

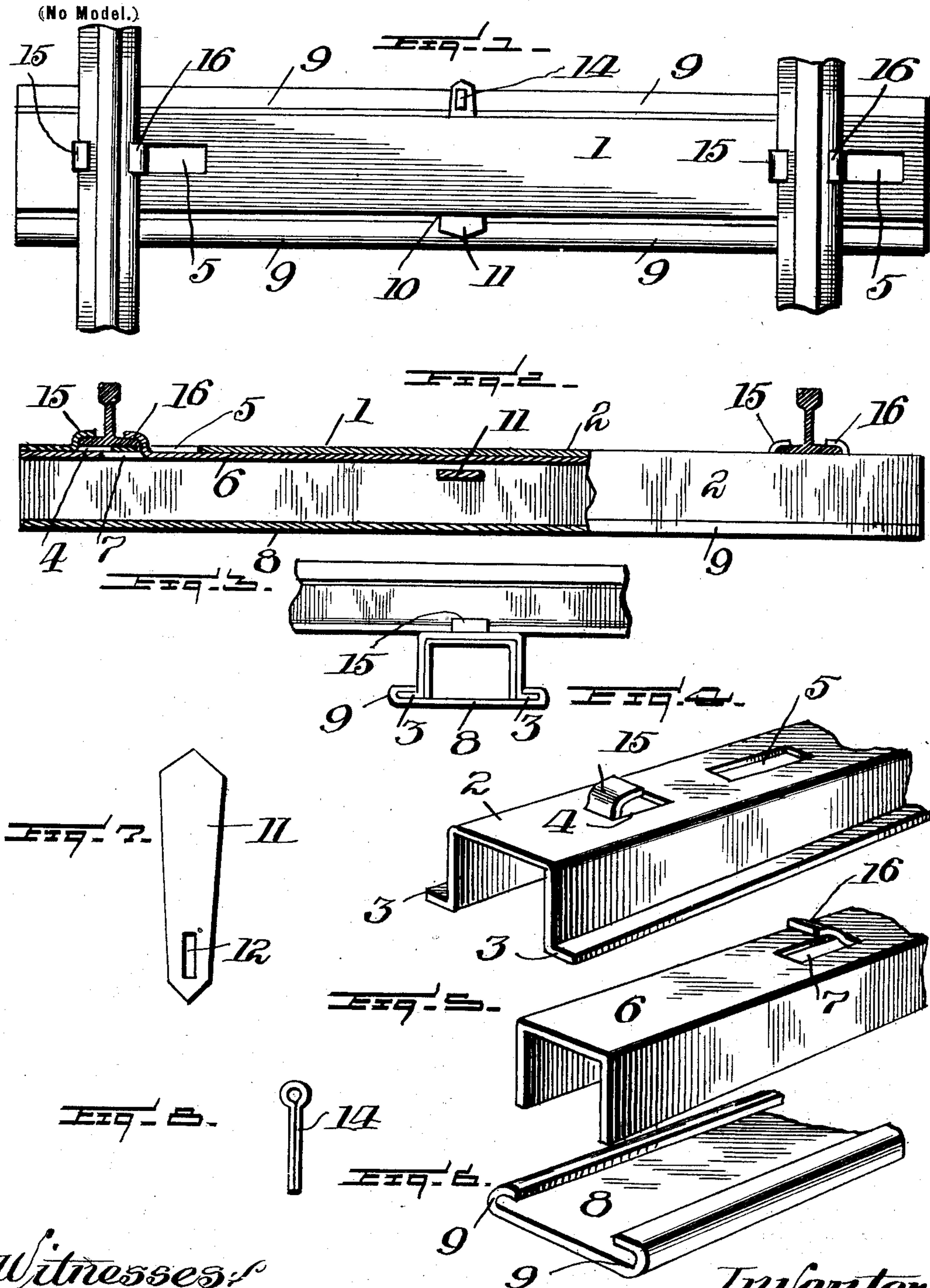
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S. J. GIBBONEY.

RAILROAD TIE.

(Application filed July 5, 1902.)



Witnesses:
J. H. Butler,
C. E. Potter,

Inventor,
S. J. Gibboney.
By
H. C. Everette,
Attorneys.

UNITED STATES PATENT OFFICE.

SAMUEL J. GIBBONEY, OF MOUNT PLEASANT, PENNSYLVANIA.

RAILROAD-TIE.

SPECIFICATION forming part of Letters Patent No. 711,305, dated October 14, 1902.

Application filed July 5, 1902. Serial No. 114,471. (No model.)

To all whom it may concern:

Be it known that I, SAMUEL J. GIBBONEY, a citizen of the United States of America, residing at Mount Pleasant, in the county of Westmoreland and State of Pennsylvania, have invented certain new and useful Improvements in Railroad-Ties, of which the following is a specification, reference being had therein to the accompanying drawings.

10 This invention relates to certain new and useful improvements in metallic ties and rail-fasteners, and has for its object to provide a tie of especial construction wherein the fastener for the rail is a part of the tie.

15 Another object of this invention is to provide a metallic tie and rail-fastener wherein the rail may be easily secured to the tie and the rail securely held thereupon.

20 Another object of my invention is to provide a metallic tie and rail-fastener that will be extremely simple in construction, strong, durable, comparatively light in weight, inexpensive to manufacture, and one wherein any size rail may be secured upon the tie.

25 To put my invention into practice, I provide a metallic tie formed of a channel-shaped bar, and in the channel of said bar I provide a similar channel-shaped bar telescoping in the same and means for locking these telescopic channel-bars together. My fastener consists of providing the outer channel-bar with an upwardly-projecting lug stamped out of a bar and in stamping a similar lug out of the inner channel-bar, these two lugs constituting the rail-fastener.

35 With the above and other objects in view the invention consists in the novel construction, combination, and arrangement of parts to be hereinafter more fully described, and specifically pointed out in the claims.

40 In describing the invention in detail reference is had to the accompanying drawings, forming a part of this specification, and wherein like numerals of reference indicate like parts throughout the several views, in which—

50 Figure 1 is a top plan view of my improved metallic tie and rail-fastening, showing the rails secured upon the same. Fig. 2 is a longitudinal section of the same, partly in elevation. Fig. 3 is an end view of the tie, showing the rail in position. Fig. 4 is a fragmen-

tary perspective view of one end of the outer channel-bar forming the tie. Fig. 5 is a similar view of the inner channel-bar. Fig. 6 is a similar view of the base-plate which supports the channel-bar forming the tie. Fig. 7 is a detail view of the wedge-shaped key. Fig. 8 is a detail view of the locking-key.

60 In the drawings the reference-numeral 1 indicates the tie proper, which is composed of an outer and inner casing, said casings conforming in shape to that of the channel-bar.

The reference-numeral 2 indicates the outer channel-bar or casing, which carries outwardly-extending flanges 3. The upper face of this casing is sheared, as indicated at 4, and the part sheared is bent upwardly and then at an angle in alinement with the upper face of the tie, as shown in Fig. 4 of the drawings. This sheared portion forms one of the locking-flanges for securing a rail upon the tie. The upper face of the tie is cut away, as indicated at 5, forming an oblong slot for the reception of the other locking-flange, to be hereinafter described.

75 The reference-numeral 6 represents the inner casing of the tie, which is also formed similar to the outer casing, said inner casing being sheared, as indicated at 7, and said sheared portion being bent upwardly and then at right angles in alinement with the upper face of the tie, this sheared portion when the two casings are placed together passing through the aperture 5 in the outer casing 2. Upon these two portions being placed together the same is secured upon a base-plate 8, said base-plate having its outer edges bent around, as indicated at 9, these outer edges engaging the flanges 3 of the outer casing 2 when the same is placed in position upon the base-plate. The ends of the tie are constructed similarly, the only difference being in reversing the position of the slot, as will be readily seen from Fig. 1 of the drawings. Centrally located in these two casings I cut an aperture 10 in the sides of the inner and outer casings, through which passes a wedge-shaped key 11, having an aperture 12 in one end thereof, in which is secured the key 14.

100 The operation of my improved device is as follows: It being desirous to secure the rail to the tie, the tie having been placed in posi-

tion upon the bed of the road, I place the rail against the flanges 15, and then the inner casing is moved until the flanges 16 engage the base of the rail. The wedge-shaped key 5 11 is then passed through the casings 2 and 6 and the key 14 inserted in the aperture 12, thus locking the two casings together and securing the rail upon the tie. It being desired to remove the rail, the keys are withdrawn from the aperture and the inner casing 6 is moved outwardly from the rail, thus allowing the flange 16, which projects up through the aperture 5, to have passed a sufficient distance from the rail, allowing the re- 10 moving of the same by disengaging it from the flange 15.

It will be noted that various changes may be made in the details of construction without departing from the general spirit of my 20 invention.

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

1. In a metallic tie and rail-fastener, the 25 combination of a tie composed of an outer and inner channel-bar, flanges formed integral with said inner channel-bar extending through said outer channel-bar, corresponding flanges

formed on the outer channel-bar, and means whereby said outer and inner channel-bars 30 are secured together, substantially as described.

2. In a metallic tie and fastener, the combination of an outer and an inner channel-bar in the latter carrying fastening means 35 extending through said outer channel-bar, similar fastening means formed integral with said outer channel-bar and a suitable base forming a locking engagement with said channel-bars, substantially as described. 40

3. In a metallic tie and fastener, the combination of an outer channel-bar, of flanges forming a support, said channel-bar having slots formed therein, flanges formed integral with said channel-bar to engage the rail; an 45 inner channel-bar carrying flanges extending through said slots engaging the opposite side of the rail, a base-plate, and a key for locking said channel-bars together, substantially as described. 50

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

SAMUEL J. GIBBONEY.

Witnesses:

B. B. BELTZ,
I. J. MCWILLIAMS.