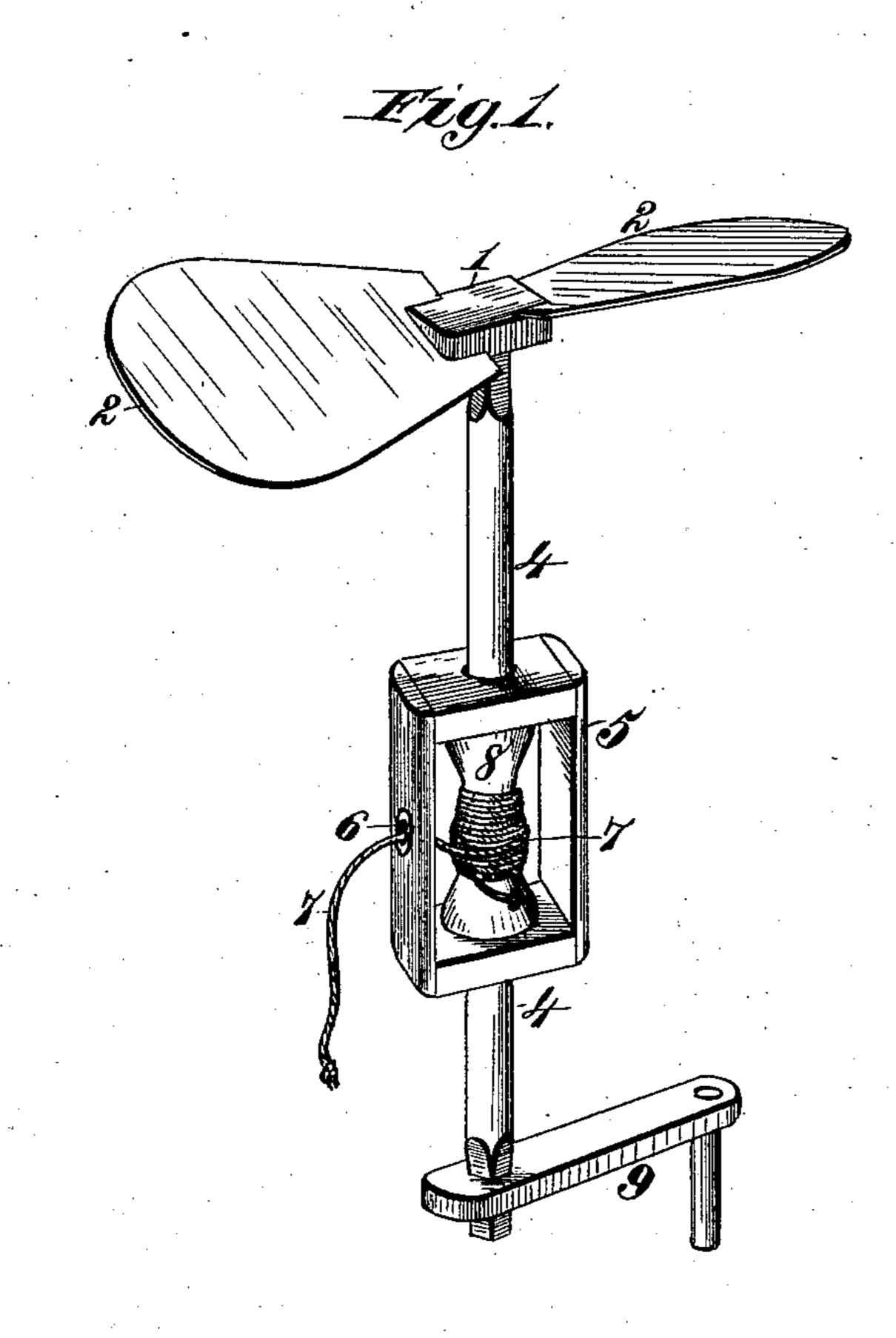
(No Model.)

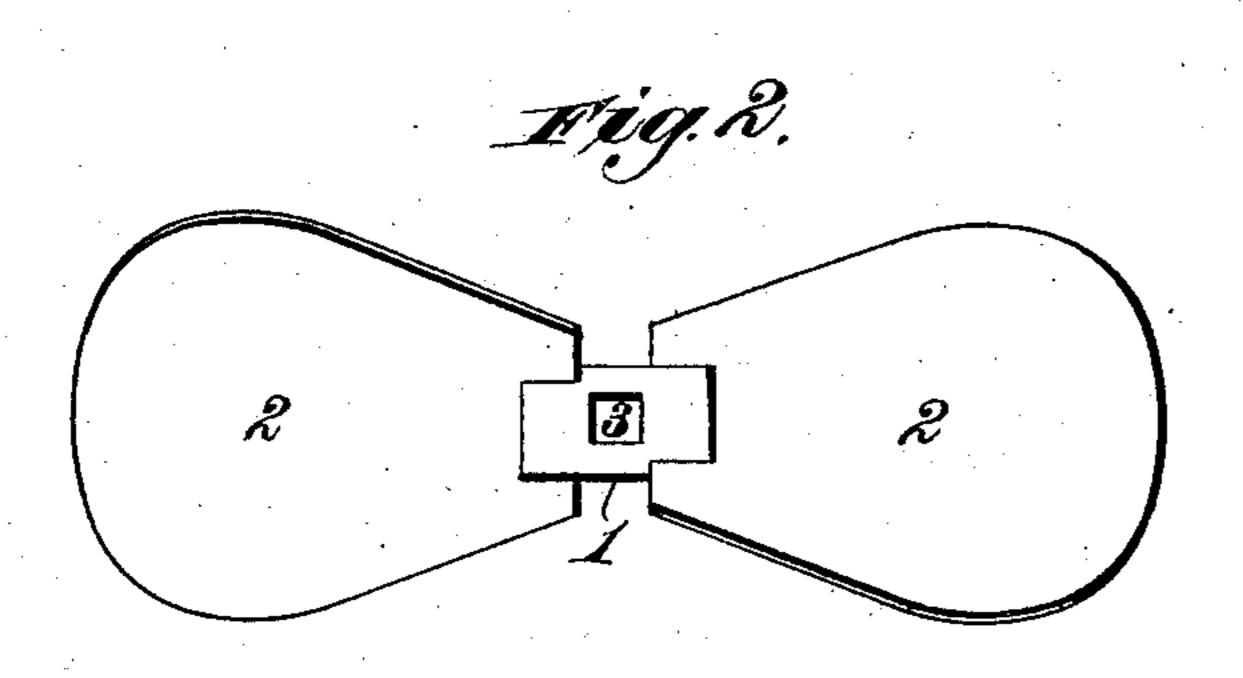
W. L. CROWSON.

FLYING TOP.

No. 368,909.

Patented Aug. 23, 1887.





Witnesses. Shut Errett,

Inventor.
William I. Crouson
By James L. Norris.
Atty.

## United States Patent Office.

WILLIAM L. CROWSON, OF MEMPHIS, TENNESSEE, ASSIGNOR OF ONE-HALF TO THOMAS H. AND JOHN D. MILBURN, BOTH OF SAME PLACE.

## FLYING TOP.

SPECIFICATION forming part of Letters Patent No. 368,909, dated August 23, 1887.

Application filed March 28, 1887. Serial No. 232,681. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM L. CROWSON, a citizen of the United States, residing at Memphis, in the county of Shelby and State of Tennessee, have invented new and useful Improvements in Flying Tops, of which the following is a specification.

This invention relates to that class of toys known as "flying tops," comprising two or no more vanes, blades, or wings set at an angle and detachably supported on one end of a rotary spindle that is journaled in a suitable frame which forms a handle for the toy.

My invention consists in the combination of a frame or box, a spindle rotatable in said frame or box, a flier on the spindle, a cord connected with the latter, and of a crank for winding the cord by which the spindle and connected vanes are set in motion; and it further consists in the construction and arrangement of parts, as hereinafter more fully set forth.

In the annexed drawings, illustrating the invention, Figure 1 is a perspective view of my improved flying top, and Fig. 2 is a bottom plan of the flier-vanes and their connecting-block or hub.

Referring to the drawings, the numeral 1 designates a central block or hub of any suit-30 able shape, to which are securely connected two or more vanes, blades or wings, 2, set obliquely or at alternately opposite angles to the horizontal plane of the flier. The under side of the flier-hub is formed with a rectan-35 gular recess, 3, to fit the squared upper end of a rotary spindle, 4, that is journaled longitudinally in a frame, 5, which forms a handle for the toy. This frame 5 is preferably rectangular, as shown, and in one side is provided 40 with a guide-opening, 6, for passage of a cord, 7, one end of which is secured to a pulley, 8, formed rigidly on the spindle. To the lower end of the spindle 4 is detachably fastened a crank-handle, 9, for turning the spindle and 45 pulley to wind the cord 7 thereon.

In operating the toy, the frame or box portion 5 is taken in the left hand, the crank 9 is then adjusted to the lower end of the spindle 4, the string is then wound once around the 50 box so that it can be held firmly and wound

tightly on the spindle, and the crank is turned to the right or away from the operator. After winding the string on the spindle, the flier is placed on the top of the spindle and pressed down firmly. Then, still holding the box in 55 the left hand in a vertical position, the forefinger of the left hand is pressed against the spindle, while with the right hand the string is straightened. The finger of the left hand is then removed from the spindle, and the string 60 is forcibly jerked with the right hand, when the top will rise in the air. The altitude which the flier attains depends very much on the speed at which it is rotating when it leaves the spindle; hence the necessity of pressing it 65 firmly on the spindle, so that the action of the blades or vanes will not lift it off the spindle till it has attained a high speed.

When the toy is properly manipulated, the top can be spun a hundred feet in the air. If 70 high spinning is desired, the top should fit the spindle tight enough to require a rapid rotation to force it off the spindle.

The top or flier may be made of paper, tin, vulcanized fiber, or any other thin light mate-75 rial, and may have any number of blades or vanes, from two upward. For high flying, however, two vanes are preferable.

By attaching a crank to the spindle the rapid and close winding of the cord on the spindle- 80 pulley is greatly facilitated, thereby enabling the toy to be quickly and conveniently put into condition for repeated operation.

Heretofore a flying top has been proposed wherein a pulley to which the cord is secured is 85 adapted to rotate on a stationary spindle fixed to a handle, the pulley having a pin to pass through a hole at one side of the center of the flier, whereby the rotation of the pulley on the spindle revolves the flier until the latter rises 90 therefrom into the air.

What I claim as my invention is—

1. The combination, in a flying top, of a frame or box, a spindle rotatable in said frame or box, a crank on the lower end of the spindle, 95 a flier on the upper end of the spindle, and a cord connected with the spindle and wound by turning the crank to rotate the spindle in the frame or box, substantially as described.

2. In a flying top, the combination of the 100

frame 5, having guide-opening 6, the spindle 4, having a rigid pulley, 8, the cord 7, the crank 9 on the lower end of the spindle, and a top or flier consisting of the vanes 2 and a central block or hub, 1, having a rectangular recess, 3, to fit the squared upper end of the spindle, substantially as described.

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

WILLIAM L. CROWSON.

Witnesses:
WM. MARSH,
C. W. Long.