March 3, 1964 A. BARR 3,122,959

MUSICAL STRAW MEANS

Filed Jan. 28, 1963

Fig. 1.

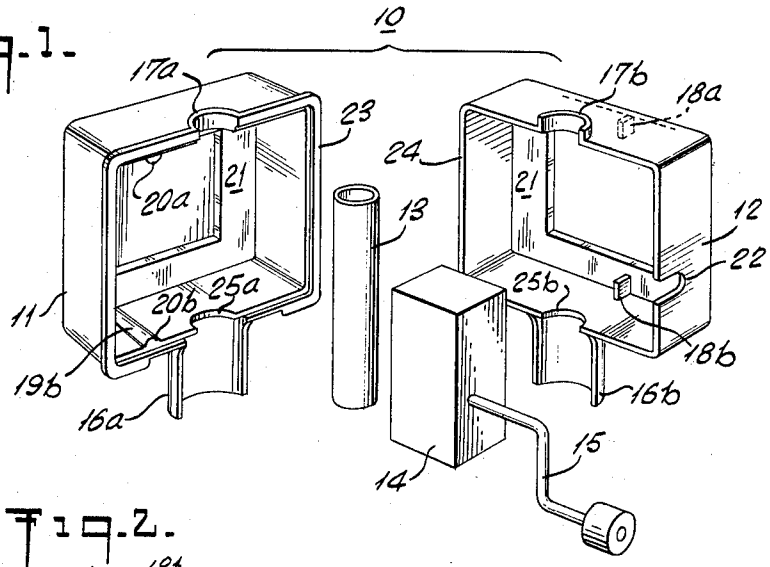


Fig. 2.

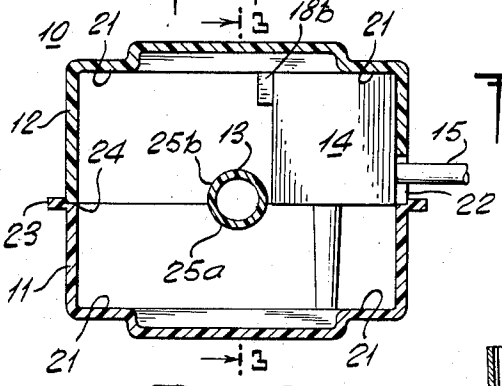


Fig. 4.

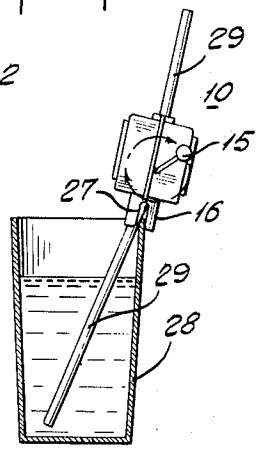


Fig. 5.

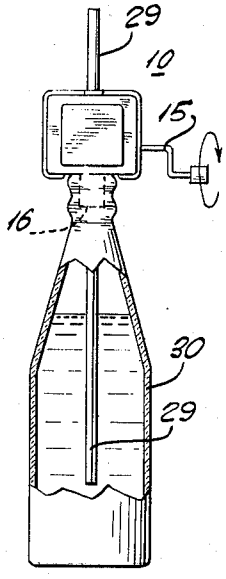
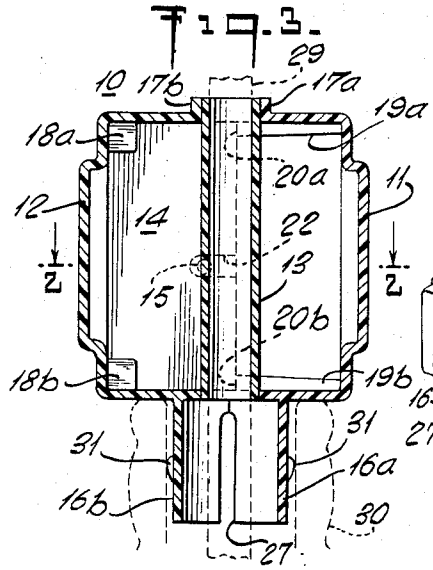


Fig. 3.



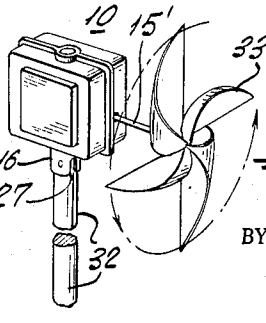


Fig. 6.

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MUSICAL STRAW MEANS

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13 Claims. (Cl. 84—94)

The present invention relates to a toy music box structure, and more particularly to a novel device adapted to house a music box for various uses as described herein.

As contemplated herein, the music-box device is intended to serve as an aid in stimulating the consumption of food, particularly liquids, e.g. milk or the like. It has been found that by distracting a child, or giving him something to do, it is sometimes easier to persuade the child to drink the beverage in question.

The present invention aims at providing a toy which stimulates the child's imagination and keeps his attention confined to the drinking process which is coupled with operating the music-box device according to this invention.

It is an object of the invention to provide a novel device for housing a rotary-action music box or the like, adapted for being used as a toy alone, or in connection with a straw, for drinking from a bottle or glass, as will be explained in more detail hereunder.

It is another object of the invention to provide a device which is inexpensive and simple to manufacture, and which can be equipped with a music-box mechanism of optimum shape, structure and operation.

According to the major feature of the invention, the music-box device comprises two separate casing portions adapted to be interconnected by conventional means, and an intermediate sleeve portion optionally inserted between the casing portions and serving to guide a straw or the like through the device.

According to another feature, the device is provided with a neck portion adapted to fit over the rim of a glass, or into the neck of a liquid bottle or the like. The neck portion also holds the straw in appropriate place for drinking.

Further objects and advantages of the invention will become more clearly understood when considering the following description in conjunction with the figures, in which:

FIG. 1 is an exploded perspective view of the components constituting a music-box device according to the invention;

FIG. 2 is a horizontal sectional view of the assembled music-box device and is taken along line 2—2 of FIG. 3;

FIG. 3 is a vertical sectional view of the assembled music-box device and is taken along line 3—3 of FIG. 2;

FIG. 4 is a longitudinal elevation illustrating the use of the assembled device with respect to a tumbler, such as a drinking glass;

FIG. 5 depicts the use of the invention with respect to a beverage bottle; and

FIG. 6 is a perspective view of the assembled music-box device showing a modification of same.

Reference is now made to FIG. 1, wherein **10** denotes a music-box device in accordance with the invention. The outer housing of device **10** is made up of matching casing portions **11** and **12**. Device **10** includes a hollow tubular sleeve **13**. Sleeve **13** may be made of plastic. Casings **11**, **12** may be made from a molded material, such as a plastic. A conventional music-box mechanism **14** is housed in the housing. Music-box means **14** has a hand crank **15** adapted for rotation, whereupon the inner mechanism thereof (not shown) having an array of teeth engage tines or like sound-emitting parts as known in the art to produce a tune or a sequence of musical notes. It will be understood that for the purpose of the instant invention, music-box means **14** is representative

of any similar mechanism which may have an optional shape and structure. However, in the preferred embodiment illustrated herein, music-box means **14** has a rectangular parallelepiped-shape to assure compact mounting in the housing formed by casings **11** and **12**.

Casings portions **11**, **12** are suitably shaped interiorwise to hold music-box means **14** and also to serve as a sound amplifier to increase the amplitude level of the musical tune produced by music-box means **14**. Casings **11**, **12** have respective depending semi-cylindrical neck portions **16***a*, **16***b*, which are shaped edgewise to mate so as to form a tubular neck **16** upon assembly of portions **11**, **12**. At their respective top ends, casing portions **11**, **12** also have semi-cylindrical rim portions **17***a*, **17***b*, also suitably shaped edgewise to form a continuous upstanding cylindrical projection **17** upon assembly of casing portions **11**, **12**. The opening formed by rim **17** upon assembly of casing portions **11**, **12** is vertically aligned with the central passage through the assembled housing and lower neck **16**.

In the interior, the side wall of portion **12** includes spaced projecting brackets **18***a*, **18***b*. Brackets **18***a*, **18***b* are integral parts of molded portion **12**. Brackets **18***a*, **18***b* are suitably located to engage against a vertical corner of music box **14** so as to nest same in firm position in the assembled casings **11**, **12**. Casing portion **11** includes a pair of elongated ribs **19***a*, **19***b* along its upper and lower horizontal walls. The flat faces **20***a*, **20***b* of ribs **19***a*, **19***b* are in the line of junction between the two casing portions **11**, **12**, whereby faces **20***a*, **20***b* press against a side wall of music-box means **14** upon assembly of the housing. These abutment faces **20***a*, **20***b* also contribute to nesting music-box means firmly in position in the assembled casing portions. As seen from FIGS. 2 and 3, the nested music-box means **14** is also buttressed by a peripheral ledge **21** in the interior of casing portion **12**. The foregoing operatively associated structures cooperate to hold music-box means **14** in a firm and fixed position in the assembled housing. Such fixture of means **14** assures that its handle **15** passes freely through an elongated opening **22** in casing portion **12** so that handle **15** may be turned by a child to cause musical sounds to be made.

Casing portion **11** is provided with a peripheral flange **23** designed to receive the mating edge **24** of portion **11** so as to provide a registered assembly of the two portions. The two portions may be interconnected and held together by conventional means, such as gluing or heat-sealing the plastic molds. At the bottom of housing portion **11**, flange **23** terminates short of neck portion **16***a*, whereby upon assembly of the housing halves, and mounting same to the mouth of a bottle (FIG. 3) as described hereinafter, the top of the bottle bears flush against the flat bottom wall of the assembled housing. Prior to assembly of same, a hollow tubular sleeve **13** of suitable length is inserted into the vertical passage formed by assembled portions. The upper end of sleeve **13** rests along the rim **17***a* or **17***b*, as the case may be, and the lower end of sleeve **13** rests against the correlated semi-circular edge **25***a*, **25***b*. When assembled, edges **25***a*, **25***b* form an opening **25**. Music box-means **14** is also mounted in position prior to assembly and sealing of portions **11**, **12**. With tubular member **13** and box **14** in position, portions **11** and **12** are mated and permanently sealed together. It will be understood that tubular member **13** may be glued to the contiguous rim **17** and also to the contiguous edge of hole **25**. This substantially completes the assembly of music-box device **10**.

As seen from FIGS. 1 and 4, the confronting edges of neck portions **16***a*, **16***b* are inclined at **26** to form diametrically opposite V-shaped grooves **27** (FIG. 4). Groove **27** serves to mount over the edge of a tumbler

28 as shown in FIG. 4 to support music-box device 10 which is shown with a straw 29. Hence, a youngster may drink his milk while turning the music box handle. Straw 29 is readily inserted through tube 13 and extends through neck 16 into the tumbler 28.

As can be seen from FIG. 4, neck portions 16*a*, 16*b* are slotted to form grooves 27 so as to allow music-box device 10 to be positioned on the upper rim of a drinking glass 28. While sipping a drink through straw 29, the child may simultaneously operate crank 15 and keep the musical mechanism 14 in operation.

FIG. 5 shows that the outside diameter of neck 16 is selected to fit into the neck of a beverage bottle 30 or the like. Two small beads 31 are formed on the outer surface of neck portions 16*a*, 16*b* to provide sufficient friction to hold device 10 in mounted position on bottle 30 as shown in FIGS. 3 and 5. This friction connection may be overcome by a manual pull-out force in order to disconnect device 10 from bottle 30. Similarly, device 10 may be snapped into position on bottle 30 by hand. Straw 29 passes through inner sleeve 13 and thus may be used in various ways. It is understood that the inside diameter of sleeve 13 is suitably selected to develop a small friction pressure against straw 29 without crushing same. This holds straw 29 in set position with respect to device 10.

FIG. 6 shows an alternative use of the device whereby it functions as a musical toy attached to the top end of a thin wooden rod 32 or the like. Rod 32 is inserted into the formed neck 16 or even sleeve 13 and holds by a friction fit. In this embodiment, box 14 may be equipped with a straight shaft 15' adapted, for example, to carry a pinwheel 33 which will rotate the music box upon being turned by the wind. Sleeve 13 need not play any part in the embodiment of FIG. 6. Consequently, it may be eliminated from this embodiment. Normally, sleeve serves as a long stiff support for receiving straw 29 to protect same against bending or crushing which would close the straw.

It will be noted that the assembled housing portions 11, 12 form a substantially enclosed sound amplifying box substantially larger than music-box means 14. This arrangement provides amplification of the sound made by means 14. To contribute to sound amplification, the side walls of both halves 11, 12 are provided with an outwardly spaced panel portion 33 to form a small region set back from the plane of interior peripheral ledges 21. It will be understood that this last-mentioned feature is optional and if eliminated, the entire side wall of each housing half 11, 12 is a flat continuous wall coplanar with ledge 21.

It should be understood, of course, that the foregoing disclosure relates only to a preferred embodiment of the inventive music-box device and that it is intended to cover all changes and modifications of the example described which do not constitute departures from the spirit and scope of the invention as set forth in the appended claims. Also, the lower neck portions of the casing halves may have other attaching or engaging means provided thereon, adapted for application on containers other than those exemplified herein.

It is intended that all matter contained in the above description or shown in the accompanying drawings shall be interpreted as illustrative and not in a limiting sense.

What is claimed is:

1. A music-box device comprising, in combination, a pair of casing parts adapted for being matingly interconnected and providing an inner space for lodging a musical mechanism therein, abutment means on at least one of said casing parts for holding said mechanism, one of said casing parts having a cut-out portion through which an operating member of said mechanism may protrude for manual operation from outside, each of said casing parts having a lower neck portion and an upper rim portion, said neck and said rim portions defining substantially aligned openings therein adapted for passing a straw or like member therethrough.

2. A music-box device according to claim 1, wherein at least one of said casing parts has a spaced-apart portion therein for increasing the resonance of the device.

3. A music-box device according to claim 1, further comprising a sleeve member adapted to be inserted between said aligned openings for providing a passage for said straw through the device.

4. A music-box device according to claim 1, wherein said lower neck portions of the casing parts have a pair of diametrally opposite slots therein, whereby the device may be positioned on the rim of a tumbler, while said straw is passed therethrough for sipping a drink contained in said glass.

5. A music-box device according to claim 1, wherein said lower neck portions of the casing parts are substantially cylindrical and of a diameter adapted to be fitted to the neck of a bottle, while said straw is passed therethrough for sipping a drink contained in said bottle.

6. A music-box device according to claim 1, wherein said lower neck portions have an inner recess for receiving a pole or like member upon which the device may be secured.

7. In a casing for a music-box or the like, the improvement comprising a pair of mating casing parts adapted to provide an inner space for lodging a music-box mechanism therein, one of said casing parts having an aperture through which an operating member of said mechanism may protrude for manual operation from outside, said casing parts being provided with an upper and a substantially vertically aligned lower opening through which a straw or like member may be passed for sipping a liquid therethrough.

8. In a casing, the improvement according to claim 7, wherein at least one of said casing parts has an outwardly spaced-apart panel portion therein for increasing the resonance of the sounds produced by said mechanism.

9. In a casing, the improvement according to claim 7, further comprising a sleeve member adapted to be inserted between said upper and said lower openings so as to provide a passage for said straw.

10. In a casing, the improvement according to claim 7, wherein said casing parts including complementary upper rim portions in the region of said upper opening and complementary lower neck portions in the region of said lower opening.

11. In a casing, the improvement according to claim 10, wherein said lower neck portions have a pair of coacting slots therein, whereby the music-box casing may be positioned on the rim of a drinking tumbler, while said straw is passed therethrough for sipping said liquid.

12. In a casing, the improvement according to claim 10, wherein said lower neck portions are substantially cylindrical and of a diameter adapted to be fitted to the neck of a bottle, while said straw is passed therethrough for sipping said liquid.

13. In a casing, the improvement according to claim 7, wherein said casing parts include complementary lower neck portions in the region of said lower opening, said neck portions having an inner recess for receiving a pole or like member upon which the device may be secured.

No references cited.