

No. 838,574.

PATENTED DEC. 18, 1906.

J. F. O'CONNOR.
METALLIC TIE FOR RAILWAY TRACKS.
APPLICATION FILED AUG. 2, 1906.

Fig. 1

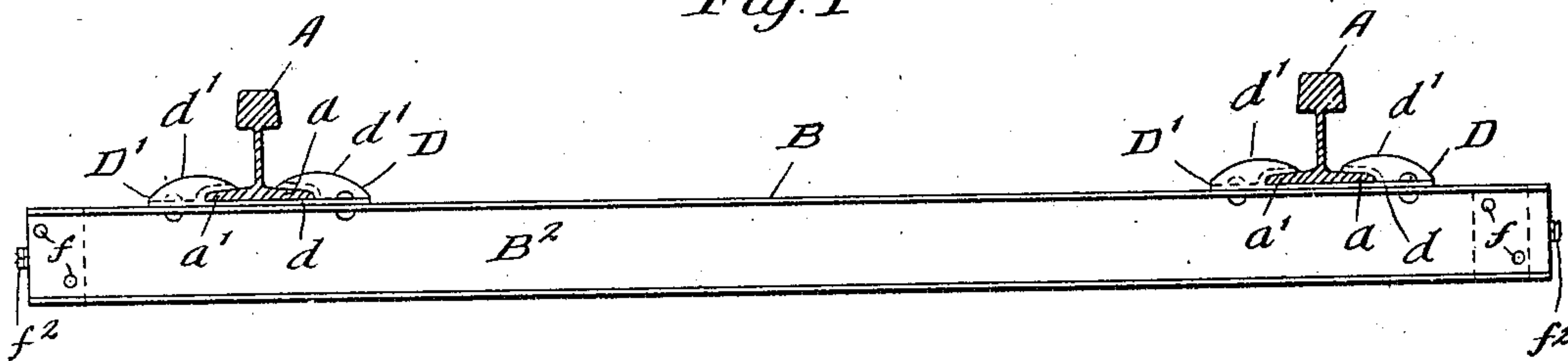


Fig. 2

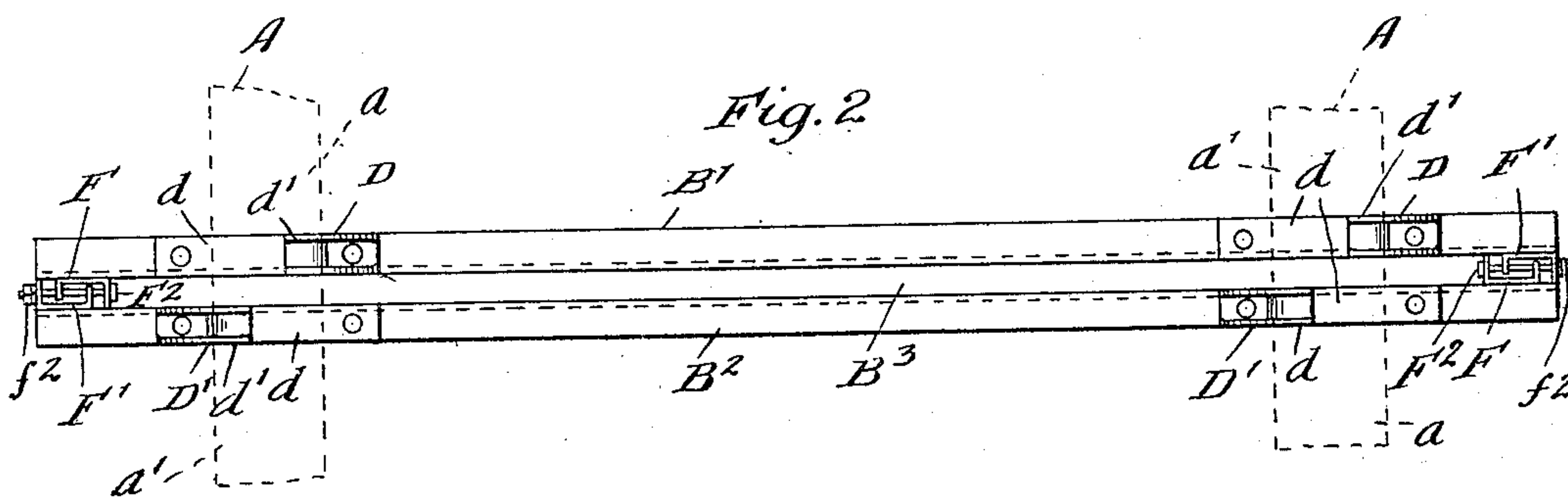


Fig. 3

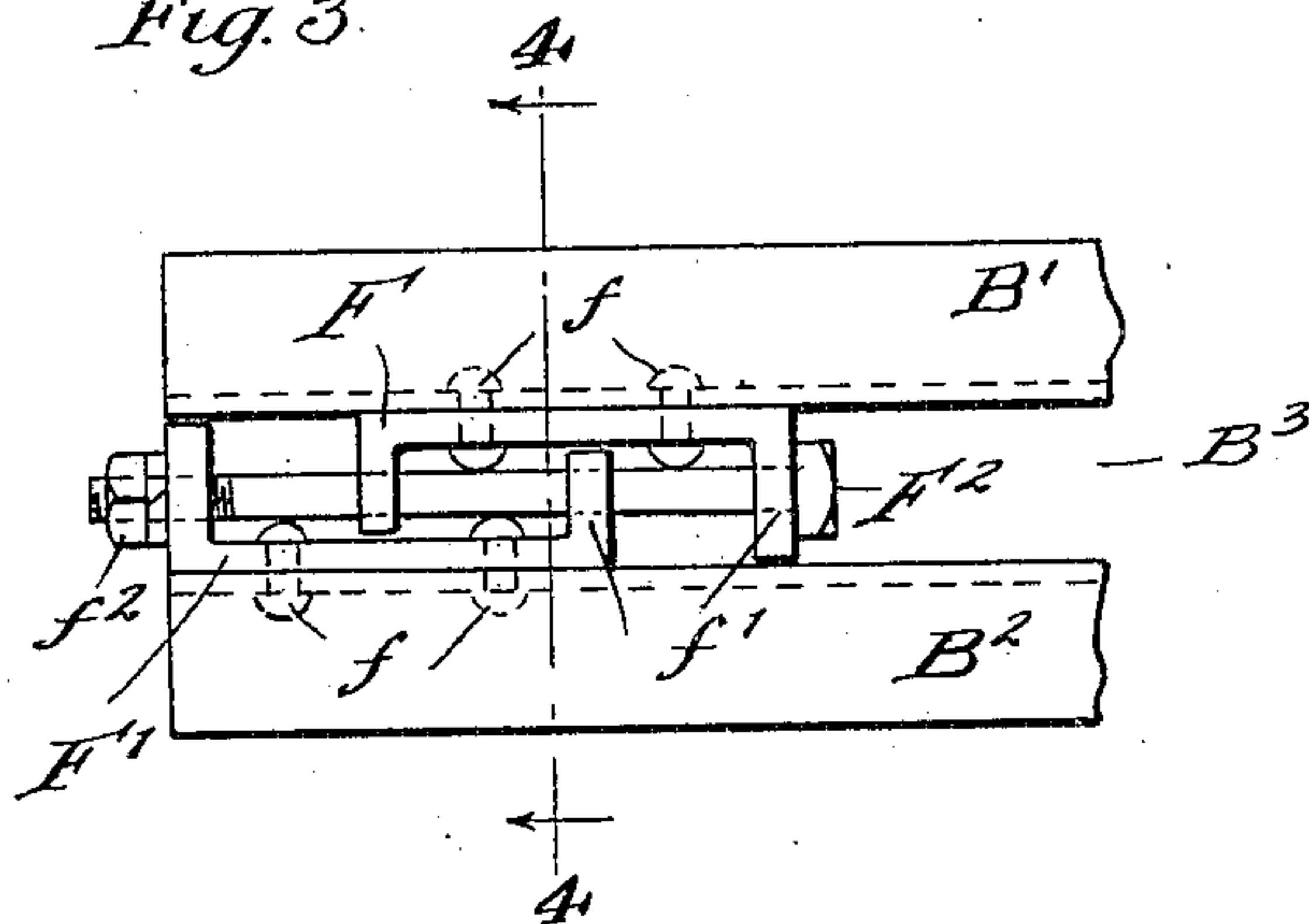
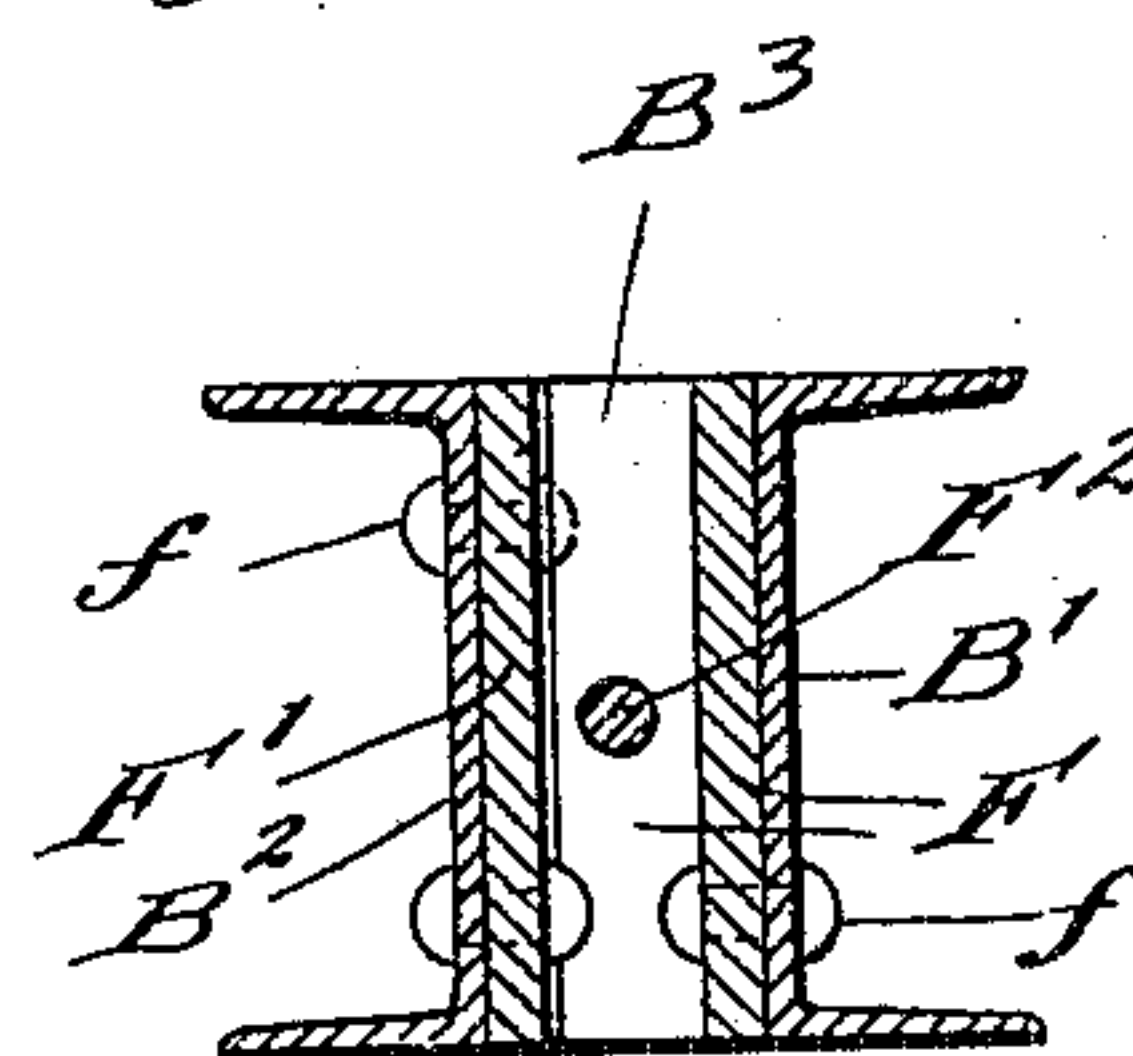


Fig. 4



Witnesses:

Wm. Geiger
A. W. Munday,

Inventor:
John F. O'Connor

Byllesday, Peart, Ader & Clark,
Attorneys

UNITED STATES PATENT OFFICE.

JOHN F. O'CONNOR, OF CHICAGO, ILLINOIS, ASSIGNOR TO W. H. MINER COMPANY, OF CHICAGO, ILLINOIS, A CORPORATION OF ILLINOIS.

METALLIC TIE FOR RAILWAY-TRACKS.

No. 838,574.

Specification of Letters Patent.

Patented Dec. 18, 1906.

Application filed August 2, 1906. Serial No. 328,828.

To all whom it may concern:

Be it known that I, JOHN F. O'CONNOR, a citizen of the United States, residing in Chicago, in the county of Cook and State of Illinois, have invented a new and useful Improvement in Metallic Ties for Railway-Tracks, of which the following is a specification.

My invention relates to ties for railway-tracks, and more particularly to improvements in the construction of metal ties.

The object of my invention is to provide a metal tie for railway-tracks of a simple, cheap, strong, efficient, and durable construction, upon which the rails of the track may be securely anchored and by means of which the track may be rapidly, conveniently, and cheaply laid, repaired, or replaced when required.

My invention consists in the means I employ to practically accomplish this object or result—that is to say, it consists in a two-part metal tie comprising two longitudinally-movable metal members, each preferably of channel form, provided with oppositely-faced rail engaging or anchoring plates or devices and with means for securing the two members together and longitudinally adjusting them in respect to each other to cause the oppositely-faced rail-anchors on the two members to properly clamp and engage the flanges of the rails.

My invention also consists in the novel construction of parts and devices and in the novel combinations of parts and devices herein shown and described.

In the accompanying drawings, forming a part of this specification, Figure 1 is a side elevation of a railway-track tie embodying my invention, showing the rails in cross-section. Fig. 2 is a plan view. Fig. 3 is an enlarged detail plan showing the means for longitudinal adjustment of the two members of the tie to cause the oppositely-faced anchor-plates on the two members to properly clamp and engage the flanges of the rails. Fig. 4 is a cross-section on line 4 4 of Fig. 3.

In the drawings, A A represent the rails of a railway-track, and B my improved two-part metal tie, the same comprising two longitudinally movable or adjustable metal tie members B' B², each preferably of channel form in cross-section and placed back to back, with a space between them to accommodate

the devices for securing the two members together and for longitudinally moving or adjusting them in respect to each other to cause the opposing or oppositely-faced rail-clamping devices D D' to properly engage the flanges *a a'* of the rail. The anchor-plates D D' are rigidly secured to the tie members B' B². Each of these anchor-plates D D' has a base-plate *d*, upon which the rail rests, and a hook or lip *d'*, which overlaps and engages the flange of the rail. The anchor-plates D on the rail member B' face in one direction and engage the flanges *a a* on one side of the rails A A, and the anchor-plates D', which are secured to the other tie member B², face in the opposite direction and engage the opposite flanges *a' a'* on the rails A. It will thus be understood that the sliding of the tie members B' B² longitudinally in respect to each other will cause the opposing anchor-plates D D' to snugly and tightly clamp and engage the flanges of the rails on both sides.

To secure the tie members B' B² together and provide means for their longitudinal movement or adjustment in respect to each other to clamp and release the rails, I provide the tie members B' B² with flanged brackets F F', secured in place by rivets *f* and having angle flanges or shoulders *f' f'*, through which the connecting and adjusting bolt F² extends and which is provided with threaded nuts *f² f²* to clamp and adjust the rail members B' B² longitudinally in respect to each other, and thus cause the opposing anchor-plates to properly grasp the rails.

The open space B³ between the tie members B' B² serves to increase the effective total width or thickness of the tie as a whole and to materially increase its effective bearing upon the earth or ballast. The tie is thus given a skeleton form, which adds materially to its strength, rigidity, and supporting action for the rails for the weight of metal in the tie.

I claim—

1. In a railway-track, the combination with the track-rails, of a two-part metal tie comprising two longitudinally movable or adjustable members provided with opposing or oppositely-faced rail engaging or anchoring devices adapted to engage and clamp the rail by the longitudinal movement of the tie members in respect to each other, and means for connecting and longitudinally adjusting

the tie members, said means for connecting and longitudinally adjusting the tie members being between the tie members and separating them slightly from each other, substantially as specified.

2. A railway-track tie comprising two longitudinally-movable members, oppositely-faced rail-anchoring plates thereon, brackets

secured to said members and an adjusting-bolt extending through the brackets and longitudinally of the members, substantially as specified.

JOHN F. O'CONNOR.

Witnesses:

H. M. MUNDAY,
WILLIAM A. GEIGER.