March 17, 1953 J. A. GUERCIO 2,631,798

KITE

Filed March 9, 1951

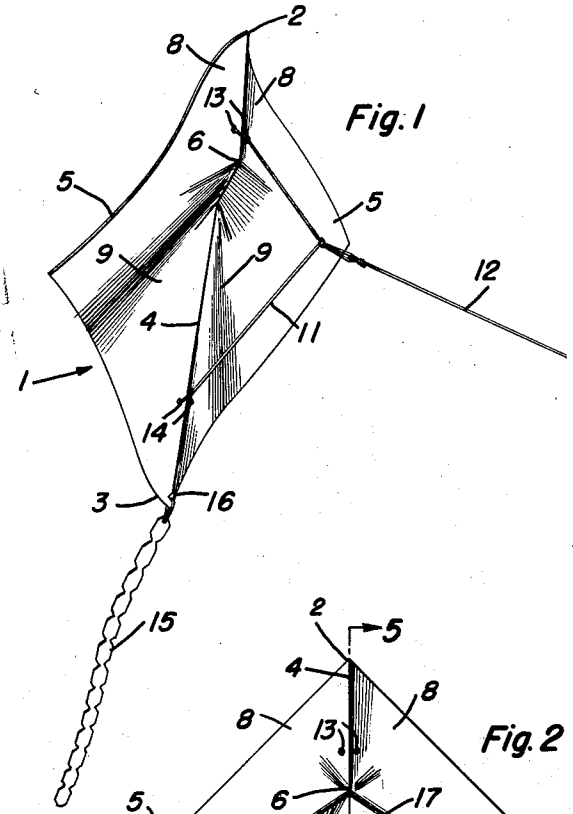


Fig. 1

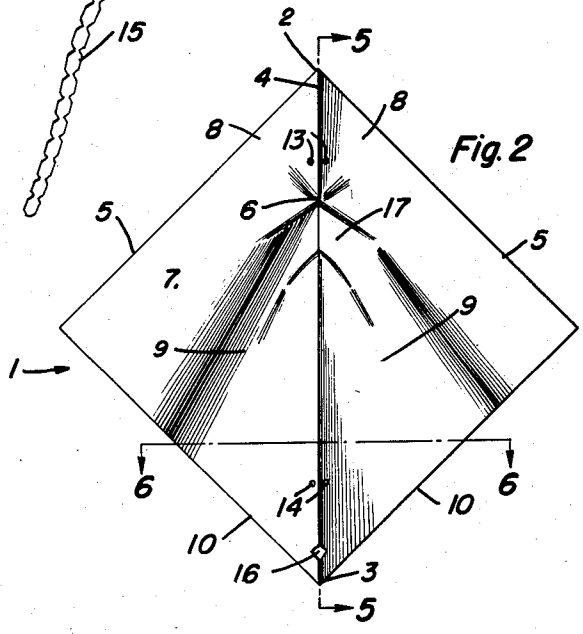


Fig. 2

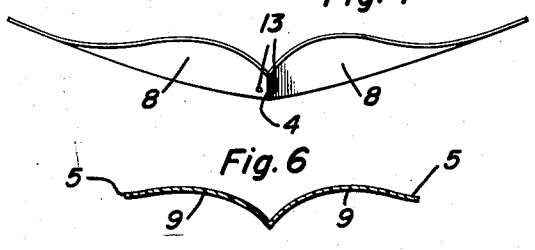


Fig. 4

Fig. 6

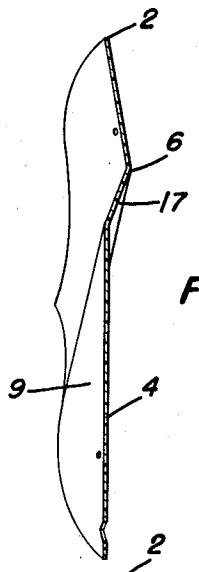


Fig. 5

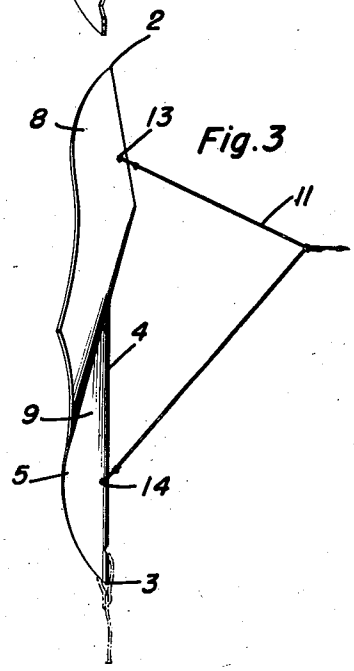


Fig. 3

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KITE

John A. Guercio, Smithtown Branch, N. Y.

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2 Claims. (Cl. 244—153)

1

My invention relates to improvements in kites, the principal object in view being to provide a one-piece kitebody molded into shape such that it can be flown in either high or low winds without darting from side to side or turning sidewise and heading downwardly toward the ground.

Another object is to provide a kite body with the above advantages and which may be molded, or pressed out, of inexpensive readily available material and into a form such as to render the body strong and durable.

Other and subordinate objects, within the purview of my invention, together with the precise nature of my improvements will be readily understood when the succeeding description and claims are read with reference to the drawing accompanying and forming part of this specification.

In said drawing:

Figure 1 is a view in perspective of my improved kite, in the preferred embodiment thereof;

Figure 2 is a view in front elevation drawn to a slightly larger scale;

Figure 3 is a view in side elevation;

Figure 4 is a view in front edge elevation;

Figure 5 is a view in longitudinal central section taken on the line 5—5 of Figure 2; and

Figure 6 is a detail view in cross section taken on the line 6—6 of Figure 2.

Referring to the drawing by numerals, my improved kite comprises a body 1 of square shape and sheet-like form providing a leading nose corner 2 and a trailing tail corner 3. The body 1 is molded, or pressed out, from any suitable material, preferably a commercial plastic, and so as to provide a diagonal crease 4 extending from one of said corners to the other and dividing the body 1 into a pair of side wings 5 of isosceles triangle form extending from opposite sides of said crease.

At a suitable point, between the leading nose corner 3 and the center of said body 1, the body 1 is formed with a bulge 6 extending forwardly of said body, that is forwardly of the face 7 to be opposed to the wind. The bulge 6 is bi-sected by said crease 4 and causes said crease and front portions 8 of the wings 5 on opposite sides of the crease 4 to slant upwardly and rearwardly of said body, as best shown in Figures 3 and 5, said portions 8 being molded into concavo-convex shape in cross section with concave sides facing forwardly, as best shown in Figure 4, so that the front portions 8 of said

2

wings 5 facilitate upward gliding of the body 1 and together with the crease 4 which forms a dividing rib between said portions stabilize the body 1 at its front against darting sidewise.

From the bottom of the bulge 6 and upon opposite sides of the crease 4, the wings 5 are molded to form wind pocketing front channel portions 9 of concavo-convex form in cross-section joined by the crease 4 and extending longitudinally rearwardly and increasing in width to the rear side edges 10 of the body 1, as best shown in Figures 2 and 6. The channel portions 9 act to collect wind and deflect the same rearwardly of the body 1, and said channel portions together with the joining crease 4 act to stabilize the body 1 below the bulge 6 against side slip.

The usual belly string 11 for the kite string 12 is fixed at its ends in pairs of holes 13, 14, on opposite sides of the crease 4 and adjacent the leading nose corner 2 and tail corner 3 respectively.

Any suitable tail 5 may be attached in an opening 16 at the trailing tail corner 3 of said body 1.

When the described kite is being flown, wind pressure forwardly of the bulge 6 glances off the wing portions 8 laterally, principally, upon opposite sides of the crease 4 and facilitate upward gliding and soaring of the kite. In the rear of the bulge 6, the wind pressure is collected in the channel portions 9 and deflected rearwardly, principally, to cause upward gliding and soaring of the kite while stabilizing the body 1 against side slip as previously set forth. The bottom face 17 of the bulge 6 slants downwardly, as best shown in Figures 1 and 5, so that wind pressure acting against the same will tend to lift the kite.

The foregoing will, it is believed, suffice to impart a clear understanding of my invention, without further explanation.

Manifestly, the invention, as described, is susceptible of modification, without departing from the inventive concept, and right is herein reserved to such modifications as fall within the scope of the appended claims.

Having described the invention, what is claimed as new is:

1. A kite comprising a molded sheet-like rigid body of square form having a front nose corner and a rear tail corner, said body having a diagonal crease formed therein from one of said corners to the other dividing said body into a pair of triangular side wings extending from opposite sides of said crease, said body between

said nose corner and the center of the body being formed with a forward bulge bi-sected by said crease, and said wings being formed with a pair of wind pocketing and deflecting front channels extending from said bulge upon opposite sides of said crease to the rear edge of the wings and gradually increasing in width toward said rear edges, said crease joining said channels and forming a forwardly extending rib therebetween acting together with said channels to prevent side slip of said body in the air, said bulge having a bottom face at the front ends of said channels extending downwardly and forwardly and tending under the action of wind pressure to lift said body.

2. A kite comprising a molded sheet-like rigid body of square form having a front nose corner and a rear tail corner, said body having a diagonal crease formed therein from one of said corners to the other dividing said body into a pair of triangular side wings extending from opposite sides of said crease, said body between said nose corner and the center of the body being formed with a forward bulge bi-sected by said crease, and said wings being formed with

a pair of wind pocketing and deflecting front channels extending from said bulge upon opposite sides of said crease to the rear edge of the wings and gradually increasing in width toward said rear edges, said crease joining said channels and forming a forwardly extending rib therebetween acting together with said channels to prevent side slip of said body in the air, said crease and wings forwardly of said bulge slanting upwardly and rearwardly of said body, and said wings forwardly of said bulge being of concavo-convex cross section to facilitate upward gliding of said body and stabilize the front thereof against darting sidewise.

JOHN A. GUERCIO.

REFERENCES CITED

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

UNITED STATES PATENTS

Number	Name	Date
2,530,641	Winslow	Nov. 21, 1950
2,537,560	Wanner	Jan. 9, 1951