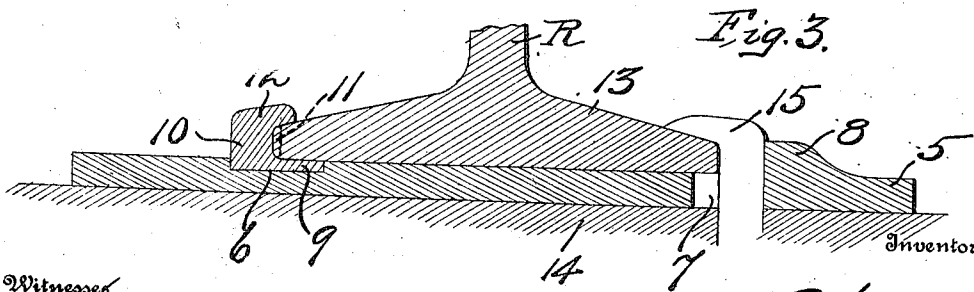
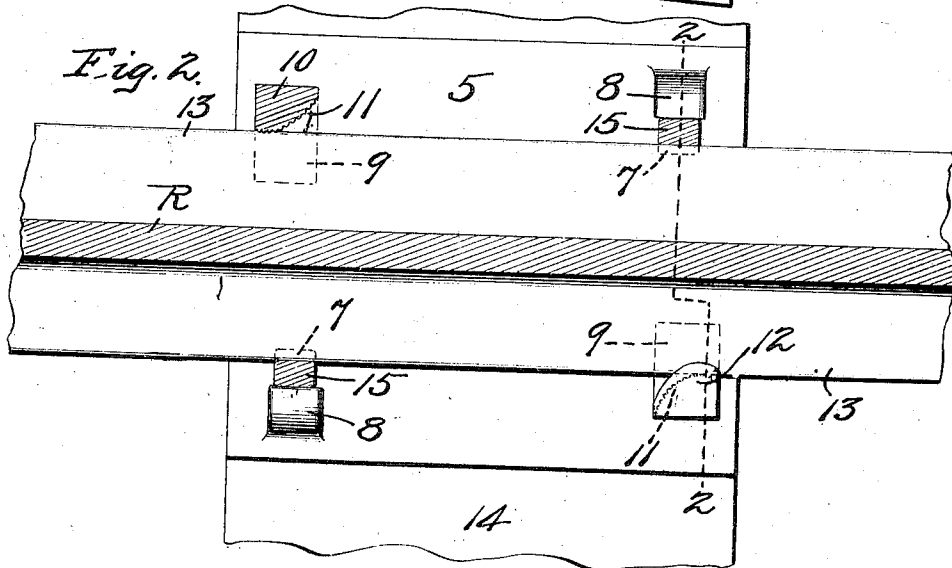
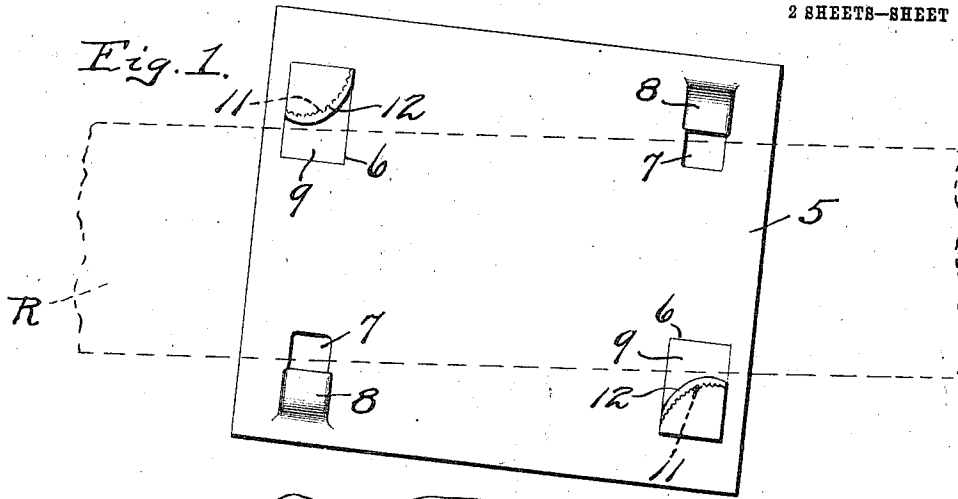


D. P. WOLHAUPTER.
 ANTICREEPER TIE PLATE.
 APPLICATION FILED MAY 28, 1909.

1,038,702.

Patented Sept. 17, 1912.
 2 SHEETS—SHEET 1.



Witnessed
T. H. Ketchum
Emory Groff.

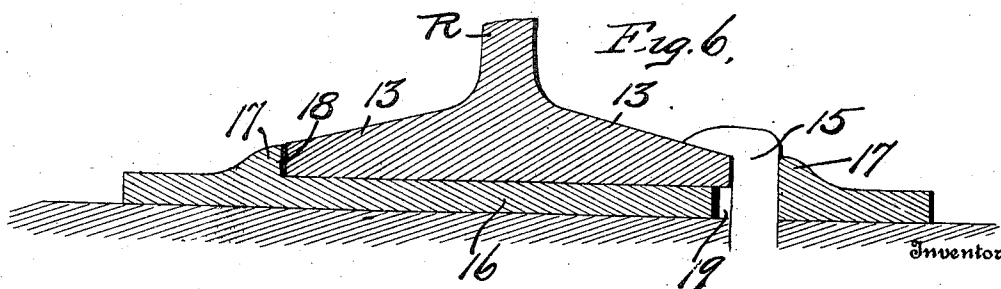
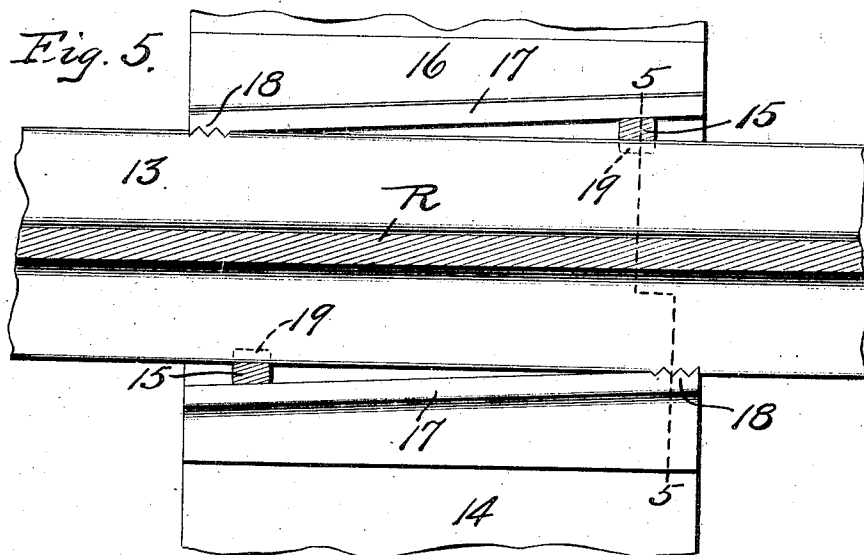
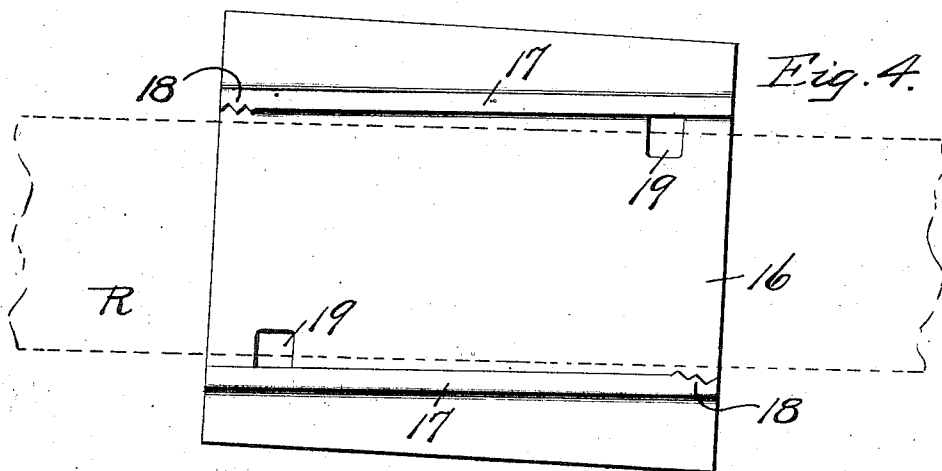
Inventor
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2 SHEETS—SHEET 2.



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UNITED STATES PATENT OFFICE.

DAVID P. WOLHAUPTER, OF WASHINGTON, DISTRICT OF COLUMBIA.

ANTICREEPER TIE-PLATE.

1,038,702.

Specification of Letters Patent.

Patented Sept. 17, 1912.

Application filed May 28, 1909. Serial No. 498,987.

To all whom it may concern:

Be it known that I, DAVID P. WOLHAUPTER, a citizen of the United States, residing at Washington, District of Columbia, have invented certain new and useful Improvements in Anticreeper Tie-Plates, of which the following is a specification.

Devices for preventing the creeping or longitudinal movement of rails due to heavy traffic conditions, have heretofore been universally constructed; so far as I am aware, with movable elements that grip the rail upon the attempted longitudinal movement thereof.

The primary object of the present invention is to provide a structure, in which the rail-gripping means is fixed, and is properly engaged with the rail upon its application to said rail.

In the preferred form of construction, it constitutes a part of, or is associated with the usual tie plate, and the two cooperate to effectively maintain a rail against longitudinal creeping or movement without the necessity of any movable parts whatsoever.

While the invention may be embodied in various ways, as will be obvious from an inspection of the claims hereto appended, for the purposes of illustration two forms of construction are herewith disclosed that will practically carry out the above mentioned objects.

In the drawings: Figure 1 is a plan view of a tie plate, showing the anti-creeping means in place thereon, and illustrating the plate in its loose position. Fig. 2 is a view similar to Fig. 1, but showing a rail in place, and secured by the novel means. Fig. 3 is a cross sectional view on the line 2-2 of Fig. 2. Fig. 4 is a plan view of a modified form of construction. Fig. 5 is a similar view showing a rail secured thereby. Fig. 6 is a cross sectional view on line 5-5 of Fig. 5.

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

Referring first to the embodiment disclosed in Figs. 1, 2, and 3, a tie plate 5 is employed, which is provided in its upper face at two diagonally opposite points with sockets 6, and at two other diagonally opposite points with openings 7 preferably having reinforcing abutments 8 behind them, and one of which openings preferably lies opposite one of said sockets. Detachably,

but fixedly and rigidly located in the sockets 6 are rail-gripping or anti-creeping devices, each of which consists of a base 9 that registers in the socket, and is provided at its outer portion with an upstanding neck 10, the inner side of which presents a rounding cam or wedge face preferably provided with teeth 11. This neck carries a head 12 that partly overhangs the base 9, and the space between the head and base receives the base flange 13 of the rail R, so that each rail gripping element may be said to be in effect a rail clip.

The sockets 6 and rail clips seated therein are of a form, such as of an angular shape, that the clips or grips are rigidly interlocked with the tie plate body so as to have no movement independent thereof.

In using the device, the tie plate 5 is interposed between the rail and the tie 14 in the usual manner, and the opposite margins of the base flange 13 of the rail are embraced by the gripping devices or clips. Also, it will be observed, by reference to Fig. 3, that the base flange of the rail 13 rests upon the bases 9, and thus securely maintains the gripping devices in the sockets. Having positioned the parts, as thus far described, the usual spikes 15 are passed through the openings 7 and driven into the tie. These spikes perform a plurality of functions. In the first place, they, as usual, hold the tie plate and the rail in position, but they also effect a lateral turning or shifting movement of the tie plate, inasmuch as they act as wedges between the rail flange and the reinforcing abutments 8, and thus cause the cam faces of the fixed gripping devices to bite into the margins of the base flange of the rail, securely locking the same against longitudinal movement on the tie plate. This action is also provided for by having the distance between each spike hole and the opposite gripping element less than the width of the rail base but large enough to expose sufficient opening to start the point of the spike into the tie and between the rail flange and the outer edge of the hole or its reinforcement.

As a result of the above described application of the tie plate, it will be obvious that creeping of the rail in either direction is positively prevented, and at the same time, there are no movable elements that are brought into action by the movement of the rail. In other words, the application

of the device effects the gripping action, and obviates the danger of inoperativeness from various causes that is incidental to movable parts of the above character.

6 With the particular form of invention just described and shown in Figs. 1 to 3 inclusive, it will be obvious that the tie plates may be constructed of cheap and inexpensive material, as usual, while the gripping devices can be of high carbon or hardened steel that will properly bite into the rails, and maintain an operative rail-grip-
10 ping action.

As an indication of how the structure may
15 be modified, attention is called to Figs. 4, 5, and 6, wherein a tie plate 16 is disclosed that is provided with the usual integral longitudinal reinforcing ribs 17, the ribs in this instance, being preferably disposed out of
20 parallel relation with the side edges of the plate. Each rib is provided at one end with a rail-gripping element, in the form of teeth 18, and the plate is provided at the other end of each rib, and just inside the same,
25 with a spike-receiving opening 19. The manner of applying this embodiment of the invention is substantially the same as that already described. The rail is placed upon the plate 16 between the reinforcing ribs,
30 and spikes are then driven through the openings 19 into the tie. These spikes act as wedges to turn the plate laterally of the rail and cause the teeth 18 to bite the opposite edges of the base flange.

35 From the foregoing, it is thought that the construction, operation and many advantages of the herein described invention will be apparent to those skilled in the art, without further description, and it will be understood that various changes in the size, shape,
40 proportion and minor details of construction may be resorted to without departing from the spirit or sacrificing any of the advantages of the invention.

45 Having thus fully described my inven-

tion, what I claim as new, and desire to secure by Letters Patent is:—

1. An anti-creeping device consisting of a single piece tie-plate having rigid rail gripping elements, and means for causing, 50 through bodily adjustment of said plate, a biting of said elements into the rail.

2. An anti-creeping device consisting of a single piece tie-plate having rail gripping elements rigid therewith, and means for ef- 55 fecting lateral bodily adjustment of the plate, through driving of the spike, to cause biting of said elements into the rail.

3. An anti-creeping device consisting of a single piece tie-plate having oppositely lo- 60 cated rail gripping elements rigid therewith, and rail engaging means arranged to cause lateral bodily adjustment of the plate for forcing said elements into biting engagement with opposite portions of the rail. 65

4. An anti-creeping device consisting of a single piece tie-plate having rigid there- with diagonally opposite rail gripping ele- ments, and fastening devices located oppo- 70 site the gripping elements and arranged to cause lateral bodily adjustment of the plate, upon the fastening-down operation, to carry the opposite gripping elements into biting engagement with the rail.

5. A tie plate having sockets at two 75 diagonally opposite points, and spike-receiving openings at two other diagonally opposite points, anti-creeping devices having bases that engage in the sockets and underlie the rail placed on the plate, said 80 devices having teeth arranged to bite the base flange of the rail and having heads that engage over the said flanges.

In testimony whereof I hereunto affix my signature in the presence of two witnesses. 85

DAVID P. WOLHAUPTER.

Witnesses:

R. C. BRADDOCK,
EMORY L. GROFF.