No. 854,492. PATENTED MAY 21, 1907.

J. T. HALLAM.

METALLIC TIE AND RAIL FASTENING.

APPLICATION FILED FEB. 23, 1907.

Fig. 1.

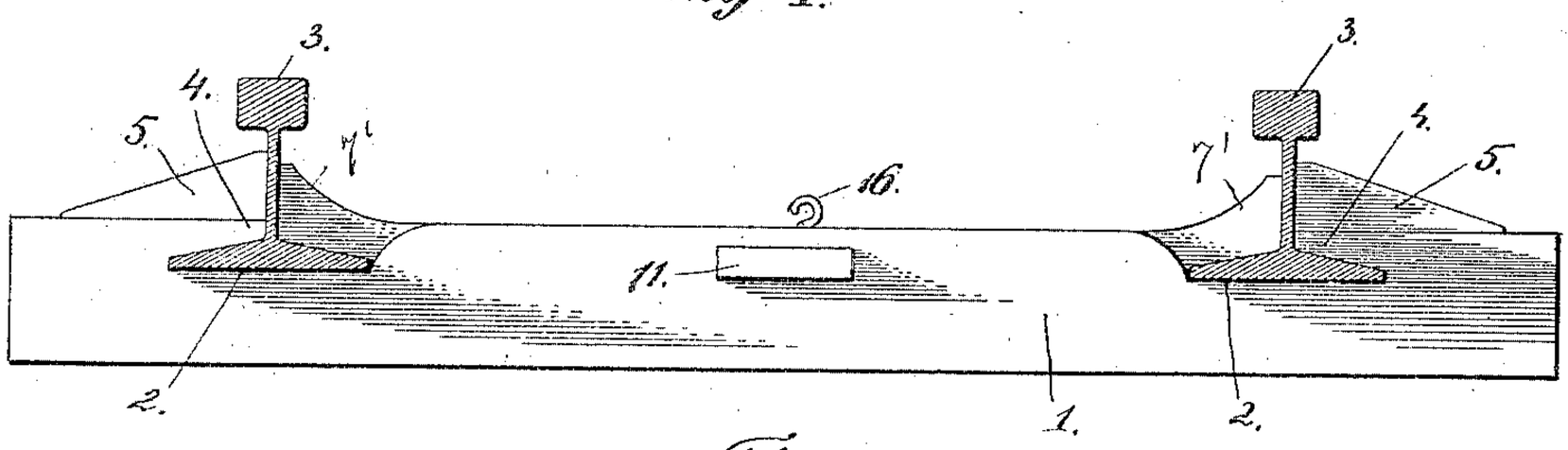


Fig. 2.

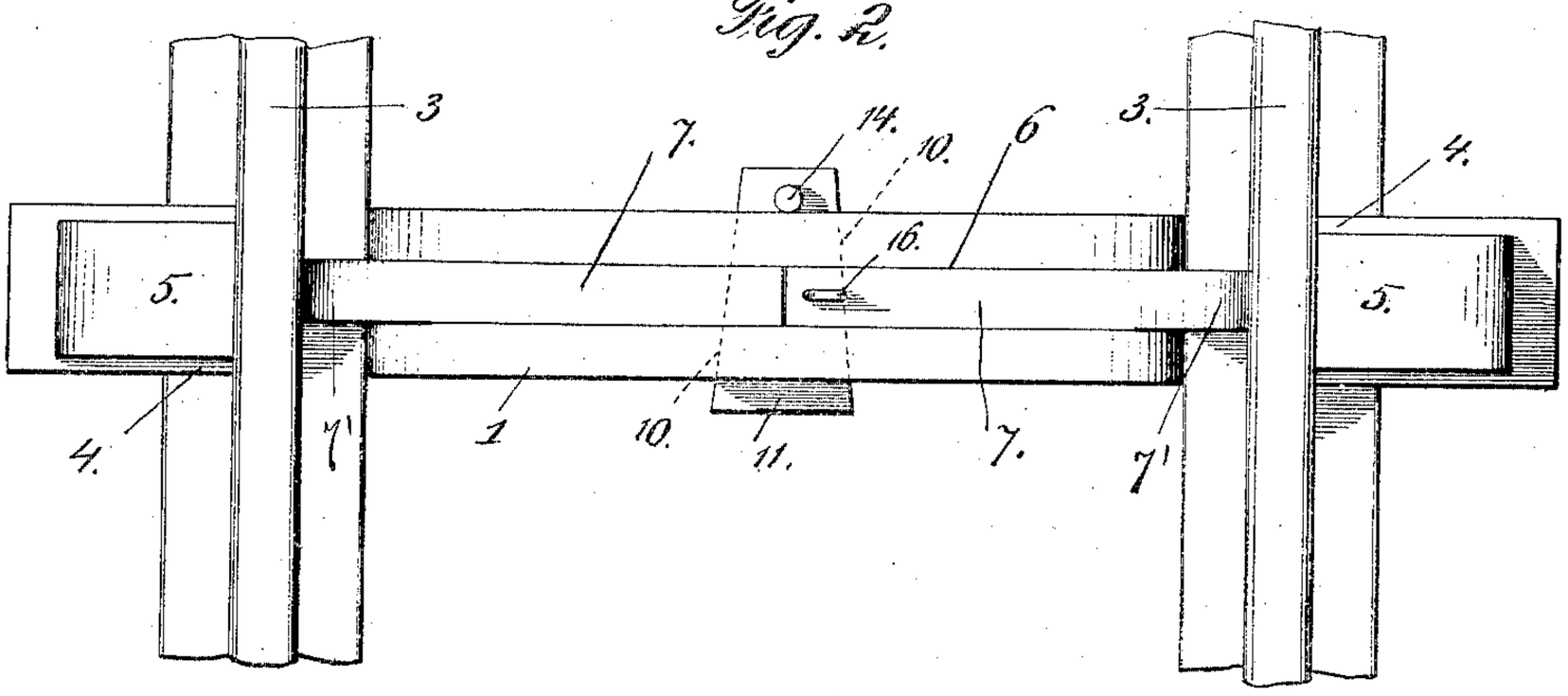


Fig. 3.

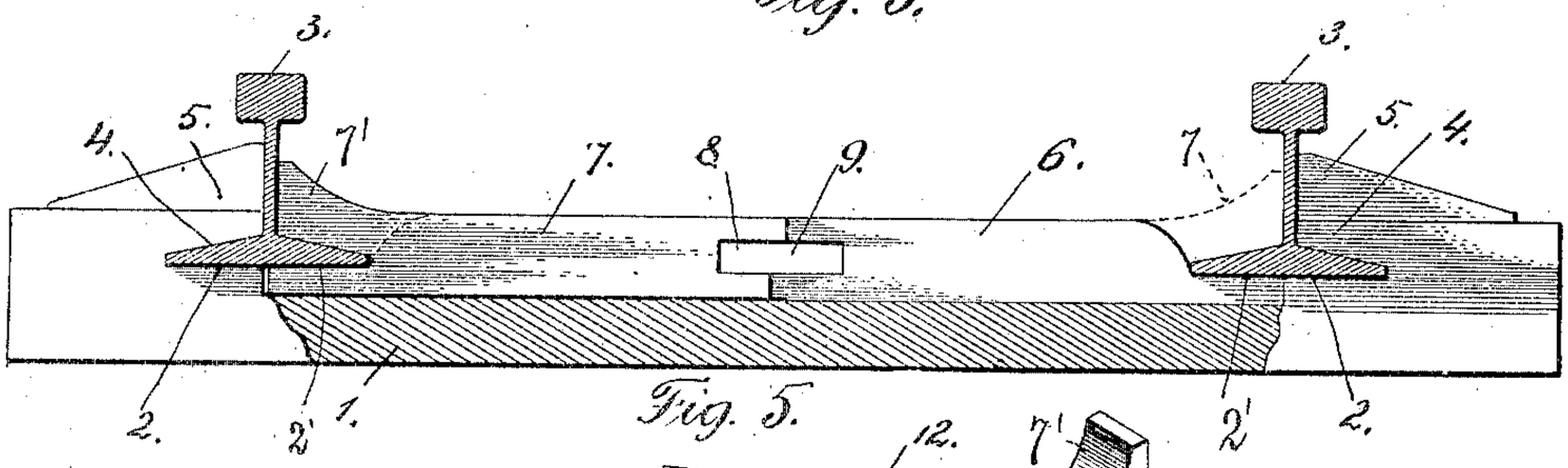
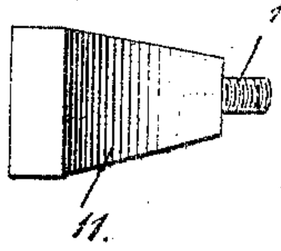


Fig. 5.

Fig. 6.



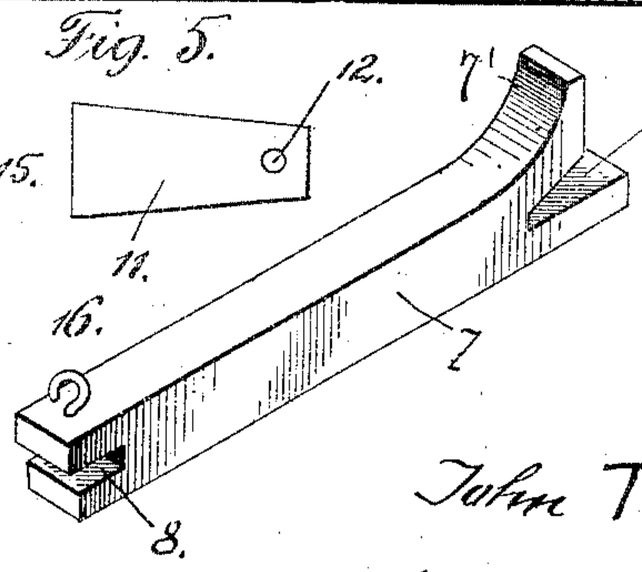


Fig. 4.

WITNESSES:
A. H. Rabsay
R. F. Butler

INVENTOR
John T. Hallam
BY H. C. Evert & Co
Attorneys

UNITED STATES PATENT OFFICE.

JOHN T. HALLAM, OF REICING, PENNSYLVANIA.

METALLIC TIE AND RAIL-FASTENING.

No. 854,492. Specification of Letters Patent. Patented May 21, 1907.

Application filed February 23, 1907. Serial No. 358,890.

To all whom it may concern:

Be it known that I, JOHN T. HALLAM, a citizen of the United States of America, residing at Reicing, in the county of Washington 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 invention has for its object to dispense with the ordinary wooden tie, fish bars or plates, and nuts commonly employed for providing a firm foundation and roadbed for a railway track.

Another object of this invention is to provide a metallic tie for supporting rails having a novel rail fastener requiring little, if any, skill to place in position.

A further object of this invention is to provide a rail fastener which will prevent lateral and vertical displacement of rails.

With the above and other objects in view, which will more readily appear as the invention is better understood, the same consists in the novel construction, combination and arrangement of parts to be hereinafter more fully described and then specifically pointed out in the appended claims, and referring to the drawing forming part of this specification, like numerals of reference designate corresponding parts throughout the several views, in which:—

Figure 1 is an elevation of a tie constructed in accordance with my invention, Fig. 2 is a plan of the same, Fig. 3 is a longitudinal sectional view of a portion of a tie illustrating the fasteners thereof in elevation, Fig. 4 is a perspective view of one of the rail fasteners, Fig. 5 is a perspective view of a wedge used in connection with the rail fastener, Fig. 6 is a perspective view of a modified form of wedge.

My improved metallic tie consists of an oblong body portion 1 which is cut away adjacent to its ends to provide rail seats 2 for rails 3, and flanges 4 adapted to overlie the outer base flanges of the rails 3. The ends of the tie are reinforced with ribs 5, said ribs bracing the web portions of the rails 3 upon the outer sides thereof.

The body portion of the tie is provided between the rail seats 2 with a longitudinally disposed groove 6 to accommodate two similar rail fasteners 7. These rails fasteners at their outer ends are notched to provide a rail seat 2′, and are also provided with an upwardly extending projection 7′ which is adapted to engage the inner face of the rail web. The base of the rails 3 therefor seats on the ledge or seat 2 provided therefor in the tie, and on the seat 2′ provided therefor in the rail fasteners. The inner ends of these fasteners abut each other, and have transverse grooves 8 forming, when the fasteners are in position, a slot 9 which alines with transverse openings 10 in the tie.

To retain the fasteners 7 within the longitudinally disposed groove 6, I employ a wedge 11 the smaller end of said wedge being provided with an opening 12 to receive a pin or key 14. In lieu of using the pin or key 14, I can provide the end of the wedge with a threaded shank 15 and upon said shank thread a nut which will serve as well to hold the wedge within the tie as the pin or key 4.

In order that the abutting rail fasteners can be easily and quickly removed from the grooves 6 I provide one of said fasteners with a catch 16, whereby the inner end of said fastener can be easily elevated.

From the novel construction of my improved metallic tie and rail fastener, it will be observed that it is impossible for lateral or vertical displacement of the rails 3, also it will be impossible for the rail fasteners to become disconnected from the rails or the tie, by vibrations of rolling stock moving upon the rails 3.

It is thought that the many advantages of my improved metallic tie and rail fastener will be apparent to those skilled in the art of railway construction, and I desire it to be understood that such variations in the structural details of the invention, as are permissible by the appended claims, may be resorted to without departing from the spirit and scope of the invention.

What I claim and desire to secure by Letters Patent, is:—

A metallic tie provided adjacent each end with a rail seat and having integral rail fasteners above said rail seats, said tie provided between the rail seats with a central longitudinal groove, in combination with rail fasteners seated in said groove, each of said rail fasteners formed at its outer end with a rail seat and an integral rail clamp, the inner ends of

said rail fasteners being in abutting engagement and being grooved, the said tie having transverse slots registering with the grooves in the abutting inner ends of said rail fasteners, a wedge passing through the slots in said tie and the grooves in said rail fasteners for securing the latter in the tie, means for securing said wedge in position, and a catch carried by one of said rail fasteners at its inner end.

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

JOHN T. HALLAM.

Witnesses:

MAX H. SROLOVITZ,

C. V. BROOKS.