L. C. ROBBINS.

ADVERTISING TOY.

APPLICATION FILED MAR. 20, 1917.

1,227,319. Patented May 22, 1917.

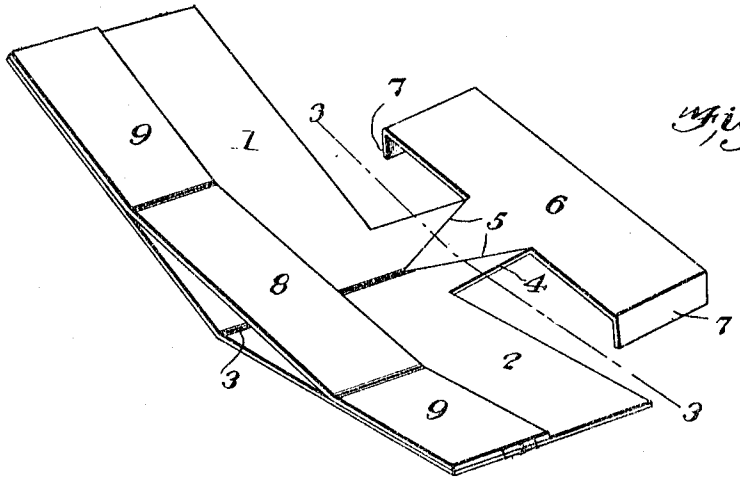


Fig. 1.

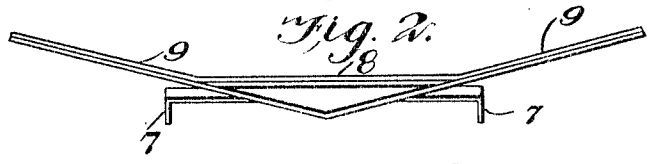


Fig. 2.

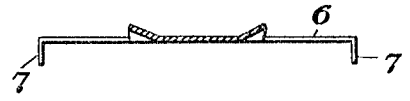


Fig. 3.

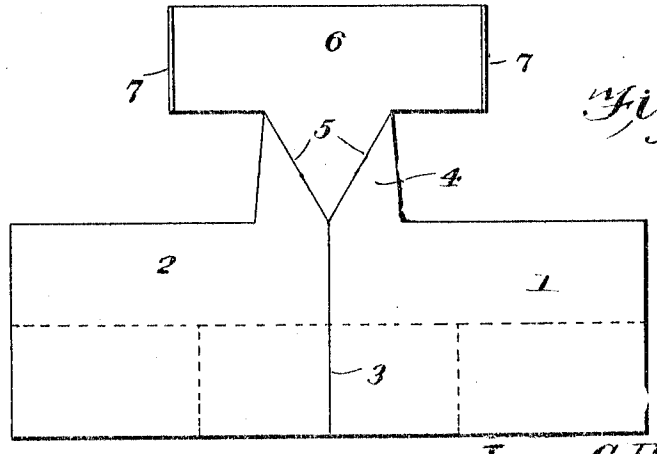


Fig. 4.

WITNESSES

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ADVERTISING TOY.

1,227,319. Specification of Letters Patent. Patented May 22, 1917.

Application filed March 20, 1917. Serial No. 156,073.

To all whom it may concern:

Be it known that I, LEON C. ROBBINS, a citizen of the United States, residing at Loveland, in the county of Larimer and State of Colorado, have invented new and useful Improvements in Advertising Toys, of which the following is a specification.

This invention relates to toys, and more especially to aerial projectiles; and the object of the same is to produce a toy aeroplane of the glider type, for advertising and similar purposes.

This object I carry out by making a little aeroplane of cardboard or the like so that it may be used by children and grown-ups to their amusement and edification, and will keep their interest for quite a time; and on the body of the device is printed an advertisement of the merchant or house which gives the articles away.

Details of the preferred construction are set forth in the following specification, reference being had to the drawings wherein:—

Figure 1 is a perspective view of this gliding toy as it appears in the air when descending slowly to the ground.

Fig. 2 is a front elevation or front end view.

Fig. 3 is a cross section on the line 3—3 of Fig. 1.

Fig. 4 is a bottom plan view.

This toy may be made completely of paper or light cardboard, or the truss hereinafter described might be of thread or fine wire, although this need hardly be illustrated. Excepting this truss, the article is cut from a single piece of stock by one movement of the die, and may be scored on lines on which it is to be subsequently folded or bent, or it may be printed on these lines because the bending is rather gentle and contains no acute angles. Referring to Fig. 4, the major portion or front end of the article may be called its body. This is made up of two wings 1 and 2 integrally united with each other at their inner ends along the line 3 where the material is bent at a slight angle so that the wings stand at an angle to each other as seen in the front end elevation, and rise gently from their point of union to their outer ends. This portion of the device is continued to the rear in what might be called a shank broadly designated by the numeral 4. The shank is integral with the rear edges of the wings at both sides of the bend or angle 3, and said bend is continued a little way into the shank and then diverges along the lines 5 to the rear end of the shank; and at this point said shank integrally unites with a flat plane which constitutes the tail 6. This element extends across the rear end of the shank and to quite a little distance on each side of the same, and its extremities are turned downward at right angles into tips 7, the body of the tail standing in a single plane with the rear portion of the shank between the diverging angles or folds 5, whereas each wing stands in a plane with that portion of the shank forward of one of said angles 5 as seen. The result is that, when viewed from in front, the forward portion or the larger portion of the toy is slightly V-shaped and is of course larger and heavier than the rear portion thereof, whereas the latter—seen behind—is flat or stands in a plane which cuts through the planes of the two wings, and is turned down at its extremities or tips as at 7. The wings 1 and 2 are held in their relative position by means of a truss which, as suggested above, might be a thread or wire, but which I preferably make in the shape of another and smaller piece of cardboard bent into three panels whereof the innermost numbered 8 constitutes the truss body and lies horizontal across and spans the angle 3, and the end panels 9 constitute reinforcing elements for the two wings, to whose upper faces they are secured by gum or otherwise. It will not be necessary to illustrate the printing or other advertising matter which may be inscribed upon either or both faces of the device. With this printed matter the device becomes an advertising toy—without it, the children may play with it just as well but the utility of the article as an advertising medium would be lost. The toy may be made and used in its finished condition as described above, or it may be distributed flat and accompanied by instructions how to fold it on the lines marked and how to apply the truss. Probably the most satisfactory manner would be to deliver the articles in bulk and in flat condition to the merchant, and advise the latter to make it up into working condition before it is given out.

In use the article may be laid on the hand upside down—that is, with the truss 8 on the hand and the parts inverted as seen in

Fig. 4—and then by a proper movement of the hand outward, and over, and inward, and with a gentle toss, the toy is directed forward and will sail or glide gently downward to the floor. Or the child may lay the toy on a flat support and stand on a chair or other object which will lift him high off the ground, and by tilting the support and permitting the toy to slide off of it, the same will glide for a considerable distance to the ground, meanwhile making some convolutions or gyrations through the air as is inevitable in its descent, owing to delicate lateral currents and other conditions which are hardly perceptible. In its gliding movement, the oblique position of the wings steadies the toy and causes it to move forward along a line coincident with the fold line 3, whereas much of the air over which the inner edges of the wings pass, is diverted by the diverging folds 5 and passes over the front edge of the tail plane 6 and across its top; hence the sustaining power of the tail plane is not as great as that of the wings and the angle or fold 3 constitutes a keel along which the toy progresses. The tips 7 at the extremities of the tail plane 6 cut endwise through the air and prevent movements of the entire tail endwise in either direction which would permit progress of the whole along a wavy path. For these reasons I consider the exact configuration as shown in the drawings to be desirable, excepting only that the truss may be made of paper or other material. It may be possible however, that if it be of paper as shown it possesses advantages over a thread, for instance. Its central panel 8 has certain sustaining properties as it cuts through the air in the progress of the toy, and end panels 9 do stiffen the wings 1 and 2 upon which they are gummed and therefore assist these wings in sustaining the entire load. Finally, if this element were of thread it would have to be attached at its extremities to the wings in some manner and the toy might tear at these points of attachment. I do not wish to be limited, however, further than the terms of the appended claims compel.

What is claimed as new is:—

1. The herein described toy aeroplane having at its front portion a pair of wings standing at a slight angle to each other, at its rear portion a flat tail plane, and at its intermediate portion a shank integrally connecting the wings with the plane, and a truss connecting said wings on their upper sides and holding them in proper relative position.

2. The herein described toy aeroplane having at its front portion a pair of wings standing at a slight angle to each other, at its rear portion a flat tail plane, and at its intermediate portion a shank integrally connecting the wings with the plane, and a truss of flat material in three panels whereof the endmost are secured to the upper faces of said wings near their outer ends and the intermediate panel stands in the space between the endmost panels and overlies the angle between said wings.

3. The herein described toy aeroplane having at its front portion a pair of wings standing at a slight angle to each other, at its rear portion a flat tail plane, and at its intermediate portion a shank integrally connecting the wings with the plane, the fold line between the wings along the center of the toy diverging in two fold lines extending through said shank, downturned tips at the extremities of said tail planes, and means for holding the wings at a proper angle to each other.

4. The herein described toy aeroplane having at its front portion a pair of wings standing at a slight angle to each other, at its rear portion a flat tail plane, and at its intermediate portion a shank integrally connecting the wings with the plane, the fold line between the wings along the center of the toy diverging in two fold lines extending through said shank to points where the side edges of the shank unite with the front edges of the tail whereby the latter and the space between the diverging fold lines stand in one plane, and means for holding the wings at an angle to each other so that each wing and that portion of the shank forward of one of said diverging lines stands in a single plane and out of the plane of the tail.

In testimony whereof I affix my signature.

LEON C. ROBBINS.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."