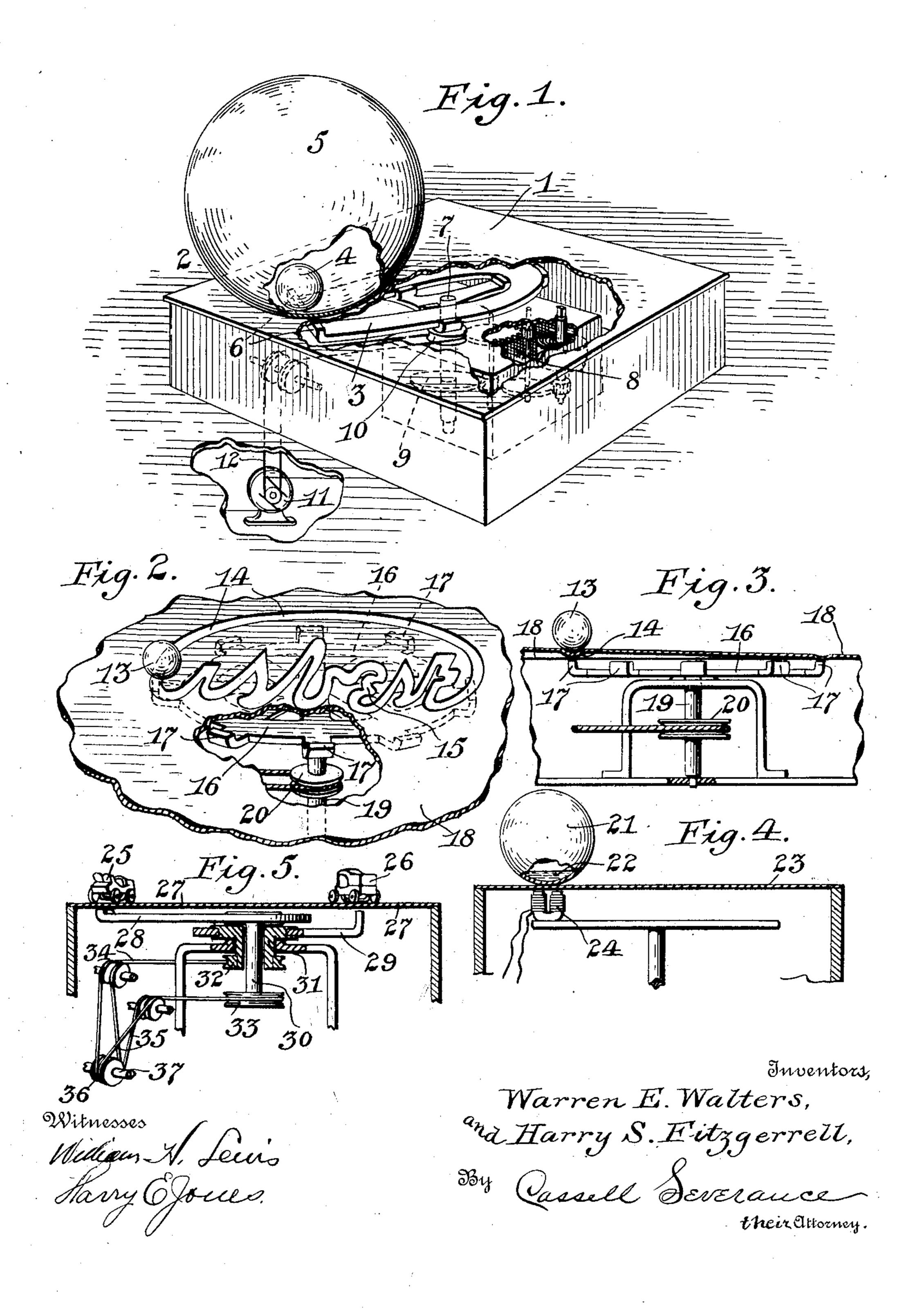
W. E. WALTERS & H. S. FITZGERRELL.

ADVERTISING DEVICE.

APPLICATION FILED DEC. 22, 1909.

962,069.

Patented June 21, 1910.



UNITED STATES PATENT OFFICE.

WARREN E. WALTERS AND HARRY S. FITZGERRELL, OF LOS ANGELES, CALIFORNIA.

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Application filed December 22, 1909. Serial No. 534,472.

To all whom it may concern:

Be it known that we, WARREN E. WALTERS and HARRY S. FITZGERRELL, citizens of the United States, residing at Los Angeles, in the county of Los Angeles and State of California, have invented certain new and useful Improvements in Advertising Devices, of which the following is a specification.

This invention relates to improvements in advertising devices, and particularly to that class of such devices, as employ a moving part or member to indicate certain facts or things. In the present instance the movable part or member, is arranged to be moved by an actuating means that is hidden from the view of the ordinary observer, so that its operation appears more or less mysterious and a cause of conjecture, and a means of attracting attention to the device and to whatever it is being associated with for advertising purposes.

With this and other objects in view, the invention consists in certain novel combinations, constructions and arrangements of parts as will be hereinafter fully described and claimed.

In the accompanying drawing forming a part of this specification:—Figure 1, is a perspective view of the advertising device 30 forming the subject matter of this invention, a part of the supporting surface, on which the moving member travels, being broken away to show the actuating mechanism beneath. Fig. 2, is a fragmentary perspective 35 view showing the use of a guiding pathway for the moving member, by which the said member is caused to trace certain words or indications, a wheel magnet being employed to return the ball or moving member to its 40 starting point. Fig. 3, is a vertical central sectional view taken through the mechanism shown in Fig. 2, to show the inclined arrangement of the guiding pathway, parts being shown in side elevation however. Fig. 4, 45 is a detail sectional view showing the movable member provided with a magnetic fluid, and a movable actuating electric magnet for controlling said movable member. Fig. 5, is a vertical sectional view through a mechanism 50 constructed in accordance with this invention, but showing the use of more than one magnet, so that objects may be moved in different directions at the same time.

This invention is designed to afford a mechanism by which an advertising carrier,

indicator or other medium can be caused to move about in a show window, show case, or on any desired support, the means for moving the indicator being hidden from view so as to appear mysterious and a matter of speculation on the part of the observer. The moving indicator may be a ball, ring, hoop, vehicle, or anything that will roll or slide readily over the supporting surface that is employed.

In the accompanying drawing is illustrated some practical embodiments of the invention, and it will now be described, reference being had to said drawing.

In the drawing 1, indicates a supporting 70 surface or floor, 2, a movable member or indicator, and 3, an actuating magnetic means operating beneath the surface or floor 1, and influencing the action of the indicator 2. The supporting surface 1, may be made 75 of any non-magnetic material, as thin wood, or non-magnetic metal, liquids or any substance suitable for movably holding the particular kind of indicator that may be used. The said surface 1, may be arranged as the 80 top of a box, table or the like, or may form a part of the floor of a show case or window as preferred.

In Fig. 1, the supporting surface is shown as the top of a closure or box, the upper face 85 thereof being flat and smooth, and with nothing to guide the movement of the indicator 2, on top. The indicator in this view, has been shown as a double ball, the small inner one 4, being the movable member, 90 that is controlled by the actuating magnet 3, while the outer large one 5, is made of light thin material and must follow the movement of the inner ball 4. As the outer thin ball 5, may be made of any size, a mov- 95 ing sphere of suitable proportions for carrying a given advertisement, can thus be easily had, the advertisement being displayed on. the surface of the said sphere or ball 5. As the inner ball 4, will follow the magnet the 100 outer ball will be carried about over-the supporting surface 1, without apparent gaide or actuating means.

The means for actuating the indicator, is arranged on the other side of the support- 105 ing surface 1, and as shown in Fig. 1, generally embraces a magnet as 3, moved by any suitable mechanism or motive power. An effective form of magnet is the horse shoe magnet 3, illustrated, which is ar- 110

ranged immediately beneath the supporting surface 1, and preferably parallel therewith, the ends 6, of said magnet being turned upwardly so that the magnetic poles can be 5 made to move quite close to the under face of the supporting surface 1. The magnet is mounted upon a shaft 7, which can be rotated in any preferred manner. As illustrated it may be rotated by a spring actu-10 ated mechanism 8, usually of the clockworks type, which connects with a gear wheel 9, secured to the shaft 7. If preferred however, the magnet may be turned by electrical means, in which case a pulley 15 10, carried by the shaft 7, is connected with any suitable electric motor as 11, by proper

beiting 12. Instead of carrying the advertisement, or all of it, the indicator 2, may be made to 20 move so as to indicate or trace out, all or a part of an advertisement. Thus as shown in Fig. 2, a ball indicator as 13, may be used in connection with a guide path or runway as 14, arranged in the supporting surface. 25 A portion of the runway is shaped to form letters, as at 15, so that as the ball 13, moves along it will trace out words descriptive of or relating to goods that are being advertised. In this form of the device the run-30 way is usually inclined slightly, from one end to the other and in this way the ball can be made to trace out the letters by the action of gravity, and the magnet will return the ball to its starting point. The incline 35 of the runway 14 will be apparent from an examination of Fig. 3. In constructing the device so that the indicator travels part of the way with the magnet, and part of the way by itself, it is preferable to use a mag-40 net with several poles. As shown in Figs. 2 and 3, a wheel magnet 16, is well adapted for the purpose. The magnet 16, is formed with a number of pole points 17, preferably bent toward the supporting surface 18, 45 which in this case is shown as a part of the floor of a show place or window. The magnet 16, is arranged so that its pole points will move beneath the return part of the runway, and when the ball reaches the lower 50 end of the runway it will be influenced by the first pole point that comes beneath it. As there are a number of pole points 17 arranged at frequent intervals on the periphery of the wheel 16, the ball will never be 55 left at the lower end of the path or runway for any appreciable length of time. When

runway the short turn therein, will carry it out of the line of influence of the magnet's 60 pole and gravity will cause it to run down the incline again. It will be apparent that the runway may be arranged in various forms, to indicate certain facts or things in reference to what is being advertised, with-65 in the spirit of the present invention. The

the ball reaches the upper end of the said

wheel magnet 16, is carried by a suitable shaft 19, journaled in any desired framing or support, and one or more pulleys may be secured thereto as at 20, to afford proper connection with any usual motive power, as 70 above referred to in connection with Fig. 1, of the drawing.

Instead of employing an indicator having a magnet follower in solid form, it will be evident that a magnetic liquid may be used 75 and placed in the indicator. As shown in [Fig. 4, the hollow indicator 21, contains a small quantity of magnetic liquid 22, which will of course always seek the lowest part of the indicator. The said indicator $2\overline{1}$, is 80 preferably a sphere and rolls about on the non-magnetic supporting surface 23, beneath which the electric magnet 24 is moved in any desired manner. The fluid or liquid 22 will be attracted by the magnet and cause 85 the indicator 21, to follow its movements.

It should be understood that the magnet follower, whether in solid or liquid form may be attached to any shaped object that it may be desired to move about, without de- 90 parting from the spirit of the invention. Thus as shown in Fig. 5, of the drawing, the magnet follower may be carried by vehicles of any suitable size, as 25 and 26, arranged to move on the supporting surface 27. The 95 vehicles or other moving objects may also be caused to move in different directions with respect to each other. As in Fig. 5, this may be accomplished by using more than one magnet beneath the supporting sur- 100 face. Thus the magnets 28 and 29 are mounted respectively on the shaft 30 and sleeve shaft 31, which carry the pulleys 32 and 33. Belts 34 and 35, the latter of which is crossed as shown, connect the said pulleys 105 32 and 33 with actuating pulleys at 36, on a power shaft 37. By crossing one of the belts as stated one magnet is revolved in an opposite direction to the other, and by making the magnet 29 shorter than the magnet 110 28, the vehicles 25 and 26 will pass each other without interference.

It will be readily understood from the above description that any size of follower or indicator can be employed, and when it 115 is made of solid substances, it can be of any form, configuration or shape desired, so that it will slide, roll or otherwise move over the supporting surface provided, all within the spirit of this invention. It will also be ap- 120 parent that any kind of supporting surface, whether solid or liquid, that will support the follower or indicator, may be used, if it is sufficiently non-magnetic not to interfere with the action of the magnet or mag- 125 nets upon the said follower or indicator. It will further be evident that one or more magnets, of any kind or form, may be used beneath the supporting surface, to provide an unseen means for controlling the move- 130

ments of the follower or indicator, within the contemplation and scope of this invention.

It will be seen that the invention is particularly well adapted for the operation of
various advertising devices, and can be
easily fitted to a great variety of cases, and
that it affords an opportunity for producing many and curious movements in the
types of followers or indicators used.

It should further be understood that the device in any of its forms can be made of any size that is best adapted for advertising the particular line of goods that is to be set 15 forth or described. Thus it can be made in very small form and set in a portion of a store, show window or show case, or it may be large enough to occupy a large floor space or a full show window as found desirable.

20 The device may therefore be either portable as is usually the case when it is used in its smaller forms or it may be stationary or a fixture when in its larger forms, all within the scope and spirit of the invention.

Having now described the invention what 25 is claimed is:—

1. An advertising mechanism comprising a rotating magnet, a supporting floor above the same, a traveling indicator made in hollow form, and a magnet follower mounted 30 in said hollow indicator for moving the same in accordance with the movement of the magnet.

2. An advertising mechanism comprising a rotating magnet, a supporting floor having 35 a guide way formed thereon arranged to spell descriptive words, and a follower adapted to travel upon the guide way in accordance with the control of the magnet, to draw the attention of observers to said 40 words.

In testimony whereof, we have hereunto set our hands, in presence of two witnesses.

WARREN E. WALTERS. HARRY S. FITZGERRELL.

Witnesses:

EVELYN H. LEWIS, CASSELL SEVERANCE.