J. MOIR & H. P. McFARLAND.

COMBINATION TIE PLATE AND ANTICREEPER.

APPLICATION FILED MAY 18, 1915.

1,167,200.

Patented Jan. 4, 1916.

2 SHEETS—SHEET 1.

Fig. 1.

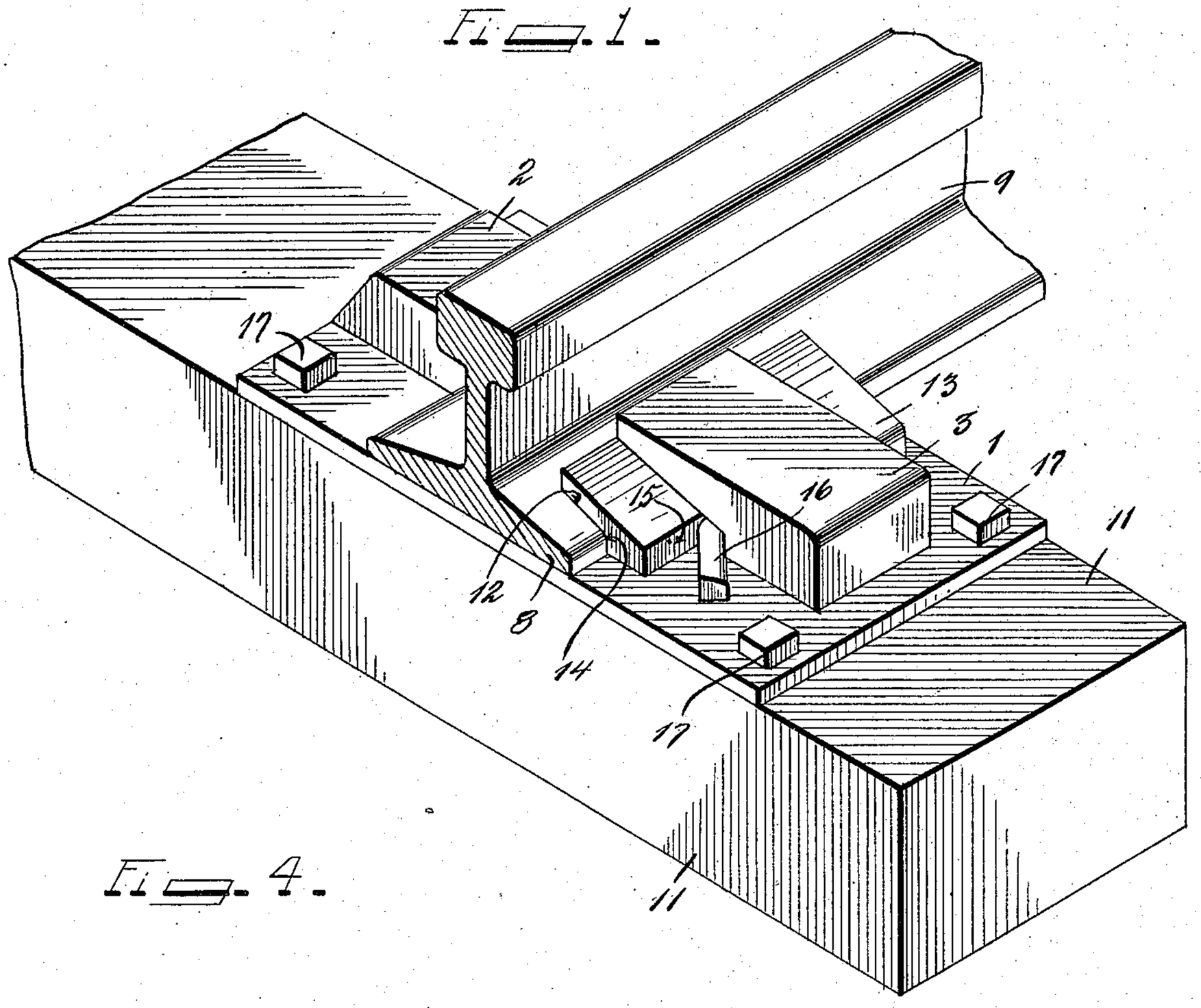


Fig. 4.

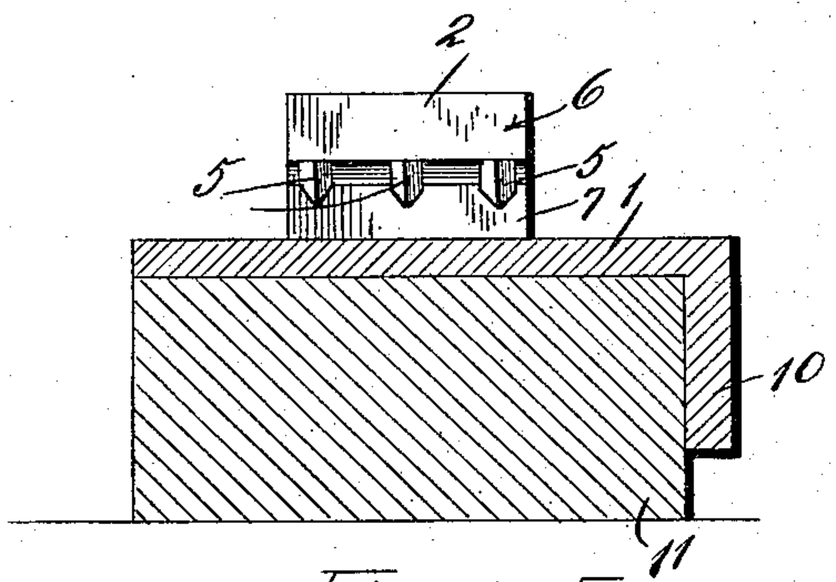


Fig. 5.

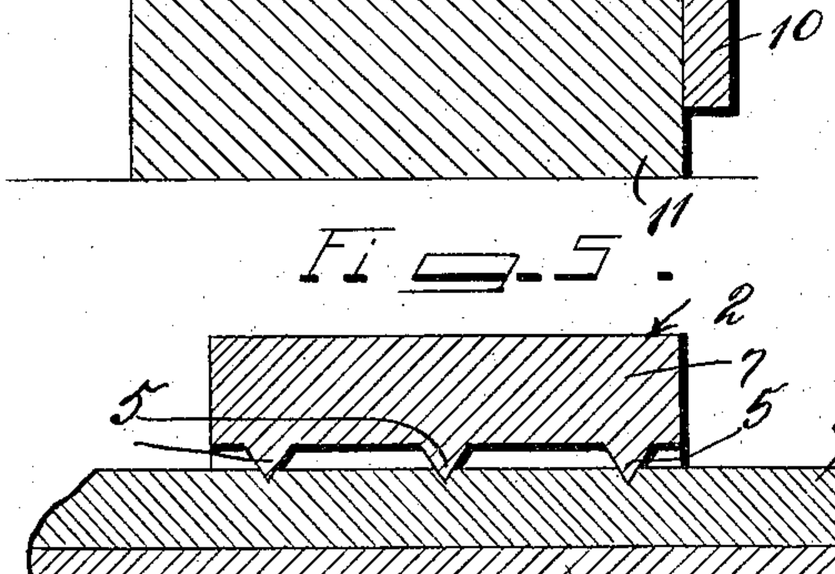
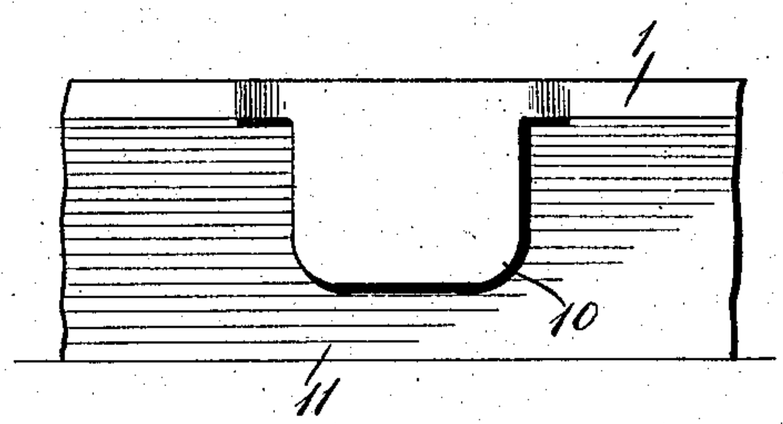


Fig. 6.



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2 SHEETS—SHEET 2.

Fig. 2.

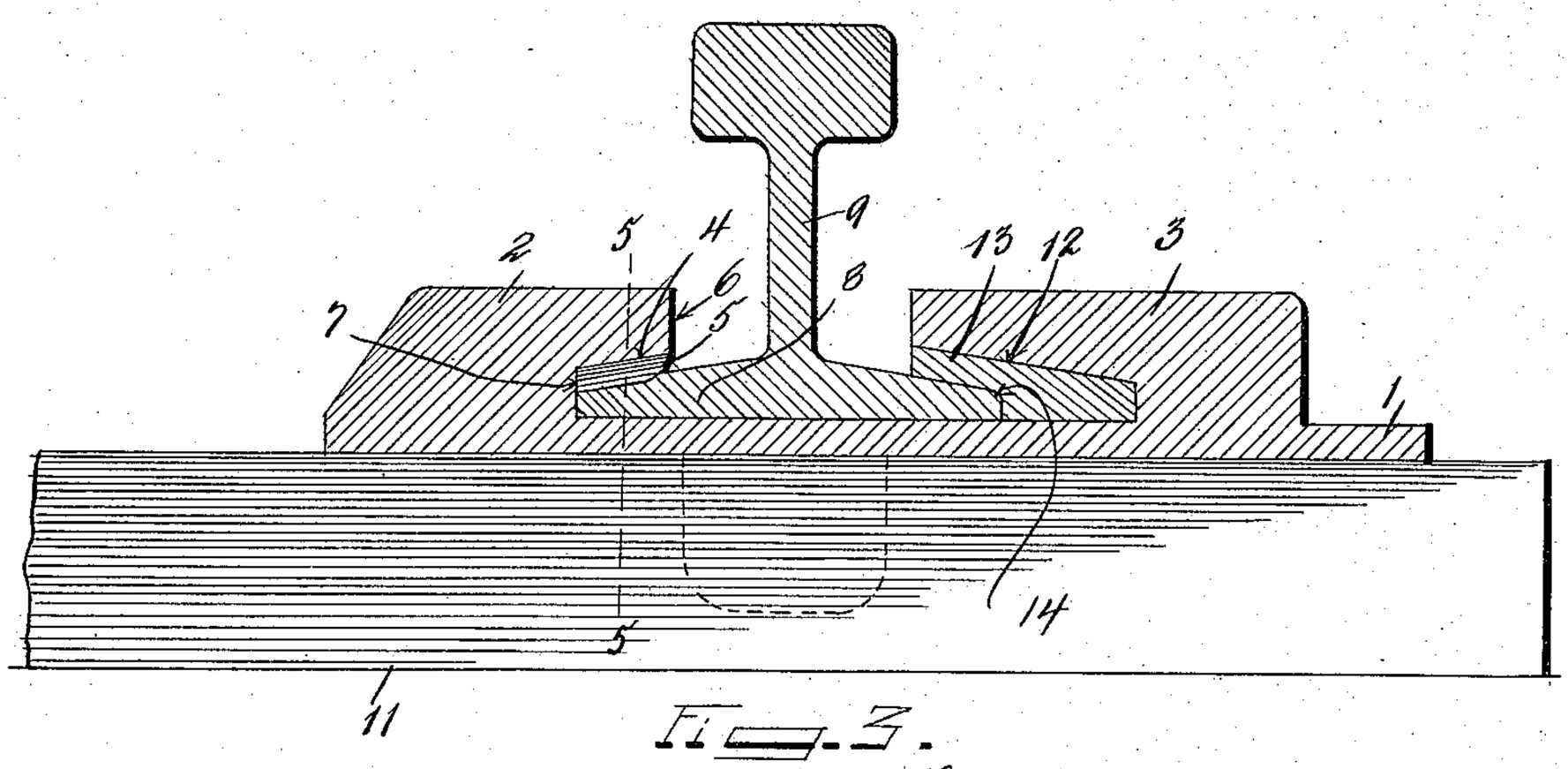


Fig. 3.

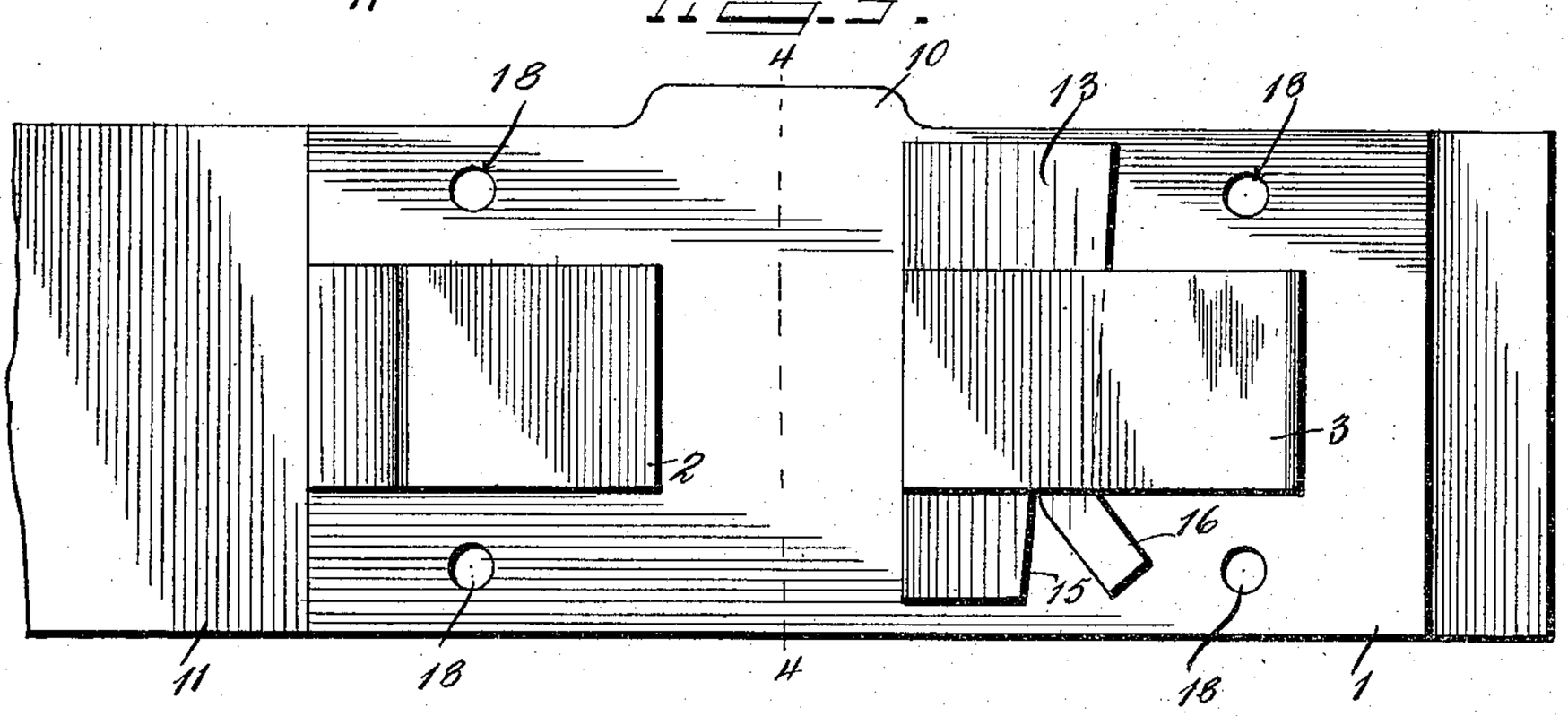
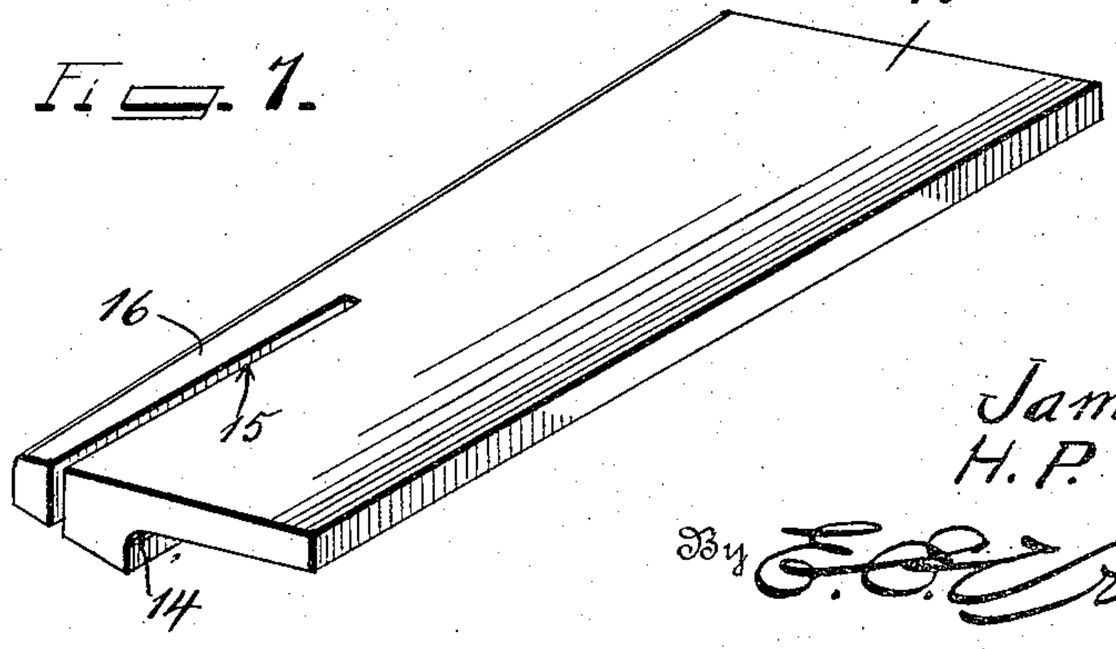


Fig. 7.



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UNITED STATES PATENT OFFICE.

JAMES MOIR AND HARVEY P. McFARLAND, OF BURLINGTON, IOWA.

COMBINATION TIE-PLATE AND ANTICREEPER.

1,167,200. Specification of Letters Patent. Patented Jan. 4, 1916.

Application filed May 18, 1915. Serial No. 28,928.

To all whom it may concern:

Be it known that we, JAMES MOIR and HARVEY P. MCFARLAND, citizens of the United States of America, residing at Burlington, in the county of Des Moines and State of Iowa, have invented certain new and useful Improvements in a Combination Tie-Plate and Anticreeper, of which the following is a specification, reference being had therein to the accompanying drawing.

This invention relates to a combination tie plate and anti-creeper and has for its object the production of a simple and efficient means for holding a rail in engagement with a railroad tie and also preventing the longitudinal movement of the rail after being fastened to the rail plate.

Another object of this invention is the production of a simple and efficient means for wedging the rail in firm engagement with the tie plate so as to prevent the rail from being accidentally detached from the rail plate.

With these and other objects in view, this invention consists of certain novel combinations, constructions, and arrangements of parts as will be hereinafter fully described and claimed.

In the accompanying drawings: Figure 1 is a perspective view of one end of a railroad tie, showing the rail attached to the rail plate. Fig. 2 is a transverse sectional view through the rail, the tie plate also being shown in section. Fig. 3 is a top plan view of the tie plate. Fig. 4 is a section taken on line 4—4 of Fig. 3. Fig. 5 is a section taken on line 5—5 of Fig. 2. Fig. 6 is a side elevation of a portion of the tie plate, showing the depending tie engaging lip formed thereon. Fig. 7 is a detailed perspective of the wedge plate used in connection with the present invention.

Referring to the accompanying drawings by numerals it will be seen that 1 designates the tie plate which is provided near one end thereof with an integral upstanding rail engaging jaw 2. The plate 1 is also provided near the opposite end with an auxiliary jaw 3, arranged in spaced relation with respect to the jaw 2. The jaw 2 is provided with an inclined under face 4 having a plurality of ribs 5 formed upon the under face thereof, which ribs extend from the outer edge 6 of the jaw 2 to the inner wall 7 thereof, as clearly illustrated in Figs. 2 and 4 of the drawings. These ribs 5 are substantially V-shaped in cross section, as clearly illustrated in Fig. 5 of the drawings so as to have a biting action upon the base 8 of the rail 9 and thereby hold the rail against longitudinal movement with respect to the plate 1.

It should be understood that the plate 1, as clearly illustrated in Figs. 4 and 6, is provided with a depending lip 10 which is adapted to abut against the side of the tie 11 and hold the plate 1 against transverse movement with respect to the tie 11. These lips 10 are preferably placed so as to engage the rear face of the tie with respect to the direction of travel upon the rails supported upon the tie plates.

The auxiliary jaw 3 is provided with a tapering pocket 12, within which tapering pocket 12 is placed a wedge 13, which wedge is provided with a cut-out portion 14 for fitting snugly over the top and side edge of the base 8 of the rail 9. This wedge plate 13 is provided with a longitudinally extending slot 15 near one end thereof for producing a narrow tongue 16, which narrow tongue 16 is adapted to be bent back at an angle to the auxiliary jaw 3 and thereby hold the wedge plate 13 against accidental removal from the auxiliary jaw 3 and the tie plate 1. It should be understood that this wedge plate 13 will constitute an efficient means for causing the ribs 5 to bite firmly into the upper face of the base 8 of the rail 9, owing to the wedging action of this wedging plate 13.

From the foregoing description, it will be seen that a very simple and efficient device has been produced for firmly clamping a rail in engagement with a tie and holding the same against accidental creeping as well as removal from engagement with the tie.

It should also be understood that a very simple and efficient means has been produced for connecting the rail to the rail or tie plate. The tie plate 1 may of course be secured to the tie 11 by means of the spikes 17 which pass through the apertures 18 formed in the plate 1.

What we claim is:—

1. A tie plate and anti-creeper comprising a base, means for holding the same in engagement with a tie, a primary jaw carried by said plate and provided with a plurality of rail gripping ribs formed upon the under face of said jaw and adapted to firmly bite into the upper face of the base of a rail, said body provided with an auxiliary jaw, and a wedging plate fitting under said auxiliary

jaw and adapted to engage the base of a rail for firmly clamping the rail between said jaws and causing said biting ribs to firmly engage the upper face of the base of a rail.

2. A tie plate and anti-creeper comprising a base, means for holding the same in engagement with a tie, a primary jaw carried by said plate and provided with a plurality of rail gripping ribs formed upon the under face of said jaw and adapted to firmly bite into the upper face of the base of a rail, said body provided with an auxiliary jaw, a wedging plate fitting under said auxiliary jaw and adapted to engage the base of a rail for firmly clamping the rail between said jaws and causing said biting ribs to firmly engage the upper face of the base of a rail, a tongue carried by said wedge plate and adapted to be bent backwardly upon said auxiliary jaw for holding said wedging plate against accidental removal from said auxiliary jaw.

3. A tie plate and anti-creeper comprising a base, means for holding the same in engagement with a tie, a primary jaw carried by said plate and provided with a plurality of rail gripping ribs formed upon the under face of said jaw and adapted to firmly bite into the upper face of the base of a rail, said body provided with an auxiliary jaw, a wedging plate fitting under said auxiliary jaw and adapted to engage the base of a rail for firmly clamping the rail between said jaws and causing said biting ribs to firmly engage the upper face of the base of a rail, a tongue carried by said wedging plate and adapted to be bent backwardly upon said auxiliary jaw for holding said wedging plate against accidental removal from said auxiliary jaw, and said wedging plate provided with a cut-out portion upon one side thereof for fitting snugly over the base of a rail.

In testimony whereof we hereunto affix our signatures.

JAMES MOIR.
HARVEY P. McFARLAND.