

Wm E. Brock's Imp^d Frame for Metallic Blinds. A.

No. 122,805.

Patented Jan. 16, 1872

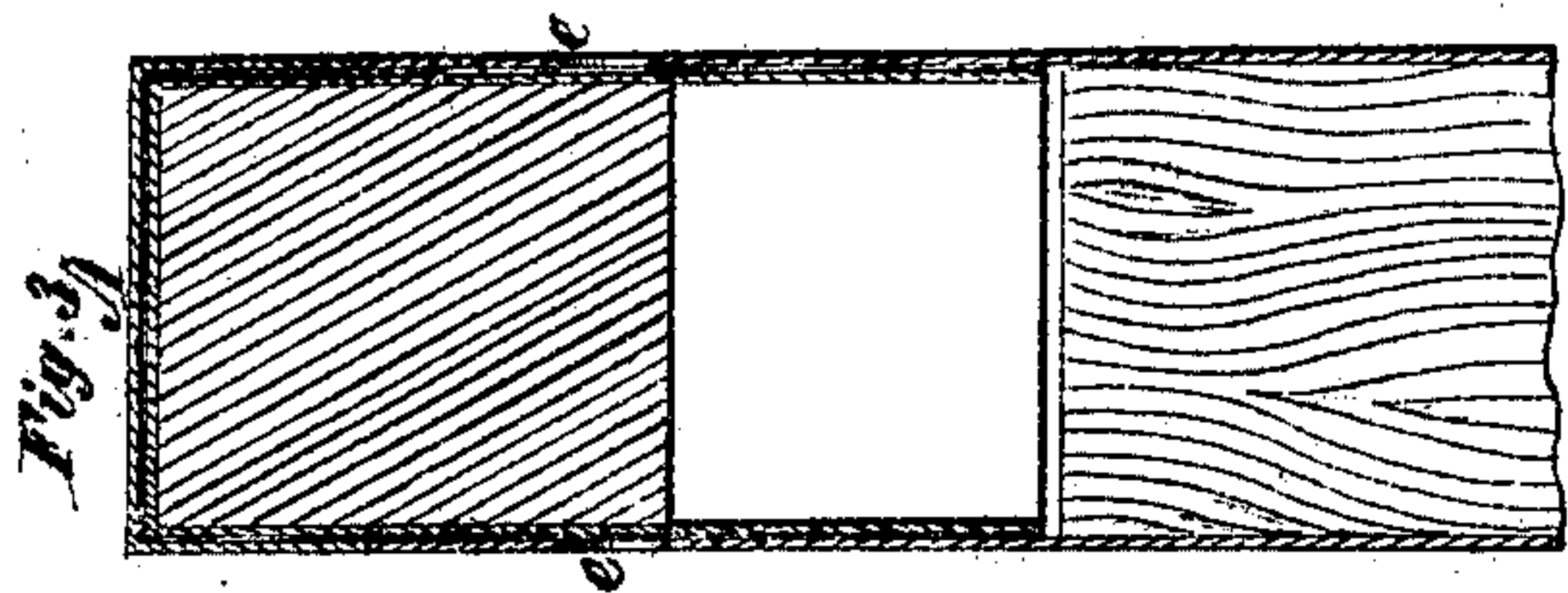


Fig. 6

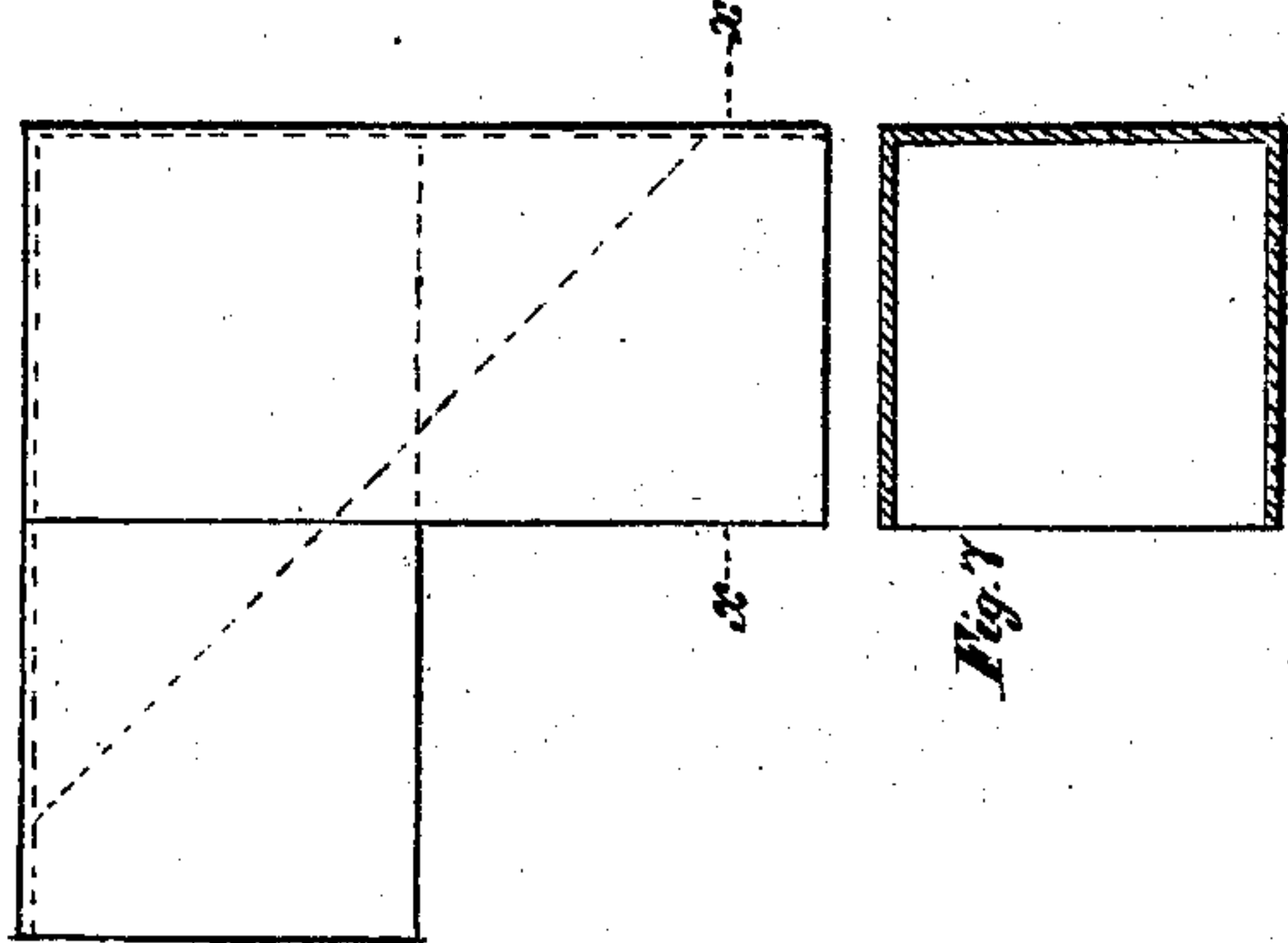


Fig. 7

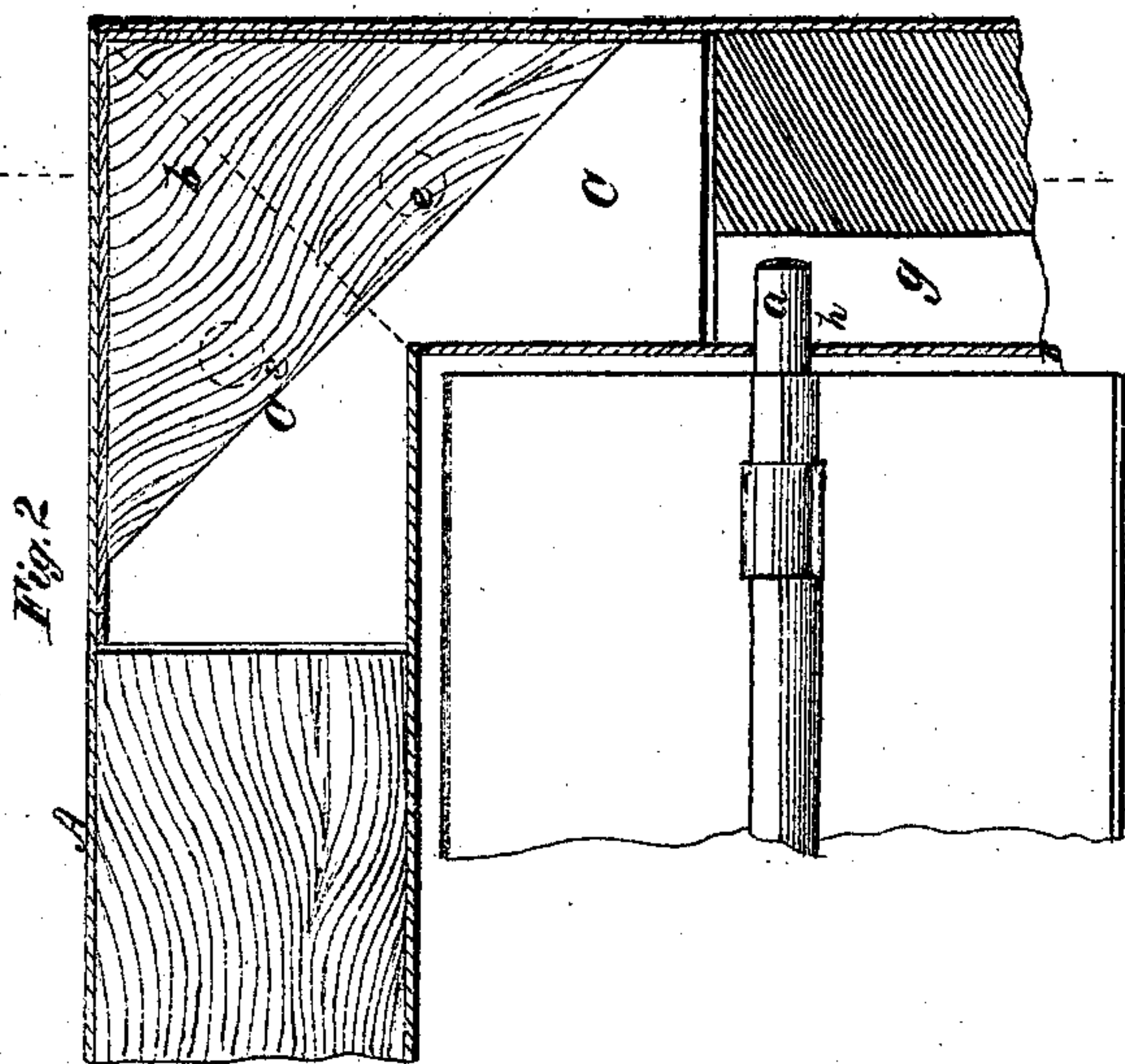


Fig. 4

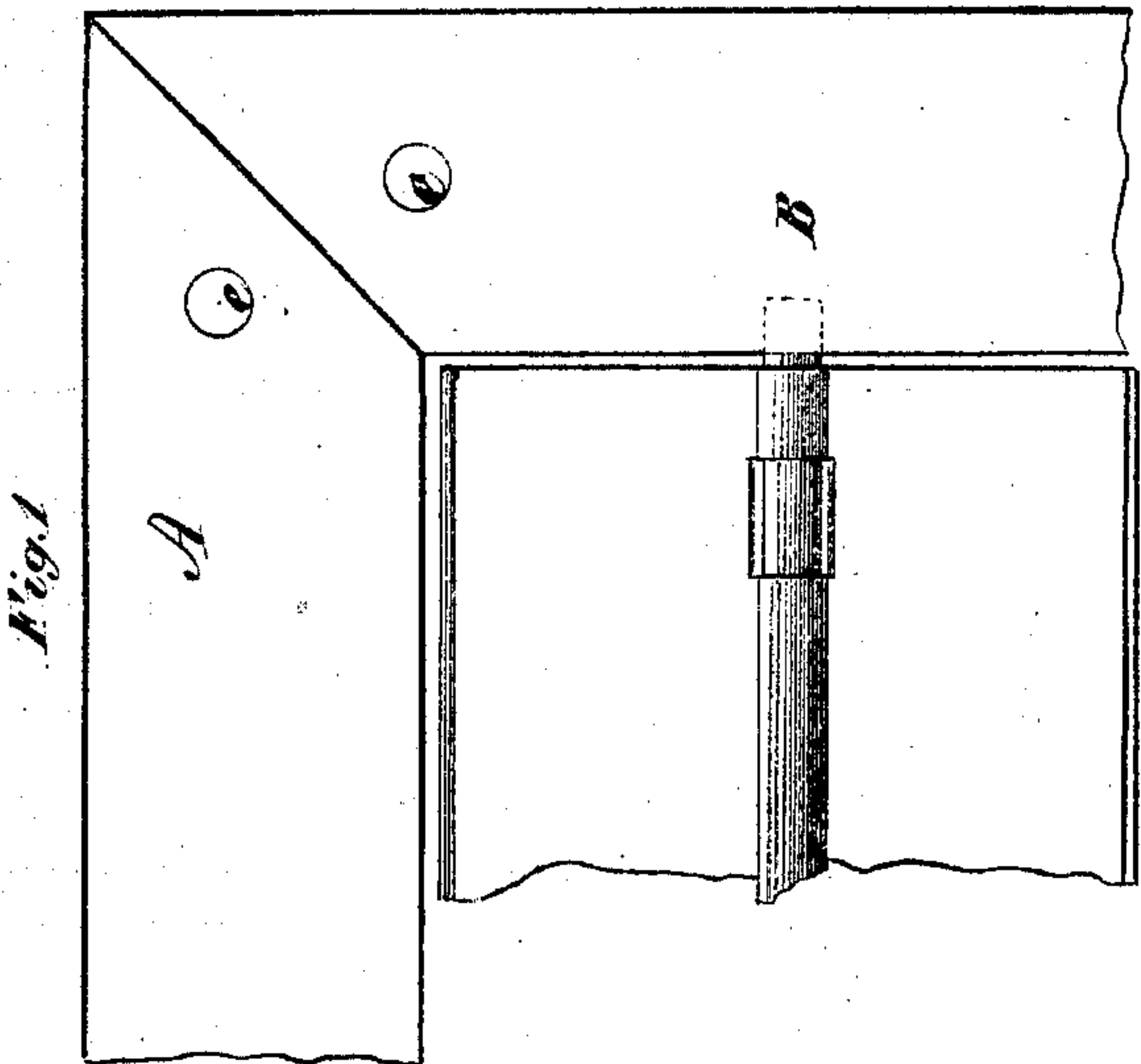
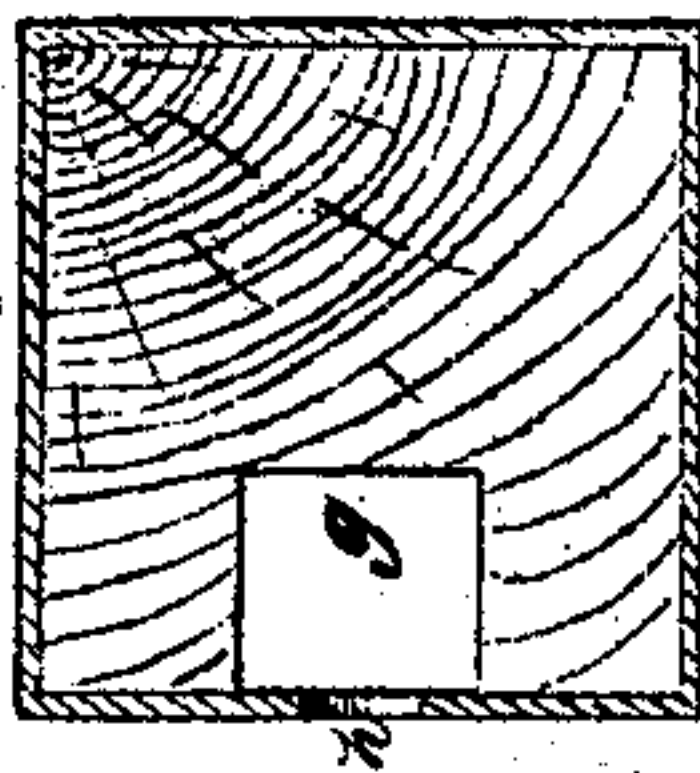
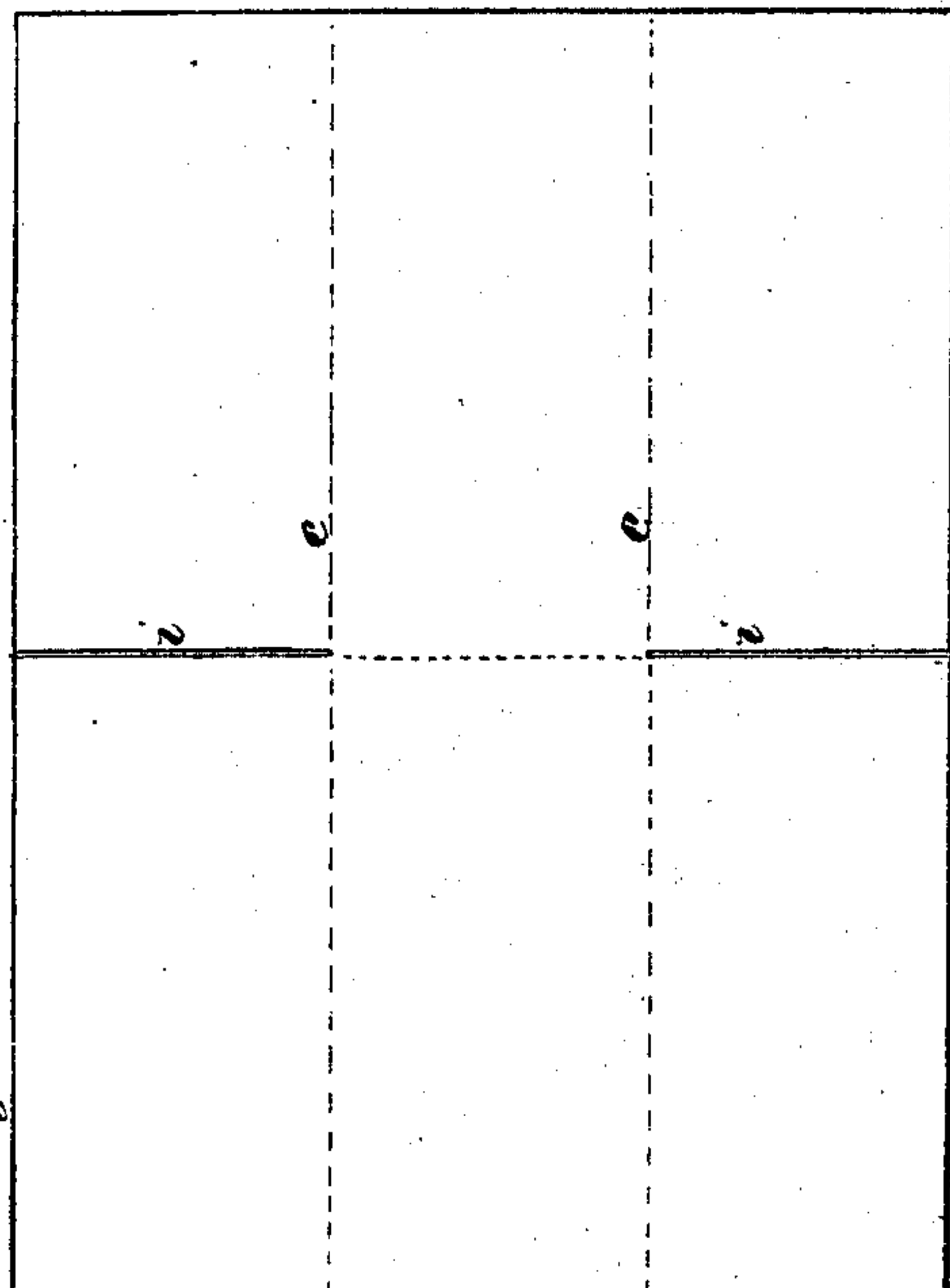


Fig. 5



Witnesses
Fred. H. Hume
R. L. Ralston

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UNITED STATES PATENT OFFICE.

WILLIAM E. BROCK, OF NEW YORK, N. Y.

IMPROVEMENT IN FRAMES OF IRON SHUTTER-BLINDS.

Specification forming part of Letters Patent No. 122,805, dated January 16, 1872.

To all whom it may concern:

Be it known that I, WILLIAM E. BROCK, of the city, county, and State of New York, have invented a new and useful Improvement in the Frames of Iron Shutter-Blinds; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawing forming part of this specification.

This invention relates to slatted shutter-blinds of iron for dwelling-houses and other buildings; and it consists in a novel construction of the frame of such a blind of four rectangular metal tubes, which are fitted throughout the greater portion of their lengths with strips of wood, which add to the strength of the frame and admit of the attachment thereto of hinges and other appurtenances by screws. The strips of wood within the side pieces of the frame have a longitudinal groove formed in them opposite the pivot-holes in the tube to prevent the wood, when swelled or contracted by the weather, from interfering with the operation of the pivots of the slats. It also consists in a novel construction of the corner-joints of the tubular metal frames, whereby great strength is obtained in an inexpensive way.

In the accompanying drawing, Figure 1 is an outside view of one corner of a blind having its frame made according to my invention. Fig. 2 is a section of the same parallel with Fig. 1. Fig. 3 is a longitudinal section through one of the tubes of the same. Fig. 4 is a transverse section thereof. Fig. 5 is a view of one of the blanks from which the elbows are formed. Fig. 6 is a view of one of the elbows complete; and Fig. 7 is a section taken in the plane indicated by the line *x x* in Fig. 6.

Similar letters of reference indicate corresponding parts in all the figures.

A and B are two rectangular tubes forming portions of the side and top of a blind-frame. These should, preferably, be made of galvanized iron. Their ends are beveled off at an angle of forty-five degrees to form a miter-joint. Each is provided near each end of those sides which constitute the front and back of the blind with holes *e e*. That side of the vertical

tube B which comes to the interior of the frame has formed in it a series of holes, *h*, for the reception of the pivots *a a* of the slats of the blind. The several tubes constituting a blind-frame have fitted within them strips of wood *b b*, which extend throughout their length, except those portions of the ends which receive the elbows C C. The strips of wood in the side tubes B have longitudinal grooves *g* of a greater width than the diameter of the pivots *a a*, formed opposite the pivot-holes in the tube, to receive the pivots in such manner that the swelling or contracting of the wood effected by the weather shall not interfere with their operation. The elbows C C are each made of a rectangular blank of sheet metal, which is cut about the middle of its length from each side for about a third of its breadth, as shown at *i* in Fig. 4. The blank is then folded longitudinally at right angles in the two parallel lines *c c*, to give it the form of three sides of a square, as shown in Fig. 7, and afterwards folded transversely at right angles in a line connecting the two slits *i i*, as shown in Fig. 6, with the before-folded portions lapping each other at the corners. The elbow thus formed is fitted with a triangular block of wood, *b*, secured to it by nails *n* in such manner as to serve to preserve the shape of the elbow. The elbows thus constructed are inserted in the tubes and solder is poured into the holes *e e* in the tubes, and thereby secures the whole together in one rigid structure.

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

1. The frame, composed of rectangular metal tubes, having wood fillings, which, in the side tubes, are grooved longitudinally, substantially as and for the purpose herein set forth.

2. The combination, with the tubes A B, of elbows, constructed of sheet metal, cut and bent substantially as herein described, and soldered into the tubes, substantially as herein set forth.

W. E. BROCK.

Witnesses:

FRED. HAYNES,
R. E. RABEAU.

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