

June 21, 1960

P. L. BARKER
CHAIR FOR INFANTS

2,941,579

Filed May 7, 1956

2 Sheets-Sheet 1

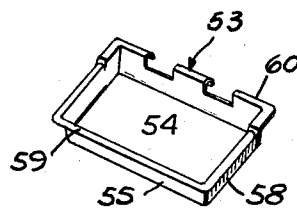
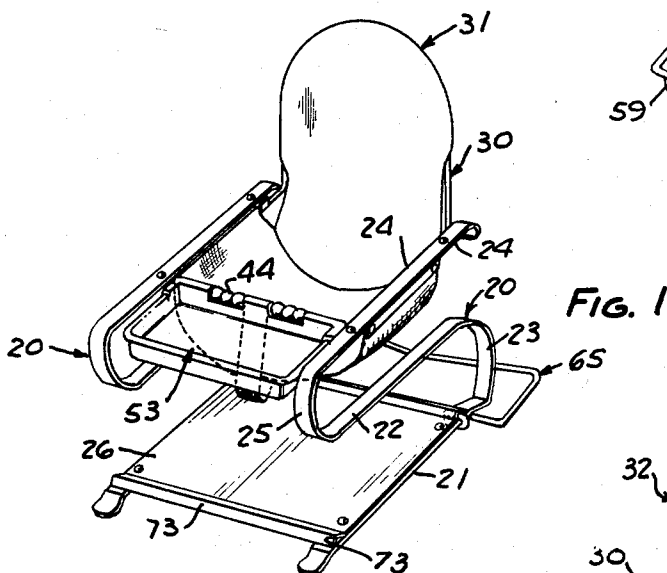


FIG. 4

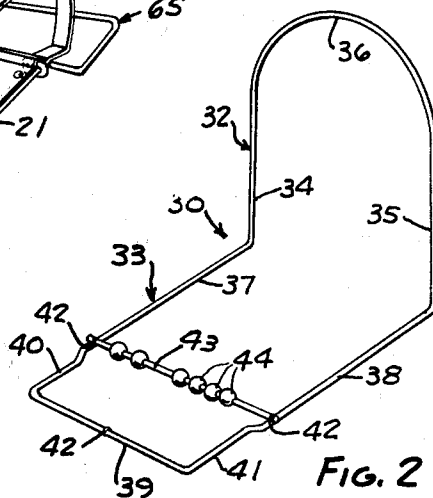


FIG. 2

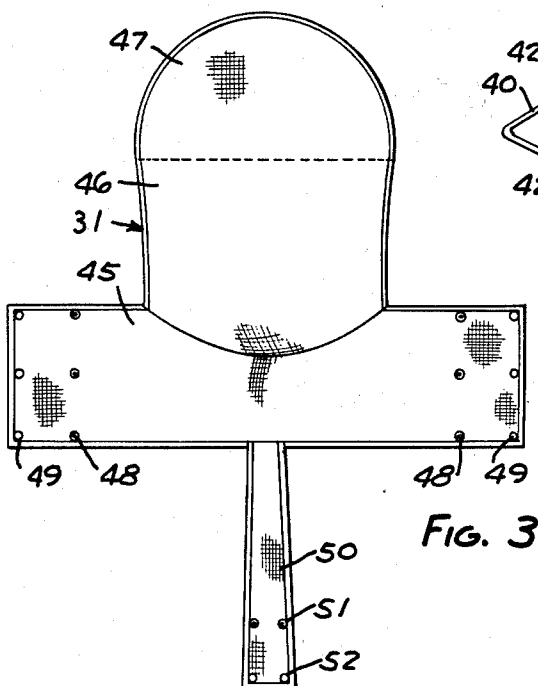


FIG. 3

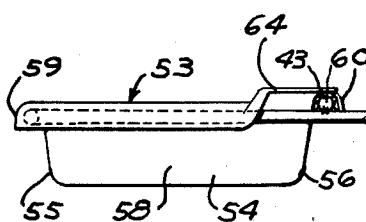


FIG. 5

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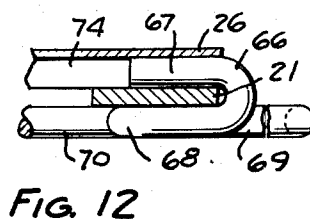
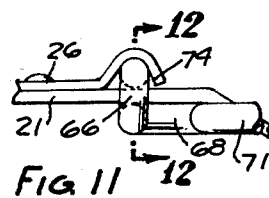
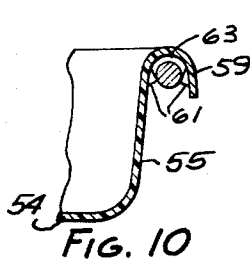
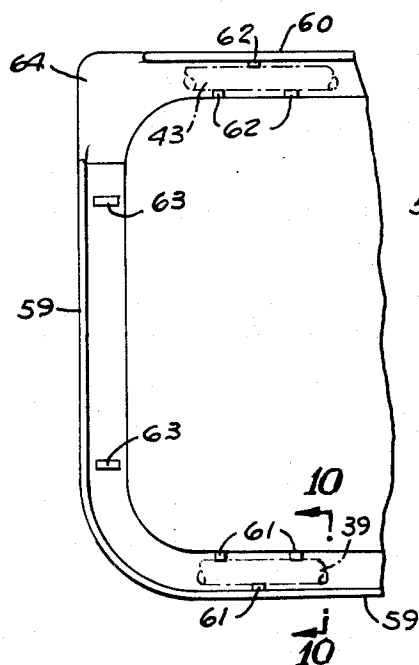
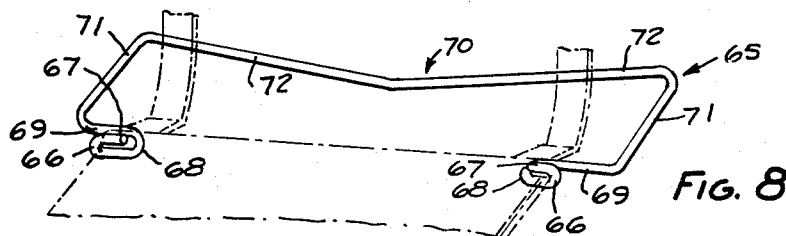
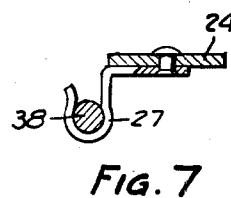
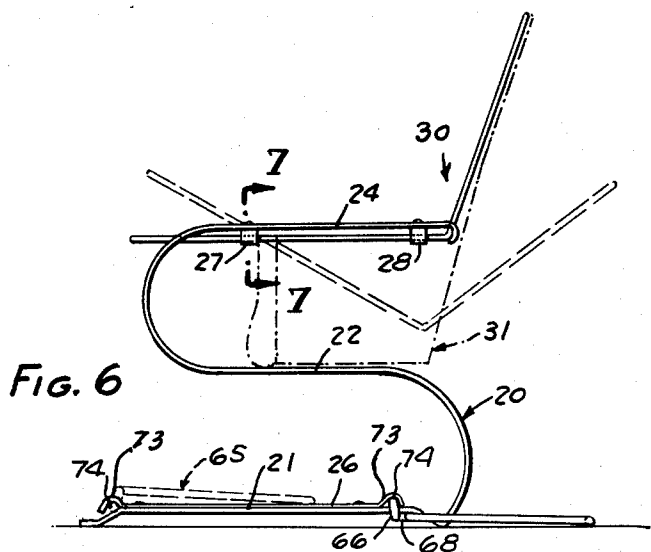
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2,941,579

CHAIR FOR INFANTS

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8 Claims. (Cl. 155—17)

This invention relates to a chair for infants and more particularly to such a chair having spring legs which will teeter or spring up and down when the chair is occupied by the infant.

This type of chair for infants comprises a spring frame, a seat frame supported by the spring frame and a seat supported by the seat frame.

It is an object of this invention to provide such a chair in which the seat may be easily assembled to and disassembled from the seat frame.

It is a further object of the invention to provide such a chair which has a novel tray structure.

It is a further object of this invention to provide such a chair which includes stabilizing members to prevent the chair from being tipped over by the movements of the infant in the chair.

In the drawings:

Fig. 1 is a perspective view of the assembled chair showing one of the stabilizing members in operative position.

Fig. 2 is a perspective view of the seat frame.

Fig. 3 is a plan view of the seat cover.

Fig. 4 is a perspective view of the tray.

Fig. 5 is a side elevational view of the tray.

Fig. 6 is a side elevational view of the chair.

Fig. 7 is a sectional view taken along the line 7—7 in Fig. 6.

Fig. 8 is a perspective view of a stabilizing member.

Fig. 9 is a fragmentary bottom plan view of the tray, on an enlarged scale.

Fig. 10 is a sectional view taken along the line 10—10 in Fig. 9.

Fig. 11 is a side elevational view, on an enlarged scale, of the portion of the seat showing the connection of the stabilizing member to the frame.

Fig. 12 is a sectional view taken along the line 12—12 in Fig. 11.

Referring to Fig. 1, the chair comprises two upstanding legs or springs 20 of an S configuration, including a lower leg 21 connected to an intermediate leg 22 by a curved portion 23 and an upper leg 24 connected to the intermediate leg 22 by a curved portion 25. A sheet metal plate 26 extends between the lower legs 21 and provides a foot rest. As shown in Figs. 1 and 6, the lower leg 21 has the major portion thereof intermediate the ends spaced vertically from the ends so that, when the frame rests on the floor, the central portion is spaced from the floor. Portions 73 adjacent the front and rear of legs 21 are bent upwardly away from leg 21 to provide lateral extending sockets or openings 74 on each end of each leg 21 and overlying a portion of the leg 21 which is spaced above the floor.

Each upper leg 24 of each leg 20 is provided with a front U-shaped spring bracket 27 and a rear U-shaped spring bracket 28 fixed thereto by suitable means such as rivets for supporting seat frame 30, as presently described. The seat of the chair includes a seat frame 30 and a seat cover 31. As shown in Fig. 2, seat frame

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30 comprises a vertical U-shaped portion 32 and a horizontal U-shaped portion 33. Vertical U-shaped portion 32 includes parallel legs 34, 35 connected by an arcuate bight portion 36. Horizontal U-shaped portion 33 includes parallel legs 37, 38 connected to each other by a straight bight portion 39 extending substantially at right angles between legs 37, 38. The end portions 40, 41 of the legs 37, 38 of horizontal U portion 33 are bent inwardly so that the distance between the legs is less in the area adjacent bight portion 39. Legs 34, 35 of vertical U portion 32 are connected to legs 37, 38 of horizontal U portion 33 at substantially right angles so that the bight portions 36, 39 are remote from each other.

The seat frame 30 may be made from a suitable piece of wire bent to the proper shape and having the ends welded together, for example, as shown at 42.

A transverse rod 43 extends between legs 37, 38 adjacent the inwardly bent portions 40, 41. Rod 43 is fastened to legs 37, 38 in a suitable manner, for example, by welding. Beads 44 may be mounted on rod 43 before it is fastened to legs 37, 38. Rod 43 may be made of the same type of wire as is used to make U-shaped portions 32, 33.

Seat cover 31 is made of canvas or other flexible material such as plastic and comprises a rectangular seat portion 45, back portion 46 extending at right angles to seat portion 45 and formed with an envelope 47 on the end thereof. Envelope 47 is adapted to be slipped over bight portion 36 of vertical U portion 32 on seat frame 30. The ends of rectangular seat portion 45 are provided with snap fasteners 48, 49 whereby the ends of the seat portion 45 may be looped over legs 37, 38 of seat frame 30 and the snap fasteners may be engaged to hold the seat portion 45 in position on seat frame 30 (Figs. 1, 6).

Seat canvas 31 also includes a longitudinally extending tab 50 extending at right angles to seat portion 45 and having snap fasteners 51, 52 on the end thereof, whereby the end of tab 50 may be looped over transverse rod 43 of seat frame 30 and the snap fasteners 51 and 52 may be interengaged to hold the front end of the seat portion in position relative to seat frame 30.

A tray 53 is adapted to be positioned in the generally rectangular opening formed by inwardly bent leg portions 40, 41, bight portion 39 and transverse rod 43. Tray 53 is preferably made of a plastic material, such as high impact polystyrene, which is highly resistant to shock. Other suitable materials may also be used.

As shown in Figs. 4, 5, 9 and 10, tray 53 includes a bottom wall 54, upstanding front and rear walls 55, 56 and upstanding end walls 57, 58. In addition, a downwardly extending peripheral lip 59 extends along the upper edge of front wall 55 and end walls 57, 58 thereby forming a peripheral groove. The rear wall 56 extends upwardly a greater distance than end walls 57, 58; and a downwardly extending peripheral flange 60 extends from the upper edge of rear wall 56, forming a groove along the upper edge of rear wall 56. Tray 53 is mounted within seat frame 30 by insertion from the top, bringing inwardly bent leg portions 40, 41 and bight portion 39 in position within the groove formed by peripheral flange or lip 59. At the same time, transverse rod 43 extends into the groove formed by flange 60. Since rear wall 56 of tray 53 extends upwardly above the level of front wall 55 and end walls 57, 58, bottom wall 54 is thus maintained substantially horizontal.

As shown in Figs. 9 and 10, projections 61 are provided along the sides of the groove formed by flange 59 so that the tray snaps over bight portion 39 and leg portions 40, 41. Similar projections 62 are provided in the groove formed by flange 60. In order to further insure that the bottom wall 54 of the tray is in hori-

zontal position, projections 63 are provided in the base of the groove formed by flange 59.

Tray 53 also includes flared portions 64 extending between flange 59 and flange 60 and overlying the area of juncture between the ends of transverse rod 43 and legs 37, 38 of the horizontal U portion of the seat frame.

Stabilizing members 65 are provided for the chair in order to provide lateral and longitudinal stability to the chair. As shown in Fig. 8, each of the stabilizing members 65 includes first looped portions 66, the ends 67 of which extend inwardly and are adapted to be inserted in the sockets 74 between elevated portions 73 of plate 26 and lower legs 21, as presently described, second looped portions 68 at right angles to the first looped portion 66, laterally extending portions 69 and an M-shaped portion 70 extending between laterally extending portions 69. Laterally extending portions 69 and M-shaped portion 70 lie in the same plane as second looped portions 68.

M-shaped portion 70 includes legs 71 at right angles to laterally extending portions 69 and interconnected members 72 between the ends of legs 71. The stabilizing member is made of a wire, the ends of which may be sprung outwardly. Each end of stabilizing member 65 is mounted in position by inserting end 67 in socket 74 between elevated portion 73 and leg 21 with second looped portion 68 below leg 21 and M-shaped portion 70 extending longitudinally of the chair, as shown in Fig. 6.

In this position, lateral portions 69 and M-shaped portion 70 of stabilizing member 65 tend to contact the ground and prevent rocking movement of the lower leg 21 in both lateral and longitudinal directions of the chair. A stabilizing member 65 is mounted on both the front and rear of legs 21. When not in use, each stabilizing member may be removed by disengaging each end 67 from its respective socket 74. Each stabilizing member 65 may be stored by inverting the stabilizing member and reengaging end 67 with its respective opening with second looped portion 68 above plate 26 and M-shaped portion 70 extending inwardly of the chair, as shown in dotted lines in Fig. 6.

Tray 53 may be readily assembled and disassembled from the chair by vertical movement relative to frame 30 for cleaning the tray or the like. Seat cover 31 may be removed for washing or replacement by disengaging snaps 48, 49 and 51, 52. If desired, the seat frame 30 may be disengaged from rear spring clips 28 to facilitate removal of the cover, as shown by the dotted lines in Fig. 6.

It may thus be seen that there has been provided a chair in which the seat may be easily assembled and disassembled to the seat frame. In addition, a novel tray structure is used. The chair is provided with stabilizing members which prevent the chair from being tipped over by the movements of the infant. The stabilizing members may be readily moved into operative or stored position.

I claim:

1. A stabilizing member for an infant's chair comprising a body made of wire and having the ends thereof spaced from each other and extending inwardly toward each other, a first portion of said stabilizing member adjacent each end being bent to form a first loop, a second portion of said member adjacent said first loop being bent to form a second loop at substantially right angles to said first loop, a laterally extending portion extending outwardly from said second loop, and an M-shaped portion interconnecting said laterally extending portions, said laterally extending portions and said M-shaped portion lying in substantially the same plane.

2. In an infant's chair, the combination comprising a seat frame formed of wire, means for supporting said seat frame for limited up-and-down movement relative to the ground, said means comprising a frame adapted

to rest on the ground, said frame including a pair of sockets extending generally laterally of said frame and a pair of openings vertically spaced below said pair of sockets, and a stabilizing member removably attached to said frame, said stabilizing member being formed of wire and having legs extending generally forwardly and rearwardly connected by a member extending generally transversely, the ends of said legs of said stabilizing member engaging the sockets in said frame, said stabilizing member having a portion thereof adjacent each end engaging each opening, said stabilizing member including another portion thereof adapted to engage the ground, whereby said stabilizing member is prevented from moving relative to said frame when the frame is on the ground.

3. The combination set forth in claim 2 wherein said means for supporting said frame includes resilient portions and generally horizontal ground engaging portions, said sockets being adjacent said ground engaging portions.

4. The combination set forth in claim 2 wherein said means for supporting said frame includes generally horizontal lower legs, said sockets being adjacent the lower legs.

5. The combination set forth in claim 4 including a foot-rest extending between said lower legs, said socket adjacent each lower leg being formed by portions of said footrest bent upwardly above each lower leg, each said lower leg having a portion thereof spaced above the ground and underlying said socket, said last mentioned portion of said lower leg cooperating with the ground surface to define said opening, the ends of said stabilizing member being received in the sockets.

6. The combination set forth in claim 5 wherein each leg of said stabilizing member comprises a first loop portion at each end thereof, with the end of said loop extending inwardly of said chair, a second loop portion at right angles to said first loop portion extending into said opening, and an arm extending laterally from said second loop portion, said transverse member connecting said arms of said stabilizing member comprising an M-shaped portion extending longitudinally from and between said arms, said arms and M-shaped portion lying in substantially the same plane as said second loop portion.

7. In an infant's chair, the combination comprising a seat, means for supporting said seat for limited up and down movement relative to the ground, said means comprising a frame adapted to rest on the ground, said frame including a pair of sockets extending generally laterally of said frame, and a pair of spaced openings, a stabilizing member removably attached to said frame, said stabilizing member having legs extending generally forwardly and rearwardly connected by a member extending generally transversely, the ends of said legs of said stabilizing member engaging the sockets in said frame, said stabilizing member having a portion thereof adjacent to each end engaging each opening, said stabilizing member including another portion thereof adapted to engage the ground, whereby said stabilizing member is prevented from moving pivotally about a horizontal direction upwardly from ground engaging position.

8. In an infant's chair, the combination comprising a frame formed of wire, the ends of said wire being permanently connected to one another, said frame having a horizontal U portion and a vertical U portion joined together at the ends of the legs and having their bight portions remotely positioned, a rod extending transversely between the legs of said horizontal U portion and fixed thereto, the ends of said transverse rod overlying portions of the legs of said horizontal U portion, a pair of side frame members connected with the legs of said horizontal U portion for supporting said frame in spaced relationship to a floor, and a tray of rigid material removably inserted in said frame in the space between said transverse rod and said bight portion of the horizontal U portion of the frame, said tray having downwardly open-

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ing grooves in at least a portion of the periphery thereof into which portions of said transverse rod and the bight portion of the horizontal U portion are inserted, the base of the groove into which said transverse rod is inserted being spaced from the base of the groove into which the bight portion is inserted, said tray having flared portions thereof extending over areas wherein the ends of said transverse rod overlie portions of the legs of said horizontal U portion.

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