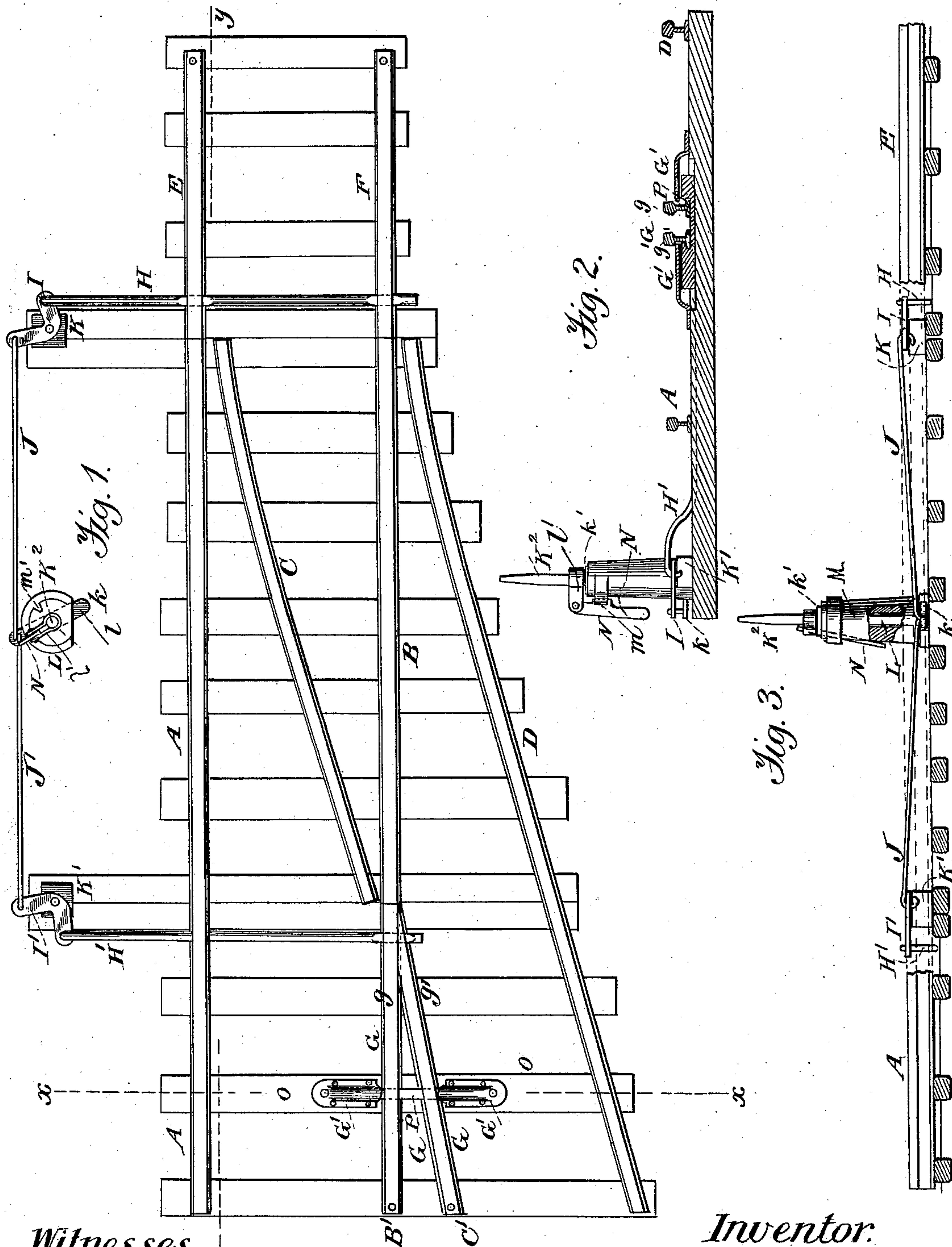


(No Model.)

J. DALY.
RAILROAD SWITCH.

No. 372,255.

Patented Oct. 25, 1887.



Witnesses.
A. Rupprecht.
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UNITED STATES PATENT OFFICE.

JOHN DALY, OF GRINNELL, IOWA.

RAILROAD-SWITCH.

SPECIFICATION forming part of Letters Patent No. 372,255, dated October 25, 1887.

Application filed February 24, 1887. Serial No. 228,680. (No model.)

To all whom it may concern:

Be it known that I, JOHN DALY, a citizen of the United States, residing at Grinnell, in the county of Poweshiek and State of Iowa, have
5 invented certain new and useful Improvements in Railroad-Switches; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable
10 others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters and figures of reference marked thereon, which form a part of this specification.

The special object of the invention is to
15 make a safety-switch which shall render the use of railroad-frogs and guard rails entirely unnecessary.

The invention will first be described in connection with the drawings, and then pointed
20 out in the claim.

Figure 1 of the drawings is a plan view showing my invention applied; Fig. 2, a vertical cross section on line xx of Fig. 1; and
25 Fig. 3 a vertical section on line yy of Fig. 1, with the main-track rail broken away.

In the drawings, A B represent the fixed rails of the main track; C D, the fixed rails of the branch track; E F, the ordinary movable parallel switch-rails; and G, my V-frog
30 consisting of the rails B' C'.

H H' are pivoted rods which connect the frog-rails with the elbow-levers I I'. The latter turn at the vertices of their angles on or with the stool-stands K K', and are connected
35 by rods J J', pivoted to the arm l, with a turn-shaft, L. The latter has bearings and turns in the casing M, while on a radial arm, l',

above the casing, is pivoted the frog-lever N, which turns to the right or left, and is held in casing-notches $m m'$, so as to hold the V-frog
40 G to either the main or branch track.

The V-frog G consists of one rail, B', cut squarely across at its free end, and of another rail, C', cut diagonally at its free end, as shown
45 at g' , so as to fit snugly together at their free ends and practically form only the end of a single rail when aligned with the fixed main-track and branch rails.

G' G' are two hollow side braces made fast to the cross tie O, so that the V-frog G swings
50 between them, and brace the rails B' C', so as to prevent them from spreading and lateral displacement. On the inside of the braces G' there slides back and forth in the sockets thereof a clamp, P, which holds the rail and
55 V-point securely in position. The end openings in the brace-sockets also serve the purpose of preventing the clamp P from being clogged by an accumulation of dirt, snow, or
60 ice.

Having thus described all that is necessary to a full understanding of my invention, what I claim as new, and desire to protect by Letters Patent, is—

The combination, with the switch-rails B' C', of the clamp-rod P and hollow braces G' G', arranged with respect to said rails, as and
65 for the purpose set forth.

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

JOHN DALY.

Witnesses:

F. C. MOORE,
J. RAMSEY.