Aug. 25, 1953 W. H. SPRIGGS 2,649,893

CHILD'S CONVERTIBLE CHAIR

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Fig. 1

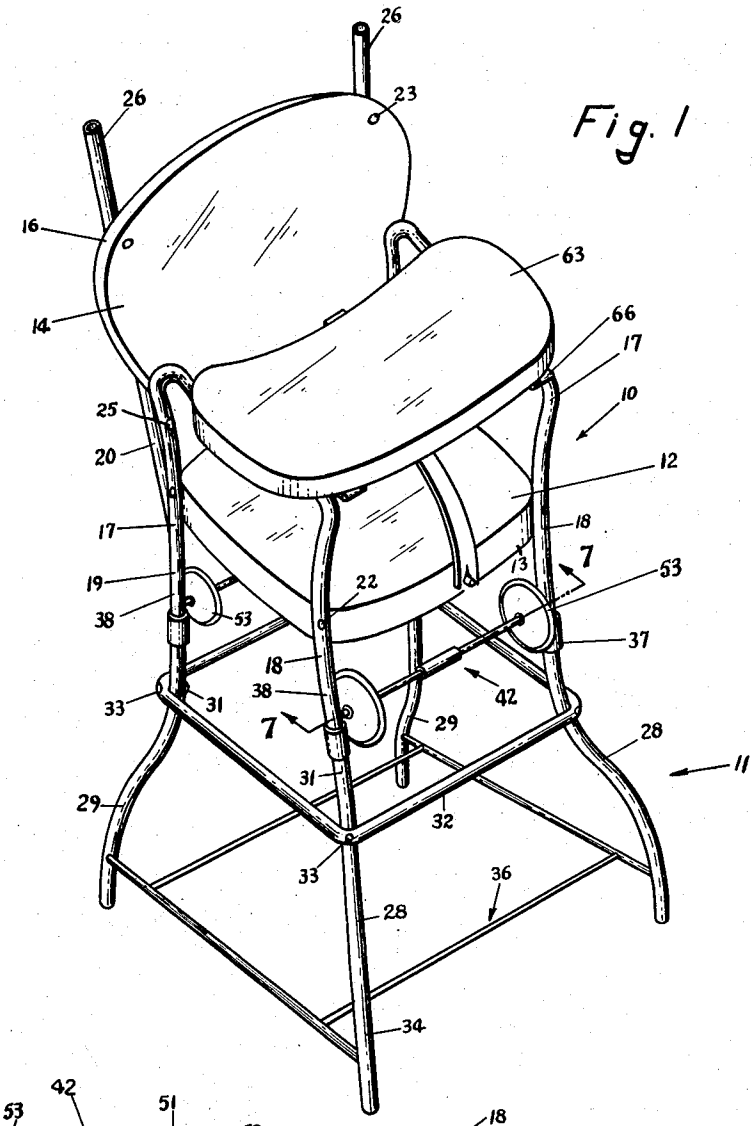
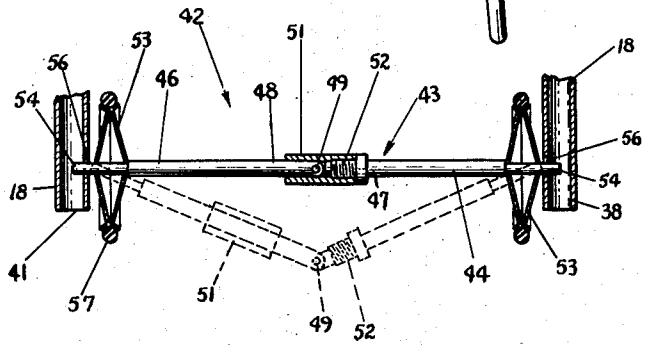


Fig. 7



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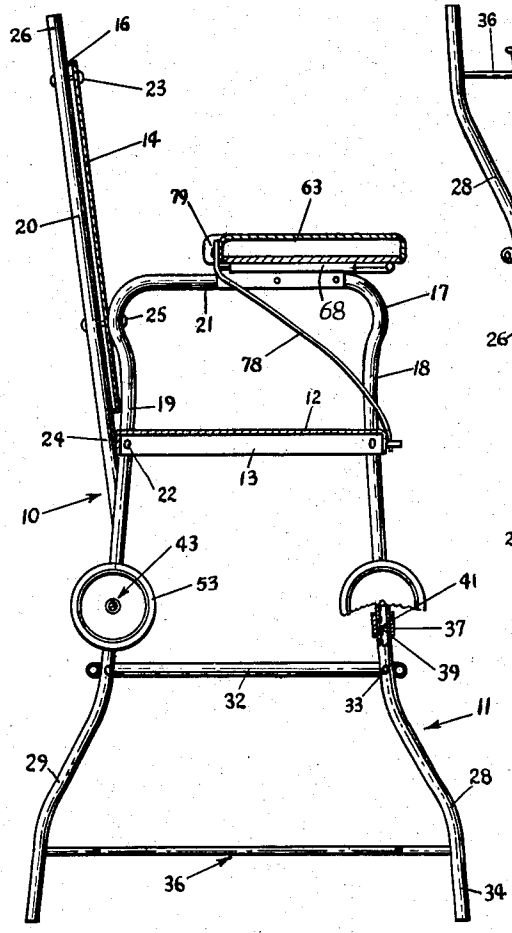


Fig. 2

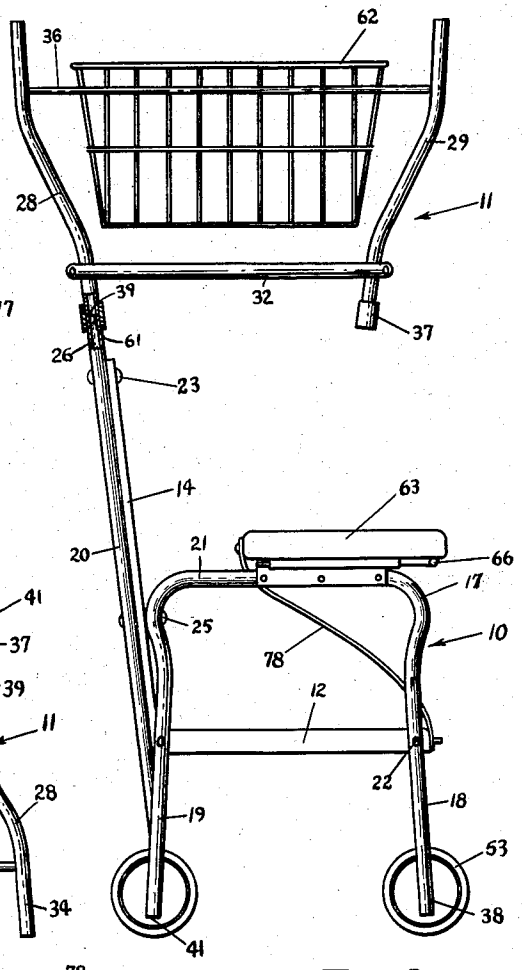
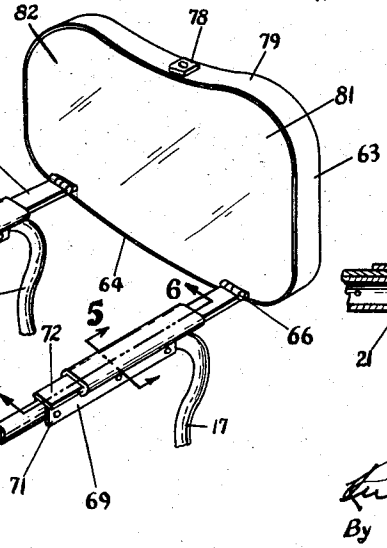


Fig. 3

Fig. 4



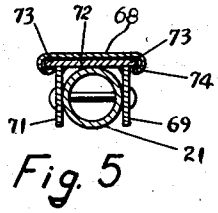
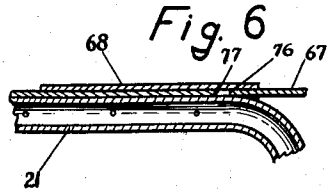


Fig. 5

Fig. 6



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CHILD'S CONVERTIBLE CHAIR

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3 Claims. (Cl. 155—38)

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This invention relates generally to chairs for children and in particular to a combination child's chair.

An object of this invention is to provide an improved combination or convertible chair for a child.

A further object of this invention is to provide a combination chair for a child in which a chair section can be equipped with wheels for use as a stroller, or supported on a base section for use as a highchair, and with the base section being constructed for support on the chair section to constitute a package container when the chair section is utilized as a stroller.

Yet another object of this invention is to provide a child's stroller in which a package container is removably supported thereon at a position directly above and spaced upwardly from the seat section of the stroller to maintain a free handling of the stroller, and the stability of the stroller against tipping movement.

Still a further object of this invention is to provide a child's chair having a seat and arm rests therefor, in which a tray member has one side thereof pivotally supported on the front ends of the arm rests for pivotal movement to an upright position located forwardly of the seat and with the underside thereof faced rearwardly.

Further objects, features and advantages of this invention will become apparent from the following description when taken in connection with the accompanying drawing in which:

Fig. 1 is a perspective view of the combination chair of this invention when used as a highchair;

Fig. 2 is a longitudinal sectional view of the chair illustrated in Fig. 1;

Fig. 3 is a side elevation of the chair of this invention showing the relative assembly of the parts thereof when the chair is to be used as a stroller having package carrying facilities with certain parts broken away for the purpose of clarity;

Fig. 4 is a detail perspective view of the tray member showing its assembly relation with the chair arms;

Figs. 5 and 6 are sectional detail views as seen on the lines 5—5 and 6—6, respectively in Fig. 4; and

Fig. 7 is an enlarged sectional view taken along the line 7—7 in Fig. 1.

With reference to the drawing the combination chair of this invention is illustrated in Figs. 1 and 2 as including an upper or chair section 10 and a lower or base section 11. The chair

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section 10 includes a metal seat member 12 having a down turned peripheral flange 13 and a back rest 14 formed with a rearwardly extended peripheral flange 16.

Arranged at opposite sides of the seat 12 are a pair of combination members 17 of a substantially inverted U-shape and of a tubular metal construction, each of which has leg sections 18 and 19 and a base section 21. The seat 12 functions as a connecting or brace member between the leg sections 18 and 19 and is arranged between such leg sections and secured thereto, intermediate the ends of the leg sections, by rivets 22 extended through the leg sections 18 and 19 and the peripheral flange 13. Those portions of the leg sections 18 and 19 extended upwardly from the seat 12 constitute supports for the base sections 21, which in turn, function as arm rests for the chair section 10. Also, those portions of the leg sections 18 and 19 extended downwardly from the seat 12 constitute the leg members for the chair section 10.

The back rest 14 is secured, as by rivets 23 and 25 to a pair of transversely spaced upright tubular members 20 the lower ends 24 of which are connected, as by welding, to the rear sides of the rear leg sections 19 at positions below the seat 12 and the upper ends 26 of which project upwardly from the back rest 14 for a purpose to later appear. The rivets 25 are extended through the rear leg sections 19 at positions above the seat 12.

The structure, as described above thus provides a child's chair which can be used in conjunction with a child's play table and like infant or juvenile furniture.

To convert the chair section 10 into a highchair, the lower section 11 (Figs. 1 and 2) is formed with four leg members 28 and 29 of a tubular metal construction, and with the leg members 28 being illustrated as the front legs and the leg members 29 as the rear legs. These leg members are connected together adjacent their upper ends 31 by a continuous connecting member 32 of a metal tubular construction and of a substantially square shape, with the leg members 28 and 29 being located in a corner of the connecting member 32 and secured to the connecting member 32 by rivets 33. The lower ends 34 of the leg members 28 and 29 are suitably connected together by a transverse open brace structure indicated generally at 36.

Mounted about and projected upwardly from the upper ends 31 of the leg members 28 and 29

are tubular socket members 37. The upper ends 31 of the leg members 28 and 29 are arranged in a spaced relation corresponding to the lower ends 38 of the leg sections 18 and 19. Further, the leg sections 18 and 19, and leg members 28 and 29 are formed of a like tubular material. Thus on inserting the lower ends 38 of the leg sections 18 and 19, within the tubular sockets 37, to a stop position defined by the abutting engagement of the upper end face 39 of a leg member 28 and 29 with the lower end face 41 of a leg section 18 and 19 (Fig. 2) the chair section 10 is positively held in a superposed position on the base or lower section 11.

To convert the chair section 10 into a stroller there is provided a pair of wheel and axle units, indicated generally at 42 (Figs. 1 and 7) for each pair of leg sections 18 and 19. Since the construction of a unit 42 and its relative assembly with a pair of corresponding leg sections 18 and 19 is the same in all respects, only one of such units will be described in detail.

The axle 43 of a unit 42 is comprised of two sections 44 and 46 having their adjacent ends 47 and 48, respectively, pivotally connected together at 49 for a relative hinged movement. Slidably supported on the axle section 46 is an internally threaded tubular locking member 51, which is threadably engageable with an externally threaded locking collar 52 mounted on the end 47 of the shaft section 44. Thus on release of the tubular member 51 from the collar 52, and movement of the tubular member 51 away from the pivot connection 49, as illustrated in dotted lines in Fig. 7, the shaft 43 is hingedly movable. With the tubular member 51 in threaded engagement with the collar 52, the pivot 49 is located within the longitudinal confines of the tubular member 49 whereby the shaft sections 44 and 46 are rigidly held in longitudinal alignment.

Ground engaging wheels 53 are carried at opposite ends 54 of the shaft 43, and with the shaft ends 54 being projected outwardly from the wheels 53. Thus with the tubular member 51 in its dotted line position shown in Fig. 7, the shaft 43 is folded or broken to provide for the insertion of the shaft ends 54 within openings 56 formed in the inner sides of the lower ends 38 of the leg sections 18. On movement of the shaft sections 44 and 46 into longitudinal alignment, as shown in full lines in Fig. 7, the length of the shaft 43 is greater than the distance between the lower ends 38 of the leg sections 18 so that on threaded engagement of the tubular member 51 with the collar 52, the shaft sections 44 and 46 are rigidly held in longitudinal alignment and against withdrawal from supported positions in the leg sections 18.

The lower sides 57 of the wheels 53 are below the level of the lower end faces 41 of the leg sections 18 and the wheels 53 are located between such leg sections. Thus the wheels 53, do not interfere with the use of the chair structure as a highchair, and on lifting of the chair section 10 off from the lower section 11, the chair section 10 is immediately available as a stroller, with the projected ends 26 of the back rest supports 20 constituting hand grips for steering and pushing purposes.

When the stroller is to be used on a shopping trip and the like the lower section 11 is adapted to be used as a package container (Fig. 3) on the stroller. The hand grips 26 are spaced a distance apart corresponding to the spaced relation of

the upper ends 31 of the leg members 28 and 29. By inverting the lower section 11, and locating such section above the chair section 10, the hand grips 26 are received within a pair of sockets 37 to a stop position defined by the abutting engagement of the end faces 39 of a pair of leg members 28 and 29 with the upper end faces 61 of the hand grips 26. This location and support of the lower section 11 on the upright supports 20, in no way interferes with the child seated in the chair section 10 and by virtue of such support being directly above the chair section 10, the chair section 10 is stabilized against tipping movement. Also, with the lower section 11 located forwardly of the back rest 14 there is no interference with the pushing or the guiding of the chair section 10.

Packages can be carried directly within the confines of the lower section 11, or in a wire basket, which as shown at 62 in Fig. 3, is supported on the brace structure 36 within the confines of the lower section 11.

The chair section 10 is equipped with a tray member 63 (Figs. 2 and 4) which has one side 64 thereof pivotally connected, as indicated at 66 to the front ends 67 of movable extensions 68 which are slidably supported on the arm rests 21 for movement longitudinally of the arm rests. An inverted U-shape guide member 69 has the leg sections 71 thereof arranged in a straddling relation with an arm rest 21, so that the base section 72 of a guide member rests on the top side of the rest arm 21. As best appears in Figs. 5 and 6 the base section 72 has the sides 73 thereof projected laterally from the leg sections 71 and an extension 68 has grooved portions 74 extended about the projected sides 73. The extensions 67 are thus slidable relative to the base section 73, and are retained against downward and lateral tipping movement by the coacting engagement of the side portions 73 and grooved portions 74 on the guide members 69 and extensions 68, respectively.

With the tray 63 horizontally disposed in an overlying relation with the extensions 68, as shown in Fig. 6, the tray is movable rearwardly to a stop position defined by the engagement of a stop portion 76 on the extension 67 with the front end 77 of a base section 72. The tray is then held against forward movement by the provision of a strap or the like 78 attached at one end 79 to the rear side of the tray 63, and at its other end 81 to the front side of the seat 12 (Fig. 2).

On release of the strap 78, and movement forwardly of the extensions 68, a child is readily removed from or positioned on the seat 12. Also, by virtue of the pivotal support of the tray 63 at its front side 64, for pivotal up and down movement on the extensions 68, the tray is movable from its horizontal position shown in Fig. 2 to its upright position shown at Fig. 4. When in an upright position, the underside 81 of the tray member 63 faces rearwardly so that a blackboard or the like, indicated at 82, secured to the underside of the tray member 63 is available for use by a child seated within the chair. The tray member 63 is maintained in an upright position by coacting stop portions (not shown) formed on the hinges or pivot connections 66, in any well known manner. Also, the tray 63 may be removed entirely from the arm rests 21 by merely releasing the strap 78 and then moving the extensions 68 forwardly out of engagement with the guide members 69.

From a consideration of the above description it is seen that the invention provides a combina-

tion chair structure which is comprised of a few parts, and is readily converted from a juvenile chair, into a feeding chair, a stroller, a highchair, or a stroller with package carrying facilities.

Although the invention has been described with respect to a preferred embodiment thereof it is to be understood that it is not to be so limited since changes can be made therein which are within the full intended scope of this invention as defined by the appended claims.

I claim:

1. A child's convertible chair structure including a lower section comprised of leg members, connected together by transverse members, an upper section having a seat portion and a back rest portion, legs extended downwardly from said seat portion in a spaced relation corresponding to the spaced relation of the leg members of said lower section, socket members carried on the upper ends of the leg members in said lower section for removably receiving therein the lower ends of the legs of said upper sections to form a child's highchair, ground engaging wheels removably carried on said upper section between the lower ends of the leg members thereof, and a pair of spaced upright supports projected upwardly from said back rest portion for insertion within the socket members on a pair of the leg members of said lower section, whereby to support said lower section in an inverted position above said seat portion, said lower section in said supported inverted position constituting a package carrying container and said upper section a child's stroller.

2. A child's stroller including a seat section and a back rest section, a supporting structure for said seat section having downwardly extended

leg members, ground engaging wheels carried between the lower ends of said leg members, a pair of transversely spaced upright hand grips on said back rest section, and a package container having a pair of transversely spaced socket members at one end thereof removably receiving said hand grips therein such that the container is supported on said hand grips at a position above said seat section.

3. A child's convertible chair structure including a portable chair section having a seat portion and a back rest portion, leg members extended downwardly from said seat portion, a pair of transversely spaced supports projected upwardly from said back rest portion, ground engaging wheels removably carried between the lower ends of said leg members, a base section for converting said portable chair section into a highchair comprised of an open frame structure having socket members at the uper end thereof receiving the lower ends of said leg members therein, said base section being convertible into a package container for said portable section by inserting said spaced supports within a pair of said socket members such that the base section is supported on said supports in an inverted position above said seat portion.

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