April 26, 1966 E. R. DANKNER 3,247,683

ROCKING CHARM

Filed April 13, 1965

FIG. 1.

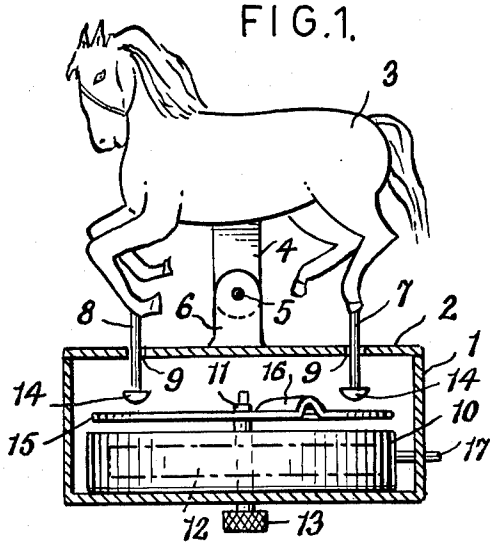


FIG. 2.

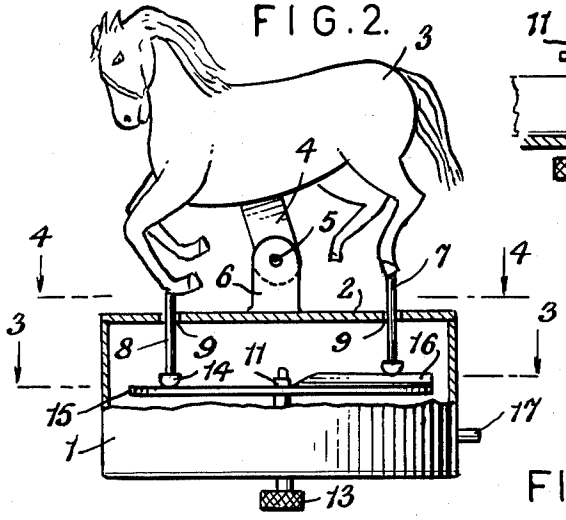


FIG. 5.

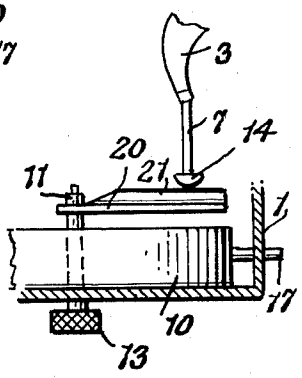


FIG. 3.

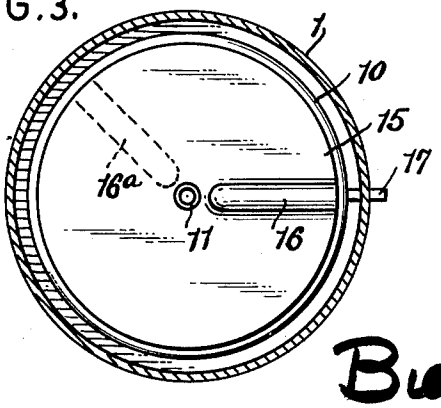
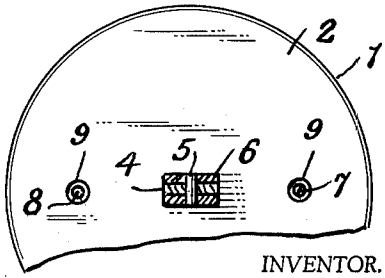


FIG. 4.



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3,247,683

ROCKING CHARM

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3 Claims. (Cl. 63—23)

This invention relates to a charm, such as used on bracelets; an ornament or article of jewelry for personal decoration, or to a decorative novelty, and particularly one having movement or animation.

It is an object of the invention to provide an article of this character which can be made in compact form or in small size; which will be ornamental and attractive and which by reason of its animation or movement will constitute an interesting and amusing novelty.

It is an object of the invention to provide an article of this kind which can be inexpensively manufactured and which by its animation will incite interest and increase its sales capabilities.

More particularly, the invention contemplates the provision of a figure of an animal, bird, human being or some other element pivotally mounted on a casing or housing containing a spring motor or propulsion means, the motor being coupled to and driving cam means operative upon projections extending from the pivoted figure to thereby impart a rocking movement to the figure, which for example, might be the figure of a horse, and to which the rocking movement will create the effect of a galloping motion.

With these and other objects to be hereinafter set forth in view, I have devised the arrangement of parts to be described and more particularly pointed out in the claims appended hereto.

In the accompanying drawing, wherein an illustrative embodiment of the invention is disclosed,

FIG. 1 is an elevational view, partly in vertical section, of a charm or similar article constructed in accordance with the invention;

FIG. 2 is a somewhat similar view showing one of the projections or stems on the figure in the act of being elevated by the cam;

FIG. 3 is a sectional view, taken substantially on the line 3—3 of FIG. 2, looking in the direction of the arrows,

FIG. 4 is a sectional view, taken substantially on the line 4—4 of FIG. 2, looking in the direction of the arrows, and

FIG. 5 shows a modified construction.

Referring to the drawing, 1 indicates a housing or casing in which most of the operating parts of the charm or similar article are contained. The housing 1 is provided with an attached cover plate 2 at its top. The housing may be cylindrical in shape or it may be made in any other suitable shape and it may be relatively flat and shallow. The form shown is primarily for the purpose of illustration to clearly show the operating structure.

The figure that is animated is shown at 3 and in the form disclosed it is shaped to form a simulated horse or pony but it will be apparent that it might be some other animal, a human figure, or any other element which, when animated in the manner to be described, will exhibit life-like movement.

The FIGURE 3 is provided with a lug 4 extending downwardly and entering between ears 6 extending upwardly from the cover plate 2, and pivotally coupled to said ears by means of a pivot pin 5. This arrangement is such as to attach the FIGURE 3 to the cover plate 2 in a manner to enable the figure to have a rocking or pivotal movement relatively to the cover plate and to the housing 1.

Extending downwardly from the feet of the figure are pins or stems 7 and 8, the same being located on the opposite sides of the pivot 5, and said pins or stems are slidable through properly located apertures or holes 9 in the cover plate. The parts of the stems 7 and 8 which reach the interior of the housing are provided with heads 14 which rest against a cam plate 15. They are shown in a central or neutral position in FIG. 1. The cam plate 15 may be in the form of a circular disk as shown in FIGS. 1 and 2 or it may be a radial arm 20 which extends from a vertical rotatable shaft 11 and has a cam 21. If the cam plate is in the form of a disk, it is provided with a rounded, raised elevation constituting a cam 16. This arrangement is such that when the cam plate 15 or the arm 20 is rotated, the cam 16 on the disk or the cam 21 on the arm 20, contacting the ends of the stems 7 and 8 successively, will lift the stems and thus impart a life-like rocking movement to the horse or other FIGURE 3, creating a galloping effect.

The shaft 11 on which the cam plate 15 or the arm 20 is mounted, is part of a spring motor assembly that is contained within an inner housing or casing shown at 10. Such spring motor assembly is one of the known forms such as are used in many so-called "wind-up" toys, so that the details of the same are not shown herein. It is sufficient to state that the motor assembly contains a torsional spring 12 indicated in dotted lines in FIG. 1, the spring being held against rotation by a dog or catch 17 which, when released, permits the spring to unwind and thus rotate the shaft 11 thereby rotating the cam plate 15. When the spring becomes fully unwound, it may be wound up by the manual turning of the knurled head or knob 13 disposed at the bottom or elsewhere on the housing 1. The position of the release dog may vary according to the construction of the particular type of spring motor employed. Also, the spring motor drive may contain gearing to drive the shaft 11 at a required speed as is often done in spring drives of this nature.

From the foregoing, the operation of the device will be apparent. The device may be made very small and compact to form a bracelet charm or similar article. It can, if desired, be provided with a suspension loop or an attaching pin. The spring motor is wound by turning the shaft 11 and when the dog 17 is released the unwinding of the spring will rotate the shaft 11, turning the cam plate 15 and causing the cam 16 thereon to intermittently and successively lift the stems 7 and 8 and impart a rocking movement of the figure 3 so that the horse will appear to be galloping. FIG. 1 shows the device with the stems 7 and 8 out of contact with the cam plate at points away from the cam 16, while FIG. 2 shows the stem 7 in an elevated position by the cam and stem 8 in its lowered position.

While I have herein suggested that there shall be one cam 16 on the plate 15, it will be apparent that additional cams, as shown at 16*a* in FIG. 3 for example might be used. In illustrating the invention, parts and components of the device are disproportionately shown for clarity in illustration. The device can be made very small and compact in actual production; the animated figure can be varied and various other design changes can be made without departing from the spirit of the invention as defined by the attached claims.

What I claim is:

1. An animated charm comprising a figure, a substantially flat support, a hinge having a horizontal pivot pin centrally of said support, said hinge being at the lower end of said figure and constituting means pivotally attaching said figure to said support, a casing of which said support is the top wall, a vertical pivot in said casing in vertical alinement with said hinge, a horizontal radially ex-

tending arm fixedly mounted on the upper end of said vertical pivot, a cam of relatively narrow width extending upwardly from said arm, a pair of openings in said support on opposite sides of said hinge, a pair of stems extending from the lower end of said figure thru said openings to respective points below the top of said cam, and motor means for rotating said vertical pivot to cause said cam to strike said stems and cause the opposite sides of said figure to be alternately raised and lowered.

2. An animated charm according to claim 1 in which said pivot pin is transverse to the long axis of said figure.

3. An animated charm according to claim 1 in which said motor means is a spring motor within said casing.

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