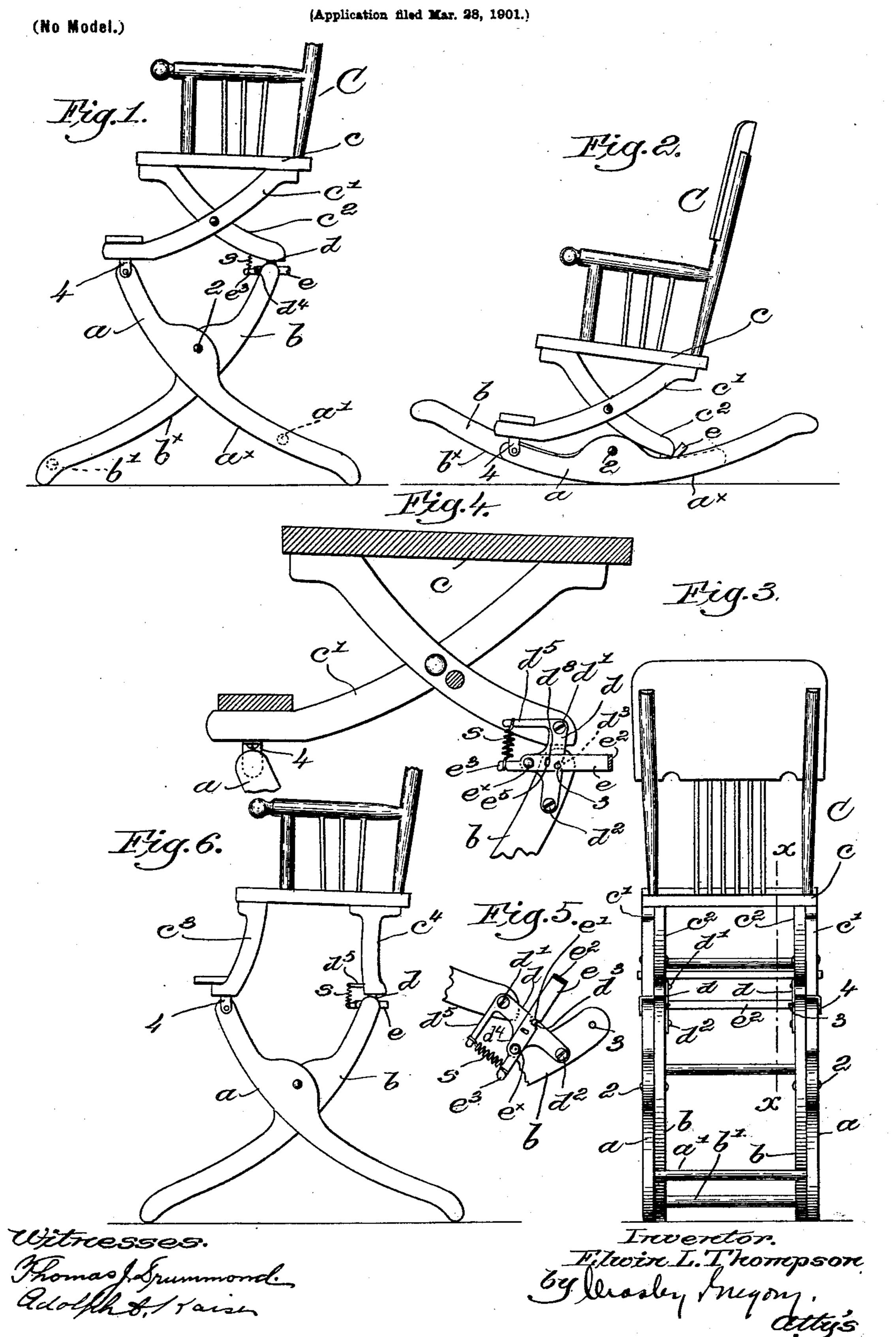
E. L. THOMPSON. CONVERTIBLE CHAIR.



United States Patent Office.

ELWIN L. THOMPSON, OF BALDWINSVILLE, MASSACHUSETTS.

CONVERTIBLE CHAIR.

SPECIFICATION forming part of Letters Patent No. 677,383, dated July 2, 1901.

Application filed March 28, 1901. Serial No. 53, 288. (No model.)

To all whom it may concern:

Be it known that I, ELWIN L. THOMPSON, a citizen of the United States, and a resident of Baldwinsville, county of Worcester, and State 5 of Massachusetts, have invented an Improvement in Convertible Chairs, of which the following description, in connection with the accompanying drawings, is a specification, like characters on the drawings representing like 10 parts.

This invention relates to chairs which can be changed from high to rocking chairs, and vice versa; and it has more particularly for its object the production of novel locking 15 means whereby the chair is securely maintained elevated until it is desired to convert it into a rocker.

Various novel features of my invention will be hereinafter described, and particularly

20 pointed out in the following claims.

Figure 1 is a side elevation of a convertible chair embodying one form of my invention, the chair being shown elevated. Fig. 2 is a similar view of the chair when lowered to form 25 a rocker. Fig. 3 is a rear elevation of the chair when elevated. Fig. 4 is an enlarged sectional detail on the line x x, Fig. 3, looking to the right to show the locking means. Fig. 5 is an enlarged detail showing the position of the 30 locking means and adjacent parts when the chair is lowered, and Fig. 6 is a side elevation of a modification to be described.

The cross-legs a b, which serve as legs when the chair is elevated, are curved or longitu-35 dinally convexed on their inner under edges, as at a^{\times} b^{\times} , to form rockers when they are spread by the lowering of the chair, as shown in Fig. 2, the legs being pivotally connected at 2 in pairs, and the said pairs of legs will in 40 practice be connected by transverse rounds

a'b'.

The seat c of the chair C is provided with a rigid depending base (shown in Figs. 1, 2, and 4 as depending) and crossed legs $c' c^2$, 45 rigidly secured together and to the seat, and the base so formed is fulcrumed on the upper ends of the cross-legs a by rigid metal straps 4, bolted or otherwise secured to the front ends of the legs c'. The other pair of legs c^2 50 are connected with the upper ends of the pair of cross-legs b by links d, pivoted at their upper ends at d' to the chair-base and at their [

lower ends at d^2 to the upper ends of the cross-

legs b.

When the chair is elevated, the links will be 55 in substantially vertical position, with the pivotal points d' d^2 practically one above the other, so that the weight upon the chair-seat is transmitted downwardly and directly to the cross-legs b through the said links.

When the chair is lowered to form a rocker, the links swing rearwardly on their pivots d', as shown in Fig. 5, as the upper ends of the

cross-legs are spread or separated.

I have herein shown a stop, made as a pin 65 or projection 3, on each of the legs b to engage the rear edge of the adjacent link when the chair is elevated to thus limit the closing movement of the cross-legs, and preferably each of the links will be notched, as at d^3 , to 70

receive its coöperating stop.

In order to maintain the links and stops in the relative position shown in Fig. 4—that is, when the stop is elevated—I have provided a simple and very effective locking device con- 75 sisting, substantially, of a Shaped bar, the sides e, which form latches, being fulcrumed at e^{\times} on a forwardly-extended ear d^4 of each link, the latches projecting rearwardly beyond the links and having notches e' in their 80 lower edges to straddle the stops 3 when in locking position, the connecting-piece e^2 between the latches constituting a handpiece to manually release the locking device.

Each link is herein shown as having a sec- 85 ond ear d^5 , to which is secured one end of a spring s, the other end thereof being attached to the extension e^3 of each latch projected forward beyond its fulcrum e^{\times} , the springs normally tending to throw the latches downward go

into engagement with the stops.

If the chair is elevated and it is desired to lower it, and thereby convert it into a rocker, the operator lifts the connecting-piece e^2 , thereby rocking the latches on their fulcra ex 95 and releasing the stops 3 from the notches e', whereupon the weight of the chair-seat operates to spread the cross-legs a b, the links swinging as described, and the chair assumes the position shown in Fig. 2, at which time 100 the cross-legs a b have their curved edges in parallelism and rest upon the floor to form rockers, while the chair-base c' c^2 is firmly supported above them.

To change the chair over from the rocker to elevated position, the chair-body is grasped and lifted, and as soon as the links assume a substantially vertical position the springs s 5 cause the latches to snap into operative engagement with the stops, as shown in Fig. 3. The locking mechanism thus automatically operates to set itself and lock the chair in

elevated position.

In Fig. 6 the cross-legs and the locking mechanism are substantially as hereinbefore described and shown; but the chair-base comprises rigidly-attached depending front and back legs $c^3 c^4$, the former pair having the 15 straps 4 attached thereto, while the upper ends of the links d are pivotally connected with the back $\log c^4$. In either case, however, the depending base is rigidly secured to the chair-seat and forms a firm and secure sup-20 port therefor either in elevated position or when lowered to form a rocker.

Each of the latches e is provided with a transverse slot e^5 , into which projects a pin or projection d^8 on the adjacent link to limit

25 the pivotal movement of the latch.

In another application, Serial No. 53,287, filed by me concurrently herewith, I have broadly claimed in a convertible chair the seat having a rigid base and with cross-legs, 30 the base being fulcrumed on the upper ends of one pair of cross-legs and connected by pivoted links to the upper pair of cross-legs, with locking means independent of the crosslegs to maintain the chair elevated, and such 35 broad construction is accordingly not herein claimed.

Having fully described my invention, what I claim as new, and desire to secure by Letters

Patent, is—

1. In a convertible chair, pivoted cross-legs curved on their inner, under sides to form rockers when the chair is lowered, and transverse connections between opposite pairs of said legs, combined with a chair-seat having 45 a rigid base fulcrumed on the upper ends of one pair of cross-legs, links pivoted to the base and to the upper ends of the other pair of legs, stops on the latter to engage the links when the chair is elevated, and locking means 50 to normally maintain such engagement.

2. In a convertible chair, pivoted cross-legs curved on their inner, under sides to form rockers when the chair is lowered, and transverse connections between opposite pairs of 55 said legs, combined with a chair-seat having a rigid base fulcrumed on the upper ends of one pair of cross-legs, links pivoted to the base and to the upper ends of the other pair of legs, stops on the latter to engage the links 60 when the chair is elevated, and means mounted on the links to engage the stops when the chair is elevated and prevent pivoted movement of the links.

3. In a convertible chair, pivoted cross-legs 65 curved on their inner, under sides to form rockers when the chair is lowered, and transverse connections between opposite pairs of l

said legs, combined with a chair-seat having a rigid base fulcrumed on the upper ends of one pair of cross-legs, depending links pivot- 70 ed to the base and at their lower ends pivoted to the upper ends of the other pair of crosslegs, stops on the latter to engage the links when in substantially vertical position, the chair being elevated, and means to lock the 75

links in such position.

4. In a convertible chair, pivoted cross-legs curved on their inner, under sides to form rockers when the chair is lowered, and transverse connections between opposite pairs of 80 said legs, combined with a chair-seat having a rigid base fulcrumed on the upper ends of one pair of cross-legs, links pivoted to the base and to the upper ends of the other pair of legs, stops on the latter to engage the links when 85 the chair is elevated, and connected notched latches fulcrumed on the links and adapted to coöperate with the stops when the chair is elevated, the connection between the latches constituting a handpiece.

5. In a convertible chair, pivoted cross-legs curved on their inner, under sides to form rockers when the chair is lowered, and transverse connections between opposite pairs of said legs, combined with a chair-seat having 95 a rigid base fulcrumed on the upper ends of one pair of cross-legs, links pivoted to the base and to the upper ends of the other pair of legs, stops on the latter to engage the links when the chair is elevated, connected latches ful- 100 crumed on the links and adapted to cooperate with the stops when the chair is elevated, and means to limit pivotal movement of the

latches.

6. In a convertible chair, pivoted cross-legs 105 curved on their inner, under sides to form rockers when the chair is lowered, and transverse connections between opposite pairs of said legs, combined with a chair-seat having a rigid base fulcrumed on the upper ends of iro one pair of cross-legs, links pivoted to the base and to the upper ends of the other pair of legs, stops on the latter to engage the links when the chair is elevated, connected latches fulcrumed on the links and adapted to coöper- 115 ate with the stops when the chair is elevated, and means to automatically set the latches when the chair is changed from lowered to elevated position.

7. In a convertible chair, pivoted cross-legs 120 curved on their inner, under sides to form rockers when the chair is lowered, and transverse connections between opposite pairs of said legs, combined with a chair-seat having a rigid base fulcrumed on the upper ends of 125 one pair of cross-legs, links pivoted to the base and to the upper ends of the other pair of legs, stops on the latter to engage the links when the chair is elevated, connected latches fulcrumed on the links and adapted to cooper- 130 ate with the stops when the chair is elevated, means to limit pivotal movement of the latches, and means to set the latches when the chair is elevated from lowered position.

8. In a convertible chair, pivoted cross-legs curved on their inner, under sides to form rockers when the chair is lowered, and transverse connections between opposite pairs of said legs, combined with a chair-seat having a rigid base fulcrumed on the upper ends of one pair of cross-legs, links pivoted to the base and to the upper ends of the other pair of legs, stops on the latter to engage the links when the chair is elevated, and an \(\begin{align*}\)-shaped bar fulcrumed at its ends on the links and having

notches in its sides to receive the stops and thereby lock the parts from relative movement when the chair is elevated.

In testimony whereof I have signed my 15 name to this specification in the presence of two subscribing witnesses.

ELWIN L. THOMPSON.

Witnesses:

W. P. ABBOTT, C. C. SPEARE.