No. 713,957.

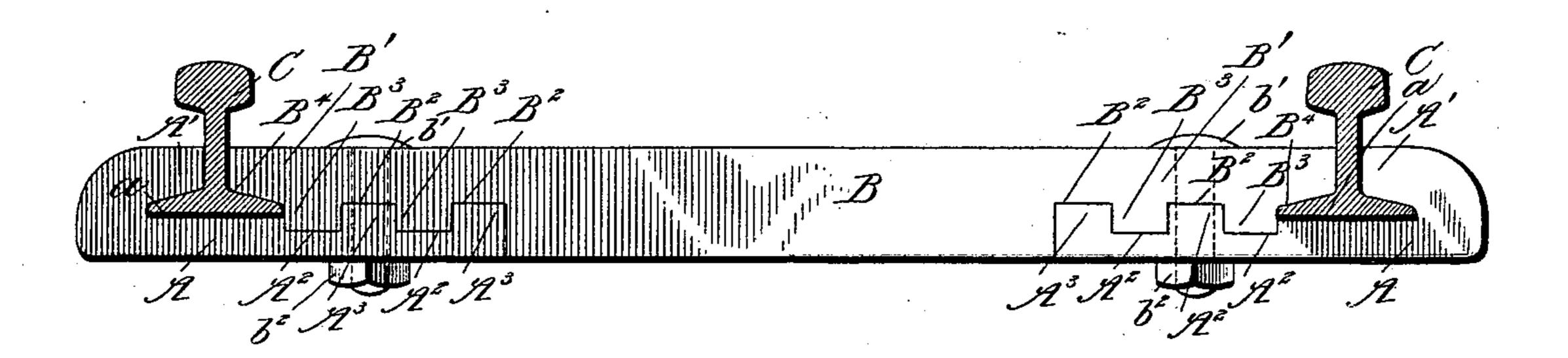
Patented Nov. 18, 1902.

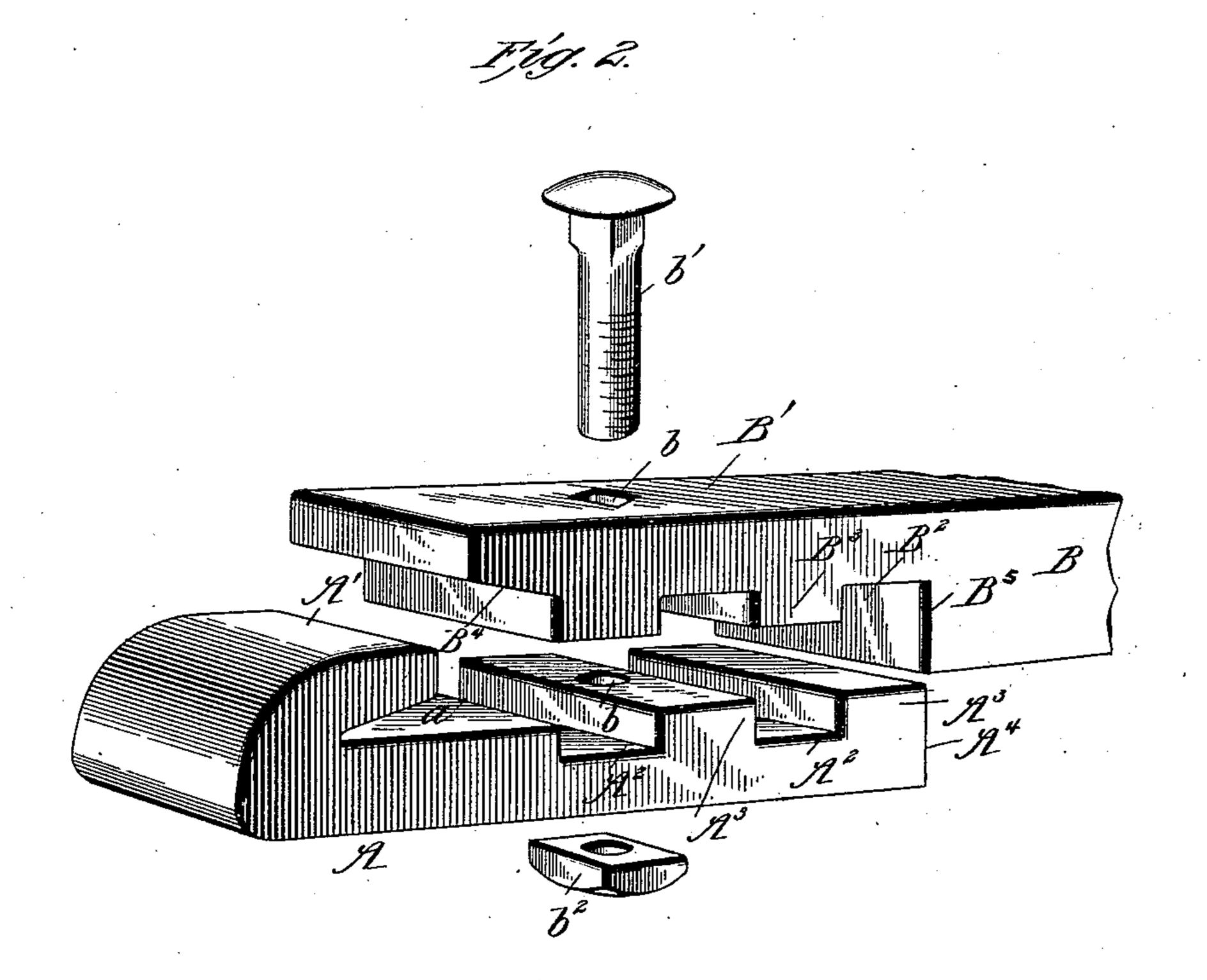
J. G. CARLSON. RAILROAD TIE OR BRIDLE.

(Application filed Aug. 22, 1902.)

(No Model.)

Fig. 1.





WITNESSES:

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JOHN GUSTAF CARLSON, OF EGGLESTON, MINNESOTA.

RAILROAD TIE OR BRIDLE.

SPECIFICATION forming part of Letters Patent No. 713,957, dated November 18, 1902.

Application filed August 22, 1902. Serial No. 120,653. (No model.)

To all whom it may concern:

Be it known that I, JOHN GUSTAF CARLSON, of Eggleston, in the county of Goodhue and State of Minnesota, have invented a new and 5 useful Improvement in Railroad Ties or Bridles, of which the following is a specification.

My invention relates to improvements in railroad ties or bridles, its object being to provide a new and improved metallic tie or 10 bridle which is simple in construction, durable, one that may be quickly laid and taken up, and is especially designed to prevent

spreading of the rails.

To these ends my invention consists of base 15 or end pieces provided with transverse grooves and projections on its upper face and an end lug or cheek-piece having a beveled face adapted to engage the rail, a stretcher or crossbar provided with transverse grooves, and pro-20 jections adapted to interlock with the grooves and projections of the base or end pieces, and a bolt-fastening for securing the stretcher and end pieces together and to the rail.

My invention also consists in the novel con-25 struction, arrangement, and combination of parts, as will be hereinafter fully described,

and pointed out in the claims.

In the drawings, Figure 1 is a side elevation with track-rails in section. Fig. 2 is a detail

30 perspective view.

My improved railroad tie or bridle is provided with two end pieces or bases A, which are alike in construction, are arranged opposite each other, and are connected by the 35 stretcher or cross-bar B. On the oppositelyarranged end pieces or bases, the upper surface of which is flat for a suitable distance at a, are placed the two rails C, forming the track. On the top of each end piece or base A and 40 at its outer end thereof is formed the lug or cheek-piece A', projecting upwardly and inwardly, so that the inner edge fits against the shank of the rail C, while the under face of said lug or cheek-piece is beveled and fits on 45 the base of the rail, as shown in Fig. 1. The opposite side of the end piece or base is provided on its upper surface with the transverse grooves A² and the transverse projections A³, as plainly shown in Fig. 2.

The stretcher or cross-bar B consists of a central portion, which is of uniform thickness, and the reduced end portions B', provided on I

their under faces with the transverse grooves B² and transverse projections B³, adapted to interlock with the grooves and projections of 55 the end pieces or bases. The ends of the stretcher or cross-bar are beveled, as at B4, on their under face, and said bevel fits upon the inner flange of the base of the rail, the outer edges of the stretcher fitting against 60 the inner face of the shank of the rail and with the lug or cheek-piece on the outer end of the end pieces or bases, forming a clamp for the rail to prevent any side movement thereof.

The lower face of the central portion of the stretcher or cross-bar is flush with the lower face of the end pieces or bases, and through the stretcher or cross-bar and the end pieces or bases when in their interlocked position 70 are drilled holes b at a suitable point inside the rails, through which holes are passed the bolts b' and secured by the nuts b^2 , thus securely locking the several parts rigidly together.

My improved tie or bridle, it will be seen, is extremely simple in construction, can be cheaply made, and can be put in place and removed by an ordinary laborer. The various parts being interlocking, there can be no mis- 80 take in putting them together.

My improved tie will effectually prevent any spreading of the rails, which is a common cause of wrecks and accidents on railroads. The various parts of the tie can be made of 85 cast or wrought metal and should any part become broken can readily be replaced.

By reducing the ends of the stretcher or cross-bar the shoulder B5 is formed, which when the parts are in their interlocked posi- 90 tion abut the inner end shoulders A4 of the clamps A, and thus distribute the strain.

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

1. A metallic railroad tie or bridle comprising end pieces having transverse grooves and projections on its upper face, and provided with an end lug or cheek-piece, a stretcher or cross-bar provided with transverse grooves 100 and projections adapted to interlock with the transverse grooves of the end pieces, and having a projecting end lug adapted to engage the rail opposite the end lug or cheek-piece of

the end pieces, and means for securing the end pieces and stretcher in their interlocked position.

2. A metallic railroad tie or bridle comprising end pieces having transverse grooves and
projections on their upper face and provided
with a beveled lug or cheek-piece at their
outer end, and shoulders at their inner end,
a stretcher or cross-bar having reduced end
portions, said end portions being provided
with transverse grooves and projections
adapted to interlock with the transverse

grooves and projections of the end pieces, and a beveled lug projection from the ends of the reduced portions, a shoulder at the inner 15 ends of the reduced portions adapted to abut the shoulders at the inner ends of the end pieces, and means for securing the end pieces and stretcher together in their interlocked position, to clamp the rails between them.

JOHN GUSTAF CARLSON.

Witnesses:
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