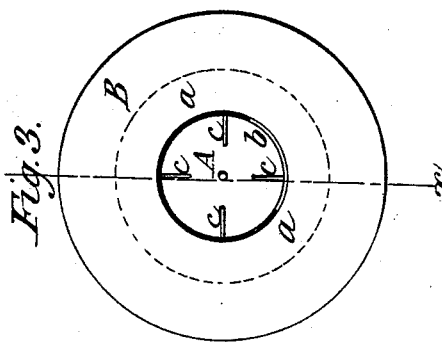
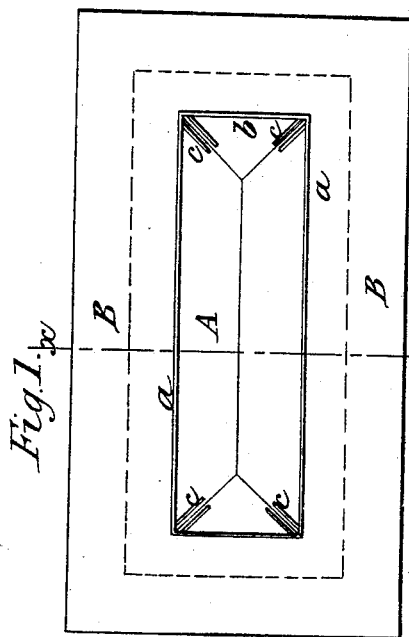
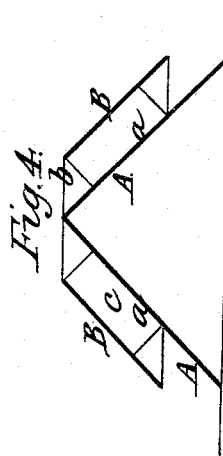
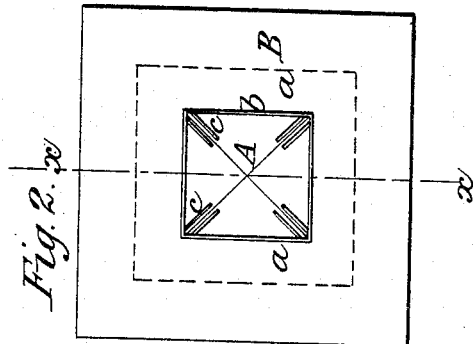


W. H. HORTON.

Chimney Cap.

No. 50,002.

Patented Sept. 19, 1865.



Witnesses:

*L. H. May*  
*Andrew J. May*

Inventor:

*Wm. Henry Horton*

*Per his atty,*

*Jed Brown.*

# UNITED STATES PATENT OFFICE.

WILLIAM HENRY HORTON, OF JERSEY CITY, NEW JERSEY.

## CHIMNEY-CAP.

Specification forming part of Letters Patent No. 50,002, dated September 19, 1865.

*To all whom it may concern:*

Be it known that I, WILLIAM HENRY HORTON, of Jersey City, in the county of Hudson and State of New Jersey, have invented a new and Improved Chimney Cap and Ventilator; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings, making part of this specification—

Figure 1 being a top view of the improved chimney-cap in oblong rectangular form, adapted to a chimney of two or more flues; Fig. 2, a similar view of a square chimney-cap, to be applied to a chimney with a single flue; Fig. 3, a top view of a round chimney-cap, applicable to a round chimney, flue, or pipe; Fig. 4, a central vertical section in planes indicated by the lines *x x*, Figs. 1, 2, and 3, being the same in all three of the varieties.

Like letters designate corresponding parts in all of the figures.

The cap proper consists of a sheet-metal cover, A, of oblong pyramidal form in Fig. 1, of exact pyramidal form in Fig. 2, and of conical form in Fig. 3. The base is of sufficient size to cover the chimney or flue, and is fastened to the chimney by any suitable and ordinary means, such as hooks, clamps, or collars. It is entirely closed at the top or apex, but about in the middle of its sides oblong horizontal apertures *a a* are formed, extending nearly all around it, as indicated by dotted lines in Figs. 1, 2, and 3. Through these apertures the smoke escapes, the width of the apertures being sufficient for the purpose. Over this cap another sheet-metal cap, B, is situated, so as to cover or shield the smoke-apertures *a a* in the cap A, and at a sufficient distance from or above the cap to allow a free circulation of the smoke or draft between the two caps, the sides of the two being all around nearly equidistant and parallel. This outer

cap is close at its sides, but its top is truncated, as at *b*, so as to open sufficient space for the smoke and draft. The top of the cap reaches up just about as high as the inner cap, as shown most clearly in Fig. 4, while its lower edge does not usually reach down so far as the inner cap, but is high enough to allow all the draft of external air needed under it above the base of the inner cap. The outer cap is secured in place over the inner cap by connecting-strips *c c* of sheet-metal, as shown in the drawings, or by any suitable means.

The operation of this improved chimney-cap is to protect the outlet-apertures *a a* of the inner cap from gusts and eddies of air by the interposition of the outer cap, *c*, before the wind in all directions. The wind enters below the outer cap, B, and, since the space between the two caps is obliquely upward in direction, the wind draws up through the same, tending to form a partial vacuum or rarefaction within the inner cap, A, thereby increasing the draft; and even if the wind or air should descend between the two caps the effect would be nearly the same, so that in either case the power of the draft is increased.

What I claim as my invention, and desire to secure by Letters Patent, is—

The combination and arrangement of the inner cap, A, closed at the apex and open at the sides, and the outer cap, B, open at the top and bottom, while its sides cover the apertures in the inner cap, substantially as and for the purposes herein specified.

The above specification of my improved chimney-cap signed by me this 14th day of March, 1865.

WM. H. HORTON.

Witnesses:

HENRY STEELE,  
MARCUS HIGGERBOTHEN.