(No Model.)

J. W. DAVIS

KITE.

No. 490,949. Patented Jan. 31, 1893.

Fig. 1.

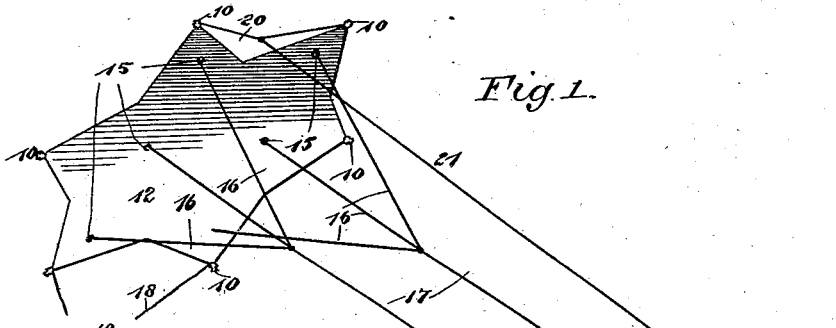

Fig. 2.

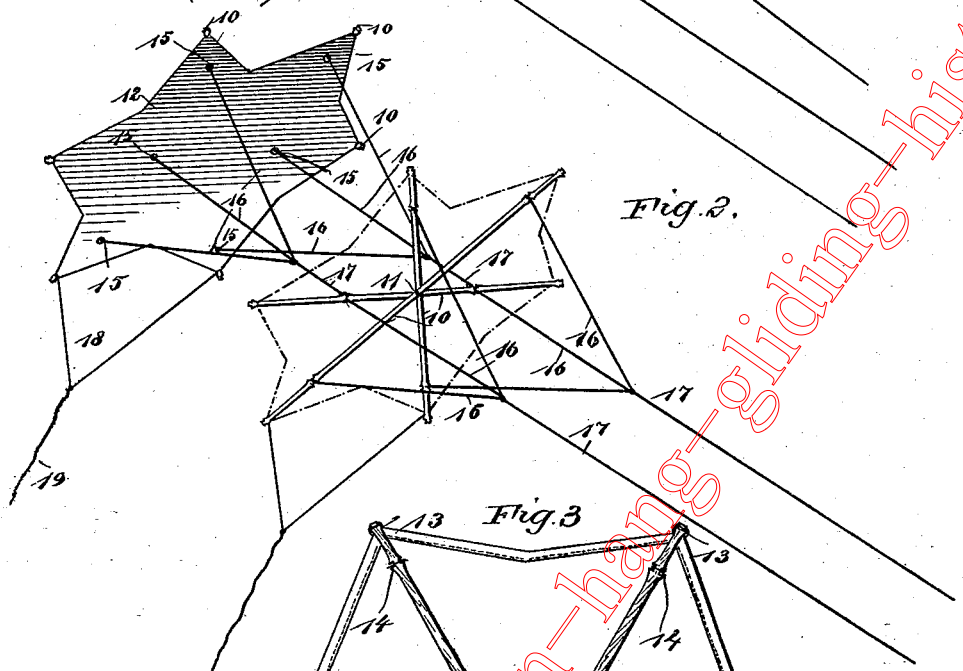

Fig. 3

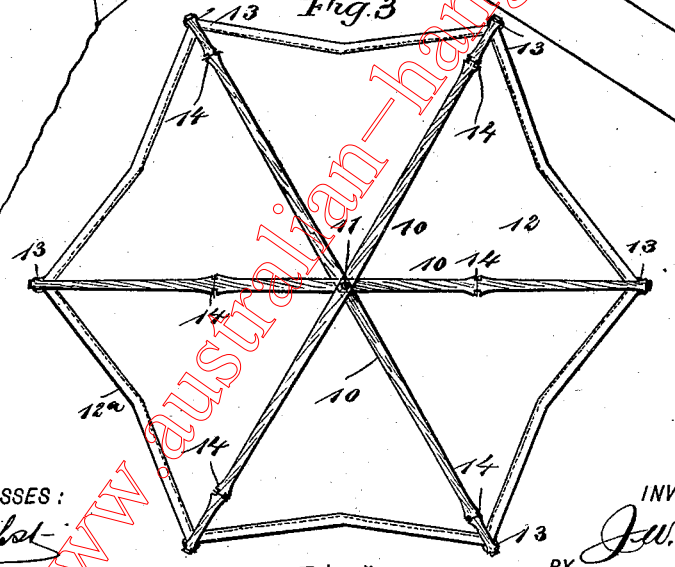

Fig. 4.

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KITE.

SPECIFICATION forming part of Letters Patent No. 490,949, dated January 31, 1893.

Application filed April 18, 1892. Serial No. 429,382. (No model.)

To all whom it may concern:

Be it known that I, JOHN W. DAVIS, of New York city, in the county and State of New York, have invented a new and Improved Kite, of which the following is a full, clear, and exact description.

My invention relates to improvements in kites, and the object of my invention is to produce a strong but collapsible kite, which may be folded into a small compass and carried easily on shipboard or in any place desired; and a further object of my invention is to construct a kite and connect it with the lines in such a way that it may be accurately steered, to the end that when carried on shipboard it may be used successfully for carrying a life line ashore, or for dragging a spar, buoy, or other article to the shore.

To this end, my invention consists in a kite, the construction of which will be hereinafter described and claimed.

Reference is to be had to the accompanying drawings forming a part of this specification, in which similar figures of reference indicate corresponding parts in all the views.

Figure 1 is a perspective view of a flying kite embodying my invention; Fig. 2 is a similar view of two kites hitched tandem; Fig. 3 is a rear elevation of the kite; and Fig. 4 is a view of the kite when collapsed and folded.

The kite frame is composed of a plurality of ribs 10, of equal length, although it is not absolutely essential that they be of the same length, and the ribs are pivoted together at the center, as shown at 11 in Fig. 3, and consequently when desired, they may be tilted into a parallel position.

The kite frame is covered by a fabric 12, preferably of cloth, the edges of the fabric being reinforced by a rope or its equivalent, as shown at 12^a, and the corners of the fabric are secured to the outer ends of the ribs 10, by means of cords, as shown at 13, the ribs having end shoulders as shown in the drawings, to facilitate this attachment. In practice, the cover is permanently secured to the extremities of one rib and detachably secured to the extremities of the other ribs, as this holds it always in place in relation to the ribs. The ribs 10 are provided on opposite sides of the center with notches 14, which receive the cords of the flying bridle, and the notches are produced, as shown in Fig. 3, in such a way that the notches on opposite sides of the center will all be in a vertical line. The kite cover 12, is perforated opposite these notches, as shown at 15, and the cords 16 which compose the bridle extend through these perforations and are secured in the notches of the ribs. The branch cords 16 of the bridle merge in the flying lines 17, these being arranged parallel with each other, as shown in Figs. 1 and 2, and the lines extend to the ground so as to enable the kite to be steered as described below.

At the bottom of the kite is a tail loop 18, which carries the tail 19, and the ends of the loop are secured to the lower ends of two of the kite ribs. If desired, the cross line 20 may connect the extremities of the two upper ends of the kite ribs, as shown in Fig. 1, and a line 21 may extend from the center of the cord to the ground, this construction enabling the kite to be steered so as to throw it up or down as desired.

When the kite is not in use the cover is removed from two of the ribs by detaching the cords 13, the ribs folded together, and the cover wrapped around them, as shown in Fig. 4, thus enabling the kite to be carried in a very small space.

The operation of the kite is as follows: The flying lines 17 which are attached to the bridles, enable the kite to be raised by the wind in the usual way, and by pulling upon one or the other of the lines 17, the kite may be given an inclination in relation to the direction of the wind which will cause it to be driven to the right or left as desired, and it may thus be very accurately steered. By pulling upon the line 21, or slackening the line as desired, the kite may be given a greater or less vertical inclination, and may thus present its surface at such an inclination to the wind that it may be forced up or down at will.

Instead of using the cord 21 and the cross cord 20, the bridles may be arranged one above the other, and the lines 17 one above the other, and this arrangement will enable the kite to be steered in a vertical direction.

On account of its easy handling, the kite is especially adapted to carry a life line, or to tow a buoy or similar article, and to give increased power, several kites may be hitched

tandem, as shown in Fig. 2, and in this case the lines 17 of the rear kite are secured to the middle rib 10 of the kite frame in front of it, but care should be taken that the lines 17 be hitched to the rib at equal distances from the center of the kite and in a horizontal line. It follows, then, that any movements of the front kite will be transmitted to the kite behind it, and if desired, any number of kites may be used in this way.

Having thus described my invention, I claim as new, and desire to secure by Letters Patent,—

1. A kite, comprising a plurality of ribs pivoted together near the center, a detachable cover for the kite, and bridles secured to the kite on opposite sides of its center, the bridles being each connected with a flying line, substantially as described.

2. The combination, with a kite having cross ribs as shown, of bridles secured on opposite sides of the center of the kite, the bridles comprising several cords having their attached ends in alignment, and flying lines secured to the free ends of the bridles, substantially as described.

3. The combination, with a kite, of a cross cord connecting two of its projecting ribs, and a separate steering line secured to the cross cord, substantially as described.

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Witnesses:
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