

W. A. Ireland,

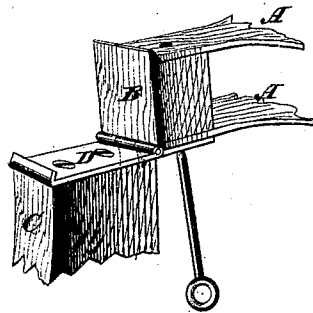
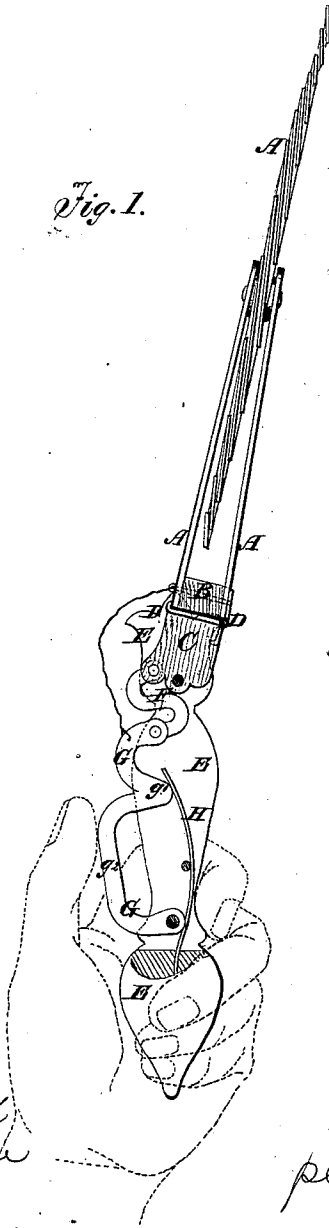
Operating Fans.

No. 107,501.

Patented, Sept. 20, 1870.

Fig. 1.

Fig. 2.



WITNESSES.

*Frederick Dietrich*  
*L. S. Haber*

INVENTOR.

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per *Wm M. [Signature]*  
Attorneys

# UNITED STATES PATENT OFFICE.

WILLIAM A. IRELAND, OF NEW YORK, N. Y.

## IMPROVEMENT IN DEVICES FOR OPERATING HAND-FANS.

Specification forming part of Letters Patent No. 107,501, dated September 20, 1870.

*To all whom it may concern:*

Be it known that I, WILLIAM A. IRELAND, of the city of New York, in the county and State of New York, have invented a new and useful Improvement in Devices for Operating Hand-Fans; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawings, forming part of this specification.

Figure 1 is a detail sectional view of my improved device. Fig. 2 is a detail perspective view, showing the hinge and catch.

Similar letters of reference indicate corresponding parts.

My invention has for its object to furnish an improved device for operating a hand-fan, which shall be simple in construction and effective in operation, enabling the fan to be vibrated easily and conveniently; and it consists in the construction and combination of the various parts of the device, as hereinafter more fully described.

A is the fan, about the construction of which there is nothing new. The fan A is attached to the block B, which is hinged to the block C by the hinge D, so that the fan A, when closed, may be folded or shut down along the handle E for convenience in carrying it. One plate of the hinge D is extended across the top of the block C, and its forward edge is turned up, as shown in Figs. 1 and 2, to form a catch to catch upon the forward edge of the block B, or upon a plate attached to said block, and hold the fan A in position to be operated. The part of the plate of the hinge D that is cut out to form the eyes of said hinge is bent downward and inward to enter a notch in the block C, and thus form an additional support or fastening for said hinge, as shown in Fig. 1. The block C is pivoted, at the middle part of its lower end, in the upper part of the slot in the handle D, so that the fan may be vibrated by oscillating the block C upon its pivoting-point.

To the forward edge of the lower end of the block C is pivoted one end of the S-shaped lever F, the other end of which is pivoted to the

forward end of the lever G. The lever G is made in about the shape shown in Fig. 1—that is to say, with a projection,  $g'$ , upon the upper part of its inner side, to rest upon the spring H, and with a projection or thumb-piece,  $g''$ , upon the outer side of its lower part, for the thumb of the operator to rest upon in operating the fan. The lower end of the lever G is pivoted in the lower part of the slot in the handle D. The lower end of the spring H is secured in and to the lower part of the handle D, and its upper or free end rests against the projection  $g'$  of the lever G. By this construction, the operator, bearing upon the thumb-piece  $g''$  of the lever G, moves the fan A forward, and, as he removes the pressure, the spring H forces the lever G forward, which moves the fan A to the rearward, so that by alternately pressing upon and releasing the lever G the fan A may be vibrated at any desired rapidity.

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

1. The catch-hinge D for connecting the block B, to which the fan is attached, with the pivoted block C, to which the power is applied, substantially as herein shown and described, and for the purpose set forth.

2. The S-shaped lever F, the lever G  $g' g''$ , and spring H, in combination with each other, said parts being constructed and operating substantially as herein shown and described, and for the purpose set forth.

3. An improved device for operating a fan formed by the combination of the slotted handle E, spring H, lever G  $g' g''$ , S-shaped lever F, pivoted block C, hinge and catch D, whether made in one or more parts, and hinged block B, to which the fan is attached, said parts being constructed and operating substantially as herein shown and described, and for the purpose set forth.

The above specification of my invention signed by me this 9th day of August, 1870.

WILLIAM A. IRELAND.

Witnesses:

GEO. W. MABEE,  
JAMES T. GRAHAM.