

No. 691,875.

Patented Jan. 28, 1902.

H. R. SAUNDERS.  
MUSICAL KITE.

(Application filed Oct. 31, 1901.)

(No Model.)

FIG. 1

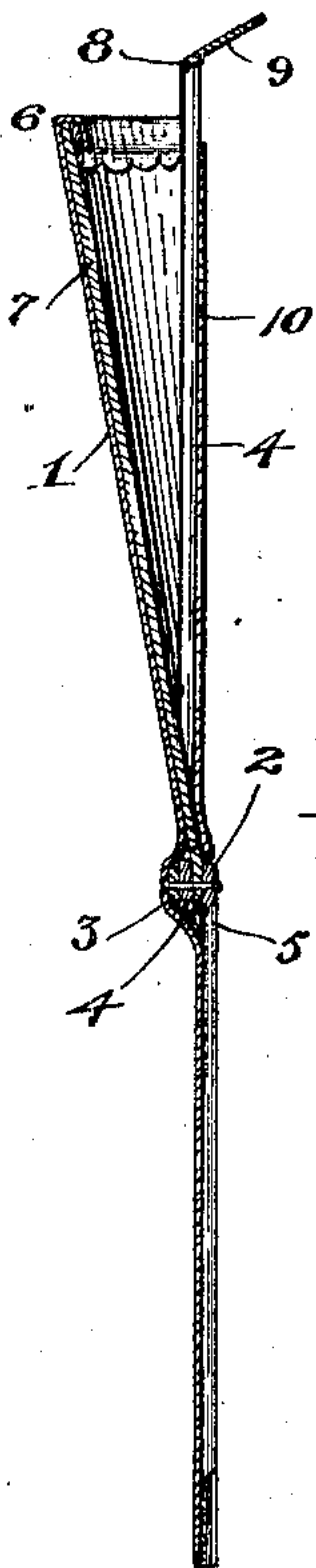
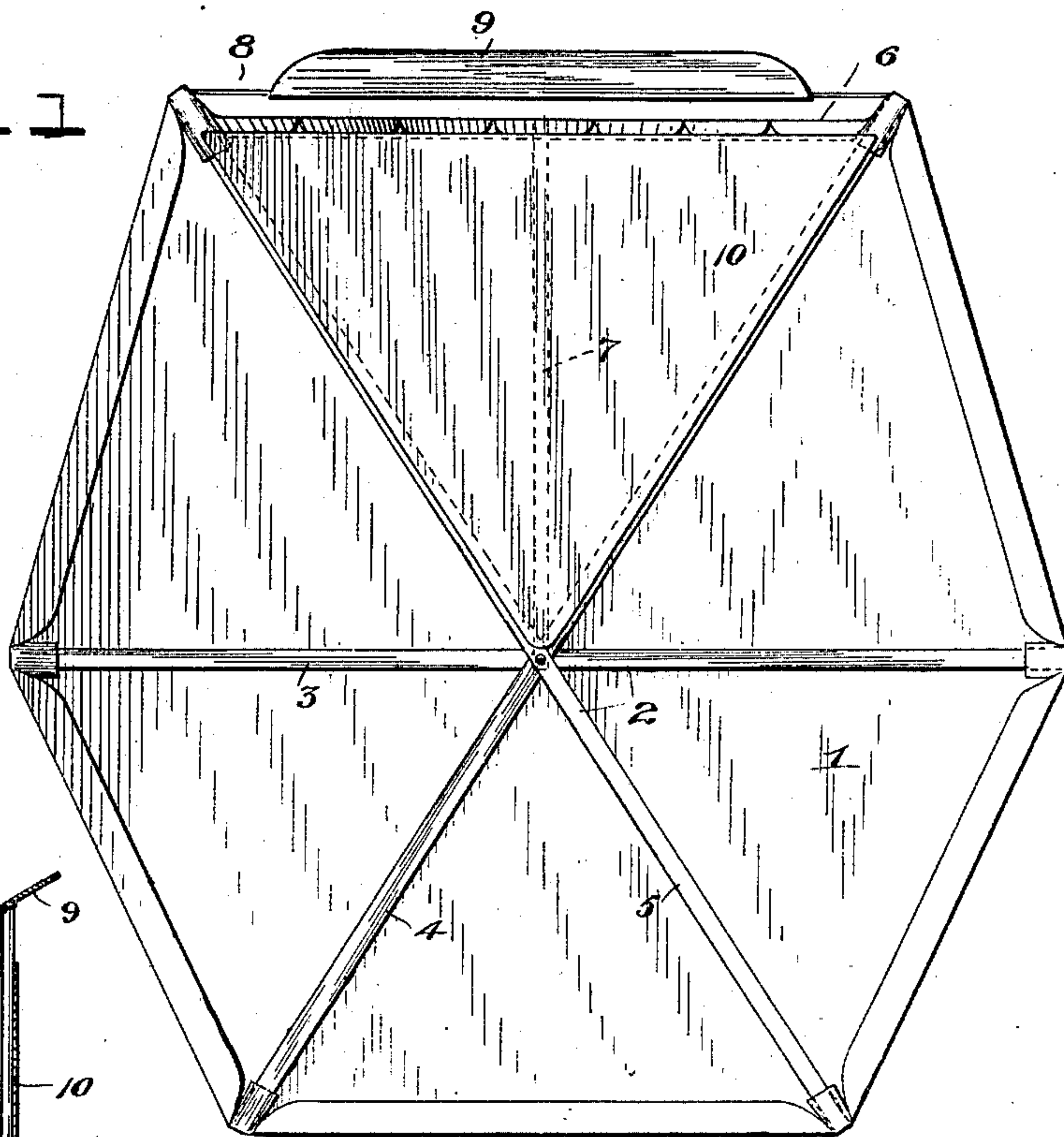
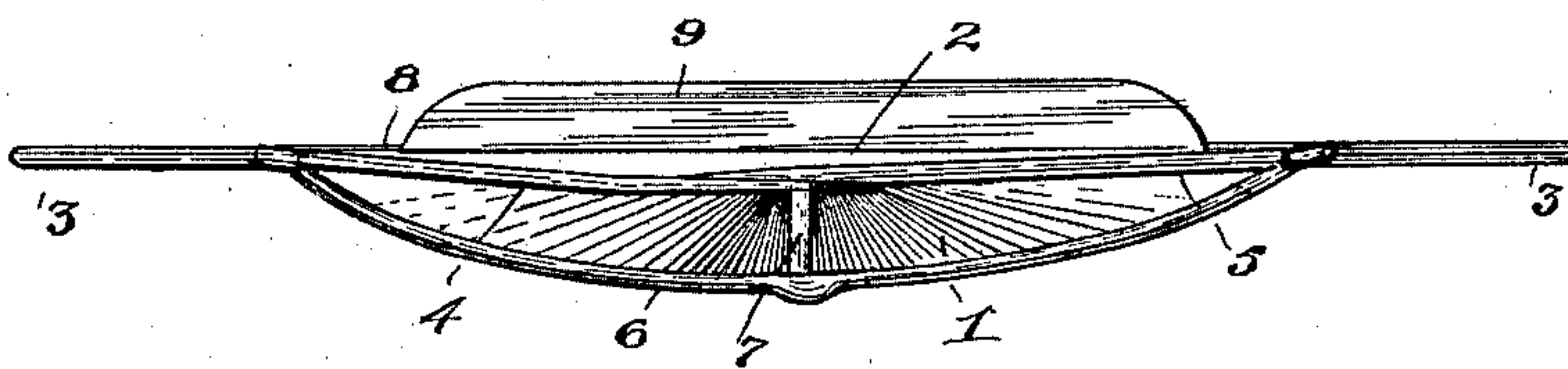


FIG. 3

FIG. 2



Inventor

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Witnesses

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# UNITED STATES PATENT OFFICE.

HENRY ROWLAND SAUNDERS, OF NEW ROCHELLE, NEW YORK.

## MUSICAL KITE.

SPECIFICATION forming part of Letters Patent No. 691,875, dated January 28, 1902.

Application filed October 31, 1901. Serial No. 80,621. (No model.)

*To all whom it may concern:*

Be it known that I, HENRY ROWLAND SAUNDERS, a citizen of the United States, residing at New Rochelle, in the county of Westchester and State of New York, have invented certain new and useful Improvements in Musical Kites; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to improvements in kites, and particularly to an improvement in kites of that character provided at the head end of the frame with a concavity and a vibrator extending across the kite adjacent to said concavity and adapted to be vibrated by the action of the wind to cause a humming sound, thus producing a musical kite.

The object of my invention is to provide a construction whereby desirable results are secured and a better musical or vibrator action of the vibrating device produced.

With this and other objects in view the invention consists of certain novel features of construction, combination, and arrangement of parts, which will be hereinafter more fully described, and particularly pointed out in the appended claim.

In the accompanying drawings, Figure 1 is a rear elevation of a kite embodying my invention. Fig. 2 is a top plan view thereof, and Fig. 3 is a vertical central section.

The kite comprises a body portion 1 of any desired and suitable material—such, for instance, as paper or a woven fabric—and a frame 2. The body portion is preferably, though not necessarily, made of hexagonal form, and the frame is composed of thin sticks or wooden strips secured together at or near their ends in any approved manner and having the body portion pasted or otherwise secured thereto. In the present instance the frame is shown as composed of a transverse center strip 3, two crossed diagonal strips 4 and 5, a head-strip 6, and a brace-strip 7, connecting said head-strip with the center of the frame at the point of crossing of said diagonal strips. The head-strip 6 is longitudinally bowed or curved, so as to form a convex surface on the upper part of the front or windward side of the kite and a corresponding

concave surface on the upper part of the back of the kite. This strip is located below the upper ends of the two diagonal strips 4 and 5, and between the said upper ends of these diagonal strips on the concave side of the kite is stretched a cord or wire 8, to which is attached an apron 9. This apron or wing is caused to vibrate rapidly by the action of the wind when the kite is brought against the same, thus producing a humming sound which varies in intensity with the strength and action of the wind-currents.

I am aware of the prior patent to Maddus, No. 121,056, in which is shown a vibrating apron stretched across a concavity formed by a similar curvature of the head-bar; but in this case the head-bar is located above the plane of the cord to which the apron is attached, and the drumming sound is produced by the apron striking against the concave portion of the kite. The objection to this construction is that as the vibrating apron is exposed only on one side to the action of the wind vibration is only set up under certain conditions and the flying action of the kite is considerably interfered with. In my construction I avoid these objections by locating the vibrating cord or wire and upper portion of the apron above the curved or bowed head-strip, so that the apron will be exposed on either side to the action of the wind-currents and will not be in the way of the body portion of the kite to interfere with the free action of the wind thereon. The apron being thus freely exposed is adapted to vibrate freely under all conditions of service and to produce a sharp and distinctly musical sound.

In order to throw the air very forcibly under the hummer, thus increasing the vibrations and enhancing the musical tone, I may provide upon the rear face of the kite a strip of paper or fabric 10, pasted or otherwise secured to the frame and conforming to the shape thereof and to the corresponding portion of the body—viz., the V-shaped concavo-convex portion bounded by the headpiece and the two diagonal frame-strips. This additional strip causes a deflection of the air-currents, whereby said currents are thrown against the vibrating apron, causing the more rapid and effective action in the same in producing the humming sound.

Having thus described my invention, what I desire to claim by Letters Patent is—

5 A kite comprising a body portion, a frame, a curved headpiece giving the head portion of the frame a concavo-convex form, a vibrating device stretched across the concavity of the frame, and a strip secured to the frame and corresponding to the shape of said concavo-convex portion, so as to form a deflector to

throw the currents of air against the vibrating device, substantially as described.

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses.

HENRY ROWLAND SAUNDERS.

Witnesses:

WM. MCKAY,

ARTHUR WADSWORTH.