

No. 885,581.

PATENTED APR. 21, 1908.

H. B. BURKE.
METALLIC TIE.

APPLICATION FILED AUG. 1, 1907.

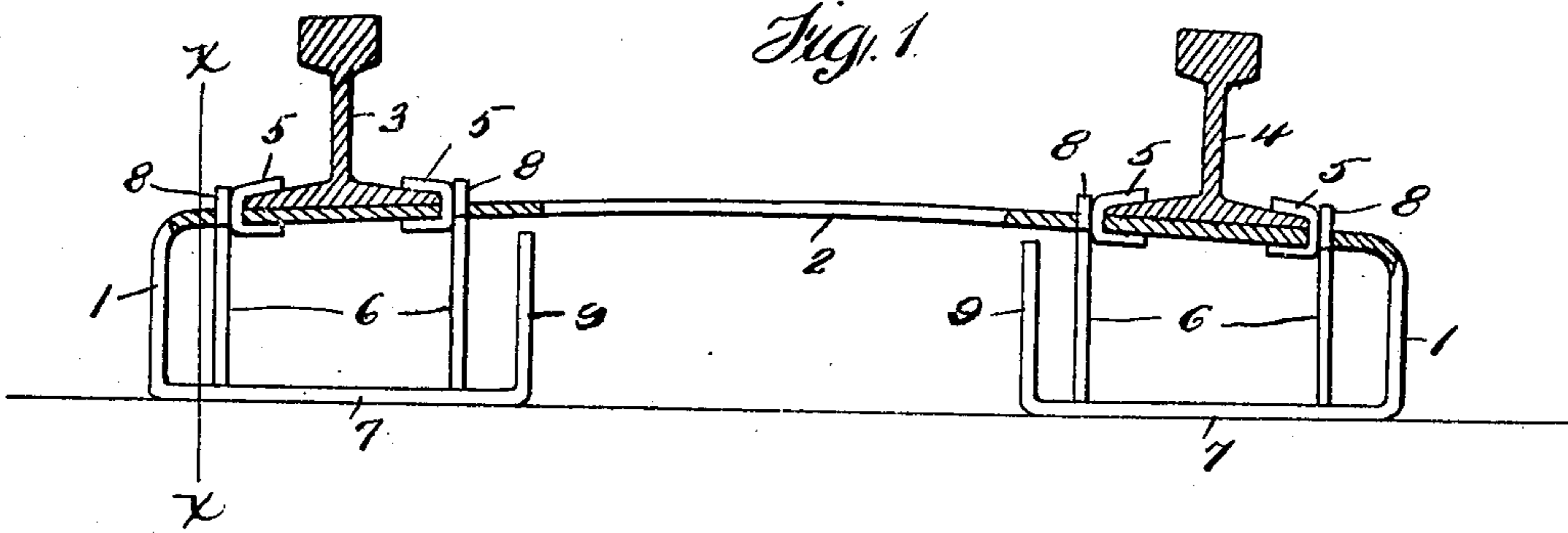


Fig. 2.

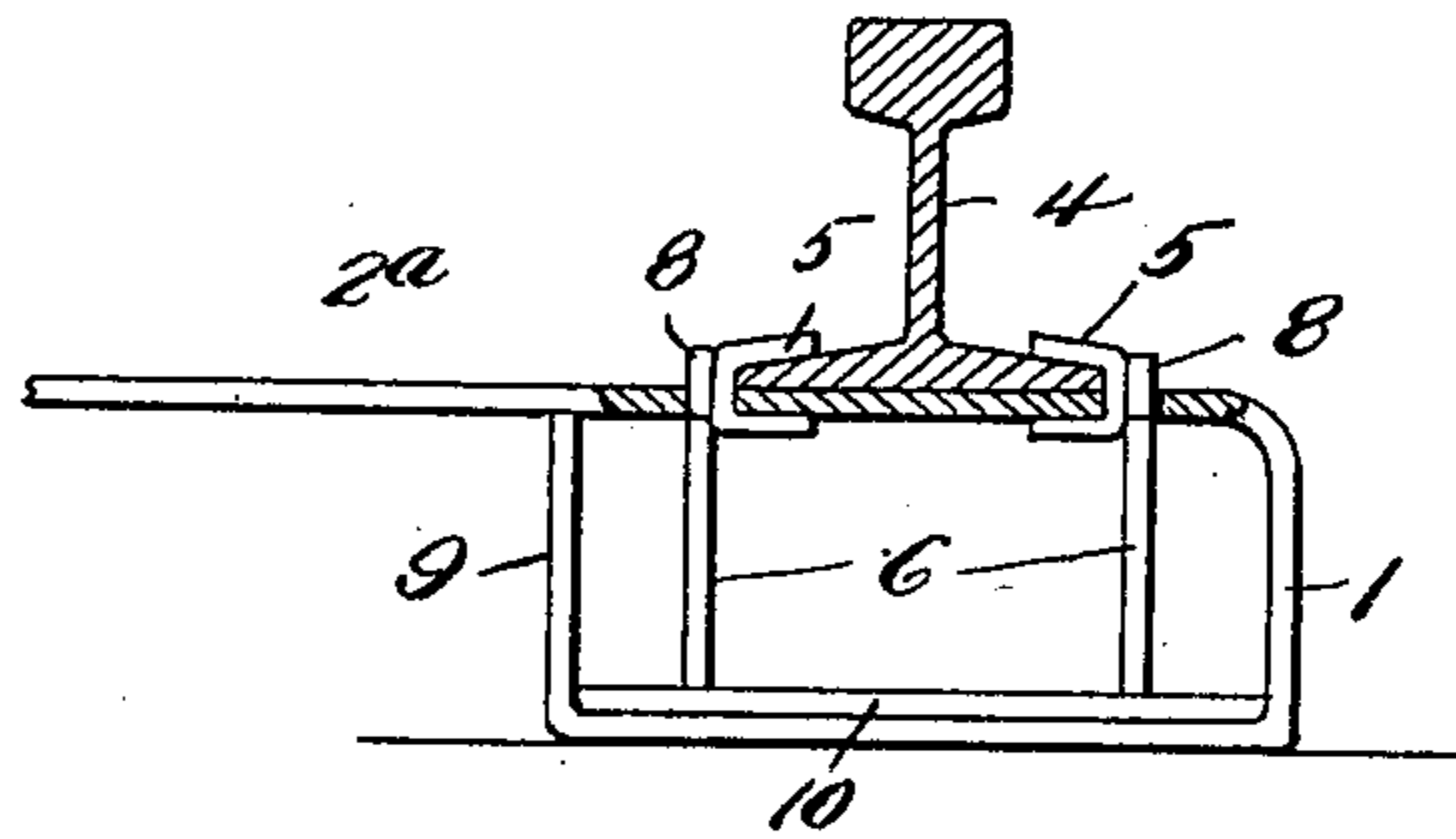
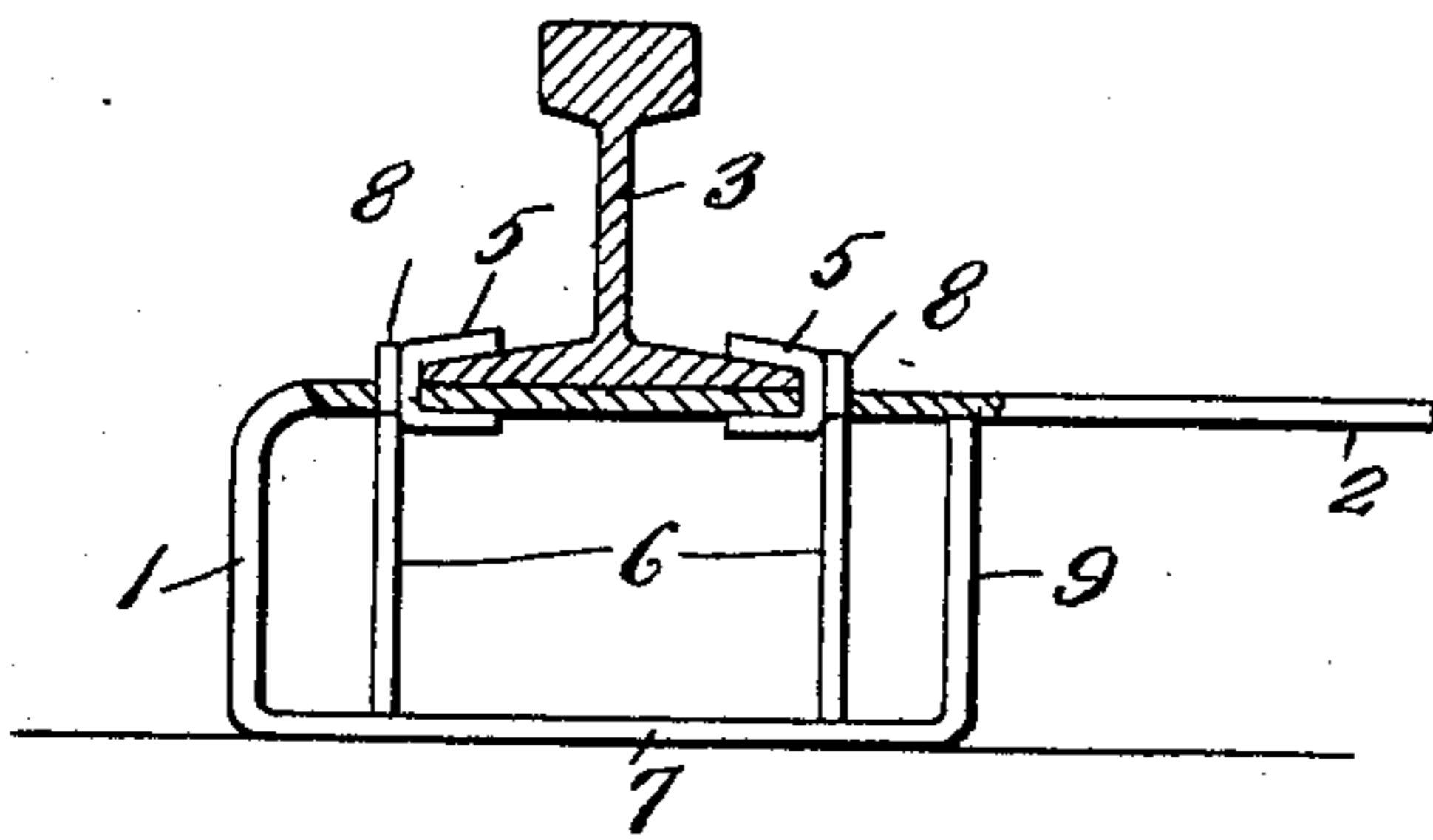


Fig. 3.

Fig. 4.

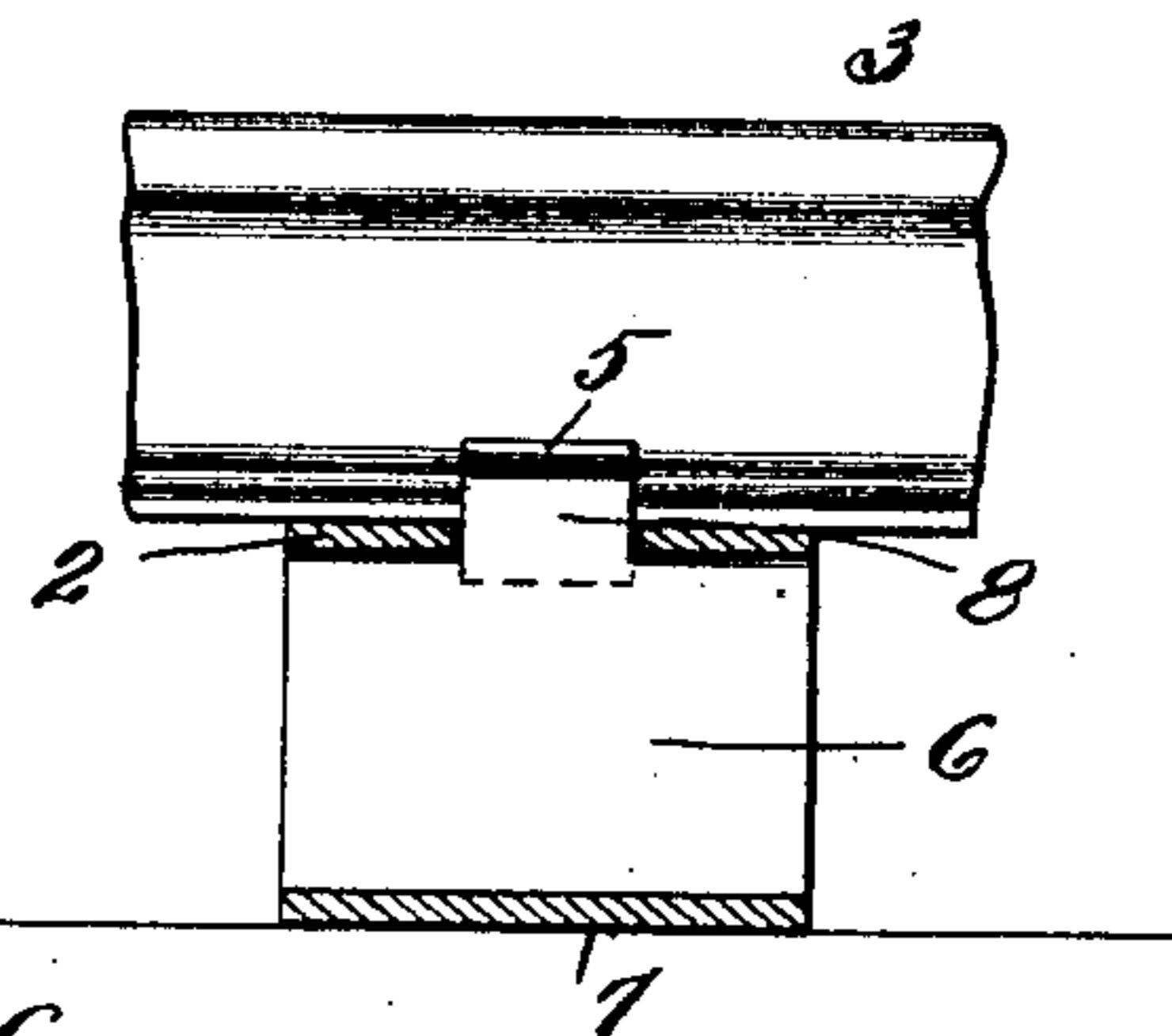
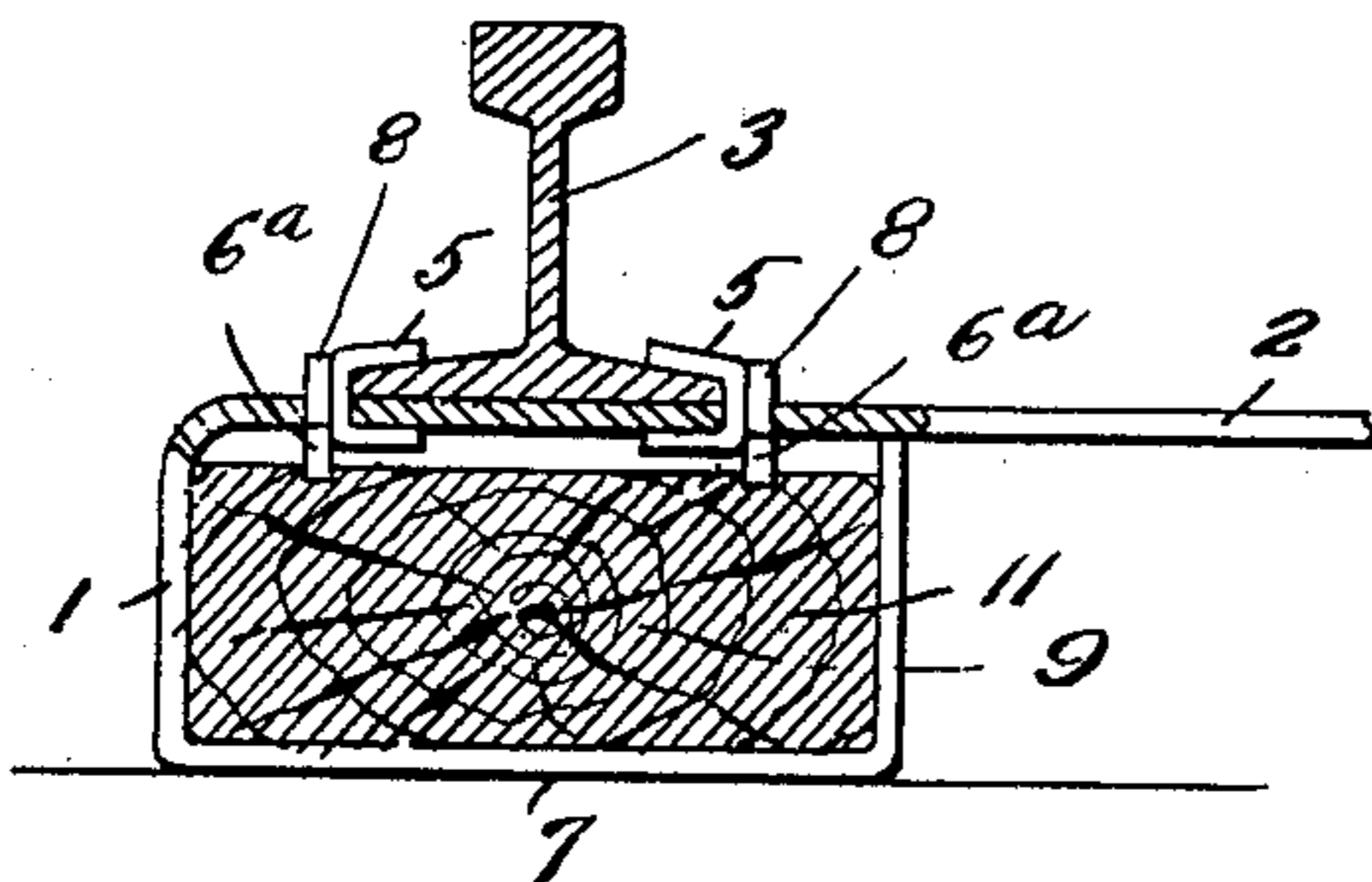
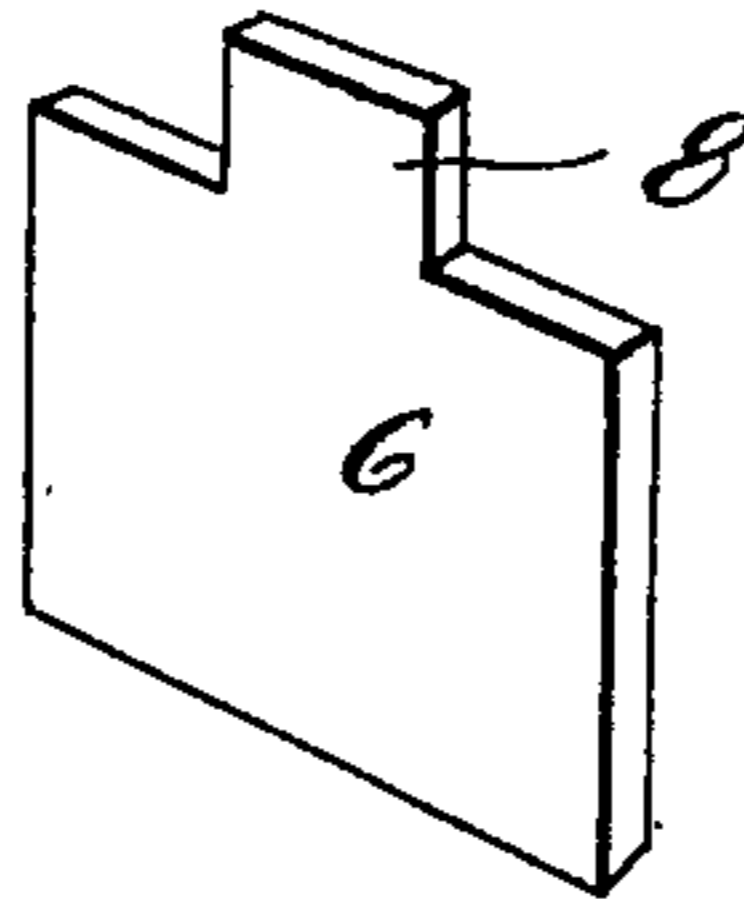
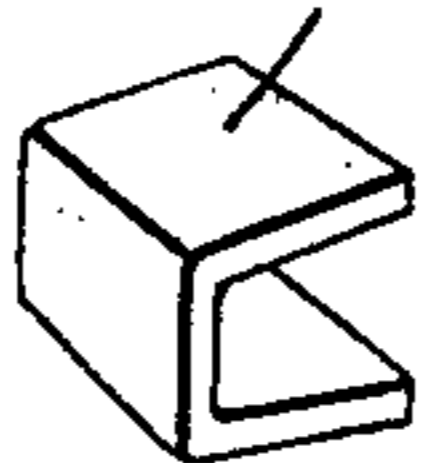


Fig. 5.

Fig. 6.



Witnesses

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METALLIC TIE.

No. 885,581.

Specification of Letters Patent.

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Application filed August 1, 1907. Serial No. 386,609.

To all whom it may concern:

Be it known that I, HENRY B. BURKE, a citizen of the United States of America, residing at Youngwood, in the county of Westmoreland and State of Pennsylvania, have invented certain new and useful Improvements in Metallic Ties, of which the following is a specification, reference being had therein to the accompanying drawing.

10 This invention relates to metallic railway ties and fasteners, and the primary object is to provide a metallic tie of novel construction formed from a single piece of metal.

15 A further object of the invention is, to provide simple but effective means for securing railway rails to the improved tie without the employment of nuts or bolts.

20 With these objects in view, the invention consists, in the improved construction of tie and rail fastening devices hereinafter fully described, and particularly pointed out in the appended claims.

25 In the drawing, Figure 1 is a view partly in section, and partly in elevation of a metallic tie and rail securing devices embodying the invention, Fig. 2 is a similar view of a slightly modified form of the invention, Fig. 3 is a sectional view of a further modification, Fig. 4 is a section on the line $x-x$ of Fig. 1, 30 Fig. 5 is a perspective view of one of the rail clips or clamps employed, and Fig. 6 is a similar view of one of the plates serving to brace the tie vertically.

35 Referring to Fig. 1 the numeral 1 designates a steel plate having its ends bent downward, then inward, and then upward to form a railway tie.

40 The body portion 2 of the tie is upwardly curved to impart resiliency thereto, and to reinforce the tie.

45 The numerals 3 and 4 designate rails supported upon the tie, and secured thereto by U-shaped clips 5, said clips extending through openings formed in the tie, and embracing the base portions of the rails. To secure the clips 5 in position, I employ brace plates 6 extending through slots formed in the tie, and resting upon the horizontal inwardly turned portions 7 thereof. Each of the brace 50 plates is provided with an upwardly-projecting lug 8, said lugs bearing against the clips 5 as shown and in connection with the weight of the rails maintaining the plates 6 in position.

55 When setting up a tie in accordance with Fig. 1, the plates 6 are inserted in the top and the lugs 8 through the openings.

In the modification shown in Fig. 2 the body portion 2^a is horizontal, and rests upon the vertical ends 9 of the tie. At the right of this figure is shown a supporting plate 10 upon which the brace plates 6 rest.

60 In the modification illustrated in Fig. 3, the space between the inwardly bent end of the tie and the body portion 2 is provided with a filling 11 of wood, and the brace plates 6^a are shortened to adapt them to rest upon the wood filling.

It will be apparent from the foregoing description, that the improvement provides a substantial tie, which may be readily made from a single piece of metal, and that the 70 securing of the rails thereto is accomplished without weakening the rails by the formation of bolt-holes in their web portions.

Having now described my invention, what I claim as new, is:— 75

1. A metallic tie comprising a rectangular plate having its end portions bent downwardly, inwardly and upwardly.

2. A metallic railway tie comprising a plate having its end portions bent downwardly, inwardly, and upwardly and a bracing means inclosed within the bent portions of the plate.

3. A metallic railway tie comprising a plate having its ends bent downwardly, inwardly, and upwardly, U-shaped rail fastening clips connected to the tie, and brace plates positioned within the tie and provided with lugs for maintaining said clips in position. 85 90

4. A metallic railway tie comprising a rectangular plate having its end portions bent downwardly, inwardly, and upwardly, means for connecting the rails to said plate, and bracing means positioned within the bent 95 portions of the plate.

5. A metallic railway tie comprising a plate having its end portions bent downwardly, inwardly and upwardly thereby forming a support for the body portion of the 100 plate, rail fastening clips carried by the plate, and bracing means positioned within the bent portions of the plate and engaging said fastening means for retaining them in position.

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

HENRY B. BURKE.

Witnesses:

B. F. MILLER,
H. A. ESTES.