

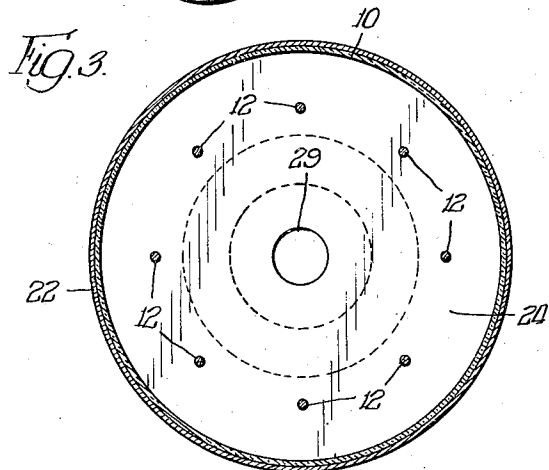
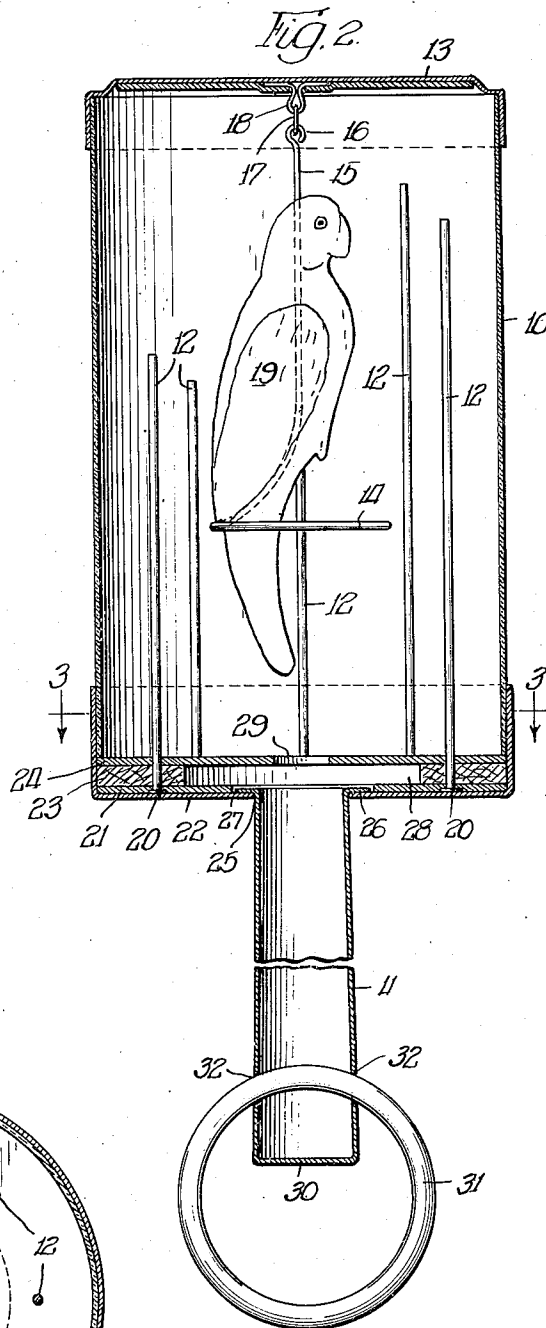
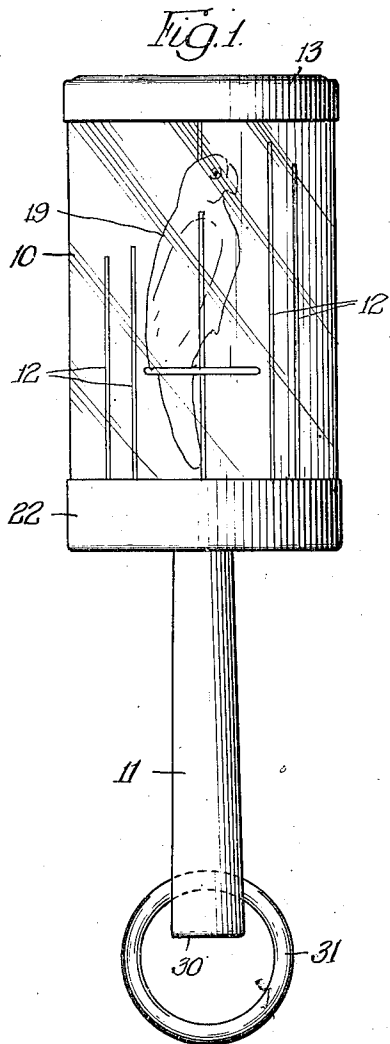
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MUSICAL TOY

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MUSICAL TOY

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10 Claims. (Cl. 46—193)

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My invention is concerned with improvements in musical toys.

An object of my invention is to provide a musical toy comprising a box-like head provided with means for producing a musical sound and a resonance producing chamber extending therefrom in the form of a handle.

A further object of my invention is to provide a tubular case having mounted therein chime rods and a clapper for producing musical sounds, and a hollow handle extending therefrom arranged to function as a resonator.

A further object of my invention is to produce a musical toy or rattle characterized by the provision of an air chamber or resonator connected to a musical chamber having one or more vibrators tuned in sympathy with the column of air in the resonator.

A further object of my invention is to provide a simple, attractive, easily constructed music-producing toy to be used to amuse small children.

Other objects and advantages will be apparent from the preferred form of my device which is illustrated by way of example in the accompanying drawings, wherein:

Fig. 1 is an elevation of my musical toy;

Fig. 2 is a longitudinal section through the center of the toy; and

Fig. 3 is a section on the line 3—3 of Fig. 2.

The preferred form of my toy as illustrated in the drawings comprises a tubular head 10 which contains the music-producing elements and a handle 11 extending from one end of the same which functions as a resonator for the music-producing elements. Secured in the head 10 in vertical position are a series of chime rods 12 which are made of different lengths to produce different musical notes when vibrated. The head 10 is enclosed at the top with a cap 13 and suspended from the center of the cap 13 is a clapper ring 14 which has an upwardly directed supporting wire member 15 terminating in a ring 16 which is connected by means of a link 17 to a hook 18 secured in the cap 13. Movement of the toy will oscillate the clapper ring 14 which strikes against the chime rods 12 and vibrates the same to produce musical sounds. The clapper ring 14 may carry an animated figure 19 as shown in the drawings.

Each of the chime rods 12 is rigidly secured at its base 20 in a metal ring or plate 21 which is secured to a cap 22 enclosing the bottom end of the head 10. Superposed on the outer portion of the plate 21 is a wooden or non-metal spacer ring 23 somewhat thicker than the plate 21

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and arranged in superposed relation on the spacer ring 23 is a metal plate 24. The chime rods 12 extend upwardly through the ring 23 and plate 24 into the head 10. The cap 22 on the head 10 is provided with a central aperture 25 and the open end of the hollow handle member 11 is secured therein by the turned-over flange 26 on the handle 11. The plate 21 is provided with a central aperture 27 somewhat larger than the aperture 25, to accommodate the flange 26. The ring 23 is provided with a larger central aperture 28 and the plate 24 is provided with a central aperture 29 which is smaller than the aperture 25. The handle 11 is closed at the free end 30 and ring 31 is pivotally attached thereto by means of the apertures 32 in the same. As shown in Fig. 3, the chime rods 12 are arranged in concentric spaced relation around the base-securing members, so that the clapper ring 14 may strike any one of the rods.

The hollow handle 11 having its interior connected with the interior of the head 10 by means of the aligned apertures 25, 28 and 29 functions as a resonator to strengthen the amount of the sound of the pitch to which it responds. The handle 11 will be in resonance with the chime or chimes in the music box or head 10 having a natural period equal to the period of the column of air in the handle which will be set into vibration by the vibration of the chimes and the effect will be to increase the intensity of the sound heard.

Since the chime rods 12 engage the plate 24, the vibration of the rods will set the plate 24 into forced vibration, having the same frequency as the chimes which will result in an increase in the loudness of the sound produced.

The head 10 of the rattle may be constructed of transparent material whereby the movement of the animated figure 19, which may be colored or decorated, will be visible to the user of the toy. I prefer to make the end caps 13, 22 and the handle 11 of Celluloid or some similar translucent material which may be colored or decorated. The ring 31 may, of course, be made of any suitable material and decorated as desired. The members may be secured to each other by adhesive or any other fastening means.

While I have referred to specific materials and details of construction, I do not intend to limit my device to such materials and features of constructions, but modifications may be resorted to within the spirit of my invention.

I claim:

1. A musical toy comprising a receptacle hav-

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ing a circumferential enclosing wall, musical sound producing means enclosed within said receptacle, and a resonance producing handle member having an open end and a closed end, said receptacle having an aperture therein and said handle member being secured to said receptacle with its open end in said aperture.

2. A musical toy comprising a box having apertured supporting members therein, chime rods supported by said supporting members in spaced relation around the apertures in the supporting members, a clapper mounted in oscillatable striking relation to the chime rods, a resonance producing tube connected to the box and arranged with an open end in coaxial alignment with the apertures in the supporting members, the free end of said tube being closed.

3. A musical toy comprising a box having apertured rod supporting base members and upright sound producing rods supported thereby, a clapper member suspended in the box in striking relation to said rods and a hollow resonance producing handle member attached to the box adjacent the base members with its open end in coaxial alignment with the apertures in the base members.

4. A musical toy comprising a transparent tubular case member having apertured chime rod supporting means in one end, chime rods secured in said supporting means in spaced relation around said aperture, a clapper mounted to be oscillated to strike the chime rods, and a resonator having its open end attached to the tubular case member in coaxial alignment with the apertures in the chime rod supporting means.

5. In a musical toy, a tubular head having a cap on one end and an apertured closure on the other end, chime rod supporting means in said other end having an aperture aligned with the aperture in said closure, chime rods in said supporting means, a tubular handle having an open end secured to said apertured closure in alignment with the apertures in the closure and the chime supporting means, and striker means for the chime rods.

6. The structure of claim 5 wherein said chime rod supporting means comprises a relatively thin centrally apertured metal base ring to which the chime rods are securely anchored, a somewhat thicker non-metal spacer ring having a larger central aperture therein than the base ring, and a relatively thin metal top ring having a smaller aperture therein than the open end of said handle, the members being arranged with their apertures in alignment and the chime rods passing through the spacer ring and the top ring and into the tubular head.

7. In a musical toy, an enclosing receptacle, music producing chime rods and a clapper therefor, means for supporting the chime rods in the receptacle comprising a metal bottom base plate

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in the receptacle, a non-metal spacer member and a metal top base member superimposed thereon, said chime rods being anchored in the bottom base plate and extending inwardly of the receptacle through the spacer member and the top base member, and being arranged in spaced relation so that they may be struck by the clapper.

8. A musical toy comprising a transparent tubular container having a cap on one end and a centrally apertured closure on the other end, chime rods in said container, means for supporting said chime rods upright in said other end thereof, a relatively thin metal disk having an aperture in alignment with the aperture in said closure, said disk being secured in spaced relation inwardly of said closure, forming with the closure a hollow chamber having a diameter greater than that of either aperture, a hollow handle member forming a resonator, said handle having one end closed and the other end secured in the aperture in said closure, and striker means in said container for said chime rods.

9. In a musical toy, a tubular head having a cap on one end and an apertured closure on the other end, chime rod supporting means in said other end comprising a metal plate having an aperture therein aligned with the aperture in said closure, said metal plate being inwardly spaced from said closure, chime rods in said supporting means, a tubular handle having an open end secured to said apertured closure in alignment with the apertures in the closure and the metal plate, and striker means for the chime rods.

10. In a musical toy, a tubular enclosure having a central aperture in one end thereof, means for supporting a plurality of chime rods in spaced relation around said aperture, said chime rod supporting means comprising a centrally apertured inner plate and means spacing said plate from the apertured end of said enclosure, said last mentioned means being radially outwardly spaced from the periphery of the apertures in said plate and said end and a tubular resonance forming handle having its open end secured in the aperture in the end of said enclosure.

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