April 22, 1952 P. L. BARKER 2,593,962

CHILD'S STROLLER

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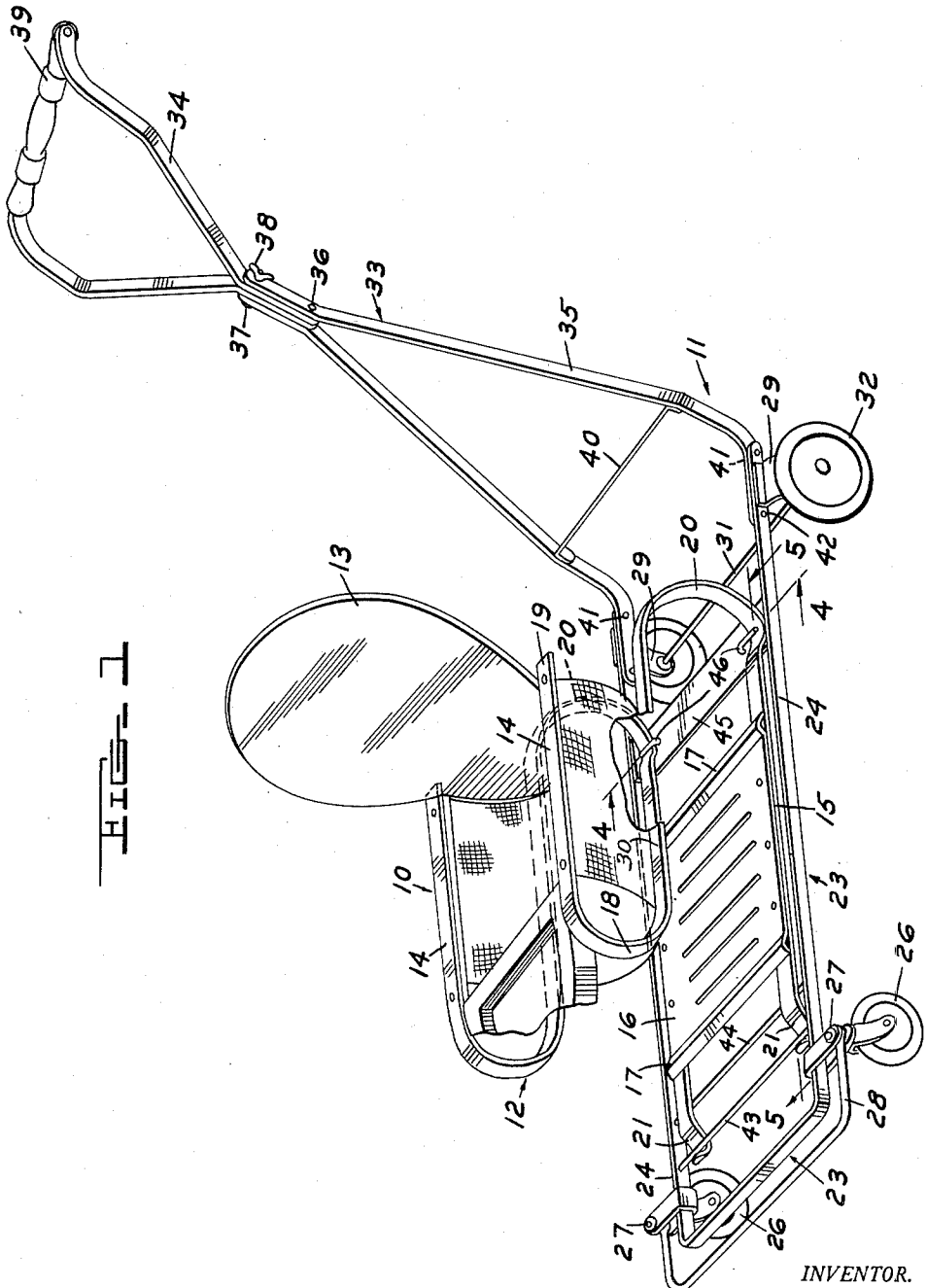


FIG. 1

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CHILD'S STROLLER

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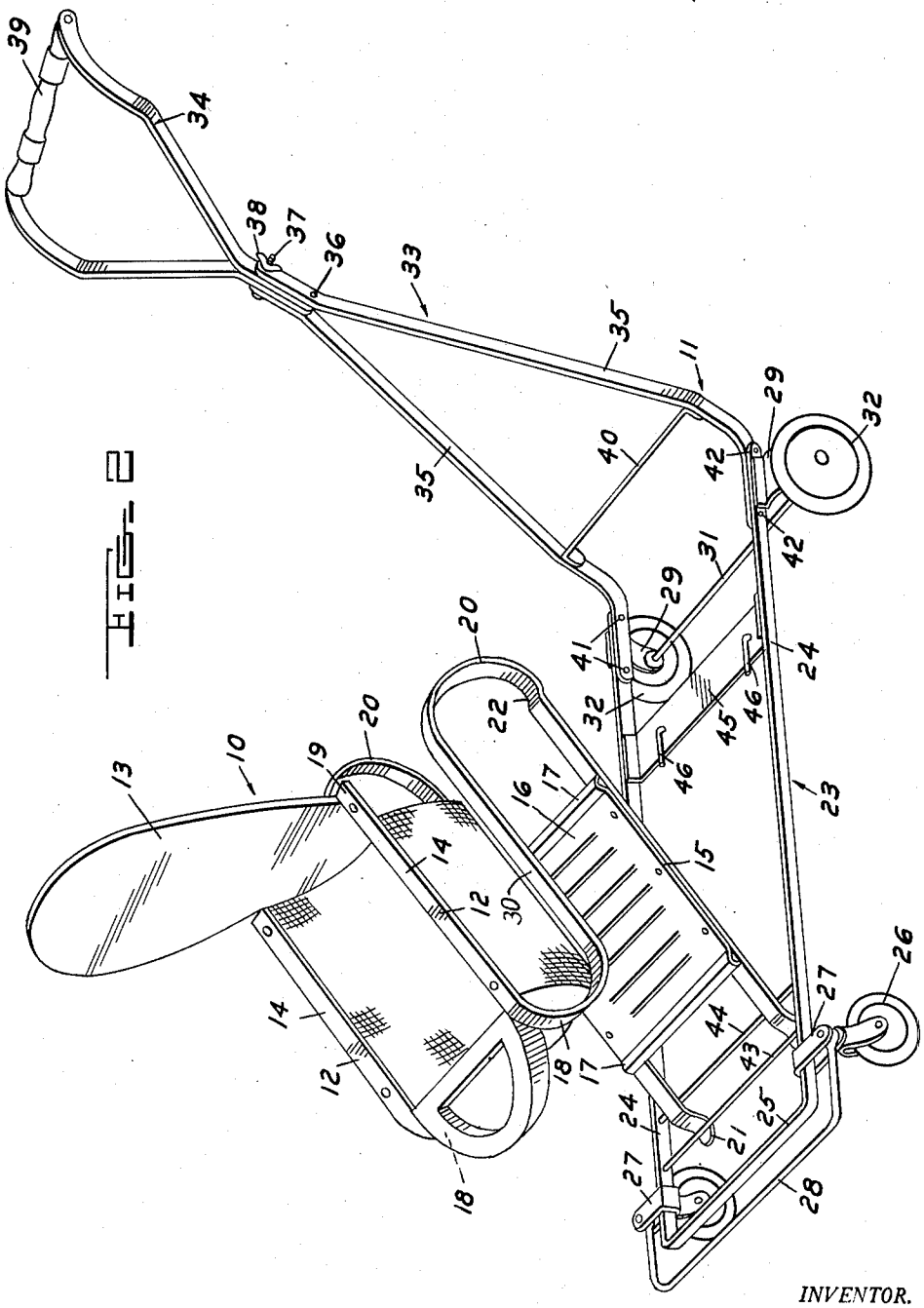


FIG. 2

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FIG. 3

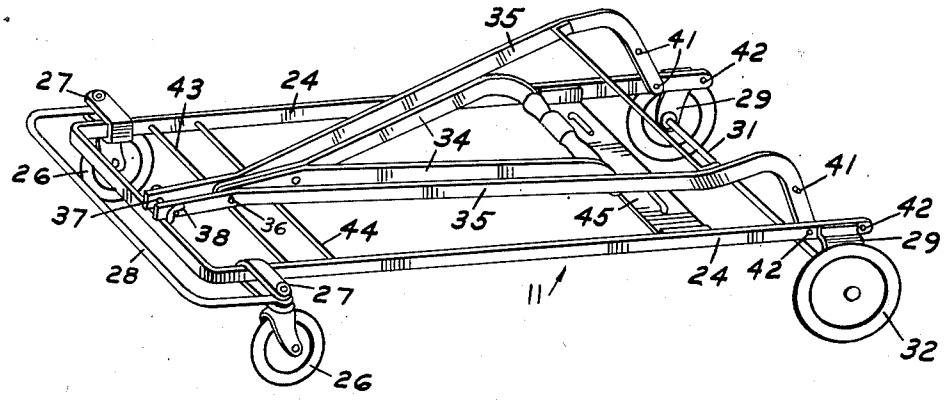


FIG. 4

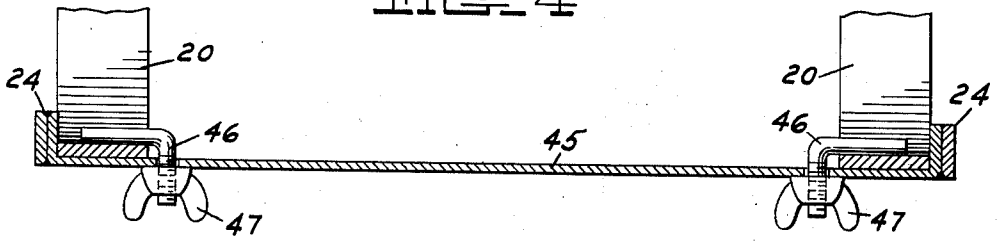
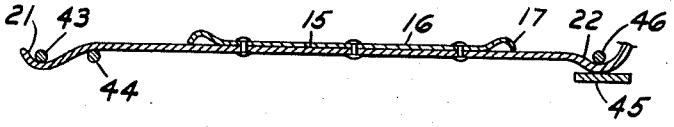


FIG. 5



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UNITED STATES PATENT OFFICE

2,593,962

CHILD'S STROLLER

Paul L. Barker, Detroit, Mich.

Application May 21, 1949, Serial No. 94,552

6 Claims. (Cl. 155—41)

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This invention relates to a child's stroller.

It is an object of this invention to produce a stroller in the form of a child's chair detachably mounted on a dolly so as to permit use of the chair with or without the dolly. The invention furthermore contemplates a stroller construction which enables mounting a child's chair rigidly on the dolly by a simple and quick operation. The invention is also directed to the provision of a stroller which is sturdy and safe and which at the same time can be manufactured economically.

In the drawings:

Figure 1 is a perspective view of the stroller of this invention.

Figure 2 is a perspective view of the stroller showing the manner in which the chair is manipulated to mount it on the dolly frame.

Figure 3 is a perspective view of the dolly frame with the chair removed and with the handle in the collapsed position.

Figure 4 is a sectional view taken along lines 4—4 in Figure 1.

Figure 5 is a sectional view taken along the lines 5—5 in Figure 1.

Referring to the drawings, and particularly to Figure 1, there is shown the stroller of this invention which comprises a chair and a dolly, generally designated as 10 and 11, respectively. The chair 10 comprises a pair of S-shaped side frames 12 which are spaced apart and arranged to support therebetween a seat member 13. Frames 12 are preferably formed of a resilient material such as spring steel and are shaped with a lower run 15 which forms the ground engaging member when the assembly is used as a chair. Frames 12 are held in spaced relation at their upper ends by means of seat 13 which is preferably formed as a wire frame with a canvas covering. A foot panel 16, corrugated at each end as at 17 for reinforcement, extends across and is secured to the bottom runs 15 as by riveting. Frames 12 are arranged with the upper run 14 extending rearwardly from a return bend 18 at the front of the chair with its free end 19 at the back of the chair. Bottom run 15 extends from the return bend 20 at the rear of the chair forwardly with its free end 21 projecting outwardly beyond and below return bend 18. An intermediate run 30 connects return bend 18 with return bend 20. As is shown more clearly in Figure 2 the free ends 21 of bottom runs 15 are of general U-shape and offset downwardly. At their rear ends bottom runs 15 are continued from an upwardly extending portion 22 of return bend 20 so that when the chair is positioned upon a supporting surface only the front and rear ends of runs 15 engage the supporting surface.

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Dolly 11 is preferably formed as a U-shaped frame 23 having a pair of side rails 24 which are connected at one end by a front rail 25. Frame 23 is supported at its front end by a pair of casters 26 which are mounted on U-shaped brackets 27 which extend outwardly from and are spot welded or otherwise secured to the side rails 24. A bumper bar 28 extends around the front end of frame 23 from one of the brackets 27 to the other. A pair of depending brackets 29 are secured to side rails 24 forwardly of the rear ends thereof.

Brackets 29 are shaped to project outwardly beyond rails 24 and form supports for an axle 31 at the ends of which a pair of wheels 32 are mounted.

Adjacent the rear ends of side rails 24 there is mounted a handle assembly 33. Handle 33 is preferably fashioned as two Y-shaped frames 34 and 35, the closed or necked ends of which are arranged in overlapping relation and pivoted together as at 36. The frames are held in the assembled position shown in Figure 1 by a screw 37 which passes through the overlapping portions of the frames and on the end of which is threaded a wing nut 38. The two frames of the handle assembly are arranged to be jack-knifed to the collapsed position shown in Figure 3 by simply removing nut 38, withdrawing screw 37, and pivoting the upper frame 34 downwardly so as to occupy a position between the legs of the lower frame 35. The upper frame 34 is reinforced by a handle bar 39 which extends across the open end of the frame. The lower frame is reinforced by a bracket 40 which is welded or otherwise secured to the legs of the frame near the lower ends thereof so that the handle assembly as a whole is quite rigid.

The lower ends of frame 35 are each provided with a pair of spaced pins 41 which project outwardly and which are arranged to engage in correspondingly spaced apertures 42 formed at the rear ends of side rails 24. This enables the handle assembly to be mounted firmly on the dolly. By springing the legs of frame 35 towards each other the handle may be disengaged completely from the dolly or, as shown in Figure 3, frame 35 may be manipulated to disengage only the rear set of pins and pivot forwardly on the other set of pins to the collapsed position on the dolly.

For the purpose of securing chair 10 on dolly 11 in a rigid and quickly detachable manner means are provided on frame 23 for releasably engaging the front and rear ends of bottom runs 15. As-

cordingly, a pair of spaced rods 43 and 44 are extended across frame 23 adjacent its front end and are welded or otherwise secured to side rails 24. Rods 43 and 44 are spaced apart so that in the assembled position of the chair and dolly, rod 43 is engaged within the U-shaped offset portion 21 of bottom run 15 and rod 44 engages the lower surface of bottom run 15 just to the rear of the offset portion 21.

Across the rear end of frame 23 and spaced forwardly of brackets 29 there is secured to side rails 24 a support bracket 45. Bracket 45 is positioned such that when the front ends of bottom runs 15 are engaged with rods 43 and 44 as described, the bottom portion 22 of the return bend 20 rests upon bracket 45. These curved portions 22 are arranged to be clamped down on bracket 45 by means of a pair of L-shaped draw bolts 46 which extend through plate 45 and which are threaded at their lower ends to receive a wing nut 47.

When the dolly is in the collapsed position as shown in Figure 3 and it is desired to mount the chair on frame 23 so as to provide a stroller, frame 35 is pivoted upwardly and manipulated to engage the rear set of pins 41 with the rear set of holes 42 in rails 24 so as to hold frame 35 in the operative position. The upper frame 34 is likewise pivoted to the operative position shown in Figures 1 and 2 and locked in place by screw 37 and wing nut 38. The chair is then mounted on the dolly by tilting the chair forwardly to the plane of frame 23 and inserting the curved ends 21 of bottom runs 15 between rods 43 and 44. The chair is then tilted back to a position where the curved portions 22 of the return bends 20 rest upon bracket 45, the draw bolts 46 having been previously arranged as shown in Figure 2 so as to clear the inner edges of the bottom runs 15. With the chair in this position the bottom runs are supported at their front ends upon rod 44 with the U-shaped end 21 hooked beneath rod 43. Bolts 46 are then turned 90° so as to overlie and engage the upper surface of bottom runs 15. The bolts are then drawn down tightly by means of wing nuts 47, and the chair is thereby securely mounted on the dolly.

It will be noted that when the chair is mounted on the dolly as described above, rod 44 engages the bottom face of bottom run 15 to hold the curved ends 21 of the bottom runs in engagement with rod 43. As is shown more clearly in Figure 5 it will be seen that this arrangement prevents the chair from accidentally falling off the dolly even though the draw bolts 46 might be loosened. Since the rod 44 insures engagement of the rod 43 with the U-shaped ends 21 of the bottom run it is obvious that the chair is prevented from being shifted to any great extent in either a rearward or forward direction. The bottom runs can be disengaged with rods 43 and 44 only by tilting the chair upwardly and forwardly, and this is unlikely to occur when a child is occupying the chair.

Side rails 24 are preferably spaced apart a distance corresponding to the spacing of frames 12 so that when the chair is mounted on the dolly, the bottom runs 15 fit nicely between rails 24 and are prevented from shifting transversely of the frame.

What I claim is:

1. A child's stroller comprising in combination a seat member, a pair of resilient, upright S-shaped frames supporting said seat at each side thereof, said S-shaped frames each having a bottom horizontal run which serves as the ground engaging member when the assembly is used as a chair, a substantially rectangular dolly frame, a pair of wheels at the front end of said dolly frame, a pair of wheels at the rear end of said dolly frame, a pair of spaced rods extending across said frame adjacent one end thereof, said bottom runs having their free ends bent into an upwardly opening U-shaped portion, said rods being spaced apart to receive therebetween said U-shaped portion when the bottom runs are inclined to the plane of the dolly frame, one of said rods being engaged within said U-shaped portion and the other rod supporting the bottom run from below at a point adjacent said U-shaped portion when the bottom runs are pivoted about said rods into the plane of said dolly frame, a bracket extending transversely of the dolly frame adjacent the other end thereof and spaced from said rods so as to support the other end of said bottom runs, a pair of L-shaped bolts having a threaded portion extending downwardly through said bracket and another portion above said bracket extending transversely over said bottom runs and nuts fitted on the threaded ends of said bolts below said bracket for drawing said bottom runs downwardly against said bracket.

2. The combination as set forth in claim 1 wherein said bolts are retained loosely on said brackets so that said transversely extending portion can be pivoted in a horizontal plane to a position clear of said bottom runs.

3. A child's stroller comprising in combination a seat member, a pair of resilient, upright S-shaped frames supporting said seat at each side thereof, said S-shaped frames each having a bottom horizontal run, said bottom runs having at the opposite ends thereof downwardly offset, upwardly opening U portions which serve as ground engaging members when the assembly is used as a chair, a dolly frame, supporting wheels on said dolly frame, a pair of spaced members extending transversely across the dolly frame adjacent one end thereof, said transverse members being spaced apart to receive therebetween the U portions at the free ends of said bottom runs when said frames are tilted forwardly to incline said bottom runs to the plane of said dolly frame, said U portions at the free ends of said bottom runs engaging the underside of one of said transverse members and the portions of said bottom runs adjacent said U portion engaging the topside of said other transverse member when the bottom runs are pivoted from said inclined position into the plane of said dolly frame, and means adjacent the other end of the dolly frame for supporting and releasably engaging the opposite ends of said bottom runs.

4. The combination set forth in claim 3 wherein said downwardly offset portions each provides a pair of spaced shoulders which engage said transverse members to prevent shifting of the upright frames in a direction longitudinally of the dolly frame.

5. A child's stroller comprising in combination a seat member, a pair of upright, S-shaped frames supporting said seat at each side thereof, said S-shaped frames each having a bottom run extending lengthwise of the seat, said bottom runs having downwardly offset portions at the rear ends thereof which form ground engaging members when the assembly is used as a chair, said side frames having another run spaced

above said bottom run, a U-shaped spring portion integrally connecting said other run with said downwardly offset portions at the rear ends of said bottom runs, a substantially flat dolly frame, supporting wheels on said dolly frame, means on said dolly frame detachably engaging the front ends of said bottom runs, a support member extending transversely across the rear end of said dolly frame on which said downwardly offset portions are adapted to be positioned, and L-shaped drawbolts having a threaded portion extending downwardly through said support, and another portion adapted to overlie and extend transversely across said downwardly offset portions for securing the rear ends of said bottom runs to said dolly frame without restraining the free flexing of said U-spring portions.

6. The combination set forth in claim 5 wherein said other portions of said drawbolts make substantially line contact with said downwardly offset portions at the rear ends of said bottom runs.

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