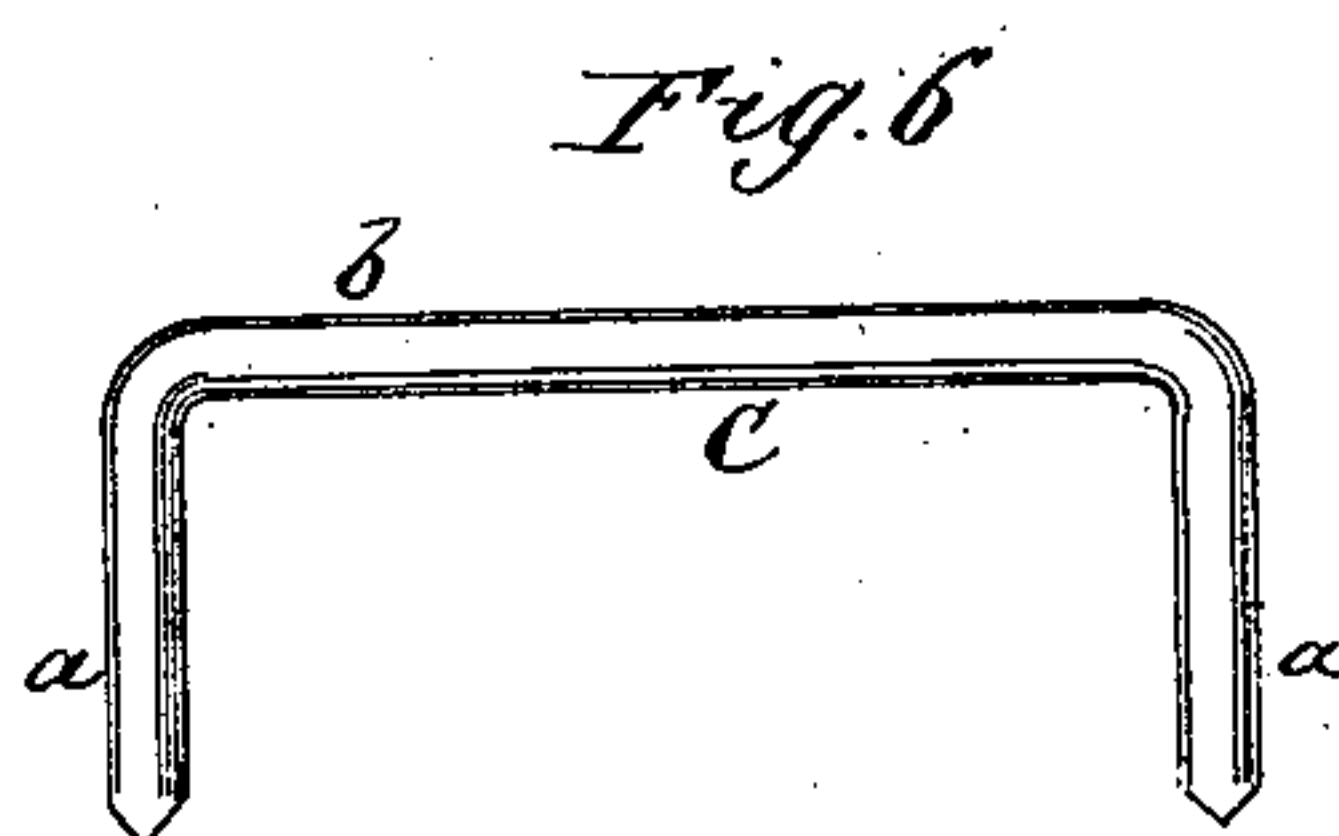
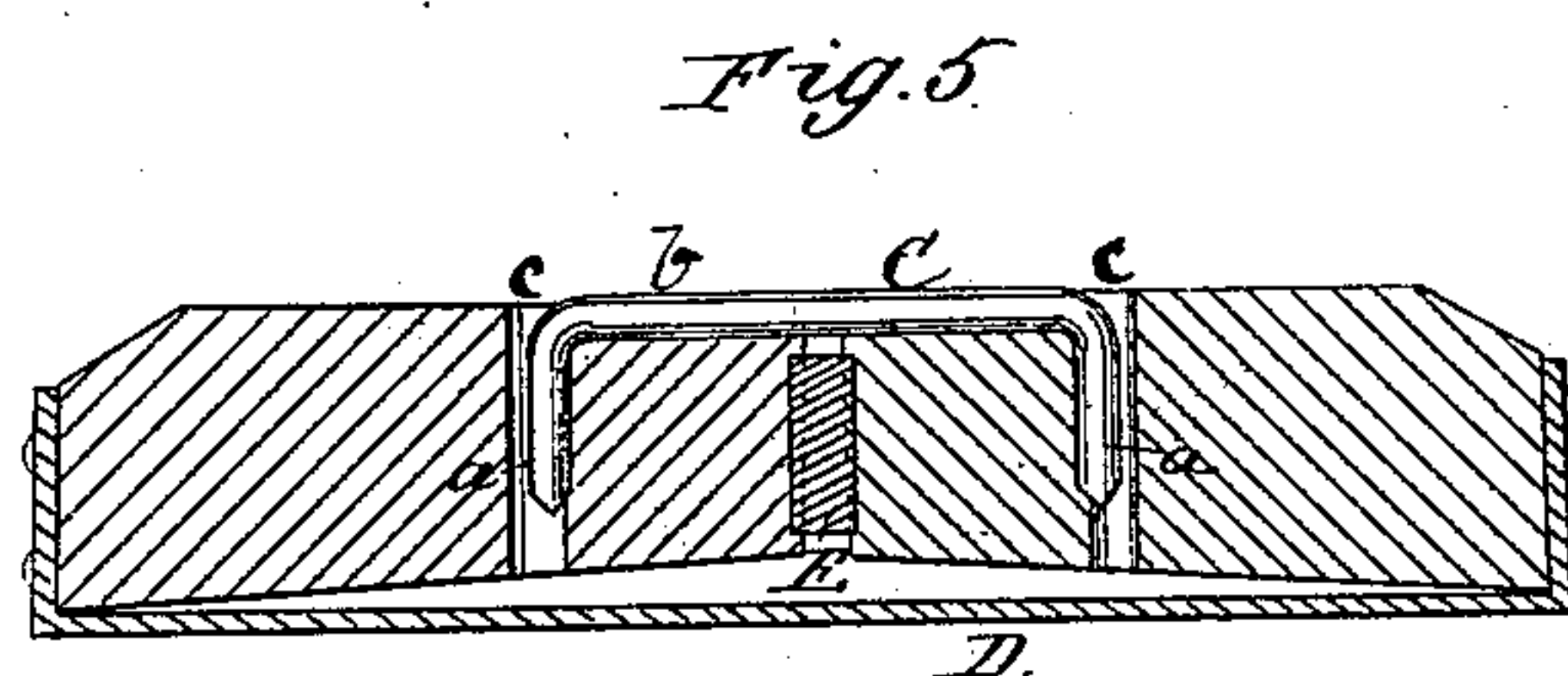
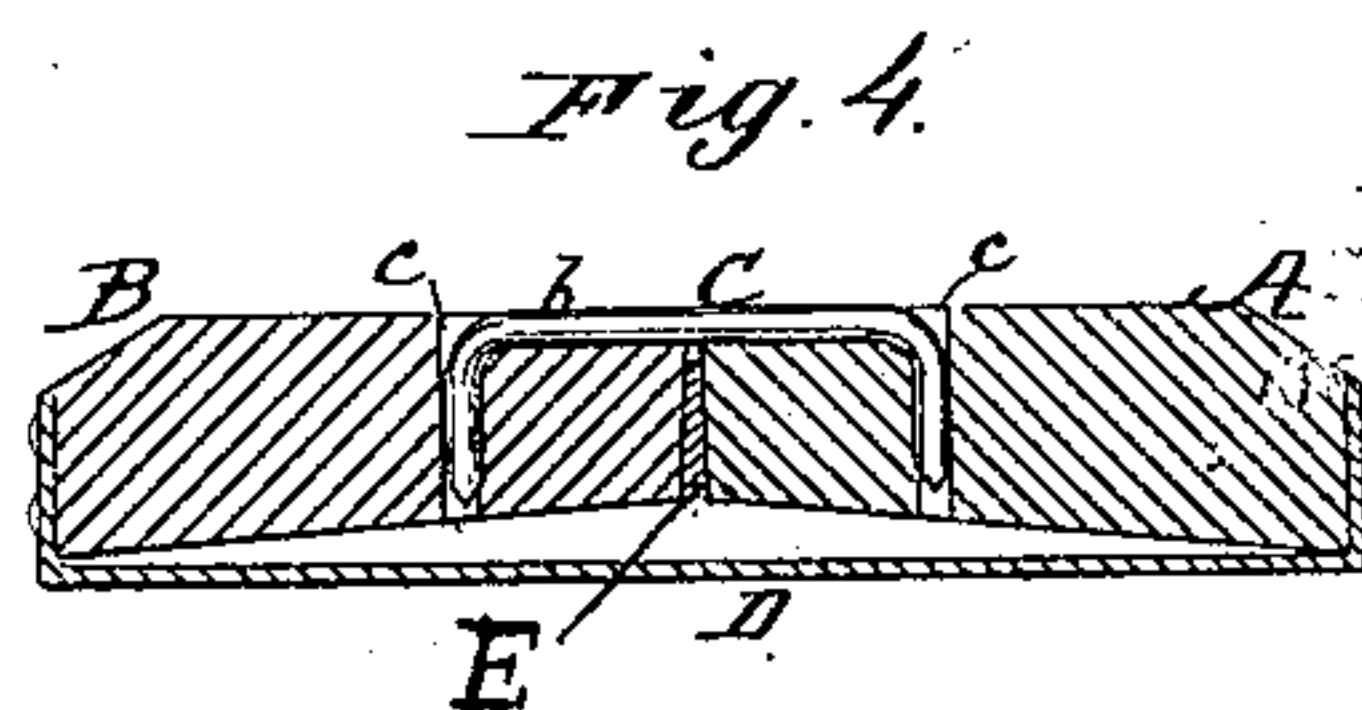
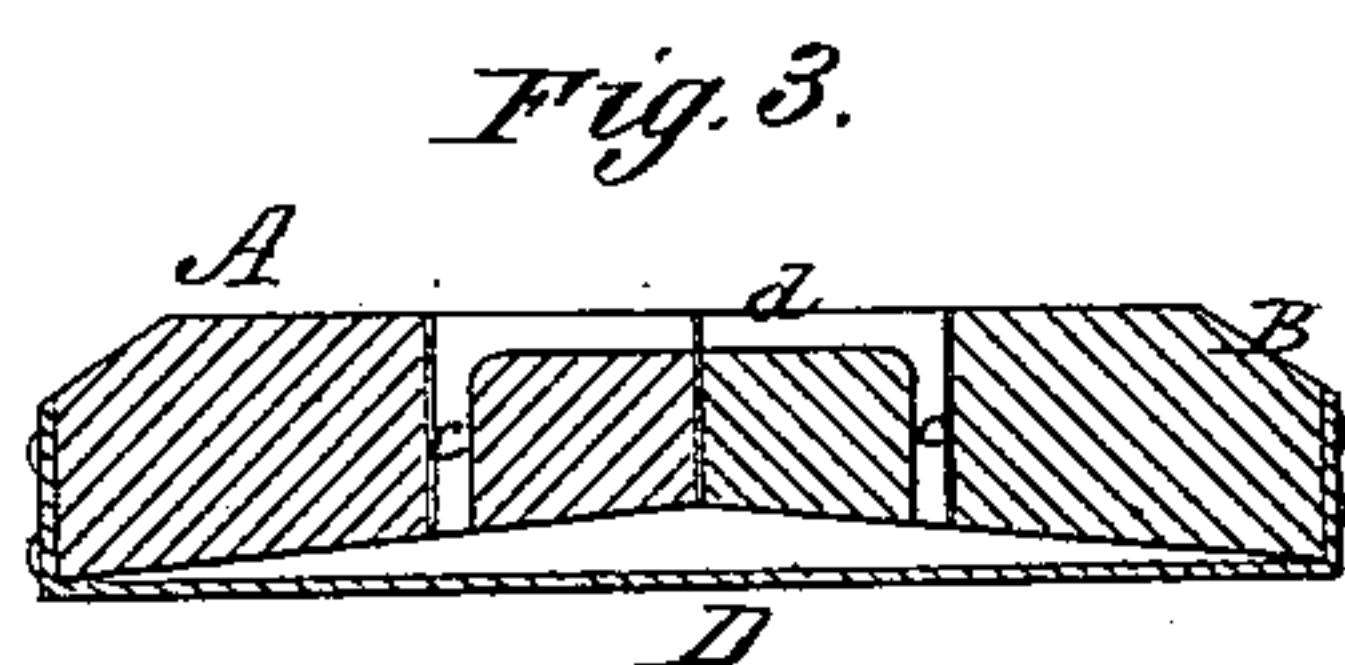
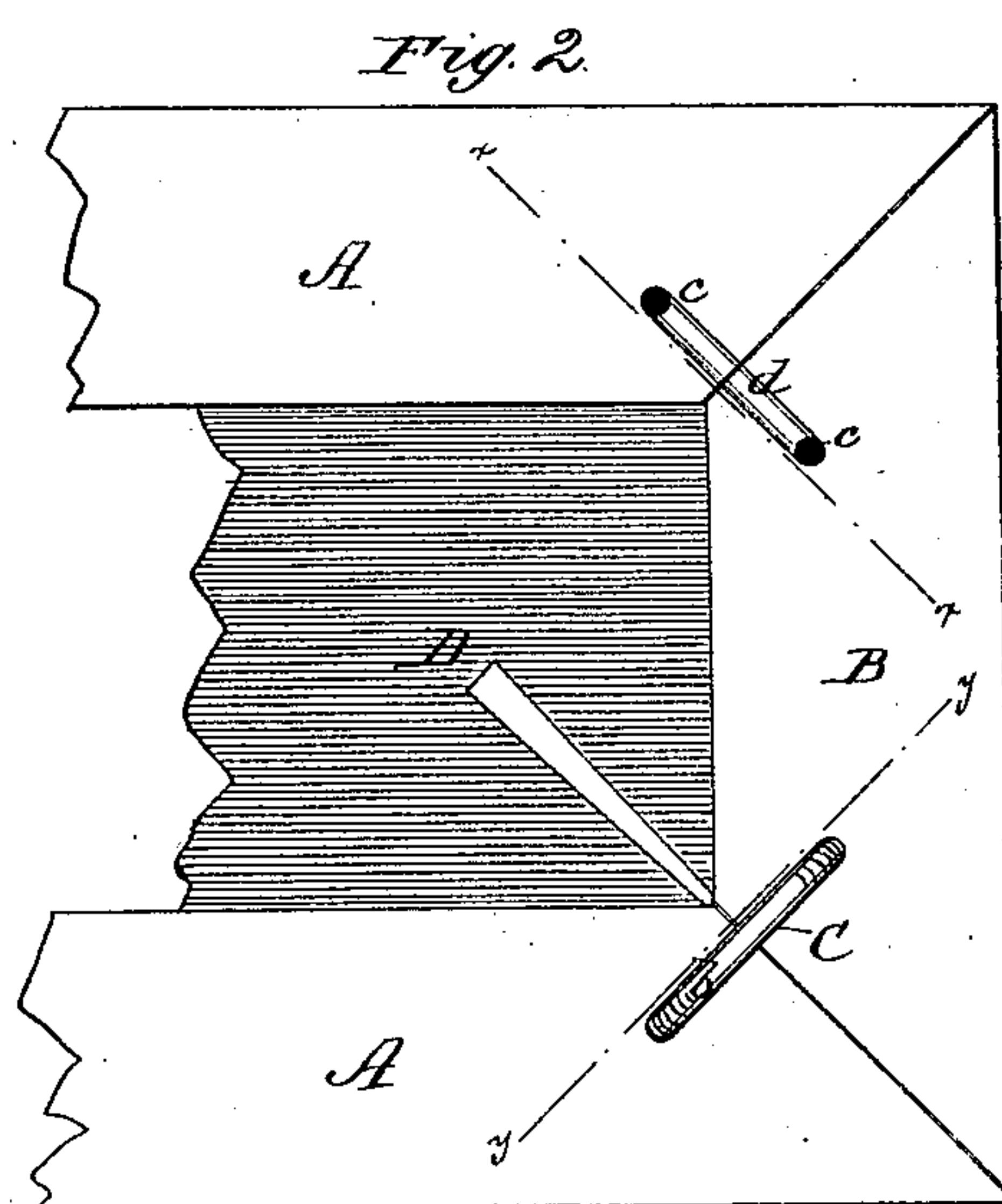
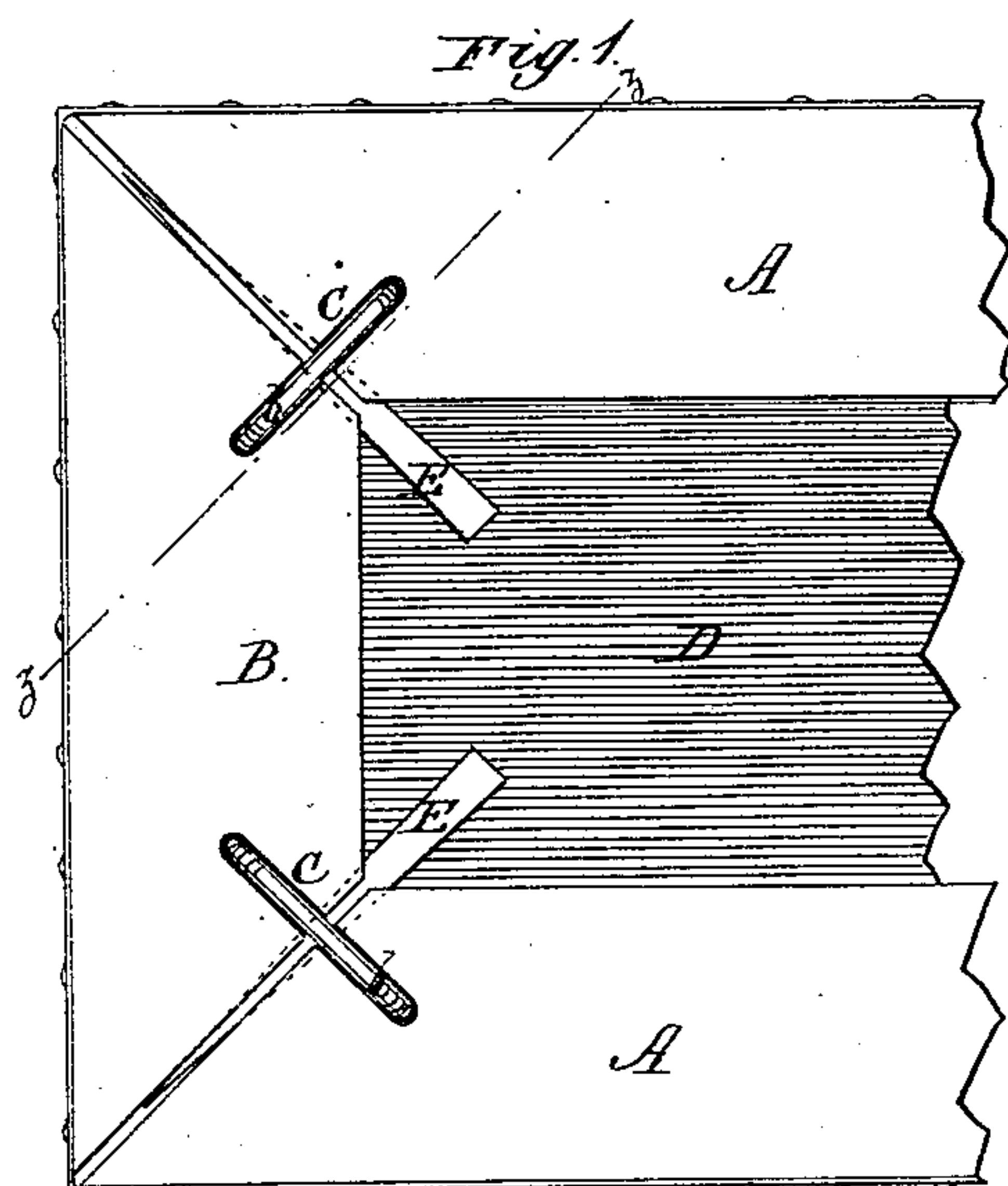


J. G. FLETCHER.
Artist's Canvas-Stretcher.

No. 226,509.

Patented April 13, 1880.



WITNESSES:

W. W. Hollingsworth
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INVENTOR:

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BY *Samuel C. [Signature]*
ATTORNEYS.

UNITED STATES PATENT OFFICE.

JACOB G. FLETCHER, OF WASHINGTON, DISTRICT OF COLUMBIA.

ARTIST'S CANVAS-STRETCHER.

SPECIFICATION forming part of Letters Patent No. 226,509, dated April 13, 1880.

Application filed November 18, 1879.

To all whom it may concern:

Be it known that I, JACOB G. FLETCHER, of Washington city, District of Columbia, have invented a new and Improved Artist's Canvas-Stretcher; and I do hereby declare that the following is a full, clear, and exact description of the same.

My invention has for its object to provide for artists' use an improved canvas-stretcher which shall have all the qualities experience has decided to be necessary or most desirable.

Many unsuccessful attempts have been made to provide a fastening which shall hold the frame-pieces rigidly in place or proper relation by preventing lateral displacement, torsion, or twisting, and shall also be simple in construction, cheap, and easily applied, and allow the stretcher to be easily expanded when required.

My invention is designed to meet a long-felt want in this line; and it consists in constructing the bars or pieces composing the stretcher proper with plain miter-joints, which are opened by means of wedges, and in providing said bars with holes and grooves for the purpose of receiving the fastening device, which is constructed of metal and approximately U-shaped, and when applied to the stretcher-frame is sunk or embedded in the wood flush with the surface thereof, all as hereinafter described.

In the accompanying drawings, forming part of this specification, Figure 1 is a plan view of a portion of a stretcher (inverted) having its bars connected by the staple and straining-wedges inserted. Fig. 2 is a similar view of the stretcher, showing the bifurcated key or fastening device and wedge detached at one corner and applied at the other, but the wedge driven in only half-way. Fig. 3 is a cross-section on line *xx*, Fig. 2. Fig. 4 is a cross-section on line *yy*, Fig. 2. Fig. 5 is a cross-section on line *zz*, Fig. 1. Fig. 6 is a side view of the staple enlarged.

The rectangular stretcher is composed of the four pieces A A and B B, whose ends have a plain miter-joint, instead of being connected by tenon and mortise or other form of socket-joint, as has been the usual practice heretofore. The device C, for fastening the said pieces together, is in the nature of a clamp or bifurcated key. It is constructed preferably of wrought-iron, and may be round, square, or of

other contour in cross-section. Its ends or arms *a a* are parallel, and its body or middle portion, *b*, is preferably straight, so as to be at right angles to the ends, as shown.

In order to prepare the frame-pieces A and B for application of said fastening device C, the pieces are laid in proper position and connected by brads driven through the corners. Holes *c* and a groove, *d*, connecting them, are then formed in the ends of the parts A B, at points contiguous to the inner angles of the frame, Figs. 2, 3. These holes *c* are made at the same distance apart as the arms *a* of the bifurcated key or fastening device C, and when the latter is inserted its middle portion, *b*, is embedded in the wood, and is thus flush with the back of the stretcher, Figs. 4 and 5. The canvas D is then secured to the stretcher in the usual way, and in order to give it the requisite tension by expanding the frame, wedges E are driven into the inner ends of the miter-joints, which, being held together at the back by the clamps C, the first effect of the action of the wedges is to open the joints on the front or inner side, as shown in Figs. 1 and 4, thus stretching the canvas as much as will be ordinarily required; but when the canvas has been stretched to such limit the further effect of driving in the wedges is to separate the joints on the back also, which can only take place by the arms of the clamps C drawing through the wood more or less, as shown in Fig. 5, which result is a safeguard against overstraining, and thereby destroying, the canvas.

The chief advantages of my invention, in respect both to the specific fastening device and the application of the same, are, first, that the device may be produced at minimum cost, may be applied very easily and quickly, and the frame-pieces may also be constructed at minimum cost, since nothing but plain miter-joints are required; second, the fastening holds the frame-pieces connected so that endwise motion of any one of them, or lateral displacement, or twisting of the same are prevented—that is to say, the legs *a* of the fastener prevent the mitered surfaces separating farther than allowed by the compression of the wood, and also prevent the piece A or B from turning or twisting, while the body or middle portion, *b*, of the fastener, being embedded in the wood, pre-

vents any movement of the mitered ends of the bars A B on each other endwise. Thus the stretcher-frame will not only remain squared when the canvas is being attached—a quality
5 artists and dealers will duly appreciate—but will continue to be held rigidly in the required relation to each other, while expansion of the frame by driving in the wedges E may be effected at any time. My improved fastening
10 therefore combines the qualities of great simplicity of construction and minimum cost, adaptation for easy application, and holding the parts of the stretcher-frame in the required relation, while permitting any required expansion.
15 sion.

A stretcher provided with my fastening will retain its original form, in place of breaking, giving way, or becoming distorted, as usual when constructed with the ordinary form of
20 joint, and hence the painted canvas attached to it will be preserved with the least possible injury and for the longest time.

I do not claim, broadly, the employment of a bifurcated key for securing the detachable parts of a frame together, nor do I broadly
25 claim embedding the same in the wood.

What I claim is—

The combination, with the canvas-stretcher frame having plain miter-joints and provided with holes *c* and grooves *d*, which connect
30 them, of the wedges E and the metal fastening device C, having parallel ends or legs connected by the portion *b*, which lies in the groove *d* and is flush with the surface of the frame when said device is applied, as shown
35 and described.

The above specification of my invention signed by me this 13th day of November, 1879.

JACOB G. FLETCHER.

Witnesses:

AMOS W. HART,
SOLON C. KEMON.