

(No Model.)

2 Sheets—Sheet 1.

B. F. HUBBS & W. Y. BYGATE.

CHAIR.

No. 321,897.

Patented July 7, 1885.

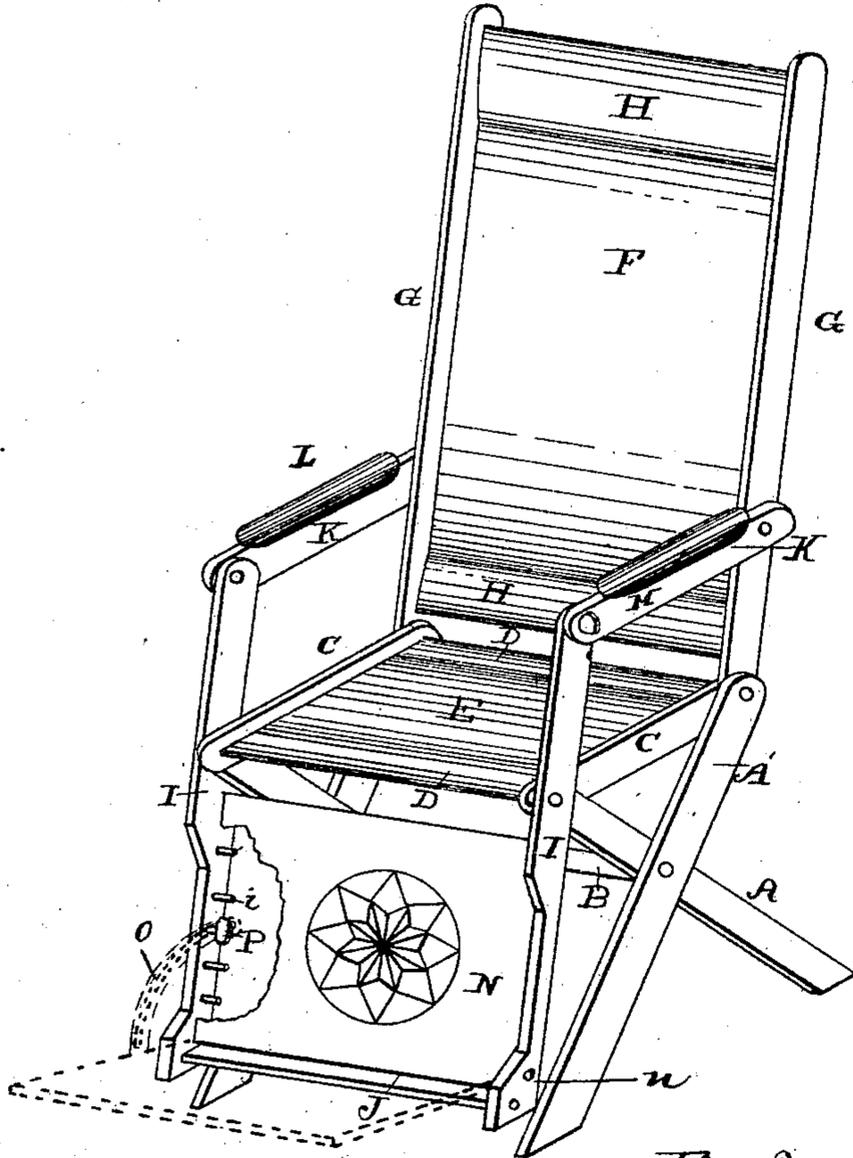


Fig. 1.

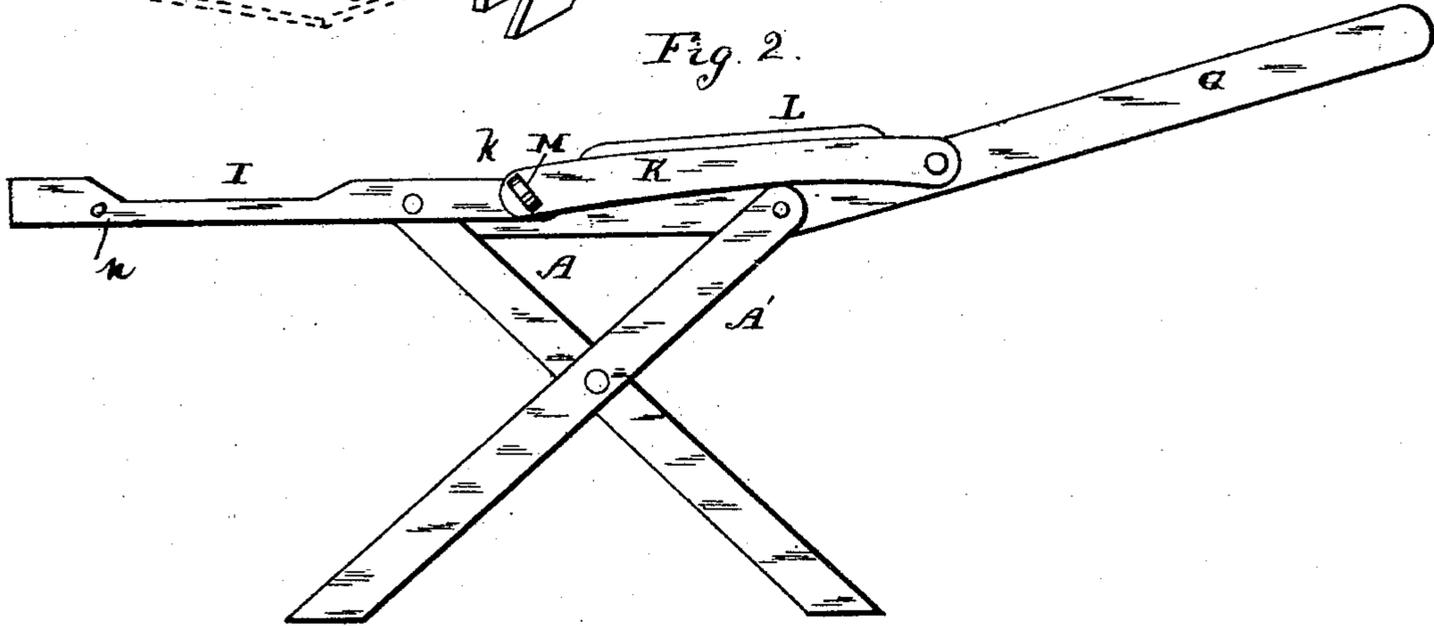


Fig. 2.

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 & William Y. Bygate
 by Doubleday & Bliss
 attys.

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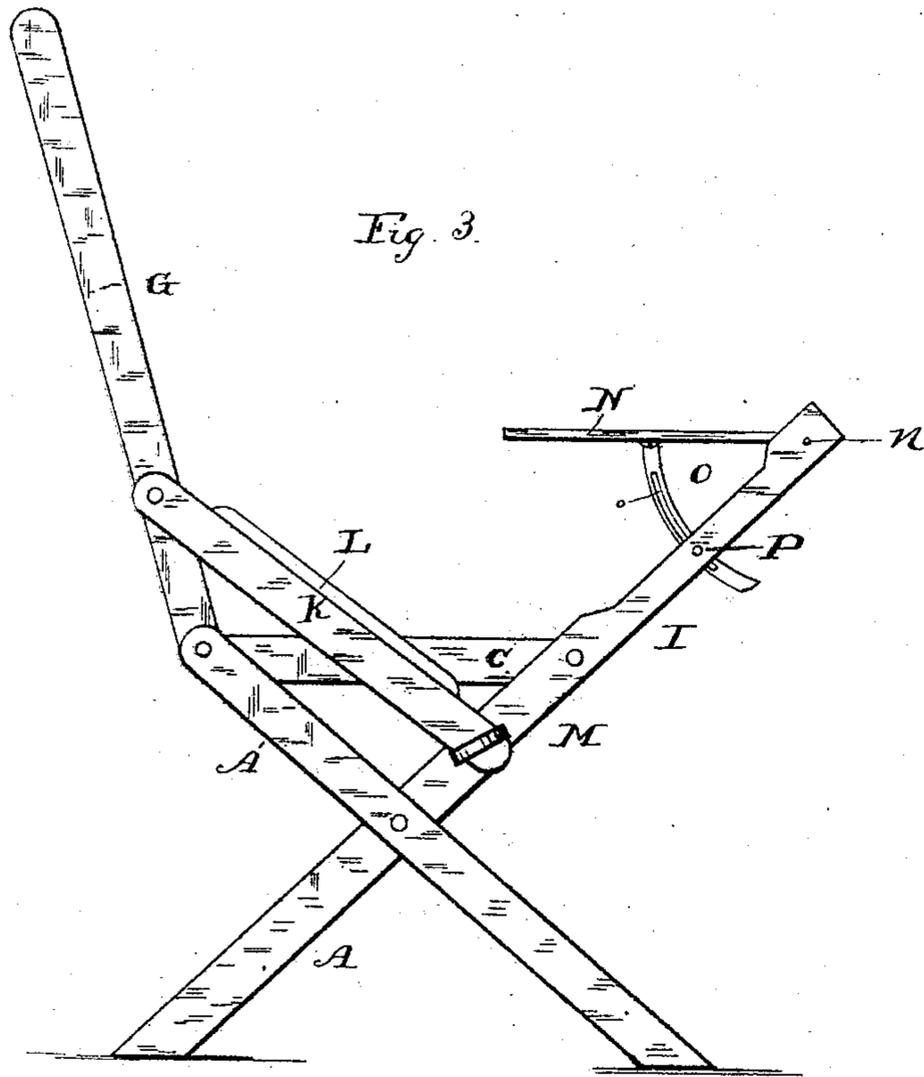


Fig. 3.

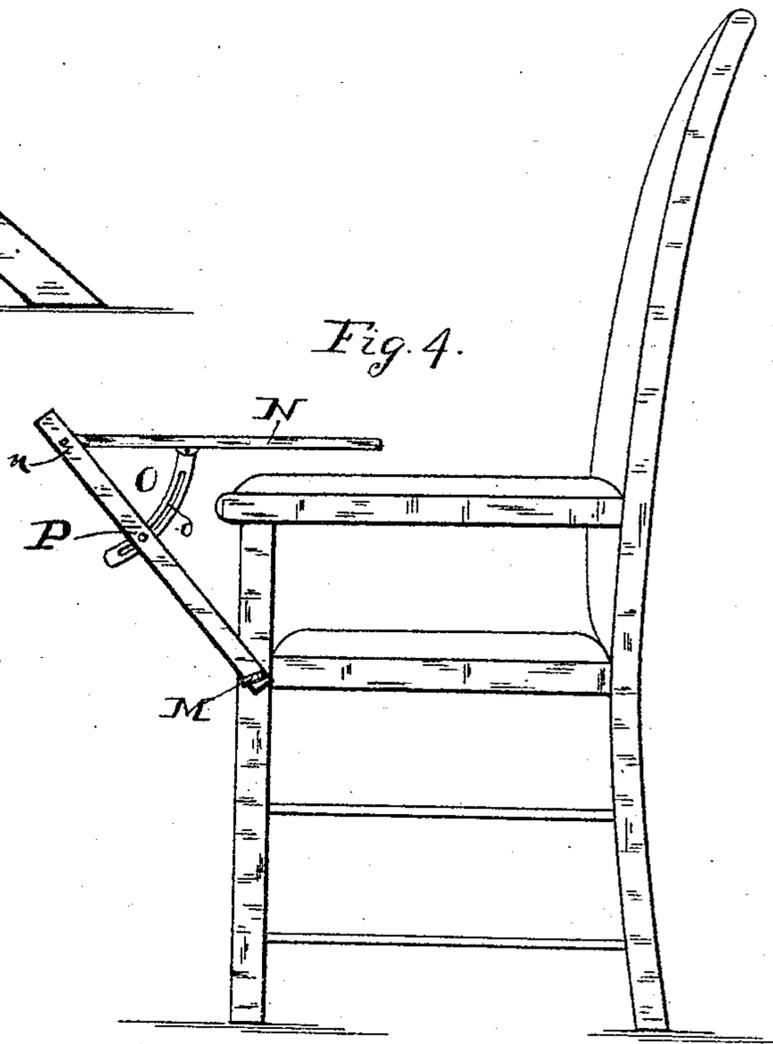


Fig. 4.

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UNITED STATES PATENT OFFICE.

BENJAMIN F. HUBBS AND WILLIAM Y. BYGATE, OF CANTON, OHIO.

CHAIR.

SPECIFICATION forming part of Letters Patent No. 321,897, dated July 7, 1885.

Application filed March 24, 1884. (No model.)

To all whom it may concern:

Be it known that we, BENJAMIN F. HUBBS and WILLIAM Y. BYGATE, citizens of the United States, residing at Canton, in the county of Stark and State of Ohio, have invented certain new and useful Improvements in Chairs, of which the following is a specification, reference being had therein to the accompanying drawings.

Figure 1 is a perspective view of our reclining chair. Fig. 2 is a side view of the chair in a reclining position. Fig. 3 is a side view of the chair when in the position occupied for writing. Fig. 4 is a side view of a modified form of chair and writing-table.

In the drawings, A A' represent the legs of the chair, which cross each other, and are connected together by cross-bar B. The seat-frame consists of the side bars C C, and front and rear cross-bars, D D, these bars forming a rectangular frame, which connects together the upper ends of the legs, and, together with the legs and cross-bar B, makes a strong rigid frame for the swing parts of the chair. The seat E may be of upholstering, cane, or other material, as may be most desirable.

The back of the chair F is supported in a swinging frame consisting of the side bars G G, pivoted at their lower ends to the upper ends of the legs A', preferably between the side bars of the seat-frame and the legs A', as shown in the drawings, and the cross-pieces H H, connecting together the bars G at the top and bottom.

I I are bars pivoted near their upper ends to the outer faces of the upper ends of legs A, and connected at their lower ends by the foot-board or rest J.

K K are links connecting the upper ends of bars I with the side bars of the back-frame, and forming the arms of the chair. They are provided upon their upper surfaces with padded arm-rests L. These links communicate motion from one swinging frame to the other. Thus, when the bars G G are moved backward, the links draw the upper ends of bars I in a corresponding direction, which lifts the foot-support frame upward, causing the chair to assume a nearly horizontal position, as shown in Fig. 2. The links or arms K lie parallel with the seat, and are so pivoted that

they retain that relative position whatever be the inclination of the swinging frames.

When the chair is in the position shown in Fig. 2, the under faces of the arms K rest upon the upper ends of legs A', and from an examination of said figure it will be seen that the pivots which connect the arms K with the back and with the bars I are so situated when the parts are in their reclining position that the back and foot-support are locked—that is to say, the weight of the occupant will not carry either the back or the foot-support or the arms downward to any appreciable extent, they tending to balance each other; but at the same time when the weight of the occupant is withdrawn from the back and the foot, the parts can be readily put into the position shown in Fig. 3 by merely pressing downward upon the forward pivots, *k*, of the arms K. When the parts are in the position shown in Fig. 2 the rear portion of the arms K cannot move downwardly, as they impinge upon the upper ends of the legs A'; but these legs do not interfere with the forward ends being pushed downward, as described.

We do not wish to be limited to attaching the writing table or board N permanently to the frame-pieces I by means of the pivot *n*, as it may be separate from the chair, and only attached thereto when it is desired for use.

When it is wished to use the chair while writing or reading, it is made to assume the position shown in Fig. 3, wherein the lower ends of bars I—to which the writing board or table N is attached—are shown elevated, thus permitting the board when extended to lie in front of the occupant of the chair. This is done by first moving the parts into the position shown in Fig. 2, when by pressing upon the pivotal points *k* connecting the arms and the side bars I they will be forced downward past the seat-frame below the seat, and will assume the position shown in Fig. 3, where they may be secured by the set-screw M, this movement being permitted by pivoting the parts in the manner shown—that is to say, the arms G upon the inside of the outer legs, A', and arms I, upon the outside of the inner legs, A, thus leaving a passage-way for the downward movement of the upper end of arm I and the forward end of link K when they

are passing into the position shown in Fig. 3. This change of position may be made while the chair is unoccupied, the user taking his seat after the parts have been placed in the position for writing, or the board or table N, when it is pivoted at *n* to the side bars I, may be swung into the position indicated by dotted lines, Fig. 1, this being allowed by the slots or adjusting apertures in the segmental supports O, after which the parts can be swung to elevate the board without requiring the occupant to leave his seat.

When the writing-board N is attached to the chair only when desired for use it will be readily seen that the swinging frames of the chair may be moved into their various positions without disturbing the person occupying the chair.

N is a board pivoted at *n* between the two bars I near their lower ends. It lies between these bars when the chair is in ordinary use for sitting and reclining purposes, and rests upon pins *i*, which project inwardly from the bars I. This board may be highly ornamented by inlaying or otherwise, so as to give the chair a handsome appearance.

O O are slotted segmental supports pivotally attached to the under surface of the board near its edges, and about midway of its length. These supports are fastened to the bars I by means of set-screws P passing through slots *o* in the supports, which permit the board to be adjusted to any height to suit the convenience of the writer, and there secured. When the board is folded into place between the bars I the segmental supports lie close under the board along the inner faces of the bars I in which position they are entirely concealed.

Instead of slotting the supports as shown, we may provide them with a series of holes through which pins or set-screws pass and engage with bars I. The person to occupy the chair when it is to be used as a writing-desk, or for the holding of books, can readily obtain access thereto by first swinging the board or table N out of the way of the feet, and then moving the back and other swinging parts of the chair in the manner above described until they have taken the position shown in Fig. 3, after which the table can be clamped in any desired position.

In Fig. 4 we have shown a modified form of the chair. In the chair shown in this view the back and arms are made rigid with their

supporting-frame, and do not swing or move. The swinging frame which carries the writing-board is pivoted to the seat-frame or the legs, and operates as in the construction above described.

We are aware that it is old to provide a chair with a swinging back and a foot-board carrying a writing table or board, which may be elevated so as to bring the writing-table up into position for use, the back and foot-board being connected by bars or hooks, such a chair being shown in the patent granted to George Hunzinger, October 1, 1861, No. 33,292; but the chair shown in said patent differs from ours in that the places of engagement of the bars or hooks with the foot-board are changed each time its position is shifted; and, further, in that there are shown no means for adjusting the height of the table. These changes in construction in our chair enable its position to be more readily and easily shifted, and permit an accurate adjustment of the table to suit the person occupying the chair.

What we claim is—

1. The combination, with a chair, of the swinging foot-support frame pivoted to the front of the chair, a writing-board supported upon said foot-support frame, and a set-screw, M, by which the said swinging frame is locked in various vertical positions in order to adjust the height of the writing-board, substantially as set forth.

2. The combination, with a chair, of the swinging foot support frame pivoted to the front of the chair, a writing-board pivotally supported upon said swinging frame, a set-screw, M, by means of which the writing-board and its supporting frame may be held in an elevated position, and the segments O, by means of which the inclination of the writing-board may be adjusted, substantially as set forth.

In testimony whereof we affix our signatures in presence of two witnesses.

BENJAMIN F. HUBBS.
WILLIAM Y. BYGATE.

Witnesses to B. F. Hubbs:

JOHN C. ENTREKIN,
ARTHUR L. HAMILTON.

Witnesses to Wm. Y. Bygate:

JACOB P. FAWCETT,
HENRY FISHER.