

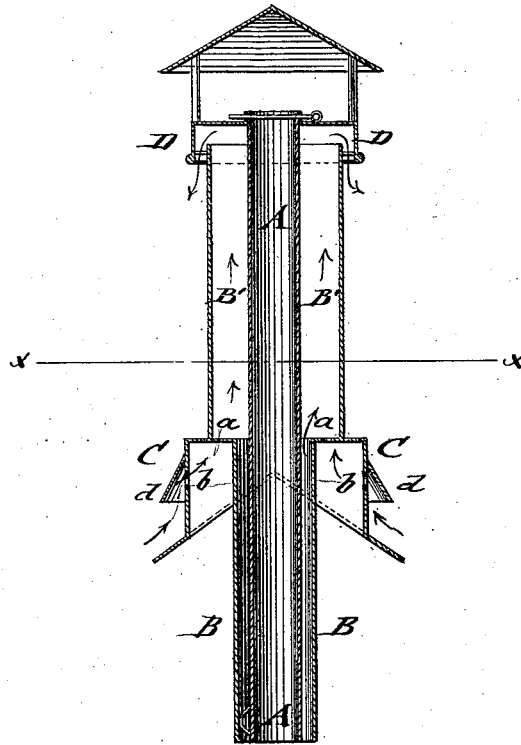
J. HARMON.

COMBINED CHIMNEY-TOPS AND VENTILATORS.

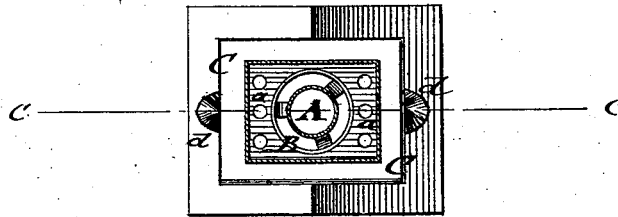
No. 183,300.

Patented Oct. 17, 1876.

*Fig. 1.*



*Fig. 2.*



WITNESSES:

*Francis M. Wade,  
John Goethals*

INVENTOR:

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# UNITED STATES PATENT OFFICE.

JOSEPH HARMON, OF DECORAH, IOWA.

## IMPROVEMENT IN COMBINED CHIMNEY TOP AND VENTILATOR.

Specification forming part of Letters Patent No. **183,300**, dated October 17, 1876; application filed August 23, 1876.

*To all whom it may concern :*

Be it known that I, JOSEPH HARMON, of Decorah, in the county of Winneshiek and State of Iowa, have invented a new and Improved Combined Chimney Top and Ventilator, of which the following is a specification:

In the accompanying drawing, Figure 1 represents a vertical central section on line *c c*, Fig. 2, of my improved chimney top and ventilator combined; and Fig. 2 is a horizontal section of the same on line *x x*, Fig. 1.

Similar letters of reference indicate corresponding parts.

The invention relates to improvements in combined chimney tops and ventilators, by which the ventilation is effectively kept up, even when the chimney is not heated, by the draft established in the chimney-top by the action of the outer air; and the invention consists of a ventilating-tube that surrounds the chimney, and is enlarged at the chimney-top, the enlarged part being connected by draft-apertures at the bottom of the enlarged part, and at the sides of the base with the outer air, to draw the air drawn up to and out at the exit-openings of the top cap-piece.

In the drawing, A represents a detachable chimney or smoke flue, that is covered at its top by a conical cap, and provided with a suitable damper for being opened or closed. The ventilating-tube B surrounds the smoke-flue, and forms an enlarged part, B', above the base C of the chimney-top, the enlarged part B' having exit-openings at the top, which are protected by a cap, D, near the upper end of the smoke-flue. The bottom of the enlarged part B' is provided with apertures

*a*, that communicate with the base C of the chimney-top, and with side apertures *b* of the same. The side apertures *b* are protected by hood-shaped flanges *d*, to prevent the rain, snow, &c., from entering at the base. The outside air passes through the side and bottom apertures into the enlarged space B', and out at the top, creating thereby a draft that produces a partial vacuum in the ventilating-tube, and thereby a continuous ventilation of the building, whether the smoke-flue is heated up or not.

In one case the draft created in the chimney-top assists the draft produced by the heated smoke-flue, while in the other case it continues the ventilation, which would be interrupted when the smoke-flue is not heated. Thus a reliable and uniform method of ventilating buildings by very simple means is obtained, with little additional expense over the common chimney tops and ventilators.

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

The combination, with a chimney smoke-flue, A, of a surrounding ventilating-tube, B, provided with an enlarged top part, B', with exit-openings and cap above the base of the chimney-top, the top part B' communicating by bottom apertures *a* and side apertures *b* of the base of the chimney top with the exit-openings, to create an air-draft in the ventilating-tube, substantially in the manner and for the purpose set forth.

JOSEPH HARMON.

Witnesses:

GEO. W. ADAMS,  
JOHN MEAGHER.