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THE
STANDARD CODE

OF THE

American Railway Association



TRAIN RULES.

BLOCK SIGNAL RULES.



AUTHORIZED EDITION.

APR 15 1905

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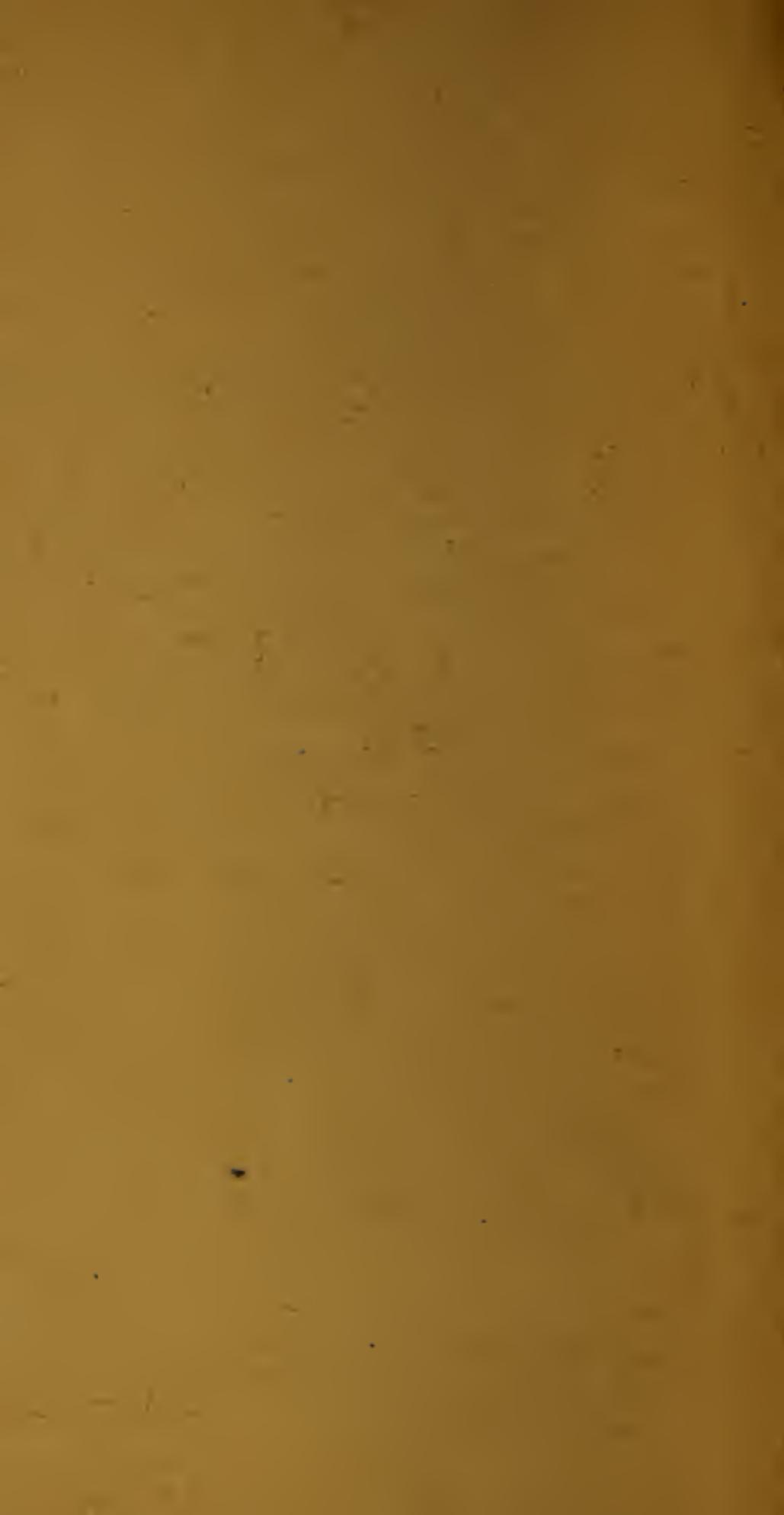
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C. A. Bosworth

Springfield
Ill.



THE
STANDARD CODE

OF THE

American Railway Association.

TRAIN RULES

ADOPTED

APRIL 14, 1887,

With Amendments agreed to October 12, 1887; April 10, 1889; April 8,
1891; October 12, 1892; April 18, 1895; October 17, 1895,
and April 7, 1897.

AND

BLOCK SIGNAL RULES

ADOPTED

APRIL 15, 1896.

EIGHTH EDITION, MAY, 1897.

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Terms expire April, 1900.

ORIGINAL ENDORSEMENT.

(July, 1889.)

This edition of "Uniform Train Rules and Rules for the Movement of Trains by Telegraphic Orders" is hereby approved as the authorized **Standard Code**, adopted by the General Time Convention.

K. H. WADE,

E. B. THOMAS,

D. J. CHASE,

C. D. GORHAM,

M. S. BELKNAP,

J. T. HARAHAN,

H. B. STONE,

H. WALTERS,

R. PITCAIRN,

} Committee.

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Terms expire October, 1899.

JOINT COMMITTEE ON INTERLOCKING AND BLOCK SIGNALS

THE COMMITTEE ON TRAIN RULES.

THE COMMITTEE ON SAFETY APPLIANCES.

CONFERENCE COMMITTEE.

(On rules which involve consideration by more than one of the three committees of which its members are composed.)

C. H. PLATT, Chairman.

- | | | |
|------------------|---|----------------------------------------------------------|
| J. G. METCALFE, | } | <i>Of Committee on General Regulations for Employes.</i> |
| S. M. PREVOST, | | |
| T. A. MACKINNON, | | |
| ROBT. PITCAIRN, | } | <i>Of Committee on Train Rules.</i> |
| C. W. BRADLEY, | | |
| A. W. SULLIVAN, | | |
| C. H. PLATT, | } | <i>Of Committee on Safety Appliances.</i> |
| W. F. MERRILL, | | |
| G. W. STEVENS, | | |

The following report was submitted to the Association at its meeting on April 15, 1896, and was adopted :

“The committee appointed to consider the question of the assignment of numbers to the rules of the Standard Code would suggest the consideration of the Association of the following, viz. :

- 1 to 300—General Regulations for Employes.
- 301 to 500—Train Rules.
- 501 to 600—Telegraph Block.
- 601 to 700—Controlled Manual Block.
- 701 to 800—Automatic Block.
- 801 to 900—Interlocking.

J. G. METCALFE,
ROBERT PITCAIRN,
E. T. D. MYERS,
Committee.”

—

At the meeting held on April 7, 1897, the following amendment to the above assignment of numbers was adopted by the Association :

- 1 to 50—General Rules.
- 51 to 300—General Regulations for Employes.

The remaining portion of the numbers previously assigned as before.

—

Number of rules in the classes referred to above, now adopted and printed in the Code:

General Rules.....	12
General Regulations for Employes.....	—
Train Rules.....	126
Telegraph Block.....	23
Controlled Manual Block.....	39
Automatic Block.....	7
Interlocking.....	—

(Form of order putting rules in effect.)

The rules herein set forth will govern the railroads operated by the.....Company, and shall take effect....., superseding all prior rules and instructions inconsistent therewith.

Special instructions may be issued by proper authority.

.....

GENERAL NOTICE.

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

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

Successful service requires the courteous, intelligent and faithful discharge of duty. To obtain promotion capacity must be shown for increased responsibility.

Employes are advised that, in accepting employment, they assume the accompanying risks, and are expected to look after, and be responsible for, their own safety, as well as to exercise the utmost caution to avoid injury to others.

GENERAL RULES.

GENERAL RULES.

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

2. Special instructions, given by proper authority, must be observed while in force.

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

4. Employees must pass the required examinations.

5. Persons employed in any service on trains are subject to the rules.

6. Employees, while on duty, must wear the prescribed badge or uniform and be neat in appearance.

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

8. The use of tobacco by employees when in or about passenger stations, or by passenger trainmen when on duty is prohibited.

9. Persons authorized to transact business at stations or on trains must be required to conduct themselves in a quiet and orderly manner, without annoyance to passengers.

10. In case of danger to the Company's property employees must unite to protect it.

11. Employees must render all the assistance in their power in carrying out the rules and special instructions.

12. Any violation of the rules must be reported.

TRAIN RULES.

STANDARD TIME.

312. Observatory Standard Time is the only recognized standard, and will be transmitted from.....
.....Observatory to the designated offices.

313. The Standard Time will be telegraphed to all points from the designated offices at ———, — m. (Eastern, Central, Mountain or Pacific time), daily.

314. Certain clocks will be designated as Standard Clocks.

315. Conductors and enginemen must not take time from any clock unless it is designated as a Standard Clock.

316. Each conductor and engineman must have a reliable watch which has been examined and certified to on a prescribed form, by a designated inspector, and must file such certificate with the ——— before he is allowed to go on duty. Watches must be examined and certificates renewed every ———.

(Form of Certificate.)

CERTIFICATE OF WATCH INSPECTOR.

This to certify that on. 18....
the watch of
employed as.....
on the.....R.....
has been examined and found to be a reliable and accurate
time-piece, and in such repair as will, in my judgment,

Rules 301-311. Omitted. See Rules 1 to 12; also pages 163-167.

Rule 313. See Note on page 140; also page 167.

Rule 314. See page 167. Rule 315. See page 168.

Rule 316. See Note on page 140; also pages 168 and 169.

with proper usage, enable it to run within a variation not to exceed thirty seconds per week.

Name of Maker
 Brand....
 Number of Movement.....
 Gold or Silver..
 Open or hunting case..
 Stem or key winding.....
 Signed,

Inspector.
 Address.

317. Each conductor and engineman must compare his watch with the designated Standard Clock before starting on each trip, and register his name and the time he compared his watch on a prescribed form.

318. Conductors and enginemen whose duties prevent them from having access to a Standard Clock must compare their watches daily with those of conductors and enginemen who have Standard Time, and have registered as provided in Rule 317.

TIME-TABLES.

319. A Time-table is the general law governing the time of all regular trains at all stations. The times given for each train on the Time-table is the Schedule of such train.

320 (A). Each Time-table from the moment it takes effect supersedes the preceding Time-table and all special instructions relating thereto.

320 (B). Each Time-table, from the moment it takes

Rule 317. See Decision of Committee, page 145 ; also page 169.

Rule 318. See page 170. Rule 319. See page 170.

Rule 320 (A), (B), (C). See Note on page 140 and Decision of Committee, page 145 ; also pages 170 and 171.

effect, supersedes the preceding Time-table and all special instructions relating thereto. A train of the preceding Time-table shall, unless otherwise directed, take the time and rights of the train of the same number on the new Time-table.

A train of the new Time-table which has no corresponding number on the preceding Time-table shall not run until it is due to start from its initial point on any division after the Time-table takes effect.

320 (C). Each Time-table, from the moment it takes effect, supersedes the preceding Time-table and all special instructions relating thereto. A train of the preceding Time-table loses its rights, and can thereafter proceed only by special orders.

A train of the new Time-table is one which is due to start from its initial point, on any division, after the Time-table takes effect.

321. Upon the Time-table not more than two sets of figures are shown for a train at any point. When two times are shown, the earlier is the arriving time and the later the leaving time. When one time is shown it is the leaving time unless otherwise indicated.

Regular meeting or passing points are indicated on the time-table by figures in **full-faced type**.

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

Where there are more trains than one to meet or pass a train at any point, attention is called to it by ———.

In all cases trains are required to clear and follow as per Rules 385 to 390 inclusive.

322. On the Time-table the words “daily,” “daily, ex-

Rule 321. See Note on page 140 ; also pages 171, 172 and 173.

Rule 322. See Note on page 140 ; also Decision of Committee, page 146 ; also page 173.

cept Sunday," etc., printed at the head and foot of the schedule of a train, indicate when it shall run. The following signs placed before the figures indicate:

"s"—regular stop (or the same may be designated by the different styles of type used):

"f"—stop on signal to receive or discharge passengers or freight:

"¶" stop for meals.

Trains are designated by numbers and their class indicated on the Time-tables.

SIGNAL RULES.

SIGNALS.

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

324. Flags of the proper color must be used by day, and lamps of the proper color by night or whenever from fog or other cause the day signals cannot be clearly seen.

325. Red signifies danger, and is a signal to stop.

326. Green signifies caution, and is a signal to go slowly.

327. White signifies safety, and is a signal to go on.

328. Green and white is a signal to be used to stop trains at flag stations for passengers or freight.

329. Blue is a signal to be placed on a car or an engine to forbid its being moved.

330. A torpedo, placed on the top of the rail, is a signal to be used in addition to the regular signals.

Rule 323. See page 173.

Rule 325. See page 174.

Rule 326. See answer of Committee, page 146, and page 174.

Rule 327. See page 174.

Rule 328. See Decision of Committee, page 146.

Rule 329. See page 174.

Rule 330. See page 174.

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

331. A fusee is a signal which may be used in addition to the torpedoes or other signals.

332. A flag or lamp swung across the track, a hat or any object waved violently by any person on the track, signifies danger, and is a signal to stop.

TRAIN SIGNALS.

333. A train, while running, must display two green flags by day and two green lights by night, one on each side of the rear of the train, as Markers, to indicate the rear of the train. Yard engines will not display Markers.

334. A train running after sunset, or when obscured by fog or other cause, must display the head-light in front, and two or more red lights in the rear. Yard engines must display two green lights instead of red, except when provided with a head-light on both front and rear.

335. Each car on a passenger train while running must be in communication with the engine by a bell-cord or an equivalent appliance.

336. Two green flags by day and night and, in addition, two green lights by night, displayed in the places provided for that purpose on the front of an engine, denote that the train is followed by another train, running on the same schedule and entitled to the same time-table rights as the train carrying the signals.

337. Two white flags by day and night and, in addition, two white lights by night, displayed in the places pro-

Rule 331. See page 174.

Rule 333. See page 175.

Rule 334. See pages 162 and 175.

Rule 335. See page 175.

Rules 336 and 337. See pages 146 and 147; also pages 175 and 176.

vided for that purpose on the front of an engine, denote that the train is an extra. These signals must be displayed by all extra trains, but not by yard engines.

338. A blue flag by day and a blue light by night, placed on or at the end of a car, engine or train, denote that workmen are at work under or about the car, engine or train. The car, engine or train thus protected must not be coupled to or moved until the blue signal is removed by the person who placed it.

When a car, engine or train is protected by a blue signal, other cars must not be placed in front of it, so the blue signal will be obscured, without first notifying the workman, that he may protect himself.

WHISTLE SIGNALS.

339. One long blast of the whistle (thus, —) is the signal for approaching stations, railroad crossings and junctions.

340. One short blast of the whistle (thus, —) is the signal to apply the brakes—stop.

341. Two long blasts of the whistle (thus, — —) is the signal to throw off the brakes.

342. Two short blasts of the whistle (thus, --) is an answer to any signal, except "train parted."

343. Three long blasts of the whistle (thus, — — —), to be repeated until answered as provided in Rule No. 362, is a signal that the train has parted.

344. Three short blasts of the whistle (thus, ---), when the train is standing (to be repeated until answered, as provided in Rule No. 361) is a signal that the train will back.

Rule 338. See page 176.

Rule 339. See page 176.

Rule 340. See page 177.

Rule 341. See page 177.

Rule 342. See answer of Committee, page 147; also page 177.

Rule 343. See page 177.

Rule 344. See page 177.

345. Four long blasts of the whistle (thus, — — — —) is the signal to call in a flagman from the west or south.

Four long followed by one short blast of the whistle (thus, — — — — —) is the signal to call in a flagman from the east or north.

346. Four short blasts of the whistle (thus, — — — —) is the engineman's call for signals, from switch tenders, watchmen, trainmen and others.

347. Five short blasts of the whistle (thus, — — — — —) is a signal to the flagmen to go back and protect the rear of the train.

348. One long followed by two short blasts of the whistle (thus, — — —) is a signal to be given by trains on single track, when displaying signals for a following train, to call the attention of trains of the same or inferior class to the signals displayed.

349. Two long, followed by two short, blasts of the whistle (thus, — — — —) is the signal for approaching road crossings at grade.

350. A succession of short blasts of the whistle is an alarm for persons or cattle on the track, and calls the attention of trainmen to danger ahead.

BELL-CORD SIGNALS.

351. One tap of the signal-bell, when the train is standing, is the signal to start.

352. Two taps of the signal-bell, when the train is running, is the signal to stop at once.

353. Two taps of the signal-bell, when the train is standing, is the signal to call in the flagman.

Rule 345. See page 177.

Rule 346. See page 177.

Rule 347. See page 178.

Rule 348. See page 178.

Rule 349. See page 178.

Rule 350. See page 178.

Rule 351. See page 178.

Rule 352. See page 178.

Rule 353. See page 178.

354. Three taps of the signal-bell, when the train is running, is the signal to stop at the next station.

355. Three taps of the signal-bell, when the train is standing, is the signal to back the train.

356. Four taps of the signal-bell, when the train is running, is the signal to reduce speed.

357. When one tap of the signal-bell is heard while a train is running, the engineman must immediately ascertain if the train is parted, and, if so, be governed by Rule No. 403.

358. Signals of the same number of sounds shall have the same significance when given by other appliances than bell-cords and signal-bells.

LAMP SIGNALS.

359. A lamp swung across the track is the signal to stop.

360. A lamp raised and lowered vertically is the signal to move ahead.

361. A lamp swung vertically in a circle across the track, when the train is standing, is the signal to move back.

362. A lamp swung vertically in a circle at arm's length across the track when the train is running, is the signal that the train has parted.

363. A flag, or the hand, moved in any of the directions given above, will indicate the same signal as given by a lamp.

FIXED SIGNALS.

364. Fixed signals are placed at junctions, railroad crossings, stations and other points as required. Special

Rule 354. See page 178.

Rule 356. See page 178.

Rule 361. See page 179.

Rule 364. See page 179.

Rule 355. See page 178.

Rule 357. See pages 178 and 179.

Rule 362. See page 179.

instructions will be issued indicating their position and use.

RULES GOVERNING THE USE OF SIGNALS.

365. A signal imperfectly displayed, or the absence of a signal at a place where a signal is usually shown, must be regarded as a danger signal, and the fact reported to the Superintendent.

366. The unnecessary use of either the whistle or the bell is prohibited. They will be used only when required by rule or law, or when necessary to prevent accident.

367. (Omitted).

368. When a danger signal (except a fixed signal) is displayed to stop a train, it must be acknowledged as provided in Rule No. 342.

369. The engine-bell must be rung before an engine is moved.

370. The engine-bell must be rung for a quarter of a mile before reaching every public road crossing at grade, and until it is passed ; and the whistle must be sounded at all whistling-posts.

371. When two or more engines are coupled to the head of a train, the leading engine only shall display the signals as provided in Rules Nos. 336 and 337.

372. One flag or light displayed as provided in Rules Nos. 336 and 337 will be regarded the same as if two were displayed ; but conductors and enginemen will be held responsible for the proper display of all train signals.

373. When a train is being pushed by an engine (except when shifting and making up trains in yards) a white light must be displayed on the front of the leading car at night, or when the train is obscured by fog or other cause.

Rule 366. See page 179.

Rule 369. See page 180.

Rule 372. See page 180.

Rule 367. See page 180.

Rule 370. See page 180.

374. When a train turns out to meet or be passed by another train the red lights must be removed and green displayed as soon as the track is clear, but the red must again be displayed before returning to its own track.

Head-lights on engines, when on side tracks, must be covered as soon as the track is clear and train has stopped, and also when standing at the end of double track.

375. The combined green and white signal is to be used to stop a train only at the flag stations designated by the schedule of that train. When it is necessary to stop a train at a point that is not a flag station for that train, a red signal must be used.

376. White signals must be used by watchmen at public road and street crossings to prevent persons and teams from crossing when trains are approaching. Danger signals must be used only when necessary to stop trains.

377. (Omitted.)

378. (Omitted.)

TRAIN RULES.

CLASSIFICATION OF TRAINS.

379. Whenever the word train is used it must be understood to include an engine in service with or without cars, equipped with signals as provided in Rules 333 and 334. Regular trains are those represented on the Time-table, and may consist of one or more sections. All sections of a train, except the last, must display signals as provided in Rule No. 336. Extra trains are those not represented on the Time-table.

380. All regular trains are classified on the Time-table with regard to their priority of right to the track ; trains

Rule 374. See page 148, and also pages 180 and 181.

Rule 375. See Decision of Committee, page 146.

Rule 376. See Note on page 141. Rule 377. See page 181.

Rule 378. See page 181. Rule 379. See pages 181 and 182.

Rule 380. See page 182.

of the first class being superior to those of the second and all succeeding classes, and trains of the second class being superior to those of the third and all succeeding classes ; and so on indefinitely.

381. Extra trains may be distinguished as :

- Passenger Extra ;
- Freight Extra ;
- Work Train Extra.

382. All extra trains are of inferior class to all regular trains of whatever class.

MOVEMENT OF TRAINS.

383. A train of inferior class must in all cases keep out of the way of a train of superior class.

384. On single track, all trains in one direction, specified in Time-table, have the absolute right of track over trains of the same class running in the opposite direction.

385. When trains of the same class meet on single track, the train not having right of track must take the siding and be clear of the main track before the leaving time of the opposing train ; but such train must not pass the switch to back in on a siding until after the arrival of the opposing train, unless otherwise directed by special instructions. When necessary to back in on the siding, before passing the switch, a flagman must be sent out in the direction of the opposing train as per Rule No. 399.

386. When a train of inferior class meets a train of superior class on single track, the train of inferior class must take the siding and clear the train of superior class

Rule 381. See page 182. Rule 384. See pages 148 and 149.

Rule 385. See Note on page 141 ; also page 149.

Rule 386. See Note on page 141 ; also Decision of Committee, page 149 ; also pages 182 and 183.

five minutes. A train of inferior class must keep five minutes off the time of a train of superior class following it.

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

387. A train must not leave a station to follow a passenger train until five minutes after the departure of such passenger train, unless some form of block signal is used.

388. Passenger trains following each other must keep not less than five minutes apart, unless some form of block signal is used.

389. Freight trains following each other must keep not less than five minutes apart (except in closing up at stations or at meeting and passing points) unless some form of block signal is used.

390. A train must not leave a station expecting to meet or to be passed at the next station by a train having the right of track, unless it has ample time to reach such station, and clear the track as per Rules Nos. 385 and 386.

391. A train not having right of track must be entirely clear of the main track by the time it is required by rule to clear an opposing train or a train running in the same direction; failing to do so, it must be immediately protected, as provided in Rule No. 399.

392. Except at meeting or passing points, as provided in Rules Nos. 385 to 391, inclusive, a train must not arrive at a station in advance of its schedule arriving time, when shown.

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

Rule 389. See Note on page 142.

Rule 390. See Note on page 142; also page 183.

Rule 392. See page 183.

393. All trains must stop at schedule meeting or passing points on single track, if the train to be met or passed is of the same class, unless the switches are plainly seen to be right and the track clear. The point at which a train should stop is the switch used by the train to be met or passed in going on the siding.

When the expected train of the same class is not found at the schedule meeting or passing point, the train having right of track must approach all sidings prepared to stop, until the expected train is met or passed.

394. All trains must approach the end of double track, junctions, railroad crossings at grade, and drawbridges, prepared to stop, and must not proceed until the switches or signals are seen to be right, or the track is plainly seen to be clear. Where required by law, all trains must stop.

395. A train must not leave its initial station on any division, or a junction, or pass from double to single track, until it is ascertained that all trains due, which have the right of track over it, have arrived or left.

396. (Omitted.)

397. (Omitted.)

398. When it is necessary for the flagman to go back to protect the rear of his train, the next brakeman must immediately take the flagman's position on the train, and remain there until relieved by the flagman ; and on passenger trains the baggage master must take the place of the front brakeman whenever necessary.

399. When a train stops or is delayed, under circumstances in which it may be overtaken by a following train, the flagman must go back immediately with

Rule 393. See pages 149 and 150 ; also pages 183 and 184.

Rule 395. See page 184.

Rules 396 and 397. See pages 184 and 185.

Rule 398. See pages 150 and 151.

Rule 399. See page 186.

danger signals a sufficient distance to insure full protection. When recalled he may return to his train, first placing two torpedoes on the rail when the conditions require it.

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

400. (Omitted.)

401. (Omitted.)

402. When it is necessary for a train on double track to cross over to the opposite track, a flagman must be sent out with danger signals, as provided in Rule No. 399.

403. If a train should part while in motion, trainmen must use great care to prevent the detached parts from coming into collision. Enginemen must give the signal as provided in Rule No. 343, and keep the front part of the train in motion until the detached portion is stopped.

The front portion will have the right to go back, regardless of all trains, to recover the detached portion, first sending a flagman with danger signals _____ in the direction in which the train is to be backed, and running with great caution, at a speed not exceeding four miles per hour. On single track all the precautions required by the Rules must also be taken to protect the train against opposing trains. The detached portion must not be moved or passed around until the front portion comes back. This rule applies to trains of every class.

When it is known that the detached portion has been stopped, and the whole occurrence is in plain view, no curves or other obstructions intervening, so that signals can be seen from both portions of the train the con-

Rule 400. See page 186.

Rule 401. See page 187.

Rule 402. See page 187.

Rule 403. See Note on page 143; decision of Committee, page 151; also page 188.

ductor and engineman may arrange for the re-coupling, using the greatest caution.

404. When a train is being pushed by an engine (except when shifting and making up trains in yards) a flagman must be stationed in a conspicuous position on the front of the leading car, to immediately signal the engineman in case of danger.

405. A train starting from its initial station on each division, or leaving a junction, when a train of the same class running in the same direction is overdue, will proceed on its own time and rights, and the overdue train will run as provided in Rule 388 or 389.

406. A train which is delayed, and falls back on the time of another train of the same class, does not thereby lose its rights.

407. Regular trains twelve hours or more behind their schedule time lose all their rights.

408. A train overtaking another train of the same or superior class, disabled so that it cannot move, will pass it, and, if necessary to enable it to proceed, will take the rights and the orders of the disabled train, and proceed to the first open telegraph office, where it will report to the Superintendent. The disabled train will take the rights and orders of the last train passing it, with which it exchanged rights or orders, and proceed until the first open telegraph office is reached.

409. All messages or orders respecting the movement of trains or the condition of track or bridges must be in writing.

410. Trains must not display signals for a following

Rule 404. See page 188. Rule 405. See page 152; also page 189.

Rule 406. See page 152; also page 189.

Rule 408. See pages 152 and 153; also pages 189 and 190.

Rule 410. See page 190.

train without orders from the Superintendent or other authority designated by the Superintendent.

411. Extra trains must not be run on single track without an order from the Superintendent.

412. When signals displayed for a following train on single track are taken down at any point before the following train arrives, the conductor must inform the Superintendent promptly by telegraph, and also the operator or switchtender; and the latter, unless there is some other provision for the purpose, must notify all opposing trains of the same or inferior class leaving that point before the train arrives for which signals were displayed.

If signals are taken down at a point where there is no operator, switchtender, or other provision for the purpose, the conductor must notify all opposing trains of the same or inferior class until he reaches the next telegraph office, when he must inform the Superintendent; and the operator, unless there is some other provision for the purpose, must notify all opposing trains of the same or inferior class until directed otherwise by the Superintendent.

If the train for which signals were displayed leaves the main line at a point where there is no operator, switchtender, or other provision for the purpose, a flagman must be left to notify opposing trains that it has arrived.

413. Work trains will be run as extras under special orders, and will be assigned working limits.

414. Great care must be used by the enginemen and trainmen of a train approaching a station where any train is receiving or discharging passengers.

415. (Omitted.)

416. (Omitted.)

417. Conductors will be held responsible for the proper adjustment of the switches used by them and their trainmen, except where switchtenders are stationed.

Whoever opens a switch shall remain at it until it is closed, unless relieved by some other competent employe.

When there is more than one train to use a switch, it must not be left open unless one of the trainmen of the following train is at the switch and takes charge of it.

418. (Omitted.)

419. A train must not start without a signal from its conductor.

420. Conductors and enginemen will be held equally responsible for the violation of any of the rules governing the safety of their trains, and they must take every precaution for the protection of their trains, even if not provided for by the rules.

421. In all cases of doubt or uncertainty take the safe course and run no risks.

Rule 417. See page 153.

Rule 419. See page 191.

Rule 421. See page 191.

Rule 418. See page 191.

Rule 420. See page 191.

RULES

FOR THE

MOVEMENT OF TRAINS

BY

TELEGRAPHIC ORDERS.

RULES FOR THE MOVEMENT OF TRAINS BY TELEGRAPHIC ORDERS.

450. Special orders, directing movements varying from or additional to the time-table, will be issued by the authority and over the signature of the Superintendent. They are not to be used for movements that can be provided for by rule or time-table. They must not contain information or instructions not essentially a part of them.

They must be brief and clear, and the prescribed forms must be used when applicable; and there must be no erasures, alterations or interlineations.

451. Each order must be given in the same words to all persons or trains directly affected by it, so that each shall have a duplicate of what is given to the others.

452. Orders will be numbered consecutively for each day as issued, beginning with No. 1 at midnight.

453. Orders must be addressed to those who are to execute them, naming the place at which each is to receive his copy. Those for a train must be addressed to the conductor and engineman, and also to a person acting as pilot. A copy for each person addressed must be supplied by the operator.

454. Each order must be written in full in a book provided for the purpose at the Superintendent's office; and with it must be recorded the names of train men and others who have signed for the order; the time and signals, showing when and from what offices the order

Rule 450. See Note on page 143; also Decision of Committee, page 153.

Rule 451. See Decision of Committee, pages 154; also pages 191 and 192.

Rule 453. See page 162.

Rule 454. See Note on page 143.

and responses were transmitted ; and the train dispatcher's initials. These records must be made at once on the original copy, and not afterward, from memory or memoranda.

455. The terms "superior right" and "inferior right" in these rules, refer to the rights of trains under the Timetable and Train Rules, and not to rights under Special Orders.

456. When an order is to be transmitted, the signal "31" (as provided in Rule 459), or the signal "19" (as provided in Rule 461), meaning "Train Order," will be given to each office addressed, followed by the word "copy," and a figure indicating the number of copies to be made, if more or less than three—thus, "31 copy 5," or "19 copy 5."

457. An order to be sent to two or more offices must be transmitted simultaneously to as many as practicable. The several addresses must be in the order of superiority of rights of trains, and each office will take only its proper address. When not sent simultaneously to all, the order must be sent first for the train having the superior right of track.

458. Operators receiving orders must write them out in manifold during transmission and make the requisite number of copies at one writing, or trace others from one of the copies first made.

459. When an order has been transmitted, preceded by the signal "31," operators receiving it must (unless otherwise directed) repeat it back at once from the manifold copy, and in the succession in which their several offices have been addressed. Each operator repeating must observe whether the others repeat correctly. After

Rule 454. See Note on page 143. Rule 457. See Note on page 141.

Rule 459. See Note on page 143 ; also Decision of Committee, pages 154 and 155 ; also page 192.

the order has been repeated correctly by the operators required at the time to repeat it, the response "O K," authorized by the train dispatcher, will be sent, simultaneously to as many as practicable, naming each office. Each operator must write this on the order, with the time, and then reply "i i O K," with his office signal.

Those to whom the order is addressed, except engine-men, must then sign their names to the copy of the order to be retained by the operator, and he will send their signatures to the Superintendent. The response "complete," with the Superintendent's initials, will then be given, when authorized by the train dispatcher. Each operator receiving this response will then write on each copy the word "complete"; the time; and his last name in full; and will then deliver a copy to each person included in the address, except enginemen, and each must read his copy aloud to the operator. The copy for each engineman must be delivered to him personally by —, and the engineman must read it aloud to —, and understand it before acting upon it.

460. For an order preceded by the signal "31," "complete" must not be given to the order for delivery to a train of inferior right until "O K" has been given to and acknowledged by the operator who receives the order for the train of superior right. Whenever practicable, the signature of the conductor of the train of superior right must be taken to the order and "complete" given before the train of inferior right is allowed to act on it.

After "O K" has been given and acknowledged, and before "complete" has been given, the order must be treated as a holding order for the train addressed, but must not be otherwise acted on until "complete" has been given.

If the line fails before an office has received and acknowledged "OK" to an order preceded by the signal "31" the order at that office is of no effect, and must be there treated as if it had not been sent.

461. When an order has been transmitted, preceded by the signal "19," operators receiving it must (unless otherwise directed) repeat it back at once from the manifold copy, and in the succession in which the several offices have been addressed. Each operator repeating must observe whether the others repeat correctly. After the order has been repeated correctly, the response "complete," with the Superintendent's initials, will be given, when authorized by the train dispatcher. Each operator receiving this response must write on each copy the word "complete," the time, and his last name in full, and reply "i i complete" with his office signal, and will personally deliver the order to the persons addressed without taking their signatures.

462. For an order preceded by the signal "19" "complete" must be given and acknowledged for the train of superior right before it is given for the train of inferior right.

If the line fails before an office has received and acknowledged the "complete" to an order, preceded by the signal "19," the order at that office is of no effect, and must be treated as if it had not been sent.

463. The order, the "OK" and the "complete" must each, in transmitting, be preceded by "31" or "19," as the case may be, and the number of the order, thus "31, No. 10," or "19, No. 10." In transmitting the signature of a conductor it must be preceded by "31," the number of the order, and the train number, thus, "31, No. 10, Train No. 5." After each transmission and response the sending operator must give his office signal.

464. The operator who receives and delivers an order must preserve the lowest copy. On this must appear the signatures of those who sign for the order, and on it he must record the time when he receives it; the responses; the time when they are received; his own name; the date and the train number, for which places are provided in the blanks. These copies must be sent to the Superintendent.

465. (Omitted.)

466. (Omitted.)

467. For orders delivered at the Superintendent's office the requirements as to record and delivery will be the same as at other points.

468. Orders to persons in charge of work requiring the use of track in yards or at other points, authorizing such use when trains are late, must be delivered in the same way as to conductors of trains.

469. An order to be delivered to a train at a point not a telegraph station, or while the office is closed, must be addressed to

“*C. and E., No. ——— (at ———), care of ———,*” and forwarded and delivered by the conductor or other person in whose care it is addressed. “Complete” will be given upon the signature of the person by whom the order is to be delivered, who must be supplied with copies for the conductor and engineman addressed, and a copy upon which he shall take their signatures. This copy he must deliver to the first operator accessible, who must preserve it, and at once advise the train dispatcher of its having been received.

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

Rule 464. See Note on page 144. Rule 465. See page 194.

Rule 466. See page 194.

Rule 467. See Note on page 144.

Rule 469. See Note on page 144.

delivering and acted on as if "complete" had been given in the ordinary way.

Orders must not be sent in the manner herein provided to trains the rights of which are thereby restricted.

470. When a train is named in an order, all its sections are included unless particular sections are specified, and each section included must have copies addressed and delivered to it.

471. Meeting orders must not be sent for delivery to trains at the meeting point if it can be avoided. When it cannot be avoided, special precautions must be taken by the train dispatchers and operators to insure safety.

There should be, if possible, at least one telegraph office between those at which opposing trains receive meeting orders.

An operator must not acknowledge the receipt of an order for a train that is at his station, the engine of which has passed his train order signal, until he has personally notified the conductor and engineman that he has orders for them.

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

472. A train, or any section of a train, must be governed strictly by the terms of orders addressed to it and must not assume rights not conferred by such orders. In all other respects it must be governed by the Train Rules and Time-tables.

473. Orders once in effect continue so until fulfilled, superseded or annulled.

Where more than one movement is included in an

Rule 469. See Note on page 144. Rule 471. See page 194.

Rule 473. See page 194.

order, any part of the order specifying a particular movement may be superseded.

Orders held by or issued for a regular train are annulled when such train has lost its rights, as provided by Rules 320 and 407, and other trains will be governed accordingly.

474 (A). A fixed signal must be used at each train-order office, which shall display red at all times when there is an operator on duty, except when changed to white to allow a train to pass after getting orders, or for which there are no orders.

When red is displayed, all trains must come to a full stop, and not proceed as long as red is displayed. The signal must be returned to red as soon as a train has passed. It must only be fastened at white when no operator is on duty. This signal must also display red to hold trains running in the same direction the required time apart. Operators must be prepared with other signals to use promptly if the fixed signal should fail to work properly. If a signal is not displayed at a night office, trains which have not been previously notified must stop and inquire the cause, and report the facts to the Superintendent from the next open telegraph office.

When a semaphore is used, the arm means red when horizontal and white when in an inclined position.

474 (B). A fixed signal must be used at each train-order office, which shall display red when trains are to be stopped for orders. When there are no orders the signal must display white.

When an operator receives the signal "31," or "19," he must immediately display red, and then reply "red displayed." The signal must not be changed to white

until the object for which red is displayed is accomplished.

While red is displayed, all trains must come to a full stop, and any train thus stopped must not proceed without receiving an order addressed to such train, or a clearance card on a specified form stating over the operator's signature that he has no orders for it. Operators must be prepared with other signals to use promptly if the fixed signal should fail to work properly. If a signal is not displayed at a night office, trains which have not been previously notified must stop and inquire the cause, and report the facts to the Superintendent from the next open telegraph office.

When a semaphore is used, the arm means red when horizontal and white when in an inclined position.

475. Operators will promptly record and report to the Superintendent the time of departure of all trains and the direction in which extra trains are moving. They will record the time of arrival of trains and report it when so directed.

476. Regular trains will be designated in orders by their schedule numbers, as "No. 10," or "2d No. 10," adding engine numbers if desired; extra trains by engine numbers, as "Extra 798"; and all other numbers by figures. The direction of the movement of extras will be added when necessary, as "East" or "West." Time will be stated in figures only.

477. The following signs and abbreviations may be used:

Initials for Superintendent's signature.

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

Rule 474 (B). See Note on page 144; also Decision of Committee, page 155.

Rule 475. See Note on page 144.

Rule 476. See Note on page 144; also page 195.

Rule 477. See Note on page 144.

C & E—for Conductor and Engineman.

O K—as provided in these rules.

Min—for Minutes.

Junc—for Junction.

Frt—for Freight.

No—for Number.

Eng—for Engine.

Sec—for Section.

Opr—for Operator.

9—to clear the line for Train Orders, and for Operators to ask for Train Orders.

31 or 19—for Train Order as provided in the rules.

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

FORMS
OF
TRAIN ORDERS.

FORMS OF TRAIN ORDERS.

Form A.—Fixing Meeting Point for Opposing Trains.

——— and ——— will meet at ———.

EXAMPLES.

No. 1 and No. 2 will meet at Bombay.

No. 3 and 2d No. 4 will meet at Siam.

No. 5 and Extra 95 will meet at Hong Kong.

Extra 652 North and Extra 231 South will meet at Yokohama.

Trains receiving this order will, with respect to each other, run to the designated point, and having arrived there will pass in the manner provided by the Rules.

Form B.—Authorizing a Train to Pass or Run Ahead of Another Train Running in the Same Direction.

(1.) ——— will pass ——— at ———.

(2.) ——— will run ahead of ———, ——— to ———.

EXAMPLES.

(1.)—*No. 1 will pass No. 3 at Khartoum.*

(2.)—*No. 4 will run ahead of No. 6 Bengal to Madras.*

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

Form A. See Decision of Committee, page 155.

Form B. See page 195.

Form C.—Giving a Train of Inferior Right the Right of Track Over an Opposing Train of Superior Right.

——— has right of track over ——— ——— to ———.

EXAMPLES.

(1.)—*No. 2 has right of track over No. 1 Mecca to Mirbat.*

(2.)—*Extra 37 has right of track over No. 3 Natal to Ratlam.*

This order gives a train of inferior right the right of track over one of superior right, to a designated point.

If the trains meet at the designated point, the train of inferior right must take the siding, unless the rules or orders otherwise indicate.

Under this order, as illustrated by example (1), if the train of superior right reaches the designated point before the other arrives it may proceed, provided it keeps clear of the schedule time of the train of inferior right as many minutes as the inferior train was before required by the train rules to keep clear of the superior train.

If the train of superior right, before meeting, reaches a point beyond that named in the order, the conductor must stop the other train where it is met and inform it of his arrival.

Under example (2) the train of superior right cannot go beyond the designated point until the extra train arrives.

When the train of inferior right has reached the designated point, the order is fulfilled, and the train must then be governed by time-table and train rules or further orders.

The following modification of this form of order will be applicable for giving a work train the right of track

over all other trains, in case of a wreck or break in the track.

EXAMPLE.

Work Train Extra 275 has right of track over all trains between Stockholm and Edinburgh from 7 p.m.—

This gives the work train the exclusive right of the track between the points designated.

Form D.—Giving all Regular Trains the Right of Track Over a Given Train.

All regular trains have right of track over ——— between ——— and ———.

EXAMPLE.

All regular trains have right of track over No. 1 between Moscow and Berlin.

This order gives to any regular train of inferior right receiving it the right of track over the train named in the order, and the latter must clear the schedule times of all regular trains, the same as if it were an extra.

Form E.—Time Orders.

- (1.) ——— will run ——— late ——— to ———.
 (2.) ——— will wait at ——— until ——— for ———.

EXAMPLES.

- (1.) *No. 1 will run 20 min. late Joppa to Mainz.*
 (2.) *No. 1 will wait at Muscat until 10 a.m. for No. 2.*

Form (1) makes the schedule time of the train named, between the points mentioned, as much later as the time

Form D. See page 197.

Form E. See Decision of Committee, pages 156 and 157; also ages 197 and 198.

stated in the order, and any other train receiving the order is required to run with respect to this later time, the same as before required to run with respect to the regular schedule time. The time in the order should be such as can be easily added to the schedule time.

Under Form (2) the train of superior right must not pass the designated point before the time given, unless the other train has arrived. The train of inferior right is required to run with respect to the time specified, the same as before required to run with respect to the regular schedule time of the train of superior right.

Form F.—For Sections of Regular Trains.

—— will carry signals —— to —— for ——

EXAMPLES.

No. 1 will carry signals Astrakhan to Cabul for Eng. 85.

2d No. 1 will carry signals London to Dover for Eng. 90.

This may be modified as follows :

Engines 70, 85 and 90 will run as 1st, 2d and 3d sections of No. 1, London to Dover.

For annulling a section :

Eng. 85 is annulled as 2d section of No. 1 from Chatham.

If there are other sections following add :

Following sections will change numbers accordingly.

The character of a train for which signals are carried may be stated. Each section affected by the order must have copies, and must arrange signals accordingly.

Form G.—For Arranging a Schedule for an Extra Train.

(1.) Eng. — will run extra, leaving — on — on the following schedule, and will have the right of track over all trains :

Leave —.

—.

Arrive —.

EXAMPLE.

(1.) *Eng. 77 will run extra, leaving Turin on Thursday, Feb. 17th, on the following schedule, and will have the right of track over all trains :*

Leave Turin 11 30 p.m.

“ *Pekin 12 25 a.m.*

“ *Canton 1 47 a.m.*

Arrive Rome 2 22 a.m.

Example (1) may be varied by specifying particular trains over which the extra shall or shall not have right of track, and any train over which the extra is thus given the right of track must clear its time as many minutes as such train is required to clear the schedule time of a first-class train.

Form H.—Extra Trains.

— will run extra — to —.

EXAMPLE.

(a.) *Eng. 99 will run extra Berber to Gaza.*

A train receiving an order to run extra is not required to guard against opposing extras, unless directed by order to do so, but must keep clear of all regular trains, as required by rule.

Form G. See Decision of Committee, page 158 ; also pages 199, 200 and 201. Form H. See Note on page 144 ; also Decision of Committee, pages 158 and 159 ; also pages 201, 202 and 203.

A "work train" is an extra, for which the above form will be used for a direct run in one direction. The authority to occupy a specified portion of the track, as an extra while working, will be given in the following form :

(b.) *Eng. 292 will work as an extra 7 a.m. until 6 p.m. between Berne and Turin.*

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

(c.) *Eng. 292 will run extra Berne to Turin and work extra 7 a.m. until 6 p.m. between Turin and Rome.*

When an order has been given to "work" between designated points, no other extra must be authorized to run over that part of the track without provision for passing the work train.

When it is anticipated that a work train may be where it cannot be reached for meeting or passing orders, it may be directed to report for orders at a given time and place, or an order may be given that it shall clear the track for (or protect itself after a certain hour against) a designated extra by adding to example (b) the following words :

(d.) *And will keep clear of (or protect itself against) Extra 223, south, between Antwerp and Brussels after 2 10 p.m.*

In this case, extra 223 must not pass the northernmost station before 2 10 p.m., at which time the work train must be out of the way, or protecting itself (as the order may require) between those points.

When the movement of an extra train over the working limits cannot be anticipated by these or other orders to the

work train, an order must be given to such extra, to protect itself against the work train, in the following form :

(e.) Extra 76 will protect itself against work train extra 95 between Lyons and Paris.

This may be added to the order to run extra.

A work train when met or overtaken by an extra must allow it to pass without unnecessary detention.

When the conditions are such that it may be considered desirable to require that work trains shall at all times protect themselves while on working limits, this may be done under the following arrangements. To example (b) add the following words :

(f.) protecting itself against all trains.

A train receiving this order must, whether standing or moving, protect itself within the working limits (and in both directions on single track) against all trains, in the manner provided in Rule 399.

When an extra receives orders to run over working limits it must be advised that the work train is within those limits by adding to example (a) the words—

(g.) Eng. 292 is working extra between Berne and Turin.

A train receiving this order must run expecting to find the work train protecting itself within the limits named.

Form J.—Holding Order.

Hold —— at ——.

EXAMPLES.

(1.) Hold No. 2 at Berlin.

(2.) Hold all trains east at Berlin.

Form II (*f*). See Decision of Committee, pages 158 and 159.

Form J. See pages 203, 204 and 205.

As any order for which "O K" has been given and acknowledged operates as a holding order for the train to which it is addressed, this form will only be used in special cases, to hold trains until orders can be given or for some other emergency. The reason for holding may be added, as "for orders."

This order is not to be used for holding a train, while orders are given to other trains against it, which are not at the same time given to it in duplicate. It must be respected by conductors and enginemen of trains thereby directed to be held as if addressed to them. Conductors when informed of the order must sign for it, and their signatures must be sent and "complete" obtained.

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

"———may go."

This must be addressed to the person or persons to whom the order to hold was addressed and must be delivered in the same manner.

Form K.—Annulling a Scheduled Train.

——— of —— is annulled.

EXAMPLES.

- (1.) *No. 1 of Feb. 29th is annulled.*
- (2.) *No. 3 due to leave Naples Saturday, Feb. 29th, is annulled.*

Adding "from Alaska," or "between Alaska and Halifax," when appropriate.

This order takes away all rights of the train annulled and authorizes any train or person receiving it to use the track as if the train annulled were not on the time-table.

If a train is annulled to a point named, its rights beyond that point remain unaffected.

The train dispatcher may direct any operator to omit repeating back an order annulling a train, until he has occasion to deliver it.

When a train has been annulled it must not be again restored under its original number by special order.

Form L.—Annulling or Superseding an Order.

“Order No. —— is annulled.”

This will be numbered, transmitted and signed for as other orders.

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

Annulled by order No. ——.

An order superseding another may be given, adding “*this supersedes order No. ——,*” or adding “*instead of ——.*”

EXAMPLE.

No. 1 and No. 2 will meet at Sparta, instead of at Thebes.

An order that has been annulled or superseded must not be again restored by special order under its original number.

In the address of an order annulling or superseding another order, the train first named must be that to which rights were given by the order annulled or superseded, and when the order is not transmitted simultaneously to all concerned, it must be sent to the point at which that train is to receive it and the required response first given, before the order is sent for other trains.

LONDON AND PARIS RAILWAY COMPANY.

CLEARANCE CARD.

Dover, 9 15 A.M.

March 25, 1887.

Conductor and Engineman No. 12.

I have no orders for your train. Signal is out for No 16.

John Jones,

Operator.

This does not interfere with or countermand any orders you may have received.

Conductor **MUST SEE** that the number of **HIS TRAIN** is entered in the above form correctly.
Conductor and Engineman must each have a copy.

SPECIFICATIONS FOR TRAIN ORDER FORM AND
BOOKS FOR OPERATORS FOR 19 ORDERS.

Form as here shown. Blank space for order (4) inches with no lines. The mode of filling the blanks is indicated by small type.

Names of Divisions and office to be varied to suit each Division.

Form ($6\frac{1}{4} \times 6$) inches below perforated line. Book ($6\frac{1}{4} \times 7\frac{1}{2}$) inches.

300 leaves. Stitched. Bound at top. Paper cover on face and top. Very stiff back on lower side.

Paper opaque, green, sized, and of such thickness as to admit of making (7) good copies with No. 4 Faber pencil.

To be used with Carbon Paper ($6\frac{1}{4} \times 7$) inches, and a stiff tin, same size, corners rounded.

Standard Train Order Blank for 19 Order.

BOUND HERE.

PERFORATED LINE.

LONDON AND PARIS RAILWAY COMPANY

TELEGRAPHIC TRAIN ORDER No.

Superintendent's Office,

March 27, 188 5.

FORM
19*For*Station *to*

C. & E.

of

No. 13.

FORM
19

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

Rec'd 2.15 P. M. *Made* Complete at 2.16 P. M. *Rec'd* by Jones *Opr.*

SPECIFICATIONS FOR TRAIN ORDER FORM AND
BOOKS FOR OPERATORS FOR 31 ORDERS.

Form as here shown. Blank space for order (4) inches with no lines. The mode of filling the blanks is indicated by small type.

Names of Divisions and office to be varied to suit each Division.

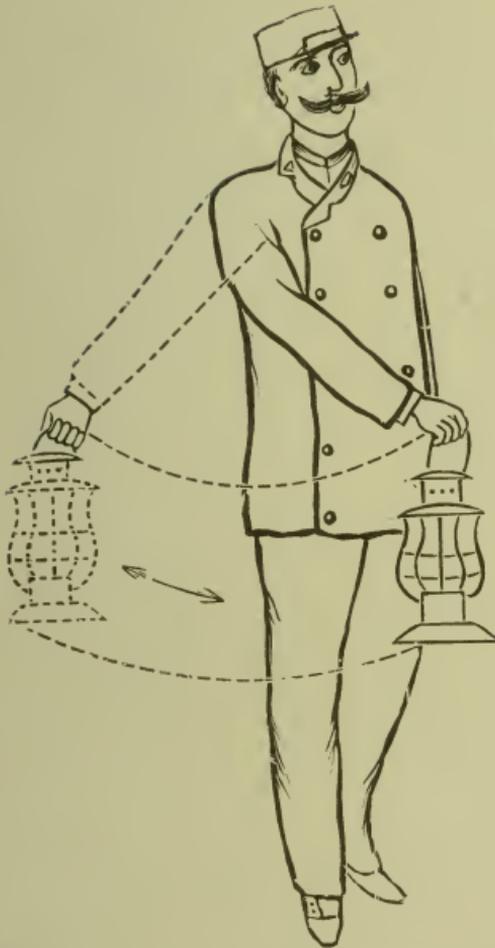
Form ($6\frac{3}{4}$ x $9\frac{1}{4}$) inches below perforated line. Book ($6\frac{3}{4}$ x $10\frac{1}{2}$) inches.

300 leaves. Stitched. Bound at top. Paper cover on face and top. Very stiff back on lower side.

Paper opaque, white, sized, and of such thickness as to admit of making (7) good copies with No. 4 Faber pencil.

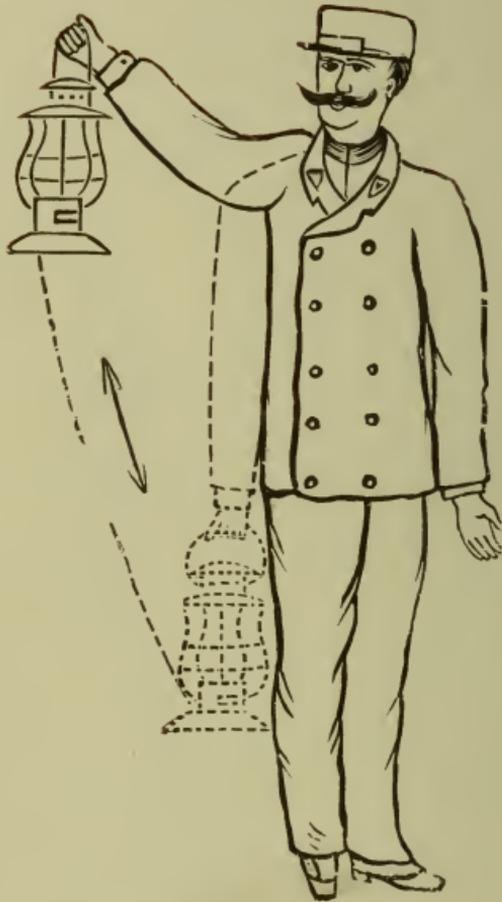
To be used with Carbon Paper ($6\frac{3}{4}$ x 9) inches, and a stiff tin, same size, corners rounded.

DIAGRAMS
OF
HAND AND LAMP
SIGNALS.



Stop—A motion crosswise with the track.

[See Rule 359.]



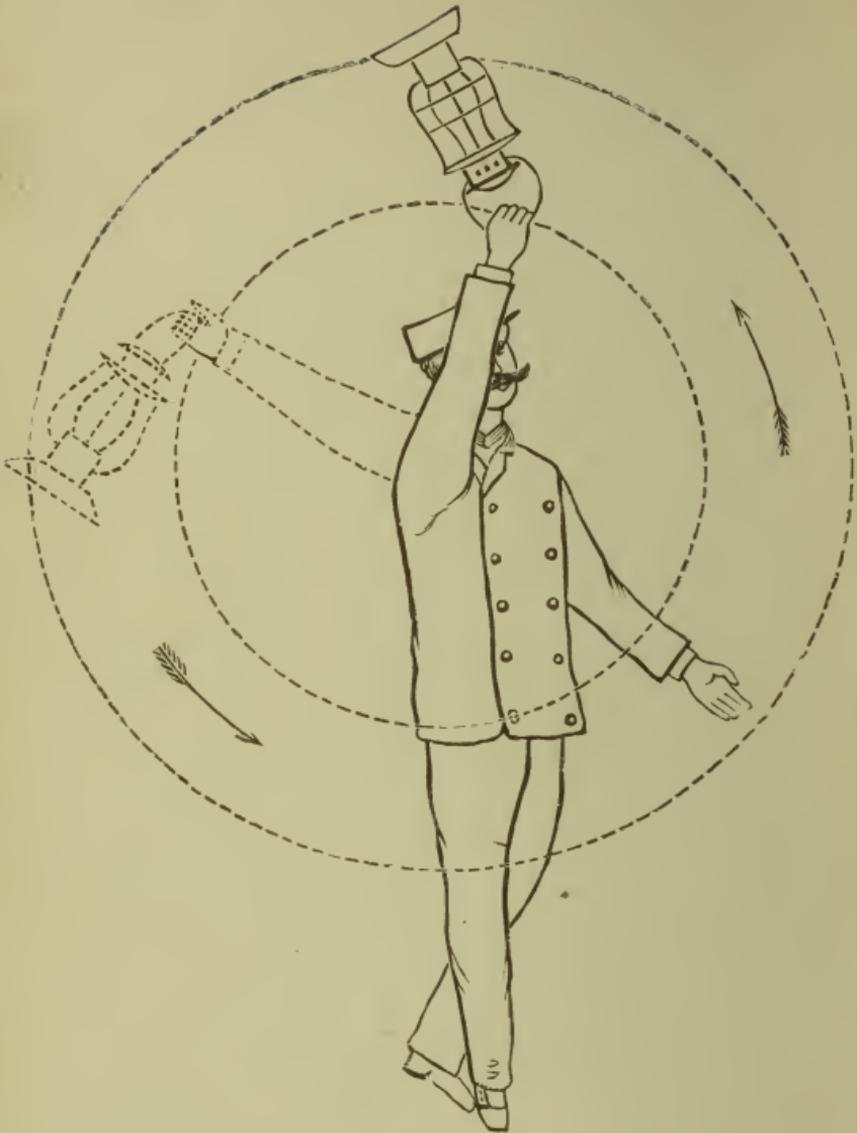
Go ahead—A motion up and down.

[See Rule 360.]



Back up--A motion in a vertical circle.

[See Rule 361.]



Train Parted—A motion in a vertical circle at arm's length across the track, given continuously until answered by the engineman.

[See Rule 362.]

DIAGRAMS

ILLUSTRATING

Manner of Using Signals

ACCORDING TO

THE STANDARD CODE OF
TRAIN RULES.

ADOPTED BY THE

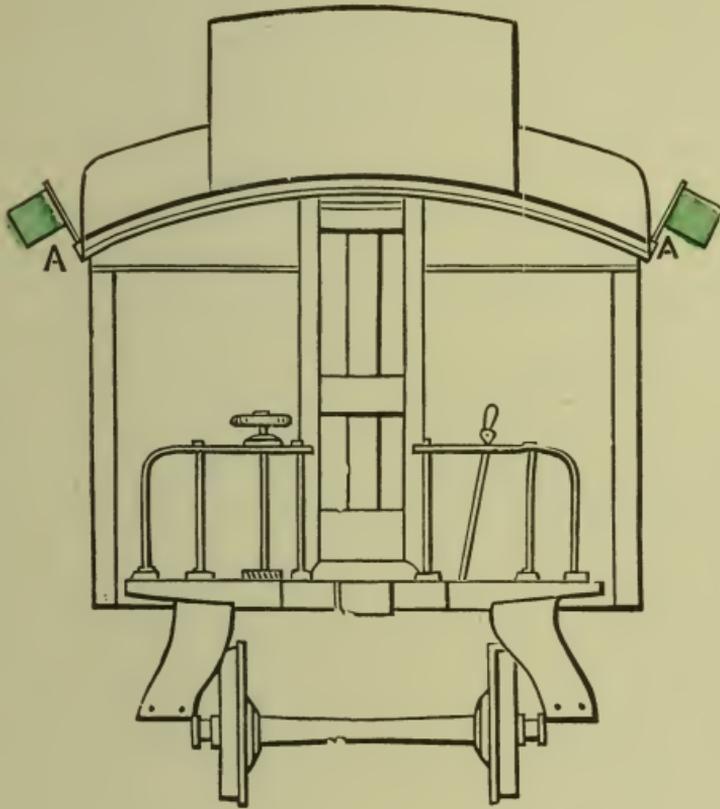
AMERICAN RAILWAY ASSOCIATION.

APPROVED JULY 15, 1889.

Amended April 8, 1891.

NOTE.—Lamps with four illuminated colored faces are represented in the following diagrams.

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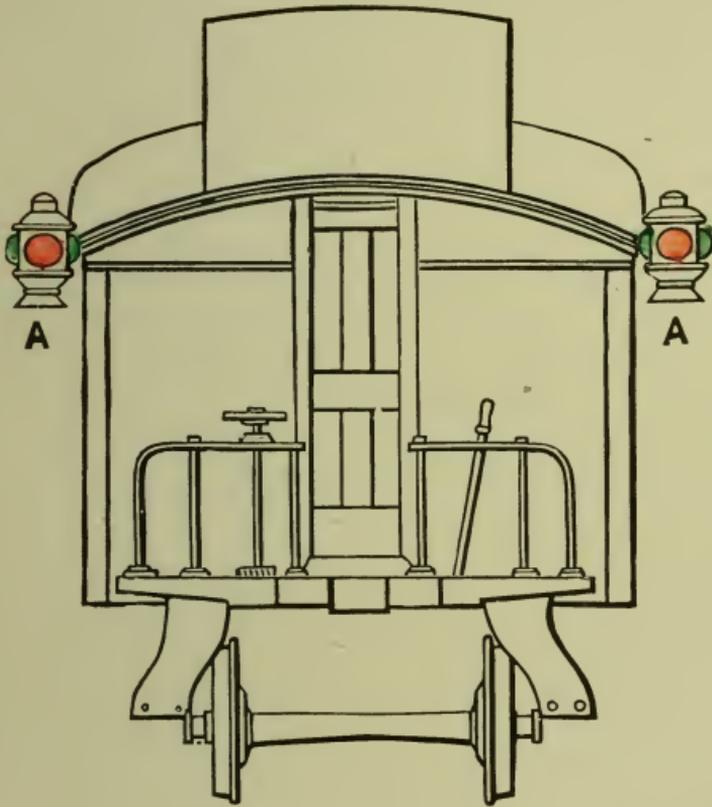


REAR OF TRAIN BY DAY.

Green flags at A A, as markers, to indicate rear of train.

See Rule 333.

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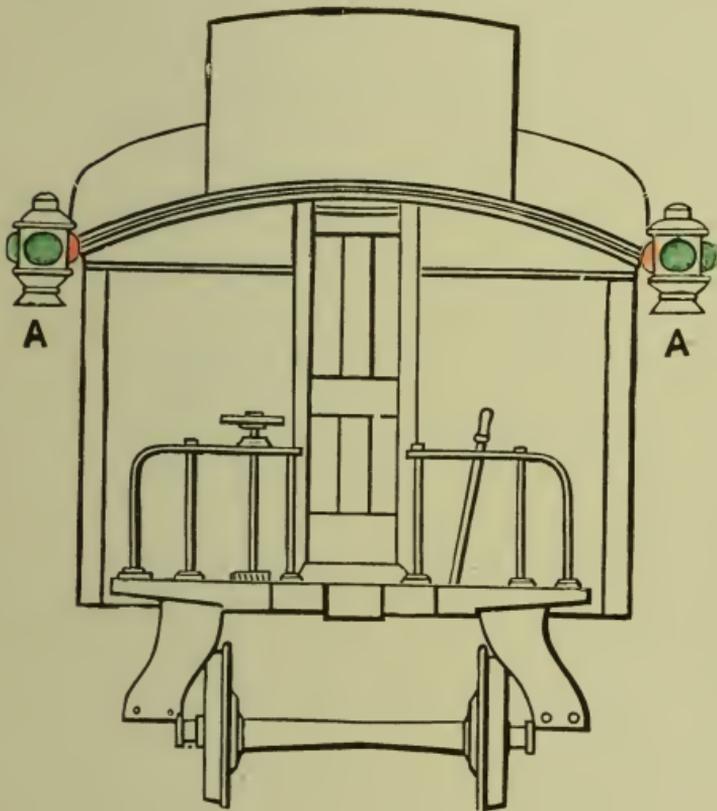
REAR OF TRAIN BY NIGHT WHILE RUNNING.

Combination lights at A A, showing Green toward engine and at side as markers, and Red to rear.

See Rules 333 and 334.

NOTE.—Lamps with four illuminated colored faces are represented in this and the following diagrams.

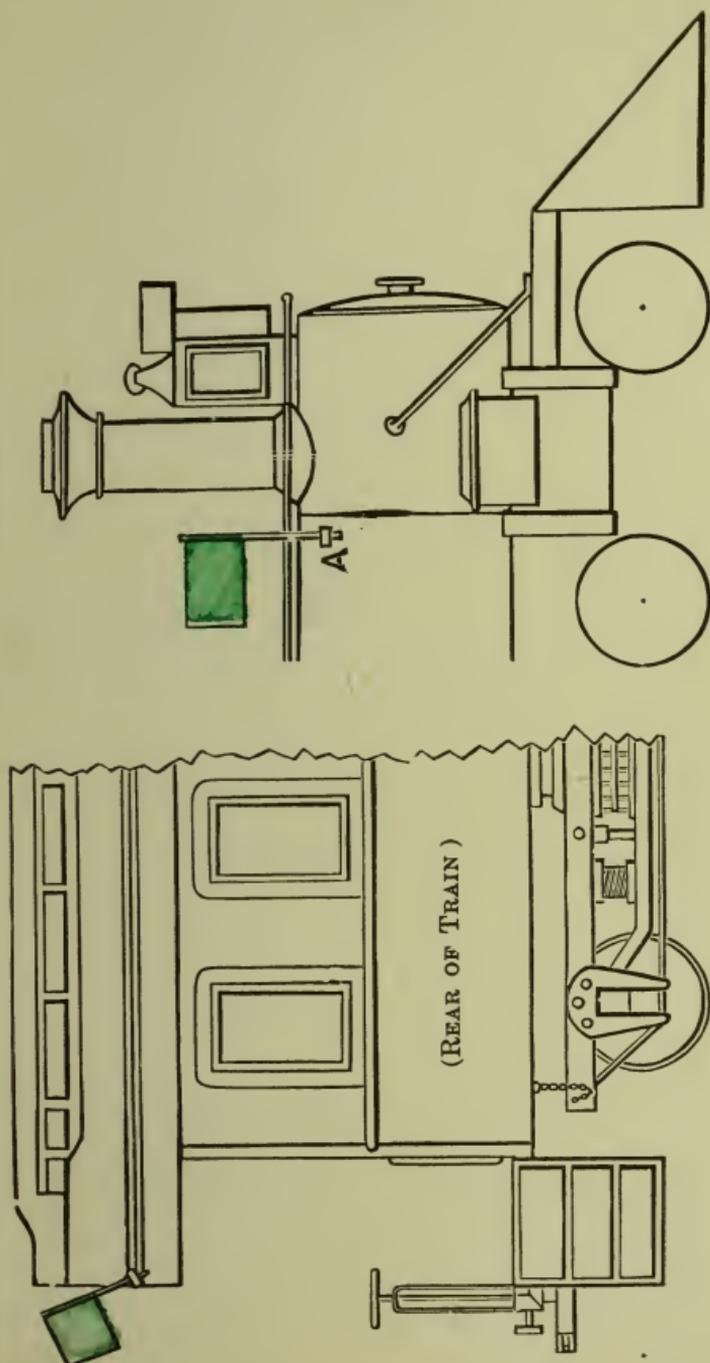
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REAR OF TRAIN BY NIGHT WHEN ON SIDING.

Green lights at A A. See Rule 374.

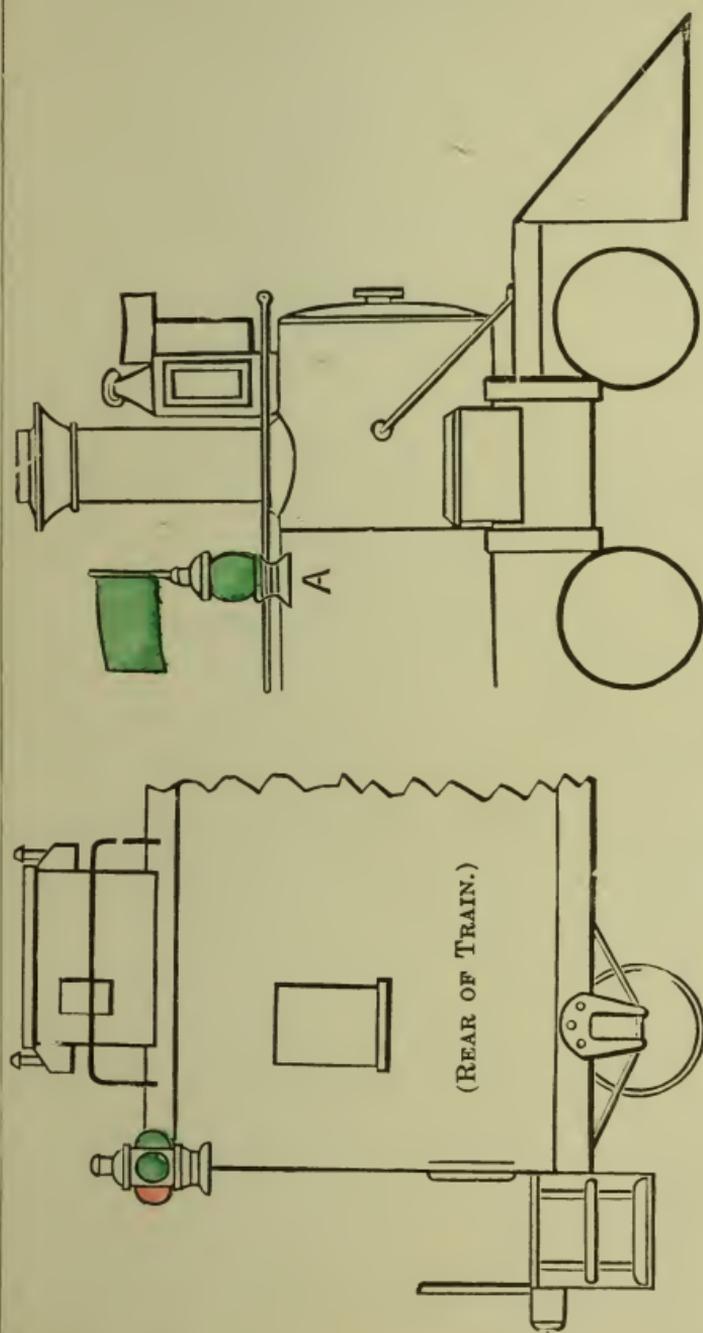
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LOCOMOTIVE RUNNING FORWARD BY DAY CARRYING SIGNALS FOR FOLLOWING TRAIN.

Rule.—Green flag at A as provided by Rule 336.

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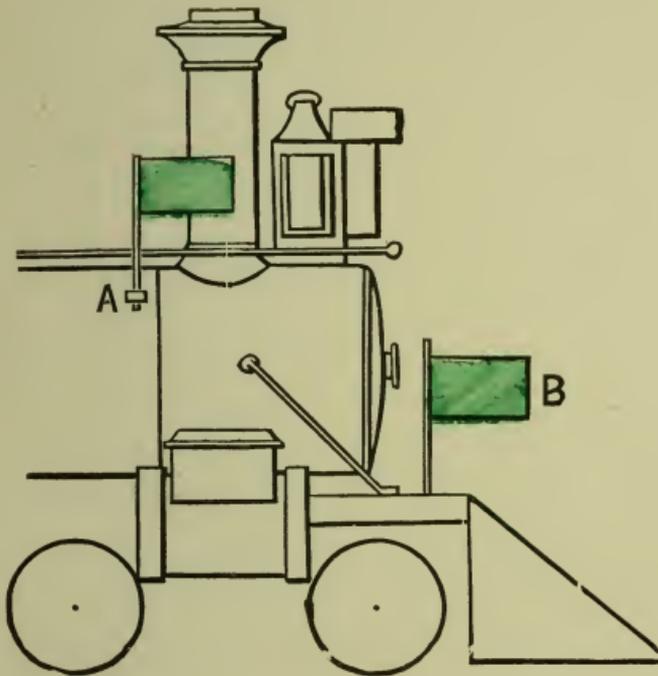


LOCOMOTIVE RUNNING FORWARD BY NIGHT CARRYING SIGNALS FOR FOLLOWING TRAIN.

Rule.—Green light and green flag at A as provided by Rule 336.

NOTE.—The diagram is intended to indicate the general location of the flag at A, not the method of attaching the staff.

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**LOCOMOTIVE RUNNING BACKWARD BY DAY WITHOUT
CARS, OR PUSHING CARS, AND CARRYING
SIGNALS FOR FOLLOWING TRAIN.**

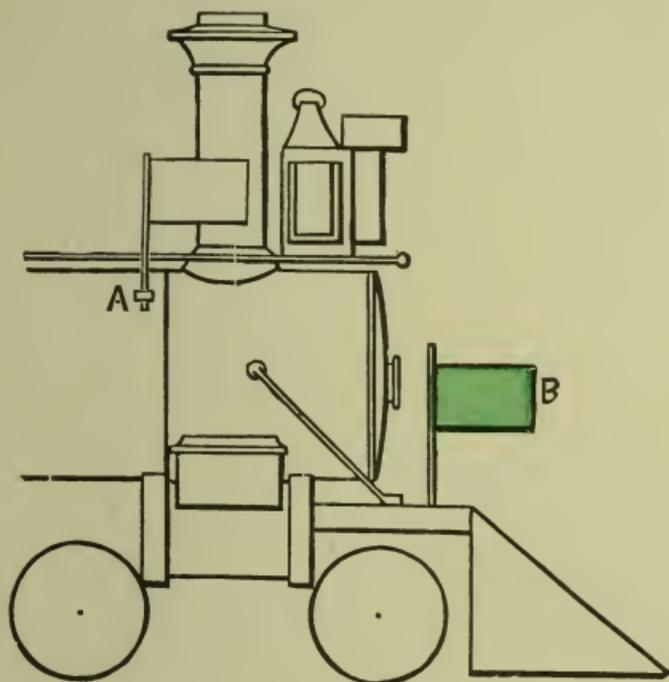
Rule.—Green flags at A and B.

Green flag at A as provided by Rule 336.

Green flag at B as marker.

See Rules 333 and 336.

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**LOCOMOTIVE RUNNING BACKWARD BY DAY WITHOUT
CARS, OR PUSHING CARS, AND RUNNING EXTRA.**

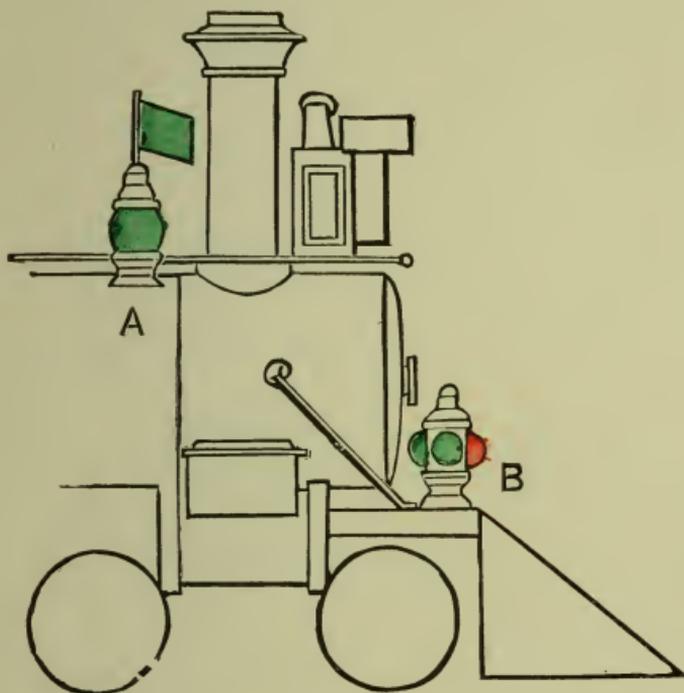
Rule.—White flag at A and green flag at B.

White flag at A as provided by Rule 337.

Green flag at B as marker.

See Rules 333 and 337.

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LOCOMOTIVE RUNNING BACKWARD BY NIGHT WITHOUT CARS, OR PUSHING CARS, AND CARRYING SIGNALS FOR FOLLOWING TRAIN.

Rule.—Green light and green flag at A and combination light at B.

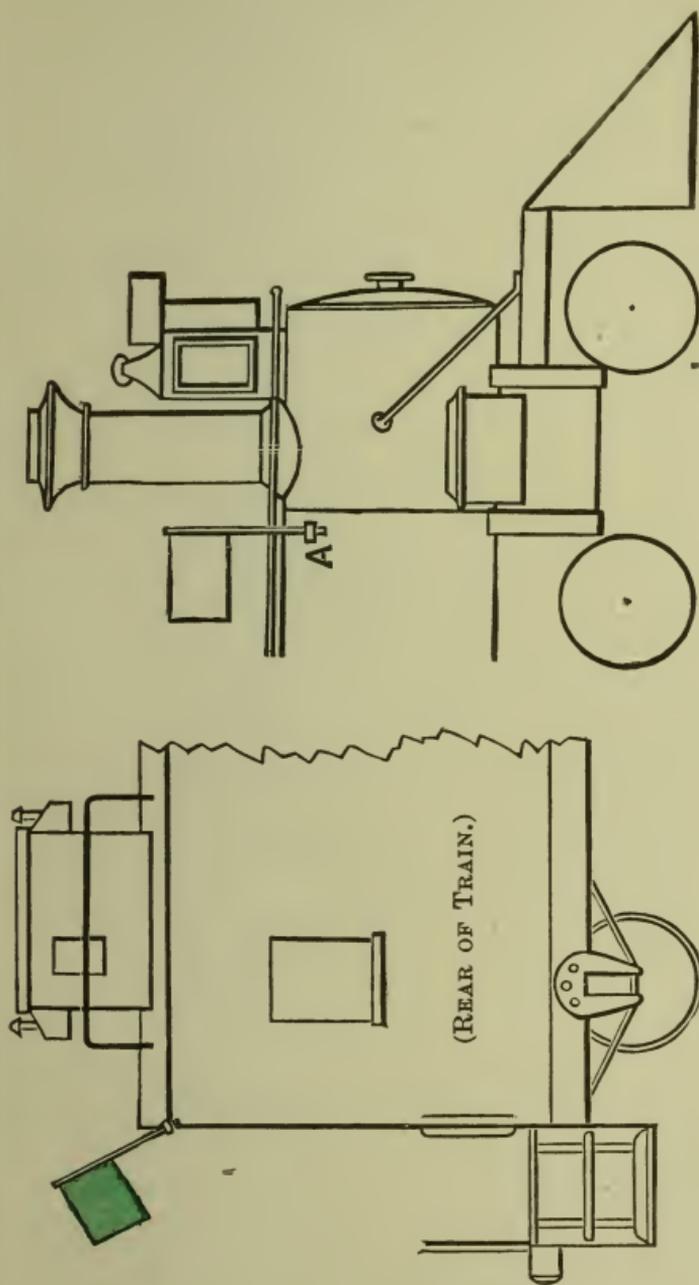
Green light and green flag at A as provided by Rule 336.

Combination light at B showing Green on side and in direction engine is moving, as marker, and Red in opposite direction.

See Rules 333, 334 and 336.

NOTE.—The diagram is intended to indicate the general location of the flag at A, not the method of attaching the staff.

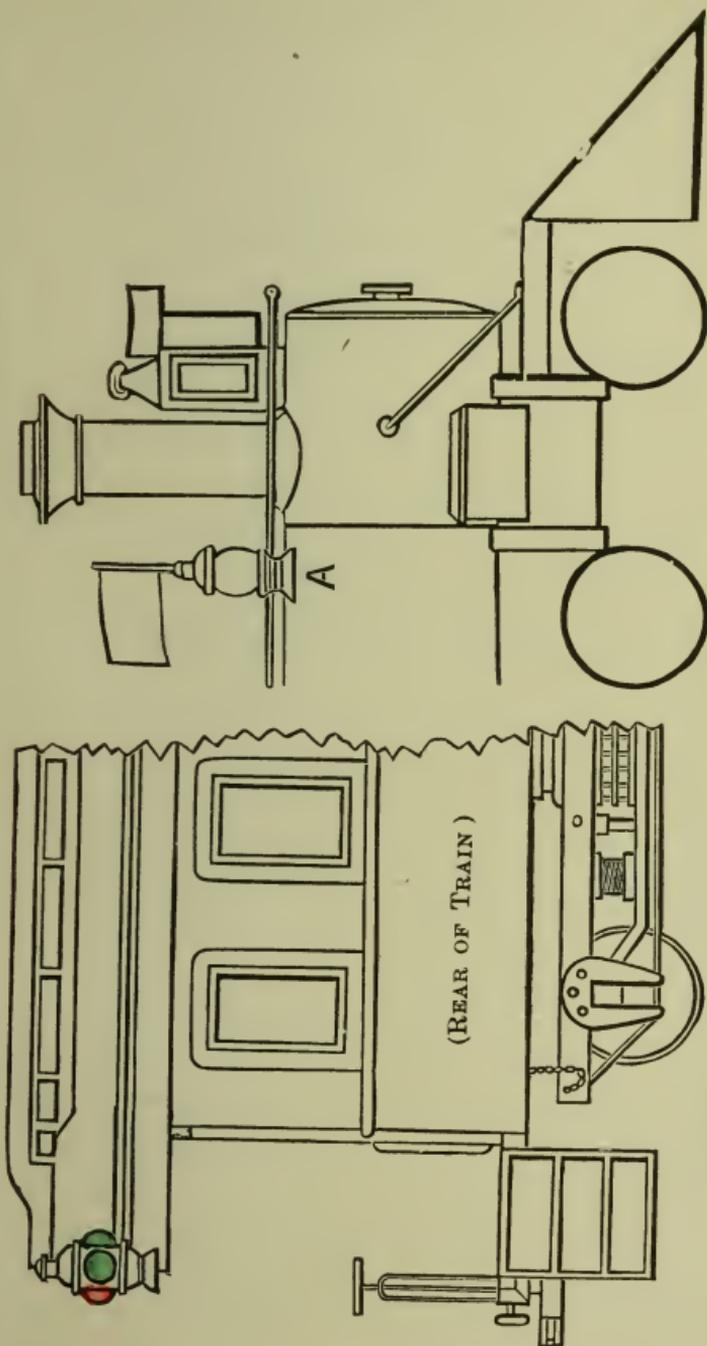
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LOCOMOTIVE RUNNING FORWARD BY DAY AND RUNNING EXTRA.

Rule.—White flag at A as provided by Rule 337.

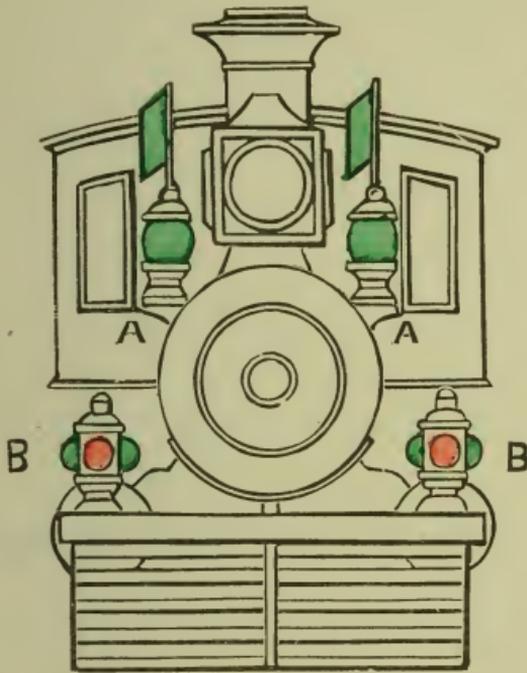
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LOCOMOTIVE RUNNING FORWARD BY NIGHT AND RUNNING EXTRA.

Rule.—White light and white flag at A as provided by Rule 337.
 NOTE.—The diagram is intended to indicate the general location of the flag at A, not the method of attaching the staff.

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LOCOMOTIVE RUNNING BACKWARD BY NIGHT WITHOUT CARS, OR PUSHING CARS, AND CARRYING SIGNALS FOR FOLLOWING TRAIN.

Rule.—Green lights and green flags at A A. Combination lights at B B, showing Green on side and in direction engine is moving, and Red in opposite direction.

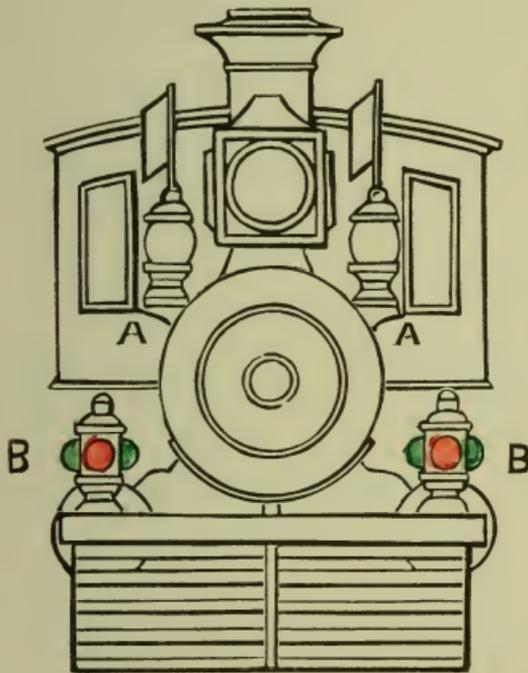
Green lights and green flags at A A as provided by Rule 336.

Combination lights at B B showing Green as provided by Rule 333 and Red as provided by Rule 334.

See Rules 333, 334 and 336.

NOTE.—The diagram is intended to indicate the general location of the flags at A A, not the method of attaching the staff.

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LOCOMOTIVE RUNNING BACKWARD BY NIGHT WITHOUT CARS, OR PUSHING CARS, AND RUNNING EXTRA.

Rule.—White lights and white flags at A A. Combination at B B, showing Green on side and in direction engine is moving, as markers, and Red in opposite direction.

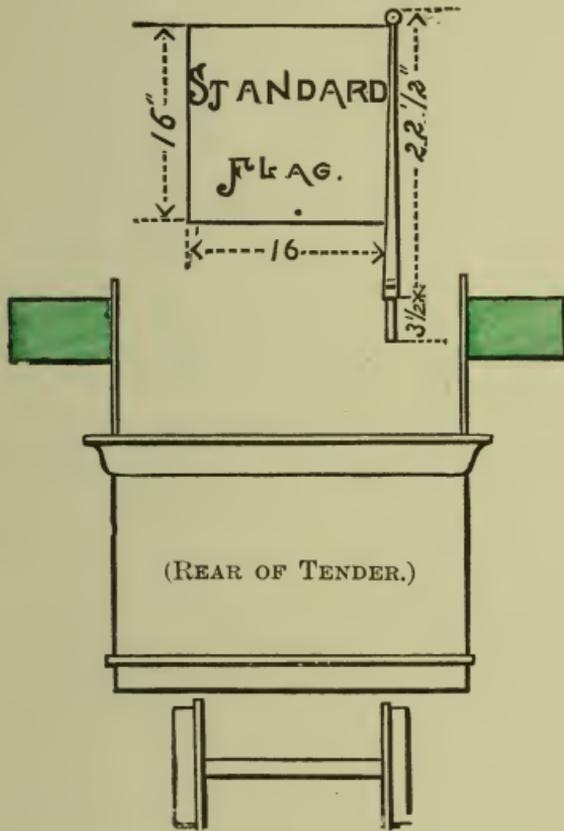
White lights and white flags at A A as provided by Rule 337.

Combination lights at B B showing Green as provided by Rule 333, and Red as provided by Rule 334.

See Rules 333, 334 and 337.

NOTE.—The diagram is intended to indicate the general location of the flags at A A, not the method of attaching staff.

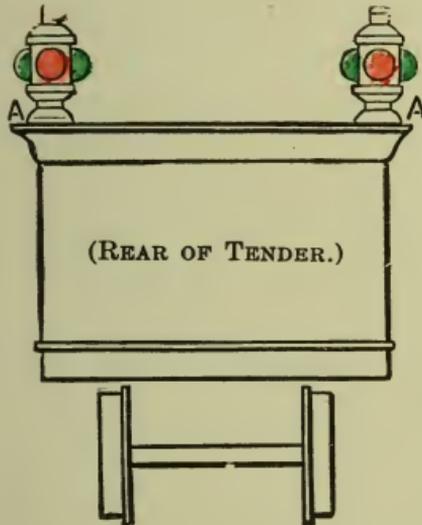
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LOCOMOTIVE RUNNING FORWARD BY DAY
WITHOUT CARS.

Rule.—Green flags by day, as markers. See Rule 333.

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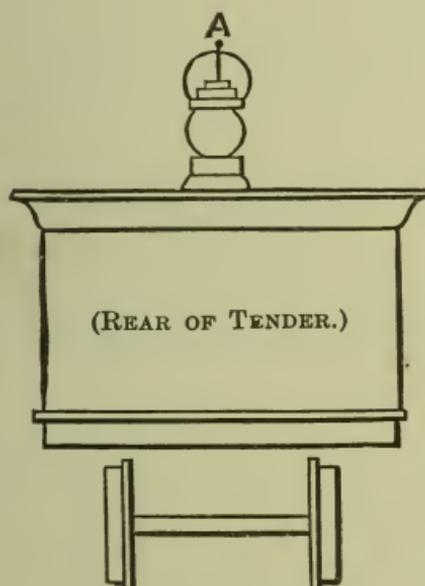


**LOCOMOTIVE RUNNING FORWARD BY NIGHT
WITHOUT CARS.**

Rule.—Combination lights at A A, showing Green as provided by Rule 333, and Red as provided by Rule 334.

See Rules 333 and 334.

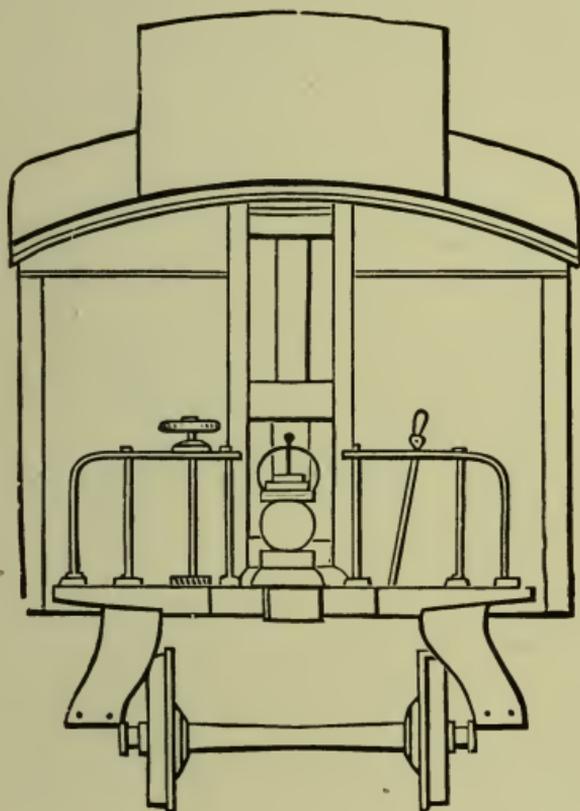
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LOCOMOTIVE RUNNING BACKWARD BY NIGHT.

Rule.—White light at A. See Rule 373.

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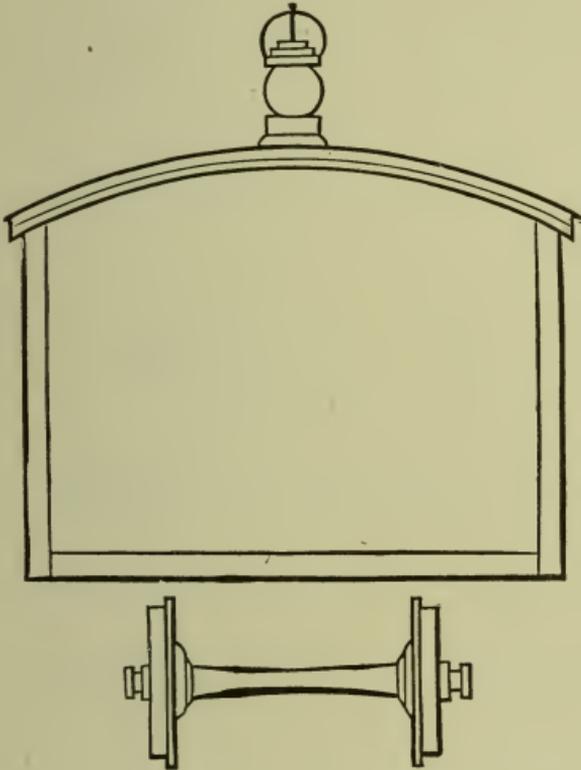


**PASSENGER TRAIN BEING PUSHED BY AN ENGINE
BY NIGHT.**

Rule.—White light on front of leading car.

See Rule 373; also Rule 404.

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**FREIGHT TRAIN BEING PUSHED BY AN ENGINE
BY NIGHT.**

Rule.—White light on front of leading car.

See Rule*373; also Rule 404.

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BLOCK SIGNAL RULES.

DEFINITIONS

AND

REQUISITES OF INSTALLATION.

BLOCK SIGNALING.

DEFINITIONS.

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

2. **BLOCK STATION.**—An office from which block signals are operated.

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

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

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

6. **ADVANCE BLOCK SIGNAL.**—A fixed signal placed in advance of a home block signal to provide a supplemental block between the home block signal and the advance block signal.

7. **BLOCK SYSTEM.**—A series of consecutive blocks controlled by block signals.

8. **TELEGRAPH BLOCK SYSTEM.**—One in which the signals are operated manually upon telegraphic information.

9. **CONTROLLED MANUAL BLOCK SYSTEM.**—One in which the signals are operated manually, and by its construction requiring the co-operation of the signalmen at both ends of the block to display a clear signal.

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

TELEGRAPH BLOCK SYSTEM.

REQUISITES OF INSTALLATION

AND

RULES.

TELEGRAPH BLOCK SYSTEM.

A series of consecutive blocks, controlled by block signals operated manually upon telegraphic information.

THE REQUISITES OF INSTALLATION ARE :

1. The normal indication of Home (and Advance) block signals—**Stop** ; (of distant block signals—**Caution**) :
2. Failure of any part directly controlling a signal to cause it to give the normal indication :
3. Signals of prescribed form, the indications given by not more than three positions ; and, in addition, at night by lights of prescribed color :
4. Where the semaphore is used, the arm displayed to the right of the signal mast, as seen from an approaching train :
5. The signals, either over, or upon the right of, and if practicable, adjoining the track upon which trains are governed by them. For less than three tracks, signals for trains in each direction may be on the same support :
6. The home block signals within view of the signalman operating them.

ADJUNCTS.

The following may be used, if desired :

- (A) Distant Block Signals interlocked with Home Block Signals.
- (B) Advance Block Signals interlocked with the Home Block Signal, and the Distant Block Signal if used.
- (C) Repeaters or Audible Signals, to indicate the position of signals to the signalman operating them.
- (D) The interlocking of telegraph keys and block signals.
- (E) The automatic return of the signal to the normal indication.
- (F) The interlocking of switches and block signals.
- (G) Bell circuits for signaling between a block station and outlying switches.

RULES FOR THE TELEGRAPH BLOCK SYSTEM.

501. The movement of trains is regulated by block signals between limits designated by —.

502. SIGNALS.

SIGNAL.	OCCASION FOR USE.	INDICATION.	NAME.
Color.	The signal will be displayed when	For enginemen and trainmen.	As used in rules.
(a) Red.	Block is not clear.	Stop.	Stop signal.
(b) —.	Block is clear.	Proceed.	Clear signal.
(c) —.	Block is not clear.	Proceed with caution.	Caution signal.

Where the semaphore is used, the governing arm is displayed to the right of the signal mast as seen from an approaching train, and the indications are given by positions :

Horizontal as the equivalent of (a).

Vertical or Diagonal —* as the equivalent of (b).

Diagonal —* as the equivalent of (c).

RULES FOR SIGNALMEN.

503. A register is required at each block station.

504a. Upon the approach of a train to a block station the signal indications shall be given in accordance with Rule 502.

When a train enters a block the signalman will report it to the signalman in advance, and when the rear of a train has passed — feet within the block, and he has seen the “markers,” he will give the required signal

Rules 501 to 539. See Note on page 206.

Rule 502. * Angle above or below the horizontal.

Rule 504a. See Note on page 206.

indication, and report to the signalman in the rear that the train is clear of the block.

504*b*. When notice is received of an approaching train the signalman receiving it will notify the signalman in advance ascertain if the block is clear and the "Stop signal" displayed, and after arranging with the signalman in advance to hold the block for —, admit the train to the block.

When a train enters a block the signalman will report it to the signalman in advance, and when the rear of a train has passed — feet within the block and he has seen the "markers," he will give the required signal indication, and report to the signalman in the rear that the train is clear of the block.

505. Should a train pass a block station without "markers," the signalman will notify the signalman at the block station on each side of him, and will not report the block clear until the signalman in advance has notified him that the train is complete.

506. Should a train pass a block station in two or more parts, the signalman must notify the signalman at the block station in advance. A signalman having received this notice must stop any train running in the opposite direction. He must not give the stop signal to the engineman of the divided train if the block in advance is clear, but must give the "Train parted" signal (see Train Rules 362 and 363). Should any train going in the opposite direction be stopped, it may be allowed to proceed when it is known that its track is not obstructed.

507. When it is necessary to allow more than one train in a block, the signalman will :

Issue "Caution card," Form — (B).

or

Give "Caution signal."

But a train shall not be allowed to enter a block occupied by a passenger train, except as provided in Rule 511 or by special order.

508. If necessary, while it is passing a block station, to stop a train for which a "Clear signal" (or a "Caution signal") has been given, the signalman will give hand signals in addition to displaying the "Stop signal," and will give the conductor the reason for the change.

509. A signalman having orders for a train shall display the block signals at "Stop" and in addition display —. The signalman may allow trains so stopped to proceed under block signal rules after having given them clearance cards or orders as per Train Rules.

510. A signalman informed of any obstruction in a block will notify the signalman at the other end of that block. The "Clear signal" must not be given until the obstruction is removed.

511. If from failure of telegraph line or other cause, a signalman be unable to communicate with the next block station, he will stop trains moving in that direction, give to each written notice of the trouble, and then allow them to proceed under — with — minutes interval, until communication is restored.

512. Lights must be used upon the block signals from one hour before sunset until one hour after sunrise, and whenever the signal indications cannot be clearly seen without them.

513. Signalmen must have the proper appliances for hand signaling ready for immediate use. These must be used when the proper indication cannot be given by a fixed signal.

514. Block stations must not be closed without permission of the ———, nor until the signalman at the next open block station on each side is notified and the notice acknowledged.

RULES FOR ENGINEMEN AND TRAINMEN.

531. Block signals, unless otherwise provided, do not affect the rights of trains under the time-table or train rules.

532. Block signals do not dispense with the use or the observance of other signals whenever or wherever they may be required.

533. Trains may pass a block signal which displays either

A "Clear signal," or

A "Caution signal," or

A "Stop signal" upon receiving a "Caution card, Form—(B).

FORM — (B).

LONDON AND PARIS RAILWAY COMPANY.

CAUTION CARD.

Block Station.....;M.,189 .

To ENGINEMAN, train No..... on track.

Block is not clear. You may proceed with caution expecting to find track obstructed.

..... *Signalman.*

Enginemen receiving this card properly filled out and signed by the signalman, may proceed with the train under control prepared to stop short of any obstruction in the block.

[PRINT NAME.]

..... *Superintendent.*

534. An engineman holding a notice, as per Rule 511, will deliver it to the signalman at the next block station and personally ascertain from him whether the block in advance is clear before proceeding.

535. The engineman of a train which has parted will, on approaching a block station, notify the signalman by sounding the whistle signal for "Train parted."

536. An engineman receiving a "Train parted" signal from a signalman will answer by the whistle signal for "Train parted." When the train has been re-coupled the signalman shall be notified.

537. At a block station where, because the signalman is absent or incapacitated, instructions cannot be obtained, trains shall wait — minutes and then proceed with caution, the conductor reporting accordingly to the ———— from the next block station.

538. If the track be obstructed between block stations notice shall be given to the nearest block signalman.

539. When a block station is closed, except as provided on time-table or by special instructions, notice will be given by ————.

CONTROLLED MANUAL
BLOCK SYSTEM.

REQUISITES OF INSTALLATION

AND

RULES.

CONTROLLED MANUAL BLOCK SYSTEM.

A series of consecutive blocks controlled by block signals operated manually, and which by its construction requires the co-operation of the signalmen at both ends of the block to display a clear signal.

THE REQUISITES OF INSTALLATION ARE :

1. The normal indication of Home (and Advance) block signals, — **Stop**; (of distant block signals, — **Caution**):
2. Failure of any part directly controlling a signal to cause it to give the normal indication :
3. Failure of the block signal instruments or electric circuits to prevent the display of a clear signal :
4. Signals of prescribed form, the indications given by two positions; and, in addition, at night, by lights of prescribed color :
5. Where the semaphore is used the arm displayed to the right of the signal mast as seen from an approaching train :
6. The signals either over, or upon the right of, and, if practicable, adjoining the track upon which trains are governed by them. For less than three tracks, signals for trains in each direction may be on the same support :
7. The relative position of the home signal and track instrument or releasing circuit, such as to make it necessary that the rear of a train shall have passed — feet beyond the home block signal before the signal at the preceding block station can be released :
8. When signals controlling a block also indicate the position of main track switches, all such switches must be locked for the main track before a clear signal can be given :

ADJUNCTS.

The following may be used, if desired :

(A) Distant Block Signals interlocked with Home Block Signals.

(B) Advance Block Signals interlocked with the Home Block Signal, and the Distant Block Signal, if used.

(C) Repeaters or audible signals to indicate the position of signals to the signalman operating them.

(D) Track circuits.

(E) The automatic return of the signal to the normal indication.

(F) The interlocking of switches and block signals.

(G) Bell circuits for signaling between a block station and outlying switches.

RULES FOR THE CONTROLLED MANUAL BLOCK SYSTEM.

601. The movement of trains is regulated by block signals between limits designated by ———.

602. HOME AND ADVANCE SIGNALS.

SIGNAL.	OCCASION FOR USE.	INDICATION.	NAME.
Color.	The signal will be displayed when	For enginemen and trainmen.	As used in rules.
(a) Red.	Block is not clear.	Stop.	Stop signal.
(b) ———.	Block is clear.	Proceed.	Clear signal.

Where the semaphore is used, the governing arm is displayed to the right of the signal mast as seen from an approaching train, and the indications are given by positions :

Horizontal as the equivalent of (a).

Diagonal below as the equivalent of (b).

DISTANT SIGNALS.

SIGNAL.	OCCASION FOR USE.	INDICATION.	NAME.
(c) ———.	Home (or advance) signal at (a).	Proceed with caution to the home (or advance) signal.	Caution signal.
(d) ———.	Home (and advance) signal at (b).	Proceed.	Clear signal.

Where the semaphore is used, the governing arm is displayed to the right of the signal mast as seen from an approaching train, and the indications are given by positions :

Horizontal as the equivalent of (c).

Diagonal below as the equivalent of (d).

RULES FOR SIGNALMEN.

603. The normal indication of Home (and Advance) block signals is (*a*) as above; [of Distant block signals (*c*) as above.]

604. A register is required at each block station.

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

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

607. Bells must be rung deliberately and distinctly, and answered promptly. All signals must be repeated until answered.

608. The prescribed BELL SIGNALS are as follows:

2—All right. Yes.

3—Unlock my lever. Answer by unlocking, or 5, or 3-1.

4—Train has entered block.

5—Block is not clear.

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

1-2—Clear. Train has cleared block.

2-1—No.

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

3-1—Have unlocked. If levers are not released, instrument must be out of order. Block is clear. This signal must be answered by 3-1 and the answer acknowledged by 2. It must not be used unless the block is known to be clear. A signalman having received 3-1 and answered it by 3-1 and received 2 in acknowledgment, may allow train to proceed under Rule 617, announcing it by 4.

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

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

3-3-3-3-3-3—Train in block has broken apart. Answer by 3-3-3-3-3-3.

4-4-4—Cars running away in the wrong direction and proceeding toward you. Answer by 4-4-4.

4-6-4—Cars running away in the right direction and proceeding toward you. Answer by 4-6-4.

2-3-2—Train has passed without markers. This signal to be given to station in advance. Answer by 2-3-2.

5-2-5—Train has passed without markers. This signal to be given to station in rear. Answer by 5-2 5.

1-4-1-4—Stop train approaching and have it examined. Answer by 2.

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

2-4-2—Repeat previous signal.

6-6-6—Testing. Answer by 6-6-6.

1—(Long stroke.) Answer telegraph call.

When bell circuits for signaling between a block station and outlying switches are used, the following signals will be given and observed by conductors and signalmen :

1-2-3—Train has gone on siding. All clear. Switch closed. Answer by 1-2-3.

3-4—Train is ready to leave siding. Answer by 3-4, or 5. Conductor when ready to go will give 3-4, and will not start his train until 3-4 has been given in reply, and this must not be given by the signalman unless the block is clear.

609. To receive and forward a train, the block being clear, and signals giving the normal indication :

In answer to 3 from the block station in the rear, unlock by closing the circuit, holding it closed until acknowledged.

In answer to 4 from the block station in the rear, give 2, then give the block station in advance 3. If released, give 2 in acknowledgment, then clear the signals. When the train enters the block in advance, give 4 to the block station in advance. When the train has passed the home signal — feet give 1-2 to the station in the rear.

610. When a block signal has been cleared it must be restored to its normal indication as soon as the train for which it was cleared has passed it.

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

612. Signalmen must observe all passing trains and note whether they are complete and in order. Should there be any indication of conditions endangering a train, or a train on another track, the signal 1-4—1-4 must be given to the block station in advance and the signalman must display stop signals, in both directions, and then answer 1-4—1-4. Should a train going in the opposite direction be stopped, it may be allowed to proceed when it is known that the track on which it is running is not obstructed. When practicable, the signalman giving 1-4—1-4 must inform the signalman at the other end of the block why the signal was given.

613. Should a train pass a block station without "markers," the signalman must not report the block clear, but will give 2-3-2 to the block station in advance and 5-2-5 to the block station in the rear, and not unlock the block station in the rear until the signalman in advance has reported that the train is complete.

614. Should a train pass a block station in two or more parts, the signal 3-3-3—3-3-3 must be given to the block station in advance. A signalman receiving

this signal must stop any train running in the opposite direction. He must not give the "Stop signal" to the engineman of the divided train if the block in advance is clear, but must give the "Train parted" signal (see Train Rules 362 and 363). Should any train going in the opposite direction be stopped, it may be allowed to proceed when it is known that its track is not obstructed.

615. Should cars run away in the wrong direction, the signal 4-4-4 must be given to the next block station toward which they are running. Should cars run away in the right direction, the signal 4-6-4 must be given to the block station in advance. Signalmen receiving either of these signals must take such measures for the protection of trains as may be practicable.

616. A signalman receiving notice of any obstruction in a block must display stop signals and give 5-5-5 to the signalman at the other end of that block. A signalman receiving 5-5-5 must immediately display stop signals and then answer by 5-5-5. The "Clear signal" must not be given until the obstruction is removed.

617*a*. In case of the failure of block signal instruments, or circuits, or when the block signal cannot be changed from the normal indication, a signalman having information from the signalman at the block station in advance that the block is clear may admit a train to the block by giving hand or lamp signals from an open side window of the block station in the direction of the approaching train.

617*b*. In case of the failure of block signal instruments, or circuits, or when the block signal cannot be changed from the normal indication, a signalman having information from the signalman at the block station, in advance that the block is clear, may admit a train to the block by the use of Clearance Card, Form— (C).

FORM — (C).

LONDON AND PARIS RAILWAY COMPANY.**CLEARANCE CARD.**

.....BLOCK STATION,, 189 ,M

TO ENGINEMAN :

Train No. on track. Signal cannot be cleared ; proceed.

....., *Signalman.*

This card must be used only in case of failure of block signals, and when block has been duly reported clear by the signalman at the block station in advance. The engine-man receiving it duly dated, timed, and signed, may proceed.

[PRINT NAME.]

.....*Superintendent.*

618. When a train is admitted to a block as provided in Rule 617, both signalmen must use every precaution to prevent a second train from entering the block until the first train has cleared the block.

619. In case of the failure of bell circuits and telegraph line, signalmen must stop every approaching train and notify the conductor and engine-man, using the blank provided for that purpose, Form — (D). Should no cause for detaining the train be known, it may then be allowed to proceed, provided — minutes have elapsed since the passage of the last preceding train.

FORM — (D).

LONDON AND PARIS RAILWAY COMPANY.**CAUTION CARD.**

.....BLOCK STATION,189 ,M.

TO ENGINEMAN, train No.... on track.

Bell circuits and telegraph line have failed. You may proceed at.... M. with caution, expecting to find track obstructed.

.....*Signalman.*

Engine-men receiving this card properly filled out and signed by the signalman, may proceed with the train under control prepared to stop short of any obstruction in the block.

[PRINT NAME.]

.....*Superintendent.*

620. A second train must not be admitted to any block until the first has cleared the block, except as provided in Rule 619.

621. A signalman, after having unlocked the block station in the rear or given 3-1, will not permit train or switching movements that will endanger an approaching train.

622. When, as provided for in Rule 647, coupled trains have been separated, the signalman must regard each portion as an independent train.

623. If necessary, while it is passing a block station, to stop a train for which a "Clear signal" has been given, the signalman will give hand signals in addition to displaying the "Stop signal," and will give the conductor the reason for the change.

624. A signalman having orders for a train shall display the block signal at "Stop," and in addition display —. The signalman may allow trains so stopped to proceed under block signal rules after having given them clearance cards or orders as per Train Rules.

625. Lights must be used upon the block signals from one hour before sunset until one hour after sunrise, and whenever the signal indications cannot be clearly seen without them.

626. Signalmen must have the proper appliances for hand signaling and keep them ready for immediate use. Stop signals must be given by them when that indication cannot be given by a fixed signal.

627. Block stations must not be closed without permission of ————, nor until the signalman at the next open block station on each side is notified and the notice acknowledged.

RULES FOR ENGINEMEN AND TRAINMEN.

641. Block signals, unless otherwise provided, do not affect the rights of trains under the time-table or train rules.

642. Block signals do not dispense with the use or the observance of other signals whenever or wherever they may be required.

643. Block signals apply only to trains running in the established direction, not to trains moving in the opposite direction.

644. Either a red flag or red light displayed from the side window of a block station, or either a flag or light swung in the same direction as across the track signifies stop.

645*a*. Hand signals given from an open side window of a block station in the direction of approaching trains, overrule the indication of the block signal.

A — flag by day and a — light by night, raised and lowered vertically, signifies "caution," and gives a train the right to run through the block under control, prepared to stop short of any obstruction that may be found within the block.

Enginemen receiving this signal must acknowledge it by two short followed by one short blast of the whistle.

A — flag by day and a — light by night, raised and lowered vertically, signifies that the block is clear, and the train may proceed.

Enginemen receiving this signal must acknowledge it by two short blasts of the whistle.

645*b*. An engineman holding a Clearance card, Form — (C), may pass the block signal indicating "stop," and proceed as directed by the card.

646. An engineman holding a Caution card (Form — D), may pass the block signal indicating “stop,” and proceed as directed by the card, and will deliver it to the signalman at the next block station and personally ascertain from him that the block in advance is clear before proceeding.

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

648. The engineman of a train which has parted will, on approaching a block station, notify the signalman by sounding the whistle signal for “Train parted.”

649. An engineman receiving a “Train parted” signal from a signalman will answer by the whistle signal for “Train parted.” When the train has been re-coupled the signalman shall be notified.

650. At a block station where, because the signalman is absent or incapacitated, instructions cannot be obtained, trains shall wait — minutes and then proceed with caution, the conductor reporting accordingly to the ———— from the next block station.

651. If the track be obstructed between block stations notice must be given to the nearest block signalman.

652. When a block station is closed, except as provided on time-table or by special instructions, notice will be given by ————.

AUTOMATIC BLOCK SYSTEM.

REQUISITES OF INSTALLATION

AND

RULES.

AUTOMATIC BLOCK SYSTEM.

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

THE REQUISITES OF INSTALLATION ARE :

1. That the failure of any part controlling a signal shall cause the Home block signal to indicate—**Stop** ; (Distant block signal—**Caution**) :

2. Signals of prescribed form, the indications given by two positions ; and, in addition, at night by lights of prescribed color :

3. Where the semaphore is used, the arm displayed to the right of the signal mast, as seen from an approaching train :

4. The signals, either over, or upon the right of, and if practicable, adjoining the track upon which trains are governed by them. For less than three tracks, signals for trains in each direction may be on the same support :

5. All switches in the main track so connected with the block signals that the block signal back of the switch will display a "Stop signal" when the switch is not set for the main track :

6. The signal connections and operating mechanism so arranged that a Home block signal for an unoccupied block, shall display a "Stop signal" after the head of a train shall have passed it :

ADJUNCTS.

The following may be used, if desired :

(A) Distant Block Signals in circuit with corresponding Home Block Signals.

(B) Track Circuits.

(C) Indicators at main track switches.

RULES FOR THE AUTOMATIC BLOCK SYSTEM.

701. The movement of trains is regulated by block signals between limits designated by _____.

702. HOME SIGNALS.

SIGNAL.	OCCASION FOR USE.	INDICATION.	NAME.
Color.	The signal will appear when	For enginemen and trainmen.	As used in rules.
(a) Red.	Block is not clear.	Stop.	Stop signal.
(b) —.	Block is clear.	Proceed.	Clear signal.

Where the semaphore is used the governing arm is displayed to the right of the signal mast as seen from an approaching train, and the indications are given by positions:

Horizontal as the equivalent of (a).

Diagonal —* as the equivalent of (b).

Where a single disc is used for two indications these are given by position of a “—†” disc as seen from an approaching train:

Disc displayed as the equivalent of (a).

Disc withdrawn as the equivalent of (b).

DISTANT SIGNALS.

SIGNAL.	OCCASION FOR USE.	INDICATION.	NAME.
Color.	The signal will appear when	For enginemen and trainmen.	As used in rules.
(c) —.	Home signal is at (a) or track obstructed between Distant and Home signal.	Proceed with caution to the home signal.	Caution signal.
(d) —.	Home signal is at (b).	Proceed.	Clear signal.

Where the semaphore is used, the governing arm is displayed to the right of the signal mast as seen from an approaching train, and the indications are given by positions:

Horizontal as the equivalent of (c).

Diagonal —* as the equivalent of (d).

Where a single disc is used for two indications these are given by position of a “ — † ” disc as seen from an approaching train:

Disc displayed as the equivalent of (c).

Disc withdrawn as the equivalent of (d).

703. Block Signals, unless otherwise provided, do not affect the rights of trains under the time-table or train rules.

704. Block Signals do not dispense with the use or the observance of other signals whenever or wherever they may be required.

705. Block Signals apply to the trains in the established direction, not to trains in the opposite direction.

706. When a train is stopped by a block signal it may proceed:

When the signal is cleared, or

After waiting — minutes and then running under caution, or

Preceded by a flagman to the next clear signal.

707. When a signal is out of service the fact will be indicated by ————.

Trains finding a signal out of service will, unless otherwise directed, proceed with caution to the next signal.

NOTICE.

SPECIAL ATTENTION is called to the following recommendatory and explanatory notes adopted by the Committee on Train Rules. Also to the Decisions of the Committee on various points under the Train Rules.

EXPLANATORY NOTES

ADOPTED BY THE

COMMITTEE ON TRAIN RULES.

For Rule 304.

[NOTE.—The blank in the above rule may be filled for each road to suit its own organization or requirements.]

(Rule 304 omitted. See foot note page 163.)

For Rule 313.

[NOTE.—In order to detect possible errors at junction points and to secure uniformity, the Committee recommends that the time be disseminated to all points at the same hour. They consider it of great importance that the time be obtained from some observatory of recognized standing.]

For Rule 316.

[NOTE.—Where this system of examining watches has been adopted, the result of the examination has developed the fact that a large percentage of the watches previously in use were unfit to run trains by.]

For Rule 320 (A), (B), (C).

[NOTE.—The Committee has recommended three forms of Rule 320, leaving it discretionary with each road to adopt any one of these, as best suits its own requirements.]

For Rule 321.

[NOTE.—The Committee recommends that each company adopt such method as it may prefer in filling the above blank as to the manner of calling attention to such meeting or passing points.]

For Rule 322.

[NOTE.—The Committee recommends that odd numbers shall be given to West or South-bound trains, and even numbers to East or North-bound trains.]

For Rule 337.

[NOTE.—The Committee finds on investigation that the combined green and white signal denoting an irregular train following, as suggested by the "Committee on Uniform Train Signals" in its report of October 11, 1883, and adopted by the Convention of October 9, 1884, is unsatisfactory and is used by a very

limited number of roads. As your Committee has found it impracticable to suggest any combination of signals, sufficiently distinct from other signals, they do not recommend the carrying of any signal denoting an irregular train following, and have therefore omitted the signal from the Rules.]

The note for Rule 337 was omitted in the revision of April 18, 1895.

For Rule 348.

[NOTE.—In order to avoid duplicating signals the Committee has recommended that the above named signal be substituted for the three short blasts now used, with which much dissatisfaction has been expressed. In the opinion of some of the Committee this rule is unnecessary.]

This note for Rule 348 was omitted in the revision of April 18, 1895.

For Rule 376.

[NOTE.—In connection with the subject of signals the Committee recommends that no cross-arms or telegraph poles placed along the lines shall be permitted to be painted red or green.]

For Rule 384.

[NOTE.—It being represented to the Committee that some of the roads represented in the Convention will be unable, on account of limited telegraph facilities, and other local causes, to carry out this rule in its literal meaning and full scope, it is suggested by the Committee that such roads may issue regulations to arrange this matter in some other way. The Committee believe, however, that a test of the rule, as approved by the Committee, and its literal enforcement, will result to the entire satisfaction of those using it.]

This note to Rule 384 was omitted in the revision of April 18, 1895.

For Rule 385.

[See note under Rule 386.]

For Rule 386.

[NOTE ON RULES NOS. 385 AND 386.—The Committee recommends, in case grades or other conditions are such that on any line or parts of line greater protection is necessary, Rule No. 385 should require a clearance of FIVE minutes, and Rule No. 386 of TEN minutes.]

For Rule 389.

[See note under Rule 390.]

For Rule 390.

[NOTE.—The Committee recommends, in case grades or other conditions are such that on any line or parts of a line greater protection is necessary, Rules Nos. 389 and 390 should allow a clearance of TEN minutes or more.]

For Rule 396.

[NOTE.—The Committee, on account of the existing great diversities of grades, amount of traffic and other local circumstances, have left blanks in Rule No. 396 for each company to fill out, after determining what times, if any, are necessary either for its road as a whole or for each division.]

This note, together with Rule 396, was omitted in the revision of April 18, 1895.

For Rule 397.

[NOTE.—The Committee, finding that the distances and times necessary for flagmen to go back differ so much on account of grades, amount of traffic and other local circumstances, have left blanks for each company to determine what distance and time is necessary, either for its road as a whole, or for each division.]

This note, together with Rule 397, was omitted in the revision of April 18, 1895.

For Rules 399, 400, 401 and 402.

[See note under Rule 397.] Omitted in revision of April 18, 1895.

For Rule 402.

[NOTE.—In regard to backing trains upon the main track or crossing over on double track to move in the wrong direction to avoid obstructions, the Committee believe that owing to the different conditions of the train service, etc., on the various roads, it is impossible to formulate a rule which can be generally adopted, and therefore recommend that each company issue such special instructions to cover this case as its circumstances may require.]

This note was omitted in the revision of April 18, 1895.

For Rule 403.

[NOTE.—The Committee, finding that the distances and times necessary for flagmen to go back differ so much on account of grades, amount of traffic and other local circumstances, have left blanks for each company to determine what distance and time is necessary, either for its road as a whole, or for each division.]

For Rule 450.

[NOTE.—On roads whose organization provides that any other officer than the Superintendent shall direct train movements, the official title of such officer may be substituted in the above rule. The Committee considers it essential, however, that but one person's signature should be used in directing train movements on any dispatching division.]

For Rule 454.

[See note under Rule 450.]

For Rule 457.

[NOTE.—On roads which desire the operator at a meeting point to have copies of the order, the several addresses will be, first, the operator at whose station the trains are to meet, and next in the order of superiority of the rights of trains.]

For Rule 459.

[NOTE.—The blank in the above rule may be filled for each road to suit its own requirements. On roads where the signature of the engineman is desired, the words "except enginemen," and the last sentence in the second paragraph may be omitted. See also note under Rule 450.]

[Individual operator's signals may be used when desired in addition to office signals, as here and elsewhere provided for.]

For Rule 460.

[NOTE.—On roads where the signature of the engineman and pilot is desired, the words "engineman and pilot" may be added after the word "conductor" in the first paragraph of Rule 460.]

For Rule 461.

[NOTE.—On roads where it is desired the signature of the conductors (or conductors, enginemen and pilots) may be taken by the operator on the delivery of the order. See also note under Rule 450. The Committee has recommended two forms of train orders,—the "31" order and the "19" order; leaving it discretionary with the roads to adopt one or both of these forms.]

For Rules 464 and 467.

[See note under Rule 450.]

For Rule 469.

[See note under Rule 460.]

For Rules 474 (A) and 474 (B).

[NOTE.—The Committee has recommended two forms of Rule 474, leaving it discretionary with the roads to adopt one or both of these forms according to the circumstances of their traffic.]

For Rule 475.

[See note under Rule 450.]

For Rule 476.

[NOTE.—In case any roads desire to state time in words as well as figures, the Committee sees no objection to their doing so.]

For Rule 477.

[See note under Rule 450.]

For Form H.

[NOTE.—The Committee has recommended two forms of orders for work train extras, leaving it discretionary with the roads to adopt one or both of the forms, according to the circumstances of the traffic on the different roads or different divisions of the same road.]

QUESTIONS

On Various Points under the Train Rules and Decisions of the Committee.

RULE 317.

“ We have seven branches on which one or more of the crews start in the morning from the end of the road, come to the junction point with the main line, and return to the end of the road in the afternoon. It is our intention to have standard clocks at the junction points, and I would be pleased to know if we would be conforming to the rule by having the men regulate their watches when they arrive at the junction point, or whether we should have a standard clock at the end of each of these branches. It strikes me it would be just as well to have the clocks at the junction points. The main line men would then have the benefit of them. We cannot afford to have the standard clocks at both places. We propose to have all standard clocks regulated by the clock in the train dispatcher’s office.”

The Committee decided that it would be entirely in conformity with the spirit of the rule to put standard clocks at the junction points, covering the same by special instructions.—*April 8, 1890.*

RULE 320.

The following question and example was submitted to the Committee :

“ *Example:* Train No. 1 under the old time-table leaves B at 10 00 a.m. The new time-table takes effect at 10 00 a.m., June 1st. On the new time-table No. 1 leaves B at 9 00 a.m. and C at 10 00 a.m. Does the new time-table provide for No. 1 between B and C on June 1st, or is the train annulled? If annulled, is it annulled only between B and C, or is it annulled from B to the end of the division? If not annulled, should No. 1 consider itself one hour late at B and govern itself accordingly?”

The Committee decided that, in such an instance, the plain duty of the Superintendent is to conform to Rule 302,* and issue special instructions to provide for such a contingency, as it can only affect the train for one day.—*October 13, 1891.*

* See Rule 2.

RULES 322, 328 AND 375.

Rule 322—"It is our intention to adopt this rule as far as passenger trains are concerned. I have looked over quite a number of time cards, and do not remember of a single instance where this rule is applied to freight trains. As it is at present, our local trains go along and enquire if there is any freight to go, and at night the pick-up trains stop and look in the bill boxes. I do not see how we could do otherwise and get the freight moved as promptly as it is now."

Rules 328 and 375—"I hardly see how roads situated as we are can enforce these rules. Suppose there is a flag station at which there is no agent or other person to display the proper signals when passengers wish to get on, or suppose a passenger wants to get on one of the night trains at a station the business of which will not justify keeping a man on duty at night. How would the passenger go about flagging the train, taking it for granted the station was a flag station for that train? It would not do to leave the lamps where the public at large, tramps and small boys could have access to them, and under the rules the engineer would have no right to stop unless flagged with the regulation signal, at least nothing could be said to him if he were to run by the passenger. I have had some to explain, or at least to attempt to do so, by calling my attention to Rule 332, but I do not think Rule 332 has anything to do with stopping a train for passengers. At stations that are flag stations for night trains it is the usual custom for the passengers to flag the train with a fire-brand or something of that sort.

The Committee decided that special arrangements should be made to cover such detailed cases as those in point.—*April 8, 1890.*

RULE 326.

In answer to a suggestion that some other color than green should be used for "caution," the Committee agreed to the following statement: The Committee cannot recommend the use of any other color except green for caution, no other color having been discovered that will answer the purpose as well. They would welcome the discovery of some other distinctive color that could be used.—*April 14, 1892.*

RULE 328.

[See decision under Rule 322.]

RULES 336 AND 337.

The question was asked, in regard to the practice under the rules, whether it is intended that flags should be displayed by day only, or that flags, in addition to lights, should be displayed at night.

In the formulation of the Standard Code it was considered by the Committee that the use of lights alone at night, as then generally practiced, was sufficient, but, in view of the great increase in electric lights at stations, which render the signal lights less distinct, and in view of the possibility of signal lights being less visible at twilight, the Committee decided to report the following resolutions :

Resolved, That Rule 336 be amended to read as follows:

RULE 336. Two green flags by day *and night*, and, *in addition*, two green lights by night, displayed in the places provided for that purpose on the front of an engine, denote that the train is followed by another train, running on the same schedule and entitled to the same time-tables rights as the train carrying the signals.

Resolved, That Rule 337 be amended to read as follows :

RULE 337. Two white flags by day *and night*, and, *in addition*, two white lights by night, displayed in the places provided for that purpose on the front of an engine, denote that the train is an extra. These signals must be displayed by all extra trains, but not by yard engines.

NOTE.—The amendments are shown in *italics*.

Resolved, That the diagrams illustrating the manner of using signals be altered accordingly.

April 7, 1891.

The amendments were adopted by the Association on April 8, 1891.

RULE 342.

The following addition was proposed : When given in response to a flagman's signal to stop, this signal shall be given twice (thus — — — —) with a sufficient length of time intervening to prevent its being taken for the four short blasts mentioned in Rule 346.

After full discussion the Committee was unable to see its way clear to adopt the suggestion.—*April 14, 1891.*

RULE 374.

A member asked the question as to whether, under the second paragraph of this rule, the head-lights of engines on side tracks must be covered only when waiting for trains or otherwise.

After fully considering the possible misinterpretation in practice of this rule as it now reads, the Committee recommended that the wording of the rule be slightly altered, and, therefore, reported the following resolution for the consideration of the Convention :

Resolved, That the second paragraph of Rule 374 be altered to read as follows :

“Head-lights on engines, when on side tracks, must be covered as soon as the track is clear and train has stopped, and also when standing at the end of double track.”

April 7, 1891.

Amendment adopted by the Association April 8, 1891.

RULE 375.

[See decision under Rule 322.]

RULE 384.

“This is a first-class rule, except that it requires the giving of an additional number of train orders. Take for granted we put this rule into effect, and give the southbound trains the right to the track. Suppose a southbound train is late and does not reach A, the southern terminus of our road, before the leaving time of a northbound train of the same class. The northbound train will have to be given orders against the delayed southbound train, and in case the wires were to go down not a train except those of superior class could budge. I will be glad to do away with our half-hour rule, but think it should be so arranged that a southbound train failing to make A before the leaving time of a train of the same class should keep entirely out of the way of said northbound train. In my opinion this would reduce the number of train orders and aid in getting trains out of A. It would add some little complications to be sure, but men who have been running under the half-hour rule would fall into the arrangement very readily, I should imagine.”

In regard to the criticism of Rule 384, the Committee referred to the note on same on page 141 of the Code of Standard Train Rules, with the further information that the experience of a large number of roads that have

recently adopted Rule 384, as formulated, has demonstrated the fact that the operation of trains has been facilitated and that the delays have been much less than under the thirty-minute rule referred to.—*April 8, 1890.*

RULE 385.

“May an inferior train pass the switch to back in without flagging the superior train?”

The reply of the Committee was in the negative.—*February 24, 1893.*

RULE 386.

In answer to a question respecting Rule 386 it was decided as the sense of the Committee that the words “five minutes off the time” refer to the time of the superior train at the station where the trains meet.—*April 14, 1892.*

RULE 393.

“Will you please submit to the Committee on Train Rules the advisability of changing Rule 393 of the Standard Code, so as to strike out in the latter clause the words ‘of the same class.’ I enclose one of our rule books, and would refer you to S. F. & W. Rule 227. S. F. & W. Rule 227 specifies that no train must pass a meeting point at a greater rate of speed than eight miles per hour. Standard Rule 393 states:

“‘All trains must stop at schedule meeting or passing points on single track, if the train to be met or passed is of the same class, unless the switches are plainly seen to be right, the track clear,’ etc.”

“Standard Train Rule 383 says:

“‘A train of inferior class must in all cases keep out of the way of a train of superior class, except as provided in Rule 406.’”

“Now, what occurs to me is that the whole of these rules were intended by the Committee to bear upon the point of having the switches in the proper position, and in the event they were not in proper position the moving train would be under control.

“It appears to me that in Standard Rule 393 the wording ‘of the same class’ destroys the intention of this order. For instance, a passenger train passing a freight train on single track at a turnout, under this rule, is not compelled to reduce its speed in accordance with S. F. & W. Rule 227, as Standard Rule 393 says they must be of the same class.

“If there is no modification of the rule by erasing the words ‘of the same class,’ then it occurs to me that passenger trains can run by inferior class trains at as high rate of speed as they choose, disregarding Standard Rule 383. There are instances when Standard Rule 383 cannot be carried out under certain conditions, such as short side tracks, heavy freight trains and grades, which may prevent the inferior train from being on the side track, clear of superior trains, when if Rule 393 was modified with the words ‘of the same class’ stricken out, the same would have to reduce speed in accordance with S. F. & W. Rule 227.”

The judgment of the Committee was that the rule, as approved by the Convention, is correct and according to the best practice.

The Committee believes that as few restrictions and exceptions as possible should be interposed in the way of permitting trains to make time, as, for example, that trains delayed at stations should protect themselves, rather than continue the old practice of compelling all trains to feel their way into stations, expecting to find trains occupying the main track without proper protection.

The precaution required by Standard Rule 393 is thought to be necessary only for cases in which there is no time clearance required.—*October 8, 1889.*

RULE 398.

“Please see Rule No. 398 of the Standard Code. I would like to be advised of the particular circumstances in mind by the Committee at the time this rule was formulated; the particular class of roads it was expected it would affect, and anything else in connection with the rule that will be of interest in discussing the adoption of it for our line. In looking over these rules it seems as though Rule No. 399 leaves a great deal to the discretion of the companies in the adoption of flagging rule, and that means in turn leaving something to the discretion of the conductors which is impossible to cover in carrying out the principle. Yet before we come to Rule No. 399 Rule No. 398 seems to lay down a very iron-clad principle which, on such a single track road as ours where but two brakemen are employed on almost all freight trains, and being a level prairie road, it would hardly seem as though the rule was necessary, and it would seem best that it should be left out.”

In answer to the above the Committee stated:

That in its opinion the rear of the train should not be left unguarded by the absence of a competent employe.

The importance of this precaution has not until the present time been questioned, and the Committee under the circumstances does not know of any better way of providing for the required protection than the manner specified in this rule.—*September 12, 1895.*

RULE 403.

“A freight train of fifty-five cars pulling out of a siding breaks loose three cars from the caboose. The three cars and caboose are stopped on the siding by the flagman, who is on the rear end, before they run out of the siding. The main line in the direction in which the train is going is down grade and on a curve so that the engine-man cannot be promptly signalled. The conductor, who is at the switch, sees that the train is broken apart and jumps on the last car attached to the train as it passes the switch, leaving the flagman on the detached portion on the siding. By the time the engineman can be signalled the train has gone down grade so that it cannot be backed up. The conductor, therefore, takes the portion of the train which he has to the next siding, at a distance of several miles, and returns with the light engine for the detached portion. In the meantime a passenger train running on a fast schedule, without a stop at the siding, arrives and the flagman stops it and informs it of the circumstances. While the flagman does not know that the conductor intends to come back with the light engine, on the chance of their doing so he notifies the passenger train and they wait. The engineer and conductor come back with the light engine against the passenger train presuming that it is stopped in accordance with Rule 403. The question is, whether under that rule the engine of the freight train had a right to come back to recover the detached portion, which they know to have been left on a siding, against the passenger train.

“Another actual case, putting the point in still, perhaps, better light, is one which recently occurred. The passenger train arrives at a siding and finds a caboose with several cars in front of it with the markers up on the rear end of the caboose and no trainmen at the siding. The engineer and conductor of the passenger train take this portion of a train with markers on the rear as notification of a portion of a train of which the front portion might come back, and wait at the siding until they get assurance to the contrary. It is to be observed in reference to these two cases that Rule 403 does not limit the right of a train to come back to recover its detached portion to the case of breaking loose on the main line only. On the contrary, the fact that a portion of a train with markers is found on a siding is only an indication that some break loose has happened. In the last case stated the indication of the switch being set to the main line would lead to presume to the contrary, but the position of the switch should not be given conclusive weight under any circumstances.

“In the first case above mentioned, we would be glad to have the construction of the Train Rule Committee as to the right of the engine of the front train, under Rule 403, to come back for the detached portion; and in the second as to whether the passenger train was right in waiting on finding the detached cars with markers on the rear of the caboose standing on the siding.”

In reply, the Committee decided that in the first case, in accordance with Rule 403, the engine had absolute right to go back to recover the detached portion of train. In the second case the passenger train should not have waited.—*December 9, 1896.*

RULE 405.

In case a leading section had passed such a point, would another train of the same class have a right to go ahead of following sections of such overdue train?

Answer—Yes.—*February 24, 1893.*

RULE 406.

A member has inquired as to whether when an extra is overtaken by another extra, the second extra has the right to run around the first extra without special orders?

The Committee decided that one extra has no right to run around another extra, moving in the same direction, without special orders.—*April 8, 1890.*

RULE 408.

In reply to inquiries respecting Standard Rule 408, the Committee stated that the last paragraph of the rule is intended to mean that, “until the disabled train can reach the next open telegraph office, it will assume the rights and orders of the train last taking its rights and orders.”—*October 8, 1889.*

A member called the attention of the Committee to the fact that the last sentence of this rule, in reference to “the last train passing the disabled train,” is liable to misconstruction.

The rule has been the subject of much controversy, and in order that it might not be misunderstood, the Committee recommended the adoption of the following resolutions:

Resolved, That the second sentence of Rule 408 be amended to read as follows:

“The disabled train will assume the rights of the last train passing it *with which it exchanged rights or orders*, till the next telegraph office *which is open* is reached.”

(The amendment consists in the addition of the words in *italics*.)

Adopted by the Association April 8, 1891.

The Committee was requested to define the character of the disability to which this rule refers with greater distinctness.

The Committee thought that any trouble in regard to the meaning of the word “disabled” could only occur when it is of minor importance. In such a case the judgment of conductors and enginemen must be used, always bearing in mind that the rule is intended to expedite the movement of trains.—*April 7, 1891.*

RULE 417.

The question of the proper interpretation of Rule 417 was brought before the Committee, it having been stated that the word “responsible” is ambiguous.

The Committee unanimously agreed that the conductor is the person to be held responsible for the proper use of the switches by himself or his trainmen, and that the word “responsible” should be taken in its true, literal, dictionary sense, viz.: answerable, amenable, accountable.—*April 8, 1890.*

RULE 450.

The following questions were asked in regard to this rule :

First—As Rule 450 only authorizes the issuance of orders varying from or additional to the time-table, am I correct in assuming that an order does not affect a standard rule?

Second—If train orders as per Forms A to L affect rules, where will I find authority?

Third—If orders affect time-tables only as per Rule 450, do they affect everything on the time-table, which is the existence of trains and their time and class?

The Committee stated that Rule 450 authorizes the issuance of orders for the movement of trains which are not provided for in the time-table and the authority for the execution of such orders is the signature of the superintendent thereto attached. As the time-table is made to conform to the Standard Code the assumption that an order does not affect a Standard Rule is not correct.

In regard to the second inquiry, as has been above stated, the authority is "on the signature of the superintendent." In regard to the third inquiry, Rule 450 is clear when taken in connection with the form of orders and only affects what is contained in an order, and trains may be annulled and their time and class changed.—*April 7, 1891.*

RULE 451.

The following questions were submitted to the Committee :

"Order 20 gives Engine 17 right to work extra between Rendville and Drakes, protecting itself against other specified extras. Order 37 gives Engine 15, south-bound, rights to run extra Fultonham to Drakes, which puts them over the limit assigned Engine 17, saying in the order Engine 17 is working extra between Rendville and Drakes, but does not say that Engine 17 is protecting itself. When Engine 15 arrives at Rendville, which is the northern limits covered by Extra 17's orders, how does Extra 15, according to the rule, or Order 37, get from Rendville to Drakes without flagging against Extra 17. This information is asked for as it is not clear that on Orders 37, Extra 15 can get over the limits of Extra 17, working between Rendville and Drakes, without flagging. Has the explanations to the examples, given under Forms of Orders, any thing to do with Rule 451? Should the orders not be given, and run upon, strictly in accordance with that rule? And is, or is it not, necessary under the circumstances for Extra 15 to protect itself when it strikes the limit of work train Extra 17?"

In the judgment of the Committee the orders referred to do not violate the requirements of Rule 451, for the reason that Order No. 20 to Engine 17 was of such a character that no other train could be directly affected by it, and Order No. 37 to Engine 15 in no way affected Order No. 20 held by Engine 17. The answer to the last question as to whether Engine 15 should protect itself within the limits of Engine 17 is "no." See last paragraph under Form H.—*December 9, 1896.*

RULE 459.

Is it intended that when the dispatcher gives "complete" to an order with the Superintendent's initials, should the Superintendent's initials be placed on the bottom of the blank under the word "complete." If it is not the intention to do this, why are the Superintendent's initials used after the word "complete?"

It was ruled that the Superintendent's initials are sent over the wire after the word "complete" to authorize

the operator to write the word "complete" on the copy and to sign his "last name in full" to connect the operator with the order. The Superintendent's initials need not be written on the order after the word "complete."
—*September 9, 1892.*

RULE 474 (B).

A member of the Association presented to the Committee the suggestion that the following note to Rule 474 (B) should be adopted :

[“NOTE.—Nothing in this rule will authorize a train to pass a train order signal at danger, without a clearance card in regular form, signed by the operator on duty.”]

The Committee does not deem it advisable to change the practice authorized in Rule 474 (B), but sees no objection to any road issuing a clearance card in addition to a train order where the conditions of service may require it.—*March 16, 1896.*

FORMS A AND C.

In answer to a question submitted the Committee stated that the two forms, Form A and Form C, may be used in conjunction for the same trains.—*April 14, 1892.*

FORM A.

“No. 40 and Work Extra 237 will meet at Rome.” At 8 30 p.m., or at the expiration of the work limits, work extra has not reached Rome; how are both trains to be governed after this hour?”

In answer the Committee stated that No. 40 could not pass home without orders, and that if Work Extra 237 had orders to work only until 8 30 p.m. it has no right to the track after that hour. Under the circumstances the second form of Form E of Train Orders would have been the preferable form to use.—*September 7, 1893.*

FORM C.

“If an inferior train is given right of track order against a superior train to a designated point, is it competent for the train dispatcher to issue subsequently an order making a definite meeting point between the trains designated in the right of track order at an intermediate station, unless and until the previous order giving right of track to inferior train is superseded or annulled?”

The Committee decided that it was competent and proper for the dispatcher to make a definite meeting

point between the trains designated in the right of track order at an intermediate station, and it would not be necessary to previously annul the right of track before doing so.—*April 14, 1892.*

FORM C.

If an inferior train be given a right of track order against a superior train to a designated point, is it competent for the train dispatcher to issue, subsequently, an order making a definite meeting point between trains designated in the right of track order at an intermediate station, unless or until the right of track order is superseded or annulled?

It was decided "That after having given a train a right of track order against an opposing train it is perfectly competent and proper to make a definite meeting point between the two trains without annulling or recalling the right of track order.—*February 24, 1892.*"

FORM C.

"Northbound, odd numbers are ruling trains; No. 2 gets an order at A giving him the right of track against No. 1 from A to F. A subsequent order is given that Nos. 1 and 2 will meet at E. (E being an intermediate station.) What train takes the siding? Does the meeting order kill the right of track order?"

The Committee decided that the train having the right of track under the special order would hold the main track.—*March 8, 1894.*

FORM E.

The Committee received the following communication in regard to Form E, "Time Orders."

"Under example 1, Form E, of Train Orders. Special East leaves Omaha with an order reading that No. 1 will run 30 minutes late, New York to Chicago. Will this give the special until 3 25 to reach Chicago, or must they reach there at 2 55? If they must reach there at 2 55 of course they are not aided any, against No. 1, by the order, as they have a right to go there at 2 55, 3 o'clock being the leaving time of No. 1. On the other hand, it is argued that No. 1's order has expired on her arrival at Chicago 30 minutes late, at 3 o'clock, and has nothing to prevent her leaving at 3 00 or 3 01 provided her work is done, or she has none to do, and, of course, in this event, the special would not be helped any by the order. A great many conductors have said that they would run against No. 1 until 3 25 to make Chicago.

“*Another case.* No. 1 is instructed to run 10 minutes late, New York to Rochester; they pass Syracuse 10 minutes late, which is the last station they are timed at east of Rochester. The train has but one time at Rochester, which is their leaving time, and, consequently, there is no time for them to arrive 10 *minutes late by*. Their running time from Syracuse is slow enough to enable them to make up this 10 minutes and be ready to leave Rochester on time, or within one or two minutes of it, and as their order expired as soon as they arrived at Rochester, what would prevent them from leaving Syracuse 10 minutes late and arriving at Rochester at their leaving time, they having no arriving time, and its being generally understood that train is due to reach the next station (if no arriving time is given) as soon as they can get there after leaving the last station as *ordered* or required by schedule.”

In regard to the first question the Committee decided that, inasmuch as the order delivered to the special at Omaha did not control the movement of No. 1 west of Chicago, the order could not have been used by the special until after its arrival at Chicago. It was, therefore, an improper order to issue to move the special from Omaha to Chicago. If it was the purpose to move the special to Chicago against No. 1, the order prescribed in No. 2 of Form E should have been used. In the opinion of the Committee the issuing of this order, as stated, gave rise to the difficulty which the gentleman mentions.

In regard to the second question, No. 1, with an order to run 10 minutes late from New York to Rochester, should leave all intermediate stations 10 minutes late, and arrive at Rochester (as no arriving time is shown there) as much ahead of its leaving time as it would be permitted to do when running without an order, that is to say, the only difference this order makes is that the figures on the time-table are changed 10 minutes later between the points specified in the order, and, as there is only one time given at Rochester, which is the leaving time, the order practically expired when the train left Syracuse.—*October 13, 1891.*

FORM F.

The following questions were asked in regard to Form F:

“For instance we should use Example 1 that No. 2 will carry signals Fowler to Fox for engine 636, would No. 2 when they should arrive at Fox have to have orders to run as No. 2 from Fox to York? No. 2, understand, is a first-class train, and this engine and crew run on this train regular from Fowler to York. Is there any difference

in the meaning of the two examples (1 and 2) and does it make any difference whether terminal or not, or to class trains, or which example we use? Or suppose we run engine 636 as first No. 2 Fowler to York, would the regular train have a right to proceed from Fox to York without orders?"

The Committee decided that in the first case Train No. 2 would take down its classification signal and proceed from Fox on its time-table rights. The second case, second section of No. 2, which is the regular train, having fulfilled the order would proceed from Fox under time-table rights.—*March 8, 1894.*

FORM G.

The following question was asked the Committee in regard to Form G. "For arranging a schedule for a special train."

"Will you kindly say if special trains should carry a white signal? There is a wide difference of opinion on this subject, and I respectfully refer the question to you."

A train running under Example No. 1, Form G, would carry the white classification signals, because it is a train not represented on the time-table, and is therefore an extra train. A train running under Example No. 2, Form G, would *not* carry the white classification signals, because the order expressly states that its schedule *is a supplement to the current time-table*, and therefore makes it a regular train.

The Committee has under consideration the question as to whether the word "*special*" in Example No. 2, Form G, should **not** be eliminated.—*October 13, 1891.*

FORM H.—Example (d).

Is the word "extra" before 292 omitted intentionally? •

The Committee voted that the word "extra" should be omitted in the example.—*February 24, 1893.*

FORM H.—Paragraph (f).

The question was asked the Committee whether under Form II Paragraph (f), of Train Orders, a work train is authorized to flag against all regular trains?

The Committee decided that the form does not permit a work train to occupy the main line until the arrival of regular trains, but that it does permit a work train to

occupy the main track until the arrival of an extra from either direction by properly protecting itself.—*April 7, 1891.*

FORM K.

The Jamestown and Yorktown Divisions are operated as two separate divisions—the Jamestown Division and the Yorktown Division, Jamestown Shops being the dividing point; the time-table, however, is continuous. Train No. 16 leaves Yorktown at 9 40 p.m. and leaves Jamestown Shops at 12 10 a.m. It is decided to annul train 16, which starts from Yorktown, January 1st, on the Jamestown Division. Question—Should the order read “Train 16, of January 1, 1893, is annulled on Jamestown Division,” or should it be “January 2d?”

The Committee decided that in such a case the order should read “Train No. 16 leaving Yorktown at 9 40 p.m., January 1st, is annulled on Jamestown Division,” or “leaving Jamestown 12 10 a.m. of January 2d is annulled”—*April 14, 1892.*

FORM L.

Referring to the following paragraph :

“If an order which is to be annulled has not been delivered to a train, the annulling order will be addressed to the operator,” &c., the Committee was asked what is meant by the word “delivered.” Whether it means the delivery to the trainmen after the order is made complete only, or whether it includes the delivery of an order that has not been made complete to the engineer and conductor for signature, and the occasion for annulling the order does not arise until after such signatures have been received. If the meaning of the word “delivered” applies only to the case first stated, what official knowledge can the conductor and engineer, who have signed the order, have that the order has been annulled, and that they would not be responsible for its fulfillment?

In answer to the above the Committee stated : That in the judgment of the Committee the delivery of an order can take place only after “complete” has been given as stated in Rules 459 and 461.—*December 10, 1896.*

MISCELLANEOUS.

A letter was submitted in regard to the proper color to be used for switch lights. Respecting this question it is the unanimous opinion of the Committee that red

and white are the proper colors, but it has purposely omitted any mention of the same in the rules, believing that the signification of the colors determines the same, there being no question about the use of red for open switches. If white is used, it means that there is no restriction as to speed unless otherwise ordered. If green is used, it means that caution is to be used and it is a signal to go slower.—*April 8, 1890.*

A form of record and operators' transfer of orders was submitted to the Committee, and while it thought the form a good one, it was of the opinion that such matters must be left to the judgment of each line to be determined according to the circumstances governing its operation.—*April 7, 1891.*

A question was submitted to the Committee in reference to the color and shape of distant semaphore signals for head-on switches.

The opinion of the Committee was that under no circumstances should red be used as a cautionary signal; the proper color is green. The determination of the shape of the semaphore should be left to each road. Taking into consideration the fact that semaphores are now being used for block purposes, it may be desirable to use different shapes for different purposes.

The question as to what the distant signal is to denote, determines the color. If it is not intended to stop the train until the signal is changed, it should be red; if intended to allow the train to pass under control, the signal should be green.—*April 7 1891.*

If an extra train overtakes a regular train can it pass it without orders to do so? Take, for example, a local freight train at a busy station where it is allowed an hour to do its work and does not occupy the main line. Can extras pass during that time, provided they do not get on the time of the regular train?

Answer—Yes.—*February 24, 1893.*

The following inquiry has been submitted to the Committee:

“We notice that it has been decided by the Association to drop from the Code of Train Rules, Rules Nos. 7, 8, 10 and others. Is it the intention to drop these rules out entirely, or to place them in some other part of the book, and if the latter, has any suggestion been made towards the part in which they will be placed?”

“Also, how is it intended to fill the space made vacant by the dropping of these numbers?”

The Committee would say that it considered these questions in its arrangement of the Standard Code of Train Rules, and has adopted the form shown in the edition of April, 1895,* thus preserving the original numbers of the rules.

* This was by inserting the word (omitted) opposite the number of the rule.—*September 12, 1895.*

The following subjects were referred to the Committee on Train Rules for consideration :

1. The definition of the duties and authority of a Pilot, and the circumstances under which a train should be provided with one. (See Rule 453.)

The Committee reported as follows :

A Pilot is a person placed on a train when, in the judgment of the proper authority, an engineman or conductor, or both, are unacquainted with the physical characteristics or running rules of the road or portion of the road over which the train is to be moved.

The responsibility of a Pilot is the same as the responsibility of the engineman or conductor, or both, whom he pilots.

2. In regard to the use of a combination of red and white lights on the rear end of a train. (See Rule 334.)

After examining the results of experiments made on the Wabash and the Pennsylvania Railroad the Committee unanimously concluded that red lights alone are better than a combination of red and white lights for marking the rear end of a train. Both sets of experiments, conducted independently of each other, brought out the fact that the white light somewhat obscured the red ; that is to say, the red disappeared from view sooner when shown in connection with the white than when shown alone, the red being absorbed by the white.

It was also suggested to the Committee that the use of white lights in connection with red lights for rear-end signals would interfere with the semaphore bracket signals, on which many of the displays would be in the same relative position as when a white light or lights were used in connection with one or more red lights on the rear end of a train.

October 12, 1887.

ORIGINAL AND AMENDED FORMS OF TRAIN RULES.

Original reading of General Notice :

GENERAL NOTICE.

It is of the utmost importance that proper rules for the government of the employes of a railroad company should be literally and absolutely enforced, in order to make such rules efficient. If they cannot or ought not to be enforced, they ought not to exist. Officers or employes whose duty it may be to make or enforce rules, however temporary or unimportant they may seem, should keep this clearly in mind. If in the judgment of any one whose duty it is to enforce a rule, such rule cannot or ought not to be enforced, he should at once bring it to the attention of those in authority.

All employes should be required to be polite and considerate in their intercourse with the public. The reputation and prosperity of a company depend greatly upon the promptness with which its business is conducted and the manner in which its patrons are treated by its employes.

Amended reading, adopted April 7, 1897

(See page 10.)

Original reading of Rules 301, 302 and 303 :

301. The Rules herein set forth apply to and govern all roads operated by the.....
Co.

NOTE.—The General Rules adopted April 7, 1897, superseded Rules 301, 302, 303, 304, 305, 306, 307, 310 and 311.

(See page 13.)

They shall take effect.....
and supersede all prior rules and instructions, in whatsoever form issued, which are inconsistent therewith.

(See foot note.)

302. In addition to these rules, the Time-tables will contain special instructions, as the same may be found necessary. Special instructions, whether in conflict with these rules or not, which may be given by proper authority, whether upon the Time-tables or otherwise, shall be fully observed while in force.

(See foot note.)

303. The head of each department must be conversant with the rules, supply copies of them to his subordinates, see that they are understood, enforce obedience to them, and report to the proper officer all violations and the action taken thereon.

(See foot note.)

Original reading of Rule 304:

304. Every employe of this company whose duties are in any way prescribed by these rules must always have a copy of them at hand when on duty, and must be conversant with every rule. He must render all the assistance in his power in carrying them out, and immediately report any infringement of them to the head of his department.

Amended reading, adopted April 18, 1895:

304. Every employe whose duties are in any way prescribed by these rules must always have a copy of them at hand when on duty, and must be conversant with every rule. He must render all the assistance in his power in carrying them out, and immediately report any infringement of them to the —.

(See foot note.)

Original reading of Rule 305 :

305. The fact that any person enters, or remains in, the service of the company will be considered as an assurance of willingness to obey its rules. No one will be excused for the violation of any of them, even though not included in those applicable to his department.

Amended reading, adopted April 18, 1895 :

305. The fact that any person enters, or remains in, the service will be considered as an assurance of willingness to obey its rules. No one will be excused for the violation of any of them, even though not included in those applicable to his department.

(See foot note.)

Original reading of Rule 306 :

306. If in doubt as to the meaning of any rule, or special instructions, application must be made at once to the proper authority for an explanation. Ignorance is no excuse for neglect of duty.

(See foot note.)

Original reading of Rule 307 :

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

Revision adopted April 18, 1895 :

Rule 307 is a statement of principles affecting general discipline, and is out of place in a Code of Train Rules, and is therefore eliminated.

(See foot note.)

Original reading of Rule 308 :

308. If an employee should be disabled by sickness, or other cause, the right to claim compensation will not be recognized. An allowance, if made, will be a gratuity, justified by the circumstances of the case, and the employee's previous good conduct.

Revision adopted April 18, 1895 :

Rule 308 is a statement of principles affecting general discipline, and is out of place in a Code of Train Rules, and is therefore eliminated.

Original reading of Rule 309 :

309. Every employe, while on duty connected with the trains on any division of the road, is under the authority, and must conform to the orders, of the superintendent of that division.

Rule 309 was transferred on April 7, 1895, to the Committee on General Regulations for Employes with the view to its incorporation in the rules to be reported by that Committee.

Original reading of Rule 310 :

310. Employees must wear the prescribed badges or uniforms while on duty.

Revision adopted April 18, 1895 :

Rule 310 belongs among General Regulations for Employes, and not in a Code of Train Rules, and is therefore eliminated.

(See foot note.)

NOTE.—The General Rules adopted April 7, 1897, superseded Rules 301, 302, 303, 304, 305, 306, 307, 310 and 311.

(See page 13.)

Original reading of Rule 311 :

311. Mail agents, express messengers, parlor and sleeping car conductors and porters, news agents, and persons in charge of individual cars are subject, while on duty, to the rules governing employees of the company.

Amended reading, adopted April 18, 1895 :

311. All persons engaged in performing any service on a train are subject to the rules governing employes of the company.

(See foot note.)

Original reading of Rule 313 :

313. The Standard Time will be telegraphed to all points from the designated offices at 4 00 p.m., Central time, daily.

[NOTE.—In order to detect possible errors at junction points and to secure uniformity, the Committee recommends that the time be disseminated to all points at the same hour. They consider it of great importance that the time be obtained from some observatory of recognized standing.]

Amended reading, adopted April 18, 1895 :

313. The Standard Time will be telegraphed to all points from the designated offices at ———, — m. (Eastern, Central, Mountain or Pacific time), daily.

[NOTE.—Same as for original reading.]

Original reading of Rule 314 :

314. Certain clocks will be designated on each division as Standard Clocks.

Amended reading, adopted April 18, 1895.

(See page 17.)

NOTE.—The General Rules adopted April 7, 1897, superseded Rules 301, 302, 303, 304, 305, 306, 307, 310 and 311.

(See page 13.)

Original reading of Rule 315 :

315. Where station clocks are provided, station agents must see that they show correct time; but trainmen and enginemen must not take time from such clocks unless they are also designated as Standard Clocks.

Amended reading, adopted April 18, 1895.

(See page 17.)

Original reading of Rule 316 :

316. Each conductor and engineman must have a reliable watch which has been examined and certified to on the form attached hereto by a responsible watchmaker. Conductors and enginemen entering service must file such certificate with the proper designated officer before they are allowed to take charge of trains or engines; and watches must be examined and certificates renewed every six months.

Amended reading, adopted October 12, 1887 :

316. Each conductor and engineman must have a reliable watch which has been examined and certified to on the form attached hereto by a responsible watchmaker, and must file such certificate with the proper designated officer before he is allowed to take charge of a train or engine. Watches must be examined and certificates renewed every six months.

Amended reading, adopted April 18, 1895 :

316. Each conductor and engineman must have a reliable watch which has been examined and certified to on a prescribed form, by a designated inspector, and must file such certificate with the — — before he is allowed to go on duty. Watches must be examined and certificates renewed every — —.

[NOTE.—In the new form of this rule the blanks were left and changes suggested so that each road may designate the officer and the time when certificates must be renewed in accordance with its organization or its service. The words "go on duty" express the intent of the rule in better terms than the old reading.—*April 18, 1895.*

Original form of Certificate :

WATCHMAKER'S CERTIFICATE.

This is to certify that on.....18....
 the watch of.....
 employed as.....
 on the.....R.....
 has been examined and found to be a reliable and accurate
 time-piece, and in such repair as will, in my judgment,
 with proper usage, enable it to run within a variation
 not to exceed thirty seconds per week.

Name of Maker.....
 Brand.....
 Number of Movement.....
 Gold or Silver.....
 Open or hunting case.....
 Stem or key winding.....

Signed,

.....
Watchmaker.

Address.....

Form of Certificate adopted April 18, 1895.

(See pages 17-18.)

Original reading of Rule 317 :

317. Each conductor and engineman must regulate his watch by the designated Standard Clock before starting on each trip, and register his name and the time at which he regulated his watch on a blank form (or in a book) provided for that purpose.

Amended reading, adopted April 18, 1895.

(See page 18.)

Original reading of Rule 318 :

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

Amended reading, adopted April 18, 1895.

(See page 18.)

Original reading of Rule 319 :

319. A Time-table is the general law governing the arriving and leaving time of all regular trains at all stations. Time-tables will be issued from time to time, as may be necessary. The times given for each train on the Time-table is the Schedule of such train.

Amended reading, adopted April 18, 1895.

(See page 18.)

Original reading of Rule 320 :

320. Each Time-table, from the moment it takes effect, supersedes the preceding Time-table, and all special instructions relating thereto ; and trains shall be run as directed thereby, subject to the rules. All regular trains on the road running according to the preceding Time-table shall, **unless otherwise directed**, assume the times and rights of trains of corresponding numbers on the new Time-table.

Amended reading, adopted April 18, 1895 :

320 (A). Each Time-table, from the moment it takes effect, supersedes the preceding Time-table and all special instructions relating thereto.

320 (B). Each Time-table, from the moment it takes effect, supersedes the preceding Time-table and all

special instructions relating thereto. A train of the preceding Time-table shall, unless otherwise directed, take the time and rights of the train of the same number on the new Time-table.

A train of the new Time-table which has no corresponding number on the preceding Time-table shall not run until it is due to start from its initial point on any division after the Time-table takes effect.

320 (C). Each Time-table, from the moment it takes effect, supersedes the preceding Time-table and all special instructions relating thereto. A train of the preceding Time-table loses its rights, and can thereafter proceed only by special orders.

A train of the new Time-table is one which is due to start from its initial point, on any division, after the Time-table takes effect.

[NOTE.—The Committee has recommended three forms of Rule 320, leaving it discretionary with each road to adopt any one of these forms as best suits its own requirements.]

Original reading of Rule 321 :

321. Upon the Time-table not more than two sets of figures are shown for a train at any station.

The times at regular meeting or passing points are shown in **full-faced type**; other times in ordinary type.

When two times are shown for a train at any station the earlier (placed in its proper position) is the arriving time and the later the leaving time.

When but one time is shown in ordinary type it is the leaving time.

When but one time is shown in **full-faced type** it is the actual meeting or passing time.

When both the arriving and leaving times are shown in **full-faced type** it indicates that one or more trains are to be met or passed at or between those times.

In all cases trains are required to clear and follow as per Rules 385 to 390 inclusive.

Amended reading, adopted October 12, 1887 :

321 Upon the Time-table not more than two sets of figures are shown for a train at any point. When two times are shown the earlier is the arriving time and the later the leaving time. When one time is shown it is the leaving time, unless otherwise indicated.

Regular meeting or passing time is in **full-faced type**.

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

Where there are more trains than one to meet or pass a train at any point attention is called to it by —.

In all cases trains are required to clear and follow as per Rules 385 to 390 inclusive.

Amended reading of second paragraph, adopted April 10, 1889 :

Regular meeting or passing points are indicated on the time-table by figures in **full-faced type**.

Amended reading, adopted April 18, 1895 :

321. Upon the Time-table not more than two sets of figures are shown for a train at any point. When two times are shown, the earlier is the arriving time and the later the leaving time. When one time is shown it is the leaving time unless otherwise indicated.

Regular meeting or passing points are indicated on the time-table by figures in **full-faced type**.

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

Where there are more trains than one to meet or pass a train at any point, attention is called to it by ——.

In all cases trains are required to clear and follow as per Rules 385 to 390 inclusive.

Original reading of Rule 322 :

322. On the employees' Time-table the words "daily," "daily, except Sunday," etc., printed at the head and foot in connection with a train, indicate how it shall be run. The figures given at intermediate stations shall not be taken as indicating that a train will stop unless the rules require it. The following signs placed before the figures indicate :

"s"—regular stop (or the same may be designated by the different styles of type used);

"f"—stop on signal to receive or discharge passengers or freight ;

"¶" stop for meals.

Trains are designated by numbers and their class indicated on the Time-tables.

Amended reading, adopted April 18, 1895.

(See pages 19-20.)

Original reading of Rule 323 :

323. Conductors, enginemen, firemen, brakemen, station agents, telegraph operators, switchmen, switch-tenders, track foremen, road and bridge watchmen, and all other employees whose duties may require them to give signals, must provide themselves with the proper appliances, and keep them in good order and always ready for immediate use.

Amended reading, adopted April 18, 1895.

(See page 20.)

Original reading of Rules 325, 326 and 327 :

325. Red signifies **danger**, and is a signal to stop.

326. Green signifies **caution**, and is a signal to go slowly.

327. White signifies **safety**, and is a signal to go on.

NOTE.—In the revision of these Rules adopted April 18, 1895, the words in bold-face type were printed in the same type as the rest of the rules.

Original reading of Rule 329 :

329. Blue is a signal to be used by car inspectors.

Amended reading, adopted April 18, 1895.

(See page 20.)

Original reading of Rule 330 :

330. An explosive cap or torpedo, placed on the top of the rail, is a signal to be used **in addition** to the regular signals.

The explosion of **one** torpedo is a signal to **stop** immediately; the explosion of **two** torpedoes is a signal to **reduce speed** immediately, and look out for a danger signal.

Amended reading, adopted April 18, 1895.

(See pages 20-21.)

Original form of Rule 331 :

331. A fusee is an **extra** danger signal, to be lighted and placed on the track at night, in cases of accident or emergency.

A train finding a fusee burning upon the track must come to a stop, and not proceed until it is burned out.

Amended form, adopted April 18, 1895.

(See page 21.)

Original reading of Rule 333 :

333. Each train, while running, must display two green flags by day and two green lights by night, one on each side of the rear of the train, as Markers, to indicate the rear of the train. Yard engines will not display Markers.

Amended form, adopted April 18, 1895.

(See page 21.)

Original reading of Rule 334 :

334. Each train running after sunset, or when obscured by fog or other cause, must display the head-light in front, and two or more red lights in the rear. Yard engines must display two green lights instead of red, except when provided with a head-light on both front and rear.

Amended form, adopted April 18, 1895.

(See page 21.)

Original reading of Rule 335 :

335. Each car on a passenger train while running must be in communication with the engine. In the absence of an equivalent appliance, a bell-cord must be attached to the signal-bell of the engine, passing through or over the entire length of the train, and secured to the rear end of it.

Amended form, adopted April 18, 1895.

(See page 21.)

Original reading of Rule 336 :

336. Two green flags by day and two green lights by night, displayed in the places provided for that purpose on the front of an engine, denote that the train is fol-

lowed by another train, running on the same schedule and entitled to the same time-table rights as the train carrying the signals.

Amended reading, adopted April 8, 1891.

(See page 21.)

Original reading of Rule 337 :

337. Two white flags by day and two white lights by night, displayed in the places provided for that purpose on the front of an engine, denote that the train is an extra. These signals must be displayed by all extra trains, but not by yard engines.

Amended reading, adopted April 8, 1891.

(See pages 21-22.)

Original reading of Rule 338 :

338. A blue flag by day and a blue light by night, placed on the end of a car, denote that car inspectors are at work under or about the car or train. The car or train thus protected must not be coupled to, or moved, until the blue signal is removed by the car inspectors.

When a car or train standing on a siding is protected by a blue signal, other cars must not be placed in front of it so that the blue signal will be obscured, without first notifying the car inspector, that he may protect himself.

Amended form, adopted April 18, 1895.

(See page 22.)

Original reading of Rules 339 to 344 :

339. One **long** blast of the whistle (thus, —) is the signal for approaching stations, railroad crossings and junctions.

340. One **short** blast of the whistle (thus, -) is the signal to apply the brakes—stop.

341. Two **long** blasts of the whistle (thus, — —) is the signal to throw off the brakes.

342. Two **short** blasts of the whistle (thus, - -) is an answer to any signal, except “train parted.”

343. Three **long** blasts of the whistle (thus, — — —), to be repeated until answered as provided in Rule No. 362, is a signal that the train has parted.

344. Three **short** blasts of the whistle (thus, - - -) when the train is **standing** (to be repeated until answered, as provided in Rule No. 361) is a signal that the train will back.

NOTE.—In the revision of these rules adopted April 18, 1895, the words in bold-face type were printed in the same type as the rest of the rule.

(See page 22.)

Original reading of Rule 345:

345. Four **long** blasts of the whistle is the signal to call in the flagman (thus — — — —).

Amended reading, adopted October 12, 1887:

345. Four **long** blasts of the whistle (thus — — — —) is the signal to call in a flagman from the west or south.

Four **long** followed by one **short** blast of the whistle (thus — — — — -) is the signal to call in a flagman from the east or north.

Amended reading, adopted April 18, 1895.

(See page 23.)

Original reading of Rules 346 to 357:

346. Four **short** blasts of the whistle (thus, - - - -) is the engineman's call for signals, from switchtenders, watchmen, trainmen and others.

347. Five **short** blasts of the whistle (thus, ----- is) a signal to the flagmen to go back and protect the rear of the train.

348. One **long** followed by two **short** blasts of the whistle (thus, — — —) is a signal to be given by trains on single track, when displaying signals for a following train, to call the attention of trains of the same or inferior class to the signals displayed.

349. Two **long**, followed by two **short**, blasts of the whistle (thus, — — — — —) is the signal for approaching road crossings at grade.

350. A succession of **short** blasts of the whistle is an alarm for persons or cattle on the track, and calls the attention of trainmen to danger ahead.

BELL-CORD SIGNALS.

351. One tap of the signal-bell, when the train is **standing**, is the signal to start.

352. Two taps of the signal-bell, when the train is **running**, is the signal to stop at once.

353. Two taps of the signal-bell, when the train is **standing**, is the signal to call in the flagman.

354. Three taps of the signal-bell, when the train is **running**, is the signal to stop at the next station.

355. Three taps of the signal-bell, when the train is **standing**, is the signal to back the train.

356. Four taps of the signal-bell, when the train is **running**, is the signal to reduce speed.

357. When one tap of the signal-bell is heard while a train is **running**, the engineer must immediately

ascertain if the train is parted, and, if so, be governed by Rule No. 403.

NOTE.—In the revision of these rules, 346 to 357, adopted April 18, 1895, the words in bold-faced type were printed in the same type as the rest of the rules.

(See pages 23 and 24.)

Original reading of Rules 361 and 362:

361. A lamp swung vertically in a circle across the track, when the train is **standing**, is the signal to move back.

362. A lamp swung vertically in a circle at arm's length across the track when the train is **running**, is the signal that the train has parted.

NOTE.—In the revision of these rules, 361 and 362, adopted April 18, 1895, the words in bold-faced type were printed in the same type as the rest of the rule.

(See page 24.)

Original reading of Rule 364:

364. Fixed signals are placed at junctions, railroad crossings, stations and other points that require special protection. Special instructions will be issued indicating their position and use.

Amended reading, adopted April 18, 1895.

(See page 24.)

Original reading of Rule 366:

366. The unnecessary use of the whistle is prohibited; when necessary in shifting at stations and in yards the engine-bell should be rung, and the whistle used only when required by rule or law, or when necessary to prevent accident.

Amended reading, adopted April 18, 1895.

(See page 25.)

Original reading of Rule 367 :

367. The whistle must not be sounded while passing a passenger train, except in cases of emergency or danger, or when required by the rules.

This rule was omitted in the revision adopted April 18, 1895.

Original reading of Rule 369 :

369. The engine-bell must be rung before starting a train, and when running through tunnels and the streets of towns or cities.

Amended reading, adopted April 18, 1895.

(See page 25.)

Original reading of Rule 370 :

370. The engine-bell must be rung for a quarter of a mile before reaching every road crossing at grade, and until it is passed ; and the whistle must be sounded at all whistling-posts.

Amended reading, adopted April 18, 1895.

(See page 25.)

Original reading of Rule 372 :

372. One flag or light displayed as a classification signal will be regarded the same as if two were displayed ; but conductors and enginemen will be held responsible for the proper display of all train signals.

Amended reading, adopted April 18, 1895.

(See page 25.)

Original reading of Rule 374, second paragraph :

Head-lights on engines when on side tracks or at the end of double tracks, waiting for trains, must be covered as soon as the track is clear and the train has stopped.

Amended reading, adopted April 8, 1891 :

374. When a train turns out to meet or pass another train the red lights must be removed and green displayed as soon as the track is clear ; but the red must again be displayed before returning to its own track.

Head-lights on engines, when on side tracks, must be covered as soon as the track is clear and train has stopped, and also when standing at the end of double track.

Amended reading, adopted April 18, 1895.

(See page 26.)

Original reading of Rule 377 :

377. Torpedoes must not be placed near stations or road crossings, where persons are liable to be injured by them.

Rule 377 was omitted in the revision approved April 18, 1895.

Original reading of Rule 378 :

378. All signals must be used strictly in accordance with the rules, and trainmen and enginemen must keep a constant lookout for signals.

Rule 378 was omitted in the revision approved April 18, 1895.

Original reading of Rule 379 :

379. All trains are designated as regular or extra. Regular trains are those represented on the Time-table, and may consist of one or more sections. All sections of a train except the last, must display signals as provided in Rule No. 336. Extra trains are those not repre-

sented on the Time-table. An engine without cars, in service on the road, shall be considered a train.

Amended reading, adopted April 18, 1895.

(See page 26.)

Original reading of Rule 380:

380. All regular trains are classified on the Time-table with regard to their priority of right to the track; trains of the first-class being superior to those of the second and all succeeding classes, and trains of the second-class being superior to those of the third and all succeeding classes; and so on indefinitely. The terms passenger, freight or mixed are descriptive, and do not refer to class.

Amended reading, adopted April 18, 1895.

(See pages 26 and 27.)

Original reading of Rule 381:

381. Extra trains may be distinguished as :
 Passenger Extra, or Special ;
 Freight Extra ;
 Work Train Extra

Amended reading, adopted October 12, 1892 :

381. Extra trains may be distinguished as :
 Passenger Extra ;
 Freight Extra ;
 Work Train Extra.

Original reading of Rule 386:

386. When a train of inferior class meets a train of superior class on single track, the train of inferior class must take the siding and clear the train of superior class

five minutes. A train of inferior class must keep **five** minutes off the time of a train of superior class following it.

Amended reading, adopted April 18, 1895.

(See pages 27-28.)

Original reading of Rule 390 :

390. No train must leave a station expecting to meet or to be passed at the next station by a train having the right of track, unless it has full schedule time to make the meeting or passing point, or unless it has the full time allowed between stations (which may be shown on the margin of the Time-table) to make the meeting or passing point, and clear the track by the times required by Rules Nos. 385 and 386.

Amended reading, adopted April 18, 1895.

(See page 28.)

Original reading of Rule 392 :

392. Except at meeting or passing points, as provided in Rules Nos. 385 to 391, inclusive, no train must arrive at a station in advance of its schedule arriving time, when shown.

No train must leave a station in advance of its schedule leaving time.

Amended reading, adopted April 18, 1895.

(See page 28.)

Original reading of Rule 393 :

393. All trains must **stop** at schedule meeting or passing points on a single track, if the train to be met or passed is of the same class, unless the switches are plainly seen to be right and the track clear. The point at which a

train should **stop** is the switch used by the train to be met or passed in going on the siding.

When the expected train of the same class is not found at the schedule meeting or passing point, the train having right of track must approach all sidings prepared to stop, until the expected train is met or passed.

NOTE.—In the revision of April 18, 1895, the words stop, printed above in bold-face type, are printed in the same type as the rest of the rule.

Original reading of Rule 395 :

395. No train must leave a junction, a terminal, or other starting point, or pass from double to single track, until it is ascertained that all trains due, which have the right of track against it, have arrived.

Amended reading, adopted October 12, 1892 :

395. No train must leave a junction, a terminal, or other starting point, or pass from double to single track, until it is ascertained that all trains due, which have the right of track over it, have arrived or left.

Amended reading, adopted April 18, 1895.

(See page 29.)

Original reading of Rule 396 :

396. When a passenger train is detained at any of its usual stops more than ———— minutes, the flagman must go back with danger signals and protect his train, as provided in Rule No. 399 ; but if it stops at any unusual point, the flagman must immediately go back far enough to be seen from a train moving in the same direction when it is at least ————— from the rear of his own train, and if the stop is over ———— minutes he must be governed by Rule No. 399.

When it is necessary to protect the front of the train, the same precautions must be observed by the fireman.

If the fireman is unable to leave the engine, the front brakeman must be sent in his place.

[NOTE.—The Committee, on account of the existing great diversities of grades, amount of traffic and other local circumstances, have left blanks in Rule 396 for each company to fill out, after determining what times, if any, are necessary either for its road as a whole or for each division.]

Revision adopted April 18, 1895 :

Rule 396 omitted, as the subject matter is contained in the new form of Rule 399.

Original reading of Rule 397 :

397. When a freight train is detained at any of its usual stops more than —— minutes, where the rear of the train can be plainly seen from a train moving in the same direction at a distance of at least ——, the flagman must go back with danger signals not less than ——, and as much farther as may be necessary to protect his train ; but if the rear of his train cannot be plainly seen at a distance of at least ——, or if it stops at any point that is not its usual stopping place, the flagman should go back not less than ——, and if his train should be detained until within **ten** minutes of the time of a passenger train moving in the same direction, he must be governed by Rule No. 399.

When it is necessary to protect the front of the train, the same precautions must be observed by the fireman. If the fireman is unable to leave the engine, the front brakeman must be sent in his place.

[NOTE.—The Committee, finding that the distances and times necessary for flagmen to go back differ so much on account of grades, amount of traffic and other local circumstances, have left blanks for each company to determine what distance and time is necessary, either for its road as a whole or for each division.]

Revision adopted April 18, 1895 :

Rule 397 is omitted, as the subject matter is contained in the new form of Rule 399.

Original reading of Rule 399:

399. When a train is stopped by an accident or obstruction, the flagman must immediately go back with danger signals to stop any train moving in the same direction. At a point ——— from the rear of his train he must place **one** torpedo on the rail; he must then continue to go back at least ——— from the rear of his train, and place **two** torpedoes on the rail, ten yards apart (one rail length), when he may return to a point ——— from the rear of his train, and he must remain there until recalled by the whistle of his engine; but if a passenger train is due within **ten** minutes, he must remain until it arrives. When he comes in, he will remove the torpedo nearest to the train, but the **two** torpedoes must be left on the rail as a caution signal to any following train.

If the accident or obstruction occurs upon single track, and it becomes necessary to protect the front of the train, or if any other track is obstructed, the fireman must go forward and use the same precautions. If the fireman is unable to leave the engine, the front brakeman must be sent in his place.

[See Note under Rule 397.]

Amended reading, adopted April 18, 1895.

(See pages 29–30.)

Original reading of Rule 400:

400. Freight trains having work to do on any other track may cross over if no passenger train is due, provided no approaching freight train is in sight; and also provided that a flagman has been sent with danger signals, as provided in Rule No. 399, not less than ——— in the direction of the expected train.

[See Note under Rule 397.]

In the revision approved April 18, 1895, this rule was omitted, the subject matter being covered by the new reading of Rule 402.

Original reading of Rule 401:

401. When a freight train on double track turns out on to the opposite track to allow a passenger train running in the same direction to pass, and, while waiting, a passenger train from the opposite direction arrives, the freight train may cross back and allow it to pass, provided the other passenger train is not in sight; and also provided that a flagman has been sent with danger signals, as provided in Rule No. 399, not less than ——— in the direction of the expected train.

[See Note under Rule 397.]

In the revision approved April 18, 1895, this rule was omitted, the subject matter being covered by the new reading of Rule 402.

Original reading of Rule 402:

402. When it is necessary for a freight train on double track to turn out on to the opposite track to allow a passenger train running in the same direction to pass, and a passenger train running in the opposite direction is due, a flagman must be sent back with danger signals, as provided in Rule No. 399, not less than ——— in the direction of the following train, and the freight train must not cross over until one of the passenger trains arrives. Should the following passenger train arrive first, a flagman must be sent forward on the opposite track with danger signals, as provided in Rule No. 399, not less than ——— in the direction of the overdue passenger train before crossing over. Great caution must be used, and good judgment is required to prevent detention to either passenger train. The preference should always be given to the passenger train of superior class.

[See Note under Rule 397.]

Amended reading, adopted April 18, 1895.

(See page 30.)

Original reading of Rule 403 :

403. If a train should part while in motion, trainmen must use great care to prevent the detached parts from coming into collision. Enginemen must give the signal as provided in Rule No. 343, and keep the front part of the train in motion until the detached portion is stopped.

The front portion will have the right to go back, regardless of all trains, to recover the detached portion, first sending a flagman with danger signals ————— in the direction in which the train is to be backed, and running with great caution, at a speed not exceeding four miles per hour. On single track all the precautions required by the Rules must also be taken to protect the train against opposing trains. **The detached portion must not be moved or passed around until the front portion comes back.** This rule applies to trains of every class.

An exception will only be made to the above when it is known that the detached portion has been stopped, and when the whole occurrence is in plain view, no curves or other obstructions intervening, so that signals can be seen from both portions of the train. In that event the conductor and engineman may arrange for the re-coupling, using the greatest caution.

[See Note under Rule 397.]

Amended reading, adopted April 18, 1895.

(See pages 30 and 31.)

Original reading of Rule 404 :

404. When a train is being pushed by an engine (except when shifting and making up trains in yards) a flagman must be stationed in a conspicuous position on the front of the leading car, so as to perceive the first sign of danger and immediately signal the engineman.

Amended reading, adopted April 18, 1895.

(See page 31.)

Original reading of Rule 405 :

405. A train starting from a station, or leaving a junction, when a train of the same class running in the same direction is overdue, will proceed on its own time and rights, and the overdue train will run as provided in Rule 388 or 389.

Amended reading, adopted April 18, 1895.

(See page 31.)

Original reading of Rule 406 :

406. A train which is delayed, and falls back on the time of another train of the same class, does not lose its rights.

Amended reading, adopted April 18, 1895.

(See page 31.)

Original reading of Rule 408 :

408. A train overtaking another train of the same or superior class, **disabled so that it cannot move**, will run around it, assuming the rights and taking the orders of the disabled train, to the next telegraph office which is open, where it will report to the Superintendent. The disabled train will assume the rights of the last train passing it, till the next telegraph office is reached.

Amended reading, adopted April 8, 1891 :

408. A train overtaking another train of the same or superior class, **disabled so that it cannot move**, will run around it, assuming the rights and taking the orders of the disabled train, to the next telegraph office which is open, where it will report to the Superintendent. The disabled train will assume the rights of the last train passing it, with which it ex-

changed rights or orders, till the next telegraph office which is open is reached.

Amended reading, adopted April 18, 1895.

(See page 31.)

Original reading of Rule 410:

410. Passenger trains must not display signals for a following train without an order from the Superintendent; nor freight trains without an order from the yard master.

Amended reading, adopted April 18, 1895.

(See page 31.)

Original reading of Rule 414:

414. Great care must be exercised by the trainmen of a train approaching a station where any train is receiving or discharging passengers.

Amended reading, adopted April 18, 1895.

(See page 32.)

Original reading of Rule 415:

415. Enginemen must observe trains on the opposite track, and if they are running too closely together call attention to the fact.

NOTE.—In the revision adopted April 18, 1895, this rule was omitted, it being considered non-essential to the Code.

Original reading of Rule 416:

416. No person will be permitted to ride on an engine except the engineman, fireman and other designated employees, in the discharge of their duties, without a written order from the proper authority.

NOTE.—In the revision adopted April 18, 1895, this rule was omitted, it being considered non-essential to the Code.

Original reading of Rule 418 :

418. Accidents, detention of trains, failure in the supply of water or fuel, or defects in the tracks or bridges, must be promptly reported by telegraph to the Superintendent.

NOTE.—In the revision adopted April 18, 1895, this rule was omitted, it being considered non-essential to the Code.

Original reading of Rule 419 :

419. No train shall leave a station without a signal from its conductor.

Amended reading, adopted April 18, 1895.

(See page 33.)

Original reading of Rules 420 and 421 :

420. Conductors and enginemen will be held equally responsible for the violation of any of the rules governing the safety of their trains, **and they must take every precaution for the protection of their trains, even if not provided for by the rules.**

421. **In all cases of doubt or uncertainty take the safe course and run no risks.**

In the revision adopted April 18, 1895, the bold faced type was omitted and the same type used as for the rest of the rules.

Original reading of Rule 451 :

451. Each order must be given in the same words to all persons or trains directly affected by it, so that each

shall have a duplicate of what is given to the others. Preferably an order should include but one specified movement.

Amended reading, adopted October 16, 1895.

(See page 37.)

Original reading of Rule 459 :

459. When an order has been transmitted, preceded by the signal "31," operators receiving it must (unless otherwise directed) repeat it back at once from the manifold copy, and in the succession in which their several offices have been addressed. Each operator repeating must observe whether the others repeat correctly. After the order has been repeated correctly by the operators required at the time to repeat it, the response "O K," authorized by the train dispatcher, will be sent, simultaneously to as many as practicable, naming each office. Each operator must write this on the order, with the time, and then reply "i i O K," with his office signal.

Those to whom the order is addressed, except engineers, must then sign their names to the copy of the order to be retained by the operator, and he will send their signatures to the Superintendent. The response "complete," with the Superintendent's initials, will then be given, when authorized by the train dispatcher. Each operator receiving this response will then write on each copy the word "complete"; the time; and his last name in full; and will then deliver a copy to each person included in the address, except engineers, and each must read his copy aloud to the operator. The copy for each engineer must be delivered to him personally by —, and the engineer must read it aloud and understand it before acting upon it.

Amended reading, adopted October 16, 1895.

(See pages 38 and 39.)

Original reading of Rule 460 :

460. For an order preceded by the signal "31," "complete" must not be given to the order for delivery to a train of inferior right until "O K" has been given to and acknowledged by the operator who receives the order for the train of superior right. Whenever practicable, the signature of the conductor of the train of superior right must be taken to the order and "complete" given before the train of inferior right is allowed to act on it.

After "O K" has been given and acknowledged, and **before** "complete" has been given, the order must be treated as a holding order for the train addressed, but must not be otherwise acted on until "complete" has been given.

If the line fails **before an office has received and acknowledged** "O K" to an order preceded by the signal "31" the order at that office is of no effect, and must be there treated as if it had not been sent.

In the revision adopted October 16, 1895, the bold faced type was omitted and the same type used as for the rest of the rules.

Original reading of Rule 462 :

462. For an order preceded by the signal "19" "complete" must be given and acknowledged for the train of superior right before it is given for the train of inferior right.

If the line fails **before an office has received and acknowledged the "complete"** to an order, preceded by the signal "19," the order at that office is of no effect, and must be treated as if it had not been sent.

In the revision adopted October 16, 1895, the bold faced type was omitted and the same type used as for the rest of the rules.

Original reading of Rules 465 and 466 :

465. Orders used by conductors must be sent by them daily to the Superintendent.

466. Enginemen will place their orders in the clip before them until executed.

[NOTE.—In the revision adopted October 16, 1895, Rules 465 and 466 were omitted as not essential in a code of Train Rules.]

Original reading of Rule 471 :

471. Meeting orders must not be sent for delivery to trains at the meeting point if it can be avoided. When it cannot be avoided, special precautions must be taken by the train dispatchers and operators to insure safety.

There should be, if possible, at least one telegraph office between those at which opposing trains receive meeting orders.

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

Amended reading, adopted October 16, 1895.

(See page 42.)

Original reading of Rule 473 :

473. Orders once in effect continue so until fulfilled, superseded or annulled. Orders held by or issued for a regular train which has lost its rights, as provided by Rule No. 407, are annulled and other trains will be governed accordingly.

Amended reading adopted October 16, 1895.

(See pages 42 and 43.)

Original reading of Rule 476 :

476. Regular trains will be designated in orders by their schedule numbers, as "No. 10," or "2d No. 10," adding engine numbers if desired; extra trains by engine numbers, as "Extra 798"; and all other numbers by figures. The direction of the movement of extras will be added when necessary, as "East" or "West." Time will be stated in figures only.

Amended reading, adopted October 16, 1895.

(See page 44.)

Original reading of Form B :

Form B.—Authorizing a Train to Run Ahead of or Pass Another Train Running in the Same Direction.

- (1.) _____ will pass _____ at _____.
- (2.) _____ will run ahead of _____, from _____ to _____.

EXAMPLES.

- (1.)—*No. 1 will pass No. 3 at Khartoum.*
- (2.)—*No. 4 will run ahead of No. 6 from Bengal to Madras.*

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

Amended reading, adopted October 16, 1895.

(See page 49.)

Original reading of Form C :

Form C.—Giving a Train of Inferior Right the Right of Track Against an Opposing Train of Superior Right.

_____ has right of track against _____ _____ to _____.

EXAMPLES.

(1.)—*No. 2 has right of track against No. 1 Mecca to Mirbat.*

(2.)—*Extra 37 has right of track against No. 3 Natal to Ratlam.*

This order gives a train of inferior right the right of track against one of superior right, to a designated point.

If the trains meet at the designated point, the train of inferior right must take the siding, unless the rules or orders otherwise indicate.

Under this order, as illustrated by example (1), if the train of superior right reaches the designated point before the other arrives it may proceed, provided it keeps clear of the schedule time of the train of inferior right as many minutes as the inferior train was before required by the train rules to keep clear of the superior train.

If the train of superior right, before meeting, reaches a point beyond that named in the order, the conductor must stop the other train where it is met and inform it of his arrival.

Under example (2) the train of superior right cannot go beyond the designated point until the extra train arrives.

When the train of inferior right has reached the designated point, the order is fulfilled, and the train must then be governed by time-table and train rules or further orders.

The following modification of this form of order will be applicable for giving a work train the right of track over all other trains, in case of a wreck or break in the track.

EXAMPLE.

Work Train Extra 275 has right of track over all trains between Stockholm and Edinburgh from 7 p.m. ———

This gives the work train the exclusive right of the track between the points designated.

Amended reading, adopted October 16, 1895.

(See pages 50 and 51.)

Original reading of Form D :

Form D.—Giving all Regular Trains the Right of Track Over a Given Train.

All regular trains have right of track against —— between —— and ——.

EXAMPLE.

All regular trains have right of track against No. 1 between Moscow and Berlin.

This order gives to any regular train of inferior right receiving it the right of track over the train named in the order, and the latter must clear the schedule times of all regular trains, the same as if it were an extra.

Amended reading, adopted October 16, 1895.

(See page 51.)

Original reading of Form E :

Form E.—Time Orders.

- (1.) —— will run —— late from —— to ——.
- (2.) —— will wait at —— until —— for ——.

EXAMPLES.

- (1.) *No. 1 will run 20 min. late from Joppa to Mainz.*
- (2.) *No. 1 will wait at Muscat until 10 a.m. for No. 2.*

Form (1) makes the schedule time of the train named, between the points mentioned, as much later as the time stated in the order, and any other train receiving the order is required to run with respect to this later time,

the same as before required to run with respect to the regular schedule time. The time in the order should be such as can be easily added to the schedule time.

Under Form (2) the train of superior right must not pass the designated point before the time given, unless the other train has arrived. The train of inferior right is required to run with respect to the time specified, the same as before required to run with respect to the regular schedule time of the train of superior right.

Amended reading, adopted October 16, 1895.

(See pages 51 and 52.)

Original reading of Form F:

Form F.—For Sections of Regular Trains.

—— will carry signals —— to —— for ——.

EXAMPLES.

No. 1 will carry signals Astrakhan to Cabul for Eng. 85.

2nd No. 1 will carry signals London to Dover for Eng. 90.

This may be modified as follows:

Engines 70, 85 and 90 will run as 1st, 2d and 3d sections of No. 1, London to Dover.

For annulling a section:

Eng. 85 is annulled as second section of No. 1 from Dover.

If there are other sections following add:

Following sections will change numbers accordingly.

The character of a train for which signals are carried may be stated. Each section affected by the order must have copies, and must arrange signals accordingly.

Amended reading, adopted October 16, 1895.

(See page 52.)

Original reading of Form G:

Form G.—For Arranging a Schedule for a Special Train.

(1.) Eng. --- will run as special —— train, leaving —— on —— on the following schedule, and will have the right of track over all trains.

Leave ——.

——.

Arrive ——.

EXAMPLE

(1.) *Eng. 77 will run as special passenger trains, leaving Turin on Thursday, Feb. 17th, on the following schedule, and will have the right of track over all trains:*

Leave Turin 11 30 p.m.

“ Pekin 12 25 a.m.

“ Canton 1 47 a.m.

Arrive Rome 2 22 a.m.

Example (1) may be varied by specifying particular trains over which the special shall or shall not have right of track, and any train over which the special train is thus given the right of track must clear its time as many minutes as such train is required to clear the schedule time of a first-class train.

(2.) Eng. — will run as special —— train, leaving —— on —— with the rights of a —— class train, ——, on the following schedule, which is a supplement to time-table No. ——.

Leave ——.

——.

Arrive ——.

EXAMPLE.

(2.) *Eng. 75 will run as special passenger trains, leaving Geneva, Thursday, Feb. 17th, with the rights of a*

first-class train east, on the following schedule, which is a supplement to time-table No. 10 :

Leave Geneva 10 a.m.

Pekin 10 30 a.m., passing No. 12.

Canton 11 a.m., meeting No. 7.

Arrive Athens 11 30 a.m.

Example (2) creates a regular train and the specified meeting and passing points are to be regarded as if designated in the same manner as on the time-table. Such trains will be governed by all rules which affect regular trains.

Amended reading, adopted October 12, 1892 :

Form G.—For Arranging a Schedule for an Extra Train.

(1.) Eng. ——— will run extra, leaving ——— on ——— on the following schedule, and will have the right of track over all trains :

Leave ———.

—————.

Arrive ———.

EXAMPLE.

(1.) *Eng. 77 will run extra, leaving Turin on Thursday, Feb. 17th, on the following schedule, and will have the right of track over all trains :*

Leave Turin 11 30 p.m.

“ Pekin 12 25 a.m.

“ Canton 1 47 a.m.

Arrive Rome 2 22 a.m.

Example (1) may be varied by specifying particular trains over which the extra shall or shall not have right of track, and any train over which the extra is thus given the right of track must clear its time as many minutes as such train is required to clear the schedule time of a first-class train.

(2.) Eng. — will run as special — train, leaving — on — with the rights of a — class train, —, on the following schedule, which is a supplement to time-table No. —.

Leave —.

—.

Arrive —.

EXAMPLE.

(2.) Eng. 75 will run as special passenger trains, leaving Geneva, Thursday, Feb. 17, with the rights of a first-class train east, on the following schedule, which is a supplement to time-table No. 10:

Leave Geneva 10 a.m.

Pekin 10 30 a.m., passing No. 12.

Canton 11 a.m., meeting No. 7.

Arrive Athens 11 30 a.m.

Example (2) creates a regular train and the specified meeting and passing points are to be regarded as if designated in the same manner as on the time-table. Such trains will be governed by all rules which affect regular trains.

Amended reading, eliminating the (2.) form and example, adopted October 16, 1895.

(See page 53.)

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Original reading of Form H:

Form H.—Extra Trains.

— will run from — to —.

EXAMPLE.

(a.) Eng. 99 will run extra from Berber to Gaza.

A train receiving an order to run extra is not required to guard against opposing extras, unless directed by order to do so, but must keep clear of all regular trains, as required by rule.

A “work train” is an extra, for which the above form will be used for a direct run in one direction. The

authority to occupy a specified portion of the track, as an extra while working, will be given in the following form :

(b.) *Eng. 292 will work as an extra from 7 a.m. until 6 p.m. between Berne and Turin.*

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

(c.) *Eng. 292 will run extra from Berne to Turin and work as an extra from 7 a.m. until 6 p.m. between Turin and Rome.*

When an order has been given to "work" between designated points, no other extra must be authorized to run over that part of the track without provision for passing the work train.

When it is anticipated that a work train may be where it cannot be reached for meeting or passing orders, it may be directed to report for orders at a given time and place, or an order may be given that it shall clear the track for a designated extra, in the following form :

(d.) *Work Train 292 will keep clear of Extra 223, south, between Antwerp and Brussels after 2 10 p.m.*

In this case, extra 223 must not pass either of the points named before 2 10 p.m., at which time the work train must be out of the way between those points.

When the movement of an extra train over the working limits cannot be anticipated by these or other orders to the work train, an order must be given to such extra, to protect itself against the work train, in the following form :

(e.) *Extra 76 will protect itself against work train extra 95 between Lyons and Paris.*

This may be added to the order to run extra.

A work train when met or overtaken by an extra must allow it to pass without unnecessary detention.

When the conditions are such that it may be considered desirable to require that work trains shall at all times protect themselves while on working limits, this may be done under the following arrangements. To example (b) add the following words:

(f.) *protecting itself against all trains.*

A train receiving this order must, whether standing or moving, protect itself within the working limits (and in both directions on single track) against all trains, in the manner provided in Rule 399.

When an extra receives orders to run over working limits it must be advised that the work train is within those limits by adding to example (a) the words—

(g.) *Eng. 292 is working as an extra between Berne and Turin.*

A train receiving this order must run expecting to find the work train within the limits named.

Amended reading, adopted October 16, 1895:

(See pages 53, 54 and 55.)

Original reading of Form J:

Form J.—Holding Order.

Hold _____.

EXAMPLES.

(1.) *Hold No. 2.*

(2.) *Hold all trains east.*

As any order for which "O K" has been given and acknowledged operates as a holding order for the train to which it is addressed, this form will only be used in special cases, to hold trains until orders can be given or for some other emergency. The reason for holding may be added, as "for orders."

This order is not to be used for holding a train, while orders are given to other trains against it, which are not at the same time given to it in duplicate. It must be re-

spected by conductors and enginemen of trains thereby directed to be held as if addressed to them. Conductors when informed of the order must sign for it, and their signatures must be sent and "complete" obtained.

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

"——— may go."

This must be addressed to the person or persons to whom the order to hold was addressed and must be delivered in the same manner.

Amended reading, adopted October 12, 1892 :

Form J.—Holding Order.

Hold —— at ——.

EXAMPLES.

- (1.) *Hold No. 2 at Berlin.*
- (2.) *Hold all trains east at Berlin.*

As any order for which "O K" has been given and acknowledged operates as a holding order for the train to which it is addressed, this form will only be used in special cases, to hold trains until orders can be given or for some other emergency. The reason for holding may be added, as "for orders."

This order is not to be used for holding a train, while orders are given to other trains against it, which are not at the same time given to it in duplicate. It must be respected by conductors and enginemen of trains thereby directed to be held as if addressed to them. Conductors when informed of the order must sign for it, and their signatures must be sent and "complete" obtained.

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

"——— may go."

This must be addressed to the person or persons to whom the order to hold was addressed and must be delivered in the same manner.

Original reading of Form L:

Form L.—Annuling or Superseding an Order.

“Order No. —— is annulled.”

This will be numbered, transmitted and signed for as other orders.

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

Annulled by order No. ——.

An order superseding another may be given, adding “*this supersedes order No. ——,*” or adding “*instead of ——.*”

EXAMPLE.

No. 1 and No. 2 will meet at Sparta, instead of at Thebes.

An order which includes more than one specified movement must not be superseded.

An order that has been annulled or superseded must not be again restored by special order under its original number.

In the address of an order annulling or superseding another order, the train first named must be that to which rights were given by the order annulled or superseded, and when the order is not transmitted simultaneously to all concerned, it must be sent to the point at which that train is to receive it and the required response first given, before the order is sent for other trains.

Amended reading, adopted October 16, 1895.

(See pages 57 and 58.)

EXPLANATORY NOTES

Respecting Block Signal Rules adopted by the Joint Committee on Interlocking and Block Signals.

General Note.

[The Committee has found it desirable to leave blanks (—) in certain rules for which times, distances, &c., are to be supplied by each company adopting them, as may best suit its own requirements.]

For Rules 501 to 539.

[NOTE.—Rules 501 to 539 inclusive, apply to this system without any of the “adjuncts.”]

For Rule 504*a* and 504*b*.

[NOTE.—Two forms of Rule 504 are recommended :

504*a*. For blocks where following movements only are to be regulated.

504*b*. For blocks where both opposing and following movements are to be regulated.]

For Rule 513.

[NOTE.—Hand signaling includes the use of lamp, flag, torpedo and fusee signals.]

For Rule 604.

[NOTE.—The following records may be kept on the block register:

a. The time a train enters the block in the rear.

b. The time a train clears the block in the rear and enters the block in advance.

c. The time a train clears the block in advance.

d. Other information as desired.]

For Rule 608.

[NOTE.—Additional bell signals may be used if desired. The telegraph or other equivalent may be used instead of the bell for transmitting signals.]

[NOTE.—(—) signifies pause between beats.]

For Rule 617*a* and 617*b*.

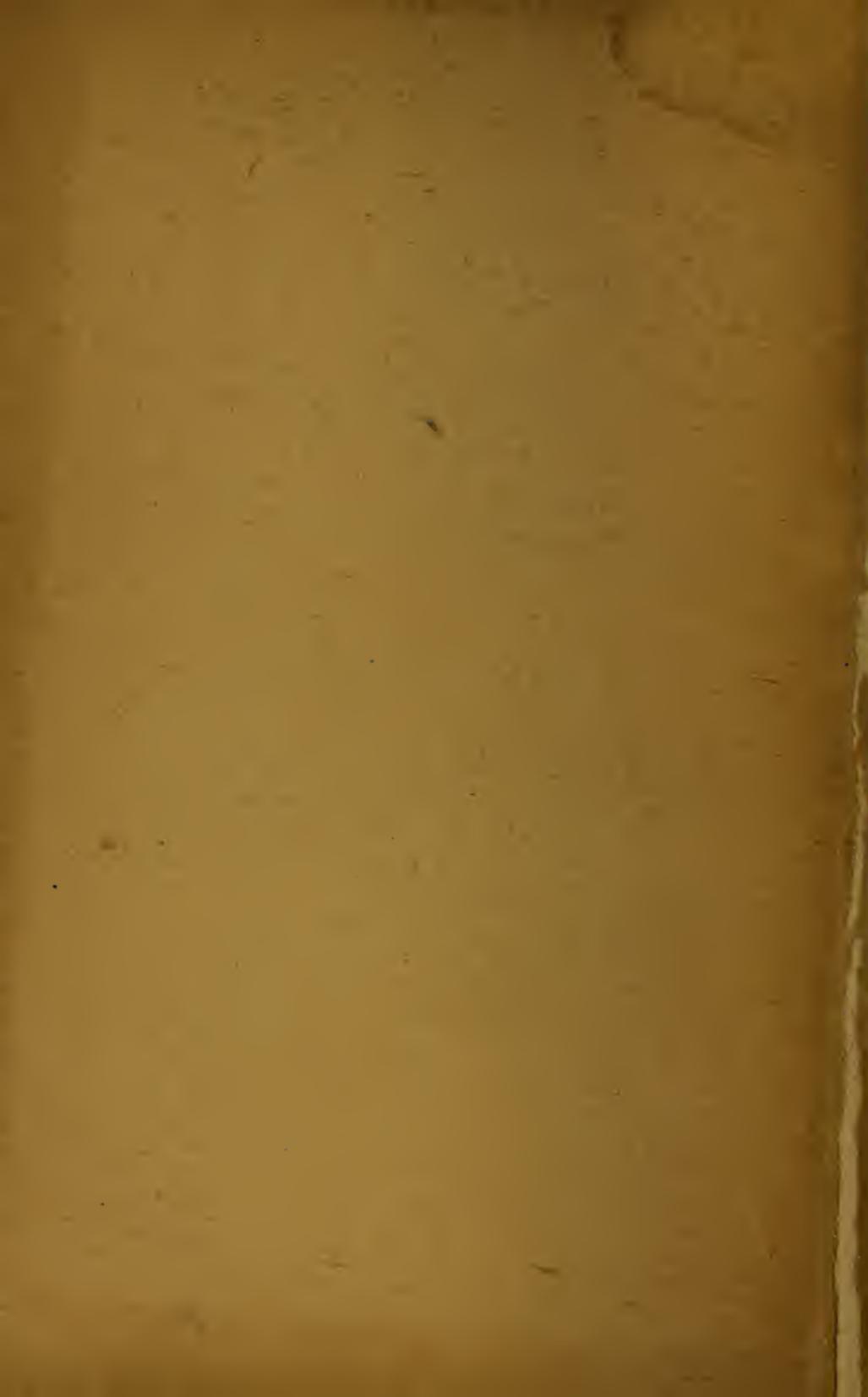
[NOTE.—The Committee has reported two forms of Rule 617, believing either to be good practice.]

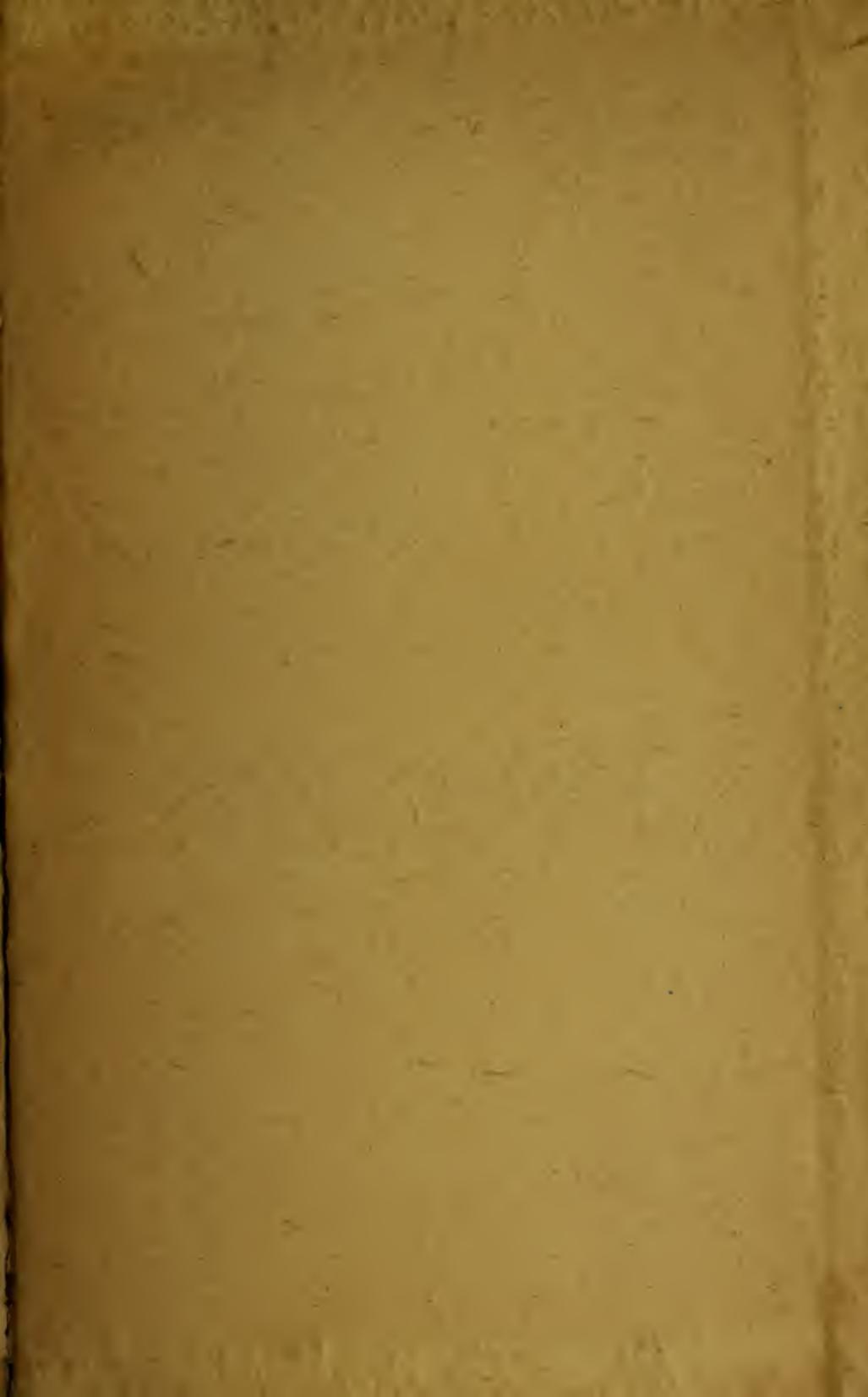
For Rule 626.

[NOTE.—Hand signaling includes the use of lamp, flag, torpedo and fusee signals.]

For Rule 645*a* and 645*b*.

[NOTE.—The Committee has reported two forms of Rule 645, believing either to be good practice.]





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