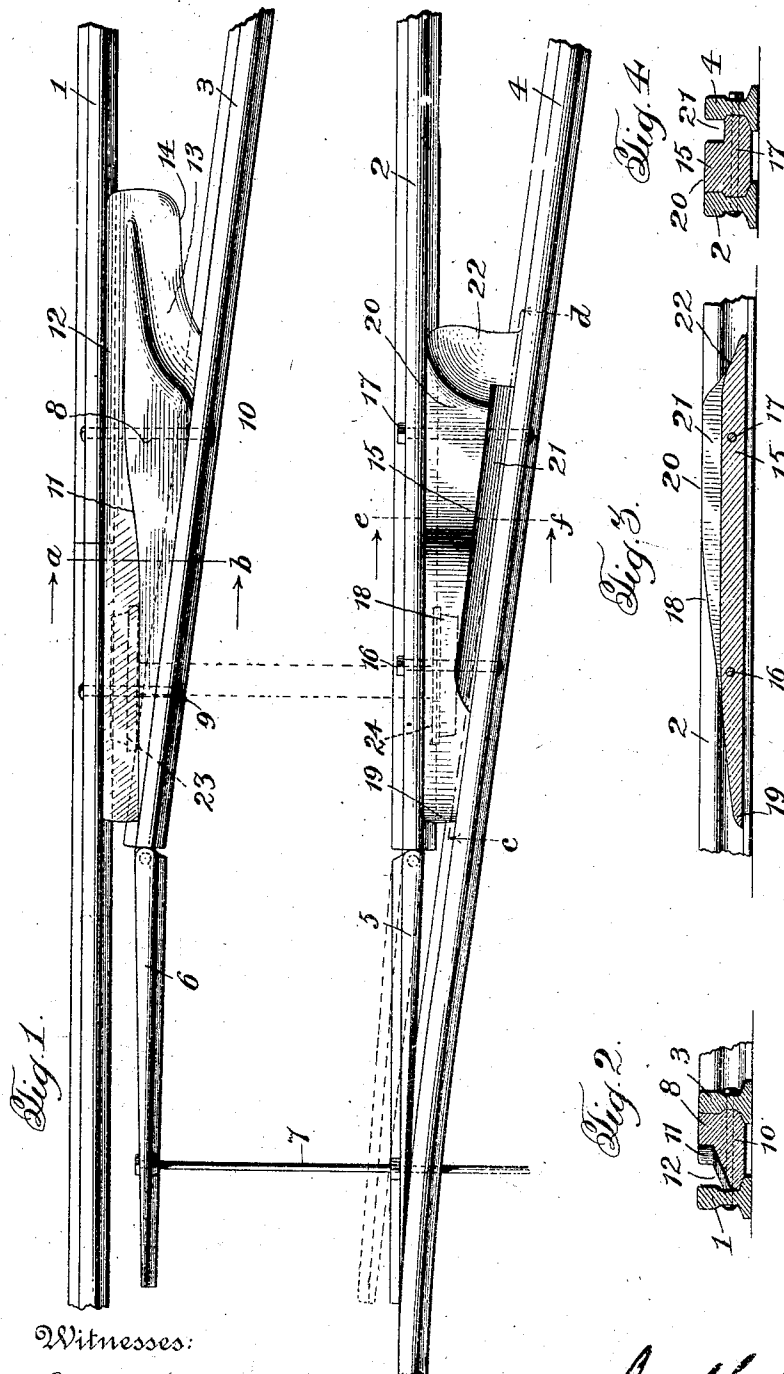


J. B. COMPTON.
SAFETY DEVICE FOR RAILWAY TRACKS.
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1,010,480.

Patented Dec. 5, 1911.



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SAFETY DEVICE FOR RAILWAY-TRACKS.

1,010,480.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, JOSEPH B. COMPTON, a citizen of the United States, residing at Buchanan, in the county of Lawrence and State of Kentucky, have invented certain new and useful Improvements in Safety Devices for Railway-Tracks, of which the following is a specification.

The primary object of this invention is the prevention of railway accidents due to derailed trains.

As herein shown and described in detail the said invention is employed particularly to prevent such accidents when due to a split or broken switch.

In said specific application of my invention I employ, in combination with the track rails of a switch, rerailing devices which will automatically cause a train derailed by a split or broken switch to pass back onto the track in the proper way.

In order to more fully describe my said invention reference will be had to the accompanying drawings wherein,

Figure 1, represents in top plan a railway switch embodying a form of my said invention; Fig. 2, a section taken on line *a-b* Fig. 1; Fig. 3, a section taken on line *c-d* Fig. 1, and, Fig. 4, a section taken on line *e-f* Fig. 1.

In the accompanying drawings 1, 2, indicate the main track rails, and 3, 4 the rails of the siding or turn out, the cross ties being omitted for the sake of clearness in the drawing. Attached to the ends of rails 2 and 3 are movable switch points 5 and 6, which may be operated in the usual way as by switch rod 7, or in any other suitable way. These parts may be of any well known construction.

In the angle between the main track rail 1 and siding rail 3, I place a rerailing device 8, consisting preferably of a shoe of steel or other suitable material held as by bolts 9, 10, or otherwise, firmly between the track rails, thus giving additional rigidity and strength to the said rails along the point where they need it most. The shoe 8, is provided with a vertical cam face 11, and a wheel supporting base 12 which preferably has a downward slant toward the outside track rail 1 (see Fig. 2).

The rear end of shoe 8 is cut away as at 13, the said portion having a gradual upslant from the rear bottom edge as at 14

to the top of the shoe. The rear of the shoe being so shaped will cause a body, such for example as a part trailing from a moving train, striking the rear of said shoe to ride up over the shoe instead of catching thereon. On the opposite side of the track from the shoe 8, I place another shoe 15, of steel or other suitable material, firmly held in the angle between rails 2 and 4 by means of bolts 16, 17 or otherwise. This shoe therefore acts to strengthen rails 2 and 4 as pointed out with regard to shoe 8 and rails 1, 3. The shoe 15, has a tread portion 18 which has an upward slant from a thin rounded end 19 to the portion 20 where the top of the shoe is flush with the top of rail 2. In addition, the shoe 15 is recessed as at 21 to allow clearance for the flange of a car wheel passing on the siding rail 4. The rear of shoe 15 is provided with an upwardly slanting face 22 which serves the same purpose as pointed out with reference to the rear upslanting face 13 of shoe 8. Both shoes 8 and 15 are supported between the base and tread of the rails as shown most clearly in the sectional views Figs. 2 and 4.

In Fig. 1, I have indicated in dotted lines a pair of derailed car wheels 23 and 24 in the position they would occupy shortly after passing on to the rerailing shoes.

The operation is as follows: Suppose, from some cause, switch point 5 gets into the dotted line position shown in Fig. 1, while point 6 is in its normal position as shown. The wheels of a train bound on the main track from left to right Fig. 1, instead of passing onto point 5 would drop down between rail 4 and point 5, instantly derailing the train. As this train travels forward, however, its wheels will soon engage the shoes 8 and 15. The flanges of the wheels on the left side of the train will roll onto tread portion 12 of shoe 8, the back of the wheel being against vertical cam face 11 which thrusts the wheels toward rail 1, and as the tread portion 12 is high enough to bring the tread of the wheel up to the top of the rail 1, the wheels will be thrust back on rail 1. The wheels on the right hand side of the train will have then passed onto upwardly slanting tread portion 18 of shoe 15 and have been pulled onto rail 2, the flange of the wheels riding up on portion 20, and thence across the top of rail 2. The train thus becomes rerailed automatically.

In addition to the function of automatically rerailing the train, the shoes 8 and 15 close up that portion of the angle between the converging rails of a switch where pedestrians often get their feet caught and are sometimes held thereby until killed by a passing train.

Having thus described a specific embodiment of my said invention, it should not be understood that I limit my invention to the specific details thus described. For example, pairs of rerailing shoes such as described may be used in various ways to rerail trains.

What I claim is:

1. A rerailing device, comprising main and turn-out track rails, movable switch points, and rerailing shoes located rearward of the respective switch points in the angles formed by the converging main track and turn-out rails on the two sides of the track, the said shoes being detachable from said rails and engaging the webs of said rails, and bolts passing transversely through said shoes and through the rails between which they are located and adapted to clamp said rails and shoes together, substantially as described.

2. A rerailing device, comprising main and turn-out track rails, movable switch points, and rerailing shoes located rearward of the respective switch points in the angles formed by the converging main track and turn-out rails on the two sides of the track, the said shoes being detachable from said rails and having side extensions adapted to fit said rails intermediate of the tread and base thereof and bolts passing transversely through said shoes and through the webs of said rails and acting to clamp said rails and the shoes located therebetween, together, substantially as described.

3. A rerailing device, comprising main and turn-out track rails, movable switch points, and rerailing shoes located rearward of the respective switch points in the angles formed by the converging main track and turn-out rails on the two sides of the track, one of said shoes having a tread portion adapted to receive the periphery of the flange of a derailed wheel and a wheel thrust cam face extending upward from said tread portion, adapted to engage the back of the derailed wheel flange, and the other shoe provided with a wheel raising tread portion, inclined longitudinally of the track, the said shoes having beveled sides adapted to fit the portion of the rails on each side thereof intermediate the web and flange, and

bolts extending transversely through the said shoes and binding the main track and turn-out rails against the sides of said shoes, substantially as described.

4. A rerailing device, comprising main and turn-out track rails, movable switch points, and rerailing shoes located rearward of the respective switch points in the angles formed by the converging main track and turn-out rails on the two sides of the track, one of said shoes having a tread portion adapted to receive the periphery of the flange of a derailed wheel and a vertical cam face adapted to engage the back of said flange to thrust said wheel back on said track, and the other shoe provided with a wheel lifting tread portion inclined upwardly longitudinally of the track, the said shoes being separable from said rails and provided with side portions adapted to fit between said rails intermediate the tread and base thereof, and bolts passing transversely through said shoes and the pairs of rails between which said shoes are located, substantially as described.

5. The combination with angularly disposed rails of a railway track, of a rerailing shoe separable therefrom and located within the angle formed by said rails and having an inclined wheel lifting portion adjacent one of said rails, and a wheel thrusting cam face extending upwardly from said lifting portion, bolts extending through the webs of said rails and transversely through said shoe, the sides of said shoe adapted to fit between the tread and base of said rails, substantially as described.

6. The combination with the rails of a railway track, of a rerailing shoe made fast alongside of one of said rails and having a tread portion adjacent said rail and inclined longitudinally and transversely thereof, and adapted to receive the periphery of the flange of a derailed wheel, the longitudinal incline causing said wheel to rise and the transverse incline tending to thrust said wheel toward said rail, the said shoe also having a wheel thrusting cam face rising from said tread portion and extending longitudinally of said rail in a direction at an angle to said rail and then substantially parallel thereto, substantially as described.

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

JOSEPH B. COMPTON.

Witnesses:

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