July 6, 1937. W. B. KASZAS 2,086,361

AIRPLANE KITE AND ADVERTISING DEVICE

Filed Oct. 19, 1936 2 Sheets-Sheet 1

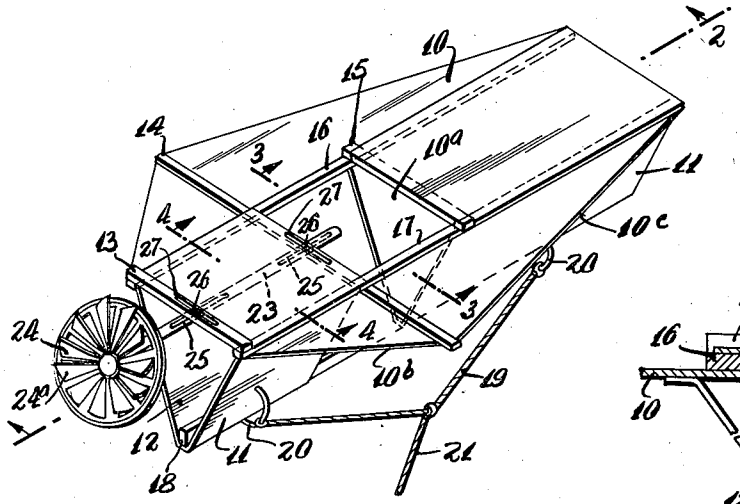


Fig. 1.

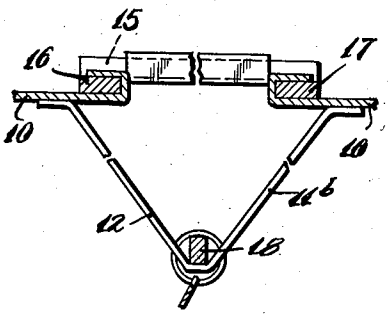


Fig. 3.

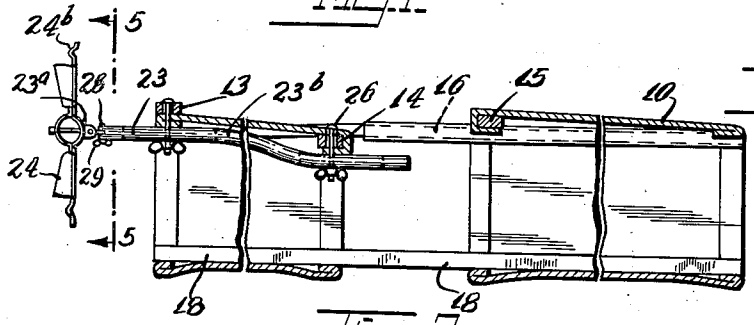


Fig. 2.

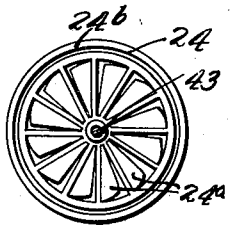


Fig. 5.

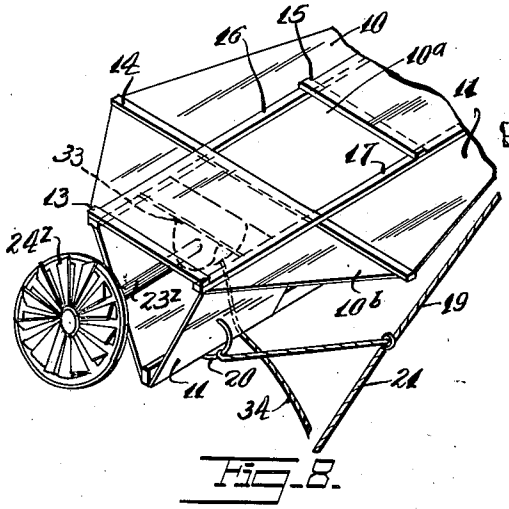


Fig. 8.

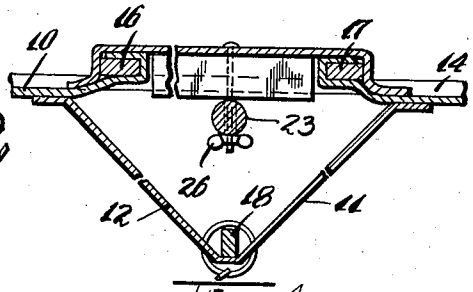


Fig. 4.

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AIRPLANE KITE AND ADVERTISING DEVICE

Filed Oct. 19, 1936 2 Sheets-Sheet 2

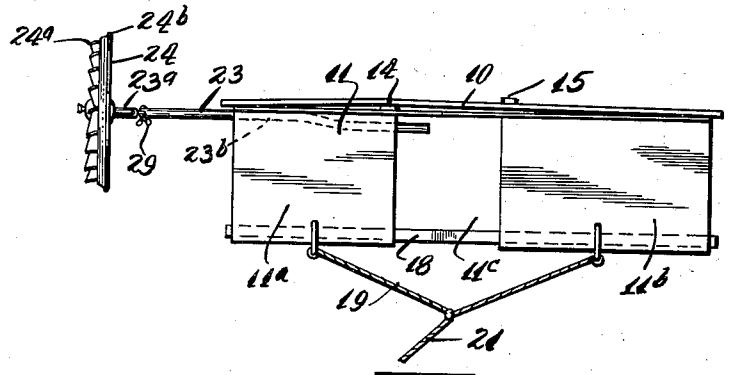


Fig. 6.

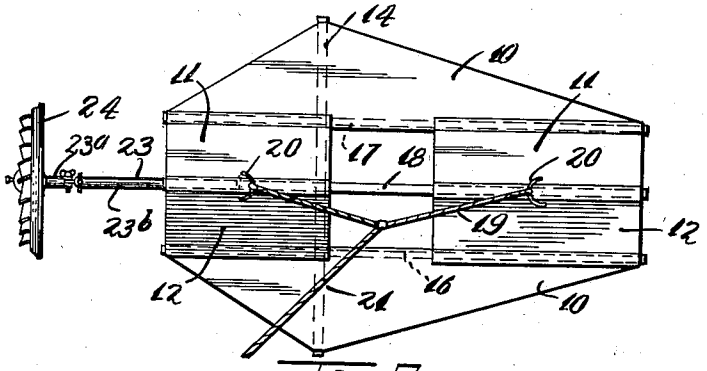


Fig. 7.

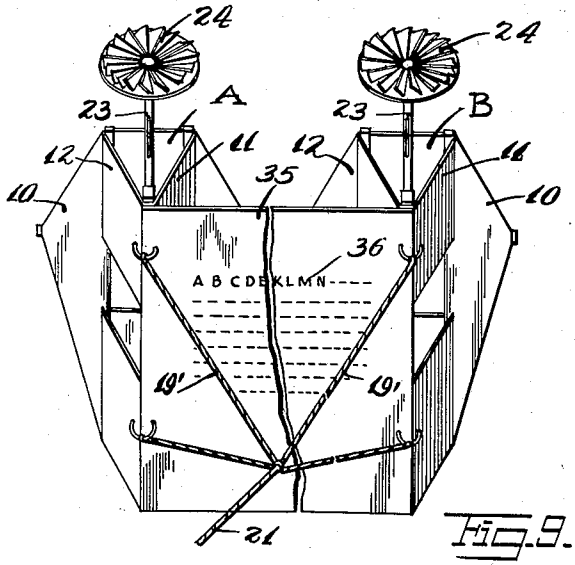


Fig. 9.

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UNITED STATES PATENT OFFICE

2,086,361

AIRPLANE KITE AND ADVERTISING DEVICE

William B. Kaszas, New York, N. Y.

Application October 19, 1936, Serial No. 106,294

3 Claims. (Cl. 244—154)

This invention relates to new and useful improvements in an airplane kite and advertising device.

The invention has for an object the association with a three dimensional kite of a rod attached to a top portion thereof and a fan wheel rotatively mounted on the end of the rod.

It is proposed to so arrange the rod and fan wheel to assist in lifting the kite. The fan will act as a helicopter and its rotation will exert a lifting tendency.

Another one of the objects of this invention is to provide a three dimensional kite with the fan wheel as previously described, which kite is characterized by the fact that it has a main top sail with transverse braces upon which the rod may be attached.

Still further it is proposed to characterize the three dimensional kite with auxiliary side sails associated with the main sail.

Another one of the objects of this invention is to arrange the rod which supports the fan wheel longitudinally and angularly adjustable. It is thus possible to cause the kite to act in various manners to attract attention to enhance the advertising ability.

Still further the invention proposes the association of several airplane kites, according to this invention, and provision of an advertising sign between these kites.

For further comprehension of the invention, and of the objects and advantages thereof, reference will be had to the following description and accompanying drawings, and to the appended claims in which the various novel features of the invention are more particularly set forth.

In the accompanying drawings forming a material part of this disclosure:—

Fig. 1 is a perspective view of an airplane kite constructed according to this invention.

Fig. 2 is a longitudinal sectional view taken on the line 2—2 of Fig. 1.

Fig. 3 is a transverse sectional view taken on the line 3—3 of Fig. 1.

Fig. 4 is a fragmentary enlarged transverse sectional view taken on the line 4—4 of Fig. 1.

Fig. 5 is a sectional view taken on the line 5—5 of Fig. 2.

Fig. 6 is a side elevational view of Fig. 1.

Fig. 7 is a bottom view of Fig. 1.

Fig. 8 is a fragmentary perspective view similar to the front portion of Fig. 1 but illustrating a modification of the invention.

Fig. 9 is a bottom perspective view of another modified form of the invention.

The airplane kite and advertising device comprises a three dimensional kite consisting of a main sail 10 and auxiliary sails 11 and 12 associated therewith. The main sail 10 includes several transverse braces 13, 14 and 15. These braces are held together by a pair of parallel spaced longitudinal braces 16 and 17. The sail 10 is formed with an open area 10^a bounded between portions of the braces 16 and 17 and the braces 14 and 15. The brace 14 is much wider than the other braces. The main sail 10 is formed to have tapering sides, namely, forward side portions 10^b and rear side portions 10^c.

There is a longitudinal keel brace 18 extended from end to end of the kite along the center line of the main sail 10. The side sails 11 and 12 are arranged diverging from this keel brace 18 and connects with the braces 16 and 17. The kite is provided with a belly cord 19 secured at its ends by rings 20 to spaced areas of the keel brace 18. A main cord 21 is attached to the belly cord.

The sails 10, 11 and 12 are formed from light sheet material such as paper. The edges of this paper material are attached to the braces preferably by having edge portions bent around the sides of the braces and secured in position with glue or adhesive means. The side sails 11 are formed of front and rear sections 11^a and 11^b respectively (see Fig. 6) so as to provide an intermediate space 11^c. This space is of the same width as the space 10^a.

A rod 23 is attached along the longitudinal center of the sail 10 at the top portion of the kite and extends from the end thereof. A fan wheel 24 is rotatively mounted upon the end of the rod. This fan wheel is shown to be formed from a disc of metal stamped so as to have blade portions 24^a arranged radially thereof. These blade portions extend from the center to a circular outer rim portion 24^b.

The rod 23 is formed with longitudinal slots 25 through which clamp bolts 26 pass. These clamp bolts also extend up through slots 27 formed in the braces 13^a and 14. The slots 27 are at right angles to the slots 25. The arrangement is such that the clamp screws 26 may be loosened and the rod 23 adjusted longitudinally forwards or at angles towards the right or left. The rod may also be adjusted to positions off center. The rod 23 is composed of a front section 23^a and a rear section 23^b connected together by a universal joint 28. This universal joint comprises a pair of pivotal joints arranged at right angles to each other and provided with clamping screws 29 by which they may be locked into various angular

positions. It is thus possible to arrange the section 23^a at a slight angle in any desired direction relative to the section 23^b.

In Fig. 8 a modified form of the invention has been disclosed in which there is shown a three dimensional kite identical in construction to the one previously described, the parts of which may be recognized by the same reference numerals. A small electric motor 33 is attached upon the inner side of the sail 10. This electric motor is provided with an extended shaft 23^z upon the outer end of which there is fixedly mounted the fan 24^z. A thin light cable 34 for supplying electric current to the motor 33 is extended down along the cord 21 of the kite. In this form of the invention the fan wheel may be power driven so as to raise and hold the kite in the air.

In Fig. 9 another modification of the invention has been disclosed in which there is a pair of parallel spaced kite units A and B identical in construction to the kite units described in Figs. 1–7 inclusive. Between the keel braces 18 of these kites there is spread a sign 35 which is imprinted with advertising material 36. The belly cords 19' of the kite units are joined together and connected with a kite string 21. This kite unit may be used to support a large advertising sign 35 in the air.

It is to be understood that this propeller device may be applied to any type of objects which are sufficiently light for lifting by the said device, also for parachutes in case of emergency, for toy motor boats and toy airplanes for moving the same, and for any other practical or novel toys that may be manufactured. It may also be illuminated in colors so that the device or its advertisement may be viewable from the ground.

While I have illustrated and described the preferred embodiments of my invention, it is to be understood that I do not limit myself to the precise constructions herein disclosed and the right is reserved to all changes and modifications coming within the scope of the invention as defined in the appended claims.

Having thus described my invention, what I claim as new, and desire to secure by United States Letters Patent is:—

1. In an airplane kite, a kite body having a pair of parallel spaced bars formed with longitudinal slots, a rod at right angles to said bars and being formed with longitudinal slots at right angles to said slots, a fan wheel mounted on the extended end of said rod to assist in raising said kite, and clamp bolts extending through said slots to hold said rod in various angular or straight positions in relation to said parallel bars to make said kite react differently when said rod is shifted.

2. In an airplane kite, a kite body having a pair of parallel spaced bars formed with longitudinal slots, a rod at right angles to said bars and being formed with longitudinal slots at right angles to said slots, a fan wheel mounted on the extended end of said rod to assist in raising said kite, and clamp bolts extending through said slots to hold said rod in various angular or straight positions in relation to said parallel bars to make said kite react differently when said rod is shifted, said rod comprising a rear section mounted on said parallel bars, a front section supporting said fan wheel, and a universal joint connecting said front and rear sections so that said fan wheel may be maintained in a parallel condition with said bars in all of the adjusted positions of said rod.

3. In an airplane kite, a kite body having a main sail, a pair of spaced parallel bars forming a portion of the frame work of said main sail, a rod at right angles to said parallel bars and having a fan wheel on the extended end thereof, and clamp bolts engaging through longitudinal slots in said parallel bars and through longitudinal slots in said rod formed at right angles to said slots in said bars to support said rod in various angular positions in relation to said parallel bars to make said kite act differently in different positions of said rod.

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