

July 23, 1946.

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2,404,477

TOY

Filed Feb. 22, 1945

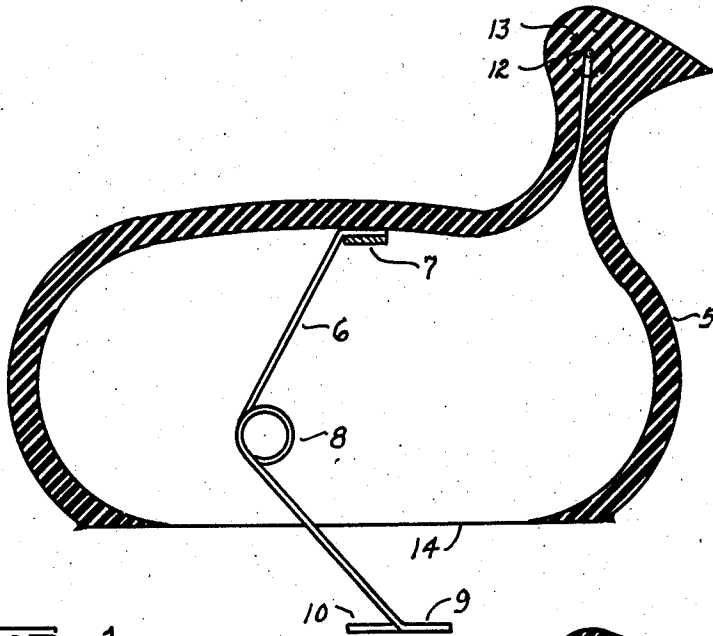


FIG. 1.

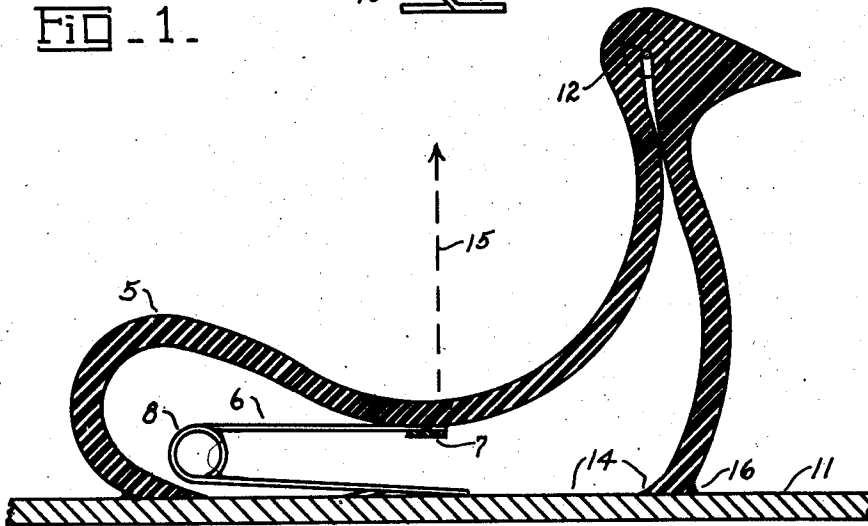


FIG. 2.

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## UNITED STATES PATENT OFFICE

2,404,477

TOY

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Application February 22, 1945, Serial No. 579,245

2 Claims. (Cl. 46-145)

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This invention relates to toys and the principal object of the invention is the provision of a toy which will suddenly "jump" from its resting place.

Another object of the invention is the provision of a jumping toy which can conveniently simulate such animated things as a dog, frog, chicken, ball, etc.

A still further object of the invention is the provision of a toy which may be conveniently pressed against a smooth surface and left there for a short interval of time, perhaps ten seconds, whereupon the toy will suddenly jump upwards from the smooth surface.

Other and further objects will appear in the specification and be specifically pointed out in the appended claims, reference being had to the accompanying drawing exemplifying the invention, and in which:

Fig. 1 is a vertical cross sectional view of one form of the toy, in this case simulating a chicken.

Fig. 2 is a similar view as Fig. 1 but showing the toy in depressed condition.

Referring to the drawing in which like numerals and characters of reference refer to similar parts throughout the several views, the numeral 5, in Figs. 1 and 2, denotes a flexible and resilient cup of rubber or similar material and of any desired shape such as a chicken in this illustration. To the bottom of the cup on the inside thereof is secured a spring 6 by means of the glued tape 7 as will be readily understood. The spring 6 may have a loop 8 for greater resiliency and to more closely resemble a chicken's leg, and a foot 9 which, with the toe 10 welded thereto, will enable the chicken to stand upright when the rubber cup 5 is inverted and placed upon a table 11 or other similar smooth surface. A very small hole 12 is preferably placed at the eye of the chicken although this hole 12 may be conveniently placed anywhere else in the cup 5 with satisfactory results. The hole 12 may constitute the usual hole of a circular air whistle 13 which is frictionally set in the rubber wall 5.

The operation of the toy is as follows; the child grasps the chicken in the hand and merely presses it downward onto the smooth table top 11, the spring legs 6 being compressed upward within the cup as illustrated in Fig. 2 and the annular rim 14 of the cup touching the smooth table top throughout its circumference. As pressure on the chicken's back is increased, the rubber cup 5 becomes deformed as shown and the entrapped air within the cup is forced out through hole 12 or around the edge 14, thus creating a partial vacuum within the deformed inverted cup

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5. At this point, the hand is released but the toy, due to atmospheric pressure on the outside of the cup, will remain in the deformed position in the same manner as the conventional vacuum cup, in this case however, overcoming the compressive stress of the spring leg 6. As soon as the hand is released from the chicken, air begins to seep into the cup through small hole 12 but as it requires an interval of time before the cup is filled, the child sees the chicken gradually resuming its natural molded form due to the force of the spring leg 6 and the molded tension of the soft resilient rubber cup 5. Incidentally, as air seeps through hole 12 in whistle 13, a whistling noise is emitted, adding to the interest of the child. At some point during the resumption of the natural form of the chicken as just described, the opposing pressure of the spring leg 6 and the decreasing degree of vacuum within cup 5, will become equalized, this condition permitting the annular edge 14 to lift itself from the smooth table top 11. At this instant, the sudden inrush of air into the cup 5 is quicker than the resumption of spring leg 6 to its original state as illustrated in Fig. 1, with the result that the spring 6 imparts a sudden upward jerk to the chicken and makes it jump as indicated by dotted line 15. Assisting the spring 6 to cause the chicken to jump is the natural elasticity of the rubber cup 5 tending to resume its molded form.

Of course, the cup 5 may have any desired shape, preferably resembling animated objects, and the smooth surface 11 may be a vertical window pane, the floor, etc. The annular edge 14 of the cup 5 may be supplemented with a flange 16 for better contact with the smooth surface 11. It will also be obvious that the spring legs 6 may be secured to the outside of the cup 5 if desired and four legs may also be preferable in some cases.

From the foregoing description it will be apparent that I have evolved a new toy operated by a new principle, that of a spring compressed within a rubber vacuum cup with means for permitting air to gradually seep into the cup within a predetermined time so that a point is soon reached where the spring pressure is greater than the atmospheric pressure holding the cup to its surface, thus permitting the spring to "jump" the cup into the air a considerable distance and to be caught coming down, to the delight of children.

I claim:

1. A toy comprising a resilient rubber cup sim-

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ulating the configuration of an animated legged creature and capable of preventing the entrance of atmospheric air to the interior thereof when its rim is pressed against a smooth surface, a small hole in the wall of said resilient rubber cup for the admission of atmospheric air in restricted quantity to the interior of said cup, and a spring having one end thereof attached to the upper interior wall of said resilient rubber cup and the other end of said spring protruding beyond the rim of said cup, said protruding portion of said spring simulating the legs of said animated legged creature configuration.

2. A toy comprising a resilient rubber cup simulating the body configuration of an animated legged creature, the lower body portion of said

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animated creature constituting the rim of said cup, means for expelling the atmospheric air from the interior of said cup when said cup is forcibly collapsed with its rim against a smooth surface, a spring simulating the legs of said animated creature, said spring having one end thereof attached to the upper inner portion of said resilient rubber cup and the other end thereof projecting beyond said rim, means for permitting atmospheric air in time limited quantity to enter to the interior of said cup, and means for causing the projecting spring legs of said "animated creature" to enter the interior of said cup when said cup is forcibly collapsed onto a smooth surface.

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