

(No Model.)

J. B. BATT.
RAILWAY SWITCH.

No. 327,220.

Patented Sept. 29, 1885.

Fig. 1.

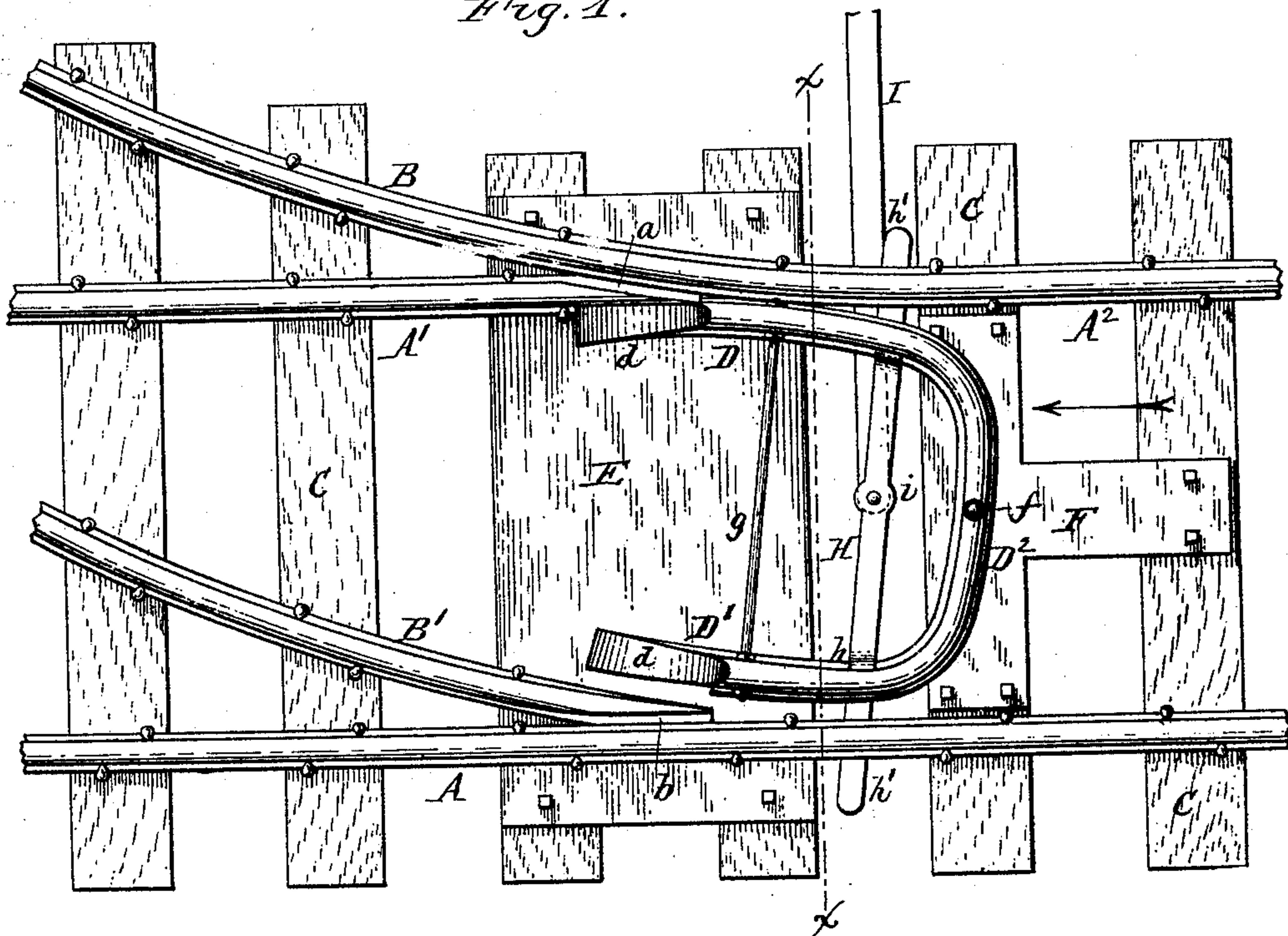


Fig. 2.

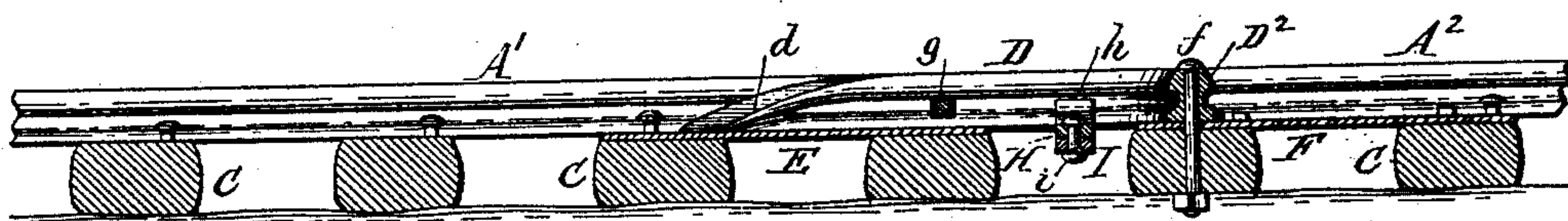
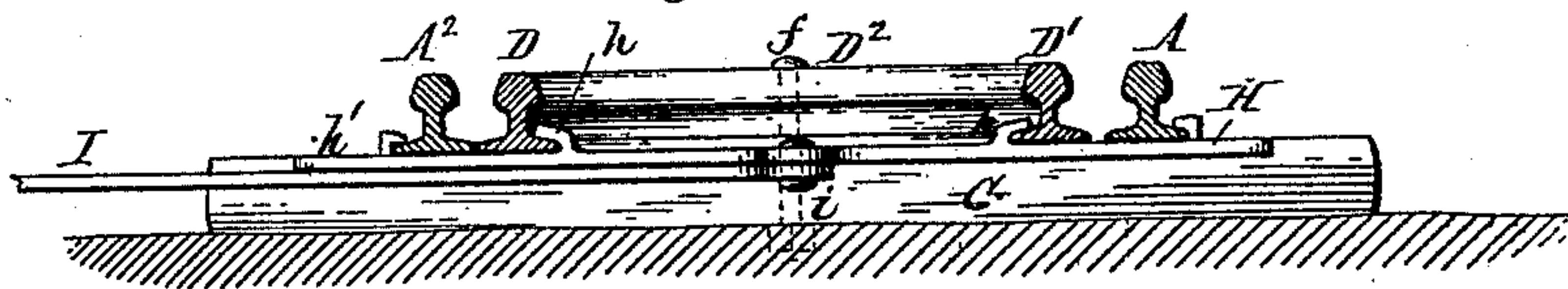


Fig. 3.



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UNITED STATES PATENT OFFICE.

JOHN B. BATT, OF BUFFALO, NEW YORK, ASSIGNOR OF ONE-HALF TO
CHARLES HAGER, OF SAME PLACE.

RAILWAY-SWITCH.

SPECIFICATION forming part of Letters Patent No. 327,220, dated September 29, 1885.

Application filed May 16, 1885. (No model.)

To all whom it may concern:

Be it known that I, JOHN B. BATT, of the city of Buffalo, in the county of Erie and State of New York, have invented a new and useful
5 Improvement in Railway-Switches, of which the following is a specification.

This invention relates to that class of railway-switches in which the rails of the main track and siding are rigidly secured in place,
10 and in which the wheels are guided to or from the main track or siding by movable guide or switch rails arranged between the pointed rails of the main track.

The object of my invention is to construct a
15 simple safety-switch of this class which will securely retain the wheels on the track when the switch is misplaced; and my invention consists to that end of the improvements which will be hereinafter fully set forth, and pointed
20 out in the claims.

In the accompanying drawings, Figure 1 is a top plan view of my improved switch. Fig. 2 is a longitudinal section of the same. Fig. 3 is a cross-section in line *x x*, Fig. 1.

25 Like letters of reference refer to like parts in the several figures.

A represents the continuous rail of the main track, A' the pointed rail of the main track, and A² the main-track rail, which is arranged in line with the pointed rail A', and is separated therefrom by a space, *a*, through
30 which the flanges of the wheels pass in running to or from the siding. B is the side-track rail, which forms a diverging or lateral continuation of the main-track rail A², and B' is the pointed rail of the side track. The pointed end of the rail B' is separated from the rail A of the main track by a space, *b*, through
35 which the flanges of the wheels pass in running on the main track. The pointed ends of the rails A' B' are arranged opposite each other, and all of the track-rails A A' A² B B' are rigidly secured to the sleeper or cross-ties C.

D D' represent the movable guide or switch
5 rails, arranged between the main-track rails A A², in front of the pointed rails A' B', and made laterally movable in such manner that either one or the other guide-rail will lie against the adjacent pointed rail, and compel the wheels
10 to run either on the main track or siding. In

the position of the guide-rails represented in Fig. 1, in which the guide-rail D rests against the point A', the switch is set for the side track, and a pair of wheels running over the switch from the right-hand side of the figure
55 in the direction of the arrow will be guided upon the side track. The ends *d* of the guide-rails D D' which extend along the inner sides of the points are beveled or inclined, and are supported by a metallic plate, E, which is secured to the ties. If a pair of wheels pass
60 over the switch on the main track from the left-hand side of Fig. 1, the switch is misplaced for such a movement of the wheels. The flange of the wheel running on the rail A' will ride
65 up on the inclined end *d* of the guide-rail D, which will lift the flange over the guide-rail and drop it into the space between the guide-rail D and the main-track rail A², with the tread of the wheel on the rail A², thereby
70 preventing the wheels from leaving the track under these circumstances. Upon shifting the guide-rails so that the rail D' bears against the point B', while the rail D clears the point
75 A', the switch is set for the main track; but if a pair of wheels should pass over the switch from the siding—for which the switch is now misplaced—the flange of the wheel running
80 on the rail B' would be lifted over the guide-rail D' by the inclined end *d* thereof and dropped into the space between the rails D' and A, with the tread of the wheel on the rail A, thus guiding the wheels to the main track. The guide-rails D D' are connected by a rail,
85 D², which is preferably made of one piece or integral with the guide-rails, the three rails forming a guide of U or horseshoe form. This U-shaped guide is pivoted by a vertical bolt,
90 *f*, to a plate F, which latter is secured to the ties. By shifting the guide on the pivot *f* the switch is set for the main track or siding, as may be desired. The guide-rails D D' are further connected by a cross-stay, *g*. It is obvious that each guide-rail D D' may be pivoted
95 separately, provided both rails are connected so as to be moved simultaneously.

H is a horizontal bar, which is arranged horizontally under the guide-rails D D', and provided with shoes *h*, in which the guide-rails are seated. The ends *h'* of the bar H bear against
100

the undersides of the main rails A A², whereby the guide-rails are held down and prevented from rising above the level of the main rails.

5 I represents the shifting-bar, which is pivoted to the cross-bar H at i, and moved in any suitable or well-known manner for setting the switch, and held in position by a locking device of any suitable or well-known construction.

10 The guide-rails D D' and connecting-rail D² can be bent out of a single ordinary rail, rendering the guide-rails very strong and the construction of the switch comparatively inexpensive.

I claim as my invention—

15 1. The combination, with the fixed main rails A A², fixed side rail, B, and fixed pointed rails

A' B', of the movable guide-rails D D', connected to move simultaneously, and provided with beveled ends d, substantially as set forth.

2. The combination, with the fixed main rails 20 A A², fixed side rail, B, and fixed pointed rails A' B', of the pivoted guide-rails D D', connecting-bar H, having its ends h' engaging under the main rails, and the shifting-bar I, attached to the bar H, substantially as set forth. 25

Witness my hand this 24th day of April, 1885.

JOHN B. BATT.

Witnesses:

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C. F. GEYER.