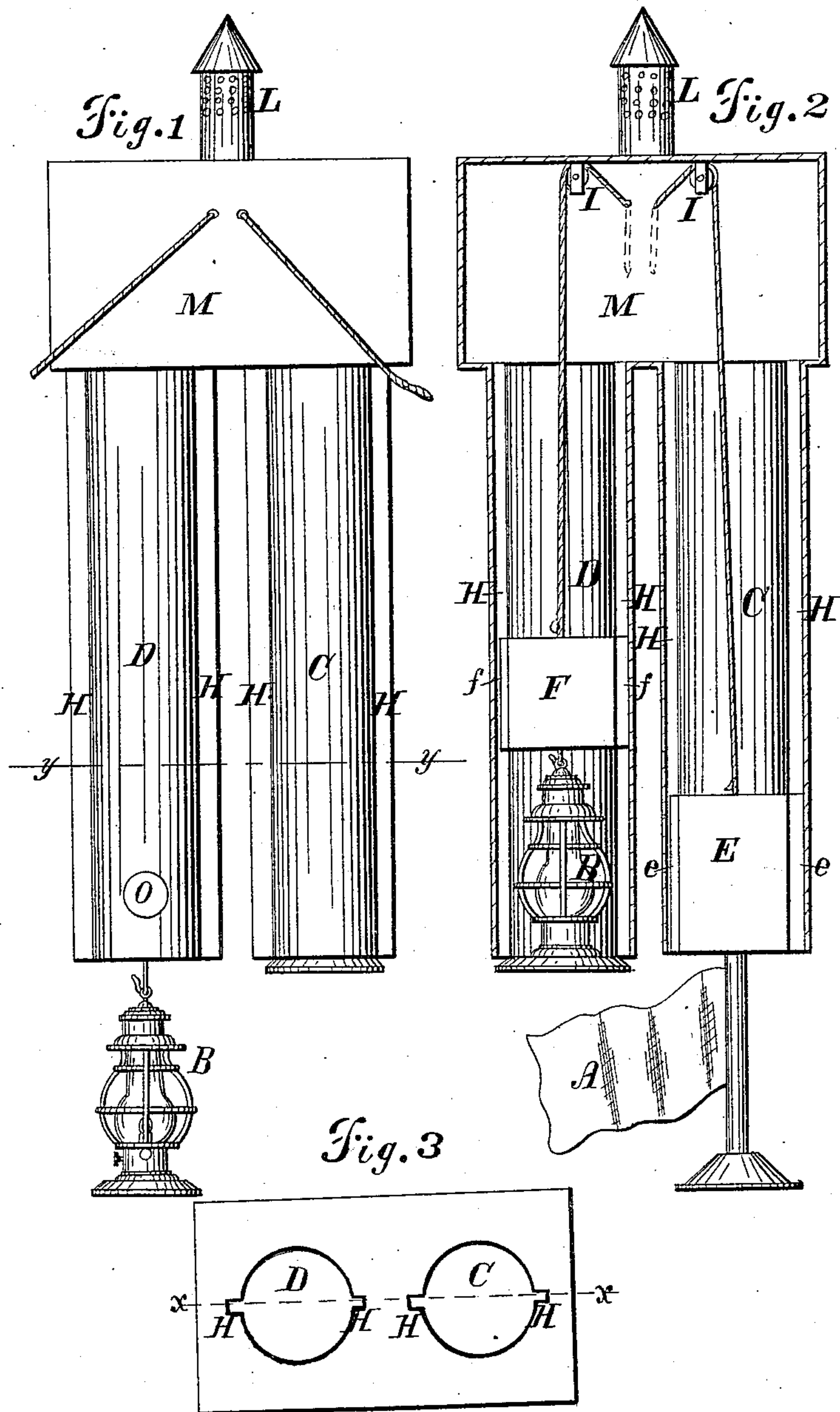


W. McKEE.  
Signal Light.

No. 77,392.

Patented April 28, 1868.



Witnesses:  
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# United States Patent Office.

WILLIAM McKEE, OF NEPONSET, ILLINOIS.

*Letters Patent No. 77,392, dated April 28, 1868.*

## IMPROVEMENT IN SIGNAL-BOXES.

*The Schedule referred to in these Letters Patent and making part of the same.*

### TO ALL WHOM IT MAY CONCERN:

Be it known that I, WILLIAM McKEE, of Neponset, in the county of Bureau, and State of Illinois, have invented a new and useful Improved Signal-Box; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, and the letters and figures marked thereon, which form a part of this specification, and in which—

Figure 1 represents a side elevation of my improved signal-box with the lantern shown.

Figure 2, a vertical view at the line *x*, in fig. 3, showing the flag; and

Figure 3 a transverse sectional view at the line *y*.

The nature of my invention consists in a box of novel construction containing signals to be displayed, so hung and arranged within said box that an operator, from a point remote from the box, can display the signal, or either of them, when there is more than one, at the signal-box.

To enable those skilled in the art to manufacture and use my invention, I will proceed to describe it in detail.

The same letters of reference represent corresponding parts in the different figures.

A signal-box is made of tin or other suitable material, which can be attached to any prominent object where it can be seen at a distance.

My invention is especially adapted for use on railroad-lines, where the telegraph-operators have orders to display signals to notify the train-conductors to stop their trains and receive telegrams with reference to running their trains. The telegraph-operators have orders, on many of the railroads, to display as a signal, a green flag by day and a green light by night, to notify the engine-drivers and train-conductors to stop and receive telegraphic orders awaiting them. The signals must be immediately taken in when the train leaves the station. The trouble of hanging out flags by day and lanterns by night, and taking them in upon the arrival and departure of trains, and watching them to see that they do not get displaced in any way, is a great inconvenience to the telegraph-operator.

To obviate this trouble and inconvenience, I place my signal-box, containing a green flag and the lantern with a green globe, outside of the building, at some convenient place for displaying the signals.

A represents the flag, and B the lantern, being the same flags and lanterns now in use. When they are not displayed as signals, they are drawn up into the tubes C and D, which are made of tin or other suitable material, and are sufficiently large and long to contain the ordinary-sized flags and lanterns displayed for signals. There are blocks of wood, E and F, so arranged within the tubes C and D, as to slide up and down therein by the lips or ledges *e f*, on the edges of the blocks, sliding in the recesses H. These blocks will not slide out of the tubes, but will slide down sufficiently low to display the signals, which are attached to the blocks below the tubes. There are cords attached to the blocks E and F, which extend over the pulleys I in the upper part of the box, and through the side of the signal-box down to the telegraph-operator's room.

The operator can display the flag as a signal by loosening the cord attached to the flag-block E, and, by simply drawing on said cord, he takes in the signal by drawing it into the tube C. He displays the lantern-light as a signal by night, by simply loosening the cord attached to the lantern-block F, and takes it in again, when the train has passed, by simply drawing on the said cord and raising the lantern into the tube D. The blocks E and F are held and guided by the recesses H, so that they will not fail to draw in the flag or lantern without their catching on the bottom of the tube. L is any ordinary ventilation for the escape of the heat and smoke arising from the lantern B when it is in the box. O is a small glass put in one side of the tube D, in such a position that the telegraph-operator can see whether or not the lantern is lighted when it is in the box.

By this arrangement the operator is able to display and take in his signals without leaving his desk.

Having fully described the construction and operation of my invention, what I claim, and desire to secure by Letters Patent, is—

1. The combination of a box, M, tubes C D, provided with ways H, blocks E F, with lips *e f*, cords and pulleys I I, arranged and operating as and for the purposes set forth.



2. The combination of the box M, tube C, block E, cord and pulley I, and the ventilator or draught-inducer for the lantern, arranged as described, and for the purposes specified.

3. Providing the tube C with a glass, or its equivalent, O, when used in combination with the block E and lantern, in the manner and for the purposes set forth and shown.

4. The combination of the box M, tubes C D, guides H, blocks E F, with their lips *ef*, cords and pulleys I I, ventilator L, and glass, O, all arranged and operating in the manner and for the purposes specified and set forth.

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