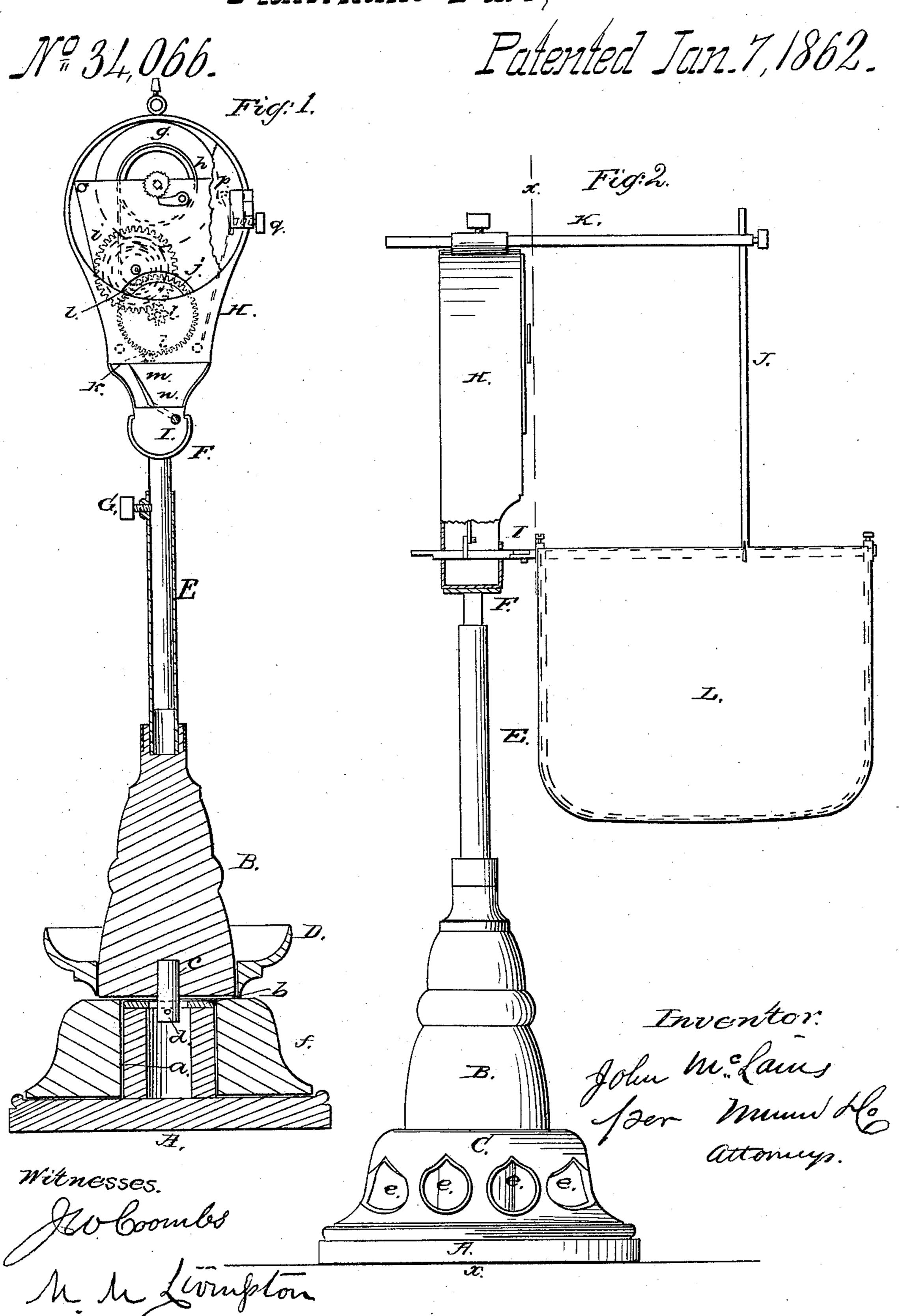
TMC I ZZZZZ,

Automatic Fan,



United States Patent Office.

JOHN MCLAIN, OF ST. MARY'S, OHIO.

IMPROVED AUTOMATIC FAN.

Specification forming part of Letters Patent No. 34,066, dated January 7, 1862.

To all whom it may concern:

Be it known that I, John McLain, of St. Mary's, in the county of Auglaize and State of Ohio, have invented a new and Improved Automatic Fan, designed for ventilating purposes and also for keeping away or expelling insects; 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, in which—

Figure 1 is a vertical section of my invention, taken in the line x x, Fig. 2; Fig. 2, an elevation of same not bisected.

Similar letters of reference indicate corre-

sponding parts in the two figures.

The object of this invention is to obtain a simple, efficient, and economical fan operated by clock mechanism, and so arranged that it may be placed upon a table or suspended from the ceiling over a bed, the stand or support of the fan and driving mechanism also serving as receptacles for various articles which may be required, and hence compensating for the room taken up or monopolized by it.

To enable those skilled in the art to fully understand and construct my invention, I will

proceed to describe it.

A represents the base of the device, which is composed of a flat circular disk having a central upright tube a attached, at the upper end of which there is secured a slotted metal plate b, which receives an actor c at the lower end of the body of the stand or upright B of the device, the actor c having a pin d passing horizontally through it, which pin d and the slot in the plate b, when the former is turned obliquely with the latter, serve as a lock to secure the stand B to its base, as will be understood by referring to Fig. 1.

When the implement or device is used on a secretary or desk, the tube a of the base A is encompassed by an annular box or receptacle C, (see Fig. 2,) which may be provided with radial partitions to form a series of compartments, each compartment being provided with an opening e. These compartments may serve for various purposes—one for an inkstand, another for a sand-box, one for a wafer-receptacle, &c.

When the device is used on a dining, card,

or sewing table, a solid annular block f may be substituted for the box C, as shown in Fig. 1. On the lower part of the stand or upright B there is placed an annular cup or receptacle D, the lower part of said cup or receptacle resting on the box C or block f, whichever is used.

The cup or receptacle D may be used as a fruit basket or receptacle when the device is placed on a dining or supper table, and used as a work-basket when placed on a sewing-

table.

In the upper end of the stand or upright B there is inserted a metal tube E, in which a slide-rod F is placed and secured at any desired point by a set-screw G. To the top of the rod F there is attached a box H, in which the principal parts of an ordinary movement of a clock are placed, g representing the cylinder which contains the spring; h, the chain; i, the fusee; j, the balance-wheel. and k a crank which is rotated by gearing lfrom the fusee i, said crank having a rod m attached, which is connected to an arm n, projecting from a fan-shaft I, the outer bearing of which is at the lower end of a pendent rod J, the upper end of rod J being secured in a horizontal rod K, which is attached to the upper end of box H. The fan-shaft I may extend entirely through the box H, if desired, and a fan L secured to it at each side of the box.

The fan or fans L may be of cloth of any suitable fabric secured to a frame attached to the shaft I by set-screws or other wire. All the other parts of the device herein described may be of metal or wood and metal combined.

The cylinder g, which contains the spring, has a brake o bearing against it. This brake is simply a yielding bar having a frictionroller p at its upper end, said roller bearing against the cylinder q with a greater or less pressure, which is regulated by a set-screw qpassing through the side of the box H. The clock-movement, it will be seen, gives a vibratory or swinging motion to the fan or fans through the medium of the crank k, rod m, and arm n. By means of this brake the speed of the fan may be nicely graduated, the crank k and its concomitant parts admitting of the perfect operation of the brake, a result which cannot be attained by the ordinary escapement—to wit, the pallets and scape-wheel.

The device may be suspended from a ceiling over a bed or crib by securing the base A to the ceiling by screws or nails, and if desirable in the latter case the box H may be so arranged as to be capable of being inverted to admit of the fans being at the lower end of the device.

The whole affair is exceedingly simple and may be very economically constructed, and is capable of being very generally applied for fanning or ventilating purposes and for expelling or keeping away insects.

I do not claim, broadly, the driving or oscillating of fans by clock-work, for that has been previously done; but

I do claim as new and desire to secure by BENJ. KELNY, $\mathbf{Sabirate}_{\mathbf{SCOTT}}.$

1. The particular arrangement of the crank k, rod m, arm n, projecting from the fan-shaft I, for operating the fan-shaft from the fusee i, as set forth in connection with the brake o, arranged to act against the cylinder g, substantially as and for the purpose set forth.

2. The attaching of the stand or upright B to the base A by means of the slotted plate b on tube a, and the arbor and pin cd at the lower end of the upright B, when said parts thus connected are used in combination with a removable box C or block f, and the cup D, substantially as described.