July 19, 1949. W. C. MILLER 2,476,678

INFLATABLE TOY AIRPLANE

Filed Jan. 14, 1947

Fig. 1.

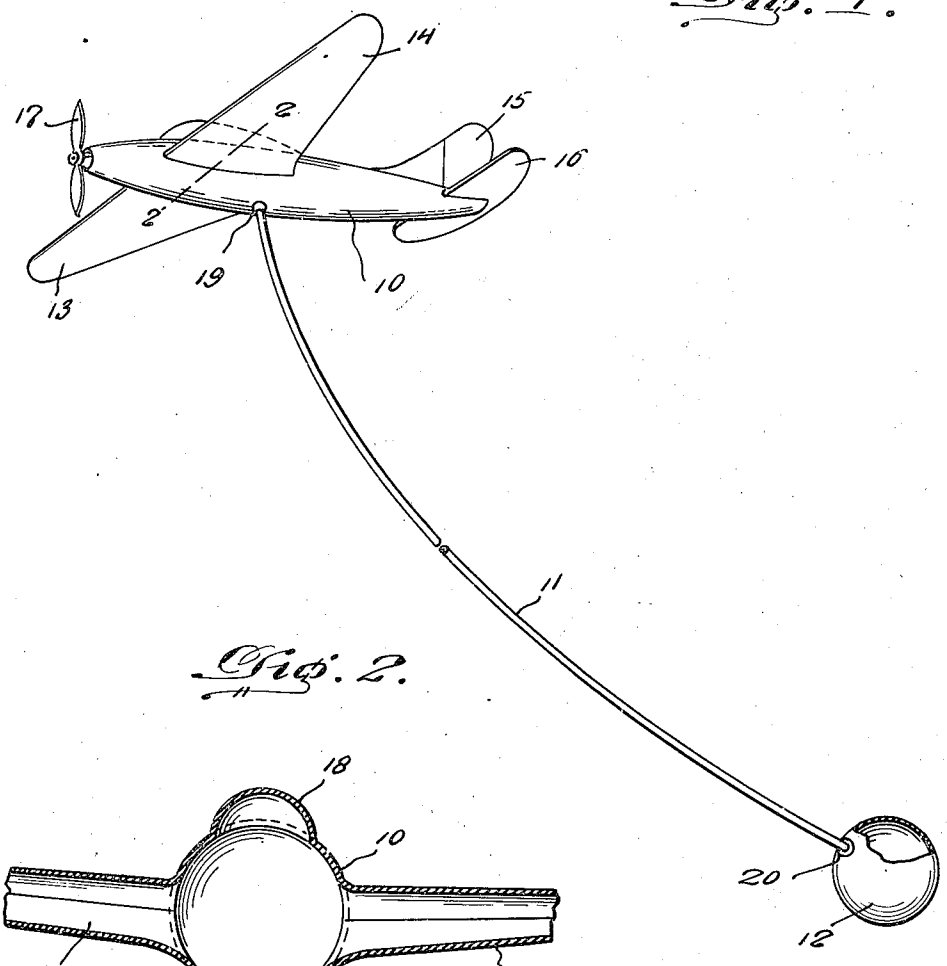


Fig. 2.

Inventor
Walter C. Miller,

By McMorrow, Berman & Davidson
Attorneys

Patented July 19, 1949

2,476,678

UNITED STATES PATENT OFFICE

2,476,678

INFLATABLE TOY AIRPLANE

Walter C. Miller, Frankfort, Ill.

Application January 14, 1947, Serial No. 721,947

1 Claim. (Cl. 46—77)

1

This invention relates to toy airplanes of the balloon type, and in particular, an inflatable toy in the form of an airplane with a comparatively small supply tube extending therefrom through which a lighter-than-air gas may be injected into or extracted from the airplane by a bulb at the end of the tube.

Toy balloons have been made of various designs and in different shapes to imitate or resemble different objects or devices, and these are generally made of relatively thin rubber and provided with a connection wherein air or gas may be blown or injected into the device to inflate the same, and some of these toy balloons are provided with means for retaining the air or gas therein. These toy balloons are sometimes provided with extending cords, but they can only be inflated or deflated by drawing the device downward and opening an inlet nipple thereof.

With these ends in view, this invention contemplates a toy balloon or airplane with a small extending supply tube having a bulb at the end thereof, wherein the bulb may be depressed to inject air or a lighter-than-air gas therein through the tube into the toy, and the toy may be deflated so that it will descend by releasing the bulb wherein air or gas will be extracted from the toy.

A purpose of this invention is to provide an improved activated toy of the balloon type wherein the toy may be controlled so that it will ascend or descend as the operator thereof desires.

The toy may be of any size or shape, although it is preferred that it be made to imitate an airplane, and in the deflated position it may be placed upon the floor or any surface, and as the bulb is compressed, it will take off and remain in the air as long as the bulb is held compressed. The bulb may be partly released to partially deflate the device, and when it is completely released, the toy will be deflated and will drop.

The object of this invention is, therefore, to provide means for causing a toy balloon or similar device to ascend or descend at the will of the operator.

Another object is to provide means for readily inflating an airplane in the form of a toy balloon in which the inflating means remains associated with the airplane.

A further object is to provide an inflatable toy in the form of an airplane in combination with means for causing the toy to ascend or descend in which the elements thereof are comparatively simple and inexpensive.

2

With these and other objects in view, the invention includes a thin rubber toy or device, such as an airplane, with a small supply tube extending therefrom and with a bulb preferably containing a gas lighter than air attached to the end of the tube.

Other features and advantages of the invention will appear from the following description taken in connection with the drawings, wherein:

Figure 1 is a view illustrating the elements as they appear in use with parts broken away.

Figure 2 is a partial section through the body of the device on line 2—2 of Figure 1, with the ends of the wings and lower portion of the supply tube broken away.

The inflatable toy is formed with a body portion, a bulb, and a connection tube, and with a lighter-than-air gas distributed through the parts, the bulb may be compressed to force a sufficient amount of the gas in the body to provide lifting power therefor, or the bulb may be released to withdraw some of the gas wherein the body will overbalance the lifting force and descend.

Referring now to the drawings, wherein like reference characters indicate corresponding parts, the inflatable toy of this invention includes a hollow body 10, a supply tube 11 and a bulb 12.

In the design shown, the body 10 of the toy is provided with wings 13 and 14, a rudder 15, an elevator 16 and a propeller 17. The body portion may be provided with a bulge 18 to represent a cabin of an airplane, and the tube 11 may be connected to the under surface thereof through a socket or connection 19. The opposite end of the tube 11 is connected to the bulb 12 through a similar socket or connection 20.

The inflatable rubber balloon or airplane of this invention includes, therefore, a body element which may be made in the form of an airplane, animal or other object or device, a bulb by which air or gas may be injected into the body portion, and a tube connecting said body portion to the bulb.

The elements may be manufactured and supplied in the assembled positions, as illustrated in Figure 1, and the elements may contain a gas that is lighter than air, so that when the bulb is compressed, and air or gas therein forced into the body of the airplane, it will ascend, as hereinbefore described.

It will be understood that modifications may be made in the design or arrangement of the

elements without departing from the spirit of the invention.

What is claimed is:

In a toy, a balloon simulating an airplane and comprising a hollow fuselage and hollow wings, a flexible elongated tube connected with the fuselage and leading to the interior thereof, and a closed bulb connected with the opposite end of the tube and having the tube leading to the interior of the bulb, the balloon, tube and bulb forming a completely closed unit filled with a lighter-than-air gas, the volume of gas within the balloon when the bulb is released being slightly less than the amount required to cause the balloon to rise, and the increased amount of gas within the balloon caused by the collapsing of the bulb being sufficient to cause the balloon to rise in the air.

WALTER C. MILLER.

REFERENCES CITED

The following references are of record in the file of this patent:

UNITED STATES PATENTS

Number	Name	Date
817,442	Page	Apr. 10, 1906
1,243,287	Haigh	Oct. 16, 1917
1,633,238	Bassett	June 21, 1927
1,690,978	Jatunn	Nov. 6, 1928