

No. 753,687.

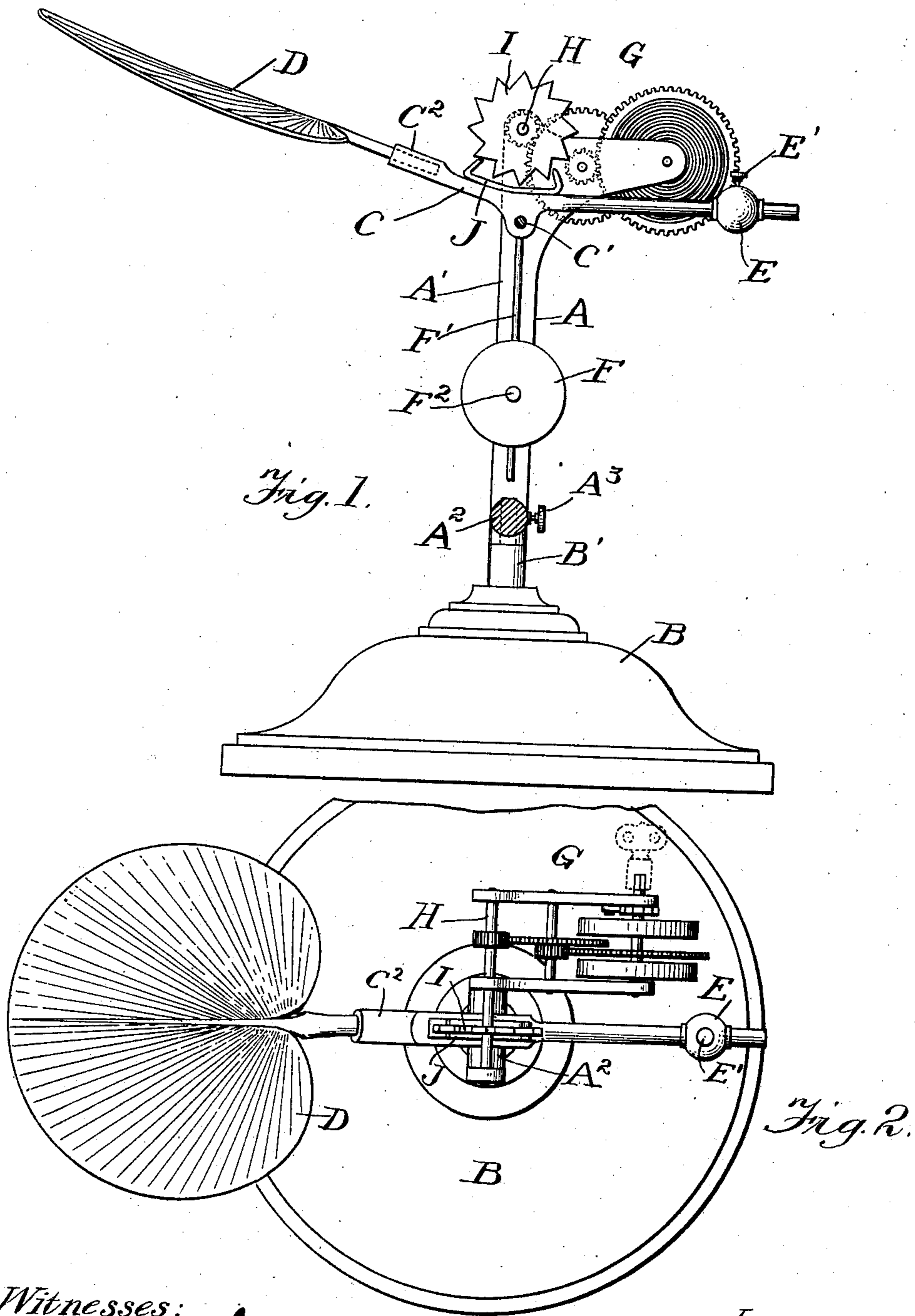
PATENTED MAR. 1, 1904.

S. D. EARL.

FAN.

APPLICATION FILED JULY 15, 1903.

NO MODEL.



Witnesses:
H. A. Hallack.
L. H. Morrison

By.

Inventor:
Spencer D. Earl,

W. P. Williamson
Attg.

UNITED STATES PATENT OFFICE.

SPENCER D. EARL, OF NORRISTOWN, PENNSYLVANIA, ASSIGNOR OF
ONE-HALF TO FRANK HERBERT, OF PHILADELPHIA, PENNSYLVANIA.

FAN.

SPECIFICATION forming part of Letters Patent No. 753,687, dated March 1, 1904.

Application filed July 15, 1903. Serial No. 165,670. (No model.)

To all whom it may concern:

Be it known that I, SPENCER D. EARL, a citizen of the United States, residing at Norristown, county of Montgomery, and State of Pennsylvania, have invented a certain new and useful Improvement in Fans, of which the following is a specification.

My invention relates to a new and useful improvement in fans, and has for its object to provide a simple, cheap, and efficient fan, the motor of which is adapted to oscillate an ordinary palm-leaf fan so as to create a gentle breeze.

With these ends in view this invention consists in the details of construction and combination of elements hereinafter set forth and then specifically designated by the claims.

In order that those skilled in the art to which this invention appertains may understand how to make and use the same, the construction and operation will now be described in detail, referring to the accompanying drawings, forming a part of this specification, in which—

Figure 1 is a side elevation of my improved fan, a portion of the standard being broken away to better show the operating parts; Fig. 2, a plan view of the device.

The framework of the device consists of the bifurcated standard A, the two prongs A' of which extend upward and are joined at the lower end by the cross-bar A².

B is the base, which has the upwardly-projecting shouldered stud B', the upper end of said stud adapted to pass through an opening formed in the cross-bar A² and secured in place by the set-screw A³. A base provided with a short stud, as shown in the drawings, is designed for table use; but the framework may be attached in the same manner to a base having a long upwardly-projecting rod, so that the device may rest upon the floor.

C is the oscillating arm, pivoted at the point C' between the two prongs A' of the standard A. One end of the oscillating arm C is provided with a socket C², in which the handle of an ordinary palm-leaf fan D is adapted to be inserted. The other end of the oscillating

arm upon the opposite side of its pivotal point carries a movable weight E, adapted to slide along the arm and be set in any position desired by the set-screw E' to counterbalance the weight of the fan D.

F is a pendulum which is adjustable vertically along a rod F', depending from the oscillating arm C at the point where it is pivoted. This pendulum is set in any position desired upon the rod by means of a set-screw F².

G represents a clockwork-motor secured upon one side of the standard, and this motor is driven by a spring or a series of springs, so that any strength desired can be given to the motor. In this motor the shaft H, upon which the escapement-wheel is located, extends through the frame and through both prongs of the standard, and the escapement-wheel I is secured to the shaft between the prongs and directly over the oscillating lever C. The pallet J is secured to the upper surface of the oscillating arm, as shown in Fig. 1, and engages the escapement-wheel I. Thus the motor will revolve the escapement-wheel, and if the fan is started to oscillate the pendulum in swinging will actuate the pallet, and the escapement-wheel, acting upon the pallet, will keep up the oscillating of the fan until the motor has run down, and the fan will have a gentle oscillating movement and create a breeze in this manner.

Of course I do not wish to be limited to any particular form of escapement-wheel, as the escapement-wheel and pallet can be so formed that the fan will have a comparatively slow steady downward movement and a quick return, and I do not wish to be limited to the exact construction here shown, as slight modifications could be made without departing from the spirit of my invention.

Having thus fully described my invention, what I claim as new and useful is—

1. In a fan of the character described, a standard, an oscillating arm pivoted intermediate of its two ends to the standard, a socket provided in one end of the arm, a fan adapted to be held within said socket, an adjustable weight slidably mounted upon the other

end of the arm, an adjustable pendulum suspended from the arm beneath the pivotal point, a clockwork - motor, the escapement-wheel of which is arranged directly over the
5 oscillating arm, a pallet secured to the oscillating arm and in engagement with the escapement-wheel, as and for the purpose specified.

2. In a fan of the character described, a base, a removable standard extending upward
10 from said base, said standard being bifurcated, an oscillating arm pivoted near the upper end of the standard between the two prongs of the same, one end of the arm being provided with a socket, a palm-leaf fan, the handle of
15 which is adapted to fit within said socket, an adjustable counterbalancing-weight arranged upon the other end of the arm, a pendulum depending from below the pivotal point of the arm, a clockwork - motor carried by the
20 upper end of the standard, the escapement-wheel of which is arranged above the oscillating arm, a pallet secured to the oscillating arm and in engagement with this escapement-wheel, as and for the purpose specified.

25 3. In a fan of the character described, a standard consisting of two side strips connected together by a cross-bar at their lower

ends, a base, a stud extending upward from said base and adapted to protrude through an opening in the cross-bar, a set-screw for se- 30 curing the standard to the stud, an oscillating arm pivoted intermediate of its two ends between the side strips of the standard, a socket provided in one end of the arm, a palm-leaf fan, the handle of which is adapted to be fitted 35 in said socket, an adjustable counterbalancing-weight slidably mounted upon the other end of the arm, a rod depending from the arm below the pivotal point, a pendulum adjustable upon said rod, a clockwork-motor carried 40 by the standard, the escapement - wheel of which is arranged between the side strips and directly above the oscillating arm, a pallet secured to the upper surface of the oscillating arm and adapted to coact with the escapement- 45 wheel to oscillate said arm, as and for the purpose specified.

In testimony whereof I have hereunto affixed my signature in the presence of two subscribing witnesses.

SPENCER D. EARL.

Witnesses:

A. GARGES,

EUGENE D. EGBERT.