

No. 755,444.

PATENTED MAR. 22, 1904.

W. T. BROWN & W. C. WATSON.  
RAILWAY RAIL CONNECTION.

APPLICATION FILED JAN. 4, 1904.

NO MODEL.

Fig. 1.

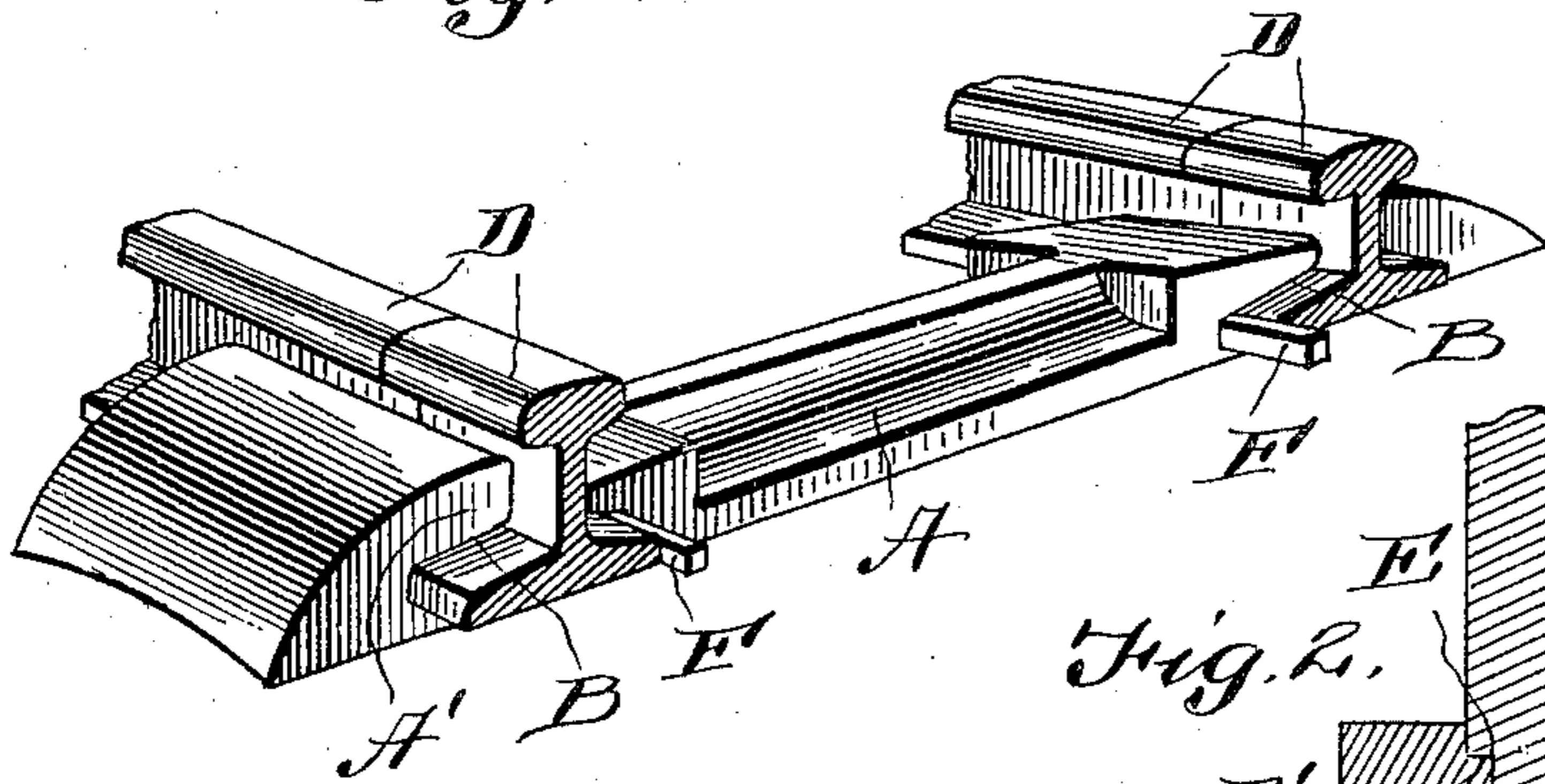


Fig. 2.

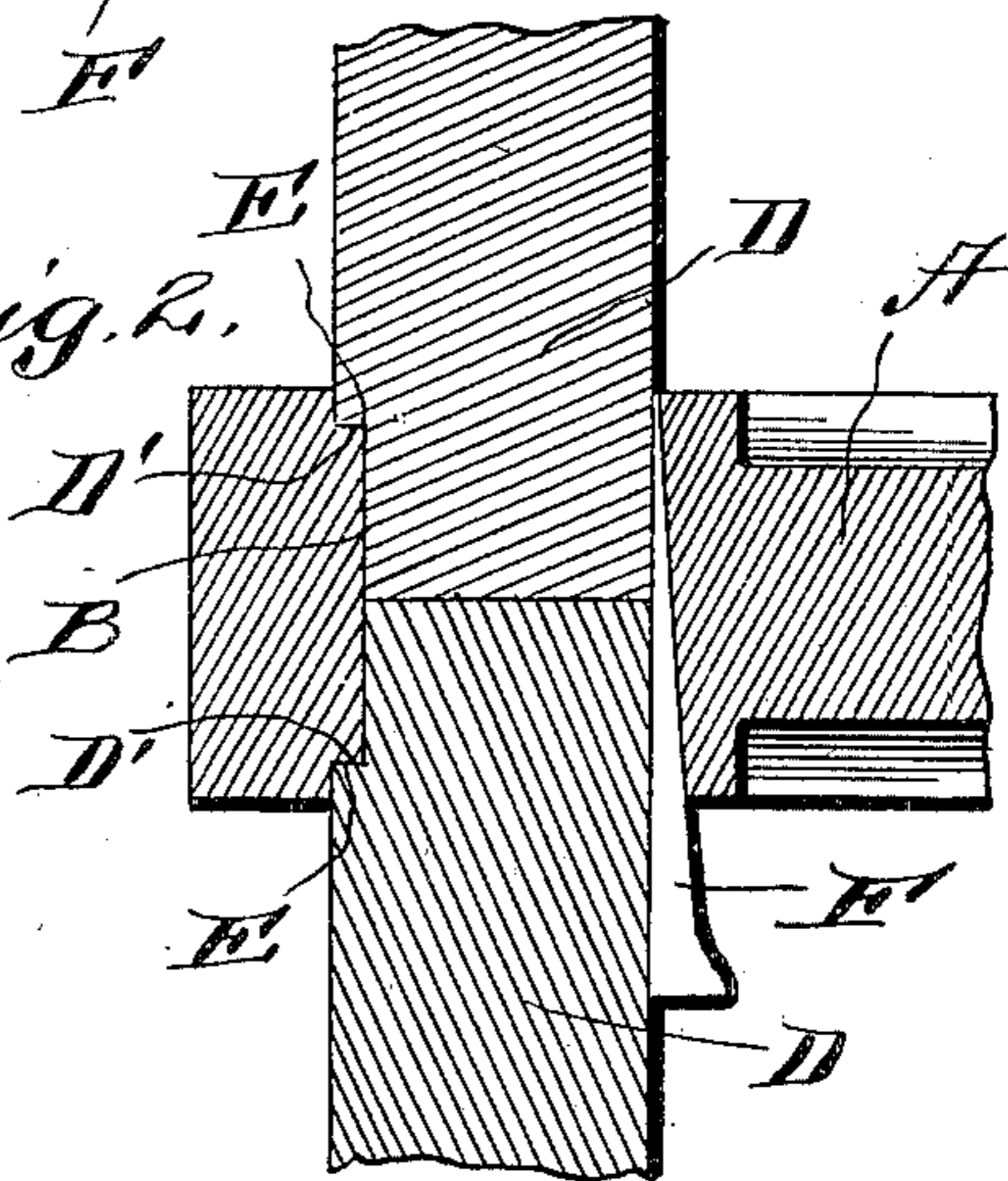


Fig. 3.

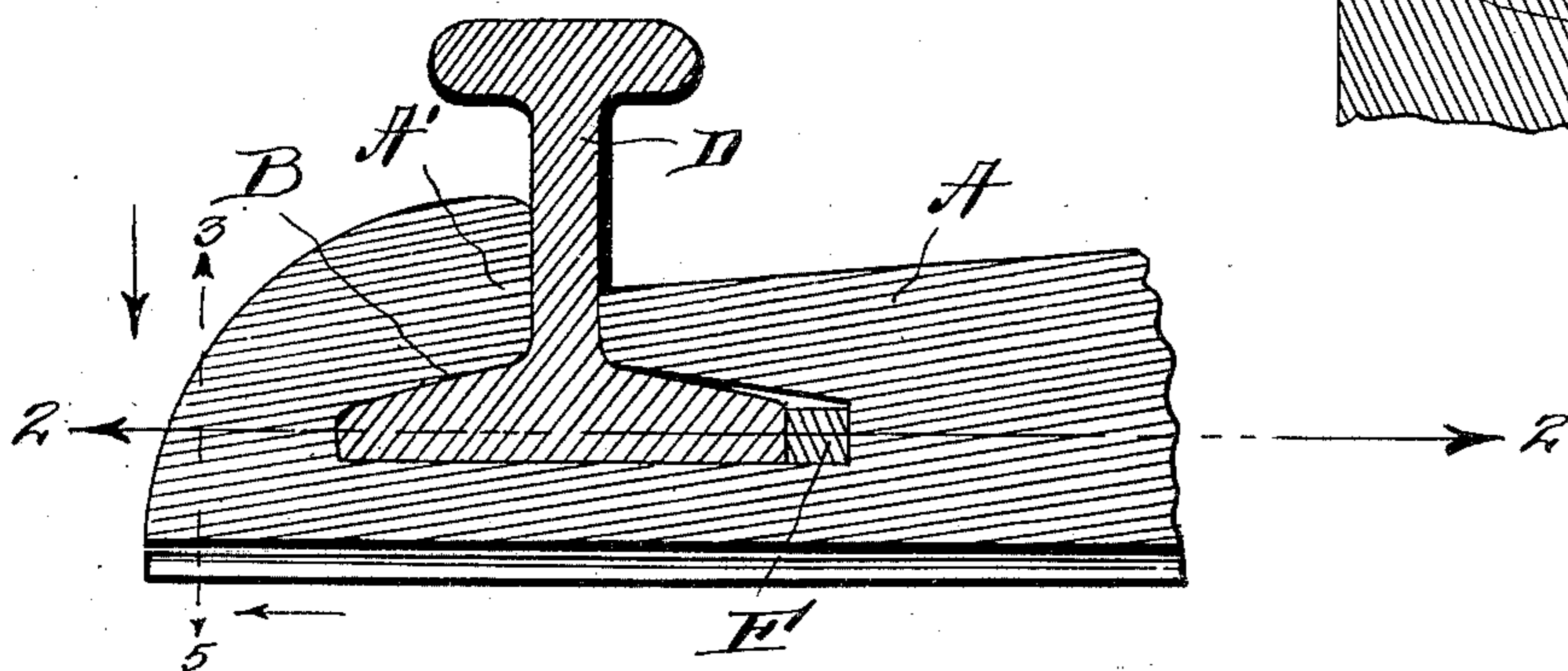
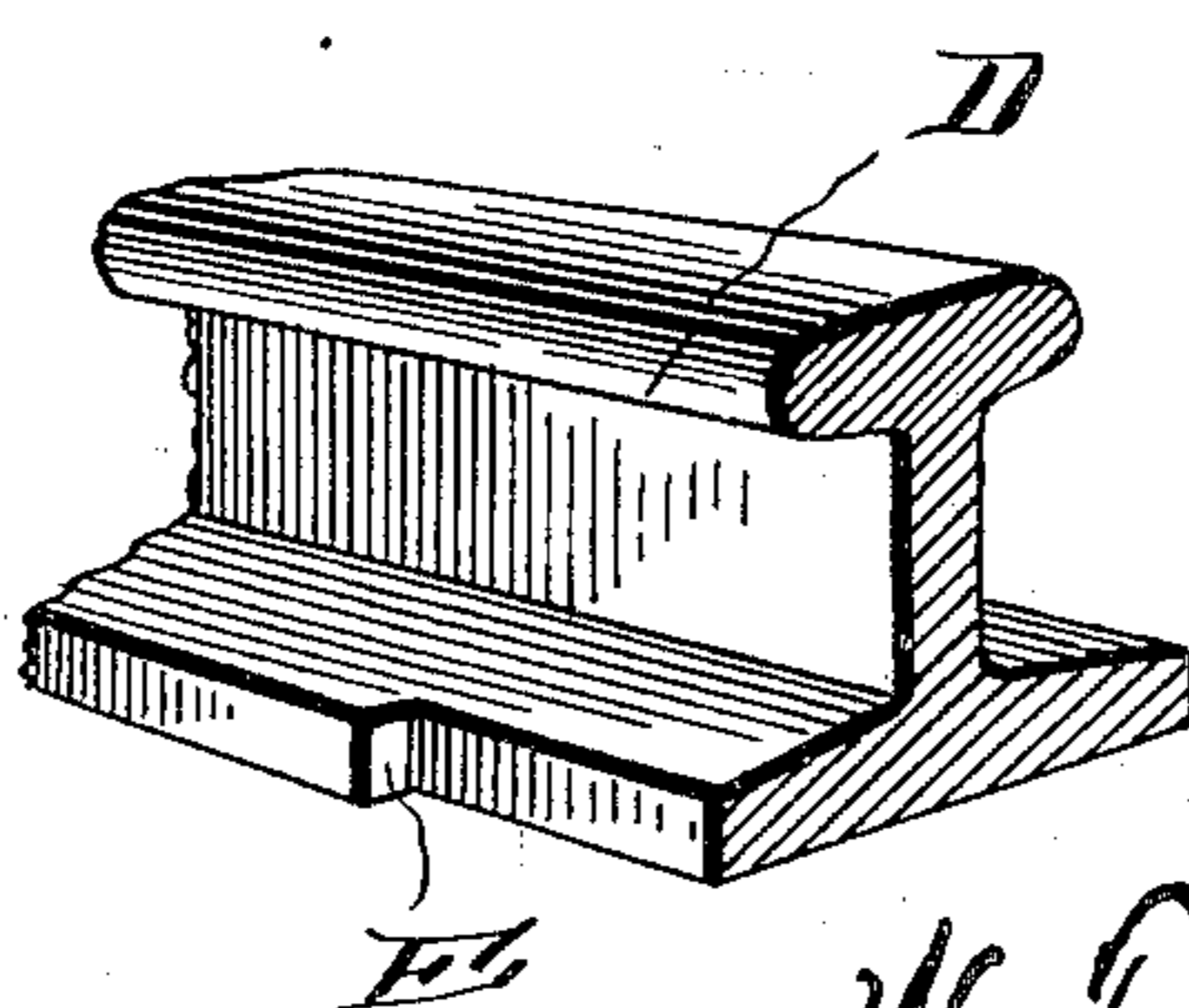


Fig. 5.



Fig. 4.



Witnesses

R. A. Boswell,  
A. L. Hough.

Inventor  
W. T. Brown & W. C. Watson,  
By Franklin H. Hough  
Attorney

# UNITED STATES PATENT OFFICE.

WATT THOMAS BROWN, OF LOCK NO. 3, AND WILLIAM C. WATSON, OF  
RAGLAND, ALABAMA.

## RAILWAY-RAIL CONNECTION.

SPECIFICATION forming part of Letters Patent No. 755,444, dated March 22, 1904.

Application filed January 4, 1904. Serial No. 187,704. (No model.)

*To all whom it may concern:*

Be it known that we, WATT THOMAS BROWN, residing at Lock No. 3, and WILLIAM C. WATSON, residing at Ragland, in the county of St. Clair and State of Alabama, citizens of the United States, have invented certain new and useful Improvements in Railway-Rail Connections; and we do 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, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

This invention relates to new and useful improvements in railway-rail connections, and comprises means whereby the meeting ends of rails may be securely held in place; and it consists, essentially, of a metallic tie which is provided with a rail-receiving portion at each end designed to receive the adjacent ends of notched rails and in the provision of a wedging member for locking the rails in place.

The invention consists, further, in various details of construction and in combinations and arrangements of parts, which will be hereinafter fully described and then specifically defined in the appended claims.

Our invention is illustrated in the accompanying drawings, which, with the letters of reference marked thereon, form a part of this application, and in which drawings similar letters of reference indicate like parts in the views, in which—

Figure 1 is a perspective view of one end of a tie, showing the meeting ends of rails secured together in the end of a tie. Fig. 2 is a sectional view transversely through the rail ends and a portion of the tie, showing the wedge member with the recesses in which the notches of the rail engage. Fig. 3 is a vertical sectional view through one end of the tie. Fig. 4 is a detail of one end of the rail, showing the recessed portion thereof. Fig. 5 is a cross-sectional view through a tie.

Reference now being had to the details of drawings by letter, A designates a metallic tie,

which is made preferably concaved upon its lower face for the purpose of providing means to prevent said tie from slipping by the edges of the tie, forming resistance to any inclination of the tie to move by said edges engaging in the soil. The tie in order to afford rigidity and strength is made preferably with a rib along its upper edge, and at each end of the tie is a recess B, having a contracted opening leading to the wider part, below which is adapted to receive the flanges of the meeting ends of the rails D. Each of said recesses in the end of the tie has a shouldered portion D', adapted to receive the shoulder E, which is formed by notching one of the flanges of said rails. One of the flanges, A', of the tie extends over the outer flange of the rail and is adapted to form a brace against the web portion of the rail, while the opposite marginal edge of the opening into the recess of the tie contacts with the flange of the rail adjacent to its point of emergence into the web of the rail.

F designates a wedge which is inserted between the inner edge of the inner flange and the adjacent wall of the recess in the tie and is designed when driven in place to force the shouldered portions of the rails into the notches formed in the inner wall of the recess of the tie for the purpose of securely holding the rails in place.

By the provision of a rail connection embodying the features of our invention it will be observed that a simple and efficient means is provided comprising a tie having the recessed ends with integral brace portions, which recesses are adapted to receive the flanged ends of the rails, which are securely locked in place by means of the wedge. When it is desired to remove the rails, the wedge is removed and the ends may be readily detached from the recessed portion of the rail.

While we have shown a particular construction embodying the features of our invention, it will be understood that we may make alterations, if desired, in the details of construction without in any way departing from the spirit of the invention.

Having thus described our invention, what

we claim as new, and desire to secure by Letters Patent, is—

1. A railway-rail connection comprising a metallic tie having recesses at its ends, the outer  
5 wall of each recess being extended to form a brace designed to contact with the webs of rails, the inner wall of each recess having an offset or notch, the rails having flanges which have recessed portions, and a wedge member  
10 designed to force said rails so that the recesses thereof will engage said notches in the wall of the recesses of the ties, as set forth.

2. A railway-fastening comprising a metallic tie having its lower face concaved and pro-  
15 vided with recesses at its ends, each of which

is provided with a notched portion adjacent to each end of the recess, the outer wall of the recess being extended to form a brace adapted to bear against the web of the rails, a wedge member, and rails having recesses  
20 adapted to be held by said wedge member in the notches in the inner wall of the recess, as set forth.

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

WATT THOMAS BROWN.

WILLIAM C. WATSON.

Witnesses:

W. T. FLOYD,

SIDNEY GLENN.