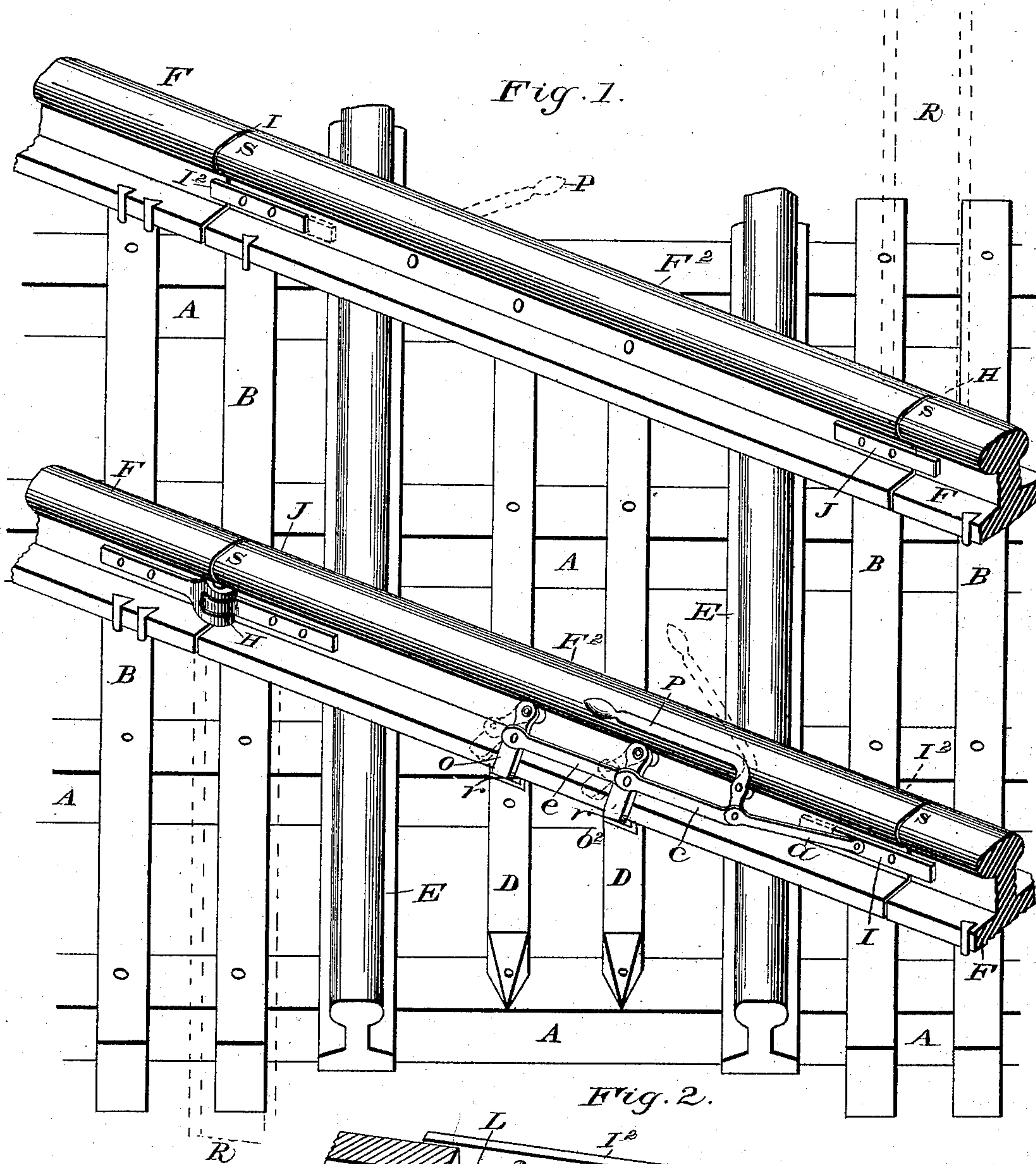


(No Model.)

M. SCHLESSMAN.
RAILROAD CROSSING.

No. 316,576.

Patented Apr. 28, 1885.



Witnesses:

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UNITED STATES PATENT OFFICE.

MICHAEL SCHLESSMAN, OF COLUMBIA CITY, INDIANA.

RAILROAD-CROSSING.

SPECIFICATION forming part of Letters Patent No. 316,576, dated April 28, 1885.

Application filed July 5, 1883. (No model.)

To all whom it may concern:

Be it known that I, MICHAEL SCHLESSMAN, a citizen of the United States, residing at Columbia City, in the county of Whitley and State of Indiana, have invented a new and useful Improvement in Railroad-Crossings, of which the following is a specification.

My invention relates to improvements in railroad-crossings, whereby the rails of one of the tracks at the crossing are laid in the same plain unbroken manner as at any point on said track where there is no crossing, and the rails of the other track pass over the tops of the rails of the first-named or lower track, while the rails of the last-named or upper track are so arranged as to be readily swung aside and permit the unobstructed passage of trains on the lower track, or, when the rails of the upper track are locked in position, to permit the free passage of trains on the upper track.

The objects of my invention are to provide a railroad-crossing over which trains may freely pass in all directions without shock or bumping, or the necessity of running slowly, and without the use of frogs or other analogous devices, thereby preventing the loss of time and the great wear and tear to which rolling-stock and tracks are subject where ordinary crossings are in use. I attain these objects by the mechanism illustrated in the accompanying drawings, in which—

Figure 1 is a view in perspective of both tracks of the crossing, and Fig. 2 is a longitudinal sectional view of a portion of the mechanism used for locking the rails of the upper track in position for the passage of trains on the upper track.

Similar letters refer to similar parts in both views.

A A, Fig. 1, represent the ties of the lower track, and E E the rails of the same spiked to the ties in the usual manner. To the ties of the lower track are also bolted the ties B B of the upper track, as shown. These ties for the upper track have a perpendicular thickness equal to the height of rails E E on lower track. Across ties A A, and between rails E E, are also bolted the stay-ties D D, which are of the same thickness as ties B B. The permanent rails F F of the upper track are spiked to upper ties, B B, except those movable por-

tions of rail (marked F² F²) extending from point S to S, and each of sufficient length to reach across and rest on the tops of both rails E E as well as on the tops of ties B B and stay-ties D D, as shown. Each movable rail F² is hinged to a permanent rail, F, by a strong hinge, H, so that both movable rails F² F² can be readily swung around over the tops of both rails of the lower track until the ends unprovided with hinges are brought to the points designated by the dotted lines at R R. When a train is to cross on the upper track, the movable rails are swung into the positions shown and locked by the double bolts I and I². The locking is done by pressing lever P downward from the dotted lines to its present position, whereby the double bolts are moved forward until they inclose the end of permanent rail F, as seen in Fig. 2, where is also shown a slot in rail F² at L, through which bolts I and I² are held in place by rivets connecting them, and permitted to slide back and forth to lock and unlock the rails F² and F.

Opposite the hinges H H, on each movable rail, are riveted the stays J J to aid in holding the permanent and movable rails in line with each other. The lever P is jointed to the outside of each movable rail, and to the short end of said lever is jointed one end of arm a, the other end of said arm being jointed to locking-bolt I, as shown. To the short end of lever P is also jointed one end of arm c, the other end of which is connected with stop O² by means of arm e, as shown. The stops O and O² are jointed at their upper ends to the outside of rail F², immediately under the cap thereof, and the use of said stops is to prevent the movable rails of the upper track from spreading under the weight and momentum of heavy trains passing over the same. These stops effect that object by being brought down into slots or mortises r r in stay-ties D D by the same downward motion of lever P that locks rail F² in position and line with rail F. Slots r r are strengthened by linings or facings of metal inserted in and attached to ties D D, as shown. Stops O O² are made of bars of metal of sufficient strength, so that when they are brought down into the metal-lined slots r r close to the outer edge of the base of the rail, as illustrated, all spreading of the rails on either side of the track is prevented. When

lever P is raised to unlock the rails, the stops O O² are at the same time swung and raised out of slots r r so as to clear the tops of ties D D, rails E E, and ties B B whenever it is necessary to swing open the rails of the upper track for the passage of trains on the lower track. The positions assumed by stops O O² when raised out of slots r r are shown by the dotted lines.

10 I am aware that broadly railway-crossings in which one set of rails crosses a lower set of rails, and provided with means to move the upper jointed rail-pieces out of the way of trains passing over the lower set of rails, are not
15 new, and therefore disclaim such; but,

Having described my invention, what I claim is—

20 1. In a railway-crossing, the laterally and horizontally movable rails F² F², hinged to the fixed rails F and locked in position by levers P and bolts I, constructed and operated as shown and specified.

2. In a railway-crossing, the combination of the unbroken rails E, movable rails F² F²,

hinged to fixed rails F, and passing over said 25 unbroken permanent rails, and the locking-levers P, connected by links to the bolts I, all arranged for operation as shown and set forth.

3. A railway-crossing, as described, having the movable rails F² F², hinged to the fixed or 30 permanent rails F, and crossing a lower unbroken track, in combination with the levers P, connected to the stops O O², engaging with slots r r in the stay-dies D D to prevent the spreading of the rails, all as shown and speci- 35 fied.

4. The railway-crossing herein described, consisting of movable rails F² F², hinged to permanent rails F and crossing a lower un- 40 broken track, in combination with levers P, connected to the stops O O², engaging with slots r r in the stay-dies D D and by links to the locking-bolts I, all arranged for operation as shown, and for the purposes set forth.

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Witnesses:

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