

(No Model.)

N. W. HUNTER.
HARNESS COUPLING.

No. 333,634.

Patented Jan. 5, 1886.

FIG. 1.

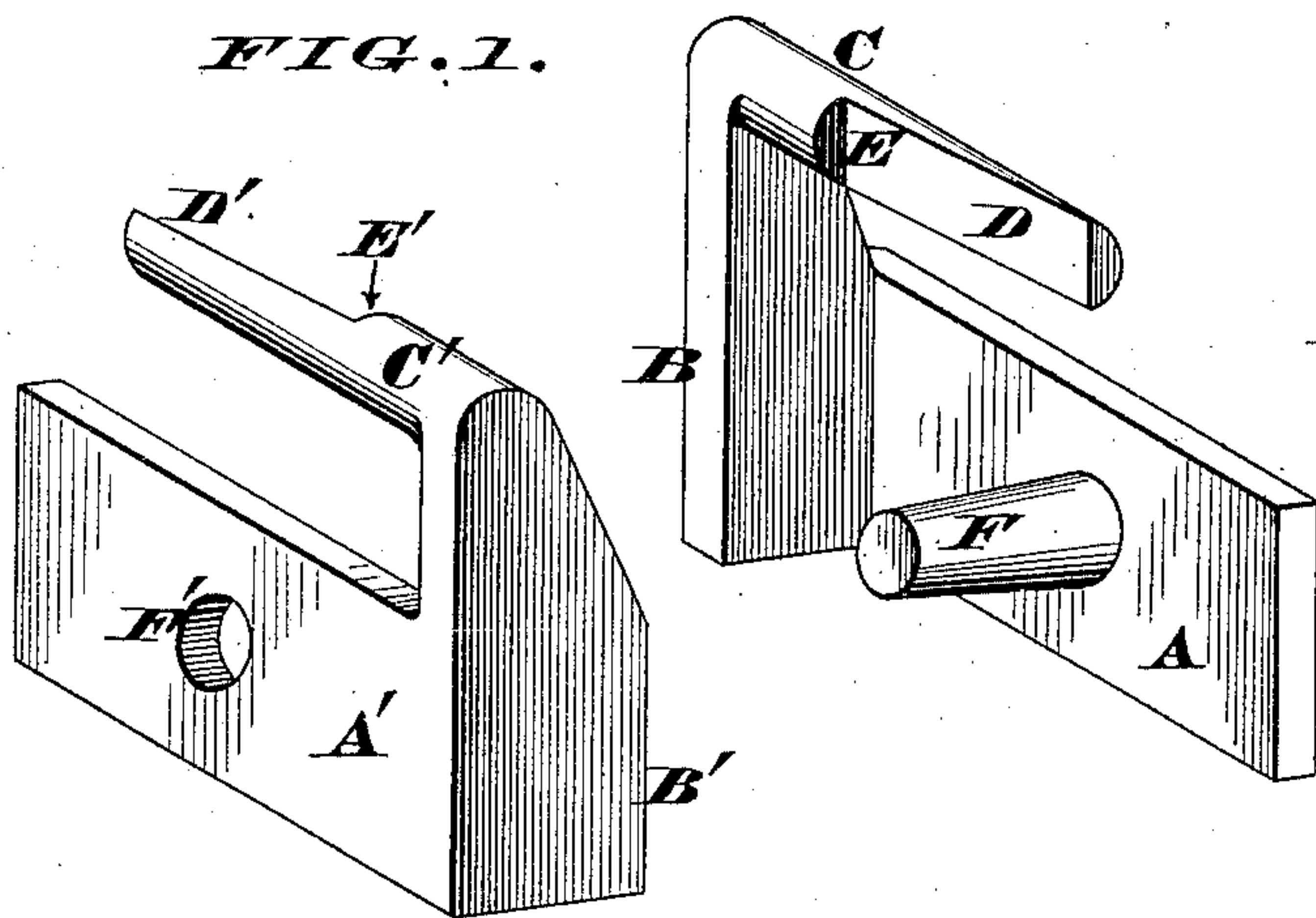


FIG. 2.

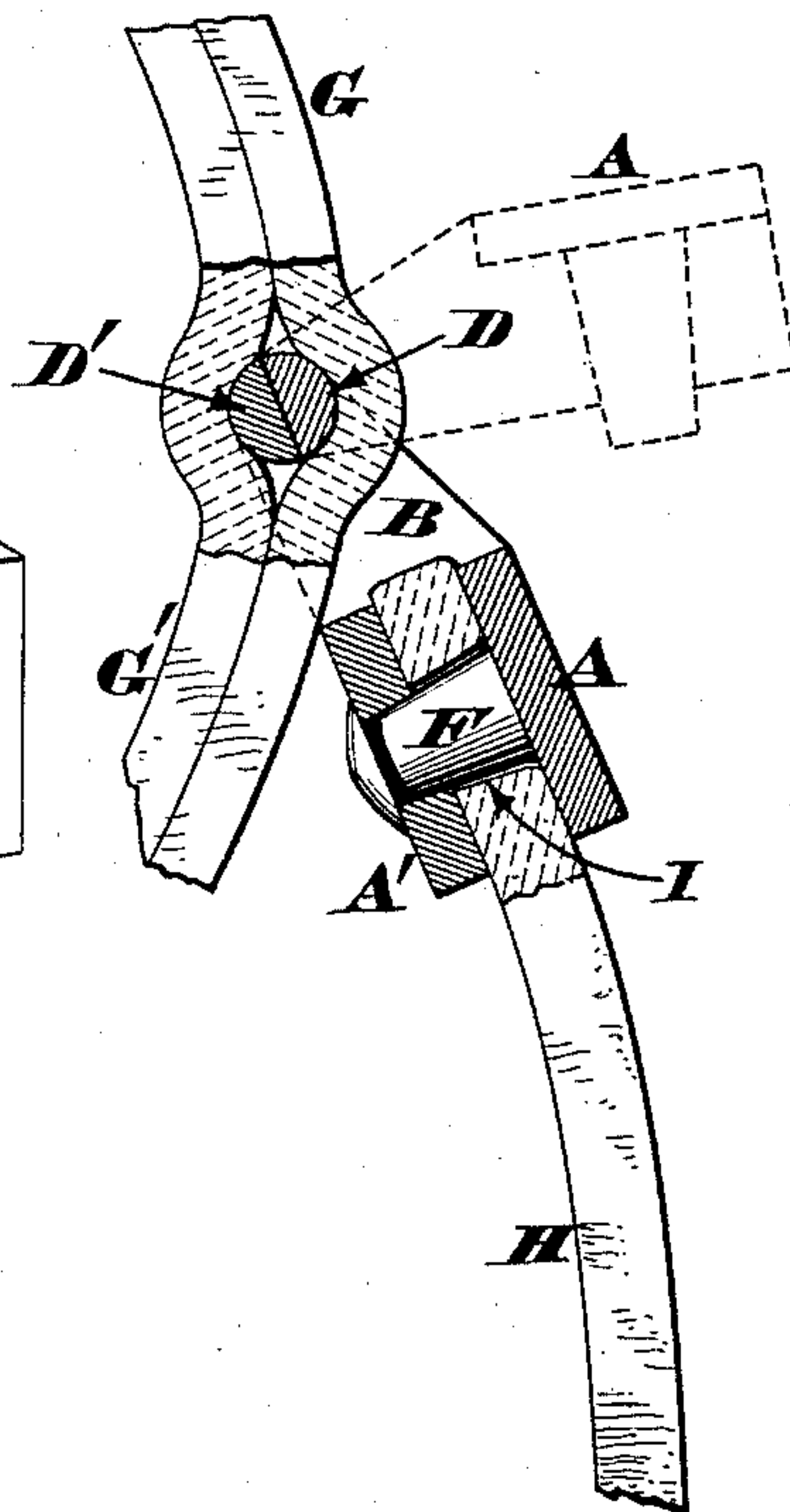


FIG. 5.

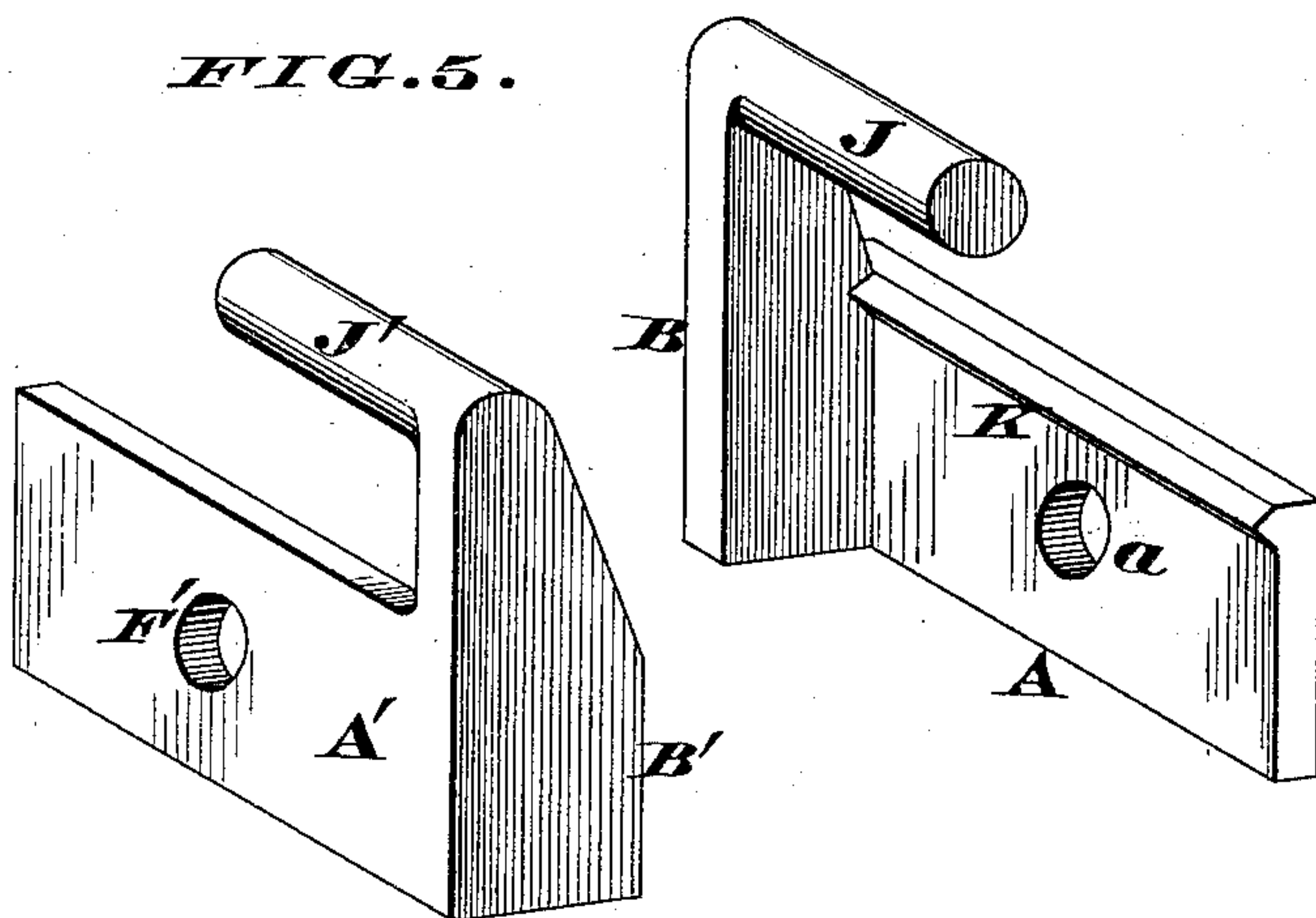


FIG. 3.

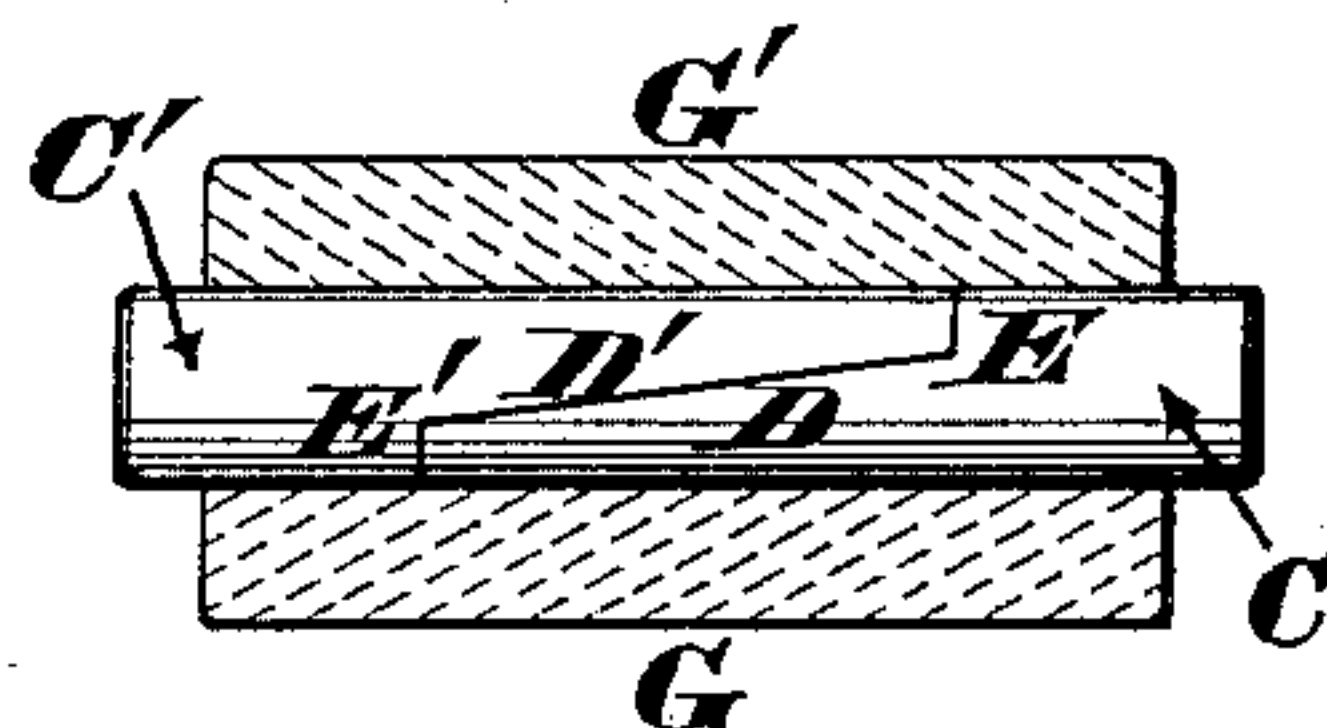


FIG. 4.

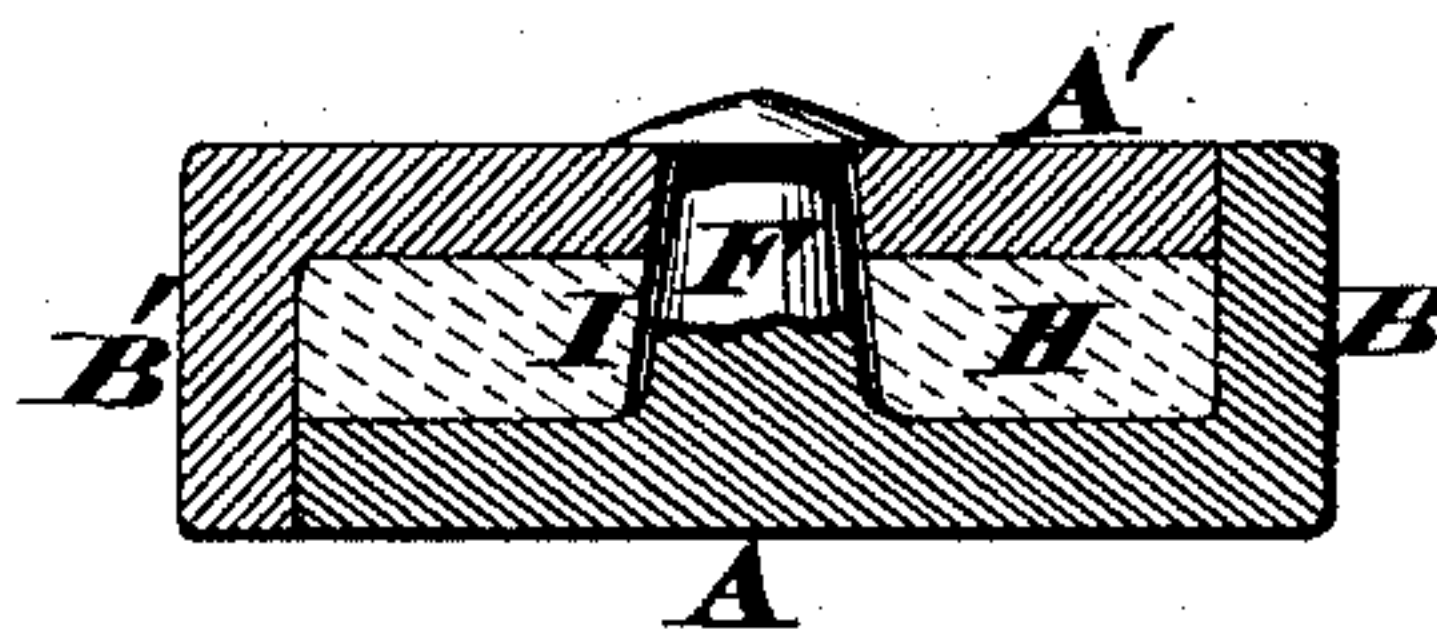


FIG. 6.

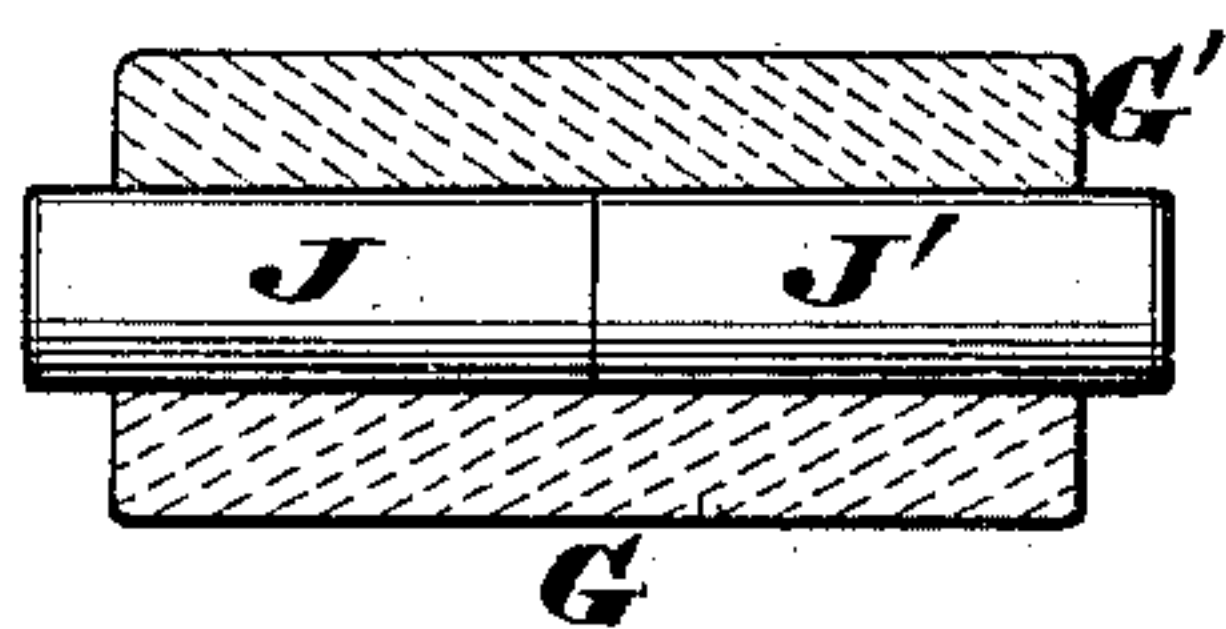


FIG. 8.

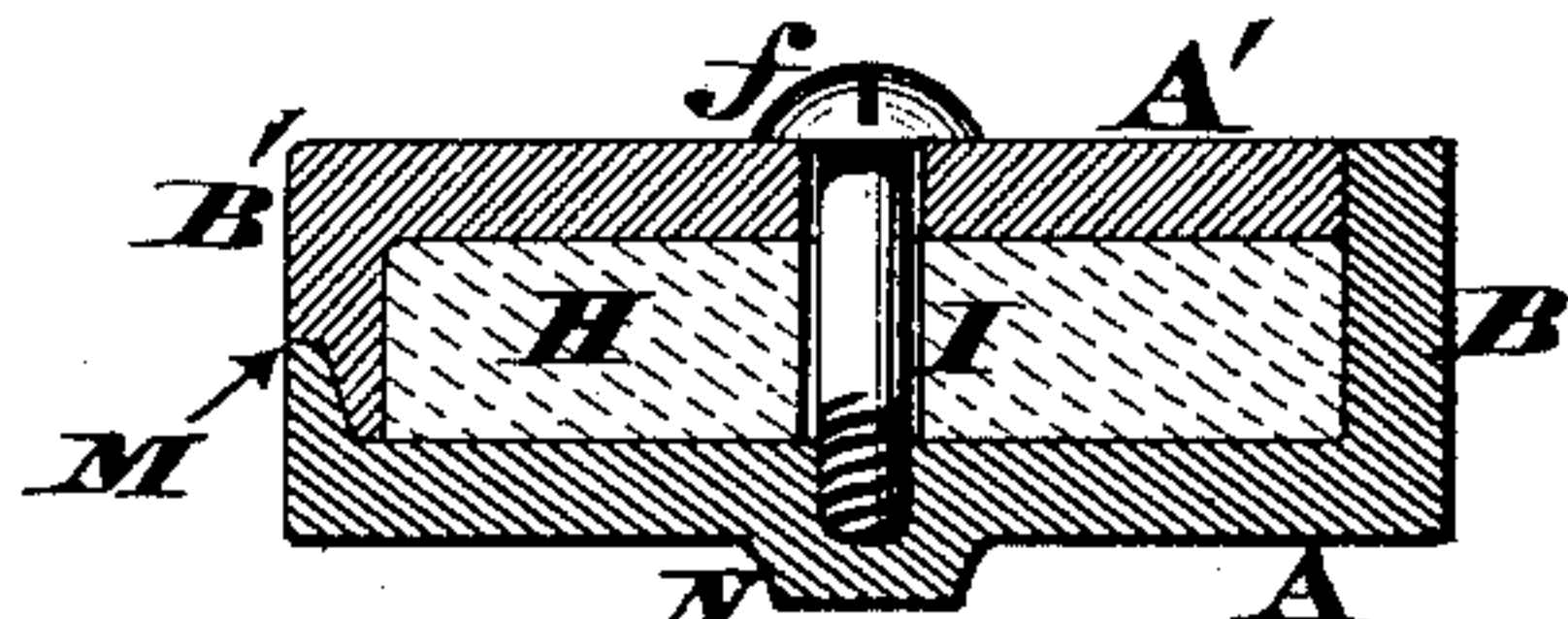
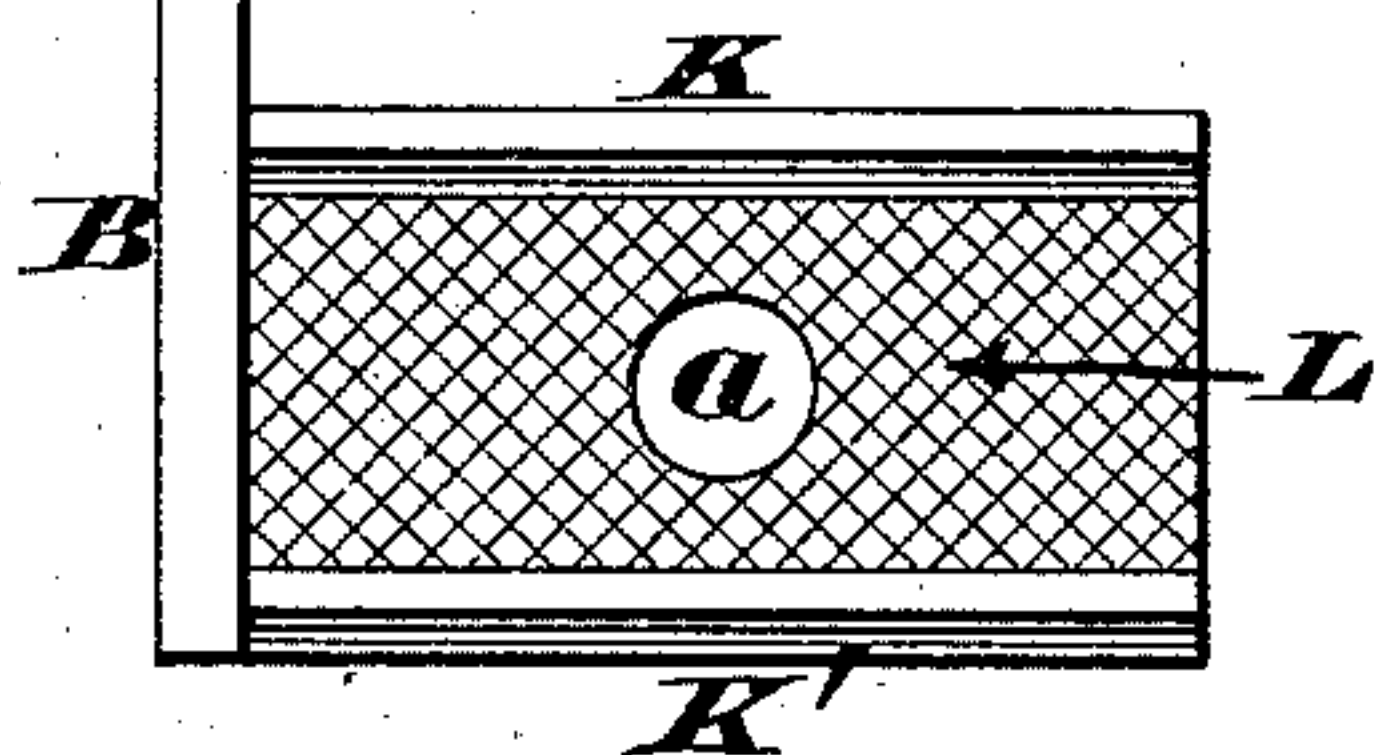


FIG. 7.



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UNITED STATES PATENT OFFICE.

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HARNESS-COUPLING.

SPECIFICATION forming part of Letters Patent No. 333,634, dated January 5, 1886.

Application filed November 7, 1885. Serial No. 182,086. (No model.)

To all whom it may concern:

Be it known that I, NATHANIEL W. HUNTER, a citizen of the United States, residing at Cincinnati, in the county of Hamilton and State of Ohio, have invented certain new and useful Improvements in Harness-Couplings, of which the following is a specification, reference being had therein to the accompanying drawings.

The object of my invention is to afford a cheap, simple, and effective device wherewith billets or straps can be readily and securely attached to shaft-tugs or other parts of harness without stitching them to a ring or "D," thereby saving considerable time and avoiding the waste of leather incidental to the use of the ordinary fastenings.

This coupling or "D," as it is generally called, consists of a pair of plates adapted to grasp the front and rear sides of the billet or other strap, each of said plates being provided with an end piece that bears against the edge of said billet, and said end pieces being prolonged laterally to form the bar of the D—or in other words, to afford means of attaching the device to the shaft-tug or other part of a harness. This bar of the D is consequently formed of two sections whose inner ends may abut squarely against each other; or they may be either scarfed, chamfered, or otherwise halved together, accidental shifting of said sections being prevented when the billet is clamped between the plates. The clamping action is effected by a rivet, which is preferably integral with the front plate, although any other convenient retaining device may be used, as hereinafter more fully described.

Another feature of my invention consists in providing the plates either with flanges, corrugations, or ribs that assist in maintaining a secure hold on the billet grasped by the coupling device, as hereinafter more fully described.

In the annexed drawings, Figure 1 is a perspective view of the preferred form of my coupling device, the plates of the same being shown separated from each other. Fig. 2 is a vertical section of the coupling detached to a harness. Figs. 3 and 4 are horizontal sections of the same, taken, respectively, in the plane of the divided bar D D' and rivet F. Fig. 5 is a perspective view of a modification of my

invention. Fig. 6 is a horizontal section showing this form of the device fastened within a shaft-tug. Figs. 7 and 8 show other modifications of the invention.

Referring to Fig. 1, A represents a plate of sufficient length to extend across a harness strap or billet, said plate being furnished with an end piece, B, that extends upwardly, and is then prolonged laterally, as at C, which lateral prolongation has a chamfered or scarfed portion, D, and a vertical shoulder, E. These members A B C D E constitute the front half of the coupling, which may be provided with an integral rivet, F, if desired. The rear member of the device is a reversed fac-simile of this front half, being composed of a plate, A', end piece, B', lateral extension C', chamfer D', and shoulder E', said plate A' being pierced at F' to admit the projecting end of rivet F.

G G' in Fig. 2 represent portions of the straps, composing a shaft-tug or other member of a harness, and H is part of a billet to be attached thereto, said members G G' being stitched together while perfectly flat and straight, after which operation the lateral extensions C D C' D' are inserted at the proper place and in line with each other. This insertion is readily accomplished, because the tapered ends of said extensions crowd the stitches aside without cutting or breaking them, and when these extensions are driven home, the scarfed portions D D' of the same fit snugly against each other, as more clearly seen in Fig. 3. Furthermore, when thus driven home, the extreme ends of these scarfed portions abut against the appropriate shoulders, E E'. These portions C D C' D' accordingly serve as the suspension-bar for the D and allow the front plate, A B, to be swung up, as indicated by the dotted lines in Fig. 2, the hole I of the billet H being now engaged with the stump or rivet F. Said plate is then swung down, and its rivet is caused to pass through the hole F' of the inner plate, after which act the protruding end of said rivet is headed up and the attachment of the billet or other strap or band is complete. When thus attached, the upper portion of the strap is inclosed by the plates A B A' B', as seen in Fig. 4, and as the head of the rivet is on the rear side of the D this retaining device is con-

cealed. As the billet H terminates at the top of plates A A', it is apparent considerable material is saved by this construction, as it usually requires from four to six inches of leather to stitch a billet or other strap around a D in the usual manner. Furthermore, the time required for this stitching operation is saved. When all the parts are thus attached, it is evident the rivet F performs the twofold purpose of fastening the billet to the D, and also of preventing the plates A B A' B' spreading laterally, and thereby pulling the extensions C D C' D' out of the shaft-tug or other supporting member of the harness.

15 An obvious modification of my invention is seen in Fig. 5, where the plate B has a cylindrical prolongation, J, adapted to abut squarely against the end of a similar extension, J', of the other plate, B', as shown in Fig. 6.

20 Again, Fig. 5 shows a hole, a, in the plate A, which hole, in conjunction with the aperture F' of the other plate, A', is intended to receive an ordinary eyelet or rivet for uniting said plates, thereby dispensing with the integral rivet F. (Seen in Figs. 1, 2, and 4.) Fig. 5 shows also a flange or rib, K, at the upper edge of plate A', which flange coacts with the rivet F in retaining the strap within the coupling device. Fig. 7 shows a pair of such flanges, K K', and a roughened or corrugated face, L, for the same purpose. Fig. 8 shows one end of the coupling halved together at M, to preserve the front plate in a perfectly flat position in case the billet H should be too tightly compressed by the rivet, or should not be sufficiently thick to fill the space between the two plates A and A'. In this illustration a screw, f, is shown for fastening said plates together, which screw may engage with a boss, N, of the outer plate, A, and said boss can be ornamented to

give a very finished appearance to the coupling.

I claim as my invention—

1. A harness-coupling consisting of the separable plates A A', having, respectively, end pieces, B B', provided with lateral extensions adapted to engage with the tug or other supporting member, a retaining device being employed for uniting said plates, as herein described. 50

2. A harness-coupling consisting of the separable plates A A', having, respectively, end pieces, B B', provided with scarfed lateral extensions adapted to engage with the tug or other supporting member, a retaining device being employed for uniting said plates, as herein described. 55

3. The combination, in a harness-coupling, of the front plate, A, having the end piece, B, lateral extension C D, and integral rivet F, and the rear plate, A', having an end piece, B', lateral extension C' D', and a hole, F', for the reception of said rivet, as herein described. 60

4. As a new article of manufacture, a harness-coupling consisting of the separable plates A B C D F and A' B' C' D' F', either of said plates being provided with one or more flanges, K, for the purpose specified. 65

5. A harness-coupling consisting of the separable plates A B C D F and A' B' C' D' F', joined with a retaining device and halved together at one side, as at M, for the purpose described. 70

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

NATHANIEL W. HUNTER.

Witnesses:

JAMES H. LAYMAN,
SAML. S. CARPENTER.