Feb. 23, 1937. M. T. ASHE 2,072,018

ILLUSORY DISPLAY DEVICE

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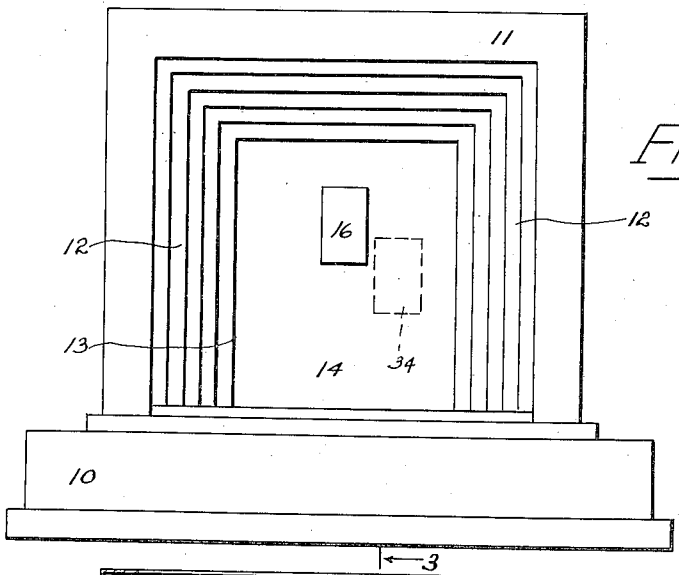


Fig 1

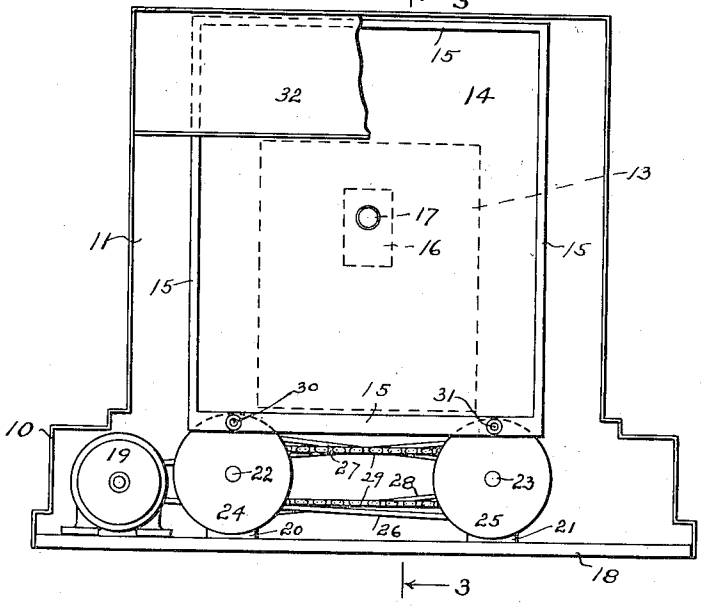


Fig 2

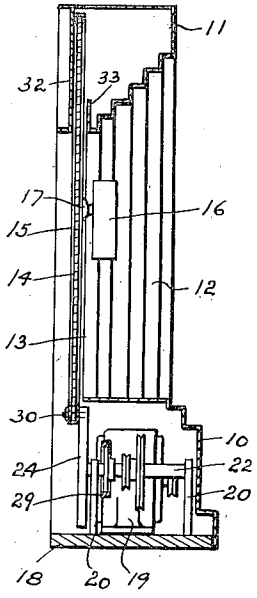


Fig 3

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ILLUSORY DISPLAY DEVICE

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3 Claims. (Cl. 40—30)

This invention relates to improvements in display devices and its principal object is to provide a device which will attract great attention by creating the illusion that the article displayed on the device is suspended and moved in space without any support. Another object is to provide a device in which a great variety of movements may be imparted to the article displaced. A further object is to provide a device of attractive appearance, which may either be placed on a platform or suspended by cords from the ceiling, and which can be manufactured and operated at a comparatively low cost.

These and various other objects and advantages will be readily understood from the following description and from the accompanying drawing of a preferred embodiment of the invention, in which, however, modifications may be made without departing from the scope of the appended claims. In the drawing

Fig. 1 is a front view of the display device,

Fig. 2 a rear view, and

Fig. 3 a cross-sectional side view taken on line 3—3 in Fig. 2.

Referring now to all the views, simultaneously, the device consists of a base 10 on which is erected a frame 11. This frame is relatively deep and provided with a plurality of inwardly and rearwardly extending steps 12. The opening in the frame is shown at 13 and this opening is covered with a glass 14 held in a frame 15. The article 16 to be displaced is mounted on the front of the glass preferably by means of a suction cup 17. As this cup is secured on the rear of the article it is, of course, hidden from the observer.

A baseboard 18 is placed in the bottom of the device and on this a small electric motor 19 is mounted, as is also two pairs of bearings 20 and 21. Shafts 22 and 23 are mounted in these bearings and these shafts support a pair of discs 24 and 25 at the outer ends. The discs are driven from the motor by means of belts 26, 27 and 28 which operate on a system of speed-reducing pulleys, as plainly shown in Fig. 3. As these means of reducing the speed is well known in the art it need not be described herein in detail, it will be sufficient to say that the discs 24 and 25 are rotated at a relatively slow speed and that their rotation is synchronized by means of a chain 29. Crank pins 30 and 31 are mounted on the discs and engaged in the lower part of the frame 15, as plainly shown in Figs. 2 and 3, and the frame is guided between a cross member 32 and an edge 33 bent upwardly from the frame.

It is evident that when the discs are rotated by the motor, a movement will be imparted to the glass 14 and consequently to any article suspended thereon. In the present embodiment the article 16 will appear to be turning in a circle, as indicated by the dotted representation of the article shown at 34. When a clear and highly polished glass is used, and the device is placed in front of a correct background, the glass is not visible and the illusion is therefore created that the article is suspended and turned in the air without any support. The depth of the frame further heightens this illusion. The wires from the electric motor may, of course, be concealed by passing them through the platform on which the device is located. However, it will be noted that the device may also be suspended, either in an upright or inverted position, by hanging it in cords and hiding the electric wires in the cords.

It will also be noted that, while I have shown and described crank discs for imparting the movement to the glass, cams of various constructions may be employed so that a great many variations of motions may be imparted to the glass and consequently to the articles suspended thereon. It is also evident that the motor and the speed-reducing means need not necessarily be contained within the device, but might be placed under the platform on which the device is placed and connected with the crank discs by a hidden belt. For these reasons, I do not wish to confine the invention to the preferred embodiment here shown, but intend to construct it in any manner desirable within the scope of the claims.

From the foregoing it will be seen that this device, due to the puzzling manner in which the article displayed thereon is suspended and moved, will attract great attention and thus have a real advertising value. Furthermore, the attractive appearance of the whole device further adds to its advertising value.

Having described the invention and its objects, what I claim as new and wish to protect by Letters Patent is:

1. A display device of the class described comprising a relatively deep frame having its inner edges flared outwardly from the opening; a transparent sheet movably mounted in said frame and adapted to have articles displayed thereon; two holes formed adjacent to one edge of said sheet; a pair of crank discs mounted within the frames; the crank pins of said discs engaged in

the holes in the sheet; and means for rotating said discs in unison so as to impart a translational movement to the sheet and to any article displayed thereon.

2. A display device of the class described comprising a relatively deep frame having its inner edges flared outwardly from the opening in a plurality of progressive steps; a transparent sheet movably mounted in said frame and adapted to have articles displayed thereon; two holes formed adjacent to one edge of said sheet; a pair of crank discs mounted within the frames; the crank pins of said discs engaged in the holes in the sheet; and means, contained wholly within the frame, for rotating said discs in unison so as to impart a translational movement to the sheet and to any article displayed thereon.

3. A display device of the class described comprising a relatively deep frame having its inner edges flared outwardly from the opening in a plurality of progressive steps; a transparent sheet movably mounted in said frame and adapted to have articles displayed thereon; two holes formed adjacent to one edge of said sheet; a pair of crank discs mounted within the frames; the crank pins of said discs engaged in the holes in the sheet; means, contained wholly within the frame, for rotating said discs in unison so as to impart a translational movement to the sheet and to any article displayed thereon; and the whole device adapted to be placed on a platform or suspended from a support.

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