Dec. 26, 1933. B. A. FLEMING 1,940,679

ARTICLE OF FURNITURE

Filed Feb. 29, 1932 3 Sheets-Sheet 1

Fig. 1.

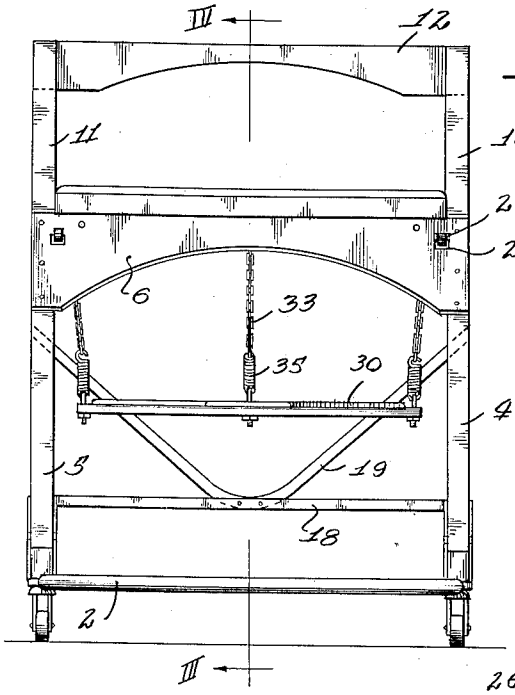


Fig. 2.

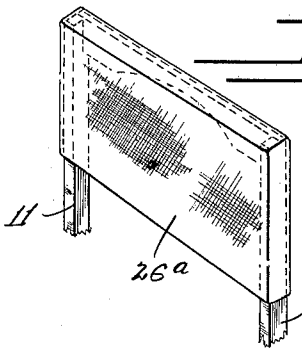


Fig. 3.

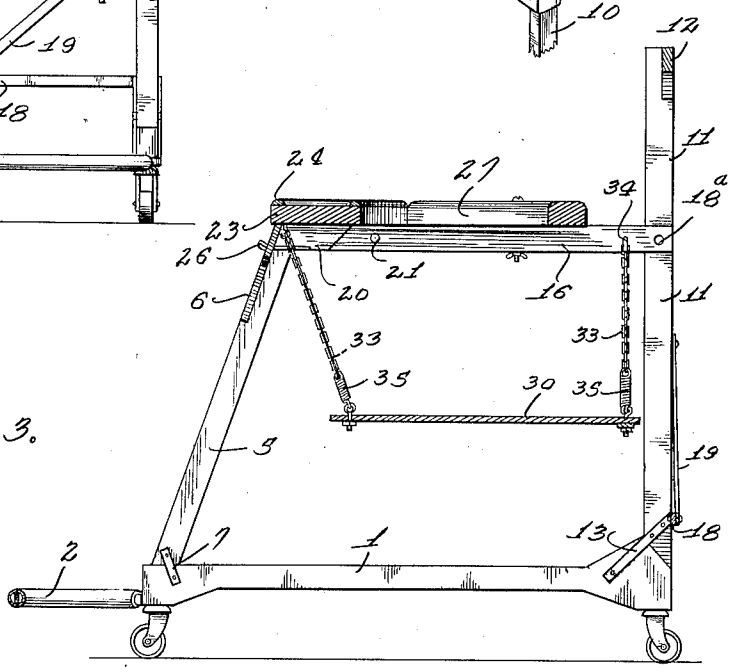
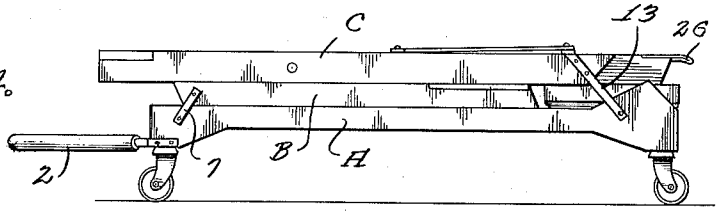


Fig. 4.



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Dec. 26, 1933. B. A. FLEMING 1,940,679

ARTICLE OF FURNITURE

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Fig. 5.

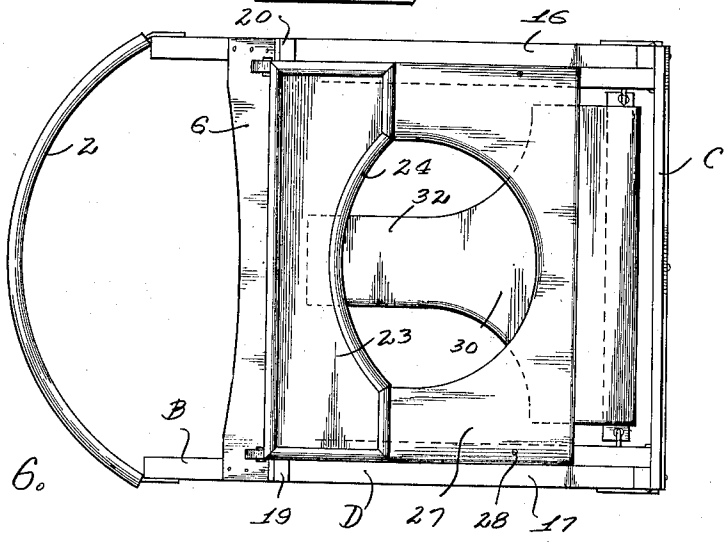


Fig. 6.

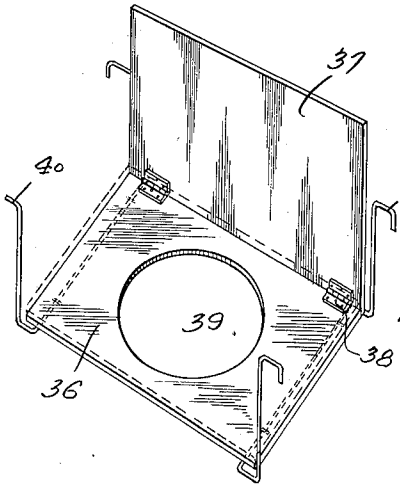
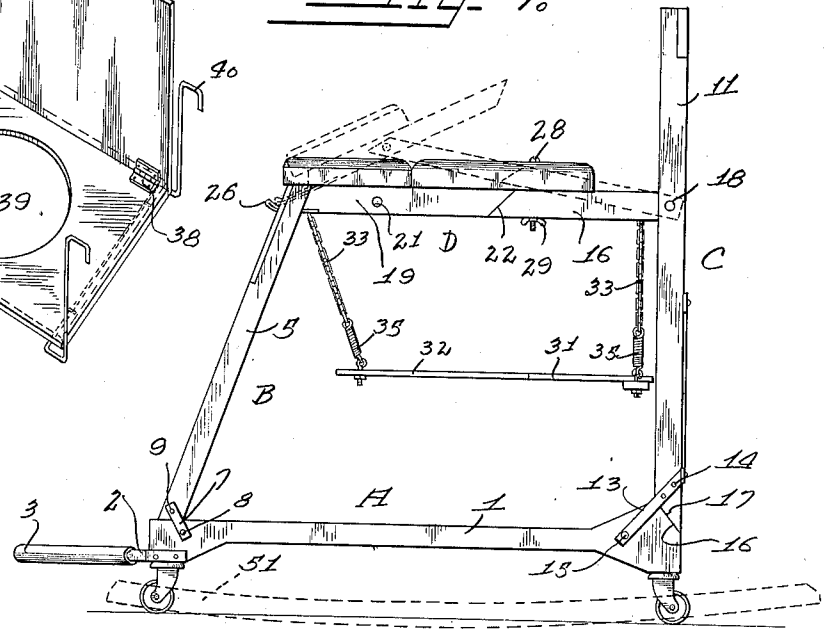


Fig. 7.



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Dec. 26, 1933. B. A. FLEMING 1,940,679

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Fig. 8.

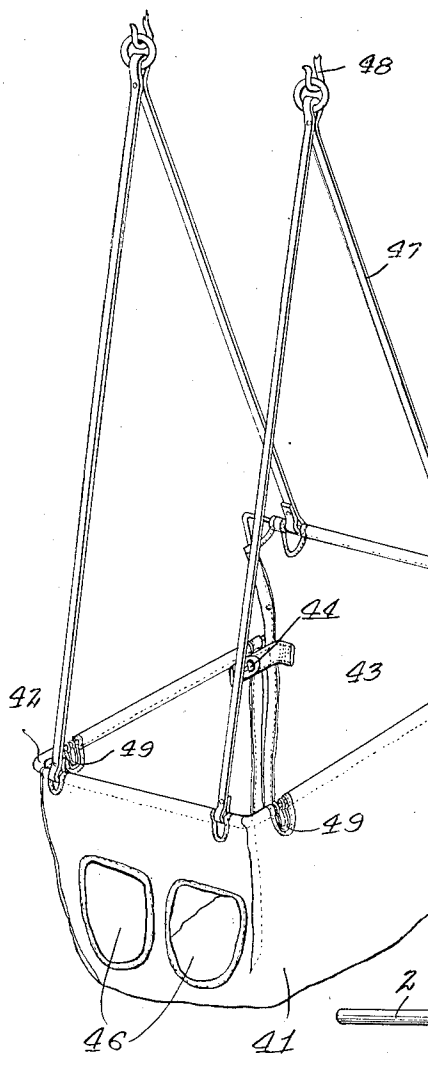


Fig. 9.

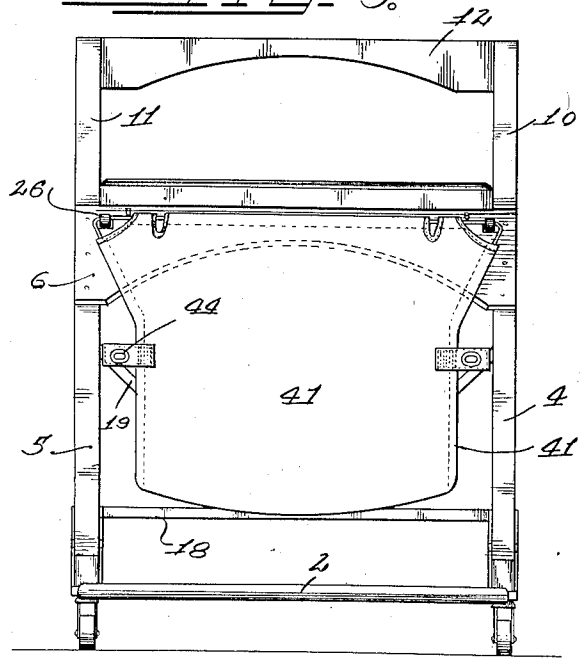
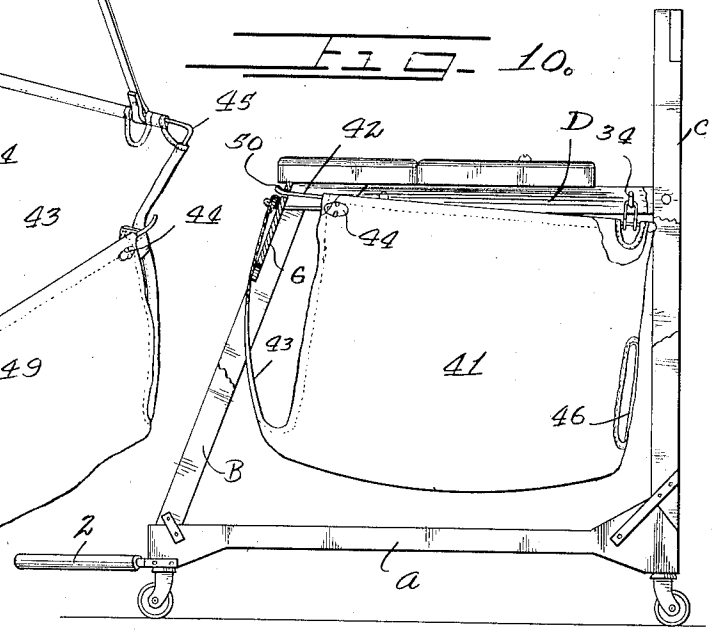


Fig. 10.



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Patented Dec. 26, 1933 1,940,679

UNITED STATES PATENT OFFICE

1,940,679

ARTICLE OF FURNITURE

Billie A. Fleming, Miami, Fla.

Application February 29, 1932. Serial No. 595,677

8 Claims. (Cl. 155—22)

This invention relates to an article of furniture and more particularly to a combination chair and walker for a child and concerns itself with an article which may be readily collapsed for carrying purposes or which may be opened for use as a walker, a chair, or a rocking chair.

An object of the present invention is to provide an article of furniture such as a chair which may be readily collapsed for carrying purposes and which may be opened and maintained in opened position for use.

Another object of the invention is to provide a combination chair and walker for a child, which chair may be readily supplied with any one of several forms of seats to make the chair available as a straight chair or a rocking chair or adaptable as a walker by interchange of some of the parts, which interchange may be quickly and expeditiously effected as desired.

A further object of the invention is to provide a combined chair and walker for a child, which chair may be economically manufactured and which is efficient in use.

The above, other and further objects of the invention will be apparent from the following description, accompanying drawings and appended claims.

The accompanying drawings illustrate embodiments of the present invention together with various ways in which the chair may be utilized.

The views of the drawings are as follows:

Figure 1 is a front elevational view of an article of furniture embodying principles of the present invention, and showing the same in extended position and in front elevation.

Figure 2 is an isometric view of a canvas cover which may be applied over the back of the illustrated form of chair.

Figure 3 is a vertical sectional view through the chair of Figure 1, showing the same assembled as a walker.

Figure 4 is a side elevational view of the chair in collapsed position, for carrying purposes.

Figure 5 is a top plan view of the chair illustrated in Figures 1 and 3.

Figure 6 is an isometric view of one of the various forms of seats that may be employed in a chair embodying the present invention.

Figure 7 is a side elevational view of a chair showing in the full lines the same in extended or opened position and in dotted lines at the bottom, rockers substituted for the rollers and in dotted lines at the top the position assumed by the side arms in initiating the collapsing act.

Figure 8 is an isometric view of the canvas seat of the present invention provided with straps for supporting the same in a doorway so as to serve as a jumper for a small child.

Figure 9 is a front elevational view of a chair embodying the principles of the present invention equipped with the canvas seat of Figure 8.

Figure 10 is a side elevational view of the chair of Figure 9.

The drawings will now be explained.

The form of chair chosen to exemplify the present invention consists primarily of a base A, a front B, a back C, and side arms D.

The base A comprises two side bars 1 which at the front ends are connected by a curved bar 2 provided with a rubber cover 3 and serving as a bumper.

The front B comprises two uprights 4 and 5 connected at the upper ends by a plate 6. The uprights 4 and 5 are swingingly or hingedly connected to the side bars 1 by links 7 each of which is pivoted to a side bar 1 by a pin 8 and to an upright by a pin 9. Such construction allows swinging of the front with respect to the base and at the same time allows limited bodily movement of the front with respect to the base to accommodate the swinging movement of the front and also move it on the base when opened to provide a firm footing for the front. The front B when opened or extended is preferably made to stand in an inclined position with respect to the base A and to incline backwardly a slight amount.

The back B comprises two uprights 10 and 11 which are connected at the upper ends by a back rest 12 and which at the lower ends are swingingly or hingedly connected to the side bars 1. Links 13 rigidly secured to the lower edge of the bars 10 and 11 by rivets or pins 14 are pivotally connected to the side bars 1 by pins 15. The side bars 1 at the rear ends thereof are preferably enlarged to provide inclined surfaces 16 for engagement by the inclined ends 17 of the side bars 10 and 11; the purpose of which construction is to afford proper footing for the back when extended and to enable ready collapse of the back when it is desired to fold the same into the form shown in Figure 4.

The back C is strengthened with a cross brace 18 and other braces 19, which latter are illustrated as fastened to the cross brace 18. This construction provides a chair which is strong and rigid and which at the same time is light enough to be readily moved by a child when using it as a walker and also light enough to be readily carried when collapsed.

Each side arm unit consists of two members,

sections or side bars 16 and 17 which are pivoted at 18*a* to the uprights 10 and 11 of the back C. The side bars 16 and 17 stop short of the front B when in extended position. Short arms 19 and 20 are connected by pivots 21 to the arms 17 and 16 respectively so that the combined length of the arms 17 and 19 on one side and 16 and 20 on the other side provides a side arm unit of sufficient length to engage the front member B when the same is opened. The arms 16 and 17 are cut away for a portion of the length of the same to receive the extended ends of the arms 19 and 20 as shown in dotted lines in Figure 7. The meeting ends of the arms 19 and 17 and 20 and 16, respectively, are inclined as at 22 in Figure 7 for cooperating the pivot 21 to provide rigid side arm construction of this portion of the chair.

A tray 23 is fastened to the arms 19 and 20 so as to be in front of a child occupying the chair. The tray 23 is provided with the usual rail 24 to prevent accidental displacement of toys or dishes placed on the tray for the child.

The upper member 6 of the front B is provided with apertures 25 to receive projections or hooks 26 secured to the arms 19 and 20. The projections or hooks 26 are preferably curved upwardly to aid in inserting the same and removing the same from the apertures 25 and also to aid in holding the parts together in operative position.

A fabric or canvas cover 26*a* may be employed to apply over the upper end of the back C as affording greater comfort to the child occupying the chair.

The tray 23 has a concave rear edge for purposes well understood.

A keeper piece 27 having an enlarged concave front edge is removably applied to the side arm unit D for preventing a child within the chair from climbing out of the same. The keeper piece 27 is secured to the arms by bolts 28 passing through apertures in the keeper piece and the arms and is secured by wing nuts 29 engaging the bolts so that the keeper piece may be readily applied to or removed from the arm unit D. There are various forms of seats that may be employed with the chair of the present invention.

The seat illustrated in Figures 1, 3, 5, and 7 is herein termed "a saddle" as the child straddles the saddle for walking purposes. A saddle 30 has an enlarged rear portion 31 and a forwardly extending portion 32 of less width, the width being such as to enable a child to readily straddle the same while the widened rear portion 31 serves as a seat. The seat 30 is removably supported in the chair by means of chains 33 which have hooking engagement with hooks 34 of the side arm unit D. Preferably, springs 35 are interposed between the chains 33 on the seat 30 so that a child in using the chair may bounce, if he so desires, with comfort.

Another seat which may be employed is that illustrated in Figure 6, which seat comprises a bottom portion 36 and a back portion 37 connected to the bottom portion 36 by hinges 38. The bottom portion 36 is provided with an opening 39 so that this seat may be used as a toilet seat if desired. The top 37 might be moved against the bottom 36 and then the child would have a flat seat in the chair. The seat of Figure 6 is removably supported in the chair by means of hooks which engage over the side arms of the side arm unit D between the rear edge of the tray 23 and the back C.

Another form of seat which may be readily used with the chair of the present invention is that illustrated in Figures 8, 9 and 10 and the same consists of a canvas or other fabric structure 41 made with three sides shaped in box-like form and with the upper ends of these sides fastened over a U-shaped bar 42. This seat has a flap portion 43 which may be brought up and fastened to the sides of this seat by buttons 44 or other suitable fastening means. The flap 43 has a U-shaped reinforcing bar 45 inserted in its free end. The wall of the seat opposite the flap 43 is provided with two apertures 46 through which the child may pass his legs if he so desires, thus using it as a jumper as illustrated in Figure 8, in which event the seat would be supported by straps 47 engaging hooks 48 forming a part of a spring suspension.

The seat just described may also be applied to the chair or walker as illustrated in Figure 10; in such event, the U-shaped rod 42 has metallic loops 49 secured thereon which engage hooks 34 at the rear of the side arm unit D with the free ends of the rod 42 extending through suitably disposed apertures 50 in the front plate 6 of the front B. Such an arrangement of the seat member 41 would bring the leg openings 46 at the rear of the walker. It is within the contemplation of the present invention to provide the leg openings 46 in the end flap 43 as well as in the end of the seat member as illustrated in the drawings.

It will be observed that the chair of the present invention is one which is readily collapsible and extensible and when collapsed may be readily carried by means of the bumper 2 as a handle. The chair also is adaptable to receive any of a plurality of different forms of seats such as illustrated in the drawings, for different uses, which seats are readily interchangeable with minimum effort.

The chair illustrated in Figures 1, 3, 4, 9 and 10 is provided with rollers or casters, while, as shown in Figure 7, rockers which may be applied to the chair by removing the casters and inserting the rockers, which are provided with spindles for entering the caster openings in the base A in lieu of the casters.

The chair of the present invention is one which is very readily collapsed, which is possible when the keeper piece 27 is removed as then the arms constituting the side arm unit D may be moved to the dotted line position of Figure 7 whereupon the projections 26 may be removed from the apertures in the plate 6 of the front and the front and seat unit disconnected. The front unit is then folded against the base unit A with the back unit against the front unit as illustrated in Figure 4. The parts may be fastened together by straps or similar fastening means.

The keeper 27 is shown as attached to the side arms in a manner to overlie the hinged connections between the bars, sections, or members 20 and 16 constituting the side arms. The keeper, therefore, when fastened to the portions 16 of the side arms overlies the hinged connections between the members or sections 20 and 16 of these arms and thus prevents unhinging action of the sections of the side arms, thereby preventing accidental collapse of the chair.

The invention has been described more or less precisely as to details, yet it is understood that the invention is not limited thereby, as changes may be made in the arrangement and proportion

of parts and equivalents may be substituted, without departing from the spirit and scope of the invention.

The invention is claimed as follows:

1. A combination chair and walker for a child comprising a roller supported frame structure, side arms, means supporting said arms on said frame structure, a tray on said side arms, and a keeper piece secured to said arms and cooperating with said tray to prevent a child from climbing out of the walker.

2. A combined chair and walker for a child, in combination, a base comprising side bars and an outwardly curved rail connecting the front ends of the side bars, a front member hinged to the front of said base, a back member hinged to the rear of said base, said front and back members being swingable against said base to fold the chair for carrying purposes, said front member when opened being inclined rearwardly toward the back, said back member when opened being substantially vertical, side arms connecting the back and front members when opened for maintaining said members in operative position, said arms being swingably connected to one member and removably associated with the other member, and interchangeable seats removably supported by said arms, said arms carrying a tray and a removable keeper piece, said tray and keeper cooperating to prevent a child climbing out of the walker.

3. A combination chair and walker for a child comprising a roller supported frame structure, side arms, means supporting said arms on said frame structure, a tray on said side arms, a keeper piece secured to said arms and cooperating with said tray to prevent a child from climbing out of the walker, and a removable seat suspended from said arms.

4. A combined chair and walker for a child, in combination, a base comprising two parallel side bars and a curved bumper bar connected to the front ends of said side bars, the upper surface of said side bars being horizontal adjacent the front ends thereof, a chair front connected to said base by links, the lower ends of said front being cut aslant for resting against the horizontal surfaces of said base when said front is set up to incline said front rearwardly, the upper surfaces of said side bars at the rear ends thereof having downwardly and rearwardly inclined surfaces, a back connected to said base by links, the lower ends of the back having inclined ends complemental to the inclined surfaces of said base side bars so that the back is substantially vertical when set up, the linkage connections between said base and front enabling folding said front flatwise against said base and the linkage connection between the base and back enabling folding of the back flatwise against the front, side arms hinged to said back and removably engageable with the front to maintain the walker in set up position, and a removable seat suspended from said arms, the side bars being provided with means to interchangeably receive casters or rockers.

5. A combined chair and walker for a child, in combination a base comprising two parallel side bars and a curved bumper bar connected to the front ends of said side bars to provide a rigid base, a front hingedly connected to the front of said base adapted to lie flat-wise against said base when collapsed, a back hingedly connected to the rear of said base adapted to lie flat-wise against said front when collapsed, side arms pivoted to said back and having locking engagement with said front to maintain the chair in set-up position, said front and back being otherwise unconnected from each other, each of said side arms comprising hingedly connected sections, and means overlying the hinged portions of said arm sections for locking said side arms in extended position to prevent accidental collapse of the chair.

6. A collapsible chair and walker for a child comprising in combination, a base, a front and a back hinged to said base to fold one atop the other in substantial contact when collapsed, links connecting said front and back to said base to permit such folding action thereof, the ends of the front and back adjacent the base being cut aslant to cooperate with predetermined shaped portions of said base to maintain one in substantially vertical position and the other inclined towards the one when in set up position, hinged means connecting said front and back for maintaining the same in set up position, and means for locking said hinged means in extended position to prevent accidental collapse of said chair.

7. A collapsible chair and walker for a child comprising in combination, a base, a front and a back hinged to said base to fold one atop the other in substantial contact when collapsed, links connecting said front and back to said base to permit such folding action thereof, the ends of the front and back adjacent the base being cut aslant to cooperate with predetermined shaped portions of said base to maintain one in substantially vertical position and the other inclined toward the one when in set-up position, side arms connecting said front and back for maintaining the same in set-up position, each of said side arms comprising hingedly connected sections, and means reaching from one side arm to the other side arm and overlying the hinged portions of said arm sections for locking said side arms in extended position to prevent accidental collapse of said chair, said last mentioned means constituting a keeper to prevent a child from climbing or falling out of the chair.

8. A collapsible chair and walker for a child, in combination, a roller supported base, a front section hinged to the front end of said base and foldable rearwardly thereagainst, a back section hinged to the rear end of said base and foldable forwardly to rest against the front section when folded, side arms hingedly connected to one of said sections and having engagement with the other of said sections to maintain said chair in set-up position, each of said side arms comprising two members hinged together, a seat suspended from said arms, the suspension means for said seat constituting the sole support therefor, and a keeper extending from one side arm to the other side arm and removably attachable to said arms in overlying relation to the hinges of said members to prevent accidental unhinging of said arm members and disengagement of said arms from said other section to prevent a child from climbing out of the chair.

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