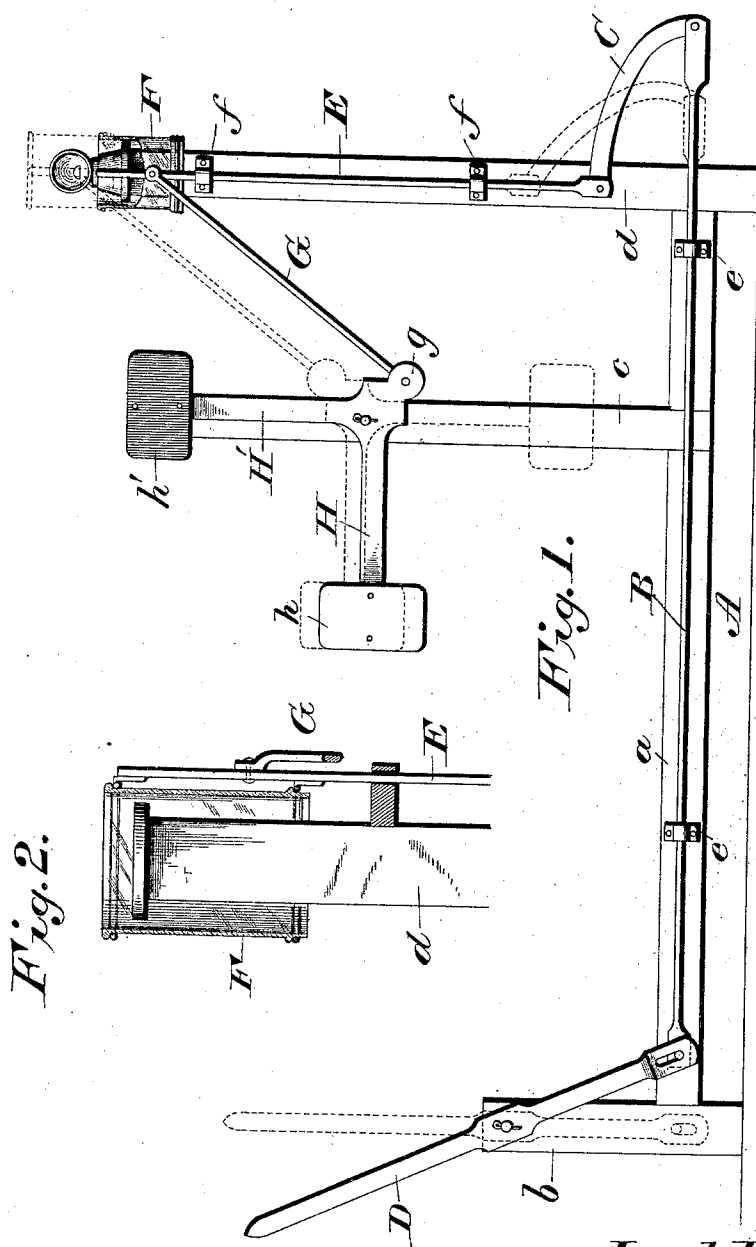


(No Model.)

J. B. CARWELL.
RAILWAY SIGNAL.

No. 465,752.

Patented Dec. 22, 1891.



Witnesses
G. S. Elliott.
E. W. Johnson

Jacob B. Carwell.
Inventor
by [Signature]
Attorney

UNITED STATES PATENT OFFICE.

JACOB B. CARWELL, OF MIDDLEBROOK, VIRGINIA.

RAILWAY-SIGNAL.

SPECIFICATION forming part of Letters Patent No. 465,752, dated December 22, 1891.

Application filed May 14, 1891. Serial No. 392,734. (No model.)

To all whom it may concern:

Be it known that I, JACOB B. CARWELL, a citizen of the United States of America, residing at Middlebrook, in the county of Augusta and State of Virginia, have invented certain new and useful Improvements in Railway-Signals; and I do hereby declare the following to be a full, clear, and exact description of the invention, such 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 letters of reference marked thereon, which form a part of this specification.

This invention relates to improvements in railway-signals.

The object of the invention is to provide a simple, cheap, and effective means for displaying either a light or signal-arm; and it consists in the construction and combination of the parts, as will be hereinafter fully set forth, and particularly pointed out in the claims.

In the accompanying drawings, forming part of this specification, Figure 1 is a side view of a railway-signal constructed in accordance with my invention. Fig. 2 is a detail view of the glass cylinder.

A refers to a frame which is suitably planted in the ground a suitable distance from the track. This frame consists of a horizontal beam *a* and vertical posts or standards *b*, *c*, and *d*. To the horizontal beam *a* are secured bearings *e e* for the operating-rod *B*, to one end of which is connected a link *C*, and at the other end a pivoted operating hand-lever *D*. The link *C* connects with a vertical rod *E*, which passes through bearings *f f*, and to the upper end of this rod is rigidly secured a colored-glass cylinder *F*, which moves over a lamp or other suitable light attached to or carried by the upper end of the post *d*. It will be observed that the rod *E* moves vertically and carries with it the glass cylinder *F*, so that when it is raised a red or other colored light may be shown, indicating "danger," and when it is lowered the white or ordinary light will show.

To near the upper end of the rod *E* is connected a bar *G*, which is also pivotally connected to the projecting portion *g* of the signal-arms *H* and *H'*, which arms carry the plates or signals *h* and *h'*. The signal-arms are connected to each other and adjacent to their juncture are pivoted to the post *c*, which may be wide enough to hide said signals when behind the same. The signals *h* and *h'* will be visible when at right angles with the post.

By the construction of the device herein shown and described it is obvious that I provide a signal in which there is very little liability of error and which may be operated at a considerable distance from where it is desired to display the same.

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

1. In combination with the signal-arms *H* and *H'*, pivoted to an upright and provided with a projecting portion *g*, a rod *G*, connecting the same with a vertically-moving rod *E*, carrying a transparent cylinder which is adapted to move over a light, the lower end of the bar *E* being connected to a link *C*, said link being adapted to be operated by a reciprocating bar *B*, substantially as set forth.

2. In combination with the frame *A*, constructed substantially as shown and provided with vertical signal-carrying posts *b*, *c*, and *d*, a lever pivoted to the post *b* and connected to a reciprocating rod *B*, a curved link *C*, pivotally attached to a vertically-moving rod *E*, said rod carrying a transparent cylinder which is adapted to move over the lamp, a bar *G*, pivoted to the rod *E* and to a projecting portion *g* of the signal-arms *H* and *H'*, said signal-arms being pivoted to the post *c*, substantially as set forth.

In testimony whereof I affix my signature in presence of two witnesses.

JACOB B. CARWELL.

Witnesses:

J. N. MCFARLAND,
C. B. SEALS.