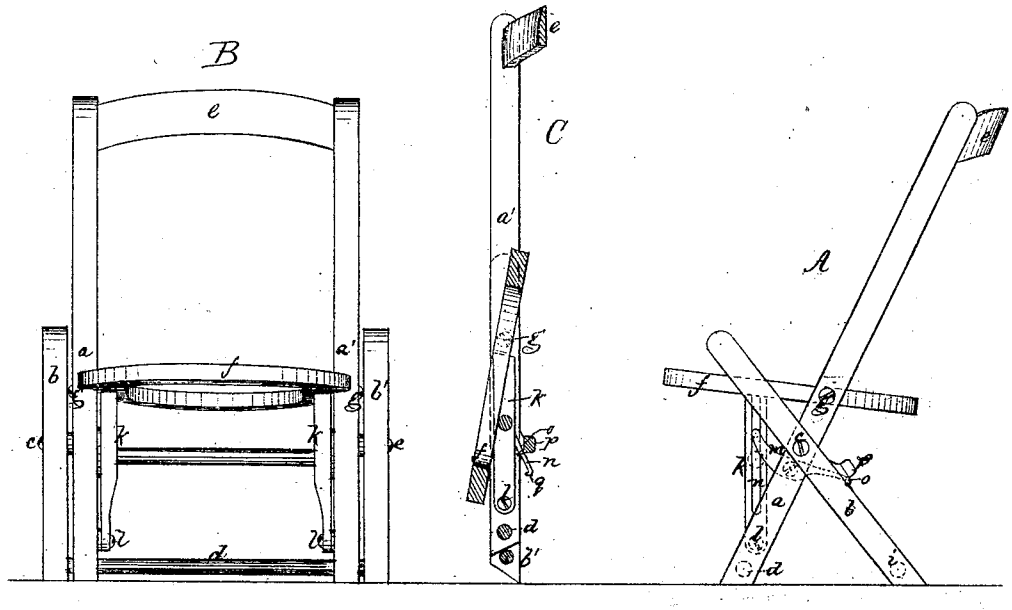
A. N. Stewart,

Folding Chair.

NO. 102,178. Patented Apr. 19. 1870.



Witnesses
S. B. Kidder.
M. W. Frothingham

Alexander N. Stewart
by his attys.
Crosby, Halsted & Gould

United States Patent Office.

ALEXANDER W. STEWART, OF BOSTON, MASSACHUSETTS.

Letters Patent No. 102,178, *dated April* 19, 1870.

IMPROVED FOLDING CHAIR

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that I, ALEXANDER W. STEWART, of Boston, in the county of Suffolk, and State of Massachusetts, have invented Improvements in Folding Chairs; and I do hereby declare that the following, taken in connection with the drawings which accompany and form part of this specification, is a description of my invention sufficient to enable those skilled in the art to practice it.

My improved chair is, in some respects, like a folding chair shown in United States Patent No. 41,001, granted to P. J. Hardy, December 22, 1863, in that, both in said Hardy's chair and mine, the seat tips up at the back as the chair is folded, bringing the top of the seat to the front, and in that the extended seat in such chair is supported at its front upon struts or braces, or a strut or brace-supported bar, the folding movement of the chair carrying these braces into the plane assumed by the pivoted frames and seat.

My improvement consists primarily in pivoting to the front legs of a chair having a falling seat, and below the pins by which the crossing legs are pivoted together, a seat-supporting frame or braces connected to and operated by the legs of the chair.

The drawings represent a chair embodying my improvements.

A shows a side elevation of the open chair.

B, a front elevation of it.

C is a vertical section of the folded chair.

As the invention relates wholly to the arrangement and connection of the parts with reference to obtaining the requisite strength in the open chair, and compactness in the folded chair, no upholstery is shown upon the frame.

The two crossing legs *a b a' b'* on each side of the chair are shown as pivoted together at *c*, and the legs *a a'*, a bottom stretcher, *d*, and a top stretcher, *e*, constitute a rigid quadrangular frame, in which the seat *f* is hung by pivot-pins *g*, the preponderence of weight being in front of the pivots, so that the seat freely drops into, or nearly into, a plane with the frame when the legs are folded. The legs *b b'* constitute, with one or more stretchers, *i*, below the pivots, another frame, these legs being pivoted outside of and to the legs *a a'*.

To support the seat in horizontal position two movable braces, *k*, are used, each brace extending from the legs under the seat, and firmly supporting the seat under any weight upon it.

To automatically remove these braces, for folding the chair, each is jointed to the adjacent leg, as seen at *l*, and at or near the upper end of each brace I connect it to a lever or arm, preferably worked by the other legs, which lever or arm, as the legs close together, swings the braces inward, bringing them into, or nearly into, vertical line with the legs to which they are pivoted, and out of the path of tipping-down movement of the seat.

The brace-actuating levers are shown at *m*, each being fulcrumed to the adjacent leg *a*, or *a'*, and having its front arm provided with a finger or pin that enters a groove, *n*, in the side of the brace. The rear arm of the lever extends through an eye or loop, *o*, in a rail, *p*, connecting the legs *b b'*, and, as the legs *b b'* are moved into line with the legs *a a'*, the rail and the legs to which the braces are pivoted force down the rear arms of the levers, and the front ends rearward, thereby bringing the braces into line with the legs.

When the legs are spread, the eyes or loops draw up the rear arms of the levers, thus throwing forward their front arms and pushing out the braces, which, in their outward movement, tilt up the seat into horizontal position, and themselves assume a position to firmly support the seat.

Undue spreading of the legs may be prevented by hooks *q*, on the rear ends of the levers, catching upon the eyes or loops *o*.

I claim—

In combination with the crossing pivoted legs and with a dropping seat, the seat-supporting braces pivoted to the legs *a a'*, and thrown out under the front of the seat when the legs are spread, and back into the plane of the legs when the chair is folded, substantially as described.

ALEXR. W. STEWART.

Witnesses:

J. B. CROSBY,

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