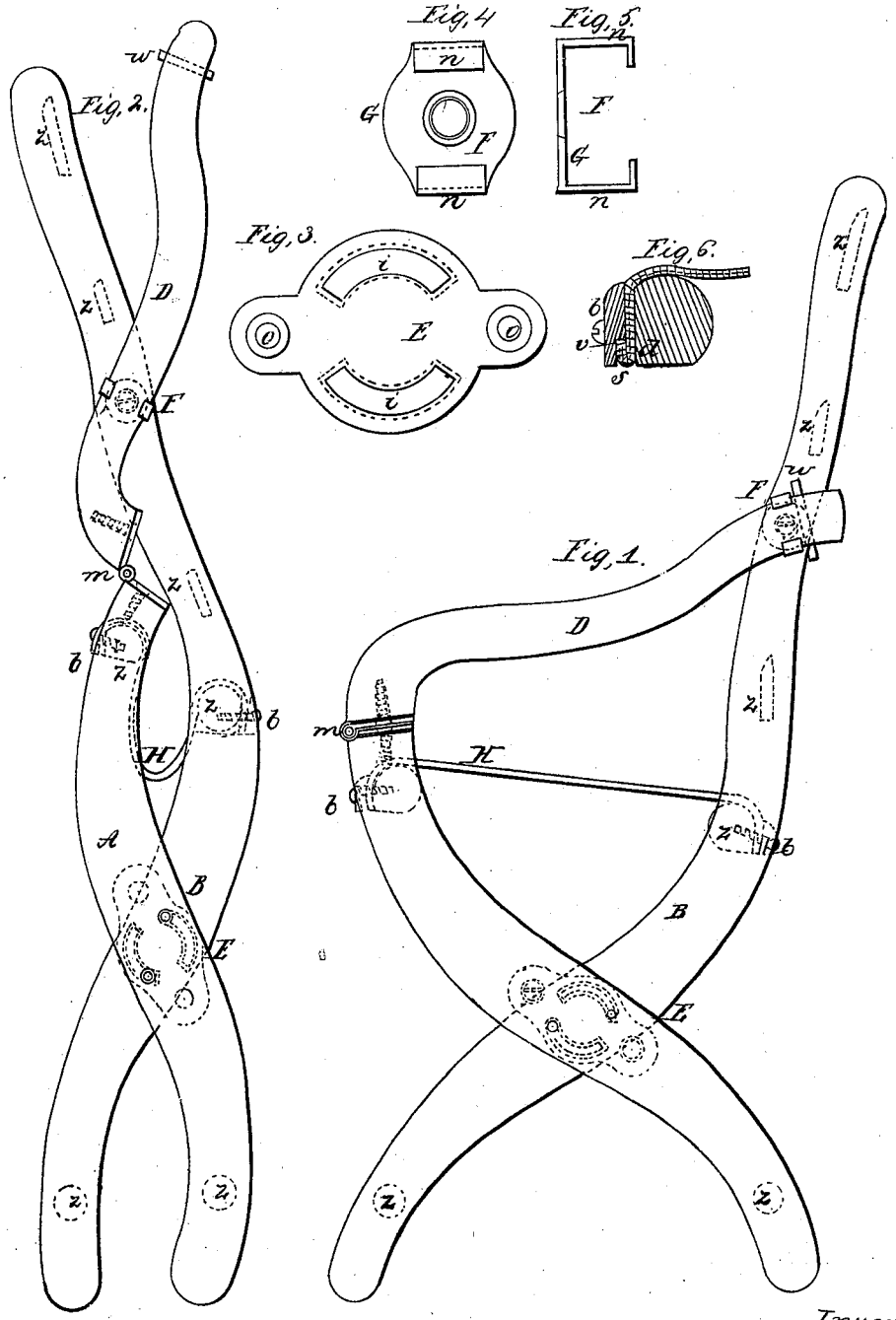
Miller & Hannah,

Folding Chair.

NO. 113,077. Patented Mar. 28. 1871.



Witnesses
A. L. Peck
John Gorton Jr

Inventors
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United States Patent Office.

GEORGE MILLER AND PHILLIP HANNAH, OF ROCHESTER, NEW YORK, ASSIGNORS TO THEMSELVES AND JOHN GORTON, JR., OF SAME PLACE.

Letters Patent No. 113,077, dated March 28, 1871.

IMPROVEMENT IN FOLDING-CHAIRS.

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

To all whom it may concern:

Be it known that we, GEORGE MILLER and PHILLIP HANNAH, of Rochester, in the county of Monroe, in the State of New York, have invented certain new and useful Improvements in Folding-Chairs; and we do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawing and to the letters of reference marked thereon.

Figure 1 represents a side elevation of our folding-chair as adjusted when in use.

Figure 2 represents a side view of the same when folded together.

Figure 3 represents the slotted plate by which the legs of the chair are adjustably connected.

Figure 4 represents a front view of the pivotal arm-clasp, detached.

Figure 5 represents an edge view of the same.

Figure 6 represents a transverse section of one of the seat-supports.

Our invention relates to the connecting, supporting, and strengthening devices used by us in constructing folding-chairs; and consists in the arrangement and combination of these devices therewith as herein fully set forth.

Where the legs A B, at each side of the chair, cross each other, they are connected together by a double support, which allows sufficient movement of the legs in respect to each other to fold and unfold the chair, and which greatly strengthens it and prevents lateral flexure, to which such chairs are liable when the legs are connected with a pivot, rod, or bolt.

This connecting mechanism consists of the slotted plate E, which is interposed between the legs of the chair, (at each side thereof,) and four screws, by means of which the plate is secured in place. Two of the screws pass through the curved slots *i i*, which have beveled or countersunk edges for these screws to work in freely when the chair is being adjusted.

The two screws, the heads of which work in the beveled slots *i i*, serve also to fasten the plate E to one leg of the chair; and after the plate is thus fastened to the inner leg B, it will be secured rigidly to the inner side of the adjacent leg A by two screws, which enter the holes *o o* in the ends of the plate. The two legs are thus connected at each side of the chair.

The movement in folding and unfolding the chair will cause the two screw-heads which are held in the beveled slots *i i* to traverse these slots, while they constitute a substantial double connection and support at a point where the tendency of the chair to lateral flexure is to be prevented.

The plate E also serves as a washer, to protect the legs from wearing against each other in folding.

The arm D is hinged at *m* to the upper end of the leg A, and it extends rearward through the pivoted clasp F, represented in figs. 4 and 5.

The clasp consists of the circular plate G, having arms or brackets *n*, which loosely embrace the chair-arm D; and when the chair is folded together, or opened for use; the clasp, being pivoted by the screw which secures it to the side of the chair-back, will freely turn upon its pivot and adjust itself to the different positions of the arm D, which freely slides through it while folding and unfolding the chair, as above described.

As a support, auxiliary to the flexible seat H, we insert the pin *w* through the end of arm D, which pin bears against the brackets *n* of the clasp, as shown in fig. 1, when the chair is in use.

Instead of pin *w*, an enlargement of the rear end of arm D would answer this purpose.

In fig. 6, which represents one of the chair-rounds (in section) which supports the seat H, *b* denotes a rabbeted cleat, which is applied to secure the hemmed edge of the flexible seat to its supporting rounds.

The hem of the cloth or carpet-seat will occupy the groove at *s*, between the lower part of the cleat *b* and the part at *d* of the chair-round, and be securely held between them by the angular edge *v* of the cleat when the latter is fastened in its place by screws, as represented in the drawing.

It will be observed that the working parts of the connecting devices mutually strengthen and support each other when the chair is supporting the weight of the person who may be occupying it.

As a substitute for the pieces or pins *w*, a round or slat, connecting the rear ends of the arms D, in rear of the chair-back, may be used.

We do not claim a slotted plate used in connection with lugs, which serves as a stop for a hinge, or circular movement, as such a mechanism is not new.

Having fully described our invention,

What we claim, and desire to secure by Letters Patent, is—

1. The plate E, constructed with two beveled slots *i i* and projecting ends for the screw-holes *o o*, in combination with the chair-legs, to form a double fastening thereof, connected, arranged, and operating substantially as and for the purpose described.

2. The self-adjusting clasp F in combination with hinged-arm D, applied and operating in the manner and for the purpose described.

3. The combination of slotted plate E and pivotal clasp F, with the legs, seat, arm, and back of folding-chairs, substantially as and for the purposes described.

In testimony whereof we have hereunto set our hands this 18th day of January, A. D. 1871.

GEORGE MILLER.
PHILLIP HANNAH.

Witnesses:
H. P. K. PECK,
A. L. PECK.