Sept. 22, 1925. 1,554,892

E. A. STIER

FIGURE TOY

Filed Feb. 3, 1925

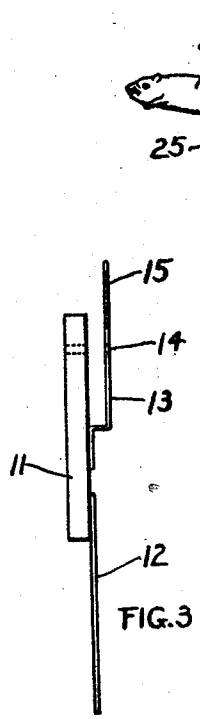


FIG.3

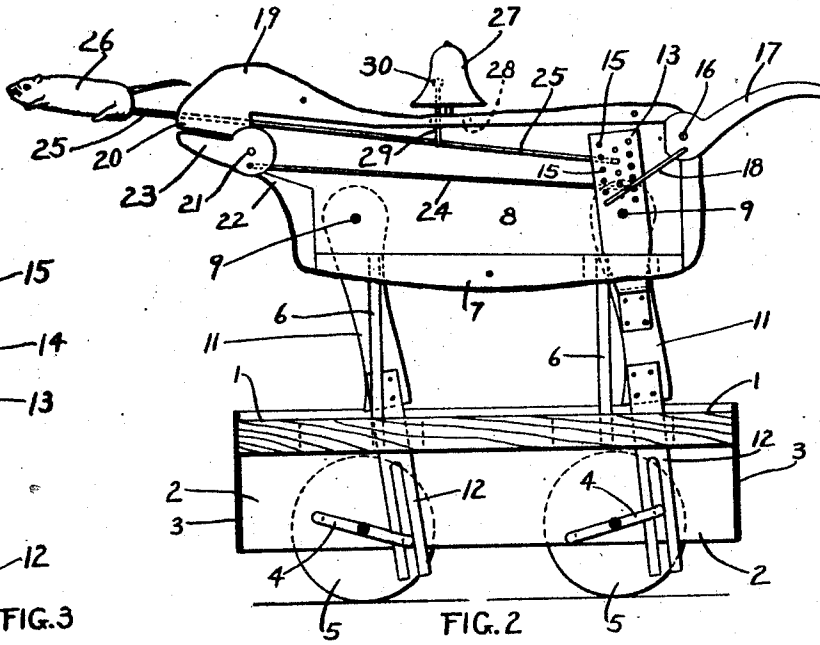


FIG.2

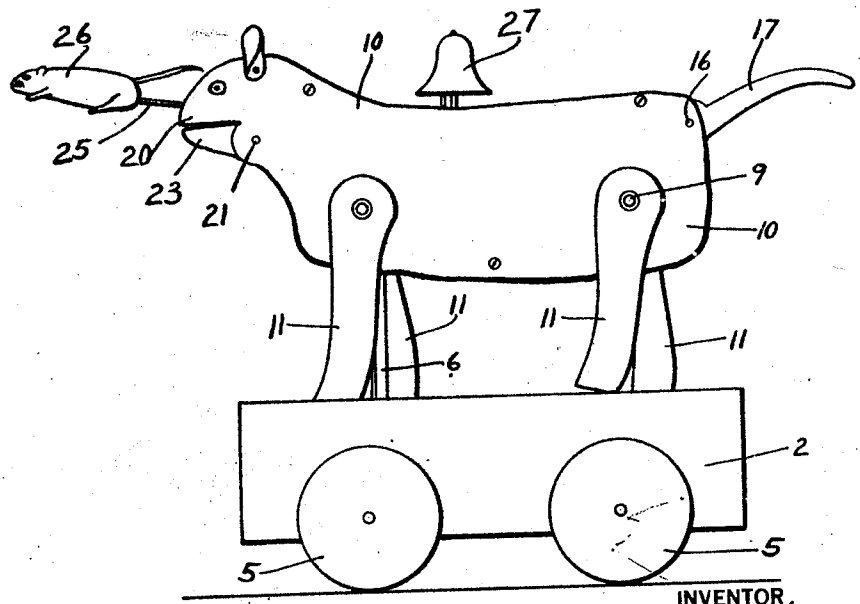


FIG.1

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UNITED STATES PATENT OFFICE.

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FIGURE TOY.

Application filed February 3, 1925. Serial No. 6,659.

To all whom it may concern:

Be it known that I, EUGENE A. STIER, a citizen of the United States, residing in the county of Montgomery, near the city of Dayton, and State of Ohio, have invented certain new and useful Improvements in Figure Toys, of which the following is a specification.

This invention relates to new and useful improvements in figure toys.

It is one of the principal objects of my invention to provide a figure toy which is simple in construction, instructive and easy in operation and capable of being economically made.

It is another object of my invention to provide a figure toy which will imitate many, or all, of the motions of an animal in simulation of which it is constructed, the parts for accomplishing these motions being simply made and connected, and few in number, so that it can be marketed at small cost.

It is still another object of my invention to connect to the toy, other objects such as a bell, for operation by the actuating mechanism within the body of the toy.

My improved toy is susceptible of a large number of motions that are effected through a central operating plate secured to a reciprocating member such as a leg of the toy. This plate can be widened and lengthened to provide the required number of apertures to receive the ends of the operating links necessary to effect the desired number of motions of the toy.

Other important and incidental objects will be brought out in the following specification and particularly set forth in the subjoined claims.

In the accompanying drawings illustrating one form of embodiment of my invention, Figure 1 is a side elevational view of my figure toy. Figure 2 is a side view of the same, with the base in section and the side plate of the figure portion of the toy removed to reveal the operating mechanism for the mouth, tail and other movable parts. And Figure 3 is an end view of the operating means attached to one leg of the toy.

Referring to the acompanying drawings for a detailed description of the form of embodiment of my invention illustrated in them, the numeral 1 designates a base to which there are attached downwardly extending sides 2, 2 and ends 3, 3. The sides 2, 2 are formed at their front and rear portions with oppositely disposed holes through which project the ends of cranks 4, 4 upon which are mounted wheels 5. Projecting upwardy from the middle portion of the base 1, one near each end thereof, are standards 6, 6. At their upper ends these standards are connected to and support the bottom member 7 of a body 8 that is formed in simulation of that of a cat, although it may be constructed to imitate the body of any other figure.

Projecting through the body 8, one near the front and the other near the rear thereof, are two bolts 9, 9. The numeral 10 designates a side plate constructed to conform in shape to the body 8, and formed with two holes through which the bolts 9, 9 are adapted to project when said side plate is applied to the said body.

Pivotally mounted on each bolt 9, one on each side of the body 8 after the plate 10 has been applied thereto, is the upper end of a leg 11. Secured to the lower end of each leg 11 is a longitudinal metal strip 12 having a bifurcated lower end which straddles the throw of the crank 4 below it, after passing through a longitudinal slot in the base 1. (See Figure 2.) When these cranks are turned by the wheels 5, they will reciprocate the legs 11 through the bifurcated strips 12. An ambulating effect is thus imparted to the figure mounted upon the base 1.

It is very desirable that other parts of the figure such as the mouth and tail of the cat mounted upon the base in the present instance, be moved in similitude of those appendages in the live animal. For the purpose of effecting the movement of these parts, as well as accomplishing the motion of any other parts of the figure or of objects attached thereto, I secure to one of the rear legs 11 an angle plate 13. Just above its lower attached part, this angle plate is turned outwardly and then upwardly for projection through a longitudinal slot in the bottom 7 of the toy body 8. The upper part of the angle plate 13 is formed with a central hole 14 through which the rear leg bolt 9 projects, and above that bolt it is formed with a series of apertures 15. (See Figures 2 and 3.)

Pivoted in a slotted part of the body 8 at the upper rear end thereof, by a pin 16, is a tail member 17. The latter is formed at its

inner enlarged end with a hole which receives one hook end of a link 18, whose other end is hooked in one of the apertures 15 of the angle plate 13 whereby, when the latter is reciprocated by the rear leg 11 to which it is attached, the tail member 17 will be wagged. (See Figure 2.)

The body 8 of the figure terminates at its upper front end in a head portion 19 whose bottom part 20 is made straight to imitate the roof of the animal's mouth. Secured by a pin 21 to the neck portion 22 of the body 8, in a position to have its outer end close against the mouth portion 20 of the figure, is a lower jaw piece 23. The latter is formed at its enlarged inner end with an aperture which receives one hook end of a link 24, whose other end is connected to one of the apertures 15 in the angle plate 13 whereby, when the latter is reciprocated by the rear leg 11 to which it is attached, the jaw piece 23 will be moved toward and away from the roof part 20 of the animal's mouth. (See Figure 2.)

Also connected to one of the apertures 15 of the angle plate 13 is a link 25 which at its outer end projects through a substantially horizontal hole in the mouth portion 20 of the figure. Secured to the extreme outer end of this link 25 is an object such as the object 26 made in the likeness of a mouse which, when the plate 13 is reciprocated, will be moved toward and away from the mouth portion 20 of the Figure 8 to represent a cat in the act of running down a mouse. (See Figure 2.)

A bell 27 may be mounted upon the middle top portion of the body 8 over a slot 28 in the latter, for the horizontal movement therethrough of a vertical arm 29 fixedly secured at its lower end to the link 25. At its upper end the vertical arm 29 terminates in a ball portion 30 which is adapted to strike the inner surface of the bell 27 to ring it when the link 25 is reciprocated by the angle plate 13. (See Figure 2.)

It is thus seen that my toy, which is economically and simply constructed, contains an actuating mechanism which will effect the movement of a large number of parts of the figure, such as its legs, mouth and tail, as well as the movement of extraneous objects like the mouse 26 and the bell ringing arm 29. The angle plate 13 may be provided with a large number of apertures to receive the hook ends of the links required to move the parts which it is desired to animate, without the employment of other and more complicated mechanism for this purpose.

Having described my invention, I claim:

1. A figure toy comprising a base, wheels supporting the latter, a body mounted on said base, a leg pivoted at one end to said body, means actuated by said wheels for reciprocating said leg, a plate fixedly connected to said leg and formed with a series of apertures, parts pivoted to said body for animation, and links connected at one end in the apertures of said plate and at their other ends to said parts for the purpose specified.

2. A figure toy comprising a base, wheels supporting the latter, a body mounted on said base, a leg pivoted at one end to said body, means actuated by said wheels for reciprocating said leg, an angle plate fixedly connected to said leg and formed with a series of apertures, said body providing a hollow portion into which the apertured portion of said plate projects, parts pivoted within said body and projecting therefrom for visible animation, and links having hook ends connected in the apertures of said plate and at their other ends to said parts for animating them.

3. A figure toy comprising a base, wheels supporting the latter, a hollow body mounted on said base, a leg pivoted at one end to said body, means actuated by said wheels for reciprocating said leg, a member secured to said leg for reciprocation within said body, a horizontal link secured to said reciprocating member for horizontal movement therein, said body having a horizontal slot in its top portion over said link, an object mounted on said body over the slot, and an arm secured to said link for projection through said slot to actuate said object, for the purpose specified.

4. A figure toy comprising a base, wheels supporting the latter, a hollow body mounted on said base, a leg pivoted at one end to said body, means actuated by said wheels for reciprocating said leg, a member secured to said leg for reciprocation within said body, said body having a horizontal hole through one end, a link secured to said reciprocating member for projection through said hole, an object carried by the outer end of said link, said body having a horizontal slot in its top portion over said link, a bell mounted on said body over said slot, and means secured to the link for projection through the slot to ring said bell when the link is reciprocated.

5. A figure toy comprising a base, a pair of transverse double throw cranks pivotally secured to said base, wheels fixedly secured to the ends of said cranks, a figure mounted on said base, legs pivoted at their upper ends to said figure for reciprocation above the base, said base formed with longitudinal slots below said legs, and cam members secured to said legs, said members being bifurcated at their lower ends for projection through said slots to straddle the throws of said cranks for the purpose specified.

In testimony whereof I have hereunto set my hand this 2d day of February, 1925.

EUGENE A. STIER.