

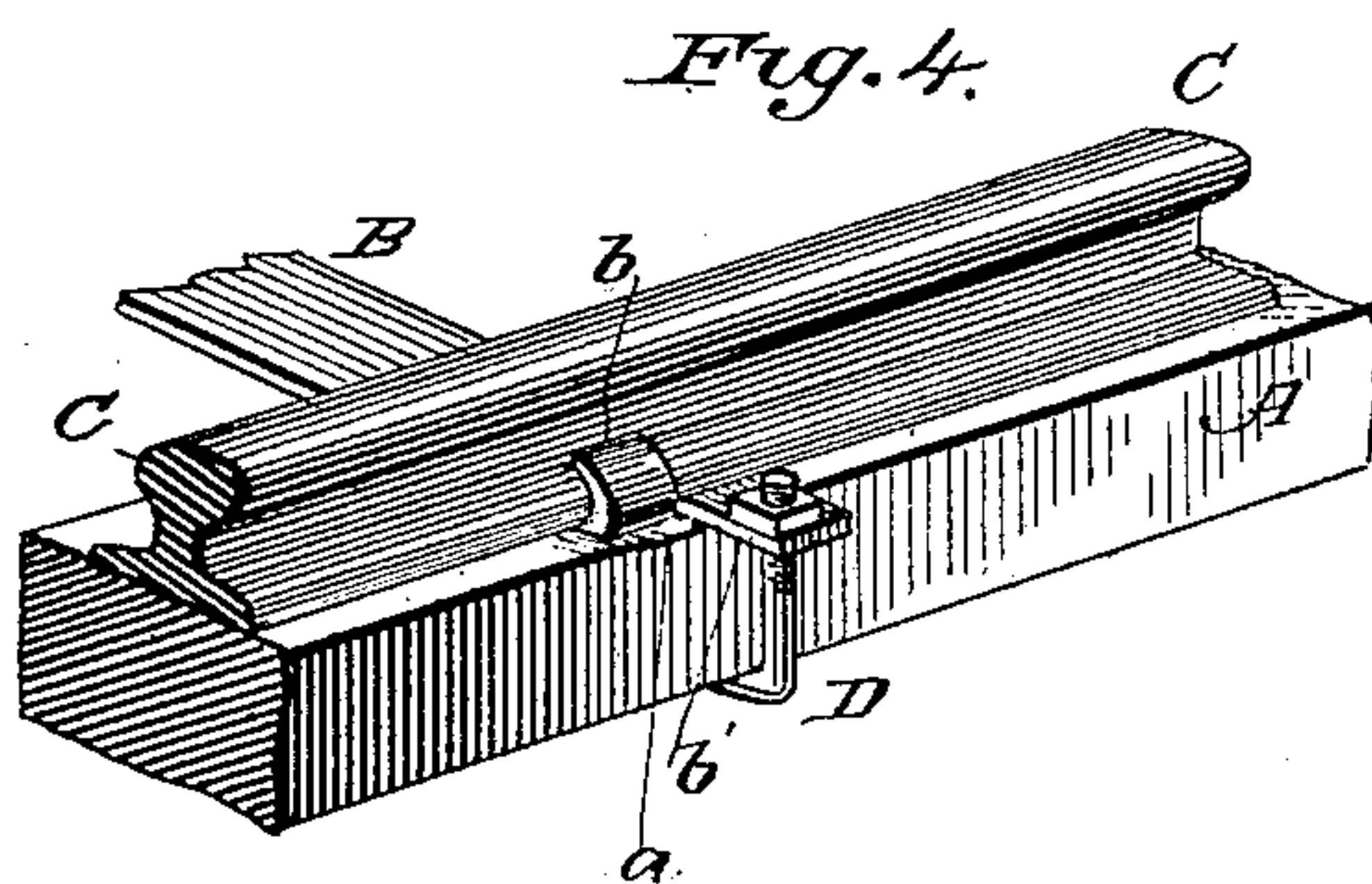
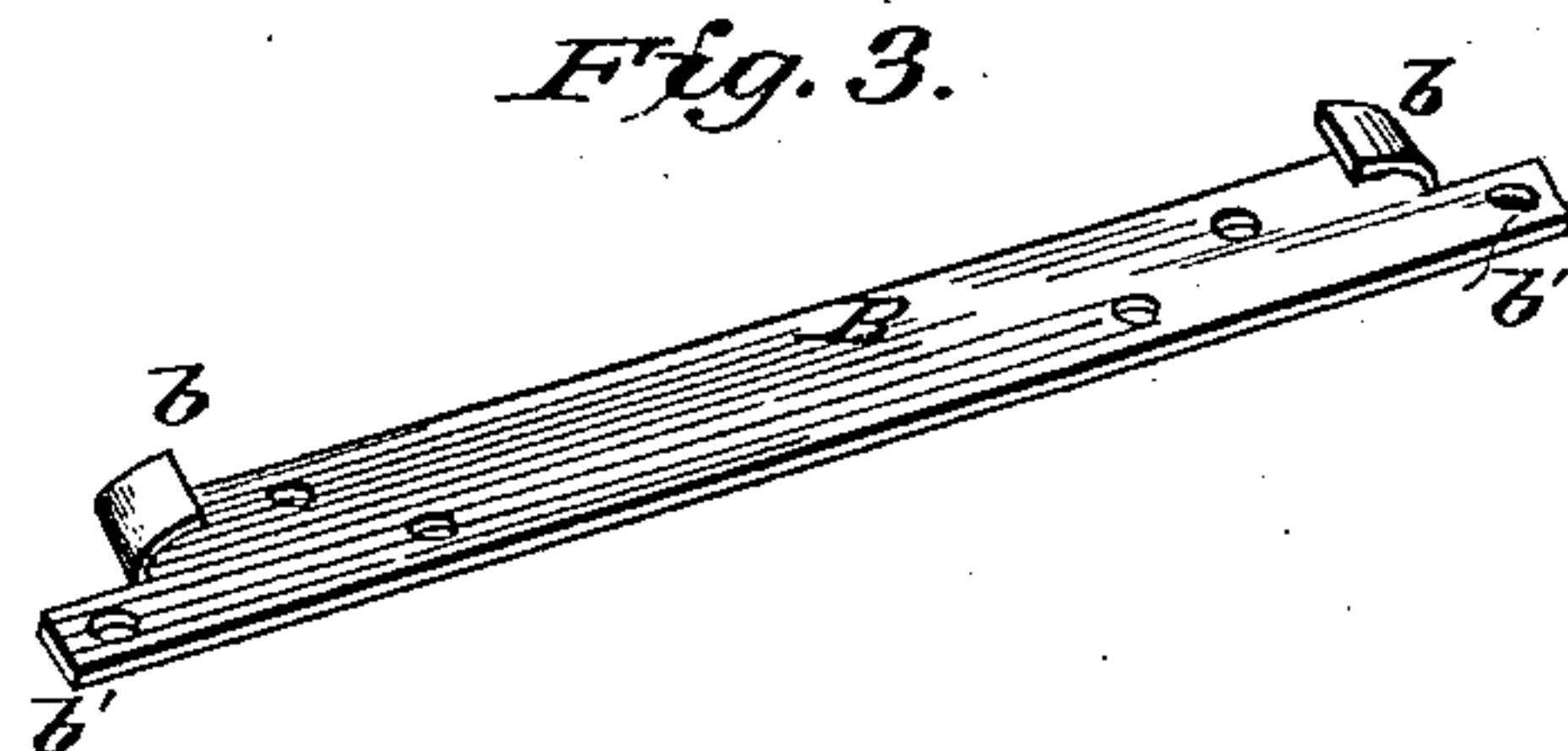
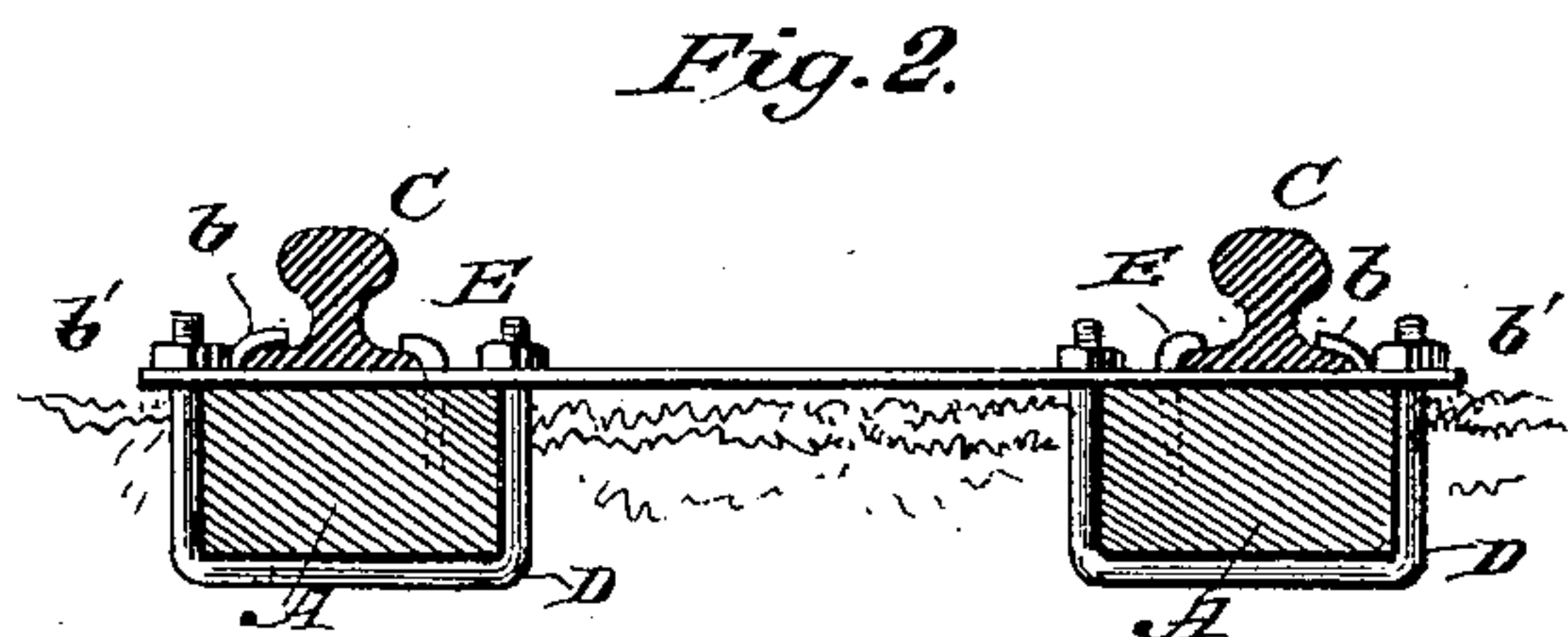
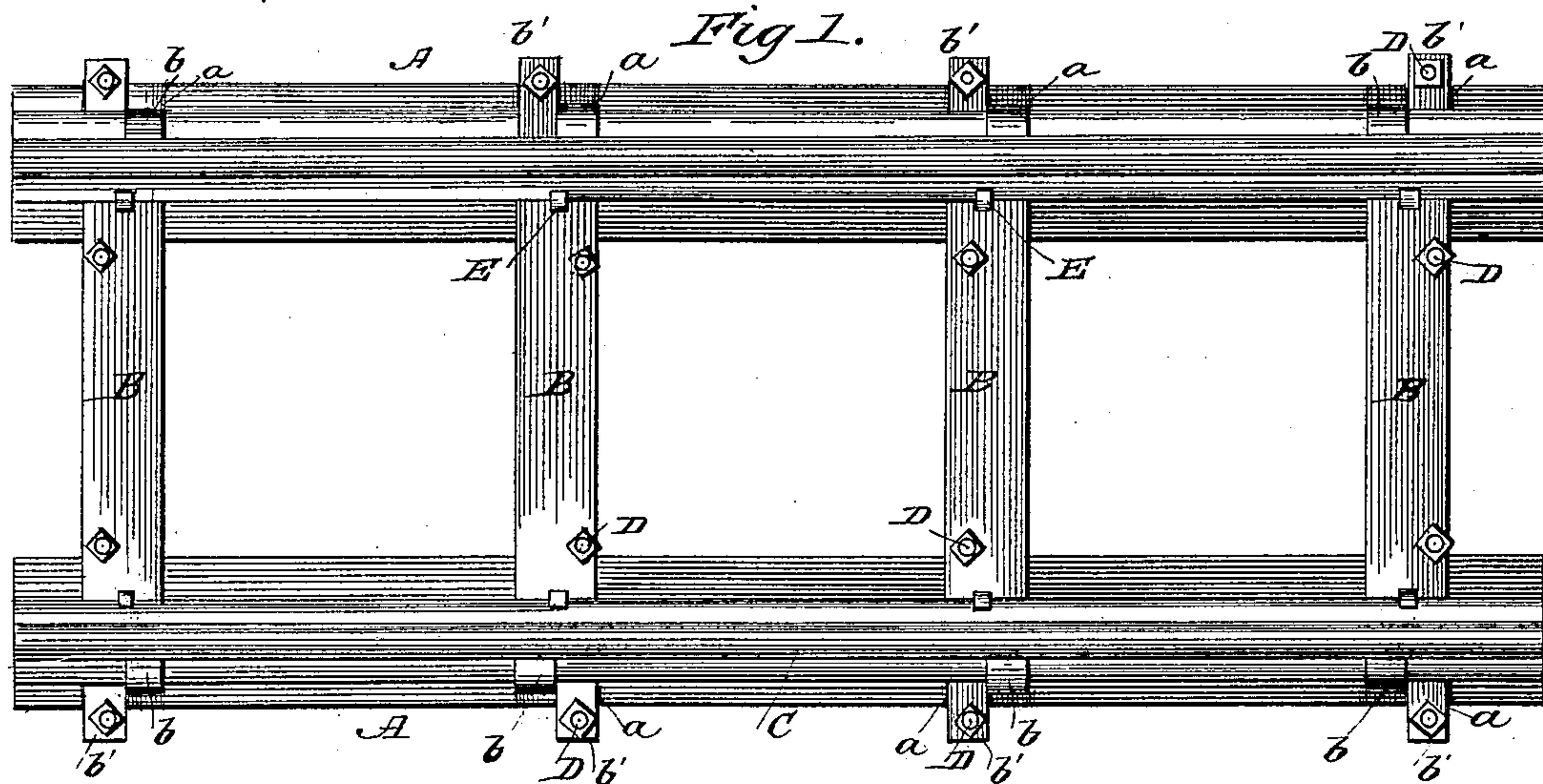
(No Model.)

R. P. FADDIS.

RAILWAY.

No. 390,014.

Patented Sept. 25, 1888.



WITNESSES:
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UNITED STATES PATENT OFFICE.

ROBERT P. FADDIS, OF SOCORRO, TERRITORY OF NEW MEXICO.

RAILWAY.

SPECIFICATION forming part of Letters Patent No. 390,014, dated September 25, 1888.

Application filed January 17, 1888. Serial No. 261,070. (No model.)

To all whom it may concern:

Be it known that I, ROBERT P. FADDIS, of Socorro, in the county of Socorro, Territory of New Mexico, have invented a new and useful Improvement in Railways, of which the following is a specification.

My invention is an improvement in railways; and it consists in certain novel construction and combination of parts, as will be hereinafter described and claimed.

In the drawings, Figure 1 is a plan view of a section of track constructed according to my invention. Fig. 2 is a cross-section thereof. Fig. 3 is a detail view of one of the ties, and Fig. 4 is a detail perspective view showing the outer end of one of the ties in connection with the stirrup and part of the stringer and rail.

The stringers A A may be of any suitable length, and are preferably made of timbers of sufficient size and strength to stand the traffic for which the track is intended, as my invention is applicable alike to street and steam railways.

The ties B are made of metal and rest transversely on the stringers, the latter being preferably cut out slightly at *a*, forming recesses, in which the ties are seated, so the rails C may rest flat on the stringers. The recesses *a* may be readily cut out with an adz or other suitable implement.

Near their ends the ties B have upwardly-projected portions *b*, which engage the outer side edges of the rails, as shown most clearly in Fig. 2. When the rails are seated on such ties and rest against the inner sides of the portions *b*, it is practically impossible for the track to spread, and when the ties are fastened to the stringers, and the rails are fastened in engagement with portions *b b*, the track will be firm and secure. I form the ties with extensions or portions *b'*, which extend laterally beyond the portions *b* and project in practice past the outer edges of the stringers.

In the construction shown the ties and stringers are held together by stirrups D, which embrace the stringers from below, having their arms extended up along the opposite sides of the stringers through the cross-tie, and secured above said cross-tie, it may be, by nuts, as shown. The extensions *b'* provide for the engagement of the ties by the outer arms of the stirrups, as will be seen. These

stirrups form a very secure and firm fastening for the ties, and one which may be readily applied and removed.

To fasten the inner edges of the rails, I provide spikes E, driven into the ties and engaging the inner edges of the rails, so as to secure the outer edges thereof in firm engagement with the upwardly-projected portions *b* of the ties. By preference, these spikes E are driven through the metal ties for the reasons that thereby a stronger seat or bearing is provided for the spike, and the spike serves as an auxiliary fastening for the tie.

The track may in practice be ballasted in any suitable way.

Having thus described my invention, what I claim as new is—

1. In a railway-track, a metallic tie having its ends divided or split longitudinally, and having one portion turned upward at *b* and adapted to engage the rail, and the portion *b'* extended outward, substantially as and for the purposes specified.

2. The combination, in a railway-track, of the stringers, the metallic ties B, having portions *b b'*, the rails, and fastenings, substantially as and for the purposes specified.

3. In a railway-track, the combination of the stringers, the cross-ties, made of metal and formed with upwardly-projecting portions *b b*, arranged to engage the outer sides of the rails, and with lateral extensions *b' b'* beyond said portions *b b*, the stirrups embracing the stringers and having their arms projected up on opposite sides thereof through openings in the ties and secured, the rails engaged on their outer sides by the portions *b b*, and spikes for securing the inner sides or edges of the rails to the stringers, all substantially as and for the purposes specified.

4. The combination of the stringers, the metal ties rested thereon and having upwardly-projected portions for engaging the outer sides of the rails, fastenings for securing the ties to the stringers, the rails, and spikes D, for securing the inner sides of the rails, said spikes being driven through the ties into the stringers, substantially as set forth.

R. P. FADDIS.

Witnesses:

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