No. 896,593. PATENTED AUG. 18, 1908.

A. C. SMITH.

RAIL SECURING APPLIANCE.

APPLICATION FILED OCT. 14, 1907.

Fig. 1.

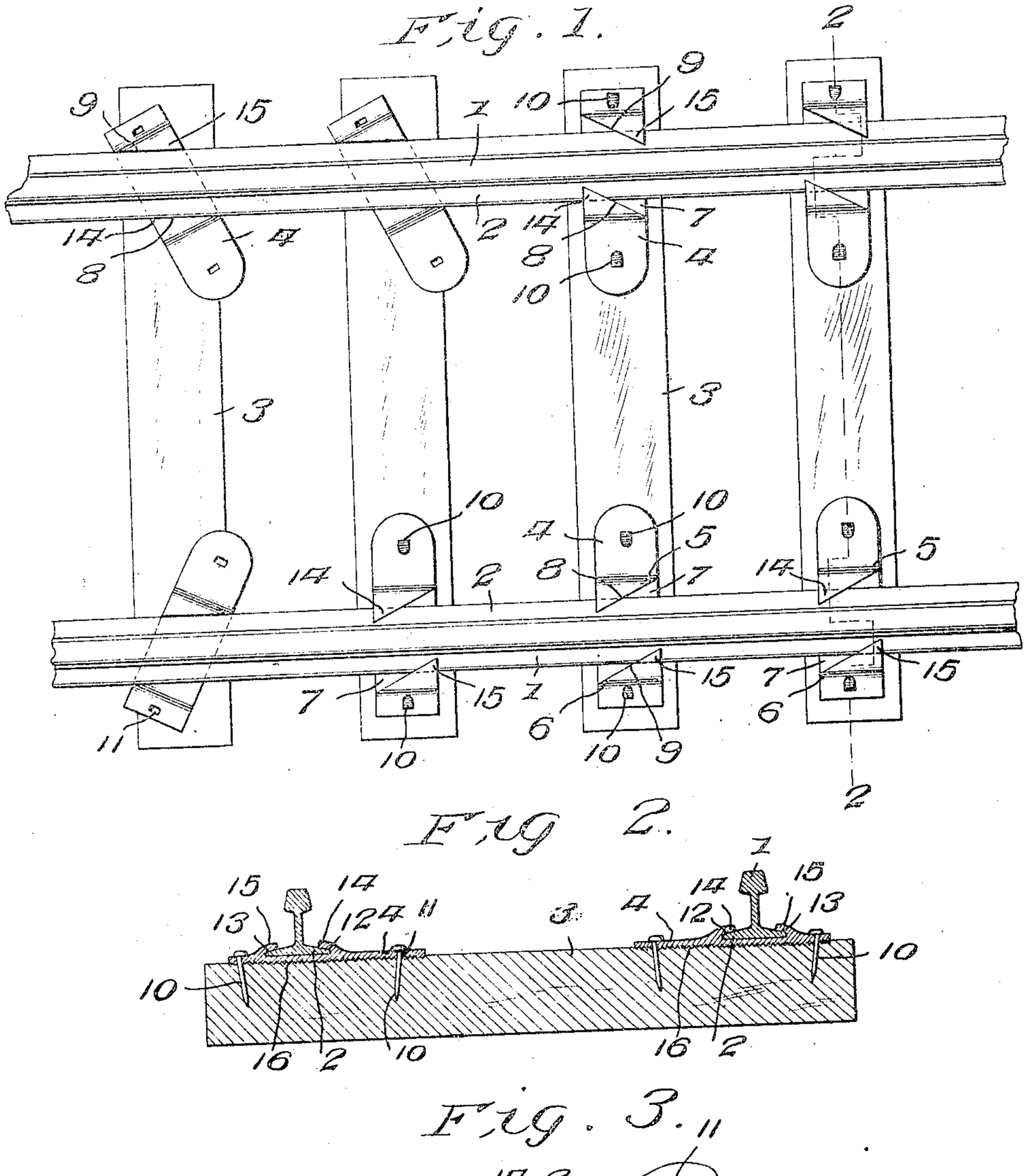
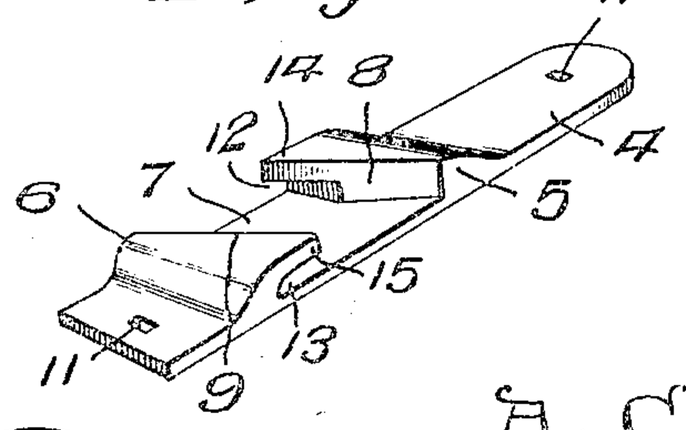


Fig. 2.

Fig. 3.



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RAIL-SECURING APPLIANCE.

No. 896,593. Specification of Letters Patent. Patented Aug. 18, 1908.

Application filed October 14, 1907. Serial No. 397,397.

To all whom it may concern:

Be it known that I, ALFRED C. SMITH, a citizen of the United States, residing at Dobbs Ferry, in the county of Westchester and State of New York, have invented certain new and useful Improvements in Rail-Securing Appliances; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to new and useful improvements in rail securing devices and more particularly to that class adapted to be used for securing railway rails, or the like, in position on the cross ties, whereby said rails will be prevented from spreading.

A further object is to provide means for fastening the appliances to the cross ties and a still further object is to provide means for holding the appliances against slipping on the ties.

Other objects and advantages will be hereinafter referred to and more particularly pointed out in the claims.

In the accompanying drawings which are made a part of this application, Figure 1 is a top plan view of a section of railway track, showing the manner of attaching my improved device. Fig. 2 is a sectional view as seen on line 2—2, Fig. 1, and, Fig. 3 is a perspective view of one of the securing devices removed from engagement with the rail.

Referring to the drawings in which similar reference numerals designate corresponding parts throughout the several views, 1 indicates rails, such as are commonly used in constructing railway or street-car tracks, said rails having the usual form of flange or supporting base 2 and the rails are supported by the usual or any preferred form of cross tie 3.

It has been found by experience that on sharp curves the flanges 2 will cut the heads from the spikes employed in securing the rails to the ties, thereby allowing the rails to spread and causing a wreck and it is my object to provide a securing appliance which will positively hold the rails and prevent them from spreading or destroying the spikes and to this end a bar 4 is introduced below the rails 1 and rested on the ties 3, said bar having upwardly extending lugs 5 and 6 thereon, said lugs being spaced apart to form a channel 7 across the upper face of the bar, the inner faces 8 and 9 of the lugs 5 and 6, respectively, being at an angle to the longitudinal plane of the bar 4, so that in seating the rails in the channels, the bars 4 are placed at such an angle to the longitudinal plane of the rails as to bring the faces 8 and 9 of the lugs 5 and 6 parallel with the longitudinal edges of the flanges 2 and after the rail is seated in the channel, the bars are swung at right angles to the longitudinal plane of the rails and parallel with the ties 3, said bars being then secured to the ties by introducing the usual or any preferred form of spike 10 through openings 11 in the ends of the bar. It is to be observed that the openings 11 are arranged on downward converging planes so that the spikes 10 passing therethrough will form an effective joint. It is also to be observed that the locks 5 and 6 are positioned adjacent one end of the bar 4. By this arrangement it has been found that the device performs its function with greater facility, it being understood that the unobstructed end portions of the bars extend inwardly of the track-way when applied.

The faces 8 and 9 of the lugs 5 and 6 are provided with recesses 12 and 13, respectively, which extend substantially one-half the width of the bars and form lips 14 and 15, respectively on the lugs 5 and 6, which lips are adapted to extend over and engage the upper faces of the flanges 2, when the bars are moved at right angles to the rails 1, said lips firmly holding the rails and preventing lateral movement thereof and in view of the fact that the faces 8 and 9 are at an angle to the longitudinal plane of the bars, the lips are staggered with relation to each other.

The major portion of the strain on the spikes 10 is relieved by providing the lower face of the bars 4 with a plurality of projections or teeth 16 which are adapted to enter the upper surface of the ties when the bars are secured in position thereon, said projections preventing longitudinal movement of the bars and, thereby, relieving the strain from the spikes.

It will thus be seen that I have provided a very cheap and economical form of securing device and one that may be readily and quickly secured in position on the track-way and it will further be seen that when the appliances are properly secured to the rails, said rails will be held against spreading or tilting and the spikes employed for holding the appliance, relieved from any undue strain thereon.

What I claim is:

A railway rail fastening device of the character described, consisting of a member having spaced lugs adjacent one end thereof, said lugs having their opposed faces arranged on an incline transversely of the member and parallel one with the other, the broad ends of the opposed faces of the lugs having their under surfaces recessed, the opposed walls of the recesses being parallel and arranged at approximately right angles to the sides of the member, said member having an opening adjacent each end and having its under surface serrated said openings being arranged on downwardly converging planes.

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

ALFRED C. SMITH.

Witnesses:

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