

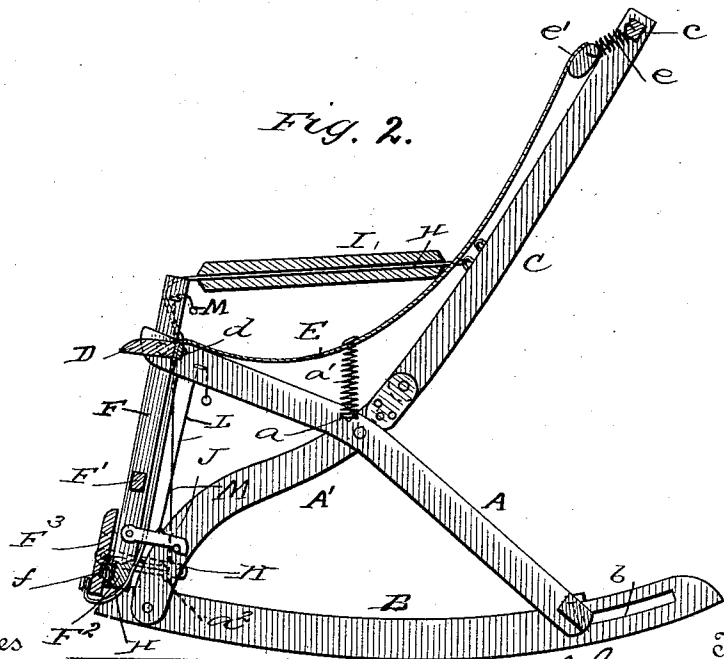
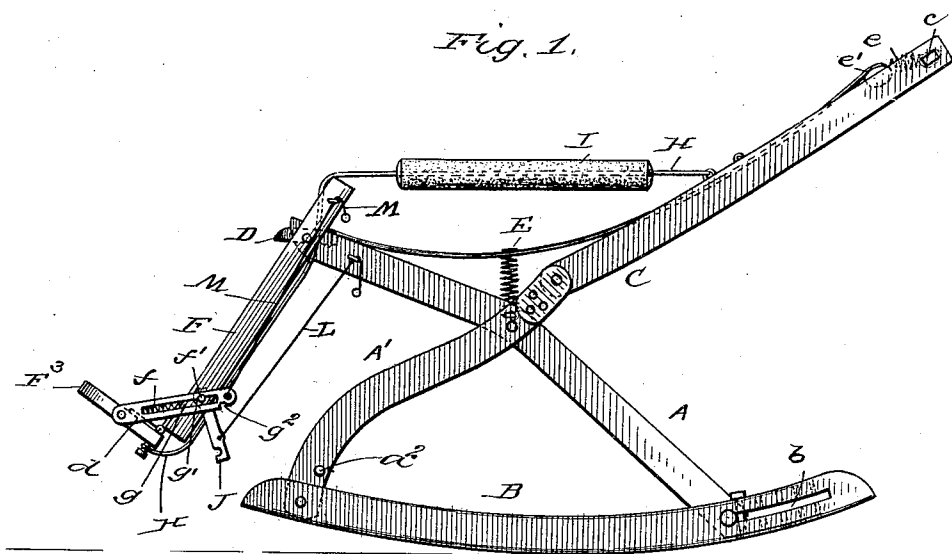
(No Model.)

2 Sheets—Sheet 1.

J. G. WHITTIER.
RECLINING ROCKING CHAIR.

No. 475,370.

Patented May 24, 1892.



Witnesses F^d
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Inventor
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Alexander Davis

(No Model.)

2 Sheets—Sheet 2.

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Fig. 3.

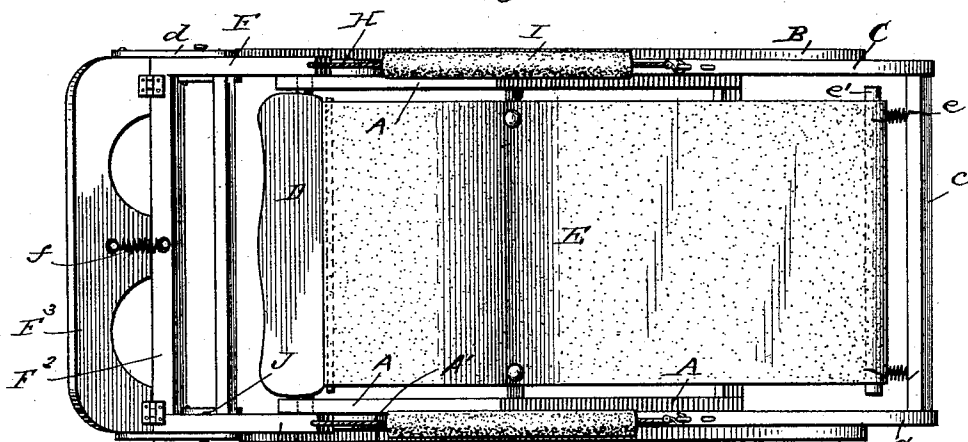


Fig. 4.

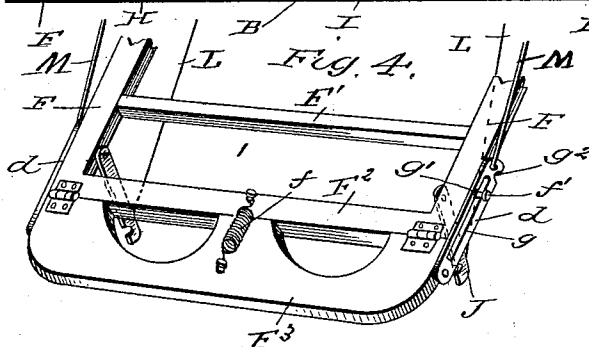
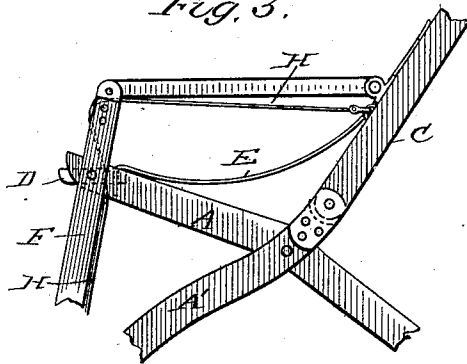


Fig. 5.



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UNITED STATES PATENT OFFICE.

JOSEPH G. WHITTIER, OF ATTICA, INDIANA.

RECLINING ROCKING-CHAIR.

SPECIFICATION forming part of Letters Patent No. 475,370, dated May 24, 1892.

Application filed October 9, 1891. Serial No. 408,249. (No model.)

To all whom it may concern:

Be it known that I, JOSEPH G. WHITTIER, a citizen of the United States, residing at Attica, in the county of Fountain and State of Indiana, have invented certain new and useful Improvements in Reclining Rocking-Chairs, of which the following is a specification, reference being had therein to the accompanying drawings.

My invention relates to chairs of that class capable of use by an occupant either sitting upright or in a reclining position, my aim being to provide a chair of this description which shall be capable of conversion from one position to the other with facility and convenience and which shall consist of but few parts, so as to conduce to simplicity in its structure and economy in its manufacture.

To these ends said invention consists in the chair and the parts thereof, constructed and combined substantially as and for the purpose hereinafter specified.

In the drawings, Figure 1 is a side elevation of my chair arranged for use in a reclining position; Fig. 2, a longitudinal section when arranged to enable its occupant to sit upright; Fig. 3, a plan view having the arrangement shown in Fig. 1; Fig. 4, a detail perspective view of the foot-rest, and Fig. 5 a detail in side elevation showing a modification.

Like letters of reference designate like parts.

Referring to the drawings, A and A' designate two pieces or bars constituting a side of the chair-frame and attached at their ends to a rocker B. The bar A is attached to the latter near its rear end and extends upward and forward therefrom, while the bar A' is attached near the front end of the rocker and extends upward and rearward, crossing the bar A at about its middle, the two being connected together pivotally at the intersecting point. The bar A' extends but a short distance beyond the bar A, and to its end is hinged a bar C, constituting one side of the chair-back frame. The bar C of one side is connected to the like bar C of the other side at its top by a transverse strip or bar c, and connecting the front ends of the bars A A' of the side frames is a transverse piece D. Extending from the latter to the transverse bar c is a piece of flexible material E, of carpet or

other fabric, which forms the body receiving and supporting part of the chair. Its connection with the bar c is not direct; but short spiral springs e extend from the latter to a transverse bar e', to which the end of the fabric is fastened. The springs, as will be readily seen, contribute materially to the comfort of the user of the chair and are further advantageous in that the fabric is relieved from strain and will not be torn away by a person suddenly seating himself, as would be the case were there no yielding connection with the frame-bar. The connection of the fabric with the piece D is preferably made by placing the end thereof between the rear edge of said piece and a thin strip d and suitably fastening the three together, as by tacks passed through said strip and the fabric and into the piece D. Should the fabric stretch during use, this form of fastening will enable the matter to be easily remedied, as the strip can readily be removed and the fabric fastened again in place thereby, as before. The piece D is not rigidly attached to the side pieces A, but is pivotally connected to them at its ends, so as to be capable of a certain degree of movement to enable its position to be automatically adapted or conformed to the position of the limbs of the occupant of the chair.

The pivots of the bar D are preferably at or near its rear edge in order that the pressure of the limbs of the occupant bearing upon its forward edge will cause it to automatically conform to the position of the limbs independently of the supporting-fabric.

Contractile coil-springs a' a' connect the seat portion of the fabric E to a convenient part of the chair-frame in order to normally draw the fabric taut and keep the front pivoted board D and seat portion in an approximately horizontal position. One spring is preferably attached to the under side of the fabric on each side of the chair, the lower ends of the springs being connected to suitable staples a, secured to the chair-frame near the intersection of bars A A'. These coil-springs may be arranged to impart some resiliency to the seat fabric and form a kind of seat-spring, as is evident.

Pivotally attached to the front end and on the outside of each side frame-bar A is a downwardly-extending bar F, that at its lower

end is connected to the opposite bar F by two transverse bars F' and F². To the latter is hinged an extension or piece F³, which is adapted to occupy a horizontal position to enable the chair occupant to rest his feet upon it when in a sitting position or to be turned up against the bar F' out of the way should it be preferred to have the feet on the floor, or when the chair is to be used in a reclining position to be extended in line with and form a continuation of the frame formed by the bars F, F', and F², so as to furnish a support for the extremities of the limbs of even a very tall person. A coiled spring f, extending from the bar F² to the pivoted or hinged extension F³, operates to normally pull and hold the latter to the second position just described, while to secure it in the first or horizontal position both against stress of the spring and the weight of the feet a slotted bar or link d is pivotally attached to said extension upon each side, through whose slot g projects a stud or pin f' on the bar F, adapted to engage a notch g' in the link. To insure said extension being held in the second position, the link d has a notch g² in its under edge to engage a stud a² on the side bar A', as shown in Fig. 2. To the under side of the extension F³, near its rear edge, is attached a cord or rope H, which thence passes to the rear of the bar F and up alongside its rear edge until within a short distance of its top. Above the point of the pivotal connection of the bar F with the bar A the cord passes through a forwardly and upwardly inclined passage in said bar, emerging on its front edge and then extending rearwardly in substantially a horizontal line to the side bar c of the back frame, to which it is connected. Upon the cord between the point of its attachment to the back frame and the upper end of the bar F is a round bar I, which has a longitudinal opening, through which the cord passes which constitutes the arm of the chair. The arms I are loosely mounted on the cords H, in order that they may be readily adjusted along the cords by the occupant according to the position of the back and also in order that they may be rotated on the cords in order to present different wearing-surfaces. Thus suspending the arms upon the cords between the leg-rest and hinged back renders the arm-supports flexible and yielding. Through the instrumentality of this cord the conversion of the chair from a sitting to a reclining position is effected and without the occupant moving from the chair, for, it will be observed, the arrangement of the cord is such that weight or pressure upon the chair-back tends to raise the foot and leg rest, composed of the bars F, F', and F² and extension F³, and that consequently a rearward movement of the back on its hinge toward a horizontal position will raise said rest toward a like position. The arrangement of the parts, it will thus be seen, is such that the tendency is to the inclined position,

and this, therefore, necessitates the employment of a locking device to retain the parts in the sitting position. Such a locking device I show, which consists simply of a hook or latch J, pivoted to one of the side bars F, adapted to engage a pin or stud K on the bar A'. From said latch or hook a cord or wire L is run to a point conveniently within reach of a person in the chair, so that the latch may be released without the necessity of getting out. A wire or cord M is also provided, to enable the occupant to conveniently operate the link d so as to free the foot-rest extension F³. The latter, it is to be noted, when the link will allow, will be automatically extended into alignment with the frame F, F', and F² when the chair is assuming an inclined position, owing to the connection with it of the rope or cord H. To vary the angle of parts when the chair is to be inclined, provision is made for an attachment of the rope to the back-bar B at different points, as shown.

In case it should be objectionable to place the arm I on the rope, as described above, I contemplate the arrangement shown in Fig. 5, where the arm is pivotally connected at one end to the back-bar and at the other to the foot-rest bar F, the rope being placed beneath it.

In order to diminish the compass of the chair for shipping purposes as much as possible, the connection of the bar A' with the rocker is made by means of a stud on the bar that is located in a slot b in the rocker, and which when in use is in the front end thereof, where it is held by a pin passing vertically through the rocker in rear of it. When the stud is at the rear end of the slot, the vertical dimension of the chair is decreased, as the seat and back will be lowered or moved toward the rocker. By disengaging the cord H from the back the latter and the foot-rest may both be folded over toward and to rest one on the other.

The construction of my chair is such as to insure comfort whether used for sitting or reclining, the parts are few and simply arranged, and the conversion from one position to the other can be easily and quickly done, being practically automatic in respect to the change from the sitting to the reclining position. The design of the frames of course can be raised to suit the taste; any mode of upholstering may of course be resorted to; the chair need not be a rocker, and other changes may be made without departure from the scope of my invention.

Having thus fully described my invention, what I claim, and desire to secure by Letters Patent, is—

1. In a reclining-chair, the combination of a base, a leg-rest pivotally depending from its front end, a back hinged to the rear of the base, a foot-rest F³, hinged to the lower end of the leg-rest and adapted to be adjusted in alignment thereto and at an angle therewith, as the exigencies of the case may require, means for holding it in its adjusted positions,

a spring for normally folding it in against the leg-rest, and cords connecting the foot-rest and leg-rest and hinged back, whereby when the back is pressed backwardly the cords will
 5 throw the lower end of the leg-rest outwardly and extend the foot-rest against the action of the spring, substantially as described.

2. The combination of a base, a back hinged thereto, a leg-rest F, pivotally depending from the front end of the base, the upper end of this leg-rest extending above its pivotal point, a foot-rest F⁸, hinged to the lower end of the leg-rest and adapted to normally fold up against the leg-rest and be adjusted out at an
 15 angle thereto, and cords secured to the foot-rest and extending up and loosely connected to the leg-rest above its pivotal point and from thence extending rearwardly and connected to the hinged back, whereby when the
 20 back is pressed backwardly the leg-rest will beswing outwardly and the foot-rest adjusted out at an angle thereto, and means for holding the parts in their adjusted positions, substantially as described.

3. In a reclining-chair, the combination of a base, a back hinged thereto, and a leg-rest depending from its front end and having its side bars extending a suitable distance above the seat, cords connecting the upper ends of
 30 the side bars of the leg-rest to the back, whereby when the back is thrown backwardly the leg-rest is thrown outwardly at its lower end, and chair-arms I, suspended upon the cords between the leg-rest and back, substantially
 35 as described.

4. In a chair, the combination of a base with a back and leg-rest hinged thereto, the foot-rest hinged to the leg-rest, the contracting spring secured to the leg-rest and to the foot-rest, slotted bars pivoted to the foot-rest, pins
 40 projecting from the side bars of the leg-rest through the slotted side bars pivoted to the foot-rest and adapted to engage a notch in the edge of the slot in said bars, and a cord secured to the slotted side bars and carried to
 45 a convenient position to be grasped by the occupant of the chair, substantially as described.

5. In a chair, the combination of a base, a back and leg-rest hinged thereto, a foot-rest hinged to the lower end of the leg-rest, a cord connecting said back-rest, leg-rest, and foot-rest, a slotted bar f, pivoted to the foot-rest, a
 50 pin on the side bars of the leg-rest projecting

through the slot in bar f and engaging a notch
 55 in the edge of said slot, a pin projecting from the side bars of the chair to be engaged by a notch in the under side of the bar f, and a cord secured to said bar and carried to a point
 60 in convenient reach of the occupant of the chair, substantially as described.

6. In a chair, in combination with a base, a pivoted back, a pivoted leg-rest, a foot-rest hinged to the lower end of the leg-rest, a cord connecting said back-rest, leg-rest, and foot-
 65 rest, a contracting spring for normally folding the foot-rest in against the leg-rest, a catch pivoted to the foot-rest, a pin on the base engaged by the catch on the foot-rest, and means for locking the leg-rest in against the base,
 70 substantially as described.

7. In a chair, the combination of a base, a hinged back, a bar D, pivoted in the forward part of the chair-frame, a flexible body-support secured at one of its ends to the back-
 75 rest and at its other end to the rear edge of the bar D, contracting coil-springs for drawing the flexible body-support taut, the upper ends of said springs being secured to the seat portion of said support, their other ends be-
 80 ing secured to the chair-frame below the said support, substantially as described.

8. In a chair, the combination of a base, a back and leg-rest hinged thereto, a foot-rest hinged to the leg-rest, the cords attached to
 85 the rear edge of the foot-rest and running thence up along the rear sides of the frame-bars of the leg-rest, passing through openings therein above their pivots and emerging on their front sides, and thence passing to said
 90 hinged back, and means for adjustably securing said cords to the hinged back, substantially as described.

9. In a chair, the combination of a base, a hinged back, a pivoted leg-rest having its side
 95 bars extending to a suitable point above the seat, cords connecting the upper ends of the side bars of the leg-rest to the back, rotatable arms loosely mounted on the cords, said cords passing through longitudinal openings in said
 100 arms, substantially as described.

In testimony whereof I affix my signature in presence of two witnesses.

JOSEPH G. WHITTIER.

Witnesses:

PETER ABERG,

ALBERT SCHOONOVER.