Oct. 22, 1963 A. G. VAN SYOC, SR., ETAL 3,107,360

COLLAPSIBLE RECEPTACLE

Original Filed Feb. 25, 1960

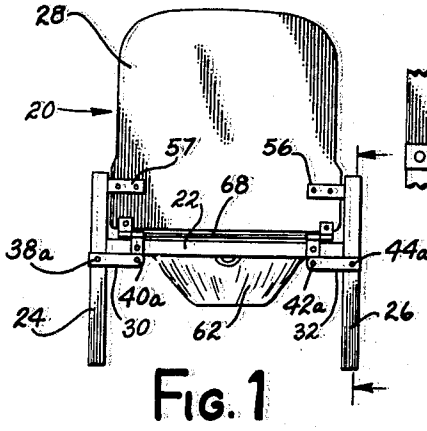


FIG. 1

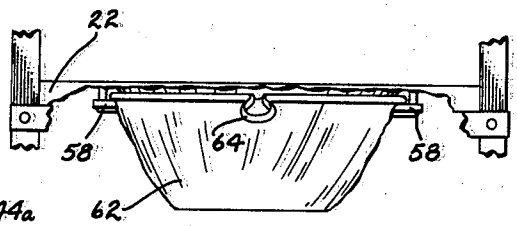


FIG. 2

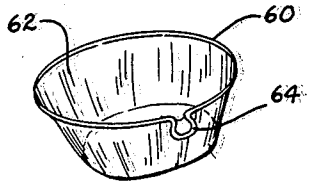


FIG. 3

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United States Patent Office 3,107,360 Patented Oct. 22, 1963

3,107,360

COLLAPSIBLE RECEPTACLE

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Original application Feb. 25, 1960, Ser. No. 11,074, now Patent No. 3,047,883, dated Aug. 7, 1962. Divided and this application Nov. 16, 1961, Ser. No. 152,874

1 Claim. (Cl. 4—142)

This invention relates to a child's training chair, and more particularly to a folding training chair suitable for easy transportation in an automobile or the like.

This application is a division of our co-pending application Serial No. 11,074, filed February 25, 1960, entitled, Folding Training Chair, now Patent No. 3,047,883, issued August 7, 1962.

Collapsible training chairs have been known for some time, and they have found extensive use in connection with automobile travel. A disadvantage of previously known collapsible training chairs was the fact that the receptacle was either too shallow to be fully effective, or else it had to be withdrawn and carried separately when the chair was folded.

The present invention overcomes this difficulty by providing a collapsible plastic receptacle which is automatically compressed into a flat shape when the chair is collapsed and which can be easily expanded into a receptacle of standard depth when the chair is erected.

It is an object of this invention to provide a collapsible training chair having a sanitary collapsible receptacle.

These and other advantages of this invention will be apparent from a perusal of the following specification taken in connection with the accompanying drawings in which:

FIG. 1 is a rear elevation of the chair in its erected position with the receptacle in place.

FIG. 2 is a detail rear elevation, partly cut away, showing the receptacle.

FIG. 3 is a perspective view of the receptacle.

Basically, the chair of this invention consists of a seat to which are hinged a pair of side panels and a back. The side panels serve both as arm rests and as legs. The side panels are not hinged directly to the seat, but are attached to the seat by means of hinge arms which are pivoted both on the side panels and on pivot brackets attached to the seat. This arrangement permits spacing of the side panels from the underside of the seat when the side panels are in their folded position.

The receptacle, according to this invention, is made of a soft yet sturdy plastic which can readily be compressed into a flat shape when the chair is collapsed, yet equally readily expanded into a full sized bowl shape when the chair is erected. A metallic hoop is provided around the perimeter of the receptacle for supporting purposes. The hoop is fully encased in the plastic material of the receptacle for sanitary reasons and is provided with a handle portion which permits the easy insertion and withdrawal of the receptacle into and out of the supporting brackets.

Referring now to the drawings, and more particularly to FIG. 1, it will be readily seen that the chair **20** is composed of a seat **22**, side panels **24** and **26**, and a back **28**. Hinge arms **30**, **32** are pivotally mounted both with respect to the side panels **24**, **26** and with respect to the arm supporting brackets **34**, **36** by seat pivots **40***a*, **42***a* and panel pivots **38***a*, **44***a*.

Referring now to FIGS. 1, 2 and 3, it will be seen particularly in FIG. 2 that the underside of the seat **22** is provided with receptacle supports **58** which in effect are tracks adapted to guide and support the supporting hoop

60 of a receptacle **62**. A handle **64** is provided in the supporting hoop **60** so that the receptacle can be pulled out of and pushed into position under an opening of conventional shape and size formed in seat **22**. In accordance with the present invention, the receptacle **62** is formed of a soft pliable plastic material such as vinyl or polyethylene, or any other low-durometer, flexible material which is watertight, non-hygroscopic, and resistant to discoloration and odors. For sanitary reasons, the supporting hoop may be entirely encased in plastic so as to make the receptacle readily washable and to prevent corrosion of the supporting hoop by organic acids or other substances with which it is likely to come into contact during use.

Operation

The chair **20** is normally transported in folded condition. If it is now desired to erect the chair for use, the chair is grasped by its seat **22**, and side panel **24** is pulled downwardly and then to the right in FIG. 3 until the hinge arm **30** has been swung around in a counterclockwise direction about seat pivot **40***a* to the position shown in FIG. 1. The side panel **24** is then pivoted counterclockwise about the panel pivot **38***a* until it is completely vertical. The other side panel **26** is then pulled downwardly into erected position. Next, the back **28** is raised out of its horizontal position and swung about the back hinge **68** (FIG. 1) until it assumes a vertical position as shown in FIG. 1.

Following completion of the use of the chair, the receptacle **62** may be withdrawn rearwardly by using handle **64** to pull the supporting hoop **60** out of the receptacle supports **58**. The receptacle is then washed and reinserted in the receptacle supports **58**, and the chair can now be collapsed by reversing the steps described in the erection thereof. As the chair is collapsed, pressure is applied to the top of the seat **22**, and panels **24** and **26** will thereupon fold snugly against the bottom of seat **22**. At the same time, the receptacle **62** is compressed into a flat shape so as not to interfere with the movement of panels **24** and **26**.

It will be seen that the present invention provides a safe, sturdy and inexpensive training chair receptacle which is particularly adapted to the efficient and sanitary training of children under travel conditions. Although one embodiment of this invention has been described herein, it will be understood that this embodiment is illustrative only and that the spirit of the invention can be carried out in many different forms. Therefore, this invention is not to be deemed limited by the embodiment described herein, but only by the scope of the following claim.

We claim:

A foldable waste receptacle for a training chair, said receptacle comprising: a relatively rigid generally annular supporting member; one portion of said supporting member extending outwardly therefrom as a handle; a flexible, normally bowl-shaped container of synthetic resinous material suspended from said supporting member, said container being compressible into and out of a shape generally coplanar with said supporting member; said resinous material of said container encasing all of said supporting member except said handle.

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