

[54] **WEIGHTED, MUSICAL ROLY-POLY TOY CONSTRUCTION**

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[52] U.S. Cl. .... **46/117; 46/155**

[51] Int. Cl.<sup>2</sup> ..... **A36H 3/28**

[58] Field of Search ..... **46/117, 155**

[56] **References Cited**

**UNITED STATES PATENTS**

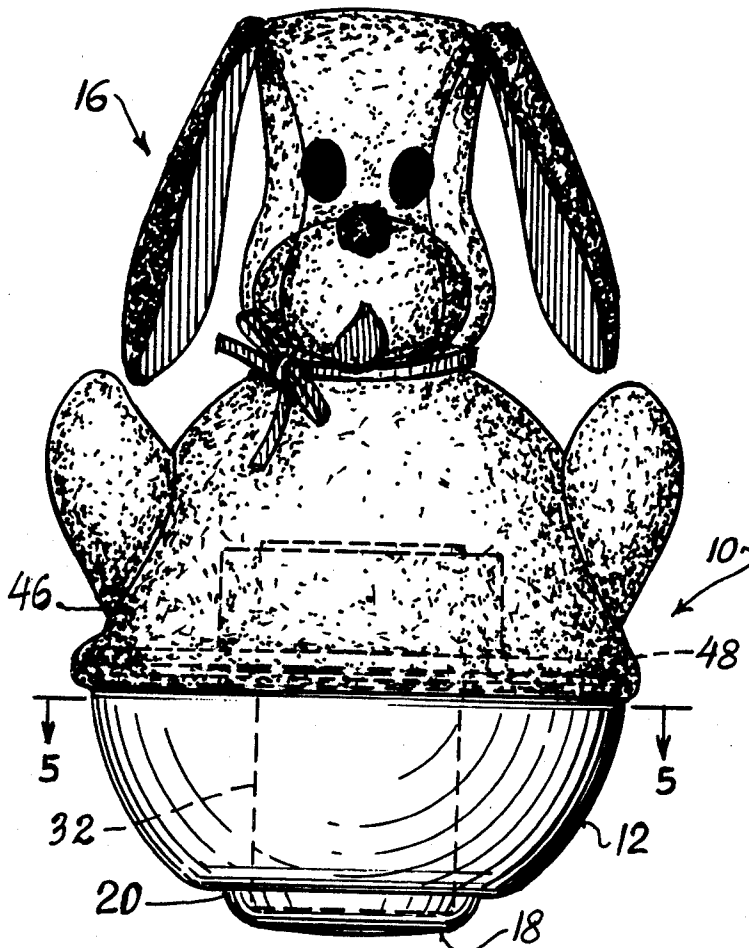
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Assistant Examiner—Robert F. Cutting  
Attorney, Agent, or Firm—Stoll and Stoll*

[57] **ABSTRACT**

A weighted, musical roly-poly toy construction, wherein the weight and music producing means occupy a tubular container, and the base is provided with a socket or recess at its lower end and a collar at its upper end to receive and hold the tubular container. Mounted on the base is a doll or toy animal figure or the like. The base is formed with an annular groove around its upper peripheral edge and the doll or toy animal figure or the like is provided with a tie string around its lower peripheral edge, said tie string being drawn through said annular groove to secure the doll, toy animal figure or the like to the base.

**5 Claims, 8 Drawing Figures**



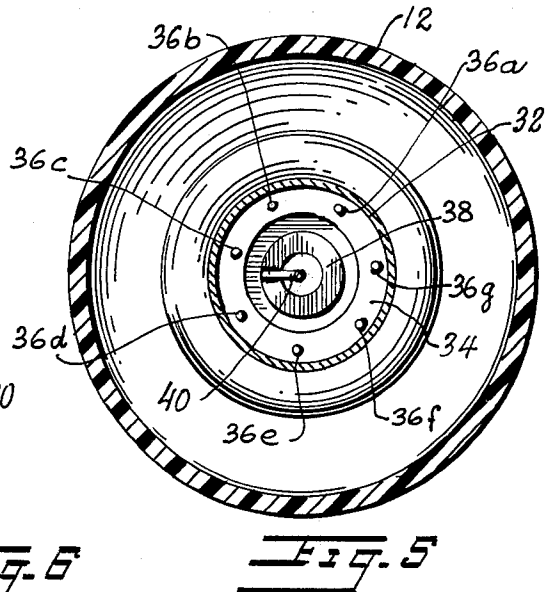
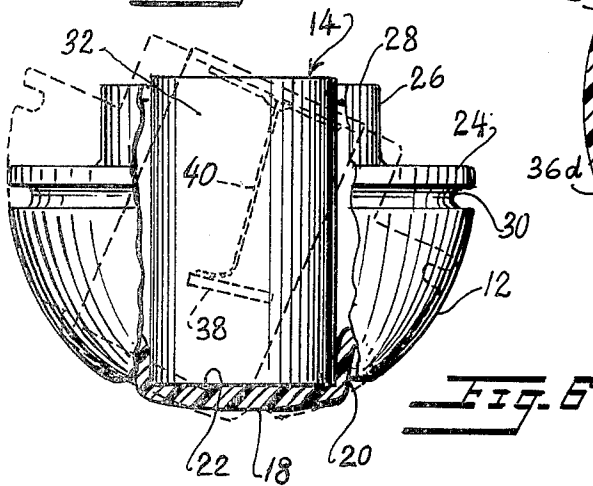
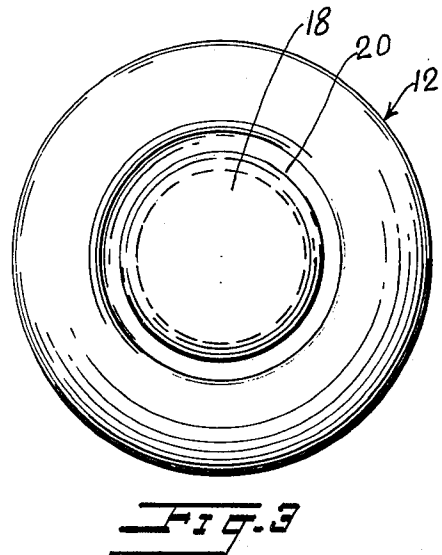
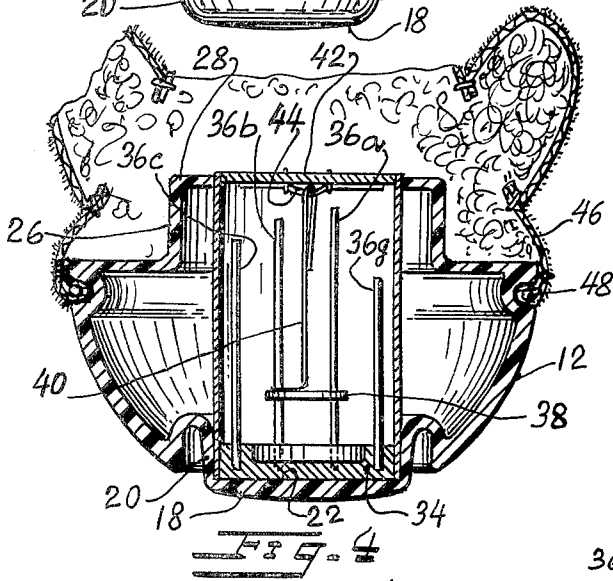
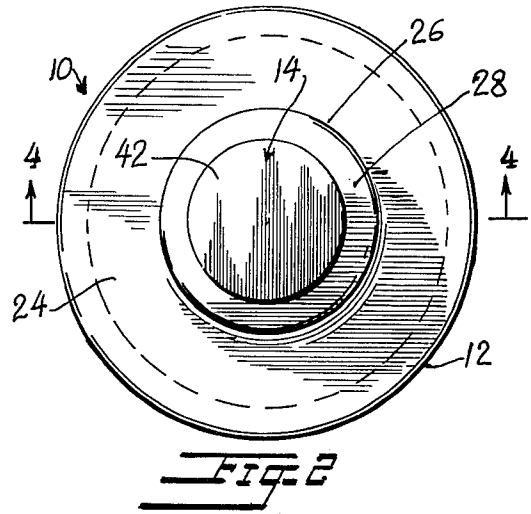
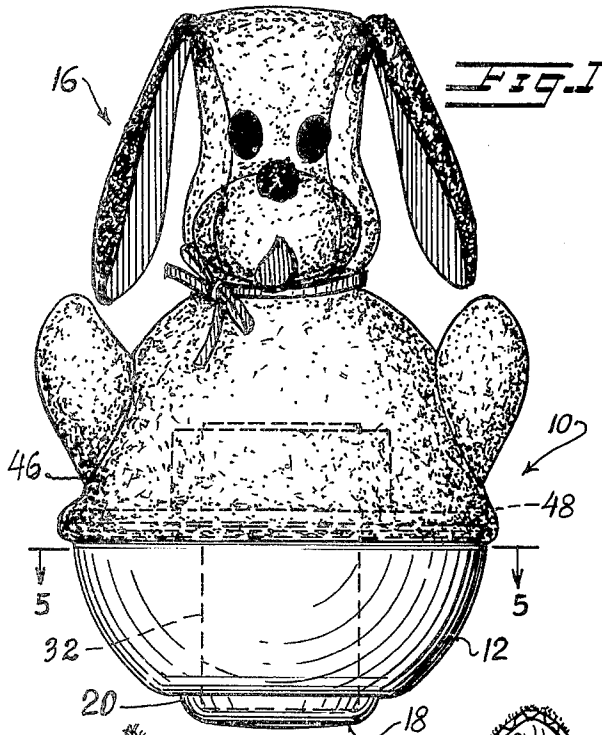


Fig. 7

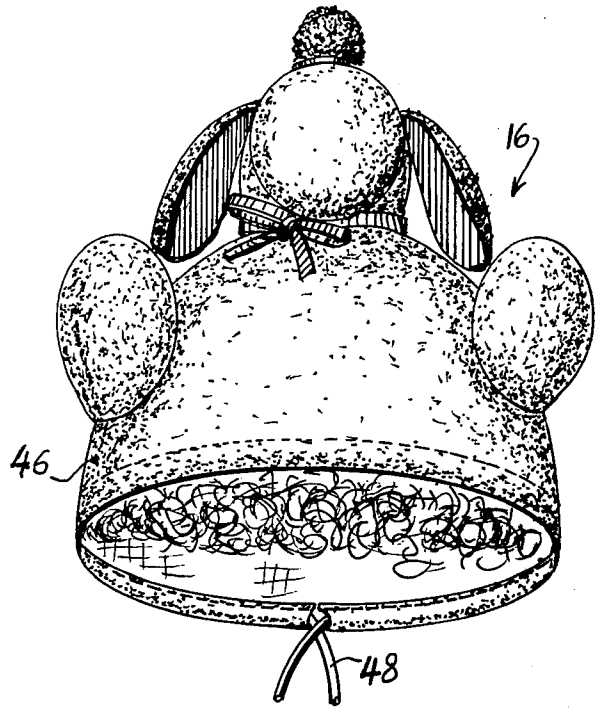
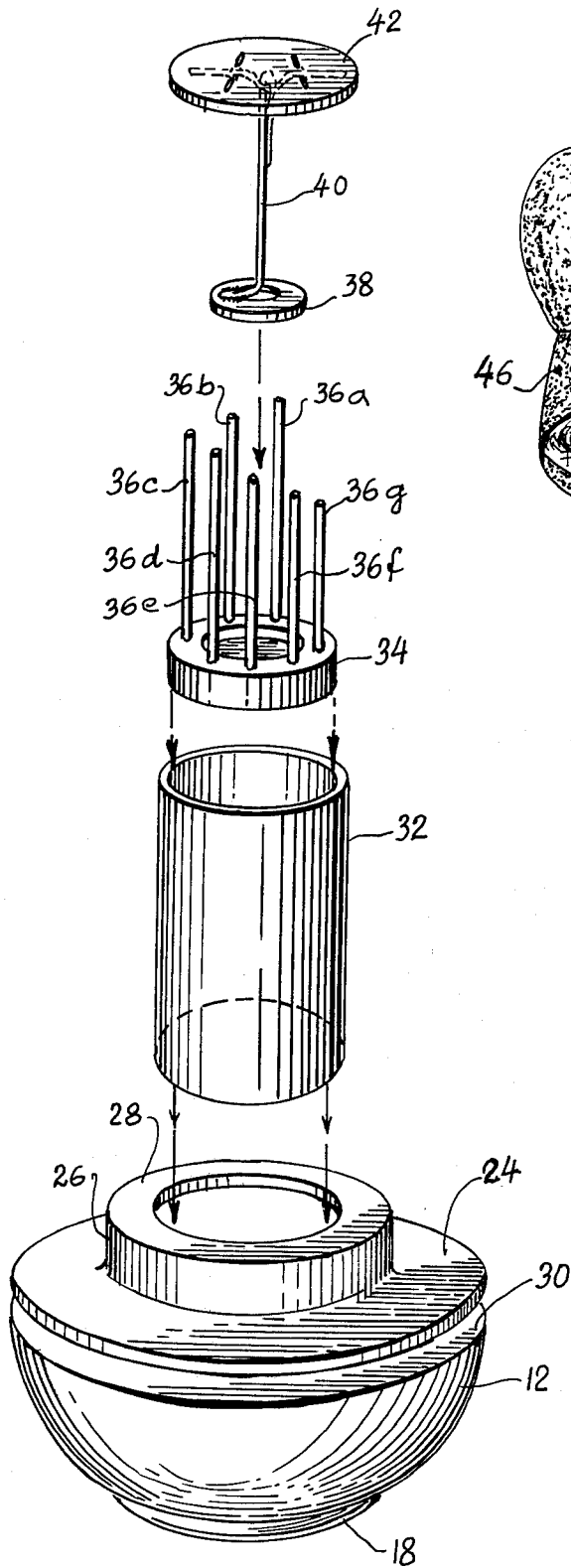


Fig. 8

## WEIGHTED, MUSICAL ROLY-POLY TOY CONSTRUCTION

### BACKGROUND OF THE INVENTION

#### 1. Field of the Invention

This invention relates to children's toys in the form of weighted, musical roly-poly toys enjoyed mainly by infants and very young children.

#### 2. Brief Description of the Prior Art

The closest prior patent art known to applicant consists of the following U.S. Pat. Nos.: 790,660, 901,762, 907,092, 1,394,669 and 2,499,743. The broad concept of utilizing a generally spherical or semi-spherical base construction with a weight disposed at the bottom to insure automatic assumption of an upright position is old in the art. Many methods have been used to secure the weight to the base. It is also old art to provide music producing means in the base and many methods have been employed in securing the music producing means in place in the base.

### SUMMARY OF THE INVENTION

The present invention comprises three self-contained components which are individually made and then joined together to form the completed toy. Specifically, the invention comprises (a) a base, (b) an or cartridge assembly consisting of a container and a weight and music producing means mounted in the container, and (c) a doll, toy animal figure or the like. Molded integrally in the base are means for holding said weight and music producing means assembly in place. Molded integrally into the base is means for engaging a tie string to secure the doll, toy animal figure or the like to the base.

More particularly, the base has an integrally molded annular socket or recess and an integrally molded annular collar to hold the weight and music producing means assembly in place in the base. The base also has an annular groove molded integrally into its peripheral edge to receive the tie string of the mounted doll, toy animal figure or the like. The tie string ties said doll, toy animal figure or the like to the base.

### BRIEF DESCRIPTION OF THE DRAWING

FIG. 1 is a front view of a roly-poly toy made in accordance with this invention.

FIG. 2 is a top view of the base of said roly-poly toy showing its weighted, musical assembly mounted therein.

FIG. 3 is a bottom view of said base.

FIG. 4 is a vertical section through said base, including the weighted, musical assembly mounted therein, said section being taken on the line 4-4 of FIG. 2.

FIG. 5 is a horizontal section taken on the line 5-5 of FIG. 1.

FIG. 6 is a view of the base, partly broken away and in section, showing the action of the music producing means when the base is rocked about a transverse axis.

FIG. 7 is an exploded perspective view showing the several parts of the toy except for the stuffed figure, in separated positions.

FIG. 8 is a perspective view of the stuffed figure which is mounted on the roly-poly base.

### DESCRIPTION OF PREFERRED EMBODIMENT OF INVENTION

Roly-poly toy 10 comprises a hollow base 12 a cartridge consisting of, a weight and music producing assembly 14, and a doll or toy animal figure 16. As will be seen, base 12 is a molded plastic unit, somewhat bowl-shaped, and substantially spherical or spheroidal on its outer surface. Its bottommost wall 18 is somewhat flattened for stability when the roly-poly toy is in a state of rest. Molded into the base, centrally thereof, is an annular wall 20 which, with the bottom wall 18 of the base, defines a cylindrical recess or socket 22.

The upper section of the base includes an annular flange 24 which extends radially inwardly and occupies a horizontal plane when the roly-poly toy is in upright position. Extending upwardly from annular flange 24 is a cylindrical neck 26 which is co-axial with recess or socket 22, and extending radially inwardly from cylindrical neck 26 is an annular collar 28 which occupies a plane parallel to the plane of annular flange 24. Annular collar 28 is co-axial with recess or socket 22. It will also be observed that an annular groove 30 is formed in the side wall of the base, immediately below annular flange 24. The purpose and function of these various aspects of the configuration of base 12 will shortly be described.

The weighted musical sound producing device 14 comprises a cylindrical tube 32, a generally disc-shaped weight 34, a plurality of vibratory wires 36A, 36B, 36C, 36D, 36E, 36F and 36G, a hammer 38, suspension means 40 for said hammer, and a cap 42 which closes the upper end on cylindrical tube 32. More specifically, cylindrical tube 32, which may be made of cardboard or plastics or any other suitable material, is set in recess or socket 22 formed in the base. The upper end of cylindrical tube 32 extends into annular collar 28. It will be understood that cylindrical tube 32 is held in place in base 12 by means of recess or socket 22 and annular collar 28. This may be accomplished by the use of a suitable adhesive or a friction fit or the like. Disc-shaped weight 34 is thereby lodged against the bottom wall 18 of the base and it accordingly occupies the lowest possible position within said base. This of course provides the base with a low center of gravity.

Disc-shaped weight 34 is made of a relatively heavy material such as cast iron or a die-cast zinc alloy or the like. It functions not only as a weight for the roly-poly toy but it also functions as a support for the vibratory wires 36A - G of the musical sound producing mechanism. Specifically, a plurality of holes are formed in the disc-shaped weight 34 along its circumferential periphery. These holes are equally spaced from each other and from the axial center of said disc-shaped weight. It will be seen in FIGS. 4 and 5 that the vibratory wires are set into the holes and that said vibratory wires are thereby supported in equally spaced relationship both among themselves and between the wires and the central axis of disc-shaped weight 34, cylindrical tube 32 and cap 42. It will also be noted that these vibratory wires are of unequal length, wire 36A being the longest and wires 36-36G being successively shorter, wire 36G being the shortest of the group. The wires are of equal diameter and since they are of progressively stepped lengths, they will vibrate at different frequencies and produce different sounds when struck by a hammer; in this case hammer 38.

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Hammer 38 comprises a steel or iron disc or the like. It is suspended by means of wire 40 from a looped member such as string 44 secured to the underside of cap 42. It will be evident that when base 12 is caused to rock about its verticle axis hammer 38, functioning in the manner of a pendulum, will strike the individual vibratory wires 36A-36G and will cause them to produce bell or chime type musical sounds.

The direction of the rocking movement of the base will largely determine the vibratory wire or wires which the hammer will strike.

Doll or animal FIG. 16 or the like comprises, preferably, a stuffed character selected by the manufacturer of the toy. It is supported by cap 42 on cylindrical tube 32, annular collar 38 and annular flange 24 of the base. The outer skin 46 of the stuffed character 16 extends downwardly below annular flange 26 and across annular groove 30. A tie string 48, which may be in the form of a tie wire or string or elastic member, secures the lower end of said skin 46 to groove 30 and thereby attaches the stuffed character to the molded base. Other securing means may be used such as a suitable adhesive.

The foregoing is illustrative of a preferred form of this invention and it will be understood that this preferred form may be modified for purposes of production, reduced labor costs within the broad scope of the appended claims.

I claim:

- 1. A roly-poly toy construction, comprising:
  - a. a hollow base externally rounded to enable it to rock on a flat horizontal surface;
  - b. a socket formed within said base, centrally thereof,
  - c. a collar formed on said base in axial alignment with and above said socket,
  - d. a tubular cartridge mounted within the base, its lower end projecting into said socket and its upper end received within said collar, whereby the tubular cartridge is secured to said base, centrally thereof, and coaxially therewith and is rockable therewith,
  - e. a weight secured within the lower end of said tubular cartridge,

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f. musical sound producing means including a plurality of sound emitting members and a hammer member adapted to strike said sound emitting members mounted in said tubular cartridge and adapted to produce musical sounds when the roly-poly rocks, and

g. a toy character mounted on said base and rockable integrally therewith.

2. A roly-poly toy construction in accordance with claim 1, wherein:

a. the musical sound producing means comprises a plurality of vibratory wires secured to the weight and projecting upwardly therefrom in the tubular container,

b. said hammer supported at the upper end of the tubular cartridge and hanging downwardly therein for percussive engagement with the vibratory wires when the roly-poly rocks.

3. A roly-poly toy construction in accordance with claim 2, wherein:

a. the vibratory wires have a common diameter but different lengths,

b. said vibratory wires being arranged in size sequential relationship along a circumferential line concentric with the tubular container.

4. A roly-poly toy construction in accordance with claim 3, wherein:

a. the tubular cartridge has a top wall which closes its upper end, and

b. the hammer is suspended from said top wall, centrally of said circumferential line of vibratory wires, and adapted to swing into percussive engagement with said vibratory wires when the roly-poly rocks.

5. A roly-poly toy construction in accordance with claim 1, wherein:

a. the toy character is a stuffed doll or animal figure or the like and is provided with a tie string which extends peripherally around it along its lower perimeter,

b. said base having an annular groove formed externally thereof along its lower perimeter,

c. said tie string being tied into and around said annular groove to secure the toy character to the base.

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