Dec. 24, 1957 J. M. AUZIN 2,817,187

SQUEEZE TOY

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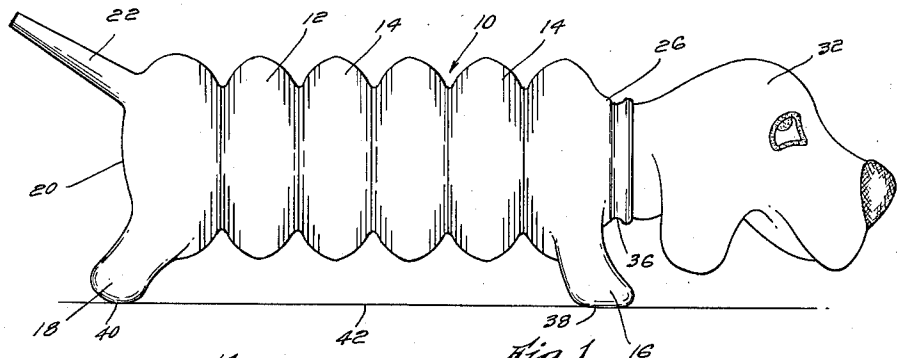


Fig. 1

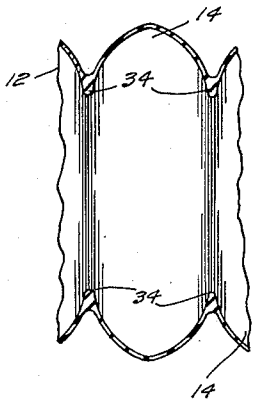


Fig. 5

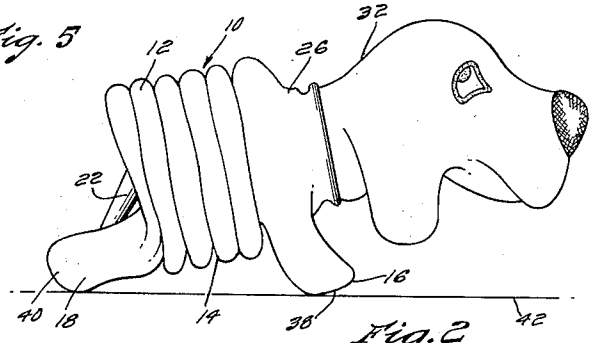


Fig. 2

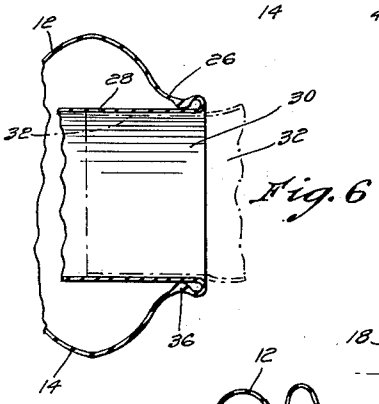


Fig. 6

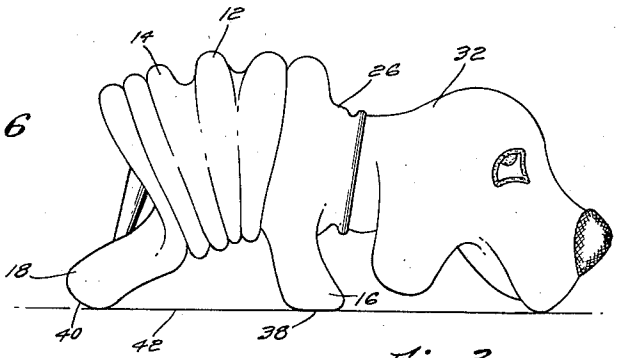


Fig. 3

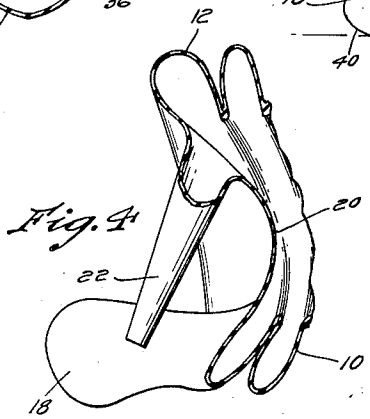


Fig. 4

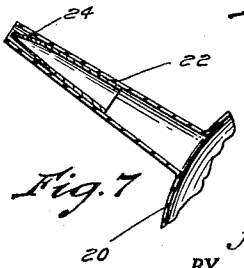


Fig. 7

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SQUEEZE TOY

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6 Claims. (Cl. 46—118)

The present invention relates generally to so-called "action toys," and more specifically to a resilient squeeze toy.

A primary object of the instant invention is the provision of a rubber or latex squeeze toy preferably in the form of a four-legged animal, which toy may be longitudinally collapsed, whereupon it will automatically resume its normal shape and form in a fascinating and attractive manner.

Another object of my invention is the provision of a squeeze toy having a flexible, convoluted body which after manual collapsing will intermittently but steadily resume its former shape.

Another object is the provision of an animal squeeze toy which may be collapsed, after which it will self-resume its normal shape while simultaneously producing an intermittent sound.

A further object of the instant invention is the provision of a squeeze toy having a collapsible, convoluted body portion so constructed as to prevent permanent collapsing in any direction.

Still another object is the provision of an animal squeeze toy comprising a collapsible body having a tail portion extending upwardly therefrom, said body and tail being so constructed that upon collapsing of the former, the tail will snap downwardly and will remain so directed until the body has substantially resumed its normal shape, at which time the tail will suddenly snap up again, thereby providing a mysterious and provocative action.

A further object of my invention is the provision of a toy of the character described which may be economically manufactured in mass quantities but which at the same time is durable, attractive and efficient in operation.

Other objects, features and advantages of the invention will become apparent as the description thereof proceeds when considered in connection with the accompanying illustrative drawings.

In the drawings which illustrate the best mode presently contemplated by me for carrying out my invention:

Fig. 1 is a side elevation of a toy constructed in accordance with my invention;

Fig. 2 shows the toy of Fig. 1 in collapsed form;

Fig. 3 shows the toy in the process of resuming its normal shape;

Fig. 4 is a fragmentary section, on an enlarged scale, showing the position of the tail when the body is collapsed;

Fig. 5 is a fragmentary section, on an enlarged scale, showing the convoluted body construction;

Fig. 6 is a fragmentary section, on an enlarged scale, showing the joint between the head and the body portion; and

Fig. 7 is a fragmentary section, on an enlarged scale, showing the tail construction.

It has been found desirable to provide a toy of hollow, flexible construction which may be manually squeezed or otherwise collapsed and which when released will automatically resume its normal shape in a mysterious and fascinating manner. The toy, preferably, although not necessarily, manufactured by the latex dip method, may take the form of a four-legged animal having a body portion, a head, depending feet, and a tail. The body portion, at least, is hollow and is provided with circumferentially extending convolutions whereby it may be longitudinally compressed in accordion-like fashion. Air-control means are provided in association with said body portion for enabling the manual collapsing thereof, said air-control means being so regulated that upon release of the device, after manual collapsing thereof, it will automatically resume its normal shape steadily but in jerky, intermittent movements. This provides a highly fascinating action which is further accentuated by the fact that the body construction is such that immediately upon collapsing of same, the normally upwardly extending tail is caused to point downwardly, in which position it remains until the toy has substantially completely regained its normal shape, at which time it suddenly snaps upwardly once again into its usual upwardly extending position. As will be obvious, the toy may take the form of any desired animal, and it may be gaily colored to provide a highly attractive and pleasing appearance.

Referring now to the drawings, my invention is illustrated in the form of a hound dog, generally designated at **10**, which is preferably constructed of rubber or any other material having similar resilient qualities. The dog **10** comprises a hollow body portion **12** having a plurality of circumferentially extending convolutions **14**, a pair of front depending feet **16**, rear legs **18**, and a rear wall **20** having an upwardly extending tail **22**. The tail **22** is preferably integrally formed with respect to rear wall **20** and has provided therein an air-control means **24** which may be a reed or other noise-making device. The neck end **26** of body portion **12** has an integral, rearwardly extending tubular portion **28** defining an opening **30** into which head portion **32** is adapted to be inserted and secured, such as by cementing or the like, note Fig. 6.

Referring to Figs. 5 and 6, it will be noted that integral, circumferentially extending strengthening beads **34** are provided intermediate each pair of adjacent convolutions **14**. Neck portion **26** is also provided with an integral, circumferentially extending strengthening bead **36**, said beads **34** and **36** functioning to impart a certain degree of rigidity to the structure, whereby when it is collapsed or otherwise dented, it will always spring back to its normal shape. More specifically, any dents or depressions that may result in the body portion from squeezing or poking same will be restricted or localized by said beads to a single convolution, and hence said dents or the like will always pop out by themselves. Were the beads not present, however, a dent or depression could extend across a plurality of convolutions with the result that automatic righting would not always take place. The bead **36** additionally functions to maintain the opening **30** substantially round whereby to facilitate insertion of the head **32** therein for securement of the latter to the body portion **12**.

When the body portion **12** is collapsed, it will assume the appearance shown in Fig. 2 wherein the convolutions **14** have been compressed into accordion-like relationship. Upon release of the toy, air-control means **24** will enable air to penetrate slowly into the body portion of the toy until the pressure therein equalizes the outside pressure, at which time the toy will have completely regained its normal shape. Due to the presence of the strengthening beads **34**, the toy, when regaining its normal shape, will do so periodically. More specifically, as shown in Fig. 3, the forwardmost portion of the toy will begin expanding first, and as each convolution **14** becomes filled with air,

it will snap apart from the previously expanded adjacent convolution, thereby providing a jerky, intermittent action as the toy spreads apart. As previously indicated, this intermittent snapping apart of adjacent convolutions forms a highly important feature of the instant invention, and it has been found by trial and experimentation that this action is made possible by the presence of the aforementioned strengthening beads **34**. If desired, the air-control device **24** may take the form of a noise-maker or reed, whereby when the toy is compressed, a sound will be produced, and also, as the toy intermittently spreads apart, an intermittent sound will be produced.

In order to facilitate the spreading apart of the toy **10** after manual collapsing or compression of same, I prefer to provide the front feet **16** with relatively flat bottom surfaces **38**, whereas, preferably, the rear legs **18** are provided with rounded bottoms **40**. This has been found to be advantageous since in normal use the toy is placed upon a table or other base support **42**, and it is desirable to keep friction between said table and the rear legs **18** at a minimum while at the same time maintaining a firm contact between front legs **16** and said table. Quite obviously, if too much friction exists between rear legs **18** and the table **42**, the body portion may encounter some difficulty in spreading apart by itself, hence the desirability of minimizing bearing surface between said rear legs and said table.

Another important constructional feature of my invention resides in the fact that rear wall **20** of body portion **12** functions, in effect, as a diaphragm for controlling the direction of tail **22**. Thus, it will be noted that when the toy is in its normal position, as per Fig. 1, said rear wall assumes, in effect, a convex curvature, and the tail **22** extends upwardly; but that as soon as the body is collapsed, note Figs. 2, 3 and 4, rear wall **20** buckles inwardly to a concave position, whereupon the tail **22** is directed in a downward direction. The tail **22** remains in this downwardly directed position until self-inflation of the body **12** is in its very final stage, at which time rear wall **20** pops outwardly, whereupon tail **22** suddenly snaps upwardly into its normal position. This action is extremely amusing and entertaining and greatly enhances the overall attractiveness of my invention when in operation.

It will be understood that by regulating the air-control means **24**, the speed with which the device self-resumes its normal shape may be varied. Also, it will be obvious that the instant invention readily lends itself to a plurality of ornamental forms and configurations and that the dog illustrated and described herein is purely illustrative and is not to be taken as limiting in any sense. I find that my invention can be most simply manufactured by the latex dip method, but it will be obvious that numerous other manufacturing techniques can well be utilized to arrive at the finished product herein described.

While there is shown and described herein certain specific structure embodying the invention, it will be manifest to those skilled in the art that various modifications and rearrangements of the parts may be made without departing from the spirit and scope of the underlying inventive concept and that the same is not limited to the particular forms herein shown and described except insofar as indicated by the scope of the appended claims.

I claim:

1. An action toy comprising a hollow, flexible, cylindrical body having a plurality of circumferentially extending convolutions, an integral, circumferential strengthening bead located intermediate each pair of adjacent convolutions, and air-control means associated with said body for enabling longitudinal collapsing of same, during which said convolutions function as bellows, said air-control means and said strengthening beads cooperating to cause said toy to self-resume its normal shape, subsequent to collapsing, in an intermittent, jerky manner.

2. An action toy as set forth in claim 1 further characterized in that said air-control means comprises a reed whereby an intermittent sound is produced as the body resumes its normal shape.

3. An action toy simulating an animal, said toy comprising a hollow, flexible, cylindrical body having depending front and rear feet and a rear wall at one end thereof, a hollow integral tail extending from said rear wall and in communication with said body portion interior, a plurality of circumferentially extending convolutions in said body portion, an integral, circumferential strengthening bead located intermediate each pair of adjacent convolutions, and air-control means located in said tail, whereby said body may be longitudinally collapsed in accordion-like fashion, after which said air control means and said strengthening beads will cooperate to cause said body to self-resume its normal shape in jerky, intermittent movements.

4. An action toy as set forth in claim 3 further characterized in that said front feet have a substantially flat bottom whereas said rear feet have a rounded bottom.

5. An action toy as set forth in claim 3 further characterized in that said rear wall has a slightly convex curvature and functions as a diaphragm for controlling the direction of said tail, whereby when said body portion is in normal, air-filled position, said tail extends upwardly, whereas when said body portion is collapsed by longitudinal compression, said rear wall assumes a concave position whereupon said tail becomes downwardly directed.

6. An action toy as set forth in claim 3 further characterized in that said body portion is provided with a neck portion at the end opposite from said rear wall for reception of a head, said neck portion having a circumferentially extending strengthening bead.

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