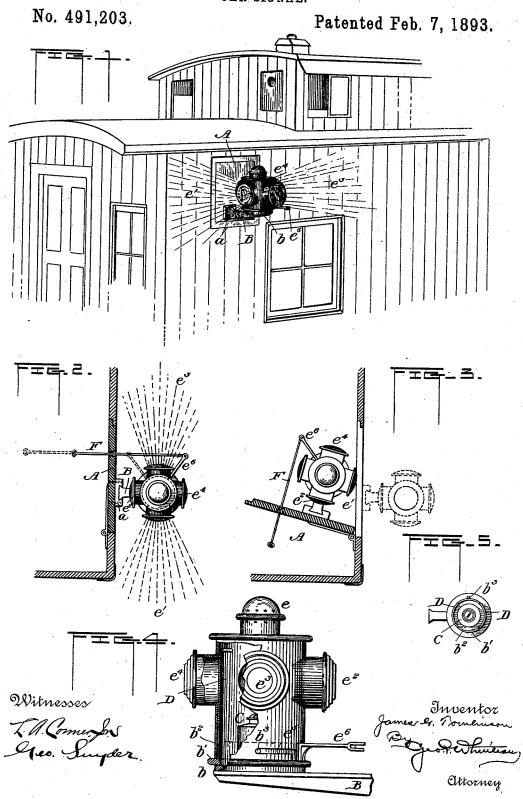
J. G. TOMLINSON.
CAR SIGNAL.



## UNITED STATES PATENT OFFICE.

JAMES G. TOMLINSON, OF BIRMINGHAM, ALABAMA.

## CAR-SIGNAL.

SPECIFICATION forming part of Letters Patent No. 491,203, dated February 7, 1893.

Application filed July 10, 1891. Serial No. 398,996. (No model.)

To all whom it may concern:

78

Be it known that I, JAMES G. TOMLINSON, a subject of the Queen of Great Britain and Ireland, residing at Birmingham, in the 5 county of Jefferson and State of Alabama, have invented certain new and useful Improvements in Tail-Lamps for Railway-Trains; and I do declare the following to be a full, clear, and exact description of the invention, such 10 as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specifica-15 tion.

My invention relates to improvements in tail lamps for trains, and the objects of my improvement are first to provide a tail lamp, which for the purpose of changing the color 20 of the signal when taking a siding to meet opposing trains, may be operated from the inside of the caboose or coach without detaching the lamp from its brackets, and second to provide means by which the lamp may be 25 drawn into the caboose or coach to be lighted again, or refilled, or for any other purpose, whether the train is moving or at rest, thus obviating the frequent removal of the lamp from the bracket, and the difficulty of doing 30 so with safety when the train is in motion. I attain these objects by the mechanism illustrated in the accompanying drawings, in which

Figure 1 is a perspective view of a part of a 35 caboose equipped with my signal lamp. Figs. 2 and 3 are sectional plan views. Fig. 4 is a sectional elevation, looking from the forward end of the car, and Fig. 5 is a plan of the base.

At the proper place, where tail lamps are 40 usually displayed, small doors A are hinged to the frame of the car, and arranged to open inwardly. Fixed to the outside of each door, is a block a, containing a dovetail socket, as shown. A bracket B is formed with a dove-45 tail edge to fit into the socket, and project at right angles to the side of the car. On the outer end of the bracket is a stationary circular plate or base b having a shoulder b' and a circular wall or upright flange  $b^2$ . In the cen-50 ter of the base is a socket for the lamp C. Se-

opaque substance, curved to fit the inside of the flange  $b^2$ , and extending around a quadrant of the circle. If one blind is used, it may 55 be placed either next to the door A, or on the opposite of the base b, as desired. If two are used, they are arranged diametrically opposite on the line of the bracket B. Their function is to constantly obstruct the light shin- 60 ing toward and away from the car, but permit it to show to the front and rear. If it is desired to show the light on the side of the train also, the outside blind may be omitted.

Around the blinds and the circular flange 65 fits a cylindrical body E, having a ventilated top e and carrying four globes or semaphores e' e<sup>2</sup> e<sup>3</sup> e<sup>4</sup>, arranged with their axes at right angles, as shown, one of them, e', being red, and the others green. The lower part of the 70 body has a bayonet slot e5 to engage with a pin,  $b^3$  projecting from the flange  $b^2$ , whereby the body E is locked to the base b. The horizontal arm of the slot  $e^5$  is long enough to permit the body E to be oscillated a quarter turn on 75 the shoulder b', when the position of the lights is to be changed.

In order to effect the change from inside the car, an arm  $e^6$  is rigidly fastened to the body E, and a rod F, jointed to said arm, runs 80 through a hole in the door A, to the inside of the caboose or coach.

The operation of my device is as follows: When the train is running, the lights are arranged as shown in Fig. 2, the red light e' 85 showing to the rear and the green light  $e^3$  to the front, the green lights  $e^3e^4$  being blanked by the blinds D inside the body E. Upon taking a side track to clear the main line, the rod F is pulled in, rotating the body E a 90 quarter turn, and showing green lights  $e^2$   $e^4$ to rear and front respectively, the red e' and green e<sup>3</sup> being blanked. When re-entering the main line, the rod F is pushed out, restoring the lights to the positions shown in Fig. 2.

When the lamps C are to be lighted, extinguished, trimmed or filled, the door A is opened inwardly as shown in Fig. 3, carrying the entire apparatus into the caboose or coach, where it can be attended to with ease, whether icc the train be in motion or at rest.

The object in making the body E with four cured to the flange  $b^2$  is one or two blinds D, semaphores of proper color is to do away with consisting of a plate of sheet metal or other the small removable glass slides now carried semaphores of proper color is to do away with

which are constantly liable to breakage. If preferred, however, the semaphores may be white, and removable colored slides inserted, but the slides must of course clear the blinds 5 when the body is revolved.

When the tail lamp is applied to a passenger coach, the door A is omitted, the bracket being fastened to the side of the coach, and the rod F passed through a slot in the car body.

My signal lamp is applicable to the end of a caboose or coach as well as to the side thereof. It can also be used on locomotives, being provided with the proper semaphores.

Having thus described my invention, what I claim and desire to secure by Letters Patent

is:-

The combination with a railway car of a signal lantern, consisting of a stationary base fastened to the car and carrying one or more fixed blinds, a body rotatably mounted on said base and containing four semaphores, and a suitable device for rotating the body from within the car, substantially as described.

2. The combination with a stationary base having a circular shoulder and two diametrically opposite blinds, of a cylindrical body rotatably mounted on said shoulder and carrying four semaphores, an arm rigidly attached to said body, and a rod jointed to said

30 arm, substantially as described.

3. The combination with a railway car, of a door in the side of said car opening inwardly,

and a signal lantern attached to the outside of said door, substantially as described.

4. The combination with a railway car, of a 35 door in the side of said car adapted to open inwardly, a lamp bracket attached to the outside of said door, a rotatable lantern body mounted on said bracket, and means for operating said body from inside the car, sub-40 stantially as described.

5. The combination with a railway car, of a door in the side of said car adapted to open inwardly, a lamp bracket attached to the outside of the door, a cylindrical lantern body 45 rotatably mounted on said bracket, and carrying four semaphores, an arm rigidly fastened to said body, and a rod jointed to said arm and passing through a hole in the door, substantially as described.

6. The combination with a railway car, of a door in the side of said car adapted to open inwardly, a lamp bracket attached to the outside of the door, and carrying fixed blinds, a lantern body rotatably mounted on said 55 bracket and carrying four semaphores, and means for operating the body from inside the car, substantially as described.

In testimony whereof I affix my signature in

presence of two witnesses.

JAMES G. TOMLINSON.

Witnesses:

NATHANIEL L. MEWHINNEY, HARRY W. WESTCOTT.