of the Department is invited to communicate to or through his Superior Officer anything calculated to promote the interests of the Department or the Safety and Comfort of the Public.

48. All Special Orders and Instructions connected with the working of the Line must be made in writing.

49. Whenever the term "Main Line" is used it means the Running Line of any Railway or Branch, and the crossing-loop at any Station.

50. On Double Lines Trains must run on the Left-hand Line in the direction in which they are travelling.

51. (a.) Whenever the word "Train" is used it must be understood to include Light Engine—i.e., Engine without a Train.

(b.) Whenever the words "Goods Train" are used they must be understood to include Goods, Mineral, Stock, and Work-trains.

52. Whenever the term "Officer-in-Charge" is used in these Rules it must be understood to mean the Stationmaster, Signalman, or other Member who is in charge for the time being.

53. *In the event of circumstances occurring which are not provided for in these Rules and Regulations, or in any other Instructions issued by the Department, the Members in such cases must be guided by their own prudence and judgment, always bearing in mind that the Public Safety is the first consideration.*

#### UNIFORM TIME TO BE KEPT.

54. New Zealand Mean Time will be observed on all Lines. Time will be sent to all Railway Stations which have Telegraphic communication at 9 a.m. daily,

and Clocks must be regulated accordingly.

55. Every Member connected with the Train Service, and every Ganger, Leading Hand in charge of Works, or any person who may be required to run a Trolley or Velocipede on the Main Line, must provide himself with a reliable watch, and keep it regulated to correct Railway Time.

#### SIGNALS.

56. The word "Signal-box" means any place where Signal Levers are worked from.

The word "Signalman" means any Member in charge of the working of Signals.

57. The strictest obedience must be given to *all Signals*. Members are not allowed to judge of the necessity for any of these Signals being shown, the responsibility resting with those exhibiting them.

58. It is the duty of every Member of the Department to prevent danger by exhibiting the proper Signal in the proper manner; and if, from accident, the proper Member cannot perform his duty, any other Member on the spot must give the Signal required.

59. All members employed on any duty connected with the Line must bear in mind that *Trains may pass any part of the Line at any moment during the Day or Night*, whether or not they are mentioned in the Time-tables or Train Advices; and *the same precautions must always be taken in Signalling, whether Trains are expected or not.*

60. **RED** is a Signal of **DANGER—Stop**.

**GREEN MOVED** is a Signal for **CAUTION—Move slowly**.

**GREEN STEADY** is a Signal for **ALL RIGHT—Go on**.

61. Any unusual Signal, or the Hand waved violently, denotes Danger, and the necessity for stopping immediately.

62. Signal Lamps must be lighted before it becomes dusk, and in Foggy Weather, or during Falling Snow.

63. *No Signal must, under any circumstances, be operated without the knowledge and sanction of the Member on duty and in charge of it.*

64. No new Signal must be brought into use, nor any alteration made in the position or use of any existing Signal, without the concurrence of the District Traffic Manager.

65. *The absence of a Signal at a place and time where and when a Signal is ordinarily shown, or a Signal imperfectly exhibited, or the exhibition of a White Light at a place where a Green or Red Light ought to be seen, must be regarded as a Danger Signal.*

66. Whenever Trains are required to run at hours when the Staff at certain Stations or Signal-boxes are not on duty Special Written or Printed Instructions will be issued specifying the conditions under which Fixed Signals may be

passed. Unless such Written or Printed Instructions have been issued the Signal Regulations remain in full force at all times.

67. (a.) In case of detention at a Home, Starting, or Advanced Starting Signal, the Engine-driver must immediately sound his whistle, and, if still detained, the Guard, Shunter, or Fireman must (except where the Lock and Block system of train-signalling is in operation) go into the Signal-box and remind the Signaller of the position of the Train, and remain there until the Signaller can give permission for it to go forward.

In Foggy Weather, or during Falling Snow, the Guard, Shunter, or Fireman must, immediately upon the Train coming to a stand, proceed to the Signal-box.

(b.) When a Train or Vehicles have passed a Home Signal and are waiting to be crossed to another Line or to be let into a Siding, or have been shunted on to the opposite Running Line, or placed on either a Main Line or Branch Line at a Junction, or when a Train or Vehicles have been shunted from a Siding on to a Running Line and are waiting to be crossed to another Line, the Guard, Shunter, or Fireman must, when the Train or Vehicles come to a stand if detained, proceed to the Signal-box, and remind the Signaller of the position of the Train or Vehicles, and remain in the Box until the Signaller can give permission for them to proceed, or to be shunted clear of the Running Lines.

(c.) The duty of going to the Signaller must be performed as under:—

- (i.) In the case of a Light Engine, by the Fireman.
- (ii.) In the case of a Train, by the Guard, Under-guard, or Fireman, as the Guard in charge of the Train may instruct.
- (iii.) In the case of a Train or Vehicles in charge only of a Shunter, by the Shunter.

(d.) When a Train or Vehicles have been shunted from one Running Line to another, the Guard or Shunter, as the case may be, must, before going to the Signal-box, satisfy himself that the Line from which the Train or Vehicles have been shunted is clear.

(e.) Sufficient time must be allowed for the Guard, Shunter, or Fireman to rejoin the Train before the Signal is lowered, and the Engine-driver must not, when the Signal is lowered, go forward until he has received a Hand Signal from the Guard or Shunter to intimate that he has rejoined the Train.

68. When a Signal is lowered, or turned off, the Engine-driver must satisfy himself that it refers to the Line he is on and to that on which he is to proceed.

69. Any Signal may be passed at Danger on receipt of Verbal or Written Instructions from, or the exhibition of proper Hand Signals by, the Signaller.

DESCRIPTION OF SIGNALS.

FIXED SIGNALS.

70. Fixed Signals are made by Semaphores and Discs fitted with Lamps. They consist of—(1) Distant Signals; (2) Home Signals; (3) Calling-on Signals; (4) Starting Signals; (5) Advanced Starting Signals; (6) Directing or Stop Signals—(all the foregoing are indicated by Semaphores); (7) Siding and Shunting Signals, which are indicated by Discs. Fixed Signals as a rule are so placed as to indicate by their position the Lines to which they apply.

Except as provided in Rules 73 (d), 81, and 84, when more Arms than one are fixed on the same side of a post, they apply as follows, viz.: the first or top Arm, to the Main Line; the second Arm to the Line next in order, and so on.

In cases where there are Lines diverging both to the right and the left of Main Line for which Signals are needed, Bracket Signals will always be placed, and will indicate by their construction the Line to which they apply, the Main-line Arm being in all cases higher than the others.

71. The normal position of Fixed Signals is Danger, except where otherwise instructed.

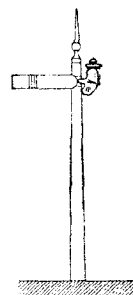
When lowered or turned off to allow a Train to pass they must, after the passing of the Train, be immediately returned to Danger.

SEMAPHORE SIGNALS.

72. The Semaphore Day Signal is made by an Arm painted Red, on the left side of the post as seen by the Engine-driver of the approaching Train, and the Night Signal by a Light worked in conjunction with the Arm.

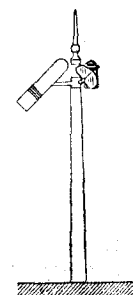
73. (a.) Each Semaphore Arm and Lamp will give two Signals only—Danger, Stop; and All Right, Go on.

(b.) The Arm set thus, horizontally—



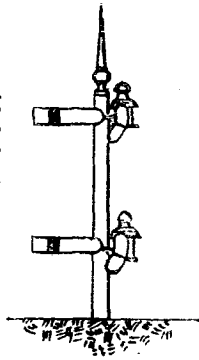
or a Red Light, indicates Danger — "Stop."

(c.) The Arm inclined at an angle of 45°, thus—



or a Green Light, indicates All Right — "Go on."

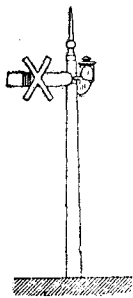
(d.) In cases where, owing to intervening objects, Signals cannot readily be seen, a higher or lower Arm, as the case may be, is erected to work in conjunction with the Signal, as shown in marginal diagram.



74. Semaphore Signals apply only to Trains travelling in the proper direction on the Running Lines, and must not be used for any other purpose, except as provided in clause (i), Rule No. 279. Trains moving in the wrong direction on any Running Line must be signalled by Hand-lamp or Flag. Trains Shunting from one Running Line to another, or Shunting into or out of Sidings connected with Running Lines, must, unless Fixed Signals are provided for the purpose of signalling such operations, be signalled either verbally or by Flag or Hand-lamp, as occasion may require, it being necessary in such cases that the Fixed Signals should be kept at Danger for the protection of the Trains so employed.

75. When a Semaphore Signal is so placed as to be out of sight of the Signaller who works it a Repeater will be provided.

76. Semaphore Signals not in use are distinguished by two pieces of wood fastened to the Arm in the form of a cross, thus:—



DISC SIGNALS.

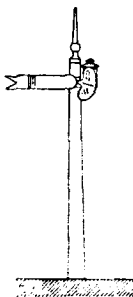
77. (a.) Where Disc Signals are used to regulate the passage of Trains between Sidings and Running Lines, or Shunting operations in Sidings, the Danger Signal is shown in the Daytime by a Red Disc or Target, and at Night by a Red Light.

(b.) The All Right Signal is shown in the Daytime by a Green Disc or Target, and at Night by a Green Light.

(c.) Disc Signals not in use will not be fitted with Discs or Lamps.

DISTANT SIGNALS.

78. The arms of Distant Signals are notched or swallow-tailed, thus:—



79. A Distant Signal is always related to a Home Signal. It is placed at some distance from its Home Signal to indicate to approaching Trains the state of the latter. The All Right Signal must never be given at the Distant Signal post unless the Home Signal to which it relates is also at All Right.

80. When an Engine-driver finds the Distant Signal at Danger he must immediately reduce the speed of his Train so as to be able in case of need to stop at such Signal; but if he sees the way in front of him is clear he must proceed slowly and cautiously within the Distant Signal, having such control of his Train as to be able to stop it short of any Obstruction that may exist between the Distant Signal and the Home Signal, and must bring his Train to a stand before reaching the Home Signal, where he must stop until either the Home Signal is lowered or other Signal given, according to Rule No. 126.

81. Where it is found necessary to place the Distant Signal Arm from a Box in advance, on the Home or Starting Signal post applicable to the same line, of the Box in the rear, the Distant Signal will be the lower and the Home or Starting Signal the upper Arm of that post.

HOME SIGNALS.

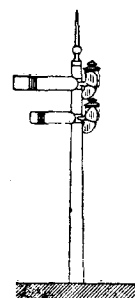
82. Home Signals are placed at Junctions, Stations, Sidings, and Signal-boxes.

83. No train may pass a Home Signal at Danger, or foul the Crossings or Points to which it applies, except—

- (a.) When Staff not on duty. (See Rule No. 66.)
- (b.) On instructions from the Signaller (see Rules Nos. 69 and 126) or on instructions from the Signal-adjuster (see Rule No. 145).
- (c.) When Signal is defective. (See Rule No. 147.)
- (d.) When Shunting, as prescribed in Rules Nos. 158 and 159.
- (e.) When a Calling-on Arm is in use. (See Rule No. 84.)
- (f.) When working under instructions of Pilot Guard. (See Rule No. 279.)

CALLING-ON SIGNALS.

84. (a.) Where short Arms are fixed upon the Home Signal posts as Calling-on Signals, they are placed below the Home Signal, thus:—



(b.) When a Calling-on Arm is lowered, the Engine-driver must draw forward past the post of the Signal on which the Calling-on Arm is fixed as far as the Line is clear. If after lowering the Calling-on Arm the Signaller wishes to communicate with the Engine-driver and the Signal-box is ahead of the Calling-on Arm, he must

show a Hand Danger Signal from the Box to stop him.

(c.) The Calling-on Arm must not be lowered until the Train has been brought to a stand at the Home Signal.

(d.) When Home Signal is lowered the Calling-on Arm may be passed at Danger.

**STARTING AND ADVANCED STARTING SIGNALS.**

85. Starting and Advanced Starting Signals are intended to control the departure of Trains into the Section ahead. Starting Signals must never be passed when at Danger, except as follows:—

- (a.) Where there are Shunting Discs. (See Rule No. 89.)
- (b.) As provided in Rules Nos. 69, 83, 126, and 145.
- (c.) When Signal is Defective. (See Rule No. 147.)
- (d.) Where the Points of Sidings or Crossover Roads are so near to a Starting or Advanced Starting Signal as to render it necessary for the Signal to be passed for Shunting purposes and a Shunting Disc is not provided, Engine-driver may, for the purpose of performing Shunting operations, pass the Starting or Advanced Starting Signal when at Danger upon being directed to do so by the Signalman either verbally or by the ordinary Shunting Hand Signal, but they must not proceed on their journey until the Starting and Advanced Starting Signals have been lowered.
- (e.) When Staff not on duty. (See Rule No. 66.)
- (f.) When working under instructions of Pilot Guard. (See Rule No. 279.)

86. (a.) Where Starting and Advanced Starting Signals are provided, the Starting Signal must not be passed at "Danger," except as provided in Rule No. 85, but when the Line is clear between the Starting and Advanced Starting Signals and the Advanced Starting Signal is at Danger, the Signalman must, when necessary, after a Train has been brought to a stand, or nearly to a stand, lower the Starting Signal to allow such Train to proceed towards the Advanced Starting Signal.

(b.) In Foggy Weather, or during Falling Snow, Trains waiting "Line Clear" must, as far as practicable, be kept within the sight of the Signalman, and, unless Special Instructions are issued to the contrary, no Train must be drawn past the Starting Signal towards the Advanced Starting Signal except for Station duties or Shunting purposes.

**DIRECTING OR STOP SIGNALS.**

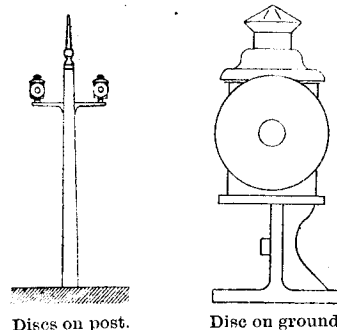
87. Directing or Stop Signals are used only in Station Yards, and are only for the purpose of directing Trains to the various Platforms or Sidings to which they apply, and for protecting those Lines to which they refer. They must not be passed at

"Danger," except where provided for to the contrary in Rules Nos. 66, 69, 126, 145, 147, and 279.

**SIDING AND SHUNTING SIGNALS.**

88. Siding and Shunting Signals are used for controlling the movements of Trains whilst Shunting.

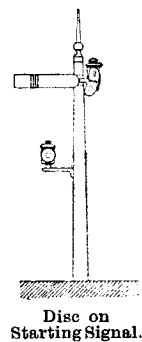
(a.) They consist of Discs fixed on posts (except where space cannot be found for a post, when the Discs are placed on the ground), and are operated independently by a separate Lever from the Signal-box, as per diagram, thus:—



(b.) When the exit from Sidings is controlled by Signals no attempt must be made to take a Train from such Sidings until the Signal is turned off, nor must an Engine-driver whilst waiting for such Signal to be turned off allow his Engine to stand foul of any other Line.

(c.) When a Signal applies to more than one Siding, and more than one Engine is in the Sidings at one time, no Engine-driver must move towards the Signal until he has been instructed to do so by the Shunter or other Member in charge.

89. Where these Signals are fixed upon the Starting or Advanced Starting Signal posts, as per diagram, the Green Disc or Light authorises an Engine-driver to pass, for Shunting purposes only, the Starting or Advanced Starting Signal when at Danger, but no Train must go forward on its journey until the Starting and Advanced Starting Signal is lowered.



**BACK LIGHTS OF FIXED SIGNALS.**

90. The Back Lights of Fixed Signals show a White Light to the Signalman when at Danger, and no Light when at All Right.

**POINT INDICATORS.**

91. Catch Points are placed upon the Main Line to intercept Runaway Vehicles.

Safety Points are placed on Sidings to prevent Vehicles entering on or fouling the Main Line.

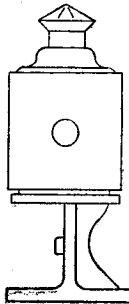
Catch Points must always be set for the Runaway Siding, and Safety Points must always be set for the Backshunt, except when required to be turned to allow a Train or Vehicle to pass to or from the Running Line.

92. Trap Points are Derailing Switches fixed in Sidings in Station Yards for the protection of the Running Lines. They must always stand in the derailing position when not in actual use for passing traffic.

93. Point Indicators are fixed at Trap and Catch Points. They are placed on the ground, and are connected to and worked with the Points to which they apply. They are solely for the purpose of indicating which way the Points lie. Engine-driver must, before proceeding over such Points, receive a Signal from the Signalman or Shunter. The Shunter must not, however, give such Signal until he has received authority from the Signalman to do so.

Point Indicators have two positions, and exhibit a Red Square Target by Day, and a Red Light at Night, when the Points are in their normal position; and a Purple Square Target by Day, and a Purple Light by Night, when the Points are reversed.

POINT INDICATOR.



HAND-SIGNALS.

94. Hand-signals will be made with Flags or with the Arms by Day, and with Lamps by Night or in Foggy Weather, as under. The man signalling must face the Engine.

(a.) A Red Flag, or, in the absence of a Red Flag, both Arms raised above the Head, thus :



by Day, or a Red Light, or, in the absence of a Red Light, any light waved violently by Night, denotes Danger—"Stop."

(b.) A Green Flag moved slowly up and down, or one Arm raised above the Head, thus :



by Day, or a Green Light moved slowly up and down by Night, denotes Caution—"Move slowly."

(c.) A Green Flag held steadily, or one Arm held horizontally across the Line, thus :



by Day, or a Green Light held steadily by Night, indicates All Right—"Go on."

95. Hand-lamps and Flags when used as Signals must be held in the Hand and not placed upon, or stuck into, the ground, and care must be taken that the person sent on any occasion to use a Signal be practised in the use of it and understands its meaning.

In exhibiting Hand-signals by Day from a Station-platform Flags must be used.

96. Where Fixed Signals are not provided at Stations, Trains will be signalled by Hand-signals.

(a.) A Red Flag by Day, or a Red Light by Night or in Foggy Weather, is an order to stop.

When this Signal is shown at a Station or stopping place to an approaching Train, the Train must immediately be brought to a stand.

(b.) A Green Flag moved slowly sideways across the Line or one Arm raised above the Head and dropped forward palm down by Day, or a Green Light moved slowly sideways across the Line by Night, is an order to come on slowly and stop at the Station or stopping-place.

When it is necessary to stop a Train which is scheduled not to stop, the Danger Signal must be shown.

(c.) A Green Flag held steadily, or one Arm held horizontally across the Line by Day, or a Green Light held steadily by Night, is an order to proceed without stopping at the Station or stopping-place.

97. A Green Flag and a White Flag held together and waved apart at frequent intervals by Day, or a Lamp showing in quick alternations Green and White Lights at Night, shown at a Station or Signal-box, indicates to Engine-driver or Guard that his Train has parted while running.

98. When no Signal can be seen at a Station at which a Signal should be exhibited, the Train must come to a stand outside the Station limits, and the Engine-driver must whistle for a Signal.

HAND-SIGNALS FOR SHUNTING.

99. Hand-signals by Day will be made by the Shunter with the Arms. The Shunter will signify by movement of his Arm whether the Engine-driver is to come towards the Signal or go away from the Signal.



(a.) At Night a White Light moved slowly up and down denotes "Go away" from the Signal; a White Light moved slowly sideways across the Line denotes "Come" towards the Signal.

(b.) A Green Light denotes "Caution"; moved slowly up and down denotes "Go slowly away" from the Signal; moved slowly sideways across the Line denotes "Come slowly" towards the Signal.

(c.) A Red Light, or any Light moved violently, denotes "Stop at once."

(d.) Hand-signals exhibited from a Signal-box must always be by Flag or Lamp.

#### DETONATING SIGNALS.

100. Every Guard, Signalman, Engine-driver, Gateman, Bridge-keeper, Crossing-keeper, Ganger, and Leading Hand in charge of Works in connection with the Line must be provided with a supply of Detonators, which he must always have ready for use whilst on duty; and every person in charge of a Station must keep a supply of these Signals in a suitable place, known by, and easy of access at all times to every person connected with the Station. All persons above named will be held responsible for keeping up the proper supply of Detonators.

101. Detonators must be placed on the Rail (label upwards) by bending the clasp round the upper flange of the Rail to prevent their falling off. When an Engine passes over a Detonator, the Detonator explodes with a loud report, and the Engine-driver must instantly shut off Steam, and bring his Engine to a stand, and then proceed cautiously until he receives a Signal.

102. Detonators must be carefully handled, as they are liable to explode if roughly treated. It is necessary to keep them well protected from damp. At intervals of not more than two months one from each Member's Stock must be tested, to insure that they are in good condition.

They must not be kept after they are three years old or when bearing any signs of rust on the outside of the case, but must be withdrawn from the Stock and returned to the Officer who supplied them.

103. Detonators must be issued in the order in which they are received, those which have been the longest on hand being always used first to avoid an accumulation of old Stock.

104. Should any Detonator fail to explode when a Train passes over it, the circumstance must be promptly reported to the Officer from whom the Detonator was obtained, and the defective Detonator forwarded to him for examination.

#### LINE-REPAIRERS' SIGNALS.

105. Signals for Trains, given by Line-repairers, are as follows: A Red Disc, Red Flag, Red Light, any Light moved violently, both Arms held vertically, or Detonators on Rails: each of these denotes Danger—Stop. The Disc will be attached to a stake driven firmly into the ground, and fitted with brackets for Lamps.

106. Whenever a Danger Signal is shown by Surfacemen or others on the Line, the Train must be stopped before passing the Signal.

107. Two steady Green Lights, one Green Light moved slowly up and down, or a Green Flag moved slowly up and down, denotes Caution—Reduce speed to six miles an hour.

*In the absence of a Green Flag or Green Light the Danger Signal must be shown.*

108. Two steady White Lights, being the Back-lights of the two Green Light Caution Signals, for the reverse direction, indicate the end of the protected portion of the Line.

109. A Green Flag or Green Light, held steady, or one Arm held horizontally across the Line, denotes All Right—Go on.

110. Boards indicating the speed to be run at places over which reduced speed must be observed are erected when necessary.

#### SIGNALS CARRIED BY TRAINS.

111. After Sunset and during Foggy Weather or Falling Snow, every Train Engine running on the Main Line must carry a White Head-light, and when running alone a Red Tail-light also; and every Train must carry a Red Tail-light, and two Side-lights in the rear of the Train showing White Lights forward and Red Lights backward.

112. Every Train travelling on the Line must have a Tail-lamp, to show Red when lighted, attached to the last Vehicle, by Day as well as by Night. The Lamp need not be lighted in the Daytime, except during Foggy Weather or Falling Snow; but its presence in the rear of each passing Train will furnish evidence to every Member along the Line that no portion of the Train has become detached on the Road.

113. Engines, when running on the Main Line without a Train, must carry a Tail-lamp, to show Red when lighted, in the rear, both by Day and by Night. Engines assisting Trains in the rear must carry a Tail-lamp, to show Red when lighted. Engines drawing Trains must not carry any Tail-lamp in the rear. In the case of two or more Engines running coupled together without a Train, the last Engine only must carry a Tail-lamp, to show Red when lighted.

114. The large fixed Head-lamps either in front or rear of Engines are not to be regarded as Tail-lamps.

115. Engines while employed exclusively in Shunting must carry, after Sunset or in Foggy Weather or during Falling Snow, a White Light at each end.

116. A Special Train is indicated by the preceding Train carrying on the last Vehicle a Red Board or Red Flag by Day and an additional Red Tail-light by Night. (On Single Lines this indicates a Special Train, not necessarily following, but which may be travelling in either direction.) *The Staff along the Line must be at all times prepared for extra Trains. All Mem-*

bers are to observe the last Vehicle on all passing Trains, to see if a Red Board or additional Tail-lamp is affixed.

#### WHISTLE SIGNALS.

117. The following are the Whistle Signals for Trains:—

- One Short Whistle to start or go ahead;
- Two Short Whistles to set back;
- One Long Whistle when approaching Stations, Signal-boxes, or Sidings;
- Two Long Whistles, Branch Trains approaching Junctions;
- Three Short Whistles for Brakes;
- One Long, Two Short, one Long Whistles for "Train parted while running;"
- One Long Loud Whistle must be sounded at least 300 yards from any Level Crossing or Tunnel, and again on entering Tunnel;
- Whistle to be sounded whilst passing another Train stopping or shunting at a Station on the opposite Running Line.
- Local Codes for Shunting purposes will be found in the Working Timetables or in the Interlocking Circulars.

#### WORKING OF POINTS AND SIGNALS.

118. The All Right Signal must not be given unless the Signaller knows positively that the Line is clear of all Obstructions, and safe for the Trains signalled to pass on, and where Stations are worked under Special Regulations that the Regulations have been complied with.

119. When a Train is due and approaching, and Line is clear, the proper Signals must be set at All Right in order that no unnecessary delay may be caused by stopping the Train.

120. When the Home and Distant Signals have been lowered for an approaching Train the Distant Signal must be replaced at Danger as soon as the Train has passed it. The Home Signal will remain at All Right until the Train has passed within it or come to a stand, and then also will be replaced at Danger.

121. When a Train has passed the Distant Signal at Danger in terms of Rule No. 80, the Home Signal only must be lowered to allow the Train to pass.

122. (a.) No Home Signal may be set at "All Right" unless the Line is clear up to the Starting Signal for the like direction, and the Signals covering all intervening Fouling-points are set at Danger, and on Single Lines unless the Home and Distant Signals for the contrary direction are also set at Danger.

(b.) In the case of Trains not timed to stop, the Home Signal must not be set at All Right unless the Starting Signal and Advanced Starting Signal where provided for the like direction are set at All Right.

Where no Starting Signal is provided, the Home Signal may not be set at All Right unless the Line ahead is safe and clear for the Train to proceed.

(c.) In case of Trains timed to stop, and where no Starting Signals are provided, the Home Signal must not be set at All Right unless the Line ahead within the Station limits is safe and clear.

123. When Trains which have to cross each other are approaching a Station from opposite directions or from converging Lines, and the Signals have to be lowered for one Train, they must not be lowered for the other Train until the first Train has come to a dead stop and the Signaller has seen that the Line on which the other Train will arrive has been left quite clear.

*This does not apply to Stations on Double Lines where the approaching Trains cannot foul each other, nor to Stations which have been interlocked and arranged so that two Trains can be brought in at the same time.*

124. When a Home Signal has been lowered for the passing of a Train, it must not (except in the case of accident or Obstruction) be again placed at Danger until such Train has been brought to a stand, or passed within the Home Signal.

125. If, when two or more Trains approach a Junction at nearly the same time, the Signaller has lowered the Signals for a Train which should have been kept back for the passage of another, he must not attempt to alter the order of the Trains by reversing the Signals, but must put all the Signals to Danger, and so keep them until all the Trains have been brought to a stand, when precedence can be given to the proper Train.

126. When a Train has been stopped at a Home Signal, and it is necessary to bring it within the Home Signal before the Section ahead is clear,—

(a.) At places where Starting Signals are provided the Signaller may, if the Starting Signal is at Danger and the Line is clear to the Starting Signal, lower the Home Signal for the Train to draw ahead. The Engine-driver of any Train which has been thus stopped at a Home Signal must, after that Signal has been lowered, go slowly forward towards the Starting Signal, but must not pass it until it is lowered. If the Signal-box is between the Home and Starting Signals, the Engine-driver must be prepared to stop at the Box. Where the Line is not wholly clear to Starting Signal, Engine-driver must, on receiving a Hand Signal or Verbal Instructions from the Signaller, draw cautiously past the Danger Home Signal as far as the Line is clear, so as to bring his Train under its protection.

(b.) At places where Starting Signals are not provided the Engine-driver must, on receiving Verbal Instructions from the Signaller, draw past the Danger Home Signal, so as to bring his Train under its protection. If the Signaller is too far from the Engine-driver to be able to communicate verbally with him, the Engine-driver upon receipt of the necessary Signal by Hand-lamp or Flag from the Signaller must pass the Home Signal, and draw cautiously towards the Signal-

box, as far as the Line is clear, and there await the Verbal Instructions of the Signalman. The Hand-signals for the purpose must be given only by a Green Light or a Green Flag, in accordance with Rule No. 96 (b).

127. When a Train is stopped at a Home Signal, and owing to the Sidings being occupied or from other cause the Signalman is unable to bring it within the protection of the Home Signal, the Guard, except where *Absolute Block* is in operation, must protect the Train in the rear as directed in Rule No. 269 (b).

128. No Starting or Advanced Starting Signal may be set at All Right unless the Line is safe and clear for the Train to pass on, and all Signals covering Fouling-points in advance are set at Danger.

129. One minute before a Train is ready to start from a Station, and if the Line is clear, the Starting Signal is to be set at All Right.

130. No Siding or Shunting Signal may be set at All Right unless the Home, Distant, and other Signals which protect the portion of the Line to be occupied by the Train signalled are all at Danger, and the Line unobstructed.

131. At Stations where Semaphore Signals controlling more than one Line are on the same post the whole of the Signal-lamps on the post must be lighted at Night, even although they are not all required to control the movement of Trains, as it is only by the relative position of the Lamps that the Engine-driver and Guards can pick out the proper Signal for their respective Trains.

132. The Signalman must frequently examine and try the working of all his Semaphore Signals, to see that they show properly. Great care must be used in setting a Signal; it is not sufficient merely to move the Lever, but the Signalman must at the same time watch the Signal or its Repeater, so as to ascertain that it obeys the Lever and goes fully to Danger or All Right, as the case may be. He must take care that the Signal wires are kept at the proper length by means of the regulating appliances, so as to compensate for the expansion and contraction caused by variations of temperature.

133. During falls of Snow the working of the Apparatus must be frequently examined by the Signalman, in order to see that nothing interferes with the true working of the Signals and Points, and that they are kept clear of Snow. The Ganger of Permanent-way must provide for this duty being performed while the Snow or its effects continue.

134. Facing-points must be frequently tested by the Signalman, so that he may satisfy himself that the Points have obeyed the Lever, that they work well, and that no part is injured. The Lever of the Locking-frame which governs the Facing-points must close home to the Frame, and the Catch fit firmly down in the Notch.

135. Facing-points on Running Lines not worked from a Locking-frame must be securely pinned and locked, except when

required to be open for Shunting. They must be locked or held for the passage of Trains. Points must not, under any circumstances, be wedged or propped open.

136. Signalmen must exercise great care in Shunting. They must not move the Points until they have obtained a Signal from the Guard or Shunter, or from the Engine-driver or Fireman in the case of a Light Engine, that the Last Vehicle or the Light Engine, as the case may be, is clear of the Points.

137. If a Train should pass without a Tail-lamp the Signalman must immediately communicate with the Stations or Signal-boxes on both sides in order to prevent any Train passing in either direction until it has been ascertained that the Train without Tail-lamp has arrived complete, and that the Line is clear.

138. Every Signalman must take particular notice of each Train as it passes; and if he sees anything wrong, such as Signals of alarm by Passengers, Goods falling off, Vehicle on fire, or other mishap, he must show a Danger Signal and endeavour to attract the attention of the Guard or Engine-driver. If unable to attract attention, the Signalman must direct the Station in advance to stop and examine the Train. Should he have reason to believe that the Line is damaged or Obstructed he must take steps to prevent any Train from proceeding in the direction of the Obstruction until the Line has been examined, and he is satisfied that it is safe for the passage of Trains.

139. Whenever the Points, Crossings, or Rails receive injury, the circumstances must be *immediately* reported to the Stationmaster and Inspector of Permanent-way, or Ganger, and all Trains must be stopped or allowed to pass over as slowly as is necessary until damage is repaired. Where derailments of any kind occur, either in the Station Yard or on the Main Line, the circumstances must be similarly reported to the Inspector of Permanent-way or Ganger, who must certify as to the fitness of the Road for traffic.

In all cases where derailments occur at Interlocked Points, or where Interlocked Points have been "run through," or where any injury has been caused to Interlocking-gear, the Signal-Adjuster for the district must be immediately advised.

140. The Signalman will be responsible for seeing that the Points, Signals, Interlocking, Electric, and other Apparatus are kept in perfect working-order, and for immediately reporting any defects. Unauthorised persons must not be allowed to interfere with the working of Points, Electrical Instruments, or Bells.

Any Obstruction to the proper working of the Signals must be removed, and broken Signal-wires must be temporarily repaired until the regular Signal-Repairer can attend to them.

141. No Signalman must leave his Signal-box for any purpose unless all his Signals are at Danger.

142. Every Signalman, before taking charge, must satisfy himself that all the Electrical Instruments, Signals, Points,

and Gear are in good working-order, and when relieving another Signalman must ascertain from the man he relieves whether there are any special circumstances or Instructions requiring attention; whether the Trains which are due to pass have done so, and, if not, what are the exceptions; also, what Trains, if any, are in the Station, or are signalled; if any Special Trains are advised; and on all other matters necessary to enable him to properly discharge his duty. The Signalman relieved must give full information on these points before leaving, and must remain on duty until any Train for which he has given or obtained Line Clear has cleared the Section and the entries in the Train Signal-book are completed. Each Signalman must register in the Train-book the time of his arrival on duty and of his leaving, and sign the same. Signalmen must change duty only at the appointed hours.

143. (a.) Each Signalman must keep his Signal-box strictly private, and not allow any persons other than the authorised officers and members of the Department to enter it.

(b.) The Signal-boxes, Instruments, and other appliances therein must be kept perfectly clean and in proper order.

144. The greatest care must be exercised in the cleaning, trimming, and lighting of Signal-lamps, and Officers in Charge will be held responsible for this work being efficiently performed. The lamps must not be trimmed at the Signal-posts, but must be brought to the lamp-room each morning, cleaned and trimmed there, and not replaced in the Signal-lamps until required to be lighted.

Stationmasters and others having Signals under their care must frequently inspect the Fixed Signal-lamps, and satisfy themselves that they are in good order, and that the glasses in front and back of lamp and reflectors are well cleaned.

The lamps must be lighted in accordance with Rule No. 62, and extinguished when no longer required.

#### FIXING, REMOVING, OR REPAIRING SIGNALS OR APPARATUS FOR WORKING POINTS AND SIGNALS.

145. Before the erection or removal of Signals, or the prosecution of other work in connection with Points or Signals which may interfere with the safe working of the Line, the Signal-adjuster or Foreman who has charge of the work must (unless the work has been previously arranged for between the Maintenance and Traffic Branches, and the necessary notice issued by the District Traffic Manager) communicate with the District Traffic Manager or Officer-in-Charge, as the case may be, who will make any special arrangements that may be necessary in connection with the working of the traffic during the time such alterations or repairs are being effected. Where there is no Officer-in-Charge or no special arrangements have been made with the Traffic Branch, the Signal-adjuster must, before entering a Section to attend to

any Interlocking or Signals at any unattended Siding, give written notice to the Officer-in-Charge of the Station which he passes on entering the Section stating exactly what Sidings he intends to be engaged at; and such Officer-in-Charge will be held responsible for immediately wiring the information to the Officer at the other end of the Section. During the time the Adjuster is engaged in the Section, the Engine-driver of each Train or Engine must be supplied with a written notice as to the Adjuster's movements, so that he may approach such Sidings with the utmost caution, and be prepared to stop at once, or act on any Hand-signal that may be given by the Adjuster so employed. A copy of the form of notice to the Engine-driver is provided in the instructions regarding Tablet-working.

146. (a.) When the work involves the disarrangement of the Interlocking Apparatus, with the disconnection of Signals, Points, Facing-point Bars, or Locks, Foul-ing Bars, Detectors, Bridge Bolts, Turntable Bolts, or Level-crossing Gates or Bars, the Signal-adjuster must, before the work is commenced, give to the Signalman an exact description of the nature of the work, and the Signalman must enter in the Train Register, or Book provided for the purpose, the words "Locking disarranged," with the numbers of the Levers which will be interfered with; both he and the Signal-adjuster must sign their names, and the time must be recorded.

(b.) When the work involves the disarrangement of the Interlocking, and when it is necessary to disconnect a Facing-point, Facing-point Bar or Lock, Bridge Bolt, or Turntable Bolt, the Signal-adjuster must, before the work is commenced, disconnect and fix at Danger the Distant Signals applicable to the Lines affected.

(c.) A Hand-signalman, to work under the Instructions of the Signalman, must be provided, and act in accordance with Rule No. 147.

(d.) Before interfering with the Locking connections, the Signal-adjuster must satisfy himself that the Hand-signalman is at his post.

(e.) During the time the Points are disconnected the Signalman must, on each occasion when he requires to pass a Train over the Points, communicate with the Hand-signalman and receive his assurance that each Point is in its proper position and secured.

(f.) In cases where, owing to a number of Points being disconnected from the Signal-box, it may be necessary to place a man at each pair of Points, or to attend to a number of Points, the Signalman must instruct each man as to the duties he has to perform. When a Train is required to be sent over Points which are being attended to by the men assisting the Hand-signalman, the Hand-signalman must so inform such men, and take care that they properly secure the Points for the Line on which the Train is to pass, and the Points must not again be altered in position until the Hand-signalman has advised them that the opera-

tion is completed. When this has been done, the men will be at liberty to move the Points as may be required to suit the convenience of the Signal-adjuster working at them, it being understood that no Train will be sent over them without previous intimation being given in each case by the Hand-signalman.

(g.) When carrying out repairs to Level-crossing Gates or Bars involving the disconnection of the Interlocking, the Signal-adjuster must disconnect and fix at Danger the Distant Signals, and a Hand-signalman must be provided to attend to the working of the Gates or Bars and the protection of the Crossing.

(h.) When the work is completed, the Signalman, after receiving an assurance from the Signal-adjuster that all is right, must test the Locking, and, if found to be all right, then enter in the Train Register, or Book provided for the purpose, the words "Locking restored," and both he and the Signal-adjuster must sign their names under the words, a note of the time being also inserted.

(i.) When any Fixed Signal is out of order or is disconnected for repair or otherwise, or when any Points are disconnected and the Interlocking of the Point and Signal Levers is all right, the Signalman must, to enable him to obtain the security of the Interlocking, use the Lever applicable to such Signal or Points as if the Signal or Points were in work, and the Signal and Counter-balance Weight must, when necessary, be disconnected by the Signal-adjuster from the Lever to admit of this being done.

(j.) When the Interlocking of any Signal or Point is being repaired, altered, or cleaned by the Signal-adjuster, the Signal-adjuster must not, except for testing purposes, and then only with the permission of the Signalman, move any Lever, but must ask the Signalman to move it for him; nor must the Signalman move any Lever connected with any Point or Signal at which the Signal-adjuster is at work without first obtaining his permission.

#### *Defective Signals, Points, &c.*

147. (a.) When a Home, Starting, or Advanced Starting Signal, or Siding Signal applicable to a Siding not protected by Safety Points, becomes defective, or is not working efficiently, a competent person must be placed at such Signal with Hand-signals and Detonators, and act under the Instructions of the Signalman. The Distant Signals applicable to the Lines affected must be kept at Danger by being disconnected from the Levers by which they are worked, and must remain in that position until the defect has been made good and all is again in working-order. If the defective Signal can be placed at Danger, it must be kept at Danger until again in working-order.

(b.) Should the Interlocking of a Lever-frame or any Facing-point, Bolt, or Bar be out of order, one competent man or more, as may be necessary, provided with Hand-signals and Detonators, must be appointed to act under the Instructions of

the Signalman in charge of the Signal-box, and the Distant Signals applicable to the Lines affected must be kept at Danger by being disconnected from the Levers as above directed.

(c.) The Hand-signalman must ascertain from the Signalman in charge of the Signal-box what Train he is to bring forward, and if the Train which is to be brought forward is approaching Facing-points, he must, before signalling it forward, inform the Signalman in charge of the Signal-box the position of such Points, and satisfy himself that they are set and secured for the Line on which the Signalman in the Signal-box intends the Train should run.

(d.) If the Train which is to be brought forward is approaching Trailing-points, the Hand-signalman must satisfy himself that the Points are in the proper position for the Train to pass.

(e.) The Hand-signalman, must, when signalling a Train forward, stand near to the Signal for which he is acting, in order that his Signal may not be mistaken by the Engine-driver on any other Line; and should it be necessary to stop, or reduce the speed of, an approaching Train, the Hand-signalman must exhibit a Red Hand-signal to the Engine-driver until the Train has been stopped or the speed sufficiently reduced, and then, if permission can be given for the Train to proceed, he must exhibit a Green All Right Signal.

(f.) Hand-signalmen must work under the Instructions of the Signalman only, who will be responsible that they are properly instructed as to their duties and understand what they have to do.

(g.) Where practicable, the Stationmaster must select proper men from his own staff for Hand-signalmen; but where this cannot be done he must apply to the nearest Ganger for Surfacemen competent to act as Hand-signalmen.

(h.) When the Interlocking at a Junction is out of order, the Facing-points must, except when required to be otherwise placed for the passage of Trains, be so set that no Train can cross the path of another Train.

(i.) When a Distant Signal becomes defective, so that it cannot be placed at Danger, a competent person must be stationed just outside it with Hand-signals and Detonators, and there repeat the Signals exhibited at the Home Signal. When such a person is out of sight of the Home Signal, one man or more must be stationed between that and the defective Signal, for the purpose of repeating by Hand-signals to the man stationed at the Distant Signal the Signals exhibited at the Home Signal.

(j.) When a Tunnel intervenes, or in Foggy Weather or during Falling Snow, the man at the Distant Signal must continue to exhibit a Hand Danger Signal, and keep two Detonators, 10 yards apart, on one Rail of the Line to which the Signal applies, until the Signal has been repaired and is again in working-order.

(k.) If the defective Distant Signal can be kept at Danger, it must be kept at

Danger until again in working-order, and a Hand-signalman need not be appointed.

(*l.*) The Signalman at the box in the rear must, when practicable, be advised if the Distant or Home Signal cannot be placed at Danger, and he must stop all Trains proceeding in the direction of the defective Signal and advise the Engine-drivers of the circumstance.

(*m.*) Hand Signals must be made by Flag by Day except in cases of emergency.

#### SIGNALLING IN FOGGY WEATHER, OR DURING FALLING SNOW.

148. (*a.*) In Foggy Weather, or during Falling Snow, it is the duty of the Stationmaster or other appointed person to take care that Fog-signalmen are employed at all the places where their services are required, and, where Surfacemen are employed for the purpose, to arrange beforehand with the Inspector of Permanent-way the Surfacemen who are to act as Fog-signalmen at the various Posts. The Foreman, Ganger, or Leading Hand must not be assigned a fixed Post, but must be left free to examine his Road as directed by Rule No. 307. He may, however, when no other competent man is available, be employed to call the Fog-signalmen, to visit them at their Posts, and distribute Detonators, &c., in accordance with Rule No. 154.

(*b.*) A list of the names and addresses of the Fog-signalmen, showing the Post to which each man is appointed, must be kept exhibited in a conspicuous position in the Stationmaster's Office and Signal-box.

149. When a Fog occurs during the Day, between 6 a.m. and 8 p.m., the men appointed to act as Fog-signalmen must at once report themselves to the Stationmaster and take his Instructions. Those who have to do duty at Junctions or intermediate Signal-boxes away from a Station must report themselves to the Signalmen on duty at the respective Boxes.

150. (*a.*) When it is necessary to employ Fog-signalmen during the Night, between 8 p.m. and 6 a.m., the Officer-in-Charge must arrange to have the men called and sent to their respective Posts. If the Fog-signalmen become aware, from their own observation or from information given to them, that their services are required during the Night, or at any other time when off duty, they must at once report themselves to the Officer-in-Charge without waiting to be called; but this will not relieve the Officer-in-Charge from the responsibility of sending for the Fog-signalmen when necessary. If the Fog-signalman, on his way to the Signal-box to report himself for Fog-signalling duty, has to pass the Signal to which he is appointed, he must, when practicable, if that Signal is at Danger, place two Detonators, 10 yards apart, on one Rail of the Line for which he is Fog-signalling, and then proceed to the Signal-box, getting back to his Post as promptly as possible.

(*b.*) When the Fog has sufficiently cleared away, each Fog-signalman must place two Detonators, 10 yards apart, on one Rail of the Line for which he is Fog-signalling, and then go to the Signalman at the Box in connection with which he is employed, and take his Instructions as to whether his services are any longer required for Fog-signalling duties.

151. (*a.*) Each Fog-signalman must, before proceeding to his Post, be supplied with not less than twenty-four Detonators, a Hand Signal-lamp, trimmed and lighted, and a Red and a Green Flag. If Fog-signalling for a Distant Signal, he must place himself outside the Signal in connection with which he works, and as far from it as is consistent with his keeping it well in sight; and whenever a Train has passed him going in the direction of the Signal-box from which the Signal is worked, and so long as the Signal exhibits the Danger Signal, he must place and keep two Detonators fixed, 10 yards apart, on one Rail of the Line for which the Signal is at Danger, and, unless Instructions are issued to the contrary, exhibit a Red Hand-signal to the Engine-driver and Guard of an approaching Train. When a Signal is lowered or taken off, he must remove the Detonators from the Rail, and exhibit to the Engine-driver and Guard a Green Hand-signal, which must be held steadily in the hand. If he become aware of any Obstruction on the Line in the immediate neighbourhood of the Signal for which he is signalling, either from a Train not having gone forward or from any other cause, he must leave the Detonators on the Rail and, showing a Red Light with his Hand-lamp, go back along the Line a sufficient distance to protect such Obstruction, and must there place on one Rail of the Line for which he is Fog-signalling three Detonators, 10 yards apart, and return to within sight of the Distant Signal. When he is satisfied that the Obstruction has been removed, he must take up the more Distant Detonators and return to his Post.

(*b.*) The absence of any Signal after the explosion of a Detonator must be considered equal to the exhibition of a Danger Signal.

(*c.*) The Fog-signalman must see that the Distant Signal which has been taken off for a Train to pass is placed at Danger after the passing of such Train. If, after a reasonable time has elapsed, the Signal is not placed at Danger, the Fog-signalman must go back to protect the Train as above directed. The next following Train must be stopped and the Engine-driver instructed to proceed cautiously and to inform the Signalman at the Box in advance of the circumstances.

(*d.*) When there is a Distant Signal Arm on a Home or Starting Signal post, it will not be necessary to put down more than two Detonators, although both Signals are at Danger, but the Fog-signalman must not take up the Detonators unless both Signals are lowered. Should the Home or Starting Signal be lowered and the Distant Signal remain at Danger, the Fog-signalman must continue to exhibit his Red

Hand-signal, and if the Fog is so dense that the Engine-driver cannot see the Distant Signal the Fog-signalman must verbally caution him by using the words "Home Signal off—Distant on," or "Starting Signal off—Distant on," as the case may be.

(e.) When Fog-signalmen are employed in connection with Home or Starting Signals, they must place two Detonators 10 yards apart on one Rail of the Line for which the Signal is at Danger, exhibit a Red Hand-signal to the Engine-driver of an approaching Train, and carry out any Instructions they may receive from the Signalman on duty.

(f.) The Fog-signalman must see that the Home or Starting Signal which has been taken off for a Train to pass is placed at Danger after the passing of such Train. If, however, the Signal is not placed at Danger, the Fog-signalman must, in addition to putting down two Detonators, at once communicate with the Signalman.

(g.) After having fixed the Detonators on the Rails, Fog-signalmen must place themselves between the Detonators and the Fixed Signal or Obstruction for which they are signalling, and so exhibit the Hand-signals that they may be seen by Engine-drivers after the Engine has exploded the Detonators.

(h.) Fog-signalmen must stand in the best position (having regard to their own safety) for effectively giving the Hand-signals to the Engine-driver and Guard.

(i.) When the Fixed Signal for which he is Fog-signalling cannot be seen by the Fog-signalman, he must, unless he can satisfy himself to the contrary, assume that it is at Danger.

(j.) In cases of accident, failure, or Obstruction, Guards and Engine-drivers must act strictly in accordance with the prescribed Regulations, and must not depend upon Fog-signalmen for the protection of their Trains.

152. (a.) A sufficient supply of Detonators, Hand-lamps, and Flags for the use of the Fog-signalmen must be kept at the Stations and in the Signal-boxes in connection with which the men are employed. If the number of Detonators first supplied to the men is likely to become soon exhausted, they must communicate with the nearest Station or Signal-box and obtain a further supply.

(b.) Should the Fog-signalman have to leave his Post for this purpose he must leave two Detonators on the Rails.

153. Stationmasters (when Porters are employed) or Inspectors of Permanent-way or Gangers (when Surfacemen are employed) must arrange for Reliefmen should the Fog or Falling Snow continue.

154. The Stationmaster or person in charge must satisfy himself that the Fog-signalmen have duly proceeded to their respective Posts when it is necessary for them to do so; and, where the Fog-signalmen are numerous, a competent man must be appointed to visit them at their Posts, and see that they are properly performing their duties, and are supplied with

the necessary Signals, furnishing them with a further supply of Detonators, and arranging for their meals, if required.

155. At all Signal-boxes (whether intermediate or otherwise) where no Fog-signalmen are appointed, or where such men are appointed but have not arrived, the Signalman, when he requires to stop an approaching Train, in addition to keeping his Signals at Danger, must place two Detonators on the Line to which the Signals apply, sufficiently apart to give two distinct reports.

156. During the prevalence of severe Frost or Falling Snow the Signals and Points must be frequently worked by the Signalman when the Sections are clear and no Train has been signalled, in order to prevent the Frost or Falling Snow impeding their free working. Fog-signalmen also must see that nothing interferes with the true working of the Arms or Discs and Lamps of the Signals for which they are Fog-signalling; that the Lamp-glasses and Spectacles are kept clear; and that the Wires work freely over the Pulleys. The Fog-signalmen must at once report to the Signalman any defect in the Signals or impediment to their proper working. If no Fog-signalman is employed, the Ganger of the Permanent-way must provide for this duty being performed while Snow or Frost, or their effects, continue.

#### SIGNALLING FOR STATION-YARD WORKING.

157. No Engine or Vehicle must be shunted or moved from one Main Line to the other, or from the Main Line into a Siding, or from a Siding on to the Main Line, or allowed to stand on Main Line, unless protected by the proper Signals, exhibited as may be required; and where Fixed Signals are not provided Hand-signals must be used.

158. The Running Line must not be Obstructed or occupied, by Shunting or otherwise, excepting when the Signals applicable to the Line or Lines about to be Obstructed are at Danger. Where the Absolute Block System is in operation, and it is necessary to foul or occupy any portion of the Line outside the Home Signal, the Line must first be blocked to the next Signal-box before such Obstruction is permitted, except where otherwise provided in the Block or Tablet Working Regulations. During a Fog or Falling Snow, or where, in consequence of the Station being approached upon a falling gradient, or for any other reason, Special Instructions for working are issued, no Obstruction must be allowed at the Station inside the Home Signal until the Line is blocked to the Signal-box in one or both directions, as may be necessary.

159. Where Absolute Block Working is not in operation no Shunting or marshalling of Trains shall be done, nor Engine or Vehicle of any description be allowed to shunt, cross, or stand upon the Main Line, when such operations extend beyond the Home Signal post, except by instructions of the Stationmaster or Officer-in-Charge, unless such Engine, Train, or Vehicle is



protected by Hand-signal, and in all cases the movement must be completed ten minutes before an incoming Train is due.

160. No Engine must enter or foul any Running Line, nor must any Vehicle be left foul of, or standing thereon, prior to being shunted, without the permission of the Member in charge of the Points and Signals.

161. When a Train has to be shunted from one Main Line to the other to allow a following Train to pass, such Train must be set well within the Home Signal, so as to be efficiently protected by it from any Train or Engine approaching from the opposite direction.

162. (a.) The Signalman and Officer-in-Charge are responsible for ascertaining that each Train arrives complete with the Tail-lamp attached.

(b.) When the last Vehicle of a Train does not pass the Signal-box before it has been shunted into a Siding, or when a Train has been brought to a stand within the Home Signal, and it is necessary to give the "Train Arrival" Signal before the Train passes the Signal-box, the Signalman must, before giving such Signal, ascertain from the Guard or Shunter in charge of the Train that the whole of the Train, with Tail Disc or Lamp attached, has arrived; and the Guard or Shunter will be held responsible for giving this information to the Signalman, the Fireman being similarly responsible in the case of a Light Engine.

163. When it is necessary to change a Rail, or in any manner to Obstruct the Line, or to do any work to the Permanent-way, between the Distant Signals, or the Home Signals where Distant Signals are not provided, of any Station, Junction, or intermediate Signalling-place, of a character to make the exhibition of a Signal at all necessary, the permission of the Signalman in charge of the Fixed Signals must first be obtained by the Ganger, and the work must not be commenced unless those Signals are at Danger; and the Signals must remain in that position until the Signalman is informed by the man in charge of the work that the Line is again clear and safe for the passage of Trains.

The man in charge of any such work must also protect his operations, as ordered by Rule No. 316 (a).

164. When a Flagman, in going to stop a Train, passes any Signal-box, he must request the Signalman to keep his Signals at Danger to protect the Line which is Obstructed; and the Signalman so instructed must not take off his Signals until the Flagman or Ganger in charge of the work has informed him that the Obstruction has been removed and that the Line is clear; the object being that the Signalman and Workmen shall not show contrary Signals to approaching Engine-drivers.

165. Should any Obstruction exist upon the Line within the sight or knowledge of the Signalman, he must keep his Signals at Danger and prevent any Train or Engine passing his Post in the direction of the Obstruction until the Line is made safe.

166. At places where a Train is allowed to proceed towards the rear of another Train, and it is necessary, after the first Train has been started, that it should be again stopped, care must be taken not to stop the Engine-driver of the first Train until the Engine-driver of the second Train has been advised of what is about to be done.

167. (a.) When a Signal is lowered or turned off to allow a Train to run upon a Line in a Station or upon a Siding, or to leave a Station or Siding, and a second Train is following, the Engine-driver of the second Train must follow at such a distance as will enable him to avoid colliding with the first Train in the event of its being stopped, and he must bring his Train to a stand at the Signal, and not pass it until it has been replaced at Danger, and again lowered or turned off.

(b.) When a Signal is lowered or turned off to allow a second Train to leave a Station or Siding to run towards a Train ahead of such Signal, the Engine-driver of the second Train must proceed at such a speed as to be able to stop before reaching the Train ahead of the Signal.

#### CONTROL AND WORKING OF STATIONS.

168. Every Stationmaster or Member in charge of a Station is answerable for the security and protection of the Office and Station Buildings, and of the Department's property there. He is responsible for the faithful and efficient discharge of the duties of all the Members under his charge either permanently or temporarily employed at the Station or while within its limits, and such Members are subject to his authority and directions in the working of the Line. He is responsible for the general working of the Station being carried on in strict accordance with the Rules and Regulations, and must, as far as practicable, give personal attention to the Shunting and Despatch of Trains and all other operations which affect the safety of the Line. He must pay particular attention to the Special Rules for working that portion of the Line on which he is engaged.

169. The public shall be admitted to Stations only in accordance with the By-laws, and must not have access behind the counter of any Station, or be furnished with information which is not intended for them.

170. Smoking on platforms or any covered part of the Railway premises, or in Carriages other than those appointed for the purpose, is strictly prohibited. Gambling is forbidden.

171. The Loading and Securing of goods, timber, &c., should be done so as to prevent the possibility of anything falling off, or extending beyond the proper limit; and the goods should be sheeted so as to prevent the possibility of fire, and ridged to shed water. The *greatest care* is necessary in this particular, to prevent damage to the Rolling-stock, or accident to Trains. When Timber Wagons are used they must be so loaded that the bolsters will work freely. When Four-wheeled



Wagons are used for timber, the over-hanging load must not exceed the quantity specified in the Appendix to Working Time-table.

172. Wagons must be loaded in such a manner as to distribute the weight of the load as equally as possible over the floor, and the maximum load allowed for any wagon must not be exceeded.

173. When a Crane is working and there is any possibility of the Running Lines being fouled, the Member in charge of the loading must obtain the sanction of the Stationmaster and Signaller, and see that proper Signals are exhibited until the operation is completed.

174. When a Crane is sent to a Flag-station, a competent man must be sent out to work it, and he will be responsible for exhibiting the proper Signals to protect the operations.

175. The following Instructions are to be observed in working Travelling Cranes: Before using the Crane the Chocks must be fixed on top of Axle-boxes, the Holding-down Clips securely attached to the Rails, Weight-box run out, and, in cases where the lift is OVER ONE TON, the Out-riggers must be used. In no case may the Crane be allowed to swing, even without any load, until these instructions have been complied with. The Gin-block for the double purchase is never to be removed from the Crane. If any of the Clips or other gear be missing or damaged, a report is to be made at once, and the Crane is not to be used until damage is made good.

176. Materials must not be stacked within 9 ft. of the Centre of any Running Line, nor within 5 ft. from the nearest Rail of any Siding.

177. Where Lines have been laid for Public purposes upon Harbour Boards' Wharves, Breastworks, and Land, or elsewhere outside the Railway boundaries, and are worked by the Department, the Department is responsible for preventing the erection of any Obstructions, permanent or otherwise. Rule No. 303 gives list of Standard Clearances. Stationmasters and others must prevent the erection of any structures allowing insufficient clearance. Stationmasters are responsible for seeing all proper Precautions taken for safety on all such Lines.

178. Carriages and Wagons are never to be allowed to remain on the Main Line, but must be placed on a Siding, and Brakes applied and pinned down. Vehicles not provided with Brakes must be securely scotched. Sprags and Scotches must be kept at all Stations where there are Sidings, and in the Brake-vans of all Trains. On Incline Sidings Vehicles must be placed close to Stop-block at lower end of the Siding.

179. When Shunting into Incline Sidings no greater number of Wagons shall be moved in one Shunt than the Engine can push up without going at a violent or excessive speed.

180. Great care must be exercised in conducting Shunting operations to avoid damage to Stock. Coupling by side-chains

only is forbidden. Vehicles should be coupled up by centre Couplings.

181. All Stop-blocks must be kept locked across the Rail; and all Safety Points locked against the Main Line, except when it is necessary that they should be open for Shunting, and all Vehicles must be placed within the Stop-blocks or Safety Points.

182. When a horse is used on the Railway a man must in all cases remain with it, whether it is drawing Vehicles or not.

#### WORKING OF TRAINS.

183. Each Train is under the control of the Guard. When there are two Guards the Under Guard must obey the orders of the Head Guard. The Head Guard must always ride in the rear Brake-van.

184. Every Member who goes in charge of a Train as Guard must be well acquainted with the Line over which he has to travel, and with the Special Rules for working that portion of the Line on which he is employed.

185. Every Guard and Engine-driver, before starting with their Train, must examine the notices to see whether there is anything requiring special attention on those parts of the Line over which they have to work, and before leaving any Terminal or Sub-terminal Station they must apply to the Stationmaster for any Special Train Advices or other Running Instructions affecting the district they are about to enter. They must also compare their watches with the Station Clock.

186. The Guard in charge of the Train must satisfy himself before starting, and during the journey, that the Train is properly loaded, marshalled, coupled, lamped, lashed, and sheeted; that the Brakes are in good working-order; that the Train is in a state of efficiency for travelling, and has the proper Signals attached to it. He must also carefully examine the loading of any Vehicles he may attach on the way, and if any Vehicle is unsafe through improper loading, or has become unsafe from the shifting of the Load, he must at once have the Load readjusted, or the Vehicle removed from the Train. Any defects in Vehicles or Brakes must be reported at once.

187. From the moment that the Train is in motion the Guard will be held responsible for its *safe working and punctuality*; and the *Engine-driver must take his instructions as to the stopping, starting, and general working of the Train from the Guard.*

188. When a Light Engine is running on the Line, unaccompanied by a Guard, the Engine-driver will be held responsible for Shunting, where necessary for Trains to pass, and for carrying out the duties prescribed for the Guard.

189. The Engine-driver is responsible for the safety of the Engine, and equally responsible with the Guard for the safe working of the Train; and he must make himself thoroughly acquainted with the Line over which he runs, and also with the Signals governing the traffic. He is responsible for attaching the proper Signals to his Engine when required.

190. The Fireman must in all cases act under the direction of the Engine-driver.

191. No Fireman may move an Engine except when instructed by and in the presence of the Engine-driver.

192. The Fireman must couple his Engine to the Train five minutes before time for starting, and will be held responsible for doing so properly.

193. Except where specially authorised, no Engine must be in motion on the Main Line, nor be used for Shunting unless both Engine-driver and Fireman are upon it.

194. Engines without Trains are not to stand on the Main Line, except while taking Coal or Water.

195. After Water has been taken from Tanks or Water Columns, the Hose or Water Crane must be left clear of the Main Line, and properly secured.

196. The Engine-driver and Fireman when on duty must not both leave their Engine unless it is absolutely necessary for them to do so, nor, except as directed in the Rules, without a reliable man being left in charge of it, or the Engine is left in a Siding and out of gear, with the Hand-brake hard on.

197. The last Vehicle in every Train must be a Brake-van, unless other written orders are given by the Traffic Manager.

198. In Mixed Trains the Vehicles carrying Passengers must always be placed next the Brake-van.

199. No Wagon fitted with Bond-chains may be allowed to leave a Station or Siding unless the Chains are secure. Guards will be held responsible for seeing that they remain so during the journey.

200. The Carriages and Wagons on all Trains must be properly coupled by the side-chains as well as the centre Coupling, and in all cases the bridle must be placed over the draw-hook. Side-chains must be coupled hook to hook; those in front of Engine and in rear of last Vehicle must be properly hooked up.

201. No Train is to be started before the time stated in the Tables.

202. Before starting a Train, and whenever Vehicles are attached, the Stationmaster must see that it is properly arranged and coupled, and in a perfect condition for running with safety. The moment before the Train starts he should closely observe each Vehicle to insure that the doors (where the Vehicles have side doors) are properly fastened, and that the necessary Train Signals are in place; and the Vehicles should be closely watched from the farthest point of the platform as the Train moves out, with the view of discerning any defect.

203. At Stations where Train Examiners are located, the Stationmaster or Member in charge must, before starting the Train, satisfy himself that the examination of it has been completed, and that, so far as the Train Examiner is concerned, the Train is all right, and fit to proceed.

204. The Engine-driver must not start his Train until he has received the proper Signal from the Guard. The Guard must not give the Signal to start the Train until

he has received intimation from the Stationmaster, or Member in charge of the Station, that all is right for the Train to proceed. Before starting from Flag Stations and Sidings or Officered Stations when no one is in attendance, the Guard must satisfy himself that all is right to proceed before giving the Signal to start his Train. The Signal to start the Train will be given by the Guard blowing his whistle, and by Day extending his Arm or showing a Steady Green Flag, and by Night by showing a Steady Green Light. The Engine-driver on receiving the Signal to start must sound his Whistle before turning on Steam.

205. The Signal given by the Guard to start a Train merely indicates that the Station duty is completed. Before starting, the Engine-driver must satisfy himself that the Line before him is clear, and that the Starting Signal when provided is lowered. When starting, the Fireman must look back on the platform side, until the last Vehicle has drawn clear of the platform, and exchange Signals with the Guard so as to be sure that the whole of the Train is following in a safe and proper manner, and that the Guard is on the Train.

206. (a.) When two Engines are employed, the leading Engine is to start and get the whole Train in motion, or the Couplings stretched, before Steam is put on the second Engine. The Engine-driver of the leading Engine will work the Continuous Brake. The Engine-driver of the second Engine must look for and take the Signals from the Engine-driver of the leading Engine, but the Engine-driver of the second Engine will be held equally responsible for the proper observance of all Signals regulating the safe working of the Line, and in case of need he must apply the Continuous Brake. Great caution must be used in starting and stopping Trains worked by two Engines, in order to prevent the breaking of the Couplings.

(b.) When a Banking Engine is employed in the rear of a Train, the Engine-driver must repeat the Starting Whistle, and the Engine-driver of Leading Engine must not start the Train until he has received such acknowledgment.

207. While the Engine is in motion the Engine-driver must keep a good look-out, and the Fireman must also do so when not necessarily otherwise engaged. The Fireman must be ready to assist the Engine-driver in looking out for Signals when nearing a Station or Signal-box. They are also to look back frequently and see that the whole of the Train is following safely, especially just after starting, and after passing a Level Crossing or a Surfaceman. The Engine-driver must at all times be prepared to act upon any Signals shown by Surfacemen or others on the Line. He must not, however, depend entirely on Signals, but on all occasions be vigilant and cautious.

208. When from Fog, Falling Snow, or other cause the Fixed Signals are not visible as soon as usual, the Engine-driver must run cautiously, especially when ap-

proaching Stations or Signal-boxes, so that he may be able to stop the Train short of any Obstruction should the Signals be against him.

209. Engine-drivers must regulate the speed of their Trains by the Time-tables, and they should endeavour to run their Engines regularly at a uniform speed, from which they should vary as little as possible, and on no account run before the time specified in the Time-tables.

210. Engine-drivers must never exceed the maximum rates of speed shown in the speed Schedules in the Working Time-tables.

211. Engines must be backed carefully to their Trains, and Engine-drivers must start and stop cautiously, and without a jerk. In stopping Trains they must pay attention to the state of the weather, the condition of the Rails, and the length and weight of the Train. These circumstances must be considered in determining when to shut off Steam, and when to apply the Brakes. They should be able to stop at the proper place without the aid of the Guard's Brake. Engine-drivers must exercise caution when approaching Stations, whether they are required to stop or not, and must approach Terminal Stations, Crossing-places, or Junctions at such speed as will enable them to stop their Trains with the ordinary Hand-brakes before entering the Station limits.

212. On approaching the top of a heavy descending Incline the Engine-driver must reduce speed before the Incline commences, to insure keeping the Train in command all the way down. Where Trains are too heavy for the ordinary Brake-power, they are to be brought to a stand at the top of Grades, and sufficient Brakes pinned down or screwed down to insure safety.

213. An Engine must not leave a Standing Train on a Gradient suddenly, but must draw gradually away, to see whether the Train is properly secured by the Brakes.

214. If a Train is timed to stop at a Station or Siding "when required," the Engine-driver must stop there, unless he receives a Signal to proceed without stopping.

215. No Engine may be run Tender first unless under special circumstances; and the speed of an Engine running Tender first must not exceed *ten miles an hour*, except when assisting and coupled in rear of Train Engine, when the ordinary Time-table speeds may be run.

216. Except as shown below, no Engine may push a Train upon any Running Line, but must draw it. Exceptions:—

(a.) When within Station limits, or where specially authorised by the Traffic Manager.

(b.) Under Special Regulations when assisting up Inclines.

(c.) When a Train or portion of a Train is left upon any Running Line, and the Engine returns for it upon the proper Line and crosses behind it, as shown in Rule No. 272.

(d.) When a Train has to return on the wrong Line to Signal-box in the rear, as shown in Rule No. 274.

(e.) In the case of an Engine being disabled, a following Engine may push the Train slowly to the next Siding or Cross-over Road, when the pushing Engine must go in front.

(f.) When the Line is blocked, and Trains are being worked to the point of Obstruction on both sides.

(g.) Engines of Work-trains between nearest Siding and Point of Loading or Discharge.

(h.) When required to assist in starting a Train from a Station.

(i.) When required by Officers of the Department travelling in an Inspection Carriage by Special Train.

Pushing Engines must be coupled to the Trains where necessary before starting.

(j.) When a Train is not being pulled but only pushed by an Engine in the rear, the speed must not exceed 10 miles an hour, except for Inspection Trains.

(k.) Engines employed to assist a Train in the rear must not leave the Train except where specially directed by the Traffic Manager, or as provided for in the Tablet Regulations.

217. When two or more Engines are employed to draw a Train they must not be uncoupled until the Train has been brought to a stand.

218. When two or more Engines have to pass at the same time through a Block Section they must be coupled together before entering such Section, and must not be uncoupled except at a Block Signal-box where there is a man on duty.

219. Engine-drivers, when running through Junctions or to or from Lines diverging from the straight Road, must so reduce their speed as to insure a steady passage for the whole Train through the Points and Crossings.

220. Turntables must never be crossed at more than a walking-speed.

221. When passing over Timber Bridges Engine-drivers must keep both dampers of their Engines closed, to prevent any live Ashes falling out and endangering the safety of the Bridge by firing it.

222. The Guard must ride in his Brake-van, and not upon the Engine or in any other part of the Train. He is forbidden to pass over the tops of Carriages when in motion.

223. The Guard is responsible for maintaining the necessary Train Signals at the rear of his Train; and should a Vehicle be attached to, or detached from, the rear of a Train at an intermediate Station, the Guard, if there be only one, or the Head Guard, if there be more than one, must see that the Train Signals are removed to their proper places in the Train.

224. Guards must see that the Doors of all Vehicles having Side Doors are properly closed, and, in case of any unusual stoppage on the road, must request the Passengers to keep their seats, except when necessary to alight.

225. In running down steep Inclines Guards must apply the rear Brake, except when the Train is equipped with the Continuous Brake.

226. In the event of a Train stopping or moving slowly on the Line, especially

ascending an Incline, the Guard must not leave his Brake for any purpose until he has secured it.

227. If any Carriage is complained of as being *unsteady* or *defective* it must, if found necessary, be removed from the Train, and the number and class of the Carriage must be reported.

228. Guards must not allow any other duty to interfere with their attention to Signals when approaching Stations or Signal-boxes.

229. Should a Passenger Train in stopping at a Station over-run or stop short of the platform, the Engine-driver must not move the Train back or draw it forward until he receives instructions from the Guard in charge to do so. Stationmasters, Guards, and others must at once take steps to prevent Passengers leaving the Carriages; and, as soon as the Guard in charge has satisfied himself that no Passenger is entering or leaving the Train, he must instruct the Engine-driver to put back or draw up to the platform, as may be required. The Engine-driver must sound his Whistle before moving the Train.

230. Stationmasters at intermediate Stations on the arrival of Trains must see that the proper Train Signals are carried, and, as far as practicable, observe the state of the Couplings (including Cord or other Passenger Communication, Continuous Brake, and other Couplings), and cause any that require it to be adjusted.

231. Before detaching the Engine for Shunting or other purposes at places situated on Inclines, care must be taken to apply a sufficient number of Hand Brakes or Sprags to prevent the possibility of the Train or any of the Vehicles breaking away.

232. Before detaching any Vehicle at a Station when the operations will foul any Running Line, the Guard is responsible for advising the Signaller or person in charge, in order that he may exhibit the necessary Danger Signals for the protection of the Line.

233. *Double Shunting is prohibited, except when done by Engines specially used for the purpose of Shunting, and attended by experienced Shunters. Fly Shunting of Vehicles against loaded Passenger Trains, and of Vehicles containing Passengers, Live-stock, or Explosives is prohibited.*

234. Vehicles must not be shunted without remaining attached to the Engine unless they are attended by a competent person prepared to put on Brakes, so as to prevent their coming into violent contact with other Vehicles or fouling other Lines.

235. (a.) Whenever any Vehicle has been derailed or has received any injury, however slight in appearance, or has been "running hot," it must not be allowed to continue in Traffic until it has been inspected and pronounced safe by the Car and Wagon Inspector or his Deputy.

(b.) When such a Vehicle is left at a Flag-station the Guard must attach to it on each side a "Not to Run" label.

(c.) If a Ganger or Surfaceman finds any Vehicle damaged or derailed at any Siding where there is no Officer-in-Charge,

he must attach on each side a "Not to Run" label, and advise Guard of first Train, so that the Vehicle may be inspected before running again.

236. In all cases of accident or detention to a Passenger Train the Guard must at once endeavour to secure the safety of Passengers, and, if he leaves his Train for the purpose of protecting in front or rear, he must have his *Brake properly secured*, or left in charge of some competent person. It is the duty of the Guard to explain to the Passengers the cause of detention, and, if there is no danger to them, to satisfy them of that fact.

237. In case of necessity the Guard may command the assistance of any Member of the Railway Service, either by Night or Day.

238. Where the Block System is not in operation no Train must be allowed to follow any other Train on the same line within fifteen minutes, except by special authority of the Traffic Manager.

239. During Foggy Weather or Falling Snow the Engine-driver must be warned by the Officers-in-Charge of Stations of the time of departure of a preceding Train, and where it will next stop.

240. If from any cause the order of a Train is altered—that is, if its place in relation to other Trains as given in the Working Time-table or Train Advice is changed—such Train must in all respects, until it resumes its proper place in the running, be dealt with as a Special Train.

241. Except where Lines are worked by Train-tablet or Electric Block, no Special Train may be despatched unless notice has been received and acknowledged, *if at all practicable*, by every one concerned.

242. The Stationmaster or other person in charge of the Station from which a Special Train is to start shall cause the Special Train Signals, as described in Rule No. 116, to be affixed behind the last Vehicle of the previous Train over that portion of the Line on which the Special Train is to travel, and shall inform the Guard in writing to what Station such Special Train is going. The Guard shall replace the Red Board by a Red Tail-light should Nightfall or Foggy Weather come on before his Train reaches the Station at which the Special Train is intended to stop, and shall remove the Red Board or Light on arriving at that Station.

243. Where Trains are timed to cross at certain specified Stations, the Crossing-places must not be altered except by written or Telegraphic instructions from the Officer controlling the Train running, unless where otherwise provided under Block Regulations; but where a Special Train or Work-train is running without specific Instructions as to the crossing of other Trains on a portion of the Line on which Block Working is not in operation, such Special Train or Work-train must be shunted clear at least fifteen minutes before any other Train is due *in either direction*; but if unable or doubtful of being able to get out of the way the proper Signals for protection must be made, according to Rule No. 269.

244. On Single Lines where an *incoming* Train is timed to arrive and terminate its run at a Station from which an *outgoing* Train is due to start, it is the duty of the Member in charge of such Station to see that all *incoming* Trains due to arrive from the direction in which the *outgoing* Train is to run have actually arrived before the *outgoing* Train is started.

245. When Trains timed to cross at a Flag-station arrive simultaneously at the Crossing-place both Trains must be brought to a standstill before fouling the Points at either end of the Station Yard. The Guard of the Train that is to take the Siding will then bring his Train into the Siding, and, when it is clear, signal to the Crossing Train to come on. When one Train arrives before the other, the first Train to arrive must, except otherwise instructed, take the Siding, the Guard of such Train afterwards giving the necessary Signal to the approaching Train. This does not apply to Stations on double lines where the approaching Trains cannot foul each other. Similarly, when a Train shunts at a Flag-station for another Train to pass, the Guard of the first Train to arrive will signal the following Train through such Flag-station.

246. When a Work-train or Special Train running fifteen minutes clear shunts at a Flag-station to allow two Trains (timed to cross at such Flag-station) to pass, the Guard of the Work-train or Special Train shall inform the Guards of the timed Trains as to nature of his Train, and call their special attention to it, and may, when necessary, stop any non-stopping Train for this purpose, and the Guards of the timed Trains are also held responsible for satisfying themselves before leaving such Stations of the identity of the Trains they are crossing.

247. Carriages containing Passengers must not be run through Goods-sheds nor past the fixed Loading-races of Cattle-yards.

248. In all cases when a Train is standing at a Station it must be drawn so far inside the Points and Crossings as to remove all danger of a passing Train coming in contact with any portion of it. At Officered Stations both the Stationmaster and Guard will be held responsible for this instruction being observed.

249. (a.) If a Train be brought to a stand at or near any set of Points, the Engine-driver must not allow his Engine to stand foul of any other Running Line, nor must he move his Train until he has satisfied himself that the Points are in the proper position, and that all is right for the Train to be moved.

(b.) Should a Train be so long that it cannot be contained within the limits of a Crossing Siding, and any portion be foul of the Main Line, the Stationmaster or Guard must, in the absence of Semaphore Signals, exhibit a Danger Hand-signal, and stop the incoming Train before it passes the Facing-points. The incoming Train will then draw slowly ahead until the Line is clear for the other Train to move.

250. All Trains taking Sidings to allow other Trains to pass or cross must, unless otherwise instructed, enter from the nearest end, and must not draw ahead and back into the Siding except under proper protection.

251. When a Train is shunted for another Train to pass, the Tail and Side Lights must be removed, or so disposed of as not to exhibit the Red Light to the passing Train. Before returning to the Running Line the Guard must see all Train Signals properly replaced.

252. At Flag-stations and Sidings, and at Officered Stations when no one is in attendance, the Guard who opens any Points or Stop-blocks for the purpose of Shunting or Crossing will be responsible for seeing that all Vehicles are secured and placed within the Stop-blocks or Safety Points, that all Stop-blocks are replaced and locked across the Rail, all Safety Points locked against the Main Line, and all Main Line Points closed and locked as soon as Shunting is finished.

253. When from any cause a Train is unable to proceed at its usual speed, and there is a liability of its being overtaken by a following Train, the Guard must, except where "Absolute Block" is in force, place Two Detonators on the Rails behind his Train to warn the Engine-driver of a Train following closely on the same Line.

254. Should any Vehicle on a Train be on fire, the Train must be stopped as quickly as possible, and, if not protected by Fixed Signals, or being run under "Absolute Block," it must be protected in accordance with Rule No. 269 (b). The Under Guard or Fireman must first detach the Vehicles in the rear of those on fire, and the burning Vehicles must be drawn forward to a distance of at least 50 yards and then be uncoupled and left until the fire is extinguished.

255. Should a Guard wish to attract the attention of the Engine-driver, he must apply his Hand-brake sharply and release it suddenly, repeating the operation till the attention of the Engine-driver has been attracted. When the Engine-driver whistles for Brakes the Guard must immediately apply Hand-brakes, whether he may see a Signal or not, or whether or not he comprehends the Engine-driver's reason for making the Signal.

256. If any portion of a Train becomes detached when in motion, great caution must be exercised in looking out for the second portion, and unless the Engine-driver has reason to believe that the Line is not clear ahead he must not stop the portion attached to his Engine till he is satisfied that the rear portion has been stopped or is running very slowly. If approaching a Station or Signal-box he must give the "Train Parted" whistle, and observe and obey any Signals that may be exhibited against him. The Guard must use every endeavour to stop the detached portion promptly. The Signalman must not, when the Line is clear for it to proceed beyond the Signals, stop the first portion so as to risk its being overtaken by the second

portion, but he must use his judgment as to shunting either portion into a Siding.

257. (a.) In the event of any failure of, or accident to, some part of a Train, it will generally be found to be desirable to bring the Train to a stand as quickly as possible; but whether this course can be taken with safety, and how the stoppage can best be effected, must depend upon the nature of the mishap, the weight and speed of the Train, the gradients, curves, and other conditions applying to the Line, particularly as regards the position of Points and Crossings. In all cases when the whole of the Train remains upon the Rails it must be brought to a stand as quickly as possible.

(b.) If the Engine be defective, the sooner the Train can be stopped the better. If any of the Vehicles be off the Rails, the Brakes in the rear must be instantly applied, in order that, by keeping the Couplings tight, the disabled Vehicles may be kept up and out of the way of the Vehicles behind until the force of the latter is exhausted; it being desirable that the front portion of the Train should be brought slowly to a stand. The application of the front Brakes might result in further damage, and great care must be exercised in their application. In all cases the application of Brakes behind a disabled Vehicle at the rear of a Train will be attended with advantage, and Rear Guards of Trains fitted with the Continuous Brake must apply the Continuous Brake as well as the Hand-brake if found necessary.

(c.) In the event of the Rear Guard not promptly applying the Hand-brakes when the Engine-driver whistles for them, the Engine-driver must, if his Train is fitted with the Continuous Brake, apply the same gradually and with judgment and care.

(d.) In all cases Engine-drivers and Guards must act according to the best of their judgment and ability in the circumstances in which they are placed.

258. Should any Engine-driver observe a Train or Engine at a stand on the opposite Line to that on which he is travelling, obscured by Steam or Smoke, he must sound his Whistle and approach it very cautiously, so as to be able to stop if necessary.

259. (a.) Should an Engine-driver or Guard observe any irregularity in the working of Signals, or should he see any Cattle or other Obstruction on the Line, or any Defect in the Signals, Works, Permanent-way, or Telegraph, he must report the same at the first Station at which the Train stops; but if the circumstances be of a serious character he must stop the Train at the first Signal-box, and give information.

(b.) The Engine-driver also, if necessary, must stop before reaching the Signal-box, to give information to Surfacemen or other Members of the Department.

(c.) The Engine-driver, if he observe anything wrong on the Line opposite to that on which his Train is running, must sound his Whistle, and exhibit a Danger Signal and warn any Train he may meet; he must also, when necessary, place Detonators on the opposite line of Rails. Should he

meet a Train following too closely any preceding Train, he must sound his Whistle, and exhibit a Caution or Danger Signal, as occasion may require, to the Engine-driver of such following Train.

(d.) At the end of his journey the Engine-driver must report the circumstance to his Foreman or Clerk in attendance; and the Guard must also report the case in his Journal.

260. When a Train has been checked or stopped by a Signal, the Engine-driver will give a short Whistle immediately the Signal is lowered, as a Signal to the Guard to release his Brake and an acknowledgment of the Signal. But if the Train be stopped at the Platform, the Engine-driver must not start until he receives a Signal from the Guard.

261. Although working under the instruction of the Inspector of Permanent-way, or Ganger, the Work-train Guard is solely responsible for the safe running of his train. Work-trains must not pass Officered Stations without being signalled, except as may be provided under Rule No. 66.

262. When working on a Block Section, a Work-train must be clear of the Block Section at least five minutes before the time that any Ordinary or Special Train is due to enter thereon.

263. Should a Work-train have to discharge or take up materials on the Main Line between two Block Signal-boxes, the Guard of such Train must, before entering the Section, inform the Signaller in charge of the Block Signal-box there, so that he may know the proposed occupation of the Line, and give necessary instructions as to the Shunting of the Work-train.

264. Before removing any Travelling Crane the person in charge of it must see that the Jib is properly lowered and secured, and so fixed that it will pass under the gauge; and that the Balance-box is properly secured. When the Crane has to be conveyed by Train it must, when practicable, be so placed that the Jib will point to the rear of the Train.

265. Travelling Cranes must, when practicable, be forwarded only by slow Goods Trains, and in no case by fast Passenger Trains. The Stationmaster or person in charge, and the Guard of the Train, must, before a Crane is attached to the Train, take care that all the fastenings supplied for securing the Jib and Balance-box, and, where provided, the side stays are in good condition, and secured in their proper position, and that when necessary Check Wagons are provided. The Engine-driver must, before starting, be informed by the Guard that the Crane is being forwarded by the Train, and at each Stopping-place on the journey the Guard must satisfy himself that the fastenings are secure. Train Examiners must also inspect the fastenings, in addition to the usual examination of the wheels, &c. If any defect exist in any of the fastenings the Crane must not be attached to a Train, and if travelling it must be detached for the fastenings to be made good.

266. No unoccupied Sleeping-van, Guard's Van, or other Vehicle fitted with a stove or other heating apparatus may be run on a Train unless the fire has been extinguished.

Members travelling in such Vehicles are responsible for the fires.

#### TRAIN STOPPED BY ACCIDENT, FAILURE, OR OBSTRUCTION ON LINE.

267. When an accident or Obstruction of any kind occurs on any part of the Line, it must be immediately reported by Telegraph, or by the most expeditious means, to the next Station or Signal-box on each side of the place where the accident occurred, to the Officer who has control of the Train running on that portion of the Line, to the District Engineer, Inspector of Permanent-way, and to those Stations where the starting or crossing of other Trains is liable to be affected by the delay.

268. (a.) The Ganger or Senior Member of the Maintenance Branch will take charge of the operations for clearing the Line.

(b.) In the absence of any Ganger or Senior Member of the Maintenance Branch, then the Senior Member of the Traffic Branch on the spot will be responsible for taking immediate steps to communicate with the nearest Maintenance Member, and to commence clearing the Line if practicable. Pending his arrival, and in the absence of a Traffic Member, the Senior Locomotive Member must act similarly. Particular care should be taken by all persons to note any facts which may appear to explain the cause of an accident—such as the state of the Permanent-way, condition and position of the Rolling-stock, time of accident, speed of Train, &c.; and the attention of the responsible Member on the spot should be called to any facts which may be observed.

(c.) Lifting and replacing on the Line of all Rolling-stock must be done to the satisfaction of the Senior Locomotive Member on the spot.

269 (a.) When, from accident or any other cause, a Train is stopped on the Main Line, the Engine-driver, after taking such steps as may be necessary for the safety of the Engine, must immediately communicate with the Guard of the Train, and receive his directions.

(b.) Except where the Train is efficiently protected by Fixed Signals, the Guard, if there be only one, or the Under Guard or Brakesman if there be two or more, shall immediately protect the Train in the rear, the Fireman protecting the Train in the front. The Train shall be protected in the following manner: The Guard shall go back and the Fireman forward at least 800 yards, or more as provided below, plainly exhibiting the Hand Danger Signals; and, in addition, they must, at every interval of 200 yards, place a Detonator on one of the Rails, and, at the distance of 800 yards, or more as provided below, three Detona-

tors, 10 yards apart, must be placed, and the Danger Signals conspicuously exhibited to stop any approaching Engine or Train, even if such Engine or Train be not expected. On Double Lines if the opposite Line is not Obstructed the Train need only be protected in the rear. If the distance of 800 yards falls in a Tunnel the man shall proceed 400 yards beyond the Tunnel, and place the Signals as described above. If a Train be stopped on, or near, the foot of an Incline, the Danger Signal on the higher side must be placed 1,200 yards from the Train, with Detonators as described above. The Guard must not return to his Train until recalled by the Engine-driver sounding the Whistle, or otherwise communicating with him, and when recalled he must leave the three most distant Detonators, taking up the others on his return.

(c.) If there is no Guard, the Engine-driver must send his Fireman to the rear and a Surfaceman or other competent person to the front, the Train being protected on both sides as indicated in clause (b) above. The Engine-driver must also send information to the nearest Station, *but he is not himself to leave the Train* unless he cannot otherwise protect it.

(d.) The Engine-driver, in absence of the Guard and Fireman protecting Train, if it be Foggy, Dusk, or Dark, must see that the Engine Lamp shows a Red Light forward, and the last Vehicle shows a Red Light backwards, thus putting Red Lights to show in *both* directions.

(e.) It will not be necessary to carry out these precautions for the protection of Trains on Single Lines when the Engine-driver is in possession of the Train Tablet or Staff, but should the Engine-driver part with the Train Tablet or Staff for the purpose of sending for assistance, the Train must be protected by the Guard as indicated in clause (b) above.

270. (a.) If a second Train comes up before the Obstruction be removed, the Guard of second Train will leave his Van and proceed to protect his Train, as directed in preceding Rules. The Guard of first Train, having assured himself that the Guard of the second Train has gone back with the necessary Signals for protection of the second Train, may then rejoin his own Train. If other Trains arrive, the same Regulations must be carried out, the Guard of the last being the protector of the whole.

(b.) Should a Train be disabled at a Station so that it cannot proceed, and cannot get clear of the Main Line, the Guard or Engine-driver must, unless the Train is efficiently protected by Fixed Signals, act in all respects as instructed in Rule No. 269.

271. When a Train is divided on any Running Line from accident or inability of the Engine to take the whole forward, and the Engine has to take forward a portion of the Train and return for the remainder, the following procedure must be adopted:—



- (a.) When two Guards are employed with the Train, the Head Guard, after putting on Brakes and securing the rear portion of the Train, must go back and protect it in accordance with Rule No. 269, and prevent any following Train from pushing it ahead. The Under Guard will then uncouple and ride upon the last Vehicle of the front portion.
- (b.) When there is only one Guard with the Train, the Fireman must ride upon the last Vehicle of the front portion, and the Guard must take the necessary measures to secure and protect the rear portion. Detonators to be placed on the Rails, about 100 yards from the front Vehicle, to notify the Engine-driver when returning of the position of the remainder of the Train.
- (c.) After sunset, in Foggy Weather, or during Falling Snow, before the front portion is drawn forward a Red Light must be exhibited on the front Vehicle of the rear portion by the man who divides the Train.
- (d.) A Tail-lamp must not be carried on the Engine or last Vehicle of the front portion of the Train before reaching the first Signal-box, where the Engine-driver must stop and inform the Signalman of the position of matters. If the Engine or front portion of the Train has to pass into the next Block Section, a Tail-lamp must then be placed in the rear. The Signalman must not give "Train Arrival Signal" to the Signal-box in the rear until he has satisfied himself that the whole of the Train has arrived.

272. (a.) When a Train is divided on a Double Line, and the front portion has been taken forward, the Engine-driver must not return for the Train or the rear portion of the Train on the same Line, except as ordered below, but must cross on to and travel along the proper Line, and must recross at the nearest point behind the part left, which he must push before him until convenient to go in front again with the Engine. If there be a Cross-over Road immediately in front of the Train, and the operation can be performed within sight of the Signalman, the Engine-driver may use such Cross-over Road for the purpose of attaching his Engine in front of the Train.

(b.) If it be found necessary to return to the Train or rear portion of the Train on the wrong Line, the Engine-driver must, before starting with the front portion, send his Fireman to the Guard to obtain his written Authority to the Signalman at the nearest Signal-box in advance where the front portion of the Train can be put away, authorising him to allow the Engine to return from that point on the wrong Line (see Form A at end of Rule), and without this Authority the Signalman must not

allow the Engine to return on the wrong Line to its Train. Should there be any intermediate Signal-box, the order held by the Engine-driver must be shown to the Signalman at that Box. After giving such Instructions, the Guard must continue to protect his Train in the rear, and prevent a following Train from pushing it ahead.

(c.) When a Train is brought to a stand on any Running Line, owing to the failure of the Engine or from any other cause, and the Guard has gone to the rear to protect it, it may be necessary for the Engine coming to the assistance of the Train, or for the Breakdown Van Train, to travel on the wrong Line from the Signal-box in advance. In such a case the Engine-driver of the disabled Train must write out an Authority (on Form B, where in use: see below) for the Signalman at the Box in advance to allow the Relief Engine, or the Breakdown Van Train, to travel on the wrong Line to the disabled Train. The Fireman of the disabled Train must hand the written Authority to the Signalman, and accompany the Relief Engine, or the Breakdown Van Train, to his Train, advising the Engine-driver where and under what circumstances the disabled Train is situated, and the Signalman must show the Authority to the Engine-driver before allowing the Relief Engine or Breakdown Van Train to proceed on the wrong Line. The Engine-driver of the disabled Train, after giving the order for the Relief Engine or the Breakdown Van Train to run on the wrong Line, must not allow his Train to be moved until the Relief Engine or the Breakdown Van Train arrives, unless satisfactory arrangements have been previously made to prevent the Relief Engine or the Breakdown Van Train from coming on the wrong Line, and his Fireman has returned and handed the "Wrong Line" order back to the Engine-driver.

(d.) Should there be any intermediate Signal-box without a Cross-over Road, the Fireman, when going for assistance, must show the written Authority on Form B (where in use) to the Signalman at that Box.

(e.) The Engine-driver, when returning for the portion of his Train that has been left behind, or when pushing such portion of his Train, or the Engine-driver of the Relief Engine or the Breakdown Van Train, as the case may be, must not pass any Signal-box without the permission of the Signalman.

(To be printed on pink-coloured paper.)

[Front of Form A.]

(A supply of these Forms must be kept by each Guard.)

To the Signalman at ..... Signal-box.

Allow Engine-driver of Engine No. .... to return on the wrong Line to the remainder of his Train standing on the ..... Line at ..... I will prevent its being moved until the return of the Engine.

(Signed) ....., Guard.

Date: ....., 19... Time issued: .....m.  
Catch-points exist at .....

[Back of Form.]

(Here appears paragraph (b) of Rule No. 272.)



(To be printed on green-coloured paper.)

[Front of Form B.]

(A supply of these Forms must be kept by each Engine-driver.)

To the Signalman at ..... Signal-box.  
 Allow a Relief Engine or a Breakdown Van Train to proceed on the wrong Line, as authorised by Rule 272 (see other side), for my Train, which is stationary at ..... I will not move my Engine in any direction until the arrival of the Relief Engine.

(Signed) ....., Engine-driver.

Date: ....., 19... Time issued: .....m.

Catch-points exist at.....

[Back of Form.]

(Here appears paragraph (c) of Rule No. 272.)

273. If, after a Train has become accidentally divided, both portions have been brought to a stand within sight of each other, and there is not a Signal-box near either end of the Train, the front portion may be set back to the rear portion, provided the two portions can be re-coupled.

274. If, in case of accident, it is necessary for a Train, or portion of a Train, to return on the wrong Line to the Signal-box in the rear, the Guard or Fireman must first go or send some other competent person to the Signalman there and obtain his permission, in writing, for the Train, or portion of Train, to run on the wrong Line to his Box; but the Engine-driver must not move in the wrong direction until he has received such written permission. (See Form C below.)

(To be printed on yellow-coloured paper.)

[Front of Form C.]

(A supply of these Forms must be kept in each Signal-box.)

AUTHORITY FOR ENGINE-DRIVER TO TRAVEL ON THE WRONG LINE IN CASE OF ACCIDENT.

To Engine-driver of Engine No. ...., ..m. Train from ..... to .....

I authorise you to return with your Train on the wrong Line to this Signal-box.

(Signed).....

Signalman, at ..... Signal-box.

Date: ..... 19... Time issued: .....m.

Catch-points exist at .....

[Back of Form.]

(Here appears Rule No. 274.)

275. When moving in the wrong direction, as laid down in Rules Nos. 272 and 274, the Engine-driver must proceed slowly and cautiously, having such control of his Engine or Train as to be able to stop it short of any Obstruction that may exist between the Signal-box and the disabled Train. He must also make frequent use of the Engine-whistle.

276. Should Catch-points exist, arrangements must be made for securing them, as shown in Rule No. 283, and Engine-drivers, when authorised to travel in the wrong direction under the circumstances referred to in Rules Nos. 272 and 274, must not pass over such Catch-points in the wrong direction until they have assured themselves that they are held or secured in their proper position for the Train to run over them. Signalmen must, before authorising Engine-drivers to run in the wrong direction, remind them of the existence of the Catch-points.

277. (a.) Should an accident to a Train foul, or be dangerously near to, any Line used by Trains running in an opposite direction, in addition to the Guard going back to protect the Train, in accordance with Rule No. 269, the Engine-driver of the disabled Train must immediately detach his Engine, if it be able to run forward, and proceed with it not less than 800 yards from the scene of accident, and there leave his Fireman with Detonators, to act as laid down in Rule No. 269, to protect the opposite Line. The Engine-driver must then go forward with his Engine to the nearest Signal-box and inform the Signalman of the Obstruction, in order that any Train running on opposite Line may be stopped until the Obstruction has been removed. In the course of the journey from the Breakdown to the Signal-box, the Engine-driver must stop any Train that may be approaching on the opposite Line, by sounding the Brake Whistle and exhibiting the necessary Hand-signals.

(b.) Should the Engine be disabled, or should there be any delay in detaching it, the Fireman *must at once go forward* and place the Detonators on the opposite Line, and also perform the duties of Engine-driver, as described above.

(c.) Should an accident happen to an Engine or a Train without a Guard, causing the Obstruction of both Lines, the Engine-driver must immediately send his Fireman to stop Trains travelling on the opposite Line, and must himself go back or send some other competent person, so that the Obstruction may be protected in both directions.

278. (a.) Should an accident to a Train accompanied by only one Guard cause the Obstruction of both Lines, and the Engine-driver runs forward without being aware of the Accident, the Guard must, if he can obtain the services of a competent person, send him forward to protect the opposite Line to that on which the Train was running, and himself go back as directed in Rule No. 269.

(b.) In the event of no competent person being at hand, the Guard *must first go forward as quickly as possible*, exhibiting his Hand Danger Signal, and place Detonators upon the opposite Line to that on which his Train was running, as under:—

- 1 Detonator 400 yards from the Obstruction;
- 1 Detonator 600 yards from the Obstruction;
- 3 Detonators, 10 yards apart, not less than 800 yards from the Obstruction;

and then return and protect the rear of his Train as prescribed in Rule No. 269.

(c.) Should the Guard in going forward arrive at a Signal-box, he need not go the prescribed distance, but must place there Detonators on the opposite Line at the Box, inform the Signalman of the circumstances, instruct him to keep the necessary Signals at Danger to protect the Obstruction, and then return and protect the rear of his Train as prescribed in Rule No. 269.

**WORKING TRAFFIC OF A DOUBLE LINE BY PILOTMAN OVER A SINGLE LINE OF RAILS DURING REPAIRS OR OBSTRUCTION.**

279. When it is necessary, during repairs or owing to Obstruction, to work the traffic of a Double Line in both directions over a Single Line, the following precautions must be adopted :—

- (a.) Single Line Working should be confined to points at which there are Fixed Signals with a Cross-over Road, and at all times to the shortest length possible; but in the event of a Cross-over Road not protected by Fixed Signals being used for Single Line Working, a competent man, with the necessary Signals, must be placed at least three-quarters of a mile beyond the Cross-over Road to signal in place of the Distant Signal, and another man (similarly provided) at the points to signal in place of the Home Signal. Should the distance of three-quarters of a mile fall within a Tunnel, or close to the mouth of a Tunnel nearest to the Obstruction, or in any other position where, owing to the formation of the Line or to some other circumstance, the Engine-driver of an approaching Train would be unable to obtain a good and distant view of the Signal, then the Signal must be exhibited at the end of the Tunnel farthest from the Cross-over Road, or at such a distance over and above the prescribed distance of three-quarters of a mile as may be necessary to insure the Engine-driver obtaining a good and distant view of such Signal.
- (b.) If Telegraph or Telephone communication is available, the Stationmasters or other responsible Officials at both ends of the Obstructed Section must communicate with each other by Telegraph or Telephone, and agree as to who shall arrange for Pilot-working.
- (c.) It will generally be found most expeditious for the Stationmaster or other responsible Official in advance of the Obstruction to undertake the arrangements, as he will have the proper Running Line clear on which the Pilotman with the Forms can make his first journey by Train or Velocipede, if either is available. Under no circumstances must a Train or Velocipede be allowed to run over the Single Line in the wrong direction until the Pilotman holds upon his Form the signatures of the Signalman at each end of the Single Line Section, and also at any intermediate Signal-box.
- (d.) A competent person must be appointed as Pilotman, who must wear, round his left arm above the elbow, a distinctive Badge. The distinctive Badge must be a

Red Armband with the word "Pilotman" shown thereon in white letters, thus :—



Until the regular Badge can be obtained the Pilotman must wear a Red Flag tied round his left arm.

- (e.) A sufficient number of the Forms (see Specimen Form Rule No. 287 following) provided for the purpose of establishing Single Line Working must be filled up and signed by the Stationmaster or person arranging the Single Line Working. One of these, signed by the Pilotman, he must deliver, in the presence of the Pilotman, to the Signalman in charge of the Cross-over Road at which the Single Line Working commences; one, signed by the Signalman, must be handed to the Pilotman, who must also sign it, and the remainder must be conveyed by the Pilotman to the other end of the Section which has to be worked as a Single Line. On his way the Pilotman must verbally inform Crossing-keepers, Surfacemen, and any other men at work on the Line, that Single Line Working is about to be commenced, and which Line will be used; he must also leave a copy of the Form (signed by himself) with the person in charge of any intermediate Signal-box or Station then open between the points between which Single Line Working is about to be put into operation, and each of such persons must sign the Form held by the Pilotman. On his arrival at the other end of the Single Line Section the Pilotman must deliver a copy (signed by himself) to the Stationmaster or person in charge, and another (also signed by himself) to the Signalman on duty, each of whom must also sign the Form held by the Pilotman. Trains may then be allowed to pass to and fro on the Single Line by the permission and under the control of the Pilotman as under :—
- (f.) When a Stationmaster himself acts as Pilotman he must also address and give a copy of the Form to the person he leaves in charge of his Station.  
Should any intermediate Signal-box or Station be opened after Single Line Working has commenced, the Pilotman must, as soon as practicable, advise the person in charge of such Signal-box or Station that Single Line Working is in operation, and obtain his signature on the Form in the usual way. He must also hand to the Signalman or Stationmaster a copy of the Single Line Working Form.

- (g.) No Engine must enter upon any portion of the Single Line without the Pilotman being PRESENT and riding upon the said Engine, unless two or more Trains are required to follow in the same direction, when he must furnish the Engine-driver of each Train not accompanied by himself with a Ticket (see Specimen Form, Rule No. 287, following) properly filed up and signed, must personally start such Trains, and must himself accompany the last Train, upon the Engine of which he must ride.

The Pilotman must also inform the Guard, or Guards, that Single Line is being worked, and the points between which it is in operation.

The Ticket issued by the Pilotman will apply only to the single journey for which it is issued, and on arrival of the Train at the other end of the Section must be given up to the Officer-in-Charge, who will at once cancel it, and after ordinary working has been resumed will forward it to the District Traffic Manager.

If Telegraphic communication exists, the arrival of each Train unaccompanied by the Pilotman must be reported to the Pilotman by the Officer-in-Charge at the other end of the Section, and the Pilotman must not start another Train till he has received intimation that the preceding Train has arrived.

If no Telegraphic communication exists, no Train must be allowed to follow another Train within fifteen minutes, except by special authority of the Traffic Manager.

- (h.) The Pilotman must show himself to the Signalman at each Box he passes.
- (i.) The Signalman at each end of the Single Line must know the man appointed as Pilotman, and must keep at Danger the Signals applicable to Trains entering upon the Single Line until both Lines are safe and the ordinary working of the Traffic is resumed; Engine-drivers may pass the Signals at Danger, but only when so instructed by the Pilotman.

The Fixed Signals at intermediate Boxes must be worked for Trains passing over the Single Line in both directions.

Before starting any Train the Pilotman must ascertain from the Signalman and the Guard that all is right for the Train to proceed.

- (j.) When the Section to be worked by Pilot is not provided at either end with Fixed Signals, competent men, with the necessary Signals, must be placed in charge at each end of the Section, as provided for in clause (a) preceding.

The man representing the Distant Signal must take the neces-

sary steps to stop all approaching Trains, and instruct the Engine-driver to proceed slowly towards the man representing the Home Signal, who will exhibit a Clear or Danger Signal to all Trains entering upon the Single Line as instructed by the Pilotman.

- (k.) Where Telegraphic communication does not exist, intermediate Sidings can be worked only by Trains accompanied by the Pilotman.

- (l.) When Single Line has to be worked, and it is necessary to suspend Block Telegraph Working, this must be done only by the person who arranges the Single Line Working, by an order in writing on the Single Line Working Form; but in Foggy Weather, or during Falling Snow, or when a Tunnel intervenes, or the gradients are heavy on the Section of the Line where the Traffic has to be worked on a Single Line, Block Telegraph Working must be maintained on such Section, the Up Trains being signalled on the Up Line Block Telegraph Circuit, and the Down Trains on the Down Line Block Telegraph Circuit, or the Pilotman must accompany every Train passing over the Single Line.

- (m.) When Block Telegraph Working has to be maintained, and the Block Indicator is at the "Train on Line" position for the Train which has caused the Obstruction, the Signalman at the Box in advance of the Obstruction must, in order that the Block Signalling of the Trains in both directions on the Single Line may be carried on as laid down in the foregoing paragraph, liberate the Block Indicator in accordance with the following instructions:—

(1.) When the Stationmaster in advance of the Obstruction arranges Single Line Working, and the necessary Form has been conveyed to the Signalman in the rear, the Signalman in the rear must, if the Pilotman has been conveyed by Train, and provided the Train has arrived complete, give the "Train out of Section" Signal, and the Signalman in advance of the Obstruction, after acknowledging such Signal, must release the Block Indicator for the Line which is Obstructed.

(2.) If the Pilotman is not conveyed through the Section by Train, he must, when the arrangements for commencing Single Line Working have been completed, instruct the Signalman at the Box in the rear of the Obstruction to so inform the Signalman at the Box in advance; the latter Signalman must then release the Block Indicator for the Obstructed Line.

(3.) When the Stationmaster in the rear of the Obstruction arranges Single Line Working, and the

necessary Form is conveyed to the Signalman in advance of the Obstruction, the Pilotman when handing the Signalman the Form must request him to release the Block Indicator for the Train which caused the Obstruction.

(n.) When two or more Trains are allowed to follow in the same direction, and Block Telegraph Working is suspended, the Engine-driver of each following Train must be told by the Pilotman what interval of time has elapsed since the preceding Train left.

(o.) When Block Telegraph Working is maintained, the Pilotman must obtain the permission of the Signalman before allowing a Train to enter upon the Single Line.

NOTE.—Not applicable to Lines worked on the Lock and Block System, or with Block Indicators showing two positions only.

280. Before Single Line Working is put in operation the Signalman at each end of the Single Line must, when practicable, advise the Signalman at the Box in the rear, and the latter must stop each Train proceeding in the direction of the Single Line Working, and inform the Engine-driver of the circumstances, and instruct him to proceed cautiously, the Trains being accepted by the Signalman at each end of the Single Line in accordance with clause 5 of the Double Line Block Telegraph Regulations where in force.

281. (a.) When both Lines are blocked and it becomes necessary to work the Trains up to the Obstruction on both sides, for the transfer of Passengers or any other purpose, Single Line Working must be arranged on both sides, between the nearest Cross-over Road and the Obstruction, a Pilotman being appointed to act on each side in accordance with these Regulations.

(b.) Two competent men, provided with the necessary Hand-signals and Detonators, must be appointed to protect the Obstruction, one on each side.

(c.) When one Line is cleared, arrangements must be made for Single Line Working between the Cross-over Roads on each side of the Obstruction. Both Pilotmen must proceed with the First Train over the Line which has been cleared, and the person who is appointed Pilotman for that Line must withdraw all the Single Line Forms previously in use at the same time that he delivers the new Forms.

282. All Points which become Facing-points to Trains running over the Single Line must either be held by a competent man appointed to the duty, or so secured as to enable the Trains to pass safely over them.

283. (a.) Where there are Catch-points, Stationmasters, Signalmen, and others must take care, before Single Line Working is put in operation over such Catch-points, that a man, provided with proper Signals, is placed at them, with special orders to remain there, and to hold them properly closed or see that they are firmly secured for the safe passage of each Facing Train, until the order for Single Line Work-

ing has been withdrawn and Double Line Working resumed.

(b.) When a Train is approaching Catch-points in the Facing direction, the man at the Points must, when they are right for the Train to pass over them, give the Engine-driver the "All Right" Signal.

(c.) The Pilotman must satisfy himself that the Engine-driver is aware of the position of the Catch-points.

(d.) Engine-drivers must not, when Working Single Line, as above, pass any Catch-points in the Facing direction until they have assured themselves that they are in the proper position for their Trains to run over, nor until they have received a Signal to do so from the man at the Points.

284. Trains, when working over the Single Line, must be run cautiously and at reduced speed, and Engine-drivers must make frequent use of the Engine-whistle. When passing through a Tunnel, or after Sunset, in Foggy Weather, or during Falling Snow, they must carry a Red Light on the front of the Engine.

285. (a.) Should the Pilotman give up the working to another, the name of the second Pilotman must be substituted on new Forms, to be held by the Officer-in-Charge at both ends of the Single Line, and by the men at any intermediate place; but this alteration can only be made by the person who arranged the Single Line Working, and he, in doing so, must collect and retain the Forms previously issued.

(b.) After one Pilotman has been relieved by another, the Pilotman who has been relieved must not ride upon any Engine until he resumes duty as Pilotman.

286. Should the Officer-in-Charge or Signalman be changed during the time Single Line Working is in operation, the man coming on duty must be made acquainted by the man going off duty with the arrangements in force and with the person acting as Pilotman, and the Officer-in-Charge before taking charge of the Station, and the Signalman before taking charge of the Signal-box, must countersign the Form held by the Pilotman.

287. (a.) When the Line is Clear, and before ordinary Work is resumed, the Stationmaster or other Officer who instituted Pilot-working must formally cancel, in writing (see specimen form following), the instructions issued, and arrange that all Forms which have been issued for the Single Line Working be collected by the Pilotman, and afterwards sent to the District Traffic Manager.

(b.) The Pilotman must accompany the First Train passing over the Line on which the Obstruction existed.

SPECIMEN FORM TO BE USED FOR PILOT-WORKING.

..... Station.  
 To ..... 19 .  
 THE\* ..... all traffic will pass between  
 ..... and ..... in charge of  
 ..... who will act as Pilot, and no En-  
 gine or Train is to be allowed to leave .....  
 or ..... unless he is present and gives  
 permission.  
 This order is to remain in force until with-  
 drawn by the Pilot presenting my written autho-  
 rity.  
 ..... (Signed).

\* Here insert "Line being blocked at ....."

Catch-points exist at .....  
 Noted by\* ..... at .....  
 Noted by\* ..... at .....  
 Noted by\* ..... at .....  
 Noted by\* ..... at .....  
 Noted by\* ..... at .....  
 Noted by\* ..... at .....  
 Noted by\* ..... Pilotman.

\*These signatures must be made on the copy held by the Pilot.

[Back of Form.]

A supply of these Forms must be kept in a convenient place at each Station, and at every Signal-box where there is a Cross-over Road, so as to be available at any moment.

Before Single Line Working is commenced a copy of this Form must be signed by the Signaller and Person in Charge at each end of the Single Line, and at each Intermediate Signal-box or Station, and be kept by the Pilotman, who must see that each of the men signing the Form retains a copy for himself.

In the event of a Stationmaster himself acting as Pilotman he must address and give a copy of the Form to the person he leaves in charge of his Station.

Stationmasters and Persons in Charge receiving this Form will be held responsible that the Foremen, Signallers, and others concerned at their Stations are immediately made acquainted with the circumstances, and are instructed in their necessary duties.

NEW ZEALAND GOVERNMENT RAILWAYS.

PILOT'S TICKET.

Ticket No. ....  
 Train No. .... Line or Branch.  
 To the Engine-driver.  
 You are authorised to proceed from .....  
 to ....., Pilot following.  
 Signature of Pilotman: .....  
 Date: ....., 19 .....

[Back of Ticket.]

This Ticket must be given up by the Engine-driver immediately on arrival to the Person in Charge of the Station to which he is authorised to proceed; the Ticket to be afterwards cancelled and forwarded to the District Traffic Manager.

SPECIMEN OF PILOT-WORKING CANCELLATION FORM.

..... Station,  
 ..... (Date).  
 To .....  
 PILOT-WORKING arrangements made by me at  
 ..... on ..... for the Section  
 ..... and ..... are hereby cancelled, and ordinary working will now be resumed.  
 (Signed) .....

288. When it becomes necessary to establish Pilot-working on Single Lines the procedure for instituting Pilot-working must be as described in the Regulations for working Single Lines of Railway, by Pilot Guard, Train Staff and Ticket, or Electric Train Tablet, as the case may be.

WORKING OF LEVEL CROSSINGS AND COMBINED ROAD AND RAILWAY BRIDGES.

289. Every Bridge-keeper or Crossing-keeper must see that he is provided with Day and Night Signals, and Detonators, which he must keep in order.

290. Where Fixed Signals are provided Crossing-keepers or Bridge-keepers must see that the Lamps are lighted and extinguished as necessary.

291. Where Gates or Bars across Public Roads are provided, instructions for working them will be issued in each case.

292. Every Bridge-keeper and Crossing-keeper on duty must stand clear of the Rails, in such a position as to be readily seen by Engine-driver and Guard of ap-

proaching Train, and be prepared to give the proper Signal as provided for in Rule No. 295.

293. Provided the Railway Lines are clear for their passage, Road Vehicles and Foot Passengers may be allowed to cross over the Railway without Signal from the Crossing-keeper. When the Railway Lines are required to be clear for the passage of a Train, Road Vehicles and Foot Passengers must be stopped by the exhibition of a Green Flag by Day and a Green Light by Night.

294. When two Trains are approaching a Crossing in opposite directions, the Crossing-keeper must take care to stop Foot Passengers and Road Vehicles from crossing till both Trains have passed.

In the absence of a Crossing-keeper both Engine-drivers must use their Whistles freely to warn Passengers and Drivers of Vehicles that Trains are approaching on both Lines.

295. No Hand-signal must be given by the Bridge-keeper or Crossing-keeper to the Engine-driver of an approaching Train if the Line is clear. He must take particular notice of each Train as it approaches and passes; and if he sees anything wrong he must show a Danger Signal to the Engine-driver and Guard, and, if necessary, exhibit his Danger Signal and place three Detonators on the Rail against any following Train or any Train coming in the opposite direction.

296. In the event of any Obstruction at or near a Level Crossing or Bridge, the Crossing-keeper or Bridge-keeper must exhibit the necessary Danger Signals.

297. Except where the Gates or Bars open simultaneously, the Gate towards which Cattle, Carriages, or Horses are approaching is not to be opened until the opposite Gate has been first opened, so as to allow them to cross without stopping on the Line.

298. When any Signal, Gate, or Fastening thereto is defective the person in charge thereof will be held responsible for reporting the defect immediately, in order that it may be made good.

299. Crossing-keepers and Bridge-keepers are to prevent any person trespassing on the Railway, and every case of Trespass must be reported immediately to their Superior Officer.

300. Special Local Instructions for the working of each Combined Road and Railway Bridge will be found in the Working Time-tables.

PERMANENT-WAY AND WORKS.

301. In every Gang of Workmen there shall be a Ganger or a Leading Hand appointed by the Engineer.

302. In each Gang a Surfaceman will be appointed to act temporarily in the Ganger's place should he be absent from his Length or incapacitated. This man will, until the Ganger returns to his post, or until further instructed, act as Ganger of the Length for the time being.

303. The following list of clearances must be strictly adhered to, and the Ganger, or man in charge of the Length, is responsible for seeing that these are not encroached upon. All encroachments must

be immediately reported to the Inspector of Permanent-way, and, if necessary, in the interests of safety, the Ganger is empowered to remove them.

All structures must have a side-clearance of 9 ft. from centre-line of Railway, and headway of not less than 12 ft. above the Rails, with the following exceptions—viz., goods-shed doorways out of centre must have nowhere less than 4 ft. 4 in. side-clearance; central doorways must have nowhere less than 5 ft. side-clearance. Tank-stands must have nowhere less than 7 ft. side-clearance. Platforms must have nowhere less than 4 ft. 4 in. side-clearance. Truss-bridges must have nowhere less than 6 ft. side-clearance.

304. The whole of the Permanent-way, Formation, Bridges, Culverts, Drains, Roads, Approaches, Fences, Gates, Water-services, and generally all the Standing Works of the Railway, are placed under the charge and care of the Ganger of the Length, who is responsible for maintaining them in proper order, subject to the directions of the Inspector of Permanent-way of the District, excepting only such Works or Structures as are, by Special Regulations issued by the Engineer, placed under the charge of some other person.

305. Work required to be done to such Bridges as may be excepted from the charge of the Inspector of Permanent-way and the Gangers under him shall be carried out by a Leading Hand, who shall hold a certificate from the Engineer authorising him for the purpose. He must be always present while any work is in progress that might by any possibility obstruct the Line, and he will be responsible for exhibiting the proper Signals and maintaining them until the Line is clear. A Bridge Inspector, if personally superintending the work, will take the place of a Leading Hand.

306. If the nature of the Work requires the Permanent-way upon or near the Bridge to be altered in any way the Ganger of the Length must be called, and the alteration to the Permanent-way must be done by him only; and in this case the Ganger is responsible for the Signals while he is at the Bridge, and he must, before leaving, hand over charge of the Signals to the Leading Hand.

307. Except where other Special Instructions are issued, each Length must be carefully inspected on foot or by Velocipede every week-day; also on Sundays where Passenger Trains are run. During Stormy Weather or Heavy Rains, when there is likelihood of floods or damage to the Line, the inspection of the Length must be made before the first Train enters on it in the morning, whether before or after Daylight. The Ganger must either do this himself or specially appoint one or more trustworthy and experienced men of his Gang to do this duty. He must satisfy himself that the inspection by his men is properly done, and report every case of neglect. Once in every week the Ganger must personally inspect the whole of his Length.

308. The Ganger must see that all Points, except such as are Interlocked, on the Main Line are fitted with locks, and that the pins and cotters hold the Points tight, and that all Sidings off the Main

Line have Stop-blocks or Safety Points with their locks in working-order.

309. At all Sidings where there is no Officer-in-Charge, the Ganger of the Length is responsible for seeing that all Points on the Main Line, Stop-blocks, and Safety Points are kept locked, and must report when any such are left unlocked. He must also see that any Vehicle remaining on such a Siding is properly spragged or the Brake pinned down, and that on Incline Sidings the Vehicles stand close to the Stop-block at the lower end of the Siding.

310. Unless specially authorised, all Main Line Points which are not worked from a Locking-frame must be fitted with Non-reversible Levers, and arranged to lock only for the Main Line.

311. At Interlocked Facing-points packing of Sleepers must be done only in the presence of the Signal Adjuster. When such work is necessary the Ganger must communicate with the Adjuster so that he may be present.

312. Each Gang of Surfacemen and Workmen must be supplied with the necessary Discs, Flags, Lamps, and Detonators, for the purpose of exhibiting the proper Signals. Each Ganger or Leading Hand is held responsible for having his Signals always in proper order and ready for use, and his supply of Detonators kept up.

313. The Danger Signals must be used where the line is Obstructed. The Caution Signals must be used where it is necessary to slacken the speed of a Train. When the Double Green Light "Caution" Signal is placed on the Line, the Lamps must have White Back-lights.

For description and meaning of Signals see Rules Nos. 105 to 110.

314. Each Ganger and Leading Hand must report every case in which any Signal under his charge is disregarded by an Engine-driver.

315. When Floods or Storms are threatening the Ganger must be on the alert; and the men must be at hand ready to be summoned at immediate notice, any hour, Day or Night.

316. (a.) Anything which interferes with the safe passage of Trains is an Obstruction. Whenever any accidental Obstruction occurs on the Line, or if from any other cause any part of the Line is unsafe for Trains to pass over it, the Ganger, or the man in charge, must immediately show Danger Signals in both directions, at a distance of not less than 800 yards from the point where the Obstruction exists, *whether any Train be expected or not*. In all cases three Detonating Signals must be placed upon the Rail, about 10 yards apart, a little in advance of the other Signal, so that, after hearing the report, the Engine-driver may see the Signal in front of him. In addition he must at every interval of 200 yards place a Detonator on one of the rails.

If the Disc Signals and Back-lights of Lamps cannot be seen by the Ganger from where he is working, a man must remain in charge of them.

These Signals must be maintained until orders are given by the Ganger to remove them, which orders must not be given until the Line is again safe for Traffic.

(b.) Should the Obstruction be within a distance of 800 yards of any Signal-box, so that the Fixed Signals afford protection, the Ganger shall call upon the Signalman to keep the Signals at Danger, and the Signalman must so keep them until the Line is again reported to him by the Ganger to be safe.

The Ganger shall maintain his own Signals in addition until the Line is clear.

(c.) Should the Obstruction occur in a Tunnel, the distance of 800 yards must be measured in both directions from the mouths of the Tunnel; or, if less than 800 yards from a Tunnel, the Signal must be carried through the Tunnel, and be placed at least 400 yards beyond it, and not less than 1,000 yards from the Obstruction.

(d.) Should the Obstruction occur on a Gradient, or close to the foot of a Gradient, the Signal on the higher side of the Obstruction must be placed at least 1,200 yards from the Obstruction.

(e.) In all cases the Signals must be so placed that the Engine-driver will have as clear and distant a view of them as is possible.

317. If a Ganger be informed of an accidental Obstruction on an adjoining Length he must at once go and put up Signals and make the Line safe.

318. Whenever Repairs or Alterations are required to the Line, Bridges, or any Works which necessitate the removal of a Rail, Fastenings, or Supports, or cause any Obstruction to the safe passage of Trains, Danger Signals, as directed in Rules Nos. 316 (a) and 316 (b) must always be shown before the Line is obstructed, and be maintained until the Line is again Clear and Safe for Traffic.

319. When any parts of the Line, Formation, Track, or Bridges are under alterations or repairs, or not in good order, or if from any circumstance Trains can only pass with Safety at a Reduced Speed, the Ganger or Leading Hand in charge on the spot must exhibit the Caution Signal at least 400 yards in both directions from the defective place, and at a greater distance should Gradients or Tunnels intervene, so as to insure giving such timely warning to the Engine-driver of any approaching Train as will enable him to slacken speed before reaching the defective place. If when going back to exhibit the Caution Signal the Ganger or Leading Hand should arrive at a Signal-box, or if the work is near to a Signal-box, he must advise the Signalman, who will keep his Danger Signals exhibited until the speed of the Train has been sufficiently reduced, when if the Block Telegraph or other Rules and Regulations have been complied with he must turn his Signals to allow the Train to pass.

320. Any Accident to a Train or Engine, or any serious failure of, or Obstruction to, the Works which cannot be immediately repaired, must be reported as soon as possible, by Telegraph or otherwise, to the Engineer and Inspector of Permanent-way, to the Stationmasters on each side of the place, and to the Signalman of any intervening Signal-box.

321. Should any Surfaceman or other Member find any defect or Obstruction on the Line he must take immediate steps

for exhibiting the proper Signals, and, if necessary, send for assistance. No Obstruction or dangerous defect shall be left unwatched until the Line has been made Safe.

322. All Workmen are to stand off the Line when a Train is within 400 yards, and when the Line is clear the Ganger or Leading Hand must give the "All Right" Signal with his Arm, Flag, or Lamp.

323. Where the Line is not worked under Block Regulations, if Surfacemen or others should observe that one Train is following another too closely, they must give the Engine-driver of the following Train a Caution Signal, or, if necessary, Stop him.

324. In no case, except under absolute necessity, must a Rail be displaced, or other work be performed by which an Obstruction is made to the passage of Trains, during a Fog or Falling Snow. Repairs which involve the stopping of Trains must, as far as practicable, be timed to suit the regular Traffic or advised Specials; and, except in cases of accident or absolute necessity, all repairs must be effected and the Line made clear and safe fifteen minutes before a Train is due.

#### TROLLIES AND VELOCIPEDES.

325. No Truck, Self-propelling Crane, or Material Trolley, loaded or empty, may be upon the Main Line within fifteen minutes of a Train being due.

326. When any loaded Material Trolley, Truck, or Self-propelling Crane is to be run on the Main Line without an Engine it must be preceded and followed by men with Danger Signals at a distance of 800 yards in each direction.

327. Material Trollies may be used on the Main Line only by Gangers or Leading Hands of the Works Department specially authorised by the Engineer.

In cases where the authorised persons above specified cannot personally go with a Trolley, they must place a competent man of their Gang in charge of it. In case of accident, the person in charge of the Trolley will be liable for the consequences. Whenever a Material Trolley, loaded or empty, is travelling on the Main Line there must be at least two men to work it.

328. When there is a clear view of the Line for at least half a mile in both directions, empty Trollies may be run without protection; but a good look-out must always be kept.

329. Except where specially authorised, no Trolley or Velocipede may be attached to a Train; and, when not in use, it must be lifted well clear of the Line, and the wheels secured with chain and padlock.

330. The word "Velocipede" includes also the light four-wheeled Trolley used for Members travelling without other load.

331. Velocipedes may be run by the following Members of the staff: Inspecting and District Officers, Traffic Inspectors, Inspectors of Signals, Interlocking Electricians, Foremen of Works, Inspectors of Permanent-way, Bridge Inspectors, Signal Adjusters, Electric Linemen, Leading Hands of Works Staff, Gangers and Surfacemen on their own Lengths and between their homes and the ends of their



Lengths, and Members of the Maintenance Staff authorised by District Engineers, and persons carrying a special permit from the District Traffic Manager.

332. Velocipede permits for persons other than Members of the Railway Service are not to be issued without the authority of the General Manager, to whom all applications for such permits must be made.

These permits will be issued only by Traffic Managers and Stationmasters-in-Charge.

In cases of extreme urgency, such as serious sickness, these Officers may, on application, issue Velocipede permits to Members of the Railway Staff; but the use of Velocipedes for any other private purpose must be discountenanced, and application for permits declined.

Persons having a permit must exhibit the same to Stationmasters and Gangers when required.

333. Every person using a Velocipede must be in possession of a reliable Watch, showing correct Railway time, and a Working Time-table for the district; he will be held responsible for obtaining information as to the running of Special Trains, and Work-trains; and where there is not a clear view for half a mile in each direction he must protect his Velocipede as provided in Rule No. 326; or special arrangements may be made with the Traffic Branch for particular trips if necessary.

334. When a Work-train is working over any Section of Line Velocipedes must not be used thereon unless the person using the same has obtained advice of the running-time of the Work-train, or protects his Velocipede in accordance with Rule No. 326.

335. Where the Line is worked by Telegraph, Velocipedes may be run under the direction of the Stationmaster or Signaller, provided they do not interfere with the time of any Train-running.

336. In places where there is a clear view for half a mile in each direction Velocipedes may be run without protection between two Stations worked under Block, as on other parts of the Line, after the person in charge of the Velocipede has obtained information from the Stationmaster or Signaller as to the running of Trains. No Velocipede shall be allowed to enter a Block Section when a Train is immediately due, but it can be allowed to follow a Train from a Block Station the Velocipede being run in accordance with these Regulations.

337. In places where there is not a clear view for half a mile in each direction no person shall use a Velocipede between two Stations worked under Block without having previously obtained the consent of the Stationmaster or Signaller in charge at the Starting Station, and the following procedure is to be adopted:—

- (a.) Before leaving one Station to travel to another, or to any part of the Line between two Stations, the person in charge of the Velocipede shall ascertain from the Stationmaster or Signaller whether any Special Trains are advised.

(b.) He shall then inform the Stationmaster or Signaller whether he proposes to travel direct through to the next Station; if not, he shall say to what part of the Line he is going, how long he anticipates to be between the two Stations, and whether he proposes to go on to the Forward Station or return to that from which he started.

(c.) When the Stationmaster or Signaller is supplied with this information he shall at once communicate with the Forward Station, and advise the Signaller there that a Velocipede is either coming through or is travelling between the two Stations. On receipt of acknowledgment he shall give the person in charge of the Vehicle permission to proceed.

(d.) The person in charge of the Velocipede on reaching the Forward Station, or on his return to that from which he started, shall immediately on arrival advise the Stationmaster or Signaller, who shall inform the Officer at the other Station.

(e.) In case a Special Train shall be running over a Block Section before the Velocipede has cleared it, the Officer-in-Charge of the Block Working at the end from which it enters the Section shall advise the Guard and Engine-driver of the Train, if necessary stopping the Train for the purpose, that a Velocipede is on the Section, and also its probable movements, and the Engine-driver shall keep a good Look-out and sound his Whistle at frequent intervals.

338. Where it is necessary for a person in charge of a Velocipede to commence his journey within the Block Section, and it is not possible to communicate with the Stationmaster or Signaller at either end, and when there is not a clear view for half a mile in each direction, he must use his Velocipede strictly in accordance with Rule No. 326 preceding; but if the view be clear for half a mile in each direction, the Velocipede need not be protected in accordance with Rule No. 326.

339. No Velocipede shall be allowed to travel after dark on a Block Section unless under absolute Block or in accordance with Rule No. 326.

340. The regulations contained in Rules Nos. 336, 337, 338, and 339 will not prevent a Velocipede being run under Absolute Block if so desired by the person using it.

341. Every Trolley or Velocipede must carry a Lamp, showing Red both ways by Night and when passing through Tunnels, and a Red Flag exhibited by Day.

342. The person in charge of a Trolley or Velocipede is in all cases responsible for its safety, and for the exhibition of the proper Signals.

J. F. ANDREWS,  
Acting Clerk of the Executive Council.