

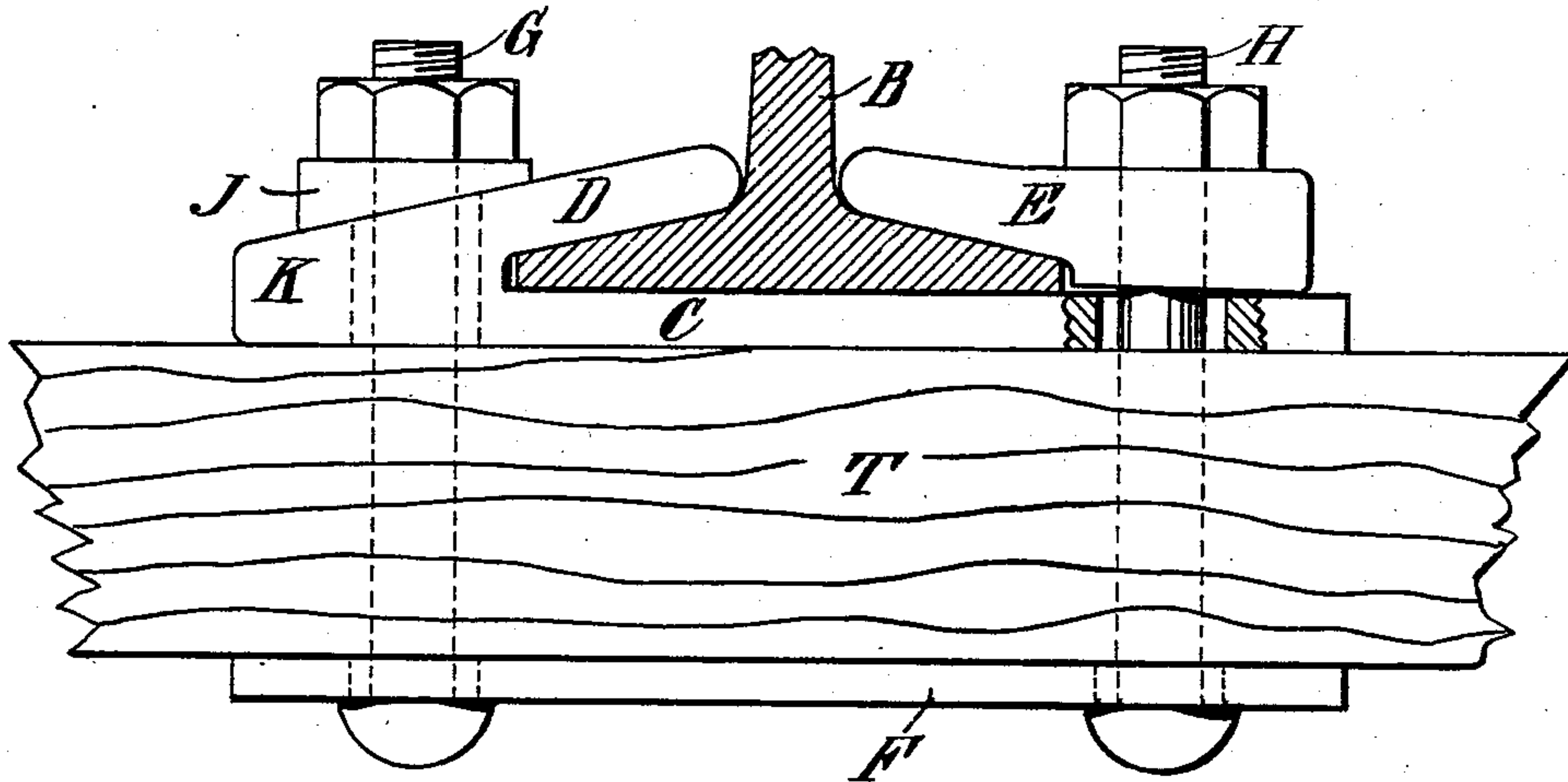
No. 733,445.

PATENTED JULY 14, 1903.

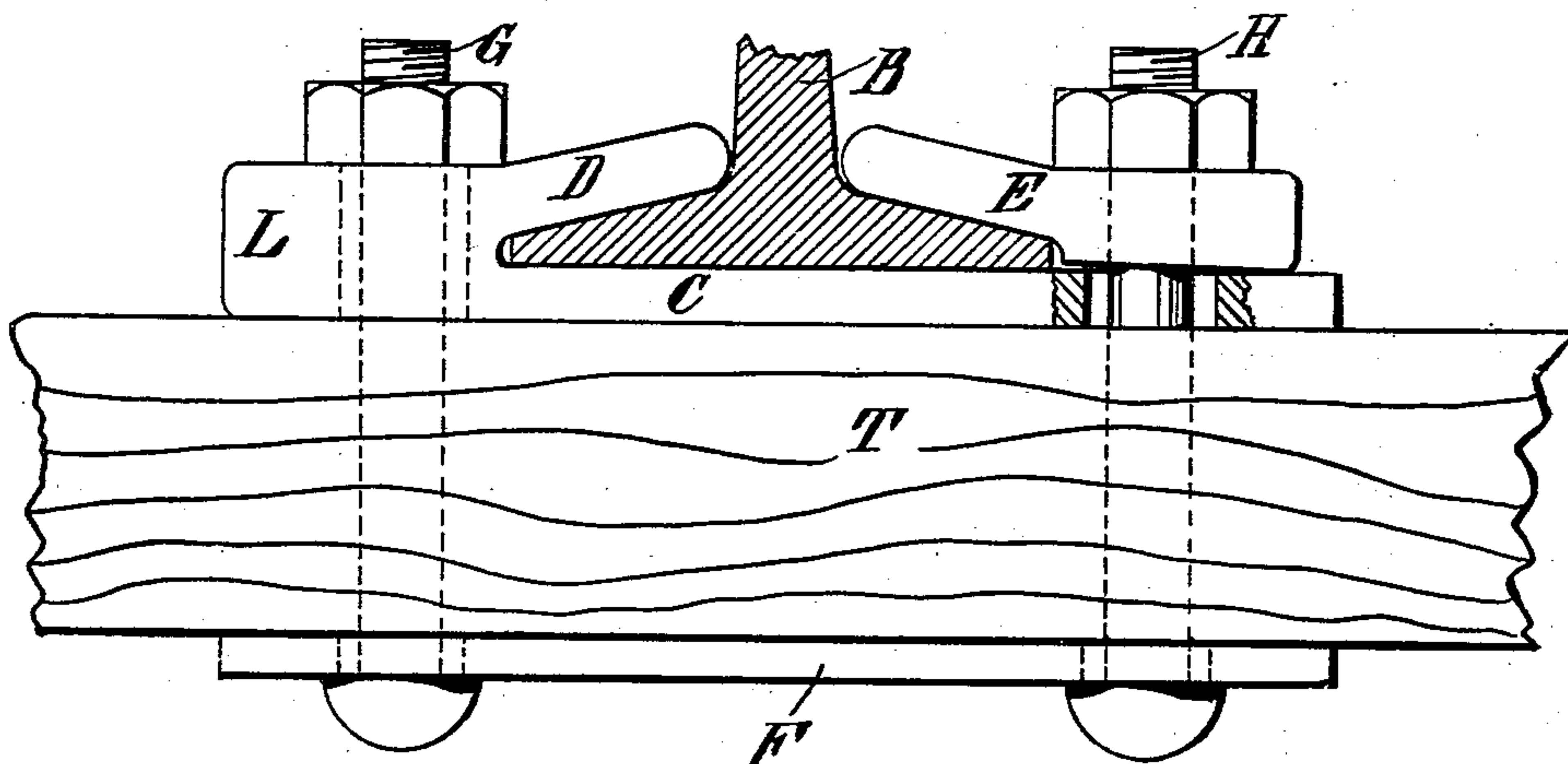
G. A. WEBER.  
RAIL FASTENING.  
APPLICATION FILED FEB. 28, 1903.

NO MODEL.

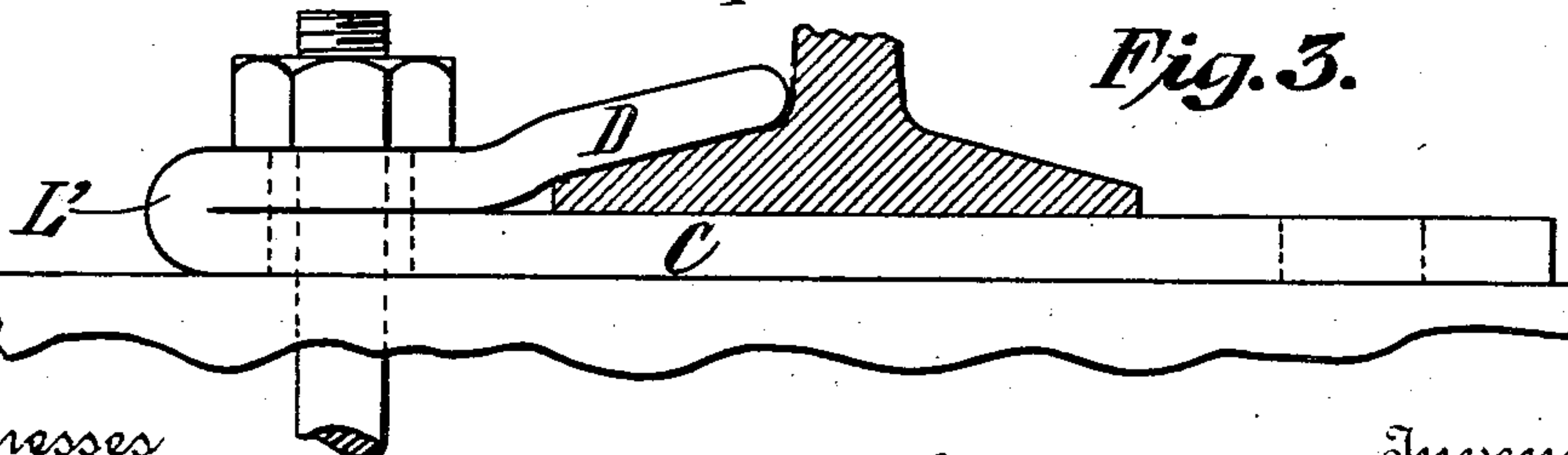
*Fig. 1.*



*Fig. 2.*



*Fig. 3.*



Witnesses  
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# UNITED STATES PATENT OFFICE.

GEORGE ADAM WEBER, OF NEW YORK, N. Y., ASSIGNOR TO THE WEBER RAILWAY JOINT MANUFACTURING COMPANY, OF NEW YORK, N. Y., A CORPORATION OF WEST VIRGINIA.

## RAIL-FASTENING.

SPECIFICATION forming part of Letters Patent No. 733,445, dated July 14, 1903.

Application filed February 28, 1903. Serial No. 145,537. (No model.)

*To all whom it may concern:*

Be it known that I, GEORGE ADAM WEBER, a citizen of the United States, and a resident of the borough of Manhattan, city, county, and State of New York, have invented certain new and useful Improvements in Rail-Fastenings, of which the following is a specification accompanied by drawings.

My said invention consists in a new and improved fastening for railway-rails, as will appear from the following description in connection with the accompanying drawings, in which—

Figure 1 is a side elevation, partly in section, showing one part of the cross-tie, the rail-fastening partly in section, and the lower portion of the rail in section. Fig. 2 is a view similar to Fig. 1, showing a slightly-different form of the fastening. Fig. 3 is a view showing another slightly-different construction of the fastening, parts being omitted.

As shown in Fig. 1, the improved fastening comprises a metal plate C, adapted to rest upon the cross-tie T and to receive and support the base of the rail B. The plate C is longer than the width of the base of the rail B, so as to afford an extended bearing upon the cross-tie T and also ample space for the bolts G H, by which the plate C is secured to the cross-tie and the rail securely clamped to the plate. The bolts G H pass upwardly through the cross-tie T through holes therein, within which the said bolts are held stationary. A strip of metal F is interposed between the heads of the bolts and the cross-tie and is formed with square holes to receive the ordinary square necks of the bolts G H to prevent them from turning. The plate C is provided at one end with a clamp K D for holding the rail-flange, the lug D of the clamp being adapted to fit the rail-flange and being preferably sprung slightly downward in order that when the rail is in place the elasticity of the lug D will prevent loose vibration. Opposite the lug D is provided a clamp E, attached to the other side of the rail-flange and adapted to be clamped against the plate C, making contact with the plate C mainly at the extreme outer portion of the clamp E, so as to provide some resilience. The end of

the plate C, which is of extra thickness, as at K, may have an inclined upper surface, upon which is provided a correspondingly-beveled piece J, either in the form of a loose washer or formed as part of the thickened portion K. The bolts G H pass through holes in the plate C, that are much larger than the bolts to permit adjustment of the plate C transversely of the rail and also to permit adjustment of the clamp E. Therefore when the rail is set in place the plate C may be adjusted until the rail is in proper alinement, and then after the nut of the bolt G has been tightened the clamp E may be fastened securely in place, holding the rail in exact alinement.

Fig. 2 differs from Fig. 1 in showing a thickened end L on the plate C with a flat upper surface for the bolt-nut.

Fig. 3 shows the plate C with thickened portion L' and clamping-lug D' made on a folded length of iron, the bolt passing through the folded portion, as shown.

Obviously my invention may be embodied in widely-varying forms and therefore without limiting myself to the construction shown and described nor enumerating equivalents, I claim, and desire to obtain by Letters Patent, the following:

1. An improved fastening for railway-rails, consisting of a metal plate resting upon the cross-tie and adapted to support the rail, and of extra thickness at one end, the thick end having an inwardly-extending clamp portion adapted to bear upon the flange on one side of the rail, a clamp resting upon the other end of the base-plate, and adapted to rest upon the other flange of the rail, securing-bolts passing upward through the tie and through holes in the fastening-plate, which are sufficiently large to permit adjustment, whereby the said bolts may clamp the clamp, the fastening-plate and the rail, and whereby the clamp is adjustable to the said clamp portion and both are adjustable transversely of the rail, for the purpose set forth.

2. An improved fastening for railway-rails, consisting of a metal plate resting upon the cross-tie and adapted to support the rail, and of extra thickness at one end, the thick end



having an inwardly-extending clamp portion adapted to bear upon the flange on one side of the rail, a clamp resting upon the other end of the base-plate, and adapted to rest  
5 upon the other flange of the rail, securing-bolts passing upward through the tie and through holes in the fastening-plate, which are sufficiently large to permit adjustment, the said clamp being formed to rest upon the  
10 rail-flange and to rest upon the supporting-plate at its own outer extremity to afford a slight resilience, whereby the said bolts may clamp the clamp, the fastening-plate and the rail, and whereby the clamp is adjustable to  
15 the said clamp portion and both are adjustable transversely of the rail, for the purposes set forth.

3. An improved fastening for railway-rails, consisting of a metal plate resting upon the  
20 cross-tie and adapted to support the rail, and of extra thickness at one end, the thick end having an inwardly-extending clamp portion adapted to bear upon the flange on one side

of the rail, a clamp resting upon the other end of the base-plate, and adapted to rest 25 upon the other flange of the rail, securing-bolts passing upward through the tie and through holes in the fastening-plate, which are sufficiently large to permit adjustment, the clamping portion of the supporting-plate 30 having an inclined portion adapted to the rail-flange and the nut-receiving portion at an angle thereto, whereby the said bolts may clamp the clamp, the fastening-plate and the rail, and whereby the clamp is adjustable to the 35 said clamp portion and both are adjustable transversely of the rail, for the purposes set forth.

In testimony whereof I have signed this specification in the presence of two subscrib- 40 ing witnesses.

GEORGE ADAM WEBER.

Witnesses:

E. VAN ZANDT,

H. D. OGDEN, Jr.