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J. D. GRIMM.
ANTICREEPER FOR RAILROAD RAILS.
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Fig. 1.

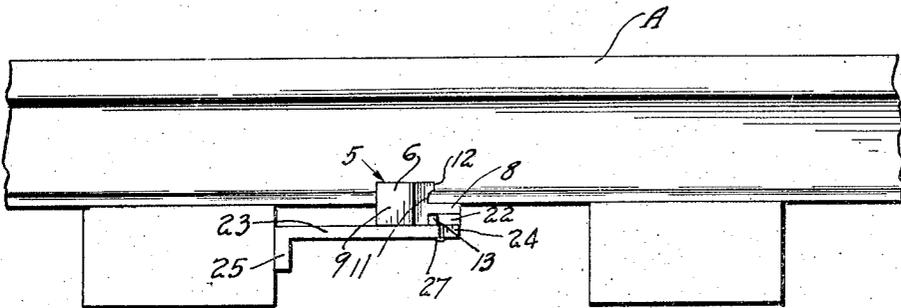


Fig. 2.

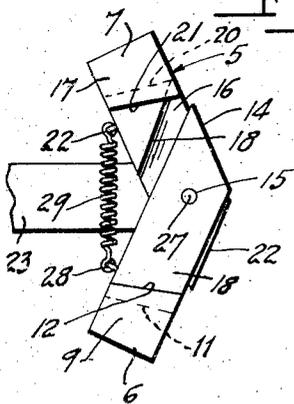


Fig. 3.

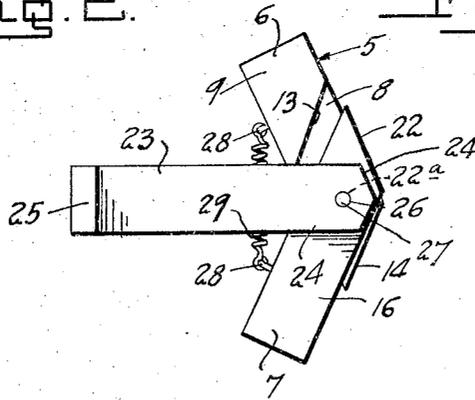
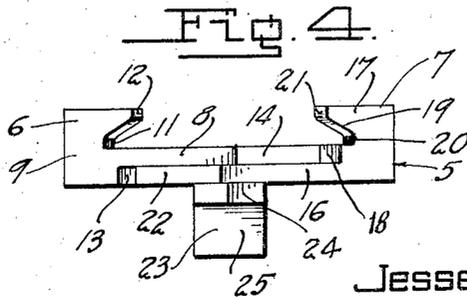


Fig. 4.



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ANTICREEPER FOR RAILROAD RAILS.

Application filed August 23, 1922. Serial No. 583,808.

To all whom it may concern:

Be it known that I, JESSE D. GRIMM, a citizen of the United States, residing at Watersville, in the county of Carroll and State of Maryland, have invented certain new and useful Improvements in Anticreepers for Railroad Rails, of which the following is a specification, reference being had to the accompanying drawings.

This invention relates to anti-creepers for railroad rails, and has for its object to provide a device of this character capable of being applied to any rail without requiring alteration of the rail, or without requiring fastening means for connecting the device to the rail or tie.

Another object of the invention is to provide a device of this character including jaw members adapted to engage a rail, and yieldably urged toward the rail in one direction, and means engaged with the jaws for urging the jaws in the opposite direction into engagement with the rail upon creeping movement of the rail.

It is a further object of the invention to provide a device of this character including a pair of movably connected jaws, said jaws being provided with means for oscillating the same upon creeping movement of the rail.

With these and other objects in view, the invention consists in the improved construction and arrangement of parts to be hereinafter more particularly described, fully claimed and illustrated in the accompanying drawings, in which:—

Figure 1 is a side elevation of an anti-creeper for railroad rails constructed in accordance with an embodiment of the invention, the anti-creeper being applied to the rail;

Figure 2 is a top plan view of the anti-creeper;

Figure 3 is a bottom plan view; and

Figure 4 is an end elevation.

Referring to the drawings, 5 designates an anti-creeper embodying jaws 6 and 7. The jaw 6 includes a shank 8 having its end portion 9 enlarged, said end portion projecting beyond the side faces of the shank, one of said projecting portions having its end face undercut to provide a jaw, the inner wall 11 of said jaw being inclined with respect to the shank and serrated to bite into the rail.

The face 12 is also inclined relative to

the shank and disposed substantially parallel to the inner wall 11. The opposite end portion of the enlargement, or that portion projecting from the opposite side of the shank, is canted as at 13 in the opposite direction to the inclination of the face 12 and inner wall 11 of the shank to provide a stop, said stop terminating substantially at the central portion of the shank. The end portion 14 of the shank is canted, the canted portion 14 being disposed in parallel relation to the canted portion 13 of the stop. An opening 15 is provided in the shank 8 adjacent the canted end portion 14.

The jaw member 7 includes a shank 16 having an enlarged extension 17 projecting from the end portion of one face of the shank, said enlarged portion having its end face 18 canted to provide a stop similar to the end face 13, but canted in the opposite direction to that of the canted face of the stop 13. The extension 17 is also reduced and undercut as at 19 to form the jaw, the inner wall 20 of the jaw being canted with respect to the shank and in the opposite direction to the canted face 18. The inner wall is serrated to penetrate the rail. The end face 21 of the jaw is likewise canted and disposed in parallel relation to the end wall 20. The end portion 22 of the shank is canted, said canted portion being disposed in parallel relation to the canted portion 18. Said end portion of the shank 18 is provided with an opening 22^a, the purpose of which will be hereinafter described.

The shanks of the jaw members 6 and 7 are intended to be disposed one upon the other, the under face of the shank 6 engaging the upper face of the shank 7. By the provision of the enlarged portions forming the stops, the outer face of one jaw member is permitted to lie flush with the outer face of the adjacent jaw member, thereby positioning the jaw members substantially in the same plane. At the same time, the stops 13 and 18 limit pivotal movement of the jaws.

When the jaw members are assembled the canted end face of one jaw member is disposed substantially parallel with the longitudinal edge of the shank of the adjacent jaw member. Thus the jaw members are disposed substantially in parallel relation to each other regardless of the angular re-

lation between the shanks of the jaws so as to permit the jaw members to engage the rails at all points longitudinally of the jaws.

5 In connection with the jaws, an operating member 23 is provided, said operating member being longer than the shanks of the jaw members and having its end portion 24 beveled from the central portion to the end
10 face of the operating member so as to prevent projections at the connection of the jaw members to each other. The opposite end portion of the operating member is provided with a foot 25 which extends in a direction
15 opposite to that of the jaws and is intended to engage a railway tie. The end portion 24 of the operating member is provided with an opening 26 adapted to register with the openings provided in the shanks of the jaw
20 members 6 and 7. A pivot pin 27 is passed through said openings to movably connect the operating member and jaw members to each other.

Each of the side faces of the shanks of the
25 jaw members adjacent the operating member is provided with an eye 28, to which one end of a spring 29 is connected. This spring is normally intended to urge the jaw members substantially toward each other and into
30 binding engagement with the rail.

In operation, the jaw members are moved away from each other to permit the insertion of a rail A therebetween, the serrated inner walls 11 and 20 of the jaws engaging the
35 edges of the rails. The jaw members are then moved along the rail until the foot 25 comes in contact with one of the railway ties. Upon release of the jaws by the operator the spring 29 will urge the jaws into binding
40 engagement with the rail. It will be noted that while the jaw members are disposed at an inclination to each other and the operating member, that in view of the inclination of the serrated inner walls 11 and 20, said
45 walls are disposed parallel to the edge of the rail, so that yieldable movement of the spring will cause binding engagement of the jaws on the rails. Should the rail start to creep, the movement of the rail will urge the
50 foot 25 to firmly engage the tie, and cause pivotal movement of the shanks 8 and 18 relative to each other. This movement permits the spring 29 to urge the jaws into firm engagement with the edges of the rail.

55 During pivotal movement of the jaw members on the operating member the spring contracts, thereby urging the jaws into binding engagement with the rail through the cooperation of the operating member 23, as the
60 operating member is substantially urging the pivoted ends of the shanks of the jaws away from the spring, which naturally permits the spring to pull the outer ends of the jaw members inwardly so that a double
65 clamping operation is provided which causes

penetration of the edges of the bases of the rails by the serrated walls of the jaws, thus stopping further creeping movement of the rail. It is of course obvious that the movement of the rail is relatively slight, but even
70 this movement is sufficient to permit penetration of the rail by the jaws through the medium of the operating member.

From the foregoing it will be readily seen that this invention provides a novel form of
75 anti-creeper capable of being applied to any rail without the use of fastening means, and without rigidly attaching the device to the tie or the rail, other than the means provided by the serrated inner walls of the jaws, and
80 all of these features are possessed by a device which is composed of only three parts. These, in view of their simplicity and substantial qualities, will operate under all conditions and will last indefinitely. 85

What is claimed is:—

1. An anti-creeper for railway rails comprising jaw members movably connected to each other, means for normally urging the
90 jaw members toward each other, and an actuating member movably connected to the jaw members at the pivotal connection of said jaw members to each other.

2. An anti-creeper for railway rails comprising jaw members pivoted at one of their
95 ends to each other, a spring connected at its ends to said jaw members and normally urging the jaw members toward each other in one direction, and an actuating lever pivoted to said jaw members at the pivotal connection of said jaw members to each other to
100 permit the spring to urge the jaws into binding engagement with the rail.

3. An anti-creeper for railway rails comprising a pair of jaw members, each jaw
105 member including a shank, the end portions of said shanks being disposed one upon the other, said end portions having registering openings, an actuating member having an opening in one end thereof adapted to register with said opening, a pivot pin connecting
110 the shanks of the jaws to each other and to the actuating member, a foot carried by the opposite end of the actuating member for engagement with a railway tie, said actuating member causing movement of the shanks
115 of the jaws upon movement of the rail.

4. An anti-creeper for railway rails comprising a pair of jaw members, each jaw
120 member including a shank, the outer face of one end portion of one shank and the inner face of one end portion of the remaining shank being cut away, said cut-away portion being adapted to receive the end portion of the adjacent shank to dispose the jaw members of said shanks substantially in the same
125 plane, the rail engaging faces of said jaw members being serrated, and canted with respect to the shanks, an actuating member having one end thereof engaged with said ends 130

of the shanks, a pivot pin extending through said shanks and the actuating member, a spring connecting the shanks of the jaw members to each other and normally urging the rail engaging faces of the jaw members toward each other, said actuating member having a foot on one end adapted to engage a railway tie to cause movement of the shanks of the jaw members relative to each other and toward the actuating member. 10

In testimony whereof I hereunto affix my signature.

JESSE D. GRIMM.