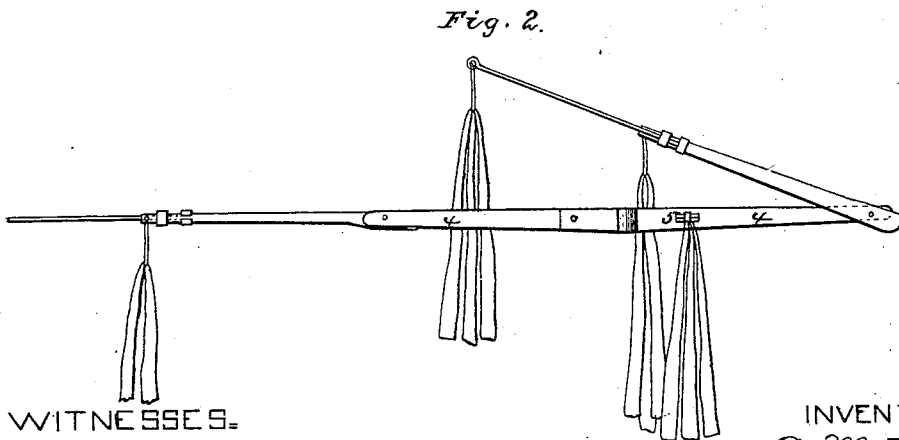
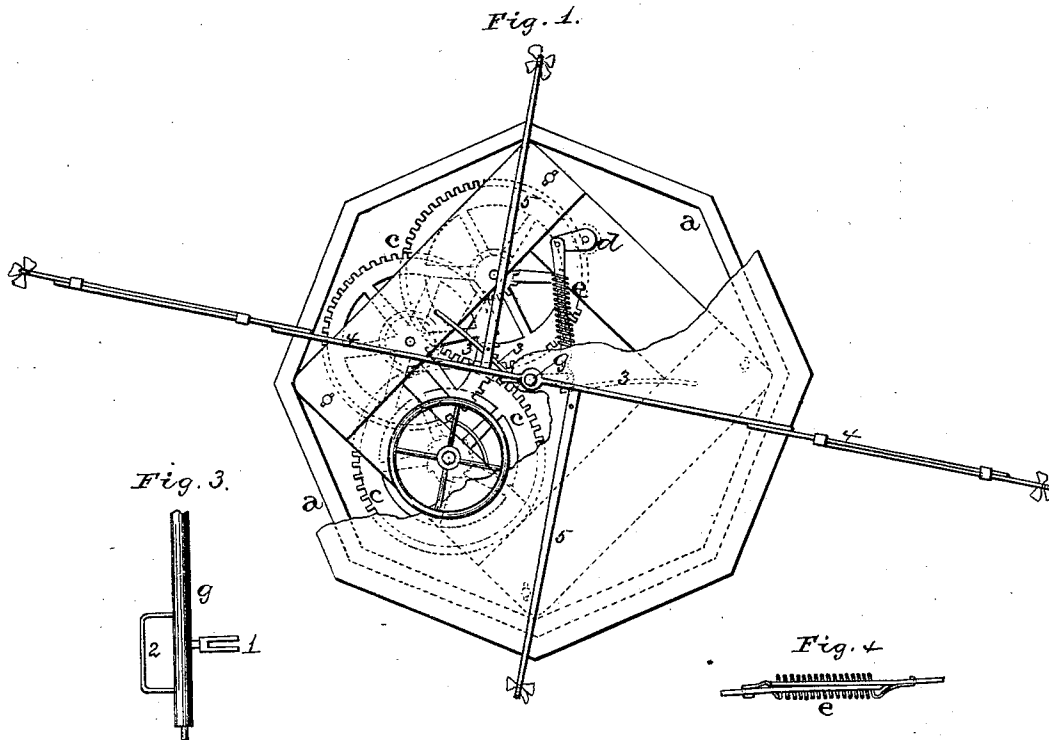


A. MATTOX.
AUTOMATIC FAN.

No. 179,211.

Patented June 27, 1876.



WITNESSES.

Wm. Garner?
F. M. Burnham.

INVENTOR=
A. Mattox
per
F. A. Lehmann
att'y.

UNITED STATES PATENT OFFICE.

AARON MATTOX, OF SOUTH BLOOMINGVILLE, OHIO.

IMPROVEMENT IN AUTOMATIC FANS.

Specification forming part of Letters Patent No. **179,211**, dated June 27, 1876; application filed May 2, 1876.

To all whom it may concern:

Be it known that I, AARON MATTOX, of South Bloomingville, in the county of Hocking and State of Ohio, have invented certain new and useful Improvements in Automatic Fly-Brush; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it pertains to make and use it, reference being had to the accompanying drawings, which form part of this specification.

My invention relates to an improvement in automatic fly-brushes; and it consists in the use of a flexible spiral connecting-rod, for uniting the shaft to the clock-work, spring-stops, and folding arms, whereby an automatic brush is produced which can be used in keeping away the flies from a table, bed, or cradle, as will be more fully described hereinafter.

The accompanying drawings represent my invention.

a represents a suitable frame or box, in which the mechanism is placed, and which box is of such a size as to be readily portable, and which can be placed in the center of a table, or upon a stand or shelf on or beside a bed or cradle. In this box is placed a clock mechanism, or a train of wheels, *c*, which is wound up in the usual manner, and which communicates a reciprocating rotary motion to the brush-shaft through the crank *d* and a connecting-rod, *e*. This rod consists of two pointed rods, which project toward each other and overlap, and around these overlapping ends is placed a coiled spring, which spring has one of its ends fastened to each rod, so that the rods are connected together through the medium of the spring alone. By means of these three parts a flexible connecting-rod is formed, which allows a free play both to the crank and the shaft *g*, so that there shall be no binding or stiffness in the connections, and thus allows the shaft to work longer from

a single winding of the spring or weight. Upon the opposite side of the shaft to the projection 1, to which the connecting-rod is attached, is formed a stop, 2, which strikes against the two springs 3, projecting outward toward the shaft from opposite sides, and thus not only prevents the shaft from turning wholly around, but starts it in the opposite direction. Secured to the shaft at any suitable point above the frame *a* are two long arms, 4, having tassels of paper, or other suitable brushes, fastened to their outer ends, and which rods are jointed, so that they can be folded inward. Projecting outward from each arm is a shorter arm, 5, which is also jointed, so that it can be closed inwardly.

When the device is used to keep the flies off from the table, it is set in the center, and all of the arms opened outward. When used for keeping the flies or mosquitoes from the bed or cradle, it is only necessary to open a single arm, and then set the frame so that the one brush will sweep back and forth over the face.

Having thus described my invention, I claim—

1. In an automatic fan, a flexible connecting-rod, *e*, consisting of two separate and distinct rods secured together by a coiled spring, substantially as shown.

2. The combination of the flexible connecting rod, as claimed above, with a reciprocating rotary shaft, *g*, a crank, *d*, and an operating mechanism, substantially as set forth.

3. The shaft *g*, provided with the stop 2, in combination with the springs 3, substantially as specified.

In testimony that I claim the foregoing I have hereunto set my hand this 17th day of April, 1876.

AARON MATTOX.

Witnesses:

JOHN T. STARKEY,
CHARLES WILSON.