Feb. 7, 1956 G. G. BURRELL ET AL 2,733,880

KITE

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Fig. 1

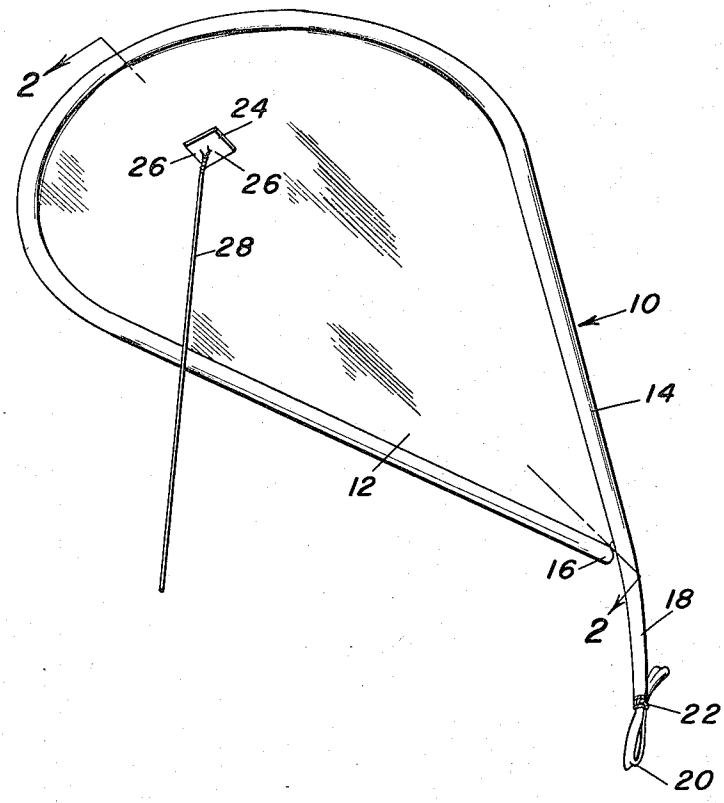


Fig. 2

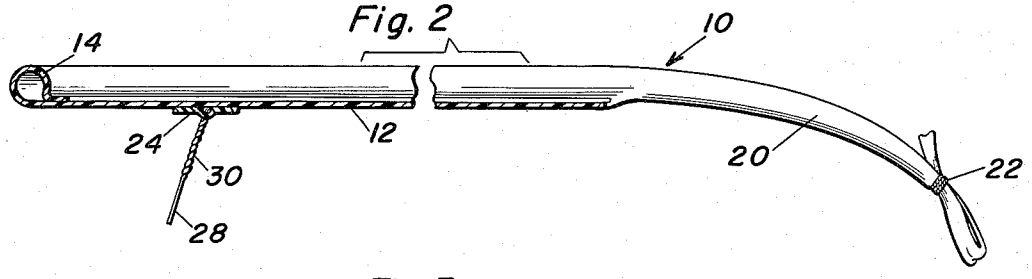
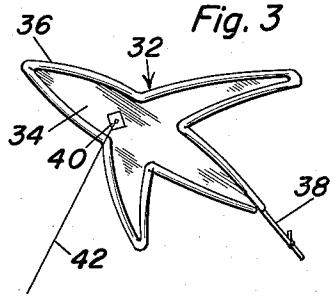


Fig. 3



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KITE

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1 Claim. (Cl. 244—153)

This invention relates in general to aerial toys and more specifically to an improved kite construction.

The average kite is formed of wooden sticks having secured thereto by strings or paste a thin paper covering. Not only is the average kite of such a nature whereby it must be assembled and disassembled for storage purposes, there is also inherent weakness of both the paper covering and the relatively thin, lightweight sticks.

It is therefore the primary object of this invention to provide an improved kite which is constructed whereby the size thereof may be reduced to a minimum when not being utilized, the kite being of such a nature whereby it may be flattened out and folded so as to be capable of being carried in one's pocket or being shipped in an envelope.

Another object of this invention is to provide an improved kite which is so constructed whereby there are no parts thereof to break.

A further object of this invention is to provide an improved kite which is formed of a single sheet of impervious material, the sheet being provided along its periphery with an integral tube capable of retaining air under pressure whereby the tube can add stiffness to the sheet and form therefrom a kite.

These together with other objects and advantages which will become subsequently apparent reside in the details of construction and operation as more fully hereinafter described and claimed, reference being had to the accompanying drawings forming a part hereof, wherein like numerals refer to like parts throughout, and in which:

Figure 1 is a perspective view of a preferred form of kite conforming to the spirit of this invention and shows the general details thereof;

Figure 2 is an enlarged fragmentary sectional view taken substantially along the plane indicated by the section line 2—2 of Figure 1 and shows the exact manner in which the kite is made; and

Figure 3 is a perspective view on a reduced scale of a slightly modified form of kite.

Referring now to the drawings in detail, it will be seen that there is illustrated in Figures 1 and 2 a preferred form of the kite which is the subject of this invention, the kite being referred to in general by the reference numeral 10. The kite 10 is formed of a single sheet of material, preferably a lightweight plastic or rubber material, the sheet being referred to by the reference numeral 12. The sheet 12 is cut in the general outline of the kite 10 and the peripheral edge thereof is rolled to form a tube 14. That portion of the sheet 12 which is rolled to form the tube 14 is sealed to the remainder of the sheet by a simple heat sealing operation or through the use of suitable adhesive, as desired.

The tube 14 extends about the periphery of the sheet

12. One end of the tube 14 is closed as at 16 and the other end thereof is provided with an extension 18. The purpose of the extension 18 is to form a suitable inflating part for the tube 14. The extension 18 also functions as a tail.

Because of the thinness of the sheet 12, it is readily apparent that when the tube 14 is not filled with the air, the kite 10 may be conveniently folded to a flat state and may be carried in one's pocket or shipped in an envelope. When it is desired to utilize the kite 10, the tube 14 is inflated through the use of the extension 18. The extreme end of the extension 18 is folded over as at 20 when the tube 14 is inflated and tied through the use of a rubber band or other fastening means 22.

In order that the kite 10 may be flown, there is secured to a central portion of the sheet 12 a reinforcing sheet 24. The reinforcing sheet 24 is formed of the same material as the sheet 12 and is suitably secured thereto either by a heat bonding process or through the use of cement. The reinforcing sheet 24 is provided with spaced openings 26 through which a bridle string 28 passes. The bridle string is then tied as at 30 to secure it to the reinforcing sheet 24. The kite 10 may then be flown in the customary manner.

Referring now to Figure 3 in particular, it will be seen that there is illustrated a kite which is referred to in general by the reference numeral 32. The kite 32 has the general outline of a jet plane and differs from the kite 10 only in that respect. The kite 32 is formed of a sheet 34 having the peripheral edges thereof rolled to form a continuous tube 36. The tube 36 is provided with a filler extension 38. A bridle reinforcing plate 40 is secured to the sheet 34 and has attached thereto a bridle string 42 for flying the kite 32.

From the foregoing, the construction and operation of the device will be readily understood and further explanation is believed to be unnecessary. However, since numerous modifications and changes will readily occur to those skilled in the art, it is not desired to limit the invention to the exact construction shown and described, and accordingly, all suitable modifications and equivalents may be resorted to, falling within the scope of the appended claim.

What is claimed as new is as follows:

A kite comprising a single thin sheet of impervious material cut to the general outline of the kite to be formed and having edges thereof rolled to form a continuous tube about the periphery of said sheet, said tube being adapted to be inflated to stiffen said sheet, means carried by intermediate portions of said sheet for attaching a bridle string, one end of said tube being closed, the opposite ends of said tube being provided with an extension for filling said tube, said extension being flexible for forming a tail for said kite and folding upon itself and being compressible to seal said opposite end against the escape of air from the tube, and a tie member for compressing said extension when folded and maintaining the same folded.

References Cited in the file of this patent

UNITED STATES PATENTS

1,480,889	Massa	Jan. 15, 1924
2,486,158	Haas	Oct. 25, 1949

FOREIGN PATENTS

215,241	Germany	Oct. 23, 1909