

No. 840,074.

PATENTED JAN. 1, 1907.

W. J. MATTERN.  
SPLICE BAR.

APPLICATION FILED MAR. 2, 1906.

Fig. 1.

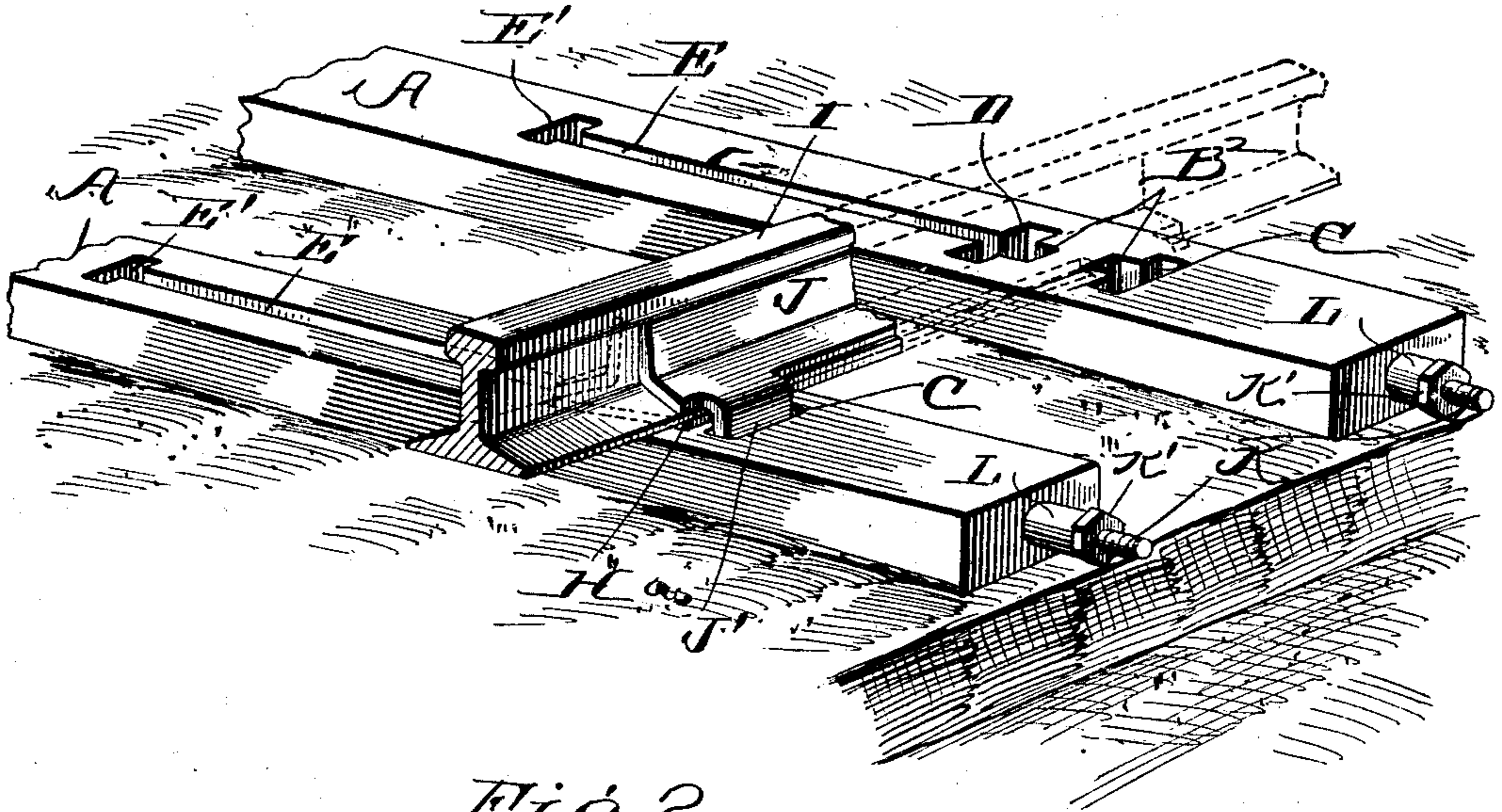
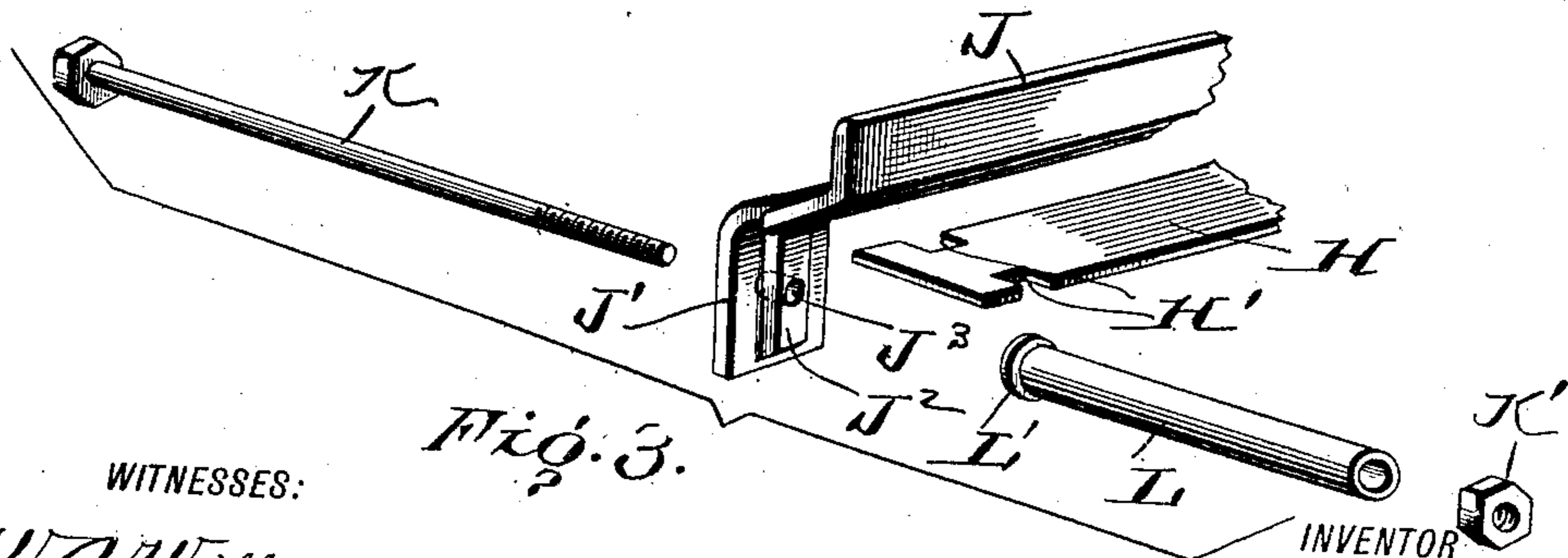
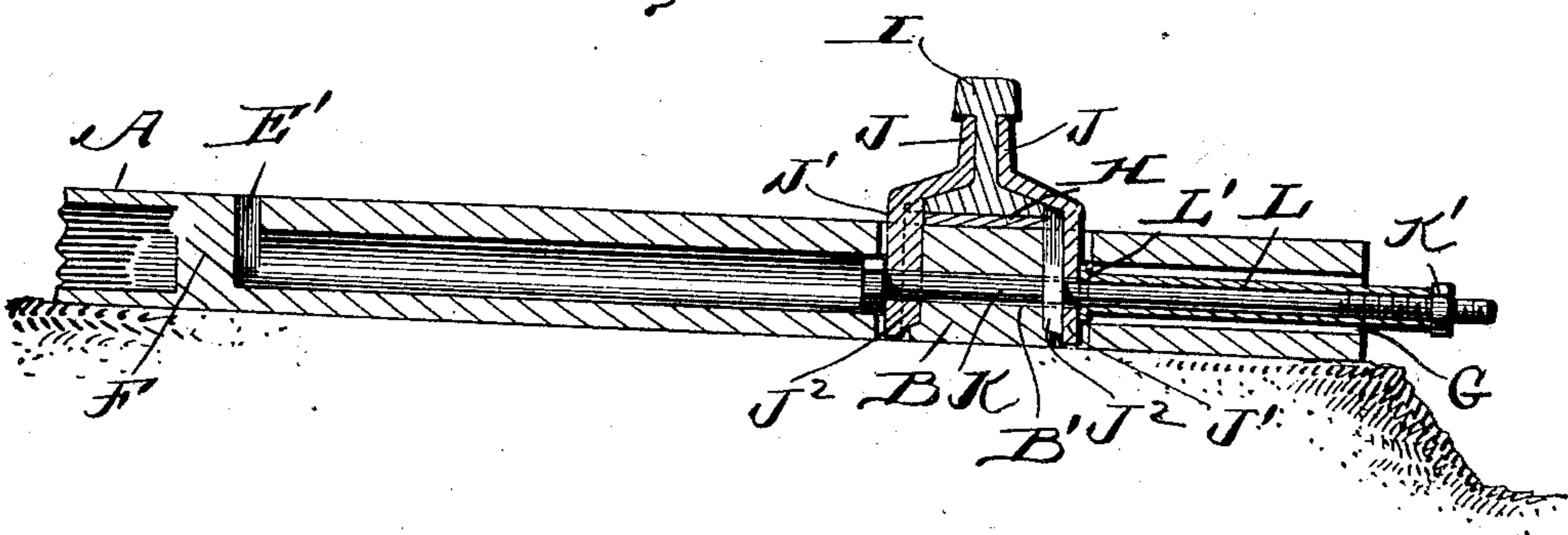


Fig. 2.



WITNESSES:

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# UNITED STATES PATENT OFFICE.

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## SPLICE-BAR.

No. 840,074.

Specification of Letters Patent.

Patented Jan. 1, 1907.

Application filed March 2, 1906. Serial No. 303,843.

*To all whom it may concern:*

Be it known that I, WILLIAM J. MATTERN, a citizen of the United States, residing at Lewistown, in the county of Mifflin and State of Pennsylvania, have invented a new and useful Improvement in Splice-Bars, of which the following is a specification.

This invention relates to railway-ties, and more particularly to ties provided with track-fastening devices, the object of the invention being to so construct the ties that the fastening means can be easily and quickly attached.

Another object of my invention is to provide a track-fastening means which can be used as a splice-bar when desired.

With these objects in view the invention consists in the novel features of construction, combination, and arrangement of parts hereinafter fully described, and pointed out in the claims.

Figure 1 is a perspective view of the ties, showing the track arranged thereon. Fig. 2 is a longitudinal sectional view of one of the ties. Fig. 3 is a detail perspective view of the track-fastening means detached.

Referring to the drawings, A indicates a tie, which may be formed of any material desired, but is preferably made of metal. The tie is formed with a solid portion B adjacent each end, having a horizontal opening B' extending therethrough, and is provided with vertical grooves B<sup>2</sup>, communicating with oblong openings C and D, formed in the tie at each side of the portion B. The opening D is connected with a longitudinal slot E, formed in the top of the tie, which connects with a transverse slot E', formed adjacent a central solid portion F. An opening is formed in each end of the tie of a greater diameter than the horizontal opening in the portion B. The ties are adapted to be used in pairs and are connected by a plate H, provided with notches H' adjacent each end and registering with the vertical grooves B<sup>2</sup> of the solid portion B, and upon this plate the rail I is adapted to rest.

Fish-plates J, provided with downwardly-projecting members J' adjacent each end and having inwardly-extending lugs J<sup>2</sup>, are arranged in the oblong opening and grooves of the ties. A horizontal opening J<sup>3</sup> is formed in the members J' and lug J<sup>2</sup> in alinement with the opening B' and through which a bolt K is adapted to pass after it has been inserted in

the ties through the slots E and E'. The end of the bolt K projects out through the openings in the end of the tie and is secured by a sleeve L, provided with a flanged end L', adapted to engage the downwardly-projecting member of the outside fish-plate when the nut K' is screwed on the bolt and securely lock the fish-plates against the rails.

From the foregoing description it will be readily seen that I have provided the ties with track-fastenings which can be used with great advantage as a splice-bar when desired, and it is of course understood that the fish-plate can be made in the form of rail-braces and used with the same result.

Having thus fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. The combination with a hollow tie provided with openings, of fish-plates arranged in said openings and a bolt passing through said plates in said tie provided with a sleeve having a flanged end, for the purpose described.

2. The combination with a hollow tie provided with a solid portion adjacent each end having a horizontal opening, of fish-plates arranged in openings at each side of said portion provided with horizontal openings and a bolt adapted to pass through said opening provided with a sleeve on its outer end, for the purpose described.

3. The combination with hollow ties provided with solid apertured portions adjacent each end having vertical openings at each side, of fish-plates provided with downwardly-projecting apertured members arranged in said openings, a bolt passing through said portion and members, and a sleeve arranged on the outer end of said bolt, for the purpose described.

4. The combination with a pair of hollow ties provided with vertical openings, of a notched plate arranged on said ties, fish-plates provided with apertured members adjacent each end arranged in said openings, a bolt passing through said members projecting out through the end of the tie, a sleeve mounted on said bolt, and a nut carried by said bolt adapted to engage said sleeve, for the purpose described.

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Witnesses:

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