

H. S. EVANS, dec'd.
JANE D. EVANS, Ex'trx.
Railroad Signals.

No. 149,109.

Patented March 31, 1874.

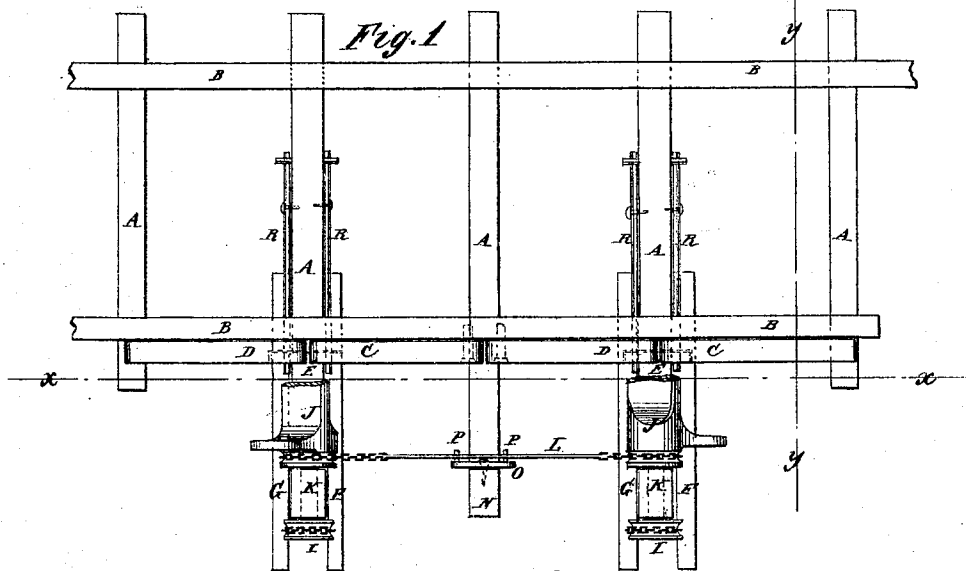


Fig. 2

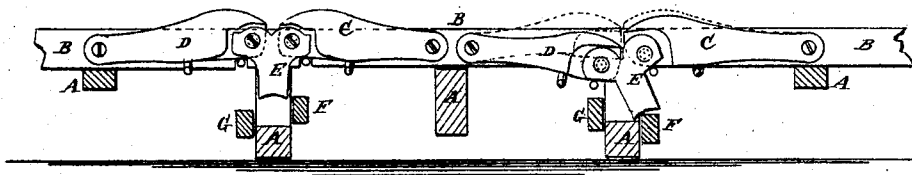


Fig. 3

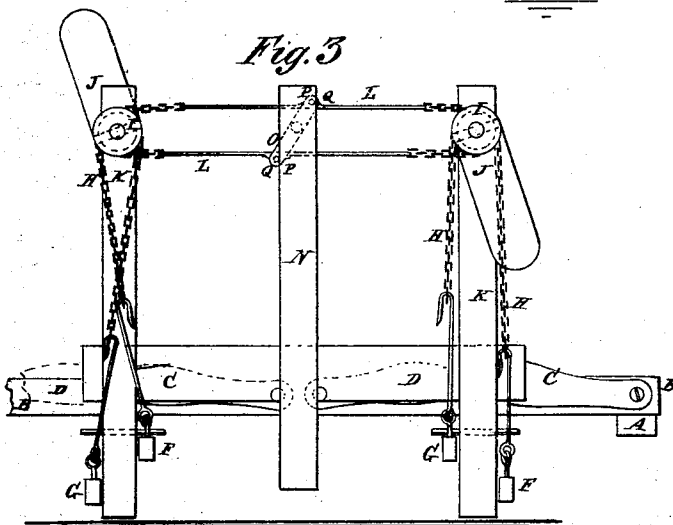
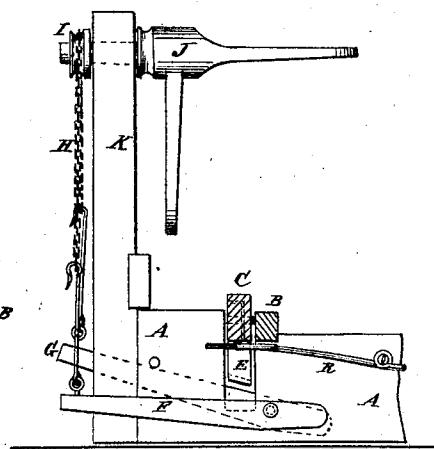


Fig. 4



Witnesses:

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UNITED STATES PATENT OFFICE.

JANE D. EVANS, OF WEST CHESTER, PENNSYLVANIA, EXECUTRIX OF
HENRY S. EVANS, DECEASED.

IMPROVEMENT IN RAILROAD-SIGNALS.

Specification forming part of Letters Patent No. **149,169**, dated March 31, 1874; application filed
July 29, 1873.

CASE A.

To all whom it may concern:

Be it known that HENRY S. EVANS, now deceased, late of West Chester, in the county of Chester and State of Pennsylvania, invented a new and useful Improvement in Automatic Railroad-Signal, of which the following is a specification:

Figure 1 is a top view of the improved device, shown as applied to a railroad-track. Fig. 2 is a vertical longitudinal section of the same taken through the line *x x*, Fig. 1. Fig. 3 is a front view of the same. Fig. 4 is a vertical cross-section of the same taken through the line *y y*, Fig. 1.

Similar letters of reference indicate corresponding parts.

This invention has for its object to furnish an improved railroad-signal for use at stations, crossings, curves, and other places of danger, which shall be so constructed that the advancing train will itself set the signals to indicate its approach and departure, and which shall at the same time be simple and inexpensive in construction and reliable in use.

The invention will first be fully described, and then pointed out in the claim.

A are the ties, and B are the rails, of the roadway. C D are two pairs of inclined bars, which are placed at the sides of one of the rails B, at suitable distances apart, and are pivoted to said rail, or to other suitable support, in such positions that the free ends of said inclines will be struck and pressed down by the wheels of the cars. The inner ends of the inclines of each pair are pivoted to opposite arms of the three-armed lever E, which is placed in a notch in the tie A, with its third arm projecting downward. By this construction, as the wheels of the engine run upon either of the inclines C D, it presses the incline upon which it runs downward. This throws the downward-projecting arm of the three-armed lever E in the opposite direction, so as to strike the lever F pivoted to the side of the tie A, and force it downward. When

the train is moving in the opposite direction, the lever G, pivoted to the other side of the tie, will be operated by the three-armed lever E. To the outer ends of each pair of levers F G are attached the ends of the chain H, the middle part of which passes over and is secured to the wheel I, formed upon or secured to the signals J, which are pivoted to the upper ends of the posts K. The signals J of the two posts K are connected by two wires, L, the ends of which are connected by short chains to wheels formed upon or attached to the signals, so that either of said signals may be operated from the other, and both set or both withdrawn at the same time. In case the distance between the posts K be great, the wires L should be supported by intermediate posts N. To each of the intermediate posts N is pivoted an equal-armed lever, O, to the ends of which are attached outwardly-projecting pins P, to receive eyes Q attached to the wires L. This construction enables the wires to be made continuous, so that there will be no slack to be taken up by one of the signals before it can operate the other. The three-armed levers E are again raised to their former position as soon as the pressure of the wheels is removed from the levers or inclines C, by the springs R attached to the ties A, and which bear against the said three-armed levers, as shown in Figs. 1, 2, and 4. The levers F G and inclines C D are provided with stops to limit their upward movement.

Having thus described the invention, what I claim as new, and desire to secure by Letters Patent, is—

The combination of the inclines C D, levers E F G, chains H, and springs R, with rails B and signals J, in the manner and for the purpose described.

JANE D. EVANS,
Executrix.

Witnesses:

WM. WHITEHEAD,
EBER MILES.