

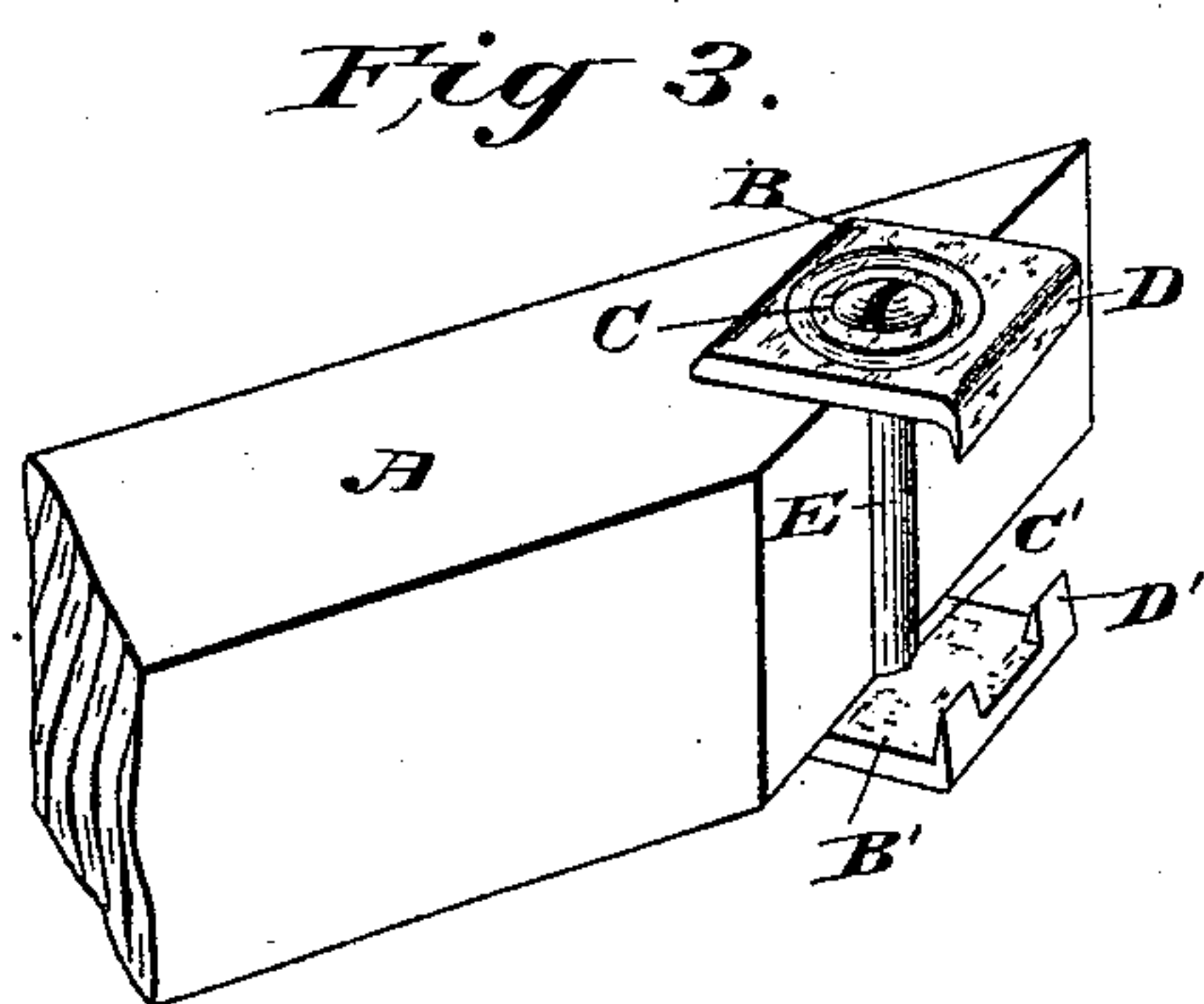
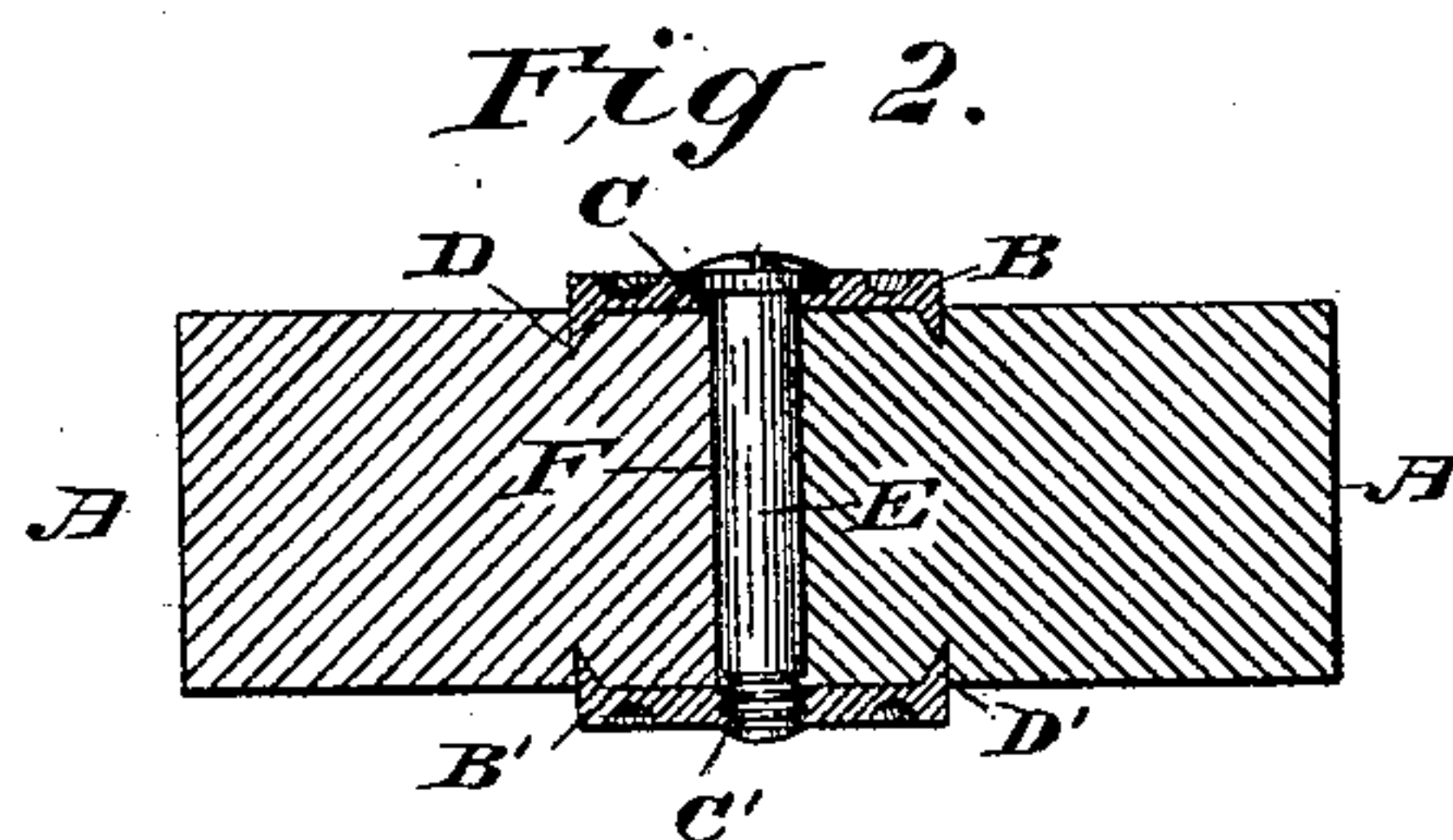
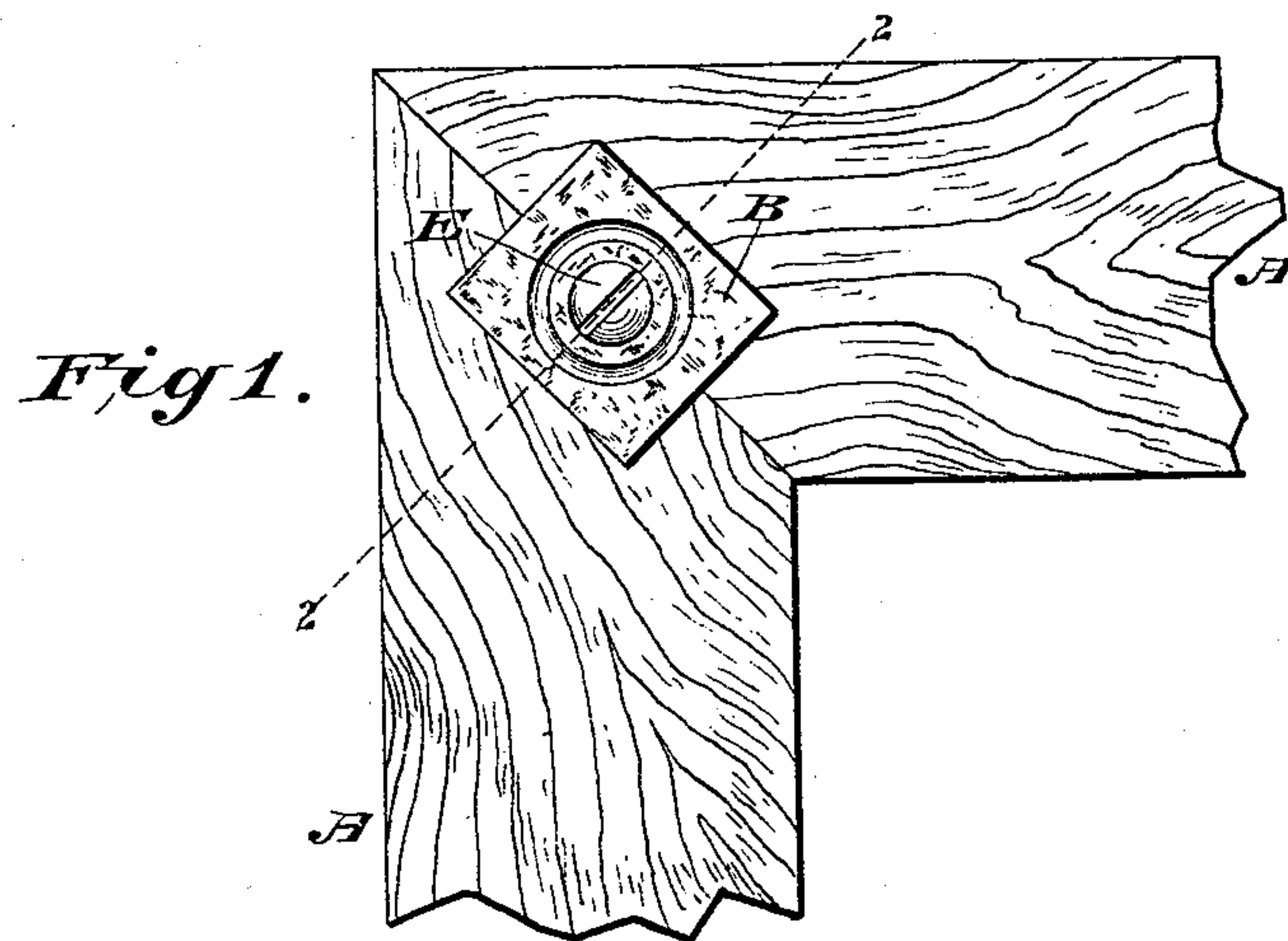
(No Model.)

J. E. STUART.

## CORNER FASTENING FOR FRAMES.

No. 277,076.

Patented May 8, 1883.



Attest,  
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Rec. Secy.

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*att'y.*



# UNITED STATES PATENT OFFICE.

JOHN E. STUART, OF NEWARK, NEW YORK.

## CORNER-FASTENING FOR FRAMES.

SPECIFICATION forming part of Letters Patent No. 277,076, dated May 8, 1883.

Application filed March 5, 1883. (No model.)

*To all whom it may concern:*

Be it known that I, JOHN E. STUART, of Newark, county of Wayne, and State of New York, have invented a new and useful Improvement in Corner-Fastenings for Frames, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, making part of this specification.

My invention relates to an improvement in the method of uniting and securely fastening the corners of frames, window-sashes, doors, &c.; and it consists in the employment of metal plates provided at or near their edges with diverging flanges or spurs sharpened and adapted to sink into the wood of the frame when said plates are placed upon opposite sides of the corners of the frame, and are drawn together by means of a through screw-bolt.

In the accompanying drawings, Figure 1 is an elevation of a frame-corner, showing my improved fastening applied. Fig. 2 is a section on the line 2 2, Fig. 1; and Fig. 3 is a detached view, showing the different forms of flanges or spurs.

A A represent two of the timbers of a frame, with their ends mitered and forming an angle, as shown.

B and B' are two metal plates, one of them—for instance, B—placed upon the front of the frame-corner, and the other, B', placed upon the back of said frame in a position corresponding to that of plate B. Both plates have perforations C C', the latter one, C', containing a thread, for a purpose hereinafter specified. Upon the opposite edges of the plates B B' are formed flanges D D', diverging outward from said edges, and sharpened for the purpose of entering the surface of the wood when they are drawn tightly thereon; and for the purpose of drawing the plates B B' toward each other and causing them to firmly clamp the two mitered ends of the frame-timbers together, a screw-bolt, E, having a thread upon its end corresponding to the thread in the perforation C' of the plate B', is provided.

The application of my corner-plates is as follows: The mitered ends of the frame-timbers A A are brought evenly together and a perforation, F, made therein for the insertion of the bolt E. The two plates B and B' are then applied one upon each side of the corner and directly opposite to each other. The screw-bolt E is then passed through the per-

foration C of plate B, also through the perforation F in the mitered ends of the frame-timbers, and then screwed into the plate B' through the corresponding threaded perforation C'. The farther the bolt E is screwed into the plate B' the more tightly it will cause the plates to clamp the edges of the timbers together, and the deeper the divergent flanges or points D D' sink into the timbers the more snugly together will the mitered edges of the frame be drawn, thus forming a very neat, secure, and inexpensive corner-fastening.

As will be noticed at D' in the drawings, the sharpened flanges need not be continuous, as shown at D; but they may be composed of two or more smaller flanges, spurs, or points, this construction serving just as well as that shown at D, and the bolt E may also pass through the plate B', and a nut be screwed upon its end, instead of providing the bolt E and perforation C' with threads. It will be apparent, also, that these plates may be applied for other purposes than the uniting of frame-corners, and also that their form and design may be varied without departing from my invention. Therefore I do not wish to limit myself to the exact form of construction shown and described.

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

1. A corner fastening for frames, composed of metal plates having diverging flanges or spurs on their adjacent sides for uniting the parts of the frame, in combination with a through-bolt, substantially as described.

2. The combination, with the ends of two frame-timbers, of metal plates provided with diverging sharpened flanges for drawing together and clamping said ends, in combination with a bolt connecting and drawing said plates toward each other, substantially as described.

3. The combination, with metal plates for uniting the ends of two timbers, of the sharpened diverging flanges or spurs and a bolt connecting the said plates, all for the purposes and substantially as specified.

In testimony whereof I have hereunto set my hand this 3d day of March, A. D. 1883.

JOHN E. STUART.

Witnesses:

JOHN S. CRONISE,  
T. DAVIS PRESCOTT.