Sept. 1, 1959 N. THOMAS 2,901,862

ARTICULATED TOY

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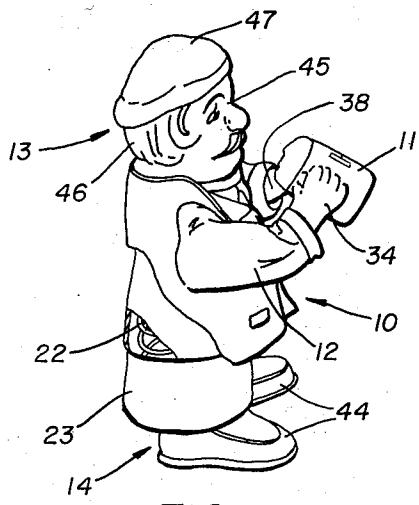


FIG. 1

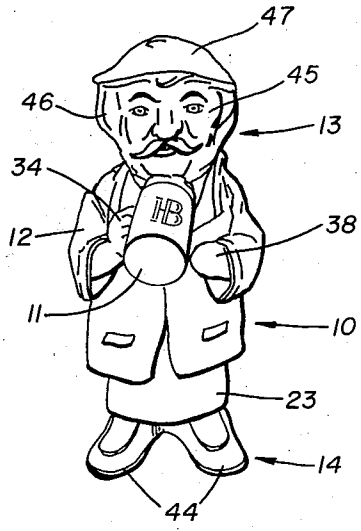


FIG. 2

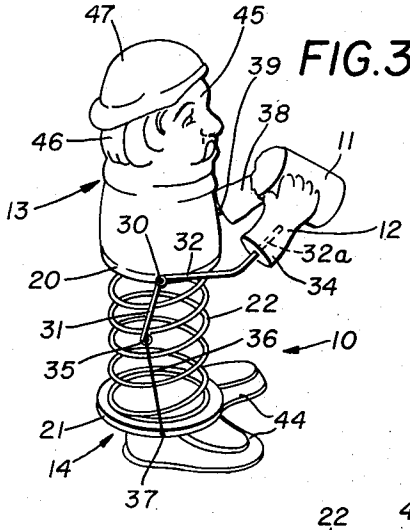


FIG. 3

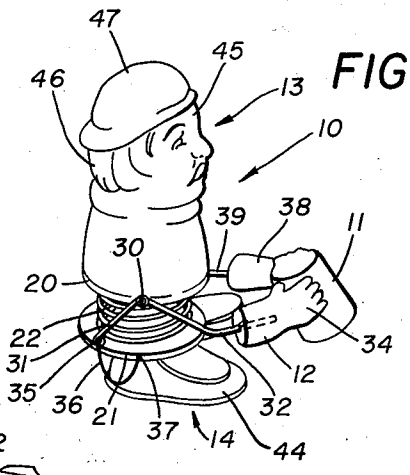


FIG. 4

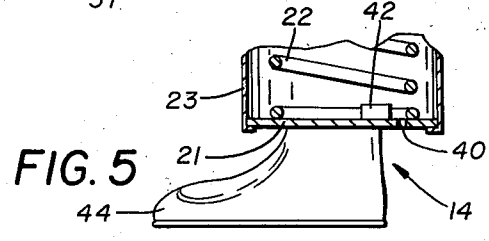


FIG. 5

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ARTICULATED TOY

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2 Claims. (Cl. 46—141)

This invention relates to the art of toys, and in particular, has reference to articulated toys that feature appendage movements upon collapsing of the toy.

In the known prior art of articulated toys, there have been provided several types of toys falling under this general classification wherein appendage movement is provided in simulation of eating, drinking, etc. However, without exception, these toys have been characterized by the use of a plurality of complicated internal mechanisms that invariably add to the expense of the toy involved. Also, toys of this general classification have almost invariably required an external actuating lever to initiate appendage movement, with this actuating lever frequently being partially disguised in the form of another appendage of the toy body.

It has been found that a new and highly interesting type of articulated toy with simplified construction can be provided if the force of gravity is utilized for one portion of the appendage movement. It has been further discovered that the appendage movement can be made to appear more realistic if the speed of movement of the said appendage is decreased materially so as to simulate the actual movement of a human being in the course of drinking a glass of a beverage, for example.

It has been further found that additional novelty and interest can be provided in toys of this approved type if a reed, or other type of "squawker" mechanism is incorporated therein so that the articulation of the toy is accompanied by an audible emission.

The provision of such a highly simplified articulated toy, having realistic appendage movement, together with sound emission upon such movement, accordingly becomes the principal object of this invention.

Other objects of the invention will become more apparent upon a reading of the following brief specification, considered and interpreted in the light of the accompanying drawings.

Of the drawings:

Figure 1 is a side-elevational view of the device partly broken away and in section, and illustrating the toy in upright position.

Figure 2 is a front elevation of the improved toy.

Figure 3 is a view similar to Figure 1 but having the external apparel removed to illustrate the condition of the mechanism in the upright position.

Figure 4 is a view similar to Figure 3, but showing the toy in its collapsed condition.

Figure 5 is an enlarged cross-sectional elevation showing the incorporation of the "squawker" mechanism in the toy.

Referring now to the drawings and in particular to Figures 1 to 5 thereof, the improved articulated toy, generally designated by the numeral **10**, is shown simulating a Bavarian character having a mug **11** placed in the hand of a movable arm **12** so that upon relative collapsing movement of the head section **13** with respect to the base section **14**, the mug **11** will be moved between the positions of Figures 3 and 4 in simulation of a drinking movement.

The actual construction of the toy per se, is best shown in Figures 3 and 4 of the drawing where the external decorative clothing has been omitted for the sake of clarity in description, and, accordingly, the head portion **13** and the base portion **14** are each shown as having cylindrical portions **20** and **21** respectively; the arrangement being such that these flat cylindrical portions serve to seat the opposed axial ends of a coil spring **22** that normally operates to urge the head section **13** and the base portion **14** axially apart towards the condition of Figure 3. Additionally, the cylindrical sections **20** and **21** are also shown interconnected by a resilient sleeve **23**, that is preferably of air-tight construction, so as to form a resilient sealed chamber between the sections **20** and **21** with this resilient chamber enclosing the coil spring **22** as will be apparent from an examination of Figures 1 and 3 of the drawings.

In addition to the aforementioned component parts the cylindrical portion **20** is shown receiving a pivot pin **30**, about which may pivotally be received a rod member having sections **31** and **32**, with the latter section **32** being bent and contoured so as to have the free end **32***a* thereof received interiorly of the hand **34**, while the portion **31** is preferably contoured and provided with an eye-end **35** through which a string **36** may be attached, with the opposite end of the string **36** being secured, as at **37**, to the cylindrical portion **21** as clearly shown in Figure 3 of the drawings.

It is to be understood in this regard, that the hand **34** will preferably be in simulation of grasping the mug **11**, and similarly, that a second hand **38** could be attached to rod **39** at a diametrically opposed portion of the cylindrical portion **20**, with the hand **38** being either stationary, or movable with the mug **11** as is desired.

Considering next the structure of the base **21**, it will be seen that the same is provided with an aperture **40** that communicates with the resilient chamber that is defined by the portions **20**, **21**, as well as the resilient sleeve **23**. Also, and as best shown in Figure 5, a "squawker" mechanism, generally designated by the numeral **42**, is shown disposed adjacent the aperture **40** so that the entrance of air into the interior of the chamber defined by resilient sleeve **23** will cause the operation of the "squawker" to emit an audible sound.

While the above-recited structural parts account for the actual movement of the toys as will be hereinafter described, it is also to be understood that the preferred embodiment countemplates the provision of feet **44**, **44**, that are secured to the underside of member **21**, while the upper portion, head section **13**, includes a face portion **45**, hair **46**, and a hat **47**, with these particular configurations forming no material part of the invention herein recited.

In use or operation of the improved toy **10**, it will first be assumed that the same has been dressed in external clothing and that the component parts have been secured together as indicated in the drawings so as to have provided an operating toy.

Normally, the toy **10** will be in the upright condition of Figures 1 and 3, with the mug **11** being fairly close to the mouth of the toy.

In this upright condition, it is also to be noted that the axial separation between the head portion **13** and the base portion **14** will be limited by the resilient sleeve **23**, with this sleeve **23** serving to limit the amount of separating movement that can be caused by the spring member **22**.

When it is desired to actuate the toy, it is merely necessary that the head portion **13** be depressed towards the base portion **14** that has been placed on the supporting surface (not shown). This depression of the head **13** will cause a partial exhaust of air through aperture **40**

and will also cause the mug **11**, as well as the hand **34** and arm **12**, to move around the pivot point **30** as a result of the slack of the string **36** that is caused by the approach of the head section **13** towards the base section **14**. Accordingly, as the head section **13** is depressed against the force of the spring **22**, the component parts of the toy will assume the position of Figure 4 with the toy being in simulation of a squatting movement with the mug being at quite a distance from the mouth portion of the toy.

However, when the depressing pressure of the hand on head section **13** is released, it is believed apparent that the spring **22** will urge the head section **13** and the base section **14** apart. However, the action of the spring **22** in the preferred embodiment of the invention is shown resisted as a result of the provision of the air-tight enclosure as provided by use of the resilient sleeve **23** with a vacuum being formed internally of the sleeve **23** upon depression of the parts to the position of Figure 4. Accordingly, the head section **13** will move relatively gradually away from the base section upon release of the hand pressure on the head section **13** with the rate of movement between head section **13** and base section **14** being controlled by the size and restriction provided adjacent to the aperture **40**.

It is believed apparent that as this upward movement of the head **13** continues, the string **36** will eventually become taut, with the result that the mug **11**, as well as the hand **34**, will rise as a result of movement of the arm sections **31** and **32** around the pivot point **30**. This will simulate the actual drinking of the beverage received in the mug **11** with the result that as the toy regains its upright position, the mug **11** will automatically be raised to the lips of the toy in perfect simulation of the drinking of the beverage contained therein.

It will be seen from the foregoing that there has been provided a new and novel type of articulated toy characterized by a realistic appendage movement upon collapsing of the toy. It has been shown how the decrease in the speed of erection of the toy causes a relatively slow appendage movement in perfect simulation of the actual act of human drinking with the result that the toy, while extremely simple in principle and construction, is exceptionally realistic in simulation of human movement.

While a full and complete disclosure of the invention has been made in accordance with the dictates of the patent statutes, it is to be understood that the invention is not intended to be so limited, and accordingly, while the style and external appearance of the toy have been illustrated in connection with Bavarian character, it is to be understood that a toy, having the face and clothing characteristics of a child could be provided with equal facility, with the child being shown drinking milk from a mug or other container that would be carried by the movable appendage of the toy. Similarly, while the preferred embodiment of the invention has disclosed the use of a reed type of "squawker" mechanism in connection with the erecting movement thereof, it is to be understood that this use is optional and could be eliminated if desired. By like token, it is believed apparent that use of the air-tight chamber to decrease the appendage movement, is, of course, optional, with it being possible to obtain a somewhat realistic simulation of appendage movement by elimination of the air-tight flexible chamber that is disclosed in the preferred embodiment of the invention.

Additionally, while the weight of the artificial hand carried on the end of the arm member would normally provide sufficient force to cause movement of this around the pivot point upon depression of the head section **13** towards the base section **14**, it is to be understood that if desired, a hand or hands could be weighted in known manner so as to facilitate a faster dropping movement of the same around its pivot point.

It accordingly follows that modifications of the invention may be resorted to without departing from the spirit hereof or the scope of the appended claims.

What is claimed is:

1. A toy of the character described, comprising; a head section; a base section; an arm pivoted to said head section adjacent its central portion and having an appendage secured to one free end thereof; a cord member interconnected between said remaining opposed end of said arm and said base section; a resilient sleeve interconnecting said head portion and base portion and defining therewith a laterally deformable cylindrical chamber and spring means interconnecting said head and base portions and urging the same apart; said cord member being relaxed when said base and head sections are moved towards adjacency with each other whereby said head section can shift laterally of said base portion during movement towards and from the same.

2. The device of claim 1 further characterized by the presence of means restricting the separating force of said spring means during movement of said head and base sections apart.

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