

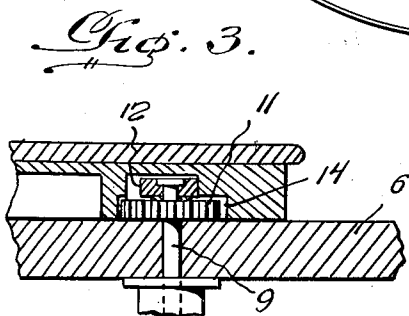
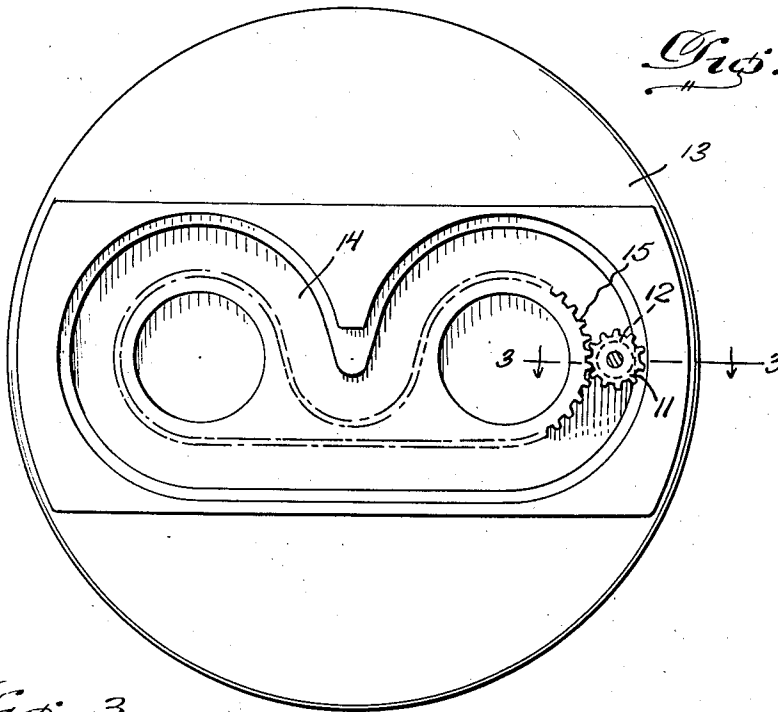
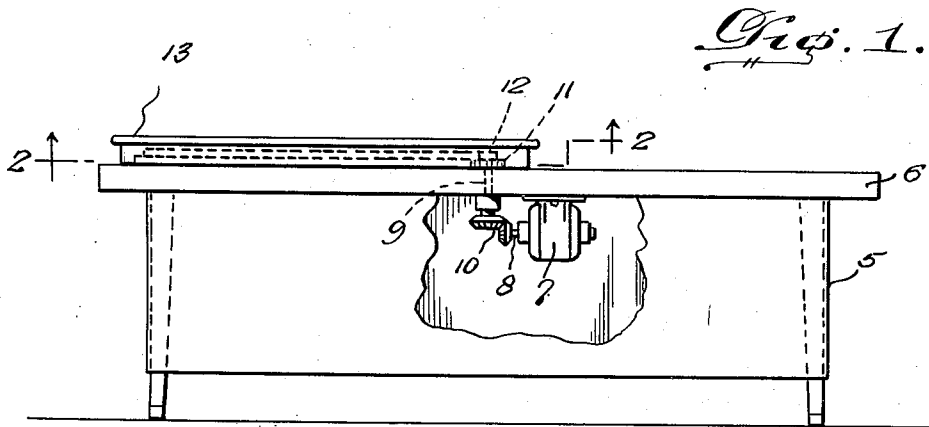
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ADVERTISING OR DISPLAY DEVICE

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ADVERTISING OR DISPLAY DEVICE

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1 Claim. (Cl. 211—1.5)

This invention relates to advertising or display devices having a display member moved mechanically to attract attention thereto, and has more particular reference to improvements in devices of this kind wherein the display member is given an irregular motion or moved in an irregular path by concealed means or mechanism so as to mystify and arouse the curiosity of beholders.

The primary object of the present invention is to simplify and improve the construction of advertising or display devices of the above character and type, so as to provide for simplicity of construction, durability, and economical manufacture.

The present invention consists in the novel form, combination and arrangement of parts hereinafter more fully described, shown in the accompanying drawing, and claimed.

In the drawing:

Figure 1 is an elevational view, partly broken away, of an advertising or display device embodying the present invention.

Figure 2 is an enlarged horizontal section on line 2—2 of Figure 1, showing the movable display member in bottom plan; and

Figure 3 is a fragmentary vertical section of the device shown in Figure 1, the plane of section being indicated by the line 3—3 in Figure 2.

Referring in detail to the drawing, the present invention consists of a hollow base 5 of any suitable or preferred construction, but essentially provided with a smooth flat top member 6. Attached to the underside of the top member 6 is a suitable motor 7 having a horizontal power shaft 8 geared to the lower end of a vertical shaft 9 as at 10, the shaft 9 extending through and being journaled centrally in the top member 6. The upper end portion of vertical shaft 9 projects slightly above the top member 6 and has a gear 11 secured thereon. An idler roller 12 is also journaled on the projecting upper end of shaft 9 directly above the gear 11. The purpose of gear 11 and roller 12 will presently become apparent, and it will be noted that the lower portion of shaft 9, the gearing 10, and the motor 7 are arranged and effectively concealed within the hollow base 5 below the top member 6.

The present advertising or display device further includes a flat display member 13 resting upon and freely slidable over the surface of the top member 6 of the supporting base 5. The movable display member 13 has an irregular endless groove 14 formed in the under side

thereof, which groove has a relatively narrow upper portion and a wider lower portion as illustrated more clearly in Figures 2 and 3. The side walls of the narrow portion of groove 14 are smooth, while the inner side wall of the wider lower portion of groove 14 is formed with rack teeth 15 engaged by the gear or pinion 11, the outer wall of the upper narrower portion of groove 14 being engaged by the roller 12. It will thus be seen that the display member 13 rests upon the top member 6 with the pinion or gear 11 and roller 12 engaged in groove 14 so as to be completely concealed within the latter, the roller 12 maintaining the engagement of gear or pinion 11 with the rack teeth 15. Also, the roller 12 is freely journaled on shaft 9 because it is required to turn in a direction opposite to the rotation of shaft 9 and gear or pinion 11, in the operation of the device. Obviously, suitable anti-friction means, such as ball casters, may be employed for reducing friction between the movable display member 13 and the top member 6, if found necessary or desirable. In the use of the invention for advertising or display devices, it will probably be preferred to use a motor 7 of the electrical type, in which case the feed wires for the motor may be suitably led thereto without being exposed to view.

In operation, the articles or products to be advertised or displayed may be placed upon the movable display member 13, and when the motor 7 is placed into operation, the vertical shaft 9 will be rotated so that the gear or pinion 11 concealed within groove 14 and meshing with rack teeth 15 will cause the display member 13 to travel in an irregular path. This movement of display member 13 will mystify and arouse the curiosity of beholders because of the apparent lack of mechanism for causing such movement of the display member 13 by reason of the fact that such mechanism is wholly concealed.

It will be particularly noted that the present invention provides a construction which is durable, extremely simple, and inexpensive to manufacture. Obviously, while the device is primarily intended for advertising or display purposes, it is apparent that the same may be made on a small scale for use as a toy, in which case a spring motor would probably be preferred to an electric motor. Minor changes in the details of construction illustrated and described are contemplated such as fairly fall within the scope of the invention as claimed.

What I claim as new is:

In a device of the character described, a hol-

low base provided with a flat top member, a vertical shaft centrally journaled in and extending through said top member, a motor attached to the under side of said top member and geared 5 to the lower end of said vertical shaft for imparting rotary motion to the latter, the lower portion of said vertical shaft and said motor being concealed within said hollow base, a flat display member resting upon and freely movable 10 over the surface of said top member, means concealed in said display member for utilizing the rotary motion of said vertical shaft to cause movement of said display member over the sur-

face of said top member in an irregular path, said display member being formed with an irregular endless groove in the under side thereof, said groove having a relatively narrow upper 5 portion and a wider lower portion, said last-named means comprising rack teeth on the inner wall of the lower wider groove portion, a pinion secured on the vertical shaft and meshing with said rack teeth, and a guide roller freely journaled on the vertical shaft above said pinion 10 and engaging the outer side wall of the narrow upper portion of the groove.

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