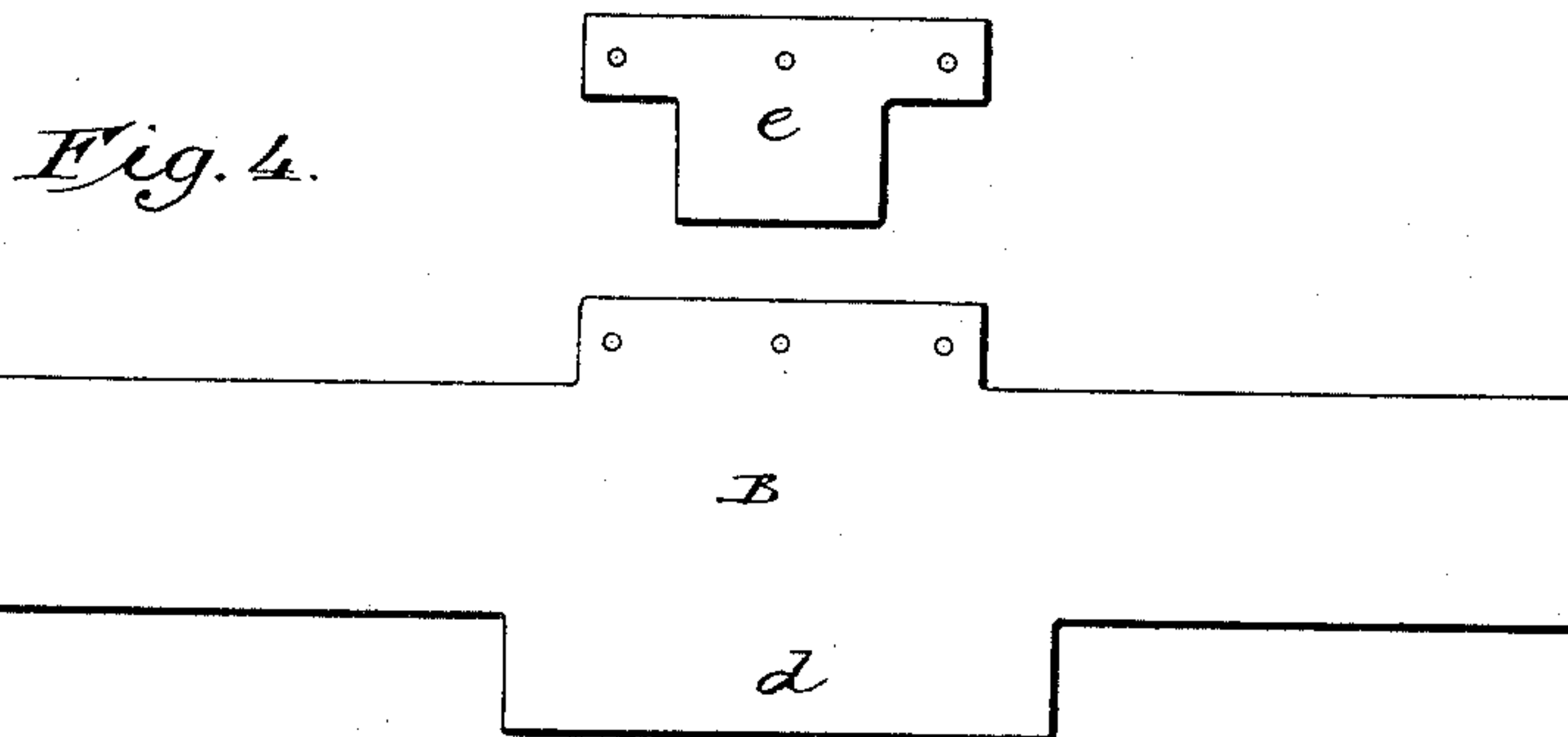
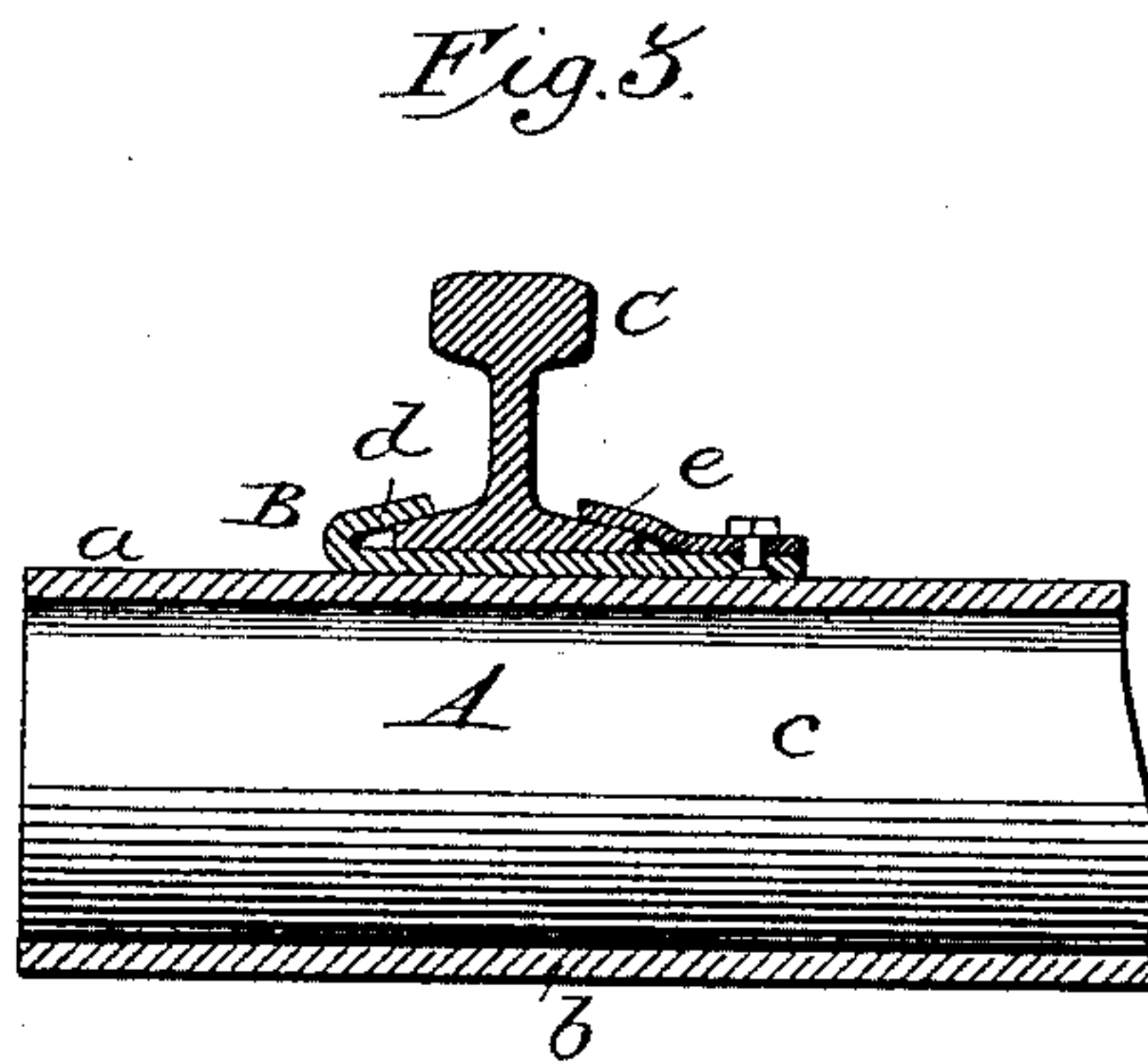
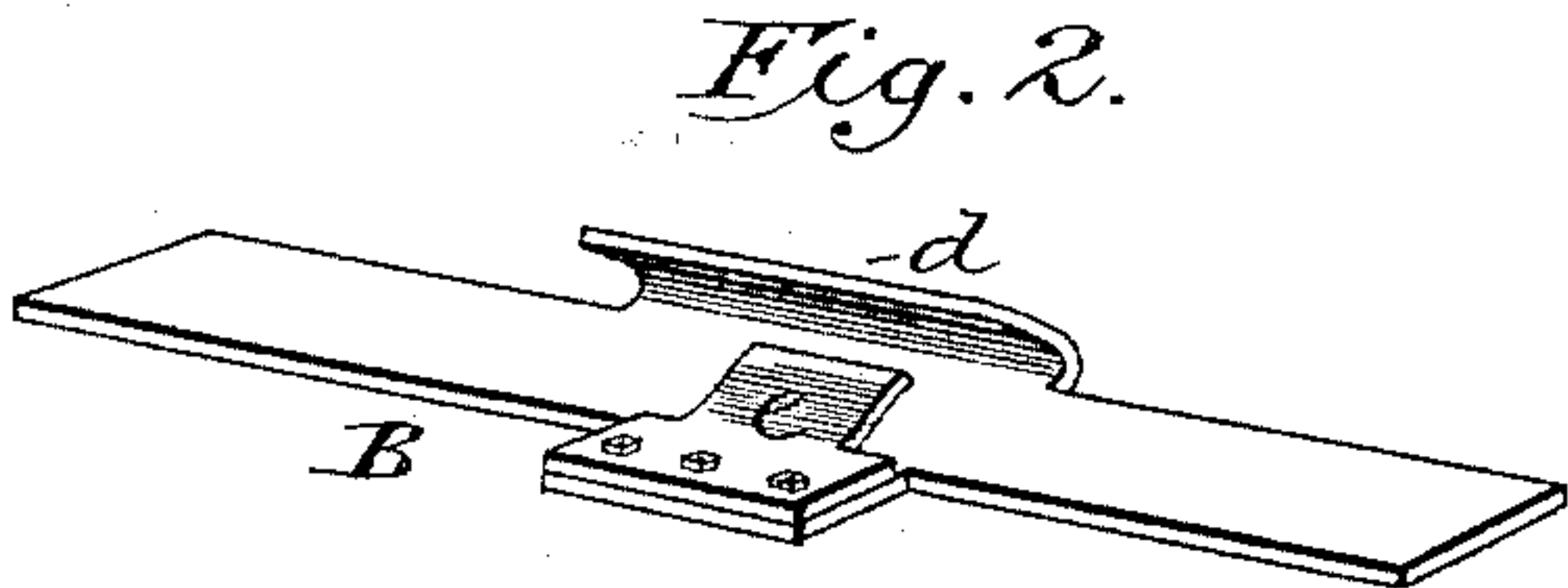
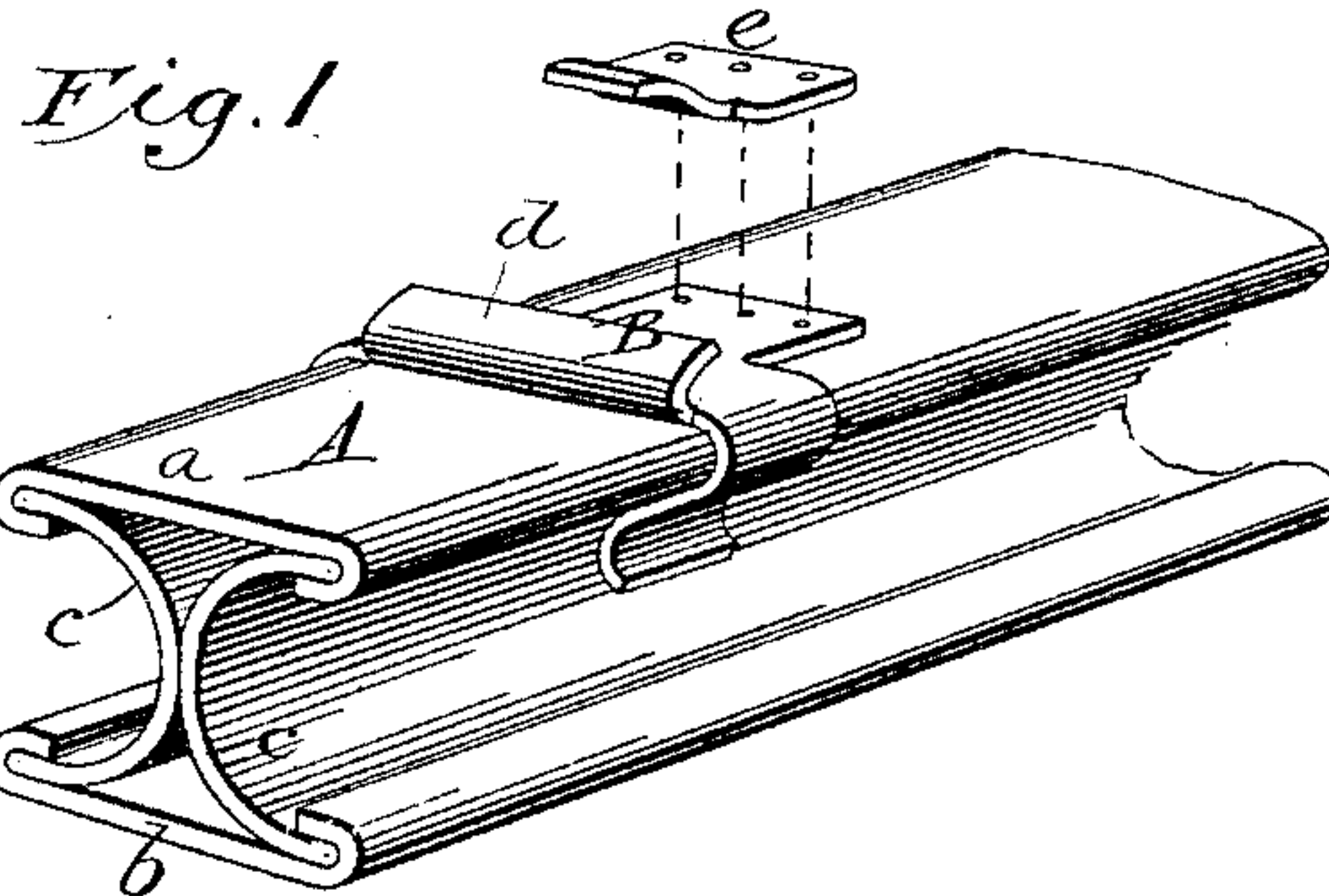


(No Model.)

L. E. WHIPPLE.
FASTENING FOR RAILROAD RAILS.

No. 327,745.

Patented Oct. 6, 1885.



WITNESSES
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UNITED STATES PATENT OFFICE.

LEANDER E. WHIPPLE, OF HARTFORD, CONNECTICUT.

FASTENING FOR RAILROAD-RAILS.

SPECIFICATION forming part of Letters Patent No. 327,745, dated October 6, 1885.

Application filed June 6, 1885. Serial No. 167,864. (No model.)

To all whom it may concern:

Be it known that I, LEANDER E. WHIPPLE, of Hartford, in the county of Hartford and State of Connecticut, have invented certain
5 Improvements in Fastenings for Railroad-Rails, of which the following is a specification.

This invention relates to an improved device for securing railway-rails to the supporting-ties, and is designed more particularly for
10 use in connection with the metallic tie for which I filed application for Letters Patent of the United States on the 13th day of March, 1885, No. 158,670.

15 The invention consists in a plate provided with depending arms or ends to clasp the tie, and with lips upon the top to engage the edges of the rail-base.

Referring to the accompanying drawings,
20 Figure 1 is a perspective view showing my fastening device applied to my tie, the separable lip being detached. Fig. 2 is a perspective view of the fastening as it appears when viewed from the opposite side. Fig. 3 is a
25 longitudinal vertical section of the tie and fastening with the latter in position. Fig. 4 is a top plan view of the blank from which the fastening is formed.

Referring to the drawings, A represents the
30 tie, B the fastening device, and C the rail.

The tie consists, as shown, of top and bottom plates, *a* and *b*, having their edges curled inward to embrace the edges of intermediate supporting-plates, *c*, which are made of concave form and arranged back to back. The
35 tie thus constructed presents in cross-section a widened or expanded top peculiarly adapted to receive and retain my rail-fastening device.

The fastening is composed, as shown, of two
40 parts. The main part consists of a plate, such as shown in Fig. 4, made of such length that when laid transversely upon the tie it will project beyond the same on both sides, the extended ends being adapted to be bent downward, so as to engage beneath the edges of the
45 tie for the purpose of retaining the device thereon. On one side of the plate there is a

projection, *d*, which is curled inward and upward, as shown in Figs. 2 and 3, forming a lip to engage over one side or edge of the base
50 of the rail. To secure the opposite edge of the rail, I make use of the removable plate *e*, provided with holes to receive rivets, bolts, or equivalent fastening devices by which it is united to the main plate.

55 In making use of this device it is placed on top of the tie and beneath the rail, as represented in Fig. 2, and the ends hammered or otherwise bent into position to clasp securely the edges of the tie. This bending may take
60 place either before or after the application of the device to the tie.

After the rail is placed in position the plate *e* is secured in place. The movement of the fastening lengthwise of the tie may be prevented by extending the fastening bolts or
65 screws downward into holes in the top of the tie, or in any other appropriate manner.

As my fastening is constructed of wrought-iron or other ductile metal, its arms may be
70 hammered into proper form to adapt them to the tie, and caused to clasp the latter with an elastic or yielding pressure. This insures a close fit of the parts, and prevents the noise and the loosening of the parts which would
75 otherwise result from the passage of trains thereover.

Having thus described my invention, what I claim is—

1. The rail-fastening device having lips on
80 the upper side to embrace the base of the rail and ductile lips on the under side to engage the edges of the tie.

2. The fastening consisting of the plate B, having the extended ends, and the lip *d*, formed
85 thereon, and the separate plate *e*, adapted for attachment thereto.

In testimony whereof I hereunto set my hand this 5th day of June, 1885, in the presence of two attesting witnesses.

LEANDER E. WHIPPLE.

Witnesses:

A. W. ROOD,
A. C. TANNER.