No. 877,645. PATENTED JAN. 28, 1908.

J. R. HARE.

KALEIDOSCOPE.

APPLICATION FILED FEB. 15, 1907.

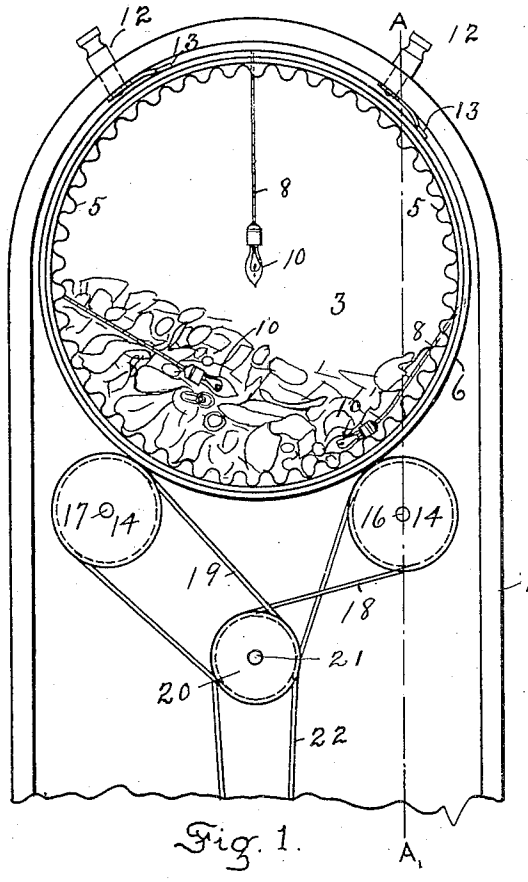


Fig. 1.

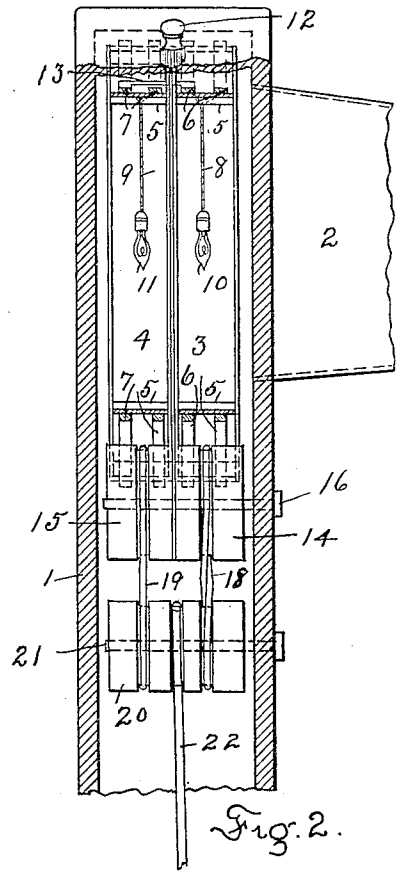


Fig. 2.

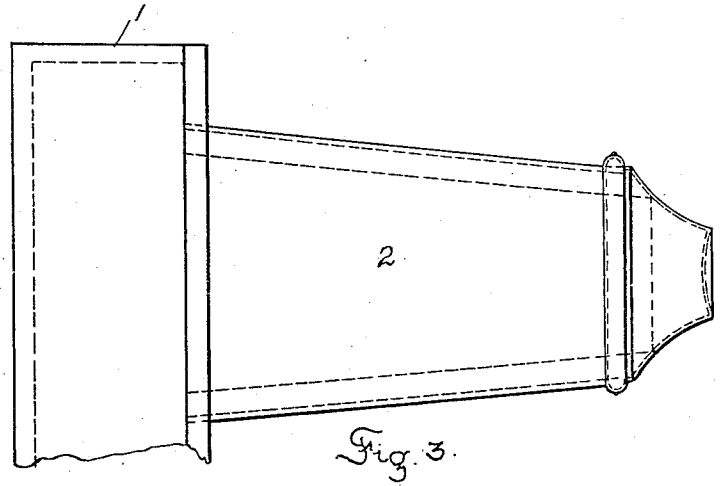


Fig. 3.

Witnesses
Harry Watson
Jas. Dwyer

Inventor
John R. Hare
By Chapin & Ferguson
Attorney

THE NORRIS PETERS CO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

JOHN R. HARE, OF BALTIMORE, MARYLAND.

KALEIDOSCOPE.

No. 877,645. Specification of Letters Patent. Patented Jan. 28, 1908.

Application filed February 15, 1907. Serial No. 357,485.

To all whom it may concern:

Be it known that I, JOHN R. HARE, a subject of the King of England, residing at Baltimore, in the State of Maryland, have invented certain new and useful Improvements in Kaleidoscopes, of which the following is a specification.

This invention relates to improvements in kaleidoscopes, and has for its object, among other things, to provide means for automatically operating, or rotating, the object boxes, or agitators; also to so construct the said boxes as to cause more frequent movements of the objects therein; and also to provide the said boxes with electric lights, adapted to swing into view at intervals, and means for conducting the current to said lights.

The invention consists of the novel parts and combinations of parts hereinafter more fully set forth in the following specification and pointed out in detail in the claims.

In the accompanying drawing,—Figure 1 is a front elevation of the casing, partly broken away, and having the front thereof removed. Fig. 2 is a vertical sectional view on the line A—A of Fig. 1. Fig. 3 is a side view of the upper portion of the casing showing the mirror holder projecting therefrom.

Referring to the accompanying drawings, forming part of this specification and in which similar reference numerals designate like parts, 1 designates the casing, and 2 the mirror holder which is of the usual construction and having the mirrors therein with their reflecting surfaces arranged at suitable angles for producing kaleidoscopic effects.

Within the casing 1, and on a line with the mirror holder 2, are two object boxes, or agitators 3 and 4, each provided with a glass front and back. The inner surfaces of the boxes 3 and 4 are provided with annular corrugations 5 to cause more frequent movements of the objects contained in the boxes. The boxes 3 and 4 are also provided on their outer edges with metal rings, or bands, 6 and 7, respectively, to which are connected the wires 8 and 9 of the electric globes 10 and 11; said globes being adapted to swing into view at frequent intervals. The current is supplied to the binding posts 12 which latter are provided with brushes 13 to contact with the rings 6 and 7 from which the current is supplied to the lights.

The object boxes 3 and 4 rest on the rollers 14 and 15, respectively, which latter revolve on the pins 16 and 17. These rollers 14 and 15 are connected by belts 18 and 19, respectively, to the pulley 20 which latter revolves on the pin 21. Power is transmitted to the pulley 20 through the medium of the belt 22 from any suitable source of power. The belt 18 is crossed in order to cause the object box 3 to revolve in the opposite direction from the box 4.

It will be seen that by having the object boxes revolve in opposite directions, and the lights to swing therein, more frequent and more brilliant kaleidoscopic effects will be produced.

While I have shown and described two object boxes, it is obvious one only may be employed, or more than two may be employed. When more than two object boxes are employed it is desirable to have each box revolve in the opposite direction from the one next thereto.

The mirrors in the mirror box may be made concaved or convexed, if desired, to give more unique effect to the objects used.

Having thus described my invention, what I claim is:

1. In a kaleidoscope, the combination of the mirror-holder, an object box having electric lights swung therein, and means for conducting the current to said electric lights.

2. In a kaleidoscope, the combination of the mirror-holder, a plurality of object boxes having electric lights swung therein, means for conducting the current to said lights, and means for automatically revolving the said object boxes.

3. In a kaleidoscope, the combination of the mirrors arranged to produce kaleidoscopic effects, object boxes at the end of said mirrors adapted to be revolved in opposite directions, electric lights within said boxes adapted to be brought into view at intervals, means for conducting the current to said lights, and means for automatically revolving said boxes.

In testimony whereof I affix my signature in presence of two witnesses.

JOHN R. HARE.

Witnesses:

CHAPIN A. FERGUSON,

OSCAR C. MARTENET.