

(No Model.)

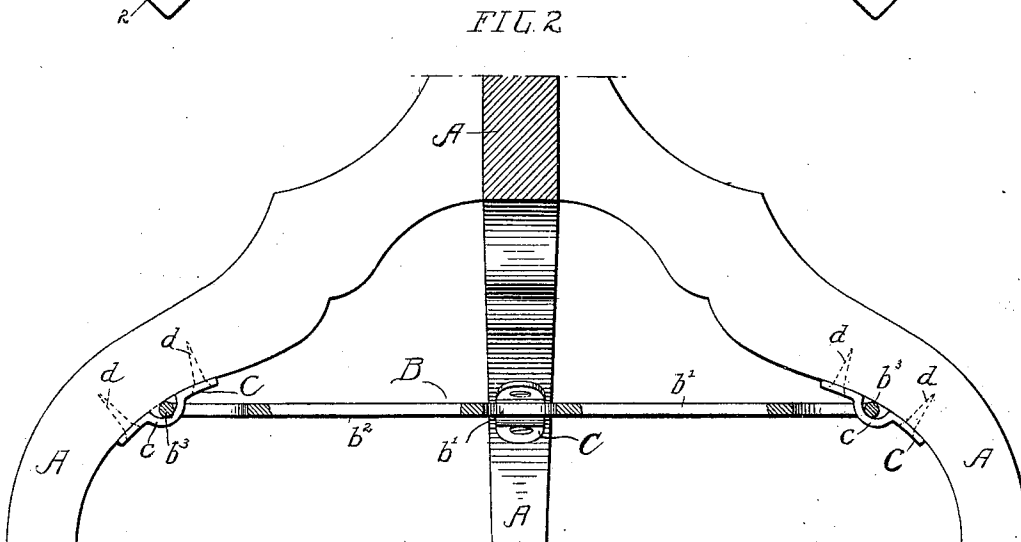
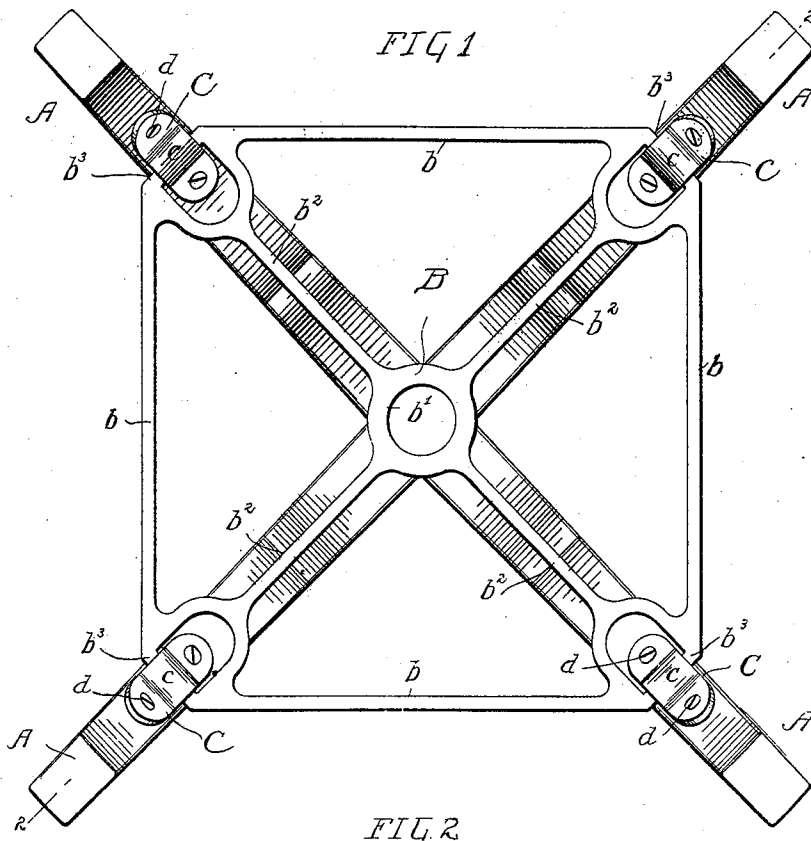
2 Sheets—Sheet 1.

H. GEISE.

STRENGTHENING DEVICE FOR CHAIR LEGS.

No. 566,979.

Patented Sept. 1, 1896.



Witnesses:
Geo E Parker
J. M. Hall

Inventor:
Henry Geise
by his Attorney
James P. Bell

(No Model.)

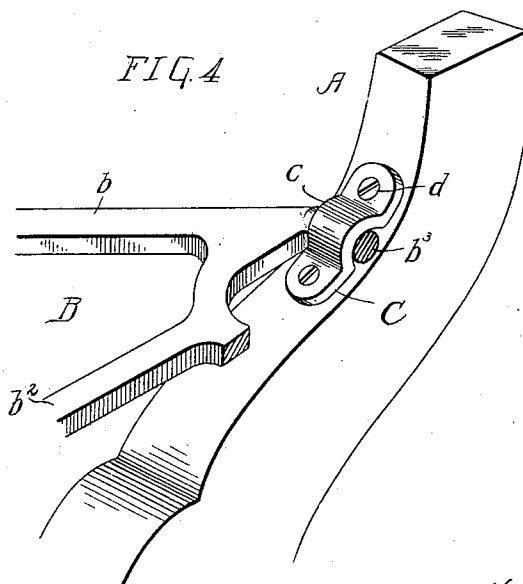
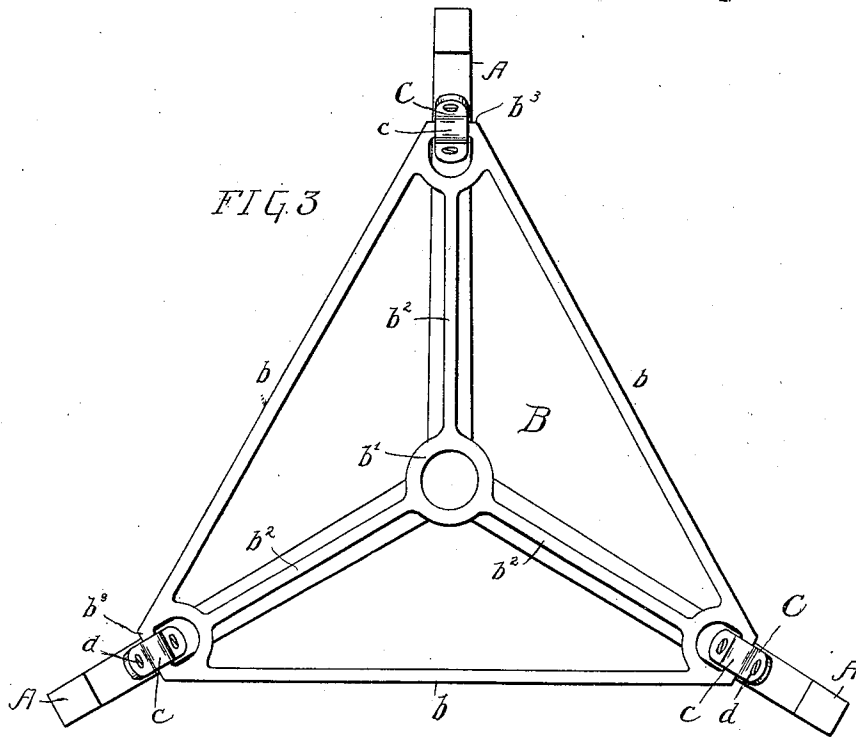
2 Sheets—Sheet 2.

H. GEISE.

STRENGTHENING DEVICE FOR CHAIR LEGS.

No. 566,979.

Patented Sept. 1, 1896.



Witnesses:
John E. Parker
John M. White

Inventor:
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UNITED STATES PATENT OFFICE.

HENRY GEISE, OF PHILADELPHIA, PENNSYLVANIA.

STRENGTHENING DEVICE FOR CHAIR-LEGS.

SPECIFICATION forming part of Letters Patent No. 566,979, dated September 1, 1896.

Application filed June 15, 1896. Serial No. 595,561. (No model.)

To all whom it may concern:

Be it known that I, HENRY GEISE, a citizen of the United States, and a resident of the city of Philadelphia, State of Pennsylvania, have invented certain new and Improved Strengthening Devices for Chair-Legs, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming part of the specification.

My invention relates to certain improvements in the construction of chairs, more especially of that class known as "revolving" desk-chairs, and has for its object to strengthen and brace the legs of the chair, as more fully set forth hereinafter.

In the accompanying drawings, Figure 1 is an inverted plan view of the base of a chair, illustrating the application of a strengthening and bracing frame in accordance with my invention. Fig. 2 is a sectional elevation of the same on the line 2 2, Fig. 1. Fig. 3 is a view similar to Fig. 1, showing the application of the strengthening-frame to a chair having three legs; and Fig. 4 is a sectional perspective view of a detail of the invention.

In revolving chairs the base is usually made with a central body-portion constructed for the reception of the screw on which the seat is supported, and from this central body-portion extend a number of supporting-legs, generally four, as shown in Figs. 1 and 2, although in some structures but three legs are employed, as illustrated in Fig. 3. There is no support for these legs save at the point of connection with the central body-portion, and the weight of the occupant exerts a force tending to break the legs at the point of connection with the central body entirely out of proportion to the weight of the occupant, owing to the fact that the weight is exerted at a point at a considerable distance from the floor, which latter forms a fulcrum or resting point for the ends of the legs.

In order to overcome the tendency of the legs to separate, I unite them near their lower ends by a strong bracing-frame, which will prevent the spreading of the legs and which at the same time may form a foot-rest for the occupant of the chair.

Referring to the drawings, A A represent the various legs of the chair, and B an angular frame which, when applied to a chair

with four legs, is substantially rectangular in form, comprising side bars b , extending from leg to leg around the chair and serving to prevent any movement of the legs toward or from each other, and also serving, when necessary, as a foot-rest.

The central portion of the frame is in the form of a ring b' , so as to permit the passage of the seat-screw, and from this ring extend four radial arms b^2 , which terminate near the four corners of the frame. At each corner of the frame is a bar b^3 , extending at an angle of about forty-five degrees to the sides of the frame. The frame is secured in position by a series of clamps C, passing over the bars b^3 and secured by suitable screws d to the inner surface of the leg, the central rounded portion c of the clamp, which passes over the bars b^3 , being of such character as to permit the ready adjustment of the clamp to accommodate the curvature or inclination of the legs of the chair, the contour of the legs varying considerably in chairs of different styles and makes, and this free movement of the clamp permitting the ready adjustment of the frame to any style of chair.

In some cases where three-legged chairs are to be strengthened the frame is made as illustrated in Fig. 3 and is triangular in form, but has the same relative number of bars arranged in substantially the same manner and with the same clamping devices as previously described.

The frame may be formed of cast or forged metal or constructed in any desirable manner, but is preferably made in a single piece, so that there will be little danger of parts working loose when in use. With a frame of this character it is impossible for the legs of the chair to spread, and the effect of the leverage is altogether overcome in so far as the tendency of the weight to break the connection between the legs and the central body is concerned, so that the legs will form, to all intents and purposes, a solid base for the reception of the seat-screw.

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

1. A chair strengthening and supporting frame comprising in combination an open framework having or comprising a series of

bars, and connecting-clamps for uniting the corner-sections of the frame to the legs of the chair said clamps being adapted to embrace the corner portions of the frame and being
5 adjustable thereon to accommodate the contour of the chair-legs.

2. The combination with the chair-legs, of the rectangular frame, B, comprising side bars, b , central ring, b' , radial bars, b^2 , and
10 corner-bars, b^3 , clamps, C, having a rounded central portion, c , adapted to embrace the

bars, b^3 , for the purpose of confining the frame in position, said clamps being adjustable on the bars, b^3 , to accommodate the varying contour of the chair-legs, substantially as specified. 15

In witness whereof I have hereunto set my hand this 13th day of June, A. D. 1896.

HENRY GEISE.

Witnesses:

W. S. FURST,

HORACE PETTIT.