E. L. THOMPSON. CONVERTIBLE CHAIR. APPLICATION FILED JUNE 15, 1904.

NO MODEL.

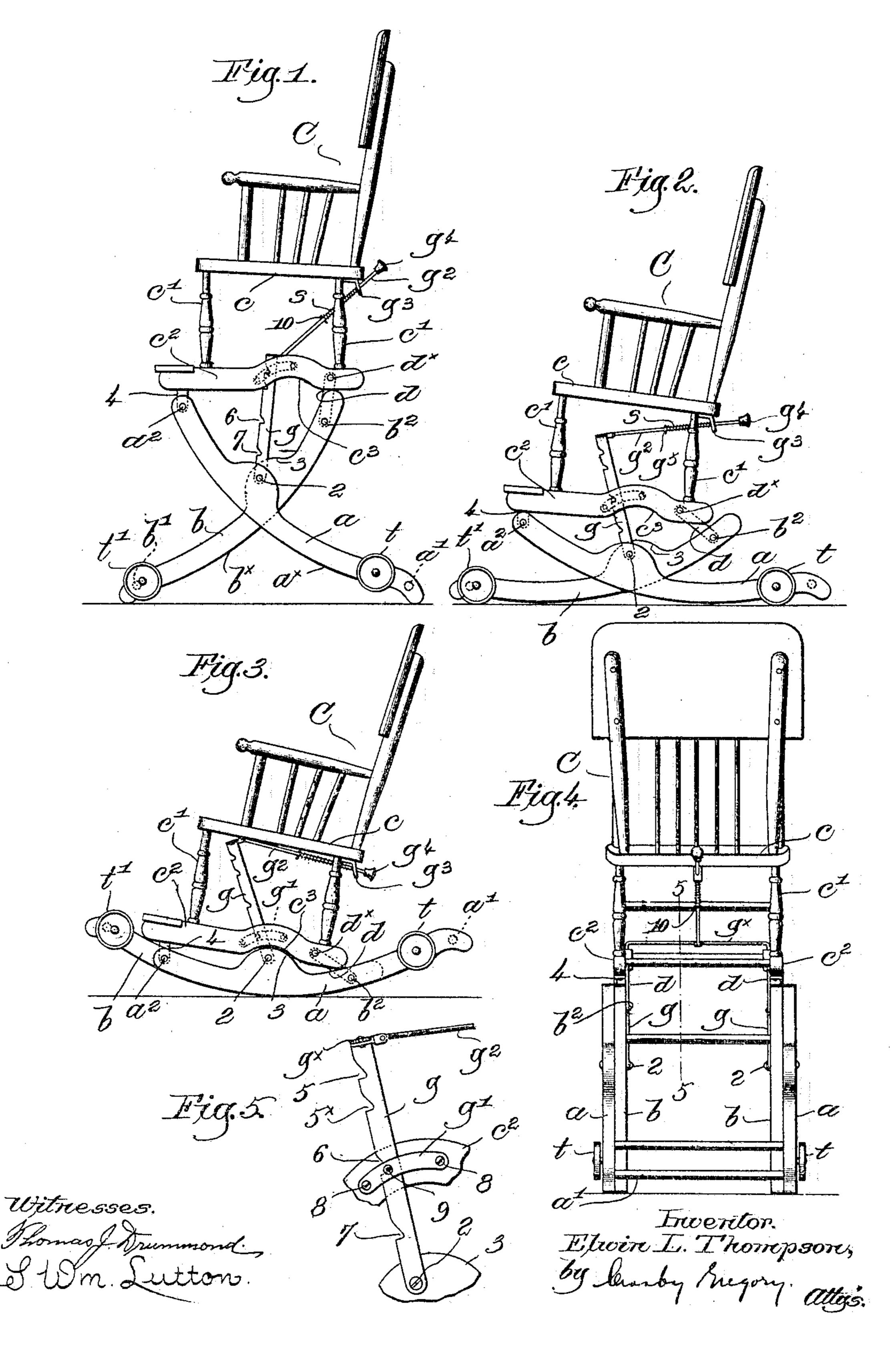


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United States Patent Office.

ELWIN L. THOMPSON, OF BALDWINSVILLE, MASSACHUSETTS.

CONVERTIBLE CHAIR.

SPECIFICATION forming part of Letters Patent No. 775,387, dated November 22, 1904.

Application filed June 15, 1904. Serial No. 212,628. (No model.)

To all whom it may concern:

Be it known that I, ELWIN L. THOMPSON, a citizen of the United States, residing at Baldwinsville, county of Worcester and State of 5 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 convertible chairs of the type which comprises a combined high and low chair, readily convertible from one to the other; and it has for its object the pro-15 duction of a novel chair of such type which can be converted from a high chair to a low chair, either a carriage or a rocker, as de-

sired.

In the present embodiment of my invention 20 I have provided means whereby the chair may be locked in two different positions as a high chair—that is, standing rigidly on its legs at two different elevations—and also in two low positions, the one as a carriage adapted to be 25 rolled about on wheels, and the other as a rocker. Thus the one chair practically embodies four different chairs in one, and I have embodied therein novel and efficient locking means to maintain the chair in any one of its 30 several positions.

The various novel features of my invention will be fully described in the subjoined specification, and particularly pointed out in the fol-

lowing claims.

Figure 1 is a side elevation of a convertible chair embodying one form of my invention in its elevated position. Fig. 2 is a similar view of the chair when lowered to its position to form a wheel-chair or carriage. Fig. 3 is a 40 side elevation of the chair completely lowered to form a rocker. Fig. 4 is a back view of the chair in the elevated position shown in Fig. 1, and Fig. 5 is an enlarged inner side elevation and partial section on the line 5 5, Fig. 45 4, of the means for locking the chair in the desired position.

The cross-legs a b, serving to support the chair when elevated and longitudinally convexed on their under edges at $a^{\times} b^{\times}$ to form 50 rockers when they are spread and the chair is

lowered in the position shown in Fig. 3, the transverse rounds a'b', rigidly connecting the pairs of crossed legs, which are pivotally connected at 2, and the seat c of the chair-body C, having a base comprising rigid depending legs 55 c', secured to side bars c^2 , recessed at c^3 to receive the enlargements 3 of the inner cross-legs when the chair is lowered, may be and are all substantially as in United States Patent No. 677,382, granted to me July 2, 1901. As in 60 said patent, the base is fulcrumed at a^2 on the upper ends of the cross-legs u by rigid metal straps 4, secured to the side bars c^2 of the base, and the latter is pivotally connected at d^{\times} with links d, pivoted to the cross-legs b at b^2 .

I have herein shown truck-wheels t t', pivotally mounted on the cross-legs a and b, respectively, at such a distance from their lower ends that when the chair is fully elevated or in its second elevated position the wheels will 7° not rest upon the floor or other supportingsurface, the chair then being firmly sustained upon the legs. When the chair is lowered into its third position, however, as shown in Fig. 2, the wheels rest upon the supporting- 75 surface and the chair is converted into a carriage which can be rolled from place to place.

As shown in Fig. 3, when the chair is converted into a rocker the truck-wheels are held

well up clear of the floor.

I have provided novel, strong, and very simple locking means to maintain the chair in desired position, said locking means being shown as upturned flat metal bars or latch members g g, fulcrumed at their lower ends 85 on the inner ends of the pivotal connections 2 of the cross-legs and rigidly connected at their upper ends by a cross-bar g^{\times} . The latch members g pass upward adjacent the inner faces of the side bars c^2 , the latter being lo- 90 cated vertically above the inside cross-legs b. Herein the latch members are shown as provided on their front edges with slanting notches 5, 5^{\times} , 6, and 7, the former two being near the upper ends of said members, while 95 the notches 6 are about midway between their upper and lower ends and the notches 7 are near their lower ends. A segmental fore-andaft guide-plate g' is securely attached at its ends to the inner face of each side bar c^2 , as 100

by screws 8, (see Fig. 5,) and the adjacent latch member g is adapted to swing back and forth between the side bar and guide-plate, as will be readily understood. A transverse 5 pin 9, extended across each guide, serves as a stop to cooperate with any one of the notches in the adjacent latch member to maintain the

chair in the desired position.

When the stops are in the notches 5, the 10 chair is maintained locked in its highest position, (shown in Figs. 1 and 4,) the latch members g transmitting the weight of the chairbody to the pivots 2, connecting the crosslegs, and the greater the weight on the chair-15 body the more firmly will the chair be locked in position.

The notches 5[×] when coöperating with the stops 9 hold the chair locked in a position intermediate that shown in Figs. 1 and 2, but 20 still as a high chair, the truck-wheels being

clear of the floor.

When the chair is lowered to cause the stops to enter the notches 6, as in Fig. 2, the chair is locked in position as a carriage, the truck-25 wheels then resting on the floor, the weight being transmitted to the pivots 2 through the latch members g, as before.

If the chair is to be converted into a rocker, the stops 9 will enter the lowest notches 7, 30 Fig. 3, and the side bars c^2 rest upon the upper

edges of the cross-legs b, as shown.

I have provided a convenient and readilyoperated releasing device for the locking means, shown as a rod g^2 , pivotally connected 35 at its forward end with the cross-bar g^{\times} and extended upward and rearward through a guide g^3 , secured to the back of the seat c, the rod having a knob or handle g^4 on its upper end at the back of the chair-body. A strong 40 spiral spring s is coiled around the rod g^2 between the guide g^3 and a pin 10 on the rod, the spring normally acting to push the latch members g forward against the stops 9. To disengage the latch members from the stops, 45 the operator grasps the knob g^4 and pulls the rod g^2 outward, it sliding longitudinally in the guide g^3 and pulling the latch members backward away from the stops, the spring s being compressed. The chair can then be lowered 50 to the next set of notches or to any of the notches desired, the spring causing the latch members to swing forward against the stops the instant the knob is released. The bottoms of the notches are substantially

55 at right angles to the front edges of the latch members, while their tops are inclined, so that to elevate the chair it is only necessary to lift it, as the inclined tops of the notches then serve as cams over which the stops 9 slide, the 60 spring s causing the latch members to snap into engagement with the next higher notches of the series. Inasmuch as I have provided a latch member at each side, there can be no twisting of the parts, and as said members are 65 rigidly connected at their upper ends they

move in unison into and out of cooperative engagement with their respective stops.

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

1. In a chair of the class described, the vertically-adjustable body, its pivotally-connected cross-legs, a latch mounted to swing beneath the seat of the chair-body and on the pivotal connection of the legs between the upturned 75 ends of the legs, means on the chair-body to coöperate with the latch and maintain the chair locked, and a manually-operated releasing device for the latch, separately mounted on the chair-body.

2. In a chair of the class described, the vertically-adjustable body, its pivotally-connected cross-legs, an upturned, swinging latch fulcrumed on the pivotal connection of the legs to swing beneath the seat of the chair-body and 85 having a plurality of locking-notches, means on the chair-body to cooperate with the notches and maintain the chair locked in different positions, and a manually-operated releasing device for the latch, mounted on the 90 chair-body and connected with the latch.

3. In a chair of the class described, the vertically-adjustable body, its pivotally-connected cross-legs, an upturned, swinging latch fulcrumed on the pivotal connection of the legs 95 to swing beneath the seat of the chair-body and having a plurality of locking-notches, means on the chair - body to cooperate with the notches and maintain the chair locked in different positions, and a spring-controlled, lon- 100 gitudinally-movable releasing device for and connected with the latch and operative from the back of the chair-body.

4. In a chair of the class described, the vertically-adjustable body, its pivotally-connect- 105 ed cross-legs, an upturned, swinging latch fulcrumed on the pivotal connection of the legs and having a plurality of locking-notches, a fore and aft guide carried by the chair-body and through which the upper end of the latch 110 passes, a transverse stop in the guide to engage with a notch of the latch and lock the chair in position, and a releasing device mounted on the chair-body and connected with the latch, to disengage the latter from the stop.

5. In a chair of the class described, the vertically-adjustable body having a rigid base, its pivotally-connected cross-legs, an -shaped latch member fulcrumed at its lower ends on the leg-pivots to swing beneath the seat of the 120 body, the upturned sides of said member having locking-notches therein, stops on the base of the chair - body to cooperate with the notches, and a spring-controlled releasing device mounted on the chair-body and pivotally 125 connected with the latch member, to disengage the notches thereof from the stops.

6. In a chair of the class described, the vertically-adjustable body having a rigid base, its pivotally - connected cross - legs, an -130

shaped latch member fulcrumed at its lower ends on the leg-pivots, the upturned sides of said member having locking-notches therein, fore and aft guides on the base, through which the upturned notched sides of the latch member extend, stops crossing the guides to coöperate with the notches and maintain the chair locked in position, and a spring-controlled releasing device connected with said latch member and manually operative at the back of the chair-body.

7. In a convertible chair, pivoted cross-legs curved on their inner, under sides to form rockers when the chair is lowered, and trans15 verse connection between opposite pairs of said legs, combined with a chair-seat having its rigid base fulcrumed on the upper ends of one pair of legs, links pivotally connecting the base with the upper ends of the other pair of legs, and a locking device for the chair comprising a member fulcrumed on the pivot of the cross-legs to swing beneath the seat of the body, a coöperating member on the chair-base, and manually-operated means mounted on the body to release said locking device.

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 its rigid base pivotally connected with the upper ends of the crossed legs, wheels on the crossed legs near their lower ends, upturned latch members fulcrumed on the pivotal connection between the legs and having a series of notches, guides for the said members mount-

ed on the base and each having a transverse stop to coöperate with a notch, and manuallyoperated releasing means connected with the upper ends of and to move said latch members in unison to disengage the same from the stops, the chair being adapted to be locked in raised position and in an intermediate position with the wheels supporting the chair.

9. In a convertible chair, pivoted cross-legs 45 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 its rigid base pivotally connected with the up- 50 per ends of the crossed legs, upturned, connected latch members notched on their front edges and fulcrumed on the pivotal connections between the legs to swing below the chair-seat, stops on the base to cooperate with 55 the notches and lock the chair in any one of a plurality of positions, a longitudinally-movable releasing device mounted on and operative from the back of the chair and pivotally connected with said latch members, to disen- 60 gage them from the stops, and a spring normally acting through the releasing device to maintain the latch members and stops in cooperation.

In testimony whereof I have signed my name 65 to this specification in the presence of two subscribing witnesses.

ELWIN L. THOMPSON.

Witnesses:

W. P. Abbott, W. P. Hawley.