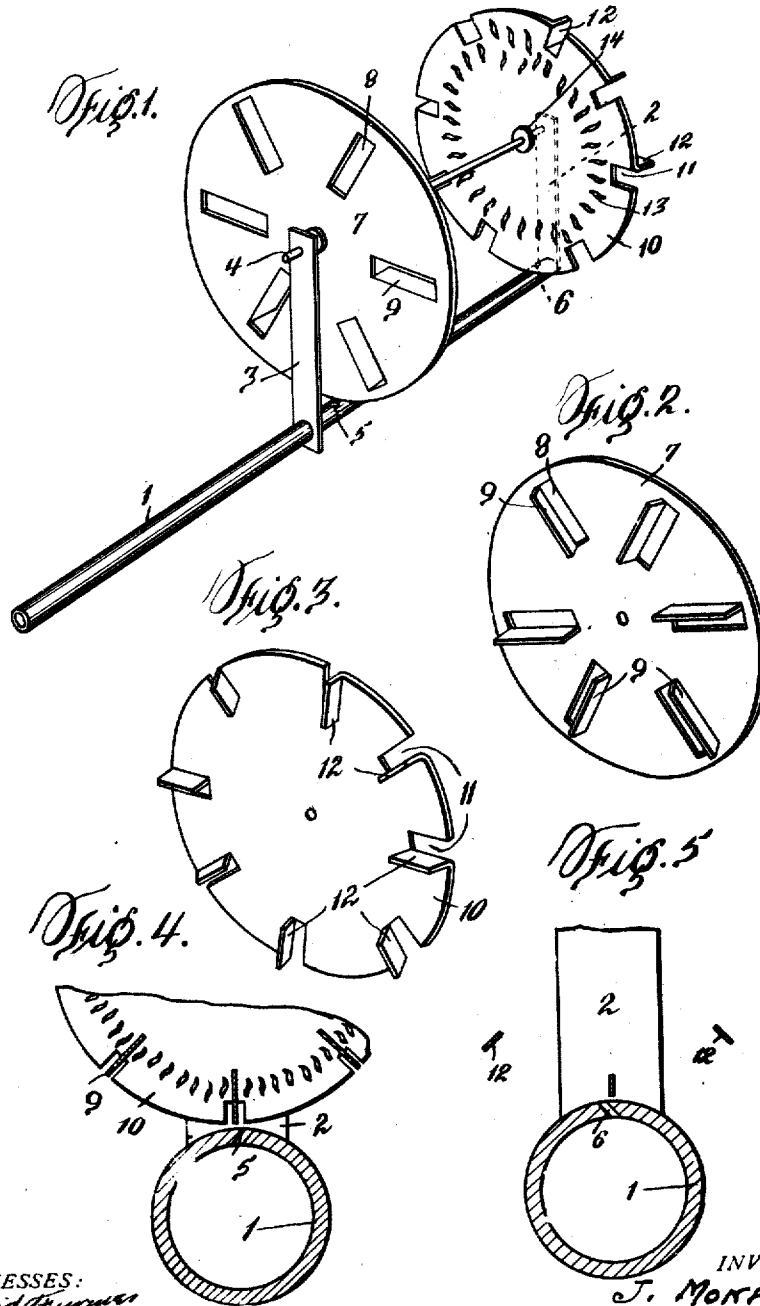


J. MONPER.
TOY.
APPLICATION FILED MAR. 20, 1911.

1,012,409.

Patented Dec. 19, 1911.



WITNESSES:
David G. ...
John L. ...

INVENTOR.
J. MONPER
BY *H. C. ...*
ATTORNEYS

UNITED STATES PATENT OFFICE.

JOHN MONPER, OF PITTSBURGH, PENNSYLVANIA, ASSIGNOR OF ONE-HALF TO FRANK OBERMILLER, OF PITTSBURGH, PENNSYLVANIA.

TOY.

1,012,409.

Specification of Letters Patent.

Patented Dec. 19, 1911.

Application filed March 20, 1911. Serial No. 815,810.

To all whom it may concern:

Be it known that I, JOHN MONPER, a citizen of the United States of America, residing at Pittsburgh, in the county of Allegheny and State of Pennsylvania, have invented certain new and useful Improvements in Toys, of which the following is a specification, reference being had therein to the accompanying drawing.

This invention relates to toys and more particularly to that class of toys operated by wind or air.

The primary object of my invention is to provide a toy for producing kaleidoscopic effects through the medium of revolvable disks actuated by air.

Another object of the invention is to provide a toy of the above type that will be instructive and at the same time amusing to juveniles.

A further object of the invention is to accomplish the above results by a mechanical construction that is simple, inexpensive to manufacture and easy to operate.

With the above and other objects in view the invention resides in a novel construction, combination and arrangement of parts to be hereinafter specifically described and then claimed.

Reference will now be had to the drawing, wherein like numerals of reference designate corresponding parts throughout the several views in which:—

Figure 1 is a perspective view of the toy. Fig. 2 is a perspective view of a detached shutter or disk. Fig. 3 is a perspective view of a detached main disk, and Figs. 4 and 5 are enlarged cross sectional views of the toy illustrating the ports thereof.

A toy in accordance with this invention comprises a tube or pipe 1 having one end thereof provided with a vertical bearing 2 and intermediate the ends there is another vertical bearing 3, cooperating with the bearing 2 in supporting a longitudinal rod 4. The tube 1 adjacent to the bearing 3 is provided with an angularly disposed port 5 and adjacent to the bearing 2 with another angularly disposed port 6. The ports 5 and 6 are disposed at angles to each other for a purpose presently described.

Revolubly mounted upon the rod 4 adjacent to the bearing 3 is a disk or shutter 7 and this disk or shutter is provided with

a plurality of radially disposed openings 8, and carried by the rear side of said disk or shutter are a plurality of radially disposed blades 9. It is preferable to cut and shear the openings 8 and bend the material outwardly from said openings to form the blades 9, which are at right angles to the rear side of said disk or shutter. The blades 9 are positioned directly above the port 5 and when air is discharged from the port 5 the disk or shutter is revolved in one direction.

Revolubly mounted upon the rod 4 adjacent to the bearing 2 is a disk 10 and this disk has a periphery thereof cut or sheared, as at 11 and the material bent outwardly to provide a plurality of radially disposed blades 12, these blades being at right angles to the rear side of the disk 10 and directly above the port 6.

The front side of the disk 10 is printed or otherwise marked with suitable configurations or designs 13, the designs being circumferentially arranged whereby they can be observed through the openings 8 of the shutter 7.

Longitudinal displacement of the disk 7 and the shutter 10 is prevented by collars 14 mounted upon the rod 4 at both sides of the disk and shutter.

The end of the tube 1 adjacent to the bearing 2 is closed and when the open end of the tube is blown into air is discharged from the ports 5 and 6, causing the disk and shutter to revolve in opposite directions. This effect is produced by reason of the arrangement of the ports 5 and 6 and the blades 9 and 12, the air or other fluid which is discharged through the ports being directed into contact with the respective blades in a manner to cause the disk and shutter to rotate in opposite directions. The revolving shutter produces a kaleidoscopic effect. With the shutter revolving the openings 8 appear to the vision as one single circular opening, yet the material between the openings 8 interrupts the designs upon the disk 10 to produce a multiplicity of designs according to the speed at which the disk and shutter are revolved.

From the foregoing it will be observed that I have devised a toy that can be constructed of various materials and in different grades, for instance, card board, with

the exception of the rod 4, can be utilized for a cheap toy, while the better grades can be made of light and durable metal or wood.

What I claim is:—

- 5 1. In a toy, a pair of bladed members revolubly mounted in axial alinement and spaced apart, the advance member being slotted and the other member provided with
10 , markings visible through the slots of the advance member, and means for simultaneously directing independent streams of a fluid blast to said members, the directions of the blasts causing the members to revolve in opposite directions.
- 15 2. In a toy, a pair of bladed members revolubly mounted in axial alinement and spaced apart, the advance member being slotted and the other member provided with
20 , markings visible through the slots of the advance member, and means for simultaneously directing independent streams of a fluid blast to said members, the directions of the blasts causing the members to revolve in opposite directions, said means
25 comprising a tubular member having a port for and in proximity to the blades of each member, said ports being disposed angularly relative to each other.
- 30 3. In a toy, a pair of bladed members revolubly mounted in axial alinement and spaced apart, the advance member being slotted and the other member provided with

markings visible through the slots of the advance member, and means for simultaneously directing independent streams of a
35 fluid blast to said members, the directions of the blasts causing the members to revolve in opposite directions, said tubular member forming the support for the rotatable members.

4. In a toy, a tubular member having
40 spaced-apart ports leading from the interior of the member and extending angularly with respect to each other, supports carried by said tubular member adjacent
45 to said ports, a rod extending through said supports, and a pair of bladed members supported on said rod between said supports, each of said latter members being
50 positioned to place its blades in the path of movement of a blast of fluid issuing from said ports to provide revoluble movement to said members in opposite directions, the advance member being slotted and the
55 other member carrying designs visible through the slotted portion of the advance member.

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

JOHN MONPER

Witnesses:

FRANK OBERMILLER,
MAX H. SROLOVITZ.