

E. W. DAVIS.
AERIAL TOY.
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1,014,953.

Patented Jan. 16, 1912.

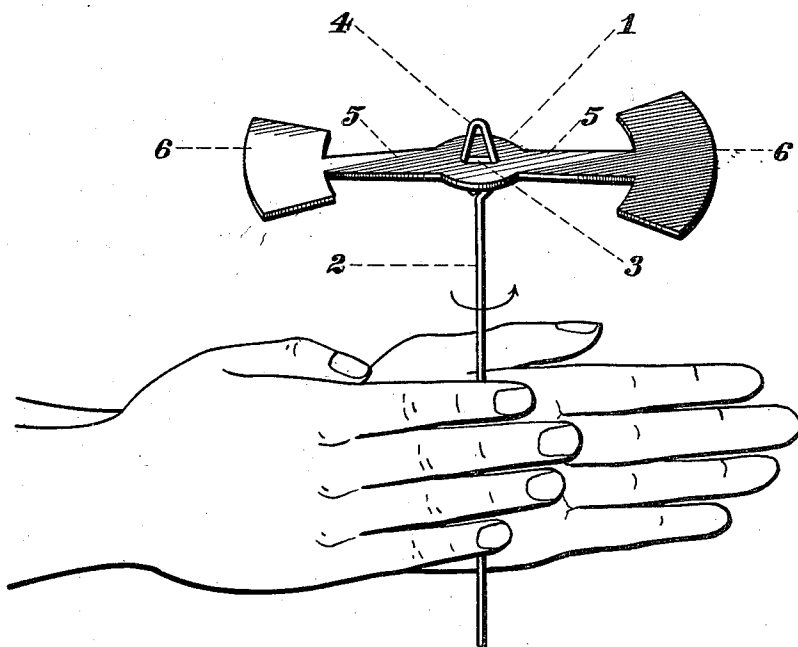


Fig. 1

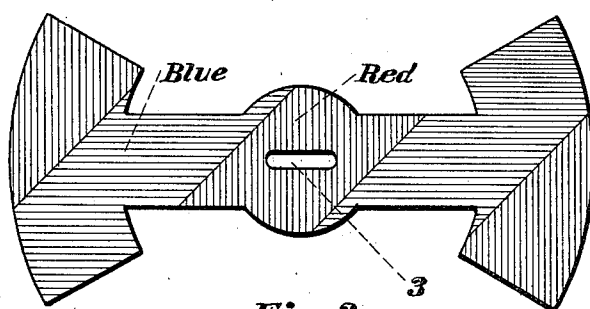


Fig. 3

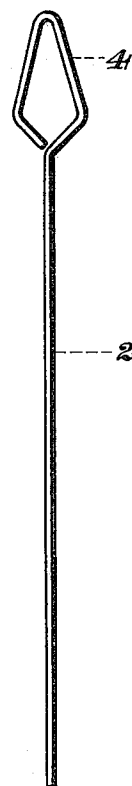


Fig. 2

WITNESSES:

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AERIAL TOY.

1,014,953.

Specification of Letters Patent.

Patented Jan. 16, 1912.

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To all whom it may concern:

Be it known that I, ERNEST W. DAVIS, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Aerial Toys, of which the following is a specification.

My invention relates to aerial toys in which a flying member or propeller is projected by rotating the same.

The object of this invention is to provide a toy of the class described which shall be of attractive appearance, which can be packed within small compass, and which can be manufactured cheaper than the toys of a similar nature which have been used heretofore. I attain these objects by simplifying and modifying the necessary parts as previously constructed and by omitting all parts which are unnecessary. The manufacturing cost may be thus reduced to approximately \$1.00 per thousand, which makes the improved device especially applicable as an advertising novelty.

In the annexed drawing illustrating the invention, Figure 1 is a perspective view of the assembled toy in position ready to be operated. Fig. 2 is an elevation of the rotating shaft shown in Fig. 1. Fig. 3 is a plan view of the propeller shown in Fig. 1 and illustrates the diagonal color stripes referred to hereinafter.

The toy consists preferably of but two pieces—the propeller 1, and the rotating shaft 2. The propeller 1, is provided with a slot 3, at its center, and the shaft 2, is provided with a wedge shaped portion 4, at one end, which wedge shaped portion is insertible within said slot.

The propeller 1, consists specifically of a central, circular, hub portion provided with two rectangular arms 5, 5. In order to increase the radius of gyration and thus increase the moment of inertia of the propeller without proportional increase of mass, sector shaped vanes 6, 6, are provided. The inclination of the vanes 6, 6 is preferably obtained by bending the arms 5, 5, along their diagonal axes.

The propeller 1, is constructed preferably of card board on account of its cheapness.

It is also less dangerous than metal when the propeller happens to strike the face of the operator. In order to provide cheap and attractive chromatic effects, the card-board stock, from which the propellers are blanked, may be printed in diagonal stripes of different colors, as indicated in Fig. 3. Upon rapid rotation of the propeller the diagonal division lines will be invisible and the colors will appear blended, as will be readily understood.

The shaft 2, Fig. 2, is constructed preferably of wire and is of such diameter as to be easily rotated between the hands. The wedge shaped portion 4, is made symmetrical, as shown, in order to make it balance when rotated.

In operation, the wedge shaped portion 4, is inserted in the slot 3, of the propeller 1, and the shaft 2, is rotated by rolling it between the hands, the propeller being thereby projected in flight. If the wedge shaped portion 4, is inserted somewhat forcibly into the slot 3, a greater speed may be obtained before the propeller leaves the shaft.

I am aware that prior to my invention, aerial toys have been constructed comprising an air propeller and means for rotating the same. I, therefore, do not claim such a combination broadly. What I claim as being new and useful, and that which I desire to secure by Letters Patent, is the cheap but efficient method of imparting rotary motion to the propeller, and the means for producing cheap, attractive, chromatic effects as herein described.

I claim:

In an aerial toy, the combination of an air propeller having a slot in the center thereof; and a single piece of wire adapted to be rotated between the hands and bent at one end to provide two offset portions insertible within said slot.

In testimony whereof I have hereunto affixed my signature in the presence of two witnesses.

ERNEST W. DAVIS.

Witnesses:

C. K. CHAMBERLAIN,
A. S. PHILLIPS.