L. J. RIEGLER.

ANTICREEPER.

APPLICATION FILED JAN. 5, 1914.

1,210,206. Patented Dec. 26, 1916.

Fig. 1.

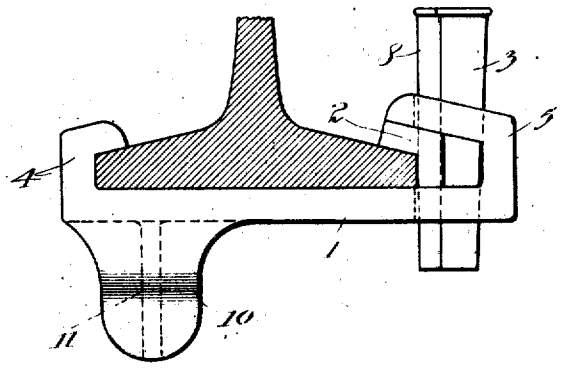



Fig. 2.

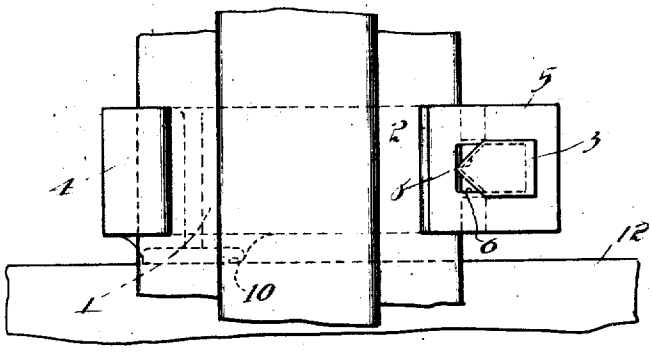



Fig. 3.

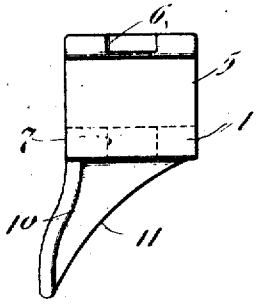



Fig. 4.

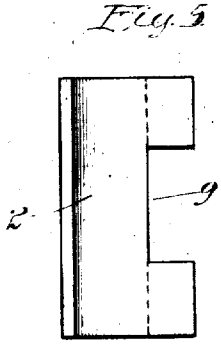
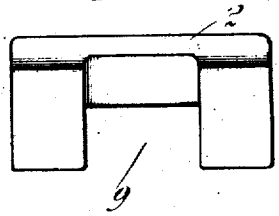



Fig. 1.




Witnesses:

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Inventor

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by George Bagard Jones Atty.

# UNITED STATES PATENT OFFICE.

LOUIS J. RIEGLER, OF BEN AVON, PENNSYLVANIA, ASSIGNOR TO THE P. & M. CO., OF CHICAGO, ILLINOIS, A CORPORATION OF ILLINOIS.

## ANTICREEPER.

1,210,206. Specification of Letters Patent. Patented Dec. 26, 1916.

Application filed January 5, 1914. Serial No. 810,489.

*To all whom it may concern:*

Be it known that I, LOUIS J. RIEGLER, a citizen of the United States, residing at Ben Avon, in the county of Allegheny and State of Pennsylvania, have invented new and useful Improvements in Anticreepers, of which the following is a full, clear, concise, and exact description, reference being had to the accompanying drawing, forming a part of this specification.

My invention relates to means for preventing creeping of railroad rails, such devices being known as anti-creepers or rail anchors.

The object of my invention is to provide an improved anti-creeper or rail anchor, which shall be of simple construction adapted for economical manufacture, which may be readily applied to the rails and maintain an effective grip thereon throughout long continued service and which shall effectively prevent creeping of said rails.

Rail anchors as constructed heretofore, have been made either to grip the rail with sufficient firmness when initially applied, to prevent creeping without further adjustment thereof, or they have been so made that a slight creeping of the rail causes a further adjustment of the parts either by sliding one member along another, or by causing a skewing action.

My improved rail anchor partakes of the advantageous features of both of the above mentioned types in that it may be applied initially so as to grip the rail base firmly, while at the same time, it is so constructed that if a slight creeping of the rail should occur, it is given a slight skewing action which tends further to increase the effectiveness of its grip.

In the accompanying drawings I have illustrated one embodiment of the invention which has various practical advantages hereinafter pointed out. The invention may be embodied in other forms, however.

Figure 1, of the drawings is an elevation of the preferred construction showing the rail in cross section. Fig. 2, is a top plan view thereof. Fig. 3, is an end elevation of the yoke. Fig. 4, is a side elevation of the filler clip. Fig. 5, is a top plan view thereof.

The device in the preferred form, is made up of three parts, consisting of the yoke 1, the filler clip or block 2 and the pin 3. The yoke is made preferably of malleable iron although it may be made from cast steel or other suitable material. Said yoke is provided with jaws 4, 5, at opposite ends thereof. The jaw 4 is adapted to fit over and grip firmly one side of a standard rail base. The jaw 5 is larger than the jaw 4 and is adapted to receive the filler clip 2, as shown in Fig. 1. Said jaw is provided with a suitable opening 6 preferably of rectangular outline, the yoke 1 having a somewhat similar hole 7 registering therewith, whereby the pin 3 may be driven through said holes and find firm bearing surfaces against the outer walls thereof. Said pin is preferably pentagonal in cross section whereby a sharp edge 8 is provided thereon adapted to cut into the edge of the rail base. Said pin, however, may be made with any suitable cross section, whereby a line contact is provided. For example, a round pin may be employed. In order to permit said pin to bear directly against the rail base without interfering with the filler block 2, the latter is cut away at 9. With this arrangement, the pin, which is preferably tapering throughout its length, may be driven downward as far as it will go, its edge 8 cutting into the rail base where a sharp edge is provided and taking a firm hold thereon, while at the same time, said pin serves to lock said filler block in position. The yoke is provided further with a downwardly extending flange 10, which may be suitably reinforced in any desired manner, for example by a bracket 11, said flange being adapted to bear against the side of a cross-tie 12 and being arranged preferably near the end of the yoke which carries the smaller jaw.

In applying the device to the rail, the jaw 5 is first hooked over one side of the rail base, after which the other end of the yoke is lifted and the jaw 4 fitted over the opposite side of said rail base. The filler block 2 is then slipped in place and the pin 3 driven down as far as possible. In view of the very gradual taper of the pin, a powerful pull is exerted on the yoke, drawing the jaw 4 over the opposite edge of the rail base, whereby the initial grip on the rail may be as firm as other rail anchors of the type where a wedging member is relied on to insure the necessary hold on the rail base. In addition the side or edge of the pin acts as a center about which the

device swings if the rail should creep somewhat. The end of the yoke, which is provided with the flange 10, being prevented from moving forward by the engagement of said flange with the tie, the other end of said yoke moves forward slightly, the device as a whole skewing somewhat, whereby the grip on the rail base is still further increased. This skewing action insures a further gripping if there is any movement of the rail and thereby provides for greater security and efficiency in operation.

If the pressure of the flange 10 against the tie is relieved, due to a rearward movement of the rail, the device cannot loosen sufficiently to fall from rail, even if said pressure is relieved for a long time, as the filler block 2 is permanently locked in place by the pin, and the latter, by cutting into the edge of the rail base, maintains its hold thereon, and in any case cannot be vibrated out of its seat.

I am aware that various changes may be made in the details of the device described and illustrated, and accordingly do not desire to limit myself to the details disclosed except where limitations appear in the appended claims.

Having thus described my invention, what I claim as new and desire to secure by Letters Patent of the United States is:

1. A rail anchor comprising a transverse element having a tie abutting extension near one end thereof, a jaw at one end adapted to receive one side of the rail base, and a vertically arranged wedging pin at the other end of said element, said pin having substantially a line contact with the edge of said rail base, whereby it may be driven downward readily to insure a powerful grip of said rail between itself and said jaw.

2. An anti-creeper comprising a yoke having an opening at one end, a vertically arranged pin fitting in said opening and having an edge in contact with one side of the rail base and a jaw at the other end of said yoke adapted to fit over the other side of said rail base, whereby said anti-creeper may pivot about said edge to increase the grip on the rail base.

3. A rail anchor comprising a yoke having a jaw at each end thereof, one of said jaws being larger than the corresponding side of the rail base, a filler block interposed between said jaw and the rail base, and a pin passing through said jaw, said pin bearing directly against said rail base.

4. A rail anchor comprising a yoke having a jaw at each end thereof, one of said jaws being larger than the corresponding side of the rail base, said jaw having an upper and a lower opening in substantial alinement with each other, a wedge shaped pin passing through said openings, said pin having an edge adapted to cut into the rail base and a filler block between said jaw and said rail base, said filler block straddling said pin.

5. An anti-creeper comprising an element arranged substantially transversely beneath the rail base, a rail gripping jaw at one end of said element, a tie abutting flange at the same end thereof, an enlarged jaw at the other end thereof, a filler block conforming to the outer and upper surfaces of the rail base and arranged between the latter and said enlarged jaw, said filler block having a cut away portion to expose part of the outer edge of the rail base and a pentagonal pin of tapering outline passing vertically through holes in said outer jaw and arranged with one of its edges cutting into the exposed portion of said rail base edge, whereby said cutting edge acts as a pivotal point for the anti-creeper and whereby said filler block is locked in position by said pin.

6. A rail anchor comprising a transverse member having means for engaging one of the base flanges of the rail and a jaw for receiving the other base flange, said jaw having a vertical inclosed socket the inner portion of which intersects the jaw opening, and a tapering fastening key fitting said socket and adapted as it is driven into place to cut slightly into the base flange of the rail to wedge the anchor on the rail and secure it thereto.

7. A rail anchor comprising a transverse member having a jaw at one end which grips the rail base, a vertical part at the other end, and a projection thereon extending above the base flange of the rail, a filler between said projection and the top of said base flange to hold the adjacent end of said member to the base of the rail, and a member engaged between the vertical edge of said base flange and said vertical part to hold said jaw in gripping engagement with the other base flange.

8. A rail anchor comprising a transverse member in contact with the bottom of the rail, a jaw at one end thereof, a tie-abutting flange intermediate the ends thereof, a larger jaw at the other end thereof, a vertical wedge between the rail base edge and the vertical wall of said larger jaw, and a filler to fill the space between said larger jaw and the adjacent side of the rail base not occupied by said wedge.

In witness whereof, I have hereunto subscribed my name in the presence of two witnesses.

LOUIS J. RIEGLER.

Witnesses:
T. B. HUMPHRIES,
J. N. COOKE.