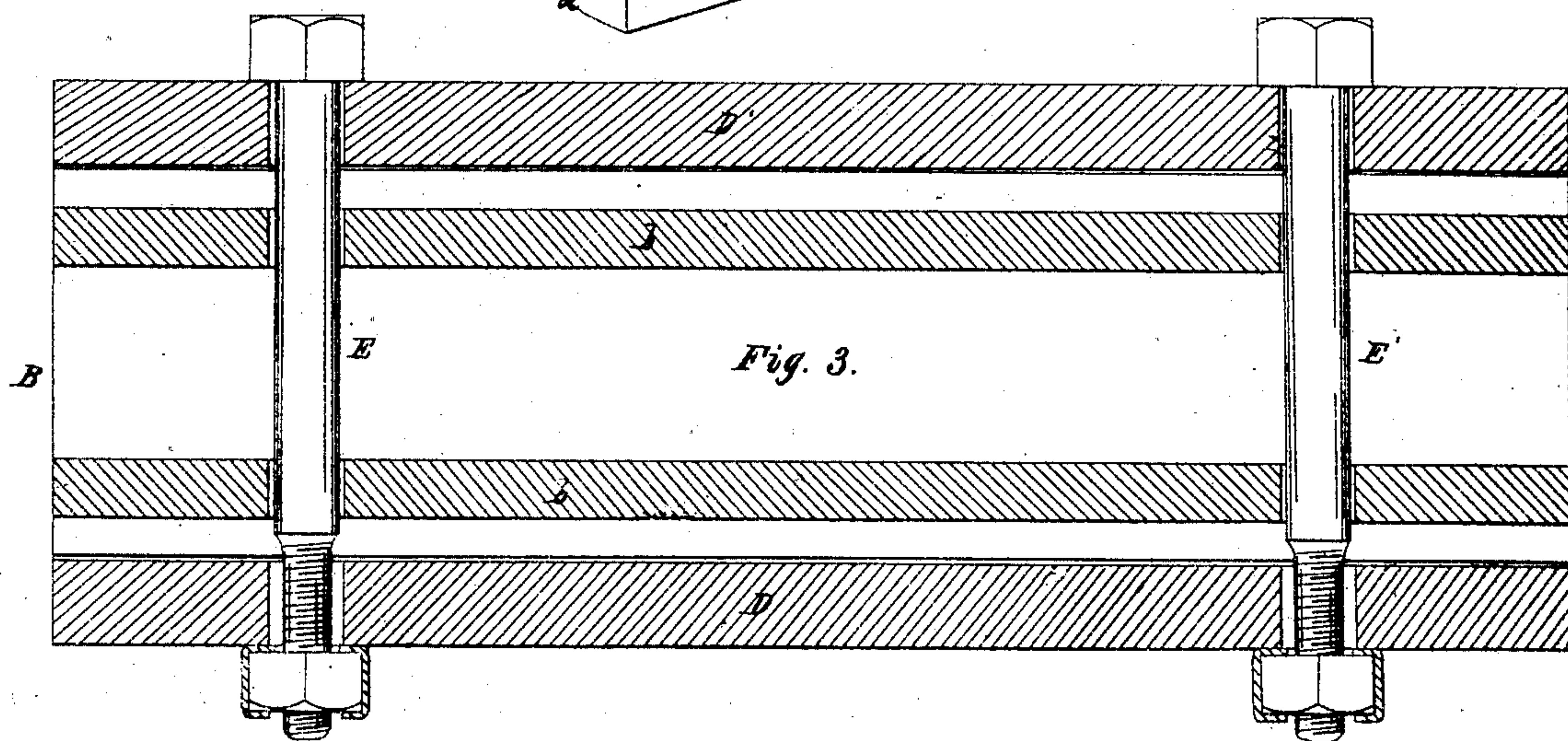
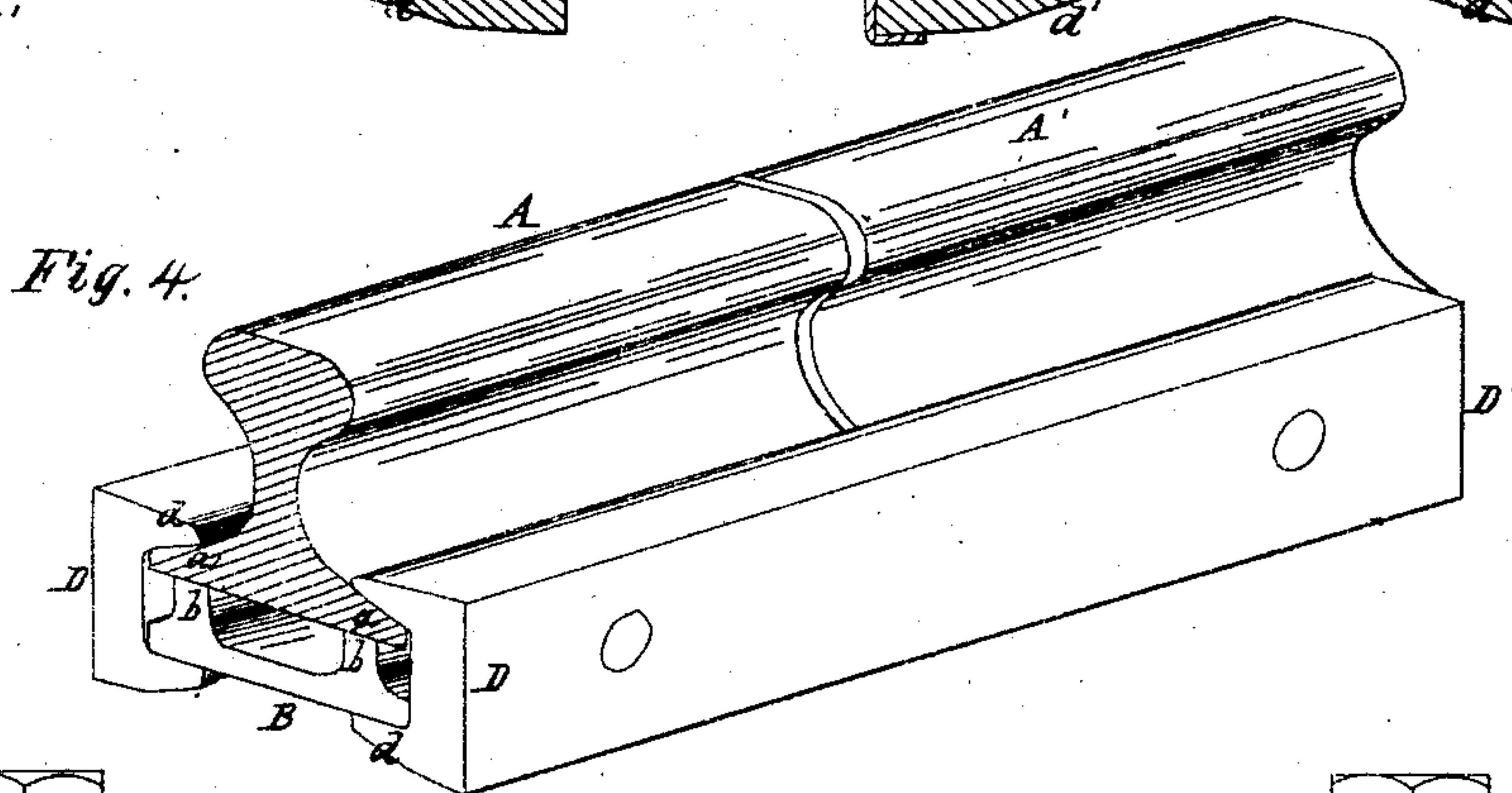
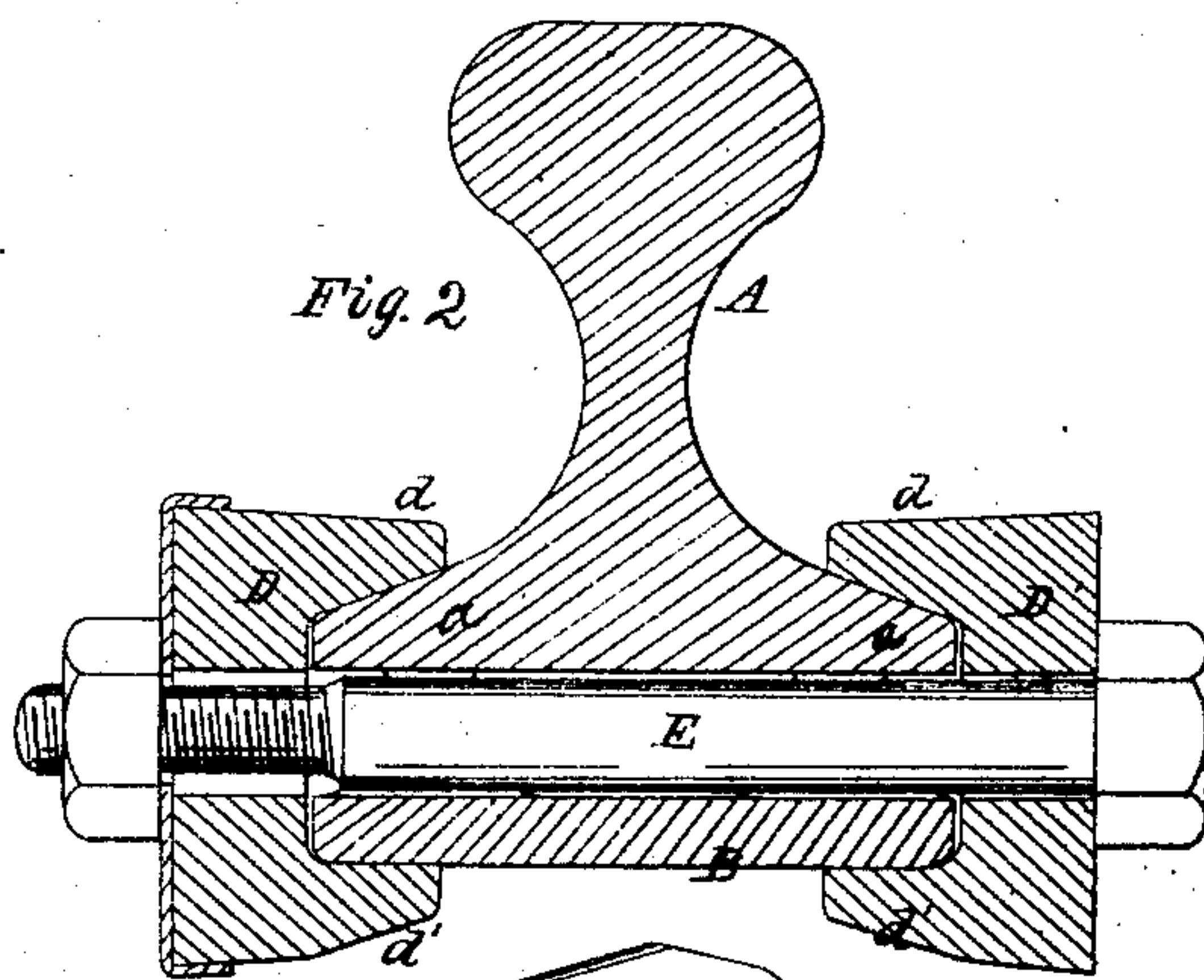
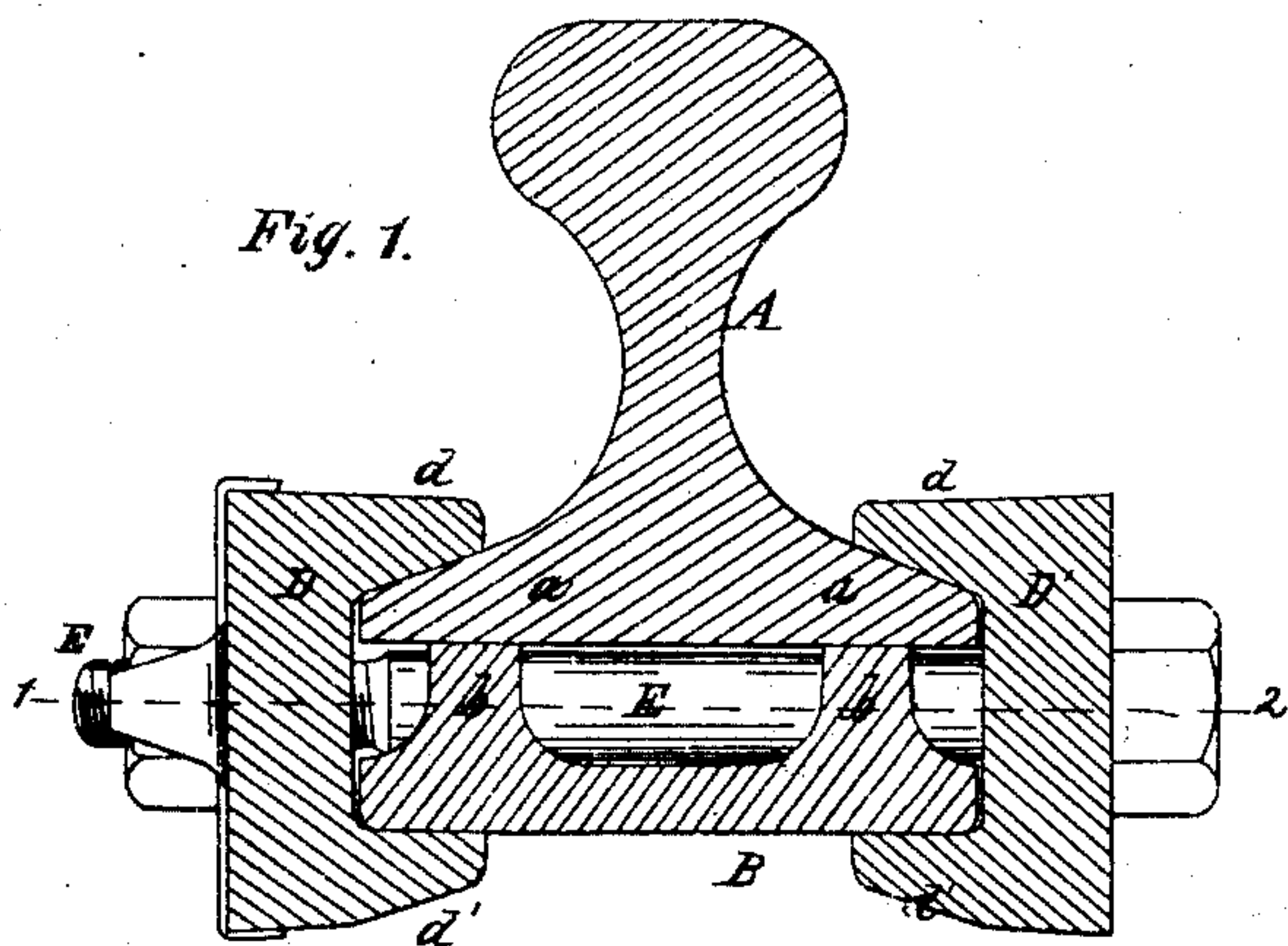


S. J. Reeves, Rail-Joint.

No 75,977.

Patented Mar. 24. 1868.



Witnesses
Wm. Abbott
Parker

S. J. Reeves
By his Atty
W. H. Howard

United States Patent Office.

SAMUEL J. REEVES, OF PHILADELPHIA, PENNSYLVANIA.

Letters Patent No. 75,977, dated March 24, 1868.

IMPROVED RAILWAY-RAIL JOINT.

The Schedule referred to in these Letters Patent and making part of the same.

TO ALL WHOM IT MAY CONCERN:

Be it known that I, SAMUEL J. REEVES, of Philadelphia, Pennsylvania, have invented an Improved Rail-Joint; and I do hereby declare the following to be a full, clear, and exact description of the same.

My invention consists of a ribbed bar, placed beneath the ends of two adjacent rails, and confined thereto by two clamping-bars, all substantially as described hereafter, so as to form an economical, secure, and rigid rail-joint.

In order to enable others skilled in the art to make and apply my invention, I will now proceed to describe its construction and operation, reference being had to the accompanying drawing, which forms a part of this specification, and in which—

Figures 1 and 2 are transverse sections (at different points) of my improved rail-joint.

Figure 3, a sectional plan on the line 1 2, fig. 1; and

Figure 4, a perspective view.

Similar letters refer to similar parts throughout the several views.

A and A', fig. 4, represent the ends of two adjacent rails, of the usual form, and B a bar, of about the same width as the under side, *a*, of the rails, against which longitudinal ribs, *b b*, on the said bar, bear. D and D' are two clamping-bars, each of which has an upper flange, *d*, overlapping the flange *a* of the rail, and a lower flange, *d'*, underlapping the bar B. The whole of the parts are secured together by two bolts, E and E', passing beneath the rails, but in close contiguity thereto, and through the clamping-bars D and D', notches being cut in the ribs *b b* for the reception of these bolts.

Owing to the inclined under sides of the flanges *d* of the clamping-bars bearing against the inclined tops of the flanges *a* of the rails, the tightening of the bolts, and the consequent drawing of the two clamping-bars towards each other, must result in binding the bar B firmly to the two rails. As the clamping-bars D and D' and the bar B are made of rolled iron, cut into appropriate lengths, and as the bolt-holes in the clamping-bars are readily punched, and the notches in the ribs *b b* as readily cut by suitable machinery, and as no expensive fitting of the parts together is required, the joint is both simple and cheap as regards construction. The bar B is, of itself, but a light and unimportant piece of metal, and will adjust itself to the rail against which the ribs *b b* fit snugly. When gripped tightly to its place, however, the bar becomes a substantial and rigid girder, and, with the clamping-bars, performs the important duty of maintaining the ends of the two rails in their proper relative positions, and of effectually resisting the shocks and strains to which the rails are subjected.

The ribs *b b* serve the twofold purpose of insuring a snug fit of the bar B to the rails, and of increasing its rigidity, the notching of the ribs for the admission of the bolts in no way detracting from this rigidity after the bar is confined to its place. It should be understood that the joint is situated between two sleepers, against which no part of the joint bears.

I claim as my invention, and desire to secure by Letters Patent—

A rail-joint, consisting of the ribbed bar B and clamping-bars D and D', adapted to each other and to the rails, substantially as set forth, for the purpose specified.

In testimony whereof, I have signed my name to this specification in the presence of two subscribing witnesses.

SAM'L J. REEVES.

Witnesses:

R. B. AERTSEN,

W. J. R. DELANY.