

No. 677,754.

Patented July 2, 1901.

A. M. BOWMAN.
METALLIC TIE.

(Application filed Sept. 19, 1898. Renewed Dec. 6, 1900.)

(No Model.)

Fig. 2.

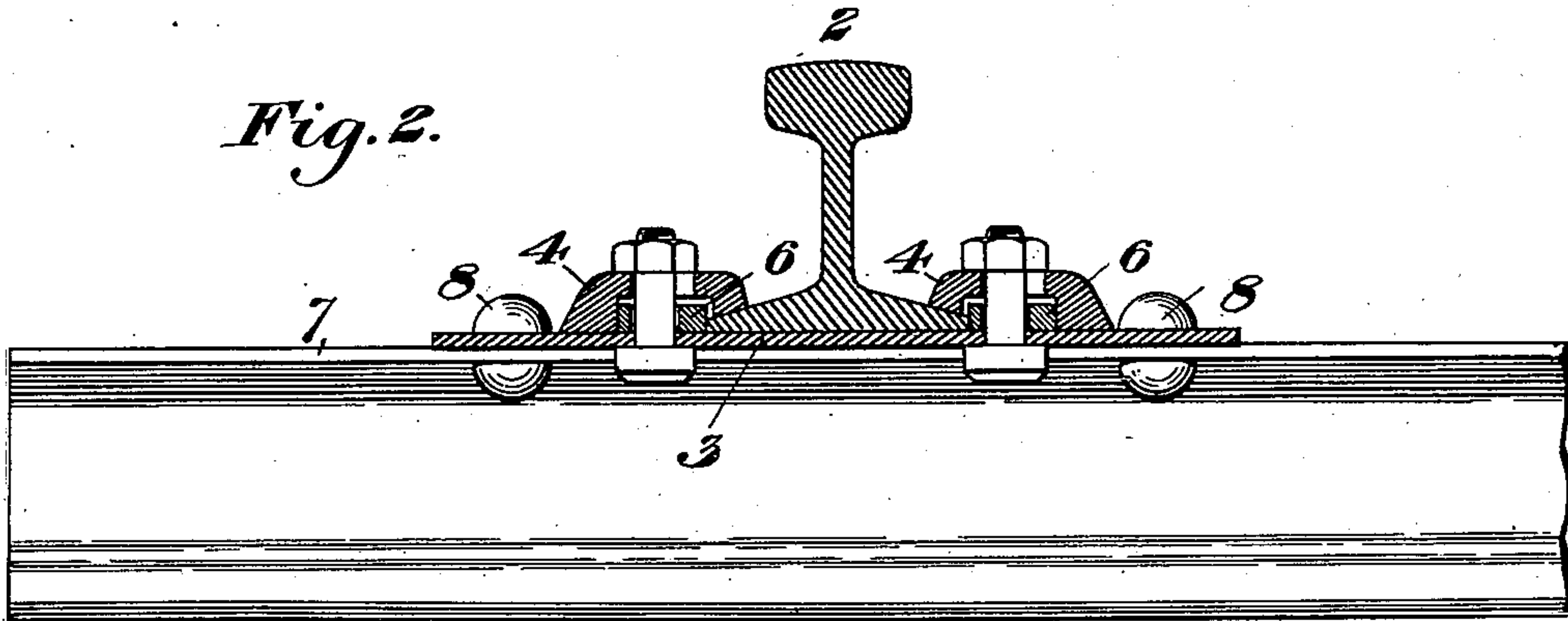


Fig. 1.

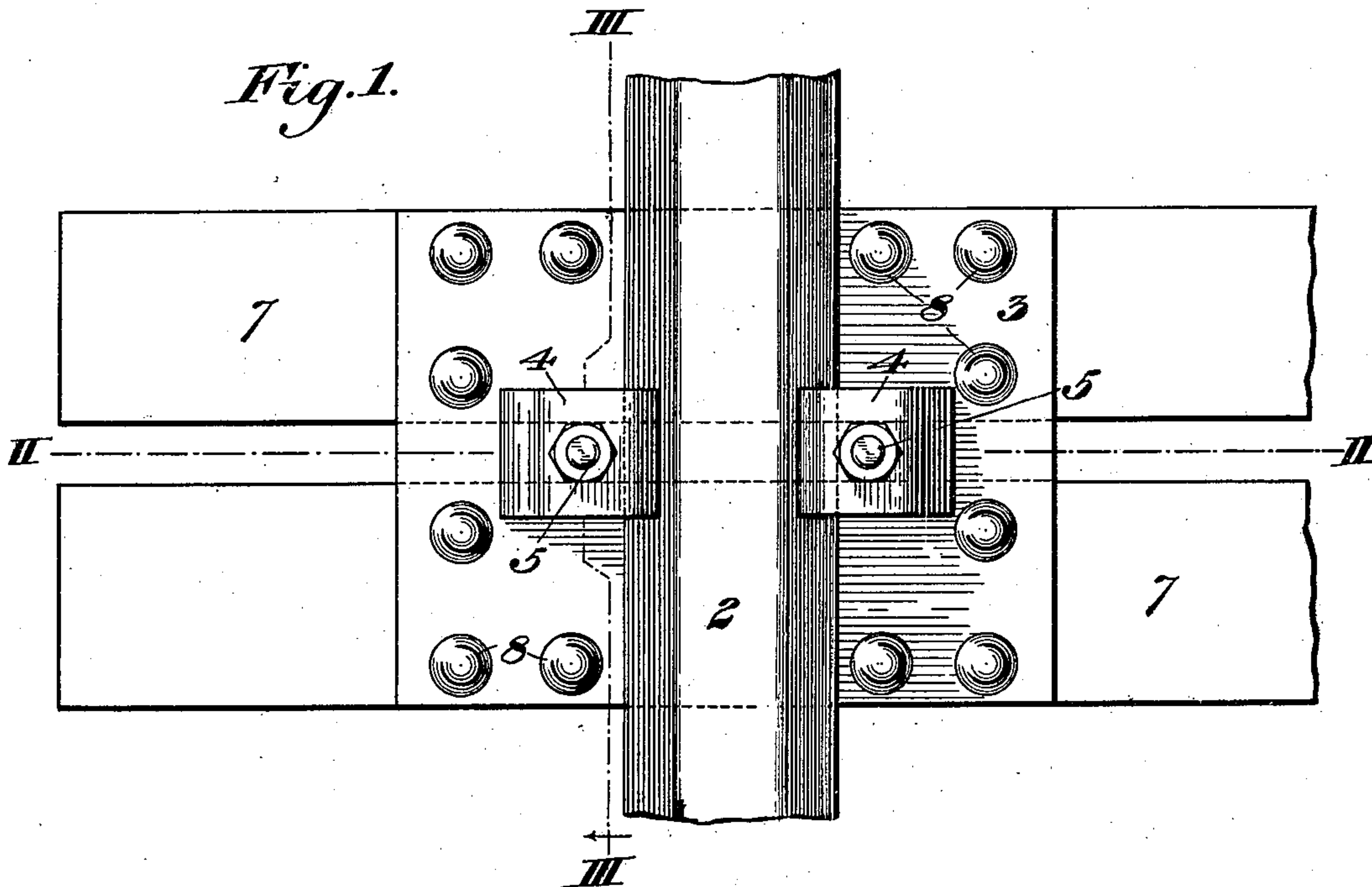
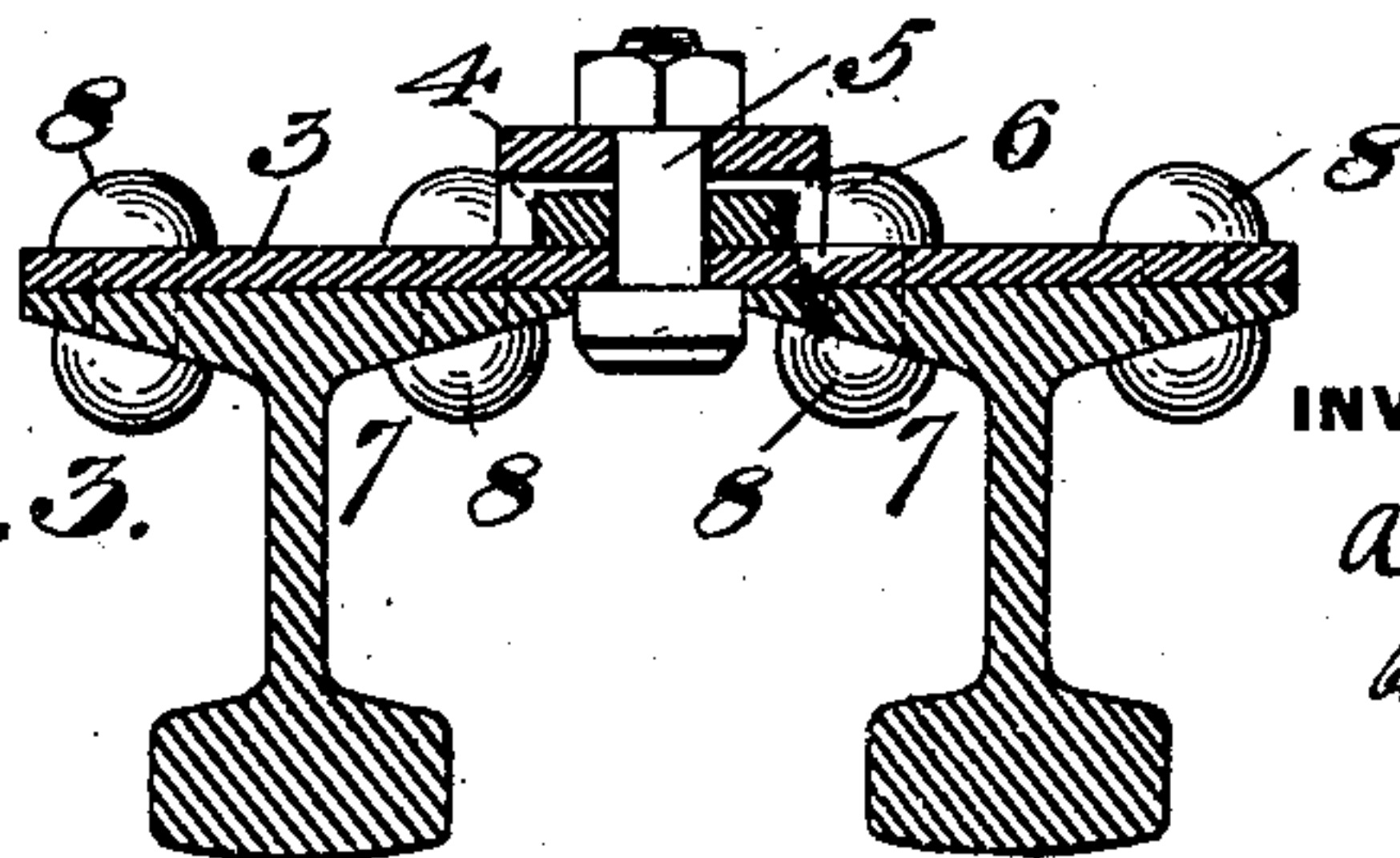


Fig. 3.



WITNESSES
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UNITED STATES PATENT OFFICE.

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METALLIC TIE.

SPECIFICATION forming part of Letters Patent No. 677,754, dated July 2, 1901.

Application filed September 19, 1898. Renewed December 6, 1900. Serial No. 38,959. (No model.)

To all whom it may concern:

Be it known that I, ARTHUR M. BOWMAN, of Bellevue, in the county of Allegheny and State of Pennsylvania, have invented a new and useful Improvement in Metallic Ties, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is a partial plan view of my improved tie as applied to one rail. Fig. 2 is a vertical longitudinal section on line II II of Fig. 1, and Fig. 3 is a vertical cross-section on line III III of Fig. 1.

My invention relates to metallic ties for railways, tramways, traction-lines, &c., and is designed to afford a cheap, durable, and efficient article made up of commercial shapes.

In the drawings, in which like symbols indicate like parts, 2 is the rail, resting upon tie-plate 3 and retained by clamps 4 4, with nuts and bolts 5 5 and eccentric washers 6 6. These parts are of the usual type. The body of the tie I form of two ordinary T-rails 7 7, set parallel to each other and inverted, thus presenting flat surfaces for the support of the tie-plate 3, secured thereto by rivets 8. Rails 7 7 are set at sufficient distance apart to permit the insertion of the heads of bolts 5 5 between their flanges, thus affording means for securely retaining said heads and obviating the necessity of cutting rails 7 7 for the passage of bolts 5 5. It will be apparent that there will be a reduplication of the parts, as shown in Fig. 1, to provide for the other rail.

The advantages of my invention will be appreciated by those skilled in the art, since it affords a simple and durable metal tie, the

cost of which is small, and by reason of the lateral extension of the tread of rails 7 7 it may be more securely anchored in the bed than with hitherto-known ties, and the separation between the upper flanges allows effective ballasting, and, further, the tread being placed downward in the road-bed affords a better anchorage therein.

Modification may be made by the skilled mechanic without departing from my invention as defined in the claims.

I claim—

1. A metallic railway-tie composed of two inverted T-rails set parallel and closely adjacent to each other, connecting tie-plates resting on the flat upper flanges of the rail-bases and secured thereto by through-bolts or rivets, and rail-clamps removably secured to the said tie-plates, the lower heads of the rails being adapted to anchor the tie in the road-bed; substantially as described.

2. A metallic railway-tie composed of two inverted T-rails set parallel and slightly separated from each other, connecting tie-plates resting on the flat upper flanges of the rail-bases and secured thereto by through-bolts or rivets, and rail-clamps removably secured to the said tie-plates at intermediate points over the space between the rail-bases, the lower heads of the rails being adapted to anchor the tie in the road-bed; substantially as described.

In testimony whereof I have hereunto set my hand.

ARTHUR M. BOWMAN.

Witnesses:

G. I. HOLDSHIP,
G. B. BLEMMING.