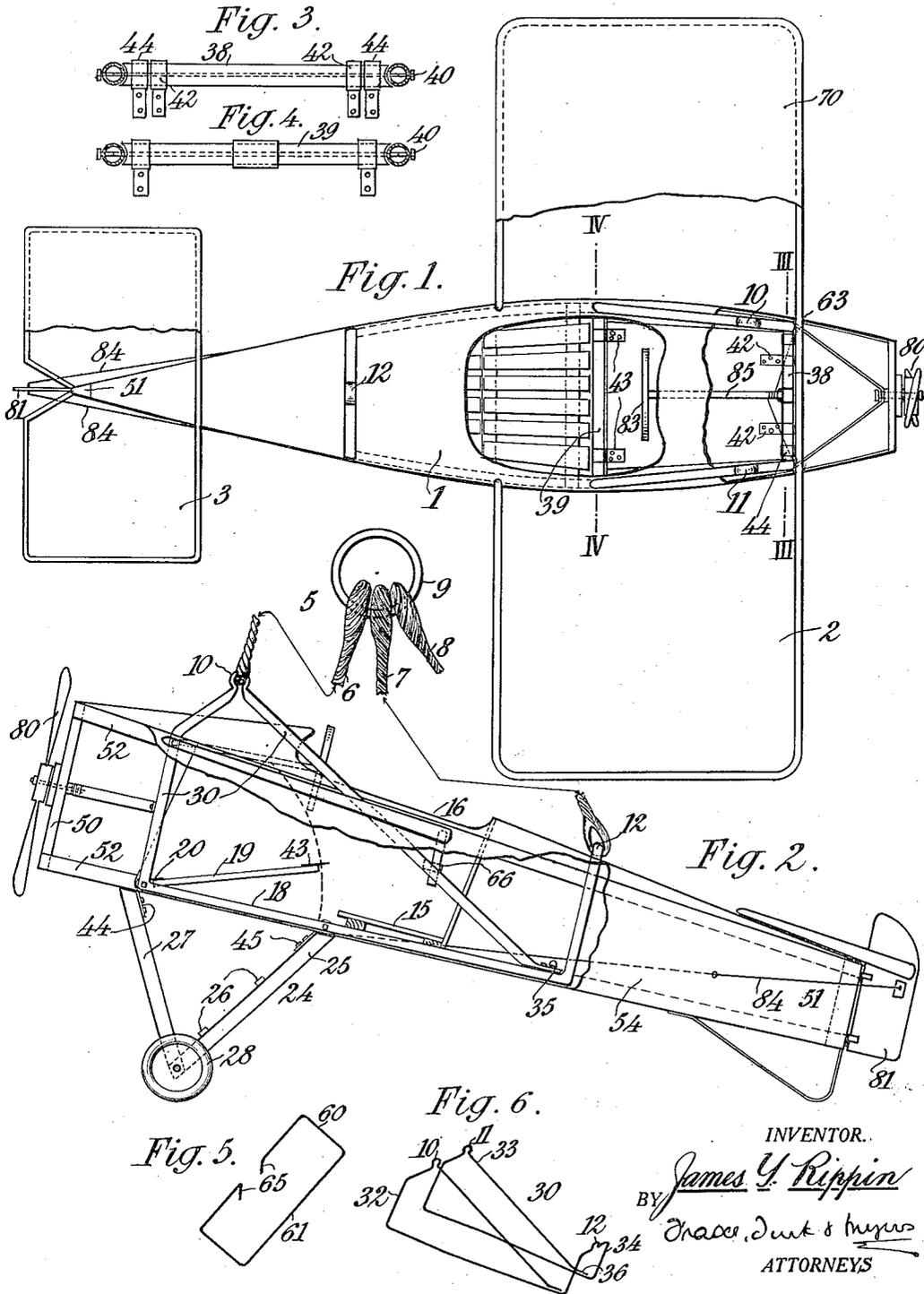


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J. Y. RIPPIN
AEROPLANE TOY

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AEROPLANE TOY.

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To all whom it may concern:

Be it known that I, JAMES Y. RIPPIN, a citizen of the United States of America, residing in the borough of Manhattan, city, county, and State of New York, have invented certain new and useful Improvements in Aeroplane Toys, of which the following is a specification.

This invention relates to aeroplane toys and aims to provide improvements therein.

The present invention provides a toy which operates as a swing and has the appearance of, and simulating in some respects, an aeroplane.

The invention provides a toy such as described, which may be readily manufactured and assembled. The invention further provides means whereby the body of the toy may be strongly constructed, so as not to develop structural weakness under the strains of use, and is particularly so constructed that the parts to which the suspending means are attached are strong and not liable to pull out.

The invention further provides a convenient means for entering the toy from the ground.

The invention further provides certain operative mechanism similar to that on an aeroplane, whereby during the swinging of the device, a child, for example, can pretend that he is operating an aeroplane.

The invention further provides certain structural parts and combinations, herein-after more fully described.

An embodiment of the invention is illustrated in the accompanying drawing. In said drawing,—

Figure 1 is a top plan view broken away, however, in parts, to more clearly show the construction;

Fig. 2 is a side elevation, likewise broken away in parts to more clearly show the construction;

Fig. 3 is a detail sectional view on the line III—III, Fig. 1;

Fig. 4 is a detail sectional view on the line IV—IV, Fig. 1;

Figs. 5 and 6 are diagrammatic views showing the shape of the wing frame and the strong body frame.

In said drawings, numeral 1 designates the body of the toy, preferably in the form and imitation of a covered cigar-shaped aero-

plane fusilage, and numeral 2 designates an imitation wing. The toy may also be provided with a rear imitation wing 3.

Numeral 5 designates the suspension means, conveniently in the form of three ropes 6, 7, 8, joined at their upper ends to a ring 9. The ropes 6, 7 and 8 are connected in three places to the aeroplane, as by means of eyes or the like, 10, 11, 12.

The aeroplane has a seat 15 therein, on which the child sits, and an opening 16 through which the head and upper part of the body of the child may project. An opening 18 may be provided in a part of the underside of the body, and a door 19 is preferably provided over said opening. The door 19 is conveniently a hinged door, as indicated at 20, and preferably swings upward. When swung upward, the door uncovers the opening 18 and provides a bottom entrance to the body of the swing. When swung downward to closed position, the door 19 constitutes a part of the floor of the body. Beneath the opening 18 there is preferably arranged a ladder 24 simulating a running or landing gear and conveniently comprising side pieces 25, rungs 26, and braces 27. Wheels 28 may be provided for carrying out the effect of the running gear.

In order to provide a strong and safe body, particularly around the seat, and a strong and secure suspension, the body is constructed in whole or in part upon a strong frame 30, in its preferred form having the construction shown diagrammatically in Fig. 6.

The said strong frame 30, in its preferred construction, is composed of a single rod of metal, or iron pipe, the ends of which are looped and bent back upon themselves to form the loops 32, 33, which are substantially of triangular form. The middle part of the pipe or rod constitutes a cross-piece connecting the two looped portions of the frame, and is preferably arched upwardly, as indicated at 34. The free ends of the rod are preferably made secure to the frame, as indicated at 35, 36. The eyes 10, 11, 12, for the suspension ropes, are conveniently formed upon the strong frame 30. The lower parts of the frame 30 are preferably connected by cross-pieces 38, 39 (Figs. 3 and 4), and these may conveniently be tubular pieces of metal, bolts or rivets 40 passing

through the cross-pieces, and through the sides of the frame 30, and holding the parts together. Straps 42, constituting the hinge connection 20 with door 19, may be attached to the cross-piece 38. Projections 43 at the opposite side of the door 19 may bear upon the opposite cross-piece 39. Straps 44 connected to the brace-pieces 27 may be provided for hingedly connecting the said pieces 27 to the cross-piece 38, and straps 45 may be provided for hingedly connecting the side pieces 26 of the ladder to the cross-piece 39. By disconnecting the brace-pieces 27 and side pieces 26 from each other, said parts may be folded flat against the underside of the body, thus facilitating packing and shipping of the swing.

The fuselage is preferably built around the strong frame 30. It may be conveniently formed of a head board 50, and a tail or stern post 51. The head board 50 and tail post 51 may be conveniently connected by light wooden strips 52. Light metal, or other suitable sheathing 54, may be placed upon the light frame constituted by the strips 52, head-piece 50, and stern post 51.

The frame 60 for the wings (Fig. 5) is preferably formed of a single rod or bar of iron, or piece of metal pipe, and is preferably rectangular in shape, as shown. The portion 61 of the frame, which extends across the front, is conveniently fastened in notches in the strips 52, as indicated by numeral 63, and said portion 61 passes through the front part of the sheathing. The end portions 65 of the rod or pipe constituting the frame, are preferably bent down so as to constitute tenons which may be fitted into keepers 66 upon the body. The frame is preferably covered at each end by sheet-metal or other suitable sheathing 70, the space at the middle portion of the frame, however, where the body passes through the frame, being left open.

The imitation wing 3 may be constructed similarly to the imitation wing 2.

An imitation propeller 80 may be provided at the front of the body, and a vertical hinged rudder 81 is preferably provided at the rear. A hand-wheel 83 is preferably provided in front of the seat, and the vertical rudder 81 is preferably connected to the hand-wheel 83, so as to be operated thereby, by suitable wires 84 and a drum shaft 85.

The construction of the fuselage or body, and of the wings, as independent and semi-complete parts, capable of ready assemblage and capable of assemblage by unskilled labor, very much facilitates the packing and transportation of the swing. Moreover, the pivotal connection of the parts of the ladder to the cross-pieces of the body frame enables this part of the construction to be readily collapsed and laid flat alongside the

underside of the body, thus additionally facilitating the transportation of the device.

Operation: The aeroplane toy is attached to an overhead support by means of the suspension ropes 6, 7 and 8, being suspended high enough not to touch the ground as it swings back and forth past its point of lowest suspension. As the fuselage is comparatively long, the seat is necessarily somewhat high above the ground. Access to the seat is conveniently had through the opening 18 at the bottom of the fuselage, and the ladder 24 is conveniently used in getting through the said opening 18. After the child is seated in the body of the aeroplane, the door 19 is preferably lowered, so as to close the bottom opening. The aeroplane may be caused to swing back and forth by a child moving its body back and forth in the device. The hand-wheel serves as a part for the child to hold onto, and the manipulation of the hand-wheel serves to occupy and entertain a child. Moreover, the action of the vertical rudder upon the air also produces a swaying to one side and the other of the body, thus adding variety to the motion of the aeroplane toy.

The inventive ideas herein set forth may receive other embodiments than those herein specifically illustrated and described.

What is claimed is:—

1. A swing comprising a body having a seat therein, and lateral projections in the form of an aeroplane, suspension means for said body, said body having an underside opening therein for the occupant to enter, and a ladder carried by the swing leading to said opening, said ladder being in the form of an under-frame simulating a running or landing gear.

2. A swing comprising a body having a seat therein, and lateral projections in the form of an aeroplane, and suspension means for said body, said body having two frameworks, a strong frame and a light frame, said suspension means being united to said strong frame and said seat also being carried by said strong frame, and imitative parts of the body being carried by said light frame.

3. A swing comprising a body having a seat therein, and lateral projections in the form of an aeroplane, and suspension means for said body, said body having a strong framework comprising portions on each side of the seat, and a cross-piece, said suspension means being connected to said side portions and to said cross-piece of said framework.

4. A swing comprising a body, said body having a strong framework, said framework comprising a single piece of iron, having its ends bent back upon themselves to form loops, and the middle portion formed as a cross-bar between said looped portions.

5. A swing comprising a body, said body having a strong framework, said framework comprising a single piece of iron, having its ends bent back upon themselves to form substantially triangular loops, and the middle portion formed as a cross-bar between said looped portions.

6. A swing comprising a body, said body having a strong framework, said framework comprising a single piece of iron, having its ends bent back upon themselves to form loops, and the middle portion arched and formed as a cross-bar between said looped portions.

7. A swing comprising a body, said body having a strong framework, said framework comprising a single piece of iron, having its ends bent back upon themselves to form loops, and the middle portion formed as a cross-bar between said looped portions, and other cross-bars connecting parts of said two looped portions.

8. A swing comprising a body, said body having a strong framework, said framework comprising a single piece of iron, having its ends bent back upon themselves to form loops, and the middle portion formed as a cross-bar between said looped portions, a second cross-bar at the end of the frame opposite said first-named cross-bar, and a third cross-bar between said other cross-bars, and a ladder having portions attached to two of said cross-bars.

9. A swing comprising a body, said body having a strong framework, said frame-

work comprising a single piece of iron, having its ends bent back upon themselves to form loops, and the middle portion formed as a cross-bar between said looped portions, and other cross-bars connecting parts of said two looped portions, and a door attached to one of said cross-bars, said door constituting a part of the bottom of said body.

10. A swing comprising a body in the form of an aeroplane, said body having imitation wings, said wings having a frame formed of a single piece of metal bent to substantially rectangular form, the ends of said metal piece having means for connecting them to said body, the part of the frame opposite said end portions extending across said body and being adapted to be connected thereto.

11. A swing comprising a body in the form of an aeroplane, said body having imitation wings, said wings having a frame formed of a single piece of metal bent to substantially rectangular form, the ends of said metal piece having means for connecting them to said body, the part of the frame opposite said end portions extending across said body and being adapted to be connected thereto, and a covering for said frame, said covering being in two parts and covering the parts of the frame which extend at the two sides of said body.

In witness whereof, I have hereunto signed my name.

JAMES Y. RIPPIN.