

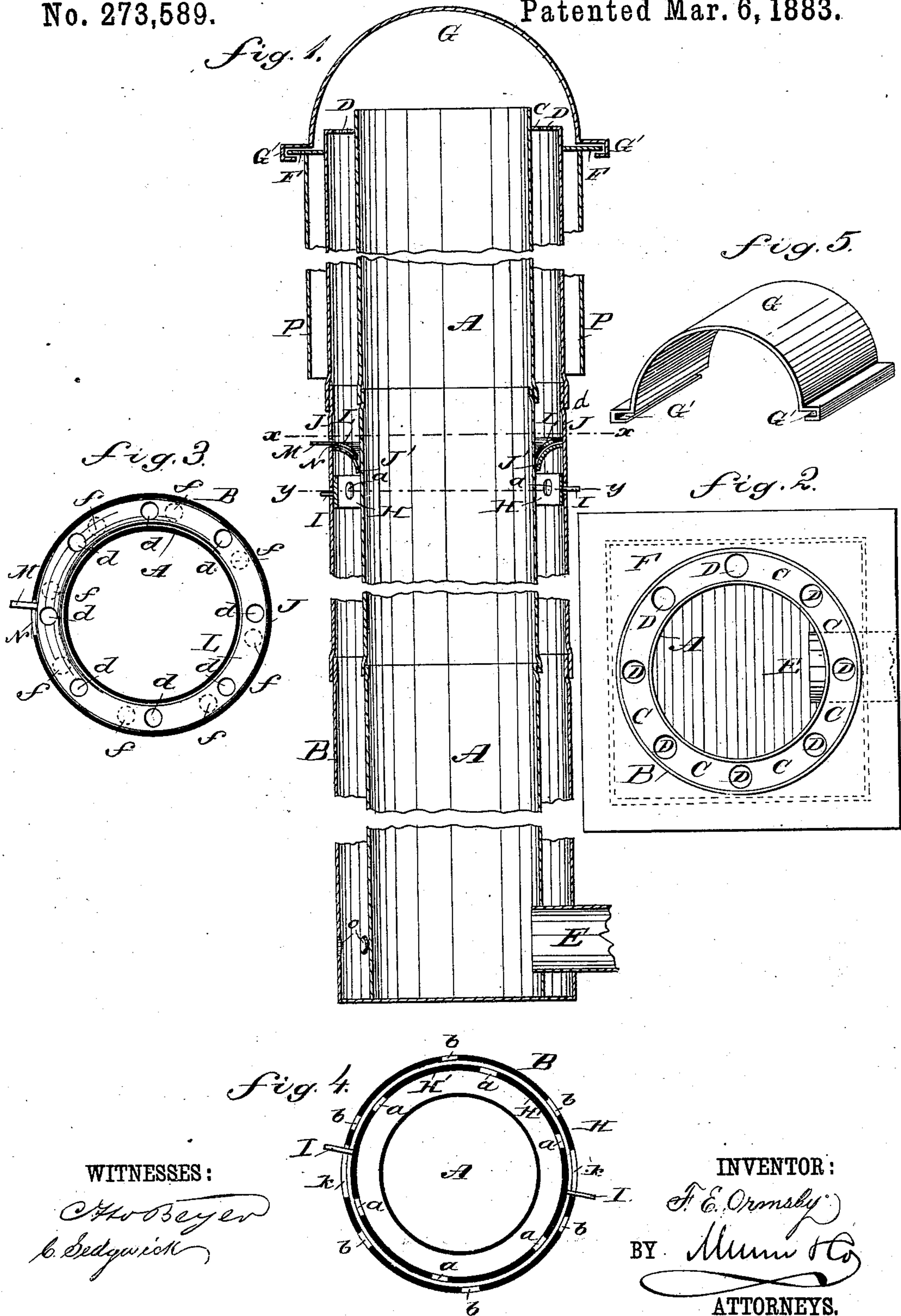
(Model.)

F. E. ORMSBY.

COMBINED CHIMNEY VENTILATOR AND HEATER.

No. 273,589.

Patented Mar. 6, 1883.





# UNITED STATES PATENT OFFICE.

FRANK E. ORMSBY, OF NAUMBURG, NEW YORK.

## COMBINED CHIMNEY-VENTILATOR AND HEATER.

SPECIFICATION forming part of Letters Patent No. 273,589, dated March 6, 1883.

Application filed September 16, 1882. (Model.)

*To all whom it may concern:*

Be it known that I, FRANK E. ORMSBY, of Naumburg, in the county of Lewis and State of New York, have invented a new and Improved Combined Chimney-Ventilator and Heater, of which the following is a full, clear, and exact description.

The object of my invention is to provide a new and improved chimney-ventilator which can be used as a heater.

The invention consists in a combined ventilator and heater formed of an inner and an outer pipe provided with a register for establishing communication between the room and the air-space between the pipes, and a register for establishing communication between the upper and lower parts of the air-space between the pipes.

The invention also consists in parts and combinations of the same, as will be fully described and set forth hereinafter.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar letters of reference indicate corresponding parts in all the figures.

Figure 1 is a longitudinal sectional elevation of my improved combined chimney-ventilator and heater. Fig. 2 is a plan view of the same, showing the cap removed. Fig. 3 is a sectional plan view of the same on the line *x x*, Fig. 1. Fig. 4 is a sectional plan view of the same on the line *y y*, Fig. 1. Fig. 5 is a perspective view of the cap.

The pipe A, which is closed at the bottom and open at the top, is surrounded by a larger pipe, B, which also is closed at the bottom, and has an annular top, C, which is provided with a series of apertures, D. The smoke-pipe E enters the inner pipe, A, at the bottom, and passes through the annular space between the two pipes.

A represents the chimney proper, and P the chimney-top, secured to the pipe B by means of the flange F at its upper end.

G represents a curved cap adapted to be placed over the chimney, and provided with bent flanges G' at its lower ends, by means of which the cap may be removably secured to the flange F.

In that part of the ventilator within the room two registers, H and J, are formed. The register H consists of a ring, H', resting, free to turn, against the inner surface of the outer pipe, B, and provided with a series of apertures, *a*, which coincide with apertures *b*

in the outer pipe, B. The ring H' is provided with handles I, projecting through horizontal slots K in the outer pipe. The register J is formed of a fixed ring, J', attached to the inner surface of the pipe B and to the outer surface of the inner pipe, A, which ring preferably has a quadrant cross-section curved downward from the outer toward the inner pipe. On the fixed ring J' a sliding ring, L, rests, which is provided with a series of apertures, *d*, coinciding with apertures *f* of the fixed ring J'. The ring L is provided with a handle, M, which projects through a longitudinal slot, N, in the outer pipe, B. When the register J is closed and the register H open, the ventilator becomes a heater, the inner pipe heating the air which passes into the air-space between the pipes A and B through bottom apertures, *o*, and the heated air passes into the room through the openings of the lower register, H. If the upper register, J, is opened, and the lower register, H, closed, the heated air passes upward and out of the top of the chimney. If both registers are opened, a perfect ventilator is formed, which carries off the air in the room.

The ventilator can be made of sheet-iron or any other suitable fire-proof material. The same can be made of any desired length until the cap projects above the chimney. The cap prevents the wind from blowing down the pipes.

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

1. In a combined ventilator and heater, the combination, with the inner pipe, A, and the outer pipe, B, provided with the orifices *o*, of the smoke-pipe E and the registers H and J, substantially as herein shown and described, and for the purpose set forth.

2. In a combined ventilator and heater, the combination, with inner pipe, A, and the outer pipe, B, having apertures *o*, of the ring H', provided with apertures *a* and handles I, the perforated ring J, extending across the air-space between the pipes A and B, and provided with apertures *f*, and the sliding plate L, provided with apertures *d* and with a handle, M, substantially as herein shown and described, and for the purpose set forth.

FRANK E. ORMSBY.

Witnesses:

CHARLES A. ORMSBY,  
ELVA E. EDDY.