(No Model.)

J. E. CARROLL.

CHAIR BRACE.

No. 544,025. Patented Aug. 6, 1895.

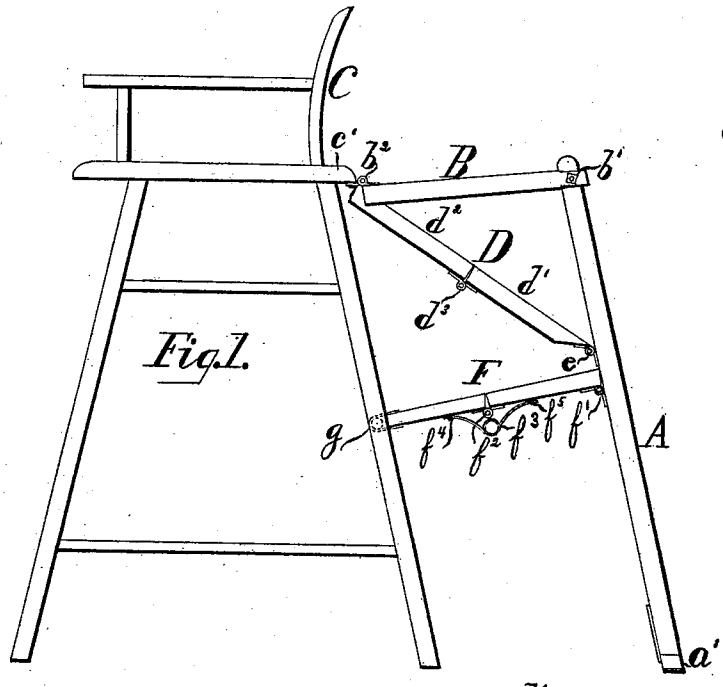


Fig. 1.

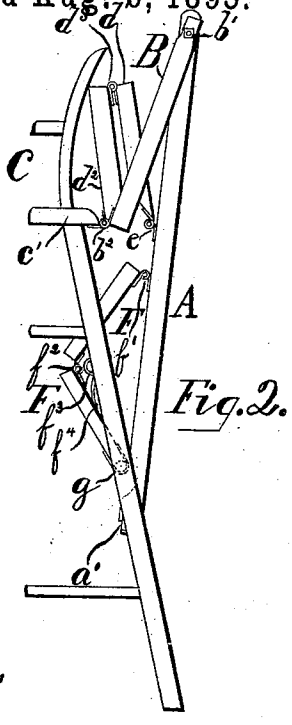


Fig. 2.

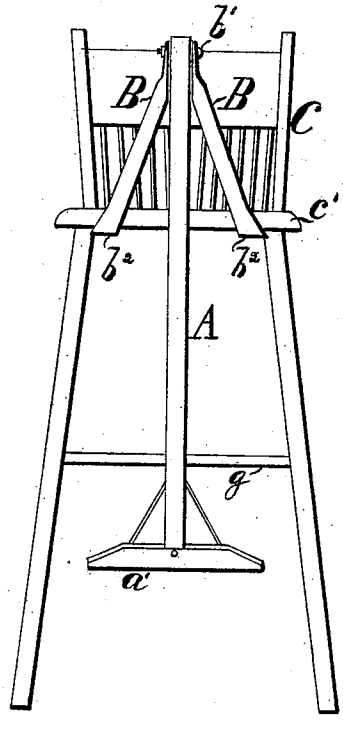


Fig. 3.

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JOHN E. CARROLL, OF PHILADELPHIA, PENNSYLVANIA, ASSIGNOR OF ONE-HALF TO FRANK J. CAMPBELL, OF SAME PLACE.

CHAIR-BRACE.

SPECIFICATION forming part of Letters Patent No. 544,025, dated August 6, 1895.

Application filed June 14, 1894. Serial No. 514,506. (No model.)

To all whom it may concern:

Be it known that I, JOHN E. CARROLL, a citizen of the United States, residing at the city and county of Philadelphia and State of Pennsylvania, have invented certain new and useful Improvements in Chair-Braces, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, of which—

Figure 1 is a side elevation opened out as in use; Fig. 2, a similar elevation in the folded position; Fig. 3, a rear elevation of Fig. 2.

The nature of this invention is a collapsible brace for a chair, more especially a child's high chair, which device, when not in actual use, may be folded up against the back of the chair; but when opened out the foot of its supporting-leg will rest firmly upon the floor at a considerable distance to the rear of the chair-legs, and thus, by practically enlarging the base-support of the chair, will obviate the liability to serious accidents which have occurred by the toppling backward of chairs—as, for example, in the case of a child seated in its high chair, near a window, pushing with its feet against the window-sill or wall and thereby throwing the chair and itself over backward.

The precise character of the improvement, which is simple in construction, application, and operation, will clearly appear from the following description, reference being had to the annexed drawings, which show the device attached a child's chair.

A is the brace, leg, or support, having, preferably, a laterally-projecting foot or base a' to rest upon the floor. This leg is pivoted to and between the outer ends of two divergent arms B B by a bolt b'. The free ends of said arms are provided with hinges b^2, the outer limb of each of which hinges is secured or adapted to be secured to the frame-piece c' of a chair-seat C.

D is an inclined brace-bar composed of two parts d' d^2, connected at their junction by a hinge d^3, in a manner to constitute a knee-joint, in order to permit the upward opening of said parts, but stopping their downward movement when they arrive in a straight line. This result is attained in the present instance by placing the hinge on the under side of the bar, so as to allow the adjacent ends of the two parts to abut against each other when the device is opened out, as seen in Fig. 1. The free or lower end of the part d' is attached to the leg A by a hinge e, and the free end of the part d^2 to the frame of the chair-seat by a hinge, which, though hidden by the other parts in the drawings, is an ordinary hinge of the same character as those lettered b^2, midway between which it is attached to the chair-seat.

F is a two-part hinged brace-bar similar to the bar D, one end of which is connected by a hinge f' to the leg A, and the other end is pivoted to a round g of the chair, as indicated by the dotted lines in the drawings. The meeting ends of the parts of this bar are connected by a hinge f^2, similar to hinge d^3 of bar D. On the under side of said bar F is a coiled spring f^3, one end f^4 of which is secured to the bar on one side of the joint, and the other end f^5 spans the joint and bears with some force against the under side of that part of the bar.

Having thus described the construction of my invention, its operation and manner of using are as follows: Normally the device is folded back, as seen in Fig. 2, in order to economize space and for convenience of handling the chair when not in use. In this position, it will be observed, the two-part brace-bar D is, so to say, doubled up back to back against the back of the chair and projecting upward between the arms B. The parts of the supplemental bar F are at an angle to each other and project partially beneath the chair, while the base of the supporting-leg is elevated some distance from the feet of the chair-legs—that is to say, all the movable parts of the device are brought as close as possible to the back of the chair.

In order to open out the device for use it is merely requisite to seize hold of the leg A and draw or press it outwardly and downwardly, when the several parts will finally assume the positions illustrated in Fig. 1. In this position the foot of said leg rests upon the floor and is firmly held and braced by the several hinged bars, and it will be obvious that the

liability of the chair being overturned backward is practically obviated, which is the ultimate object of the invention.

The device may be returned to the folded position by simply pressing upwardly against the under side of the hinged bar D, thereby causing it to open out or take an angular position, and then by pressing leg A up and back toward the chair. As the leg A rises the spring f^3, acting against bar F, causes the two parts thereof to open upwardly, and thus permits said bar to finally assume the position shown in Fig. 2. This spring may, however, be dispensed with, in which case it will be necessary, when collapsing the device, to press upwardly beneath bar F as well as bar D.

As the sole object of bar F is to constitute a stop to arrest the outward throw or movement of leg A, any other suitable jointed or flexible connection may be substituted therefor—as, for example, a chain, rope, or the like.

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

1. The collapsible, extensible chair-brace consisting of the combination of the arms B, the supporting leg pivoted between the converging end portions of said arms B, the two-part knee-jointed brace bar, and the jointed or flexible connection F, together with means for pivotally attaching the free ends of said arms and bars to a chair, substantially as and for the purpose set forth.

2. The combination with a chair of the divergent arms pivoted to the chair, the supporting leg pivoted to and between said arms, the oblique two part knee jointed brace bar D pivoted to said chair, and to the intermediate portion of said supporting leg and the jointed or flexible connection F, below the brace bar D all constructed and adapted to operate substantially as and for the purpose set forth.

3. The collapsible, extensible chair brace consisting of the combination of the arms B, the supporting leg pivoted thereto, the two part knee jointed brace bar D, the two part knee jointed bar F, and the spring f^3, together with means for pivotally attaching said arms and bars to a chair, substantially as and for the purpose set forth.

In testimony whereof I have hereunto affixed mysignature in the presence of two subscribing witnesses.

JOHN E. CARROLL.

Witnesses:
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