CHILD'S COMBINATION CHAIR

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6 Claims. (Cl. 190—8)

This invention relates to chairs of the folding type, and especially to chairs that may be compactly folded for easy carriage and trim appearance.

More particularly, the present invention is concerned with a child's folding chair having compartments that may contain useful accessories such for example, as a food or play tray, toilet facilities and the like.

It is the primary object of my invention to devise chairs of the above mentioned types which are practical and comfortable when unfolded, and which may be folded into a structure of box-like form to resemble a neat piece of luggage. In this connection it is an important object to so divide a box of generally rectangular shape and reassemble the parts by hinged connections—or to manufacture a plurality of matched parts and hingedly connect them—that the parts are foldable into the form of a suitcase that can be conveniently carried by addition of a "suitcase" handle.

Another major object of this invention resides in the provision of a child's chair having compartments for accessories, the chair being designed to coact complementarily and structurally with such accessories. This object comprehends a foldable chair in which the base affords one or more storage spaces in addition to its service for elevating the seat to proper height above ground level. By "ground level" is meant any supporting surface such as an actual ground level, the floor level of a home or a vehicle, or the seat of an adult's chair wherever provided.

As a further important object, it is contemplated to provide a system of hinges and latches that assure safety to the child when the chair is opened, and that also facilitates manipulation of the foldable parts and afford accurate and tightly locked closure of the parts when the chair is collapsed into its compact and transportable condition.

It is a further object of this invention to so divide a foldable chair transversely on an inclined plane into two main parts that the upper edge of the inclined plane is close to the hands and the chest of the child, when the structure is unfolded, so as to afford important advantages that will appear in some of the following descriptive matter.

The foregoing and other objects of the invention should become clearly apparent from a study of the following detailed description when taken in conjunction with the accompanying drawings, wherein:

Fig. 1 is a view in perspective of the chair of this invention completely folded to form a compact, portable unit similar to a piece of luggage. Fig. 2 shows the same chair partially unfolded; Fig. 3 is an enlarged view similar to Fig. 2 and showing the chair fully unfolded to form a seat; Fig. 4 represents a sectional view taken on the vertical plane of line 6—4, Fig. 2, broken lines showing the tray pulled outward to form a foot rest; Fig. 5 is an enlarged sectional view of a detail as seen on line 5—5 of Fig. 1; Fig. 6 is a perspective view of a tray removed from the chair's lower compartment and mountable on the front of the chair's top compartment; Fig. 7 shows fragments of the chair and a tray and the detachable connection therebetween; Fig. 8 is a side elevational view of the top portion of the unfolded chair with the tray attached; Fig. 9 is a perspective view of a toilet seat removed from the chair's lower compartment and unfolded; and Fig. 10 is a side elevational view of the toilet seat in its collapsed position.

With continued reference to the drawings, wherein like numerals designate like parts, the chair comprises two primary sections or compartments 15 and 16 hinged together at 17 and matched along an inclined plane 18 so that they may fit together in folded position and be clamped together by any conventional latching means 19 to form, as in Fig. 1, a small portable box having a handle 20 and appearing to be a neat piece of traveler's luggage.

To convert the box into a chair, the longer side of section 15 is laid upon a supporting surface and the section 16 is swung through an angle of 180 degrees about the hinge 17 until it rests firmly upon the section 15. In this position, the elements 22 and 23 of a conventional latch 24 can be intercoupled for the safety of the child. The section 16 has a panel 25 hinged at 26 so that it can be unfolded to form the upper part of a back rest, all as seen in Fig. 3. The bottom of the unfolded section 16 may be provided with a comfortable cover or pad 27.

An adjustment strap 28 is provided to hold the chair in the chair. Links 29 of conventional form preferably are connected by pins or screws 30 between the sides of the section 16 and its lid 29 to prevent the latter from oscillating after it has been swung to its position of Fig. 3. With the chair set up as in Fig. 3, the front edges of
the sides of the sections 15 and 16 remain in the plane 18 and slope downwardly and forwardly so that the chair has considerably greater depth at the bottom than at the top. This is important for, as subsequently seen, a tray 37 is provided that may serve as a properly disposed footrest (Fig. 4), or as a food server (Fig. 8) arranged close to the child’s chest.

As best seen in detail in Fig. 5, the transverse edge of the panel 25 has a transverse groove 32 complementary to a bead 33 on the section 18. These mating formations, of course, could be reversed, it being only desirable that they interlock when folded together as in Figs. 1 and 5 to avoid the need for securing them together by added latching means. When thus folded the section 16 may serve as a compartment for a removable pot, clothing, etc.

The side walls of the compartment 15 are built up or otherwise formed to provide horizontal slots 35 and 36 (when viewed as in Fig. 3) affording platforms for reception of a tray 37 and a toilet seat 38, respectively. Each of the devices 37 and 38 is removable outwardly (forwardly) as previously indicated the tray may be pulled out only partially (and preferably upside down for hygienic reasons) to form a footrest. The toilet seat may be removed for use upon a full sized toilet seat as presently explained, and it constitutes an invention in itself for which other accessories may be substituted.

The tray 37 comprises a food or toy supporting panel 40 secured to a framework comprising a pair of cross members 40, 42, and a pair of side members 43, the latter having spring elements 44 secured thereto and extending rearwardly from holes 45 provided in the side walls of the section 16. The interconnections or latching means are so designed that, by manipulation, the tray may be locked into and removed from the section 16, and form no part of the invention claimed herein. Reference here should be had to Figs. 6–8.

The toilet seat 38 comprises an apertured flat panel 47 having depending elements 48 and 49 (Figs. 3 and 10) for positioning it above a standard toilet bowl. It has a pair of side wings 50 hinged at 52 so that they may be folded upon the panel 47 with their free edges in proximity to each other. Importantly, the seat also is provided with a back 55 so related to the wings 50 that it can be folded upon and into parallelism with the latter, thereby permitting the seat to be slid into its illustrated compact position (Fig. 4). This folding of the back 53 is permitted by a pair of L-shaped hinge elements 54, secured to the back at one leg of each and to the panel 47 within a slot 58 at the other leg of each—the hinges being of such construction that the back 53 elevates itself and then comes to rest in parallelism upon the tops of the wings 50 after the latter have been folded previously. This necessary construction is contrived, essentially, from the fact that the lower legs of the hinges 54 are longer than their upper legs.

The invention is susceptible to modifications in form and degree, of course, and the illustrated embodiment should, therefore, be interpreted reasonably within the light of any prior art and the scope of the appended claims.

What is claimed is:

1. A folding chair of the class described comprising two mated hollow sections each constituting a five-walled half of a box so that when fitted together they form a fully closed portable box resembling a suitcase; said sections being pivotally joined along a line so located in the plane of their mated edges that when they are relatively separated 180 degrees from closed position, one section rests upon the other to form an elevated seat and the other becomes a base for said seat, the uppermost wall of the top section then being swingable to form the upper part of a back rest.

2. In the construction defined in claim 1, the plane of said mated edges being so inclined that when the box is open, the bottom section widens from the pivotal line towards the supporting base, and the upper or seat section decreases in dimension upwardly from said pivotal line.

3. In the chair structure set forth in claim 1, latching means fastened externally to said sections to hold them together in open position.

4. A foldable chair that becomes a closed box of suitcase shape when folded, having back and front sides; said box divided transversely on a plane extending from a line intermediate the top and bottom of the back side to a similar line at the front side to provide a supporting section and an upper seat section, said seat section having a front side panel and a seat-functioning compartment; a hinge connecting said sections and having its axis at the first mentioned line; and another hinge connecting the seat-functioning compartment to an upper edge of the front panel of the seat section so that the latter may be swung backwardly when the box is unfolded.

5. In the combination defined in claim 4, means for holding said front panel substantially upright to form part of the seat back when the box is unfolded.

6. In the combination defined in claim 4, an edge of said front panel opposite to said hinged edge, having a conformation that interlocks with a complementary conformation on an adjacent edge of the front side of the base section; and latching means to hold said edges in interlocked relationship.

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