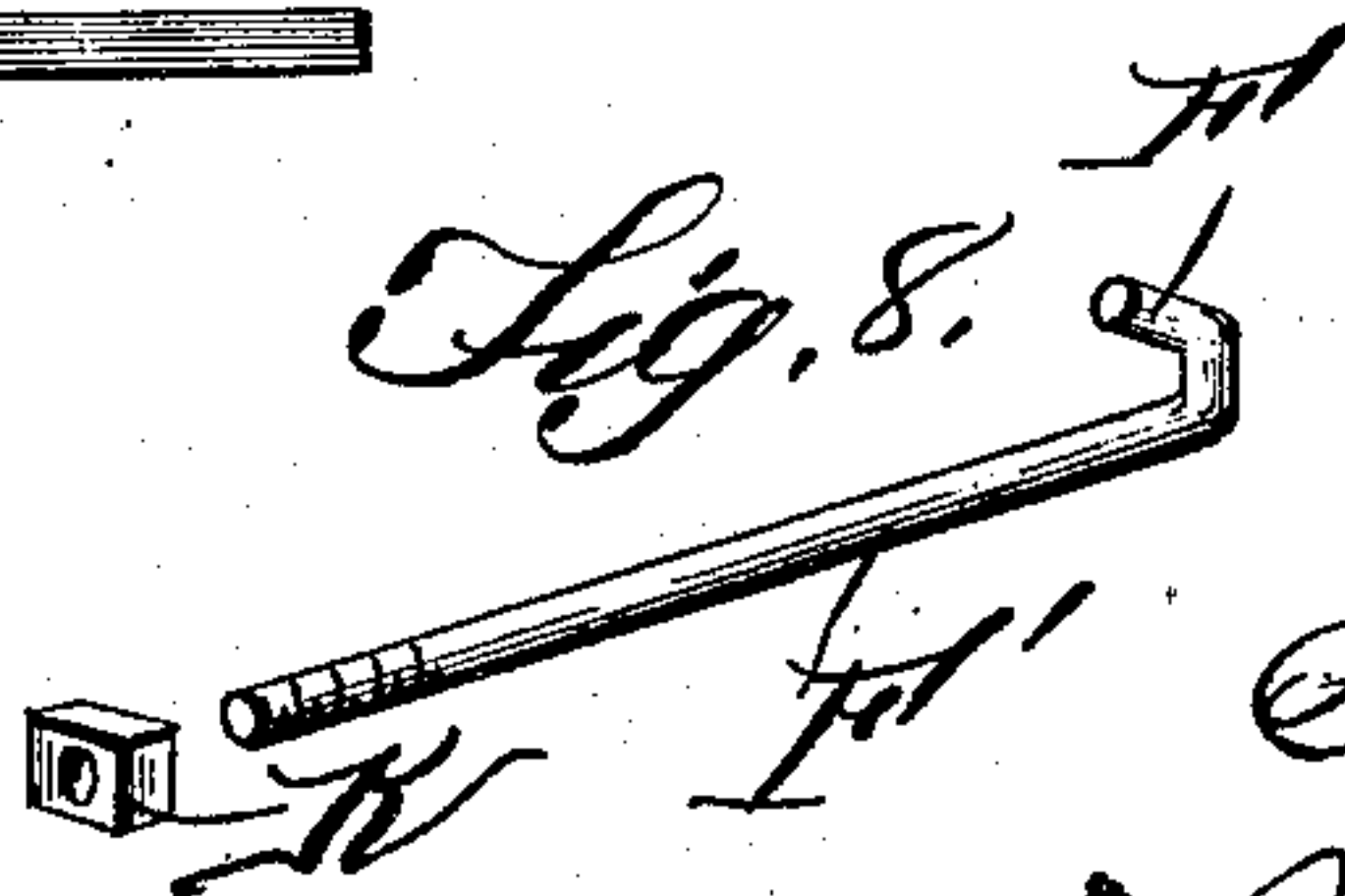
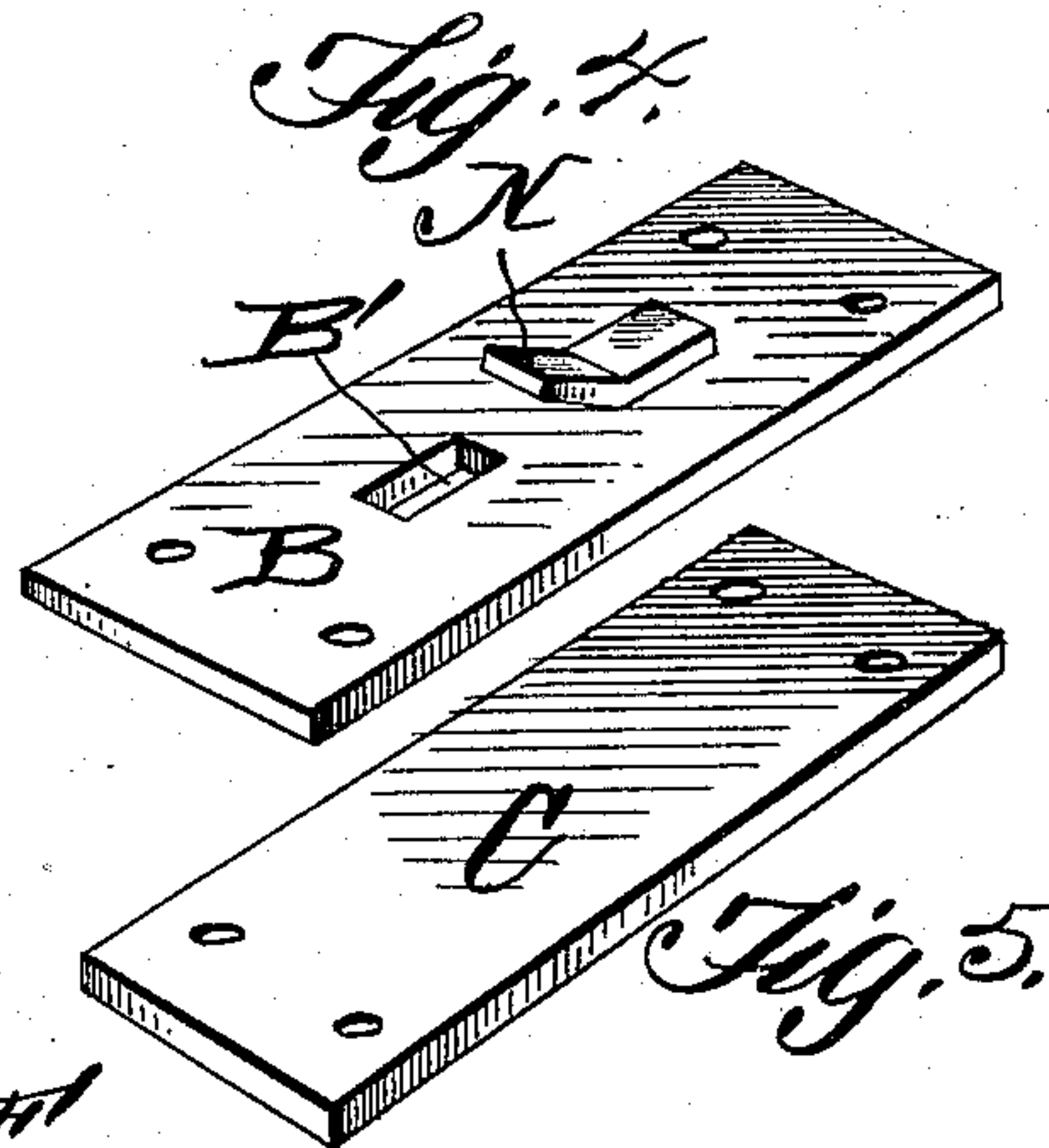
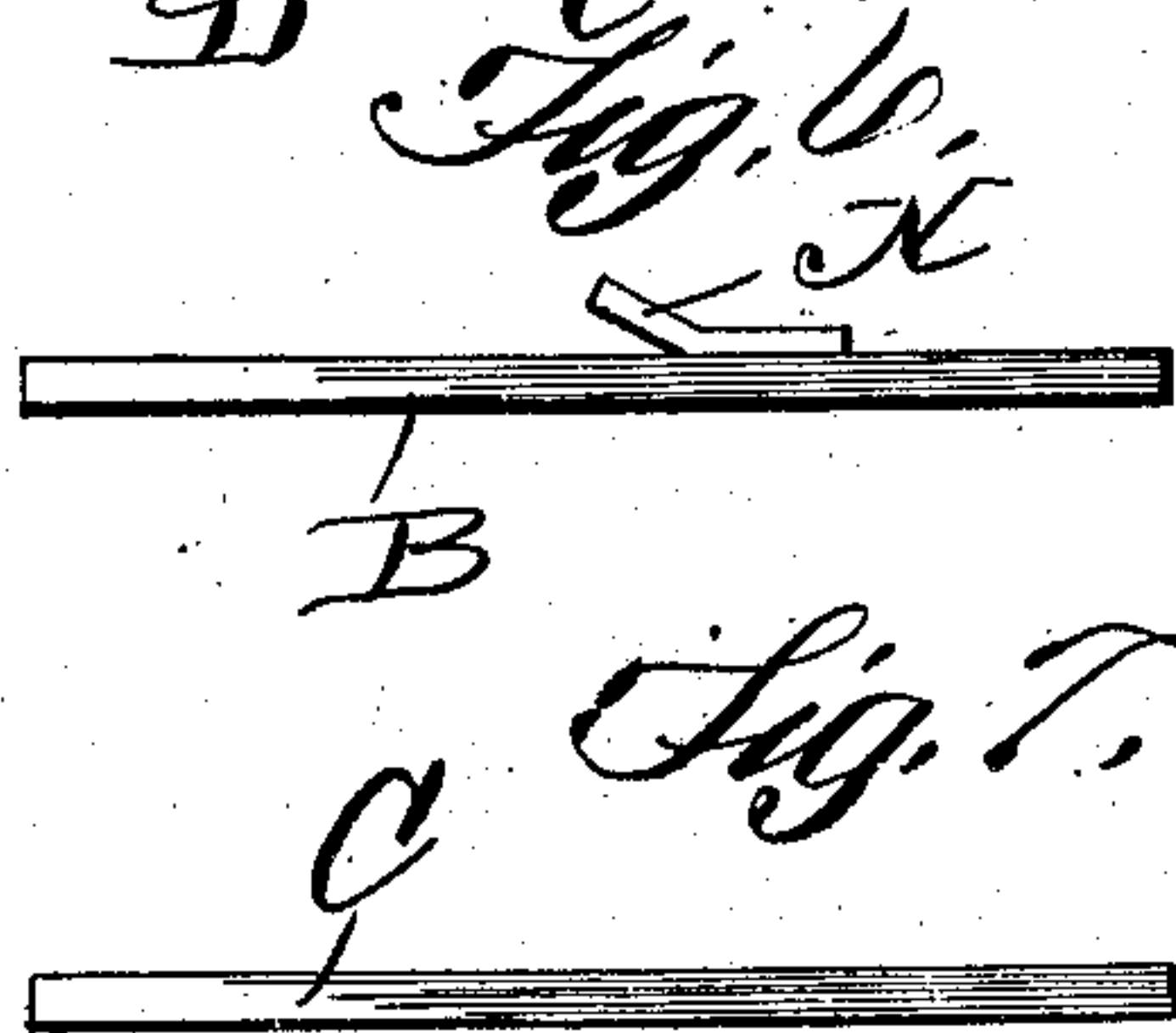
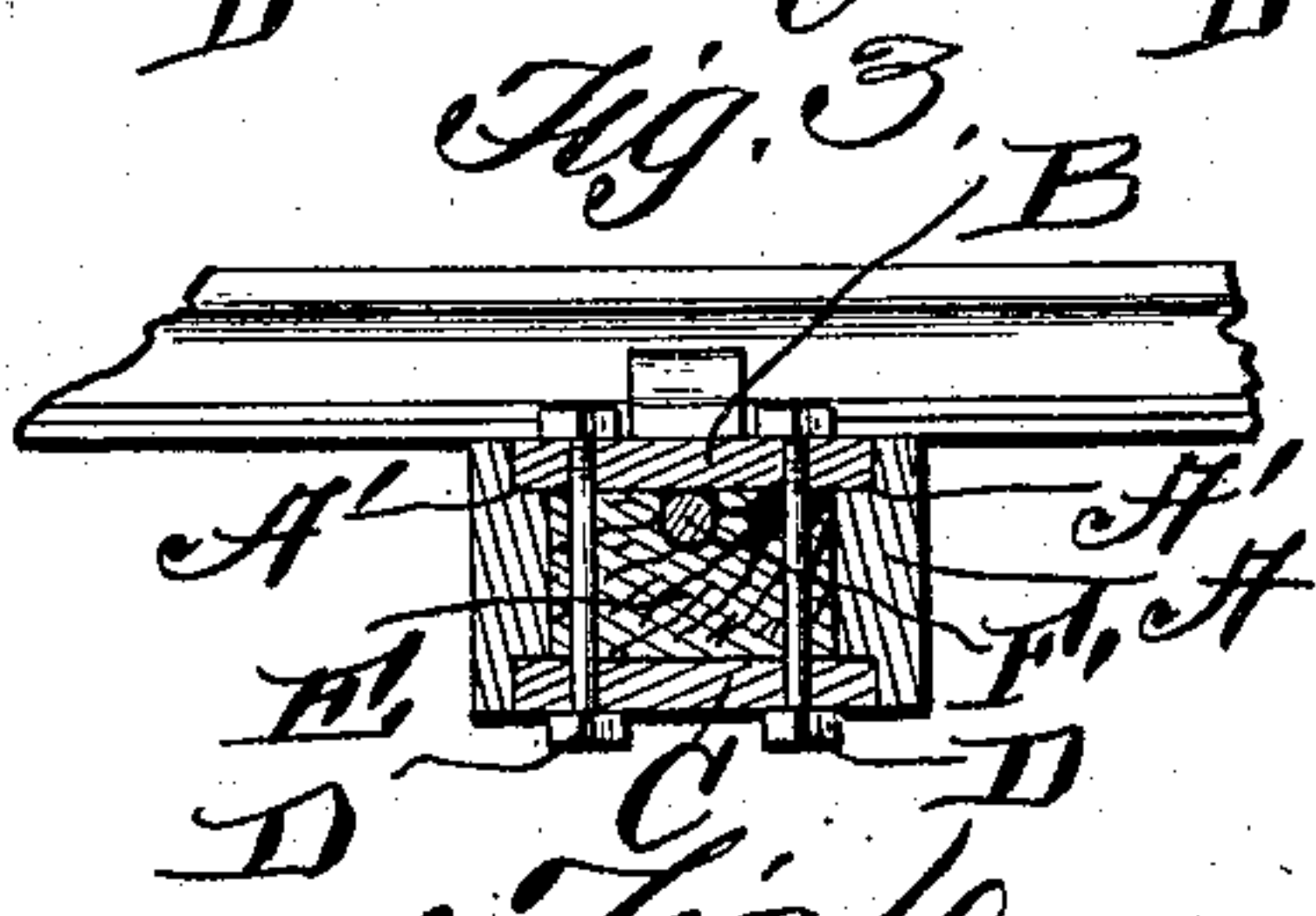
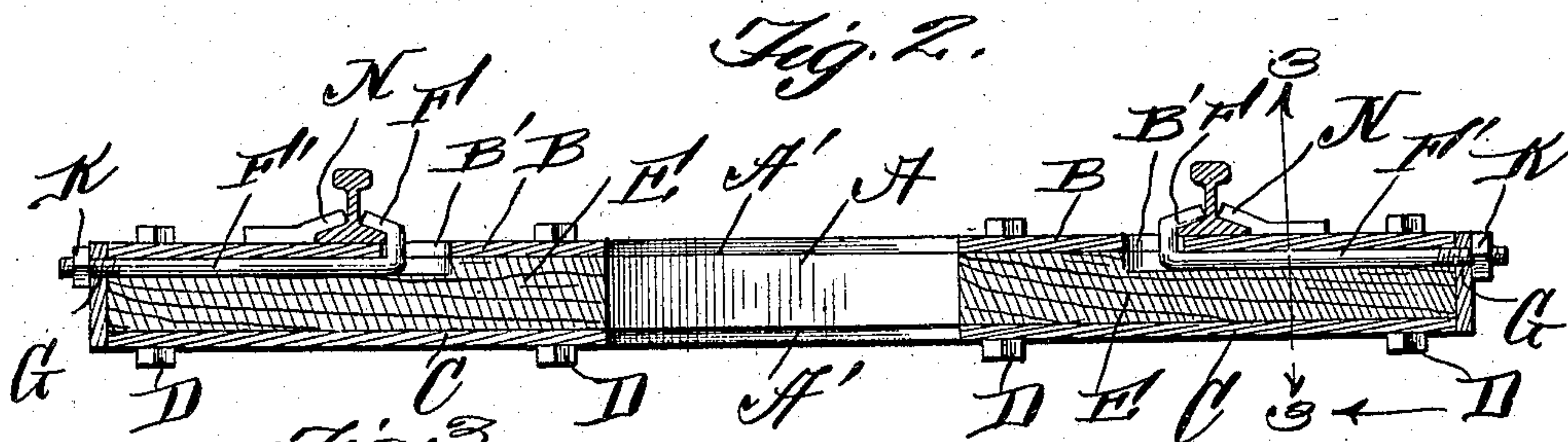
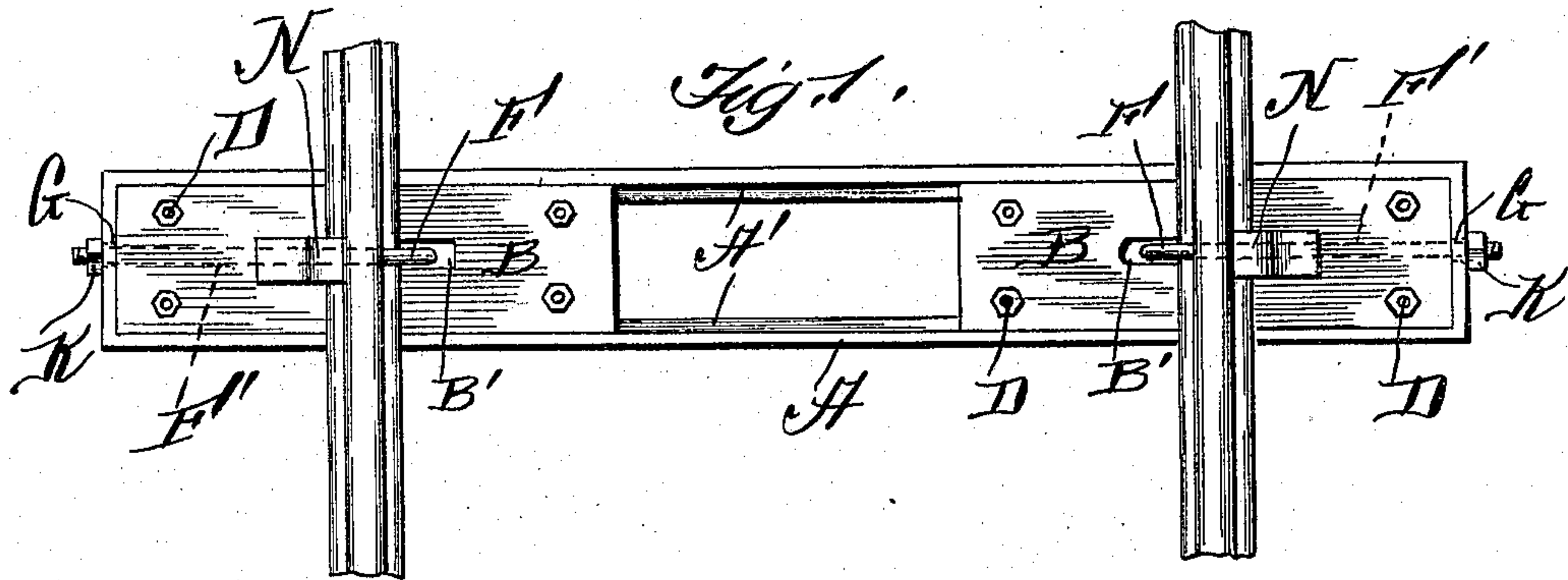


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RAILWAY TIE.  
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Patented Feb. 9, 1909.

2 SHEETS—SHEET 1.



Witnesses

*R. D. Brownell*  
a. c. Stough

Inventor

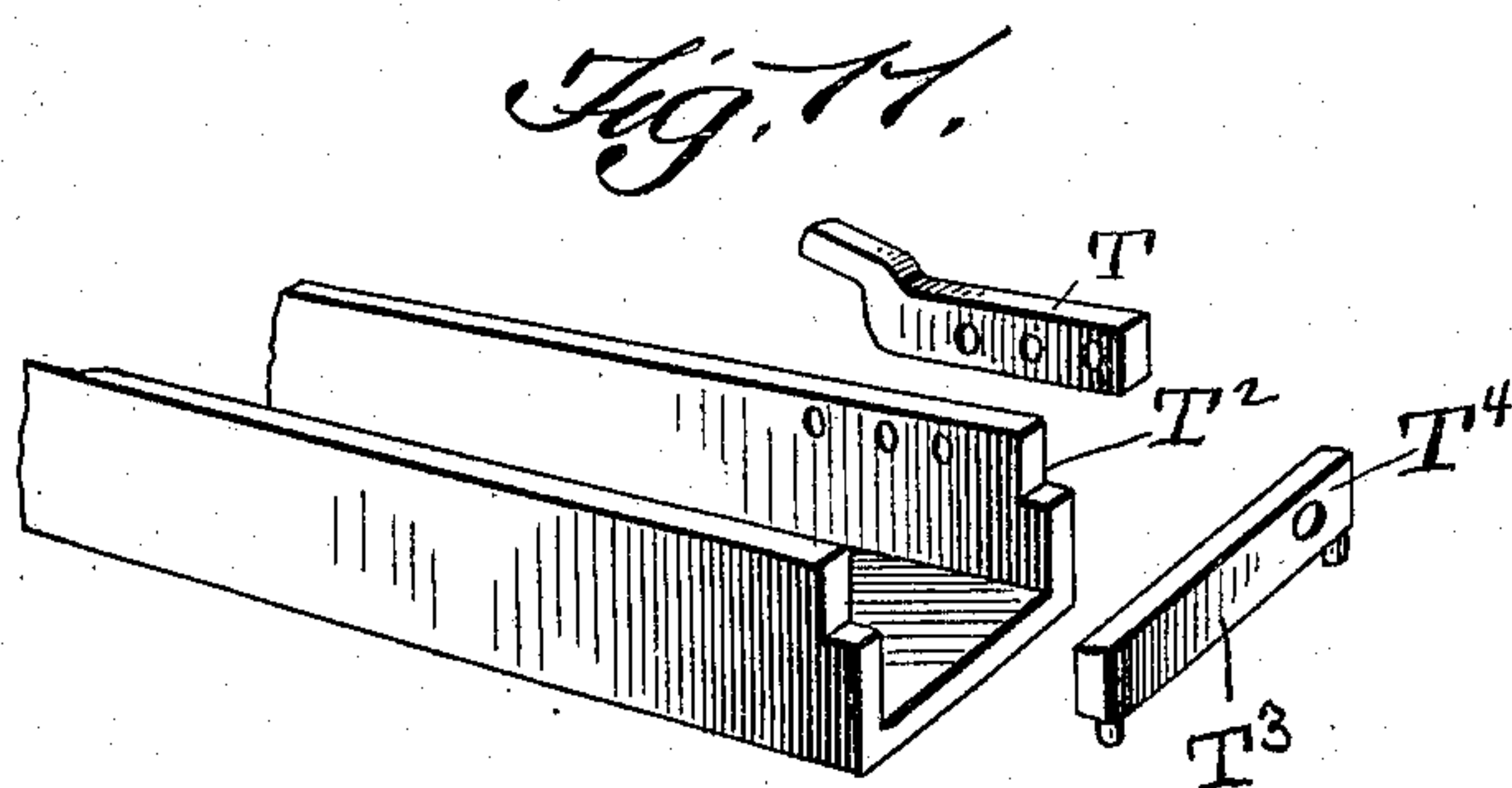
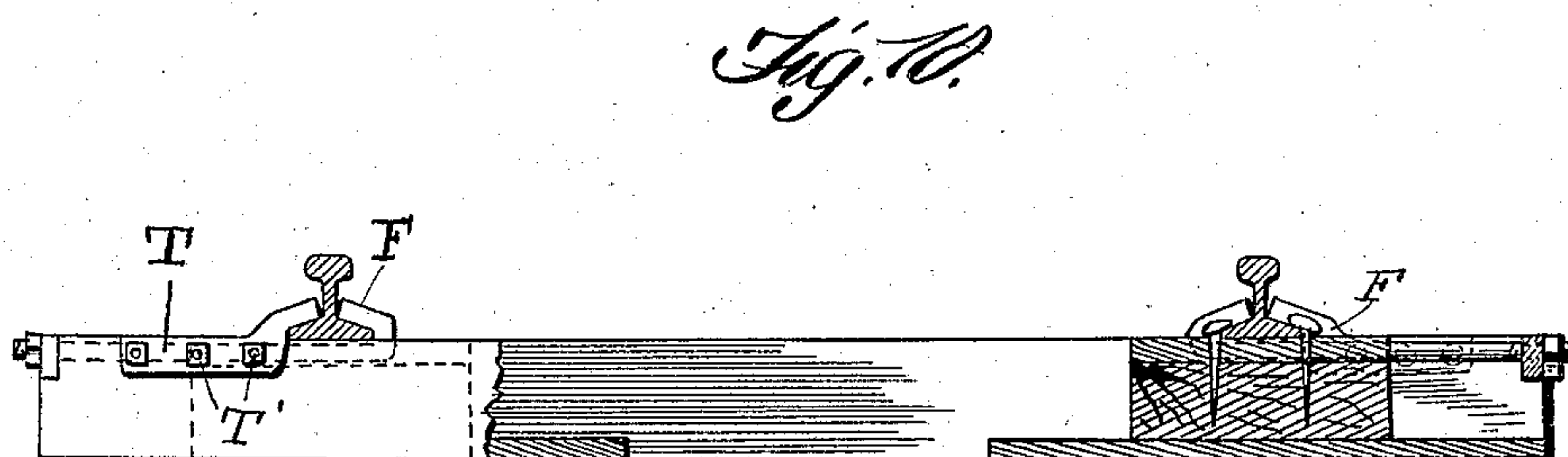
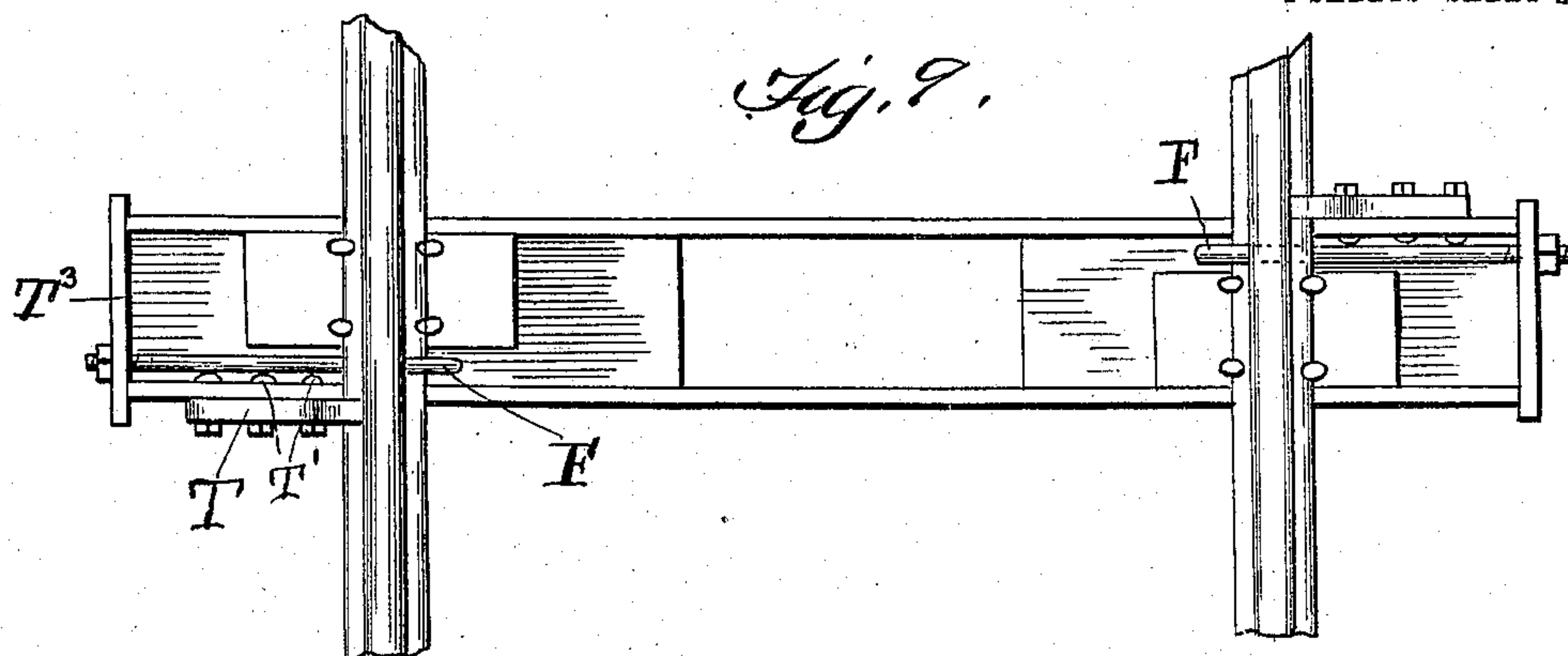
*F. A. Buse,*  
By *Franklin H. Stough*  
Attorney

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2 SHEETS—SHEET 2.



Witnesses

*R. B. Buse*  
*C. L. Hough*

By

*F. A. Buse,*  
*Franklin H. Hough*

Inventor

Attorney



# UNITED STATES PATENT OFFICE.

FREDERICK A. BUSE, OF SULPHUR, OKLAHOMA.

## RAILWAY-TIE.

No. 911,700.

Specification of Letters Patent.

Patented Feb. 9, 1909.

Application filed February 8, 1908. Serial No. 414,943.

*To all whom it may concern:*

Be it known that I, FREDERICK A. BUSE, a citizen of the United States, residing at Sulphur, in the county of Murray and State of Oklahoma, have invented certain new and useful Improvements in Railway-Ties; and I 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, reference being had to the accompanying drawings, and to the letters and figures of reference marked thereon, which form a part of this specification.

This invention relates to new and useful improvements in metallic ties for railways and comprises various details of construction, combinations and arrangements of parts which will be hereinafter fully described and then specifically defined in the appended claims.

My invention is illustrated in the accompanying drawings, in which:—

Figure 1 is a top plan view of a tie showing rails fastened thereto. Fig. 2 is a longitudinal section through the tie. Fig. 3 is a cross sectional view. Figs. 4 and 5 are detail views of the plates to which the rails are fastened. Figs. 6 and 7 are edge views of the plates shown in Figs. 4 and 5. Fig. 8 is a detail view of one of the retaining bolts. Fig. 9 is a detail view of a modification of the invention. Fig. 10 is a side elevation of the form shown in Fig. 9, parts being shown in section, and Fig. 11 is a detail perspective view.

Reference now being had to the details of the drawings by letter, A designates a rectangular outlined frame of the tie proper made of metal and provided with shoulders A' extending about the inner surface thereof adjacent to the top and lower edges. B and C designate two metallic plates which are adapted to be held upon said shoulders in the manner shown clearly in the drawings and securely fastened by means of bolts D with the outer faces of the plates flush with the opposite edges of said frame. Intermediate the plates is a block E, preferably of wood, which is clamped and held in place by said bolts and serves as a cushion to the rails. The upper plate B is provided with an elongated slot B' for the reception of the hook F, having a shank portion F' which passes through a longitudinal groove formed in said block E and also through an aper-

ture G formed in the end of the tie frame, and K designates nuts mounted upon said threaded ends. Each of the plates B has a lip N therefrom forming an abutment for the flange of a rail, as shown clearly in Figs. 1 and 2 of the drawings, the rail being held by said hook against said abutment whereby the rail may be securely held against a lateral movement.

In Figs. 9 to 11 inclusive, I have shown a slight modification of the invention in which, instead of the lugs projecting from the plate as shown in Figs. 1 and 2, detachable lips T are provided which are held by means of bolts T' to the side of the tie and, in said modifications, the usual rod with the hooked end F engages over one of the flanges of the rail while the other is engaged by said lip. In said modification, the ends of the tie are left open and each is shouldered as at T<sup>2</sup> and upon which rests a lugged cross piece T<sup>3</sup> apertured at T<sup>4</sup> for the reception of the hooked rod.

I claim—

1. A metallic railway tie, consisting of a hollow frame having shoulders formed upon the inner surface thereof, clamping plates, means for holding the same against the said shoulders, a block intermediate said clamping plates, and means for holding a rail to one of said plates, as set forth.

2. A metallic railway tie, consisting of a hollow frame having shoulders formed upon the inner surface thereof, clamping plates, means for holding the same against said shoulders, a block intermediate said clamping plates, one of said plates having an integral lip projecting therefrom and designed to engage the flange of a railway rail, and means for holding the flange of the rail against said lip, as set forth.

3. A metallic railway tie, consisting of a hollow frame having shoulders formed upon the inner surface thereof, clamping plates, means for holding the same against said shoulders, a block intermediate said clamping plates, one of said plates having an integral lip projecting therefrom and designed to engage the flange of a railway rail, a rod having a hooked end extending through a slot in said plate with a lip thereon and designed to engage over the flange of the rail, and means for holding the rod in an adjusted position, as set forth.

4. A metallic railway tie, consisting of a hollow frame having shoulders formed upon



the inner surface thereof, clamping plates, means for holding the same against said shoulders, a block intermediate said clamping plates, one of said plates having an integral lip projecting therefrom and designed to engage the flange of a railway rail, a rod having a hooked end extending through a slot in said plate with a lip thereon and designed to engage over the flange of the rail, one end of said rod passing through the end of the frame and threaded, a nut mounted upon the threaded end of said rod, as set forth.

5. A metallic railway tie comprising a hollow frame with shoulders upon the inner surface, clamping plates designed to be held against said shoulders with their outer faces flush with the edges of the frame, one of said plates having a lip adapted to engage the flange of a railway rail, a hook rod extending through an aperture in the end of the frame and having threads thereon, a nut fitted to the threaded end, the hooked end of

the rod extending through a slot in one of said plates and designed to engage the flange of a rail, and a block interposed between the plates, as set forth.

6. In combination with a hollow metallic frame having shoulders upon the inner surface thereof, clamping plates fixed to said shoulders, one of said plates having a slotted lug, a wooden block mounted between said plates and provided with a longitudinal groove, a rod seated in said groove and having a hooked end extending through a slot in one of said plates, said rod extending through an aperture in the frame, and a nut mounted upon the threaded end of the rod, as set forth.

In testimony whereof I hereunto affix my signature in the presence of two witnesses.

FREDERICK A. BUSE.

Witnesses:

J. H. WRIGHT,

J. H. WEBSTER.