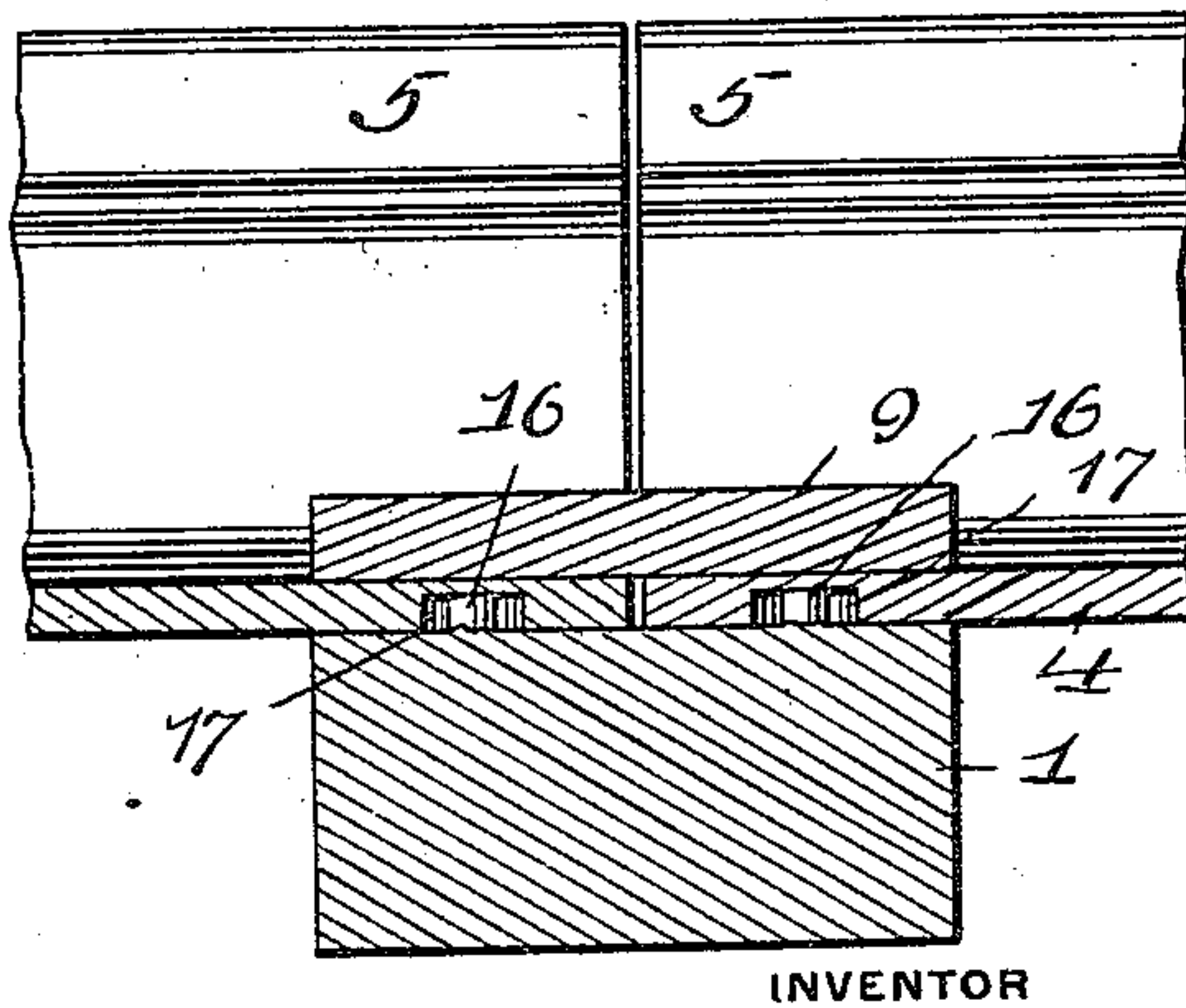
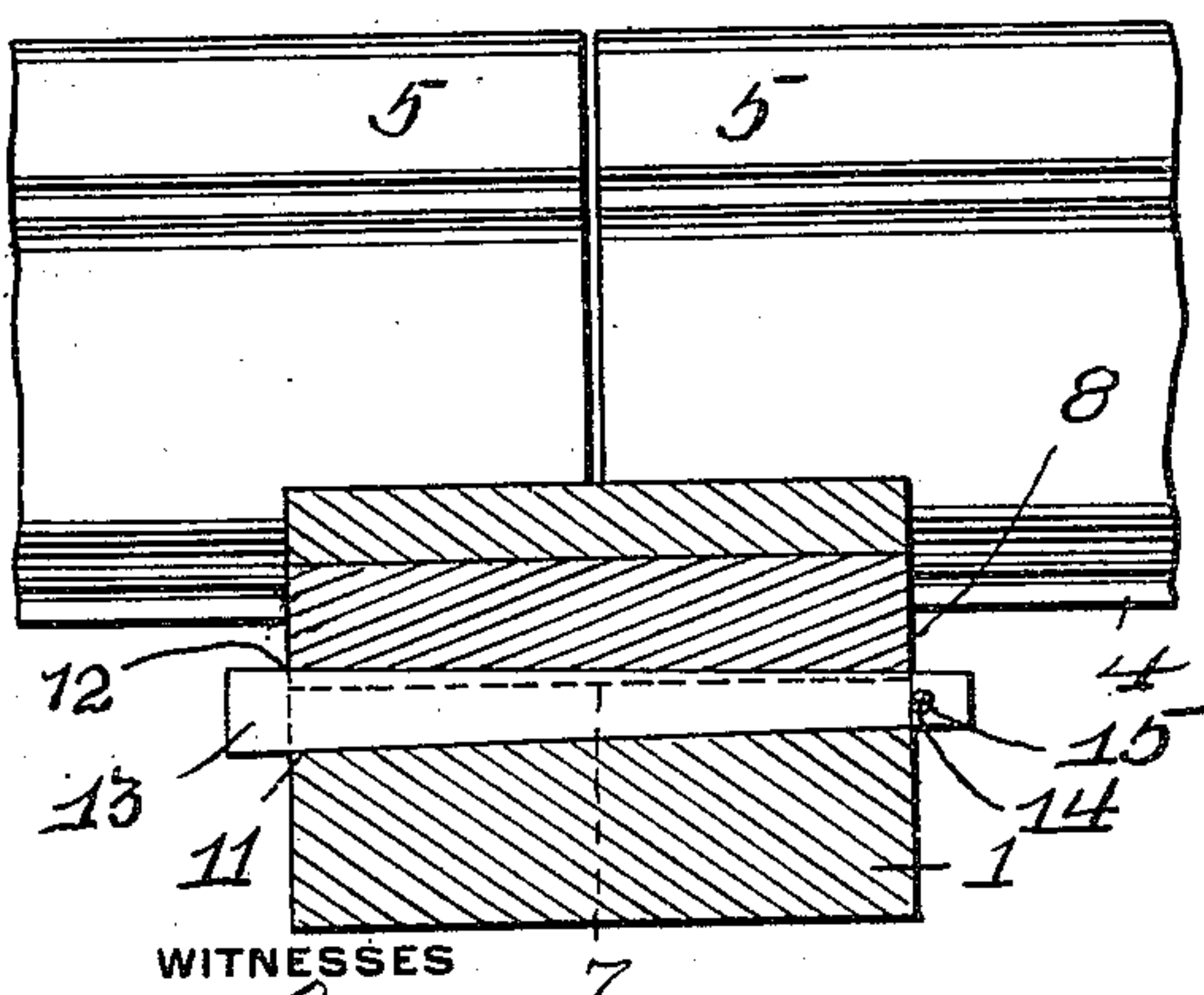
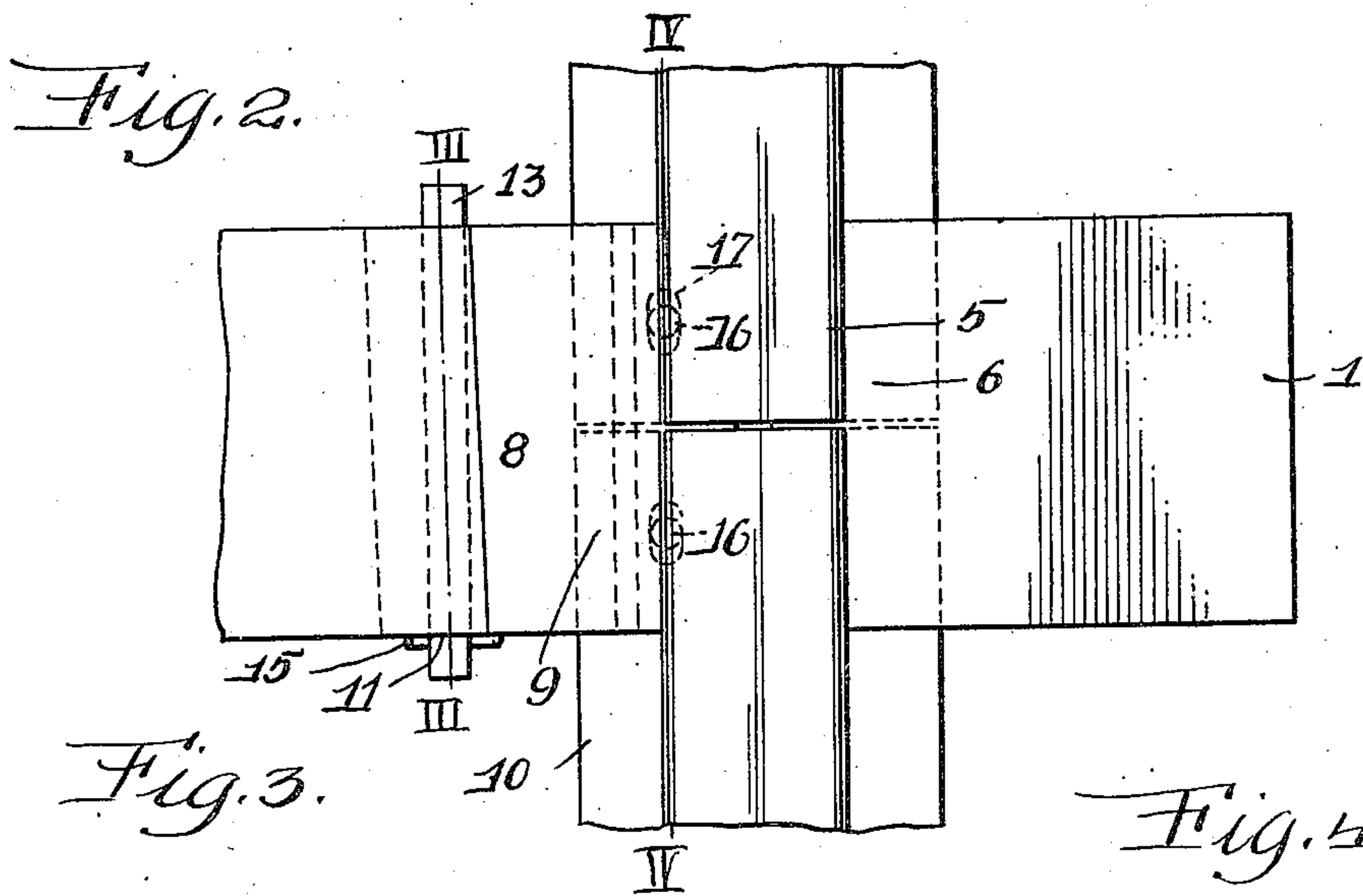
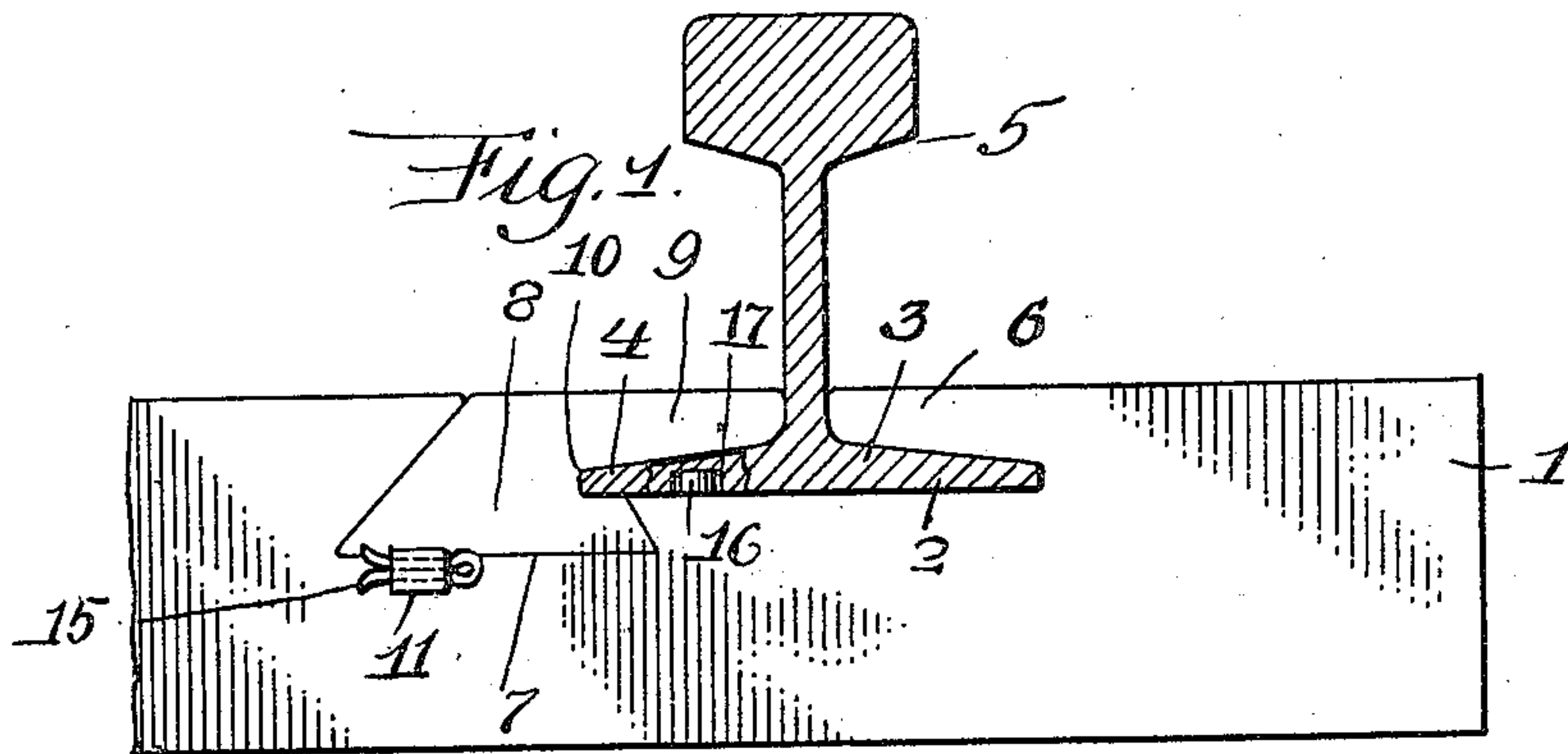


L. M. SIBLEY.
METALLIC TIE AND RAIL FASTENER.
APPLICATION FILED MAR. 20, 1911.

993,891.

Patented May 30, 1911.



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LUCIEN M. SIBLEY, OF FRANKLIN, PENNSYLVANIA.

METALLIC TIE AND RAIL-FASTENER.

993,891.

Specification of Letters Patent. Patented May 30, 1911.

Application filed March 20, 1911. Serial No. 615,636.

To all whom it may concern:

Be it known that I, LUCIEN M. SIBLEY, a citizen of the United States of America, residing at Franklin, in the county of Venango and State of Pennsylvania, have invented certain new and useful Improvements in Metallic Ties and Rail-Fasteners, of which the following is a specification, reference being had therein to the accompanying drawing.

This invention relates to metallic ties and rail fasteners, and the objects of my invention are to provide a strong and durable metallic tie for supporting the rails of a track, and to furnish the tie with a fastener that will positively retain a rail upon the tie.

Other objects of the invention are to obviate the necessity of using spikes for fastening rails to a tie, and to provide a metallic tie with simple and effective means for preventing longitudinal displacement of the rails placed upon the tie.

With the above and other objects in view the invention resides in the novel construction, combination and arrangement of parts to be hereinafter specifically described and then claimed.

Reference will now be had to the drawing, wherein:—

Figure 1 is a side elevation of a portion of the tie in accordance with this invention, Fig. 2 is a plan of the same, Fig. 3 is a cross sectional view of the tie taken on the line III—III of Fig. 2, and Fig. 4 is a similar view taken on the line IV—IV of Fig. 2.

A tie in accordance with this invention comprises an oblong body 1 rectangular in cross section and substantially the same shape and size as the present type of wooden tie. The body 1, adjacent to each end thereof, has the top surface cut away to provide a transverse seat 2 for the base flanges 3 and 4 of rails 5 having the ends thereof abutting upon the tie. The seat 2 extends into the tie whereby a portion of the tie will overhang the outer flanges 2 and constitute an outer overhanging member 6 adapted to prevent vertical displacement of the rails.

The tie 1 between the end thereof and the seat 2 is provided with a transverse tapering dove-tailed groove 7 of a greater depth than the seat 2, consequently the outer wall of the groove will be of a greater depth than the inner wall thereof.

Slidably mounted in the groove 7 is the dove-tailed tongue 8 of an outer fastener

member 9, said member having the upper surface thereof flush with the top of the tie. This member is adapted to extend over the outer base flanges 4 of the rails 5 and said member has the inner walls thereof, at the junction of the tongue 8, provided with a transverse groove 10 to receive the edges of the base flanges 4 that protrude over the seat 2.

The material at the bottom of the groove 7 is provided with a transverse key-way 11 and the bottom of the tongue 8 is provided with a transverse tapering key-way 12 adapted to confront the key-way 11, and these key-ways accommodate a tapering key 13 that has a small end thereof provided with an aperture 14 for a cotter pin 15. The key 13 is adapted to lock the member in engagement with the tie and this key can be easily removed and the member driven out of engagement with the tie when it is desired to remove the rails 5.

The seat 2 of the tie is provided with upwardly extending pins 16 adapted to engage in oblong recesses 17 provided therefor in the under side of the inner flanges 4 of the rails 5, these pins preventing longitudinal displacement of the rails and the oblong recesses 17 allowing for expansion and contraction of said rails.

What I claim is:—

1. In a metallic tie and rail fastener, the combination with rails, of a tie, said tie having the ends thereof provided with transverse seats adapted to support said rails, said seats extending into said tie and providing overhanging outer fastener members, said tie having dove-tailed transverse tapering grooves formed therein, tongues engaging in said grooves, inner fasteners carried by said tongues and adapted to engage the inner base flanges of said rails, said tie and said tongues having the lower confronting faces thereof provided with tapering key-ways, keys driven in said key-ways, and means to retain said keys within said key-ways.

2. In a metallic tie and rail fastener, the combination with rails, of a tie, said tie having the ends thereof provided with transverse seats adapted to support said rails, said seats extending into said tie and providing overhanging outer fastener members, said tie having dove-tailed transverse tapering grooves formed therein, tongues engaging in said grooves, inner fasteners

carried by said tongues and adapted to engage the inner base flanges of said rails, said tie and said tongues having the lower confronting faces thereof provided with tapering key-ways, keys driven in said key-ways, means to retain said keys within said key-ways, and means including upwardly extending pins carried by the seats of said tie and adapted to engage in the inner base

flanges of said rails to prevent longitudinal displacement of said rails upon said tie.

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

LUCIEN M. SIBLEY.

Witnesses:

JOS. W. WEINSTONE,
JOS. B. MANNING.

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