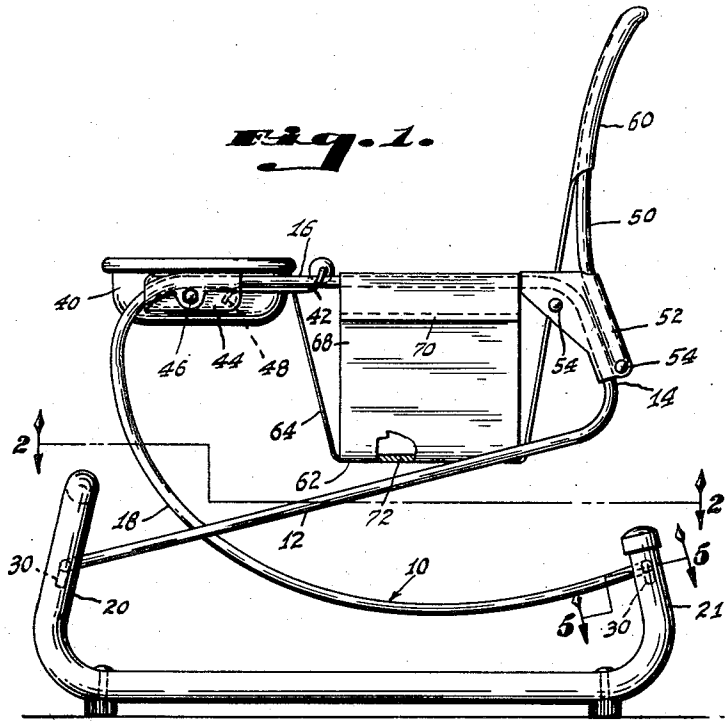
Oct. 14, 1958 B. F. HAMILTON 2,855,978

CHAIR WITH RESILIENTLY SUPPORTED SEAT

Filed June 24, 1953

Fig. 1.



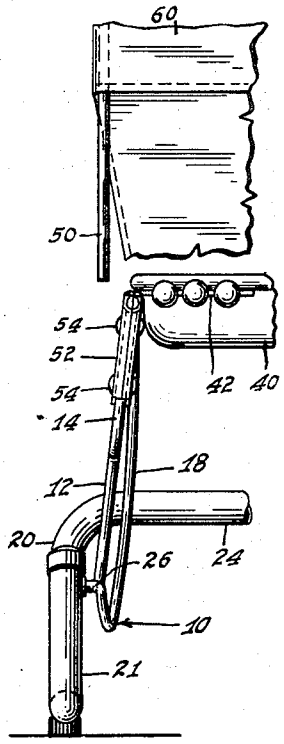


Fig. 3.

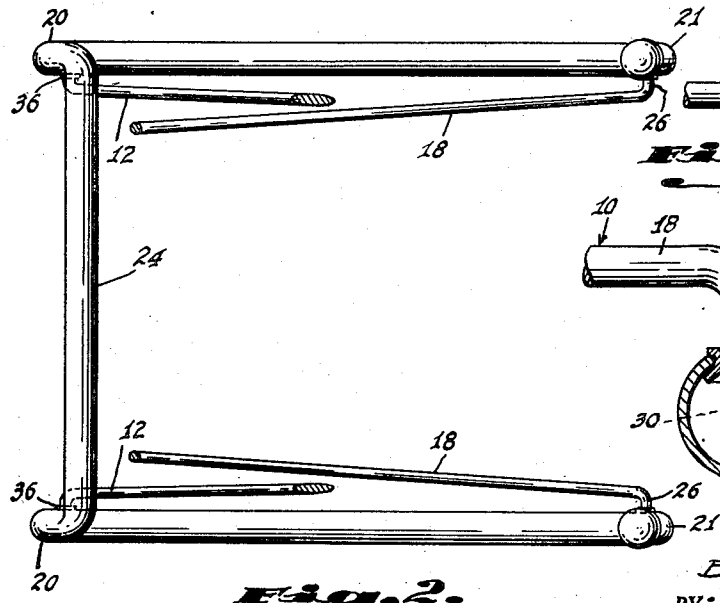


Fig. 2.

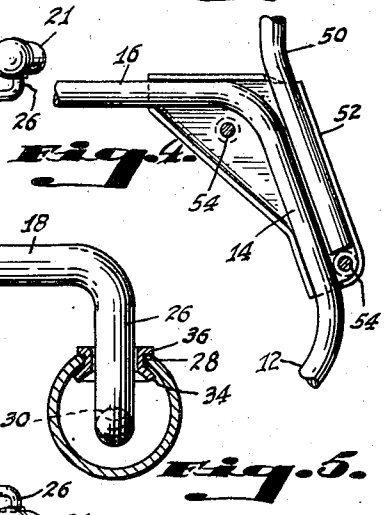


Fig. 4.

Fig. 5.

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United States Patent Office 2,855,978 Patented Oct. 14, 1958

2,855,978

CHAIR WITH RESILIENTLY SUPPORTED SEAT

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Application June 24, 1953, Serial No. 363,781

8 Claims. (Cl. 155—18)

This invention relates to an article of furniture, more specifically a baby jumper, and has for its object the provision of such an article which will have desired characteristics of springiness and sturdiness, and which will be of attractive appearance and economical construction. Another object is to provide such an article which can be shipped in at least a partially knocked-down condition, and which can be readily assembled by the purchaser using only the simplest of tools. These and other objects will become apparent as the features of my invention are understood.

In carrying out my invention in a preferred embodiment, I provide a base, conveniently in the form of a continuous length of tubular metal bent to provide two longitudinal inverted U-shaped side-portions the front legs of which are integrally interconnected at their upper ends by a transverse stretch. At each side of the base I provide a resilient seat-supporting side member preferably in the form of a continuous length of resilient stock having one end connected to the base near a front corner thereof. From such front corner the member extends rearwardly to a point near the rear of the base, thence upwardly for a distance, thence forwardly to form a seat-support, and finally downwardly and rearwardly for connection to the base at the rear thereof. A cross-member, conveniently in the form of a tray, interconnects the front ends of the forwardly extending portions of the side members. The rear end of each seat-support is provided with socket means for carrying an inverted U-shaped back frame which is secured to and projects upwardly from the rear portions of the side members. The seat is desirably formed from a piece of fabric or like material cut and sewed to provide a back pocket, a seat portion, side portions, and a crotch strap. The back pocket is adapted to be drawn downwardly over the back frame, and the side portions and crotch strap are adapted for connection to the seat-supporting side-member portions and to the cross member, respectively.

The accompanying drawing illustrates my invention:

Fig. 1 is a side elevation of an assembled baby jumper embodying my invention;

Fig. 2 is a horizontal section taken on the line 2—2 of Fig. 1;

Fig. 3 is a partial rear elevation showing relative positions of the back frame and the socket during a step in assembling the device;

Fig. 4 is a fragmental vertical section showing the socket means for attaching the back frame, with the back frame in place therein; and

Fig. 5 is a generally horizontal section taken on the line 5—5 of Fig. 1.

The baby jumper shown comprises a pair of spaced, resilient side members **10**, each of which is formed from a continuous length of metal rod bent to provide a bottom run **12** which extends fore-and-aft substantially the entire length of the device, a generally vertical portion **14**, an upper run or seat-support **16**, and a crossover portion **18** which extends generally rearwardly and downwardly desirably in a sweeping curve to a point beyond the vertical portion **14**. Each side member **10** is suspended at an elevated position by having the free ends of its lower run **12** and crossover portion **18** connected to upstanding front and rear posts **20**—**21** of a suitable base. Desirably the posts **20** and **21** are the generally parallel legs of tubular, U-shaped base-members; and the right and left hand base members are interconnected by a transverse medial portion **24** of metal tubing integrally extending from the upper end of each front post **20**.

For connecting the side members **10** to the base posts **20**—**21**, each end of each such side-member is bent outwardly, to provide a horizontal finger **26** extending through an opening **28** in the inner side of the associated post **20** or **21**, and thence downwardly to provide a hook-like end **30** which, after assembly, will be located within the tubular post. The two hook-like ends **30** on each side member **10** lie in planes which are parallel or at least so nearly parallel that they can be simultaneously threaded through the post-openings **28** which receive them. In that threading operation, each side member **10** swings upwardly about the line joining the two openings in the associated posts **20** and **21** until it reaches a generally vertical position. Desirably, as is shown in Fig. 5, each opening **28** is provided with a bushing **34**, the head-portion **36** of which dresses the base opening **28** and the sleeve-portion of which provides a journal for the finger **26**. I prefer to make the bushing of brass, as this material is easily worked in the blind openings to provide inner shoulders for locking the bushing, and gives noise-free bearing support to the finger **26** as the jumper is in use.

Interconnecting the two side-members **10** along the front of their upper runs **16** is a cross-member, desirably a shelf or tray **40**, with which desirably is mounted a bead-bar **42** or the like. Conveniently, clamp-plates **44**, each having a portion bolted as at **46** to the tray and a portion embracing the upper run **16**, are used to attach the tray to each of the side-members. As shown, the ends of the bead-bar **42** are desirably formed to overlie the upper runs **16**, then follow the perimeter thereof for about 180°, then run forwardly to end in hook-portions **48** to be held by the clamp-plates **44**. This provides for easy yet positive assembly from a knocked-down shipping condition.

To the generally vertical portions **14** of the side members **10** is connected a back frame **50**, generally of an inverted U-shape. Desirably, such connection is obtained by providing each vertical side-member portion **14** with a socket formed by a pair of opposed clamp plates **52**, held together by rivets **54**, which sockets telescopically receive the ends of the back-frame legs. Desirably also, each of such clamp-plates is formed to overlie stretches of both the seat-supporting run **16** and the vertical run **14**, to counter-act any tendency of rotation or other movement of the clamp with respect to the side-member during jumper agitation. As will be clear from Fig. 3, the parts above described are so constructed and arranged that the socket channels and the legs of the back frame cannot be brought into alignment without some elastic distortion of either the side members or the back frame. As specifically shown in Fig. 3, the lower ends of the U-shaped back frame **50** lie in vertical planes, while the sockets which receive those lower ends are inclined upwardly and inwardly, with the result that the angle between the axes of the sockets is different from the angle between the lower ends of the back frame. Insertion of the back-frame legs into the socket channels therefore will necessarily be accompanied by some distortion of the parts and introduces into the parts strains which create friction suffi-

cient to impose a substantial opposition to disassembly. This is of especial advantage in ready assembly from a knocked-down shipping condition.

A sheet of suitable fabric or similar material is formed with an inverted pocket portion **60** adapted to fit snugly over the back frame **50**. Beyond the bottom of such pocket **60** the fabric extends forwardly to provide a seat portion **62**, and a narrow crotch strap **64**, the latter being brought forwardly and upwardly from such seat portion to be supported by the tray **40**. Laterally from such seat, this fabric is brought outwardly to embrace the upper runs **16** of the side members to form seat-sides **68** to be held by the seam **70**. The seat may be reinforced by a sheet of fibreboard **72** or the like.

When a child is seated in the jumper, almost any bodily movement sets up pleasing waves of rotational and vertically translatory motion of both regular and irregular nature; yet it is virtually impossible for a small child seated in such a jumper to cause it to tip over.

Although I have shown and described a specific embodiment of my invention, I intend to cover all changes and modifications of the example herein chosen for purposes of disclosure, which do not constitute departures from the spirit and scope of the invention as set forth in the appended claims.

I claim as my invention:

1. In a baby jumper having a seat and a rigid base, generally horizontal seat-supports extending fore-and-aft at the sides of the seat, a first resiliently bendable member rigidly connected to each seat-support near the front thereof and extending from its point of rigid connection to the seat support rearwardly and substantially in a single generally vertical plane to a rear end, a second resiliently bendable member rigidly connected to each seat support near the rear thereof and extending from its point of rigid connection to the seat support forwardly and substantially in a single generally vertical plane to a front end, and means for pivotally connecting the front and rear ends of said resilient member on parallel horizontal axes to the base at fixed points thereon, one of said resiliently bendable members being substantially straight for the greater portion of its length and the other of said resiliently bendable members being curved for the greater portion of its length.

2. A baby jumper as set forth in claim 1 with the addition that each said support and both of its associated resilient members are formed from a continuous length of resilient stock, the first resilient members being curved in the form of an upwardly concave arch.

3. In a baby jumper having a seat and a rigid base including a pair of interconnected spaced members formed from metal stock into a general U-shape to provide upstanding corner posts, generally horizontal seat-supports extending fore-and-aft at the sides of the seat, a first resilient member rigidly connected to each seat-support near the front thereof and extending rearwardly to a rear end, a second resilient member rigidly connected to each seat support near the rear thereof and extending forwardly to a front end, and means for pivotally connecting the front and rear ends of the resilient members respectively to said corner posts at fixed points thereon, one of said resiliently bendable members being substantially straight for the greater portion of its length

and the other of said resiliently bendable members being curved for the greater portion of its length.

4. In a baby jumper having a seat and a rigid base, generally horizontal seat-supports extending fore-and-aft at the sides of the seat, a first resiliently bendable member rigidly connected to each seat-support near the front thereof and extending from its point of rigid connection to the seat support rearwardly and substantially in a single generally vertical plane to a rear end, a second resiliently bendable member rigidly connected to each seat support near the rear thereof and extending from its point of rigid connection to the seat support forwardly and substantially in a single generally vertical plane to a front end, the free ends of both said first resilient members being bent to provide transverse aligned fingers, and the free ends of both said second resilient members being bent to provide transverse, aligned fingers, said base being provided with openings pivotally receiving said fingers.

5. In a baby jumper, a base, a seat, a pair of resilient side-members supported by said base and supporting said seat, a back, two sets of transversely spaced and telescoping provisions carried by said back and said side-members for supporting said back, each said set of telescoping provisions including a socket and an elongated element telescopically receivable in said socket, said sockets being relatively disposed with their axes in a predetermined angular relation, and said elongated elements being disposed relatively in a second predetermined angular relation, said second predetermined angular relation being slightly different from said first whereby insertion of the elongated elements into the sockets will result in elastic distortion of said side members.

6. The invention set forth in claim 5 wherein said sockets are secured to said side members and said back comprises a frame formed from metal rod bent into the general shape of an inverted U, the legs of which form said elongated elements.

7. The invention set forth in claim 5 wherein said elongated elements form parts of the back and each said socket comprises a pair of opposed clamp-plates and means clamping each pair of such plates to one of said side members.

8. The invention set forth in claim 7 wherein said side-members are provided with bends to provide non-aligned adjacent stretches along which said clamp-plates extend to oppose movement of the clamp-plate with respect to the side-members.

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