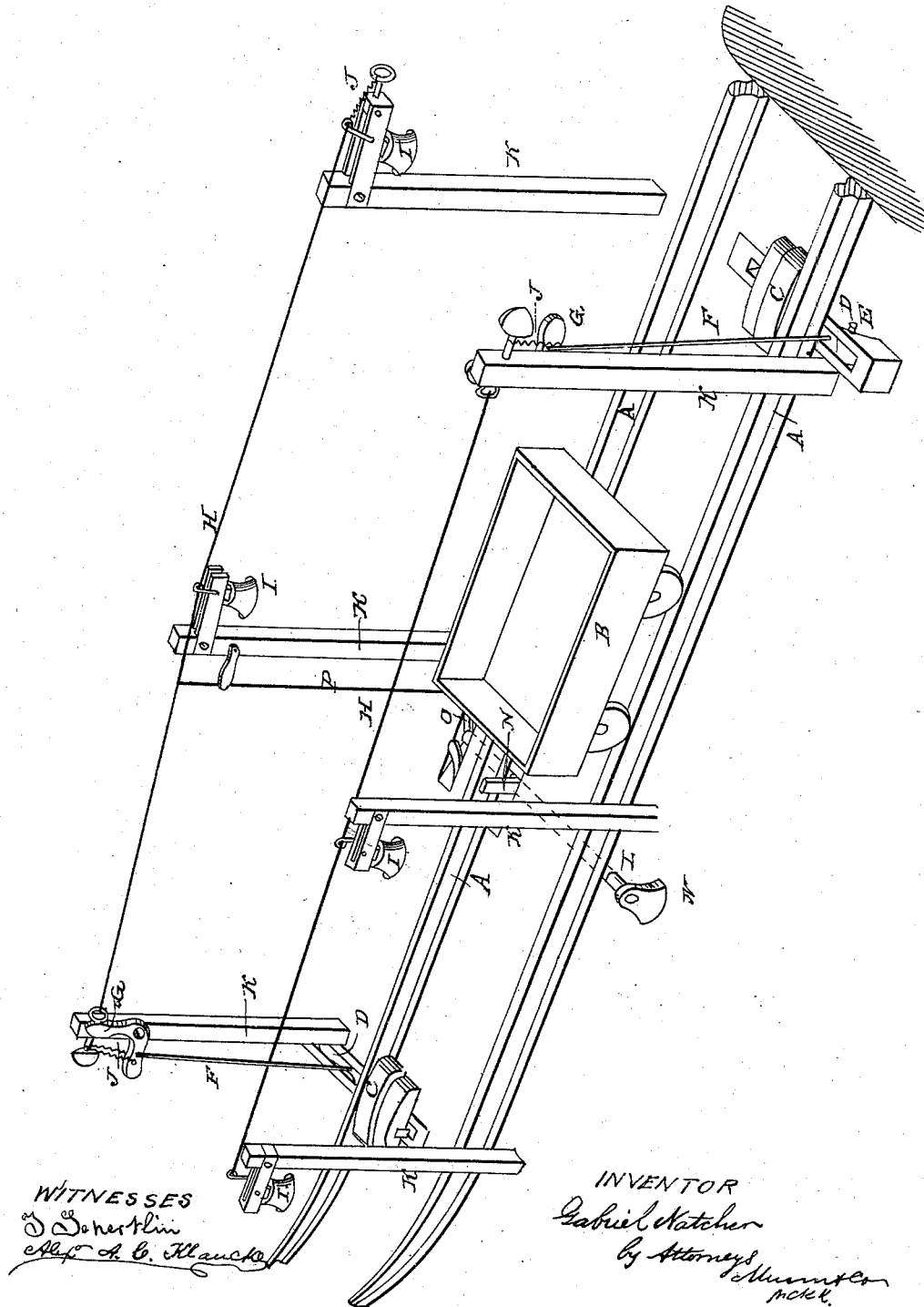


G. NATCHER.  
Railroad Signal.

No. 48,085.

Patented June 6, 1865.



# UNITED STATES PATENT OFFICE.

GABRIEL NATCHER, OF SIDNEY, OHIO.

## IMPROVEMENT IN RAILROAD-SIGNALS.

Specification forming part of Letters Patent No. 48,085, dated June 6, 1865.

*To all whom it may concern:*

Be it known that I, GABRIEL NATCHER, of Sidney, Shelby county, State of Ohio, have made certain new and useful Improvements in Apparatus for Preventing Collisions on Railroads; and I do hereby declare the following to be a full, clear, and exact description of the nature, construction, and operation of the same, reference being had to the accompanying drawing, making part of this specification, and representing my invention in a perspective view.

The invention consists in constructing a lever at right angles to the track and having an upwardly-projecting flange which is suddenly depressed by the flange of the wheel which runs over it so as to vibrate the lever, and by means of a connecting-wire oscillate a rock-shaft and draw upon a wire which is stretched from pole to pole alongside of the railroad and connected to bells at suitable intervals, to give notice to an approaching train or to passengers on railroad-crossings, or to communicate the alarm to a point in advance to which the wires are conducted; in short, to herald the approach of the train to any required spot or distance, according to the arrangement and connection of the wires.

To enable others skilled in the art to which my invention appertains to fully understand and make the same, I will proceed to describe its construction and operation.

A A are the railroad-rails, and B is a truck. C C are the projections from the upper side of the lever D, which is pivoted at a point, E, so that the flange of the passing wheel will de-

press it and draw upon the cord F, vibrating the rock-shaft G, which is mounted on the post K, and drawing upon the cord H, which rings the bell I and others connected to it. Suitable springs, J, cause the oscillating and continuous motion of the bell, and the lever D is raised to its normal position by a spring beneath it.

A modification of the device is shown, where a shaft, L, with a counterbalance-weight, M, passes under the track, an arm or standard, N, attached to the shaft, being vibrated by the passing wheel, causing the arm O to draw upon the cord P and pull the bell-wire H.

I do not confine myself to bells attached to the wires, as I may elect to effect the alarm by other audible means—such as hammers or horns—or to employ an electro-magnet in connection therewith, making the circuit by the depression of the said lever and conveying the intelligence desired.

Having thus fully, clearly, and exactly described the nature, construction, and operation of my invention, what I claim as new therein, and desire to secure by Letters Patent, is—

The bar L, laid transversely to the track, and provided with an arm, N, and counterbalance-weight M, for the purpose, and arranged substantially as described.

GABRIEL NATCHER.

Witnesses:

ALEX. A. C. KLAUCKE,  
CHARLES D. SMITH.