Dec. 19, 1950 J. A. SIMPSON 2,534,631

CORD AND SPRING ANIMATED FIGURE DEVICE

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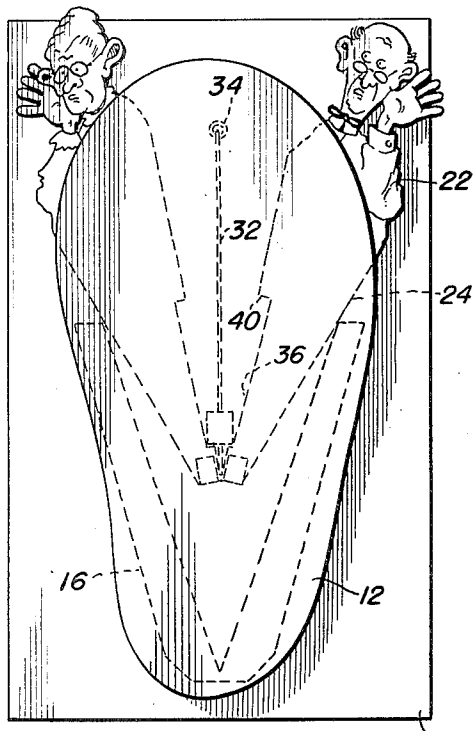


Fig. 1.

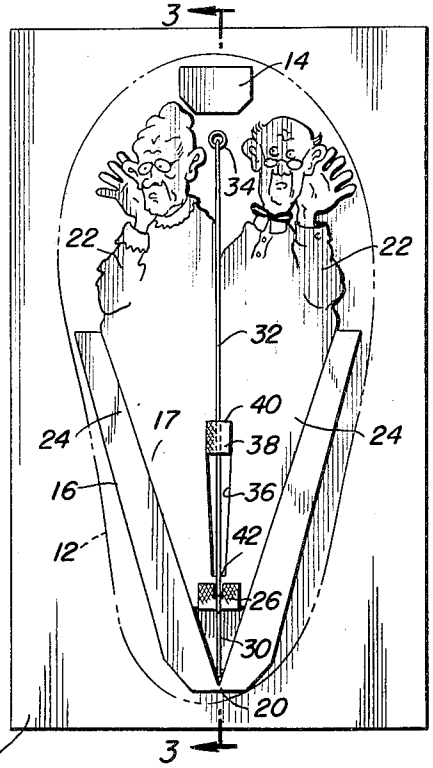


Fig. 2.

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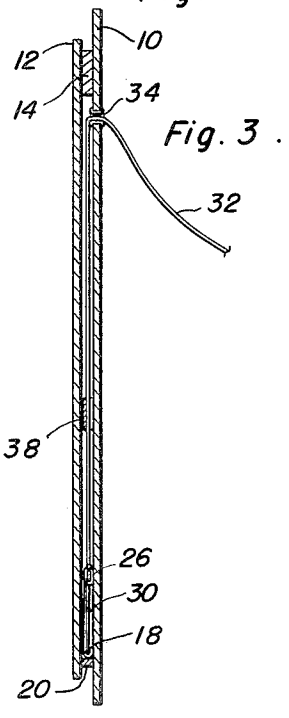
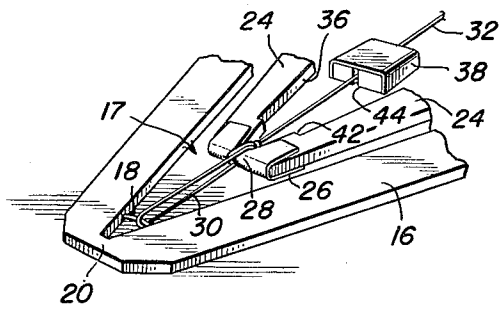


Fig. 3.

Fig. 4.



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CORD AND SPRING ANIMATED FIGURE DEVICE

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5 Claims. (Cl. 46—119)

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This invention relates generally to advertising devices, and more particularly to an animated figure device adapted to be actuated by hand or by a door or other repeatedly moving object.

A primary object of this invention is to provide an animated figure device in which the figures are partially hidden in one position and exposed in another position of each figure, the figures being simultaneously shifted from one position to the other.

Another object, of a specific character, is to provide means for exhibiting figures at opposite sides of a partially or wholly opaque front panel, the said front panel and the figures having a cogitative relationship in the majority of applications of this invention.

Still another object is to provide an animated figure device in which the figures have an attractive "jack-in-the-box" action, although the construction of the device is considerably simplified over other devices in which this action is accomplished.

And the last object to be mentioned specifically is to provide a device of this character which is relatively inexpensive and practicable to manufacture, which is extremely simple to operate and very widely adaptable for different purposes, and which will give generally efficient and durable service.

With these objects definitely in view, this invention resides in certain novel features of construction, combination and arrangement of elements and portions as will be hereinafter described in detail in the specification, particularly pointed out in the appended claims, and illustrated in the accompanying drawings which form a material part of this application, and in which:

Figure 1 is a front elevational view of this device with the figures in upraised position so that these figures are exhibited at the sides of a front panel of the device;

Figure 2 is a similar view, the figures being in positions assumed when retracted behind the said front panel;

Figure 3 is a vertical transverse sectional view, taken substantially on the line 3—3 in Figure 2; and

Figure 4 is an enlarged fragmentary three dimensional view of a portion of the device.

Similar characters of reference designate similar elements and portions throughout the specification and throughout the several views in the drawing.

Referring now to the drawing in detail, this invention includes a substantially rigid rear panel

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10 which is represented as being rectangular in shape and a front panel 12 which is represented as being in the shape of a human ear, it being understood that the shape and character of these panels will vary greatly according to the use to which the device is to be put and according to the design of the animated figures per se.

The panels are spaced apart by a spacer member 14 which will ordinarily be flat sided and adhesively or similarly secured to both panels, while another portion of the front panel is secured to the rear panel by a member 16, the essential feature of which is a V-shaped slot 17, the member 16 being represented in the drawing as also being generally V-shaped, the arms of the V being tied together by a reinforcing tie bar 18 which has a secondary function to be described hereinafter. The root portion 20 of the V-shaped member 16 will be disclosed near the lower end of the front panel 12 and the slot 17 will extend upwardly and ordinarily entirely within the confines or behind the front panel 12.

The animated figures 22 per se will, of course, be configurated according to individual preference and each figure 22 has a mechanically equivalent portion of V-form, it being understood that the figures, portions 24 thereof, and the V-shaped member 16 will be of substantially the same thickness and constructed of flat stock such as cardboard and the like, the spacer member 14 and the V-shaped member 16 being preferably very slightly greater in thickness than the figures 22 so that the latter may slide freely between the panels 10 and 12. The outer edges of the V-shaped portions 24 slide upon the inner edge portions of the V-shaped member 16 and the lower end portions of the portions 24 are secured together by a flexible hinge member 26 which will preferably be constructed simply from adhesive tape, a neck portion 28 of this adhesive tape comprising a connecting link between the two portions 24. An elastic band 30, or an equivalent spring structure of any character, will be connected to and between the tie bar 18 and the neck portion 28, so that the figures are biased downwardly within the V-shaped member 16 and behind the front panel 12.

An actuating cord 32 is led through an eyelet 34 or other suitable slot or opening in the rear panel 10, and this cord extends downwardly between the panels for connection to the neck portion 28. The portions 24 are each formed with a recess 36 and a stop member 38 is rigidly secured to either the front or the rear panel or to both of these panels substantially centrally of the

portions 24 when the same are in retracted position, the stop member being within the recessed portions 36 of the members 24 when the latter are in this position and the upper edges 40 of each recess engage the stop member 38 to limit the downward movement of the figures 22, so that there is no tendency for the V-shaped portions 24 to wedge between the arms of the V-shaped member 16. The bottom edges 42 of these same recesses 36 engage the lower edge of the stop member 38 when the figures are raised to their exhibited positions as indicated in Figure 1. The stop member 38 will be slotted, as indicated at 44, to receive an intermediate portion of the actuating cord 32.

The operation of this invention will be clearly understood from a consideration of the foregoing description of the mechanical details thereof, taken in connection with the drawing and the above recited objects. Further description would, therefore, seem unnecessary.

Many minor variations may be made in the materials used and the proportionment and configuration of the different elements of this invention without departure from the spirit thereof, and the scope of this invention should be determined only by the limitations defined by the sub-joined claims.

Having described the invention, what is claimed as new is:

1. An animated figure device comprising a front panel having at least a portion thereof opaque, a rear panel, a guide having a generally V-shaped slot therein secured to and between said front and rear panels, figure members having a hinge connection between lower portions thereof and fitting together within said slot and between said panels when in retracted positions, a cord connected to the figure members whereby the figures may be raised in the slot, the figure members having their centers of gravity disposed relative to said slot so that the figure members diverge when raised by the cord into a second position said lower portions of the figure members being cuneiform, the adjacent edge portions of said lower portions abutting when in retracted positions and outer inclined edge portions of said lower portions riding upon the sides of said slot.

2. An animated figure device comprising a front panel having at least a portion thereof opaque, a rear panel, a guide having a generally

V-shaped slot therein secured to and between said front and rear panels, figure members having a hinge connecting lower portions thereof together, said members fitting together within said slot and between said panels when in retracted positions, a cord connected to the hinge whereby the figures may be raised in the slot, the figure members having their centers of gravity disposed relative to said slot so that the figure members diverge when raised by the cord into a second position, and a stop secured to one of said panels within said slot to limit the upward movement of said figure members and to prevent said lower portions from binding within said slot.

3. A device according to claim 2 and wherein each of said figure members are simultaneously engaged by said stop at the upward limits of their travel.

4. A device according to claim 2 and including an elastic member secured under tension to and between the lower end portion of said guide and said hinge.

5. An animated figure device comprising a front panel having at least a portion thereof opaque, a rear panel, a guide having a generally V-shaped slot therein secured to and between said front and rear panels, figure members having a hinge connecting lower portions thereof together, said members fitting together within said slot and between said panels when in retracted positions, a cord connected to the hinge whereby the figures may be raised in the slot, the figure members having their centers of gravity disposed relative to said slot so that the figure members diverge when raised by the cord into a second position, and a stop secured to one of said panels within said slot to limit the upward movement of said figure members and to prevent said lower portions from binding within said slot, said stop having a slot, and said cord being threaded through said slot in the stop.

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