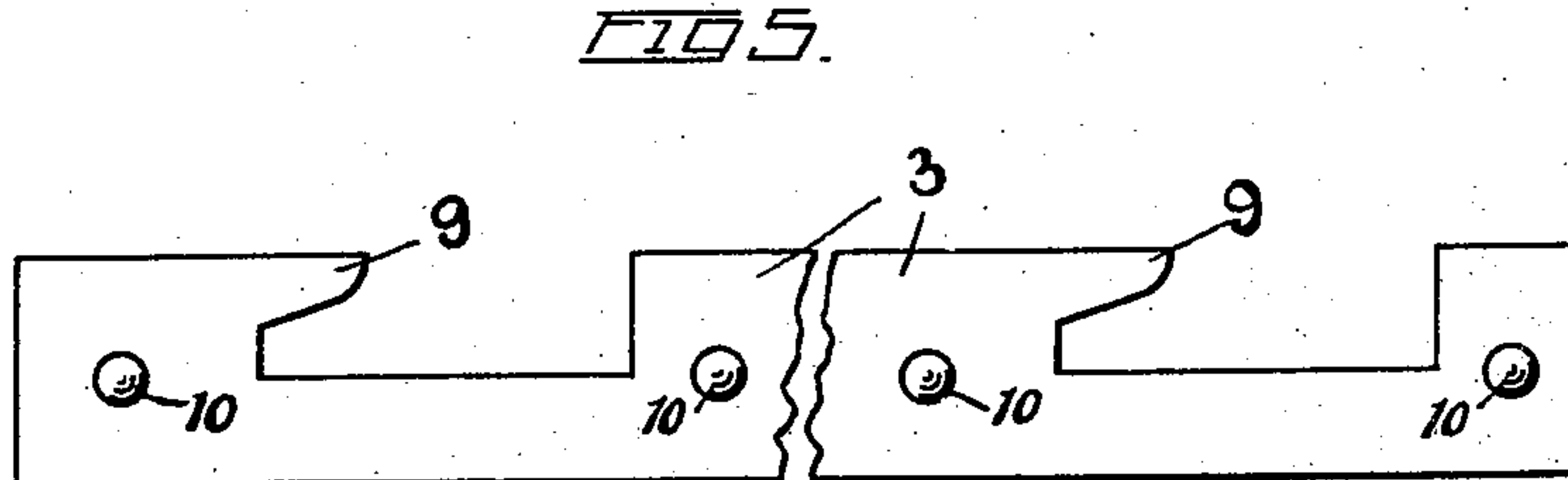
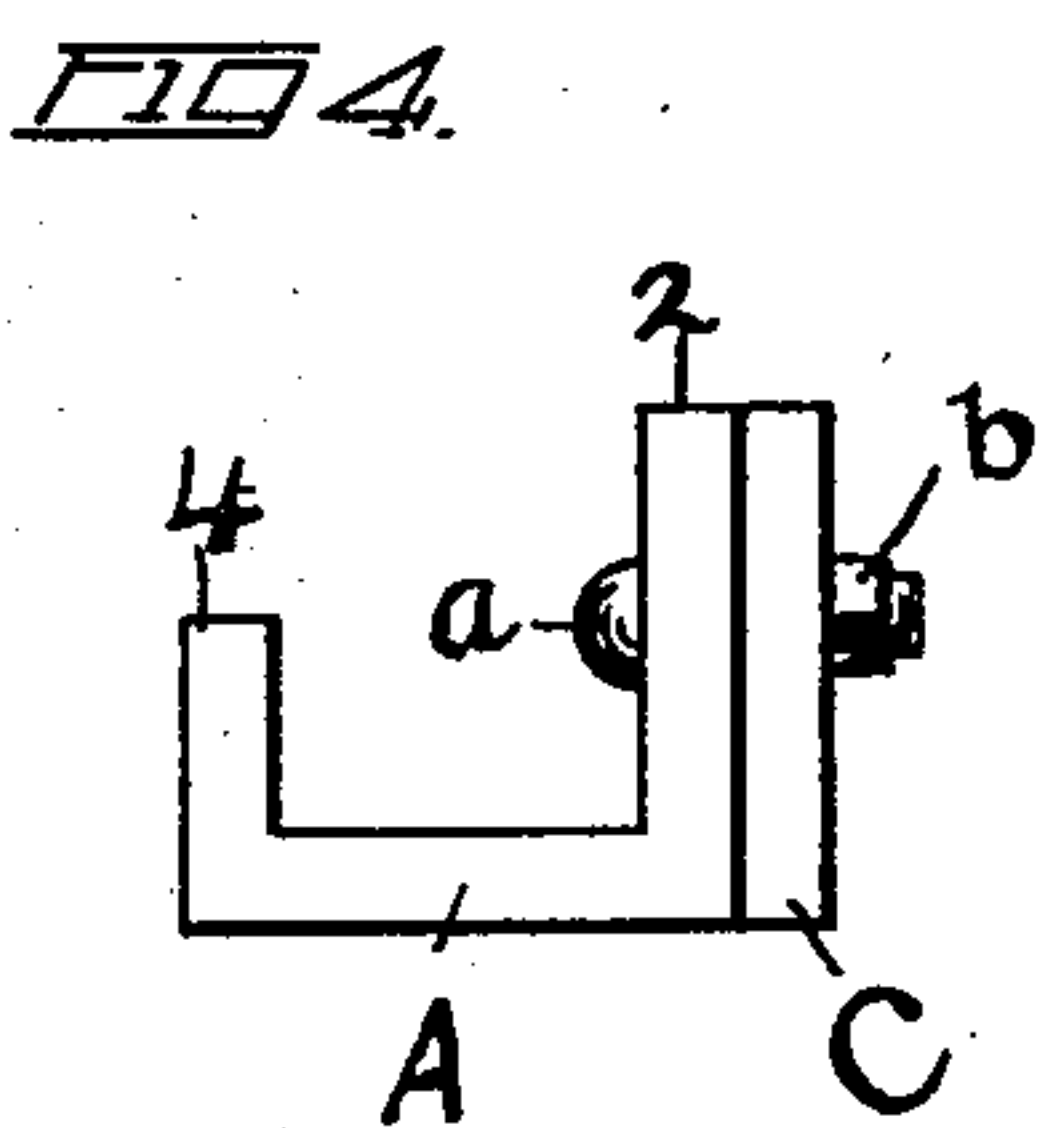
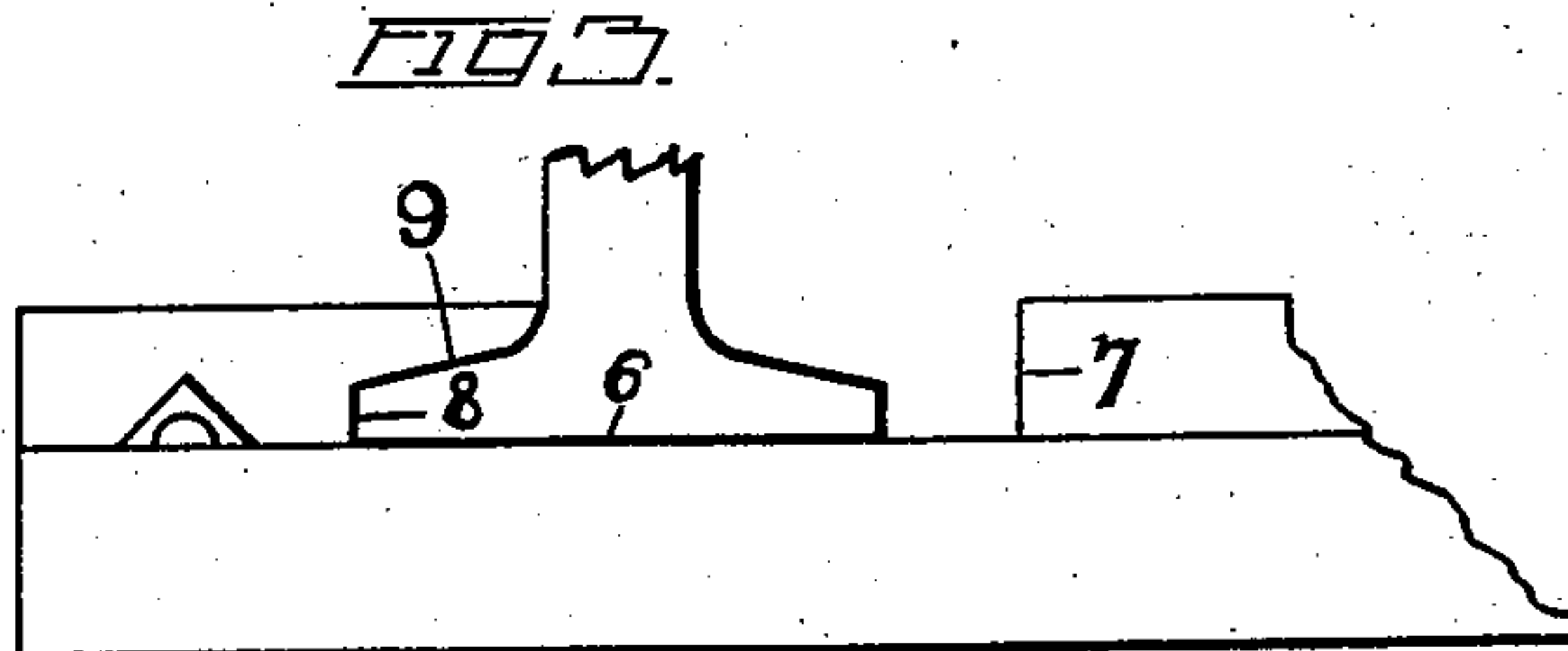
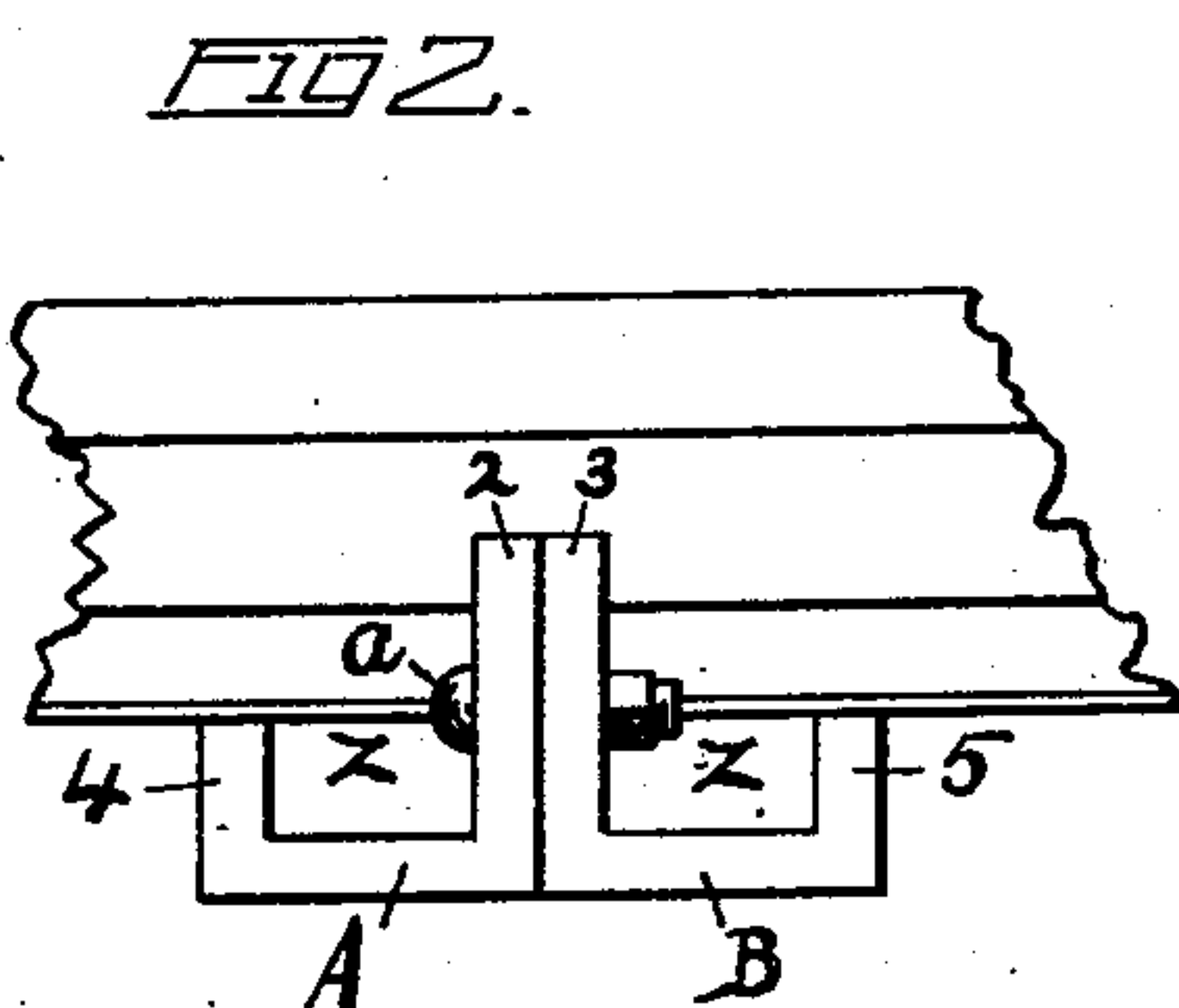
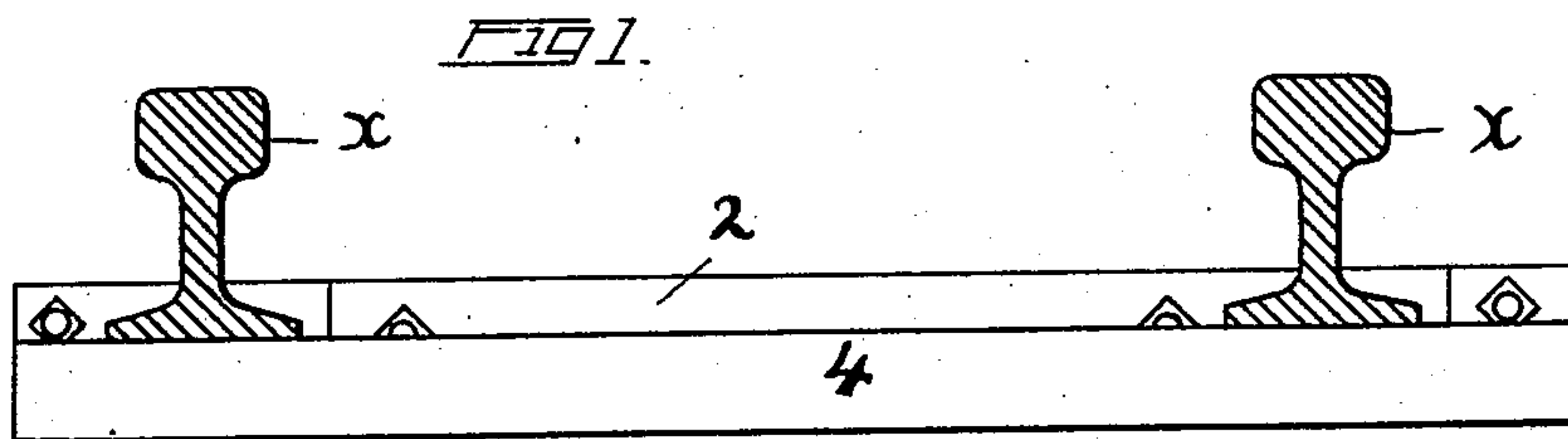


No. 724,412.

PATENTED MAR. 31, 1903.

F. L. TEEL.  
STEEL RAILROAD OR RAILWAY TIE.  
APPLICATION FILED FEB. 11, 1902.

NO MODEL.



Witnesses:

F. J. Larson.

L. M. Curtright.

Inventor:

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Attorney.

# UNITED STATES PATENT OFFICE.

FRANKLIN L. TEEL, OF LOGAN, IOWA.

## STEEL RAILROAD OR RAILWAY TIE.

SPECIFICATION forming part of Letters Patent No. 724,412, dated March 31, 1903.

Application filed February 11, 1902. Serial No. 93,649. (No model.)

*To all whom it may concern:*

Be it known that I, FRANKLIN L. TEEL, residing at Logan, in the county of Harrison and State of Iowa, have invented certain useful  
5 Improvements in Metallic Railroad-Ties; and I do hereby declare that the following is a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the  
10 same, reference being had to the accompanying drawings, which form a part of this specification.

This invention relates to an improvement in metallic railroad-ties.

15 The object of my invention is to provide a metallic tie so constructed that the tie will practically form an integral part of the rails, securely fixing the rails to the tie, so that it will be impossible for the rails to spread, while  
20 the rails further will be given a secure connection to the ties, preventing a pounding at the joints, as will be described more fully hereinafter.

In the accompanying drawings I have  
25 shown in Figure 1 two rails secured to a set of rail-ties constructed according to my invention. Fig. 2 shows an end view of a connected tie. Fig. 3 shows a side elevation disclosing the position of two connected metallic  
30 ties, while Figs. 4 and 5 show a modification of my invention.

My invention comprises a metallic tie embodying two similar counterpart members, as shown at A and B in the drawings. Extending  
35 from the bases A and B of each tie are the upwardly-extending members 2 and 3 and the two shorter members 4 and 5, as is clearly shown in Fig. 2. Both of these tie members are approximately L shape, as shown. Each  
40 upper member 2 and 3 is provided with an incision or seating, as is shown in Fig. 3, comprising the bottom 6 in alinement with the upper edge of the member 4, the straight vertical portion 7, the short vertical portion 8,  
45 and the portion 9, shaped so as to fit snugly and closely upon the bottom and against the web of the rail *x*, as is shown in Fig. 3. Each tie portion 2 and 3 is provided with two  
50 such seatings, so arranged that both the members 9 9 extend in like direction, as is shown

in Fig. 5, for instance. Now these tie members A and B are secured back to back, as is shown in Fig. 2, and each member is provided with an opening at a suitable point, as is shown at the points 10 10 in Fig. 5, so that  
55 when these members A and B are brought together with two rails between them a bolt *a*, provided with a nut *b*, will pass through the perforations 10 to securely and tightly  
60 unite these members A and B to form a solid tie within which is clamped and securely held the rail 1 near each end. In this connection the use of spikes usually employed is eliminated, and the rails and ties are so  
65 united as to form an integral part. The ties, however, may be instantly removed in removing the bolts *a* out of their seatings, when the tie members may be readily separated. In bringing the ends of the two connected  
70 rails together between the members 2 and 4 or 3 and 5, for instance, each rail end will be nicely supported in such a manner as to reduce the pounding at the joints to a minimum. As this rail is made so as to provide  
75 a trough *z*, as it were, below the rails, any water collecting between the rails will of course quickly wash out of these hollow L-shape ties.

I have shown and described so far a tie comprising two counterpart members A and  
80 B. One of these members may, however, be dispensed with, as is shown in Fig. 4, where the tie A is provided with a simple slot-bar C, constructed identical to the member 3, so that the rails are also securely locked to the  
85 tie member A.

These ties may be made in cast metal, such as steel or iron, or be made of sheet metal stamped and upset, as disclosed.

Where these ties are used in connection  
90 with elevated railroads, the bottoms thereof may of course be provided with suitable spike-openings, so that the ties may be secured to the stringers.

Having thus described my said invention,  
95 what I claim as new, and desire to secure by United States Letters Patent, is—

1. A metallic tie comprising an L-shape member, the higher vertical member of which is provided with two approximately L-shape  
100



incisions the bottom of which comes in alinement with the upper edge of the lower vertical member as set forth.

5 2. A tie comprising two counterpart, approximately L-shape members, each member being provided with two seatings approximately L-shaped, the bottom of each seating coming in alinement with the upper edge of each of the shorter vertical members, said

members being united by means of their lowest vertical positions, in such a manner as to clamp and hold to rails as set forth.

Signed in the presence of two witnesses.

FRANKLIN L. TEEL.

Witnesses:

C. R. BOLTER,  
MYRTIE GOFF.