

May 12, 1964

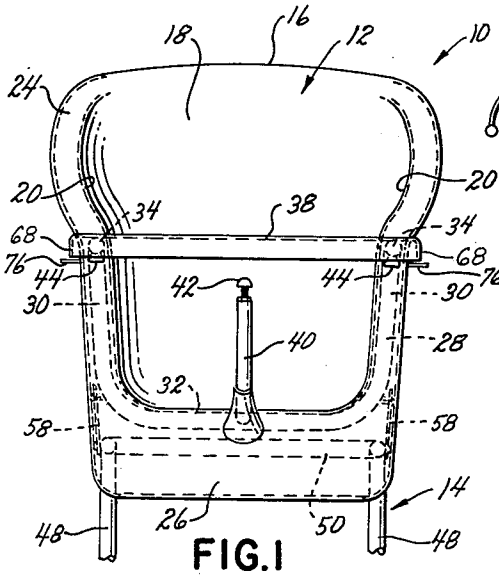
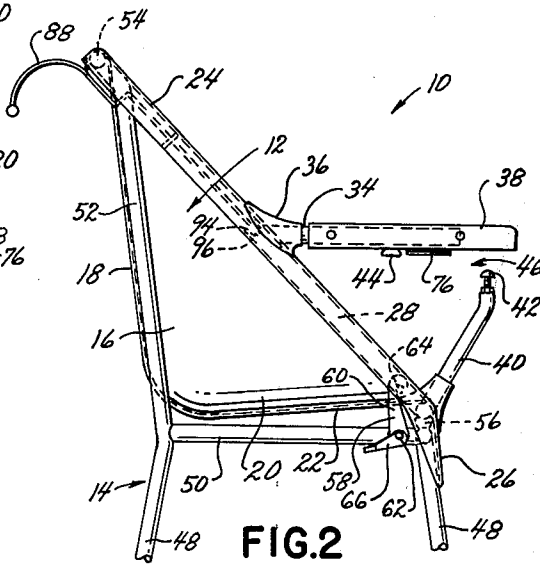
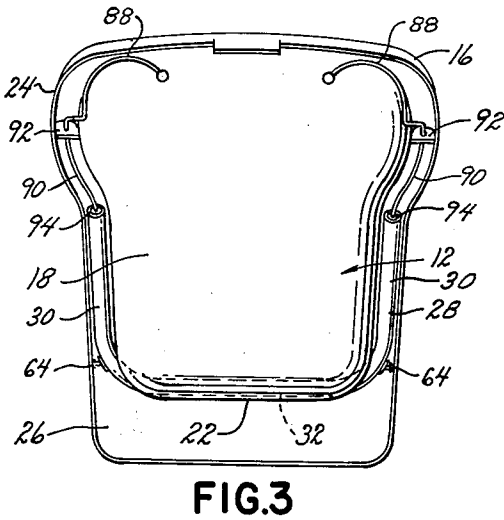
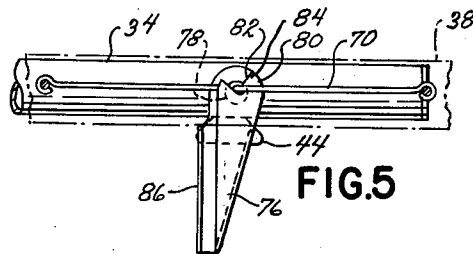
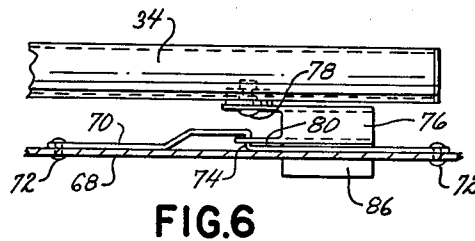
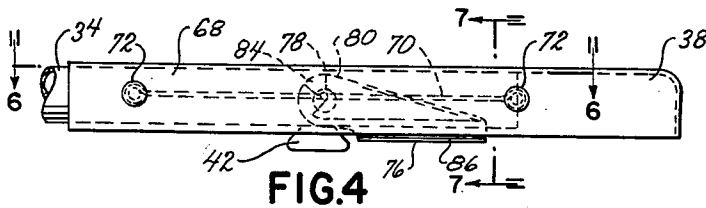
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3,132,895

HIGH CHAIR CONSTRUCTION AND PARTS THEREFOR OR THE LIKE

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2 Sheets-Sheet 1



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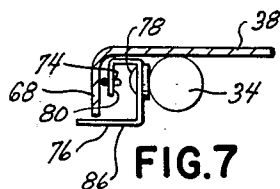
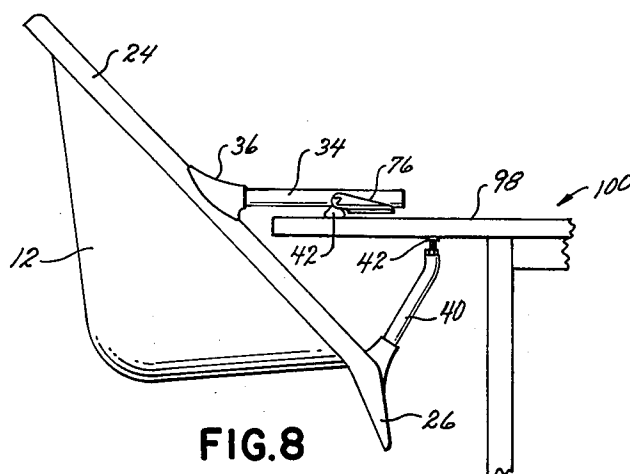
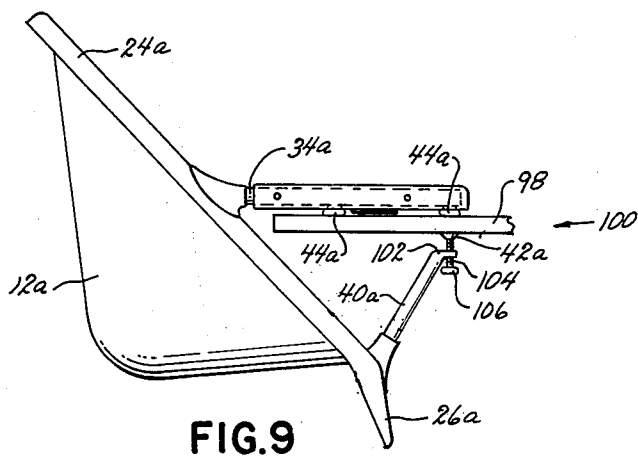
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HIGH CHAIR CONSTRUCTION AND PARTS THEREFOR OR THE LIKE

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2 Sheets-Sheet 2



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3,132,895

HIGH CHAIR CONSTRUCTION AND PARTS THEREFOR OR THE LIKE

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This invention relates to an improved child's high chair construction and parts therefor which have multiple uses.

In particular, one embodiment of this invention comprises a frame structure having a seat structure detachably secured thereto whereby the seat structure and frame structure cooperate together to form a conventional high chair or the like.

However, the seat structure of this invention is so constructed and arranged, that the same is adapted to be detached from the frame structure and utilized for different purposes.

For example, the seat structure of this invention can be removed from the frame structure and subsequently be secured to an automobile seat or the like by a pair of hook-like members carried by the seat structure whereby the seat structure of this invention can be utilized as a child's car seat or the like.

In addition, the seat structure of this invention is so constructed and arranged, that the same is adapted to be removed from the frame structure and subsequently attached to a conventional table or the like in a unique manner whereby the seat structure is suspended from the table so that a child can be properly seated relative to a table of any desired height without utilizing the frame structure of the high chair construction.

Therefore, it can be seen that the high chair construction of this invention has multiple uses heretofore unattainable by prior-known high chair constructions.

In one embodiment of this invention the seat structure comprises a bucket-like seat member having a pair of opposed sides, a back and a bottom integrally interconnected together and suitably reinforced. Such seat structure is adapted to be detachably secured to the frame means of the high chair construction whereby the frame means supports the seat structure above a supporting surface at a desired height to form a conventional high chair construction.

A pair of hook-like members are interconnected to the sides of the bucket-like seat member and are adapted to be telescoped in an out-of-the-way position and folded against the back of the seat member so that the same are out of the way when not being utilized. However, when the seat structure is detached from the frame structure, the hook-like members can be untelescoped from the sides of the seat member and folded to their hooking position so that the seat structure can be suspended over the back of an automobile seat or the like to provide the aforementioned child's car seat.

In addition, a pair of brace means or members respectively extend outwardly from the sides of the seat member and are adapted to carry a serving tray or the like to support dishes of food and the like in the conventional manner for the high chair construction, the tray being detachably secured to the side brace means by a novel latching means of this invention.

The side brace members are adapted to cooperate with a bottom brace member extending outwardly from the bottom of the seat member to define a channel therebetween which is adapted to receive a projecting edge of a table or the like so that the seat structure can be interconnected to the table and supported by the brace members independent of the frame structure of the high chair construction.

In this manner, only the seat structure of the high chair

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construction of this invention need be taken on trips and the like as the same is readily adapted to be interconnected to conventional tables and the like so that the child will be properly supported relative to the serving structure of the table without requiring bulky frame means for supporting the seat structure as provided by conventional high chair constructions.

Therefore, it can be seen that the high chair construction of this invention can be normally utilized around the home in the conventional manner and when it is desired to take a trip or the like with the child, the seat structure can be removed from the frame structure and utilized as a car seat while traveling on the road. Thereafter, when it is desired to enter a restaurant or the like, the seat structure can be removed from the automobile and taken into the restaurant and attached to a conventional table in a manner hereinafter described so that the seat structure will provide proper seating means for the child without requiring use of the bulky frame structure of the high chair construction.

Accordingly, it is an object of this invention to provide an improved high chair construction.

Another object of this invention is to provide an improved high chair construction which has a seat structure detachably secured to a frame structure.

A further object of this invention is to provide an improved seat structure for a high chair construction or the like which has multiple uses.

Another object of this invention is to provide a seat structure for a high chair construction or the like which is adapted to be removed from the frame structure of a high chair construction and utilized as a child's car seat or the like.

A further object of this invention is to provide an improved seat structure for a high chair construction or the like which is adapted to be removed from the frame structure of a high chair construction and be detachably secured to a conventional table or the like.

Another object of this invention is to provide improved latching means for attaching a tray or the like to a high chair construction or the like.

Other objects, uses and advantages of this invention are apparent from a reading of this description which proceeds with reference to the accompanying drawings forming a part thereof and wherein:

FIGURE 1 is a fragmentary front view illustrating one high chair construction of this invention.

FIGURE 2 is a fragmentary side view of the high chair construction illustrated in FIGURE 1.

FIGURE 3 is a rear view of the seat structure of the high chair construction of FIGURE 1 and illustrates the hooking members thereof disposed in their out-of-the-way position.

FIGURE 4 is an enlarged fragmentary view of the tray for the high chair construction of this invention and illustrates the latching means thereof.

FIGURE 5 is a view similar to FIGURE 4 and illustrates the latching means in its unlocked position with the side of the tray shown in phantom.

FIGURE 6 is a fragmentary cross-sectional view taken on line 6—6 of FIGURE 4.

FIGURE 7 is a cross-sectional view taken on line 7—7 of FIGURE 4.

FIGURE 8 is a fragmentary side view illustrating the method of attaching the seat structure of the high chair construction of FIGURE 1 to a supporting table or the like.

FIGURE 9 is a view similar to FIGURE 8 illustrating another embodiment of this invention.

While the various features of this invention are hereinafter described as being particularly adaptable for high chair constructions or the like, it is to be understood that

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the various features of this invention can be utilized with other constructions, as desired.

Therefore, this invention is not to be limited to only the embodiments thereof illustrated in the drawings, because the drawings are merely utilized to illustrate one of the wide variety of uses of this invention.

Referring now to FIGURES 1 and 2, an improved high chair construction of this invention is generally indicated by the reference numeral 10 and comprises a seat structure 12 detachably secured to a frame structure 14.

While the seat structure 12 can be formed in any suitable manner, the embodiment of the seat structure 12 comprises a bucket-like seat member 16 having a back portion 18, a pair of opposed sides 20 and a bottom 22, the seat member 16 comprising moldable plastic or the like and having a curled flange 24 extending about the free edges of the sides 20 and back 16, in the manner illustrated in FIGURE 2, and a downwardly extending flange 26 projecting below the bottom 22 thereof.

A U-shaped, tubular support member 28 is disposed underneath the flanges 24 and 26 of the seat member 16 and is secured thereto in any desired manner whereby the legs 30 of the tubular support member 28 extend along the straight portions of the curled flange 24 and the cross member 32 thereof extends under the bottom flange 26.

A pair of tubular side brace members 34 project through suitable apertures in the curled flange 24 of the seat member 16 and are appropriately interconnected to the upper ends of the legs 30 of the U-shaped support member 28 in the manner illustrated in the drawings whereby the side brace members 34 project outwardly from the sides 20 of the seat structure 12.

If desired, the openings provided in the curled flange 24 of the seat member 16 which receive the side braces 34 can be covered by suitable cowl-like members 36.

The side brace members 34 are adapted to carry a tray 38 for receiving food dishes and the like in a conventional manner, the tray 38 being detachably secured to the side braces 34 in a unique manner hereinafter described.

A bottom, tubular brace member 40 projects through a suitable aperture in the bottom flange 26 and is interconnected to the medial portion of the cross member 32 of the U-shaped support member 28 in the manner illustrated, the bottom brace member 40 having a cushioned end 42 disposed below cushioning means 44 carried by the side brace members 34 whereby a channel means 46 is defined between the cushioning means 42 and 44 of the brace members 40 and 34 in the manner illustrated in FIGURE 2 for a purpose hereinafter described.

The seat structure 12 is adapted to be interconnected to the frame structure 14 to form a substantially conventional high chair construction 10 in the following manner.

In particular, the frame structure 14 comprises a plurality of legs 48 interconnected together by horizontally disposed frame members 50, the rear legs 48 having upwardly extending portions 52 joined together by a rear portion 54 adapted to be disposed under the curled flange 24 of the back 18 of the seat member 16 in the manner illustrated in FIGURE 2.

The front horizontal member 50 of the frame structure 14 or the cross member 32 of the U-shaped support member 28 of the seat structure 12 carries a resilient bumper 56 so that the seat structure 12 rests on such bumper 56 when the seat structure 12 is disposed on the frame means 14 in the manner illustrated in FIGURE 2.

Therefore, it can be seen that the seat structure 12 can be readily carried by the frame structure 14 by having the upper end of the flange 24 resting around the end 54 of the frame means 14 and the cross member 32 of the U-shaped support member 28 resting on the front frame member 50 in the manner illustrated in FIGURE 2.

The seat structure 12 is adapted to be detachably secured to the frame structure 14 by a plurality of latching members 58 carried by the frame means 14.

In particular, each latching member 58 has a hook-

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shaped portion 60 pivotally mounted to a horizontal frame member 50 at the point 62 whereby the hook-shaped end 60 is adapted to be disposed around a pin 64, FIGURE 3, projecting outwardly from the legs 30 of the U-shaped support member 28 when the handle 66 of the latch member is moved in the proper direction. When it is desired to detach the seat structure 12 from the frame structure 14, the handles 66 of the latch members 58 are moved in the opposite directions whereby the hook-shaped ends 60 thereof are detached from the pins 64 so that the seat structure 12 can be lifted directly from the frame means 14.

The tray 38 is adapted to be detachably secured to the side brace members 34 of the seat structure 12 in the manner illustrated in FIGURES 4-7.

In particular, the tray 38 has a pair of opposed sides 68 adapted to be disposed on the outside of the side brace members 34 in the manner illustrated, each side 68 of the tray 38 carrying a wire or rod 70 on the inside surface thereof and secured thereto by a plurality of rivets 72 or the like. Each rod 70 has a medial portion 74 bent in the manner illustrated in FIGURE 6 so as to be horizontally disposed with respect to its respective side brace member 34 and projecting toward the same when the tray 38 is held in the position illustrated in the drawing.

Each side brace member 34 carries a latching member 76 which is pivotally secured thereto by a pivot pin 78, each latching member 76 having a projection 80 provided with a slot 82 which faces vertically upwardly when the latch member 76 is pivoted to the position illustrated in FIGURE 5.

When the latch members 76 are pivoted to the position illustrated in FIGURE 5, the tray 38 can be lowered vertically downwardly onto the side brace members 34 whereby the inwardly projecting portions 74 of the rods 70 thereof enter the slots 82 of the latch members 76 in the manner illustrated in FIGURE 5.

Thereafter, the latch members 76 are pivoted to the position illustrated in FIGURE 4 whereby the hook-shaped ends 84 of the latch members 76 are disposed over the medial portion 74 of the rods 70 to hold the tray 38 in its proper position on the side brace members 34.

When it is desired to detach the tray 38 from the side brace members 34 of the seat structure 12, the handle portions 86 of the latch members 76, which project outwardly beyond the tray 38, are pushed vertically downwardly to pivot the latch members 76 back to the position illustrated in FIGURE 5 whereby the tray 38 can be lifted vertically upwardly from the seat structure 12 and be readily removed therefrom.

As previously mentioned, the seat structure 12 is adapted to be detached from the frame structure 14 by the latch members 58 whereby the seat structure 12 can be utilized as a child's car seat.

In particular, a pair of hook-like members 88, as illustrated in FIGURES 2 and 3, have flexible portions 90 thereof passing through suitable apertures in lugs 92 interconnected to the undersurface of the curled flange 24 of the seat member 16, the free ends of the flexible portions 90 being received through support members 94 disposed at the opened ends of the legs 30 of the U-shaped support structure 28 of the seat member 16. The free ends of the flexible portions 98 of the hook-shaped members 88 are interconnected to plungers or pistons 96 which are telescopically disposed in the legs 30 of the tubular U-shaped member 28.

In this manner, the hook-shaped members 88 can be pulled outwardly to the position illustrated in FIGURE 2 whereby the piston ends 96 of the hook-shaped members 88 abut against the fixed members 94 of the tubular structure 28 so that the hook-shaped members 88 cannot be pulled out of the legs 30 of the U-shaped member 28.

With the hook-shaped members 88 in this position, the seat structure 12 is adapted to be hooked over the back

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of a car seat so that the seat structure 12 can provide a child's car seat in a conventional manner.

When it is no longer desired to use the hook-shaped members 88, the same are pushed downwardly relative to the seat member 16 whereby the ends 96 of the hook-shaped members 98 are telescoped into the legs 30 of the U-shaped member 28 to the position illustrated in FIGURE 3 whereby the hook-shaped members 88 can then be folded back in an out-of-the-way position behind the curled flange 24 of the seat structure 12.

Therefore, it can be seen that the seat structure 12 of this invention is readily adapted to form a child's car seat when desired.

As previously set forth, the seat structure 12 of this invention is readily adapted to be attached to a conventional table and the like without utilizing the frame structure 14.

In particular, as illustrated in FIGURE 8, the seat structure 12 is adapted to be interconnected to the horizontal member 98 of a table 100 or the like by having the side braces 34 thereof disposed over the top surface of the table 100 and the lower or bottom brace member 40 thereof disposed in abutting relation with the undersurface of the table 100 as illustrated.

Thus, it can be seen that the cushioning means 44 and 42 of the brace members 34 and 40 respectively abut the opposed surfaces of the horizontal member 98 of the table 100 to fully suspend the seat structure 12 thereon so that the child can be readily seated in the suspended seat structure 12 and can utilize the horizontal member 98 of the table 100 as a food serving surface.

However, it is to be understood that the tray 38 could still be interconnected to the side braces 34 in the manner previously described when the seat structure 12 is utilized with the table 100.

Another embodiment of this invention is illustrated in FIGURE 9 and like parts are designated by like reference numerals followed by the reference letter "a."

In particular, the seat structure 12a illustrated in FIGURE 9 is substantially identical to the seat structure 12 illustrated in FIGURE 8 except that the side braces 34a thereof carry a plurality of cushioning means 44a which respectively abut the upper surface of the horizontal member 98 of the table 100 and the lower or bottom brace member 40a of the seat structure 12a carries an adjustable cushioning means 42a which abuts the lower surface of the horizontal member 98 of the table 100.

In this manner, the lower cushioning means 42a of the seat structure 12a can be adjusted to vary the distance between the cooperating cushioning means 44a and 34a whereby the seat structure 12a can be utilized with tables of different thicknesses.

In particular, the bottom brace member 40a has an end 102 provided with a threaded aperture therethrough. A threaded member 104 is disposed in threaded engagement with the threaded aperture so that upon turning the handle 106 thereof the end 42a can be moved relative to the end 102 of the bottom brace member 40a to the desired position.

Therefore, it can be seen that an improved high chair construction has been provided by this invention which has a seat structure that is not only adapted to perform the conventional high chair functions, but is also adapted to be utilized as a child's car seat and be readily attachable to a conventional table or the like without utilizing the frame means of the high chair construction.

Further, this invention provides an improved latch means for detachably securing a serving tray to the seat structure or the like.

While preferred forms of this invention have been disclosed as required by the patent statute, it is to be understood that other forms may be used and fall within the scope of the appended claims.

What is claimed is:

1. A multi-purpose chair comprising in combination, a frame means, a seat structure detachably secured to

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said frame means whereby said frame means is adapted to support said seat structure above a supporting surface, said seat structure having a pair of opposed sides and a bottom, a pair of side brace members extending from said sides, and an adjustable bottom brace member extending upwardly from the center of the forward edge of said bottom intermediate to and cooperating with said side brace members to define a channel therebetween, said channel being adapted to receive a horizontally disposed member therebetween whereby said seat structure is adapted to be supported on said horizontally disposed member by said brace members when said seat structure is detached from said frame means.

2. A combination as set forth in claim 1 wherein a tray is detachably secured to said side brace members.

3. A combination as set forth in claim 1 wherein a pair of hook-like members are carried by said seat structure to hang said seat structure to a supporting means when said seat structure is detached from said frame means.

4. A combination as set forth in claim 1 wherein said brace means connected to said bottom has an adjustable end abutting said support structure.

5. A combination as set forth in claim 1 wherein said brace means are respectively interconnected to a U-shaped support member carried by said seat structure.

6. A multi-purpose chair as set forth in claim 1 wherein, said sides respectively carry tubular members, said tubular members respectively and telescopically receiving piston ends of a pair of hook-like members whereby said hook-like members can be telescoped to an out-of-the way position and be moved to a hooking position relative to said seat structure.

7. A combination as set forth in claim 6 wherein said hook-like members are rotatably mounted in said tubular members.

8. In combination, a seat structure having a tray carrying means, a latch member carried by said means and pivotally mounted thereto, said latch member having a slot therein which faces vertically upwardly when in the unlocked position thereof and which faces sideways when in the locked position thereof, and a tray having a horizontally disposed pin means which is adapted to be received in said slot of said latch member when said tray is placed vertically downwardly on said tray carrying means and said latch member is in the unlocked position, said latch member moving to the locking position thereof when said tray is moved vertically downwardly.

9. A combination as set forth in claim 8 wherein said latch member has a handle for readily moving said latch member between its locking and unlocking positions.

10. A seat structure having a pair of opposed sides and a bottom, said sides respectively having a pair of side braces extending outwardly therefrom, said bottom having a bottom brace extending outwardly therefrom and cooperating with said side braces to define a channel therebetween, and said side braces and bottom brace respectively carrying cushioning means.

11. A combination as set forth in claim 10 wherein said cushioning means of said bottom brace is adjustable relative to said bottom brace.

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