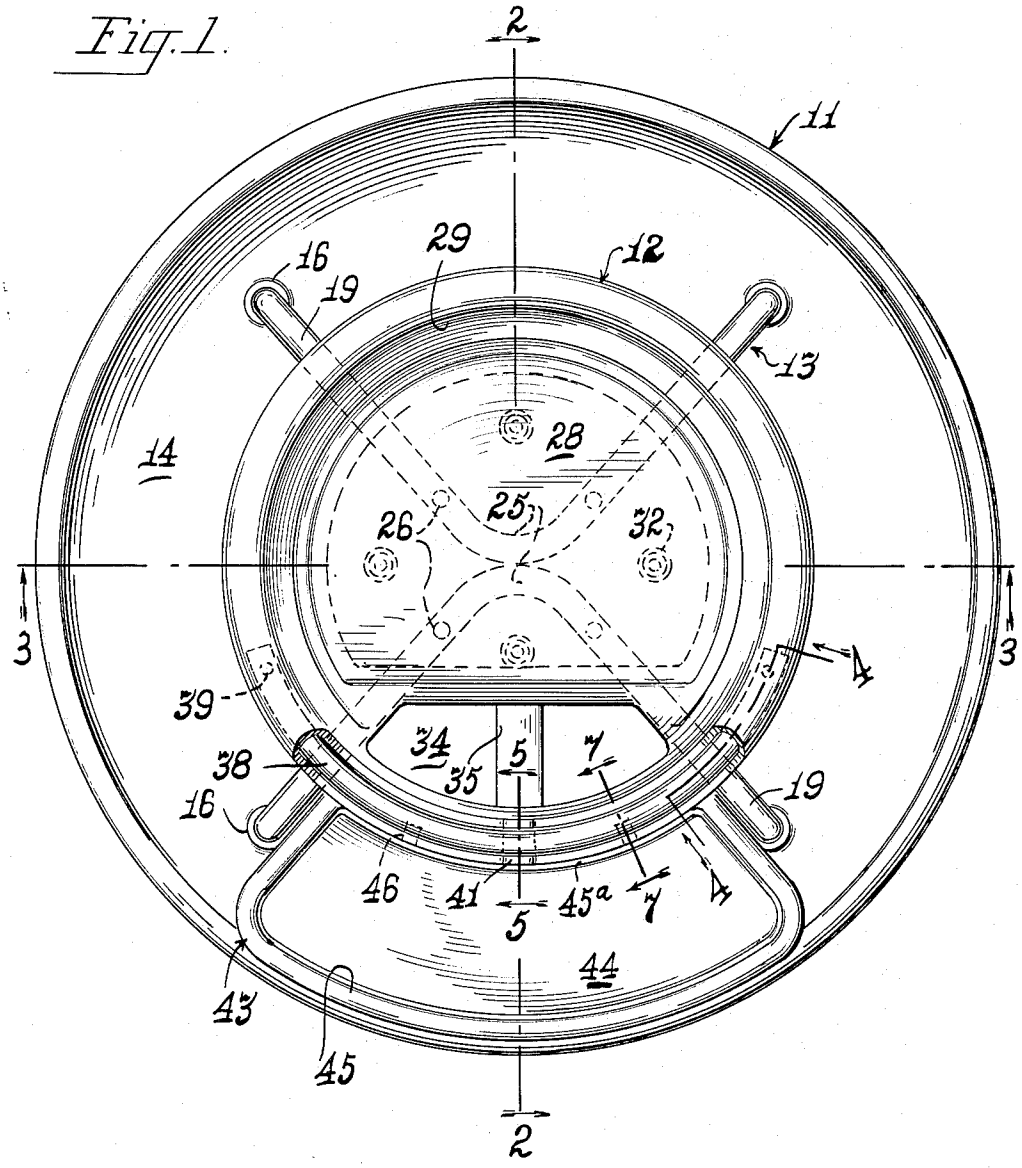
June 13, 1961 T. C. MILLS 2,988,358

CHILD'S ROCKING-ROTATING TOY

Filed Jan. 19, 1959 3 Sheets-Sheet 1

Fig. 1.



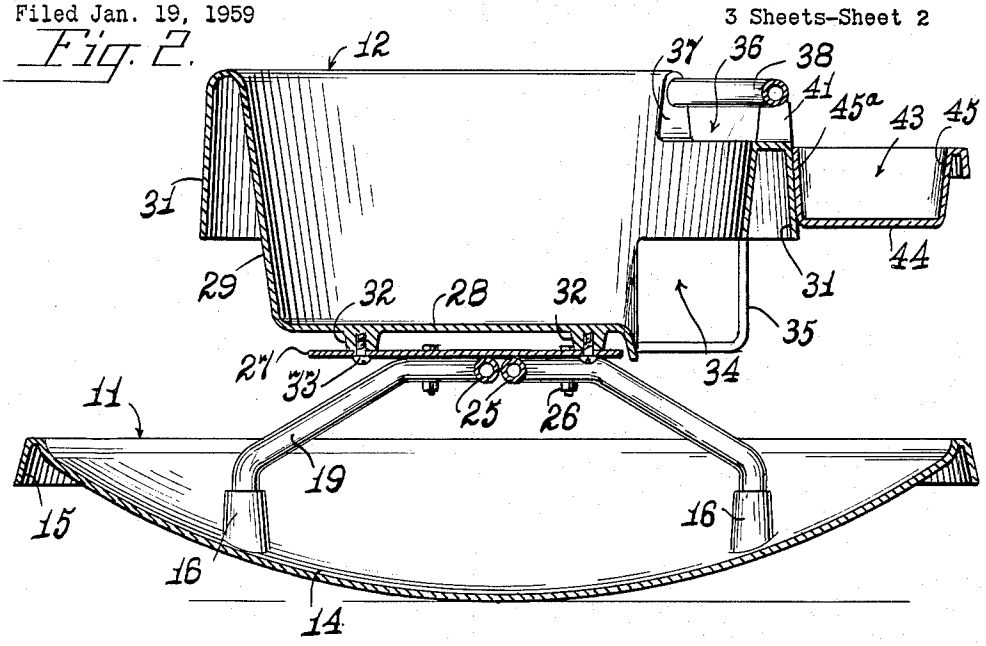
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CHILD'S ROCKING-ROTATING TOY

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Fig. 2.



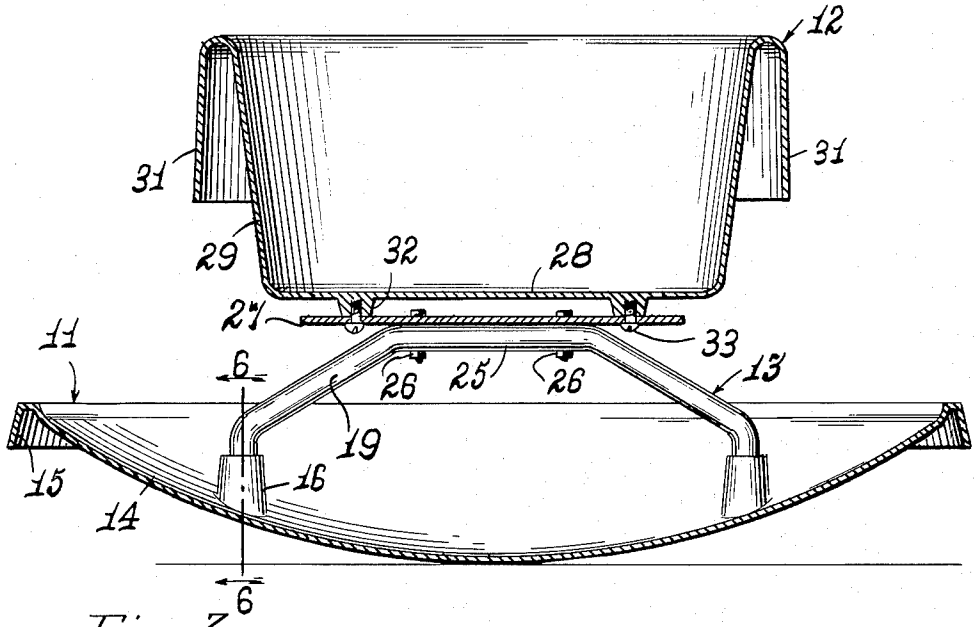


Fig. 3.

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Fig. 4.

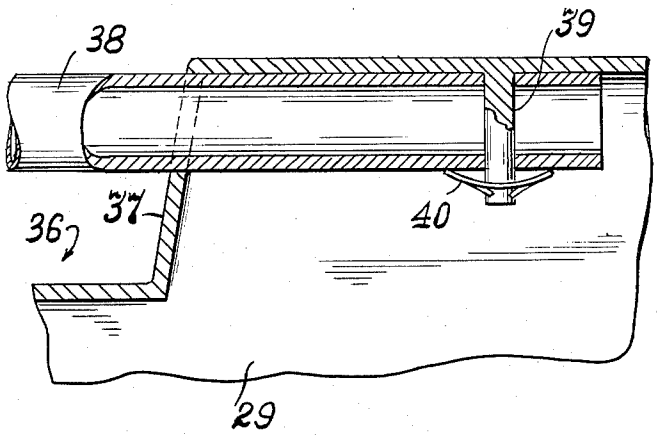


Fig. 6

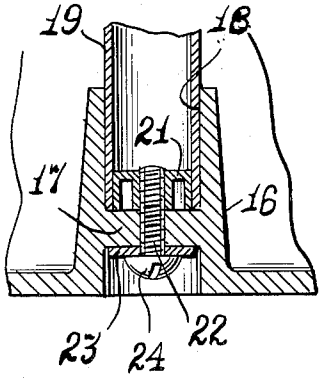


Fig. 5.

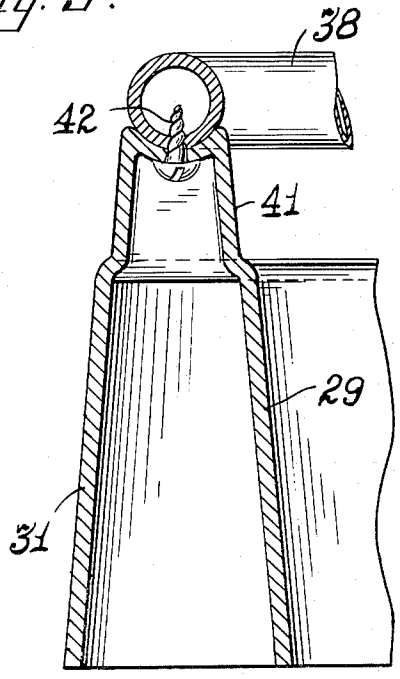
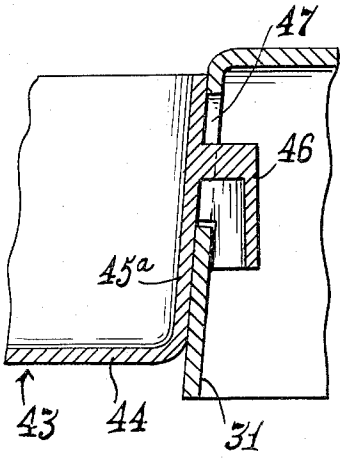


Fig. 7.



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2,988,358

CHILD'S ROCKING-ROTATING TOY

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Filed Jan. 19, 1959, Ser. No. 787,630
4 Claims. (Cl. 272—28)

The invention relates to improvements in toys and is particularly concerned with a child's rocking-rotating toy.

Toys of the general nature of the one herein disclosed have comprised of sheet metal bowl-like shells having various types of seat structures mounted therein so as to enable a child sitting in the seat to rock or spin the device by shifting his weight. Such prior devices have been expensive to produce, excessively heavy, and their use has been not without danger to the child resulting from excessive rocking or falling from the seat.

In the present disclosure the bowl-like shell is made from light weight durable plastic material and is fashioned with a peripheral skirt disposed in such direction to abut the supporting surface when the bowl-like shell is rocked a maximum safe distance. The shell is fashioned with integral sockets on its inside concave face each adapted to afford a novel mounting for a supporting leg structure upon which is secured firmly a seat. The seat is fabricated in one piece preferably by molding and it includes a hand or guard rail extending across the open front thereof so as to prevent a child from falling therefrom. Also, a tray is removably mounted on the front side of the seat structure. The whole unit can be packaged compactly when disassembled, thus minimizing shipping and storage space.

It is therefore an object of the present invention to provide a novelly constructed toy of the character described.

Another object is to provide a rocking-rotating type of toy with a tray detachably secured thereto in a novel manner.

Another object is to provide novel means for mounting a seat supporting structure on a bowl-like shell.

Another object is to provide a novel rocking-rotating toy of the character described which is not expensive to manufacture, is easy to assemble and to disassemble, may be packaged compactly when disassembled, is ruggedly constructed so as to withstand considerable abuse, and which is easy to operate and safe to use.

The structure by means of which the above noted and other advantages of the invention are attained will be described in the following specification, taken in conjunction with the accompanying drawings, showing a preferred illustrative embodiment of the invention, in which:

FIG. 1 is a top plan view of the toy device.

FIG. 2 is a diametrical vertical sectional view taken on line 2—2 of FIG. 1.

FIG. 3 is a diametrical vertical sectional view taken on line 3—3 of FIG. 1.

FIG. 4 is an enlarged sectional detail view taken on line 4—4 of FIG. 1.

FIG. 5 is an enlarged vertical detail sectional view taken on line 5—5 of FIG. 1.

FIG. 6 is an enlarged detail sectional view taken on line 6—6 of FIG. 3.

FIG. 7 is an enlarged fragmentary enlarged detail sectional view taken on line 7—7 of FIG. 1.

Referring to the accompanying drawings which illustrate a representative embodiment of the invention, the toy includes a bowl-like shell 11, and a seat structure, generally illustrated at 12, supported within the bowl by a leg structure 13. Specifically, the bowl-like shell is fabricated by molding any suitable tough wear resisting plastic substance or composition, such as "nylon" plastic,

and it includes a thin walled concave-convex body portion 14 terminating at its perimeter in a downwardly outwardly flared skirt 15 of sufficient width to afford positive abutment means to limit rocking of the bowl and thereby prevent tipping or spilling of an occupant.

A plurality of bosses 16 are formed integral with the shell and they extend upwardly from the inside face thereof. These bosses are mutually spaced circumferentially and as best shown in FIG. 6, each is recessed from both ends to provide a medial wall 17 of considerable thickness. The upper or inwardly disposed recess 18 in each boss is adapted to have telescoped thereinto one end of one of a pair of substantially U-shaped tubular frames 19 comprising the leg structure 13. Preferably the ends of the frames 19 are closed by a tapped cap 21 inserted into said end and secured thereto as by welding. The boss wall 17 is apertured to receive a screw 22 inserted from the bottom and threaded tightly into cap 21. If desired, a washer 23 may be arranged between said wall and the head 24 of the screw to resist breakage.

Each tubular leg frame 19 is bent in a manner to locate its medial portion 25 in horizontal plane and inwardly of the related mounting bosses 16, one in substantial abutment with the other and they are secured, preferably by bolts 26, to a substantially circular mounting plate 27.

The seat structure 12, which is mounted on plate 27, preferably is fabricated from "nylon" plastic material by molding or otherwise, and it includes a bottom wall 28, an upstanding peripheral wall 29 and a downwardly outwardly flared flange 31 integral with the upper edge of said wall 29. A plurality of bosses 32 are formed integral with the bottom face of bottom wall 28 and each is suitably tapped to receive a screw 33 for securing the seat structure to plate 27. A portion of the surrounding wall 29 adjacent to bottom wall 28 is cut away to provide a segmental opening 34 through which the legs of an occupant of the seat may extend and preferably a strap 35, secured at its ends to bottom wall 28 and surrounding wall 29 bisects the opening so as to afford restraining means to prevent the occupant from sliding off of the seat through opening 34.

The upper margin of wall 29 in substantial vertical alignment with opening 34 is offset downwardly, as at 36, to define upstanding shoulders 37, and a hand or guard rail 38 is extended between said shoulders above the offset. This rail preferably comprises a tubular rod which is curved to correspond to the curvature of side wall 29 and its end portions project through the wall of shoulders 37 and between the related wall portions 39—31. Each end of said rod is apertured, as best shown in FIG. 4, to receive therethrough a stud 39 formed integral with said walls. A spring lock nut 40 anchored to the protruding end of said stud secures the rod in place. The medial portion of said rod is supported on the upper end of a boss 41 (FIG. 5) formed integral with walls 29—31 and is secured thereto by screw 42.

If desired, a tray 43 may be detachably secured to the seat structure. This tray is substantially arcuate in plan and it includes a bottom wall 44 and a perimeter wall 45. The tray may be mounted in any suitable manner but preferably the inner arcuate portion 45*a* of perimeter wall 45 has a pair of spaced hook-like attaching members 46 formed integral therewith and adapted to be inserted in openings 47 formed in the outermost wall or flange 31 below rod 38. The structure is such that the tray may be attached or removed easily and quickly and when attached is held in place firmly.

The structure disclosed herein is primarily intended for use by children safely and in a manner that enables the occupant to rock in any direction by weight displacement.

The device is also capable of rotating while in use. Owing to the manner of construction and assembly the device may be disassembled and packed compactly for storage by the simple expedient of removing the various screws securing the parts and then nesting the leg frames and seat structure within the bowl-like shell.

Although I have described a preferred embodiment of my invention in considerable detail, it will be understood that the description thereof is intended to be illustrative, rather than restrictive, as many details of the structure shown may be modified or changed without departing from the spirit or scope of the invention. Accordingly, I do not desire to be restricted to the exact construction described.

I claim:

1. A toy device of the character described comprising a shell-like bowl, a peripheral flange integral with the free upper edge of said bowl and extending outwardly downwardly to limit rocking motion of said bowl in any direction, circumferentially spaced upwardly extending hollow bosses integral with the inside surface of said bowl, a pair of inverted substantially U-shaped frame members arranged in said bowl, said frame members having their lower free ends telescoped one in each boss, screw means in each boss engaged in the related frame end to secure the frames firmly thereto, said frames including substantially horizontally disposed U-shaped medial portions spaced above said bowl and arranged with the apexes of their medial portions in substantial abutment, a plate overlying said medial portions and to which said portions are secured, a seat structure supported above said plate, said seat structure including a bottom wall and bosses on the lower face of said wall, screw means extending through said plate and engaged in the bosses to secure the seat structure to said plate, an inner peripheral wall integral with and surrounding said bottom wall and extending upwardly therefrom, an outer peripheral wall integrally connected at its upper edge with the upper edge of the inner peripheral wall and terminating short of the bottom of the inner peripheral wall, a portion of said inner peripheral wall terminating short of the bottom wall to define a leg opening therein, restraining means bridging said opening, said inner and outer peripheral walls having their upper edges offset downwardly in the region of the leg opening, and a hand rail carried by the peripheral walls and bridging the downwardly offset area.

2. A toy device of the character described comprising a shell-like bowl, circumferentially spaced upwardly extending bosses integral with the inside surface of said bowl, said bosses having recessed upper ends, a pair of inverted substantially U-shaped frame members arranged in said bowl, said frame members having their lower free ends telescoped one in each boss, screw means in each boss engaged in the related frame end to secure the frames firmly thereto, said frames including substantially horizontally disposed opposed U-shaped medial portions spaced above said bowl, a plate overlying said medial portions and to which said portions are secured, a seat structure supported above said plate, said seat structure including a bottom wall, screw means extending through said plate and engaged in the bottom wall to secure the seat structure to said plate, an inner peripheral wall integral with and surrounding said bottom wall and extending upwardly therefrom, an outer peripheral wall spaced from said inner peripheral wall, said inner and outer peripheral walls being integrally connected at their upper edges, a portion of said inner peripheral wall terminating short of the bottom wall to define a leg opening, and restraining means bridging said opening.

3. A toy device comprising a shell-like bowl, circumferentially spaced upwardly extending hollow bosses integral with the inside surface of said bowl, a pair of inverted substantially U-shaped frame members arranged in said bowl, said frame members having their free ends seated one in each boss, means in each boss to secure the frame ends thereto, said frames including substantially horizontally disposed opposed U-shaped medial portions spaced above said bowl, a plate seated on said medial portions and to which said portions are secured, a seat structure supported above said plate, said seat structure including a bottom wall, means extending through said plate and engaged in the bottom wall to secure the seat structure to said plate, a peripheral wall surrounding said bottom wall and extending upwardly therefrom, an external flange integral with and depending from the upper edge of the peripheral wall, the upper edges of said peripheral wall and said flange being offset downwardly for a part of their diameter to define a recessed segment, a portion of said peripheral wall below said recessed segment terminating short of the bottom wall to define a leg opening, restraining means bridging said opening, and a hand rail bridging said recessed segment.

4. A toy device of the character described comprising a shell-like bowl, a pair of inverted substantially U-shaped upstanding frame members secured in said bowl, a plate seated on and secured to said frame member, a seat structure supported above said plate, said seat structure including a bottom wall and bosses on the lower face of said wall, means extending through said plate and engaged in the bosses to secure the seat structure to said plate, an inner peripheral wall integral with and surrounding said bottom wall and extending upwardly therefrom, an outer peripheral wall integrally connected at its upper edge with the upper edge of the inner peripheral wall, said outer peripheral wall terminating short of the bottom of the inner peripheral wall, a portion of said inner peripheral wall terminating short of the bottom wall to define a leg opening therein, restraining means bridging said opening, said inner and outer peripheral walls having their upper edges offset downwardly in the region of said leg opening, and a hand rail carried by the peripheral walls and bridging the downwardly offset area.

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