

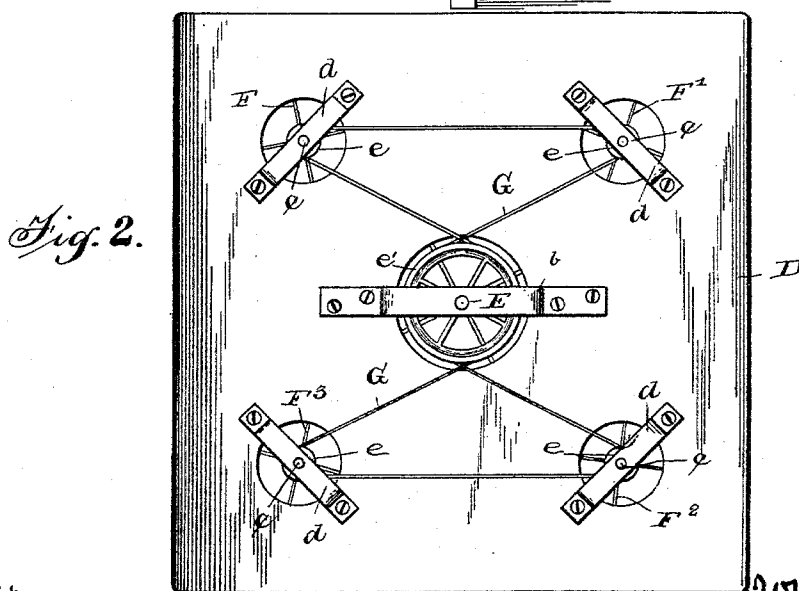
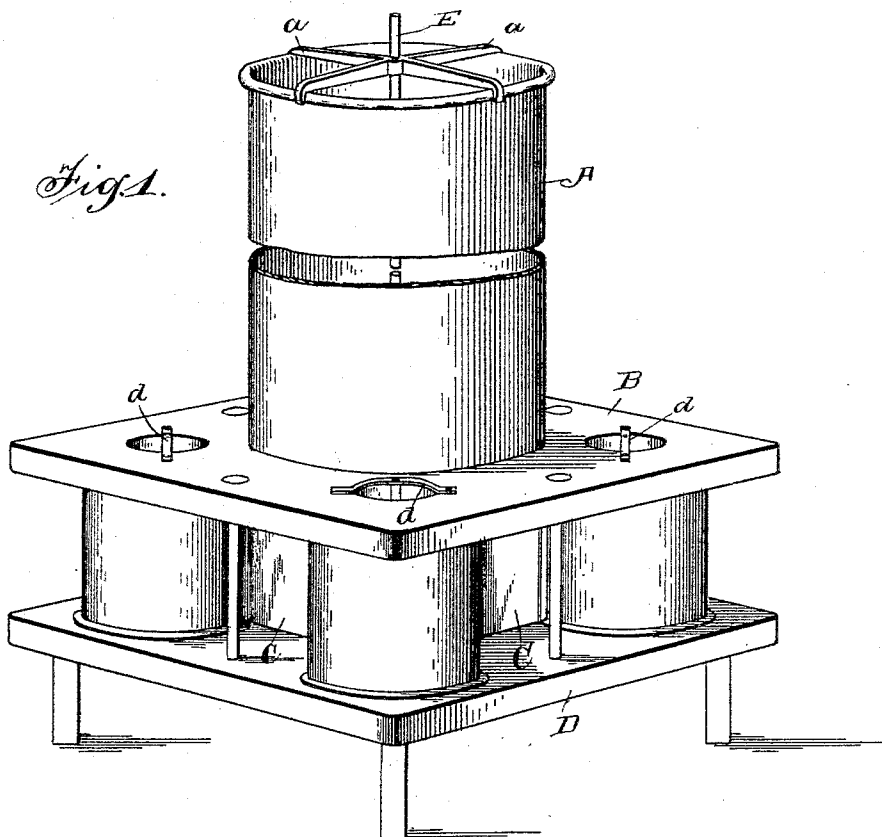
(No Model.)

2 Sheets—Sheet 1.

W. NASH.
VENTILATOR.

No. 584,234.

Patented June 8, 1897.



Witnesses
W. F. Doyle
J. A. Willson.

Inventor
Wm Nash.
By *H. B. Willson.*
Attorney

(No Model.)

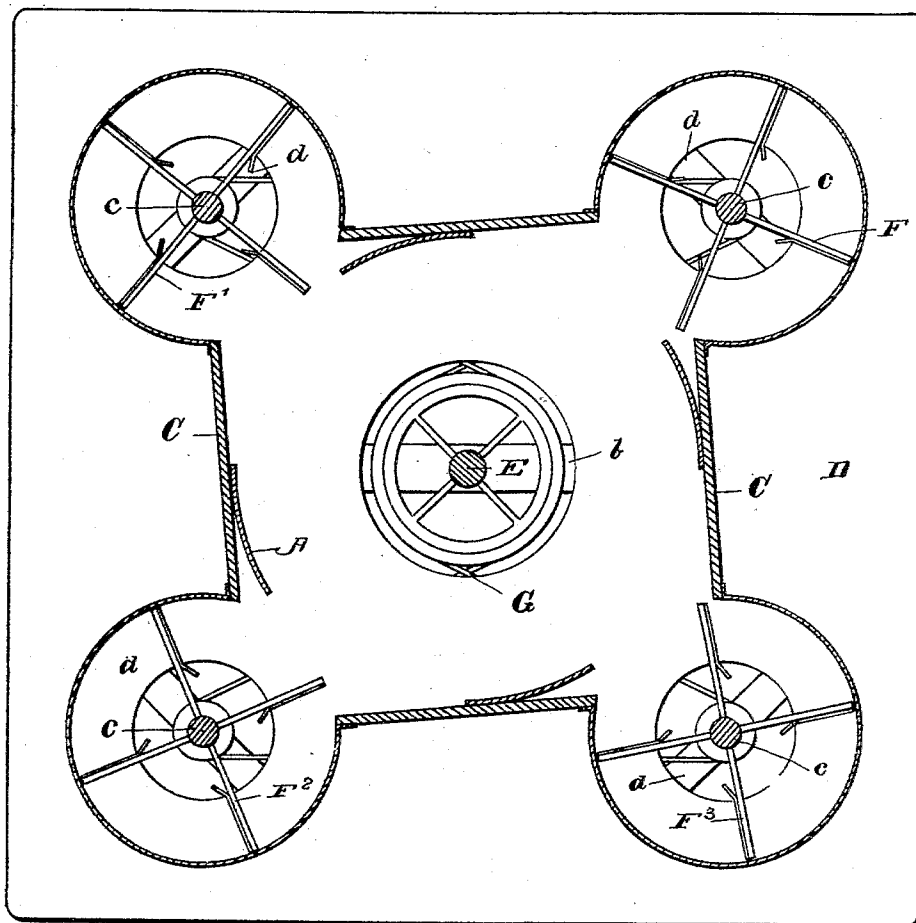
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Fig. 3.



Witnesses

Wm. F. Boyle.
J. A. Hellock

Inventor
William Nash
By H. B. Wilson
Attorney

UNITED STATES PATENT OFFICE.

WILLIAM NASH, OF GYPSUM, KANSAS.

VENTILATOR.

SPECIFICATION forming part of Letters Patent No. 584,234, dated June 8, 1897.

Application filed June 4, 1895. Serial No. 551,702. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM NASH, a citizen of the United States, residing at Gypsum, in the county of Saline and State of Kansas, have invented certain new and useful Improvements in Ventilators; 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 appertains to make and use the same, reference being had to the accompanying drawings, forming a part of this specification.

My invention has relation to ventilators; and the object of the device is to produce a ventilator for buildings, mines, and the like that will remove the foul air therefrom, so that its place may be filled with fresh air from the outside; and to this end the novelty consists in the construction, combination, and arrangement of the same, as will be hereinafter more fully described, and particularly pointed out in the claim.

Figure 1 is a perspective view of my improved ventilator. Fig. 2 is a bottom plan view of the same, and Fig. 3 is a horizontal section through the fan-casings between the platform B and the base *d*.

A is a cylindrical casing mounted on a platform B, which rests upon the approximately rectangular chamber C, secured to the base-plate D.

E is a vertical shaft centrally mounted in the casing A, its upper end being journaled in the cross-braces *a a* and its lower end in a yoke *b*, secured to the under side of the base-plate D.

F, F', F², and F³ is a series of ventilator-fans vertically mounted in the corners of the chamber C between the platform B and the base-plate D, their shafts *c* being journaled in yokes *d*, secured to the top of the platform B and the bottom of the base-plate D. Each of these fan-shafts *c* is provided with a grooved pulley *e*, from which an endless belt G passes from the pulley on the shaft of the fan F to the pulley on the shaft of the fan F', thence

half-way around the large pulley *e'* on the main shaft E, thence around the pulley on the shaft of the fan F², thence to the pulley on the shaft of fan F³, thence half-way around the pulley *e'* on the shaft E, and back to the starting-point on the pulley of the shaft of the fan F.

It will be seen that when the shaft E is rotated the series of fans will also be rotated in the same direction to draw the air in at their top and bottom ends and discharge it by centrifugal force into the chamber C, from whence it is forced upwardly and outwardly through the cylindrical casing A, the mouth of which extends outside of the building or mine.

While the shaft E may be operated by any form of steam, electrical, or other motor, I prefer to use that form of wind-motor described and claimed by me in my pending application, Serial No. 564,263, filed October 1, 1895.

Having thus fully described my invention, what I claim is—

A ventilator comprising the base-plate D, upon which is supported the chamber C provided at its corners with fans F, F', F², F³, a platform B above said chamber, a cylindrical casing A supported on said platform and communicating with the chamber C, pulleys on the ends of the drive and fan shafts, and a belt extending from pulley on shaft of fan F to and partially around pulley on shaft of fan F', thence half-way around pulley on drive-shaft, thence partially around pulley on shaft of fan F², thence partially around pulley on shaft of fan F³, thence half-way around pulley on drive-shaft and back and around pulley on shaft of fan F, substantially as shown and described.

In testimony whereof I hereunto set my hand in the presence of two witnesses.

WILLIAM NASH.

Witnesses:

WM. STAHL,
H. E. BAKER.