

(No Model.)

W. EARLE.
CHIMNEY CAP AND VENTILATOR.

No. 405,698.

Patented June 25, 1889.

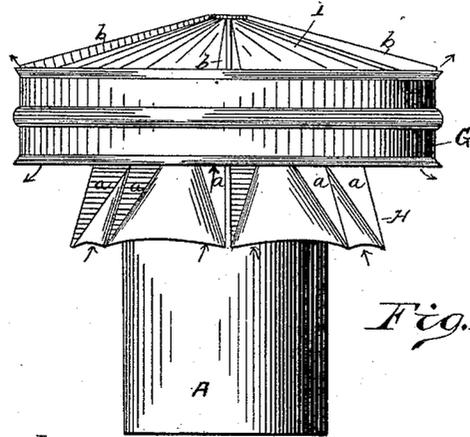


Fig. 1.

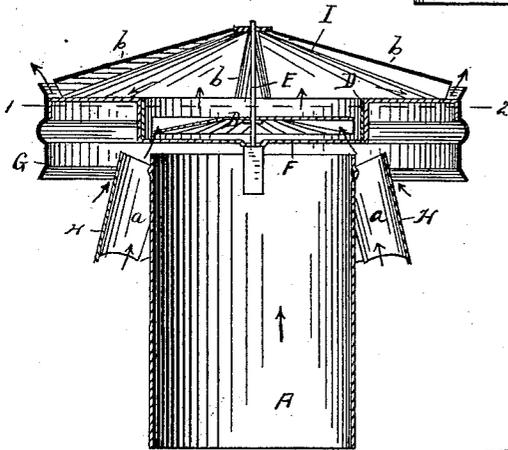


Fig. 2.

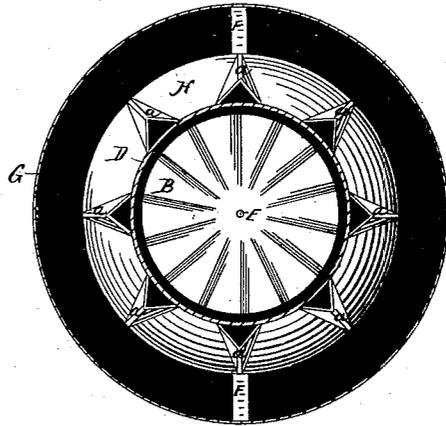


Fig. 3.

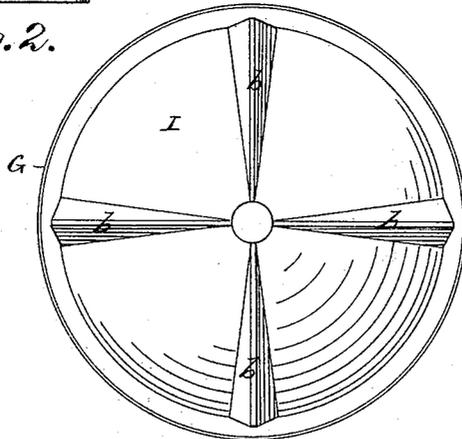


Fig. 4.

WITNESSES:

John Lefferts
Scharwankwitz

INVENTOR

William Earle
by his attorney
Walter N. Calhoun

UNITED STATES PATENT OFFICE.

WILLIAM EARLE, OF PHILADELPHIA, PENNSYLVANIA.

CHIMNEY CAP AND VENTILATOR.

SPECIFICATION forming part of Letters Patent No. 405,698, dated June 25, 1889.

Application filed May 1, 1888. Renewed March 18, 1889. Serial No. 303,824. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM EARLE, a citizen of the United States, residing at Philadelphia, in the county of Philadelphia and State of Pennsylvania, have invented certain new and useful Improvements in Chimney Caps and Ventilators, of which the following is a specification, reference being had therein to the accompanying drawings.

My invention relates to improvements in chimney caps and ventilators; and the object of my invention is to furnish a chimney cap and ventilator which will, no matter in what direction the wind may be, always create a draft through the chimney.

In the drawings, Figure 1 is a side elevation of my chimney cap and ventilator; Fig. 2, a central sectional elevation of the same; Fig. 3, a section of Fig. 2 on line 1 2, and Fig. 4 a plan of Fig. 1.

A is the pipe. Directly over this pipe is placed a wheel B, which is of slightly greater diameter than pipe A. The wheel B is enclosed in a metal cylinder D, which is open at the top and bottom, and which prevents the said wheel from being affected by horizontal currents of air.

E is the pivot upon which the wheel B is secured; F, the lower step for the pivot E, and which also forms the support for holding the cylinder D and the outside band G, the upper support for pivot E being the top I. (See Fig. 2.)

H is a corrugated flange placed around the top of pipe A, and I is a corrugated conical piece, which is of somewhat less diameter than band G, and which forms the top for the whole device.

The wind in striking against the pipe A is

forced up through the corrugations *a* between the pipe and flange, as shown by the arrows in Fig. 2, and at the same time it passes between the corrugations upon the outside of the flange up to and through the wheel B, rapidly revolving this wheel and creating a great draft in the pipe A. The smoke or foul air, after passing out of pipe A, is dispersed by wheel B and passes out both from the bottom of band G and out of the space between this band and the top I.

The top I is furnished with corrugations *b*, which, while making it stiffer, assist in causing a better dispersion of the smoke or gas.

The outside band G is of sufficient width, as shown in Fig. 2, to extend from the lower end of top I to below the top of flange H.

This band prevents all wind from blowing directly across the top of pipe A, and causes all the air to be deflected upward by the flange H.

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

1. In combination with the pipe A, band G, wheel B, and top I, the corrugated flange H, adapted to deflect air both along its inside and outside to the top of pipe A, substantially as set forth.

2. The combination of pipe A, wheel B, carried on a pivot E, cylinder D, band G, corrugated flange H, and corrugated top I, all arranged and operating substantially as and for the purposes set forth.

In testimony whereof I affix my signature in the presence of two witnesses.

WILLIAM EARLE.

Witnesses:

GEORGE W. CLEMENT,
WM. T. MCALEES.