

No. 667,469.

Patented Feb. 5, 1901.

J. W. TIGHE.

APPARATUS FOR FUMIGATING OR PERFUMING ROOMS.

(Application filed June 20, 1900.)

(No Model.)

2 Sheets—Sheet 1.

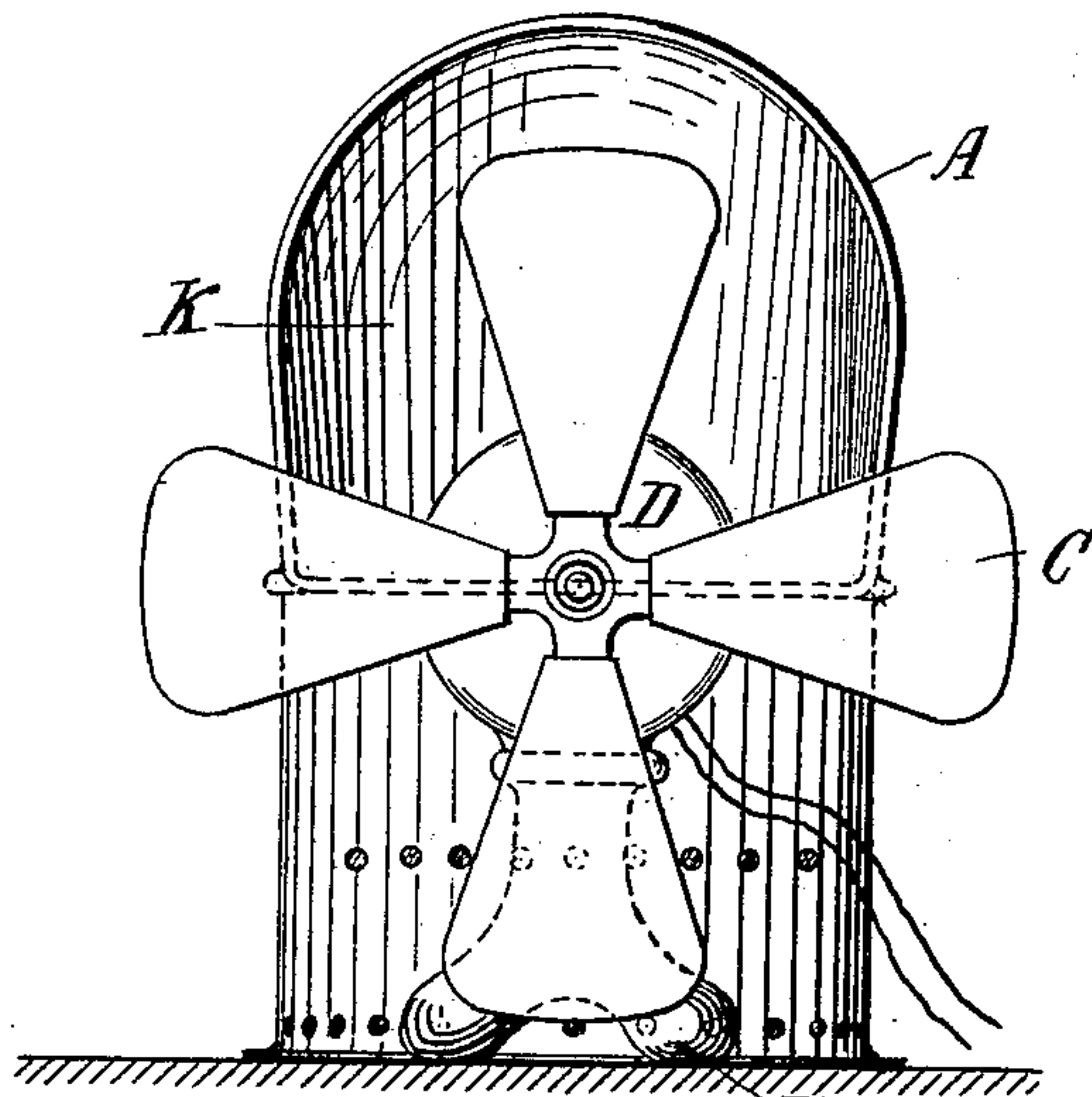


Fig. 1.

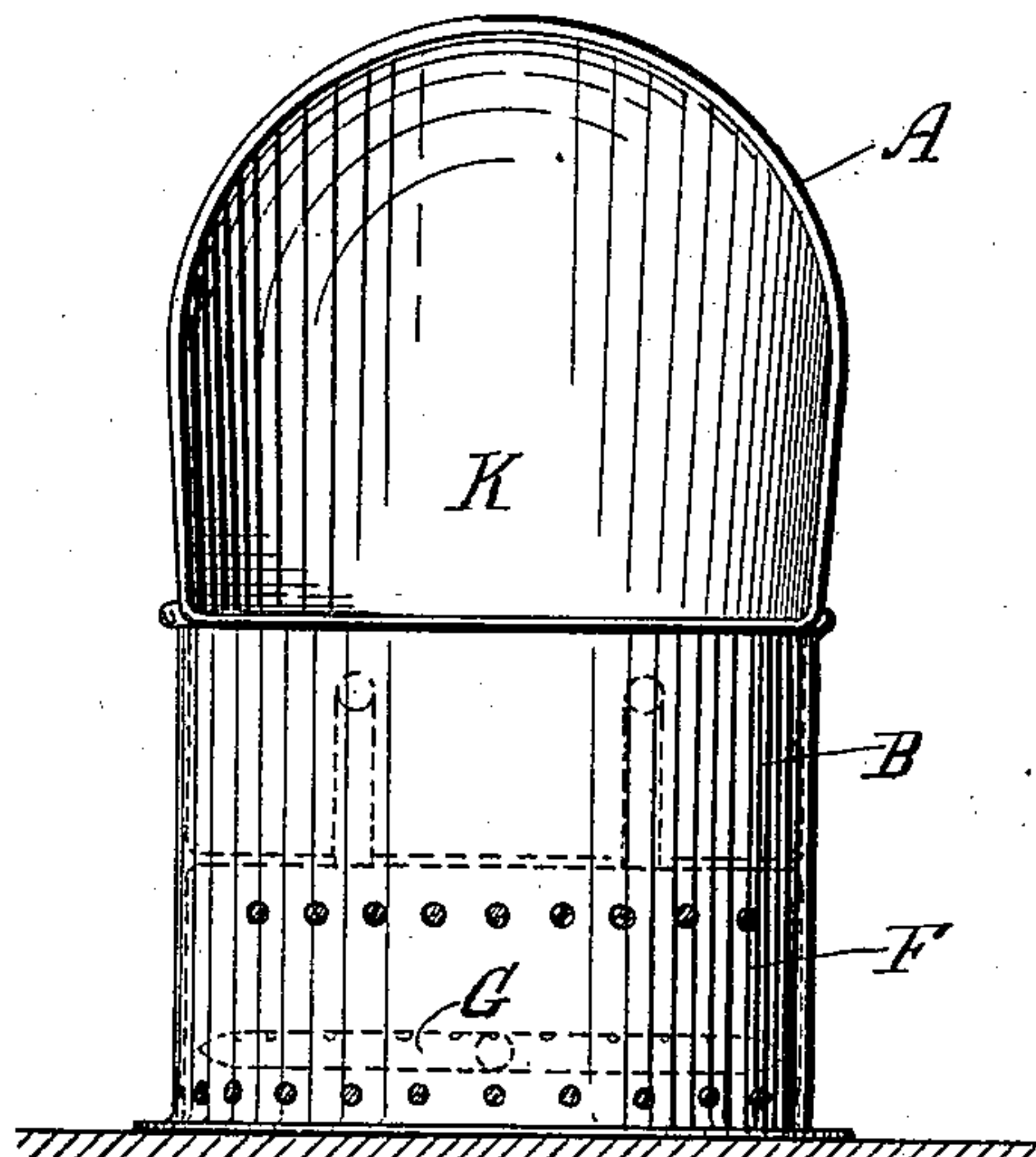


Fig. 2.

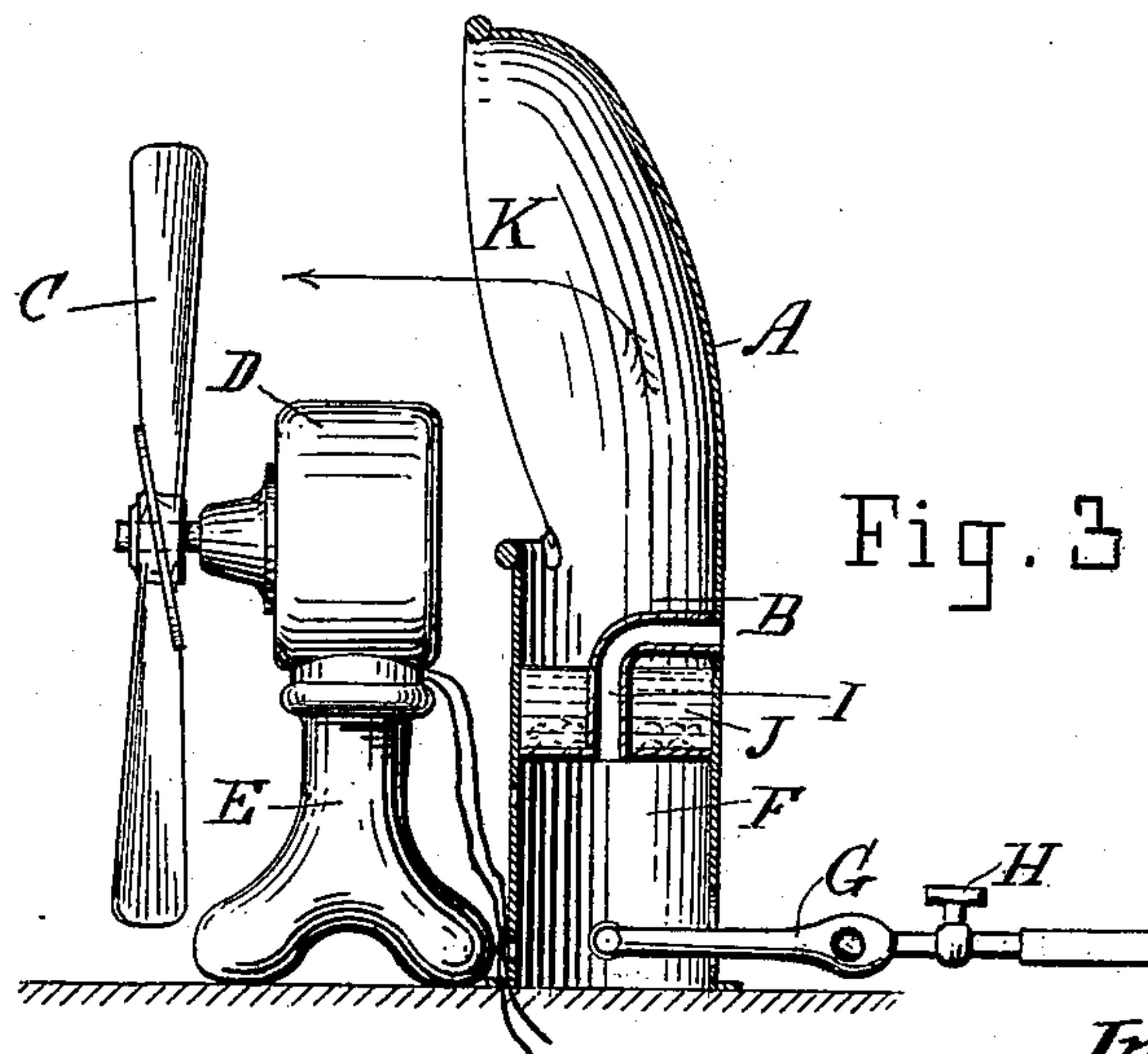


Fig. 3.

Attest:

T. L. Mockner
L. Brock.

Inventor
John W. Tighe
by Evelon B. Brock
Att'y

No. 667,469.

Patented Feb. 5, 1901.

J. W. TIGHE.

APPARATUS FOR FUMIGATING OR PERFUMING ROOMS.

(Application filed June 20, 1900.)

(No Model.)

2 Sheets—Sheet 2.

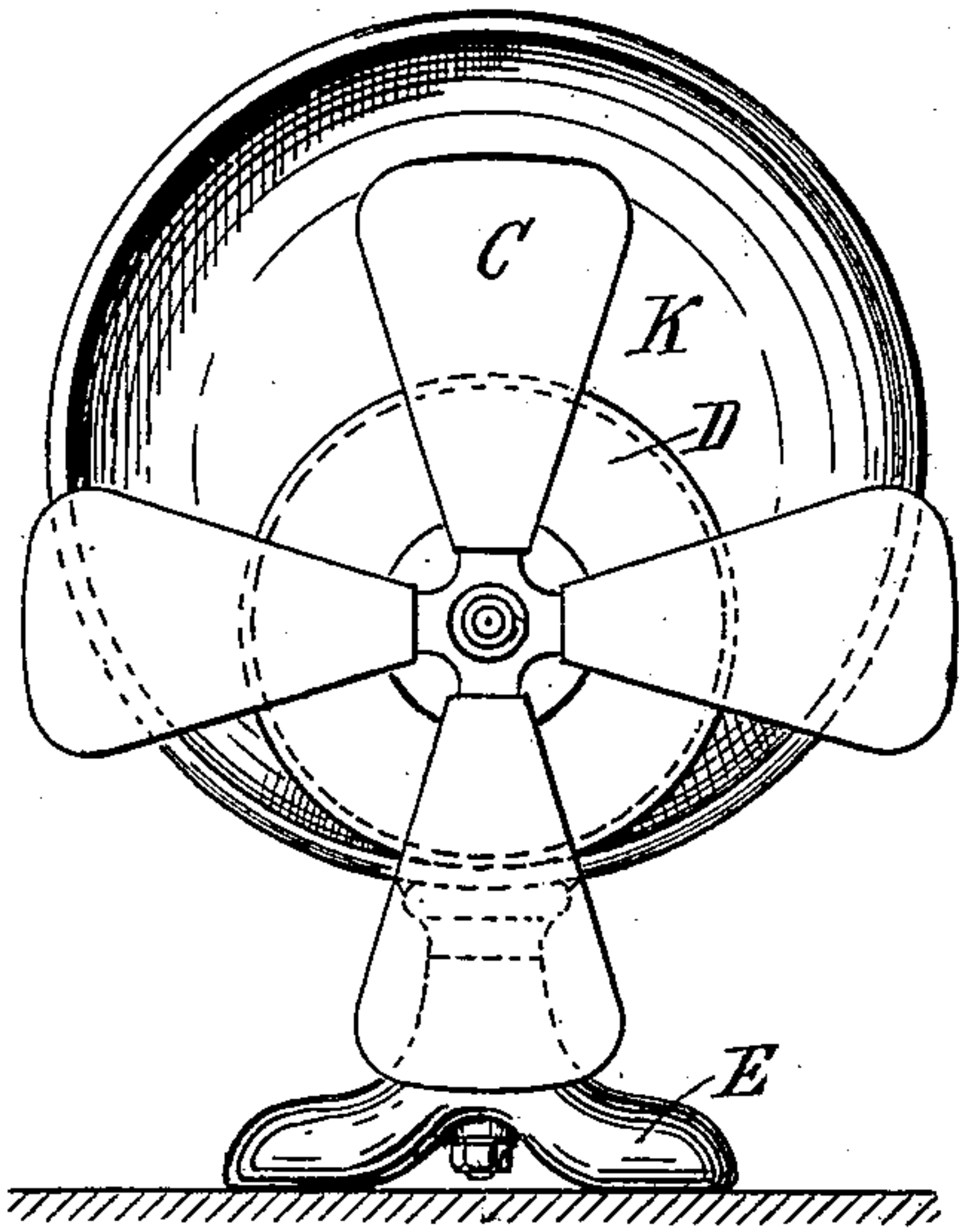


Fig. 4.

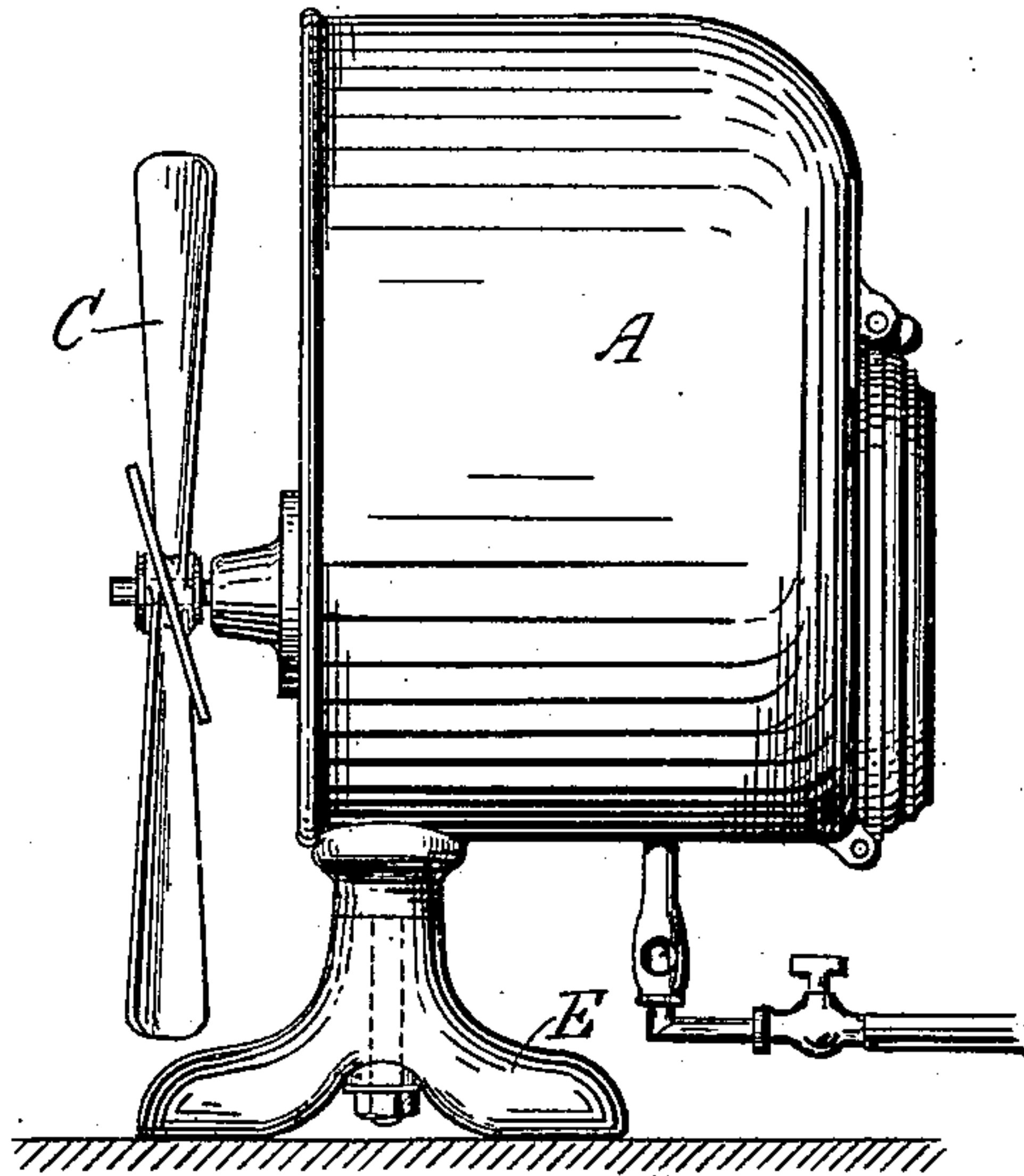


Fig. 5.

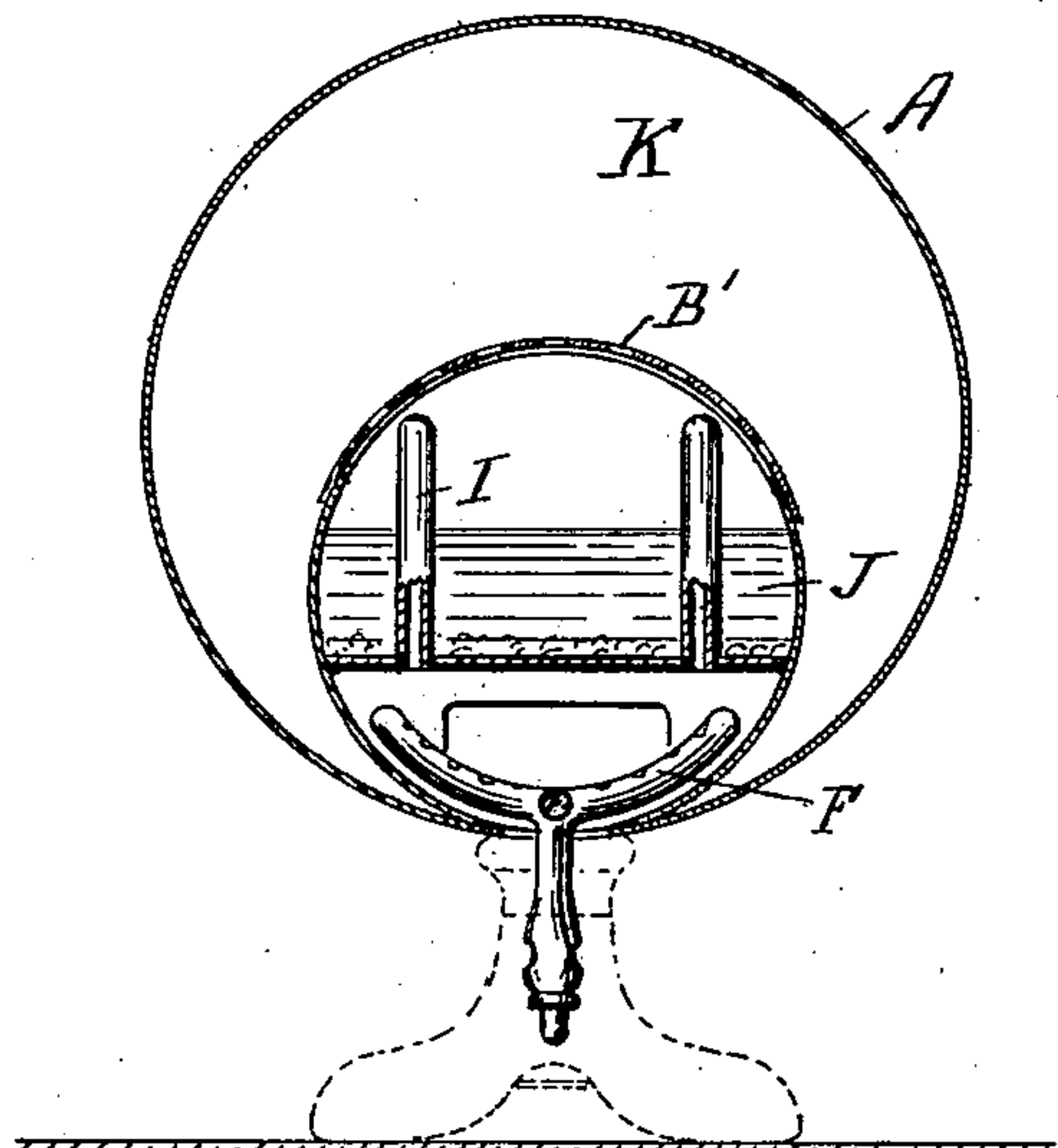


Fig. 6.

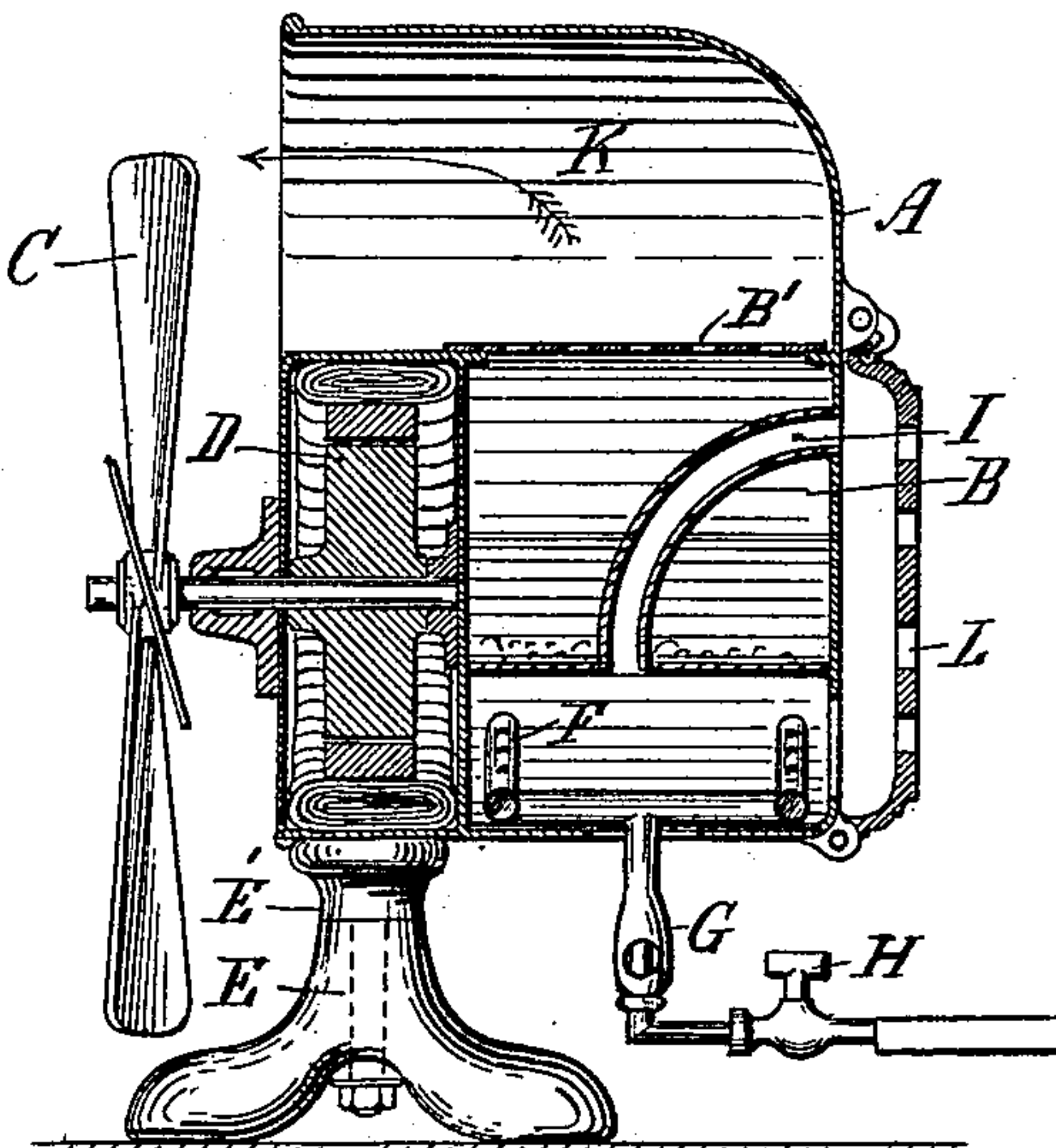


Fig. 7.

Attest:
D. L. Mocka
L. Brock

Inventor
John H. Tighe
by C. Nelson Brock
Atty

UNITED STATES PATENT OFFICE.

JOHN WYNNE TIGHE, OF EXETER, ENGLAND.

APPARATUS FOR FUMIGATING OR PERFUMING ROOMS.

SPECIFICATION forming part of Letters Patent No. 667,469, dated February 5, 1901.

Application filed June 20, 1900. Serial No. 20,963. (No model.)

To all whom it may concern:

Be it known that I, JOHN WYNNE TIGHE, dispensing and family chemist, a subject of the Queen of Great Britain and Ireland, residing at 3 and 4 High street, Exeter, England, have invented certain new and useful Improvements in Apparatus for Fumigating or Perfuming Rooms and the Like, of which the following is a specification.

This invention relates to improvements in apparatus for fumigating, disinfecting, or perfuming rooms or chambers and the like, the object of the invention being to produce a current of fumigated or perfumed air which shall rapidly permeate the surrounding atmosphere.

In order to carry out this invention, I provide a vessel made of any convenient metal, in which I vaporize the material for use in fumigating or perfuming. This vessel consists of a dish or pan surmounted by a hood made concave in shape toward the top of said hood, and underneath this said dish or pan is a chamber with ventilating-holes for receiving either a burner for gas of any convenient shape or form, or an oil-lamp or any other form of heating apparatus may be used, if preferred. One or more ventilating-tubes are provided to prevent condensation, which pass up through the aforesaid dish or pan and out through the back of the same. The heat of the gas or other burner of course vaporizes the disinfecting, fumigating, or perfuming material placed in the dish or pan aforesaid. In order to more rapidly and effectively distribute this vaporized material, I provide a revolving fan of a convenient size and form, which may be driven by electric current or any other convenient motive power and the speed of which can be regulated as may be required for the purpose. This fan may be either fixed to the vaporizer or simply placed in front thereof at whatever distance may be required, and both the fan and the vaporizer may be placed at such an angle or in such a position that the vaporized material may be caused to issue in any direction.

The quantity as well as the extent of the disinfecting or perfuming material can by means of this improved apparatus be adjusted and placed under control.

If preferred, I provide a modification of the apparatus hereinbefore described, and so arrange the various parts that both vaporizer and fan can be contained in one compartment. In order to do this, I make the body of the vaporizer cylindrical in form, with a cover-plate at front and back of same. An internal division-plate is provided, dividing the cylindrical chamber into two parts of a convenient proportionate capacity. The front chamber serves to contain the electric or other motor, and the back chamber serves to contain the disinfecting or perfuming material, which may be heated by an electric coil placed within the material to be vaporized or by gas or other jet placed underneath or in any convenient position. The fan revolves in front of the cylindrical chamber, the spindle being carried to inside the front portion of the chamber and driven by the electric or other motor therein. I provide an outer cylindrical case of a larger diameter, which incloses the aforesaid cylindrical vaporizer-chamber in such a manner that a crescent-shaped space is provided between the two cases, the widest part of which is at the top. The back part of this space is closed by a plate, while the front part is open to the action of the revolving fan, thus forming the hood; hereinbefore described, the vapor escaping through holes or slots provided in the upper part of the internal cylindrical casing.

In order that this invention may be readily understood, reference is made to the accompanying drawings, in which—

Figure 1 represents a front elevation of the apparatus, wherein the vessel for vaporizing the fumigating or perfuming material and the fan and motor are separately contained, Fig. 2 being also a front elevation of the said vessel with the fan removed. Fig. 3 is a side elevation showing the vaporizing vessel in section. Fig. 4 is a front elevation of the modified arrangement of the apparatus, wherein the fan and motor and the vaporizer are combined in one vessel. Fig. 5 is a side elevation of the same. Fig. 6 is a sectional elevation through the back or vaporizer part of the said apparatus, and Fig. 7 is a sectional side elevation of the said combined apparatus.

In the several views, A is the body of the fumigator or vaporizer, containing the vapo-

5 rizing-chamber B, which in the form of apparatus illustrated by Figs. 1, 2, and 3 is open at the top and in the combined form, as shown in Figs. 6 and 7, is formed by a closed cylindrical chamber having holes or perforations B' at the top for the escape of the vapor.

10 C is the fan, revolved by the motor D, actuated by wires D' D', connected with a battery. The motor is mounted on a pedestal or stand E, which may be provided with a swivel-joint at E' to enable the fan to be placed in any direction.

15 F is a chamber for containing jets G for gas or oil, which, in the case of gas, is controlled by the tap H. If preferred, the heating may be effected electrically by arranging the electric heating apparatus either in or under the vaporizing-chamber. I I are ventilating-tubes to prevent condensation in the heating-chamber.

20 The material or liquid to be vaporized is placed in the receptacle or chamber B and heat applied by means of the gas-jets G or other means of heating, and the vapor produced ascends into the hood or chamber K, and the fan is set revolving, thereby driving

the vapor forward at a rapid speed in the direction desired. L is a hinged door or cover, which may be provided if required to cover the openings in the said vaporizing and heating chambers. 30

All the parts of the apparatus may be arranged and made so as to be removable where required.

35 Having now described my invention, what I claim as new, and desire to secure by Letters Patent, is—

In an apparatus for fumigating or perfuming rooms, the combination of a cylindrical hood, an eccentrically-disposed cylinder therein having a motor-compartment in one end and a vaporizing-chamber in the other, a motor in the motor-compartment having a fan projecting therefrom, outside the hood, and a support for the apparatus, substantially as shown and described. 40 45

In witness whereof I have hereunto set my hand in presence of two witnesses.

JOHN WYNNE TIGHE.

Witnesses:

WILLIAM HENRY GREEN,
EDWIN JAMES HARRIS.