(No Model.)

M. A. DABERER. KITE.

No. 591,211.

Patented Oct. 5, 1897.

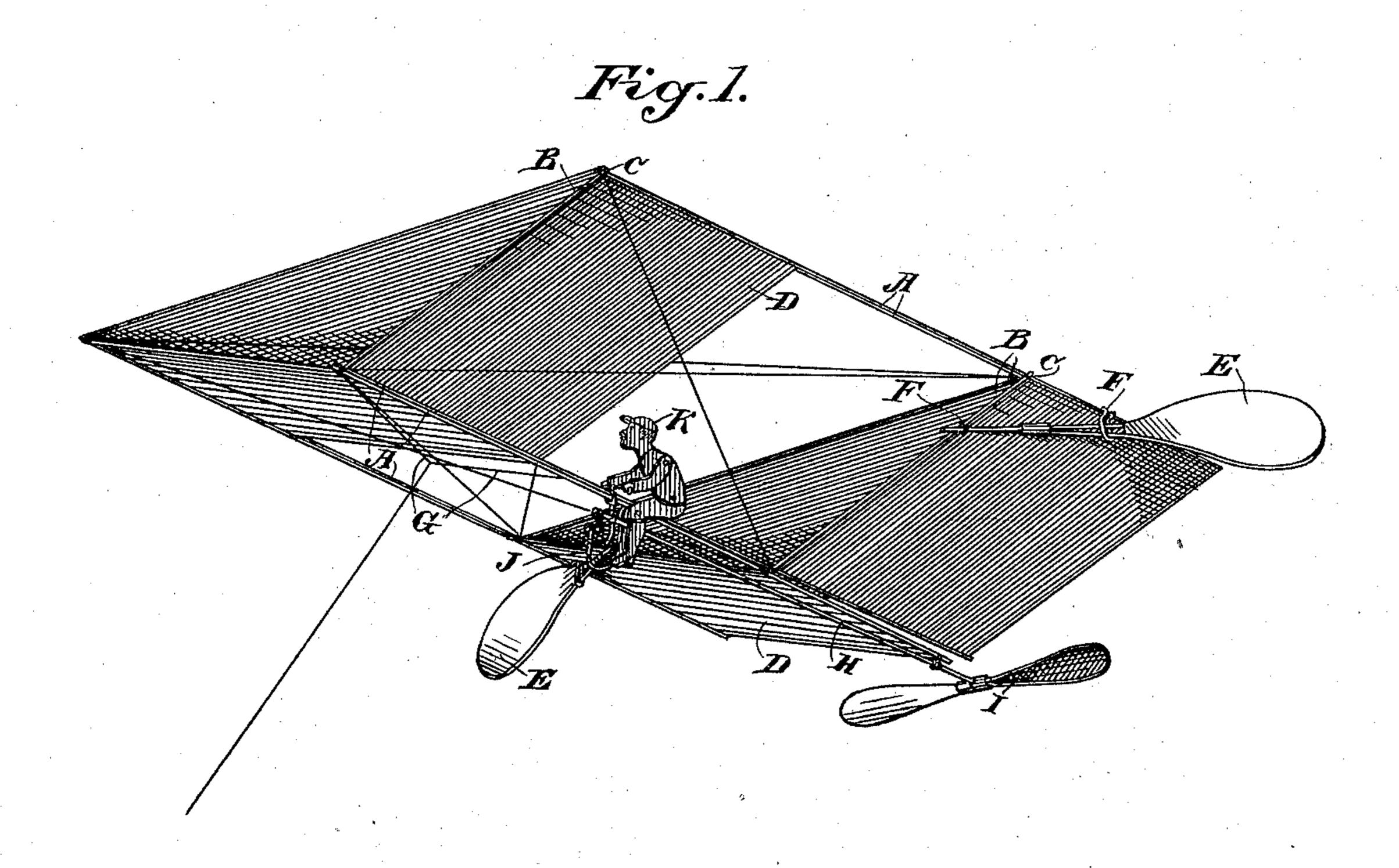
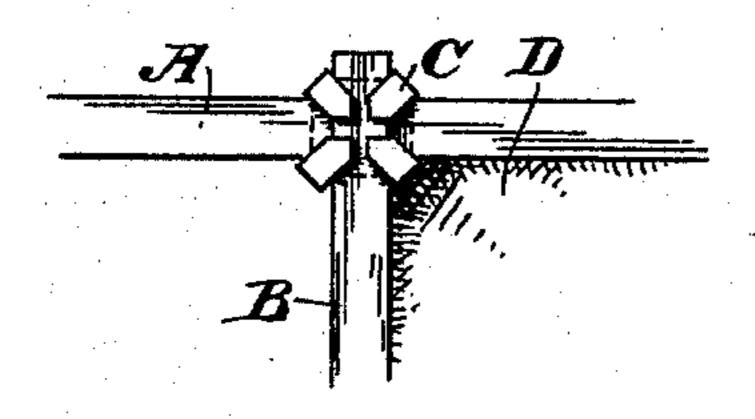


Fig. 2.



Witnesses, H.F. Elscheck Hart Dewey Ho.

## UNITED STATES PATENT OFFICE.

## MAX A. DABERER, OF WEST BERKELEY, CALIFORNIA.

## KITE.

SPECIFICATION forming part of Letters Patent No. 591,211, dated October 5, 1897.

Application filed January 15, 1897. Serial No. 619, 283. (No model.)

To all whom it may concern:

Be it known that I, MAX A. DABERER, a citizen of Austria-Hungary, residing at West Berkeley, county of Alameda, State of California, have invented an Improvement in Kites; and I hereby declare the following to be a full, clear, and exact description of the same.

My invention relates to certain improveno ments in kites which may be employed for scientific purposes and also designed for toys for the amusement of children.

It consists, essentially, in a novel construction of a kite in triangularly-shaped hollow sections, the combination therewith of wings whereby it is steadied and guided without the use of a tail, and in the application of a propeller and mechanism driven thereby.

Referring to the accompanying drawings, 20 Figure 1 is a view of my kite. Fig. 2 is a detail of the connecting elemn

tail of the connecting-clamp.

The frame may be made of bamboo or other suitable light material. These frames, as shown in the present case, consist of parallel rods A, placed with relation to each other so that when united by the triangularly-formed bars B they extend along the angles of these bars and the sectional outline of the frame forms a triangle, the broad base of which is at the upper or back part of the kite and the obtuse apex at the bottom or front portion.

The meeting ends of the rods A and B of the frame are united by suitably-formed clamps C, as shown, which allow the parts to be disengaged and folded for transportation.

The rods A may be made of any suitable or desired length, and a covering of silk or paper D is stretched over the bars A, following in the plane of and parallel with the bars 40 B, to which they are also attached, as shown.

The covering may extend the full length of the bars A, but I have found it preferable to make the covering in separate sections extending a portion of the distance between the bars A and leaving an open central space intermediate between the covering portions. The front or top edges may be attached to the transverse bars B and the rear edges of the covering unsupported or provided with a cord, which allows these edges to yield with an elastic movement. This makes an open

or box kite of triangular cross-section, which is well fitted for the purpose.

Upon the rear portion of the frame I attach wings E, which are made in any suitable 55 or desired shape. In the present case they are in the shape of a battledore, and they are secured to the frames by clamps F, so that they may be adjusted to any desired angle, standing at each side of the frame.

The kite is connected with the cord or string by which it is held by bands or loops G, suitably attached to the central lowermost of the rods A, and, if preferred, they may be connected with other steadying-lines extending 65 toward the outer angles of the frames B. I have found, however, that the supplemental wings, when properly adjusted, will steady the kite so that no tail or additional bands are necessary, and in this form it may be used 70 for carrying up thermometers, barometers, anometers, or other scientific instruments which it is desired to use in the upper higher strata of the atmosphere.

In order to complete the kite as an amus- 75 ing toy, I have journaled a shaft H along the lower central frame-rod A, and upon the rear end is fixed a propeller I.

The front end of the shaft H has a crank formed upon it, and this crank is connected 80 by a rod J with the feet of a figure K, which rides as upon a bicycle, the rider sitting astride the bar A and holding to a suitable handle in front.

When the crank is moved by the rotation 85 of the shaft, the connecting-rod J acts upon the feet of the rider to move them up and down and make it appear as if the rider were rotating the shaft and the propeller to drive the kite.

It will be manifest that other similar moving devices may be connected with the propeller apparatus, and these devices may be varied to suit the tastes or wishes of the manufacturer or purchaser.

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

1. A kite consisting of the parallel triangularly-disposed side rods or frames, the diagonal uniting-rods connecting them at their front and rear ends so as to form an open tri-

angular frame with its broad base presented upwardly, and a covering fixed to the exterior rods of said frame to form surfaces for the action of the air.

2. A kite consisting of rods united together at the angles to form obtuse triangles, with their bases presented upwardly, parallel rods extending through said angles with uniting-clamps whereby they are detachably secured together, a covering material extending between the parallel longitudinal rods and having the edges united to the triangularly-dis-

posed rods as described.

3. A kite consisting of rods united to form an obtuse triangle with its base presented upwardly, parallel rods passing through the angles of said triangles longitudinally, covering material extending between the longitudinal rods in sections approximately at the front and rear ends thereof, leaving an intermediate open space between the covered end sections.

4. A kite consisting of frames or rods united to form obtuse triangles, longitudinal parallel rods united by clamps to said triangles extending from end to end of the kite, cov-

ering-sections uniting the longitudinal rods in planes parallel with the triangularly-united rods, and exterior wings fixed to the rear lowermost end of the kite and adjustable thereon. 30

5. A kite consisting of rods united to form obtuse triangles with longitudinal parallel connecting-rods passing through the angles thereof and covering material extending between the longitudinal rods in sections at the 35 top and bottom of the kite, a suspending-loop connecting with the rod forming the apex line in front of the triangle, for the attachment of the holding-cord, a shaft journaled upon the lowermost of the longitudinal rods, pro- 40 jecting rearwardly therefrom, a propeller fixed to the rear end of the shaft whereby it is rotated, a crank fixed upon the shaft and a mechanism mounted intermediate between the covering-sections and actuated by the ro- 45 tation of the shaft.

In witness whereof I have hereunto set my

hand.

MAX A. DABERER.

Witnesses: S. H. Nourse,

Jessie C. Brodie.