No. 713,381. Patented Nov. 11, 1902.

R. H. BATTERSBY.

KITE.

(Application filed Oct. 10, 1901.)

(No Model.)

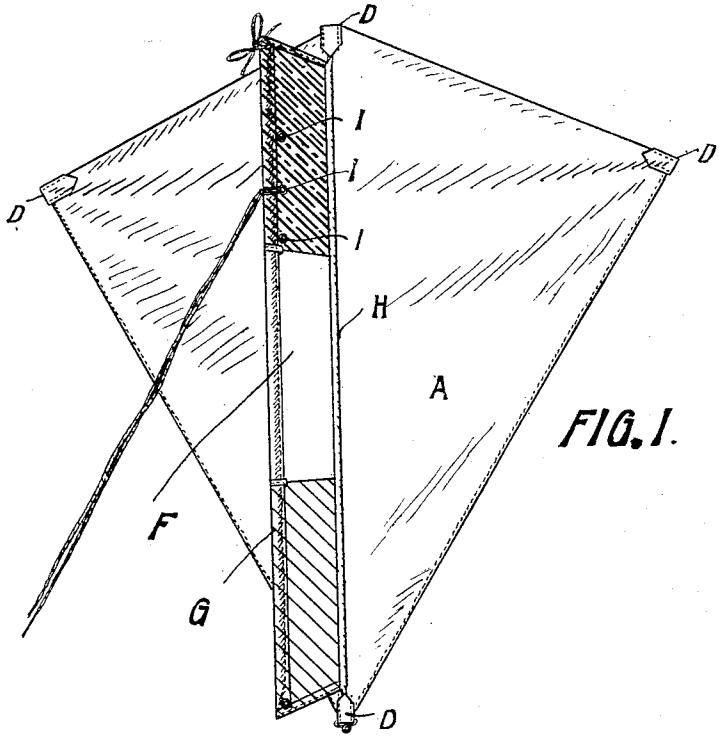
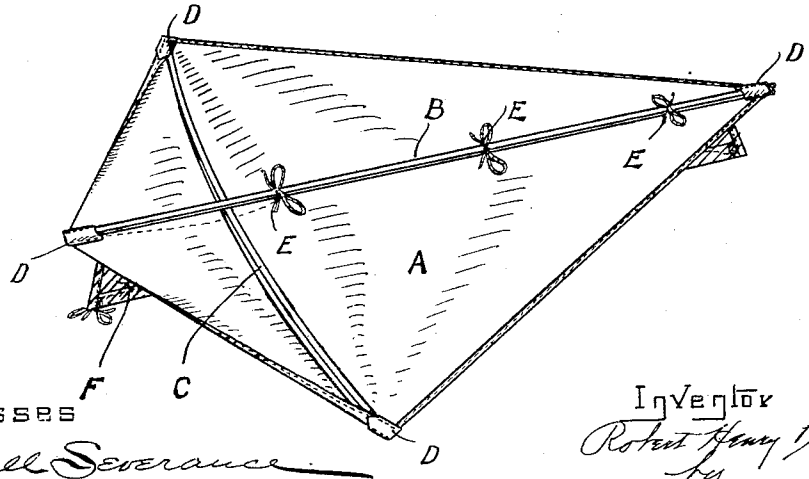


FIG. 1.

FIG. 2.



Witnesses
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THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

ROBERT HENRY BATTERSBY, OF SOUTHPORT, ENGLAND.

KITE.

SPECIFICATION forming part of Letters Patent No. 713,381, dated November 11, 1902.

Application filed October 10, 1901. Serial No. 78,264. (No model.)

To all whom it may concern:

Be it known that I, ROBERT HENRY BATTERSBY, inventor, a subject of the King of Great Britain, residing at 20 Marshside road, Southport, in the county of Lancaster, England, have invented certain new and useful Improvements in Kites, (for which application for a patent has been made in Great Britain, No. 7,990, dated April 18, 1901,) of which the following is a specification.

This invention has for its object a kite which will be very much steadier in the air than ordinary kites and which, therefore, can be used for advertising purposes.

The invention is best described by aid of the accompanying drawings, in which—

Figure 1 shows a perspective view of the kite seen sidewise from below; Fig. 2, a perspective view of the back of the kite—that is, looking at it from above.

In the drawings, A represents cloth, paper, or other flexible material forming the surface; B and C, two rods preferably attached to the kite by being sprung into pockets D D at each end and tied by string E at intervals.

F is a perfectly parallel keel formed of a sheet of flexible material inclosing a rod G. It can be laced to large kites by lacing H or can be sewed or pasted directly to the kite. The rod J can be arranged to be removable, so that a heavier rod can be placed in its position, if desirable, and it is not absolutely necessary that the rod should pass through a long pocket in the keel. It can be fixed to the keel so as to lie parallel with the surface of the kite and terminate the keel by any convenient attachment. It can also, if desirable, be in several pieces.

K represents eyelet-holes, to any of which the string can be attached. If the keel be absolutely parallel, it is immaterial within considerable limits where the string is attached, and I can do entirely without the usual loop or bridle which has hitherto been thought necessary with tailless kites, one end of the loop being at each side of the center of gravity. If the keel were not parallel, the usual double string would be necessary. Another point of my invention, which I have found to take extremely well in Great Britain, is arranging the keel so as to give the colors or flag of a given country, a given club, a given university, or the like, and the keel being always stretched tight by its own weight these colors hang vertically down and are always observable. The underneath side of the kite I frequently print with advertisements, and the kite being held remarkably steady by my keel these advertisements are very easily read, whereas with ordinary kites it quivers so much that it is very difficult to read an advertisement thereon. The ends of the keel are preferably a little sharp-pointed, as shown. I have found that where they are beveled off in the reverse direction the effect is very bad. The weight of the rod ought to extend the full length of the keel.

I claim as my invention—

1. A kite comprising a body portion formed of suitable material, a continuous keel projecting forwardly therefrom formed of flexible material, a bar or rib arranged longitudinally of the outer edge of the keel parallel with the plane of the said body portion, and a strengthening-rib behind the kite directly opposite the keel and parallel with said first-mentioned rib, substantially as described.

2. A kite comprising a body portion, a transverse rib and a vertical rib arranged at the back of the body portion, a keel projecting forwardly from the face of the kite and formed of flexible material, a stiffening bar or rib on the edge of the keel extending parallel with the said vertical rib, and means for fastening the keel to said kite, substantially as described.

3. A kite, comprising a body portion having pockets formed in the material thereof at its corners, a transverse and a vertical rib sprung into said pockets at the rear of the kite, a keel projecting forwardly from the front face of the kite and secured to the material of the kite, cords or strings at intervals attached to the keel and projecting through the material of the kite, the said strings being tied around the said vertical rib so as to firmly secure the keel to the stiffening-frame of the kite, a pocket in the forward edge of the keel, a stiffening-rod slipped in the said pocket and held therein, and a cord or string secured to the said keel stiffening-rod at any suitable point along its length for flying the kite, substantially as described.

4. A kite comprising a suitable body por-

tion, two stiff ribs spaced apart, and a web flexibly connecting said ribs for forming a keel, substantially as described.

5. A kite comprising a suitable body portion, two stiff ribs spaced apart and extending longitudinally of the said body portion and in parallel planes, and a web flexibly connecting the same for forming a keel, substantially as described.

6. A kite comprising a suitable body portion, a stiff rib attached to one face thereof, a second rib spaced from said body and extending in a parallel plane therewith, a web flexibly connecting the second rib to said body, and a retaining-string attached to said second rib, substantially as described.

In witness whereof I have hereunto signed my name, this 28th day of September, 1901, in the presence of two subscribing witnesses.

ROBERT HENRY BATTERSBY.

Witnesses:
W. H. BEESTON,
F. P. EVANS.