

1,331,418.

Patented Feb. 17, 1920.

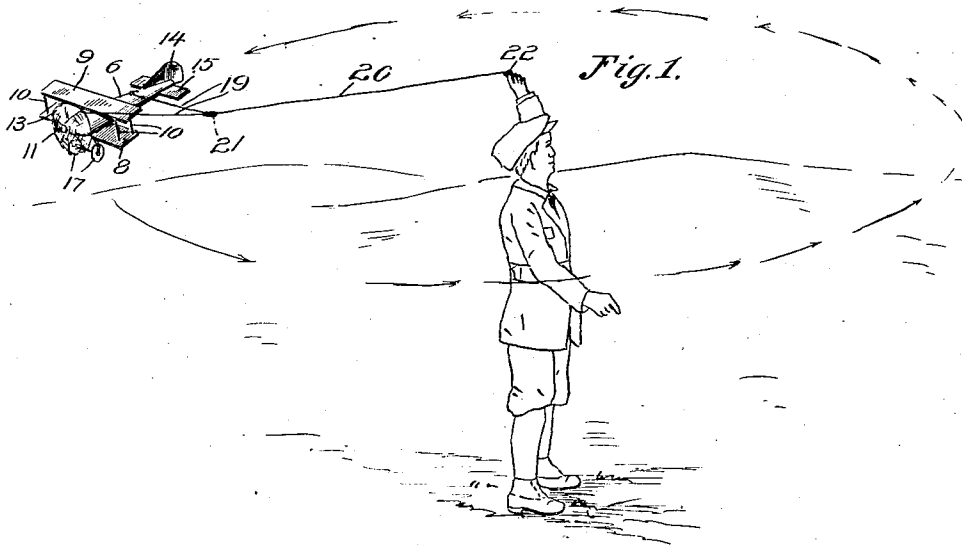


Fig. 2.

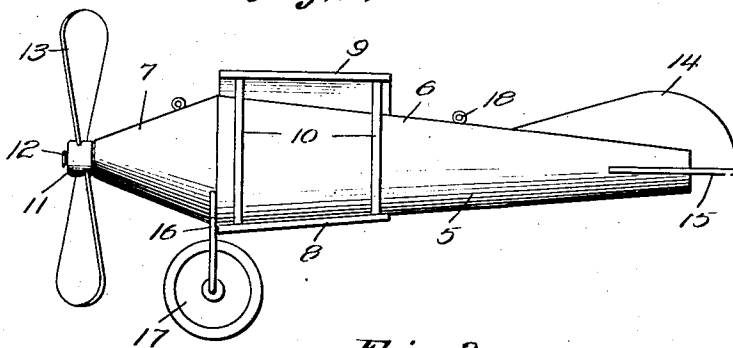
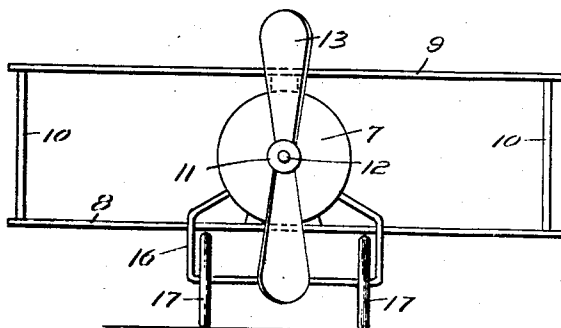


Fig. 3.



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AERIAL TOY.

1,331,418.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, ALEXANDER CRAIG, a citizen of the United States, residing at West Pittston, in the county of Luzerne and State of Pennsylvania, have invented certain new and useful Improvements in Aerial Toys, of which the following is a specification.

The invention relates to an aerial toy and more particularly to the class miniature aeroplane.

The primary object of the invention is the provision of a toy of this character, wherein on manipulating the same by a flexible element, such as a cord, it can be sustained in flight and will glide through the air in a manner simulating a heavier than air flying machine, thereby affording amusement and entertainment to an operator as well as to observers.

Another object of the invention is the provision of a toy of this character, wherein the same will glide through the air, and will ascend and descend with smoothness and ease without possibility of damage thereto resultant from the sudden descent and when in flight will effect maneuvers both in gliding and horizontal stability thereby mimicking the action and activities of a full size aeroplane.

A further object of the invention is the provision of a toy of this character, which is extremely simple in construction, readily and easily operated, capable of aerial flight and maneuvering, entertaining and amusing, thoroughly reliable and efficient in its purpose, strong, and inexpensive to manufacture.

With these and other objects in view the invention consists in the features of construction, combination and arrangement of parts, as will be hereinafter fully described illustrated in the accompanying drawing and pointed out in the claim hereunto appended.

In the accompanying drawing:

Figure 1 is a perspective view of the aeroplane toy constructed in accordance with the invention, shown in flight and under the control of an operator, the view being also indicative of one direction of movement of said toy when in flight.

Fig. 2 is a side elevation of the toy,

Fig. 3 is a front elevation thereof.

Similar reference characters indicate cor-

responding parts throughout the several views in the drawing.

Referring to the drawing in detail. The aeroplane toy comprises a fuselage 5, preferably of a cigar shape having a major rearwardly tapered portion 6, and a forwardly tapered nose portion 7, these portions being preferably of reversed conical form so as to avoid the least resistance to the fuselage when the toy is in flight.

Disposed above and below the fuselage 5 at the forward end of the rearwardly tapered major portion 6 are upper and lower sustaining planes 8 and 9 respectively, which may be termed the main supporting planes, and the same are disposed in superposed transverse parallel relation to each other through medium of vertical struts 10 which secure the planes together near opposite ends thereof, these planes being also permanently and securely fastened in any suitable manner to the fuselage.

Arranged at the smaller end of the nose portion 7 of the fuselage 5, is a pivot pin 11 constituting an axle for the propeller wheel 12, which has opposed curved propeller blades 13. The propeller wheel is freely rotatable on the axle, and is adapted to rapidly rotate when the toy is in flight, thereby imitating the propelling of said toy during flight to simulate a full size aeroplane.

Arranged at the rear end of the fuselage 5 is a vertical stationary rudder 14, and stabilizing wings 15 which extend laterally from opposite sides of the fuselage and are fixed thereto, the rear end portion of said fuselage being preferably slitted for the mounting of the stabilizing planes 15 which are in a unit therein and also for the mounting of the rudder 14 in the upper portion thereof which rises from the stabilizing planes 15.

Connected to the fuselage forwardly of the sustaining plane 8 at the point of juncture of the portions 6 and 7 is a wire frame 16, constituting a wheel support upon which are journaled the wheels 17, the same being held in spaced relation to each other in any suitable manner, and constituting ground wheels for the aeroplane toy.

Mounted in the fuselage 5 forwardly and rearwardly of the sustaining planes and spaced the desired distance from the latter are eye members 18 to which are connected the branches 19 of a flexible operating ele-

ment such as a cord 20, the free end of which is adapted to be grasped by the hand of an operator for manipulating the toy to bring the same into flight and for the maneuvering thereof during flight.

The toy when operated is adapted to be swung in a circular course above an operator to bring the same into flight over the head of an operator as illustrated in Fig. 1 of the drawing, and on pulling upon or loosening of the cord 20 the said toy can be maneuvered while in flight.

The cord 20 which constitutes the flexible operating element has at its point of connection with the branches 19 a swiveled member 21 which prevents any possibility of the twisting of said cord 20 to obviate the shortening thereof, and prevents it from breaking during the constant action of the toy when in flight, while at the free end of said cord 20 is a ring 22 to be engaged by the finger of the hand of the operator, so that the latter can have full control of the toy and prevents the cord from slipping out of the hand during the activity of said toy.

From the foregoing it is thought that the

construction and manner of use of the toy will be clearly understood and a more extended explanation has been omitted.

What is claimed is:

An aeroplane toy of the character described comprising a fuselage having a major rearwardly tapered portion and forwardly tapered nose portion conical formation, sustaining planes mounted transversely of the fuselage and having connecting structures, a frame depending from the fuselage, ground wheels journaled upon the frame, a propeller wheel rotatably mounted in the nose end of the fuselage, rudder and stabilizing means at the rear end of the fuselage, a flexible member having connection with the fuselage forwardly and rearwardly of the sustaining planes, said rudder and stabilizing means including a vertical rudder and a stabilizing plane, the latter being disposed transversely of the fuselage and at right angles to said rudder.

In testimony whereof I hereunto affix my signature.

ALEXANDER CRAIG.