

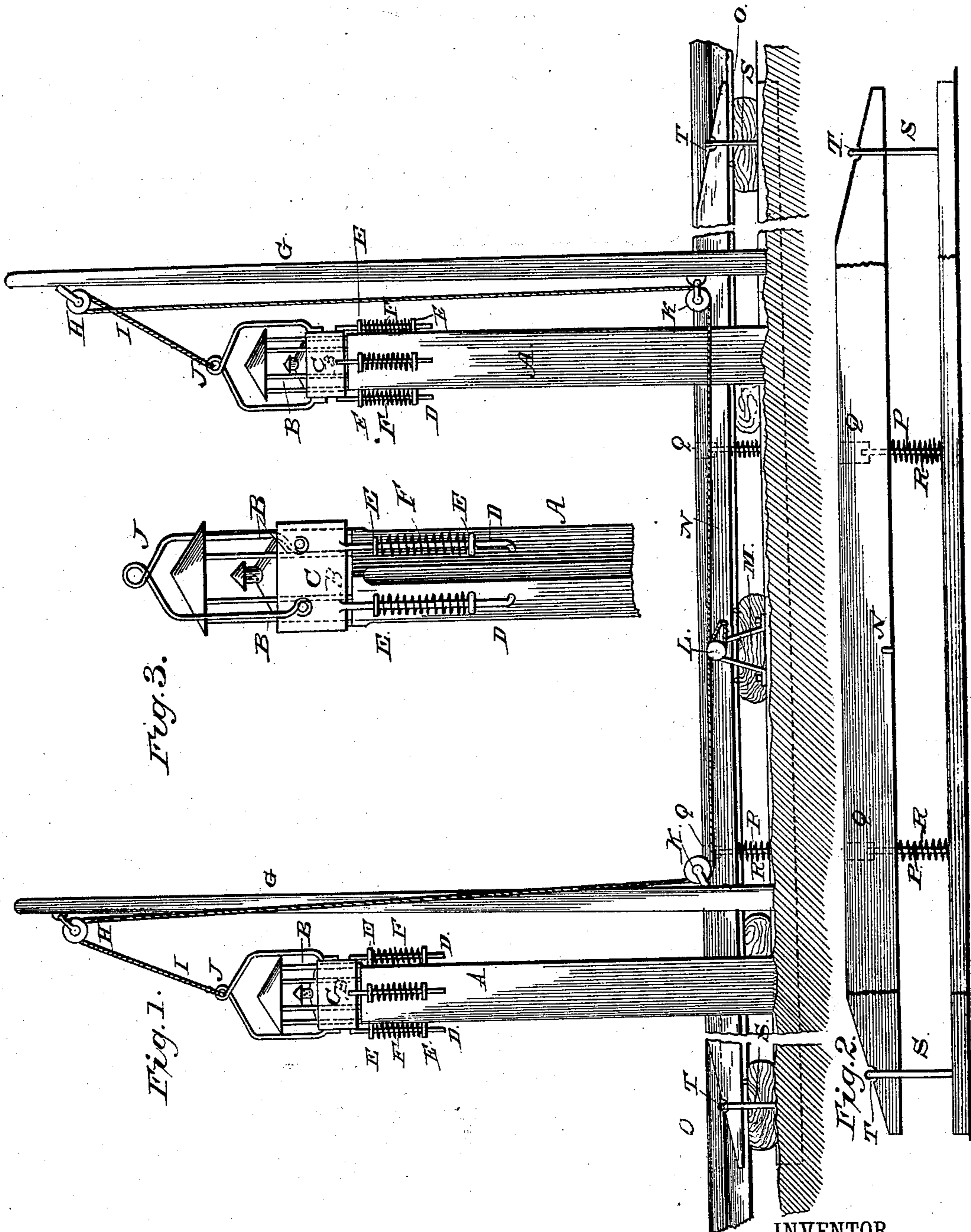
(No Model.)

H. H. EATHERTON.

RAILWAY SIGNAL.

No. 286,915.

Patented Oct. 16, 1883.



WITNESSES:

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UNITED STATES PATENT OFFICE.

HENRY H. EATHERTON, OF MONTICELLO, ILLINOIS, ASSIGNOR OF ONE-HALF
TO ASA C. THOMPSON, OF SAME PLACE.

RAILWAY-SIGNAL.

SPECIFICATION forming part of Letters Patent No. 286,915, dated October 16, 1883.

Application filed May 21, 1883. (No model.)

To all whom it may concern:

Be it known that I, HENRY H. EATHERTON, of Monticello, in the county of Piatt and State of Illinois, have invented certain new and useful Improvements in Railway-Signals; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification, and in which—

Figure 1 is a side view of a railway-crossing provided with my improved railway-signal. Fig. 2 is a front view of the bar which operates the signal, and is operated by the flange of the wheels of the passing train, and Fig. 3 is a front view of one of the posts upon which the signal is displayed.

Similar letters of reference indicate corresponding parts in all the figures.

My invention has relation to signals for crossings and similar places on railways; and it consists in the improved construction and combination of parts of a signal of that class which essentially consists in a spring-cushioned bar running parallel with the track and depressed by the flanges of the wheels of the passing train, and having wires or cords attached to the same which operate a spring-actuated sliding shade covering the signal, as hereinafter more fully described and claimed.

In the accompanying drawings, the letters A A indicate two upright posts, upon the tops of which are secured two lanterns, B B, provided, preferably, with red glass, so as to display the usual danger-signal when uncovered. A sliding shade, C, moves up and down upon the top of the post and upon the lantern, and is sufficiently large to cover the entire lantern when drawn down, and one or more rods, D, project downward from the lower edge of the same and slide in ways E upon the top of the post, and are provided with spiral springs F, bearing against the upper part of the bearings and fastened at their lower ends to the lower ends of the rods, serving to draw the latter, and through them the shades, down. Upright posts G are placed near the posts A, and are provided with guide-pulleys H, over which pass wires I, which are fastened to the top of

upright frames J, fastened to the upper parts of the shades, and the said wires pass over guide-pulleys K at the lower ends of the posts G, and from these pulleys over two pulleys, L, upon the upper end of a short upright, M, standing near the rail of the track. From these pulleys the wires pass to the center of a horizontally-placed bar, N, to which they are fastened, and the said bar slides up and down, lying parallel with and close to the rail O upon two or more upright rods, P, projecting into vertical bores Q in the bar, and having spiral springs R, wrapped around the same, bearing against the bed-plate with their lower ends and against the under side of the bar with their upper ends, holding the bar slightly above the upper surface of the rail, and cushioning it when depressed by the flanges of the passing wheels. The ends of the bar are prevented from slipping up by two bails, S, straddling the ends of the bar, and resting with their horizontal portions in two notches, T, in the ends of the bar. The upright posts are preferably placed one upon each side of the crossing, and the horizontal bar is of sufficient length to be reached and depressed by the train in time to set the signal and prevent accident to persons crossing the track.

It will be seen that when a train passes on the track the flanges of the wheels will depress the bar, which will raise the sliding shades, displaying the signal as long time as the train is on the portion of the track, provided with the horizontal bar, which especially makes the signal useful at crossings and similar places, as the train will automatically set and unset the signal, warning of its approach, doing away with the necessity of having a flagman at the crossing.

Having thus described my invention, I claim and desire to secure by Letters Patent of the United States—

1. In a railway-signal, the combination of upright posts having guides at their upper ends, colored lanterns fastened at the tops of the uprights, sliding shades, downwardly-projecting rods fastened upon said shades and sliding in the guides upon the posts, upright frames fastened upon the upper edges of the shades, spiral springs fastened to the lower ends of the guide-rods and bearing with their

upper ends against the upper guides, as described, and means actuated automatically by the passing train for raising the sliding shades, as and for the purpose shown and set forth.

- 5 2. A railway-signal consisting of upright posts, colored lanterns attached thereto, sliding shades having guide-rods and upright frames, as described, spiral springs attached to said rods, upright posts having guide-pul-
10 leys at their upper and lower ends, a short upright having guide-pulleys at its upper end and placed at the middle of the crossing, a horizontal bar having vertical bores and notches at both ends, as described, upright
15 guiding-rods arranged to work in said boxes, spiral springs wrapped around said rods, up-

right guiding-bails engaging the notches in the horizontal bar when raised, and wires fastened at one end to the upright frames upon the sliding shades passing over and under the sev- 20
eral guide-pulleys, and secured at their other ends to the middle of the horizontal spring-cushioned bar, as and for the purpose shown and set forth.

In testimony that I claim the foregoing as 25
my own I have hereto affixed my signature in presence of two witnesses.

HENRY H. EATHERTON.

Witnesses:

C. A. TATMAN,
W. P. SMITH.