

(No Model.)

D. GOLDSTEIN, R. C. DAWSON & J. F. KROUSE.  
RAILWAY RAIL JOINT.

No. 564,278.

Patented July 21, 1896.

FIG. 1.

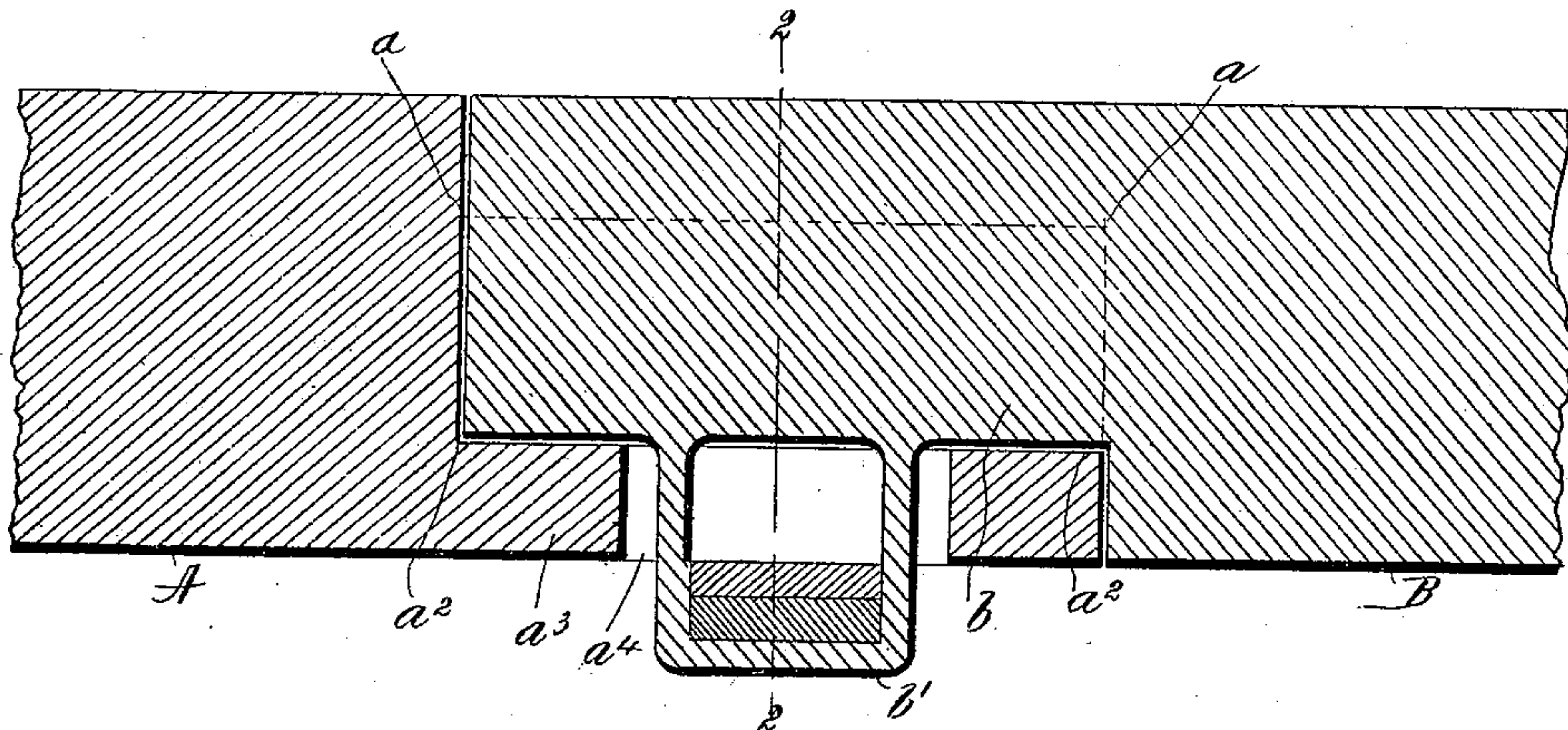


FIG. 2.

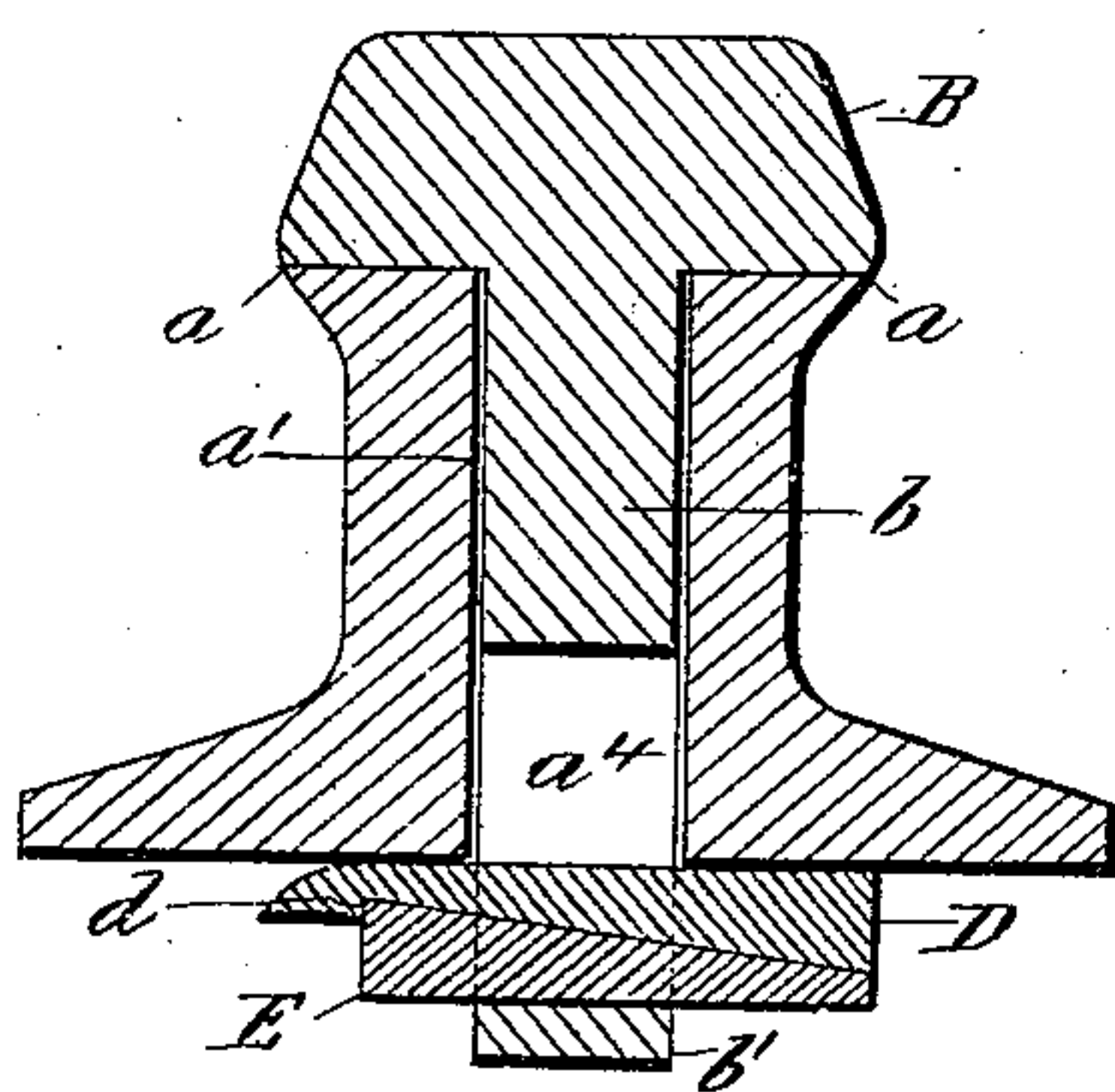
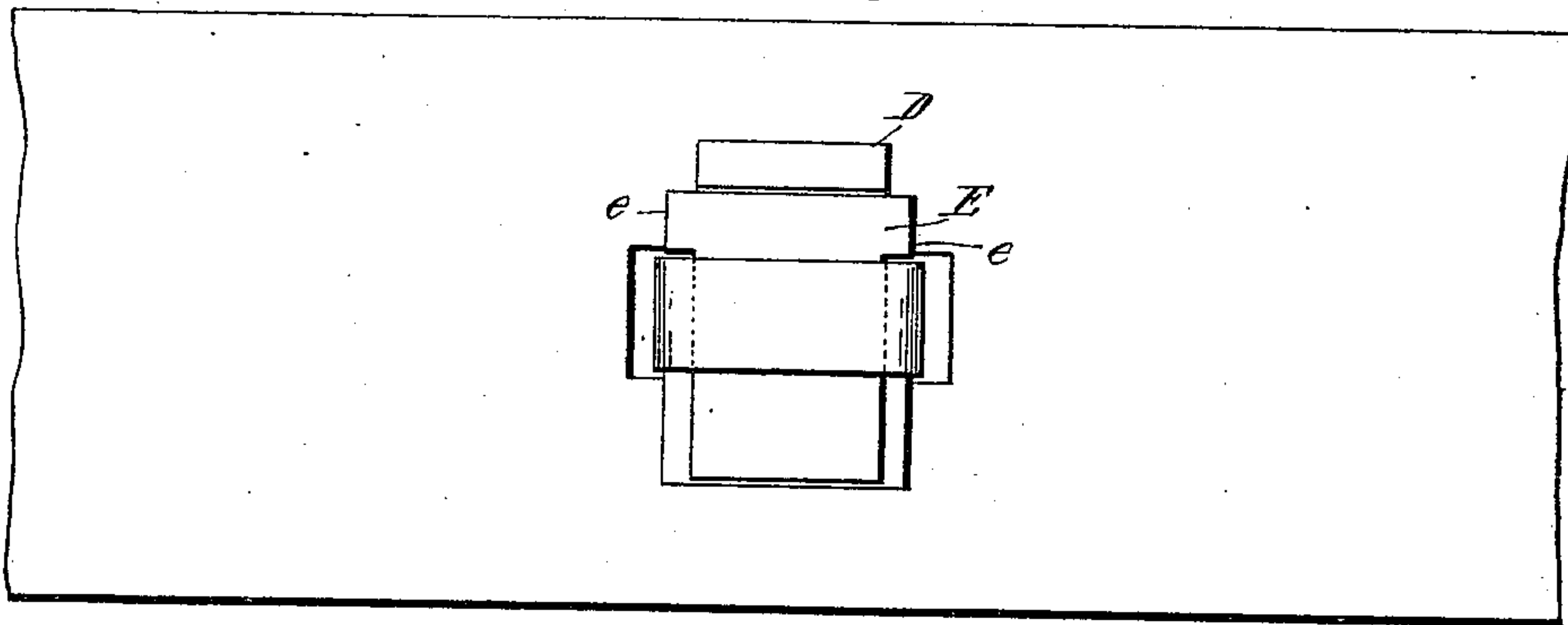


FIG. 3.



WITNESSES:

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BY



# UNITED STATES PATENT OFFICE.

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## RAILWAY-RAIL JOINT.

SPECIFICATION forming part of Letters Patent No. 564,278, dated July 21, 1896.

Application filed November 16, 1895. Serial No. 569,236. (No model.)

*To all whom it may concern:*

Be it known that we, DAVID GOLDSTEIN, ROBERT CLARANCE DAWSON, and JOHN FRANKLIN KROUSE, citizens of the United States, and residents of Barnesborough, in the county of Cambria and State of Pennsylvania, have invented certain new and useful Improvements in Railway-Rails, of which the following is a specification, reference being had to the accompanying drawings, forming a part thereof, in which similar letters of reference indicate corresponding parts.

This invention relates to railway-rails, and to joints or couplings therefor, and the object thereof is to provide means for coupling the separate rails of a railway-track in such manner that the coupling or connection of the separate rails shall be secure and tight, and the coupling or connection itself be as strong as the other portion of the rail or rails.

The invention is fully disclosed in the following specification, of which the accompanying drawings form a part, in which—

Figure 1 is a longitudinal vertical section of our improved coupling; Fig. 2, a transverse section thereof on the line 2 2, and Fig. 3 a bottom plan view.

In the practice of our invention the upper portion or head of one of the rails A is cut away down to the point *a*, and formed centrally of the lower part thereof is a longitudinal vertical recess *a'*, which extends downwardly to the point *a*<sup>2</sup>, and the bottom portion *a*<sup>3</sup> is provided with a vertical oblong slot or passage *a*<sup>4</sup>.

The sides and bottom of the end of the abutting rails B are cut away so as to form a longitudinal central tongue or projection *b*, which is adapted to fit within a longitudinal vertical recess *a'*, and said tongue or projection *b* is provided on its lower side with a downwardly-projecting yoke or loop *b'*, which is adapted to pass through the vertical slot or recess *a*<sup>4</sup>. The separate ends of the rails A and B, when thus united, are secured together by means of wedges D and E, which are passed through the yoke or loop *b'*, as clearly shown in Fig. 3. The wedge D is provided with a down-

wardly-projecting shoulder *d*, at its thinner end, and the wedge E, at its thickest end, is provided with side projections *e*, and when driven into position the head of the wedge E fits within the notch or recess in the wedge D, formed by the shoulder *d* thereon. When these wedges are driven into position, they cannot possibly be removed. The wedge E cannot go forward because of the shoulders *e* thereon, and the wedge D cannot be driven backward because of the shoulder *d* thereon, and it will thus be seen that the only way of separating these parts is by breaking the loop or yoke *b'*.

It will thus be seen that we provide a coupling for railway-rails which is simple in construction and operation, and which, at the same time, is perfectly secure, so that the rails are firmly and securely held together, and cannot be separated except by breaking the coupling.

In this construction it will be seen that the end of the rail A, or the body portion thereof below the head, must be formed thicker than usual, in order to provide room for the central longitudinal recess *a'*, which is formed therein, and with this extension the form of the rails is the same as now employed.

Our invention is not limited to the exact form and arrangement of the parts herein shown and described, and we therefore reserve the right to make all such alterations and changes therein as fairly come within the scope of the invention.

Having fully described our invention, we claim and desire to secure by Letters Patent—

A railway-rail, the head of one end of which is cut away, as at *a*, and the lower portion thereof, being provided with a vertical slot or recess as *a'*, and another rail coupled thereto, by cutting away the sides and bottom thereof, so that the central portion will fit within the said slot or recess, said central portion being provided with a yoke or loop which extends through a vertical opening in the bottom of the first rail, and said parts being held together by means of wedges, one of said wedges,

being provided with a transverse shoulder on one side, of its thinner end, and the other wedge being provided with projections at each side of its head, whereby said wedges  
5 are locked in the loop or yoke, substantially as shown and described.

In testimony that we claim the foregoing as our invention we have signed our names, in

presence of the subscribing witnesses, this 15th day of August, 1895.

DAVID GOLDSTEIN.

ROBERT CLARANCE DAWSON.

JOHN FRANKLIN KROUSE.

Witnesses:

LIZZIE MOORE,

JANE BROWN.