

T. J. BOTTOMS.
Automatic Fan.

No. 213,164.

Patented Mar. 11, 1879.

Fig. 1.

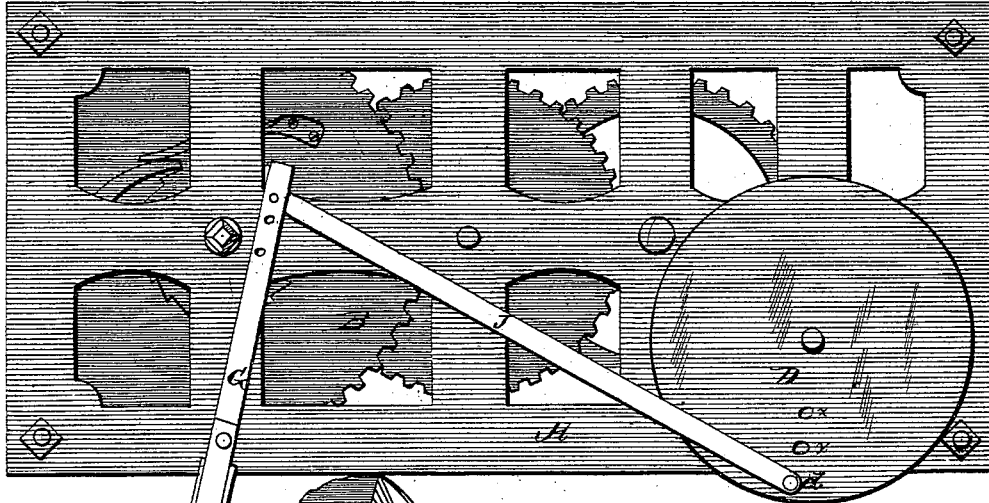


Fig. 3.

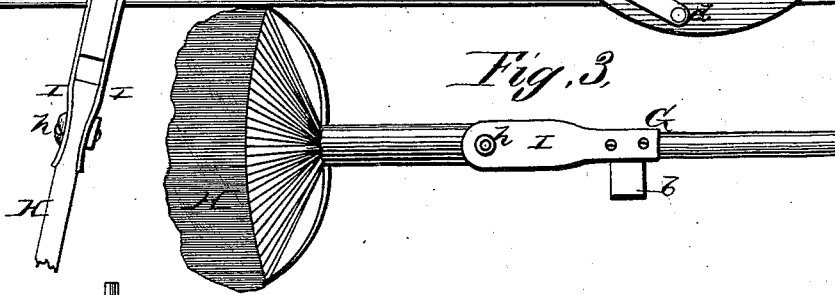
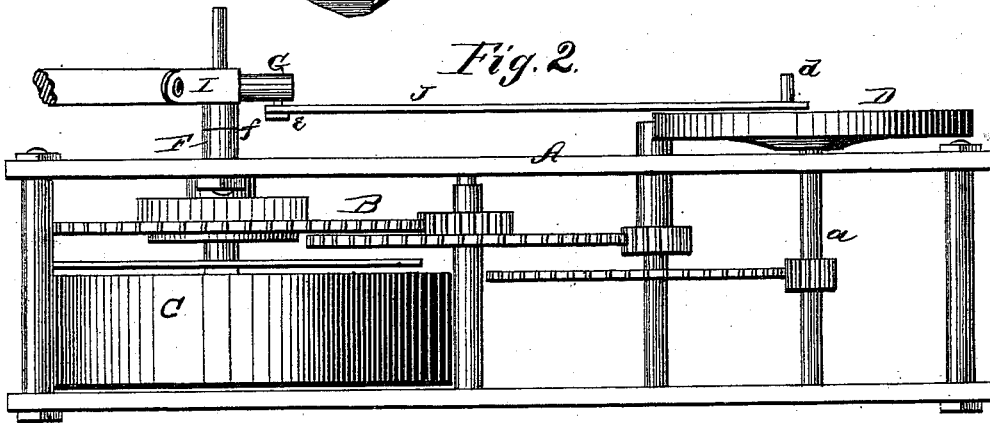


Fig. 2.



Witnesses:
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UNITED STATES PATENT OFFICE.

THOMAS J. BOTTOMS, OF THOMASVILLE, GEORGIA, ASSIGNOR TO ROBERT M. THOMPSON, OF PURDY, TENNESSEE.

IMPROVEMENT IN AUTOMATIC FANS.

Specification forming part of Letters Patent No. 213,164, dated March 11, 1879; application filed August 14, 1878.

To all whom it may concern:

Be it known that I, THOMAS J. BOTTOMS, of Thomasville, in the county of Thomas and State of Georgia, have invented certain new and useful Improvements in Automatic Fans; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form part of this specification.

The nature of my invention consists in the construction and arrangement of an automatic fan, as will be hereinafter more fully set forth.

In order to enable others skilled in the art to which my invention appertains to make and use the same, I will now proceed to describe its construction and operation, referring to the annexed drawings, in which—

Figure 1 is a plan view of my invention. Fig. 2 is a side elevation of the same, and Fig. 3 is a detailed view of a part thereof.

A represents a suitable frame-work, containing within it an ordinary train of gearing, B, operated by means of one or more springs. The frame, with the gearing, is so arranged that the machine may be placed flat down, or on the side, or on the end, according to the direction it is desired that the fan shall operate.

a is the last shaft of the train B, and upon one end of said shaft, outside the frame A, is secured a disk or wheel, D, which is provided with a wrist-pin, *d*. This wrist-pin is movable in holes *x x* on the wheel D, so that said pin can be adjusted at any desired distance from the center, thus increasing or diminishing the motion of the fan.

F represents a post rigidly secured to the frame A, and formed with a shoulder, *f*, as shown. Upon this post, and resting on said shoulder, is an arm, G, provided near one end with a downward projection, *b*. The upper end of the post F passes through said projection and through the arm, the projection resting upon the shoulder *f*. The object of the projection *b* is simply to keep the clamping-jaws I I from contact with the post during the operation of the machine.

The clamping-jaws I I are made broad, of

sheet metal, and their inner ends riveted or otherwise permanently secured to the arm G. An ordinary palm-leaf fan, H, can be used with this machine. The handle of such fan is inserted between the outer ends of the jaws I I, and fastened by means of a screw, *h*, which is passed through one jaw and through the fan-handle, and screws into the other jaw. By tightening the screw *h* the jaws are drawn close together and clamp the fan-handle, the fan being first adjusted at any angle desired.

The wrist-pin *d* on the wheel D is, by a pitman, J, connected with a pin, *e*, in the arm G, and when the machine is in motion said arm and fan thereby obtain a vibratory motion upon the post F. In other words, the fan is operated precisely in the same manner as by hand—that is, having a back-and-forth motion from a pivot.

The pin *e* is also adjustable in different holes in the arm G, and by the adjustment of this pin, as well as of the wrist-pin *d*, the stroke of the fan can be easily and definitely regulated, as required.

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

1. In an automatic fan, the clamping-jaws I I, provided with the screw *h*, for adjusting and holding a fan, in combination with the vibrating arm G, having projection *b*, and the shouldered post F, substantially as and for the purposes specified.

2. The pivoted arm G, carrying a fan, the pitman J, rotating wheel D, provided with adjusting-holes *x x*, and adjustable pins *e d*, all combined and arranged substantially as and for the purposes herein set forth.

3. The combination of the frame A, train of gearing B, with spring C, wheel D, pitman J, post F, arm G, clamps I I, and fan H, all constructed and arranged substantially as and for the purposes herein set forth.

In testimony that I claim the foregoing as my own I affix my signature in presence of two witnesses.

THOMAS J. BOTTOMS.

Witnesses:

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