Dec. 7, 1937. W. J. WALTER 2,101,276

TOY AIRPLANE

Filed Nov. 20, 1936

Fig. 1

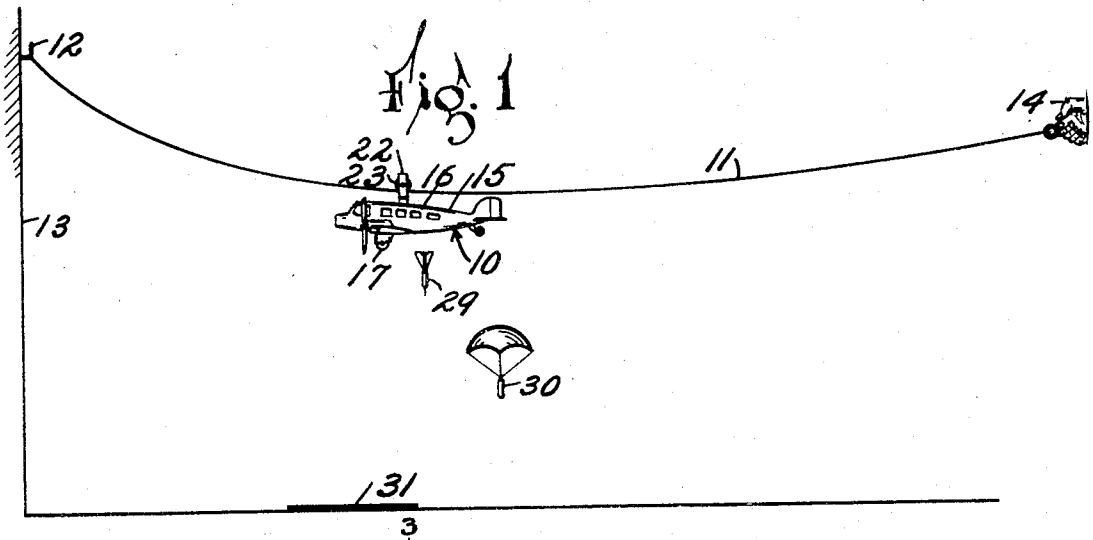


Fig. 2

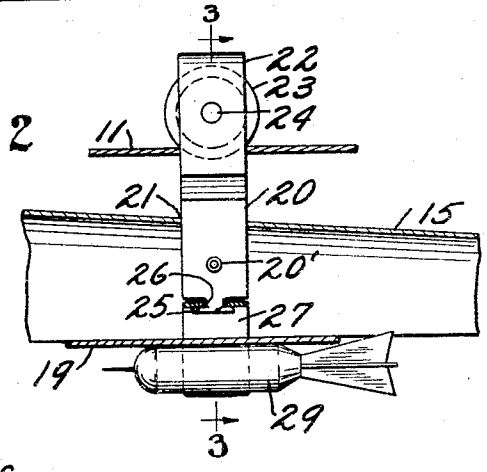


Fig. 3

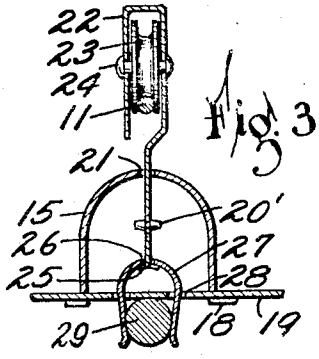


Fig. 5

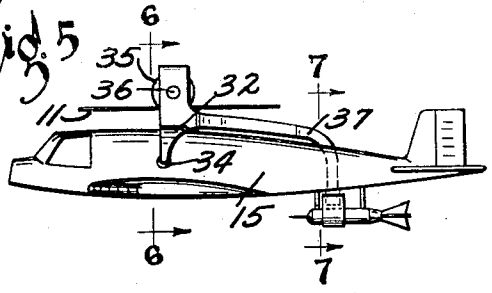
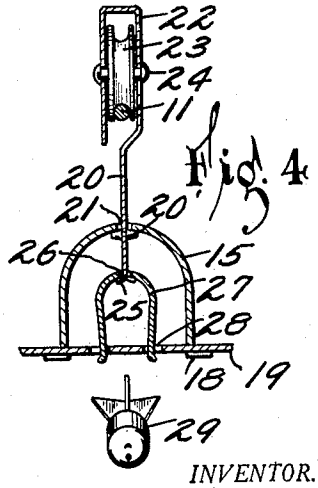


Fig. 4



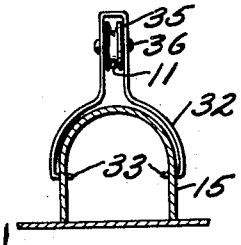


Fig. 6

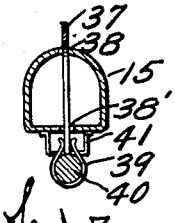


Fig. 7

INVENTOR.
WILLIAM J. WALTER
BY P. W. Pomeroy
ATTORNEY

Patented Dec. 7, 1937

2,101,276

UNITED STATES PATENT OFFICE

2,101,276

TOY AIRPLANE

William J. Walter, Mishawaka, Ind.

Application November 20, 1936, Serial No. 111,757

7 Claims. (Cl. 46—77)

This invention relates to toy airplanes adapted to be manoeuvred on a string supported at one end on a stationary object and manipulated at the other end by the operator.

One of the primary objects of my invention is to provide a toy airplane which will simulate flight and simple manoeuvres by swaying the supporting string and which will move in cycles forwardly and backwardly upon manipulation of the string.

Another object is to simulate the aerial transportation of parcels, including loading, takeoff, banking and landing, all of which may be accomplished by manipulating the supporting string.

A further object is to simulate aerial relief work by dropping a ball or parcel attached to a small parachute which may be accomplished by giving the supporting string a sharp pull.

A still further object is to simulate aerial bombardment by releasing a projectile, ball or bomb-shaped object.

Still another object is to provide a game whereby a projectile or other object may be released with the view of its striking a target positioned beneath the airplane.

Other objects, and objects relating to details of construction, methods of manufacture and operation will be apparent from the drawing and the detailed description to follow.

Referring to the accompanying drawing in which like numerals refer to like parts throughout the several views:

Fig. 1 is a side elevation of a toy airplane supported by a string and incorporating my invention therein;

Fig. 2 is an enlarged fragmentary longitudinal sectional view showing the supporting string and the means for carrying the airplane thereby and including a projectile carried by the airplane.

Fig. 3 is a transverse sectional view taken on the line 3—3 of Fig. 2.

Fig. 4 is a view similar to Fig. 3 but with the projectile released from the airplane;

Fig. 5 is a side elevation of a toy airplane showing a slightly modified form of my invention.

Fig. 6 is a transverse sectional view taken on the line 6—6 of Fig. 5;

Fig. 7 is a transverse sectional view taken on the line 7—7 of Fig. 5.

Referring to the drawing, I have shown a toy airplane indicated generally by the numeral 10 supported by a string 11 secured at 12 to a stationary object such as a wall 13, the other end of the string being manipulated by the operator the hand 14 being illustrated. The details of construction of the toy airplane per se forms no part of my invention except as the same is included therewith and for the purpose of illustration I have shown an airplane body 15 having wings 16 and a landing gear 17 attached thereto. The body 15 is a metal stamping which is U-shaped intermediate its ends and has downwardly extending prongs 18 adapted to be inserted through slots in a bottom plate 19 which is clamped against the body by bending the prongs outwardly as illustrated in Fig. 3. The support for the toy airplane comprises a plate 20 extending through a slot 21 in the top of the body 15 and has its exposed end looped at 22 to receive the pulley 23 rotatably supported therein by the rivet 24.

As illustrated in Figs. 1, 2 and 3, the pulley 23 is adapted to roll on the string 11 so that the airplane 10 can be manoeuvred thereon. The end of the plate 20 opposite to the roller 23 is provided with a pair of prongs 25 adapted to be inserted through a slot 26 formed in the spring clip 27 and then pressed in opposite directions to hold the clip 27 onto the plate 20 in a manner to permit limited universal movement thereon. The free ends of the U-shaped clip 27 extend through slots 28 formed in the plate 19 to grip a projectile or other object 29 as is best illustrated in Figs. 2 and 3. A stop 20' secured to the plate 20 limits the vertical movement thereof relative to the body 15 and prevents the clip 27 from pulling through the slots 28 in the plate 19. The article inserted between and carried by the free ends of the U-shaped spring clip 27 may comprise a projectile 29 as shown in Fig. 2, a parachute 30 as shown in Fig. 1, or any other object having a portion thereof shaped to be clamped between the prongs of the U-shaped clip.

When the object such as the projectile 29 is inserted between the free ends of the U-shaped clip 27 and the airplane is manipulated on the string 11 suitable manoeuvring can be obtained to simulate banking, landing, flight, takeoff, or other stunts which can be accomplished by the pilot of an airplane in actual flight. By a sharp pull of the string the clamp 27 will disengage from the projectile or other object permitting the same to drop, as is illustrated in Fig. 1, to simulate bombing, the dropping of the parachute or the discharge of other articles as done by the pilot of a full sized airplane.

My device may also be used as a game and as shown, a target 31 may be positioned beneath the airplane, it being the object to manipulate the airpane on the string 11 and disengage the

projectile therefrom so that it will drop with a view of hitting the bull's-eye in the target. Thus, two or more persons may play the game and the operator who is most successful in discharging the projectile to hit or approach the bull's-eye will win the game.

In Figs. 5, 6 and 7 I have shown a slightly modified form of my invention in which the airplane 10 may be substantially like that shown in Fig. 1 but in which the support therefor comprises a member having a U-shaped portion 32 provided with ends 33 which are bent inwardly and are received in slots 34 formed in the sides of the body 15. The upper end of the U-shaped portion 32 is formed to provide parallel sides in which the pulley 35 is rotatably mounted on the pin 36. Rearwardly of the U-shaped portion 32 is a tail piece 37 having its free end bent downwardly to extend through a slot 38 formed in the body 15 and through a slot 38' in the bottom thereof to be received between the free ends of a U-shaped spring clamp 39 wrapped around and forming part of the projectile or other object 40. A U-shaped bracket or projection 41 is illustrated as being secured to the bottom face of the body 15 so that when the projectile 40 is being carried by the airplane its upper face will rest against the bracket 41. When it is desired to release the projectile, the string 11 may be given a sharp pull which will release the tail piece 17 from between the free ends of the U-shaped clamp 39 as will be apparent from an inspection of Fig. 7.

I have illustrated and described several objects which may be supported by the spring clamp 27 or of which the spring clamp 39 forms a part and when in the claims I refer to a projectile, it is to be understood the term is to be used broadly and is to include any object which may be used in connection with the toy airplane as previously described.

While I have shown two modifications of my invention, it is to be understood that the same is not limited to the details of construction of the toy airplane or to the exact details of the supporting means therefor but on the contrary, my invention comprises broadly a support for such a device which is carried by a string and upon manipulation of the string the airplane can be manipulated to perform any or all of the movements set forth in the objects of the invention and to carry or release a projectile or other package as has been previously explained, and I therefore do not wish to limit my invention to the details shown and described but only by the subjoined claims.

What I claim is:

1. A toy airplane comprising, a body portion, a plate extending into said body, a pulley rotatably supported by said plate, and a U-shaped projectile receiving clip supported by said plate extending beneath said body.

2. A toy airplane comprising, a body portion, a plate extending into said body, a pulley rotatably supported by said plate above said body, and a projectile receiving means supported by said plate extending beneath said body.

3. A toy airplane comprising, a body portion, a plate extending into said body, a pulley rotatably supported by said plate above said body, and a U-shaped projectile receiving clip having limited universal movement relative to said plate and supported thereby within said body and having its free ends extending beneath said body.

4. A toy airplane comprising, a body portion, a plate extending into said body, a pulley rotatably supported by said plate above said body, projectile receiving means supported by said plate extending beneath said body, and stop means on said plate to limit the vertical movement of said plate and clip relative to said body.

5. A support for a toy airplane including a body portion comprising, a member having movement relative to said body portion, a pulley on said member adapted to be rotated on a string, and means forming an operative part of said member extending beneath said airplane to support and discharge a projectile.

6. A support for a toy airplane including a body portion comprising, a member having movement relative to said body portion, a pulley on said member adapted to be rotated on a string, and a U-shaped projectile receiving clip supported by said member extending beneath said airplane.

7. A support for a toy airplane including a body portion comprising, a member having a U-shaped portion attached to said body portion, a pulley in said member adapted to be rotated on a string, and a tail piece forming a part of said member extending beneath said airplane to support and discharge a projectile.

WILLIAM J. WALTER.