Nov. 21, 1939. M. PIFALO 2,181,024

TOY ANIMAL

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Fig. 1.

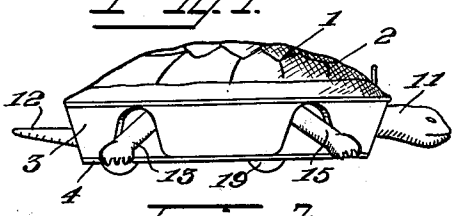


Fig. 2.

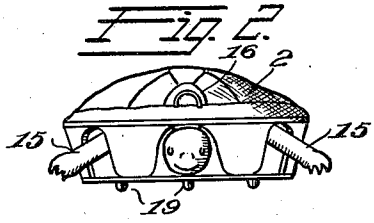


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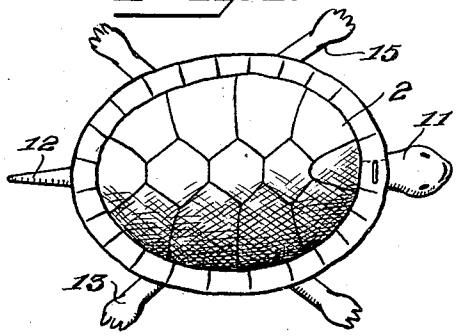


Fig. 6.

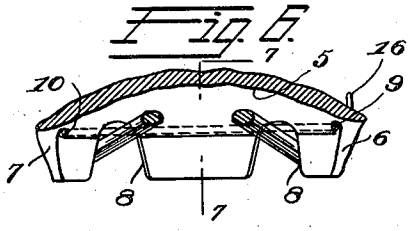


Fig. 7.

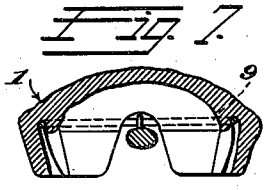


Fig. 4.

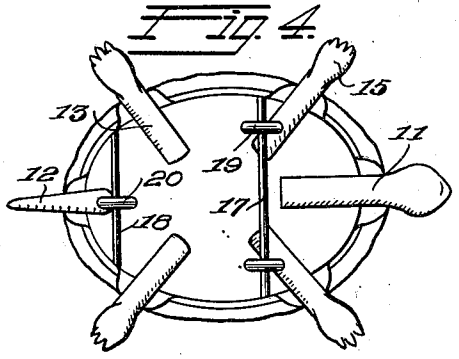


Fig. 8.

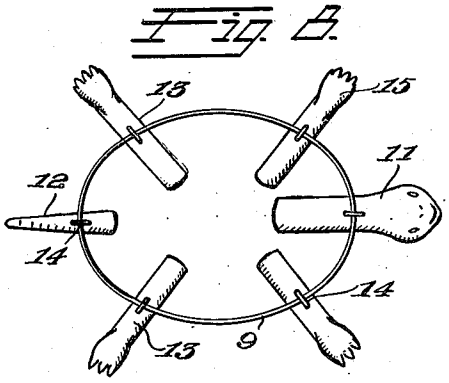
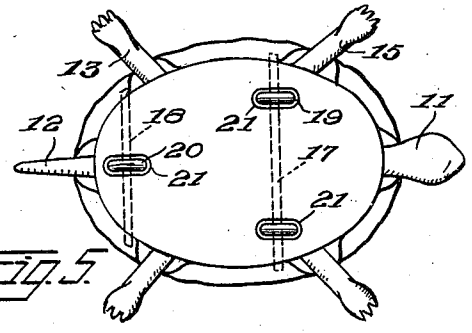


Fig. 5.



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TOY ANIMAL

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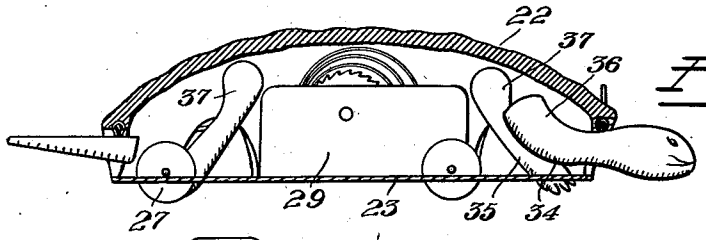


Fig. 9.

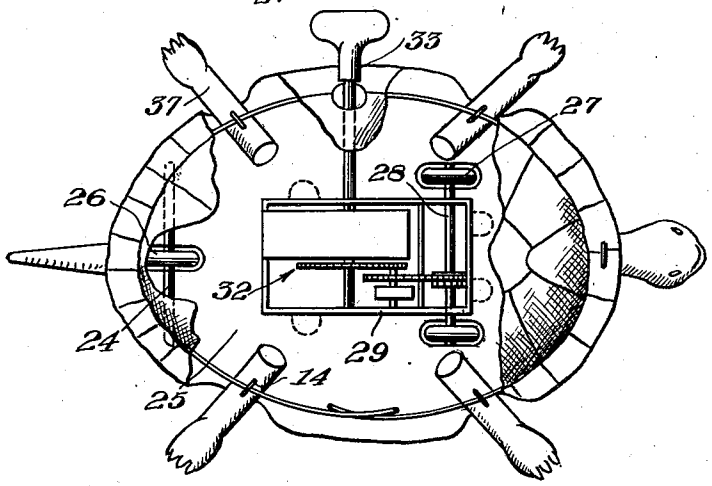


Fig. 10.

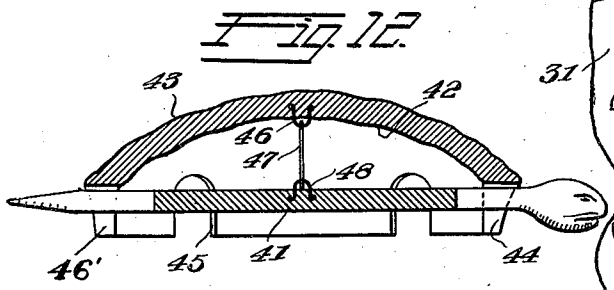


Fig. 12.

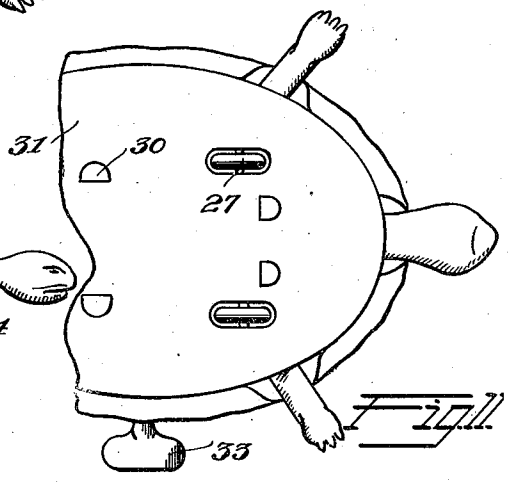


Fig. 11.

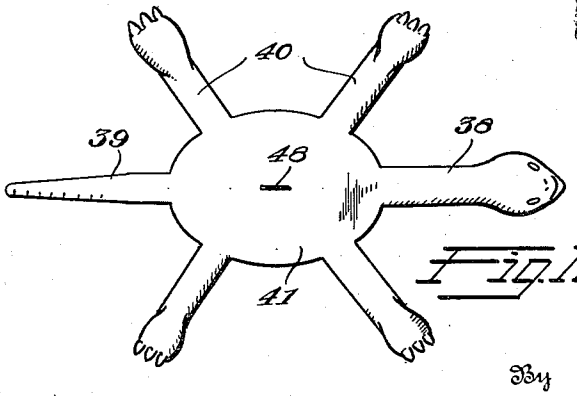


Fig. 13.

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2,181,024

UNITED STATES PATENT OFFICE

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TOY ANIMAL

Michael Pifalo, Malden, Mass.

Application May 31, 1938, Serial No. 211,053

3 Claims. (Cl. 46—152)

This invention relates to improvements in toys and pertains particularly to toys designed in simulation of animals.

The present invention has for an object to provide a novel animal toy in which the head, legs and tail are joined thereto in a novel manner whereby the same will make life like movements as the toy is moved as a whole over a supporting surface.

Another object of the invention is to provide a novel toy in simulation of an animal, in which the head, legs and tail are attached to the body in a condition of balance whereby they will move or shift freely with any movement of the body as a whole and thereby give the impression that the toy is a live animal.

The invention has for a more specific object to provide a novel toy in simulation of a turtle or any other reptilian form of animal such as an aligator or a crocodile, in which the body is designed for free movement over a floor or other supporting surface and the legs, head and tail thereof are suspended in and extend from openings in the body and are maintained in balanced condition from the suspension means whereby any slight movement of the body will set up a free oscillation of these parts to cause them to appear to be alive.

The invention will be best understood from a consideration of the following detailed description taken in connection with the accompanying drawings forming part of this specification, with the understanding, however, that the invention is not to be confined to any strict conformity with the showing of the drawings but may be changed or modified so long as such changes or modifications mark no material departure from the salient features of the invention as expressed in the appended claims.

In the drawings:

Figure 1 is a view in side elevation of a toy simulating a turtle, constructed in accordance with the present invention.

Figure 2 is a front elevation of the same.

Figure 3 is a view in top plan of the toy.

Figure 4 is a view in bottom plan of the same with the bottom plate or cover removed.

Figure 5 is a bottom plan view of the toy with the bottom plate or cover in place.

Figure 6 is a sectional view taken longitudinally and centrally of the upper half of the shell of the turtle body showing the manner of securing the member supporting wire therein.

Figure 7 is a sectional view taken on the line 7—7 of Figure 6 and showing the tail of the animal attached to the shell.

Figure 8 is a view illustrating the supporting wire for the head, tail and legs of the animal and showing these parts attached thereto.

Figure 9 is a view in longitudinal section of a spring motor driven form of the invention.

Figure 10 is a view in top plan of the toy, as shown in Figure 9, portions of the body being broken away.

Figure 11 is a plan view of a portion of the underside of the completed body, which is shown in Figure 9.

Figure 12 is a view illustrating a modified method of supporting the head, tail and legs of the animal, the same being shown attached to a shell and both the shell and head, tail and leg units being in longitudinal section.

Figure 13 is a plan view of the head, tail and leg unit of the structure shown in Figure 12.

Referring now more particularly to the drawings, the numeral 1 generally designates the upper half of the shell or body of a turtle which has been selected for illustration in connection with the disclosure of the present invention, it being understood, however, that the showing of this particular animal is for illustrative purposes only and that because of such showing the invention is not to be understood as being limited to this form of animal as the invention may be carried out in other forms of animals such as alligators, crocodiles, etc.

The body 1 is formed to provide the back 2 and the side portion 3 which may be referred to as the side wall of the toy and secured to the underside of the animal body is a cover plate 4, which in the particular animal here illustrated constitutes the under or stomach plate of the animal shell.

The shell body as a whole including the upper half 1 and the bottom plate 4 may be formed of any suitable material which can be conveniently molded into the desired shape so that the interior of the shell will be hollow to form the housing or chamber 5. In the molding of the shell, the side or wall 3 is provided with the front and rear openings 6 and 7 and the side openings 8 and encircling the interior of the chamber 5 in a plane slightly below the tops of the openings 6 to 8 inclusive, there is formed a groove or valley 9. This groove, in passing through the upper parts of the openings referred to, naturally opens into the openings and, therefore, when the wire ring 10 is placed in the groove it will extend across the tops of the openings as shown in Figure 6. The wire ring may be firmly secured in place in the groove 9 by bending or compressing the portion of the material which forms the side of the groove nearest the interior or center of the chamber so as to lock the wire firmly into place.

The head, tail and legs for the toy are indicated respectively by the numerals 11, 12 and 13, and these are formed of short lengths of a suitable material which are designed to position in and extend through the openings 6, 7 and 8,

respectively, each of these members having attached thereto a suspension loop 14 through which the exposed part of the wire ring 9 in the particular opening in which the member is located, passes to suspend the member in the opening. The suspension loop 14 for each member is attached to the member in the proper position to maintain the member balanced in its opening so that when the body of the animal is moved, the member will become slightly unbalanced and rock or swing upon the supporting wire and thereby take on the appearance of being alive. The outer ends of the members 13 are shaped to simulate feet 15, while the outer end of the member 11 is shaped to simulate the head of the particular animal which the toy represents.

The forward part of the upper portion 1 of the animal shell is provided with a suitable eye or ring 16 to facilitate the attachment of a string or cord thereto so that the animal may be moved about and in order to facilitate such movement, two shafts 17 and 18 are secured in and transversely of the chamber 5 and the forward shaft 17 is provided with two wheels 19, while the rear shaft is provided with a single central wheel 20. The bottom plate 4 is provided with suitable openings 21 so that the wheels may extend through for engagement with the floor.

In Figures 9 to 11 inclusive, there is illustrated a spring motor operated form of the invention. In this form, the upper part of the animal shell, which is indicated by the numeral 22 and the bottom plate 23 are of the same form as described in connection with the structures, shown in Figures 1 to 5 inclusive and while a shaft 24 is supported in and across the rear part of the chamber 25 to carry a rear supporting wheel 26, the front supporting wheels, which are indicated by the numeral 27, are carried by a shaft 28 which is supported within a frame 29 and this frame is secured by the attaching ears 30 to the bottom plate 31 of the toy, as shown in Figure 11, so that the frame will rest upon the top of this plate within the chamber 25. A spring motor mechanism 32 is carried within the frame 29 and coupled with the wheel shaft 28 in the manner well known in such mechanisms and the control key for winding up the spring mechanism extends laterally through a suitable aperture in the side of the toy to the exterior thereof, as indicated at 33. In view of the amount of the chamber area which is taken up by the spring motor driving mechanism in this particular form, the head and leg members 34 and 35 respectively, are made shorter and are balanced by having their inner ends turned up and slightly enlarged, as indicated at 36 and 37 respectively, for these members. The manner of suspending these members is the same as described in connection with the structure of Figure 1.

Figures 12 and 13 illustrate a slightly modified head, leg and tail suspension means. In this form of the invention, the head, leg and tail members which are designated respectively by the numerals 38, 39 and 40 are made integral with a center plate 41, which is disposed within the chamber 42 of the body 43 of the animal and the head, tail and leg members extend through the openings 44, 45 and 46' respectively, and are maintained in position by providing the suspension loop 46 in the top of the chamber 42 which is connected by a link 47 with an attaching loop 48 which is secured to the member plate 41. With this arrangement, it will be readily apparent that the head, tail and leg members of the toy may move or swing freely in their respective openings but they will all move together, whereas in the other forms of the invention these members will have independent movement one from the other.

From the foregoing, it will be readily apparent that an animal toy constructed in accordance with the present invention will, when moved about, give the appearance of being alive because of the unrestricted or uncontrolled movements which the head, tail and leg members of the animal may have by reason of the novel method of attaching them to or suspending them from the animal body.

I claim:

1. An animal toy comprising a hollow body simulating the body of an animal, a cover plate secured to the underside of the body, said body having a wall connecting the top thereof with the bottom and provided with front, rear and side openings, head, tail and leg members for said body each adapted to extend from the interior thereof through an opening, a wire ring secured in the interior of the body and having a portion extending through the upper part of each of said openings, and means for suspending each of said members from the portion of the wire loop passing through the opening in which the member is positioned.

2. A toy simulating a turtle, comprising a body in the form of a turtle shell having a side wall extending downwardly from and encircling the peripheral portion thereof, said shell being hollow, said side wall having front, rear and side openings, head, tail and leg members for said front, rear and side openings respectively, each of said members being relatively long and extending from the interior of the body through an opening thereof, a wire ring secured within the upper part of said body and extending across and exposed in the upper part of each of said openings, and a suspension loop carried by each member and having the wire passing therethrough whereby the member is suspended for oscillation in the opening.

3. A toy simulating a turtle, comprising a body having the form of a turtle shell having a side wall extending downwardly from and encircling the periphery of the shell, said shell being hollow, said side wall having front, rear and side openings, respectively, for head, tail and leg members, said shell upon the inner side having a channel formed therein and extending throughout the peripheral portion of the shell, the channel being intersected by the upper parts of said openings, a ring member having substantially the same contour as the periphery of said shell and secured in said channel, portions of the ring extending across the tops of said openings and being exposed therein, and head, tail and leg members disposed in said openings and each having a hanger loop connected therewith through said ring passes whereby said members are freely suspended in their openings.

MICHAEL PIFALO.