Nov. 15, 1960 R. C. JONES 2,960,298

KITE

Filed June 25, 1958

FIG. 1

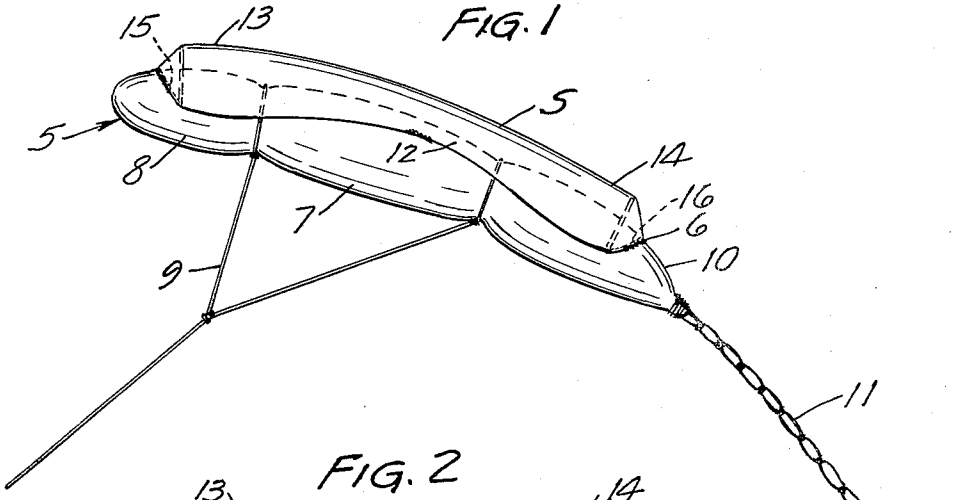


FIG. 2

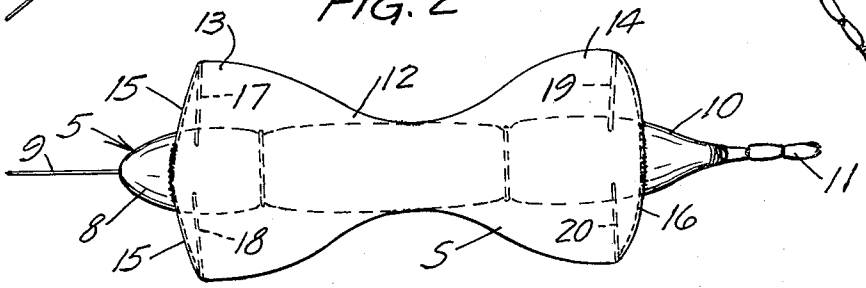


FIG. 3

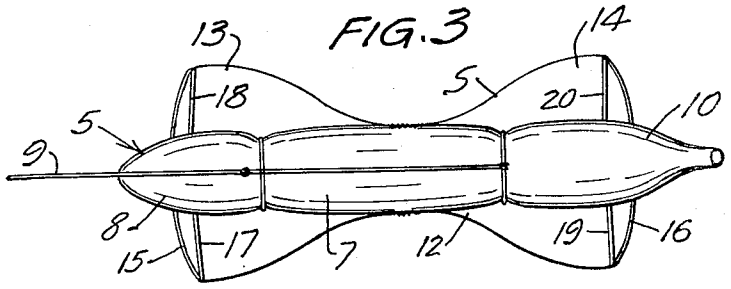
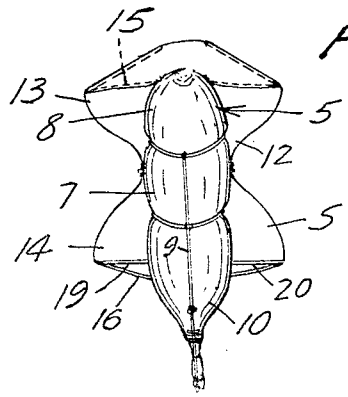


FIG. 4



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KITE

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8 Claims. (Cl. 244—153)

This invention relates to kites. More particularly, it relates to kites of the type wherein an inflated body is utilized to provide the main framework for the kite.

It is a general object of my invention to provide a novel and improved kite of simple and inexpensive construction and operation.

A more specific object is to provide a kite which utilizes a balloon or other inflated elongated object in conjunction with a sail attached thereto in order to facilitate launching and flying of the same.

Another object is to provide a kite which will launch easily, will fly more efficiently than kites heretofore known, and may be manufactured and marketed very inexpensively.

These and other objects and advantages of my invention will more fully appear from the following description made in connection with the accompanying drawings, wherein like reference characters refer to the same or similar parts throughout the several views, and in which:

Fig. 1 is a side elevational view of a kite embodying my invention;

Fig. 2 is a top elevational view of the same;

Fig. 3 is a bottom elevational view of the same; and

Fig. 4 is a front elevational view of the same.

One embodiment of my invention may include as shown in Figs. 1–4 an elongated inflated body such as a balloon indicated generally by the numeral **5**. As shown, this balloon has an upper side **6** and a lower side **7**. It has a front end portion **8** to which a mooring line **9** may be attached and a rear end portion **10** to which a tail **11** may be attached.

Secured to the inflated body **5** as shown in Figs. 1–4 is a sail member indicated generally by the letter S. This sail member S is preferably made of a thin sheet of plastic material of light weight and flexible characteristics. As best shown in Figs. 2–4, it is restricted in width at its intermediate portions **12** in contrast to its end portions **13** and **14**. As shown in Fig. 1 this sail member S extends somewhat horizontally along and above the upper side **6** of the inflated body **5** and in spaced relation thereto.

The forward end portion **13** of the sail **5** is secured to the front end portion **8** of the inflated body **5** by strings **15** or other suitable means. These strings **15** are of sufficient length, so that the side portions of the sail S may be extended as shown in the drawings and so that the forward end portion of the sail may, when filled by the wind extend in spaced relation to the forward end portion of the balloon.

The medial narrowed portions of the sail **5** are secured as shown to opposite sides of the inflated body **5** through the use of pressure sensitive tape or other suitable means, with sufficient slack being left so that the sail when filled may extend in vertically spaced relation to the upper side **6** of the body **5**, permitting air to flow rearwardly from the front end portion of the sail, along the underside of the sail to the rear end portion thereof, and between the sail and inflated body **5**.

The rear end portion **14** of the sail is connected to the

rear end portion **10** of the balloon **5** by strings such as **16** similar to the manner in which the strings **15** are attached as shown. These strings are also of sufficient length so that the rear end portion **14** of the sail S, when filled, will extend in spaced relation to the upper side **10** of the balloon **5**, thereby permitting air to pass longitudinally of the sail and the balloon **5** through the space therebetween.

Secured to the forward end portion **13** of the sail S is a pair of transversely extending rigid sail extending means which as shown may be comprised of a pair of rods **17** and **18**. These rods **17** and **18** are preferably made of light weight material such as rigid plastic and may be secured to the underside of the sail S through the use of pressure sensitive tape of other suitable means. A similar pair of rods **19** and **20** are secured to the rear end portion **14** and the sail S. These rods **19** and **20** likewise extend transversely of the sail S and the inflated body **5** and are formed of rigid light weight material. These rods **17—20** function to extend the sail at all times outwardly relative to the inflated body **5** so that during the initial stages of flight the sail S will be immediately filled with air and thereby easily launched.

The inflated body **5** and the sail S together constitute the chassis for the kite and when the tail **11** and the main kite string are applied as shown in the drawings and the body **5** is filled with air, the kite is ready to be launched. I have found that even the lightest of breezes will launch my kite successfully, for the extended portions of the sail at the rear and front ends of the inflated body **5** will immediately be filled and the kite will launch itself. In this connection it should be noted that the rods **17—20** at all times hold the front and rear end portions of the sail S in somewhat extended position relative to the inflated body **5**.

Once the kite is launched, it ascends rapidly for the air which is caught in the front end portion **13** of the sail S continues to apply its elevating effect to the kite through the length of the sail S as it passes along beneath the sail and between the body **5** and the sail S. In other words, the air moves along the underside of the sail lengthwise of the body **5** and escapes at the rear end portion of the sail by passing between the same and the body **5**. I have found that with a kite made in accordance with the disclosure herein will fly to substantially greater heights than any other type of kite which I have been able to test.

It will, of course, be understood that various changes may be made in the form, details, arrangement and properties of the various parts without departing from the scope of my invention.

What is claimed is:

1. A kite chassis comprising an inflated body having an upper and a lower side and a front end adapted to have a mooring line attached thereto and a rear end portion adapted to have a tail connected thereto, and a sail connected to said body and extending somewhat horizontally thereabove along its upper side in spaced relation but in close proximity thereto, whereby the air flow is directed from the body and received within said sail to thereby induce an elevating effect on the body and sail as a unit.

2. A kite chassis comprising an inflated body having an upper and a lower side and having a front end portion adapted to have a mooring line attached thereto and a rear end portion adapted to have a tail connected thereto, and a sail extending somewhat horizontally connected to said body at its front and rear end portions and loosely connected thereto at intermediate portions thereof, said sail being disposed in close proximity to the body whereby the air flow is directed from the body and received within said sail to thereby induce an elevating effect on the body and sail as a unit.

3. A kite chassis comprising an inflated body having

an upper and lower side and a front end portion adapted to have a mooring line attached thereto and a rear end portion adapted to have a tail connected thereto, and a sail connected to said body and extending horizontally thereabove along its upper side in spaced relation thereto, said sail being restricted in width at its medial portion, and disposed in close proximity to the body whereby the air flow is directed from the body and received within said sail to thereby induce an elevating effect on the body and sail as a unit.

4. A kite chassis comprising an inflated body having an upper and lower side and a front end portion adapted to have a mooring line attached thereto and a rear end portion, and a sail connected to said body at its forward and rear end portions and extending horizontally thereabove along its upper side in spaced relation thereto, said sail being restricted in width at its medial portions and secured thereat to opposite sides of said body, and said sail being disposed in close proximity to the body whereby the air flow is directed from the body and received within said sail to thereby induce an elevating effect on the body and sail as a unit.

5. A kite chassis comprising an inflated body having an upper and lower side and a front end portion adapted to have a mooring line attached thereto and a rear end portion, and a sail connected to said body and extending thereabove along its upper side in spaced relation thereto said sail having medial portions connected to opposite sides of said body and having relatively wide front and rear end portions connected to the front and rear end portions of said body respectively at points adjacent the sides of said sail, and said sail being disposed in close proximity to the body whereby the air flow is directed from the chassis and received within said sail to thereby induce an elevating effect of the body and sail as a unit.

6. A kite chassis comprising an inflated body having an upper and lower side and a front end portion adapted to have a mooring line attached thereto and a rear end portion, and a sail connected to said body and extending

thereabove along its upper side only and in spaced relation thereto, said sail being restricted in width at points intermediate its front and rear end portions and being connected thereby to said body at opposite sides of the latter, and rigid extending means secured to said sail at its forward and rearward end portion whereby said sail will be held at all times in somewhat spaced close proximity to said body to facilitate filling of the sail by the wind directed from the body during the initial stages of flight of the kite.

7. The structure defined in claim 6 wherein said extending means is comprised of an elongated rigid member secured to said sail at opposite sides of said body and extends transversely of said body and laterally therefrom at the forward and rearward end portions of said body.

8. A kite chassis comprising an elongated inflated body substantially round in cross-section and having an upper and a lower side and a front end adapted to have a mooring line attached thereto and a rear end portion adapted to have a tail connected thereto, and a sail connected to said body and extending longitudinally thereof somewhat horizontally thereabove along its upper side in spaced relation and close proximity thereto, and whereby the air flow is directed from the body and received within said sail to thereby induce an elevating effect on the body and sail as a unit.

References Cited in the file of this patent

UNITED STATES PATENTS

612,996	Von Siegsfeld	Oct. 25, 1898
888,220	Burnell	May 19, 1908
1,005,871	Pennock	Oct. 17, 1911
2,486,158	Haas	Oct. 25, 1949

FOREIGN PATENTS

15,627	Great Britain	1885
396,277	Great Britain	Aug. 3, 1933
401,655	France	Aug. 2, 1909