

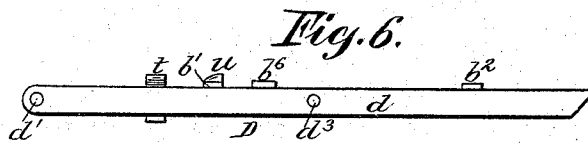
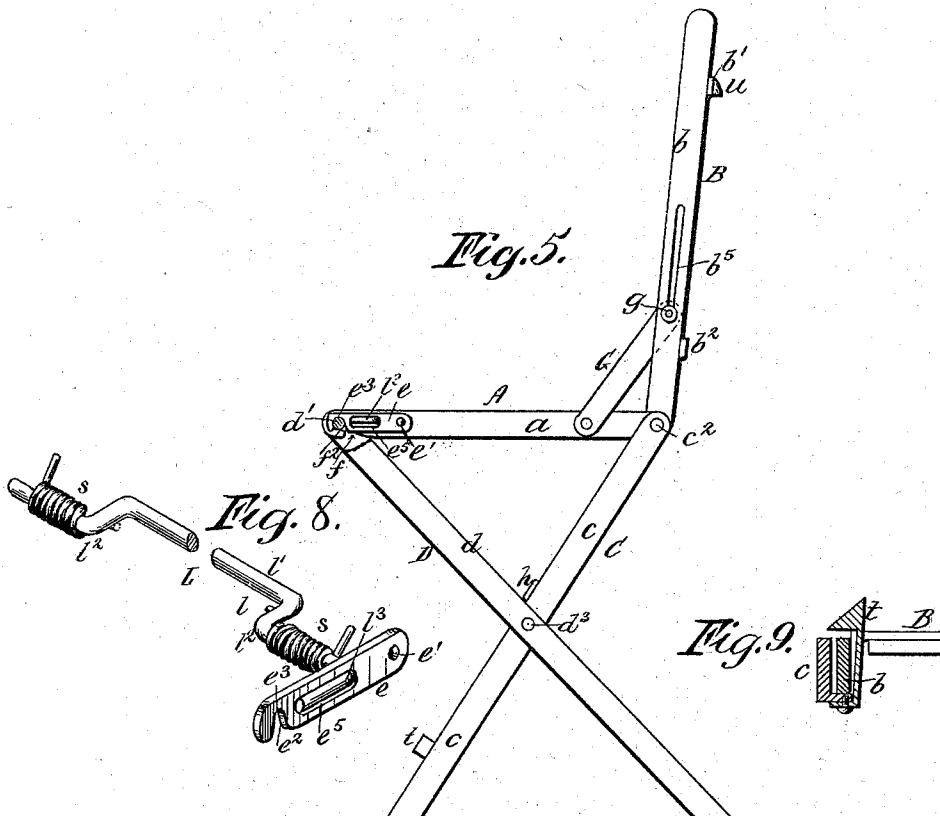
(No Model.)

2 Sheets—Sheet 2.

J. WALTON.
FOLDING CHAIR.

No. 530,564.

Patented Dec. 11, 1894.



Witnesses:

D. W. Gardner.
G. J. Mott

Inventor:

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UNITED STATES PATENT OFFICE.

JONATHAN WALTON, OF BROOKLYN, NEW YORK.

FOLDING CHAIR.

SPECIFICATION forming part of Letters Patent No. 530,564, dated December 11, 1894.

Application filed January 10, 1894. Serial No. 496,399. (No model.)

To all whom it may concern:

Be it known that I, JONATHAN WALTON, a citizen of the United States, residing in the city of Brooklyn, in the county of Kings and State of New York, have invented certain new and useful Improvements in Folding Chairs, of which the following is a description sufficient to enable others skilled in the art to which the invention appertains to make and use the same.

The object of my invention is the production of a light, substantially portable folding chair which may be quickly and conveniently opened and adjusted for use, and as quickly folded into the least possible space for storage or transportation.

The improvements relate more particularly to the form of chair described in my Patent No. 510,659, dated December 12, 1893.

The present invention consists in the special construction and arrangement of parts for effecting the locking and unlocking of the members of the chair, and for facilitating the manipulation thereof.

In the accompanying drawings Figure 1, is a front elevation of my improved chair, open. Fig. 2, is a vertical central section of the same. Fig. 3, is a section upon plane of line x, x , Fig. 2, showing the under side of the seat. Fig. 4, is a top view of the chair, closed. Fig. 5, is a side elevation of the chair, opened. Fig. 6, is a similar view of the chair, closed; Fig. 7, an end view of the chair, closed; Fig. 8, an enlarged detail of latch mechanism; Fig. 9, a transverse section of latch, enlarged.

The chair consists essentially of four parts pivotally connected the one with the other, namely the seat, A, the back B, the front leg frame C, and the rear leg frame D.

The seat A, is formed with the side pieces a, a , the rear ends a' , of which extend backward and are pivotally connected with the rod c^2 , upon the rear upper end of the front leg frame C. The front ends of the side pieces a , are slotted or hook shaped as shown more clearly in Figs. 2 and 5, so as to receive and rest upon the upper front cross bar or rod d' , of the rear leg frame D. This is accomplished by forming recesses f , in the under side of the front ends of the side pieces a , the recesses f , being formed with offsets f^2 , in which the cross rod d' , rests when the

chair is fully extended, the parts being held in this position by a latch e , formed with a notch e^2 , which allows the latch e , to drop over the rod d' , so that the shoulder e^3 , locks the said rod within the offsets f^2 . The latch f , is pivotally connected to one side piece at e' .

The back B is formed with two transverse braces b', b^3 , to which are attached the side pieces b, b , the lower ends of which are pivotally connected with the cross rods c^2 . Braces G, connect the side pieces a , of the seat with the side pieces b , of the back, said braces G, being pivotally connected to the side pieces a , at their lower ends, while their upper ends are formed with studs or pins g , which rest in the longitudinal slots b^5, b^5 , formed in the side pieces b, b , and are thus free to travel up and down the side pieces b, b , as the back and seat are turned to or from each other.

The rear leg frame D, consists of the two side pieces d, d , connected at top by the cross rod d' , hereinbefore referred to, and at the bottom by a heavy cross piece or counterweight, d^2 .

The frame D, is pivotally connected at the points d^3 , to the side pieces c , of the front leg frame C, in such manner that when the cross rod d' , is released from the recess f^2 , in the side pieces a , the side pieces d, d , may be brought parallel to each other as shown in Fig. 6. The front leg frame is stiffened by a series of braces c', c' , its upper rear end supporting the cross rod c^2 , upon which the side pieces a, a, b, b , turn, and its lower end being formed with the cross piece c^4 . The counterweight d^2 , causes the frame D, to swing rapidly upon its axis d^3, d^3 , during the operation of opening and raising the chair so that its upper front end carrying the cross rod d' , is brought immediately into position to effect the engagement of the said cross rod d' , with the recesses f, f^2 , in the front ends of the side pieces a , of the seat,—the cross rod d' , as it enters the recess f , raising the latch e , until the cross rod passes into the offset f^2 , when the slot e^2 , in the latch e , allows the latter to descend and lock the parts in position. A stop h , is formed upon one side of the side pieces c , of the frame C, in such position as to prevent the frame D, swinging beyond the proper angle for the engagement of the cross rod d' , with the slots f, f^2 , in the side pieces, a .

The lower ends of the slots b^5 , b^5 , in the side pieces of the back B, act as stops for the pins g , limiting the backward movement and inclination of the braces G, so as to limit the backward movement and inclination of the back B. A second stop b^6 , upon one of the side pieces b , of the back B, limits the movement of the forward end of the frame B, when the frames C, and D, are brought parallel and into coincidence as shown in Figs. 4 and 6.

It will be seen that the four frames A, B, C and D, all fold together so as to present a thickness equal only to the width of the side pieces d , of the frame B, as shown in Fig. 6—the stops h , b^6 , and the back braces b' , b^3 , projecting only slightly beyond the edges of the said side pieces d , so that when folded the whole device is thus practically reduced within the smallest possible area, and is in the most convenient shape for handling and for transportation.

The feature of the automatic raising of the front end of the frame D, by reason of the counterweight d^2 , is of importance in facilitating the rapid opening and adjustment of the parts; while the latch e , in conjunction with the recesses f , f^2 , in the side piece a , affords a simple and effective means for locking the whole device rigidly in its extended position. The latch e , in the present case is raised through the medium of a lifter L, consisting of a rock bar l , pivotally supported in the front ends of the side pieces a , a , back of the recesses f , f^2 . This rock bar l , may be formed in various ways, its main function being to afford means under the front edge of the seat A, for raising the catch e , and releasing the cross bar d' . As shown in the drawings it consists of a stiff wire rod bent in the middle to form the handle l' ; and having spiral springs s , s , around its axial extensions l^2 , l^2 , which springs tend constantly to force the handle l' , upward against the bottom of

the seat A. The end of the rock bar l , next the latch e , projects through the side piece a , and is bent laterally to form the radial arm l^3 , which rests in a longitudinal slot e^5 , formed in the body of the latch e . The projection of the arm l^3 , is forward in the opposite direction to that of the handle l' , so that when the latter is pulled away from the bottom of the seat A, the arm l^3 , raises the outer end of the catch e , and releases the bar d' . A spring latch t , is mounted upon one of the legs c , of the frame C, in such manner that when the parts of the chair are folded together, one of the side pieces b , of the back B, is engaged and held as illustrated in detail in Fig. 9.

The upper cross bar b' , at the rear of the back B, is formed with a flare or enlargement u , projecting sufficiently to afford a convenient means for grasping and holding the upper end of the back by hand.

What I claim as my invention, and desire to secure by Letters Patent, is—

The combination substantially as herein set forth, of the frame C, having the cross bar c^2 , and stop h ; the seat A, pivotally connected to the cross bar c^2 , and having the side pieces a formed with the recesses f , f^2 ; the back B, formed with side pieces b , having the slots b^5 , b^5 , and the stop b^6 ; the braces G, having the pins g , g , resting in the slots b^5 , b^5 ; the swinging latch e , formed with the longitudinal slot e^5 , the lifter L, consisting of the rock lever l , formed with the handle l' , springs s , s , and latch arm l^3 ; and the frame D, pivotally connected with the frame C, and carrying the cross bar d' , engaging the recessed seat bar and latch, the whole constructed and operating as shown and described.

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Witnesses:

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