April 9, 1935. L. S. BIGELOW 1,997,446

ILLUMINATING TOY

Filed Nov. 23, 1933

Fig 1

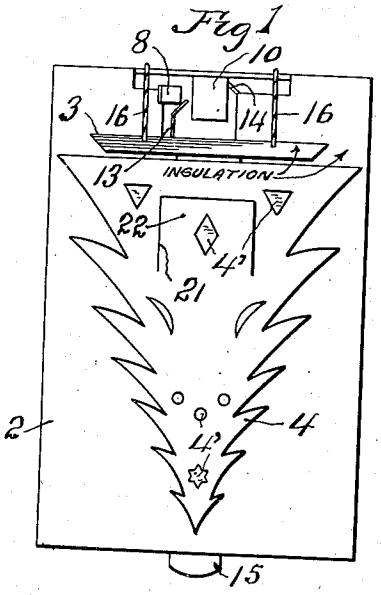


Fig 2

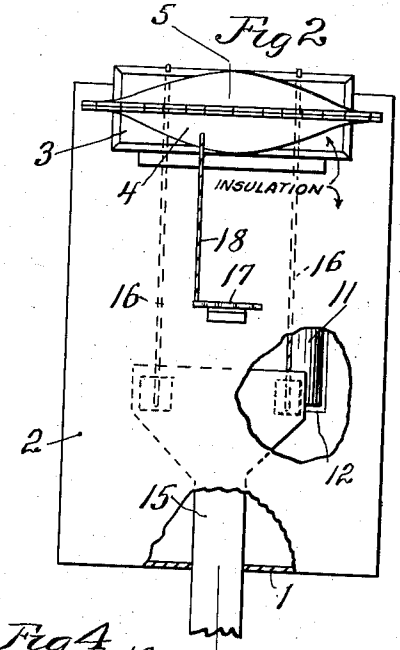


Fig 3

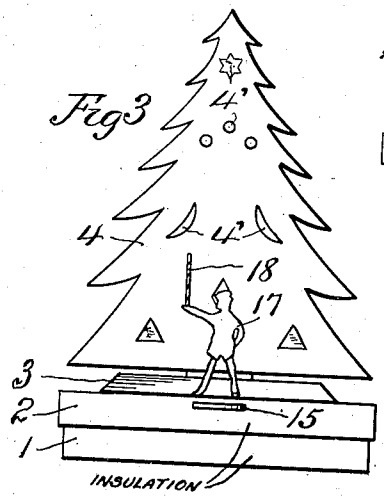


Fig 4

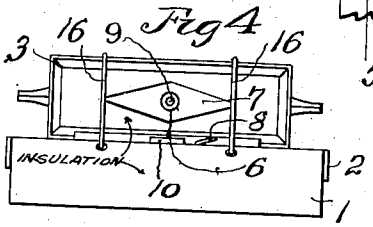


Fig 5

Fig 6

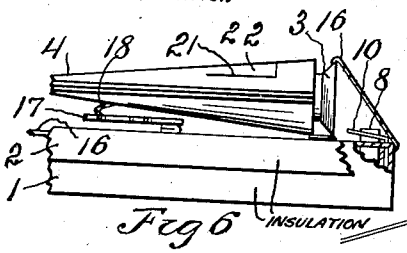


Fig 7

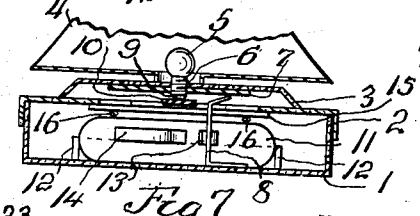
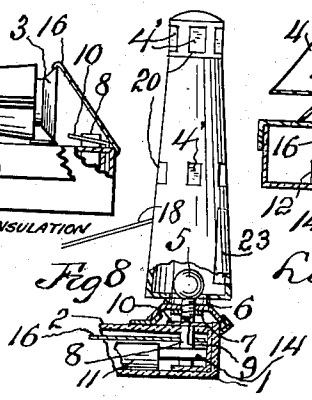


Fig 8



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Patented Apr. 9, 1935

1,997,446

UNITED STATES PATENT OFFICE

1,997,446

ILLUMINATING TOY

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Application November 23, 1933, Serial No. 699,414

3 Claims. (Cl. 46—37)

My invention relates to improvements in illuminating toys.

One of the objects of my invention is to provide in a toy of a type in which a member simulating in miniature a particular object, such as a Christmas tree, is movable to and from an erect position, novel means by which the member is illuminated when moved to the erect position.

A further object of my invention is to provide in a toy of the type referred to, and which has means for moving it to the erect position, with novel means, actuated by said moving means, for illuminating the structure when it moves to the erect position, and which provides for stopping the illumination when the member moves from the erect position.

Another object of my invention is to provide a hollow member, which simulates in miniature a particular object, such as a Christmas tree, or lighthouse, and which has portions permeable to light, combined with novel means for projecting light from the interior outwardly through said portions.

Still another object of my invention is to provide a novel illuminating toy of the kind described, which is simple, cheap, relatively durable and not likely to get out of order, which includes lighting means including a battery, arranged to be replaced readily when exhausted, and which is ornamental and will afford entertainment to grown people as well as children.

The novel features of my invention are hereinafter fully described and claimed.

In the accompanying drawing which illustrates my invention, Fig. 1 is a plan view of one form of my invention provided with a member simulating in miniature a Christmas tree, and showing the Christmas tree in a reclining position.

Fig. 2 is a plan view, partly broken away, of the structure shown in Fig. 1, showing the Christmas tree in the erect position.

Fig. 3 is an end elevation of what is shown in Fig. 2.

Fig. 4 is an end elevation of what is shown in Fig. 1.

Fig. 5 is a section on the line 5—5 of Fig. 2.

Fig. 6 is a side elevation, partly broken away, of what is shown in Fig. 1.

Fig. 7 is a section on the line 7—7 of Fig. 5.

Fig. 8 is a view, partly in side elevation and partly broken away, of a modification in which the illuminated member simulates in miniature a lighthouse.

Similar characters of reference designate similar parts in the different views.

In each of the views, is shown a support comprising, preferably, a paper box 1 having a cover 2 hinged thereto. Hinged to and on the top of the cover 2 is a base member 3, which is of insulation material, such as pasteboard.

In the form shown in Figs. 1 to 7, there is mounted on the base member 3 a hollow member 4, of paper or the like, and which simulates in miniature a particular object comprising a Christmas tree having portions permeable to light comprising holes covered, preferably, with translucent colored sheet material 4' through which light is adapted to be projected from the interior outwardly by an electric lamp 5, which has a threaded stem 6 removably fitted in a metal plate 7 fastened to the under side of the base member 3, and which is adapted to have conductive contact with a spring plate 8 fastened to the innerside of the bottom of the box 1, Figs. 5 and 7.

The outer part of the stem 6 constitutes one terminal of the lamp 5, the other terminal 9 being located, as usual, within and insulated from the stem 6, and adapted, when the tree 3 is erect, as shown in Figs. 2, 3, 5 and 7 to contact with a spring conductive plate 10 mounted in the box 1.

A battery 11 is removably mounted within a U shaped flange 12 in the box 1. The battery 11 has two resilient terminals 13 and 14 which normally respectively contact with the spring contact plates 8 and 10.

When the Christmas tree member 4 is in the erect position, shown in Figs. 2, 3, 5 and 7, the contact plate 8 will bear against the contact plate 7, and the spring contact plate 10 will bear against the inner terminal 9 of the lamp 5.

In such position of the parts, the current will flow from the battery terminal 13 through the contact plate 8, contact plate 7, lamp terminal 6, lamp 5, lamp terminal 9, spring plate 10, and battery terminal 14, thereby lighting the lamp 5, the rays from which will be projected through the colored sheet material 4', making the structure 4 simulate a lighted Christmas tree.

For swinging the Christmas tree 4 to the erect position, there is provided an operating handle comprising a member 15 slidable longitudinally on the under side of the cover 2, and extending outwardly through said cover and over the upper edge of the end of the box 1 distant from the tree 4. Two cords 16 fastened to the inner end of the member 15 extend respectively through the opposite end of the box 1, and are fastened to the base member 3. When the member 15 is drawn outwardly, the cords 16 will swing the

Christmas tree 4 from the reclining position, shown in Figs. 1, 4 and 6 to the erect position, shown in Figs. 2, 3, 5 and 7.

The Christmas tree may be lowered by pressure thereon of the hand.

A figure 17, simulating a human being, is hinged to the top of the cover 2 in front of the Christmas tree 4, with which it is connected by a cord 18. When the Christmas tree 4 is reclining, the figure 17 will be recumbent under the tree. When the tree is swung to the erect position, the cord 18 will swing the figure 17 to the erect position, as shown in Figs. 2, 3 and 5.

When the battery 11 becomes exhausted, the cover 2 may be raised, and the battery lifted from within the box 1, and a new battery substituted for the exhausted one.

As the Christmas tree is swung to the lowered position, the cords 16 will be drawn rearwardly, thus retracting the member 15 to the inner position, shown in Fig. 1.

In the form shown in Fig. 8, the hollow member 19, simulates a lighthouse, which is mounted upon the base member 3, in place of the Christmas tree, and is provided with openings 20 simulating windows covered with red tinted sheet material 4' through which light is projected from the lamp 5 on the base 3, when the lighthouse is swung to the erect position, shown in Fig. 8.

The remainder of the structure corresponds to what has already been described with reference to the other form of my invention, excepting that the lighthouse 19 is substituted on the base 3 for the Christmas tree.

For permitting ready access to the lamp 5, the paper or similar material from which the Christmas tree is composed, is provided adjacent to the lamp 5 with a U shaped slit 21, Fig. 1, which forms a flap 22 that may be swung outwardly to permit insertion of the fingers for unscrewing the lamp 5 from the plate 7, when the lamp is burned out and another is to be substituted therefor.

A similar flap 23 is provided in the lighthouse 19 adjacent to the lamp 5, for a similar purpose.

In each form of my invention shown, the box 1, illuminated member 4 (19) battery 11, lamp 5 and the circuit closing means are united together to form an integral structure disposable as a unit.

Many modifications, within the scope of the appended claims, may be made without departing from the spirit of my invention.

What I claim is:—

1. In an illuminating toy, the combination with a box having an opening and a cover movable to and from a position closing said opening, of a member pivoted to and movable on the upper side of said cover to and from an erect position and simulating in miniature a particular object, an electric circuit including in series two contacts, a battery insertable into and removable from said box through said opening, an electric lamp disposed to project light on said member when the latter is erect, and circuit controlling means actuated by the moving of said member to and from the erect position for respectively closing and opening said circuit, said box, member, battery, lamp and circuit controlling means being united together to form an integral structure disposable as a unit.

2. In an illuminating toy, the combination with a box having an opening and a cover movable to and from a position closing said opening, of a member pivoted to and movable on the upper side of said cover to and from an erect position and simulating in miniature a particular object, an electric circuit including in series two contacts, a battery insertable into and removable from said box through said opening, an electric lamp disposed to project light on said member when the latter is erect, and circuit controlling means actuated by the moving of said member to and from the erect position for respectively closing and opening said circuit, means carried wholly by said box for moving said member to the erect position, said box, member, moving means, battery, lamp and circuit controlling means being united together to form an integral structure disposable as a unit.

3. In an illuminating toy, the combination with a box having an opening and a hinged cover movable to and from a position closing said opening, of a member hinged to said cover so as to swing to and from an erect position thereon and simulating a particular object, means carried wholly by said box for swinging said member to the erect position, and an electric circuit including in series two contacts, a battery insertable into and removable from said box through said opening, an electric lamp disposed to project light on said member when the latter is erect, and circuit controlling means actuated by the moving of said member to and from the erect position for respectively closing and opening said circuit, said box, member, battery, lamp, swinging means and controlling means being united together to form an integral structure disposable as a unit.

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