

L. A. JOHNSON.

VENTILATING BUILDINGS.

No. 186,736.

Patented Jan. 30, 1877.

Fig. 1

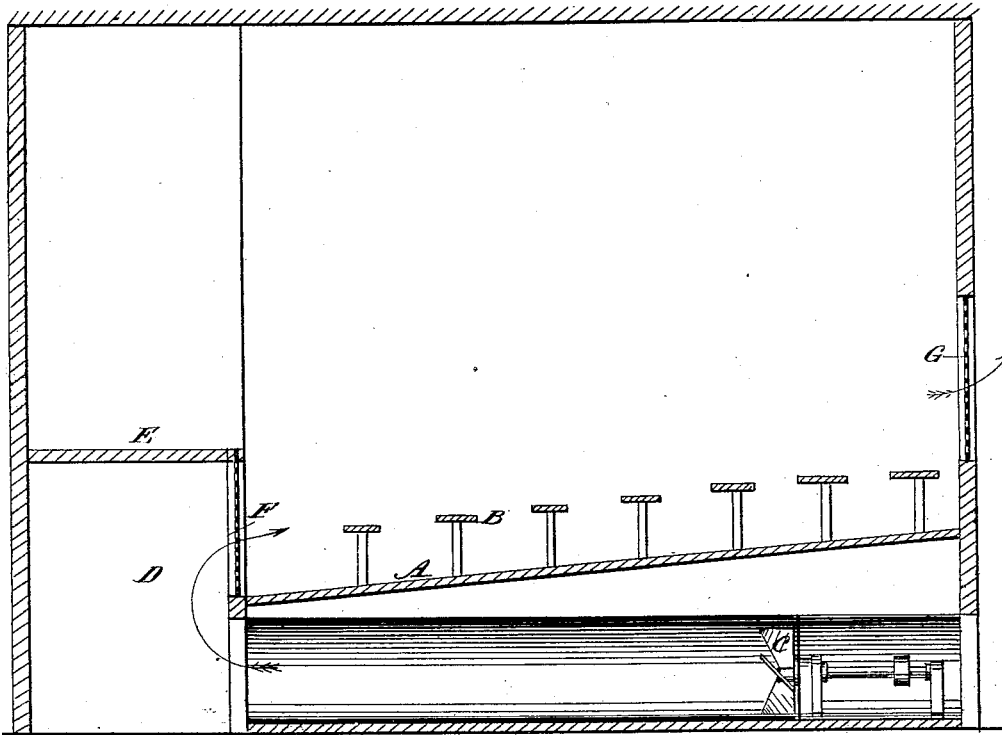
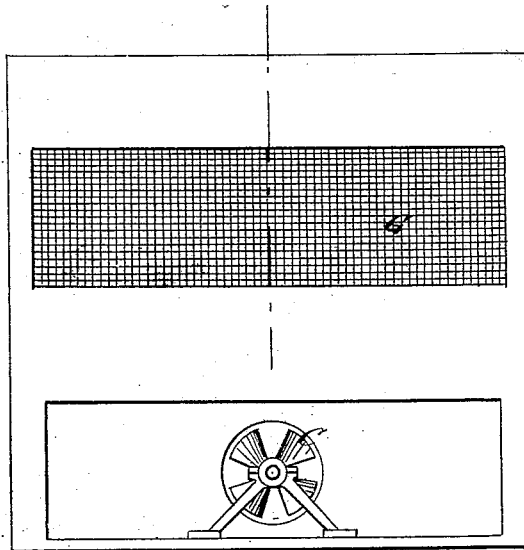


Fig. 2



WITNESSES:

*E. Stevens*  
*John Goethals*

INVENTOR:

*L. A. Johnson*  
BY *[Signature]*

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# UNITED STATES PATENT OFFICE.

LUTHER A. JOHNSON, OF NEW YORK, N. Y.

## IMPROVEMENT IN VENTILATING BUILDINGS.

Specification forming part of Letters Patent No. **186,736**, dated January 30, 1877; application filed May 16, 1876.

*To all whom it may concern:*

Be it known that I, LUTHER A. JOHNSON, of the city, county, and State of New York, have invented a new and useful Improvement in Ventilating Buildings, of which the following is a specification:

The object of my invention is to provide a simple and effectual method of ventilating theaters, lecture and concert halls, churches, and the like; and it consists, essentially, of the front elevation of the stage, speaker's desk, or other part of the building toward which the audience faces, constructed with a large area of openings in about the plane of the faces of the audience, together with similar exit-passages through the wall at the back of the audience, and means of forcing the air in and through the room, thus providing a large supply of air, and causing it to pass in such direction that the occupants of the rooms will not take cold, as when it moves sidewise, downward, or from backward upon them.

Figure 1 is a sectional elevation of an audience-chamber, showing the plan of my improved method of ventilating, the section being taken on the line *xx*, Fig. 2; and Fig. 2 is a side elevation.

Similar letters of reference indicate corresponding parts.

A represents the floor, and B the seats, of

the audience-chamber, under which is a screw-fan, C, forcing air into the chamber D under the speaker's platform E, from which it passes through the openings F in the front elevation of the platform toward the faces of the occupants of the seats, passing along at about the same height from the floor to the back of the room, where similar openings, G, allow it to escape.

The essential advantage of the arrangement is that the air flows through the room in the plane of the heads of the occupants and approaches them from the front, which is the way of least danger of taking cold.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

In a theater, lecture-room, or other assembly-room, the front elevation of the stage or lecturer's platform having inlet-openings F, and the rear partitions having outlets G in the plane of the audience, or thereabout, in combination with a fan or other means of forcing the air in at F and out at G, substantially as specified.

LUTHER A. JOHNSON.

Witnesses:

A. P. THAYER,  
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