

No. 865,125.

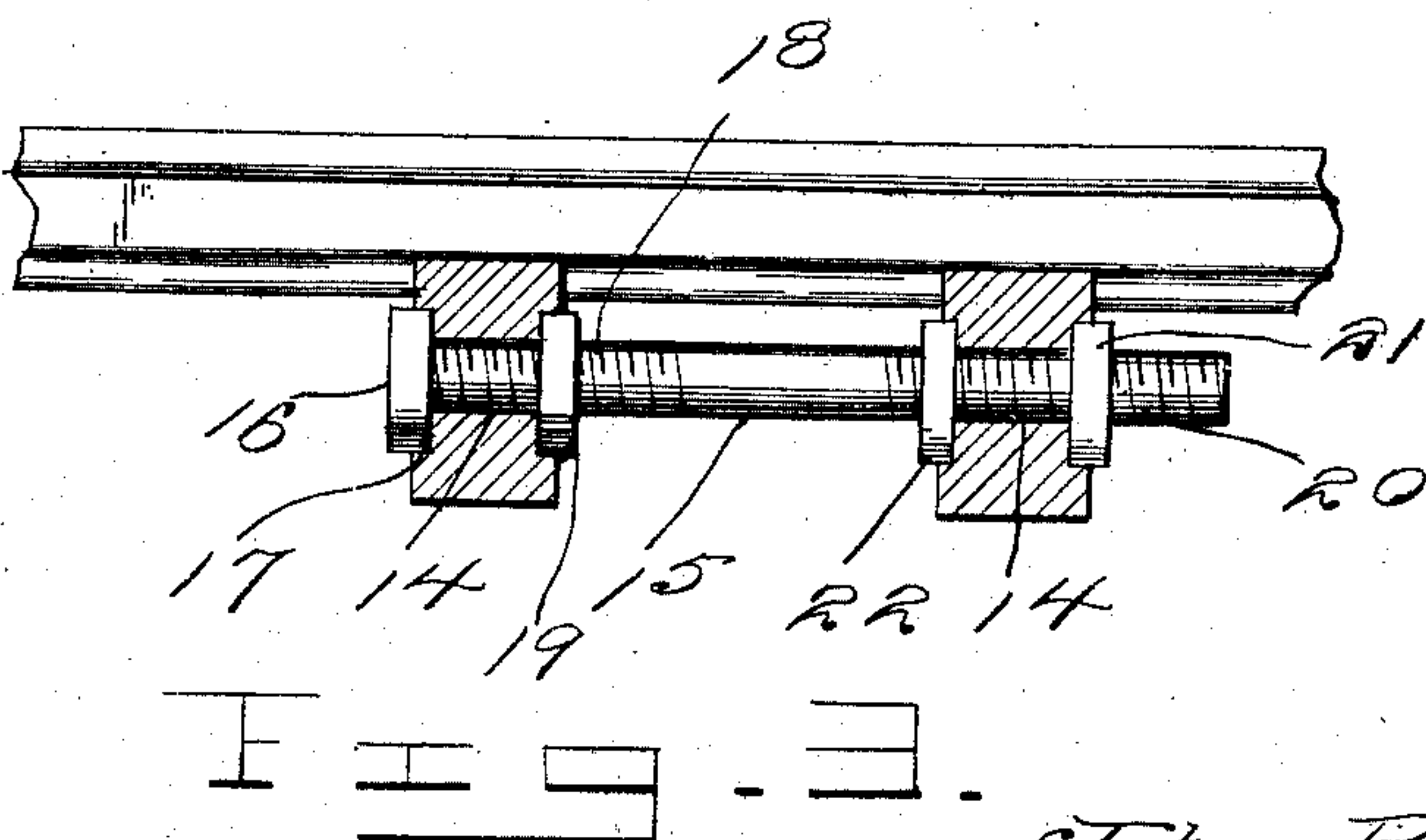
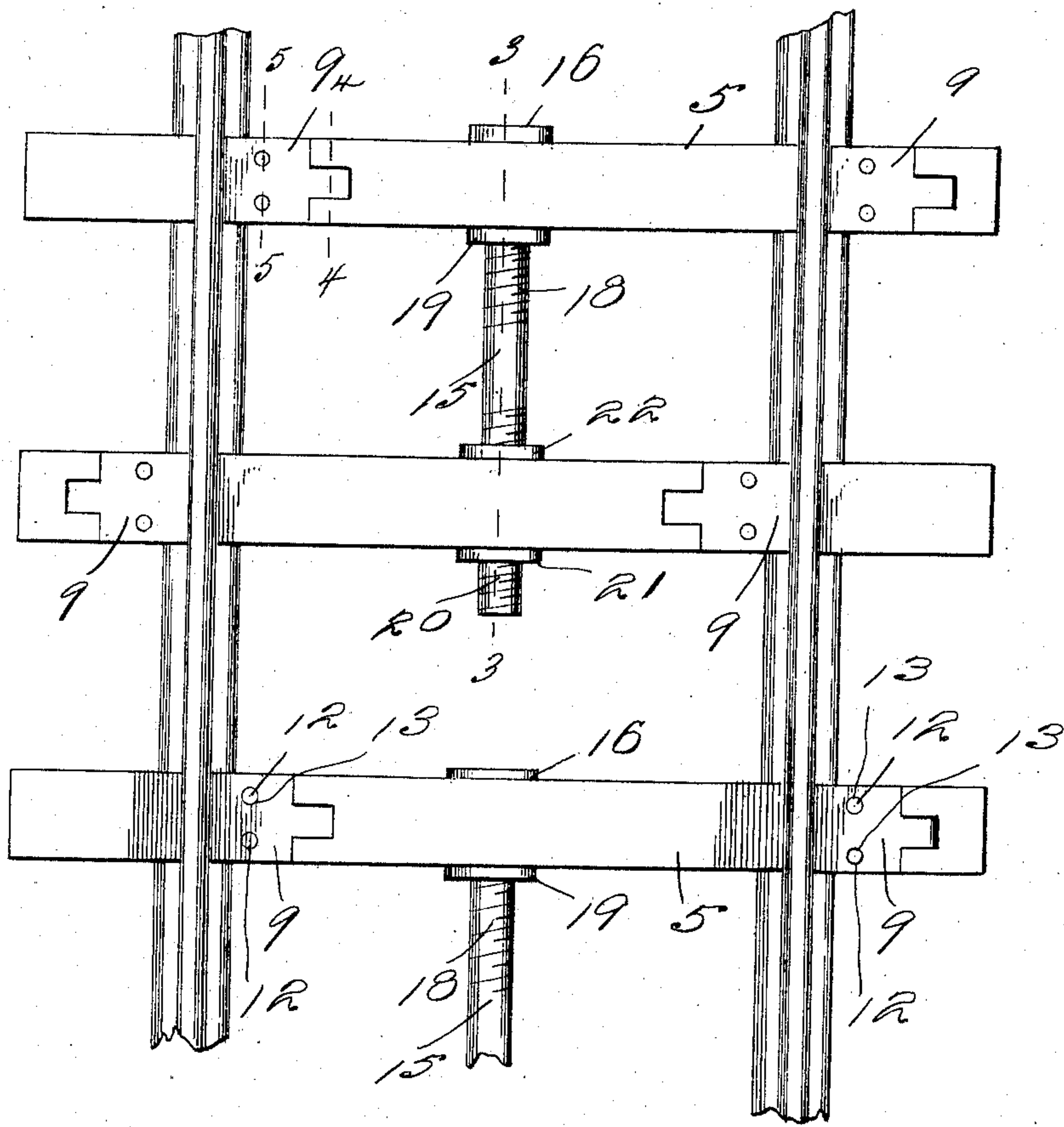
PATENTED SEPT. 3, 1907.

J. ROBERTS & J. E. BLISS.

RAILWAY RAIL TIE.

APPLICATION FILED JUNE 27, 1906.

2 SHEETS—SHEET 1.



Witnesses
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2 SHEETS—SHEET 2.

Fig. 2.

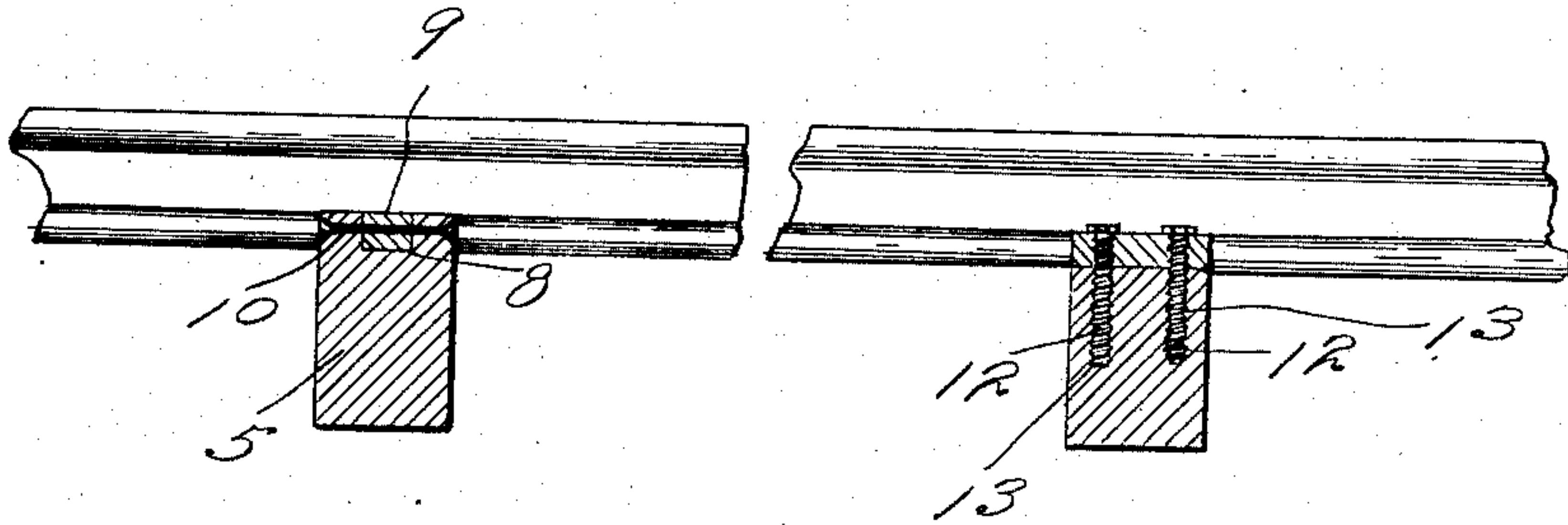
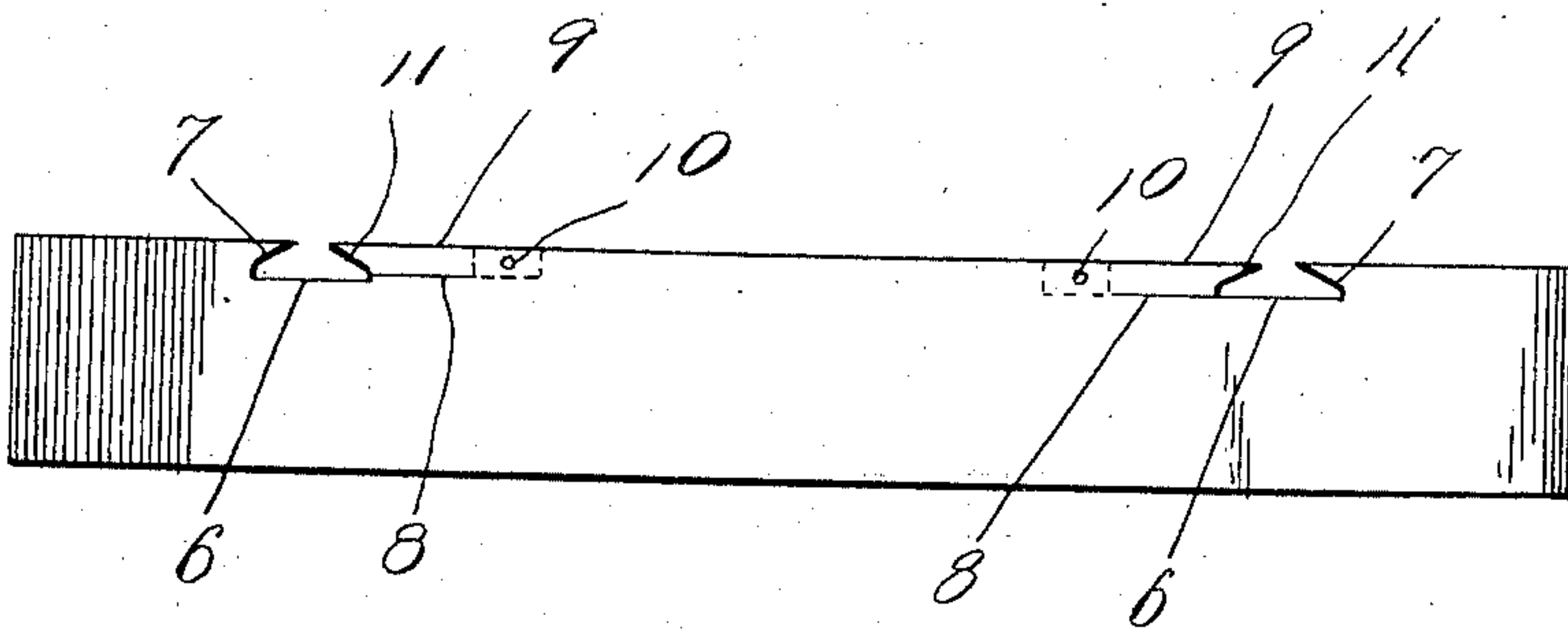


Fig. 4.

Fig. 5.

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UNITED STATES PATENT OFFICE.

JOHN ROBERTS AND JAMES E. BLISS, OF FAUST, NEW YORK.

RAILWAY-RAIL TIE.

No. 865,125.

Specification of Letters Patent.

Patented Sept. 3, 1907.

Application filed June 27, 1906. Serial No. 323,644.

To all whom it may concern:

Be it known that we, JOHN ROBERTS and JAMES E. BLISS, citizens of the United States, residing at Faust, in the county of Franklin, State of New York, have invented certain new and useful Improvements in Railway-Rail Ties; and we do hereby declare the following to be 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 same.

10 This invention relates to railroad ties and more particularly to that class which are adapted to hold the rails thereto without the use of spikes.

The invention resides in the provision of a tie having rail receiving recesses at each end and rail engaging plates hinged to the tie to hold the rails in the recesses, there being bolts engaged through the said plates and in threaded bores in the said ties for the purpose of holding the plates in position.

25 In the accompanying drawing:—Figure 1 is a plan view of a section of track showing our ties in use. Fig. 2 is a side elevation of one of the ties. Fig. 3 is a vertical sectional view on the line 3—3 of Fig. 1 through two of the ties. Fig. 4 is a detail vertical sectional view on the line 4—4 of Fig. 1. Fig. 5 is a detail view partly in section.

Referring more specifically to the drawings, the numeral 5 denotes a metallic tie preferably of solid construction, and 6 rail receiving recesses which are formed at the ends of each tie. One of the corresponding walls of each recess is beveled as at 7 to conform to the contour of the base of the rail which it engages and the upper face of each tie is recessed as at 8 at the opposite side of the recesses 6 therein to the beveled wall above referred to, for the reception of a rail engaging plate 9 which is hinged as at 10 to the ties and which has its under face at its free end beveled as at 11 to correspond to the contour of the side of the base of the rail engaged

by the plate 9. In order to hold the plates in engagement with the rails as above described, threaded bolts 12 are engaged through the said plates and into threaded bores 13 formed in the said ties.

To prevent strain being exerted upon the plates 9, the said plates of each tie are arranged upon corresponding sides of the recesses therein and have their face ends directed toward the same end of the ties; and in constructing a section of track the ties are alternately reversed as shown in Fig. 1.

In order that the tie forming the track section may be held in proper spaced relation, each pair of ties are provided intermediate their ends with alining openings 14 through which is engaged a bolt rod 15 at one end of which is formed a squared head 16 which seats in a correspondingly shaped recess 17 in one tie. The rod is threaded as at 18 adjacent its head 16 and engaged with the said threaded portion is a nut 19 which bears against the side of the tie opposite that in which the recess 17 is formed. At its opposite end the rod is also threaded as at 20 for the engagement therewith of nuts 21 & 22 which bear against opposite sides of the next adjacent tie, the nut 22 being seated in the recess 17 formed in this last named tie.

What is claimed is:—

A tie having rail receiving recesses formed therein, and having minor recesses, communicating with the rail receiving recesses, rail-engaging plates having stem portions hinged in the last mentioned recesses and having their body portions filling that portion of the rail receiving recesses not occupied by the rail flanges, and means for positively holding the plates in engagement with the rails.

In testimony whereof, we affix our signatures, in presence of two witnesses.

JOHN ROBERTS.
JAMES E. BLISS.

Witnesses:

JERRY H. SULLIVAN,
FRANK O. SAWYER.