

A. HOLLINGER.
RAILWAY FROG.
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971,129.

Patented Sept. 27, 1910.

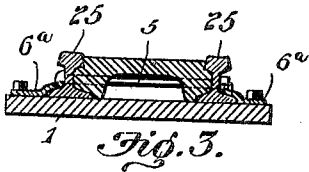


Fig. 3.

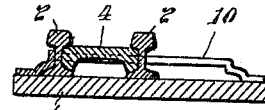


Fig. 2.

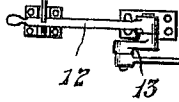


Fig. 1.

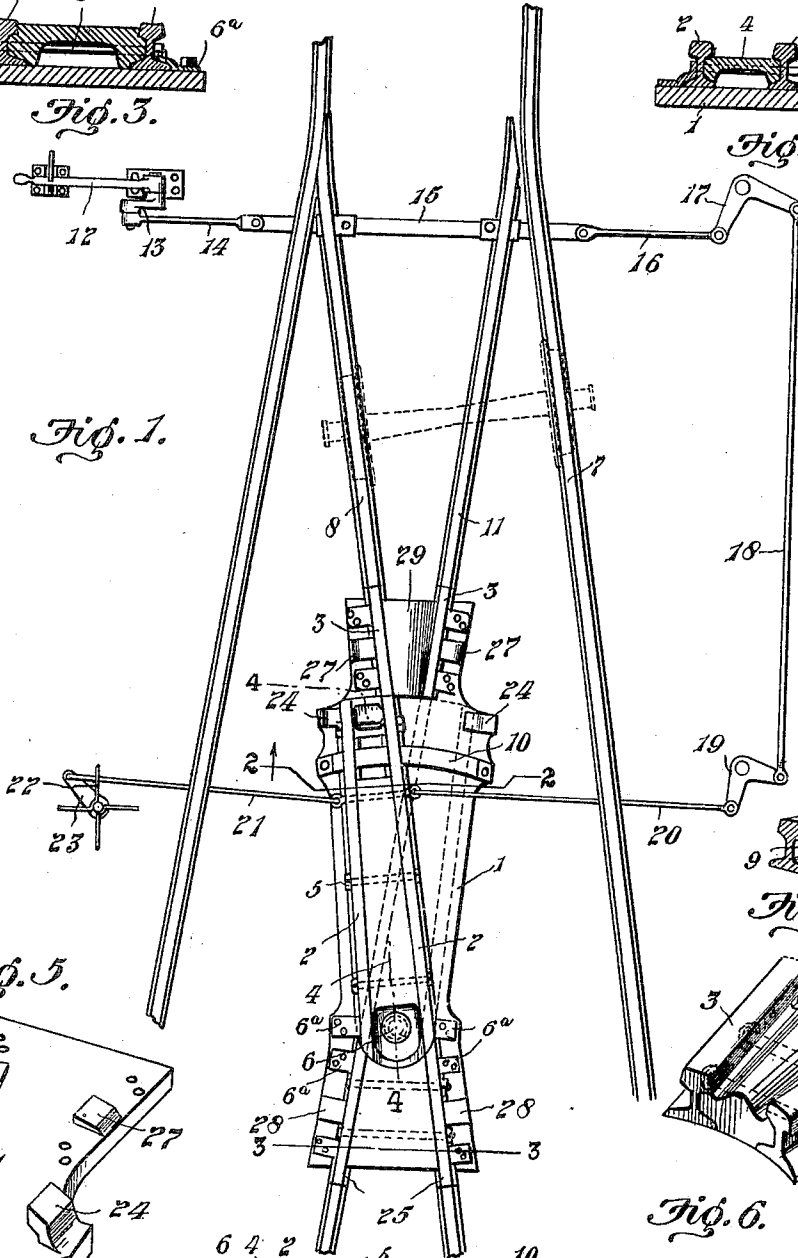


Fig. 7.

Fig. 5.

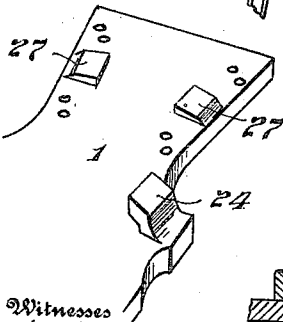


Fig. 6.

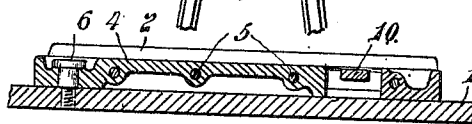
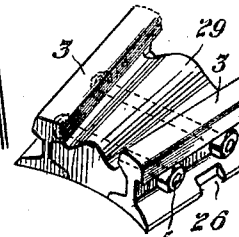


Fig. 4.

Witnesses
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UNITED STATES PATENT OFFICE.

ANDREW HOLLINGER, OF CANTON, OHIO.

RAILWAY-FROG.

971,129.

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Application filed January 12, 1910. Serial No. 537,614.

To all whom it may concern:

Be it known that I, ANDREW HOLLINGER, a citizen of the United States, residing at Canton, in the county of Stark and State of Ohio, have invented certain new and useful Improvements in Railway-Frogs; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawing making a part of this specification, and to the numerals and figures of reference marked thereon, in which—

Figure 1 is a top plan view showing the different parts properly arranged and car axle and wheels located upon the siding. Fig. 2 is a section on line 2—2, Fig. 1. Fig. 3 is a section on line 3—3, Fig. 1. Fig. 4 is a longitudinal section on line 4—4, Fig. 1. Fig. 5 is a detached view showing a portion of the fixed base plate. Fig. 6 is a detached perspective view showing the short end rails intermediate the switch point and shift rails. Fig. 7 is a detached view showing a portion of one of the shift rails, illustrating its slot through which the retaining bar passes.

The present invention has relation to railway frogs and it consists in the novel arrangement hereinafter described and particularly pointed out in the claim.

Similar numerals of reference indicate corresponding parts in all the figures of the drawings.

In the accompanying drawing, 1 represents the base plate which is secured to the ties or other foundation and upon which are located the tongue rails 2, and the stock or main rails 3, said parts being arranged substantially as shown in Fig. 1. The tongue rails 2 are tied together and held in proper distanced relationship with reference to each other by means of the filling block 4 and the clamping bolts 5, said rails being pivotally connected to the base plate 1 by means of the bolt 6 which bolt is connected in any convenient and well known manner to the base plate 1. In Fig. 1 the tongue rails and the switch point rails are brought into a position to permit the train to pass out upon the main track rails 7 over the siding rails 8.

The webs of the tongue rails 2 are provided with the slots 9, which slots are for the purpose of receiving the curved bar 10, which curved bar is for the purpose of holding the tongue rails 2 at their free ends in proper relationship with reference to the base plate 1 or in other words holding the

tongue rails down upon the base plate 1. The curved bar 10 is securely attached to the base plate 1 and serves the double purpose of holding the tongue rails down and upon the base plate and also prevents any end movement of said tongue rails, thereby preventing the lapping of the stock rails and said tongue rails. The opposite ends of said tongue rails being held by means of the pivot bolt 6. For the purpose of assisting in holding the tongue rails 2 the base plate 1 is provided with the clip plates 6^a, said clip plates being so arranged that they will bear upon the base flanges of the tongue rails 2. The tongue rails 2 are so spaced that they will properly aline with the switch point rail 8 or the switch point rail 11, reference being had to the two positions into which the tongue rails 2 can be placed as indicated in dotted lines Fig. 1.

For the purpose of shifting the tongue rails 2 and the switch point rails 8 and 11 the usual switch lever 12 is provided, which switch lever operates the crank 13, said crank being for the purpose of imparting a reciprocating movement to the rod 14, which rod is pivotally connected to the bar 15, which bar is for the purpose of tying the switch point rails 8 and 11 together. It will be understood that when the switch point rails are thrown to open and close the switch the tongue rails 2 must be moved at the same time and in order to provide for this simultaneous movement the rod 16 is provided, which rod is connected to the bell crank 17, to which bell crank is connected the tongue rail operating rod 18, said rod being pivotally connected to the bell crank 19, to which bell crank is attached the tongue rail operating rod 20.

To one of the tongue rails or its equivalent and upon the opposite side to which the operating rod is connected is attached the actuating signal rod 21, which rod is for the purpose of operating the signal 22 by means of the usual arm or lever 23.

It will be understood that means should be provided to stop the tongue rails 2 at the proper points so as to bring all of the rails in proper alinement with reference to each other and in order to accomplish this result the bed plate 1 is provided with the stop blocks 24, which blocks are securely connected to the base plate 1 in any convenient and well known manner. The track rails 25 are held in fixed position and are located

so that their switch ends will be in proper alinement at all times with the hinged or pivoted ends of the tongue rails 2.

For the purpose of preventing any end-wise movement of the stock rails 3, the bases of said rails are provided with the notches or recesses 26, into which notches or recesses the fixed blocks 27 are seated, which fixed blocks may be formed integral or made separate and attached in any convenient and well known manner. The main track rails are also held in the same manner by means of the blocks 28. It is of the utmost importance to provide against what is commonly known as creeping or end movement of the main rails 25 and the stock rails 3, hence the importance of providing the blocks 27 and 28.

For the purpose of holding the stock rails 3 in proper distanced relation with each other the tapered filling block 29 is provided and is located substantially as shown in Fig. 1.

It will be understood that by my peculiar arrangement a continuous rail is provided, thereby removing the jar of partly worn train wheels.

It will be understood that by connecting the signal as above described, said signal will indicate that all the movable parts are properly adjusted for the passing of a train, which signal is provided at all times with the usual colors indicating the right of way and when the signals are so set all of the movable parts are in proper alinement for

the passage of a train, and that no part can be thrown out of position without at the same time setting the signal against the passage of a train.

Having fully described my invention what I claim as new and desire to secure to Letters Patent, is—

In a railway frog of the class described, a base plate, said base plate provided with stop blocks, and rail anti-creeping blocks, stock rails provided with notched flanges, said stock rails located at the opposite ends of the base plate and the anti-creeping blocks located in the notches of said flanges, tapered blocks located between the stock rails and secured thereto, tongue rails held in fixed position and located intermediate the stock rails, said tongue rails pivotally connected to the base plate, clip plates adapted to assist in holding the tongue rails in position with reference to their pivotal point, said tongue rails provided with slots in their webs, a curved bar secured to and held in spaced relationship with reference to the base plate and said curved bar located through the slots in the tongue rails, all arranged, substantially as and for the purpose specified.

In testimony that I claim the above, I have hereunto subscribed my name in the presence of two witnesses.

ANDREW HOLLINGER.

Witnesses:

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SYLVIA BORON.