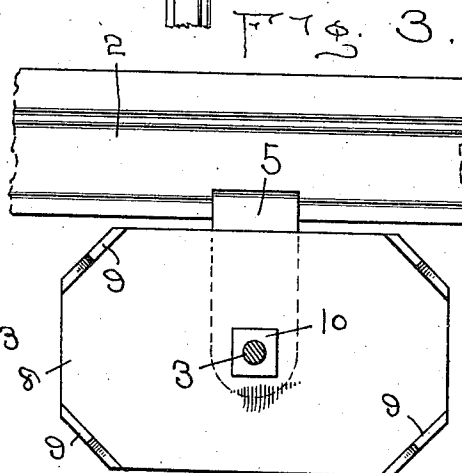
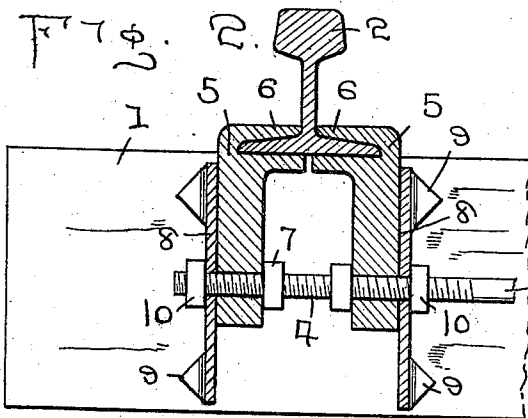
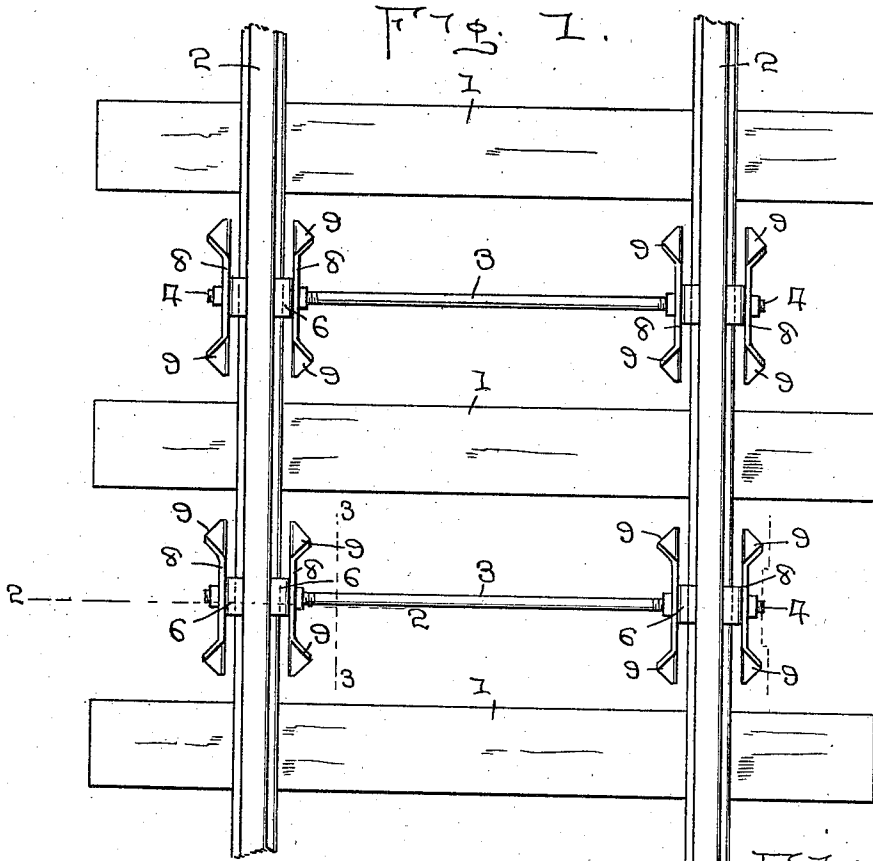


N. J. ROETHER.
RAILWAY SAFETY APPLIANCE.
APPLICATION FILED FEB. 7, 1912.

1,045,188.

Patented Nov. 26, 1912.



WITNESSES:

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UNITED STATES PATENT OFFICE.

NICKOLAS J. ROETHER, OF MINERAL POINT, WISCONSIN.

RAILWAY SAFETY APPLIANCE.

1,045,188.

Specification of Letters Patent.

Patented Nov. 26, 1912.

Application filed February 7, 1912. Serial No. 676,073.

To all whom it may concern:

Be it known that I, NICKOLAS J. ROETHER, a citizen of the United States, residing at Mineral Point, in the county of Iowa and State of Wisconsin, have invented certain new and useful Improvements in Railway Safety Appliances; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to railway safety appliances and more particularly to an anchoring and anti-spreading appliance for rails.

An object of the invention is to provide an anchoring and anti-spreading device for rails which will effectively clamp each rail and hold the same against side movement independently of the opposite rail.

Another object is to provide a device of the above stated character which will clamp each rail and connect the rails to one another, a portion of the device being anchored in the ground below each rail.

Other objects and advantages will be hereinafter set forth and pointed out in the specification and claim.

In the accompanying drawings which are made a part of this application, Figure 1 is a plan view of a portion of a track showing my anchoring and anti-spreading devices in position. Fig. 2 is a cross sectional view on the line 2—2 of Fig. 1, and, Fig. 3 is a longitudinal sectional view on the line 3—3 of Fig. 1.

Referring more particularly to the drawings in which similar reference numerals designate corresponding parts throughout the several views, 1 represents the ties and 2 the rails of a track.

Positioned transversely of the track, between the ties 1 are the connecting rods 3, the opposite ends of which extend beneath the rails 2 and are threaded, as shown at 4. Positioned upon each threaded end 4 of the rods 3 is a pair of opposed substantially inverted L-shape clamping members 5. The upper horizontal end of each clamping member 5 is slotted or bifurcated to produce the rail base engaging fingers 6 which engage the upper and lower faces of the rail base, the fingers 6 of each pair of clamping members 5 engaging the rail base upon opposite sides of the web of the rail.

The lower ends of the clamping members 5 are held in proper spaced relation from one another upon the threaded end 4 of the connecting rod 3, by means of nuts 7 or the like screwed up against the inner faces of the lower end of said clamping members 5. Engaged against the outer face of the lower end of each clamping member 5 is an anchoring plate 8 which is preferably of substantially rectangular form in general outline and has its corners 9 bent on a diagonal line and at right angles to the plate. The plate 8 is held in position against the clamping member 5 by means of a nut 10 screwed upon the threaded portion 4 and against the outer face of the plate 8.

As each connecting bar 3 extends transversely of the track and carries the anchoring plates 8 and clamping members 5 upon its opposite ends, the clamping members 5 clamp the rails 2, while the anchoring plates 8 are anchored in the ground below the rails 2 and between the ties 1, it will be evident that movement of the rails 2 will be effectively prevented.

It will be readily seen that the turned corners 9 of the anchoring plates 8 will prevent said plates from turning upon the threaded ends 4 of the connecting rods 3, and also prevent the rails from rising or rocking after said plates have been embedded in the earth or concrete bed beneath the rails 2 and between the ties 1. It will also be evident that either the lower edges of the anchoring plates 8 may be forced into the bed beneath the rails 2, or if desired, the plates 8 may be completely covered, owing to the fact that the upper edges of said plates are slightly below the base of the rails. It will be apparent that when the anchoring plates are completely covered, the earth or other material in which the plates are embedded between the ties 1 will also cover the connecting rod 3, and all movement of the rails 2, to the bases of which the clamping members 5 are clamped, will be positively prevented, making spreading of the rails impossible.

It will be seen that I have provided an anchoring and anti-spreading rail appliance which may be readily applied to the present construction of track at an extremely small cost and which will be highly efficient and effective in the performance of its duties, positively anchoring the rails and preventing spreading of the same.

What I claim is:—

An appliance of the character described comprising pairs of opposed clamping members having rail base engaging fingers for
5 engagement against the upper and lower faces of the bases of opposite rails of a track, means for connecting the pairs of clamping members, and rectangular anchoring plates secured upon opposite sides of each pair of
10 clamping members, the corners of each an-

choring plate being bent on a diagonal line and at right angles to the plate.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

NICKOLAS J. ROETHER.

Witnesses:

JOSEPH J. FIEDLER,
ANNA L. JAMES.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."