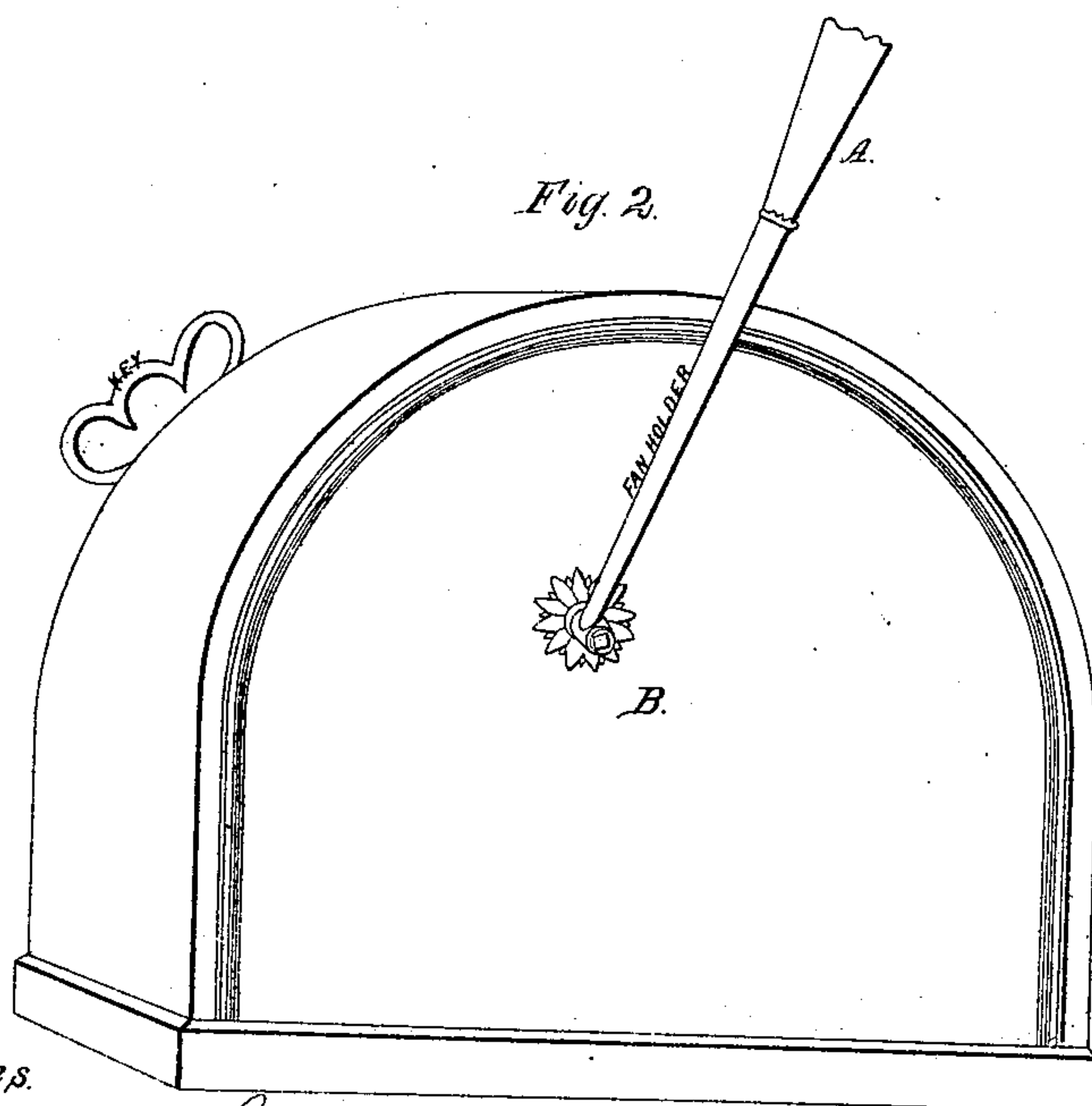
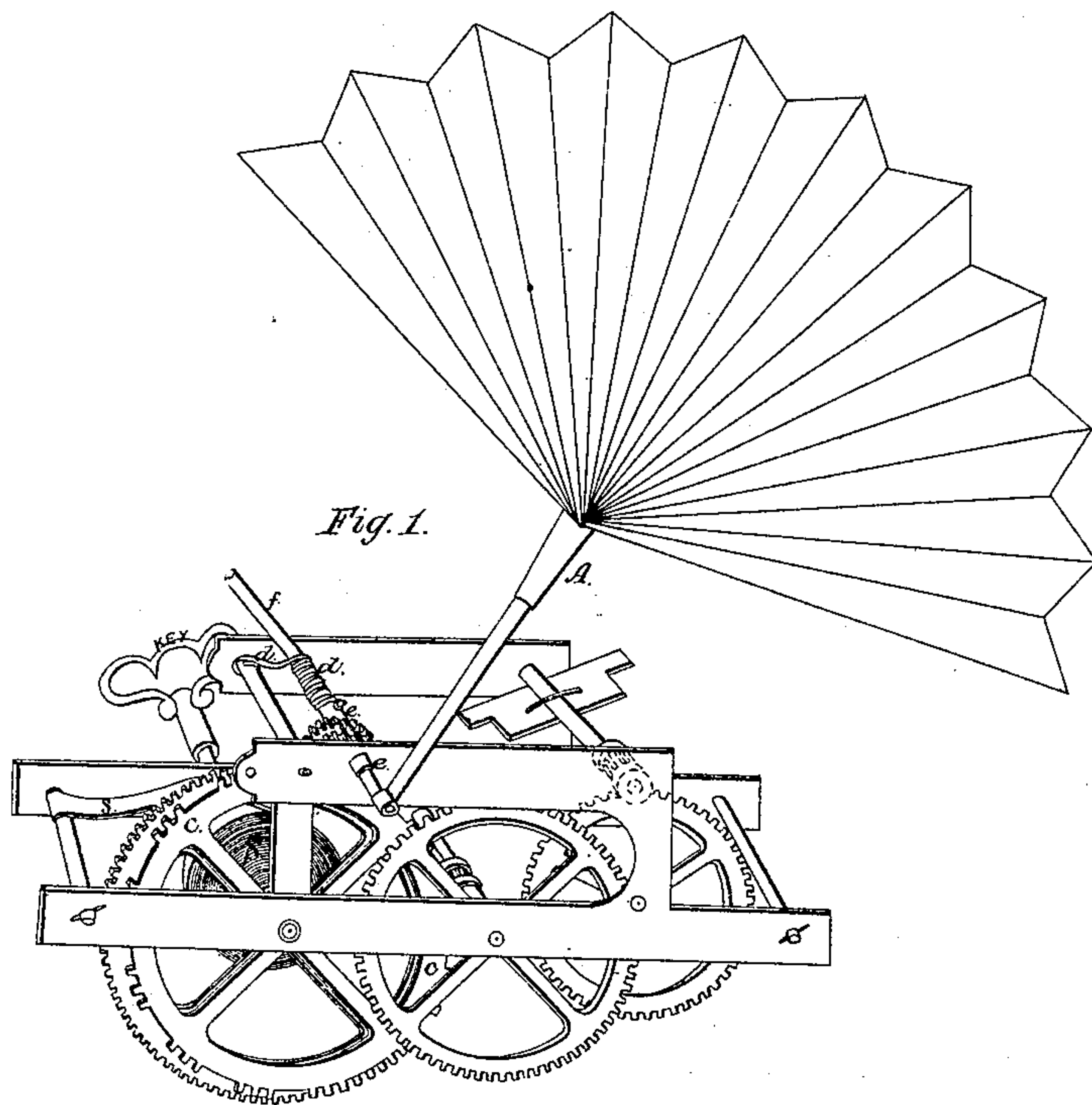


Dunn & Burroughs.

Automatic Fan.

N^o 89,566.

Patented May 4, 1869.



Witnesses.

James P. McLean
Joseph Burroughs

Inventor.

John R. Dunn
George B. Burroughs



JOHN R. DUNN, OF QUEENS COUNTY, AND GEORGE B. BURROUGHS,
OF BROOKLYN, NEW YORK.

Letters Patent No. 89,566, dated May 4, 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 we, JOHN R. DUNN, of Queens county, and GEORGE B. BURROUGHS, of Brooklyn, in the county of Kings, and State of New York, have invented a novel and useful Mode of Operating Fans; and we hereby declare the following to be a full, clear, and exact description thereof, reference being had to the accompanying drawings, which are lettered to correspond with, and form a part of the specification.

To enable those skilled in the arts to construct and operate the same, as well as to enable the public to understand the nature of our said invention, we will describe it as follows, to wit:

Figure 1 is a perspective drawing of the working-parts of our invention, having the case B removed in order to show the arrangement of the escapement, or sectional cog-wheel *c*, and reacting spiral spring *d* upon the transverse vibrating shaft, or stem *e*, which is provided with a stop-bar, *f*.

Figure 2 is a perspective drawing of the exterior of the case B, which may be of any desirable form or design.

We are aware that clock-gears are well known for various mechanical purposes; hence, we simply confine ourselves to the novel portion of the apparatus, shown at fig. 1, necessary to produce the new result of operating the fan-holder A, which is moved backward and forward by the revolution of the escapement-wheel *c* and the take-up, or reacting spiral spring *d*, upon the transverse shaft, or stem *e*, with stop-bar *f*, the whole being operated by an ordinary clock-spring, *s*, in com-

bination with the other parts of the cog-gearing shown at fig. 1.

The length of time and speed of the fan will be regulated by the length and power of the spring *s*, which is wound up with the ordinary key at the back of the case B, fig. 2.

The novelty and nature of our invention consist in a self-acting fan, upon the vibrating stem, or shaft *e*, by means of the sectional cog-wheel *c* and reacting, or take-up spring *d*, operated by a suitable spring, *s*, in combination with the other parts of a clock-gear, as shown in the drawings.

The utility of the above-described invention is, it may be used in provision-safes, pantries, store-windows, work-rooms, ships' holds, or other places where flies are troublesome, and a circulation of air is necessary; therefore,

What we claim as new and useful, and what we desire to secure by Letters Patent of the United States, is—

The vibrating stem *e*, in combination with the handle A, segmental cog, or escapement-wheel *c*, and spiral spring *d*, all arranged and operated in the manner and for the purpose set forth.

In testimony whereof, we hereunto subscribe our names, in the presence of two witnesses.

JOHN R. DUNN.
GEORGE B. BURROUGHS.

Witnesses:

JOSEPH BURROUGHS,
SARAH A. BURROUGHS.