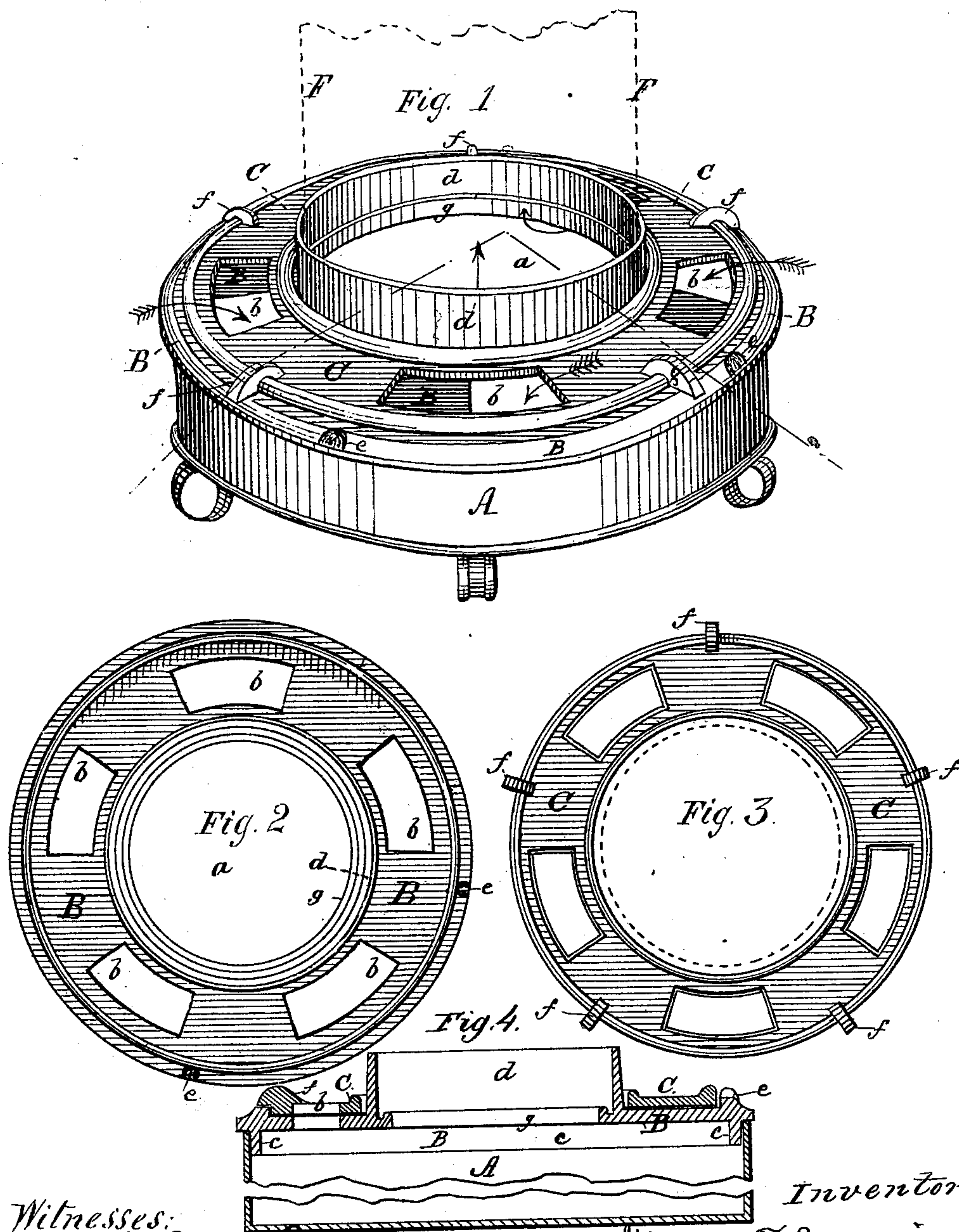


J. F. BALDWIN.  
Ventilator for Dwellings, &c.

No. 233,962.

Patented Nov. 2, 1880.



Witnesses:

Harmon Lovell  
Charles Whitmore

Inventor:

James F. Baldwin



# UNITED STATES PATENT OFFICE.

JAMES F. BALDWIN, OF LOCKPORT, NEW YORK.

## VENTILATOR FOR DWELLINGS, &c.

SPECIFICATION forming part of Letters Patent No. 233,962, dated November 2, 1880.

Application filed December 1, 1879.

*To all whom it may concern:*

Be it known that I, JAMES F. BALDWIN, of Lockport, in the county of Niagara and State of New York, have invented a new and Improved Ventilator for Dwellings, &c.; and I do hereby declare that the following is a full, clear, and exact description of the same.

The object of my invention is to provide an improved device for use in removing vitiated air from dwellings and other buildings by the vacuum process.

It is adapted for connection with a stove, stove-pipe, or flue, and may be placed on the floor or otherwise suitably arranged within the room to be ventilated, and the air is drawn into the same, whence it passes into the pipe, such current being induced by the draft in the chimney.

The device is so constructed as to receive and retain sparks, ashes, or cinders from the pipe with which it is connected, so that while the room or other space is well ventilated all danger from fire is obviated.

The details of construction are as herein-after described, reference being had to the accompanying drawings, in which—

Figure 1 is a perspective view of the device, showing the manner of connecting it with a stove-pipe. Fig. 2 is a plan view of the top of the same, the annular slide being removed. Fig. 3 is a plan view of the slide. Fig. 4 is a vertical central section of the device.

The ventilator is formed of three parts, to wit: the body A, apertured annular top B, and annular slide C.

The body A is preferably constructed of sheet metal, and is in the form of a pan having a flat bottom and vertical sides.

The annular top B has a central opening, *a*, a series of other openings, *b*, arranged concentrically with *a*, and a flange, *c*, on the under side near its outer edge; also a circular flange, *d*, projecting upward around said central opening, *a*. The flange *c* adapts the top B to retain its position on the pan A, as shown in Fig. 4, while the deeper flange, *d*, serves as a collar for the stove-pipe F, to which it may be attached, as shown in dotted lines, Fig. 1.

The top B is horizontal, and the slide C rests flat upon the same, but is free to move circularly within the limits necessary to enable

it to cover or uncover the openings *b*. Such limits are defined by the projections *e*, serving as stops on the edge of the top B, and the projections *f* on the slide C, which come in contact with *e*.

At the base of flange *d* is an inwardly-projecting shoulder, *g*, Fig. 4, which serves as a stop and rest for the stove-pipe F.

In using the ventilator it is ordinarily placed on the floor of a room, and is connected with the pipe F, leading from a stove to the chimney, or else directly with the chimney—that is to say, the pipe F may extend down to the ventilator from the stove or the stove-pipe proper, and thus constitute a branch of the latter, or it may lead to the flue or chimney and enter it in the same manner as an ordinary stove-pipe.

If the slide C be so adjusted as to uncover the openings *b* in the top B, as shown in Fig. 1, the draft in the chimney will induce a current of air through the ventilator and its attached pipe, as indicated by arrows, Fig. 1, and such current will mingle with the products of combustion and pass up the chimney. Thus the various gases or other injurious elements which vitiate the air in the room will be drawn off and fresh air admitted from without to supply the vacuum.

When the ventilator is in use, or, rather, when the slide C is open, the draft and abstraction of heat through the stove-pipe will be lessened.

The pan A will receive and retain sparks, cinders, or ashes that may fall down pipe F, and prevent their escape into the room without hindering the entrance and passage of air.

The top B, with its slide C, is detachable from pan A, so that the latter may be readily discharged of cinders, &c., accumulated in it.

The device forms a cheap and serviceable ventilator for use in rooms or other places where required, and its adaptation for location on the floor insures the drawing off of the air which is lowest in temperature and most vitiated with carbonic-acid gas, &c.

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

1. The improved ventilator for use in rooms, &c., as an attachment of a stove-pipe or flue, consisting of the pan A, apertured top B, and

an annular apertured slide, C, substantially as shown and described.

5 2. The top B, provided with a pendent flange, the central opening, and the vertical collar or flange surrounding the same, in combination with the pan A, substantially as and for the purpose specified.

3. The top B, having stops *e*, flange *c*, and the vertical collar or flange *d*, provided with

the inwardly-projecting shoulder *g*, the annu- 10  
lar apertured slide C, having projections *f*,  
and the pan A, on which the top is held in  
place by said flange *c*, all as shown and de-  
scribed.

JAMES F. BALDWIN.

Witnesses:

J. BYRON LOVELL,  
CHARLES WHITMORE.