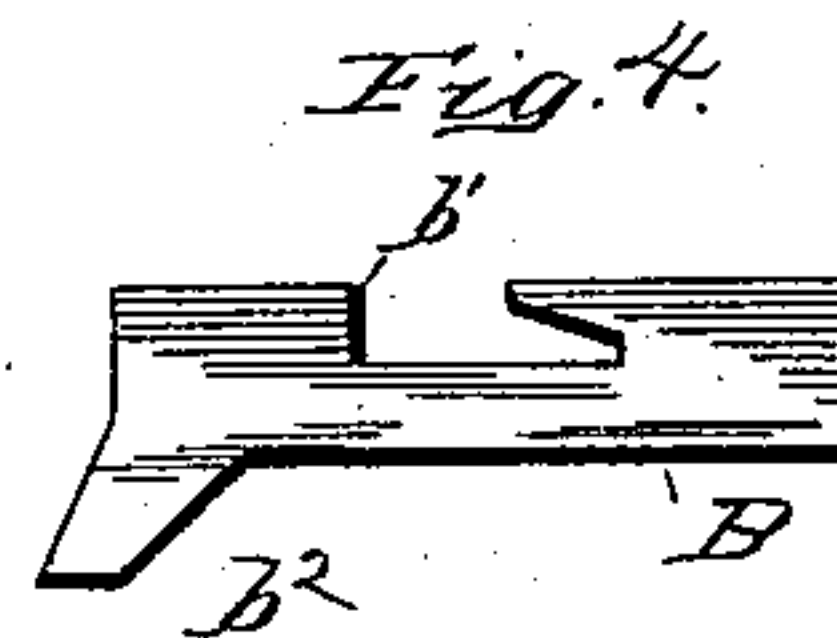
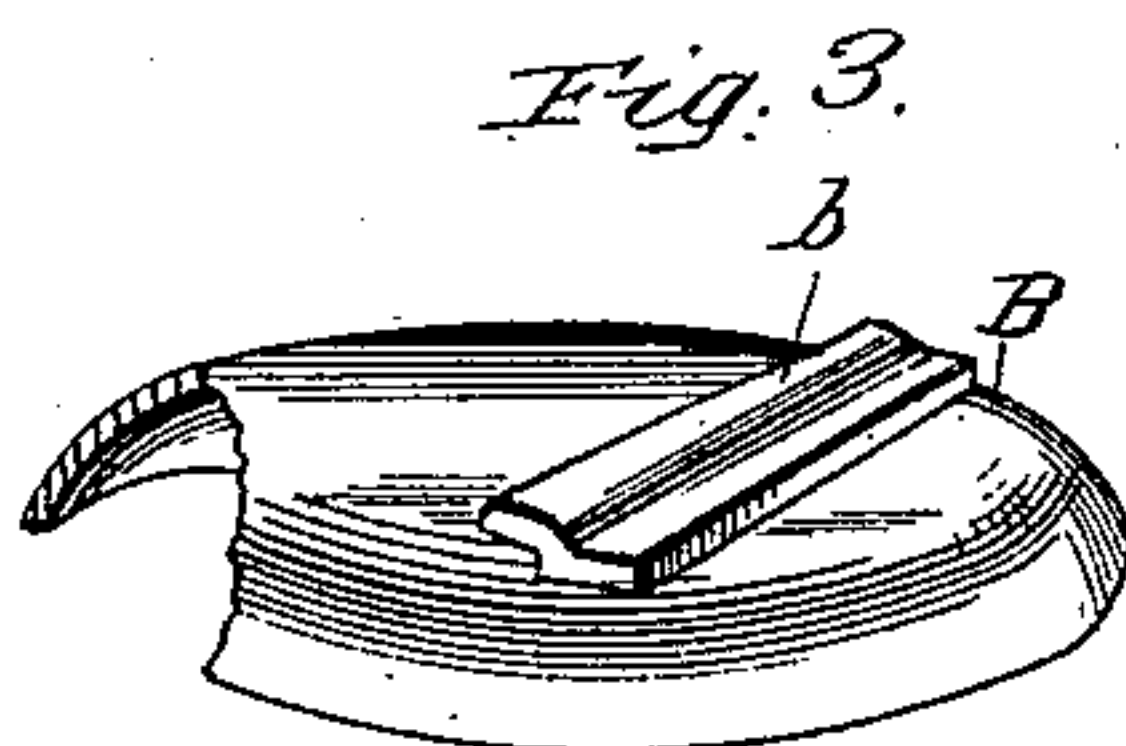
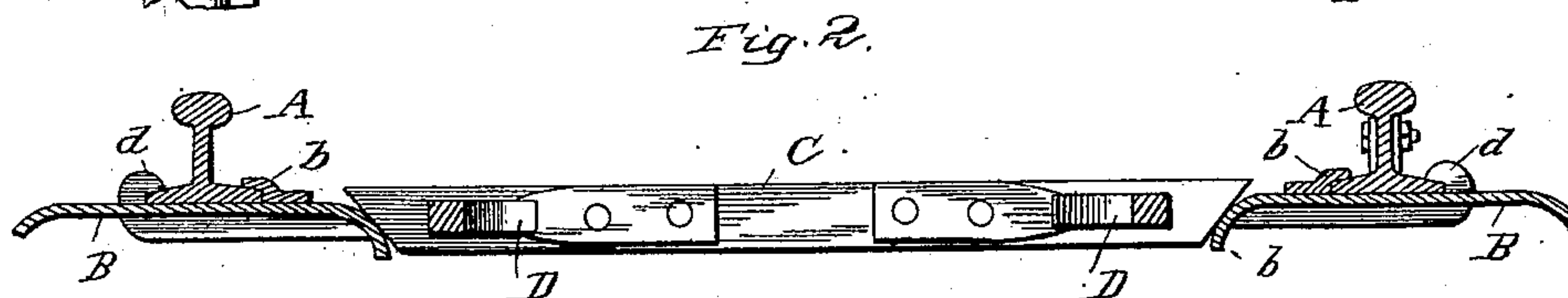
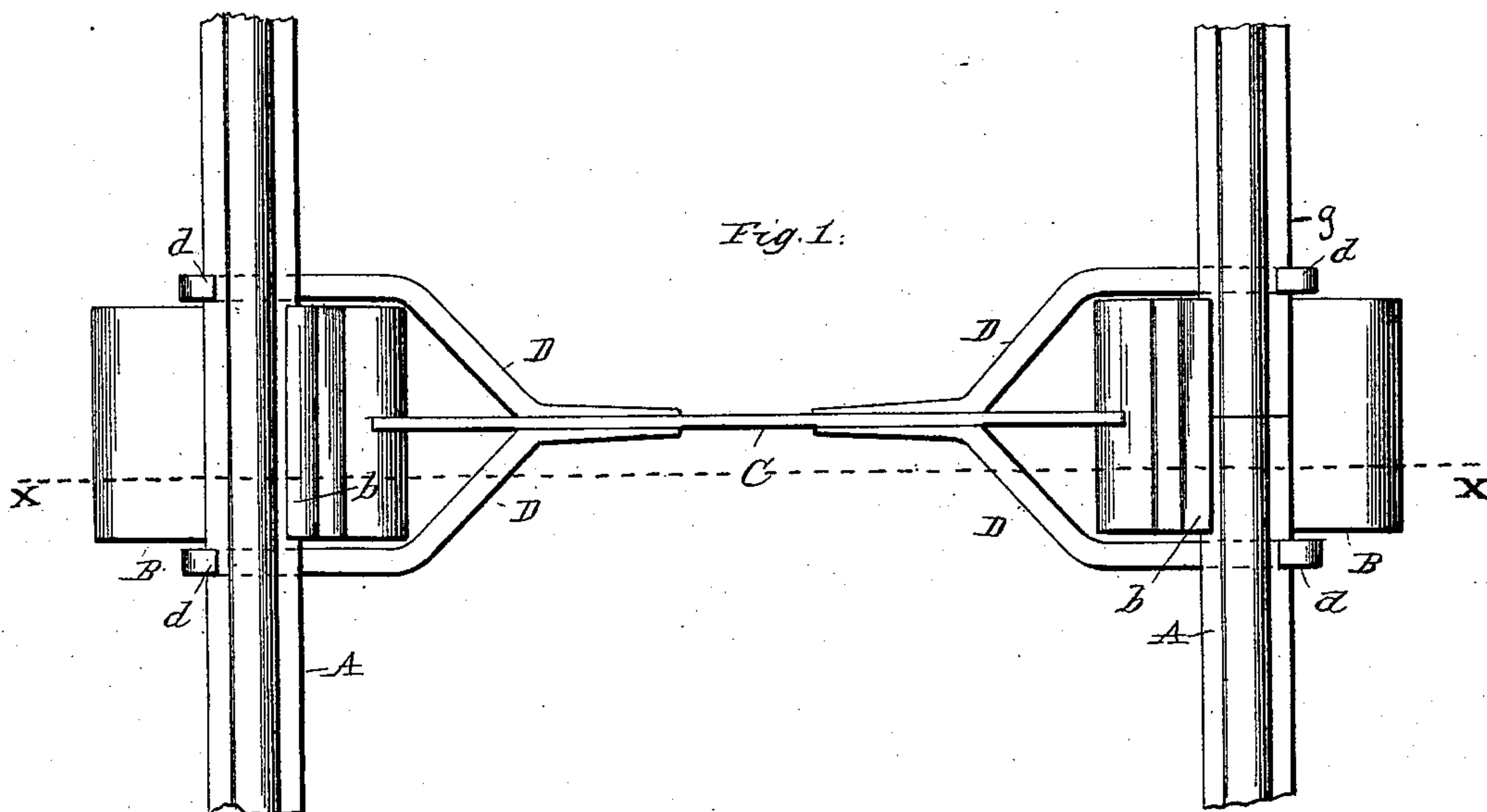


(No Model.)

J. H. CLARKE.
RAILWAY TRACK.

No. 415,092.

Patented Nov. 12, 1889.



Witnesses
L. A. Paeder.
Van Buren Hillyard.

Inventor
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By his Attorneys
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UNITED STATES PATENT OFFICE.

JOHN H. CLARKE, OF GLENMARY, TENNESSEE.

RAILWAY-TRACK.

SPECIFICATION forming part of Letters Patent No. 415,092, dated November 12, 1889.

Application filed March 6, 1889. Serial No. 302,100. (No model.)

To all whom it may concern:

Be it known that I, JOHN H. CLARKE, a citizen of the United States, residing at Glenmary, in the county of Scott and State of Tennessee, have invented certain new and useful Improvements in Railway-Tracks; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

This invention relates to railway-tracks, and aims to provide a track constructed wholly of iron, and which will be self-supporting and dispense with the usual cross-ties and small fastenings—such as bolts, nuts, keys, spikes, &c.—and which will not be spread and loosened by pressure from above.

The improvement consists of the novel features which will be hereinafter more fully described and claimed, and which are shown in the annexed drawings, in which—

Figure 1 is a top plan view of a section of track embodying my invention; Fig. 2, a cross-section on the line $x x$ of Fig. 1; Fig. 3, a perspective view of a modified form of rail-chair; Fig. 4, an end view of a further modified form of rail-chair.

The rails $A A$ are of ordinary construction, and are supported on the chairs B , which have the lips b to extend over the foot of the rail. These lips are arranged to come on the inner sides of the rails. The cross-bars C extend from the rail-chair on one side of the track to the rail-chair directly opposite, and have arms $D D$ at each end, which separate and extend along each end of the chair and beneath the rail and terminate in hooks $d d$, which embrace the foot of the rail on the side opposite the lip of the chair. The ends of the cross-bar C abut against the inner ends or edges of the rail-chairs and prevent the rails from coming closer together, and the hooks on the arms, embracing the foot of the rails, prevent the said rails from spreading. The outer edges of the chairs curve downwardly, and that the ends of the cross-bars may fit against the curved edges and overlap the same sufficiently to prevent the inner edges of the chairs rising vertically the ends of the said bars are inclined.

Ordinarily the chairs will be plain opposite the lip b ; but, if preferred, they may have a vertical shoulder b' opposite the said lip, as shown in Fig. 4. The chair may be circular and preferably concaved on its under side, as shown in Fig. 3; or it may be straight on its under side and have an oblique anchoring-lug b^2 projecting therefrom, said lug being located preferably at the outer edge of the chair.

In constructing the track the cross-bars are placed in position with the rails on each end thereof, the hooks d of the arms fitting over the foot g of the rails. The chairs are adjusted to the rail by slipping their lips over the foot of the rail, having first been inclined to the horizontal, and bringing them to the horizontal when their inner ends will bear against the inclined ends of the cross-arms. When the cross-arms and chairs are adjusted on the rails, the latter are lowered until they rest on the bed prepared for them. The deflected ends of the chairs embed themselves in the road-bed and steady the rails. If chairs shown in Fig. 4 are used, excavations are made in the road-bed to receive the anchoring-lugs, as will be readily understood.

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

1. The combination, with the track-rails and the rail-chairs having lips to embrace the foot of the rails, of the cross-bar having its ends engaging with the rail-chairs and having arms which embrace the ends of the said rail-chairs and engage with the rails, substantially as and for the purpose described.

2. The combination, with the rails and the rail-chairs having lips to embrace the foot of the rails on their inner sides, of the cross-bars having their ends abutting against the inner edges of the rail-chairs and having arms which embrace the ends of the rail-chairs and extend beneath the rails and have hooks to embrace the foot of the rails on the side opposite the said lips, substantially as described.

3. The combination, with the rails and the rail-chairs having lips to embrace the foot of the rails, of the cross-bars having oblique ends which abut against the inner ends of the rail-chairs, and having lateral arms which branch from each side of the cross-bars at some distance from their ends and extend beneath the

rails and engage therewith on the side opposite the ends of the cross-bar and said lips, substantially as and for the purpose described.

4. The combination, with the rails and the
5 rail-chairs having their ends curved or deflected down and having lips to embrace the foot of the rails on their inner sides, of the cross-bars having oblique ends, which ends abut against the inner ends of the rail-chairs,
10 and having lateral arms which embrace the ends of the said chairs and extend beneath the

rails and terminate in hooks which engage with the foot of the rails on the side opposite the lips on the rail-chairs, substantially as set forth.

In testimony whereof I affix my signature in presence of two witnesses. 15

JOHN H. CLARKE.

Witnesses:

H. J. MILSOM,
JACOB GUTH.