

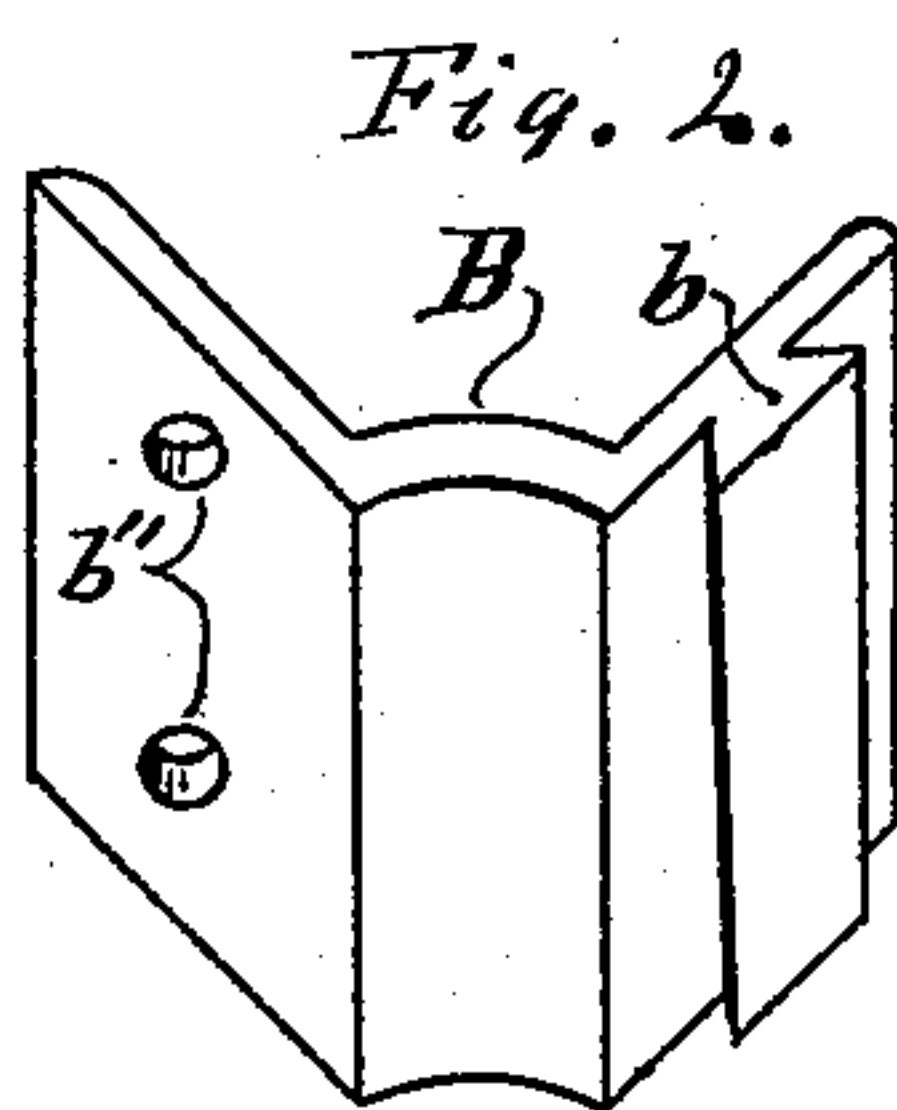
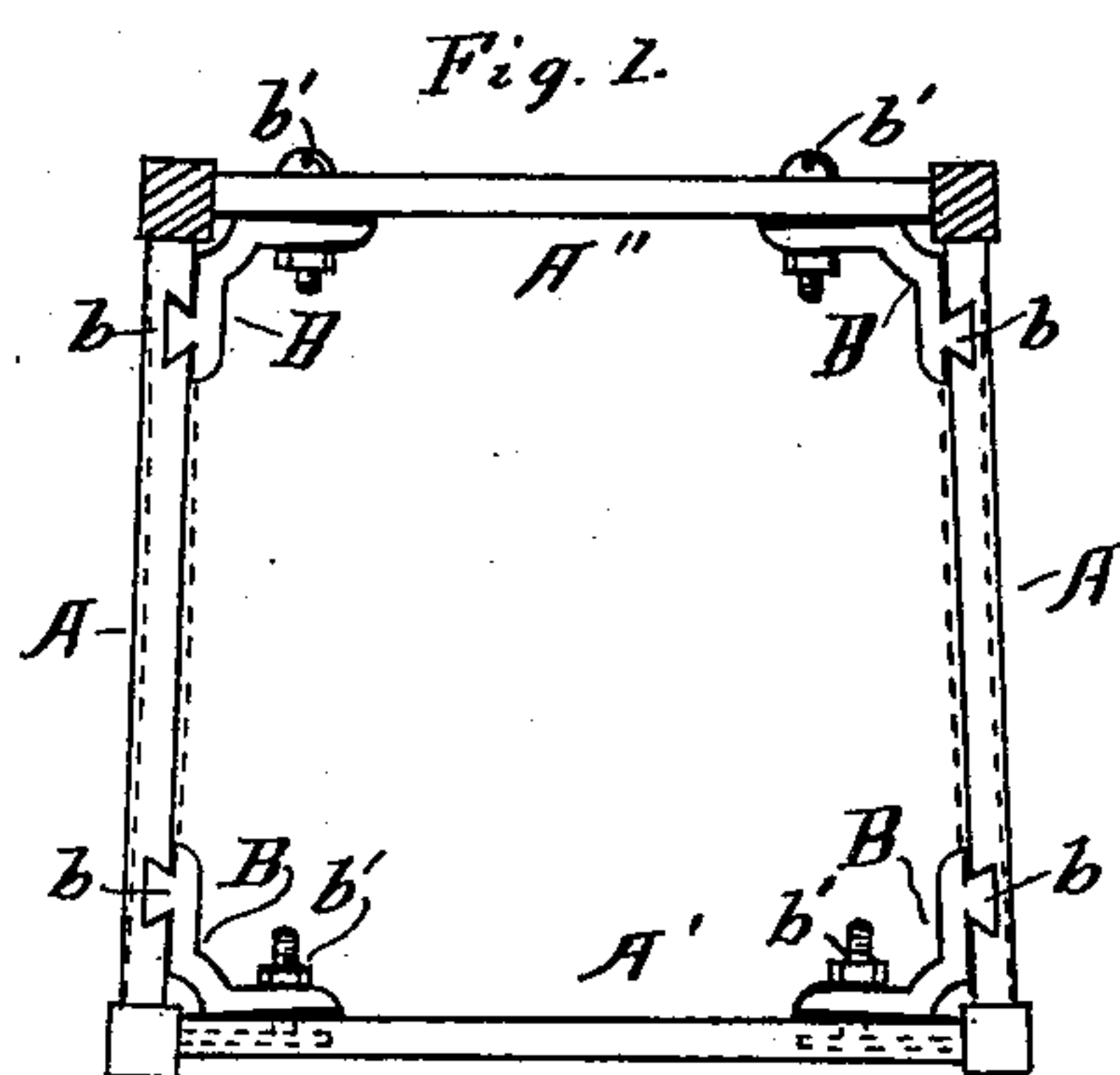
No. 636,434.

Patented Nov. 7, 1899.

D. W. KENDALL.  
BRACE FOR KNOCKDOWN FURNITURE.

(Application filed Dec. 20, 1898.)

(No Model.)



Witnesses.

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# UNITED STATES PATENT OFFICE.

DAVID W. KENDALL, OF GRAND RAPIDS, MICHIGAN.

## BRACE FOR KNOCKDOWN FURNITURE.

SPECIFICATION forming part of Letters Patent No. 636,434, dated November 7, 1899.

Application filed December 20, 1898. Serial No. 699,846. (No model.)

*To all whom it may concern:*

Be it known that I, DAVID W. KENDALL, a citizen of the United States, residing at Grand Rapids, in the county of Kent and State of Michigan, have invented a new and useful Brace for Putting Up Chairs, &c., in the "Knockdown," of which the following is a specification.

My invention relates to braces to place in the corners of chair, settee, and other furniture frames to securely hold the parts to place without the use of glue; and its objects are, first, to provide a brace that will hold the frame securely and firmly together and at the same time admit of its being readily taken to pieces for shipment, and, second, to avert the danger of the frame becoming loose-jointed by reason of long and constant usage. I attain these objects by the mechanism illustrated in the accompanying drawings, in which—

Figure 1 is a plan of a chair-frame with the seat removed and the posts shown in section to fully illustrate the manner of applying my brace; and Fig. 2 is a perspective of the brace, made upon a larger scale to more fully illustrate its construction.

Similar letters refer to similar parts throughout the several views.

In the drawings, A represents the side rails of a chair. A' represents the front rail, and A'' the back rail, of the same, and B represents my brace. This brace is constructed substantially of the form shown, having a dovetailed rib on one surface, which rib is designed to pass into a corresponding slot in the side rails of the chair-frame, as indicated at b in Fig. 1. The opposite wing of the brace is provided with one or more apertures, as b'', through which bolts may be passed, as indicated at b' in Fig. 1, to secure them to the back and front rails of the chair-frame. The dovetailed rib b should be made to fit the groove in the rails very closely, so that there will be no danger of the shrinkage of the wood or of continual use of the chair causing it to

get loose, and the angle of the brace must be less than the angle of the chair-frame, as indicated by the open joint between the wings of the brace and the front and back rails of the frame in Fig. 1, so that to screw the bolts b' firmly to place will cause the rails to spring in considerably, as indicated by the dotted lines of the side rails in Fig. 1, which has a double effect—first, to draw and hold the ends of the rails firmly against the posts, and thus insure perfect joints, and, second, it averts all danger of the frame becoming weak and shakely from constant use.

I prefer that the rib b be made a trifle wider at the top than at the bottom, so that it may be wedged snugly into the groove in the side rails of the frame.

For the purpose of averting the necessity of leaving the head of the bolt b' exposed at the front surface of the front rail of the chair I use a "joint-bolt" and insert its head in a groove in the rail, as indicated by the dotted lines at the ends of the rail A', in the usual manner of inserting joint-bolts.

Having thus fully described my invention, what I claim as new, and desire to secure by Letters Patent of the United States, is—

In combination with the rails and posts of a chair or other furniture frame, an angled body, a dovetailed rib on one wing of said body, arranged to engage a dovetailed groove in the side rails, the angle of said body being less than the angle of the frame, and the angle corner cut away so that it may connect the rails without touching the post, and bolts for securing the opposite wings of said body to the back rails of the frame, the angle of the brace being such as to spring the rails of the frame, substantially as and for the purpose set forth.

Signed at Grand Rapids, Michigan, December 13, 1898.

DAVID W. KENDALL.

In presence of—

AUGUST BEHRENS,  
ITHIEL J. CILLEY.