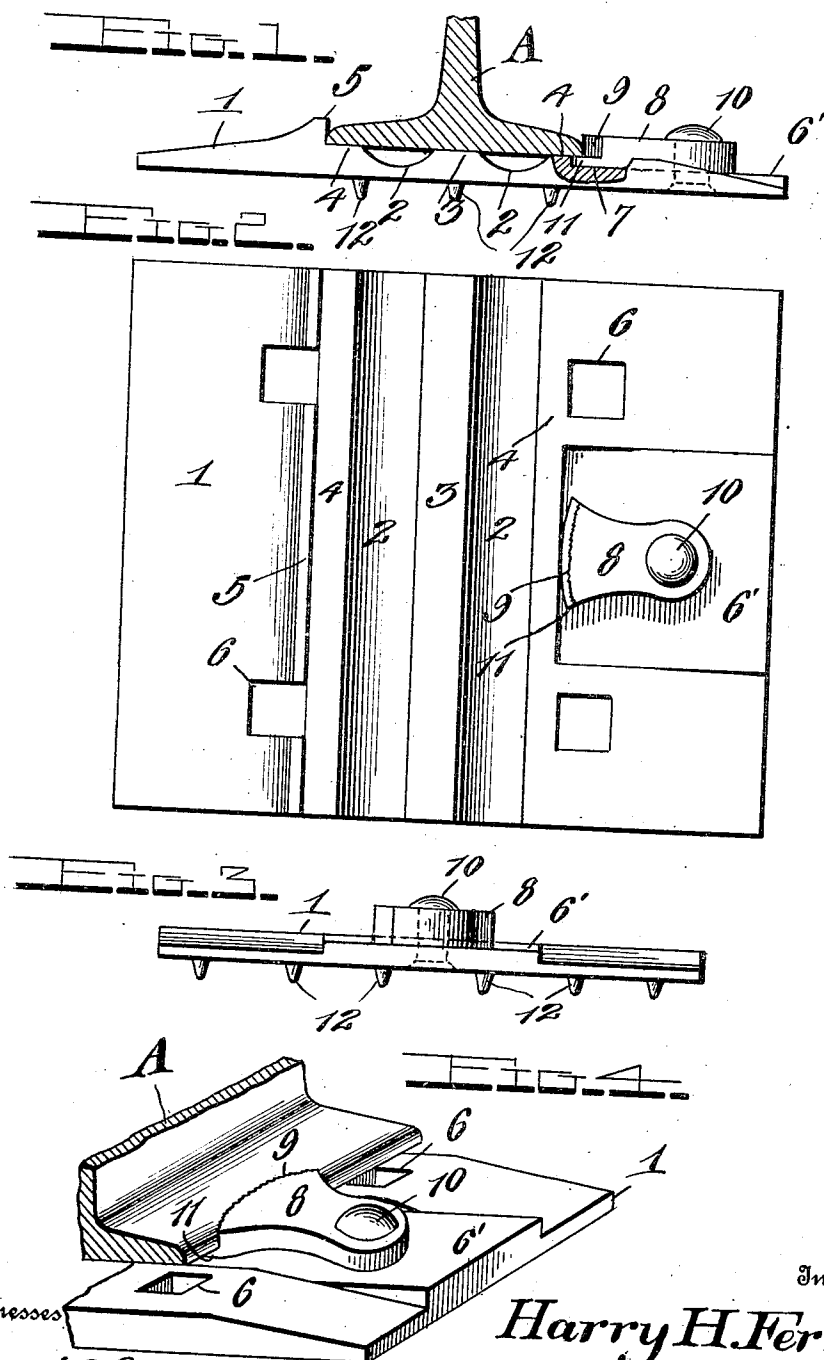


H. H. FERRIS.
RAILROAD RAIL ANTICREEPER.
APPLICATION FILED MAR. 8, 1911.

1,017,623.

Patented Feb. 13, 1912.



Witnesses

Chas. L. Griebauer.
N. L. M. C. Inaf.

Inventor

Harry H. Ferris,

By Watson E. Coleman,
Attorney

UNITED STATES PATENT OFFICE.

HARRY HICKS FERRIS, OF ANAHEIM, CALIFORNIA.

RAILROAD-RAIL ANTICREEPER.

1,017,623.

Specification of Letters Patent.

Patented Feb. 13, 1912.

Application filed March 8, 1911. Serial No. 618,100.

To all whom it may concern:

Be it known that I, HARRY HICKS FERRIS, a citizen of the United States, residing at Anaheim, in the county of Orange and State of California, have invented certain new and useful Improvements in Railroad-Rail Anticreepers, of which the following is a specification, reference being had to the accompanying drawings.

10 This invention is an improved anti-creeper for use in connection with a tie plate to prevent the creeping of a railroad rail, the object of the invention being to provide an improved device of this character which automatically engages and locks the rail against creeping and which may be readily disengaged from the rail to permit the removal of the latter, the invention consisting in the construction, combination and arrangement of devices hereinafter described and claimed.

15 In the accompanying drawings,—Figure 1 is an end elevation of a tie plate provided with my improved anti-creeper, also showing the base portion of a rail, the latter being indicated in section. Fig. 2 is a plan of the same with a portion of the base of the rail removed. Fig. 3 is a side elevation of the tie plate and anti-creeper. Fig. 4 is a detail perspective view showing a portion of the tie plate, a portion of the base of a rail, and also showing the anti-creeper engaged with the rail base.

20 The tie plate 1, which in its general features is of well known construction, is formed in its upper side with longitudinal channels 2, providing a longitudinal supporting flange 3, between the channels and a pair of longitudinal planes 4, at the outer sides of said channels, to coact with the flange 3 to support and form a seat for the base of a rail indicated at A, there being also on one side of one of the planes 4, a longitudinal shoulder or flange 5 which bears against one side of the base of the rail. The tie plate is further provided with openings 6 for the reception of the usual spikes which are employed to secure the tie plate on the tie, and to also engage the base flanges of the rail and secure the rail in place on the tie plate.

25 The tie plate is medially provided on the side opposite the flange or shoulder 5 with a boss 6', which forms a plane bearing surface, the tie plate being also provided at the inner side of the boss with a recess 7, the

bottom of which is level with and forms an extension of the plane upper surface of the boss 6'. This recess 7 extends slightly under and is partly overhung by one base flange of the rail as shown in Fig. 1. The plate has studs 12 on its underside to engage the tie.

30 In accordance with my invention, I provide an anti-creeper or locking dog 8, which has a curved serrated surface 9, at its inner end, which is presented to one base flange of the rail, and is pivotally mounted on the boss 6', and on the bottom of the recess 7 by means of a rivet 10. The pivotal axis of the dog is eccentric to the circle of which the curved end 9 of the dog forms a segment, and the radius of the curved end 9, is so great that while the central portion of the curved end of the dog will just clear the base flange of the rail when the axis of the dog is exactly at right angles to the rail, movement of the dog in either direction will cause one side of its curved engaging end to impinge against and firmly lock the rail so as to prevent the latter from creeping and also prevent the rail from rattling on the tie plate. That is to say, owing to the radius of the curved engaging end of the dog, its sides form in effect, oppositely disposed wedge shaped cams which project beyond a circle drawn from the pivotal center of the dog and touching the central portion of the engaging end thereof. Hence when the dog is disposed with its axis at exactly right angles to the rail, its curved end is just out of engagement with the base of the rail and the latter can be removed. By slightly turning the dog however, in either direction, its curved end will engage the rail and the camming or wedge action of the dog against the side of the base of the rail will effectually lock the rail in place so that it cannot creep and so that it cannot rattle.

35 The curved engaging end of the anti-creeper or locking dog is also provided with a curved flange 11 which projects outwardly therefrom, and bears under the engaged side of the base of the rail as indicated in Fig. 1, so that while the dog locks the rail in place on the tie plate, the base of the rail, at one side thereof, also bears downwardly on the flange 11 of the dog, and materially assists in holding the dog in place and engaged position with respect to the rail.

When it is desired to remove the rail for

any purpose, it is only necessary to strike the dog on one side and turn the dog to a position with its axis exactly at right angles to the rail.

5 I claim:—

In combination with a tie plate having a seat for a rail, and a recess to extend under one side of the rail, a dog pivotally mounted on the bottom of said recess, having a curved camming end to bear against

one base flange of the rail, and also having a flange at said camming end to engage under said base flange of the rail.

In testimony whereof I hereunto affix my signature in the presence of two witnesses. 15

HARRY HICKS FERRIS.

Witnesses:

FRANK F. FERRIS,
Y. B. FAIRBANK.