July 4, 1939. H. RUBENSTEIN 2,165,113

TOY EYE BLINKER

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Fig. 1

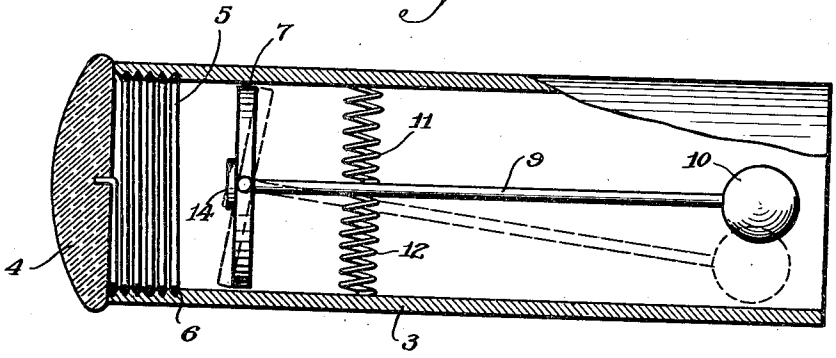
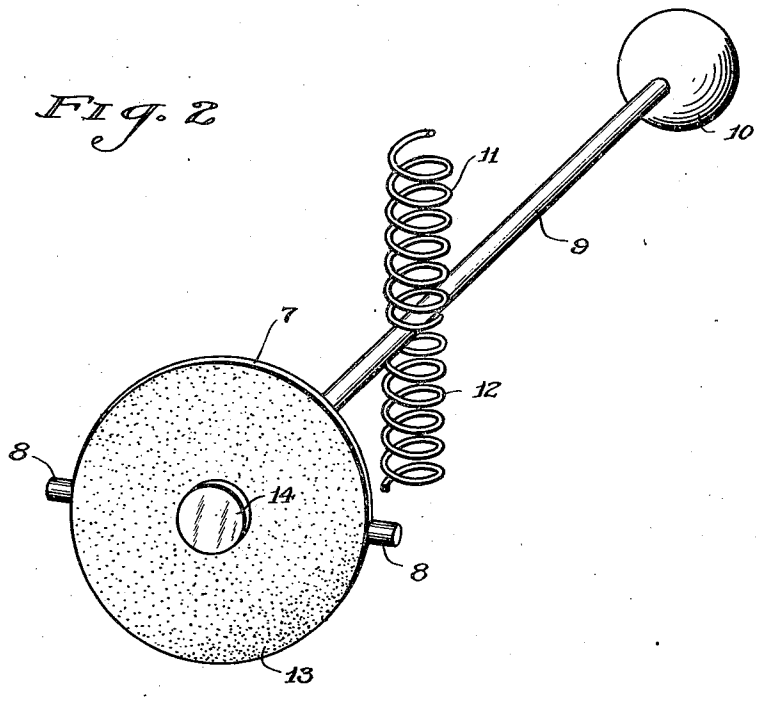


Fig. 2



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TOY EYE BLINKER

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4 Claims. (Cl. 46—170)

The present invention relates to toy dolls and animals and more particularly to the eye units of such articles including means for causing the eyes to be operated to simulate blinking.

The general object of the invention is to provide an eye piece of unitary construction to be affixed in the structure of stuffed dolls and the like, the same being so arranged that upon impact of the doll as in patting, the eyes will be intermittently illuminated to resemble in effect the blinking of the eye.

Another object is to provide an eye-blinking device of simple and economical fabrication and having a rugged mechanism to assure extensive service, the device comprising a resiliently mounted light-emitting element so suspended as to afford a particularly sensitive action to the effect of the slightest impact on the device.

The invention will be fully and comprehensively understood from a consideration of the following detailed description when read in connection with the accompanying drawing which forms part of the application.

In the drawing:

Fig. 1 is a central longitudinal section of the eye-blinking device, parts thereof being shown in elevation; and

Fig. 2 is a perspective view of the operating mechanism apart from the device.

Briefly stated the invention resides in the provision of a toy eye unit comprising a pivotally mounted light-emitting element disposed in a suitable casing including an eye piece or lens, the light-emitting element being equipped with a resiliently suspended pendulum which upon being subject to slight shock or impact will cause the light-emitting element to assume various angular positions thereby intermittently illuminating the eye piece to simulate blinking.

Referring to the drawing for a more detailed description thereof, the numeral 3 indicates a suitable casing preferably of tubular form being closed at one end by a lens or eye piece 4 shaped and colored of translucent material to resemble an eye ball. The lens 4 is removably attached to the casing 3 by a threaded sleeve 5 engaging threads 6 formed on the casing 3. The sleeve 5 is preferably formed of wire, one end of which is secured to the lens 4 and is bent into a helical form to fit into the threads 6.

A light-emitting element preferably in the form of a disc 7 is disposed behind the lens 4 and is pivotally mounted on an axis parallel to same. The disc 7 is preferably pivoted by means of trunnions 8 extending from the periphery of same to be journalled in the casing 3. Extending from the disc 7 is a rod 9 having at its free end a weighted member 10 constituting a pendulum. Adjacent the disc 7 and in engagement with the rod 9 are a pair of opposed springs 11 and 12 having their respective ends supported on the casing 3.

To the surface of the disc 7 adjacent the lens 4 is applied a luminous substance such as radium paint, preferably confined to a marginal area 13 of the disc 7. Preferably in the center of the mentioned surface of disc 7 is affixed a mirror 14 or other suitable reflecting element preferably defining a circular area thereon.

In installing the device in a stuffed animal or doll the casing 3 thereof is imbedded in the structure of the doll in a substantially horizontal position with the lens 4 in position of the eyes of the doll. As the doll is subjected to impact such as by patting the resultant shock causes the weight 10 to move in a vertical plane and the disc 7 is thus caused to assume various angular positions relative to the lens 4. It is to be noted here that the luminous area 13 and the mirror 14 constitute light-emitting or reflecting areas of varying intensity and as the position of the disc 7 is changed, light entering thru the lens 4 is impinged against the adjacent surface of the disc 7 and reflected back thru the lens 4 in rays of varying intensity, thus presenting a scintillating illumination to the lens 4 in resemblance to the blinking of the eye.

The effect of the light-emitting element will be more apparent in considering the angle at which the eyes of the doll are observed. During action of the disc 7, the light reflecting surfaces of same are intermittently moved into and out of the line of vision during which action the light rays normally existing around the doll are reflected from the disc 7 to meet the eyes of the observer in an intermittent manner and thus create the effect of blinking.

It is to be understood that this improvement is capable of extended application and is not confined to the exact showing of the drawing nor to the precise construction described and, therefore, such changes and modifications may be made therein as do not affect the spirit of the invention nor exceed the scope thereof as expressed in the appended claims.

What is claimed as new is:

1. A device of the character described comprising in combination, a translucent member, an oscillatory light-reflecting element behind said translucent member, a normally luminescent an-

nular member disposed adjacent said reflecting element and means for oscillating said light-reflecting member, said light-reflecting element having areas of different reflecting powers so as to present a scintillating illumination on said translucent member during oscillation of said reflecting member.

2. A device of the character described comprising in combination, a translucent member, an oscillatory light-reflecting element behind said translucent member, a normally luminescent annular member disposed adjacent said reflecting element and means for oscillating said light-reflecting member, said light-reflecting element comprising a mirror surface and a luminous surface in co-planar relation for reflection through said translucent element.

3. A device of the character described comprising a combination, a casing, a translucent member disposed in one end of said casing, a light-reflecting element mounted in said casing behind said translucent member, said element comprising a disc having a coating of luminous substance and a mirror-like annular member supported centrally thereof, and means for oscillating said light-reflecting element, said means including a weighted arm and a pair of springs associated with said arm and having their respective ends supported on said casing.

4. A device of the character described comprising in combination, a casing, a translucent member removably disposed in one end of said casing, a light-reflecting element mounted in said casing behind said translucent member, said light reflecting element having areas of different reflecting powers so as to present a scintillating illumination on said translucent member during oscillation of said reflecting member, and means for oscillating said light-reflecting element, said means including a weighted arm and a pair of springs having their respective ends supported on said casing.

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