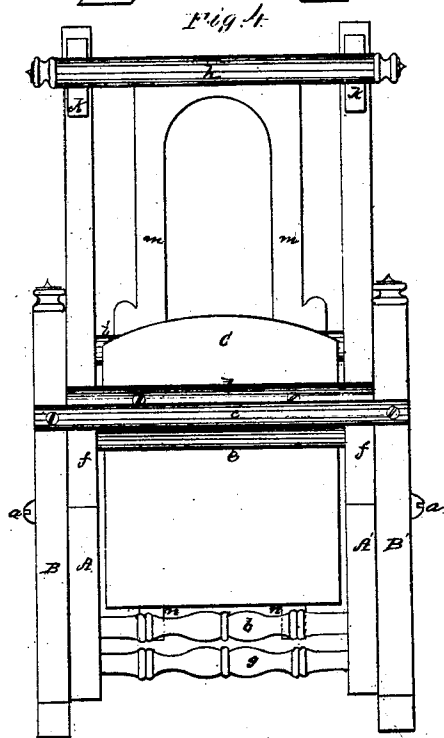
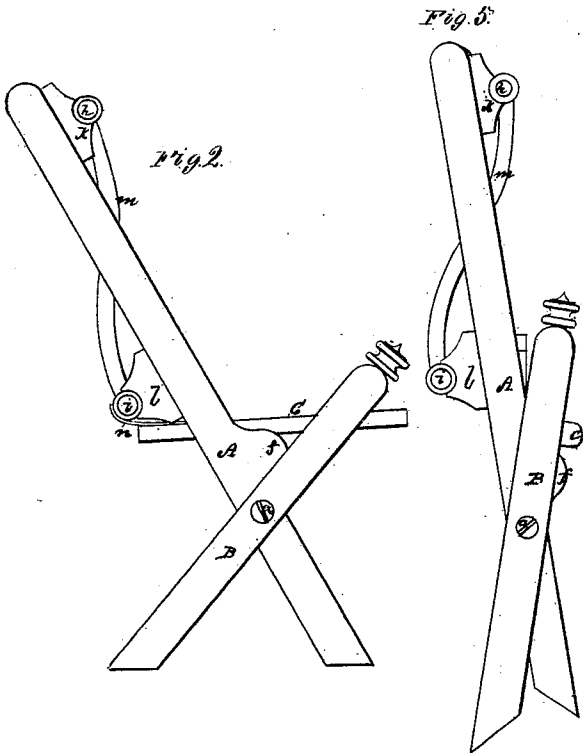
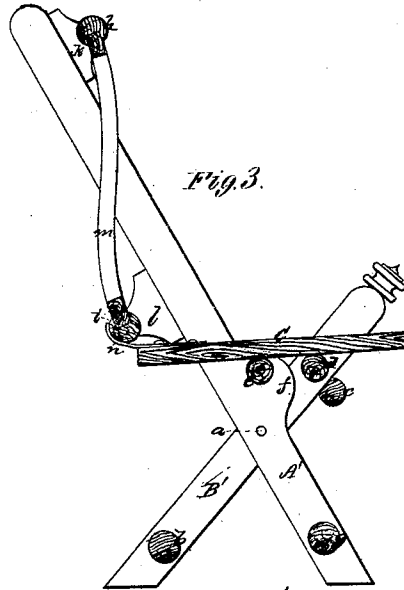
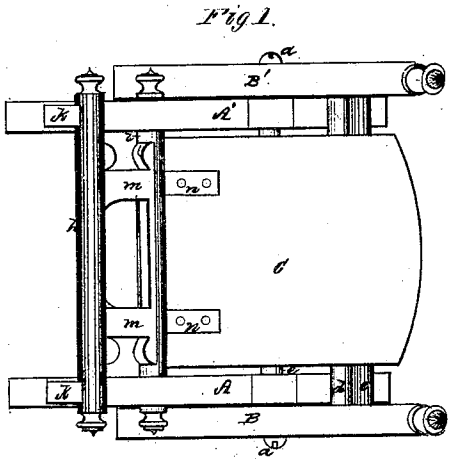


F. M. Holmes,

Folding Chair.

No. 104,851.

Patented June 28, 1870.



Witnesses.
S. C. Fisher
L. N. Wilson

Francis M. Holmes
by his attorney
R. W. Ladd

United States Patent Office.

FRANCIS M. HOLMES, OF BOSTON, MASSACHUSETTS.

Letters Patent No. 104,851, dated June 28, 1870.

IMPROVED FOLDING CHAIR.

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

To all persons to whom these presents may come:

Be it known that I, FRANCIS M. HOLMES, of Boston, of the county of Suffolk and State of Massachusetts, have invented a new and useful Improvement in Folding Chairs; and do hereby declare the same to be fully described as follows, reference being had to the accompanying drawing, of which—

Figure 1 is a top view,

Figure 2, a side elevation, and

Figure 3, a vertical section of a folding chair provided with my invention, the back and seat being exhibited as not upholstered.

Figure 4 represents a front elevation, and

Figure 5, a side or edge view of the chair as it appears when folded, it being represented in the other figures as extended or unfolded, and with its parts in position for the chair to be used by a sitter.

The purpose of my invention is to afford a strong support for the seat when the chair is extended, as well as to obtain other advantages.

In this chair, the legs and the side bars of the back are formed by four levers, A A', B B'.

Each of the shorter levers B B' crosses one of the back or longer levers A A', the two at the crossing being pivoted together, or connected by a fulcrum or joint-pin, *a*, going through one, and into the other, or through both, if preferable.

The shorter levers are arranged outside of the longer levers, and are connected by two rungs or cross-bars, *b c*.

The seat or seat-frame, shown at C, is fastened upon a shaft or bar, *d*, which is pivoted to the shorter levers B B', or has journals to rest and revolve thereon.

Such seat also rests on a round support-bar or rung, *e*, whose ends are sustained by projections, *f f*, extended from the larger levers, in manner as represented, and having the distance of its top from the fulcrums of the levers equal to or a trifle less than the distance of the seat pivotal bar from such fulcrums.

The employment of the projections *f f* for supporting the rest-bar *e* is important and essential, as without them, or were the rest-bar *e* to extend from one longer lever to the other, it will be seen that the pivotal bar, when the shorter levers are outside the longer ones, could not be brought up over the rest-bar *e*, so as to allow the seat to fall down over and against the back of such bar *e*.

The projections *f f* carry the bar *e* so far forward of the longer levers as to allow the seat, when the pivotal bar is against them, to fall down over and against the rest-bar, and between the longer levers.

Furthermore, the two longer levers are connected, near their lower ends, by means of a rung, *g*, and also

at or near their upper ends and middles by two other rungs or bars, *h i*, fastened to projections, *k l k l*, extended from such levers, the whole being arranged in manner as represented in the drawing.

The two rungs *h i* compose part of the back frame, and may be connected by bars or frame-pieces *m m*.

The seat is furnished with one or more hooks, *n n*, to extend from its rear part, and hook upward around the middle rung *i* of the longer levers, the seat, also, (or a projection therefrom,) when horizontal, or when the chair is extended, bringing up and bearing against the said rung.

From the above, it will be seen that, in folding the chair, the seat will slide on and turn down upon the rung *e* of the longer levers, and, finally, will be caused to assume the positions exhibited in figs. 4 and 5.

When the seat is horizontal, it not only will rest on the rung *e*, but be sustained by the lower cross-bar of the back-frame, such bar and the seat-hooks serving, with the seat, to hold the chair in its extended or unfolded state.

I am aware that the seat of a folding chair has been provided with projection-hooks, or guides extending downward from the under side of such seat, and serve, with the back support-bar of the seat, as means of stopping or arresting the seat, and the movements of the crossed levers. I therefore make no claim to such.

The stops in my chair extend above the seat, and consist of the rung *i* and the hooks *n n*, the said rung not only serving as a stop, but a support for the seat, to prevent it from being thrown upward at its rear by a person while sitting upon the front part of the seat.

The said rung also composes part of the back-frame.

The chair made in manner as above described, and as represented in the accompanying drawing, possesses great stability and strength when extended.

In the chair above described, the seat is not hinged to the tops of the shorter levers, nor are these shorter levers arranged between the longer levers, but are disposed outside of them.

This arrangement enables the shorter levers to be extended above the pivots of the seat, so as to form supports for arm-rests or bands which are to be extended from the heads of the shorter levers up to those of the upper cross-bar of the longer levers.

Having the shorter levers outside of the longer ones renders a chair more stable than one having its shorter levers disposed between the longer ones.

I do not herein claim the folding chair having its seat C pivoted to its shorter pair of levers B B', and having a sustaining-rung, *e*, applied to the longer

levers, the arrangement and combination of the connecting-stretchers or bars *b c*, with the said shorter levers and their fulcrums, the shorter levers being arranged with the longer levers, as explained.

What I do herein claim as of my invention is as follows:

The improved folding chair, as made with the shorter levers *B B'*, and longer levers *A A'*, seat-sup-

port bar *e*, projections *f f*, pivoted bar *d*, seat *O*, one or more hooks, *n n*, and bearing-rung *i*, when all the parts are constructed and arranged to operate as hereinbefore described.

Witnesses:

R. H. EDDY,
J. R. SNOW.

F. M. HOLMES.