

Feb. 17, 1953

C. R. CARPENTER
CONVERTIBLE FURNITURE ARTICLE

2,628,659

Filed Jan. 17, 1951

2 SHEETS—SHEET 1

Fig. 1.

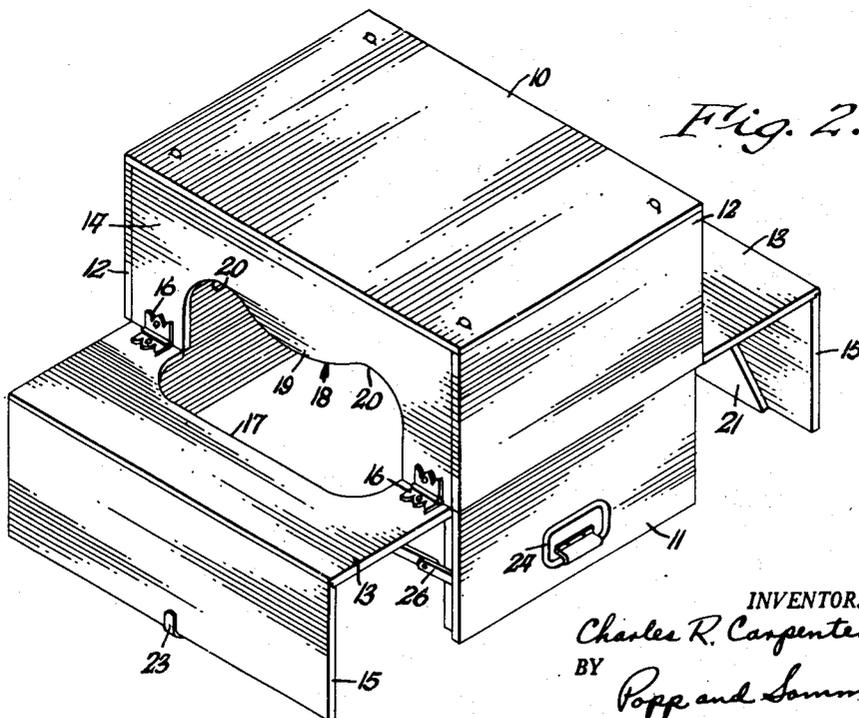
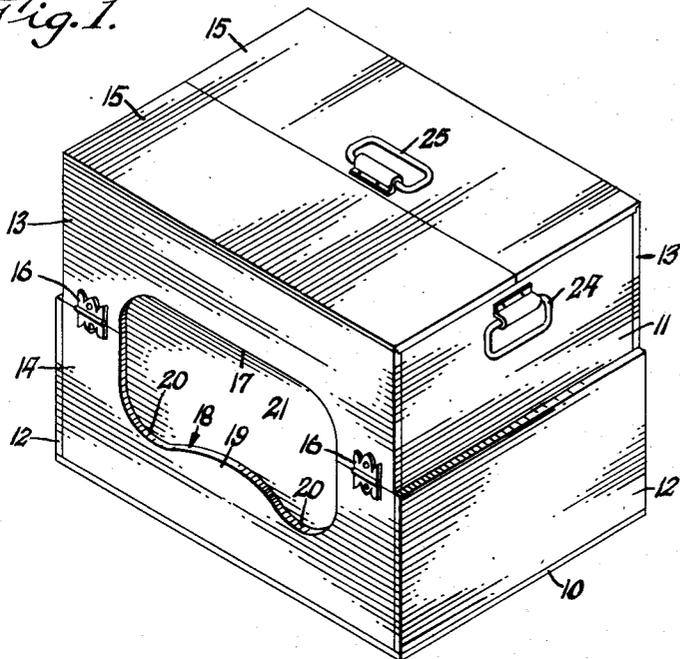


Fig. 2.

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2 SHEETS—SHEET 2

Fig. 3.

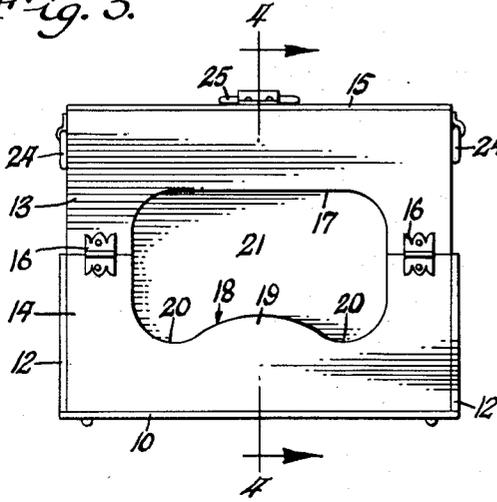


Fig. 4.

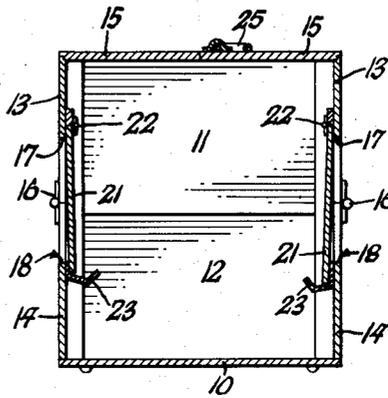


Fig. 5.

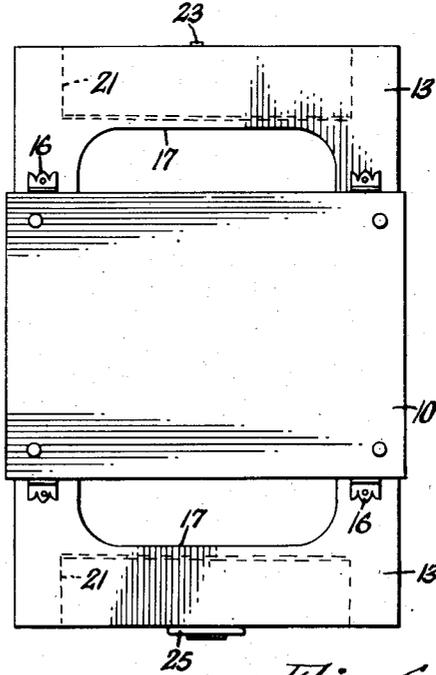
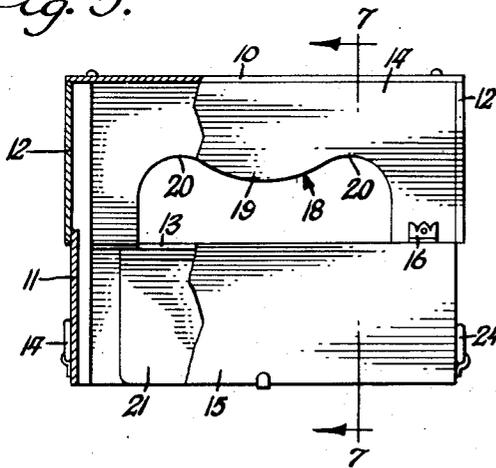


Fig. 7.

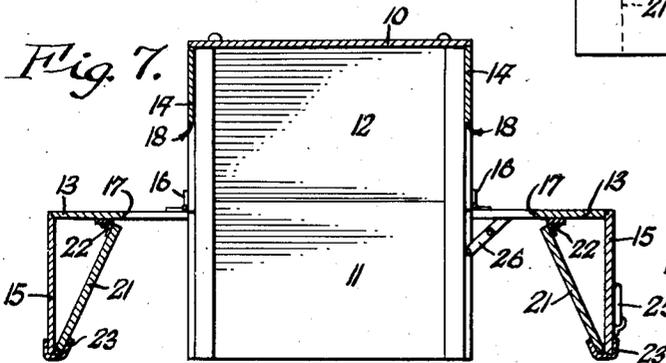


Fig. 6.

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UNITED STATES PATENT OFFICE

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CONVERTIBLE FURNITURE ARTICLE

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Application January 17, 1951, Serial No. 206,455

7 Claims. (Cl. 155-41)

1

This invention relates to a convertible furniture article of the type used either as a children's play table or toy storage box and particularly to such a furniture article which is intended and adapted to hold toys when in a folded or closed condition and to become a play table when in an unfolded or open condition.

It is an object of the invention to provide such a convertible furniture article in the form of a completely enclosed toy storage box but which is adapted to be easily unfolded into a play table.

Other objects are to provide such a convertible furniture article which is attractive and neat appearing in either its folded or unfolded condition; which is simple and sturdy in construction and which is relatively inexpensive to manufacture.

Still further objects and advantages of the invention will appear from the following detailed description and accompanying drawings wherein:

Fig. 1 is a perspective view of a convertible furniture article embodying the present invention and showing the article arranged in its closed or folded condition to provide a toy storage box.

Fig. 2 is a perspective view taken from a similar angle and showing the furniture article converted to its open or unfolded condition to provide a play table.

Fig. 3 is a side elevational view of the furniture article as shown in Fig. 1.

Fig. 4 is a vertical sectional view thereof taken on line 4-4, Fig. 3.

Fig. 5 is a side elevational view of the furniture article as shown in Fig. 2, with portions of the side walls broken away to expose the end and top walls in section.

Fig. 6 is a top plan view thereof.

Fig. 7 is a vertical sectional view thereof taken on line 7-7, Fig. 5.

Referring to Figs. 1, 3 and 4, the convertible furniture article is shown in its closed or folded condition and as being in the form of a hollow rectangularly shaped box-like structure having a rectangular bottom wall provided by a single panel 10; end walls rising from opposite ends thereof and each comprising overlapping upper and lower end wall panel sections 11 and 12 respectively; a pair of opposite side walls arranged between the end walls and each side wall comprising upper and lower side wall panel sections 13 and 14 respectively; and a top wall comprising a pair of similar top wall panel sections 15-15.

The lower end wall panel sections 12 are shown as being of the same height as the lower side wall

2

panel sections 14 and these panel sections are rigidly connected together at their respective meeting edges and also to the bottom panel 10 in any suitable manner as by screws or by being glued together.

The upper end wall panel sections 11 are shown as being offset inwardly of the companion lower end wall panel sections 12 so that the inner marginal portions of the sections 11 are overlapped by the inner marginal portions of the sections 12, as best shown in Fig. 5. If desired, however, the end walls can be constructed of a single panel member, the offset arrangement shown being preferred to provide a more attractive furniture article.

Each upper side wall panel section 13 is rigidly connected to its companion top wall panel section 15 along their respective meeting edges in any suitable manner as by screws or by being glued together, to provide an angle member as best shown in Fig. 2. Each upper side wall panel section 13 is pivoted along its inner horizontal edge to the opposing inner horizontal edge of its companion lower side wall panel section 14. For this purpose a pair of spaced hinges 16-16 is shown as connecting these panel sections and these hinges are arranged adjacent the vertical end walls of the structure.

An access opening is provided in each of the side walls of the structure shown in Figs. 1, 3 and 4 to permit toys or other articles to be inserted into the interior of the hollow structure. Each such opening is provided by recessing the inner horizontal edge of the upper side wall panel section 13 as indicated at 17 and also by recessing the inner horizontal edge of the lower side wall panel section 14 as indicated at 18. The vertical side edges of the recesses 17 and 18 register with each other so as to provide a continuous opening of general rectangular form. The horizontal edge of the recess 18 is formed to provide an upwardly extending rounded salient central part 19. Such a construction provides knee recesses 20 when the furniture article is converted into a play table.

A closure 21 is provided for each such access opening so provided in the side wall of the furniture article when arranged as a toy storage box as shown in Figs. 1, 3 and 4. Such closure 21 is shown in the form of a rectangular panel arranged against the inner faces of the side wall sections 13 and 14. The upper horizontal edge of each closure panel 21 is suitably hinged to the corresponding side wall section 13 as indicated at 22. The closure panel or door 21 is arranged to swing inwardly and upwardly about its hinge 22

3

thereby to uncover at least a portion of the side wall opening provided by the recesses 17 and 18 and permit a toy or other article to be inserted through the opening into the interior of the box like furniture article. It will be noted that the door 21 is always urged to a closed position by its own weight.

Each door 21 carries centrally at its lower edge a clip 23 as shown in Fig. 4. This clip is adapted to receive the free longitudinal edge of the adjacent top panel section 15 as shown in Figs. 2 and 7.

For ease in lifting or carrying the furniture article, a ring handle 24 is shown as arranged on each upper end wall section 11 adjacent the upper edge thereof. A similar ring handle 25 is shown as arranged on the upper surface of one of the top panel sections 15 adjacent its inner longitudinal edge.

It will therefore be seen that the convertible furniture article as shown in Figs. 1, 3 and 4 provides a sturdy and attractive storage box for toys and the like and which permits toy articles to be inserted and removed through access openings provided in the side walls thereof. If desired articles can also be inserted and removed by swinging one of the top panel sections 15 upwardly and laterally about the hinges 16 so as to uncover a portion of the top of the storage box.

When it is desired to convert the storage box into a play table, the angular members provided by the companion top panel sections 15 and upper side wall panel sections 13 are first swung upwardly and outwardly about the hinges 16 until the panel sections 15 are arranged perpendicular to the side panel sections 14. The angular members referred to are preferably restrained against further outward pivotal movement by articulated strut devices 26. These strut devices 26 are suitably connected at their opposite ends to the end wall panel sections 11 and the side wall sections 13.

The doors 21 are then swung about their hinges 22 so as to bring the clips 23 adjacent the free longitudinal edges of the panel sections 15. The clips 23 are preferably made of sheet metal and are flexible sufficient to permit the same to be distorted to receive the said longitudinal edges of the panel sections 15 as shown in Fig. 7. It will thus be noted that when the furniture article is converted into a play table the doors 21 serve as braces for the angular members provided by the connected panel sections 13 and 15.

The furniture article so extended can then be inverted to assume the position shown in Figs. 2 and 5-7. In this inverted condition the bottom wall 10 serves as a table surface and the side wall sections 13 provide seats on which the children can sit. It will be noted that the recesses 17 and 18 provide ample leg room for the child, the recess 17 serving as a cutback into the seat and the recess 18 providing a vertical opening in the side wall to accommodate the legs of the child. In this connection the recesses 20 provide ample room for the knees of the child.

When it is desired to reconvert the furniture article from its unfolded condition to its folded condition to again serve as a storage box, the unfolding operations described above are reversed. Thus the furniture article is reinverted right side up, the clips 23 are disengaged from the panel sections 15, and the angular members provided by the connected panel sections 13 and 15 are swung upwardly and toward each other so as to return the article to the folded condi-

4

tion shown in Fig. 1. During this folding together of the angular members the doors 21 will swing down so as to close the openings in the side walls.

From the foregoing it will be seen that the present invention provides a simple, sturdy and attractive furniture article which can be readily converted to and from folded and unfolded conditions thereby providing a comfortable play table when in the unfolded condition and a completely enclosed storage box for toy articles when in its folded condition.

It is to be understood that the form of my invention herewith shown and described, is to be taken as a preferred example of the same, and that various changes in the shape, size and arrangement of parts may be resorted to, without departing from the spirit of my invention, or the scope of the subjoined claims.

I claim:

1. In a toy storage box convertible into a play table with a seat when unfolded and inverted, the combination comprising bottom, end, side and top walls, said top wall having a movable section adjacent one of said side walls, said one of said side walls having an upper section connected to said movable section of said top wall along the meeting edges of said sections thereby to form an angular member, means mounting said angular member for pivotal movement along the edge of said upper side wall section opposite from said meeting edges, said upper side wall section being recessed from its said opposite edge toward said meeting edges thereby to form an access opening in said one of said side walls, a closure member for said access opening and arranged on the inner side of said one of said side walls and pivotally mounted at its upper part on said upper side wall section, and means adapted to connect said closure member with said top wall section as a brace for said angular member when the same is unfolded as a seat member.

2. In a toy storage box convertible into a play table with a seat when unfolded and inverted, the combination comprising bottom, end, side and top walls, one of said side walls having a fixed lower section and a movable upper section, said top wall having a movable section connected with said upper side wall section along their meeting edges thereby to form an angular member, means mounting said angular member for pivotal movement along the edge of said upper side wall section opposite from said meeting edges, said lower side wall section being recessed from its upper edge toward its lower edge thereby to form an access opening in said one of said side walls, a closure member for said access opening and arranged on the inner side of said one of said side walls and pivotally mounted at its upper part on said upper side wall section, and means adapted to connect said closure member with said top wall section as a brace for said angular member when the same is unfolded as a seat member.

3. In a toy storage box convertible into a play table with a seat when unfolded and inverted, the combination comprising bottom, end, side and top walls, one of said side walls having a fixed lower section and a movable upper section, said top wall having a movable section connected with said upper side wall section along their meeting edges thereby to form an angular member, means mounting said angular member for pivotal movement along the edge of said upper side wall section opposite from said meeting edges,

5

the adjacent edges of said upper and lower side wall sections being recessed to provide jointly an access opening in said one of said side walls, a closure member for said access opening and arranged on the inner side of said one of said side walls and pivotally mounted at its upper part on said upper side wall section, and means adapted to connect said closure member with said top wall section as a brace for said angular member when the same is unfolded as a seat member.

4. In a toy storage box convertible into a play table with a seat when unfolded and inverted, the combination comprising bottom, end, side and top walls, one of said side walls having a fixed lower section and a movable upper section, said top wall having a movable section connected with said upper side wall section along their meeting edges thereby to form an angular member, means mounting said angular member for pivotal movement along the edge of said upper side wall section opposite from said meeting edges, the adjacent edges of said upper and lower side wall sections being centrally recessed to provide jointly a generally rectangular access opening in said one of said side walls, the corner portions of the recess in said lower side wall section being farther recessed than the intermediate part therebetween, a closure member for said access opening and arranged on the inner side of said one of said side walls and pivotally mounted at its upper part on said upper side wall section, and means adapted to connect said closure member with said top wall section as a brace for said angular member when the same is unfolded as a seat member.

5. In a toy storage box convertible into a play table with a seat when unfolded and inverted, the combination comprising bottom, end, side and top walls, one of said side walls having a fixed lower section and a movable upper section, said top wall having a movable section connected with said upper side wall section along their meeting edges thereby to form an angular member, means mounting said angular member for pivotal movement along the edge of said upper side wall section opposite from said meeting edges, the adjacent edges of said upper and lower side wall sections being recessed to provide jointly an access opening in said one of said side walls, a closure member for said access opening and arranged on the inner side of said one of said side walls and pivotally mounted at its upper part on said upper side wall section, and means carried by said closure member and arranged to connect said closure member with said top wall section whereby said closure member serves as a brace for said angular member when the same is unfolded as a seat member.

6

6. In a toy storage box convertible into a play table with a seat when unfolded and inverted, the combination comprising bottom, end, side and top walls, one of said side walls having a fixed lower section and a movable upper section, said top wall having a movable section connected with said upper side wall section along their meeting edges thereby to form an angular member, means mounting said angular member for pivotal movement along the edge of said upper side wall section opposite from said meeting edges, the adjacent edges of said upper and lower side wall sections being recessed to provide jointly an access opening in said one of said side walls, a closure member for said access opening and arranged on the inner side of said one of said side walls and pivotally mounted at its upper part on said upper side wall section, and a clip carried by said closure member and arranged to receive the free edge of said top wall section whereby said closure member serves as a brace for said angular member when the same is unfolded as a seat member.

7. A convertible furniture article which in its folded condition provides a toy storage box and which in its unfolded and inverted condition provides a play table with seats, comprising a box-like structure having a bottom wall, end walls, lower side wall sections, upper side wall sections arranged above said lower side wall sections, a pair of top wall sections each of which is connected to the adjacent upper side wall section along their meeting edges thereby to form a pair of angular members, means pivotally connecting each angular member to the adjacent lower side wall section, the adjacent edges of said upper and lower side wall sections being recessed to provide jointly an access opening in each side wall of said structure, and a closure member for each access opening and arranged on the inner side thereof and hinged at its upper part to the adjacent upper side wall section, and means adapted to connect said closure member with the adjacent angular member as a brace therefor when these angular members are unfolded as seat members.

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