

S. C. COLLINS.
RAIL FASTENER.
APPLICATION FILED SEPT. 20, 1912.

1,065,343.

Patented June 24, 1913.

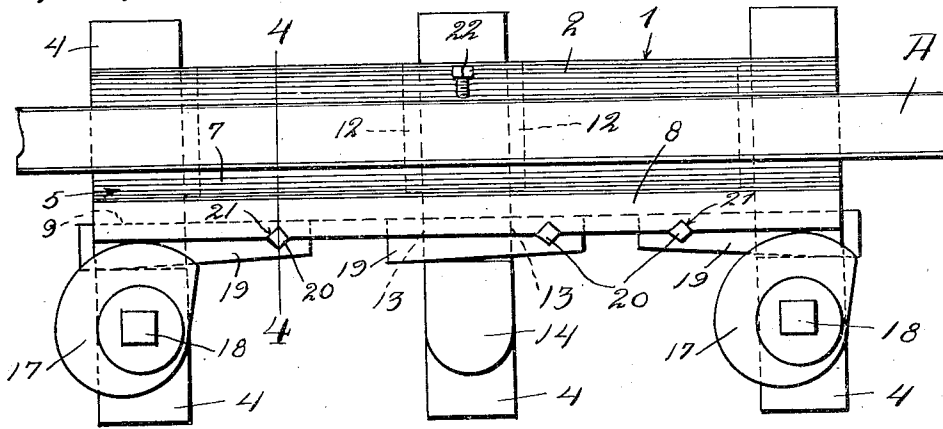


Fig. 1.

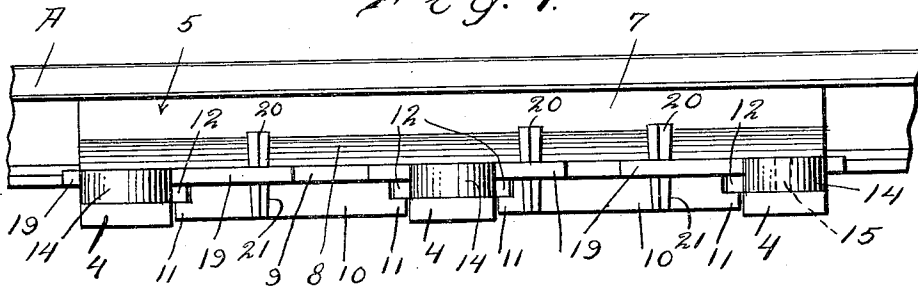
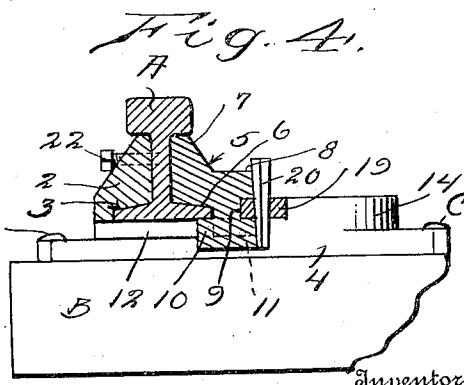
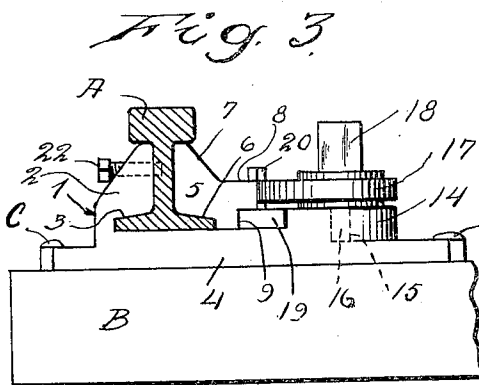


Fig. 2.



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RAIL-FASTENER.

1,065,343.

Specification of Letters Patent.

Patented June 24, 1913.

Application filed September 20, 1912. Serial No. 721,437.

To all whom it may concern:

Be it known that I, SIMON C. COLLINS, a citizen of the United States, residing at Falmouth, in the county of Lancaster and State of Pennsylvania, have invented certain new and useful Improvements in Rail-Fasteners, of which the following is a specification.

My invention relates to rail fasteners and particularly to a device of this character which is adapted to be secured upon ordinary ties and which will hold a rail firmly in place.

The object of the invention is to provide a device of this character which will be efficient in operation and durable in service.

A further object is to provide a device of this character, which will prevent creeping of the rails.

A still further object is to provide means for clamping the device in place until the permanent securing means have been applied.

With these and other objects in view, my invention consists in the novel arrangement and construction of parts as hereinafter more fully described and claimed, and illustrated in the accompanying drawings, in which:

Figure 1 is a top plan view of the device applied to a rail, Fig. 2 is a side elevation thereof, Fig. 3 is an end view, and Fig. 4 is a sectional view on line 4—4 of Fig. 1.

Referring more particularly to the drawings, the numeral 1 designates the main or body portion of the device, which comprises a longitudinal brace bar 2 adapted to bear against a rail A, channeled as shown at 3, for engagement with the base of the rail. This bar extends to the bottom of the ball of the rail and serves as an effectual reinforcing means. Preferably, though not necessarily, formed integral with the bar 2, are base plates 4 which are adapted to be secured upon the ties B by spikes C, or other suitable means.

Upon the other side of the rail and adapted to cooperate with the member 1, is a clamping member 5, similar in shape to the bar 2 and channeled at 6 for the reception of the base of the rail. The member 5 comprises an inclined portion 7 adapted to bear against the rail and a substantially horizontal portion 8. The member 5 is further channeled, as shown at 9, for a purpose to be described. Integrally formed upon the

member 5 are downwardly extending portions 10 provided with laterally extending flanges 11 adapted to cooperate with overhanging flanges 12 formed upon the base plates 4. It will be noted that the flanges 12 do not extend the whole length of the plates 4 but terminate at such a point that a constricted portion 13 is formed upon each plate 4, allowing the member 5 to be inserted in place. Formed upon the upper faces of the plates 4 are bosses or extensions 14 provided with apertures 15 for the reception of trunnions 16 formed upon removable clamping cams 17, which are provided with extensions 18 adapted to be engaged by any suitable tool.

After the body portion 1 has been secured in place upon the ties B the rail A is laid upon the base plates 4 with its web abutting against the bar 2. The member 5 is then laid upon the base plates 4 in such a position that the extensions 10 and flanges 11 thereon are in alinement with the constricted portions 13 of the plates 4. This allows the member 5 to seat itself upon the plates 4. The clamping cams 17 are then placed upon the bosses 14 with the trunnions 16 in engagement with the apertures 15. By turning the cams it will be readily seen that the member 5 will be forced into engagement with the rail A. As this movement takes place flanges 11 travel beyond the constricted portions 13 of the base plates and engage under the flanges 12 formed thereon. It will thus be seen that the member 5 is positively locked against upward displacement.

In order to provide permanent locking means wedges 19 are inserted within the channel 9, abutting against the bosses 14, and are driven securely into place. In order to hold these wedges firmly and positively in their clamping position, I provide vertical wedges 20, which engage notches 21 formed in the horizontal portion 8 of the member 5 and pass through openings formed through the wedges 19. If desired, the protruding ends of the wedges 20 may be bent over as additional securing means. After the insertion of both sets of wedges, the clamping cams 17 are removed as they are for temporary use only.

In order to prevent longitudinal creeping of the rails, I provide one or more set screws 22 passing through the bar 2 and entering a depression in the rail A.

It will be understood that various changes

in the construction, shape, and arrangement of parts may be resorted to without departing from the spirit of the invention or limiting the scope of the subjoined claims.

5 Having thus described my invention what I claim is:

1. A rail fastening device, comprising a longitudinal upstanding member channeled for the reception of the base of a rail, a plurality of laterally extending base plates formed integrally thereon, upstanding projections on said base plates, a member slidably mounted on said base plates and channeled for the reception of the base of a rail and provided with a longitudinal recess, a plurality of wedges adapted to engage said recess and said projections on said base plates, and a plurality of pins passing through said slidable member and said wedges.

2. A rail fastening device, comprising a bar adapted for engagement with a rail, a plurality of laterally extending plates connected with said bar, upstanding extensions on said plates, overhanging flanges formed on said plates and extending a portion of their length, a bar slidably mounted on said plates and provided with downwardly extending portions provided with flanges adapted for engagement with said first named flanges and further provided with a longitudinal recess, a plurality of horizontally disposed wedges adapted to engage said recess and said extensions on said base

plates, and means for locking said wedges in their proper position.

3. A rail fastening device, comprising a longitudinal bar adapted to embrace a rail, a plurality of transverse base plates connected therewith, upstanding extensions formed on said base plates, a bar slidably mounted on said plates and adapted to engage said rail, downwardly extending portions formed thereon, laterally extending flanges formed on said downwardly extending portions adapted to engage flanges formed on said base plates, said last named flanges extending a portion of the length of said base plates and terminating at a distance from said upstanding extensions equal to at least the width of said slidable bar, cams rotatively mounted on said extensions and adapted to engage said slidable plate for forcing it into engagement with the rail, and means for locking said plate in its engaging position, said means comprising wedges adapted to engage said slidable plate and the upstanding extensions on said base plates.

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

SIMON C. ^{his} X COLLINS.
mark

Witnesses:

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