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2,990,190

INFANT STROLLER AND CHAIR SUPPORT UNIT

Filed July 15, 1959

2 Sheets-Sheet 1

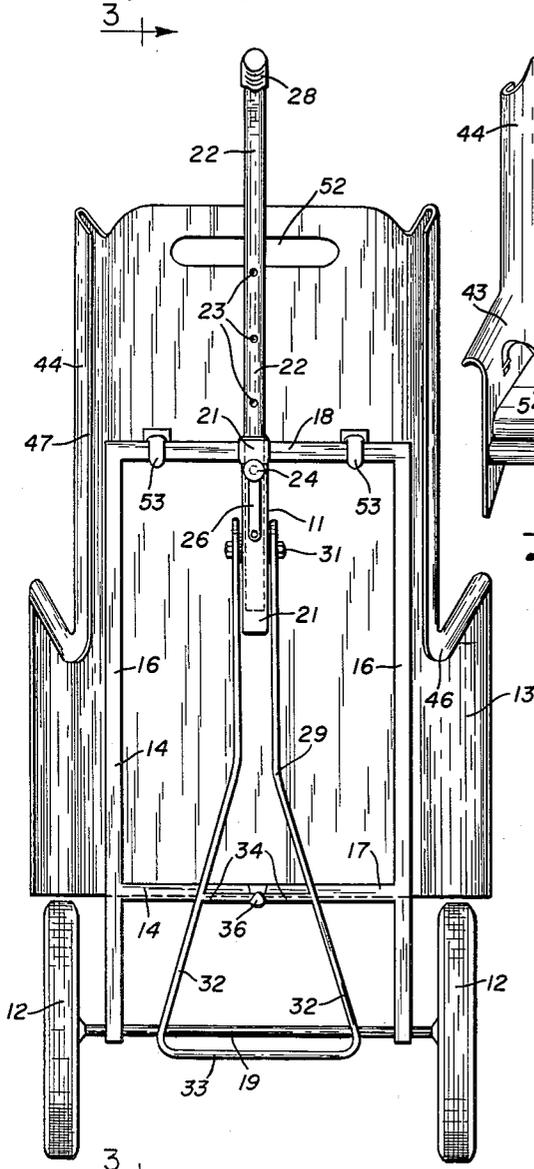


Fig. 1.

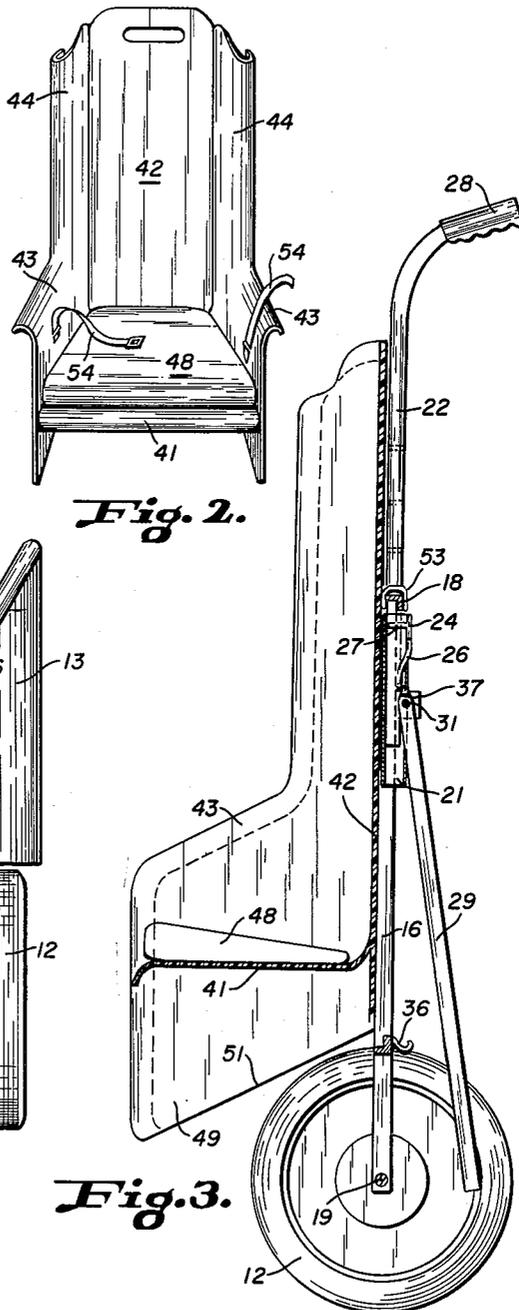


Fig. 2.

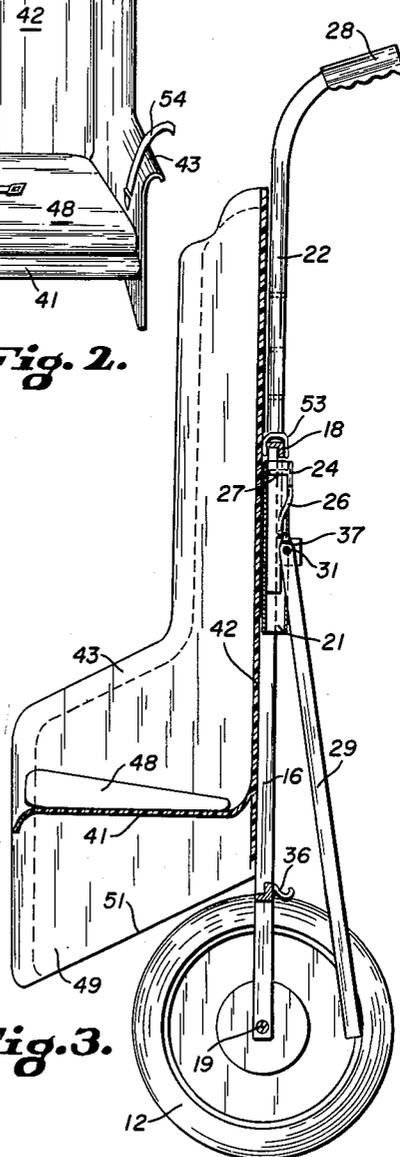


Fig. 3.

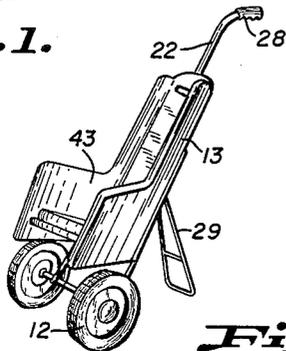


Fig. 4.

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2 Sheets-Sheet 2

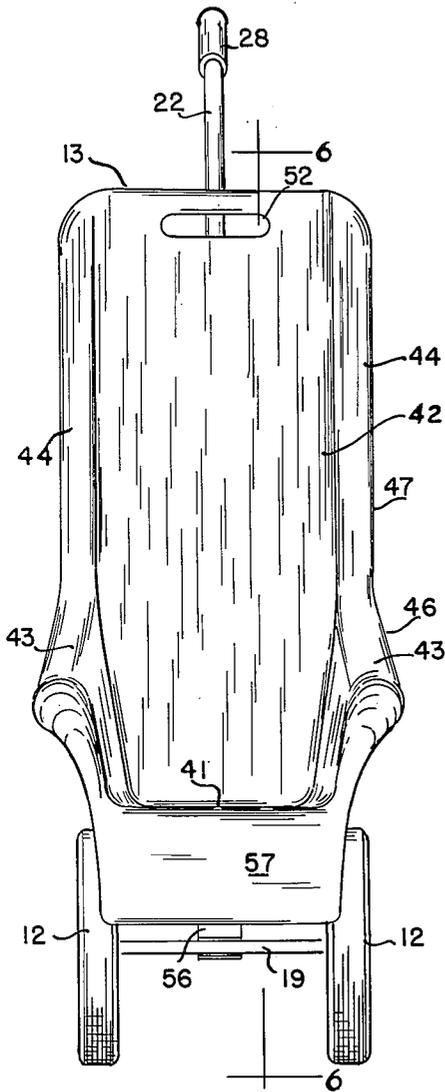


Fig. 5.

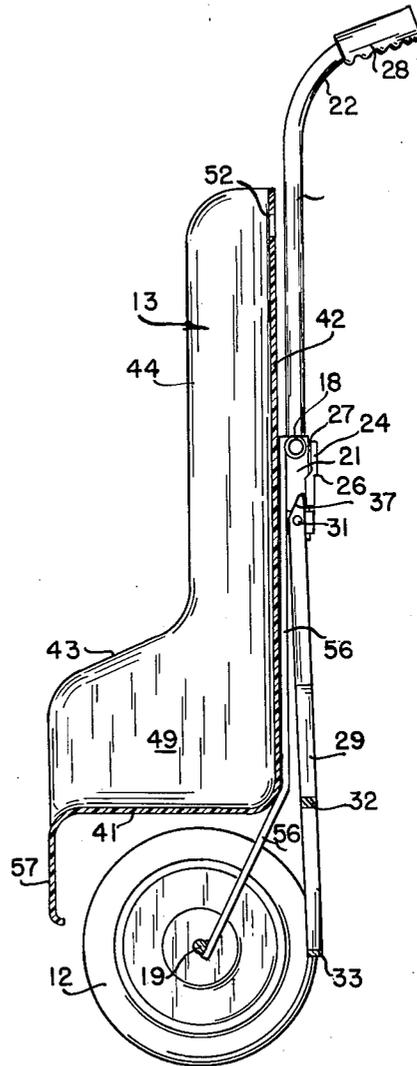


Fig. 6.

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2,990,190
**INFANT STROLLER AND CHAIR
SUPPORT UNIT**

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4 Claims. (Cl. 280—30)

The present invention relates to an infant's support chair and to carrier means therefor.

Previously, many different types of baby carriages have been designed and built. Likewise there are many different designs for support chairs having multiple use characteristics.

It is a purpose of this invention to present improvements which make it possible to provide an infant's support chair of even greater utility. The increased utility is to be in part derived from the design of the chair support and further through the provision of a carriage to which the chair support may be conveniently attached for purposes of movement.

A further object of this invention is to provide a child's chair support of such design that small infants may be safely held therein when the item is used in an automobile or on household furniture to provide a seat or high chair accessory.

Another object of this invention is to provide means whereby the chair support may be used either as an element of a child carriage or separately for the support of the infant under other conditions of use.

Another object of this invention is to provide a wheel carriage adapted to receive the child's chair support for easy movement or for static use.

Further objects and advantages of the present invention will be apparent from the appended description and drawings, in which

FIG. 1 is a rear elevation showing structural features of the chair support and carriage,

FIG. 2 is a front perspective view showing design features of the chair support,

FIG. 3 is a side cross-sectional elevation taken along the line 3—3 of FIG. 1;

FIG. 4 is a perspective view further showing features of the present invention,

FIG. 5 is a front elevation showing features of a separate embodiment of the invention; and

FIG. 6 is a side elevation taken along the line 6—6 of FIG. 5 further showing features of the separate embodiment.

Briefly stated, the present invention provides a chair support unit for infants that may be conveniently mounted on a companion wheel carrier for movement or that may be used to provide comfortable support in an automobile or on items of household furniture. The chair support and wheel carriage are cooperatively designed so they may be used as a unit for a stroller or for static use purposes. Separately the chair support unit is adapted to provide means for the support of even very small infants that may not have yet attained full body and head control. This beneficial support is available when the chair support unit is used in a car or as an adjunct to ordinary furniture to provide a high chair type of support.

Referring now to the drawings, detailed features of an embodiment of the invention may be more fully described. In FIGS. 1 and 3 it will be seen that the applicant provides a carriage 11, having wheels 12, to which the chair support 13 may be attached. The carriage itself is made up of a rectangular frame 14 having upright or side rails 16 and ladder type cross-members 17 and 18 at the bottom and top positions respectively. The side rails 16 extend downwardly past the bottom cross-member 17 to provide extensions which support axle 19.

A tube 21 is welded to the top cross-member 18 and

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extends downwardly therefrom so that extension handle 22 may be telescoped therethrough. Since the handle 22 is provided with a plurality of adjusting openings 23, reciprocal movement of the handle 22 within the tube 21 allows the handle to be moved to extended or retracted positions. A pin lock 24 is attached to the tube 21 by a spring member 26 so that when the proper extension is obtained, the pin 27 of the pin lock 24 may be passed through an opening in the slide tube 21 and through an opening 23 in the handle 22. With this arrangement, the effective length of the handle 22 may be adjusted to bring the handle grip 28 into proper position for easy handling of the carriage.

Since it is intended that this apparatus will be used both for the transportation or static support of the chair support 13, a kick stand 29 is pivotally attached to the slide tube 21 by a pivot 31. Through this mechanism the kick stand may be moved to either the support position, as shown in FIGS. 1 and 4, or to an alternate position against the frame 14. The kick stand itself is preferably of a stirrup shape, as shown, having two side members 32, a bottom cross-member 33 and an intermediate cross member 34. In addition to providing stability and reinforcement for the stirrup kick stand 29, the cross-member 34 is positioned so that it will be engaged by the hook member 36 that is attached to the lower cross-member 17 of the frame 14. With this arrangement, the kick stand may be held in its engaged or trail position until it is desired to move it to the support position.

The kick stand 29 will be held in its static support position by the angle face 37 on the end of the stand 29 extending past the pivot point 31. It will be observed that when the kick stand is moved to its full extended position, this face 37 will come into engagement with the chair support unit 13 or with the central frame member 56, as shown in FIGS. 5 and 6, to limit further outward pivoting movement of the stand.

An alternate means of construction as shown in FIGS. 5 and 6 would include the elimination of the side rails 16 and the substitution therefor of a central frame member 56 which will extend downwardly from the tube 21 to engage the cross axle 19. As in the described embodiment, the top cross-member 18 will be provided to engage the hooks 53 of the chair support 13. This embodiment of the invention presents an additional advantage, inasmuch as the central frame member 56 may be made of flat stock having a spring characteristic to reduce the shock transmitted to the chair support 13.

The described features of the carriage 11 are adapted for full cooperation with cooperative features of the chair support 13 to provide a safe and useful type of baby carriage or stroller. The distinctive features of the chair support 13 itself will be apparent from the figures of the drawings, where it will be noted that the chair support is a structure that preferably is made of molded plastic to provide a seat 41, a back 42, arm rest 43 and forwardly extending side flanges 44 positioned to give support to an infant's shoulders and head when the infant has not yet developed full muscular control or for support while sleeping.

In addition to the provision of rolled edges 46 and 47 on the arm rests 43 and side flanges 44, respectively, the chair support 13 includes other significant structural features. In FIG. 3 it will be noted that the seat 41 is disposed at substantially a right angle with respect to the back 42. This angular arrangement is important to the features of the present invention, since it aids in the provision of adequate support for an infant received in the chair whether such chair is supported on the carriage 11 or whether it is used in other manner. The angle should not be increased to greater than a right angle, but it may be decreased to further prevent any tendency of

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the child to slip out of the chair support. In fact, as shown in FIG. 3, it has been found advantageous to provide a tapered cushion 48 that will fit the seat 41 to effectively decrease the angle between the seat and the back 42 to less than a right angle.

A further structural feature of the present embodiment of the invention is the provision of the downwardly depending skirts 49 which are extensions of the side arm rests 43 of the chair support. These skirts 49 extend down past the seat 41 a substantial distance, and the lower terminating edges 51 thereof are substantially parallel to the top line of the arm rests 43. When the kick stand 29 is placed in the support position for static use, this lower terminating edge 51 is substantially parallel with the floor or ground surface upon which the carriage is placed. Necessarily this orientation causes the seat 41 to be at a raised angle of elevation to prevent the child from slipping out of the chair support.

In addition to providing the angular relationship desired when the chair support 13 is positioned on a car seat or household furniture, the skirt extensions 49 makes it possible for the chair support 13 to be used in conjunction with an ordinary dining room chair to provide elevated or high chair type seating for the infant. Because of this manner of use the distance between the bottom edge 51 of the skirt 49 and the seat 41 should be adequate to provide this desired elevation. Actually the dimensional relations represented in the drawings provided are suggestive of the actual size and proportioning of the unit.

If one piece molded construction is desired, a front skirt 57, as shown in FIGS 3, 5 and 6, may be used and the depending side skirts 49 may be terminated at seat 41. This arrangement will maintain the desired relationship between seat 41, back 42 and the lower or support edge of the skirts 49 and 57.

Since it is intended that the chair support 13 will be used both in conjunction with the carriage 11 and for other purposes, means is provided for the quick engagement or disengagement of the chair support 13 from the carriage 11. To facilitate such usage a hand hold opening 52 is provided as an aid in lifting the chair support 13, and hooks 53 are disposed on the back 42 of the chair support for cooperative engagement with the top cross-member 18 of the frame 14. For support of the infant while moving the chair from one position of use to another or for general usage, a seat belt 54, as shown in FIG. 2, may be provided for attachment to the chair support unit 13.

While separate embodiments of the invention have been shown and described, it is apparent that the invention is adaptable to various modifications and changes. All such modifications as come within the scope of the hereunto appended claims are deemed to be a part of this invention.

What is claimed is:

1. A child's stroller carriage and chair support unit comprising a main frame member, a frame extension on said main frame, a slide tube on said main frame, a telescoping extension handle for mating reciprocal engagement with said slide tube, a gripping member on said handle, a wheel axle adjacent the lower extremity of said frame extension, wheel members thereon, a kick stand pivotally connected to said main frame adjacent said slide tube and adapted with said axle and wheels to support the assembled carriage when in the extended position, means for limiting the pivotal extension movement of said kick stand so that the main frame of said carriage will be held at a reclining angle with respect to a carriage supporting level surface; a support unit for said stroller carriage, said support unit comprising a back, a seat disposed outwardly from said back at an angle not greater than a right angle therefrom, side flanges forming with said back and seat a child support-

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ing structure, a skirt extension depending downwardly from the forward edge of said seat, said skirt extension when engaged with a level surface tending to elevate the forward edge of said seat and to tilt said back backwardly with respect to said level surface whereby a child sitting in said support unit will be in semi-reclining position when the said skirt extension is resting on a level surface, and clip members on said support unit for selectively attaching said support unit to the main frame of said carriage for bringing the back of said support unit and said main frame member into aligned positions with said skirt extension of said support unit depending downwardly in front of said wheel members.

2. A child's stroller carriage and chair support unit comprising a main frame member, a frame extension on said main frame at an angle thereto, a slide tube on said main frame, a telescoping extension handle for mating reciprocal engagement with said slide tube, a gripping member on said handle disposed at an angle from said telescoping extension handle and frame in direction opposite the disposition of said frame extension, a wheel axle adjacent the extremity of said frame extension, wheel members thereon, a kick stand pivotally connected to said main frame and adapted with said axle and wheels to support the assembled carriage when in the extended position, means for limiting the pivotal extension movement of said kick stand so that the main frame of said carriage will be held at a reclining angle with respect to a carriage supporting level surface a support unit for said stroller carriage, said support unit comprising a back, a seat disposed outwardly from said back at an angle not greater than a right angle therefrom, side flanges forming with said back and seat a child supporting structure, a skirt extension depending downwardly from the forward edge of said seat, said skirt extension when engaged with a level surface tending to elevate the forward edge of said seat and to tilt said back backwardly with respect to said level surface whereby a child sitting in said support unit will be in semi-reclining position when the skirt extension is resting on a level surface, and clip members on said support unit for selectively attaching said support unit to the main frame of said carriage for bringing the back of said support unit and said frame member into aligned positions with said skirt extension of said support unit depending downwardly in front of the forwardly disposed wheel members on said frame extension and wheel axle.

3. A child's stroller carriage and chair support unit comprising a main frame member, a frame extension on said main frame at an angle thereto, a slide tube on said main frame, a telescoping extension handle for mating reciprocal engagement with said slide tube, a gripping member on said handle disposed at an angle from said telescoping extension handle and frame in direction opposite the disposition of said frame extension, a wheel axle adjacent the extremity of said frame extension, wheel members thereon, a kick stand pivotally connected to said main frame and adapted with said axle and wheels to support the assembled carriage when in the extended position, means for limiting the pivotal extension movement of said kick stand so that the main frame of said carriage will be held at a reclining angle with respect to a carriage supporting level surface; a support unit for said stroller carriage, said support unit comprising a back, a seat disposed outwardly from said back at an angle not greater than a right angle therefrom, side flanges forming with said back and seat a child supporting structure, and clip members on said support unit for selectively attaching said support unit to the main frame of said carriage for bringing the back of said support unit and said frame member into aligned positions with the said skirt extension of said support unit depending downwardly in front of the forwardly disposed wheel members on said frame extension and wheel axle, said main frame member

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and frame extension being made of a flat metal stock to provide a resilient structure having improved shock absorbing features due to said resilience and the angular disposition of said main frame, frame extension and wheel members.

4. A child's chair support unit comprising a back, a seat disposed outwardly from said back at an angle not greater than a right angle therefrom, side flanges interconnecting said back and seat, rolled edges on said flanges separately forming arm rests and a child supporting structure for holding a child in upright position against said back and seat, and a skirt extension depending downwardly from the forward edge of said seat to provide with the back edge of said seat a support for said unit whereby said skirt extension when engaged with a level surface tends to elevate the forward edge of said seat and to tilt said back backwardly with respect to said

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level surface to maintain any child sitting in said support unit in semi-reclining position, said back, seat, side flanges, rolled edges and skirt extension members of said chair support unit being all of one piece molded construction to provide a unitary structure.

References Cited in the file of this patent

UNITED STATES PATENTS

10	2,483,908	Jackson -----	Oct. 4, 1949
	2,661,959	Bell -----	Dec. 8, 1953
	2,677,413	Pernecky et al. -----	May 4, 1954
	2,745,675	Haynes -----	May 15, 1956
	2,764,228	Donohue -----	Sept. 25, 1956
15	2,784,979	Chamberlain -----	Mar. 12, 1957
	2,818,107	Thaden -----	Dec. 31, 1957
	2,823,737	Eriksen -----	Feb. 18, 1958