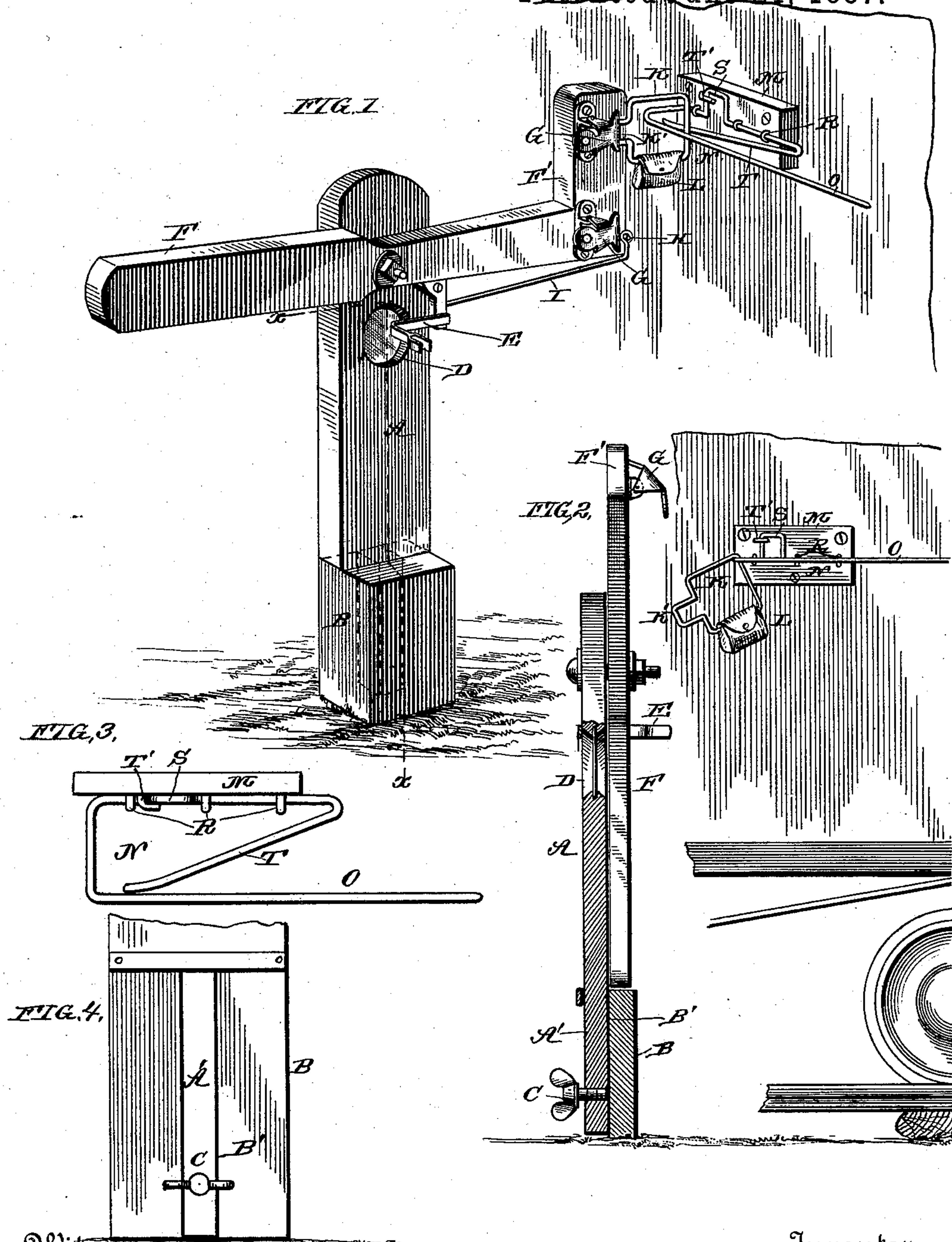


(No Model.)

R. J. MICKEY.  
TRAIN ORDER CATCHER.

No. 365,314.

Patented June 21, 1887.



Witnesses

J. C. Ryan  
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Inventor

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# UNITED STATES PATENT OFFICE.

ROBERT J. MICKEY, OF PATTERSON, PENNSYLVANIA, ASSIGNOR OF ONE-HALF TO GEORGE D. ARNOLD, OF SAME PLACE.

## TRAIN-ORDER CATCHER.

SPECIFICATION forming part of Letters Patent No. 365,314, dated June 21, 1887.

Application filed February 12, 1887. Serial No. 227,460. (No model.)

*To all whom it may concern:*

Be it known that I, ROBERT J. MICKEY, a citizen of the United States, residing at Patterson, in the county of Juniata and State of Pennsylvania, have invented a new and useful Improvement in Train Order Catchers and Railroad-Signals, of which the following is a specification.

My invention relates to an improvement in train-order catchers and automatic signals for railway-trains; and it consists in the peculiar construction and combination of devices, that will be more fully set forth hereinafter, and particularly pointed out in the claims.

In the drawings, Figure 1 is a perspective view of my invention. Fig. 2 is a side elevation of the same, partly in vertical section, on the line *xx* of Fig. 1. Fig. 3 is a detached top plan view of one of the devices for catching the train-orders. Fig. 4 is a side elevation of the lower end of the signal-post.

The object of my invention is to provide a device whereby the engineers and conductors of railway-trains may receive their running-orders without the necessity of stopping the trains, and, further, to provide a device for automatically signaling a train for orders and to withdraw the order-signal when the train has passed.

A represents a vertical signal-post, which is erected on one side of the railway-track and at a suitable distance therefrom. The lower end of this signal-post is provided with a depending adjusting-arm, A', which is fitted in a vertical dovetailed groove, B', that is made in one side of a vertical supporting-block, B. A set-screw, C, extends through the arm A', and is adapted to bear against the inner side of the groove B', so as to support the signal-post at any desired vertical adjustment in the block B. The said signal-post is provided with a circular opening, D, that is covered by a disk of colored glass.

E represents a horizontal supporting-arm, which projects from the rear side of the signal-post, and is arranged slightly above the colored disk, the said supporting-arm being adapted to suspend a signal-lantern or other source of light behind the colored disk, so that the rays from the said lantern will shine

through the disk, and thus display a signal at night to indicate to the engineer of an approaching train to look out for orders.

F represents a signal-arm, which is pivoted to the rear side of the post A, at the upper end thereof. One end of the said signal-arm is heavier than the other to a slight extent, and is broadened and painted red or some other appropriate color which corresponds with the color of the glass disk. When the signal-arm is in a vertical position, its lower colored side is arranged behind the rear side of the post A, so as to be out of sight, and is interposed between the lantern and the colored-glass disk, so that the rays of light from the lantern are cut off from the disk and the latter is not illuminated. When in this position, engineers of passing trains will run their trains past the station without looking for orders. The inner or upper end of the signal-arm is provided with an extended head, F', to which is attached a pair of spring-actuated catches, G. The said catches are arranged one above the other, for the purpose to be hereinafter explained.

From the rear side of the extended arm F', near the lower end thereof, projects a stud or pin, H, which is arranged in front of the lower spring-catch.

I represents a stay-rod, which is pivotally connected at its inner end to the post A, and is provided at its outer end with an eye adapted to be placed over the pin H, so as to secure the signal-arm in a horizontal position.

K represents a rectangular frame, which is made of wire of suitable thickness, and is provided at one side with a projecting arm or loop, K'. To the lower side of the said frame is attached a pouch, L, which is made of india-rubber or other suitable water-proof material, and is adapted to receive and retain the running-orders for a train. The said pouch will be weighted to a suitable extent, to cause it to counterbalance the weight of the broadened end of the signal-arm, so that when the frame K is attached to the head of the signal-arm the latter may be arranged in a horizontal position, as shown in solid lines in Fig. 1, and thereby display the signal.

The frame K is attached to the head of the



signal-arm by causing the loop or arm K' thereof to be engaged by one of the spring-actuated catches on the said head, so as to sustain the frame in a position projected outwardly from the outer end of the signal-arm and toward the track. After the frame K is attached to the head of the signal-arm, the outer end of the brace-rod I is attached to the pin H, so that the said brace-rod will be on the outer side of the frame, and thereby, when the latter is detached from the signal-arm by the device, to be hereinafter described, the brace-rod will be unshipped from the pin H and disengaged from the signal-arm, and the latter, relieved of the weight of the frame and its pouch, will instantly resume its normal vertical position.

M represents a rectangular block, which is adapted to be attached to one side of the cab of a locomotive at a height corresponding to the height of a spring-actuated catch on the signal-arm which is designed to deliver the orders to the train.

N represents a hook arm, which is made of a single piece of wire or rod bent in the form shown in Figs. 1 and 3, and thereby forming an engaging-arm, O, which extends in the direction in which the train is running, and a detent-arm, T, the free end of which bears against the inner side of the engaging-arm O, near the rear end of the latter. The hook-arm is pivoted in a horizontal position on the block M by means of a series of keepers, R, which engage the inner side of the hook-arm, and the latter is adapted to turn in the said keepers from a horizontal to a vertical position, and is also adapted to move longitudinally a slight distance. The hook-arm is provided at its inner pivoted side with a projecting locking-arm, S, which is bent at right angles to the hook-arm, and is adapted to engage a catch, T', that projects from the block N, and is open on its front side toward the front of the engine. When the hook-arm is turned to a horizontal position and is moved rearwardly, so that its locking-arm engages catch T', the engaging-arm O is supported beyond the side of the cab at a height corresponding with the height of the particular spring-actuated catch that is designed to deliver orders to the train. Each engine on the road will have its hook-arm supported at a different height from the hook-arm of any other engine, and the signal-post will be adjusted vertically, so as to arrange the frame at such a height as will cause it to be engaged by the trains to receive running-orders.

The operation of my invention is as follows: When a train running in the direction indicated by the arrow in Fig. 1 is to receive orders, the orders are inclosed in pouches attached to the frames K, and the latter are secured to the spring-actuated catches on the signal-arm, the signal-post being previously adjusted vertically to the required height. The weight of the frames and the pouches causes the signal-arm to remain in a horizon-

tal position, as before described, so as to display the lookout-signal either in daylight or darkness, and the engineer of the approaching train arranges the hook-arm on his cab in the horizontal position before described and blows the whistle to notify the conductor of the train. While the engine is passing the signal-arm, the arm O of the hook-arm passes through the frame or loop K and disengages the latter from the signal-arm, thus causing the said frame and the pouch containing the running-orders to be hung to the side of the cab. As the engaging-arm O moves forwardly in the frame before the latter is detached from the signal-arm, the detent-arm T opens sufficiently to permit one side of the frame to pass its free end and immediately reassumes its normal position, with its free end bearing against the arm O, thus preventing the frame K from dropping from the hook-arm and losing the orders before the engineer has time to release the frame from the said hook-arm.

The conductor's caboose at the rear end of the freight-train is provided also with a hook-arm similar to that on the locomotive, and when the conductor is notified by the whistle to look out for orders he adjusts the hook-arm and as the caboose passes the signal-post the remaining frame carrying the pouch in which the conductor's orders are inclosed is caught by the hook-arm, as before. As soon as the orders are detached from the signal-arm, the latter reassumes its normal vertical position with the signal withdrawn, as before described.

Having thus described my invention, I claim—

1. The combination of the vertically-adjustable part A and the arm F, pivoted thereto, and having one end heavier than the other, and the catches attached to the lighter end of the arm, substantially as described.

2. The combination of the part A and the arm F, pivoted thereto, and having one end heavier than the other, the lighter end of the said arm having the extended head F' provided with the catches G, substantially as described.

3. The combination of the post A, having the colored-glass signal, and the pivoted arm F, having one end heavier than the other, and thereby adapted to normally cover the signal in the post to withdraw the latter from display, the lighter end of the signal-arm being provided with devices from which to suspend the orders for the train, substantially as described.

4. The combination of the part A, the arm F, pivoted thereto, and having one end heavier than the other, the spring-actuated catches G on the lighter end of the arm, and the frames K, adapted for the attachment of the running orders of the train, and having the projecting arm or loop K' to engage the catch, substantially as described.

5. The combination of the block M, the hook-arm pivoted thereto and movable longitudinally on the block, the said hook-arm hav-



ing the locking-arm S and the engaging-arm O, and the catch T, projecting from the block M, and adapted to engage the arm S, for the purpose set forth, substantially as described.

5 6. The combination of the pivoted counter-balanced signal - arm, the spring-actuated catches attached thereto, and the frames K, to which the pouches for the train-orders are attached, the said frames having the loops or  
10 arms K', adapted to be engaged by the spring-

actuated catches, for the purpose set forth, substantially as described.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in presence of two witnesses.

ROBERT J. MICKEY.

Witnesses:

GEO. JACOBS,

J. L. SANDOE.