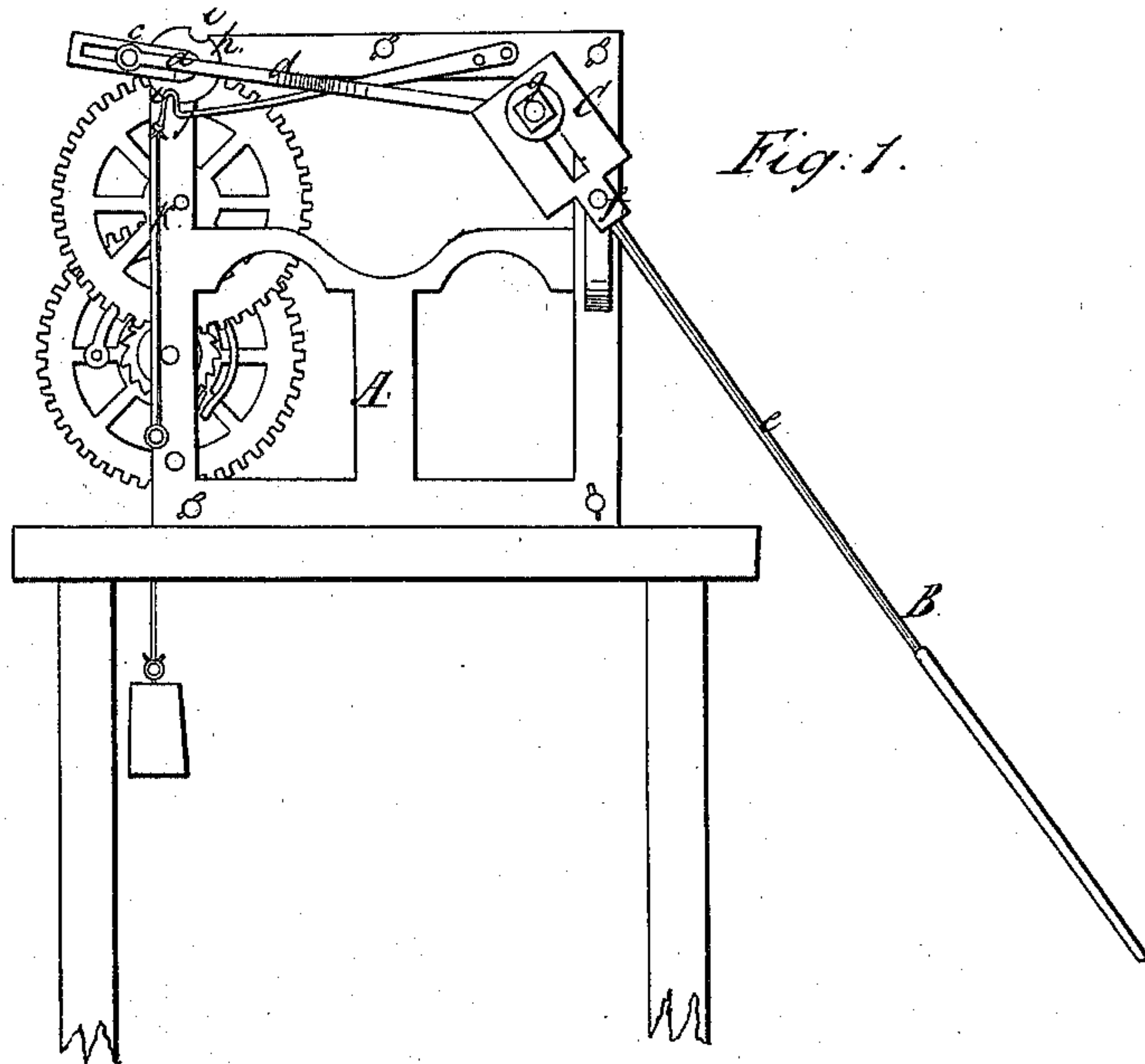


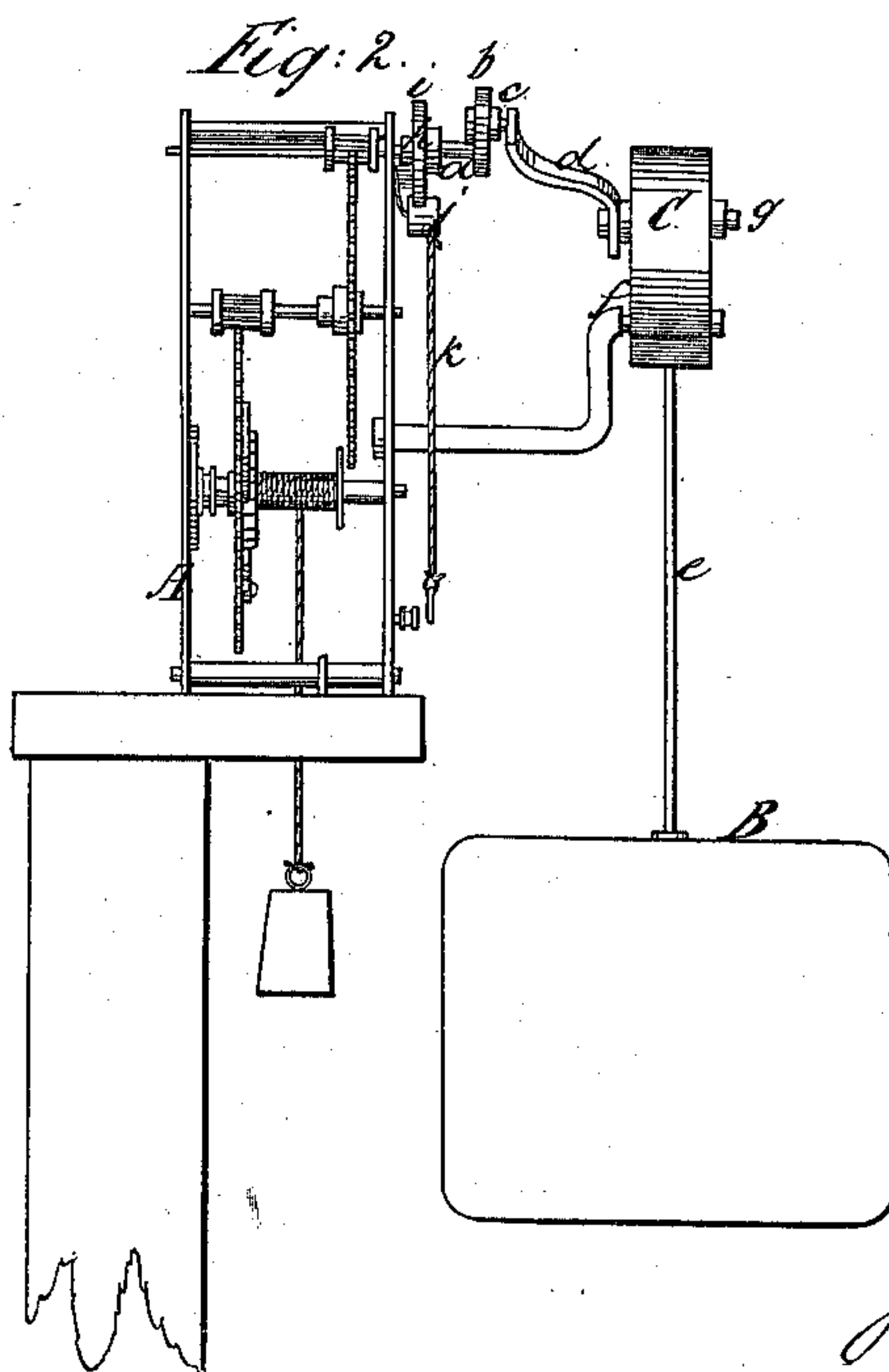
*J. Maltby*  
*Automatic Fan.*

*Nº 90,009.*

*Patented May 11, 1869.*



*Fig. 1.*



*Fig. 2.*

*Witnesses*  
*L. W. Ahlers*  
*E. F. Kastenhuber*

*Inventor*  
*J. Maltby*  
*per*  
*P. Sartorius, Clerk*  
*Att'y*



# United States Patent Office.

JOHN MALTRY, OF MORRISANIA, NEW YORK.

Letters Patent No. 90,009, dated May 11, 1869.

## IMPROVED AUTOMATIC FAN.

The Schedule referred to in these Letters Patent and making part of the same.

### To all whom it may concern:

Be it known that I, JOHN MALTRY, of Morrisania, in the county of Westchester, State of New York, have invented a new and improved Automatic Fan; and I do hereby declare the following to be a full, clear, and exact description thereof, which will enable those skilled in the art to make and use the same, reference being had to the accompanying drawing, forming part of this specification, in which drawing—

Figure 1 represents a side view of this invention.

Figure 2 is an end view of the same.

Similar letters indicate corresponding parts.

This invention consists in the arrangement of a balance-weight on the end of the fan-staff, opposite the fan, in combination with the crank and connecting-rod, transmitting the motion of a clock-movement to the fan in such a manner, that by said balance-weight, the oscillations of the fan are equalized, and the crank is enabled to pass its dead centres without noise.

The invention consists, further, in the arrangement of a spring and notched disk, in combination with the oscillating fan, in such a manner, that by said spring and disk, the fan can be always stopped at either of the extreme ends of its stroke, and that, when said fan is used on a bedstead, the person occupying the bed can rise without danger of bringing his or her head in contact with the fan.

The letter A designates a clock-movement, which receives its motion by means of a spring or weight, and which imparts motion to a shaft, *a*, to the end of which is secured a crank, *b*, carrying an eccentric wrist-pin, *c*, that connects, by a rod, *d*, with the fan B. This fan is attached to the bottom end of a staff, *e*, which is suspended from a pivot, *f*, and the fan is balanced by a weight, C, secured to the upper end of the staff *e*, as shown in the drawing.

The rod *d* is provided with a slot, which straddles the wrist-pin *c*; and the pivot *g*, which forms the connection between said rod *d* and the balance-weight C on the end of the fan-staff, is fitted into a slot in said

balance-weight, so that the stroke of the fan can be adjusted to suit circumstances.

By the action of the balance-weight C, the crank-pin *c* is enabled to pass its dead-centres without any perceptible noise, and by these means my automatic fan is rendered fit to be used on a bedstead without disturbing the rest of the person occupying the bed; and, furthermore, the motion of the fan is materially facilitated, so that it can be driven with comparatively little power.

When my fan is used at the head of a bedstead, it is desirable that the same shall oscillate as close as practicable to the head of the person occupying the bed, so that the effect of a fan driving away mosquitoes, flies, &c., and in producing a perceptible draught of air, shall be obtained; but if the fan sweeps close over the face occupying the bed, it is indispensable that the same can be arrested at either of the extreme ends of its stroke, so that said person can rise without danger of bringing his or her head in contact with the fan.

This purpose is effected by a stop-motion, consisting of a disk, *h*, which is provided with two notches *i*, to engage with a spring-stop, *j*, that can be drawn back by a cord, *k*, extending down to the bed, so that it can be conveniently reached by the person occupying said bed.

If this cord is released, the spring-stop drops into one of the notches of the disk, and these notches are so situated that the fan is arrested at either of the extreme ends of its stroke.

Having thus described my invention,

What I claim as new, and desire to secure by Letters Patent, is—

The combination and arrangement of fan B, balance-weight C, eccentric wrist-pin *c*, notched disk *h*, and spring-stop *j*, substantially as and for the purpose described.

Witnesses:

JOHN MALTRY.

W. HAUFF,

ERNEST F. KASTENHUBER.