W. P. & J. H. BOWER.

FLYING TOY.

APPLICATION FILED AUG. 9, 1916.

1,218,835. Patented Mar. 13, 1917.

Fig. 1.

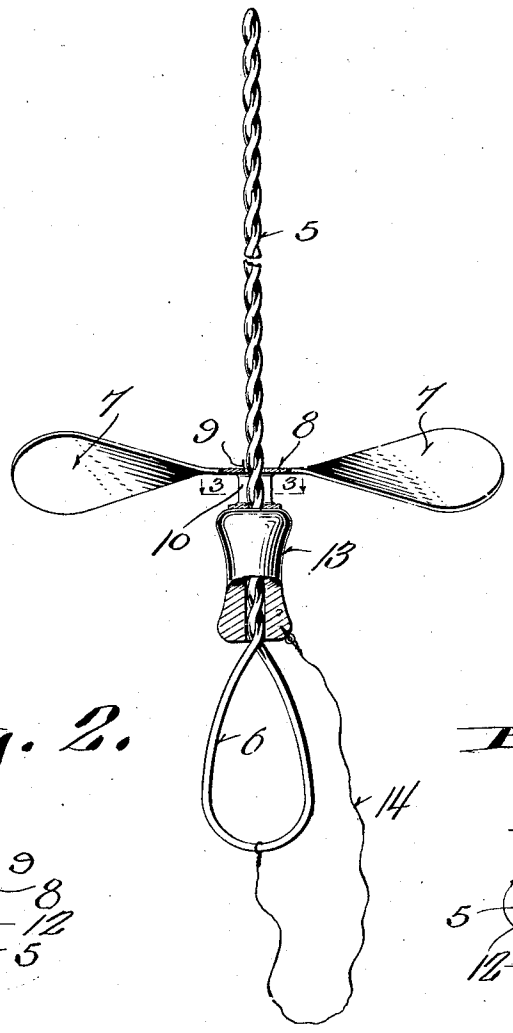


Fig. 2.

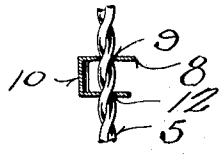
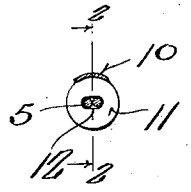


Fig. 3.



Witnesses:

Inventors
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By Attorneys

UNITED STATES PATENT OFFICE.

WILLIAM P. BOWER AND JOHN H. BOWER, OF MILWAUKEE, WISCONSIN.

FLYING TOY.

1,218,835. Specification of Letters Patent. Patented Mar. 13, 1917.

Application filed August 9, 1916. Serial No. 113,860.

To all whom it may concern:

Be it known that we, WILLIAM P. BOWER and JOHN H. BOWER, both citizens of the United States, and residents of Milwaukee, in the county of Milwaukee and State of Wisconsin, have invented certain new and useful Improvements in Flying Toys; and we do hereby declare that the following is a full, clear, and exact description thereof.

The present invention relates to new and useful improvements in flying toys, more particularly of that type including a propeller shaped aerial member which is maintained in the air by its rotative momentum and which is detachably associated with a suitable device for imparting rapid rotative movement thereto upon launching it in the air.

It is in general the object of the present invention to simplify the structure and improve the efficiency and the convenience of operation of toys of this nature and it is more particularly an object to provide a launching device for the aerial member which is of maximum simplicity.

The present invention contemplates the provision of a launching device including a spirally grooved shank on which the aerial member is slidable and with which it is so engaged as to be imparted rotative movement incidental to its sliding movement thereon, the aerial member being movable past one end of the shank to clear said member for flight, and it is further an object of the invention to provide an aerial member which is of exceedingly simple structure, and more particularly which is adapted to be stamped from a single sheet of material.

With the above and other objects and advantages in view the invention resides more particularly in the novel combination, arrangement and formation of parts more particularly hereinafter described and pointed out in the appended claim.

In the drawings:

Figure 1 is a side elevation of a flying toy embodying the present invention, with portions thereof broken away to more clearly show the structure.

Fig. 2 is a transverse sectional view through the central portion of the aerial member and the associated portion of the same, as indicated by the line 2—2 of Fig. 3.

Fig. 3 is a transverse sectional view through the aerial body member and the associated shank portion on the line 3—3 of Fig. 1.

Referring now more particularly to the accompanying drawings, the launching device of the present toy comprises a spirally grooved shank 5 formed of a pair of twisted wire sections which are bent at one end of the shank to form a handle loop 6 and which at the other end of the shank terminate in a manner not interfering with the continuity of the spiral grooves.

The aerial member associated with the launching shank is stamped from a single sheet of material and comprises a pair of relatively inclined propeller blade portions 7 connected by a shank 8 centrally apertured at 9 to receive the launching shank, and form a bearing therefor, and at one side of the shank 8 is a lateral extension 10 carrying an inwardly directed portion 11 provided with an oblong opening 12 receiving the shank in a manner whereby spiral movement is imparted thereto upon movement along the shank, the bearing opening 9 of the aerial member being circular.

Slidable on the shank is a thrust block 13 and thus in operation, when the thrust block and aerial member are disposed on the inner portion of the shank, a quick outward thrust of the block will slide the aerial member longitudinally upon the shank, to clear the outer end of the shank, and at the same time a rotative movement will be imparted to the aerial member to maintain it in the air.

An exceedingly simple toy has thus been provided which will launch and simultaneously impart rotative movement to an aerial member whereby it will be suspended in the air by reason of the inclination of its blades.

To prevent loss of the thrust block, it is preferably connected with one end of a cord 14 which has its other end connected with the handle of the loop.

We claim:

A flying toy comprising a spirally grooved launching rod, an aerial member slidable on the launching rod and formed from a single sheet of material comprising a pair of blade portions, a shank connecting said blade portions and apertured to receive the launching rod and a lateral and inward extension at one side of the shank apertured to receive the launching rod in a manner imparting

rotative movement to the aerial member, and a thrust block slidable on the launching rod and engageable with the said extension of the aerial member.

In testimony that we claim the foregoing we have hereunto set our hands at Milwaukee, in the county of Milwaukee and State of Wisconsin, in the presence of two witnesses.

WILLIAM P. BOWER.
JOHN H. BOWER.

Witnesses:
FRANK D. RATCLIFFE,
M. E. DOWNEY.