

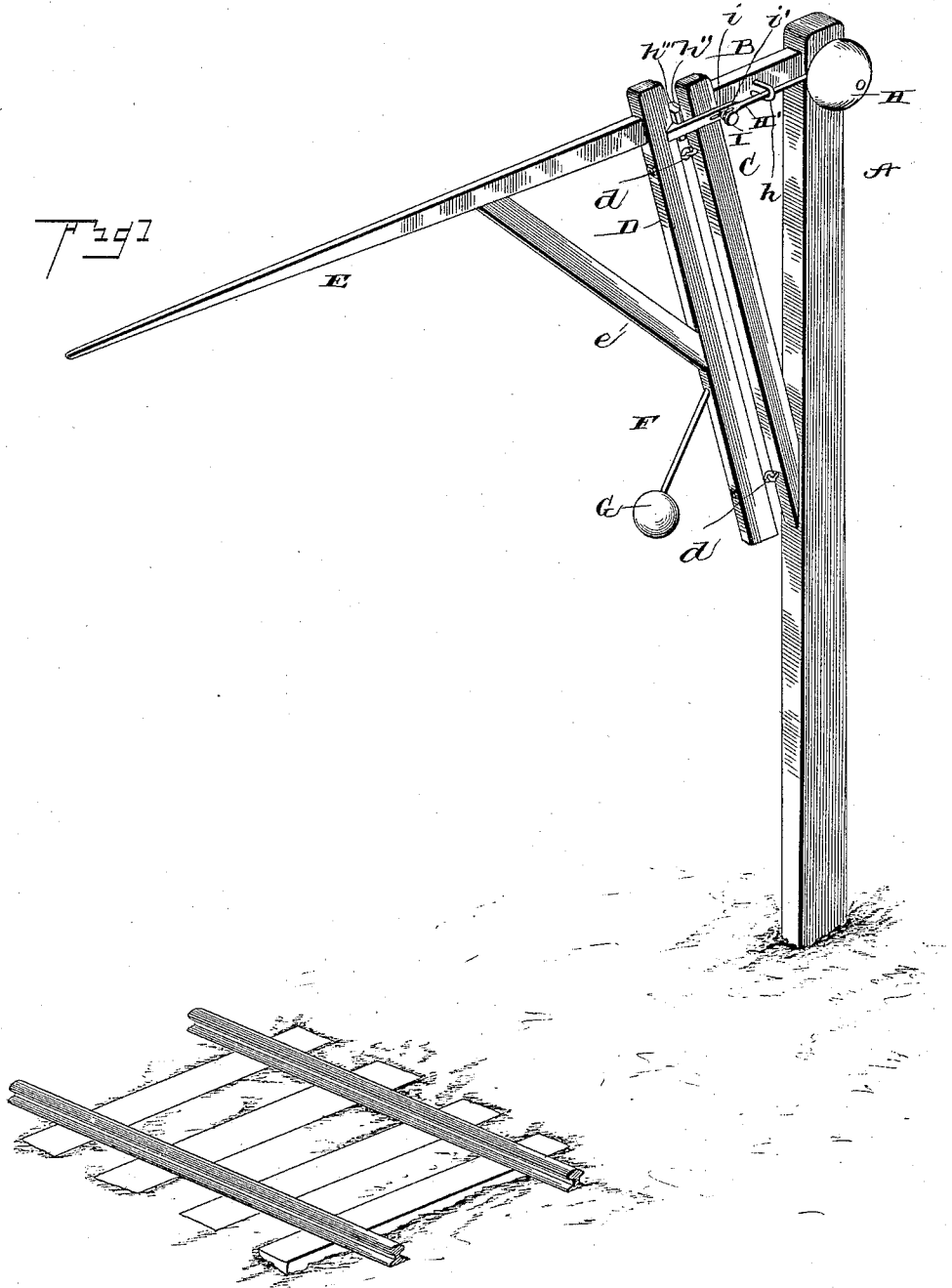
(No Model.)

2 Sheets—Sheet 1.

F. ST. CLAIR.
SIGNALING DEVICE.

No. 465,768.

Patented Dec. 22, 1891.



Witnesses

John D. Moore
Wm. J. Little

Inventor

Frank St. Clair,

By his Attorney,

J. R. Little,

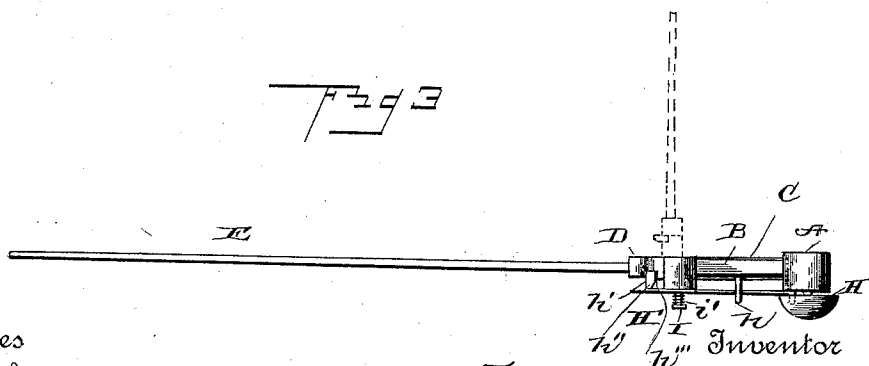
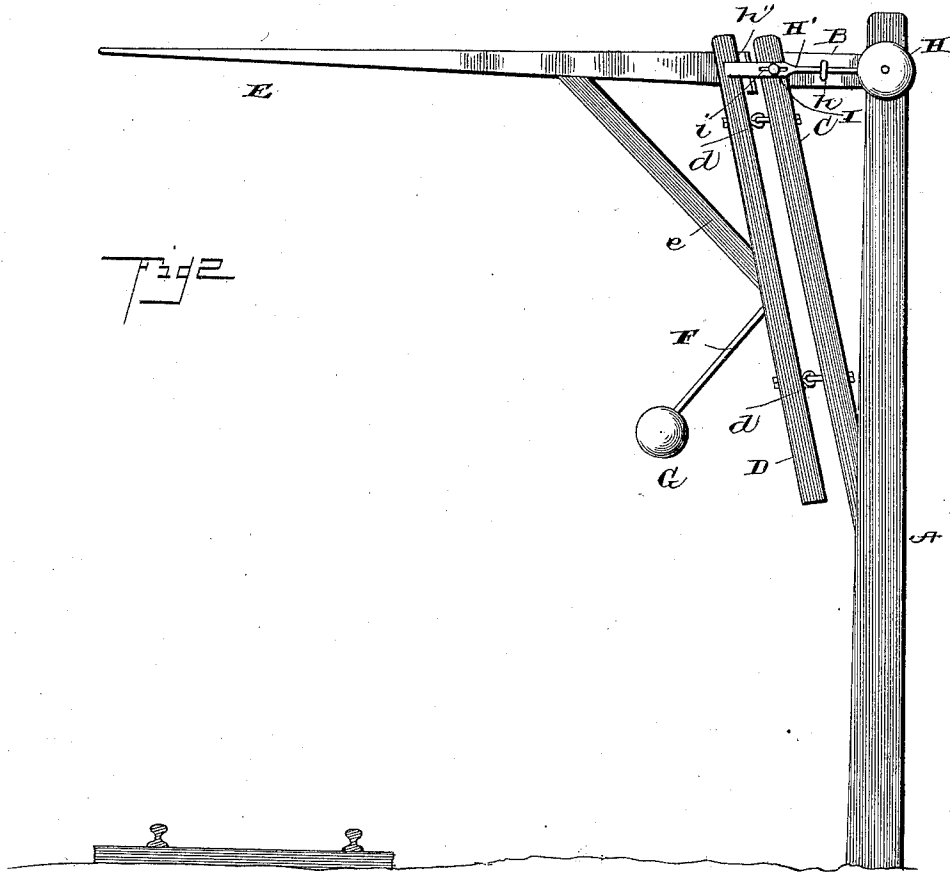
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2 Sheets—Sheet 2.

F. ST. CLAIR.
SIGNALING DEVICE.

No. 465,768.

Patented Dec. 22, 1891.



Witnesses

John Irvine
to J. Luce,

Frank St. Clair

By his Attorney,

ney, J. R. Little,

UNITED STATES PATENT OFFICE.

FRANK ST. CLAIR, OF MANCHESTER, NEW HAMPSHIRE, ASSIGNOR OF ONE-HALF TO JOHN B. VARICK, OF SAME PLACE.

SIGNALING DEVICE.

SPECIFICATION forming part of Letters Patent No. 465,768, dated December 22, 1891.

Application filed April 11, 1891. Serial No. 388,570. (No model.)

To all whom it may concern:

Be it known that I, FRANK ST. CLAIR, residing at Manchester, in the county of Hillsborough and State of New Hampshire, have invented an Improved Signaling Device, of which the following is a specification.

This invention relates to an improved signaling device adapted to be placed at the entrance of covered bridges, tunnels, and the like to warn the brakeman or other operator on top of the car of the approach of danger.

Heretofore scaffolds have been erected with one arm to overhang the track and a series of ropes depending from said arm, which strike the brakeman and warn him. Devices of this character, however, are liable to become inoperative during a storm or high wind, as the ropes may be blown around and over the arm.

The object of my invention is to provide a device that shall be operative at all times, and one that will give an audible signal to brakemen other than those operated upon.

With these objects in view my invention consists in certain details of construction and combination of parts, as will be more fully hereinafter described and claimed.

In the drawings forming a part of this specification, Figure 1 is a perspective view of my improved device as applied. Fig. 2 is a front elevation of the same; and Fig. 3 is a top plan view, the position of the parts when the device is operated being shown in dotted lines.

In the practical embodiment of my invention I employ a vertical post or standard A, which is placed on the ground about three hundred feet in advance of the entrance to the bridge or tunnel. Near the top of said post is secured the horizontal beam B, projecting inwardly toward the track, and secured to the beam B and post A, is an oblique beam or timber C, the lower end of said timber being secured to the post A near the center of the same. A beam or timber D is hinged to the beam C in parallel relation therewith by means of the hinges *d*, and to the upper end of said pivoted beam D is attached the horizontal arm E, which projects inwardly over both rails of the track. This arm E is

braced by a diagonal brace *e*. A rod F extends obliquely inward and downward from the pivoted beam, and upon the lower end of said rod is secured a weight G, which is adapted to return the arm E to its normal position after having been operated. A signal-gong H is secured to the forward or front side of the post A, and connected with the gong mechanism is an operating-arm H', said arm working in a guide-staple *h*, secured to the beam B. The inner end of the arm H' projects as far as the pivoted beam D, and is provided with a catch or projection *h'*, and the beam D is provided with an operating-dog *h''*, adapted to engage the said catch and operate the gong when the horizontal arm is swung outward or rearward. The outer end of the dog *h''* is beveled, as at *h'''*, whereby the catch *h'* is permitted to resume its normal or operative position after the gong has been sounded. The operating-arm is slotted at *i*, and through said slotted portion is inserted a screw I, carrying a spiral spring *i'*, which throws the arm back in place after the horizontal arm has returned to its normal position. As the arm E automatically returns to its normal position, the arm H' is also returned to its normal position by the engagement with the catch *h'* of the dog *h''*; or a suitable spring may be employed, if desired, to accomplish this latter operation.

From the above it will be seen that a person standing on the car-roof will strike the horizontal arm E, which, being very light, yields easily and will not injure the person, and it will also be seen that an audible signal is also given to the other brakemen. The weight will return the arm to its normal position and it is ready again for operation.

Having thus described my invention, what I claim as new is—

1. The combination, with a vertical post, of a horizontal arm pivotally connected therewith, the pivots for said arm being out of vertical alignment, for the purpose described, a gong carried by the post, and means for sounding an alarm thereon when the arm is swung out of its normal position, substantially as set forth.

2. The combination, with the post, of the

horizontal beam secured thereto, the oblique
beam connecting the horizontal beam and post,
the oblique beam pivoted to the said connect-
ing-beam, and a horizontal arm attached to
5 the pivoted beam, and a weight also secured
thereto, substantially as shown and described.

3. The combination, with the post and rigid
oblique frame, of a horizontal arm pivoted
thereto, the weight, the signal-gong, operat-

ing-arm, operating-dog, set-screw, and spring, 10
all arranged substantially as described.

In testimony whereof I affix my signature in
presence of two witnesses.

FRANK ST. CLAIR.

Witnesses:

JOHN C. BERFONT,
ANNABEL MINARD.