Sept. 17, 1968 L. A. GOODRUM, JR 3,401,485

MAGNETICALLY ACTIVATED TOY DOG

Filed June 20, 1966

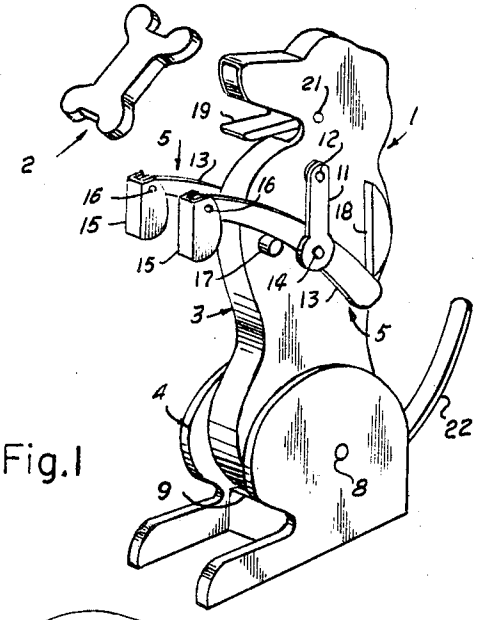

Fig. 1

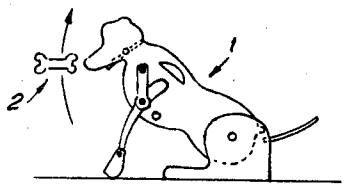

Fig. 2

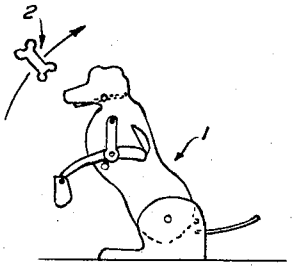

Fig. 3

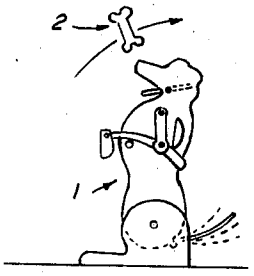

Fig. 4

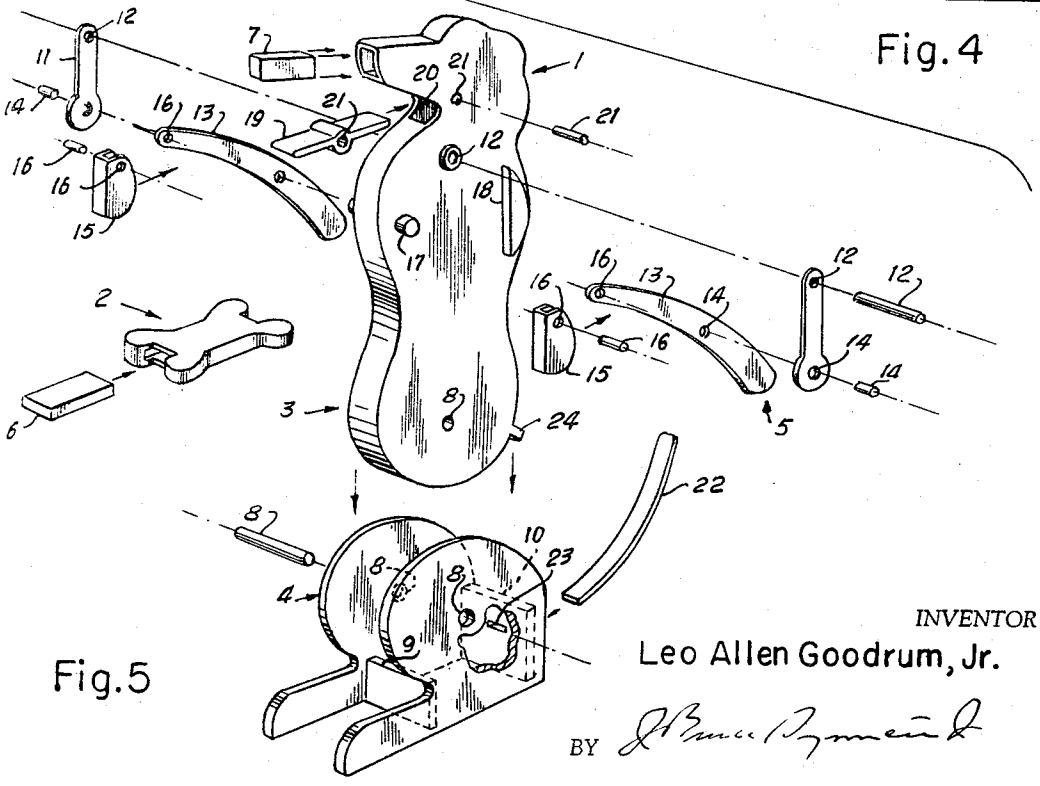

Fig. 5

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United States Patent Office 3,401,485 Patented Sept. 17, 1968

3,401,485

MAGNETICALLY ACTIVATED TOY DOG

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Filed June 20, 1966, Ser. No. 558,936
7 Claims. (Cl. 46—237)

This invention relates to a toy dog, and it concerns more particularly a child's plaything which comprises, in combination, a simulated dog having a one-piece body portion which is hinged to a supporting base simulating the hind legs, and having a pair of articulated fore legs hinged to the body, and a separate piece simulating a bone having a magnet therein acting on a second magnet in the nose of the dog whereby the dog is caused to sit up and beg in response to the action of the bone, upon advancing and retracting the bone relative to the dog, as in teasing the dog by first offering the bone and then withdrawing it.

The base, which is in the form of a four-sided shell loosely encircling the lower end of the body and having two opposite sides pivotally connected thereto, has abutments forwardly and rearwardly thereof for selective engagement by the body to limit its pivotal movement in either direction about a horizontal axis corresponding to its pivotal connection with the base.

The fore legs each include a shoulder portion pivotally connected to the body and depending therefrom, a lower leg portion pivotally connected near one of its ends to the lower end of the shoulder portion and having its longer end extending forwardly, and a paw portion pivotally connected to the forward end of the lower leg portion and depending therefrom.

A first cam surface on each side of the body is engageable under the lower leg portion of the corresponding fore leg, forwardly of its pivotal connection with the shoulder portion, to limit forward and downward pivotal movement of the forward end of the lower leg portion.

The above mentioned cam surface lifts the forward end of the lower leg portion, while permitting free sliding movement thereof in a longitudinal direction relative to said cam surface, as the lower leg portion is swung rearwardly, with the shoulder portion, in response to the upward and rearward movement of the body about its pivotal connection with the base.

A second cam surface on each side of the body is engageable over the lower leg portion of the corresponding fore leg, rearwardly of its pivotal connection with the shoulder portion, to depress the rearward end of the lower leg portion, as its forward end is lifted by engagement with said first cam surface, so that the fore legs are adjusted to raised positions, in an attitude of begging, in response to pivotal movement of the body in an upward and rearward direction relative to the base.

Simultaneously with the lively action above described, which is accomplished by maneuvering the simulated bone capriciously and malevolently, and at will, before the nose of the importune dog, the lower jaw drops and the tail wags, as hereinafter described.

A small, elongated member simulating the lower jaw, which is disposed partly in a cavity therefor in the body and extends forwardly thereof, is fulcrumed on the body intermediate its ends and is balanced in a horizontally extending position, so that the jaw appears to drop as the body is moved upwardly and rearwardly about its pivotal connection with the base.

An elongated flexible element simulating the tail, which is characterized by its inherent spring tension, is passed through an opening therefor in the base, rearwardly thereof, and is fulcrumed thereon intermediate its ends.

A lug on the back side of the body abuts the top side of the tail element adjacent its inner end, upon moving

the body upwardly and rearwardly about its pivotal connection with the base, to thereby effect a flexing movement of the tail element while at the same time moving it pivotally about a horizontal axis corresponding to its connection with the base.

The invention will be readily understood by referring to the following description and the accompanying drawing, in which:

FIG. 1 is a perspective view of a toy dog embodying the invention, showing the simulated bone in close proximity to the head of the dog and showing the dog in a sitting up position, in an attitude of begging;

FIGS. 2 to 4 are side elevational views, on a reduced scale, showing the dog in different positions and illustrating the action of the dog upon raising the simulated bone, as if to take it away, after first offering it; and

FIG. 5 is an exploded perspective view.

Referring to the drawing, the numeral **1** designates generally a simulated dog as hereinafter described, and the numeral **2** indicates generally a separate piece simulating a bone which with the simulated dog **1** comprises the invention.

The simulated dog **1** has a one-piece body portion **3** which is hinged to a supporting base **4** simulating the hind legs, and has a pair of articulated fore legs **5** hinged to the body **3**, on opposite sides thereof.

The simulated bone **2** has a magnet **6** therein acting on a second magnet **7** in the nose of the simulated dog **1** whereby the dog **1** is caused to sit up and beg in response to the action of the bone **2**, upon advancing and retracting the bone **2** relative to the dog **1**.

The base **4**, which is in the form of a four-sided shell loosely encircling the lower end of the body **3** and having two opposite sides pivotally connected thereto, as at **8**, has abutments **9**, **10** forwardly and rearwardly thereof for selective engagement by the body **3** to limit its pivotal movement in either direction about a horizontal axis corresponding to its pivotal connection with the base **4**.

The fore legs **5** each include a shoulder portion **11** pivotally connected, as at **12**, to the body **3** and depending therefrom, a lower leg portion **13** pivotally connected near one of its ends, as at **14**, to the lower end of the shoulder portion **11** and having its longer end extending forwardly, and a paw portion **15** pivotally connected, as at **16**, to the forward end of the lower leg portion **13** and depending therefrom.

A first cam surface **17** on each side of the body **3** is engageable under the lower leg portion **13** of the corresponding fore leg **5**, forwardly of its pivotal connection **14** with the shoulder portion **11**, to limit forward and downward pivotal movement of the forward end of the lower leg portion **13**.

The cam surface **17** lifts the forward end of the lower leg portion **13**, while permitting free sliding movement thereof in a longitudinal direction relative to the cam surface **17**, as the lower leg portion **13** is swung rearwardly, with the shoulder portion **11**, in response to the upward and rearward movement of the body **3** about its pivotal connection with the base **4**.

A second cam surface **18** on each side of the body **3** is engageable over the lower leg portion **13** of the corresponding fore leg **5**, rearwardly of its pivotal connection **14** with the shoulder portion **11**, to depress the rearward end of the lower leg portion **13**, as its forward end is lifted by engagement with the first cam surface **17**, so that the fore legs **5** are adjusted to raised positions, in an attitude of begging, in response to pivotal movement of the body **3** in an upward and rearward direction relative to the base **4**.

A small, elongated member **19** simulating the lower jaw, which is disposed partly in a cavity **20** therefor in the body **3** and extends forwardly thereof, is fulcrumed on

the body 3 intermediate its ends, as at 21, and is balanced in a horizontally extending position, so that the jaw 19 appears to drop as the body 3 is moved upwardly and rearwardly about its pivotal connection with the base 4.

An elongated flexible element 22 simulating the tail, which is characterized by its inherent spring tension, is passed through an opening 23 therefor in the base 4, rearwardly thereof, and is fulcrumed thereon intermediate its ends.

A lug 24 on the back side of the body 3 abuts the top side of the tail element 22 adjacent its inner end, upon moving the body 3 upwardly and rearwardly about its pivotal connection with the base 4, to thereby effect a flexing movement of the tail element 22 while at the same time moving it pivotally about a horizontal axis corresponding to its connection with the base 4.

The invention may be modified in various ways without departing from the spirit and scope thereof.

I claim:

1. A child's toy comprising, in combination, a simulated dog having an elongated, one-piece body portion and having a supporting base simulating the hind legs, the base consisting of a four sided shell loosely encircling the lower end of the body and having two opposite sides pivotally connected thereto, and the base having abutments forwardly and rearwardly thereof for selective engagement by the body to limit its pivotal movement in either direction about a horizontal axis corresponding to its pivotal connection with the base, the body having a magnet in its nose and having a pair of articulated fore legs pivotally connected to opposite sides thereof, and a separate piece simulating a bone having a magnet therein acting on said first mentioned magnet whereby the dog is caused to sit up and beg in response to the action of the bone, upon advancing and retracting the bone relative to the dog, as in teasing the dog by first offering the bone and then withdrawing it.

2. The structure of claim 1, the fore legs each including a shoulder portion pivotally connected to the body and depending therefrom, a lower leg portion pivotally connected near one of its ends to the lower end of the shoulder portion and having its longer end extending forwardly, and a paw portion pivotally connected to the forward end of the lower leg portion and depending therefrom.

3. The structure of claim 2, and a cam surface on each side of the body engageable under the lower leg portion of the corresponding fore leg, forwardly of its pivotal connection with the shoulder portion, to limit forward and downward pivotal movement of the forward end of the lower leg portion.

4. The structure of claim 3, the arrangement being such that, in operation, said cam surface lifts the forward end of the lower leg portion, while permitting free sliding movement thereof in a longitudinal direction relative to said cam surface, as the lower leg portion is swung rearwardly, with the shoulder portion, in response to the upward and rearward movement of the body about its pivotal connection with the base.

5. The structure of claim 4, and a second cam surface on each side of the body engageable over the lower leg portion of the corresponding fore leg, rearwardly of its pivotal connection with the shoulder portion, to depress the rearward end of the lower leg portion, as its forward end is lifted by engagement with said first mentioned cam surface, so that the fore legs are adjusted to raised positions, in an attitude of begging, in response to pivotal movement of the body in an upward and rearward direction relative to the base.

6. The structure of claim 1, and a small, elongated member simulating the lower jaw disposed partly in a cavity therefor in the body and extending forwardly thereof, said jaw member being fulcrumed on the body intermediate its ends and being balanced in a horizontally extending position so that the jaw appears to drop as the body is moved upwardly and rearwardly about its pivotal connection with the base.

7. The structure of claim 1, and an elongated flexible element simulating the tail, characterized by its inherent spring tension, passed through an opening therefor in the base, rearwardly thereof, and fulcrumed thereon intermediate its ends, the body having a lug on its back side for abutting engagement with the top side of the tail element adjacent its inner end, upon movement of the body upwardly and rearwardly about its pivotal connection with the base, to thereby effect a flexing movement of the tail element while at the same time moving it pivotally about a horizontal axis corresponding to its connection with the base.

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