I. G. HOAG.

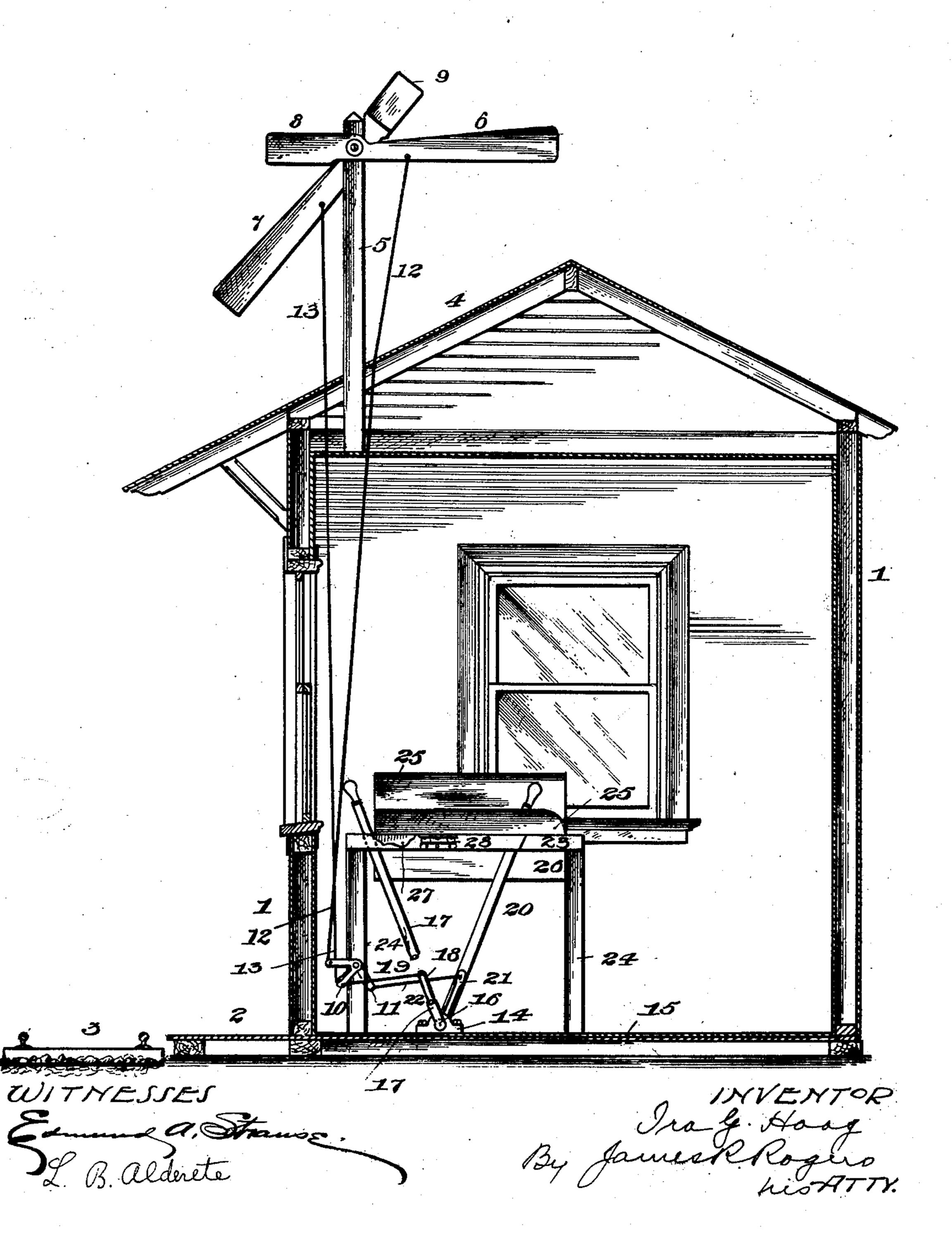
## TRAIN ORDER RECEIVING BOX.

(Application filed Dec. 12, 1901.)

. (No Model.)

2 Sheets—Sheet 1.

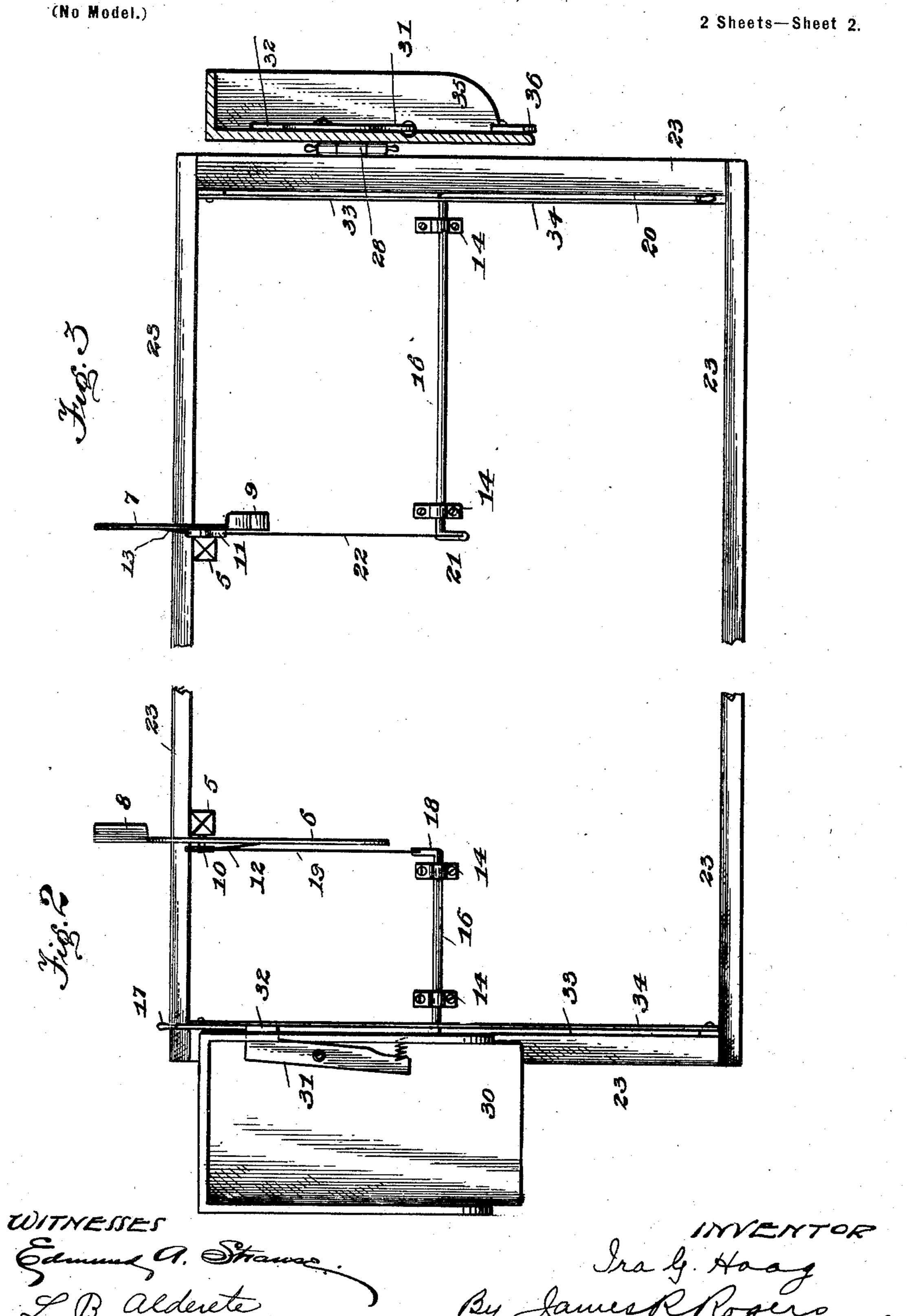
Fig. I



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## TRAIN ORDER RECEIVING BOX.

(Application filed Dec. 12, 1901.)



## United States Patent Office.

IRA G. HOAG, OF LOS ANGELES, CALIFORNIA.

## TRAIN-ORDER-RECEIVING BOX.

SPECIFICATION forming part of Letters Patent No. 703,343, dated June 24, 1902. Application filed December 12, 1901. Serial No. 85,669. (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 and State of Cali-5 fornia, have invented a new and useful Train-Order-Receiving Box, of which the following is a specification.

This invention relates to apparatus for signaling or communicating with railway-trains, o and particularly to receptacles constructed to receive the written communication or order to be delivered to those in charge of such trains; and some of the objects of this invention are to provide an apparatus of this general char-15 acter which will be simple in construction and effective for the purpose designed.

Another object of the invention is to provide a receptacle for train-orders so constructed that the latter cannot be deposited therein 20 while the semaphore or optical apparatus indicates a clear or open track or line.

It is also an object of this invention to provide means for locking the semaphore-lever in both positions.

With these and other objects in view the in-25 vention consists, essentially, in the construction, combination, and arrangement of parts, substantially as more fully described in the following specification and illustrated in the 30 accompanying drawings, forming part of this application, in which—

Figure 1 illustrates a vertical section of a station or office along a railway-track, showing the signaling apparatus therein in eleva-35 tion, two semaphores being shown, one in each position, and one order-box in each position. Fig. 2 is a fragmental top plan view of a modified form of construction, illustrating the order-box in receiving position and 40 the semaphore set in a danger position; and Fig. 3 is a similar view showing the order-box in the other position with one side thereof removed and the semaphore set to indicate a clear track or line.

Similar characters of reference designate corresponding parts throughout the several views.

Referring to the drawings, and particularly to Fig. 1 thereof, the reference character 1 50 designates a railroad station, office, or signal-

to which is formed a platform 2 and a railroadbed 3, as will be readily understood. Preferably located within the structure and desirably projecting through or beyond the roof 4 55 thereof is a post or pole 5, to the upper end whereof is movably connected the respective semaphores or other optical indicators 6 and 7 of the usual construction, and the same may be provided with counterweighted ends 8 and 9, 60 and bell-crank levers 10 and 11 are movably connected with the lower end of the post 5, preferably on opposite sides thereof, as are located the semaphores 6 and 7, and the latter are connected with one of the arms of said 65 bell-crank lever by pull rods or cords 12 and 13, respectively.

One or more bearings 14 may be secured upon the floor 15 of the structure 1 and may movably support a rocking lever 16, to one 70 end whereof is secured a semaphore-lever 17, constructed to be operated by the hand of the station agent or telegraph operator when it is desired to set the semaphore. The other end of said rocking lever is preferably provided 75 with a crank portion 18, connected by a rod or cord 19 with the other arm of the bell-crank lever 10, thereby completing the connection between the semaphore or hand lever 17 and the semaphore 6 in the usual manner.

The semaphore or hand lever 20 may be connected with one end of another rock-shaft similar to the rock-shaft 16, or the rock-shaft 16 may be extended and provided with intermediate cranks 18 and 21, or the crank 21 85 may be upon the separate rock-shaft, to the other end whereof the lever 20 is secured, and the crank 21 is connected by a rod or cord 22 with one arm of the bell-crank lever 11, to the other arm whereof is connected the 90 pull rod or cord 13, attached to the semaphore 7, whereby the latter can be operated when the hand-lever 20 is actuated.

A frame, table, or desk 23 may be secured or located adjacent to the post 5 or above the 95 rock-lever 16 and may be supported by legs 24, and upon each end of the frame 23 is secured an order-box 25, which is preferably movably connected therewith by a hinge or other device 28, so that the box may be tilted 100 into a vertical position, substantially as shown tower of the ordinary construction, adjacent I by the box 26, when the latter is not intended to receive the train-orders or the box 25 indicates the receiving position for the train-orders.

The operation of the invention will be read-5 ily understood from the foregoing description when taken in connection with the accompanying drawings and the following explanation thereof: Supposing both boxes to be in the tilted position and both semaphores 10 down or in the clear track or line position, then upon receipt of a communication for the train-crew expected to arrive the station agent or telegraph operator will deposit such communication or order in one of the order-15 boxes after first turning the same into a horizontal or receiving position, which he cannot do until he shall have first forced the hand or semaphore lever toward the post 5 and forced the semaphore to the danger position, 20 when the order-box can then be turned into a horizontal position, as shown by the orderbox 25, Fig. 1, which thus locks the lever 17 in the position shown by reason of said lever moving in a guideway 27, directly beneath 25 the box and preferably adjacent to the hinge connection thereof. When the lever 17 is in a position shown, the rod 19 will force the bell-crank lever 10 into the position shown, and the pull-rod 12 will elevate the semaphore 30 6 into the danger position or into the position to stop the arriving train on the adjacent

tention of the station agent or operator will be called to the train-orders within the box, which are deposited therein upon being received and written out, although such agent or operator may have since forgotten about the same. After the orders shall have been

track in the usual manner. Thus the ap-

proaching train will be stopped, and the at-

delivered the order-box is tilted into the position occupied by the box 26 before the semaphore can be lowered into the safe or clear-track position occupied by the semaphore 7 upon the drawings. Thus the lia-

45 bility of neglecting or forgetting to set the signal and to deliver orders will be rendered almost impossible.

Referring now to Fig. 2 of the drawings, there is illustrated a modified form of construction, wherein a stationary or immovable order-box 30 is employed which is preferably rigidly secured upon the frame 23 and is

provided with a spring-latch 31, having a lateral extension 32 to normally project over the guideway 33, within which the hand or 55 semaphore lever 17 may be moved, being retained therein by a cleat or plate 34. The operation of this construction will be understood from the foregoing explanation when it is stated that the lever 17 is retained in position by the spring-latch 31 instead of by the box 25; but the same results will be attained in either case.

Still another modification is illustrated in Fig. 3, wherein the box 35 is shown as hinged 65 to the frame 23 in the manner described in relation to Fig. 1; but in all other respects the box 35 is similar to the box 30, with a possible addition of a hook or retaining device 36 to engage and retain the hand or sema-70 phore lever 21 when the box 35 is in a receiving position—that is, a horizontal position—but the semaphore is down.

I claim—

1. A signaling apparatus provided with a 75 pivoted box for the reception of orders, said box being constructed to lock the apparatus in the danger position.

2. A signaling apparatus provided with a movable box for the reception of train-orders, 80 said box being constructed to lock the apparatus in the danger position.

3. A signaling apparatus provided with an operating-lever and a box movably mounted above the path of said lever constructed to 85 lock the lever in the danger position.

4. A signaling apparatus provided with an operating-lever, a frame or desk adjacent thereto and an order-box movably connected with the frame or desk over the path of said 90 lever to lock the same in the danger position.

5. A signaling apparatus provided with an operating-lever, a frame or desk having a guideway, an order-box upon said frame or desk and a spring-catch in the box to lock 9; the lever in danger position.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

IRA G. HOAG.

Witnesses:

AMELIA GUEST, L. B. ALDERETE.