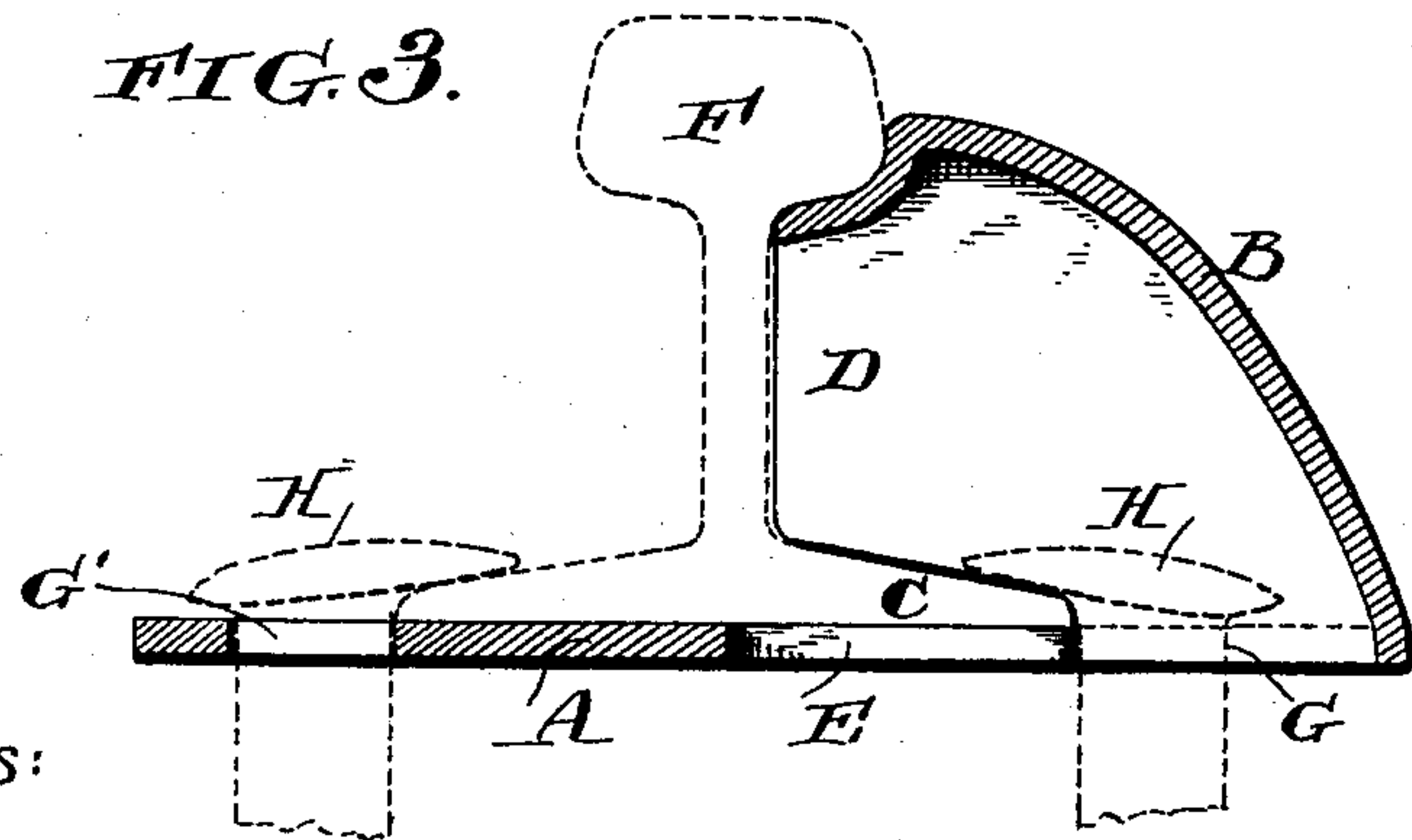
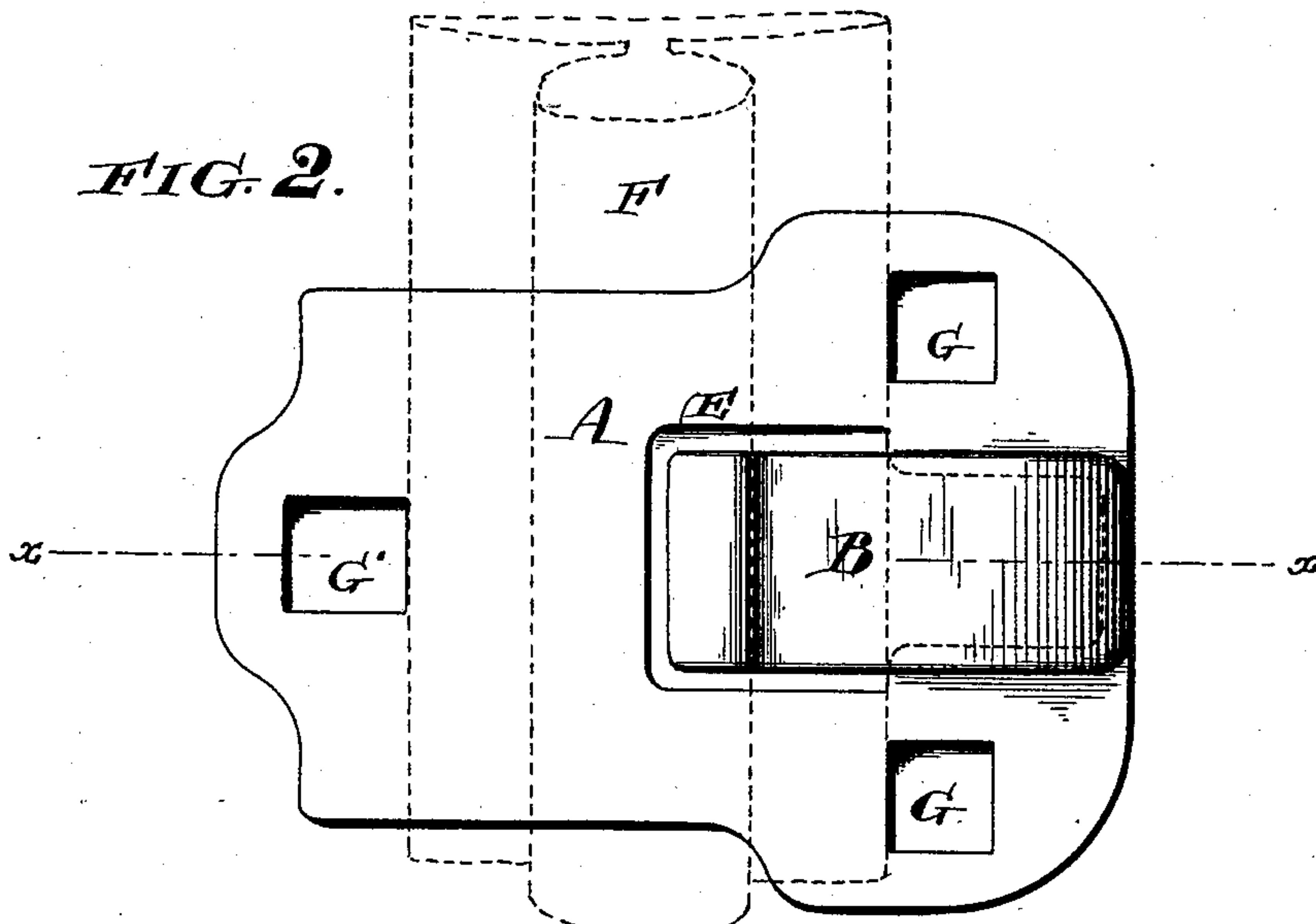
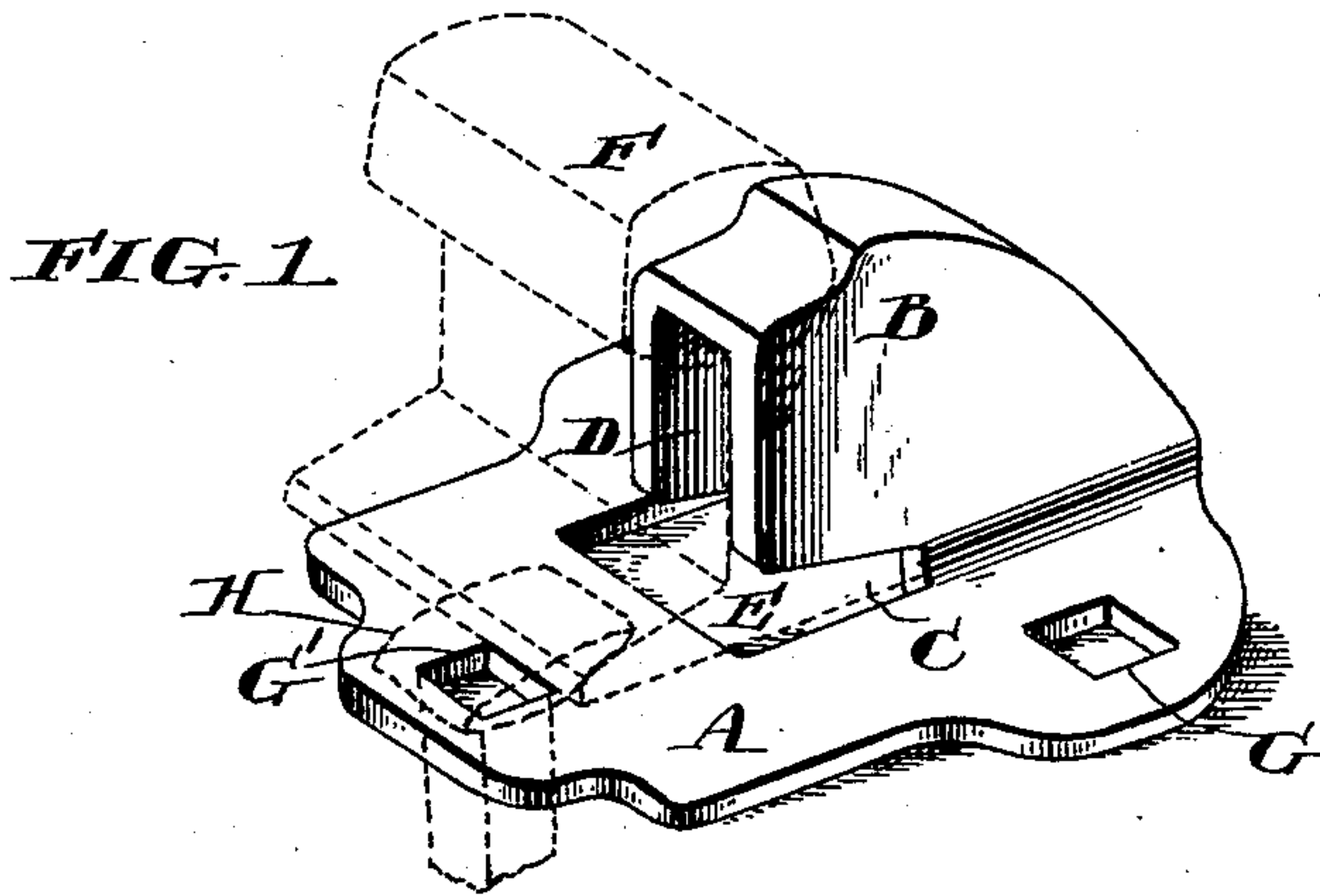


(No Model.)

W. H. PHILLIPS.
TIE PLATE AND BRACE.

No. 482,318.

Patented Sept. 6, 1892.



Witnesses:

Henry D. Dwyer
J. H. Russell

Inventor:

William H. Phillips
by his atty.

Francis J. Chambers

UNITED STATES PATENT OFFICE.

WILLIAM H. PHILLIPS, OF PHILADELPHIA, PENNSYLVANIA, ASSIGNOR TO
PAUL THOMPSON, OF SAME PLACE.

TIE-PLATE AND BRACE.

SPECIFICATION forming part of Letters Patent No. 482,318, dated September 6, 1892.

Application filed April 29, 1892. Serial No. 431,124. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM H. PHILLIPS, of the city and county of Philadelphia, State of Pennsylvania, have invented a certain new and useful Tie-Plate and Brace, of which the following is a true and exact description, reference being had to the accompanying drawings, which form a part of this specification.

My invention relates to the construction of a combined tie-plate and rail-brace, and has for its object to provide a device of this kind formed of cast metal and which, while providing a thoroughly-good support and brace for the rail, can be made at small cost, the metal being economically distributed and arranged in such a way that a separate core is not required in forming the mold for it.

The nature of my invention will be best understood as described in connection with the drawings in which it is illustrated, and in which—

Figure 1 is a perspective view of my tie-plate and brace; Fig. 2, a plan view thereof, and Fig. 3 a sectional elevation on the line X X of Fig. 2.

A is the platform upon which the rail rests and which is provided with spike-holes G G'. Springing from the outside of the platform is the brace B, which overlaps the platform, as indicated at C, so that one flange of the rail-base can pass beneath it, and is formed so that its upper end will fit against the un-

der side of the rail-head. The brace B is cored out, as indicated at D, and an opening or recess E is formed in the platform A beneath the cored-out portion of the brace.

F indicates a rail secured on the tie-plate, and H H H spikes by which the tie-plate is secured to the tie and the rail held in place upon the tie-plate.

It will be understood that the tie-plate and brace is formed of a single integral casting, and it is obvious that by reason of the opening E beneath the cored-out part B of the brace the hollow brace can be formed without the use of a separate core, while at the same time the section and distribution of the metal is such as to give the device the necessary strength.

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

The cast-metal tie-plate and brace having a platform A, a brace B, cast integral therewith, formed with a cavity D, and adapted to fit closely against the rail-head, and an opening E, formed in the platform A beneath the cavity in brace B, all substantially as and for the purpose specified.

WILLIAM H. PHILLIPS.

Witnesses:

LISLE STOKES,
J. H. RUSSELL.