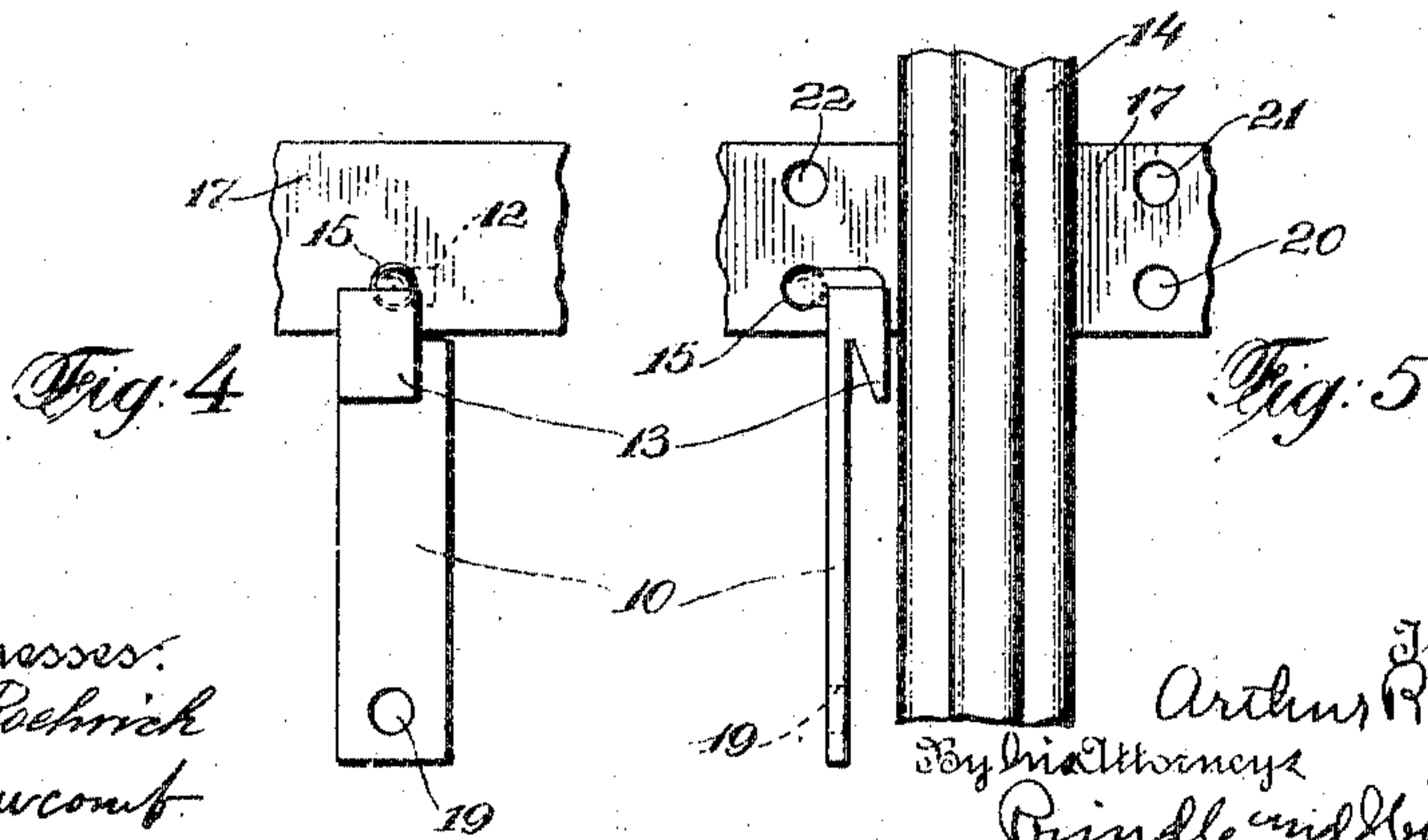
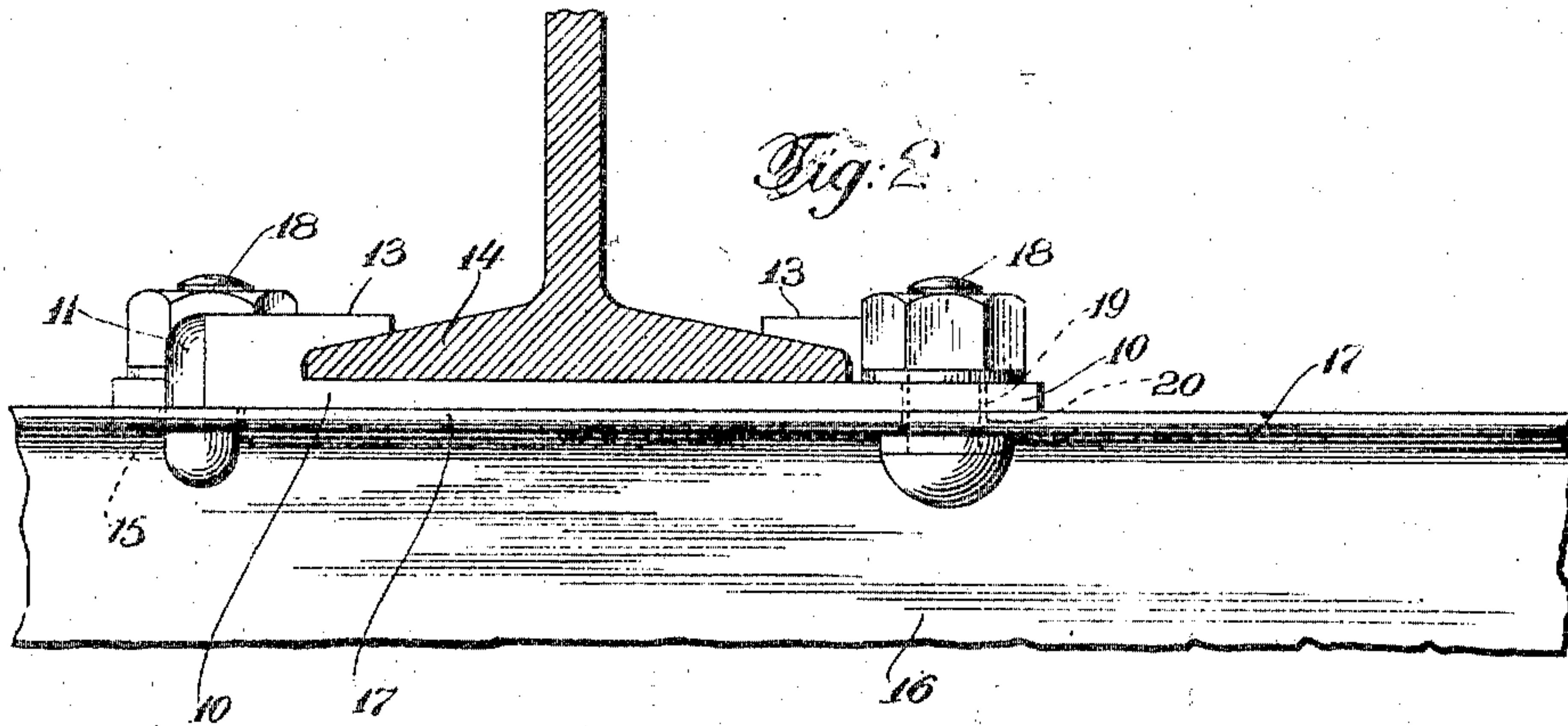
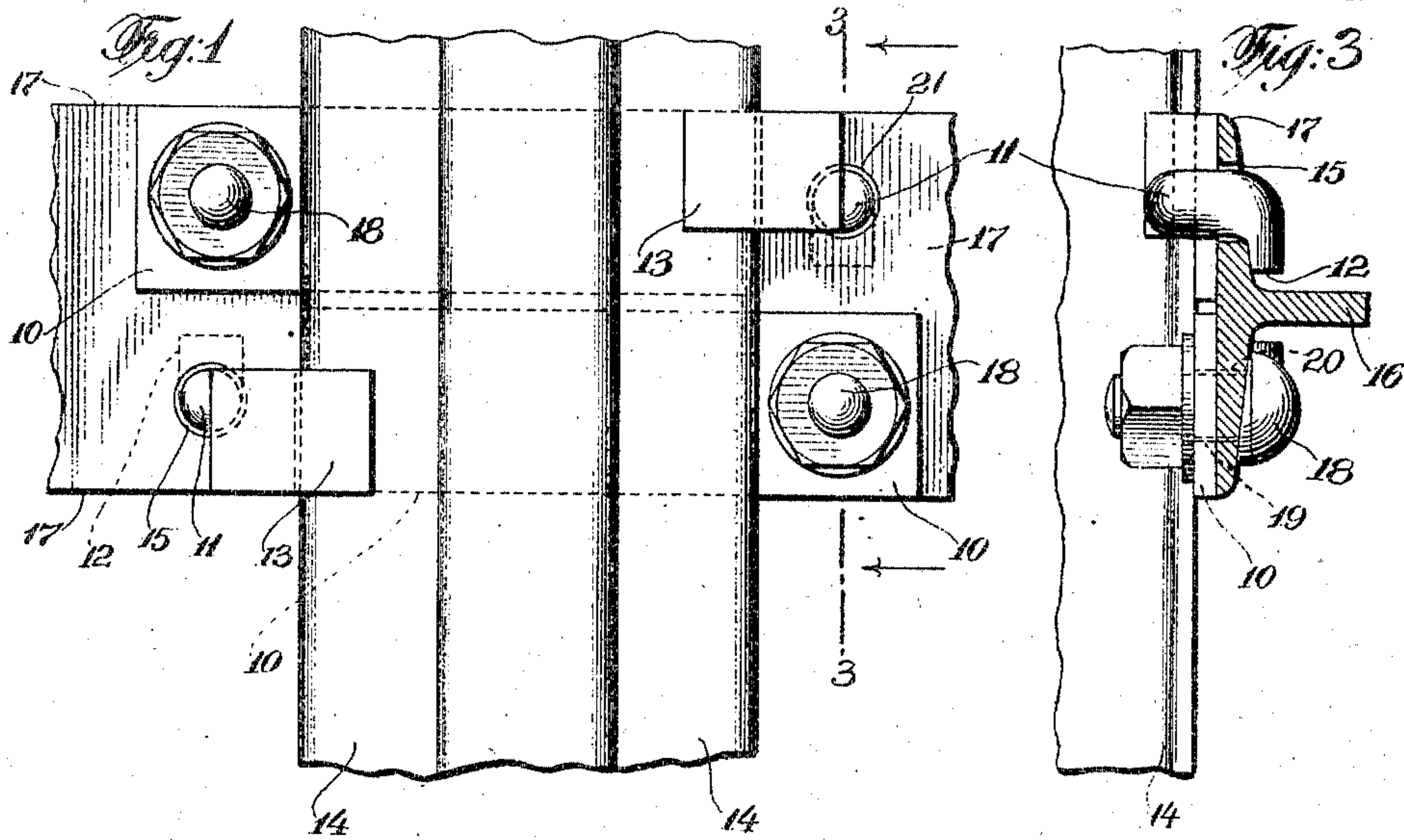


A. R. YOUNG.
FASTENING FOR RAILWAY TIES.
APPLICATION FILED JUNE 28, 1907.

967,596.

Patented Aug. 16, 1910.

2 SHEETS—SHEET 1.



Witnesses:
F. N. Roehrich
A. Newcomb

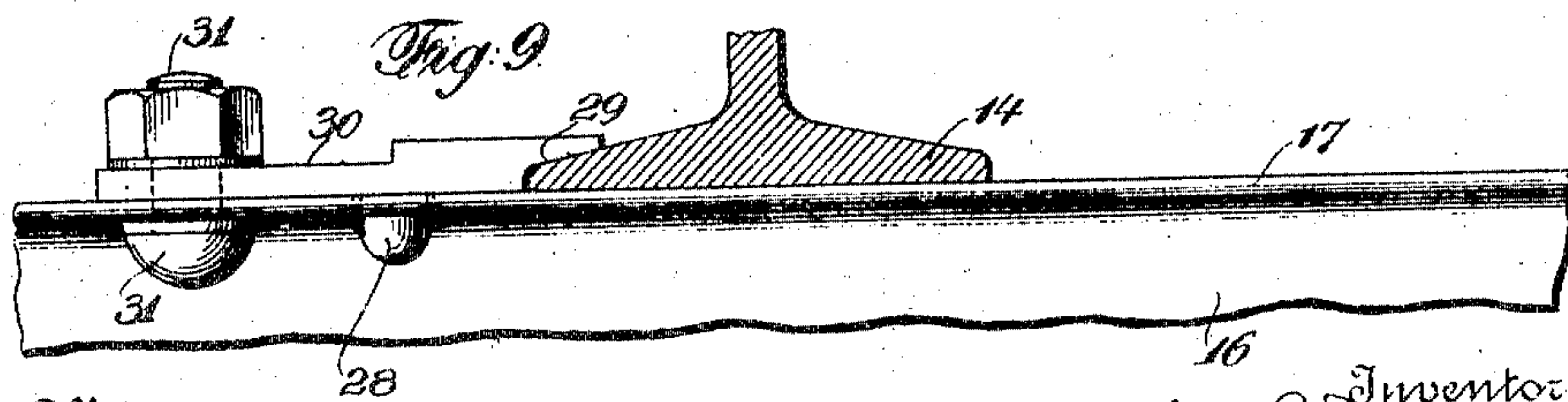
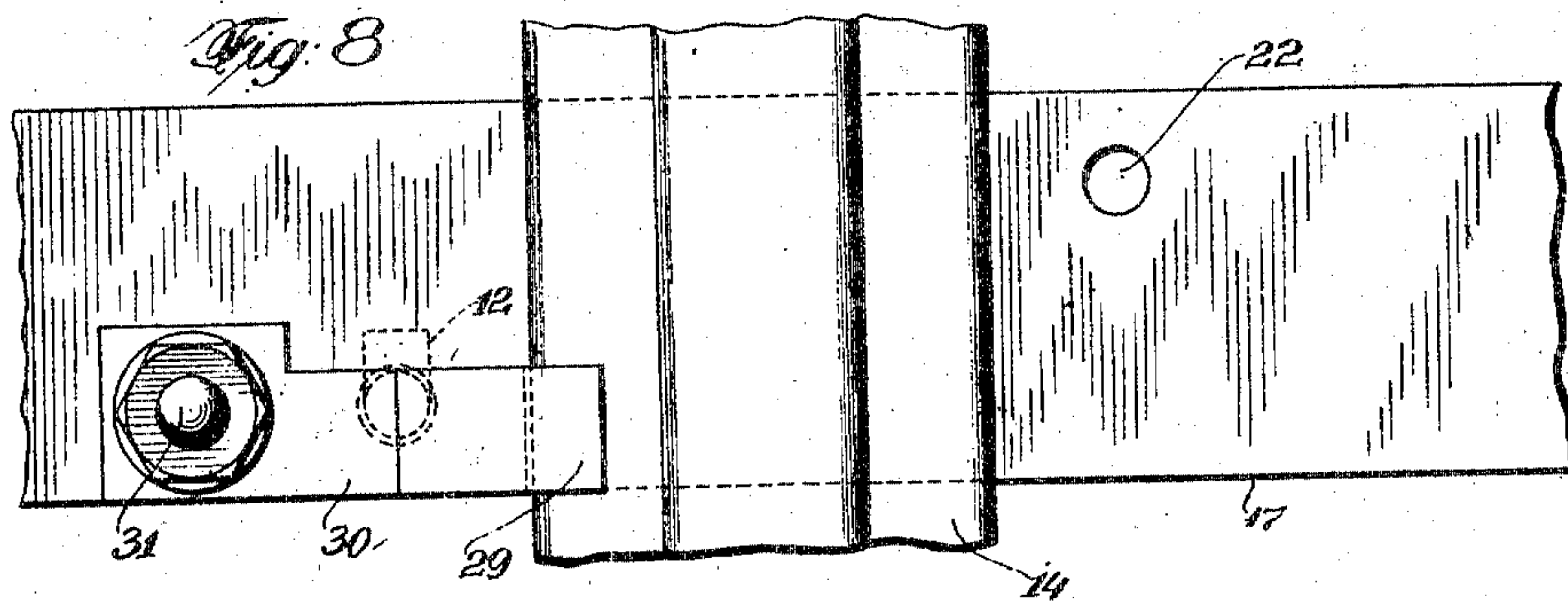
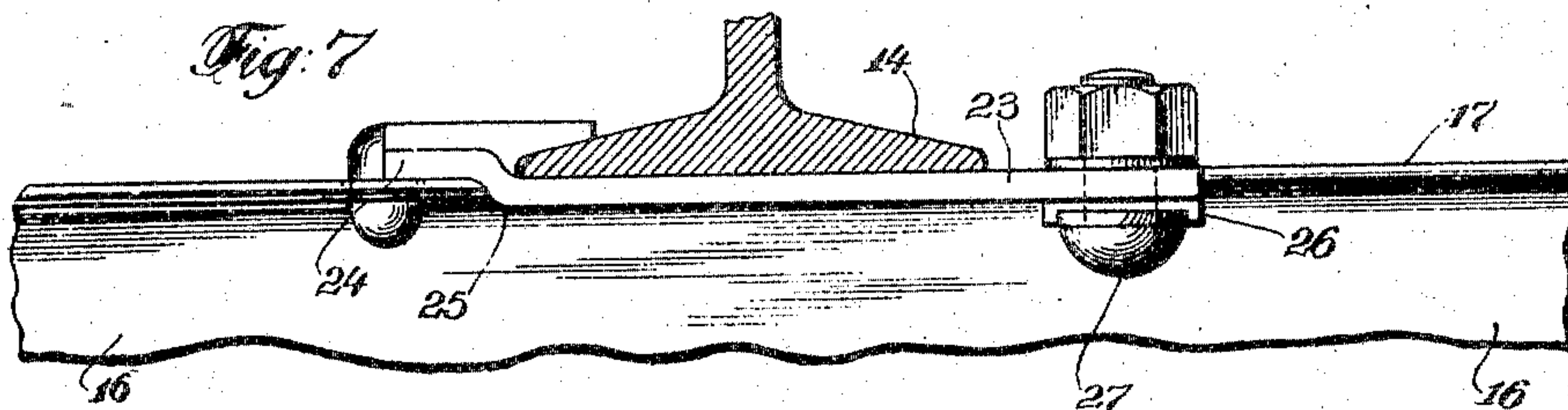
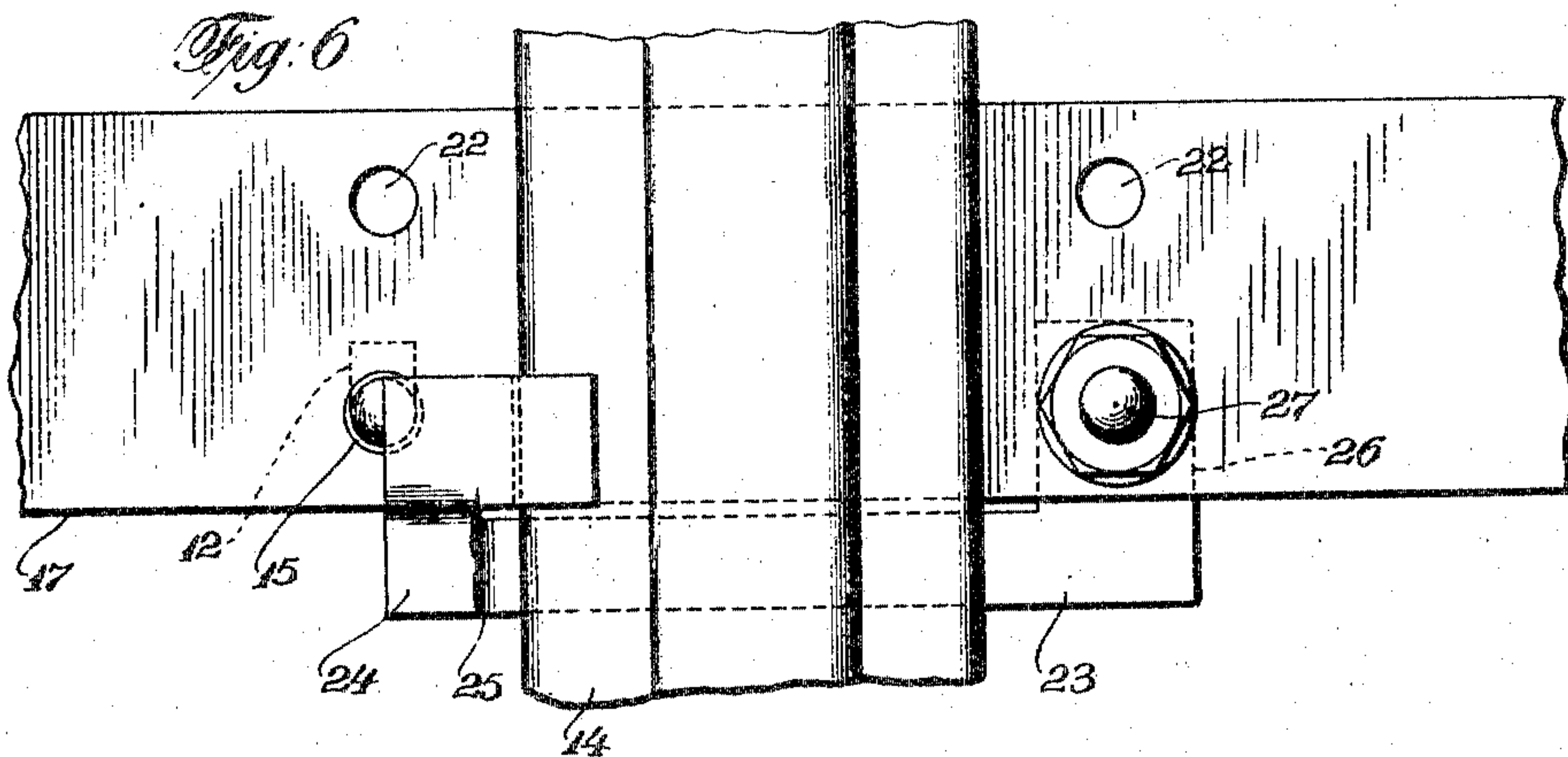
Inventor
Arthur R. Young
By *Prindle and Williamson*

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Witnesses:
F. N. Rockrich.
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Arthur R. Young
By *his* Attorneys
Grindle & Williamson

UNITED STATES PATENT OFFICE.

ARTHUR R. YOUNG, OF NEW YORK, N. Y.

FASTENING FOR RAILWAY-TIES.

967,596.

Specification of Letters Patent. Patented Aug. 16, 1910.

Application filed June 28, 1907. Serial No. 381,304.

To all whom it may concern:

Be it known that I, ARTHUR R. YOUNG, resident of New York city, in the county of New York, and in the State of New York, have invented a certain new and useful Improvement in Fastenings for Railway-Ties, and do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawing, in which—

Figures 1, 2 and 3 are respectively, a plan view, a front elevation and an end elevation of one embodiment of my invention; Figs. 4 and 5 are plan views, showing the first two positions occupied by my fastening in being put into place; Figs. 6 and 7 are respectively a plan view and a side elevation of another embodiment of my invention; and Figs. 8 and 9 are similar views of a third embodiment of my invention.

The object of my invention has been to provide a fastening for railway ties which shall be simple in construction and operation, and which shall effectively fasten the rail to a railway tie, and to such ends my invention consists in the fastening for railway ties herein specified.

My fastening is especially adapted for use with metallic ties, and I have illustrated it applied to such ties.

In carrying my invention into practice in that form which is illustrated in Figs. 1 to 5, I provide a flat bar 10 having a shoulder secured to one end thereof, the shoulder consisting of a vertical cylindrical part 11 and carrying at its lower end a horizontal offset or finger 12. On the upper side of the bar 10 is a lip 13 that is adapted to overlies the lower flange or base 14 of the rail. My fastening is applied by turning the bar 10 into a vertical position parallel to the rail (Fig. 4) and inserting the finger 12 through a hole 15 formed in the upper flange of the tie 16, and then turning the bar upon its longitudinal axis so that the finger 12 engages the under side of the flange 17 of the tie and so that the bar stands parallel with the upper surface of the tie. The bar is then swung horizontally beneath the rail and above the tie to the position shown in Fig. 2. In this position it will be seen that the lip 13 overlies the flange 14 of the rail and that the rail cannot escape by a movement toward said lip unless the bar 10 is wholly displaced by being swung through a quarter of a circle to a position shown in Fig. 5.

Such movement of the bar is resisted in the present form of my invention by the weight of the rail on the bar. In order, however, to absolutely prevent any such movement, a bolt 18 may be passed through a hole 19 in the end of the bar, and through a hole 20 in flange 17, thus securing the fastening in place. To prevent escape of the rail in a direction away from the lip 13, a fastening like that before described is engaged in a hole 21 in the flange 17, the hole 21 being diagonally across from the hole 15, and the second fastening is secured in place by a bolt passing through hole 22 in the flange. Thus the rail will be prevented from lateral movement in either direction. Instead of the flange 17 any metal plate can be used, and such plate could, if desired, be fastened to a tie made of a substance other than wood.

In that form of my invention illustrated in Figs. 6 and 7, there are the following differences from the form already described. The bar 23 instead of being swung into position between the rail and the flange of the tie is offset at 24 so that in its fastened position it does not lie over the tie, and is bent down at 25 so that it can pass beneath the rail. The bar 23 is also provided with an ear 26 which passes beneath (or above) the flange of the tie, and is secured in place by a bolt 27.

In that form of my invention which is illustrated in Figs. 8 and 9, there are the shoulder 28 and lip 29 similar to the shoulder and lip previously described, but these parts are formed on or secured to a bar 30 which extends away from the rail along the upper surface of the tie, and which is secured to the tie by a bolt 31 passing through holes in the bar and tie.

It is obvious that various changes can be made in the above described invention which will be within the spirit of my invention, and I desire not to be restricted beyond the requirements of the prior art and the terms of my claims.

I claim—

1. The combination of a railway tie having a metal plate, said plate having a hole formed therein, and a fastening consisting of a bar having a shoulder with an offset finger that is adapted to pass through said hole to engage said plate, said finger being capable of rotation in said hole about a vertical axis, said bar having a lip that is adapt-

ed to extend over the rail base at one side of the rail, and having a body that is adapted to extend under the rail to the other side thereof and above the tie, said fastening being adapted to be put in locking position by a horizontal swinging movement and adapted to be locked in position at its end opposite the shoulder.

2. The combination of a railway tie having a metal plate at its upper surface, said plate having holes formed therein on opposite sides of the position of the rail, and two fastenings, each of said fastenings having an offset finger that is adapted to engage one of said holes, and having a lip that is adapted to extend over the rail base, and also having a body that is adapted to extend between the rail base and the tie, said fingers being capable of rotation in said holes, said fastenings being adapted to engage the rail by a horizontal swinging movement, and to be held in place by the weight of the rail and locked in position by being fastened to the tie at the ends opposite their respective shoulders.

3. The combination of a railway tie having a metal plate at its upper surface, said plate having holes formed therein on opposite sides of the position of the rail, and two fastenings, each of said fastenings having an offset finger that is adapted to engage one of said holes, and having a lip that is adapted to extend over the rail base, and also having a body that is adapted to extend between the rail base and the tie, said fingers being capable of rotation in said holes, said fastenings being adapted to engage the rail by a horizontal swinging movement, and to be held in place by the weight of the rail, and bolts located in the ends of such fastenings opposite their respective shoulders to secure them in place.

4. A fastening for railway ties consisting of a bar having a shoulder with an offset or finger, and having a lip adapted to extend over the rail base, and a tie having an upper plate, said plate having a hole that is adapted to receive said shoulder so that the under sur-

face of said plate may be engaged by said finger, said finger being capable of rotation in said hole about a vertical axis, said bar extending along the tie and beneath the rail at one side of the plate, and a bolt passing through the end of said bar opposite said shoulder, and through said plate.

5. A fastening for railway ties consisting of the combination of a tie having an upper plate with holes therein at each side of the rail, two bars, each of said bars having a shoulder with an offset or finger, said shoulder being adapted to occupy one of said holes, and said finger being adapted to engage the under side of said plate, said finger being capable of rotation in said hole about a vertical axis, said bars each having a lip adapted to overlie the base of the rail, the said bars engaging said plate on opposite sides of the rail, and each of said bars extending between said plate and the rail from opposite directions and being attached to the latter at the side of the rail opposite to that at which the shoulder is located.

6. A fastening for railway ties consisting of the combination of a tie having an upper plate with holes therein at each side of the rail, two bars, each of said bars having a shoulder with an offset or finger, said shoulder being adapted to occupy one of said holes, and said finger being adapted to engage the under side of said plate, said finger being capable of rotation in said hole about a vertical axis, said bars each having a lip adapted to overlie the base of the rail, the said bars engaging said plate on opposite sides of the rail, and each of said bars extending between said plate and the rail from opposite directions, and bolts adapted to secure the ends of said bars opposite said shoulders to said plate.

In testimony that I claim the foregoing I have hereunto set my hand.

ARTHUR R. YOUNG.

Witnesses:

EDWIN J. PRINDLE,
A. NEWCOMB.