

No. 743,301.

PATENTED NOV. 3, 1903.

F. LISCHTIAK.
KITE.

NO MODEL.

APPLICATION FILED JULY 30, 1903.

2 SHEETS—SHEET 1.

FIG. 1.

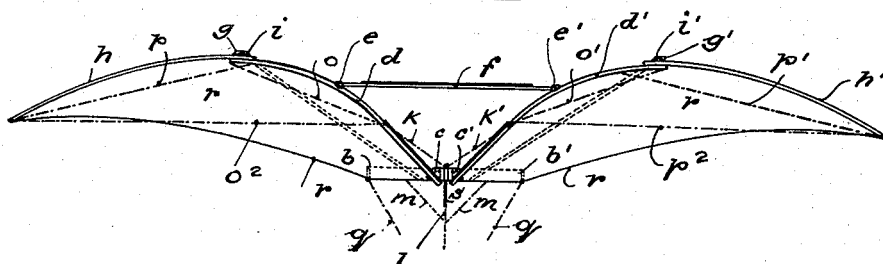


FIG. 2.

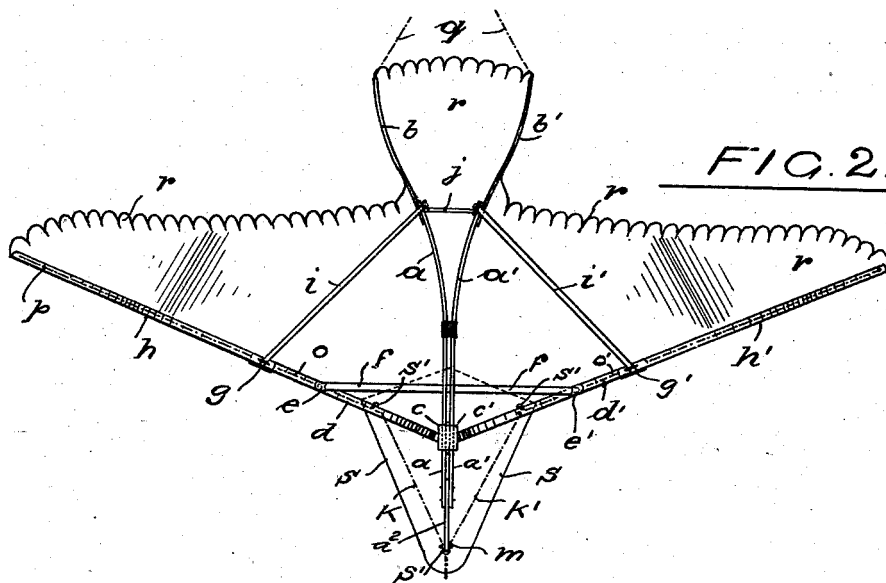
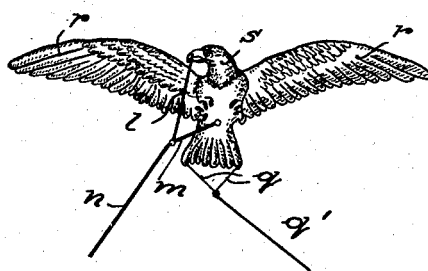


FIG. 3.



Witnesses
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Ferdinand Lischtiak
By his Attorney
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2 SHEETS—SHEET 2.

FIG. 6.

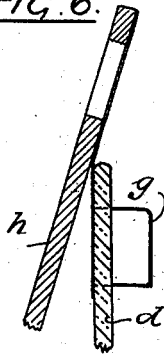


FIG. 4.

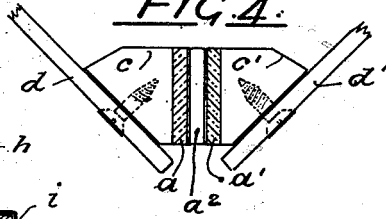


FIG. 5.

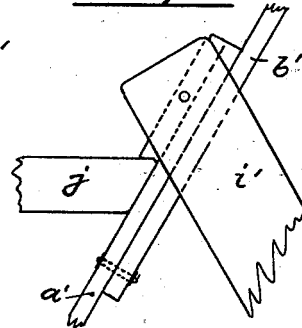


FIG. 7.

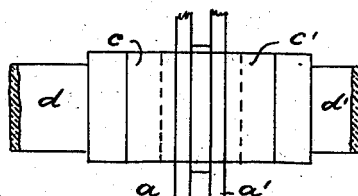


FIG. 10.

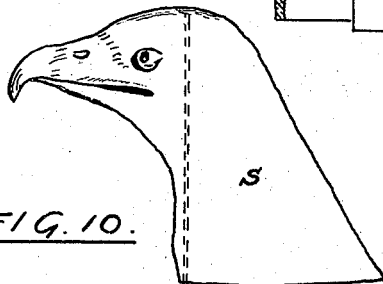


FIG. 8.

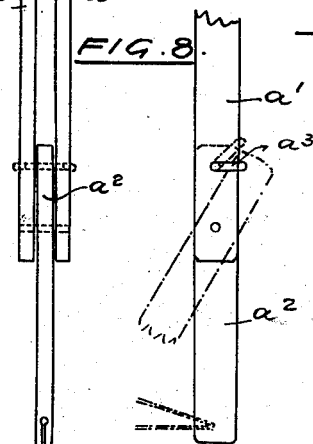


FIG. 9.

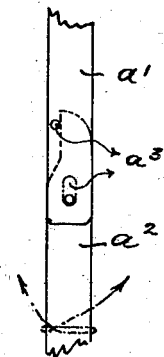


FIG. 11.

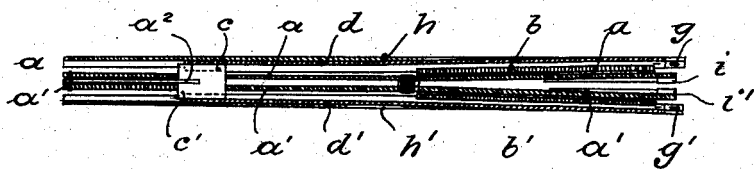
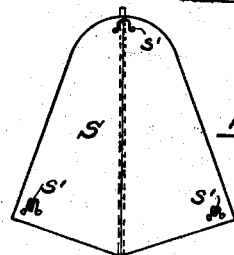


FIG. 12.

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UNITED STATES PATENT OFFICE.

FERDINAND LISCHTIK, OF LIESING, NEAR VIENNA, AUSTRIA-HUNGARY,
ASSIGNOR TO JOSEPH F. HEURTEUR, OF PATERSON, NEW JERSEY.

KITE.

SPECIFICATION forming part of Letters Patent No. 743,301, dated November 3, 1903.

Application filed July 30, 1903. Serial No. 167,525. (No model.)

To all whom it may concern:

Be it known that I, FERDINAND LISCHTIK, a subject of Francis Joseph, Emperor of Austria-Hungary, residing at Liesing, near Vienna, Austria-Hungary, have invented certain new and useful Improvements in Kites, of which the following is a specification, reference being had therein to the accompanying drawings.

My invention relates to improvements in kites made in the form of birds; and it consists in the peculiar construction, arrangement, and combination of parts shown in the drawings and hereinafter described and claimed.

The objects of my improvement are to provide a folding bird-shaped kite which is simple in construction, easily operated, and inexpensive.

The further objects of my invention are to provide a bird-shaped kite which may be used for scientific experiments, for hunting, and other sports.

The kite consists of a frame or skeleton and a covering therefor which when the parts are extended for flying will bear a close resemblance to a bird.

The construction, as shown and hereinafter described, is calculated to permit the moving and fluttering of parts of the kite when it is soaring through the air in bird-like fashion and to combine lightness, strength, and durability.

In the drawings similar letters refer to similar parts throughout the several views.

Figure 1 is a front elevation of my kite, the head portion or covering *s* being removed; Fig. 2, a top view; Fig. 3, a bottom view of kite complete as it appears when flying; Fig. 4, an enlarged detailed view of wing-bars and blocks to which they are secured, portions being broken away; Fig. 5, a detailed view of tail-bar joints and braces; Fig. 6, a detailed view of wing-bar joints and braces; Fig. 7, a plan view of back and head frame; Fig. 8, a detailed side view of same; Fig. 9, a detailed side view showing a modification of Fig. 8; Figs. 10 and 11, detailed views of head portion of kite; and Fig. 12, a plan view of skeleton of kite, parts being folded together.

The frame or skeleton consists of the two

bars *a* and *a'*, which run together parallel from the front ends thereof three-fifths of their length and are pivotally connected at their rear ends with tail-bars *b b'*, so as to be capable of being folded. Between the front ends of the bars *a a'* is pivotally secured the head-frame bar *a²*, which moves on its pivot and is adapted to hold the head portion *a*. (Shown in Fig. 10.) At a point near the front ends of said bars *a a'*, the distance between said point and said front ends being one-fifth of the length of the said bars, there are secured blocks or wooden pieces *c c'*, substantially triangular in form, one on each side of the bars *a a'*, to which blocks the wing-bars *d h* and *d' h'* are pivotally secured, so as to be capable of being turned or folded. The wing-bars *d d'* are larger at their inner ends than at their outer extremities and are provided on their upper surfaces with pockets *e e'*, which are adapted to receive the extremities of a brace *f*, and with engaging means *g g'* to receive the ends of the braces *i i'*, which are folding braces, as shown in Fig. 12. The cords *k k'* unite and are attached to the cord *l*, which connects the beak of the bird with the cords *m* and *n*. From the extremities of the tail-bars *b b'* depend the cords *q q'*, which are connected with the cord *q'*, to which a balance-weight of the desired size may be secured. The cords *o o' o²* and *p p' p²*, which are secured to the wing-bars *d h* and *d' h'*, may be regulated to give to the wings the proper or desired arch or curve when the frame or skeleton is unfolded and the braces are in position, as is shown in Fig. 1.

The covering *r* may be scalloped or cut and painted to resemble any kind of a bird. The head portion *s* is secured by means of hooks *s'* to the frame, so as to have a vertical movement on the head-frame bar *a²*, the movement of which is limited by the locking device *a³*. The person flying the kite is able to cause the head to move by manipulating the cord *n*.

With this description of my invention, what I claim, and desire to secure by Letters Patent, is—

1. The combination of the bars *a a'*, the bar *a²* pivotally secured between the front ends thereof, the bars *b b'* pivotally secured to the rear ends thereof, and an adjustable brace

to separate the rear ends of said bars $a a'$, with blocks $c c'$ substantially triangular in form, and secured to the sides of the bars $a a'$, bars $d d'$ pivotally secured to said triangular blocks and tapering toward their outer ends, bars $h h'$ suitably secured to the outer ends of the bars $d d'$, an adjustable brace f to separate the outer ends of the bars $d d'$, means for giving to the bars d, d', h and h' , an arched or curved form when extended, and folding braces $i i'$ connecting the tail-bars and wing-bars when extended, all arranged and constructed, substantially as set forth.

2. The combination of the bars $a a'$, the bar a^2 pivotally secured between the front ends thereof, the bars $b b'$ pivotally secured to the rear ends thereof, and an adjustable brace to separate the rear ends of said bars $a a'$, with blocks $c c'$, substantially triangular in form, and secured to the sides of the bars $a a'$, bars $d d'$ pivotally secured to said triangular blocks and tapering toward their outer ends, bars $h h'$ suitably secured to the outer ends of the bars $d d'$, an adjustable brace f to separate the outer ends of the bars $d d'$, means for giving to the bars d, d', h , and h' , an arched or curved form when extended, folding braces $i i'$ connecting the tail-bars and wing-bars when extended, and a suitable covering, all arranged and constructed, substantially as set forth.

3. In a kite-frame, the bars $a a' a^2, b, b'$ and brace j in combination with the framework $d d'$, members $h h'$ removably secured to $d d'$, braces f, i , and i' , a head-covering s secured to the bar a^2 , and a covering r , arranged and constructed, substantially as set forth.

4. In a kite-frame, the bars $a a'$ in combination with blocks, substantially triangular

in form, wing-bars $d d'$ operatively secured to said blocks and tapering toward their outer ends, bars $h h'$ pivotally secured to the outer ends of the wing-bars $d d'$, means for arching or curving the wing-bars when extended, and means for maintaining said wing-bars in an extended position, substantially as set forth.

5. In a kite-frame, the body-bars a and a' running parallel from the head toward the tail portion and there diverging, and means for holding the diverging ends apart, in combination with a movable head-frame bar a^2 attached to the front ends of said bars, and tail-bars $b b'$ pivotally secured to the rear ends of said bars, wing-bars $d d', h$, and h' , operatively connected with the body-bars $a a'$, means for maintaining the wing-bars in an extended position, and a covering, substantially as set forth.

6. In a kite-frame, the body-bars a and a' running parallel from the head toward the tail portion and there diverging, and means for holding the diverging ends apart, in combination with a movable head-frame bar a^2 attached to the front ends of said bars, tail-bars $b b'$ pivotally secured to the rear ends of said bars, and means for limiting the movement of the head-frame bar a^2 , wing-bars, means for maintaining the same in an extended position, and means for curving them when extended, all substantially as set forth.

In testimony whereof I affix my signature in presence of two witnesses.

FERDINAND LISCHTIK.

Witnesses:

ALVESTO S. HOGUE,
AUGUST FUGGER.

67/49

U. G. LEE & W. A. DARRAH.

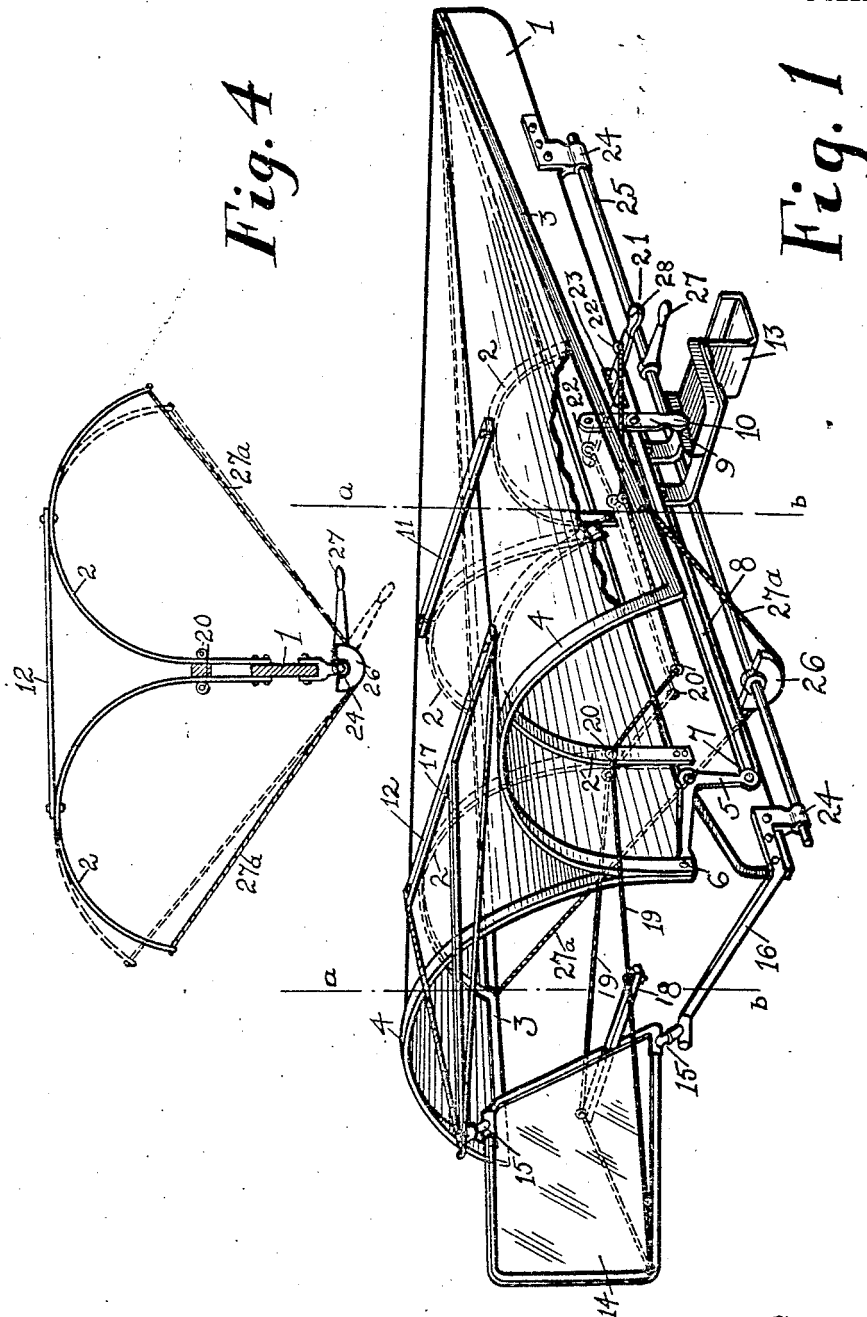
FLYING MACHINE.

APPLICATION FILED FEB. 15, 1910.

989,786.

Patented Apr. 18, 1911.

2 SHEETS—SHEET 1.



Witnesses:

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O. Ivan Lee

Ulysses Grant Lee,
William Austin Darrah,
Inventors.

By William Austin Darrah,
Attorney