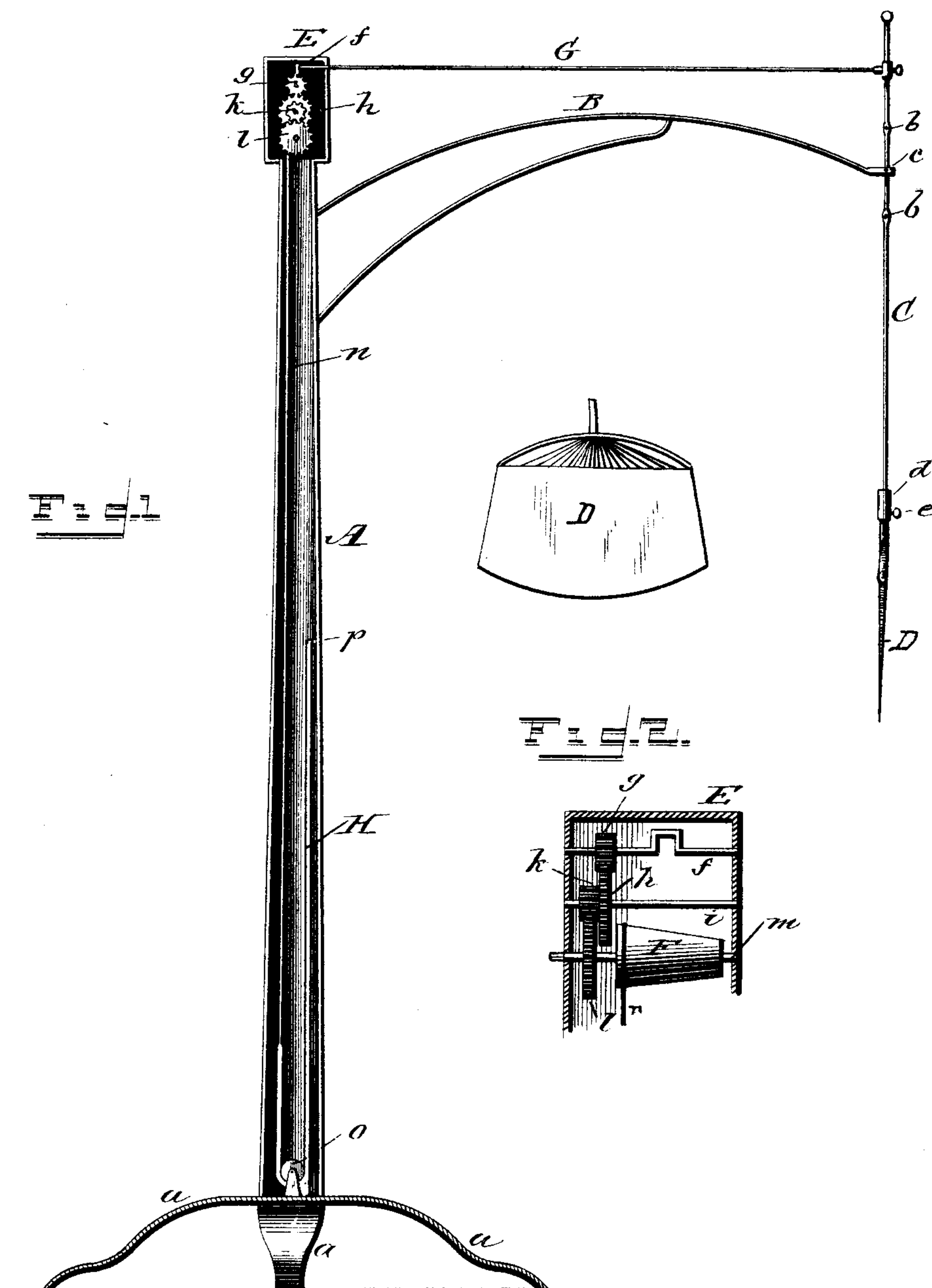


(No Model.)

H. REMBERT.  
FLY FAN OR BRUSH.

No. 388,719.

Patented Aug. 28, 1888.



Witnesses,

G. S. Elliott.  
L. L. Miller.

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# UNITED STATES PATENT OFFICE.

HENRY REMBERT, OF WILLIS, TEXAS.

## FLY FAN OR BRUSH.

SPECIFICATION forming part of Letters Patent No. 388,719, dated August 28, 1888.

Application filed April 5, 1887. Serial No. 233,762. (No model.)

*To all whom it may concern:*

Be it known that I, HENRY REMBERT, a citizen of the United States, residing at Willis, in the county of Montgomery and State of Texas, have invented certain new and useful Improvements in Fly Fans or Brushes; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the annexed drawings, making a part of this specification, and to the letters and figures of reference marked thereon.

Figure 1 of the drawings is a side elevation of my invention, showing the hollow post and legs thereof in section; and Fig. 2, a detail view, in section, of the casing at the upper end of the post, and on an enlarged scale, showing the gearing located therein.

The present invention has for its object to provide a simple and perfectly-operating fly fan or brush; and it consists in the arrangement of devices for imparting to the fan or brush the required motion, as will be hereinafter described and claimed.

In the accompanying drawings, A represents an upright hollow post, which is preferably of cast metal, and provided at its lower end with supporting-legs *a*. To this post, near the top thereof, is connected by any suitable means an arm, B, to which the upright arm C, carrying the brush or fan D, is pivoted, said arm having a series of pivot-holes, *b*, whereby it may be lengthened or shortened by means of the removable pivot or pin *c*, so as to adjust or regulate the extent of swing of the arm. Any suitable means may be employed for attaching the brush or fan to the vibrating arm, and therefore I have shown one means of attaining this end, which consists of a socket, *d*, and set-screw *e*.

The hollow post A, I have stated may be formed of cast metal; but sheet metal may be used, if so preferred, as I do not desire to confine myself to the material of which the device is constructed. The upper end of the post A terminates in a casing, E, which incloses the gearing, consisting of the crank-shaft *f*, provided near one end with a pinion, *g*, which engages a gear-wheel, *h*, upon a shaft, *i*, a pinion, *k*, upon said shaft engaging a gear-wheel, *l*, upon a shaft, *m*, which shaft carries a conical pulley, F. These several shafts above

described have their bearing in the side of the inclosing-case E, and connected to the crank-shaft *f* is a pitman-rod, G, said rod being also connected to the upright arm C near its upper end. One end of a cord, *n*, is secured to the larger end of the conical pulley F, so that it will commence winding at that end when the shaft *m* rotates in the proper direction, said cord extending down the hollow post A, and has its opposite end fastened to a rubber cord or band, H, said band passing around a pulley, *o*, at the base of the hollow post, and thence extending up and fastened thereto at *p*. This roller or pulley *o* reduces the friction on the rubber when being stretched when the machine is being wound up so that its elasticity will not be affected. When the machine is wound up by a suitable key engaging with the end of the shaft *m*, the cord *n* will commence winding upon the larger end of the pulley F and the rubber H stretched to several times its natural length, and as the power of the rubber increases the conical pulley will compensate for this, and thereby regulate the power, so that the fan will run with as much power and speed when the gearing is nearly run down as when first wound up, motion being given to the arm C by means of the rod G and crank-shaft *f*.

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

1. In an automatic fly fan or brush, a suitable hollow post terminating at its upper end in a casing, a crank-shaft and conical pulley located therein, and gearing connecting the crank-shaft with the pulley-shaft, in combination with a cord connected to the pulley and to a rubber band or cord passing around a pulley at the base of the post, said rubber cord or band at one end being connected thereto, a pitman-rod connecting the crank-shaft with the arm carrying the fan or brush, said arm being adjustably connected to its pivotal support, substantially as and for the purpose set forth.

2. The improved fly-fan described, consisting of the hollow post A, provided with legs *a*, and enlarged at its upper end to form a casing, E, arm B, connected to said post near the top thereof, and braced, as shown, the fan-car-



rying arm C, pivoted to said arm, transverse shafts *i m*, and crank-shaft *f*, journaled in said casing, pinion *g* on the shaft *f*, gear-wheel *h* and pinion *k* on the shaft *i*, the gear-wheel *l* 5 and conical pulley F on the shaft *m*, the pitman-rod G, connecting said crank-shaft and arm C, the pulley *o*, journaled in the bottom of said post, cord *n* within said post and secured at one end to the larger end of said 10 conical pulley, and the elastic band H, arranged within said post, passed under said pulley *o*, and secured at one end to the interior of said post and at the other to the other end of the cord *n*, all substantially as shown and described, and for the purpose specified. 15

In testimony that I claim the above I have hereunto subscribed my name in the presence of two witnesses.

HENRY REMBERT.

Witnesses:

J. E. PACE,

W. D. PELHAM.