

(No Model.)

J. H. McELROY.

CHAIR.

No. 343,965.

Patented June 15, 1886.

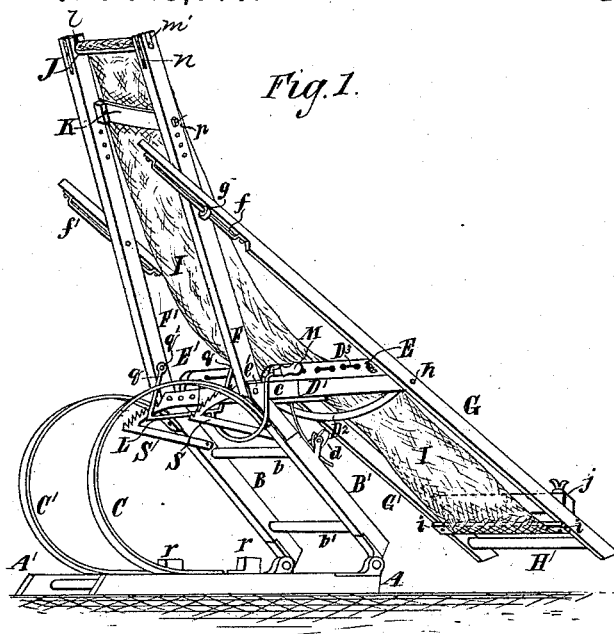


Fig. 1.

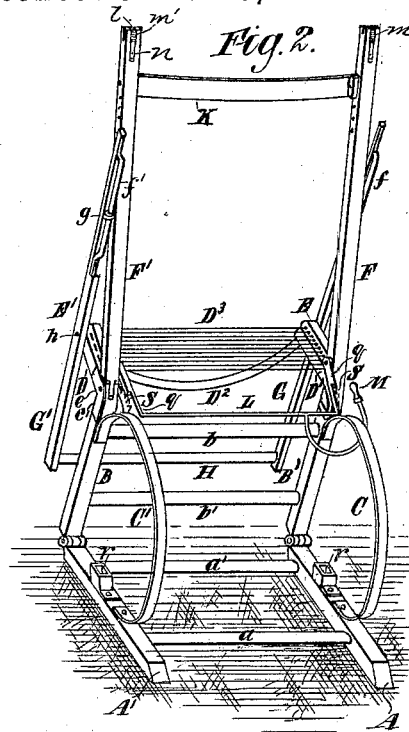


Fig. 2.

Fig. 3.

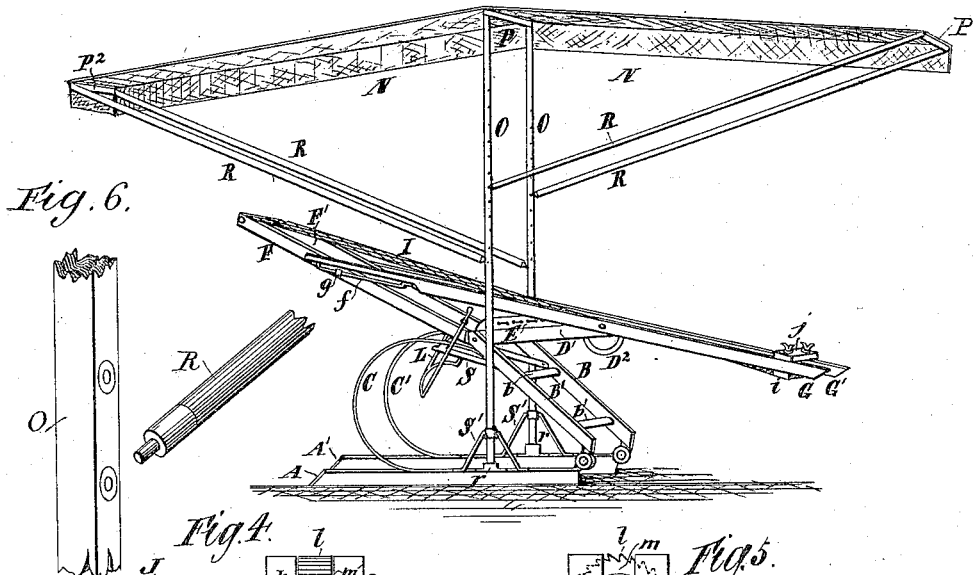


Fig. 4.

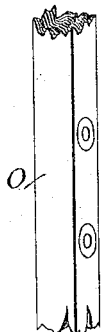
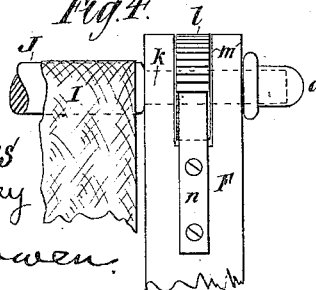
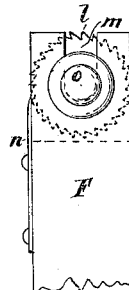


Fig. 5.



Witnesses
J. R. Bowen.

Fig. 6.



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UNITED STATES PATENT OFFICE.

JAMES H. McELROY, OF MIDDLETOWN, NEW YORK.

CHAIR.

SPECIFICATION forming part of Letters Patent No. 343,965, dated June 15, 1886.

Application filed July 11, 1885. Serial No. 171,270. (No model.)

To all whom it may concern:

Be it known that I, JAMES H. McELROY, of Middletown, in the State of New York, have invented a certain new and useful Improvement in Chairs, of which the following is a specification.

I will describe in detail a chair embodying my improvement, and then point out the novel features in claims.

In the accompanying drawings, Figure 1 is a perspective view of a chair embodying my improvement, certain features being removed. Fig. 2 is a perspective rear view of the same, both the canopy and the covering for the chair being removed. Fig. 3 is a perspective view of the same, the covering for the chair and the canopy being in place and the chair being shown arranged as a hammock; and Figs. 4, 5, and 6 are details.

Similar letters of reference designate corresponding parts in all the figures.

The pedestal of the chair consists of flat pieces of wood A A', rigidly connected together, as shown by cross-pieces or stretchers a a'. The pieces A A', near one of their ends, are hinged to uprights B B', consisting, likewise, of pieces of wood rigidly secured together by cross-pieces or stretchers b b'. Springs C C', here shown as flat and bow-shaped, are secured near one of their ends one to each of the pieces A A' of the pedestal, and at their other ends one to each of the uprights B B', near the upper ends thereof. The object of these springs will be explained hereinafter.

D D' designate pieces of wood extending at an angle from the uprights B B', and secured to said uprights by tie-braces of metal c c'. As shown, these tie-braces comprise two arms extending at acute angles from each other and conforming to the relative positions which the pieces D D' and the uprights B B' bear to each other. Obviously any other suitable form of tie-braces or connection for the pieces B B' D D' may be employed.

It will be observed that the pieces A A' B B' D D' form approximate Z-shaped structures.

The seat consists of a cord or rope, D², supported by a frame. In this instance the frame is composed of pieces of wood E E', the pieces

D D', and a cross bar or brace, D². The pieces E E' are shown as secured to the pieces D D' by bolts. The cross bar or brace D² extends between the pieces D D', near the forward ends thereof, and is preferably bowed downwardly, to prevent its coming in contact with the person of the occupant of the chair. The cord or rope D² is passed a convenient number of times back and forth between the pieces E E', through suitable holes in said pieces. Preferably one end of said cord or rope is prevented from slipping by means of a knot, and the other end will be secured by a clamping-piece, d, preferably consisting of a cam-dog upon the upright B', as shown more clearly in Fig. 1.

By using a cord or rope I secure a yielding seat for the chair. The cord or rope may be brought to any desired degree of tension, as will be readily seen, and secured at such tension by means of the clamping-piece d.

I may, if desirable, omit the pieces E E' and connect the cord or rope directly with the pieces D D'.

F F' designate uprights extending from the uprights B B'. The uprights F F' are connected to the uprights B B' and the tie-braces c c', by means of bolts or pins e e', passing through them and the tie-braces. The bolts or pins e e' act as pivots, upon which the uprights F F' may be swung.

Side pieces, G G', constituting, as shown in Figs. 1 and 2, arms for the chair and supports for a foot-rest, have a sliding connection near one of their ends with the uprights F F' about midway in the lengths of the latter. As shown, said sliding connection consists of metal rods f f', having their ends bent at angles to their lengths and secured by bolts or otherwise to the side pieces, G G'. By this means spaces are left between the rods and the side pieces. The rods pass through eyes g upon the side pieces. These side pieces are pivotally connected to the pieces D D', near the outer ends of the latter, by bolts or pins h, passing through the side pieces and the pieces D D'. A cross-piece or stretcher, H, extends between the side pieces, G G', near their lower ends and braces them.

It will be seen that when the uprights F F'

are swung backwardly upon their pivots the side pieces, G G', will be caused to assume an approximately horizontal position. The object of this movement will be presently explained.

I designates a cover for the chair. It consists of a piece of canvas or other strong textile material. As shown in Figs. 1 and 3, said cover is secured at one end to a cross-bar, *i*. This cross-bar is preferably secured upon the under side of the side pieces, G G', near the lower ends thereof by bolts or pins passing through the said cross-bar, the side pieces, G G', and a foot-rest, *j*, upon the upper side of the side pieces. The foot-rest *j* may, however, be omitted and the cross-bar *i* constitute a foot-rest. At its other end the cover is secured to a cross-bar or roller, J. I have illustrated this cross-bar or roller more clearly in Figs. 4 and 5. Near each end it has portions *k*, of less diameter than the main portion. Upon these portions *k* are rigidly mounted ratchet-wheels *l*. The upper ends of the uprights F F' are provided with slots *m m'*, extending crosswise of and at right angles to each other. The portions *k* of the cross-bar or roller J are received by the slots *m*. The slots *m'* receive the ratchet-wheels *l*. Spring-pawls *n*, secured near one of their ends to the uprights F F', engage with the ratchet-wheels. Heads *o* are arranged on the cross-bar or roller outside the uprights. When the cross-bar or roller is rotated in one direction, the cover is wound up, and when rotated in the opposite direction it is unwound. Of course the ratchets and pawls may be omitted, if desirable, and the cross-bar or roller provided with squared ends entering the slots *m*, which will prevent the cross-bar or roller from turning, except when lifted out of the slots. In this event any suitable means may be employed for preventing the cross-bar or roller from being accidentally moved out of the slots—such, for instance, as pins passing through holes in the uprights.

The uprights F F' and the cross-bar or roller J constitute the frame of the back of the chair.

K designates a head-rest, preferably made of a resilient piece of wood, secured at its ends to blocks. Pins *p*, passing through holes in the blocks and in the uprights F F', secure the head-rest in place. I provide a number of holes in each of said uprights, so that the head-rest may be adjusted into different positions.

In Figs. 1 and 2 the chair is shown as in a position to serve as a seat. It may, however, be caused to assume a position to serve as a hammock, as shown in Fig. 3; or it may be adjusted into different positions intermediate of these. In order to secure it in the different positions into which it may be adjusted, I provide ratchets, S, here shown as arc-shaped, and secured to the uprights B B' and piece D D' by bolts or otherwise. These ratchets ex-

tend rearwardly of the chair-seat and between the springs C C'. Pawls consisting of projections on a swinging pawl-carrier, L, are adapted to engage with the teeth of the ratchets.

The pawl-carrier consists of a bent rod having two arms, *q*, hung upon pivots *q'*, entering the uprights F F' above the ratchets. A handle, M, on said pawl-carrier may be used to operate the pawl-carrier, and also tends to hold the pawls in engagement with the ratchets. Obviously this arrangement of ratchets and pawls may be varied, as numerous arrangements are practicable.

Combined with this chair is a canopy, N. It may be made of any suitable textile material. It is shown as supported upon a frame comprising uprights O, cross-bars P P' P², and braces R. The lower ends of the uprights O enter sockets *r r'* upon the portions A A' of the frame. Braces S' tend, together with the sockets, to maintain the uprights in a vertical position. The cross-bar P rests upon the top of the uprights O, and may be secured thereto by pins. The braces R extend at an angle from the uprights O to the cross-bars P' P², arranged one at the front and one at the rear of the canopy.

I prefer to so construct the canopy that either its front or rear end may be raised or lowered, as desired. The means I employ for this purpose consists of a series of holes or sockets in the uprights O, into which pins upon the inner ends of the braces R may enter. By shifting these pins into different holes the canopy may be adjusted as explained. The outer end of said braces are furnished with male castings and the cross-bars P' and P² with female castings, for locking them in place.

By imparting a suitable movement to the body while occupying the chair, the chair may be rocked or swayed upon the springs C C', and a very agreeable motion thereby produced.

It will be seen that by my arrangement I produce a very simple and convenient adjustable rocking-chair and hammock-like support with a canopy, which may be moved about and placed upon a lawn or elsewhere, as desired.

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

1. In a chair, the combination, with a pedestal, of rearwardly-inclined uprights hinged to the pedestal, a seat rigidly connected to said uprights, and springs extending between said uprights and said pedestal, substantially as specified.

2. The combination, with a pedestal, of uprights hinged to the pedestal, a seat, springs extending between said uprights and said pedestal, a back-frame pivotally connected to said uprights, side pieces having a sliding connection with the back-frame and pivotally connected to the seat-frame, and a ratchet and

pawl for securing the back - frame in different positions, substantially as specified.

3. The combination, with a pedestal, of a seat, a swinging back-frame, side pieces having a sliding connection with the back-frame and pivotally connected to the seat-frame, and a removable cover of textile material secured at one end to a detachable portion of

the back-frame and at the other to a detachable cross-bar on the side pieces, substantially as specified. 10

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Witnesses:

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CHARLES McELDER.