

March 5, 1940.

G. F. MARVIN

2,192,476

AMUSEMENT APPARATUS

Filed March 8, 1939

2 Sheets-Sheet 1

Fig. 1.

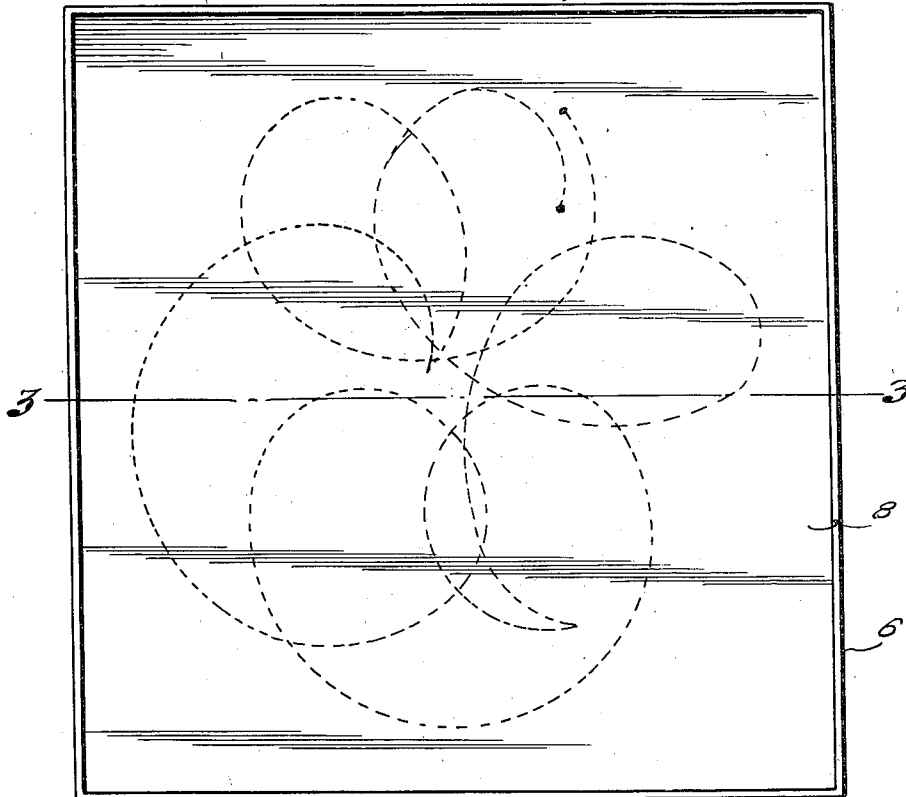
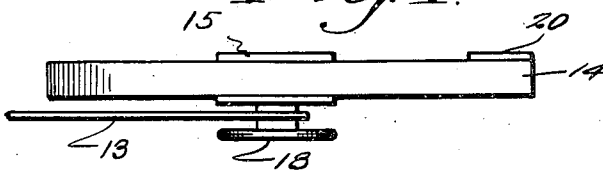


Fig. 4.



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2 Sheets-Sheet 2

Fig. 2.

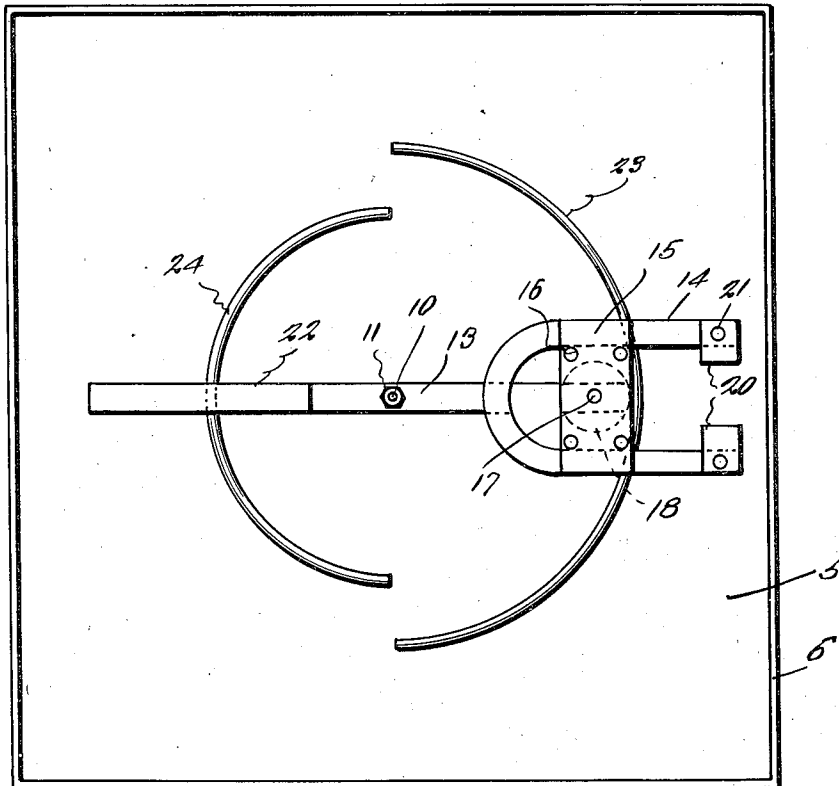
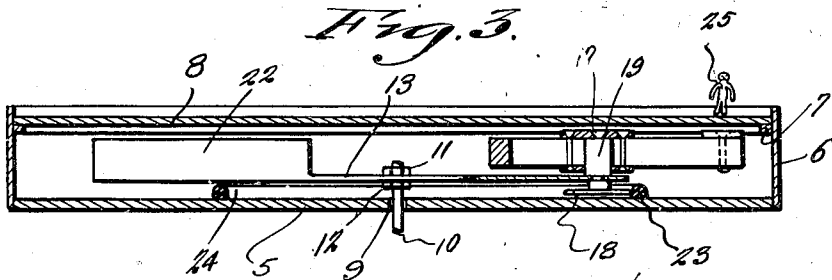


Fig. 3.



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UNITED STATES PATENT OFFICE

2,192,476

AMUSEMENT APPARATUS

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Application March 8, 1939, Serial No. 260,634

2 Claims. (Cl. 46—45)

This invention appertains to new and useful improvements in amusement apparatus and more particularly to a mystifying motivated toy.

The principal object of the present invention is to provide a toy in which a figure or other attention attracting element is caused to move on a surface, preferably opaque, to the end that observers will be puzzled as to the mechanism involved to promote the activity of the figure or attention drawing element.

Another important object of the invention is to provide a toy of the character stated in which mechanism is employed constructed in such a manner as to cause a multitude of antic activities on the part of the display element.

These and other objects and advantages of the invention will become apparent to the reader of the following specification.

In the drawings—

Figure 1 represents a top plan view of the platform with the figure removed showing in broken lines the path the figure will follow.

Figure 2 is a top plan view of the case and the mechanism therein, with the platform removed.

Figure 3 is a section on line 3—3 of Figure 1.

Figure 4 is a fragmentary side elevational view showing the magnet.

Referring to the drawings wherein like numerals designate like parts, it can be seen that the case is made up of the bottom 5 and the side walls 6. Cleats 7 are provided at the inside of the side walls 6 for supporting the platform 8, which can be of glass or any other suitable substance but preferably opaque.

The bottom 5 is formed with the centrally located opening 9 through which the drive shaft 10 from a motor or other drive unit extends. This shaft 10 extends upwardly into the case and has its upper end threaded to accommodate the nuts 11 and 12, or other suitable means for securing the arm 13 to the shaft so that the arm will rotate with the shaft.

N numeral 14 represents the permanent magnet of the horseshoe type, but obviously if desired this can be an electromagnet without departing from the spirit or the scope of the invention.

The magnet 14 is provided with bridge plates 15 secured in place to the legs of the magnet by bolts 16. A pin 17 is secured to these plates and extends downwardly through the arm 13, at one end thereof, and has secured thereto the wheel 18. In other words, the wheel 18 is fixed in relation to the magnet 14 so that rotation of the wheel 18 will carry with it the magnetic

unit before described. It is preferable that a spacing sleeve 19 be provided on the aforementioned pin 17 and interposed between the arm 13 and upper bridge piece 15.

Toe portions 20 are suitably secured as at 21 on the terminals of the magnet 14 so as to concentrate the flux area between the poles.

The opposite end of the arm 13 is provided with a weight or counter-balance 22 so as to counter-balance the weight of the magnetic unit 10 before described.

On the top side of the base or floor 5 is the semi-circular-shaped track 23, preferably of rubber.

A second semi-circular-shaped track 24 of like material is disposed in a direction away from the track 23, but has its end portions terminating on a line extending diametrically through the shaft 10 and touching the terminals of the track 23. This track 24 has a diameter sufficiently smaller than the track 23 so as to permit the wheel 18 to pass between the ends of the track 23 and track 24. It can be seen that when the arm 13 is driven by the drive shaft 10 the wheel 18 in rotating will also rotate the magnet 14 below the platform 8 and when the wheel 18 reaches one end of the track 23 it is taken over by the other track 24 which obviously causes the magnet to rotate in the opposite direction.

These antic movements of the magnet 14 are translated to the figure or other display element 25 on the platform 8. The magnet flux between the pole pieces 20 take effect on the element 25 which is of course of a material having an affinity for magnetism with the result that the element 25 will follow the tortuous maneuvers of the magnet 14 by sliding on the platform 8, and to observers looking at the figure following these maneuvers, the actuating force is concealed with the result that the true function of the apparatus conveys an atmosphere of mysticism.

While the foregoing specification sets forth the invention in specific terms, it is to be understood that numerous changes in the shape, size and materials may be resorted to without departing from the spirit and scope of the invention as claimed hereinafter.

Having described the invention what is claimed as new is:

1. An amusement device comprising a platform, an object adapted to slide on the platform, and a mobile magnet operative under the platform and in magnetic relation with the said object, a drive shaft, an arm extending from

the drive shaft, said magnet having a wheel
carried thereby, said magnet being rotatably
mounted on the arm, and a track against which
the wheel can ride to cause rotation of the mag-
net, said track comprising a pair of semi-circu-
lar sections, one of said sections being of a di-
ameter substantially smaller than the diameter
of the other section and constructed and ar-
ranged with respect to the last-mentioned sec-
tion to the end that the wheel will ride from
the end of the last-mentioned section to the
adjacent end of the other section.

2. In an amusement device comprising a plat-
form, a magnetic influence responsive movable
object on the platform, a movable magnetic unit
under the platform, a pair of tracks, one of said
tracks being of less diameter than the other,
said tracks being of semi-circular shape with
the ends of the smaller track terminating ad-
jacent the ends of the larger track and in in-
wardly spaced relation, said magnetic unit in-
cluding a wheel rideable against the said tracks
and transferrable from one track to the other.

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