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

NO MODEL.

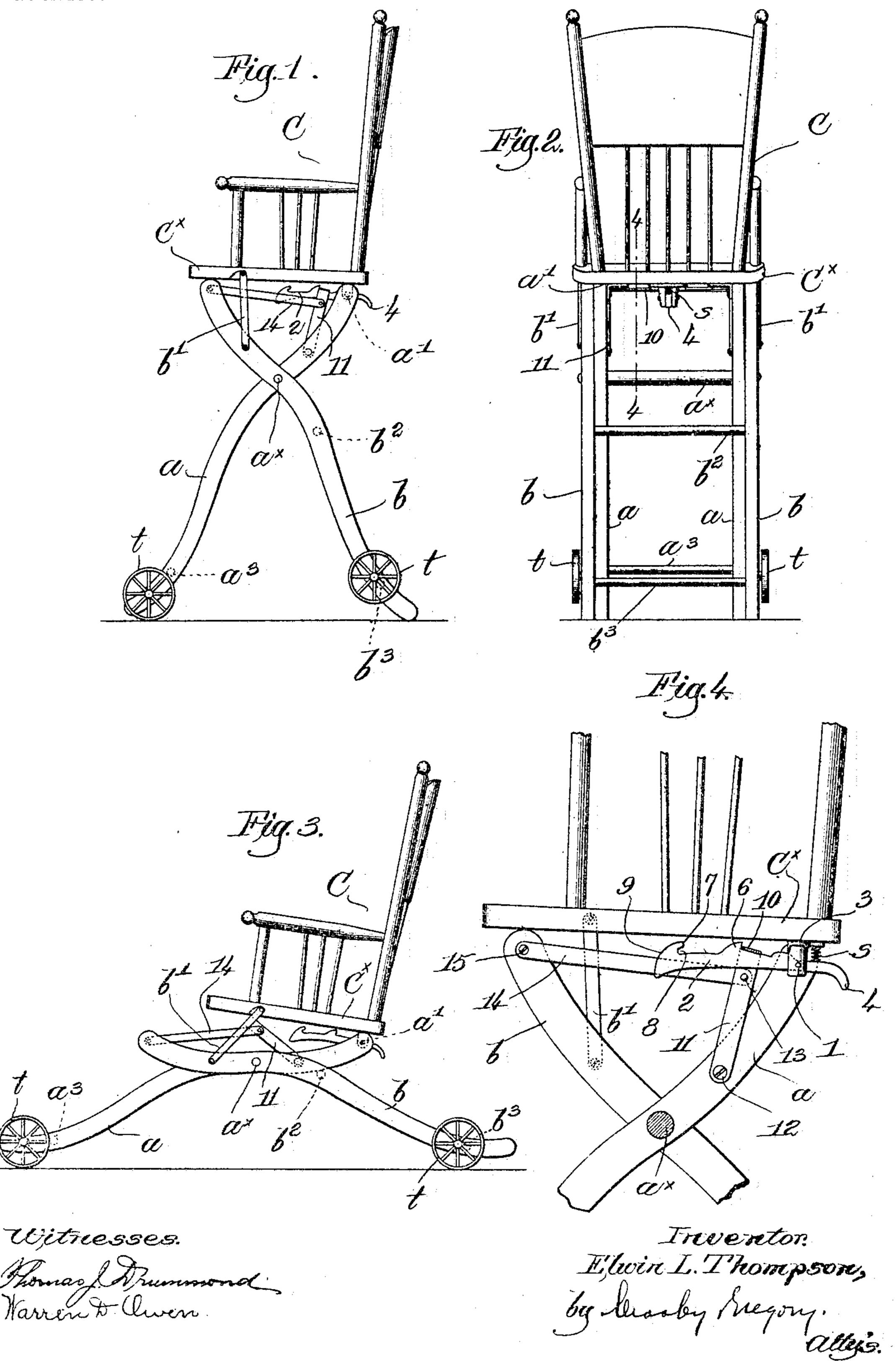


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## United States Patent Office.

ELWIN L. THOMPSON, OF BALDWINSVILLE, MASSACHUSETTS.

## CONVERTIBLE CHAIR.

SPECIFICATION forming part of Letters Patent No. 775,388, dated November 22, 1904.

Application filed June 15, 1904. Serial No. 212,629. (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, 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 parts.

This invention relates to chairs which can be converted at will into a high or low chair or carriage; and one of the objects of my present invention is the production of a chair of the convertible type which can be changed 15 to an intermediate position between that of

high chair and low carriage.

Another object of my invention is the production of novel locking means for holding the chair securely in its raised position and 20 which will not interfere in any way with the conversion into the low carriage. The locking means is so constructed and arranged that it will be moved automatically into operative position when the chair is raised and auto-25 matically withdrawn out of the way when the chair is lowered for conversion into a carriage.

The novel features of my invention will be fully described in the subjoined specification and particularly pointed out in the following

30 claims.

Figure 1 is a side elevation of a chair embodying one form of my present invention locked in its highest raised position. Fig. 2 is a rear elevation thereof. Fig. 3 is a side 35 elevation of the chair lowered to form a carriage, showing the locking means as moved out of the way of the parts of the chair; and Fig. 4 is an enlarged sectional detail on the line 4 4, Fig. 2, looking toward the right, 40 showing clearly the locking means.

The chair-body C, having a suitable seat C<sup>×</sup>, is pivotally connected with the upper ends of two pairs of legs a and b, crossed and having a pivotal connection at  $a^{\times}$ , the legs a45 being pivotally connected at a' with the chairbody, at the back thereof, while the legs b are connected by links b' to the body at the front, truck-wheels t being mounted on the crosslegs near their lower ends. A transverse 50 stop, shown as a rung  $b^2$ , rigidly connects the

outer legs b below their pivotal connection  $a^{\times}$  to support the legs a and limit further movement of the cross-legs when they are spread to lower the chair and convert it into a carriage, as shown in Fig. 3, the wheels t 55 then resting upon the floor or other supporting-surface. Other rungs,  $a^3 b^3$ , connect the pairs of legs at or near their lower ends to

stiffen and strengthen the same.

I have arranged the chair herein shown to 60 be capable of movement into two raised positions, with novel, simple, and effective means to lock it in either of such positions, and the locking means is so constructed as to move automatically out of the way when the chair is 65 lowered, as shown in Fig. 3, and to move into operative position when the chair is raised. To this end a slitted bracket 1 is secured to the under side of the seat C<sup>×</sup> and depends therefrom at its back, and a forwardly-ex- 70 tended latch 2 is fulcrumed at 3 in the bracket, the rear end of the latch being shaped to form a finger-piece or handle 4, all clearly shown in Fig. 4. A stout coiled spring s is interposed between the handle and an extension 5 75 of the bracket, in which one end of the spring is seated, the spring normally acting by its expansion to lift the front end of the latch. The upper edge of the latter is shaped to present two upright shoulders 6 and 7, the outer 80 one being preferably undercut or notched, as at 8, and beyond the shoulder 7 the upper edge of the latch is convexed or rounded, as at 9. A coöperating keeper is herein shown as a flat transverse metal bar 10, downturned 85 at its ends at 11 and fulcrumed at 12 on the legs a above the pivotal connection  $a^{\times}$ . The keeper is adapted to engage either of the latchshoulders 6 or 7, as the case may be, and to control the swinging movement of the keeper 90 it is pivotally connected at 13 with controlling-links 14, which in turn are fulcrumed at 15 on the legs b near their upper ends.

The weight upon the chair-body tends to spread the cross-legs, and this tendency is 95 overcome by the locking means, for when the latch and keeper are in coöperative engagement the spreading of the upper ends of the cross-legs is resisted by the controlling-links 14, which hold the keeper against the latch- 100 shoulder. The greater the downward pressure upon the chair-body the more securely

will the chair be locked in position.

In Figs. 1, 2, and 4 the chair is in its high-5 est position, and to lower it to intermediate position the operator lifts the handle 4, depressing the latch to withdraw the shoulder 6 from the keeper, whereupon the spreading tendency of the cross-legs acts to draw the 10 latch and keeper in opposite directions, bringing the keeper up against the shoulder 7 and again locking the chair, now in its intermediate position. (Notshown.) I prefer to notch this shoulder, as at 8, to receive the edge of 15 the keeper 10 and positively prevent any slight accidental movement of the latch to free the keeper. Now if it is desired to lower the chair to the position shown in Fig. 3 the latch-handle 4 is again raised, while the chair-20 body is slightly lifted to cause disengagement of the keeper and the notched shoulder 7, and then the chair is allowed to descend as the cross-legs spread until the legs a rest upon the stop  $b^2$ , Fig. 3. As the legs spread the links 25 14 act to swing the keeper forward and downward out of the way of the chair-seat C<sup>×</sup>, while the spring s retains the latch in normal position. When the chair is raised, the links 14 swing the keeper 10 upward and rearward 30 into engagement with the curved edge 9 of the latch, depressing the latter to cause it to slide under the keeper, so that the same may engage automatically one or the other of the shoulders 7 or 6, as may be desired.

The locking means is easily and readily controlled or operated manually from the back of the chair-body, and when the chair is raised from a lower to a higher position it is locked

automatically in the higher position. 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, pivotally-connected 45 cross-legs to the upper ends of which the chair is pivotally connected, and locking means to maintain the chair in raised position, comprising a member mounted on the chair-body, and a coöperating member operatively connected 50 with both pairs of cross-legs above their pivotal connection.

2. In a chair of the class described, the vertically-adjustable body, pivotally-connected cross-legs to the upper ends of which the chair 55 is pivotally connected, and locking means to maintain the chair in raised position, comprising a spring-controlled, shouldered member mounted on the chair-body at the back and projecting forward thereunder, and a coopόο erating member operatively connected with both pairs of cross-legs above their pivotal connection.

3. In a chair of the class described, the vertically-adjustable body, pivotally-connected 65 cross-legs to the upper ends of which the chair

is pivotally connected, and locking means to maintain the chair in raised position, comprising a spring-controlled, double-shouldered latch mounted on and beneath the chair-body at the back thereof, a coöperating keeper mount- 70 ed to swing on one pair of cross-legs above their pivotal connection, and connections between said keeper and the other pair of legs, to move the keeper into and out of operative position when the chair is raised and lowered, 75 respectively.

4. In a chair of the class described, the vertically-adjustable body, pivotally-connected cross-legs, transverse connections between opposite pairs of said legs, the chair-body being 80 fulcrumed on the upper ends of one pair of cross-legs, links pivoted to the upper ends of the other pair and to the chair-body, a latch mounted on the latter, and means pivotally mounted on both pairs of cross-legs above their 85 pivotal connection to cooperate with the latch and maintain the chair in raised position.

5. In a chair of the class described, pivotally-connected cross-legs, a chair-body fulcrumed on the upper ends of one pair of legs, 90 links pivoted to the upper ends of the other pair of legs and to the chair-body, a transverse keeper having its ends downturned and fulcrumed on the former pair of legs, a springcontrolled shouldered latch pivotally mount- 95 ed on and beneath the chair-body and forwardly extended to cooperate with the keeper, and controlling-links pivotally connected with the keeper and with the upper ends of the front pair of legs, disengagement of the latch 100 and keeper permitting the cross-legs to spread and thereby lower the chair-body, closing of the cross-legs acting through the controllinglinks to effect automatically cooperation of the latch and keeper.

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6. In a chair of the class described, pivotally - connected cross-legs, truck - wheels mounted thereon near their lower ends, a transverse stop connecting one pair of legs to engage the other pair when the cross-legs are 110 spread to lower the chair and form a carriage, a chair-body pivotally connected with the upper ends of the cross-legs, a transverse, swinging keeper mounted on one pair of legs to swing beneath the chair-body, a cooperating, 115 spring-controlled latch mounted on the latter at the back, and controlling-links pivotally connected with the upper ends of the other pair of legs and with the keeper, to automatically move the latter out of the way when the 120 chair is lowered to form a carriage and to move it into operative position with relation to the latch when the chair is raised.

In testimony whereof I have signed my name to this specification in the presence of two sub- 125 scribing witnesses.

ELWIN L. THOMPSON.

Witnesses:

W. P. Abbott, W. P. HAWLEY.