J. W. COLLINS.

CHAIR-BRACE.

No. 191,835. Patented June 12, 1877.

Fig. 1.

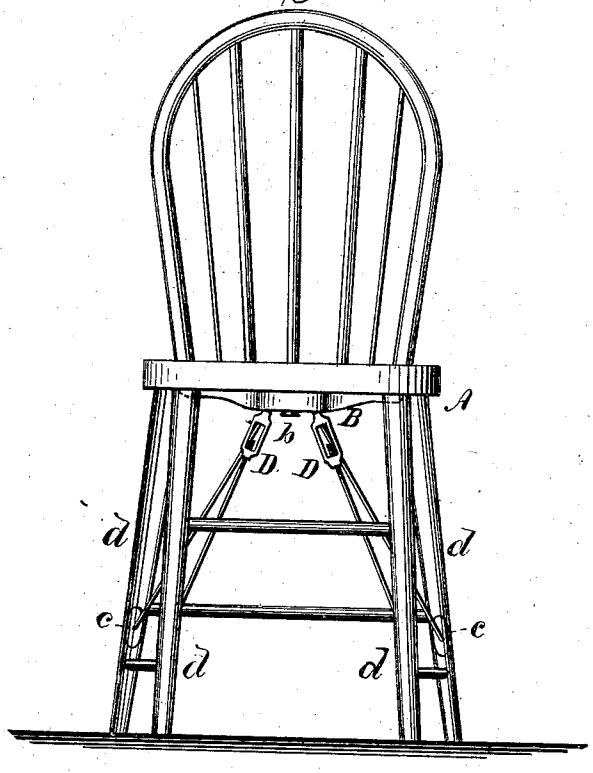
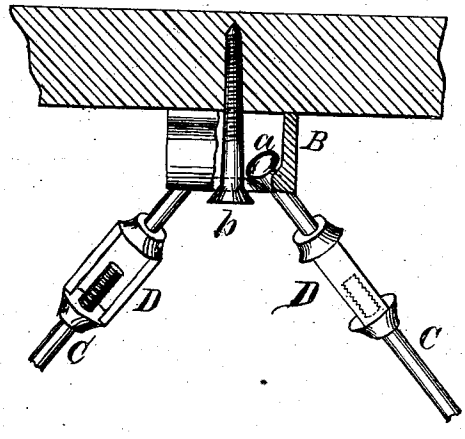


Fig. 2.



WITNESSES:

H. Rydquist

J. V. Scarborough

INVENTOR:

J. W. Collins.

BY

ATTORNEYS.

N. PETERS. PHOTO-LITHOGRAPHER, WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

JAMES W. COLLINS, OF LARAMIE CITY, WYOMING TERRITORY.

IMPROVEMENT IN CHAIR-BRACES.

Specification forming part of Letters Patent No. **191,835**, dated June 12, 1877; application filed January 29, 1877.

To all whom it may concern:

Be it known that I, JAMES W. COLLINS, of Laramie City, in the county of Albany and Territory of Wyoming, have invented a new and Improved Chair-Brace, of which the following is a specification:

Fig. 1 is a rear elevation of a chair having my improved brace attached. Fig. 2 is a detail view of the upper end of the braces and the socket for receiving the same.

Similar letters of reference indicate corresponding parts.

My improvement relates to a brace to be attached to an ordinary chair, to strengthen and stiffen it, and to draw its joints firmly together.

It consists of a cross-piece attached to the under side of a chair-bottom, and provided with sockets for receiving the upper ends of braces that incline downward and outward, and are attached to the legs of the chair near their lower extremities.

The braces are provided with turn-buckles, for giving the braces the required tension.

In the drawing, A is an ordinary chair, to the under side of the bottom of which the cross-piece B is attached. In this cross-piece a socket is formed for receiving the heads *a* of the braces C. These brace-heads are introduced to their sockets through a central opening filled by the screw *b*.

The lower ends of the braces C are attached to plates *c*, which are attached to the chair-legs *d* by means of screws or otherwise.

The braces C are provided with turn-buckles D, by means of which they are strained to any desired tension.

The cross-piece B extends nearly or quite across the chair-bottom, and strengthens and supports it. The braces C prevent the legs from twisting or swinging in their mortises, and also hold all of the joints of the lower portion of the chair firmly together.

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

The braces C, having turn-buckles D and plates *c*, in combination with the cross-piece B having a central socket for receiving the heads of the said braces, substantially as herein shown and described.

JAMES W. COLLINS.

Witnesses:

JOHN P. BARCKWAY,

M. C. BROWN.