

F. LINDBERG.
ANTI-RAIL-SPREADER.
APPLICATION FILED JULY 27, 1910.

980,301.

Patented Jan. 3, 1911.

FIG. 1.

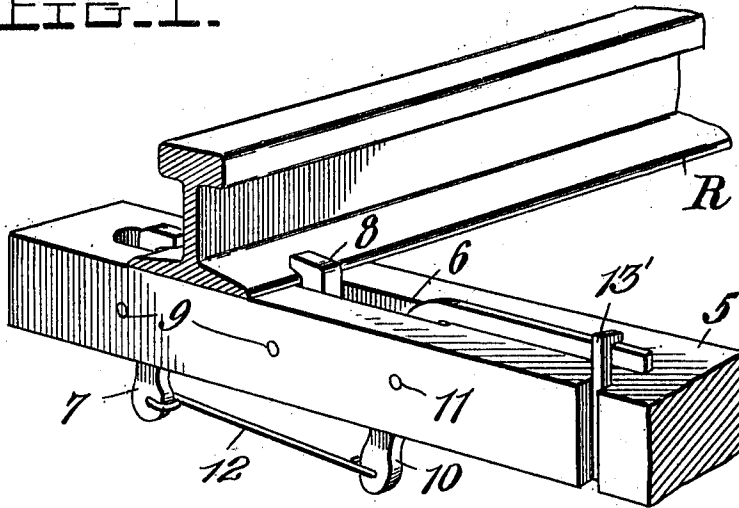


FIG. 2.

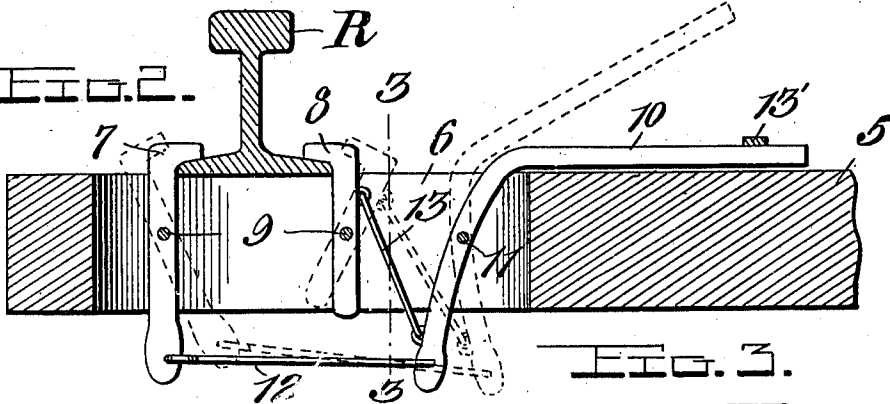
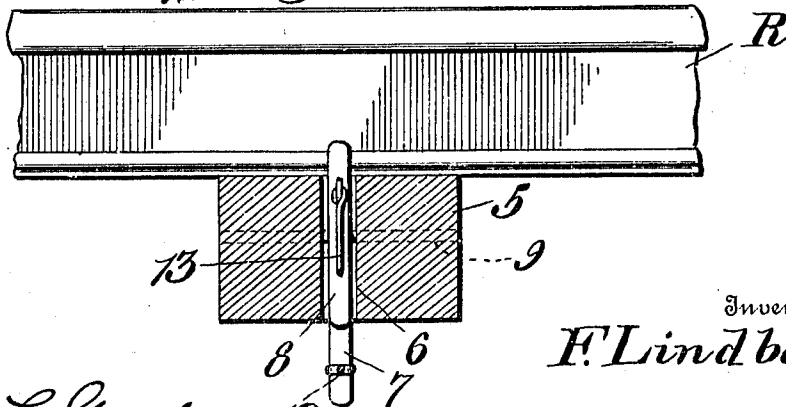


FIG. 3.



Witnesses

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ANTI-RAIL-SPREADER.

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Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, FRANK LINDBERG, a citizen of the United States, residing at Fridley, in the county of Anoka and State of Minnesota, have invented certain new and useful Improvements in Anti-Rail-Spreaders, of which the following is a specification, reference being had to the accompanying drawings.

10 This invention relates to improvements in anti-rail spreaders and has for its object to provide an extremely simple and very efficient device of this character which will effectively hold the rails in position and prevent the same from spreading, thus avoiding possible wrecks.

15 A further object of the invention resides in the provision of two movable rail clamping dogs arranged in one of the rail supporting ties, and means for simultaneously moving said dogs to clamp the same upon the rail, suitable locking means being provided to prevent their release.

20 A still further object of the invention is to provide a pair of pivoted clamping dogs arranged in the rail tie and adapted to engage upon the rail flanges, and a lever pivotally mounted in the tie and connected to the dogs to simultaneously move the same into or out of engagement with the rail, and means for locking said lever against accidental movement.

25 With the above and other objects in view, the invention consists of the novel features of construction and the combination and arrangement of parts hereinafter fully described and claimed and illustrated in the accompanying drawings in which—

30 Figure 1 is a perspective view of a rail clamping or anti-spreading device constructed in accordance with my invention. Fig. 2 is a longitudinal section through the end of the tie, and Fig. 3 is a section taken on the line 3—3 of Fig. 2.

35 Referring more particularly to the drawing, 5 denotes the rail supporting tie upon which the rail R is adapted to be arranged, and secured in the usual manner. The end of the tie 5 is provided with a longitudinal slot 6 in which are pivotally mounted, the clamping dogs 7, 8 respectively, said dogs being formed upon their upper ends with projecting heads adapted to engage upon the rail base on opposite sides of the web thereof. These dogs are mounted upon transverse pins 9 which extend across the slot 6.

The clamping dog 7 mounted in the end of the tie outside of the rail extends below the base of the tie as clearly shown in Fig. 2. A lever 10 is also mounted in the inner end of the slot 6 upon the transversely disposed pin 11. The end of this lever is angularly disposed and extends below the tie 5. The lower end of the dog 7 and the lever 9 are loosely connected by the rod 12. A short rod 13 is also loosely connected at its ends to the angular portion of the lever and to the dog 8. When the lever 9 is raised to the position indicated in dotted lines in Fig. 2, the dogs 7 and 8 are moved upon the pins 9, away from the base flanges of the rail to permit of transverse or vertical movement of the rail between the same. When it is desired to securely clamp the rail upon the tie and hold the same from spreading, the lever is forced downwardly upon the tie into the position indicated in full lines in Fig. 2. To the tie 5, one end of a heavy resilient locking bar 13' is secured. The upper end of this bar has a lug formed thereon which is adapted to engage over the beveled upper edge of the end of the lever 10. Thus the lever will be securely held against accidental movement and the dogs retained in their clamping position on the rail.

40 From the foregoing it is believed that the construction and operation of my improved anti-rail spreading device will be readily understood. It is simple and durable, and extremely efficient in practical use. The rails are positively held upon the ties against any possibility of transverse movement, thus obviating the liability of a disastrous wreck of trains passing over the same.

45 While I have shown and described the preferred construction and arrangement of the various parts, it will be understood that they may be greatly modified without departing from the essential features or sacrificing any of the advantages of the invention.

I claim:—

50 In a device of the character described, the combination with a tie and rail secured thereto, said tie being provided with a longitudinal slot, of opposed dogs pivotally mounted in the slot of said tie intermediate of their ends for clamping engagement upon the base flange of the rail, one of said dogs extending below the tie, a lever bent between its ends and adapted to be positioned in one

end of the slot, a transverse pin extending
across the slot and through said lever to
pivotally support the same therein, one end
of said lever extending below the rail tie,
5 the upper portion thereof being disposed
closely upon the upper surface of the rail
tie when the dogs are in clamping engage-
ment with the rail, a rod pivotally connect-
ing the lower end of said lever with the dog
10 which projects below the tie, a second rod
pivoted to said lever adjacent to its lower
end and connected to the other of said dogs
above its pivotal point whereby upon rais-

ing the lever above the surface of the tie
said dogs are moved upon their pivots in 15
opposite directions out of engagement with
the rail flange, and means arranged on the
tie for locking the lever upon the same to
hold the dogs in clamping engagement upon
the rail. 20

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

FRANK LINDBERG.

Witnesses:

ALFRED TANTON,
LOUIS JACOBSON.