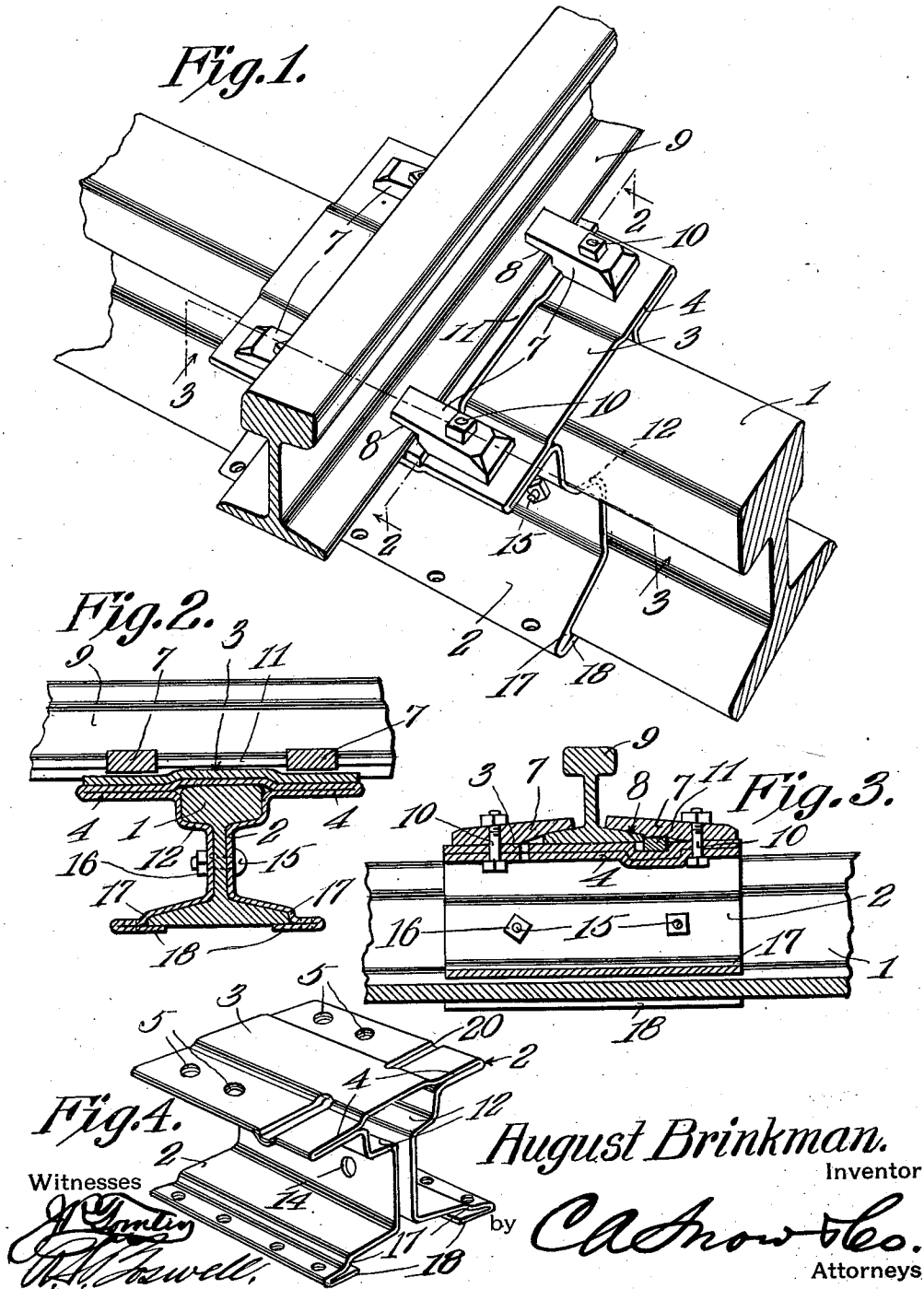


A. BRINKMAN.
RAILWAY TIE AND CLAMP.
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1,001,188.

Patented Aug. 22, 1911.



Witnesses

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AUGUST BRINKMAN, OF BUFFALO, NEW YORK.

RAILWAY-TIE AND CLAMP.

1,001,188.

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To all whom it may concern:

Be it known that I, AUGUST BRINKMAN, a citizen of the United States, residing at Buffalo, in the county of Erie and State of New York, have invented a new and useful Railway-Tie and Clamp, of which the following is a specification.

It is one object of this invention to provide a rail chair of novel and improved form, so constructed that a section of railroad rail of standard form, may be employed as a tie.

A further object of the invention is to provide novel means for adjustably assembling the rail with the rail chair.

With the above and other objects in view which will appear as the description proceeds, the invention resides in the combination and arrangement of parts and in the details of construction hereinafter described and claimed, it being understood that changes in the precise embodiment of invention herein disclosed can be made within the scope of what is claimed without departing from the spirit of the invention.

In the drawings,—Figure 1 shows the invention in perspective; Fig. 2 is a section on the line 2—2 of Fig. 1; Fig. 3 is a section on the line 3—3 of Fig. 1; and Fig. 4 is a perspective of the chair.

In the drawings, the tie is denoted generally by the numeral 1. This tie is fashioned from a section of railroad rail, of standard construction, the tie embodying a ball, a flange, and a web connecting the ball and the flange.

The rail chair, seen in clearest detail in Fig. 4, is denoted generally by the numeral 2. The chair 2 is preferably fashioned from a single piece of metal, the chair surrounding the tie 1 closely, saving only a portion of the bottom of the flange of the tie. In fashioning the chair 2, the constituent material thereof is flexed to form a raised rib 3, the constituent material of the chair being carried outwardly in opposite directions, beyond the rib 3, to form double-walled flanges 4, the component walls of which are in close contact throughout their extent. Below the flanges 4, the material which constitutes the chair 2 is carried around the ball of the tie 1, as denoted by the numeral 12, the chair embracing the web of the tie 1 closely, and being carried outwardly, to lie along the upper faces of the flange of the tie. The lower portion of

the chair is folded upon itself to form an auxiliary base 17, outstanding beyond the flange of the tie, the extreme lower edges of the chair being carried inwardly, beneath the flange of the tie 1, for a portion of the width of the flange of the tie only, as shown at 18. The flange 9 of the rail rests upon the rib 3, and upon either side of the supported rail, there are a plurality of holes 5 in the flanges 4 of the chair, these holes 5 being adapted to receive bolts 10, or other securing elements adapted to a like end, whereby rail-engaging securing devices, preferably taking the form of clips 7, may be held upon the chair 2. The inner ends of the clips 7 are recessed in their lower faces, as shown at 8, so as to fit over the flange 9 of the rail.

By inserting the bolts 10, successively, in the holes 5, proper adjustment may be made for the width of the flange 9 of the rail. These holes 5, however, cannot be placed closely enough together, so as to accommodate finer variations in the widths of the flanges 9 of different rails. To remedy this difficulty, a strip 11 is thrust beneath the clips 7, upon one side of the rail, the strip bearing along one edge, against the clips 7, and along the other edge bearing against one edge of the flange 9 of the rail, as clearly shown in Fig. 3. As an examination of Fig. 4 will show, there are seats 20 in the flanges 4 of the chair, these seats 20 being adapted to receive the ends of the strip 11. The intermediate portion of the strip 11 is bulged upwardly, across the rib 3 of the chair. The intermediate portion of the strip 11 is therefore raised slightly, so as to engage properly with one edge of the flange 9 of the rail. Moreover, this flexing of the strip 11 across the rib 3, serves to prevent an accidental removal of the strip 11.

As shown most clearly in Fig. 4, there are openings 14 in the chair, through which bolts 15 may be passed, the bolts 15 carrying nuts 16 as is common. These bolts 15 of course pass through the web of the tie 1, and thus the chair 2 is held in place upon the tie.

It is to be noted that the rib 3 serves to form a recess in the interior of the chair 2, into which recess the upper face of the ball in the tie 1 is adapted to fit, and owing to this fact, and to the further fact that the chair 2 incloses the tie 1 closely, throughout the entire transverse section of the tie, say-

ing only a portion of the lower face of the flange of the tie, the chair is given an unusually firm hold upon the tie.

Having thus described the invention, what is claimed is:—

1. In a structure of the class described, a chair adapted to inclose a tie closely and having a raised rib in its top; rail-engaging securing devices upon the chair, upon both sides of the rib, and a strip insertible beneath the securing devices, and between the securing devices and the rail, the intermediate portion of the strip being flexed across the rib.

2. In a structure of the class described, a chair adapted to inclose a tie closely, the chair being struck upwardly to form a rib, adapted to support a rail and to receive the upper portion of the tie; rail-engaging securing devices upon the chair, upon both sides of the rib; and a strip insertible beneath the securing devices, and between the securing devices and the rail, the intermediate portion of the strip being flexed across the rib.

3. In a structure of the class described, a chair adapted to inclose a tie closely, and having a raised rib in its top; rail-engaging

securing devices upon the chair, upon both sides of the rib; and a strip insertible beneath the securing devices, and between the securing devices and the rail, the intermediate portion of the strip being flexed across the rib; there being transverse seats in the chair, upon either side of the rib, for the reception of the ends of the strip.

4. In a device of the class described, a rail chair adapted to inclose a tie closely, the constituent material of the chair being folded upon itself to form double-walled flanges upon either side of the tie; rail-engaging securing devices resting upon the flanges; and securing elements extended through the rail-engaging devices, and through the constituent walls of the flanges, to hold the securing devices upon the flanges, and to bind the constituent walls of the flanges closely together.

In testimony that I claim the foregoing as my own, I have hereto affixed my signature in the presence of two witnesses.

AUGUST BRINKMAN.

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."