T. Perrins,

Kite,

No. 51,860. Patented Jan. 2, 1866.

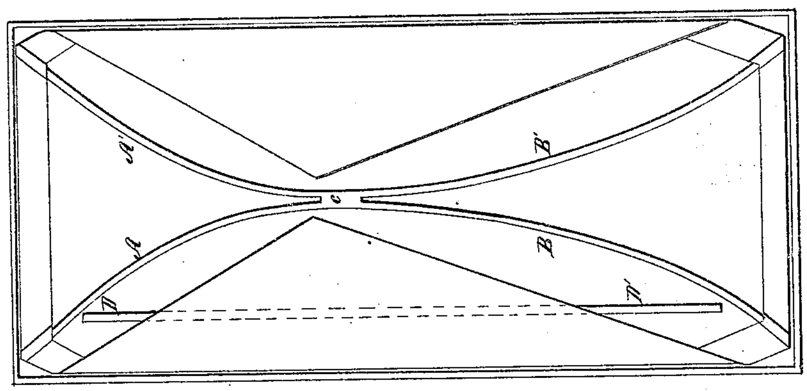

Fig. 3

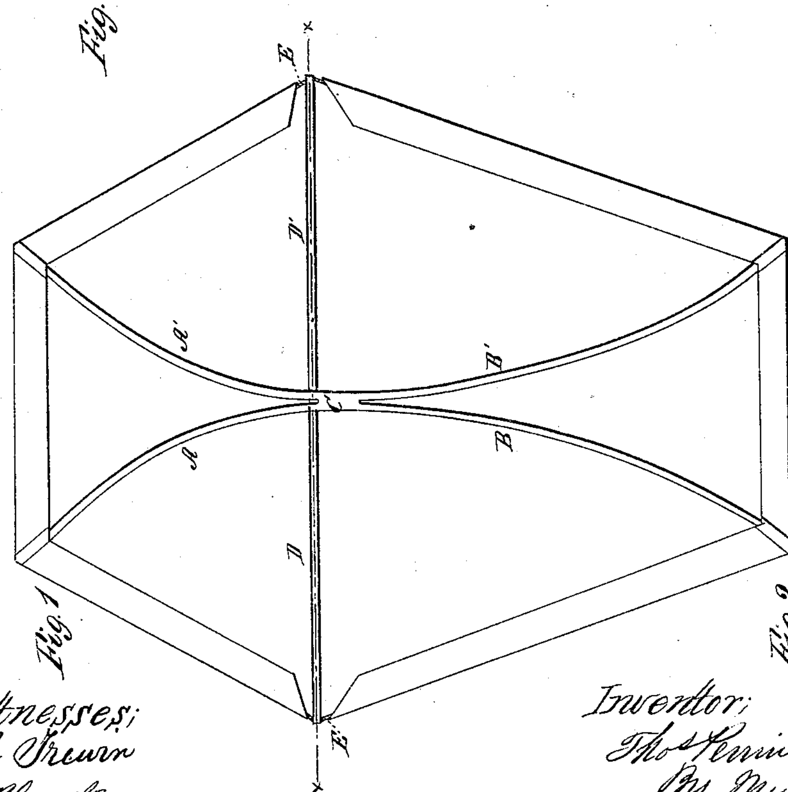

Fig. 1

Fig. 2

Witnesses;
Wm. Trewin
J. W. Coombs [?]

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UNITED STATES PATENT OFFICE.

THOMAS PERRINS, OF PHILADELPHIA, PENNSYLVANIA.

KITE.

Specification forming part of Letters Patent No. **51,860**, dated January 2, 1866.

To all whom it may concern:

Be it known that I, THOMAS PERRINS, of Philadelphia, in the county of Philadelphia and State of Pennsylvania, have invented a new and useful Improvement in Kites; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is a view of my improved kite, showing the construction of the frame and its arrangement with respect to the cover. Fig. 2 is a cross-section through the line *x x*, Fig. 1. Fig. 3 is a view showing the kite when folded and packed for market.

The object of my invention is to furnish a kite the frame of which shall be light and strong and capable of being partially taken to pieces after the kite has been completed, for convenience and economy in packing; and it consists of a frame composed of two or more pieces, constructed and arranged with respect to each other and the cover of the kite, as hereinafter more fully described.

The portion of the frame which extends the cover of the kite longitudinally is formed in one piece by sawing or cutting into the ends of said piece, so as to form arms A A′ and B B′. The arms A A′ are made shorter than the arms B B′, so as to bring the solid part C almost into a line with the widest part of the kite. The arms A A′ and B B′, when the cord which strengthens the edges of the kite and the paper which forms the cover are applied, are bent or sprung into the form represented in the drawings—that is to say, into almost the form of the letter **X**. This portion of the frame may be made in two pieces and then glued, riveted, or otherwise attached to each other at the point C, one object of the arrangement being that the pieces A B and A′ B′ be in the same plane and do not cross, or be one above the other, rendering more space necessary in packing the goods; but I prefer the manner of construction first described, as being less expensive and sufficiently strong; since from the manner in which the arms A A′ B B′ are bent or sprung the pressure exerted by the pieces A B and A′ B′ at the point C is toward and not from each other.

The portion of the frame D D′ which extends the cover of the kite laterally is made detached from the other part or parts of the frame; and when put into its proper position, as shown in Fig. 1, it is wholly free from any connection with the other parts of the frame, except the connection of simple contact at the point of intersection. The ends of the arms of the frame are notched in the usual manner, as represented in Fig. 2. Through these notches is drawn the cord E for strengthening the edges and supporting the cover of the kite.

The cover is attached to the cord and ends of the arms of the frame in the ordinary way, except that a portion of the cord at the points of greatest lateral extension is left uncovered for convenience in putting the part D of the frame in position.

The kite may be provided with lapels coated on one side with mucilage. The lapels may be attached by one end to the cover of the kite, so that they may be dampened and pressed down over the ends of the piece D when said piece has been put into its place. The piece D is put into its position by placing the notch at one end of the said piece upon the cord at one of the points of greatest lateral extension, and then springing or bending the piece sufficiently to allow the notch at the other end of the piece to be placed upon the cord at the other point of greatest lateral extension. Then as the piece D straightens itself the cover will be stretched to its proper position, the lapels may be pasted down over the ends of the piece D, and the kite is ready for use.

In packing the kite for market the piece D is removed from its place and laid upon the kite in a position similar to that shown in Fig. 3. The sides are then folded over and the entire kite placed in the box in the manner represented in Fig. 3.

By constructing the frame of the kite in the manner described two or three times as many kites can be packed in the same box as there could be if the pieces of the frame crossed each other two or three times when packed,

thus saving a large expense on the cost of preparing the kites for market, and thus enabling them to be sold at a less price than when otherwise constructed.

I claim as new and desire to secure by Letters Patent—

A kite the frame of which is formed in two or more pieces, constructed, combined, and arranged with respect to each other and the cover of the kite substantially as described, and for the purpose set forth.

THOMAS PERRINS.

Witnesses:
ISAAC H. SINGER,
WILLIAM PERRINS.