

J. P. COUTTER.  
Railroad Signal.

No. 98,233.

Patented Dec. 28, 1869.

Fig: 1.

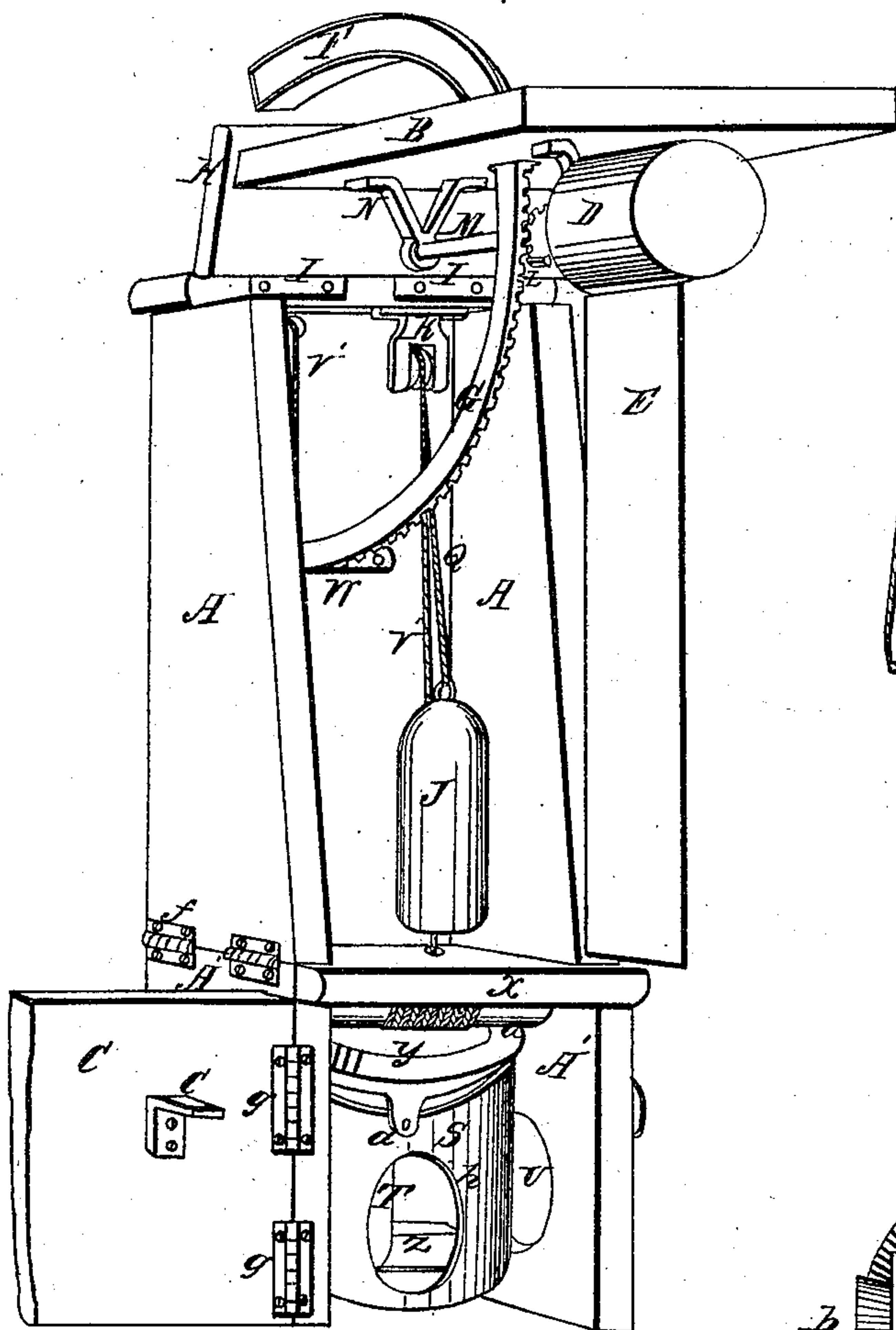


Fig: 2.

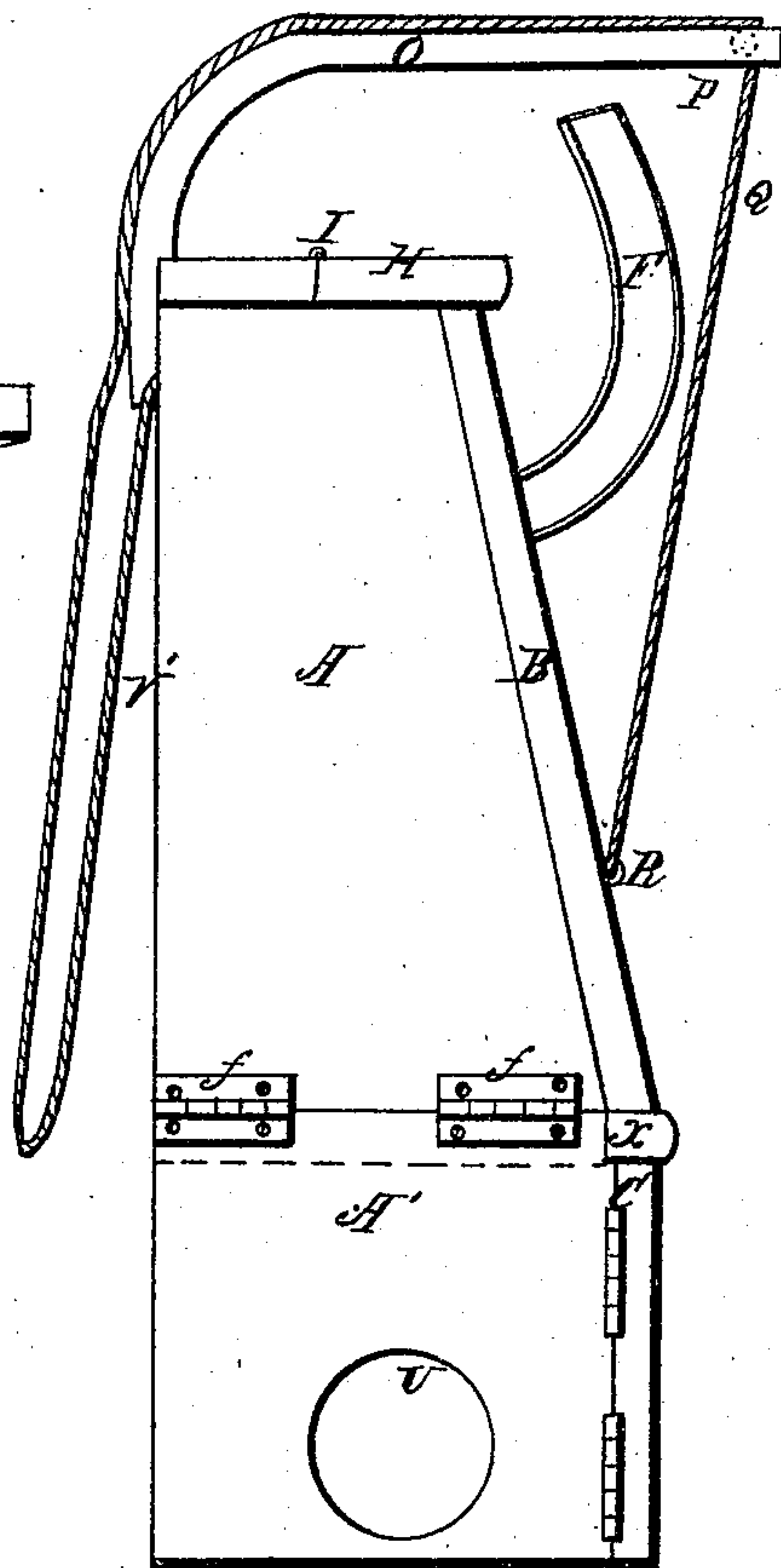
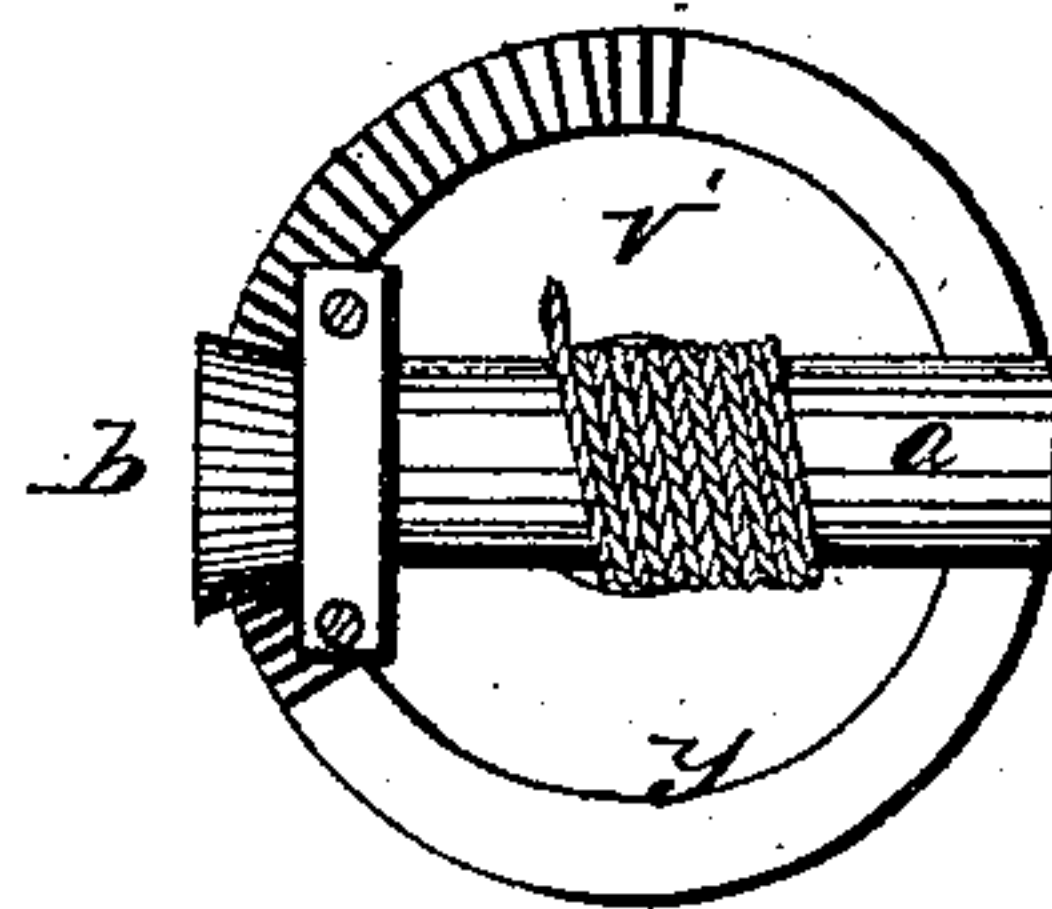


Fig: 3.



Witnesses  
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# United States Patent Office.

JAMES P. COULTER, OF BLOOMINGTON, ILLINOIS.

Letters Patent No. 98,233, dated December 28, 1869.

## IMPROVED SIGNAL FOR RAILWAYS.

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, JAMES P. COULTER, of Bloomington, in the county of McLean, and State of Illinois, have invented an Improved Signal-Box for Railroads; and I do hereby declare that the following is a full and exact description thereof, so far as completed, reference being had to the accompanying drawings, and letters marked thereon, making a part of this specification, in which—

Figure 1 is a perspective representation of my improved signal-box.

Figure 2, a side elevation of the same.

Figure 3, a plan view of the segment, by means of which the lantern-case is rotated.

The present invention relates to a signal-box, which is provided with a flag and lantern, so arranged that an operator inside of a depot can operate the signal and control it; and

Its nature consists in an elevating-lid, carrying a flag-roller, which winds and unwinds the flag automatically, together with such mechanical devices as are necessary to produce this result; and the novel construction of the lantern-case, and the manner in which it is operated, as the whole is hereinafter fully set forth.

A A represent the flag-box, and A', the lantern-box, which are made of any size or form most convenient to protect and support the devices hereinafter described.

The box A A is provided with a lid B H, which is hinged to the top of the box at I, and which supports two brackets, N, provided with bearings for the shaft M, of the flag-roller D, to rotate in; said shaft being provided with a fixed pinion, L, which is driven by a segment, G, turns the roller D, and winds and unwinds the flag E attached thereto.

This segment is attached to the back of box A A, at W, and it is protected, at the place where it runs through the lid B, by a curved box, F, figs. 1 and 2.

In order to conveniently raise and lower the lid B, a curved arm, O, is attached to the top of the box A A, and provided with a pulley, P, in its outer end, over which the rope or cord Q, attached to the lid B, passes, and extends into the operator's office, the weight of the lid being sufficient to shut itself, when the cord Q is slackened.

In the box A is arranged a lantern-case, S, fig. 1, which is provided with openings, h, in opposite sides, corresponding to openings, U, in opposite sides of the box A', and which has fastened to its upper end a segment, Y, figs. 1 and 3, by means of two or more lugs, d, projecting down from said segment, and having holes to receive rivets.

By means of this construction, a space is provided between the top of case S and segment Y, to receive two or more projecting lugs, c, fig. 1, on which the case turns, and by means of which it is held in place.

A drum, a, figs. 1 and 3, has bearings in the box A', and it is provided with a pinion, b, which turns the segment Y, when the rope or cord V' is drawn upon.

This rope is wound several times around the drum a, and one of its ends passes up through the partition X, over a pulley K, and fastens to a weight, J, and the other end passes up through the partition X, and out through the back of case A, and into the operator's office.

By means of this arrangement the case S can be so turned as to bring the holes h opposite to the holes U in the box A', and consequently allow a light in a lantern, T, placed inside of the case S, to be seen; colored glass being placed in openings U, or in openings h, are used instead of a colored lantern.

The lantern rests on a metal strip, Z, fig. 1, which is arranged to swing out at the bottom of the box, when the lantern is to be filled or trimmed.

Having thus described my invention,

What I claim, and desire to secure by Letters Patent of the United States, is—

1. The roller D and flag E, arranged to operate automatically, as set forth.

2. The roller D, arranged to operate automatically, in combination with the lid A H B, shaft M, pinion L, segment G, arm O, boxes A A E, and rope Q, as and for the purpose set forth.

3. The combination of the case S, segment Y, lugs c, drum a, lantern T, rope V', and box A', constructed and arranged as and for the purpose specified.

JAS. P. COULTER.

Witnesses:

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