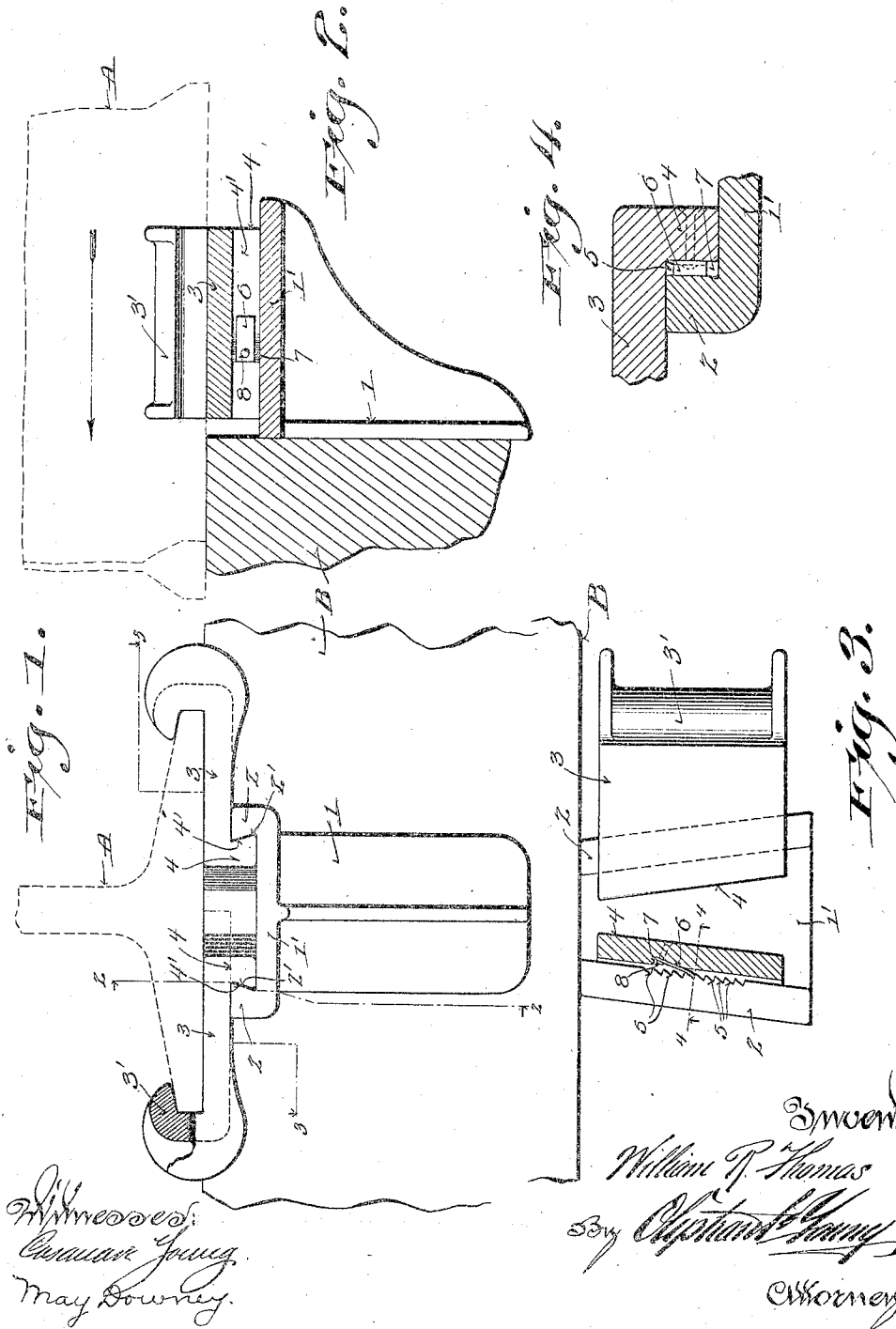


W. R. THOMAS.
 ANTICREEPER FOR RAILWAY RAILS.
 APPLICATION FILED NOV. 13, 1911.

1,034,168.

Patented July 30, 1912.



UNITED STATES PATENT OFFICE.

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SAMUEL E. GREEN, OF MILWAUKEE, WISCONSIN.

ANTICREEPER FOR RAILWAY-RAILS.

1,034,168.

Specification of Letters Patent.

Patented July 30, 1912.

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To all whom it may concern:

Be it known that I, WILLIAM R. THOMAS, a citizen of the United States, and resident of Watertown, in the county of Jefferson and State of Wisconsin, have invented certain new and useful Improvements in Anti-creepers for Railway-Rails; and I do hereby declare that the following is a full, clear, and exact description thereof.

10 The object of my invention is to provide a simple, economical and efficient anti-creeping attachment for railway rails, its construction and arrangement being such, that a tie-opposing foot member having a wedge-shaped web for interlocking engagement with wedge-shaped flanges of separable rail-clamps, may be adjusted to rails of different dimensions without the use of bolts or nuts and when so attached, the wedged engagement between the tie-opposing foot and rail clamping members due to the creeping tendency of the rails, serves to automatically tighten said clamping members to the rail flange.

25 Specific objects of my invention are to provide undercut wedge-shaped flanges of the tie-opposing member with open unobstructed ends, whereby dirt, ice or other foreign matter will not accumulate or plug the parts, there being a longitudinal space or passage between flanges of a clamping member, whereby an outlet is formed in order that said foreign matter may be cleared incidental to movement of the parts.

35 Another object of my invention is to provide independent dog and ratchet locking mechanism in connection with flanges of the rail-carrying and tie-opposing members, whereby back movement of the rail-clamping members incidental to vibration is prevented, the parts when connected by the locking mechanism being interlocked in such manner that they cannot be removed except by breakage.

45 With the above objects in view my invention consists in what is herein shown, described and claimed.

50 In the drawings Figure 1 represents an end view of a rail mounted upon a tie-section and equipped with an anti-creeping device embodying the features of my invention; Fig. 2, a side elevation of the same with a portion of the tie in section as indicated by line 2—2 of Fig. 1; Fig. 3, a plan view of the anti-creeping attachment with

the rail removed, and Fig. 4, an enlarged detailed cross-section of the locking mechanism, the section being indicated by line 4—4 of Fig. 3.

Referring by characters to the drawings, 1 60 represents a tie-opposing foot member having a longitudinally extended web 1', the upper face of which web is provided with oppositely disposed longitudinal flanges 2 having undercut grooved ways 2' that are inclined in opposite directions and together form a tapered seat for interlocking engagement with a rail clamping member.

The rail clamping member comprises a pair of separable, laterally disposed rectangular plates 3 having upwardly extending and longitudinally disposed lipped edges 3' for engagement with the edges of a rail flange A, the same being indicated by dotted lines. The lower inner opposite edges of the plates 3 are formed with downturned flanges 4 constituting tongues that have their outer faces 4' inclined and undercut in opposite directions for matched engagement with the tapered seat formed by the ways 2' of the tie-opposing member 1, the tapered seat of which tie-opposing member flares outwardly in the opposite direction from the direction of the travel of the rail incidental to creeping. 85

In assembling the elements comprising the anti-creeping attachment, the tie-opposing foot is adjusted against one face of a cross-tie B and upon that side thereof facing the direction of travel of the rail in its creeping tendency. The web portion 1' of the tie-opposing foot, is disposed under the rail flange and centrally thereof and the lipped edges 3' of the plates 3, which together form the rail-clamping member, are adjusted to the rail flange and are slid toward the tie to effect interlocking engagement between their inclined face flanges 4 and the tapered seat formed in the web 1' of the tie opposing foot. The undercut grooved ways 2' of the tie-opposing foot and the undercut faces 4' of the rail clamping member flange thus form interlocked connection between the members, whereby said tie-supporting member is held in suspension under the rail flange. The plates 3 are then tapped to force the same securely into engagement, whereby the wedging action causes said plates to contract with respect to each other and thus frictionally grip the 110

edges of the rail securely. Now, should the rail tend to creep in the direction as indicated by the arrow in Fig. 2, it is apparent that in its travel, it will cause the clamping members or plates 3 to follow, through the frictional engagement with the rail flange and thereby said clamping members will be drawn toward each other through their wedging tongue and groove engagement with the tie-opposing foot, which foot will remain stationary, owing to its abutting contact with the side of the tie. Hence it will be seen that the constant vibrating and creeping tendency of the rail in place of acting to loosen the anti-creeping attachment serves to tighten the same.

Attention is called to the fact that the flanges 2 of the tie-opposing member are entirely above its web portion, the same being unobstructed at their ends, whereby a clear passage is formed therebetween for dirt, sleet or other foreign matter, by which provision the device will not be clogged, caused through a pocket of accumulated matter, which would otherwise pack therein and prevent the rail-clamping members from performing their functions.

As best shown in Figs. 3 and 4, in order to guard against tendency of the two-part rail-clamping member from slipping backward and loosening its grip upon the rail-flange incidental to vibration, each groove-way 2' of the tie-opposing foot is provided with a series of serrations 5 that extend a portion of their length. These serrations are engaged by abrupt ends of spring-dogs 6, which spring-dogs are seated in recesses 7 of the undercut flanges 4' of the plates that form the rail-engaging members, the spring-dogs being secured in said seats by suitable rivets 8 that pass through the flanges 2. Hence it is apparent from the above described mechanism that when the rail clamping members are seated so as to grip said rail they will be locked against reverse movement, it being understood that the serrations in the undercut faces 4' of the flanges are preferably in the form of ratchet teeth as shown. Furthermore by this construction the interlocked engagement between the members will prevent the latter from being removed except by force sufficient to break one of the spring-dogs, this being particularly advantageous for the reason that devices of this character are not used after being removed and therefore, in this instance, cannot be detached in the spirit of vandalism or for theft. Still another advantage of this interlocking mechanism is that it does not require a severe blow to place the rail-gripping members in their gripping engage-

ment, it being only necessary to slide the same into place until the lips 3' seat against the rail-flange edges, and incidental to said movement each spring-dog will engage one of the first teeth of the series to form a lock. Thereafter the creeping tendency of the rail will automatically tighten the parts in the ordinary manner and the spring-dog in moving independently will engage the next tooth or serration, whereby the take-up movement incidental to travel of a train over the track is held.

I claim:

1. An anti-creeper attachment for rails comprising a tie-opposing foot having a web extending therefrom, undercut longitudinally disposed flanges in connection with the web, the undercut flanges being inclined in opposite directions to form a tapered seat, serrations in the undercut faces of said flanges, separable transversely arranged rail-clamping members comprising plates each having an outer rail-engaging clip and an inner longitudinally disposed flange, the flanges being oppositely inclined with relation to each other for matched engagement with the inclined undercut faces of the web flanges, whereby a wedging engagement is effected to cause contraction of the rail-clamping members incidental to creeping tendency of the rail to which it is attached, and spring tongues secured to the matched faces of the flanges of the rail-clamping members for engagement with the serrations formed in the flanges of the tie-opposing foot.

2. An anti-creeping attachment for rails comprising a tie-opposing foot having a horizontally disposed web, longitudinally converging flanges projecting from the web, the flanges being provided with oppositely disposed undercut faces, a series of serrations formed in the undercut faces, a pair of transversely arranged lipped plates constituting a rail-clamping member, an obliquely disposed longitudinal flange depending from each plate, the flanges being provided with undercut faces adapted to have sliding engagement with the flanges of the tie-opposing foot, and a locking spring secured to the undercut faces of the rail-clamping member engageable with the flange serrations of said tie-opposing foot.

In testimony that I claim the foregoing I have hereunto set my hand at Milwaukee in the county of Milwaukee and State of Wisconsin in the presence of two witnesses.

WILLIAM R. THOMAS.

Witnesses:

MAY DOWNEY,
N. E. OLIPHANT.