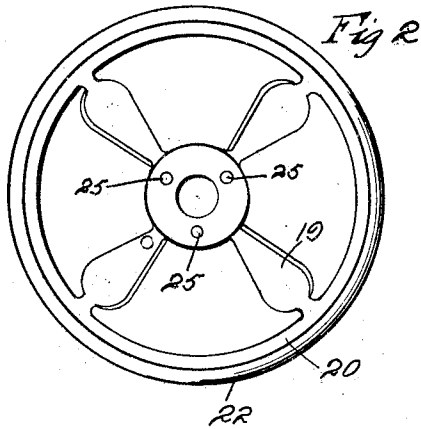
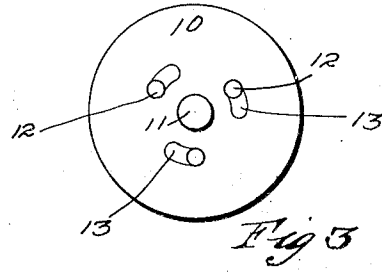
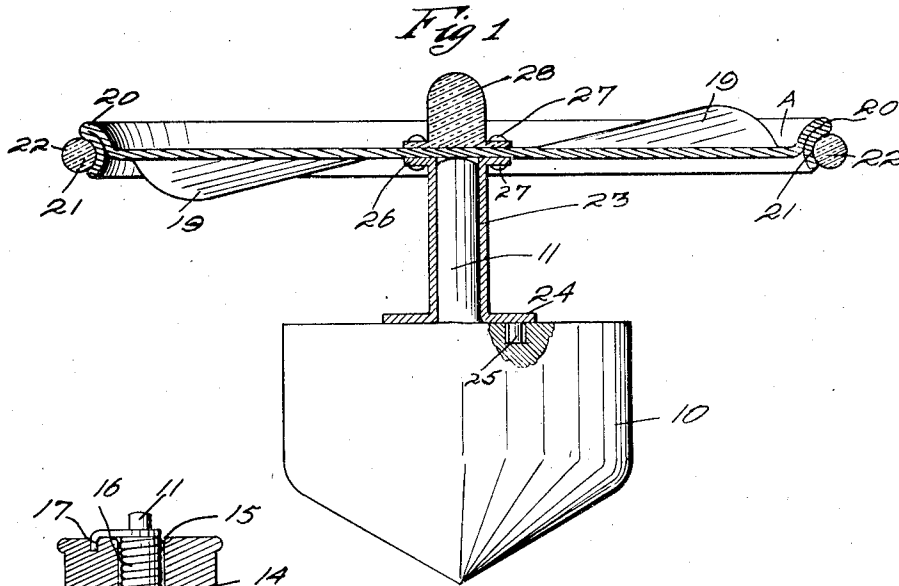
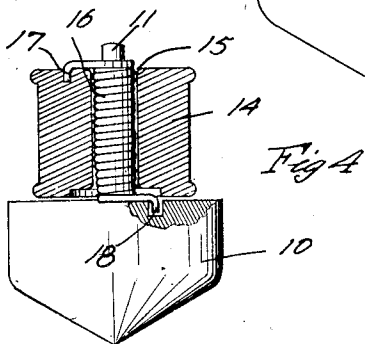


R. H. CLIFTON.
AERIAL TOY.
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1,356,969.

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Witness
Mevin Trisel.

Inventor
Ray H. Clifton
By *Orwig & Bair*
Attorneys

UNITED STATES PATENT OFFICE.

RAY H. CLIFTON, OF EAST PERU, IOWA, ASSIGNOR TO UNIVERSAL MANUFACTURING COMPANY, OF DES MOINES, IOWA, A CORPORATION OF IOWA.

AERIAL TOY.

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To all whom it may concern:

Be it known that I, RAY H. CLIFTON, a citizen of the United States, and a resident of East Peru, in the county of Madison and State of Iowa, have invented a certain new and useful Aerial Toy, of which the following is a specification.

The object of my device is to provide a toy, which may be used in combination with a spinner for causing it to rotate and spin in the air, which is of simple, durable and inexpensive construction.

Still a further object is to provide an aerial toy in combination with a spinner, which may be dropped upon the spinner and become operatively connected with it, whereby the momentum of the rotating spinner will cause the aerial toy to rotate, the device being provided with propeller blades, which will cause it to leave the spinner and to pass upwardly, rotating or spinning at a high rate of speed.

Still a further object is to provide an aerial toy comprising a propeller device, which is provided with a sleeve on its under side, the sleeve forming a means whereby the momentum of the spinning top is applied to the aerial toy, and to also act as a stabilizer when the toy is passing upwardly and rotating.

Still a further object is to provide a toy, which will spin or rotate in the air or upon the ceiling, and is so arranged that if it should strike any article either in its upward movement or in its downward movement, after it has lost its momentum, it will not mar or scratch furniture or the like.

With these and other objects in view, my invention consists in the construction, arrangement and combination of the various parts of my device, whereby the objects contemplated are attained, as hereinafter more fully set forth, pointed out in my claims, and illustrated in the accompanying drawings, in which:

Figure 1 shows a side elevation of a spinner or top with my improved aerial toy shown in section thereon.

Fig. 2 shows a plan view of the under side of my toy.

Fig. 3 shows a top or plan view of the spinner; and

Fig. 4 shows a side elevation of the spinner and the mechanism for causing it to spin or rotate.

In the accompanying drawings, I have used the reference numeral 10 to indicate an ordinary top or spinner, which is provided with a spindle 11. The spindle 11 extends upwardly from the center of the upper surface of the spinner 10.

The upper surface of the spinner 10 is provided with a series of openings 12, which are equi-distant from the center point of the top. The openings 12 are provided with an inclined groove 13, which terminates into the opening 12. The purpose of the opening 12 and the groove 13 will be hereinafter more fully set forth.

In Fig. 4 of the drawings, I have shown the mechanism which is ordinarily used for causing the top or spinner 10 to rotate. This mechanism comprises a handle member 14, which is provided with a central opening 15. Mounted within the central opening 15 is a spring 16.

The spring 16 has one of its ends fixed to the handle member 14 at 17. The free end of the spring 16 is bent downwardly at 18 and projects below the lower surface of the handle member 14. The extended portion of the spring 16 at 18 is designed to be received in any one of the openings 12 of the spinner 10.

The spindle 11 of the top is received within the spring 16. When it is desired to have the spinner spin, the handle member 14 is placed in a position shown in Fig. 4 of the drawings, and by rotating the handle member 14, the spring 16 is tightened, then by pressing the thumb slightly upon the upper end of the spindle 11, the spinner 10 is caused to become disengaged from the spring 16 at 18. The reaction of the spring 16, that is the spring going back to its original position causes the top or spinner 10 to revolve at a high rate of speed.

My device is adapted to be placed upon the spinner 10 when it is revolving at a high rate of speed.

The momentum of the revolving spinner is the power used for causing my device to rotate and spin in the air or upon the ceiling.

My device comprises a propeller device A, which is provided with the blades 19, which are of a propeller type. The blades 19 have an annular ring 20 secured to their outer ends. The ring 20 is bent upon itself to form a resilient ring receiving member 21.

Received within the portion 21 of the propeller device A is the ring 22, which is preferably made of rubber or some other soft or resilient material.

5 Extending downwardly from the center of the propeller device A is the sleeve 23, which is provided with an outwardly extending annular flange member 24. The flange member 24 is provided with lugs or
10 pins 25, which are adapted to be received within the openings 12 of the top or spinner 10.

The sleeve 23 is provided with an annular flange 26 near its upper end, which is riv-
15 eted to the center of the propeller device by means of the rivets 27.

On the upper surface of the propeller device directly above the sleeve 23, a resilient pointed member 28 is provided. It is held
20 in place by means of the rivets 27.

In the practical operation of my device, the top or spinner shown in Fig. 4 of the drawings is spun, then my toy is placed directly above the spindle 11 of the spinner 10,
25 so that the sleeve 23 will pass over the spindle 11. The pins 25, which are secured to the flange 24 will coact with the openings 12 of the spinner. Just as soon as the pins 25 are received within the openings 12, the mo-
30 mentum of the speedily revolving spinner will cause the propeller device A to be rotated at a high rate of speed. The blades 19 are so formed that when the propeller device A is rotated, they will cause it to be raised.
35 This will cause the toy to spin in the air or if it should happen to strike against some surface, it will spin on the under side of it. The resilient pointed member 28 is provided, so that if it should strike any surface, it will
40 not damage or injure it and will also act as a spindle or point of the opening on the revolving propeller device.

The sleeve 23, which is directly below the center of the toy or propeller device acts as a
45 stabilizer for my device, while it is being raised through the air. The resilient ring 22 is provided, so that when the toy has lost all of its momentum, and is descending to the floor, the resilient ring 22 or the point
50 28 will strike against the floor and thus prevent any scratching or marring of the furniture.

The greatest advantage of providing the resilient ring 22 and the point 28 resides in
55 the fact, that if the toy in its ascension strikes any woodwork or chandeliers, they will not become broken or scratched by my device coming in contact with them.

It will be seen that my device may be op-
60 erated in a very simple manner, and no skill is required by the operator for causing it to successfully work.

Some changes may be made in the construction and arrangement of the various
65 parts of my improved device without depart-

ing from the essential features and purposes of my invention, and it is my intention to cover by my claims, any modified forms of structure or use of mechanical equivalents, which may be reasonably included within 70 their scope.

I claim as my invention:

1. In a device of the class described adapted to be used in combination with a spinner comprising a propeller device having an an- 75 nular ring connected to the outer ends of said propeller, the propeller device being so adapted that when it is placed over a spinner that is rotating it will raise itself and rotate in the air at a fast rate of speed, said
80 ring being provided with a resilient band, whereby the propeller device will not mar any article in its movement.

2. In a device of the class described adapted to be used in combination with a spinner 85 comprising a propeller device, having an annular ring connected to the outer ends of said propeller, said ring being provided with a resilient band, a sleeve extended from the underside of said propeller, which is de- 90 signed to receive the spindle of a spinner, means for connecting the propeller device with the spinner, whereby rotation of the spinner will impart rotation to the propeller device and the propeller device when rotat- 95 ing at a high rate of speed will raise itself and spin in the air.

3. An aerial toy comprising a spinner having a spindle extended upwardly therefrom, a propeller device comprising a plurality of 100 blades, an annular ring formed on the outer ends of said blades, the annular ring being curved upon itself to form a resilient ring receiving member, a resilient ring received in said receiving member, a sleeve extended 105 downwardly from the center of said propeller device adapted to receive the spindle of said spinner, the propeller device being adapted so that it may be dropped upon the spinner when the spinner is rotating, where- 110 by the momentum of the rotating spinner will cause the propeller device to rotate, the blades causing the propeller device to rise off of said spinner.

4. An aerial toy comprising a spinner 115 having a spindle extended upwardly therefrom, a propeller device comprising a plurality of blades, an annular ring formed on the outer ends of said blades, the annular ring being curved upon itself to form a 120 resilient ring receiving member, a resilient ring received in said receiving member, a sleeve extended downwardly from the center of said propeller device adapted to receive the spindle of said spinner, and adapted to 125 act as a stabilizer when the device is rotating in the air, the propeller device being adapted so that it may be dropped upon the spinner when the spinner is rotating, whereby the momentum of the rotating spinner will cause 130

the propeller device to rotate, the blades causing the propeller device to rise off of said spinner.

5 5. An aerial toy comprising a spinner having a spindle extended upwardly therefrom, a propeller device comprising a plurality of blades, an annular ring formed on the outer ends of said blades, the annular ring being curved upon itself to form a resilient ring
10 receiving member, a resilient ring received in said receiving member, a sleeve extended downwardly from the center of said propeller device, adapted to receive the spindle of said spinner, and adapted to act as a

stabilizer when the device is rotating in the 15 air, a pointed member fixed to the upper surface of the propeller device at its center, whereby it may act as a point when the propeller device is spinning upon the ceiling, the propeller device being adapted so that 20 it may be dropped upon the spinner, when the spinner is rotating, whereby the momentum of the rotating spinner will cause the propeller device to rotate, the blades causing the propeller device to rise off of said 25 spinner.

Des Moines, Iowa, March 2, 1920.

RAY H. CLIFTON.