

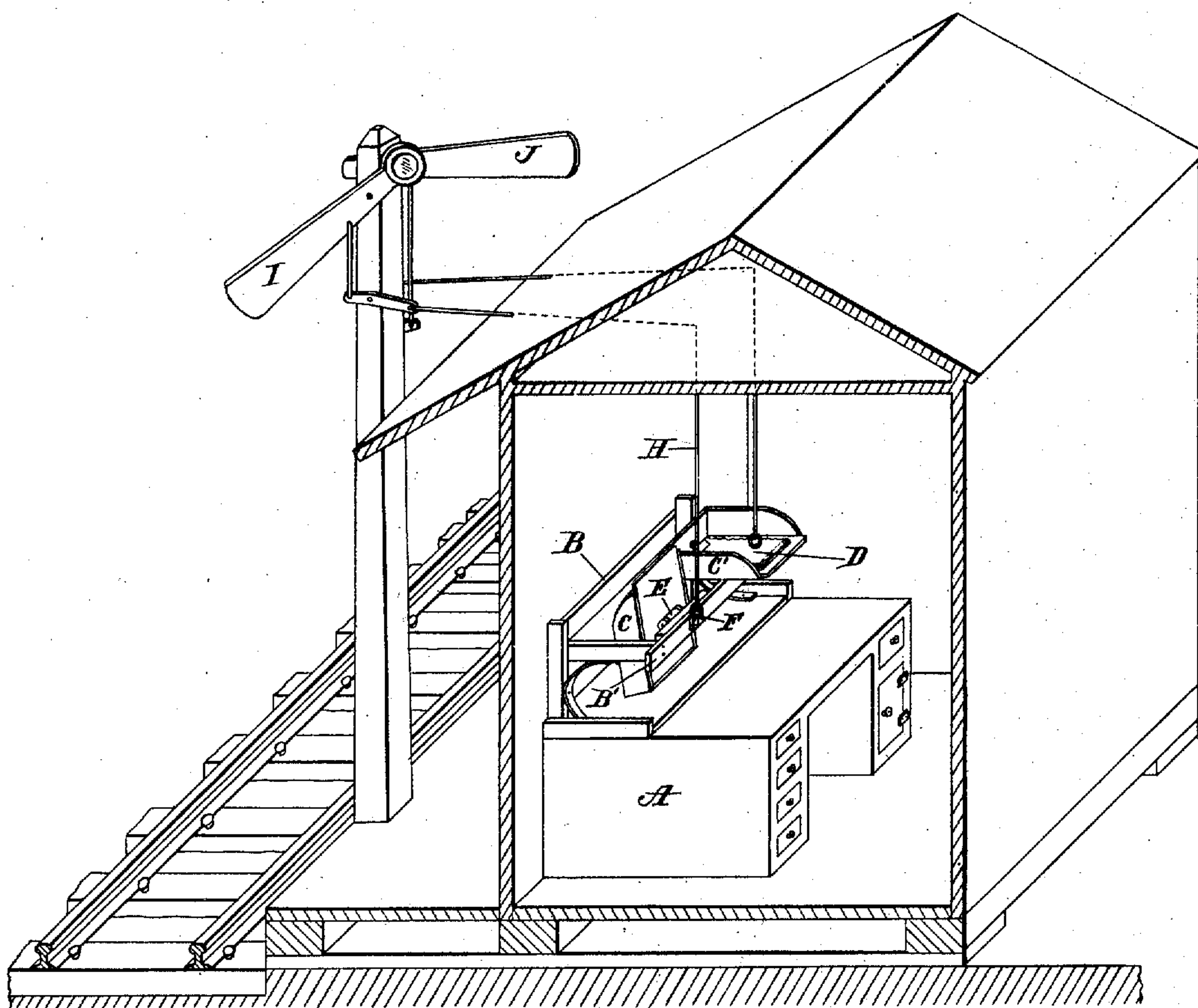
No. 692,666.

Patented Feb. 4, 1902.

I. G. HOAG.
TRAIN ORDER BOX.

(Application filed Aug. 12, 1901.)

(No Model.)



WITNESSES

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IRA G. HOAG, OF LOS ANGELES, CALIFORNIA.

TRAIN-ORDER BOX.

SPECIFICATION forming part of Letters Patent No. 692,666, dated February 4, 1902.

Application filed August 12, 1901. Serial No. 71,818. (No model.)

To all whom it may concern:

Be it known that I, IRA G. HOAG, a citizen of the United States, residing at Los Angeles, in the county of Los Angeles, State of California, have invented new and useful Improvements in Train-Order Boxes in Connection with Semaphores, of which the following is a specification.

My invention relates to improvements in train-order boxes in combination with the means usually used for working semaphores; and the object of my invention is to provide a box for the reception of train-orders which when not containing an order or other paper is in such position that the semaphore will be set to show a clear track, but when put in use for holding a train-order is in such position that the semaphore cannot be set to show a clear track, but shows the stop or danger signal to the engineer of the train which is approaching the semaphore. I accomplish this object by the device described herein and illustrated in the accompanying drawing, which is a perspective view of a station equipped with my improved device, the end of the office being removed for clearness of illustration.

In the operation of railroads it is necessary that the movement of the train shall be controlled by a train-despatcher at a central station, who sends to the outlying stations on the line of the road orders to the various trains as to where trains shall pass each other and in relation to various other matters connected with the movement of the trains. These orders are sent to the various stations on the line of road and are written out at such station by the operator thereat and should be delivered to the conductor in charge of the train. Sometimes it has happened that the operator has neglected to deliver such order to the train-crew, and a train which should have stopped at the station or passed or met a train at some other station, as per such order telegraphed by the train-despatcher, has gone on its way and collisions have occurred, occasioning loss of life as well as destruction of property. The local operator always intends to deliver such order, but in the rush of business or through forgetfulness fails so to do. The object of my present improve-

ment is to render such carelessness practically impossible.

In the drawing, A is the local operator's desk, at which he sits when receiving train-orders, the telegraphic instruments and lines not being shown, as not necessary to the illustration of my invention. At the back of the desk is a rack or frame B, on the front portion of which are mounted the tilting order-boxes C and C', adapted when in their horizontal position, as shown by box C', for the reception of train-orders, orders (represented at D) being shown therein. Each of these order-boxes is preferably fastened to the front of the frame by a self-closing spring-hinge E, which will hold the box in a vertical position, as box C, or in a horizontal position, as box C'. On the front of the bracket are hooks F, one of which is covered by box C', to which the cord H, which operates semaphore I, is hooked when there are no orders for the incoming train to hold the semaphore in the position shown, which indicates that the track is clear and the train may proceed without danger. When there are orders for the approaching train, the operator receives and writes the order upon an order-blank and places it in the order-box. Before he can put the order in the box he must place it in a horizontal position. In order to do this, if the cord H is hooked on the hook F (which is designated as the "semaphore-lock") he must unhook it and then turn the box to its horizontal position. When he unhooks the cord, the semaphore is unlocked, and it immediately assumes the stop or danger position, as shown by semaphore J, at which position it remains until the train reaches and stops at the station, when the order is then removed and delivered to the trainmen, and the semaphore is again locked to the safe or clear-track position. By this construction a box is provided for the reception of train-orders which is simple in construction and operation, convenient to the operator, and which requires the operator to set the danger or stop signal as soon as he gets a train-order, thereby insuring the receipt of the order by the trainmen and preventing accidents.

I have shown a tilting box to cover the hook that holds the semaphore-operating cord when

there are orders for the train, as that form is the most convenient and simplest of construction; but any other form of construction may be used without departing from the spirit of my invention, as a drawer which is drawn out to cover the hook, the essential feature of which is an order-box for holding train-orders so arranged that before a train-order can be placed therein the position of the box must be such that the semaphore will be set at the stop or danger position. The bracket which holds the order-box may be placed on the wall of the station.

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

1. The combination with a gravity-operated semaphore-arm of the herein-described order-box, mounted to swing in a vertical plane and adapted to hold orders while in a longitudinal position and unfit to receive them when in a vertical position, a cord secured at one end to and extending from the semaphore-arm to elevate and hold an arm in an elevated position when taut, the other end of the cord adapted to engage a hook on the order-box, the cord being of the required length to become taut when hooked thereon, a hook on said order-box for hooking the cord, the cord being adapted when hooked to hold the order-box in a vertical position.

2. The combination with a gravity-operated semaphore-arm and the cord for retaining the same in a horizontal position, the herein-described order-box mounted to swing on horizontal pivots and remain in horizontal position for holding orders when disconnected from the cord, a hook to secure said cord below said box, a ring on the free end of the cord to engage the said hook, the hook being arranged with reference to the box so that a cord passing directly from the hook to the semaphore-arm will tilt the box and prevent the placement therein of an order.

3. In a railway signaling device, the combination with the gravitating semaphore-arm I, of the order-box C pivoted to swing vertically and adapted to receive orders only when in a horizontal position, and located to contact with and be thrown into vertical position when the operating-cord H is taut and thereby rendered unfit to receive or hold orders, the semaphore-operating cord H secured at one end to the semaphore-arm to elevate and hold the arm in its elevated position when taut, the other end being adapted for engagement with the hook F, the hook F to engage the

said cord whereby when it is desired to indicate by the signal that the track is clear, the cord is secured to the hook and becoming taut thereby will throw the order-box into a vertical position unfit to hold orders and raise and lock the semaphore-arm in an elevated position indicating a clear track.

4. The herein-described means to operate a railway signaling device, comprising an order-box to receive train-orders the said box adapted to be placed in a horizontal position when disconnected with the semaphore-operating cord, a semaphore-operating cord extending from the box to a semaphore-arm and connected at one end to said arm, and having on the other end a ring, a hook for said ring in such position with reference to said box, that when the hook is on the ring the cord will tilt the order-box into a vertical position and render it impracticable to place an order therein.

5. The combination of a semaphore-arm, an operating-cord connected at one end therewith, a ring on the other end of said cord, an order-box pivoted to turn vertically but arranged to stand in a horizontal position and so located between the semaphore-arm and the cord-engaging hook, that the cord when taut will tilt the box and prevent the placement therein of an order.

6. In a railway-signal, the combination with a semaphore-arm and its connected operating-cord, a train-order box having means, substantially as shown and described, to throw said box into a vertical position rendering it thereby impossible to place an order therein when the operating-cord is made to elevate the arm and indicate thereby that the track is clear.

7. A semaphore-arm, a cord operatively connecting the same with an order-box and arranged to be attached to or detached from said box, an order-box adapted to tilt vertically and to be placed in a horizontal position to receive and hold orders when the cord is detached and connecting means between said box and cord to throw said box into a vertical position when said cord is taut and unfit it for holding orders.

In witness that I claim the foregoing I have hereunto subscribed my name this 2d day of August, 1901.

IRA G. HOAG.

Witnesses:

G. E. HARPHAM,
MATTIE MCGINNIS.