Aug. 14, 1928. 1,680,689

M. P. MILLER

TOY GLIDER

Original Filed Dec. 17, 1925

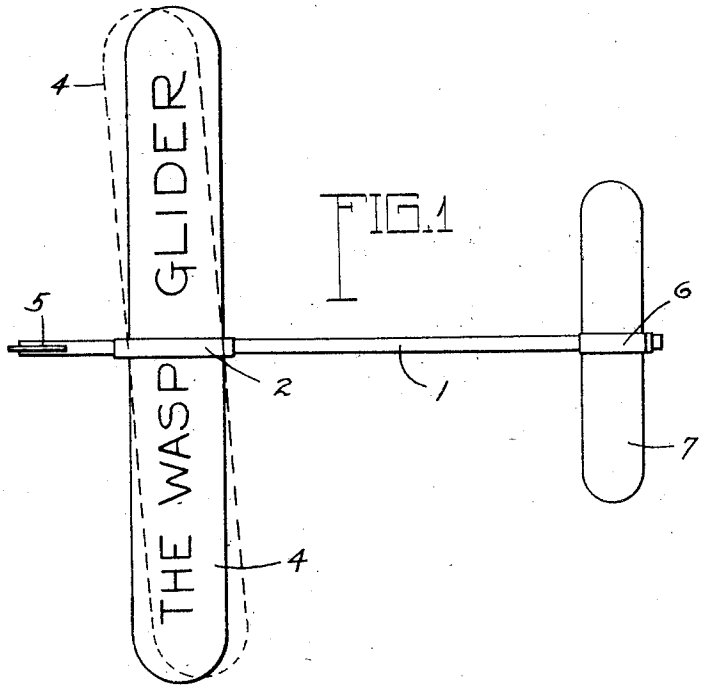


FIG. 1

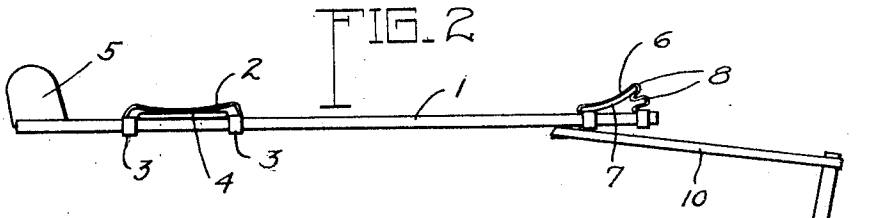


FIG. 2

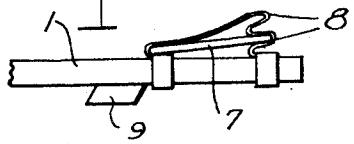


FIG. 3

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UNITED STATES PATENT OFFICE.

MILTON P. MILLER, OF DUBUQUE, IOWA, ASSIGNOR TO GEORGE D. WANNER & COMPANY, OF DAYTON, OHIO.

TOY GLIDER.

Application filed December 17, 1925, Serial No. 75,966. Renewed December 7, 1927.

My invention has reference to a toy glider of that class which are designed to be sailed through the air by means of an initial propelling force, making a flight resembling that of an air-ship or glider of a larger type. One of the purposes thereof is to provide a toy of simple construction, the parts of which can be readily disconnected, so that the same may be placed in a compact space.

Another purpose thereof is the provision of means whereby the character of the flights of the toy may be varied, so as to cause the same to describe a loop, or to follow a straight-away course, with variations of these movements.

Other advantages of the invention reside in its comparatively low cost of construction, and the provision of wing spaces which may be employed for advertising material, making it possible to have the toy used as a gift, in connection with the sale of boy's clothing or other merchandise.

In the drawings:—

Fig. 1 is a plan view of the invention.

Fig. 2 is a side view thereof.

Fig. 3 is a detail of the forward end of the toy.

The body and wings of the toy are formed of wood or other light material, with connections of metal of a minimum weight. The reference number 1 indicates a bar, and 2 a frame slidable thereon by means of loops 3 at the ends of the frame. Removably held between said frame and the bar 1 is a plane 4, the frame being curved downwardly and provided with sufficient resiliency to prevent accidental release of the plane. The frame is also sufficiently large to permit the plane to swing therein, as indicated in broken lines in Fig. 1. In case of a collision of either end of the wing with an object, as when lighting on the ground, this enables such end to move sufficiently to reduce the shock, and prevent injury thereto. At the end of the bar 1 is a tail or rudder 5.

Fixed to the opposite end of the bar 1 is a frame 6, adapted to receive a smaller plane 7, and hold the same in proper position for flights. The frame 6 is formed with two loops 8, in either of which one of the edges of the plane 7 may be held. When in the upper loop, as in Fig. 2, the tendency of the plane 7, which is ahead in the flight, is to cause the toy to move in a circle, or "loop the loop." The upper part of the frame 6 is also curved, this curvature being imparted to some extent to the plane, and aiding in the movement of the toy out of a straight line. If the plane 7 is positioned in the lower loop 8, as shown in Fig. 3, the toy will sail away in a straight line. By tipping the toy when it is being discharged variations of these flights can be secured, such as a banking glide, and the like. A difference in the pitch of the loop can also be secured by adjustment of the plane 2 along the bar 1.

Fixed to the lower side of the bar 1 is a lug 9, which may be used for the discharge of the glider, as by means of a rubber band 10, fixed to the end of a stick 11.

One or both of the faces of the plane 4, as well as of the plane 7, may be employed for inscriptions, as shown in Fig. 1, which inscriptions may take the form of advertising matter.

By removing the planes 2 and 7 said planes, and the stick 11, can be packed together in a small bundle.

What I claim, and desire to secure by Letters Patent, is:

A toy glider, adapted for being sailed through the air, consisting of a body member and plane attached thereto near one of its ends, suitable for receiving inscriptions, a frame fixed to the opposite end of said bar, having a downwardly curved bar and loops at one end thereof, and a plane adapted for support in said last-named frame, with one of its edges positioned selectively in one or other of said loops, said plane conforming to the shape of said curved bar when positioned in the upper loop.

In testimony whereof I affix my signature.

MILTON P. MILLER.