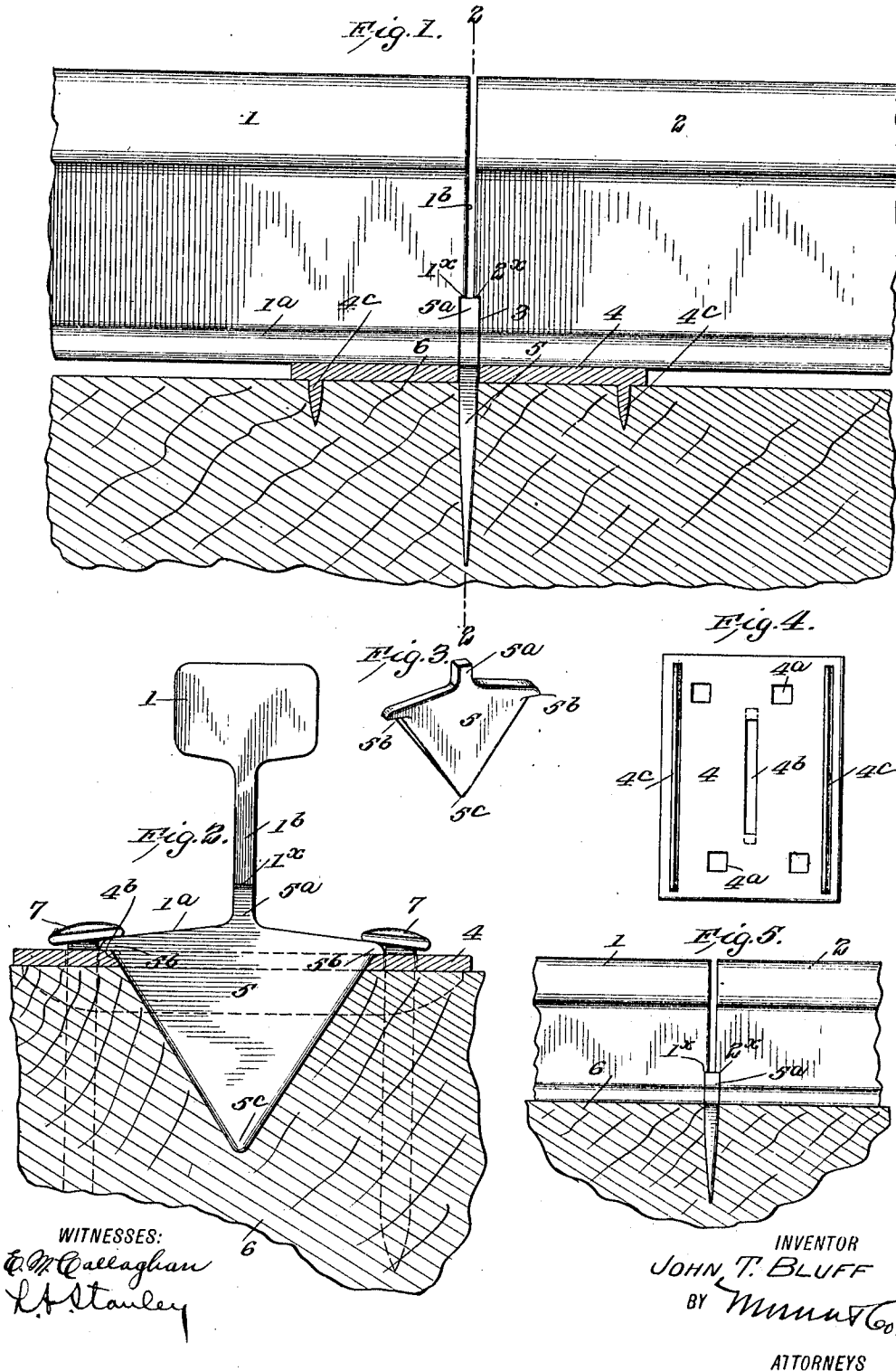


J. T. BLUFF.
 DEVICE FOR PREVENTING THE CREEPING OF RAILS.
 APPLICATION FILED MAY 6, 1910.

970,418.

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UNITED STATES PATENT OFFICE.

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DEVICE FOR PREVENTING THE CREEPING OF RAILS.

970,418.

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To all whom it may concern:

Be it known that I, JOHN T. BLUFF, a citizen of the United States, and a resident of Butte, in the county of Silverbow and State of Montana, have made certain new and useful Improvements in Devices for Preventing the Creeping of Rails, of which the following is a specification.

My invention relates to means for preventing the longitudinal movement of rails commonly known as "creeping," and it consists in the constructions, combinations and arrangements herein described and claimed.

The ordinary means of fastening rails to ties consists in spiking the rail to the tie. If the spikes become loosened as they are very apt to do, the rails may sometimes move longitudinally. In some cases this movement is a considerable one, far enough, in fact, to endanger the rail fastening and to cause accident.

An object of my invention is to provide means for preventing the creeping of the rail without sacrificing the strength of the rail.

A further object of my invention is to provide a device for preventing the creeping of rails which, at the same time, serves to keep the rail chair, which may be used with the rail, in its initial position.

A further object of my invention is to provide a device which may be easily inserted into, or removed from, the tie.

Other objects and advantages will appear in the following specification, and the novel features of the device will be particularly pointed out in the appended claims.

My invention is illustrated in the accompanying drawing in which—

Figure 1 is a section through the chair and the tie showing the rails in their normal position, Fig. 2 is a section along the line 2—2 of Fig. 1, Fig. 3 is a perspective view of the wedge, Fig. 4 is a bottom view of the chair, and Fig. 5 is a view similar to Fig. 1, showing a modification.

In carrying out my invention I make use of the ordinary rails such as those shown at 1 and 2 in Fig. 1. At the ends of the rails I cut away a portion as shown at 3. This cut away portion, as will be seen from Fig. 2, extends through the base portion 1^a of the rail, and partly into the web 1^b.

In order to support the rail I may make use of a rail chair 4. This is provided with

the spike holes 4^a and with a slot 4^b centrally disposed in the plate. The chair is provided with the wedge shaped flanges 4^c on its under side.

In Fig. 3, I have shown a wedge shaped member 5, which constitutes the means for preventing the movement of the rail. This member is provided with an upwardly extending lug 5^a and with laterally extending lugs 5^b. The member tapers to a point 5^c and the tapering sides are sharpened so as to easily enter the wood of the tie.

From the foregoing description of the various parts of the device the operation thereof may be readily understood.

When the chair 4 is to be used the latter is placed upon the tie 6 and is driven down, the sharpened flanges 4^c entering the tie until the bottom of the plate engages the top of the tie. The wedge shaped member 5 is now placed in the slot 4^b and is driven downwardly, the lug 5^a serving as a striking head. The wedge enters the tie until the laterally extending lugs 5^b engage the upper side of the plate. The rails 1 and 2 are now placed upon the plate, the recesses 3 permitting the entrance of the lug 5^a. In Fig. 1, it will be seen that the recessed portion of the rails leaves shoulders 1^x and 2^x which fit over the top of the lug 5^a. The rail is then spiked down in the usual manner, the spikes 7 being placed in the holes 4^a and driven down until they engage the base of the rail.

In the construction just described the wedge 5 prevents a longitudinal movement of the rails. The slightly recessed portions 3 being at the ends of the rails does not tend to weaken them so as to endanger the rails as it would if the recess were away from the ends. Moreover, the shoulders 1^x and 2^x rest upon the top of the lug 5^a and this tends to compensate for any weakness which might occur through the recessing of the rails at this point. The wedge 5 serves not only to prevent the longitudinal movement of the rails, but also prevents a lateral movement of the chair, and on account of the extending lugs 5^b, spikes the chair to the tie.

The wedge may be used without the chair, as shown in Fig. 5. In this construction the wedge is driven into the tie until the lugs 5^b engage the top of the tie. The rails are now placed on the lug 5^a as before described, and are subsequently spiked down in the ordinary manner. In this case, as in the other,

the shoulders 1* and 2* rest directly on the top of the wedge, thus supporting the rail while preventing a longitudinal movement thereof. The wedge may be readily removed 5 by inserting the end of a crow bar underneath one of the lugs 5^b and prying it from the tie.

It will be seen that the wedge does not interfere at all with the use of ordinary fish 10 plates since the contour of the upper portion of the wedge registers with that of the contiguous rails.

I claim:

1. In a rail fastening device, a chair pro- 15 vided with a slot, a pair of rails having a recessed portion at each end, a tie for supporting the chair, and a wedge arranged to extend through the slot in said chair into said tie, said wedge being provided with 20 laterally extending lugs for limiting the downward movement of the wedge, and an upwardly extending lug adapted to enter the recessed portions of the ends of the rails.

2. In a rail fastening device, a chair provided with a slot, a pair of rails each having 25 a recessed portion at its end, said recessed portion extending through the base and part way into the web of the rail, a tie for supporting the rail, and a wedge adapted to be driven into the tie, said wedge having later- 30 ally extending lugs and an upwardly extending lug centrally disposed on the wedge and adapted to enter said recesses and to bear a portion of the weight of the rail.

3. As an article of manufacture, a wedge 35 adapted to be driven into a tie to prevent a longitudinal movement of the rail, said wedge comprising a triangular shaped body portion having sharpened edges on its taper- 40 ing sides, a pair of oppositely extending lateral lugs and an upwardly extending central lug constituting a striking head.

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Witnesses:

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