

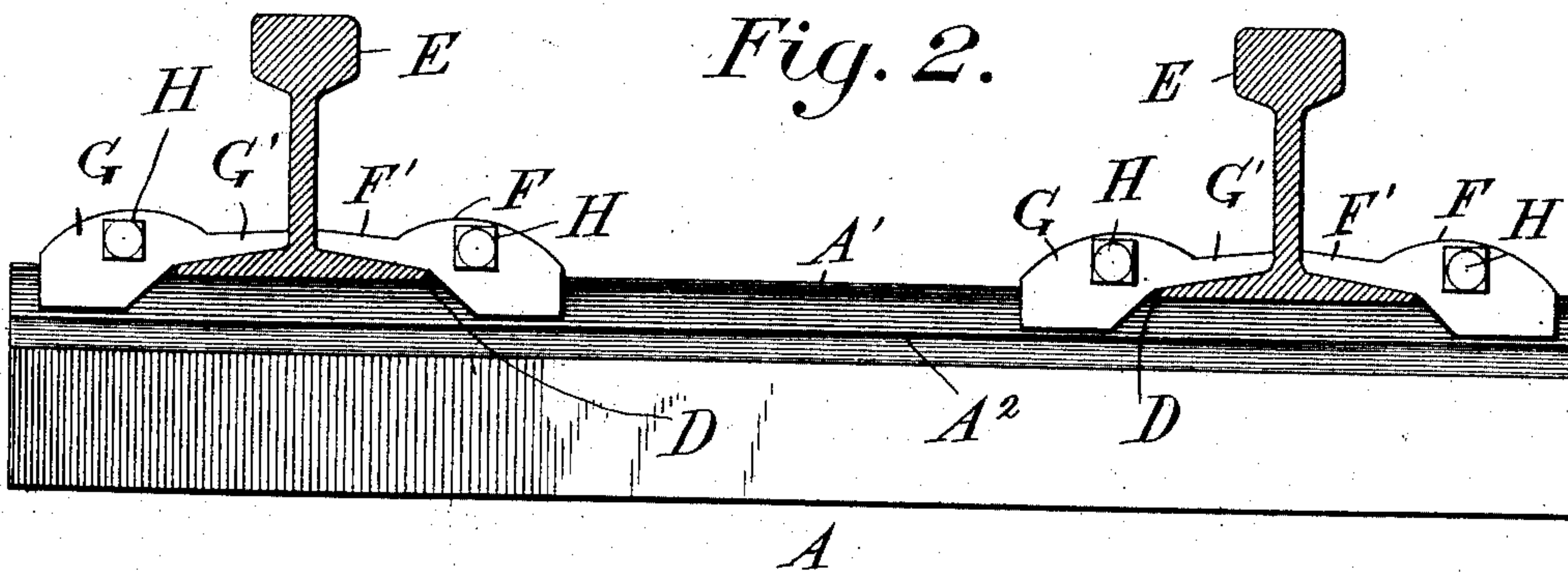
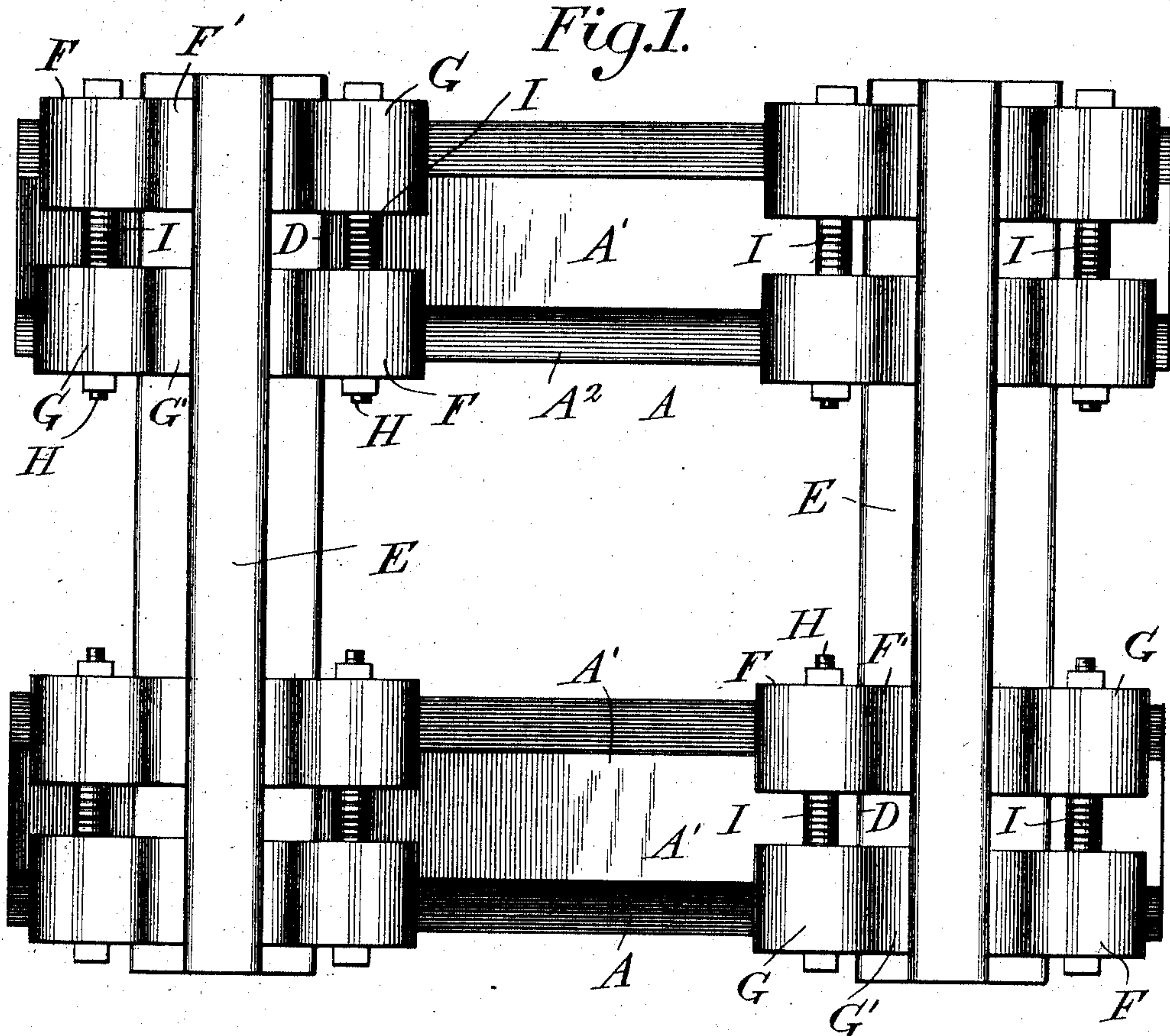
No. 874,146.

PATENTED DEC. 17, 1907.

H. G. WILLITS.
RAILROAD TIE.

APPLICATION FILED JAN. 31, 1907.

2 SHEETS—SHEET 1.



Witnesses.

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2 SHEETS—SHEET 2.

Fig. 3.

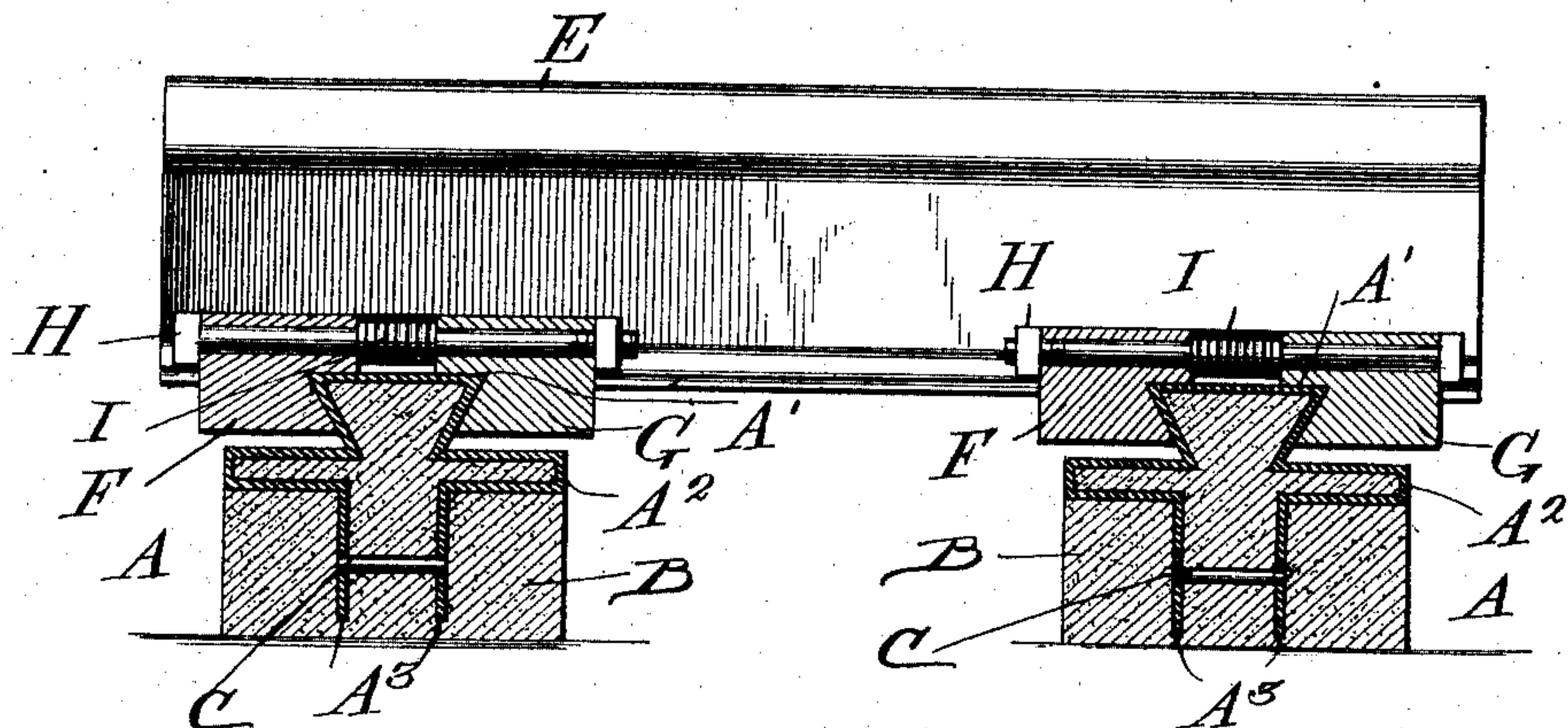


Fig. 4.

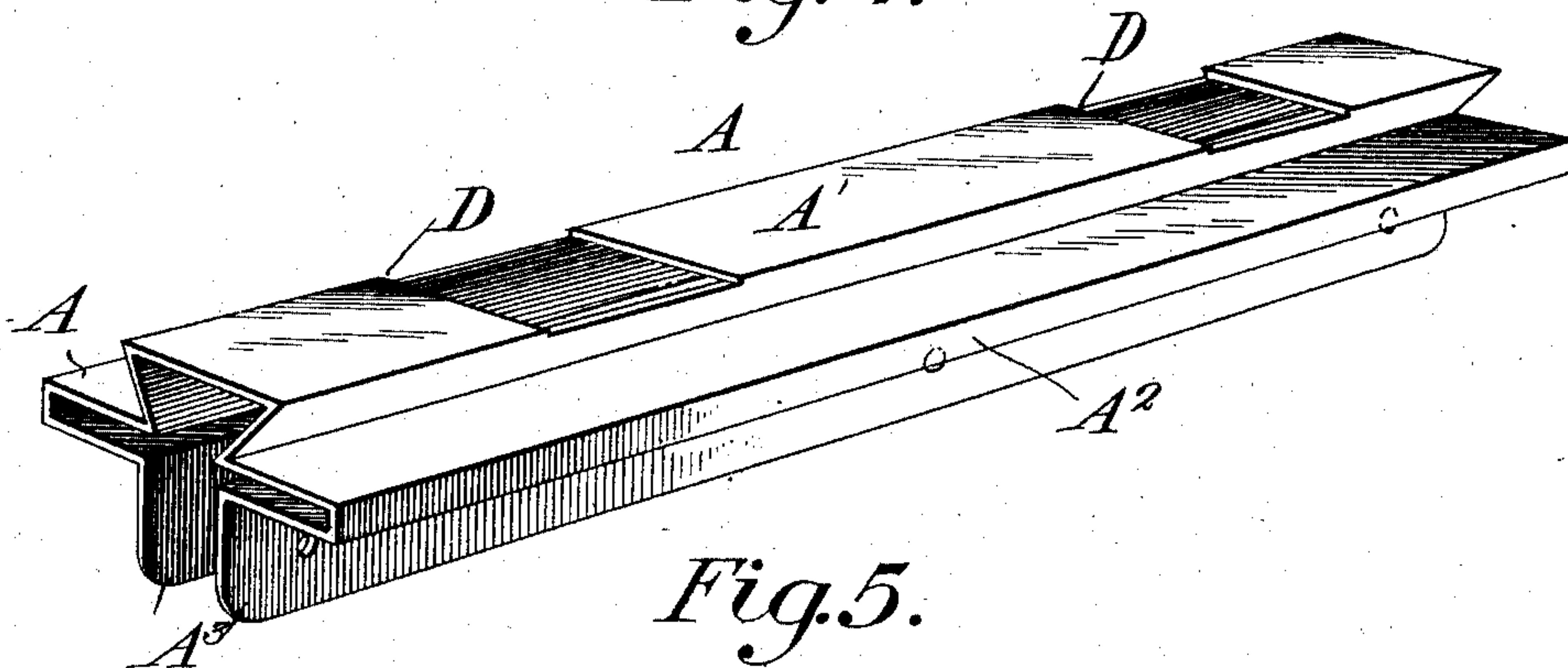
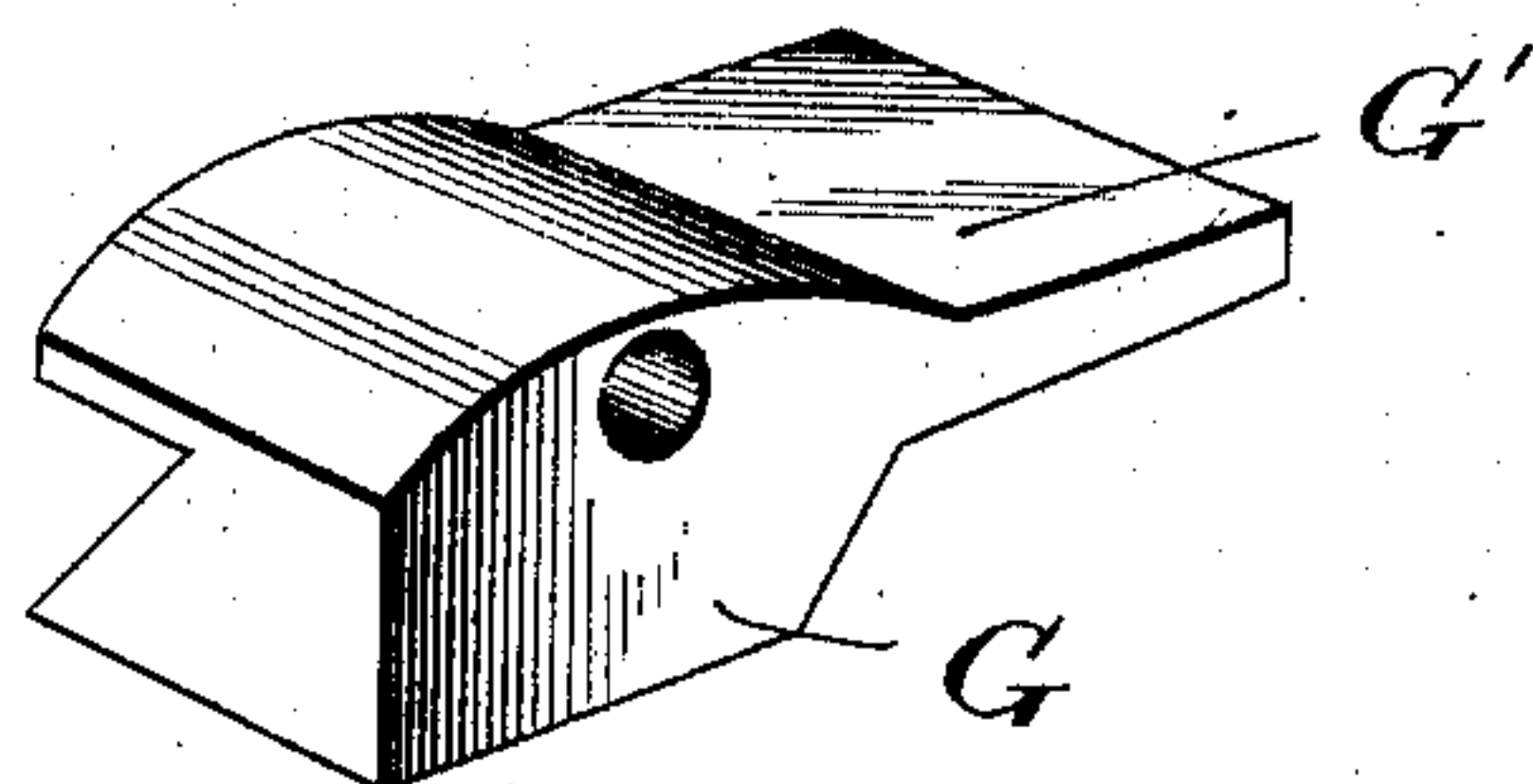


Fig. 5.



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UNITED STATES PATENT OFFICE.

HORACE G. WILLITS, OF DAVENPORT, IOWA.

RAILROAD-TIE.

No. 874,146.

Specification of Letters Patent.

Patented Dec. 17, 1907.

Application filed January 31, 1907. Serial No. 355,075.

To all whom it may concern:

Be it known that I, HORACE G. WILLITS, a citizen of the United States, residing at Davenport, in the county of Scott and State of Iowa, have invented a new and useful Improvement in a Railroad-Tie, of which the following is a specification.

This invention relates to railway ties and more particularly to combined railway ties and track fasteners, the object being to provide a tie with a dove-tail tongue on which the base of the rail is adapted to be secured by a notch fastening member working on the tongue.

Another object of my invention is to provide very novel fastening members so that the rail can be easily and quickly fastened without any danger of the rail spreading.

With these and other 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.

In the drawings forming a part of this specification:—Figure 1 is a plan view of a pair of my improved ties showing the rails secured thereon. Fig. 2 is a side elevational view of my improved tie showing the rails secured thereon. Fig. 3 is a section taken on the lines 3—3 of Fig. 1. Fig. 4 is a perspective view of the metal tie, and Fig. 5 is a perspective view of one of the fastening members.

In the drawings A indicates a hollow metal tie adapted to be filled with concrete and partly embedded in a concrete base B. The tie A comprises a dove-tail shaped tongue A', provided with oppositely disposed outwardly extending hollow shelves A² and spaced parallel sides A³ which are connected together by rods C.

The tongue is provided with cut-out portions D adjacent each end, in which the bases of the ordinary rail E, are adapted to fit and rest on the concrete filler.

A pair of fastening members F and G provided with inclined notched sides are adapted to fit over the edge of the dove-tail tongue, at each side of the rails provided with outwardly projecting tongues F', G' which extend over the base of the rail in the cut-out portion. The members are provided with transverse bores through which bolts H are adapted to pass and securely lock the members on the tongue. Coil-springs I are arranged on the bolts between the members

so as to hold the block against the nuts to prevent the nuts from turning and coming off.

From the foregoing description it will be readily seen that I have provided a tie which is very simple and cheap in construction and one which is very effective in use as the rails will be securely locked on the tie without any danger of the rails spreading.

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

1. The combination with a tie provided with a dove-tail tongue, of notched fastening members mounted on each side of said tongue provided with tongues adapted to fit over the base of the rails, and bolts connecting said members having springs arranged thereon, between said members.

2. The combination with a metal tie embedded in concrete having a dove-tail shaped tongue, of fastening members arranged on said tongue and means for securing said members on said tongue.

3. A railway tie consisting of a hollow tie filled with concrete and partly embedded in a concrete base forming supports for rails and fastening members mounted on said tie adapted to engage said rails.

4. A railway tie consisting of a hollow metal tie filled with concrete and partly embedded in a concrete base forming supports for rails, fastening members arranged on said tie and means for securing said members thereon against the rails.

5. A railway tie consisting of a hollow metal tie provided with a dove-tail tongue filled with concrete and partly embedded in a concrete base forming a support for the rails, notched fastening members mounted on said tongues and means for securing said members on said tongue against said rails.

6. A railway tie consisting of a hollow metal tie filled with concrete and partly embedded in a concrete base, a dove-tail tongue formed on said tie provided with cut-out portions forming supports for the rails, and notched fastening members secured on said tongue provided with tongues adapted to fit over the base of the rails.

7. A railway tie consisting of a hollow metal tie filled with concrete and embedded in a concrete base, a dovetail tongue projecting upwardly from said tie provided with cut-out portions adapted to receive the rails, notched fastening members mounted on said

tongue provided with tongues extending over the base of the rails and means for securing said members on said tongue, for the purpose described.

- 5 8. A railway tie consisting of a hollow metal tie filled with concrete and embedded in a concrete base, a dove-tail tongue formed on said tie provided with cut out portions to receive the base of the rails, notched fasten-

ing members mounted on each side of said tongue provided with tongues adapted to fit over the base of the rails and a bolt connecting said members having a spring arranged thereon between said members. 10

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