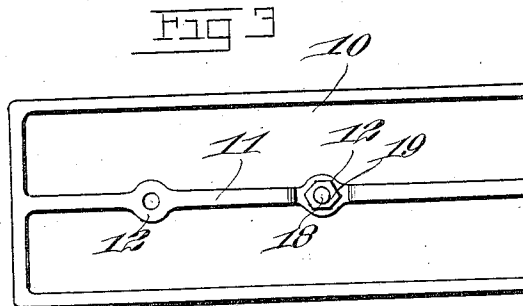
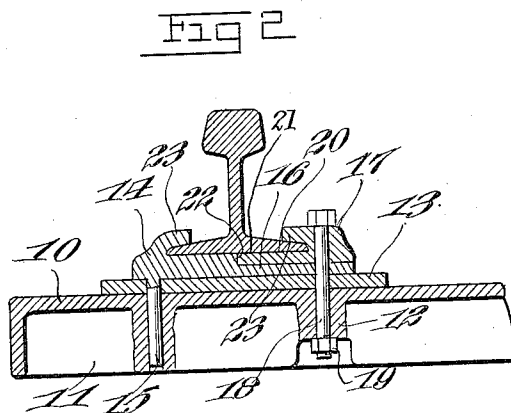
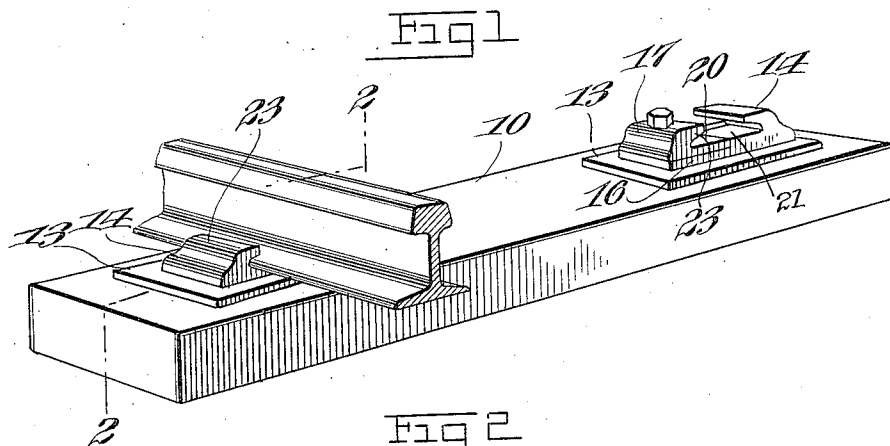


L. C. HORNING.
RAIL SECURING DEVICE.
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1,045,792.

Patented Nov. 26, 1912.



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Witnesses

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LEONARD C. HORNING, OF NORWICH, NORTH DAKOTA.

RAIL-SECURING DEVICE.

1,045,792.

Specification of Letters Patent.

Patented Nov. 26, 1912.

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To all whom it may concern:

Be it known that I, LEONARD C. HORNING, a citizen of the United States, residing at Norwich, in the county of McHenry and State of North Dakota, have invented new and useful Improvements in Rail-Securing Devices, of which the following is a specification.

An object of the invention is to provide a device for securing rails to ties to prevent a sidewise movement of the rails without impairing the expansive and contractile movement of the rail due to heat and cold.

The invention embodies among other features a plurality of clamping members arranged for clamping engagement with a rail and mounted upon a tie, the mentioned clamping members and tie being preferably made of metal, a suitable cushion plate, preferably made of wood or some other cushioning material being interposed between the tie and clamping members to provide a seat for the clamping members.

In the further disclosure of the invention, reference is to be had to the accompanying drawings constituting a part of this specification, in which similar characters of reference denote corresponding parts in all the views, and in which—

Figure 1 is a perspective view of a tie, showing my device applied thereto, one of the rails being removed to more fully disclose the structure of the clamping members. Fig. 2 is a vertical sectional view, taken on the line 2—2 in Fig. 1. Fig. 3 is a fragmentary bottom plan view of the tie.

Referring more particularly to the views, I provide a tie 10, preferably made of metal and provided with a central longitudinally extending rib 11 provided with apertured enlarged portions 12, the apertures in the said enlarged portions being extended vertically through the tie to the upper surface thereof. A cushion plate 13 is mounted to repose upon the upper surface of the tie 10 and mounted upon the cushion plate is a clamping member 14 provided with a depending pin 15, extending through an aperture in the cushion plate 13 and through the aperture in one of the enlarged portions 12 of the tie 10. The clamping member 14 is provided with an integral reduced shank 16 forming a bearing adapted to receive a clamping member 17, a bolt 18 being extended through an aperture adjacent the outer end of the shank 16, the said bolt be-

ing then extended through an aperture in the cushion plate 13 and an aperture in one of the enlarged portions 12, a suitable nut 19 being threadedly engaged with the end of the bolt and abutting against the under side of the rib 11. The rail surface 20 of the clamping member 17 is adapted to lie in the same horizontal plane as the rail surface 21 of the clamping member 14 when the clamping member 17 is mounted upon the clamping member 14 as mentioned, a shoulder 22 being formed on the clamping member 14 by reducing in size the shank 16, the inner end of the clamping member 17 being arranged to abut against the shoulder 22 so that the shoulder 22, together with the bolt 18 will prevent any movement of the clamping member 17 relatively to the clamping member 14 and the bolt 18 extending through the clamping member 17 and the shank 16 will retain the clamping members 14 and 17 in relatively rigid position. The clamping members 14, 17 are provided with integral clamping heads 23, having their inner sides inclined so that the clamping heads will securely grip the rails as shown in Figs. 1 and 2.

By simply removing the nut 19 from the bolt 18 and removing the bolt 18 from engagement with the cushion plate 13, the shank 16 and clamping plate 17, the clamping member 17 and clamping member 14, together with the cushion plate 13 can be easily removed from the tie 10.

I claim:—

1. In a rail securing device the combination with a tie, of a cushion plate mounted thereon, a clamping member mounted on the cushion plate, a pin mounted to depend from the said clamping member to pass through an aperture in the said cushion plate and extend into the said tie, a reduced shank formed integrally with the said clamping member, a second clamping member mounted to repose upon the said shank and a bolt mounted to pass through the second mentioned clamping member, the said shank and the said cushion plate and extending into the said tie to retain the first mentioned clamping member in rigid engagement with the said tie and the second mentioned clamping member in rigid engagement with the first mentioned clamping member.

2. A rail securing device comprising a cushion plate for engagement with a tie, a

clamping member mounted on the said cushion plate, a pin depending from the said clamping member and extending through the said cushion plate and into the
5 said tie, a reduced shank formed on the said clamping member, a second clamping member mounted on the said shank and means engaging the second mentioned clamping member and extending through the said
10 shank to retain the second mentioned clamping member in rigid engagement with the first mentioned clamping member.

3. A rail securing device comprising a plurality of clamping members, one mounted
15 ed upon the other, clamping heads formed

on the said clamping members and arranged in spaced relation, a pin formed on one of the said clamping members and depending therefrom to extend into a tie and means mounted on the other clamping member and
20 engaging the first mentioned clamping member for retaining the said clamping members in rigid engagement with the said tie.

In testimony whereof I affix my signature 25
in presence of two witnesses.

LEONARD C. HORNING.

Witnesses:

W. S. YOUNG,

GEO. HEGER.

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