March 8, 1949. N. M. SOULÉ 2,463,817

TOY REFLECTOR AND SUPPORT

Filed Sept. 7, 1945

Fig. 1

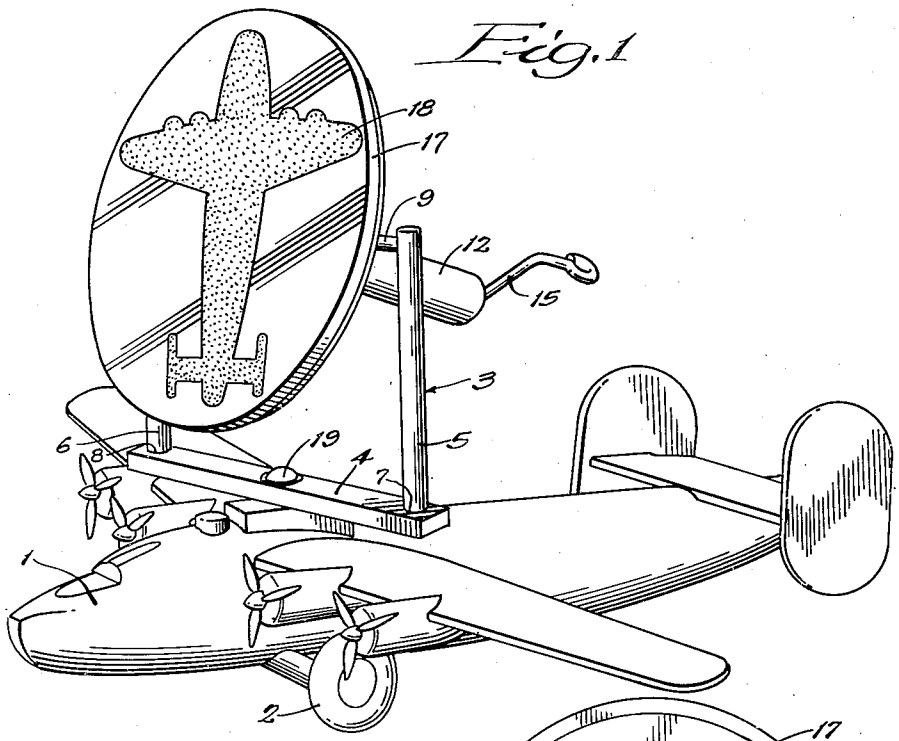


Fig. 2

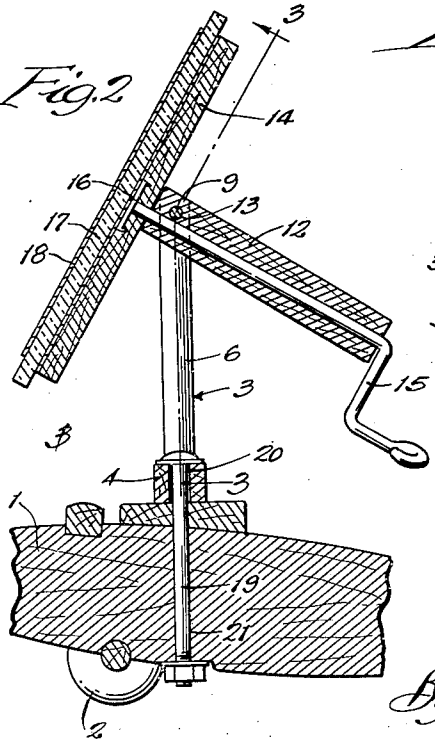
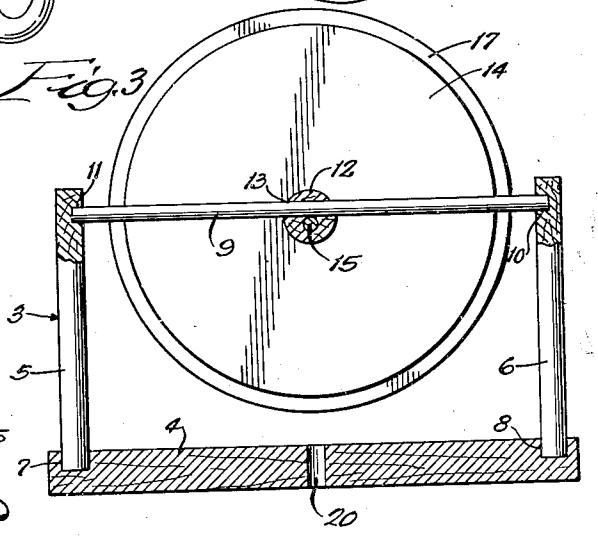


Fig. 3



Inventor:
Norma M. Soulé.

By Rummler Rummler & Davis
Attorneys.

Patented Mar. 8, 1949 2,463,817

UNITED STATES PATENT OFFICE

2,463,817

TOY REFLECTOR AND SUPPORT

Norma M. Soulé, Evanston, Ill.

Application September 7, 1945, Serial No. 614,884

3 Claims. (Cl. 46—1)

1

This invention relates to improvements in toys.

The main objects are to provide a new, novel, and inexpensive toy; to provide a device of this character having a movable body with a rectangular frame swiveled thereon and a movable reflector or mirrored surface with an object thereon attached to said frame; to provide a device of the character which will reflect an object in silhouette on a screen, ceiling, wall or similar surface; to provide a device of this character by which a reflected object can be moved about to any predetermined position and location on a surface; and to provide a device of this character which is simple in construction and simple to operate.

An illustrative embodiment of the invention is shown in the accompanying drawings in which:

Figure 1 is a perspective view of my invention.

Fig. 2 is a vertical sectional view, with parts shown broken away.

Fig. 3 is a sectional view taken on the line 3—3 of Fig. 2.

Referring in detail to the drawings, the horizontally disposed base 1 is preferably constructed of wood, or a similar light-weight material, and is supported in any suitable manner, such as by wheels 2, whereby the base may be moved about readily on a solid surface. In the embodiment shown I have illustrated the base 1 as simulating an airplane construction with its attendant propellers, fuselage, wings, etc., but it is to be understood that any type of base may be employed.

A pivoted rectangular frame 3 comprises a horizontally disposed lower cross member 4, two perpendicular uprights 5 and 6 integrally attached to the distal ends of said cross member 4 in any suitable manner, such as by gluing the lower ends of members 5 and 6 in bores 7 and 8 respectively; a horizontally disposed upper cross arm 9 is integrally attached to the upper ends of uprights 5 and 6 in any suitable manner, such as by gluing the ends of said arm 9 in bores 10 and 11 respectively of uprights 5 and 6. The forward end of the tubular member or handle shaft 12 is provided with an aperture 13 through which arm 9 is threaded, whereby the said shaft 12 is positioned medially of the uprights 5 and 6 and is pivotally movable about said arm 9. The shaft 12 is hollow, being bored in a diagonal plane from the back to the front for the reception of crank arm 15.

A backing member 14 is arranged to abut centrally against the forward end of shaft 12 and is held in position by cleat 16 which is integrally formed on the forward end of crank arm 15.

2

A mirror, reflector or other reflecting surface 17 is attached in any suitable manner to the backing member 14, so that the backing member and mirrored surface form an integral unit. An object 18, preferably opaque in character, is affixed on the reflecting surface 17, whereby the same may be projected upon a surface, such as a wall, a ceiling, or a screen and be visually perceptible when the surface 17 is placed in the path of a bright light.

The entire rectangular frame 3 is mounted in a swivellike manner to the base 1 in any suitable manner, such as by a bolt 19 which extends through aligned apertures 20 and 21 in the cross member 4 and in the base 1, respectively.

The entire structure is placed in a position so that bright light, such as the rays of the sun or concentrated artificial light as reflected from a lamp, will strike the mirrored surface 17 and reflect the image of the object 18 onto the desired surface. The object 18 can then be adjusted to a desired position by manipulating the rectangular frame 3, and crank arm 15, whereby the image will appear to do just about anything the actual object could do.

If the object on the mirrored surface is an airplane, by manipulation of the crank arm and rectangular frame the reflected image can be made to appear to be flying, looping, falling into spins, making bank turns, etc.

It will be understood that some of the details set forth may be altered or omitted without departing from the spirit of the invention as defined by the following claims:

I claim:

1. In a device of the class described, a movable base, a rectangular frame positioned above said base, means for securing said frame to said base in swiveled relation thereto, a shaft pivotally supported at its forward end to the said frame, a crank arm journaled in said shaft and having a handle portion thereon extending beyond the rearward end of said shaft, a reflector integrally secured centrally to the forward end of the said crank arm whereby said reflector may be rotated upon rotation of said crank arm, and a representation of an object secured to the said reflector.

2. In a device of the class described comprising, a movable base, a frame disposed above said base comprising a horizontally disposed cross arm, a pair of perpendicular uprights, the lower ends of each being anchored to the distal ends of said cross arm respectively, a horizontally disposed top cross arm anchored at both its ends

to the upper ends respectively of said uprights, means for pivotally securing said first-mentioned arm to said base, a tubular member pivotally supported at its forward end to said top cross arm and medially of said uprights, a crank arm journaled in said tubular member and having a handle portion on the rearward end thereof, a reflector integrally secured to the forward end of said crank arm and abutting against the forward end of said tubular member, whereby said reflector may be rotated upon rotation of said crank arm and arcuately movable in any direction upon manipulation of said tubular member, and a representation of an object attached to the said reflector whereby the image thereof may be reflected to another surface when said reflector is placed in a bright light.

3. In a device of the character described, a movable base, a reflector, and means for supporting the reflector on said base, said means including a frame swivelled to the base, a handle pivoted to said frame for movement in a plane perpendicular to the base, and a crank rotatably carried by said handle and having the reflector secured thereto, said reflector carrying an image on its face which is to be projected onto a surface when the reflector is placed in a bright light.

NORMA M. SOULÉ.

REFERENCES CITED

The following references are of record in the file of this patent:

UNITED STATES PATENTS

Number	Name	Date
303,496	Day	Aug. 12, 1884
840,084	Muller	Jan. 1, 1907
877,283	Barrath	Jan. 21, 1908
1,657,334	Adams	Jan. 24, 1928