

(No Model.)

C. F. WILLIAMS.
RAILROAD SIGNAL BOX.

No. 321,558.

Patented July 7, 1885.

Fig. 1

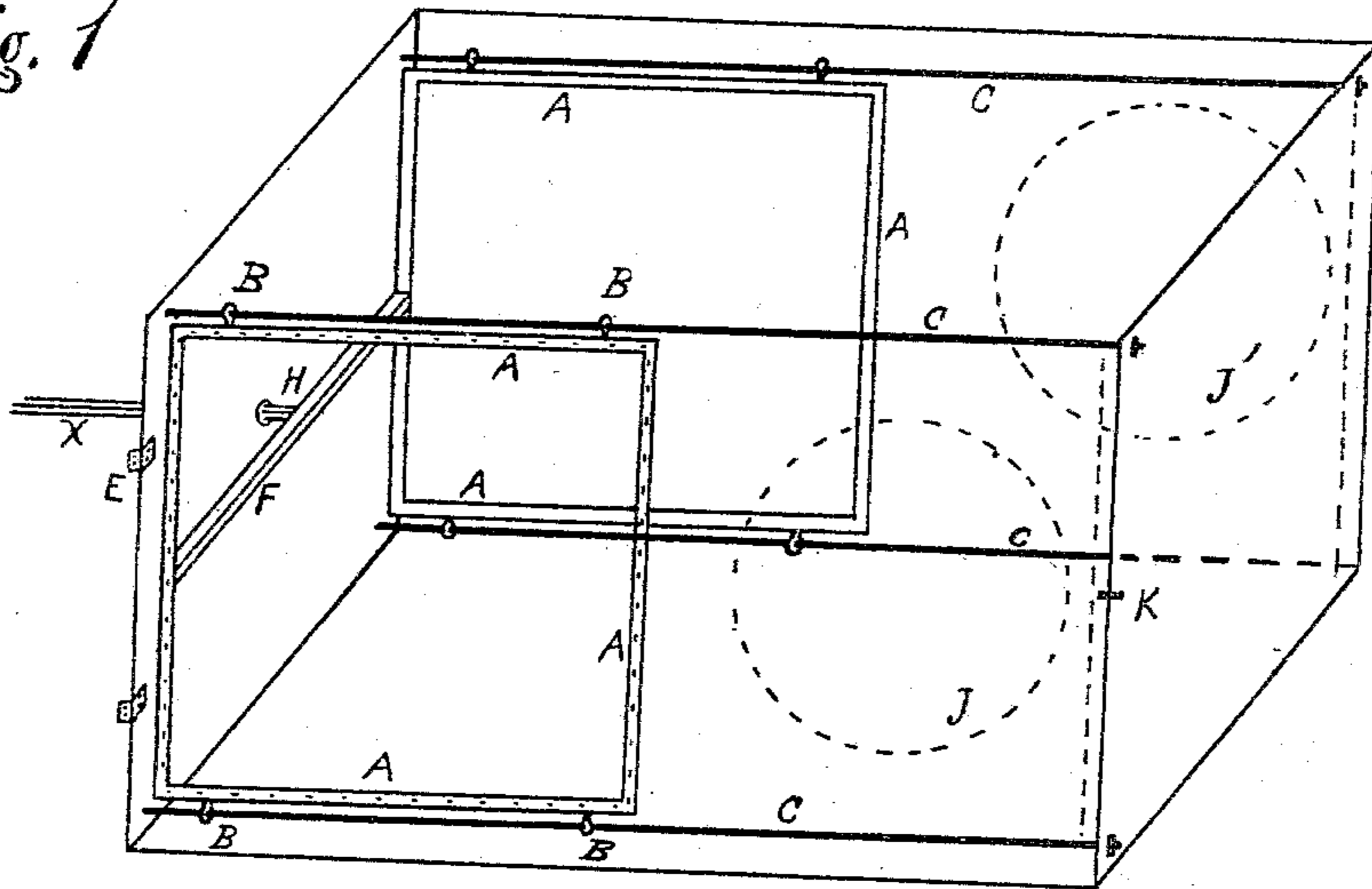
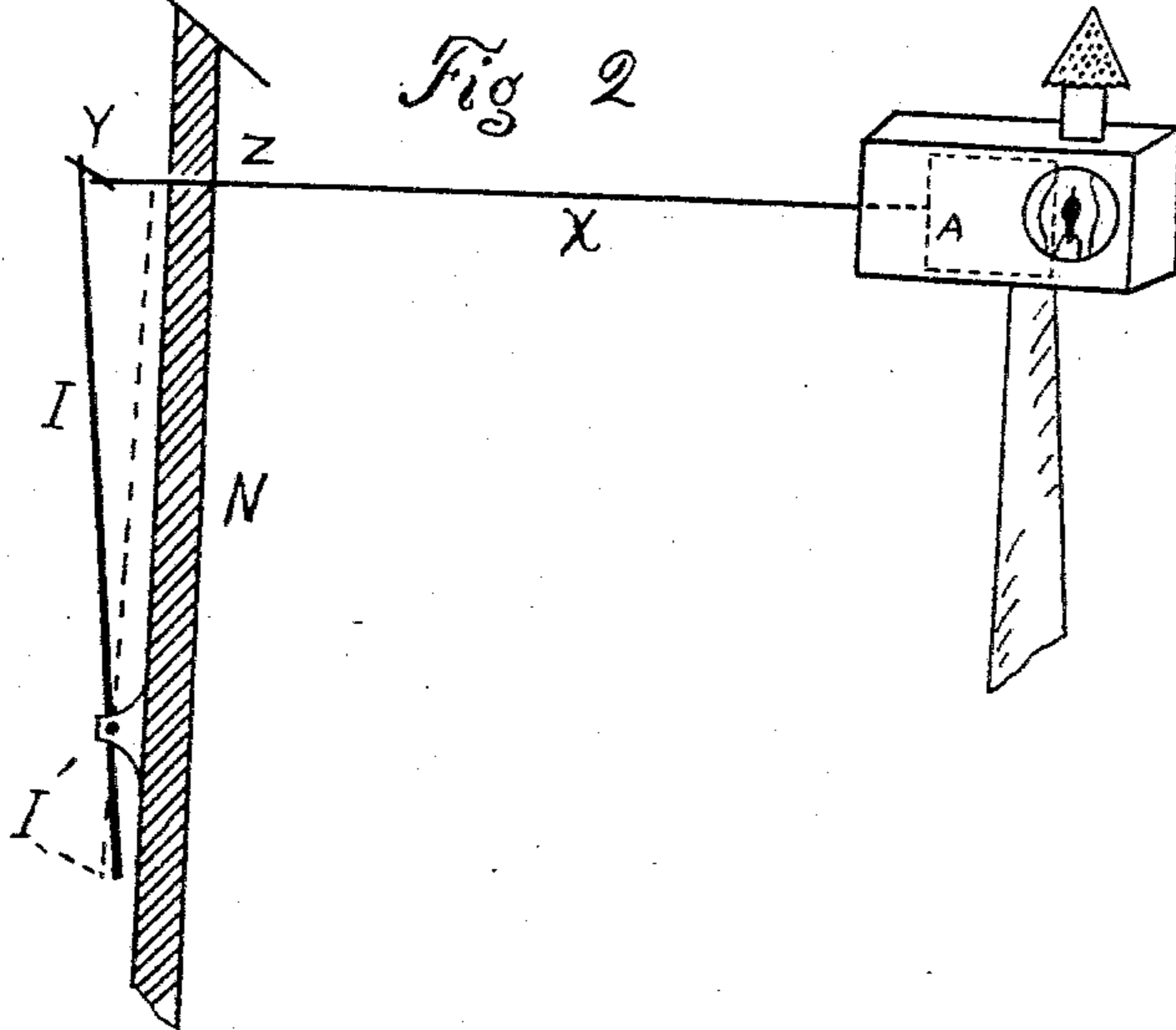


Fig 2



Witnesses

H. F. Wolfe
J. R. McSwain

Inventor
Clark F. Williams
Russon Cooper
Attorney

UNITED STATES PATENT OFFICE.

CLARK F. WILLIAMS, OF REED CITY, MICHIGAN.

RAILROAD-SIGNAL BOX.

SPECIFICATION forming part of Letters Patent No. 321,558, dated July 7, 1885.

Application filed April 10, 1885. (No model.)

To all whom it may concern:

Be it known that I, CLARK F. WILLIAMS, a citizen of the United States, residing at Reed City, in the county of Osceola and State of Michigan, have invented a new and useful machine called a "Railroad-Signal Box," to be used at railroad-stations to give signals to train-men, of which said invention the following is a specification.

My invention relates to "railroad-signal boxes" or "signal-lanterns," and is to facilitate the methods of giving notice to train-men as a railroad-train approaches a station that there are orders for said train at said station. I attain the object by the mechanism illustrated in the accompanying drawings, in which—

Figure 1 is a box with the top removed and the door taken from its hinges. A A A A show two wooden frames inside of the box. In the top and bottom of each of said frames are fastened screw-eyes B B B B, through which said screw-eyes the iron rods c c c c pass and on which the said frames slide. F is a wooden bar connecting the two frames. X is an iron rod or piston fastened to the bar F at H, by means of which the frames A A A A are pushed into position. The dots (. . .) on the frames A A A A show the tacks which fasten the red flannel or bunting to the said frames. E E show the hinges that hold the door of the signal-box. K shows the button used to fasten the door. J shows the circular window in the door. J' shows the circular window in the opposite side of box.

Fig. 2 shows the signal-box fastened upon a section of post, with the piston-rod X passing through the side of depot U at Z, and fastened by a joint at Y. I is the lever, fastened to the piston-rod X at Y, with which to work the frames A A A A back and forth upon the rods c c c c, and is shown partly pushed to position. I' shows the position of lever when the frames are pushed properly to place before the lamp and window.

The construction, working, and design of the machine are as follows: The signal-box consists of an oblong wooden or metallic box of convenient size, with one door-opening, as hereinbefore indicated. At the end of the box farthest from the depot, in the door of said box, is a circular window, and on the opposite side of said signal-box, and directly

opposite the window in the door, is another window of the same size and form, both windows having a piece of common window-glass fitted therein. These windows are indicated in Fig. 1 by the circular dotted lines J and J', respectively.

Between these two windows J and J', in the night-time is placed a common oil-lamp fastened to the bottom of the signal-box. The frames A A A A are covered with red bunting securely tacked thereon, as indicated by the dots upon the frames in Fig. 1, as aforesaid. Upon the top and bottom of each of said frames A A A A are fastened screw-eyes B B B B, two at the top and two at the bottom, so adjusted as to allow the frames A A A A to run easily and freely back and forth upon the rods c c c c. The rods c c c c are placed in said signal-box, two near the bottom and two near the top of said box, and all parallel with one another, as indicated in Fig. 1, the two upper rods being directly above the two lower ones, respectively, so that the two frames A A A A, when adjusted to the rods c c c c, stand in a vertical position and parallel with each other. The two frames A A A A are fastened together by means of the wooden bar F, so that they easily slide back and forth upon the rods c c c c, both at the same time, in front of the lamp, alternately showing a red and a white light—i. e., a red light when the frames A A A A stand before the two windows J and J', and a white light when the frames A A A A are pushed back from the said windows. The piston-rod X is fastened to the cross-bar F at H—i. e., in the center of F—by means of two nuts, and then runs back through the back of the box and into the operator's room through the wall N at Z, as indicated in Fig. 2, where X is attached to the lever I by means of a joint at Y.

When the operator at a railroad-station has orders for a train, he takes hold of the lower end of the lever I and pulls the lever into the position indicated by the dotted line I' in Fig. 2. This movement throws both frames A A A A in front of the windows and lamp, thus displaying to the view of the train-men a red light in the night-time and in the day-time a red flag. The operator by moving the lever I in the opposite direction from that above indicated can disclose a white light, thus

showing an approaching train that there are no orders for it at this station.

What I claim as my invention, and desire to secure by Letters Patent, is—

5 1. The combination, in a signal-box, of the frames A A A A, attached together by means of the cross-bar F, with the four iron rods c c c c so arranged parallel with each other that the frames A A A A, fastened to said rods
10 c c c c by means of screw-eyes B B B B, move back and forth upon said rods before a lamp in said signal-box, substantially as specified.

2. The combination, in a signal-box, of the frames A A A A, moving back and forth upon
15 the rods c c c c, with the piston X, moving horizontally, attached to the cross-bar F at H,

and worked by the lever I, as hereinbefore set forth and specified.

3. The combination, in a signal-box, of the frames A A A A, attached together by means 20 of the cross-bar F, and moving upon the rods c c c c, attached to said rods by means of the screw-eyes B B B B, the said frames A A A A being attached to the piston X at H, with the lever I, fastened to the piston X at Y, together 25 with the joint Y, used to give the piston X a perfect horizontal motion, all as substantially herein specified.

CLARK F. WILLIAMS.

Witnesses:

H. F. WOLFE,

T. R. McLARREN.