No. 790,694. PATENTED MAY 23, 1905.

J. R. LEIGHTY.

MEANS FOR PREVENTING RAILS OF RAILWAY TRACKS FROM CREEPING.

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Fig. 1

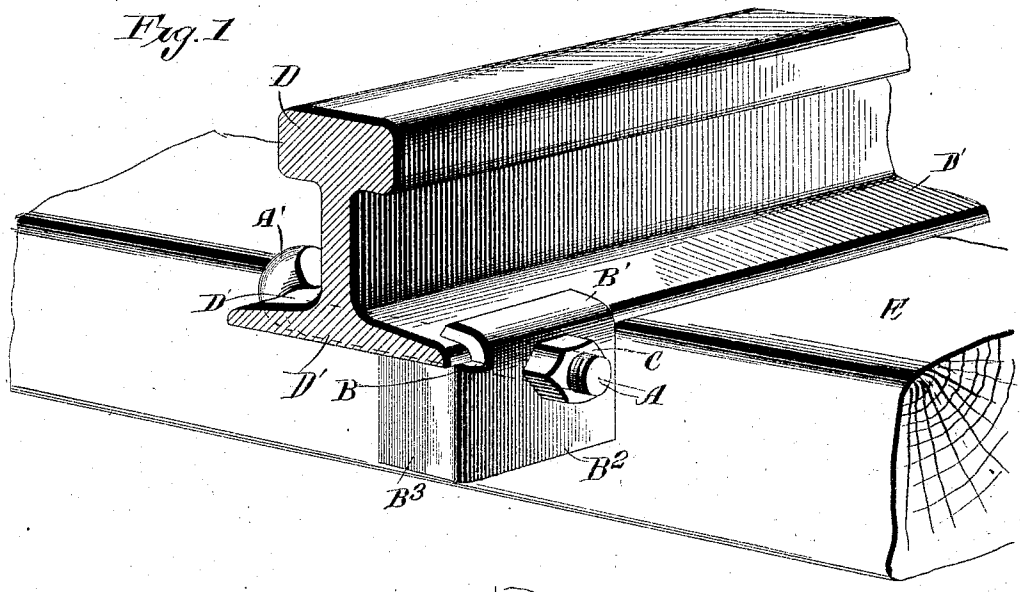


Fig. 2

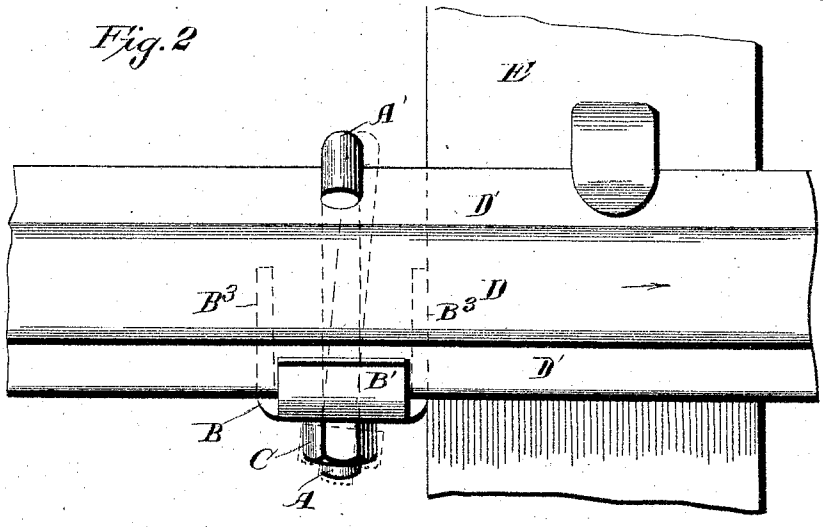
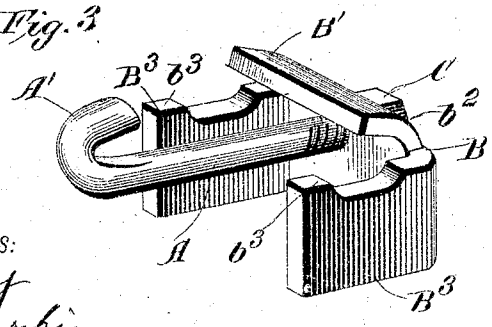


Fig. 3



WITNESSES:

C. Whitfey

Percy B. Herpin

INVENTOR

John R. Leighty

BY Munn & Co.

ATTORNEYS

No. 790,694. Patented May 23, 1905.

UNITED STATES PATENT OFFICE.

JOHN R. LEIGHTY, OF CUMBERLAND, MARYLAND.

MEANS FOR PREVENTING RAILS OF RAILWAY-TRACKS FROM CREEPING.

SPECIFICATION forming part of Letters Patent No. 790,694, dated May 23, 1905.

Application filed November 26, 1904. Serial No. 234,364.

To all whom it may concern:

Be it known that I, JOHN R. LEIGHTY, a citizen of the United States, and a resident of Cumberland, in the county of Allegany and State of Maryland, have made certain new and useful Improvements in Means for Preventing Rails of Railway-Tracks from Creeping, of which the following is a specification.

My invention is an improvement in means for preventing rails of railway-tracks from creeping, and has for an object to provide a novel construction whereby to effect such purpose; and it consists in certain novel constructions and combinations of parts, as will be hereinafter described and claimed.

In the drawings, Figure 1 is a perspective view of a portion of a rail and a tie with my invention applied. Fig. 2 is a top plan view thereof, and Fig. 3 is a detail perspective view of the improved device.

The improved device, as shown in Fig. 3 and as applied in Figs. 1 and 2, comprises the bolt A, the stop-section B, and the nut C.

The bolt A is provided at one end with a hook A′ to engage over the base of the rail and is threaded at its other end to receive the nut C.

The stop-section B is formed with the hooked flange B′ to overlap the base of the rail at the edge opposite the hook A′ of the bolt A and has the main or face plate B^2, depending below the flange B′, and the side wings B^3, extending inwardly from the opposite ends of the main plate B^2 to underlie the base D′ of the rail D, the upper edges b^3 of the wings B^3 being formed to rest against the under side of the base of the rail, as shown in Figs. 1 and 3 of the drawings.

The bolt A extends through an opening b^2 in the main plate B^2, and the nut C, when screwed on the said bolt and tightened up, draws the hook A′ of the bolt and the flange B′ of the section B tightly into contact with the base of the rail, and when applied for use the stop-section is adjusted to bear at one side against the tie E to prevent the rail from creeping, the stop-section being arranged at one or the other side of the tie, according to the direction in which the rail has a tendency to creep, which may depend on the direction of the traffic over the track or upon grade or other causes, as is well known in railroad engineering.

It will be noticed that the stop-section is of a special construction, having the main plate and hooked flange at the upper edge thereof and the side wings projecting inwardly from the opposite ends of the main plate and at an angle thereto and having their upper edges resting beneath the base of the rail, the main plate being perforated for the passage of the bolt A, as shown. This stop-section may be wrought or cast, as desired, and can be cheaply produced and efficiently serves the purpose for which it is designed, the edges b^3 of the side wings preventing any canting of the stop-section from the tension exerted on the bolt A.

An especial advantage results from the use of the bolt A with its hooked end, as in the position of parts shown in Fig. 2 it will be noticed that the initial movement of the rail D in creeping in the direction indicated by the arrow will tend to tighten the clamping action of the said bolt and the section B upon the rail by moving the hook end A′ of bolt to position indicated by dotted lines, Fig. 2, and will also tilt or cant the nut C (see dotted lines in Fig. 2) in such manner as to cause the nut at one side to bite into the face-plate B^2 of the section B, and thus be locked from turning, the locking of the nut being automatically effected by the initial movement of the rail, which in most cases will be even less than that indicated in dotted lines in Fig. 2 and yet will be sufficient to secure the desired result above described. It will be understood, however, that my device serves as a stop in the first instance to prevent any creeping of the rail—that is to say, when the device is applied it then constitutes a stop by reason of its construction and arrangement irrespective or in advance of the canting of the nut on the bolt which occurs by actual creeping of the rail and only serves to increase the gripping action of the device. It will also be noted that the thrust of the tie in case of creeping of the rail is on the end of the main plate proper and not on the flanges or wings B^2 thereof.

The construction is simple, may be easily

and cheaply made, can be quickly applied for use, and will efficiently serve the purpose for which it is designed.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. The combination substantially as herein described of the rail, the tie, the stop-section having a main plate provided with a bolt-opening, the hooked flange at the upper edge of the main plate, the side wings extending inwardly from the opposite ends of the main plate beneath the rail and having their upper edges underlying the base of the rail and the bolt having at one end a hook engaging with the edge of the rail and extending at its other end through the bolt-hole in the main plate of the stop-section and the nut on such end of the bolt, the bolt being adapted for operation by the initial creeping of the rail to cant the nut into locking engagement with the stop-section substantially as set forth.

2. A device for use substantially as described comprising a stop-section having a main plate provided at its upper edge with a hooked flange and below the same with a bolt-opening and having at the opposite ends of said main plate the projecting side wings at an angle to the main plate with their upper edges adapted to rest beneath the rail-base and a bolt having at one end a hook to engage with the edge of the rail-base and adapted at its other end to extend through the bolt-hole in the stop-section, and the nut fitting such end of the bolt substantially as set forth.

3. The combination with the rail and a stop-section having means to engage one edge of the rail-base and provided with a bolt-hole, of a bolt passed through said hole, a nut on the bolt, the other end of the bolt being provided with a comparatively narrow hook in engagement with the opposite edge of the rail-base whereby the device is adapted to secure a canting of the nut into locking engagement with the stop-section, substantially as set forth.

4. In a device for preventing rails of railway-tracks from creeping, a stop-section having a main plate, a hooked flange at the upper edge of the main plate and upright side wings extending inwardly from the opposite ends of the main plate beneath the rail and adapted to underlie the base of the rail, substantially as set forth.

JOHN R. LEIGHTY.

Witnesses:
J. B. MYERS,
S. W. JACKSON.