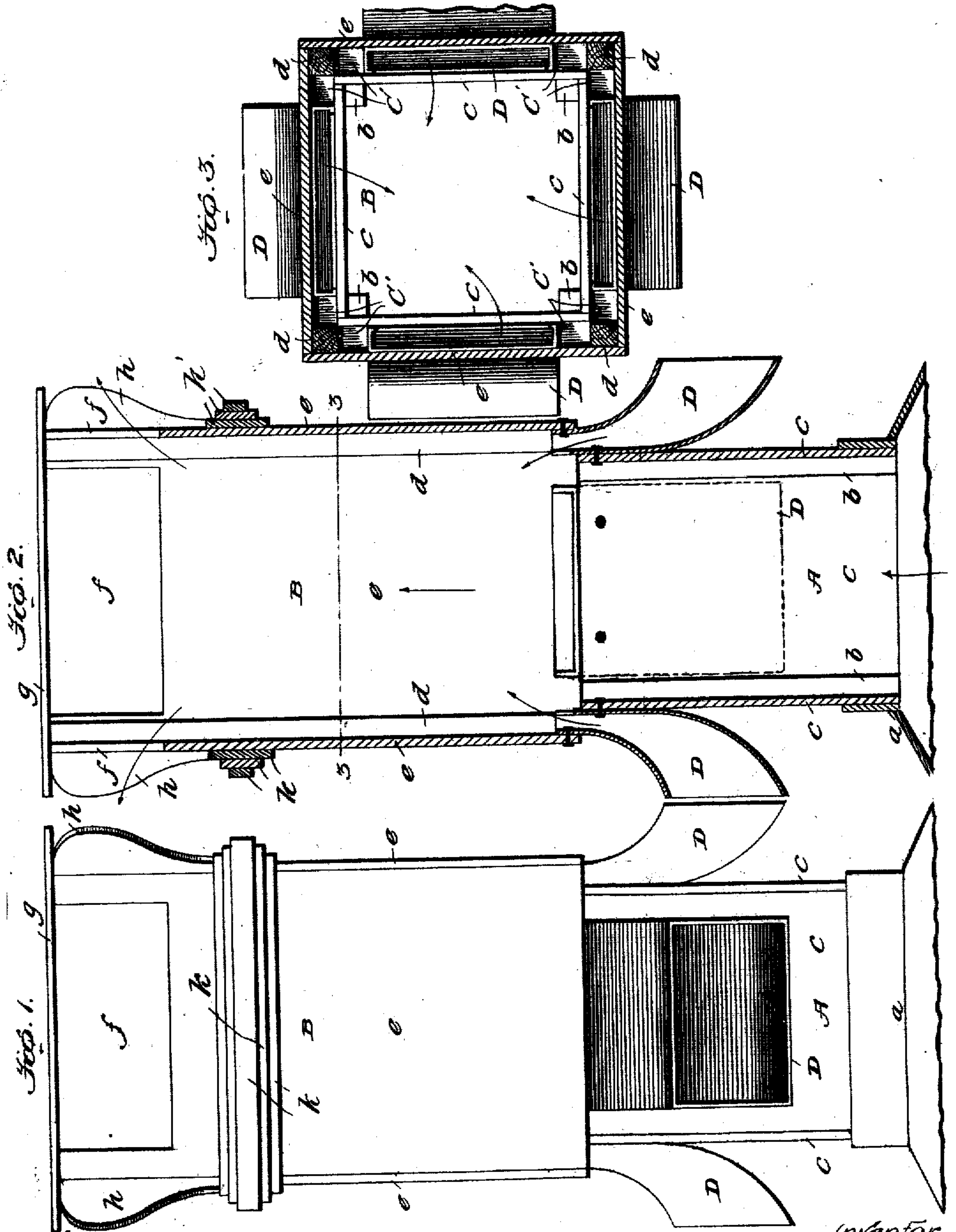


No. 814,357.

PATENTED MAR. 6, 1906.

W. T. COTTIER.
VENTILATOR.

APPLICATION FILED FEB. 3, 1905.



Witnesses.

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Inventor.

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UNITED STATES PATENT OFFICE.

WILLIAM TALBOT COTTIER, OF CHICAGO, ILLINOIS.

VENTILATOR.

No. 814,357.

Specification of Letters Patent.

Patented March 6, 1906.

Application filed February 3, 1905. Serial No. 244,000.

To all whom it may concern:

Be it known that I, WILLIAM TALBOT COTTIER, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented new and useful Improvements in Ventilators, of which the following is a specification.

My invention pertains to ventilators; and it contemplates the provision of a ventilator which is highly efficient in exhausting a building or apartment of vitiated or foul air and is also simple and inexpensive in construction and well adapted to withstand exposure to the weather.

The invention will be fully understood from the following description and claims when taken in connection with the accompanying drawings, forming part of this specification, in which—

Figure 1 is a side elevation of the ventilator constituting the preferred embodiment of my invention. Fig. 2 is a vertical central section of the ventilator with the lower portion of one side wall of the uptake broken away, and Fig. 3 is a horizontal section taken in the plane indicated by the line 3 3 of Fig. 2 looking downwardly.

Similar letters designate corresponding parts in all of the views of the drawings, referring to which—

A is the lower portion of the uptake of my novel ventilator, and B is the upper comparatively large portion of said uptake. At this point I desire to state that all of my novel ventilator excepting the inductors, presently described, is preferably of wood. The lower portion A comprises a base *a*, designed to rest on and communicate with the interior of the building or apartment to be ventilated, upright corner-posts *b*, and boards *c*, arranged at the outer sides of and connected to the corner-posts, the boards *c* being also interposed between the base *a* and the corner-posts and connected to both, Fig. 2. The upper comparatively large portion B is made up of upright corner-posts *d* and boards *e*, both preferably of wood, and it is provided with lateral openings *f* at its upper end, a cap *g*, secured over and projecting laterally beyond said end, brackets *h*, disposed below and supporting the cap *g* and connected to the boards and corner-posts, and ribs *k k k*, connected together and to the boards *e* and arranged immediately below the brackets *h*, so as to assist in supporting said brackets *h*.

D D are inductors, preferably of galvanized iron. The inductors *per se* may be of any suitable type without involving a departure from the scope of my invention. I prefer, however, in order to increase the efficiency of the inductors to gradually reduce the same in size from their lower receiving ends to their discharge ends and to arrange and secure said discharge ends between the upper end of the board covering *c* of portion A and the lower end of the board covering *e* of portion B, Fig. 2. The spaces between the sides of the inductors D and the corner-posts *d* are closed by blocks, (shown in plan in Fig. 3 and lettered *C'*,) this in order to prevent air from entering the uptake except through the said inductors D.

The lower portion A and upper portion B of the uptake are preferably connected together and fixed with respect to each other through the medium of the inductors D, to which their boards are bolted, as shown.

In the practical operation of my novel ventilator it will be observed that the atmospheric air passing upwardly through the inductors will create a strong suction in the upper portion B of the uptake and that the said suction will operate to effectually exhaust an apartment or building of vitiated or foul air. It will also be observed that the suction created in the upper portion of the uptake is increased in force by the size of said upper portion in cross-section as compared with the lower portion.

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

1. In a ventilator, the combination with an uptake comprising a lower portion, and an upper portion, comparatively large in cross-section, arranged with its lower end flush with the upper end of the lower portion, whereby vertically-disposed openings are formed between the said ends of the portions; of inductors arranged outside the uptake and having their discharge ends secured in the openings between the adjacent ends of the lower and upper portions.

2. In a ventilator, the combination of a lower uptake portion comprising corner-posts and a covering arranged on and connected to said posts, an upper uptake portion, comparatively large in cross-section, comprising corner-posts and a covering arranged on and connected to said corner-posts; the lower end of the covering of the upper portion being flush with the upper end

of the covering of the lower portion, whereby vertically-disposed openings are afforded between the said ends of the portions, and inductors arranged outside the uptake and having their discharge ends secured in the said openings of the uptake.

3. In a ventilator, the combination of a lower uptake portion comprising corner-posts and a covering arranged on and connected to said posts, an upper uptake portion, comparatively large in cross-section, comprising corner-posts and a covering arranged on and connected to said corner-posts; the lower end of the covering of the upper portion being flush with the upper end

of the covering of the lower portion, whereby vertically-disposed openings are afforded between the said ends of the portions, inductors arranged outside the uptake and having their discharge ends secured in the said openings of the uptake, and means closing the spaces between the sides of the inductors and the adjacent corner-posts.

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

WILLIAM TALBOT COTTIER.

Witnesses:

Mrs. Wm. T. COTTIER,
MARY B. HILL.