

L. J. RIEGLER.
 ANTICREEPER FOR RAILS.
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946,736.

Patented Jan. 18, 1910.

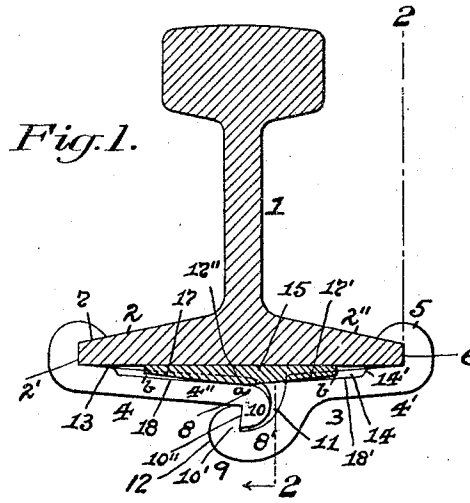


Fig. 2.

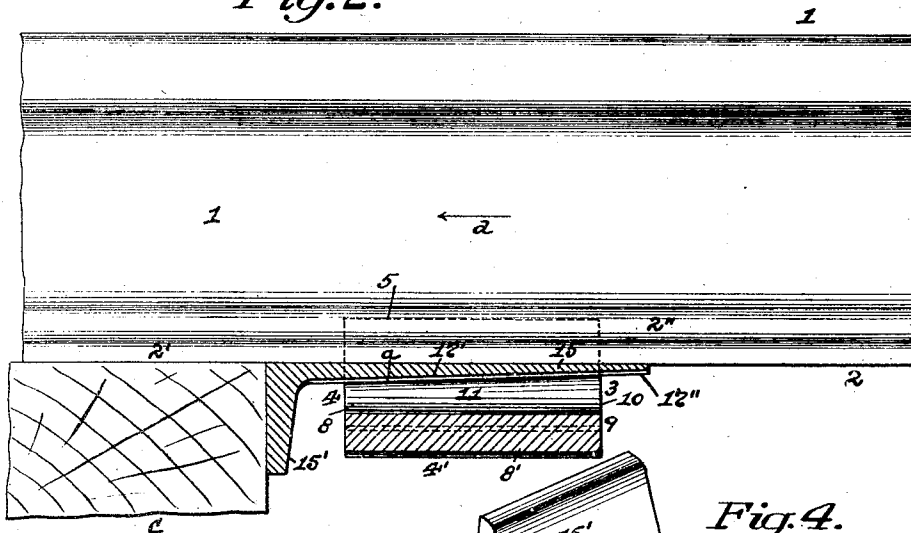
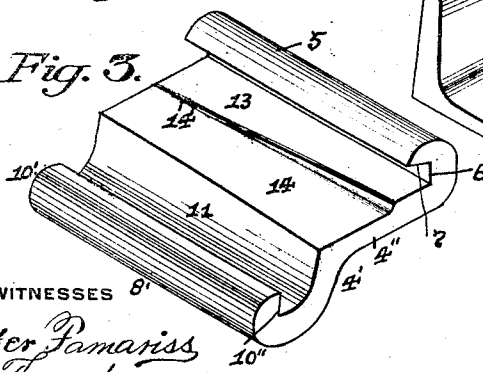


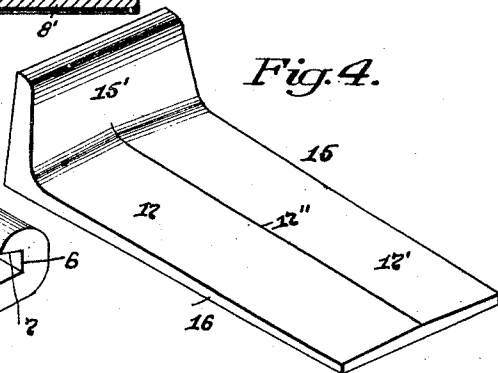
Fig. 3.



WITNESSES 8'

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Fig. 4.



INVENTOR

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ANTICREEPER FOR RAILS.

946,736.

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To all whom it may concern:

Be it known that I, LOUIS J. RIEGLER, a resident of Ben Avon, in the county of Allegheny and State of Pennsylvania, have invented a new and useful Improvement in Anticreepers for Rails; and I do hereby declare the following to be a full, clear, and exact description thereof.

My invention relates to an anti-creeping device for rails, and has special reference to such devices for use in connection with railway tracks.

The object of my invention is to provide a cheap, simple and efficient anti-creeping device for rails, which will prevent the longitudinal creeping or travel of the rails, as well as one which can be easily and quickly applied to the rails, and will not be liable to become loosened or removed from the rails, but will always form a binding action with such rails.

My invention consists, generally stated, in the novel arrangement, construction and combination of parts, as hereinafter more specifically set forth and described and particularly pointed out in the claims.

To enable others skilled in the art to which my invention appertains to construct and use my improved anti-creeping device for rails, I will describe the same more fully, referring to the accompanying drawing, in which—

Figure 1 shows a cross-section of a railway rail having my improved anti-creeping device applied thereto. Fig. 2 is a side elevation of the rail, showing my improved anti-creeping device in position and in section on the line 2—2 Fig. 1. Fig. 3 is a perspective view of one of the clamps employed. Fig. 4 is a perspective view of the wedge employed.

Like symbols of reference herein indicate like parts in each of the figures of the drawing.

As illustrated in the drawing, 1 represents the ordinary approved form of a railway rail having the usual rail base or flange 2 at the bottom of the same, and 3 my improved anti-creeping device, which comprises the two clamps 4 and 4' having the curved or inwardly turned outer ends 5 thereon for fitting around and embracing the rail flange 2. The outer ends 5 on the clamps 4 and 4' are provided with the vertical faces 6 on the inner portions of the

same for abutting against the vertical outer edges 2' on the rail flange 2, and with the inclined faces 7 extending inwardly and upwardly from the faces 6 and on the same line as the upper inclined faces 2'' on said rail flange for engaging therewith. The clamps 4 and 4' are detachably and loosely connected together centrally under the rail base 2 by a hinged joint 9 when the said clamps are in position on the said rail flange. The joint 9 is formed by the inner ends 8 and 8' on the clamps 4 and 4' respectively, the inner end 8 having a downwardly extending lip 10 at its outer edge, and the inner end 8' having an upwardly extending lip 10' at its outer edge and such lips 10 and 10' are adapted to bear against each other by their engaging faces 10'', while such lip 10' will also fit within a curved seat 11 formed in the end 8' by its curved outer edge 12, and thereby form an interlocking hinged joint.

The body portions 4'' on the clamps 4 and 4' are each provided on their inner side faces 13 with a tapered portion 14, which extends longitudinally of said clamps and parallel with the rail base 2, and the side edges 14' of the grooves forming such tapered portions are preferably converging toward each other.

A wedge 15 is employed with the clamps 4 and 4' which has preferably longitudinally-converging side edges 16, and in the same direction and line as the side edges 14' on the tapered grooves 14, and such wedge has also the transversely-converging inclines 17 and 17' on each side of the same.

When it is desired to secure the clamps 4 and 4' on the rail flange 2, such clamps are connected together by the hinged joint 9 and the ends 5 on such clamps are engaged with and embrace such rail flange, so that the wedge 15 can be inserted between the bottom of such rail flange and the inner faces 13 of the clamps, which will allow such wedge to be seated in the tapered portion 14 on said clamps. When the wedge 15 is thus inserted the converging inclines 17 and 17' thereon by thus engaging with the tapered portion 14 cant or tilt the clamps 4 and 4' on their hinged joint 9 and thereby form two converging inclines 18 and 18' on such tapered portions, which dip toward the center of said joint, and such inclines on said clamps are on a less angle or incline than their engaging inclines

on said wedge, so that the central or deepest portion 17" on said wedge and between the inclines 17 and 17' engages with such inclines 18 and 18' at the hinged joint, as indicated at *a*, to free the outer side edges on said inclines 17 and 17' from the inclines 18 and 18' and form the spaces *b* at these points, as shown in Fig. 1.

The wedge 15 is provided with a depending head, 15' at the broad end of the same, which is adapted for engagement with the tie *c*, as shown in Fig. 2, or with any other stationary part of the track or road-bed, and when the device is in position on the track, as previously described, such end of the wedge is in the direction toward which the rail *a* is liable to creep and which is indicated by the arrow *d* on said rail in Fig. 2. When the device is thus in position on the rail 1, it will be found, that by reason of the longitudinal or by the longitudinal and transverse inclines 18 and 18' on the clamps 4 and 4', the said clamps will be tightly wedged on the said rail through the wedge 15 being engaged by a stationary object, such as the tie *c*, and any shocks, stresses or pressure in the direction of the arrow *d* will serve to tighten the grip of the clamps on account of said wedge not being able to move in such direction.

It will thus be seen that in the use of my improved anti-creeping device for rails, the more the tendency of the rail to creep the tighter the wedge is inserted in the clamps, so that such clamps will be thus further tilted or canted and have a greater friction between the rail base, wedge and clamps and between the wedge and the clamps, while the outer ends in the clamps will have a more binding or gripping action on the rail base, so that such ends will not only more firmly bind or grip the upper surface of such rail base, but will also have the same action on the outer edges of said base. In this wedging action and upon such further tilting or canting of the clamps, the wedge will also have a greater wedging on the inclined surfaces of such clamps and centrally of the clamps, which will produce tensile stresses in the clamps, rather than a bending stress in the same at the points *b* and increase the friction on the upper and side edges of the rail base by said clamps. It will also be seen that in the use of my improved anti-creeper for rails, the dangerous creeping of the rails, the breaking of the bolts or spikes at the joints and the dislocation of ties and road-bed are thus prevented, or very much guarded against, and much more effectively than in the usual and ordinary track construction. The device can be quickly and readily applied to the rails by reason of detachable and interlocking parts without disturbing such rails or the

track construction, and without interfering with or interrupting the traffic on such rails.

Various modifications and changes in the design and construction of the various parts of my improved anti-creeping device for rails may be resorted to without departing from the spirit of the invention or sacrificing any of its advantages.

What I claim as my invention and desire to secure by Letters Patent is—

1. An anti-creeping device for rails, comprising two clamps having inturned ends for fitting over and engaging with the edge portions of the rail-base and connected together under said base, transversely tapered portions on said clamps extending longitudinally of the same, in combination with a wedge engaging said tapered portions and adapted to tilt or cant said clamps to form converging inclines thereon.

2. An anti-creeping device for rails, comprising two clamps having inturned ends for fitting over and engaging with the edge portions of the rail-base and detachably connected together under said base, transversely tapered portions on said clamps extending longitudinally of the same, in combination with a wedge engaging said tapered portions and adapted to tilt or cant said clamps to form converging inclines thereon.

3. An anti-creeping device for rails, comprising two clamps having inturned outer ends for fitting over and engaging with the edge portions of the rail-base and detachably connected together centrally under said base, tapered portions on said clamps extending longitudinally of the same, in combination with a wedge engaging said tapered portions and adapted to tilt or cant said clamps to form converging inclines thereon.

4. An anti-creeping device for rails, comprising two clamps having inturned outer ends for fitting over and engaging with the edge portions of the rail-base and connected together by a detachable hinge joint centrally under said base, tapered portions on said clamps extending longitudinally of the same, in combination with a wedge engaging said tapered portions and adapted to tilt or cant said clamps to form converging inclines thereon.

5. An anti-creeping device for rails, comprising two clamps having inturned outer ends for fitting over and engaging with the edge portions of the rail-base and connected together by a detachable hinge joint centrally under said base, tapered portions on said clamps extending longitudinally of the same, in combination with a wedge having transversely converging inclines on the sides of the same for engagement with said tapered portions and adapted to tilt or cant said clamps to form converging inclines thereon.

6. An anti-creeping device for rails, com-

prising two clamps having inturned outer ends for fitting over and engaging with the edge portions of the rail-base and connected together by a detachable hinge joint centrally under said base, transversely tapered portions on said clamps extending longitudinally of the same, in combination with a wedge having transversely converging inclines on the sides of the same for engagement with said tapered portions and adapted to tilt or cant said clamps to form converging inclines thereon and a lesser angle on the inclines of said clamps than their engaging inclines on said wedge.

7. An anti-creeping device for rails, comprising two clamps having inturned outer ends for fitting over and engaging with the edge portions on the rail-base and connected together by a detachable hinged joint centrally under said base, tapered portions on said clamps extending longitudinally of the same, in combination with a wedge having transversely and longitudinally inclined converging surfaces for engagement with said tapered portions and adapted to tilt or cant said clamps to form converging inclines thereon.

8. An anti-creeping device for rails, comprising two clamps having inturned outer ends for fitting over and engaging with the edge portions on the rail-base and connected together by a detachable hinged joint centrally under said base, transversely tapered portions on said clamps extending longitudinally of the same, in combination with a wedge having transversely and longitudinally inclined converging surfaces for engagement with said tapered portions and adapted to tilt or cant said clamps to form

converging inclines thereon and a lesser angle on the inclines of said clamps than their engaging inclines on said wedge.

9. An anti-creeping device for rails, comprising two clamps having inturned outer ends for fitting over and engaging with the edge portions on the rail-base and connected together by a detachable hinged joint centrally under said base, tapered portions on said clamps extending longitudinally of the same, in combination with a wedge decreasing in width from one end toward the other and having transversely and longitudinally inclined converging surfaces for engagement with said tapered portions and adapted to tilt or cant said clamps to form converging inclines thereon.

10. An anti-creeping device for rails, comprising two clamps having inturned outer ends for fitting over and engaging with the edge portions on the rail-base and connected together by a detachable hinged joint centrally under said base, transversely tapered portions on said clamps extending longitudinally of the same, in combination with a wedge decreasing in width from one end toward the other and having transversely and longitudinally inclined converging surfaces for engagement with said tapered portions and adapted to tilt or cant said clamps to form converging inclines thereon and a lesser angle on the inclines of said clamps than their engaging inclines on said wedge.

In testimony whereof, I, the said Louis J. RIEGLER, have hereunto set my hand.

LOUIS J. RIEGLER.

Witnesses:

JAMES L. WEHN,
J. N. COOKE.