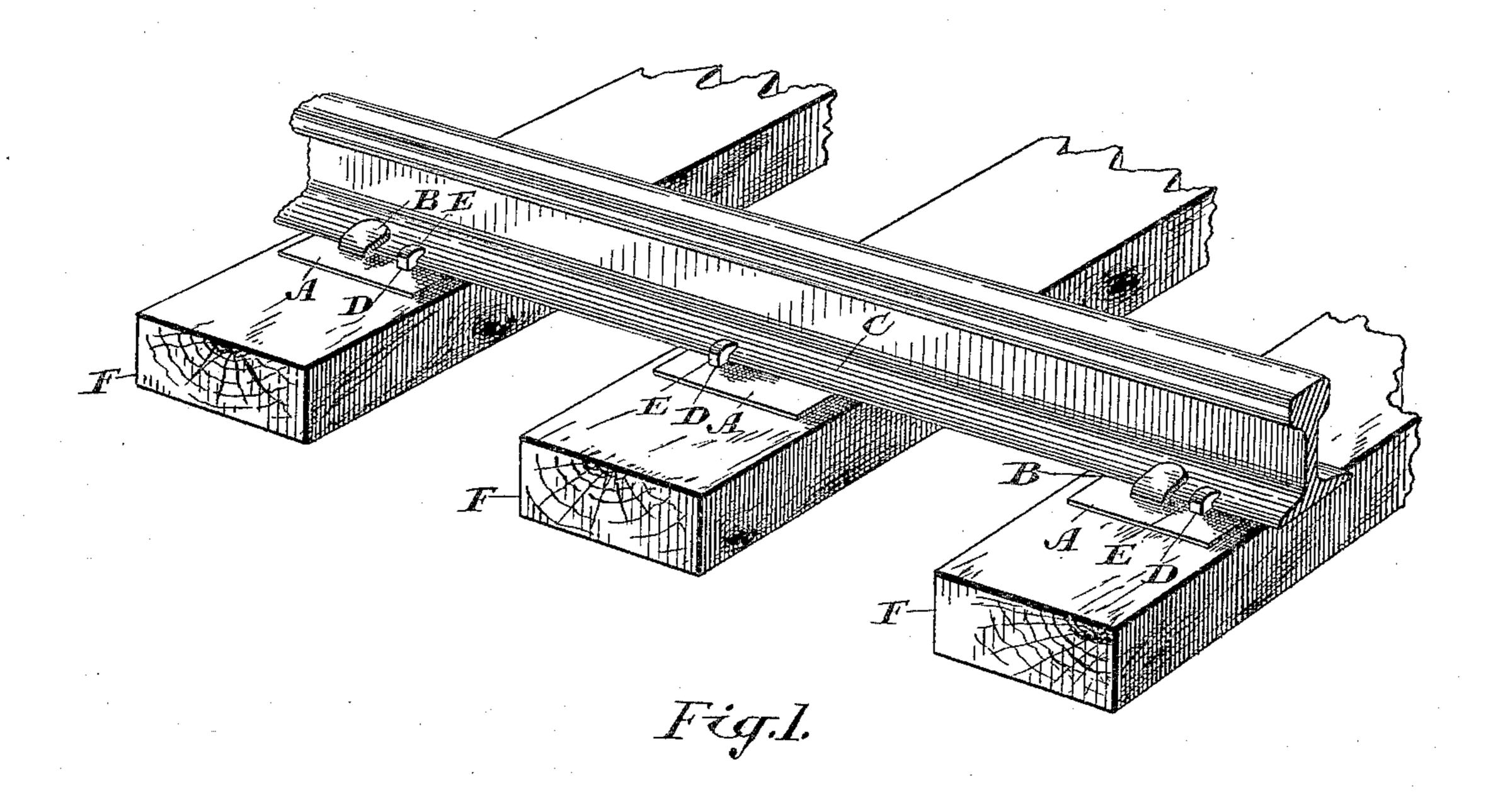
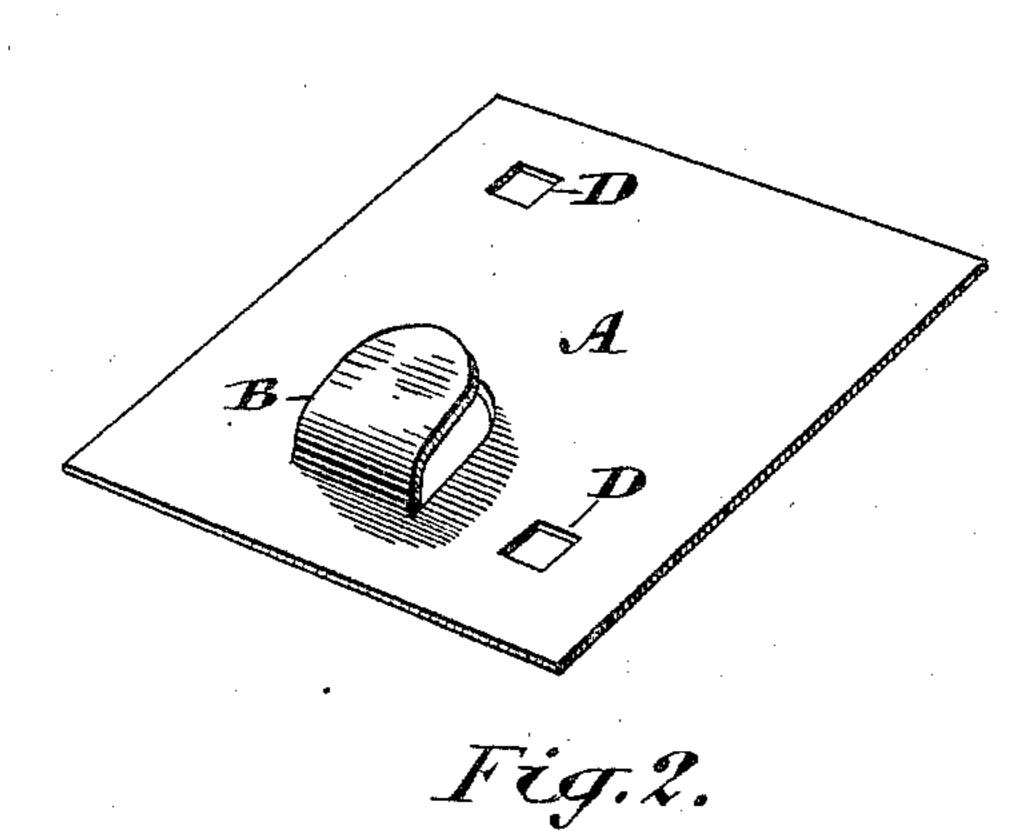
(No Model.)

H. HOLGATE. TIE PLATE FOR RAILWAYS.

No. 436,709.

Patented Sept. 16, 1890.





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Henry Holyate Lastenburgh & Co. App.

United States Patent Office.

HENRY HOLGATE, OF INNISFIL, ONTARIO, CANADA.

TIE-PLATE FOR RAILWAYS.

SPECIFICATION forming part of Letters Patent No. 436,709, dated September 16, 1890.

Application filed June 16, 1890. Serial No. 355,606. (No model.)

To all whom it may concern:

Be it known that I, Henry Holgate, civil engineer, of the township of Innisfil, in the county of Simcoe, in the Province of Ontario, Canada, have invented a certain new and useful Tie-Plate for Railways, of which the following is a specification.

The object of the invention is to provide a means of protecting the ties or sleepers of a railway-track from the cutting action of the flange of the rail and consequent wear of the said ties or sleepers and danger incident thereto caused by the vibration or spreading of the rail as the train passes over them.

Figure 1 is a perspective view of the rail provided with my improved tie-plate. Fig. 2 is a perspective detail of the tie-plate.

Owing to the soft material of the ties or sleepers used in railway-tracks the rails in a very short time sink into them unevenly, causing the spike to loosen, thus leaving the rails in a measure free to spread by the pounding action of the wheels of passing trains. It is from this cause that so many accidents occur on railways, which by the adoption of my tie-plate will be obviated.

In the drawings, A represents a plate, preferably of steel. In the body of this plate I stamp out a lug B, curved, as indicated, to fit over the flange of the rail C. Two holes D are made in the plate A, through which the spikes E are driven into the tie or sleeper F.

It will be observed that I place the plate A on each tie or sleeper F, the said plates being arranged so that the lugs B shall be on alteracted at a sides of the rail, thus forming a continuous lock along the entire length of the rail, effectually widening the base of the rail. As the plate A has a broad surface and is held to the tie or sleeper F by the spikes E, a solid to the tie or sleeper F by the spikes E, a solid unimpressionable surface is provided for the support of the rail, and as a consequence the action of the passing trains will not have any injurious effect or to any extent loosen the fastening by which the rails are secured to 45 the ties or sleepers.

Ishow two spikes; but of course more spikes may be introduced, if desired. I think two will be found sufficient for the purpose.

What I claim as my invention is—
In combination with the rails and sleepers, a series of flat metal plates A, each having a single lug B struck up from the body of the plate, the said plates being located between the rail and sleeper and arranged with the 55 lugs alternating on the sides of the rail to engage with the flange, substantially as described.

HENRY HOLGATE.

Witnesses:

W. C. Schreilus, H. G. Jackson.