

J. T. WATSON.
SAFETY DEVICE FOR RAILROAD FROGS.
APPLICATION FILED SEPT. 21, 1909.

944,754.

Patented Dec. 28, 1909.

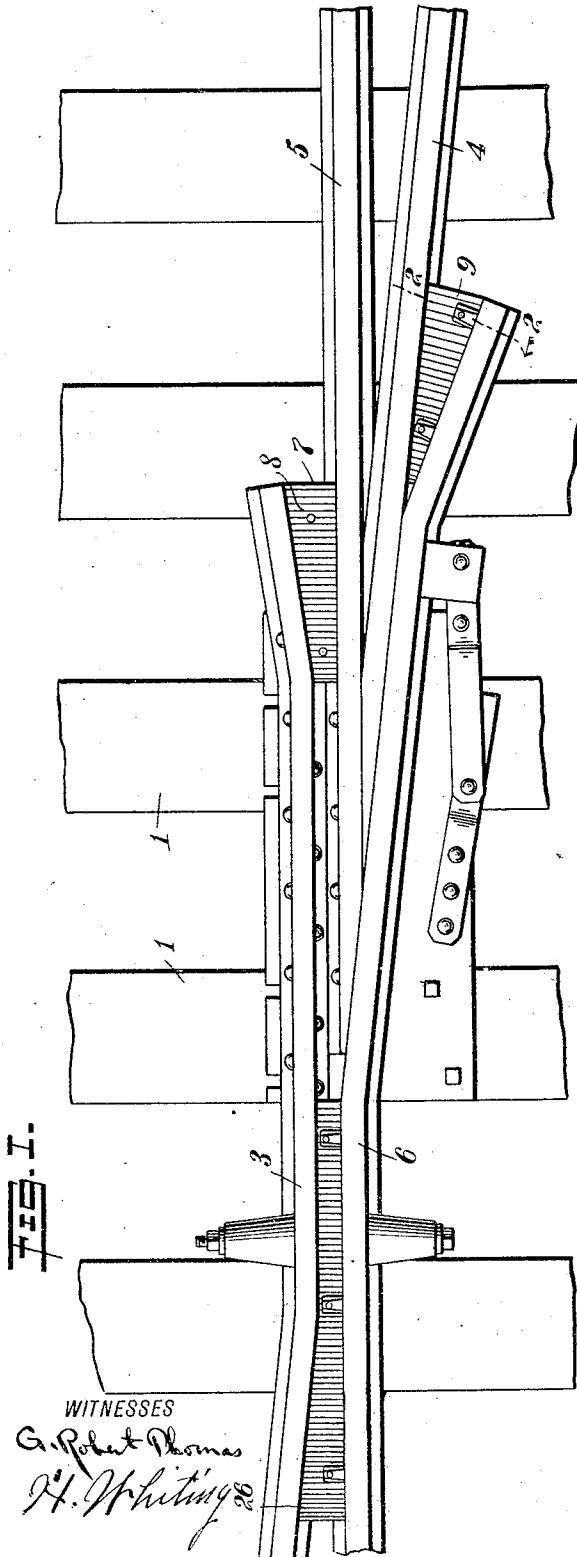


FIG. 1.

WITNESSES
G. Robert Thomas
H. Whiting

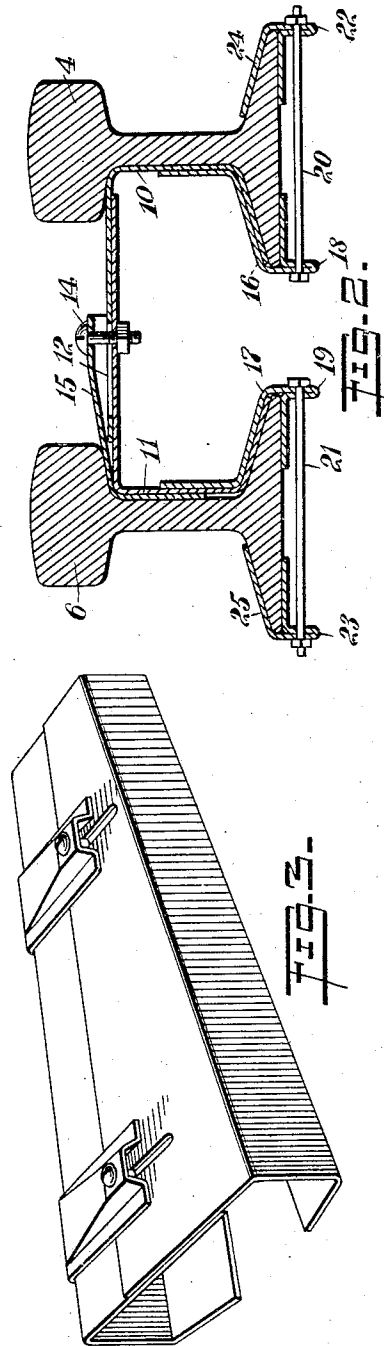


FIG. 2.

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SAFETY DEVICE FOR RAILROAD-FROGS.

944,754.

Specification of Letters Patent.

Patented Dec. 28, 1909.

Application filed September 21, 1909. Serial No. 518,792.

To all whom it may concern:

Be it known that I, JOHN T. WATSON, a citizen of the United States, and a resident of Osage City, in the county of Osage and State of Kansas, have invented a new and Improved Safety Device for Railroad-Frogs, of which the following is a full, clear, and exact description.

This invention relates to a safety device adapted to prevent a person walking on the railroad from catching his foot in a frog on the track, thus preventing the numerous accidents due to persons wedging their feet between the rails in this manner and being unable to extricate themselves before being run down by fast-moving trains.

An object of this invention is to provide a device which will be simple in construction, inexpensive to manufacture, strong, durable and easily adjusted in position.

Another object of this invention is to provide extensible means for preventing the foot of a person from falling in between the rails on a track frog.

These and further objects, together with the construction and combination of parts, will be more fully described hereinafter and particularly set forth in the claims.

Reference is to be had to the accompanying drawings forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the views, and in which—

Figure 1 is a plan view of a spring rail track frog, taken at a point where two tracks intersect each other; Fig. 2 is a vertical transverse section on the line 2—2 in Fig. 1; and Fig. 3 is an enlarged perspective view, showing in detail one of the space fillers.

Referring more particularly to the separate parts of the device, 1 indicates cross ties of a railroad track foundation, to which are secured in any well known manner stationary rails 3 and 4 of one track line, and also a stationary rail 5 and a spring rail 6 of another track line. The rails 3 and 5 form an angle with each other at 7, as is usually the custom in such frog joints. There is thus formed at this point a wedge-shaped space which provides a convenient trap for a person's foot. In order to prevent an object, such as a person's foot, from falling into this wedge-shaped space, there is provided a guard or filler 8, which may be of any suitable form and material, but is preferably

composed of sheet metal bent into such a form as to provide a support, extending between the rails 3 and 5, just below the head thereof. Between the stationary rail 4 and the movable spring rail 6, there is also left a considerable space, for which I provide a guard or filler 9, which is clearly illustrated in Figs. 2 and 3. The filler 9 comprises a plurality of channel members 10 and 11, which extend into the channels formed between the heads and the bases of the rails, the top flanges of which extend toward each other, one overlying the other, and form a convenient support extending from rail to rail just below the heads of the rails. One of these flanges is provided with slots 12, which are slidingly engaged by pins or bolts 14 which extend through perforations in the other flange. This forms a convenient slot-and-pin connection between the channel members 10 and 11, which permits them to telescope relative to each other when the movable rail 6 is forced from the stationary rail 4 by the wheels of a passing train. The slots 12 are protected and covered by suitable guards 15, which are threaded onto the bolts 14 and extend along the sides of the channel member 11, and are secured to the latter in any well known manner.

In order to secure the channel members 10 and 11 to the rails 4 and 6, there are provided clamps 16 and 17, which are preferably formed of sheet metal and so bent and folded on themselves as to extend along the inner sides of the channel members 10 and 11 and also to extend tightly over the base flanges on the rails 4 and 6. These clamps 16 and 17 are also formed with perforated folds 18 and 19, through which extend tie-bolts 20 and 21, which secure them to the rails 4 and 6 by engaging in similar folds 22 and 23 on clamps 24 and 25, which are secured to the opposite flanges of the bases on the rails 4 and 6.

Between the stationary rail 3 and the movable rail 6, there are also formed rectangular and angular spaces, for which I have provided a guard or filler 26, which is similar to the filler 9, in that it is telescopically extensible and forms a convenient guard extending between the rails 4 and 6, just below the heads thereof. The members of this guard or filler 26 are secured to the rails 3 and 6 in a manner similar to those of the filler 9.

The purpose of this invention will be readily understood from the above description. The guard or filler 8 positively prevents the foot of a person from falling in below the head of the rails 3 and 5, and thereby prevents the person's foot from becoming caught between the rails. In the case of the rails 3 and 6 and 4 and 6, the spring rail 6 moves toward and from the rails 3 and 4 when a train passes from the rail track 3 to the rail 4. The spaces formed between tracks 3 and 6 and 4 and 6 are positively guarded by the fillers 26 and 9, which, by reason of their adjustable nature, at all times fill the spaces between the rails and form convenient floors extending between the rails, just below the heads thereof.

Having thus described my invention, I claim as new and desire to secure by Letters Patent:—

1. A guard, comprising a plurality of telescopic channel sections, a pin-and-slot connection between said sections adapted to permit transverse movement of said sections relative to each other, and a protector for said pin-and-slot connection.

2. In a device of the class described, the combination with a plurality of relatively movable rails, of a filler for the space between said rails, comprising a plurality of relatively adjustable sections rigidly secured to said rails and adapted to move therewith.

3. In a device of the class described, the combination with a plurality of relatively movable rails, of a filler for the space between said rails, comprising a plurality of relatively adjustable sections rigidly se-

cured to said rails and adapted to move therewith, and means for adjustably securing said sections together.

4. In a device of the class described, the combination with a plurality of relatively movable rails, of a filler for the space between said rails, comprising a plurality of relatively adjustable sections rigidly secured to said rails and adapted to move therewith, said sections having a slot-and-pin connection with each other.

5. In a device of the class described, the combination with a plurality of relatively movable rails, of a filler for the space between said rails, comprising a plurality of relatively adjustable sections, and clamps rigidly securing said sections to said rails, so that said sections will move with said rails.

6. In a device of the class described, the combination with a plurality of relatively movable rails, of a filler for the space between said rails, comprising a plurality of relatively adjustable sections, said sections being adjustably secured together, clamps engaging said rails on their facing sides and securing said sections to said rails, clamps engaging said rails on their outer sides, and tie-bolts securing said first-mentioned clamps to said second-mentioned clamps.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

JOHN T. WATSON.

Witnesses:

JEROME GAMBA,
J. M. HELLER.