

(No Model.)

G. M. McCLOSKEY.  
CHIMNEY CAP OR VENTILATOR.

No. 482,905.

Patented Sept. 20, 1892.

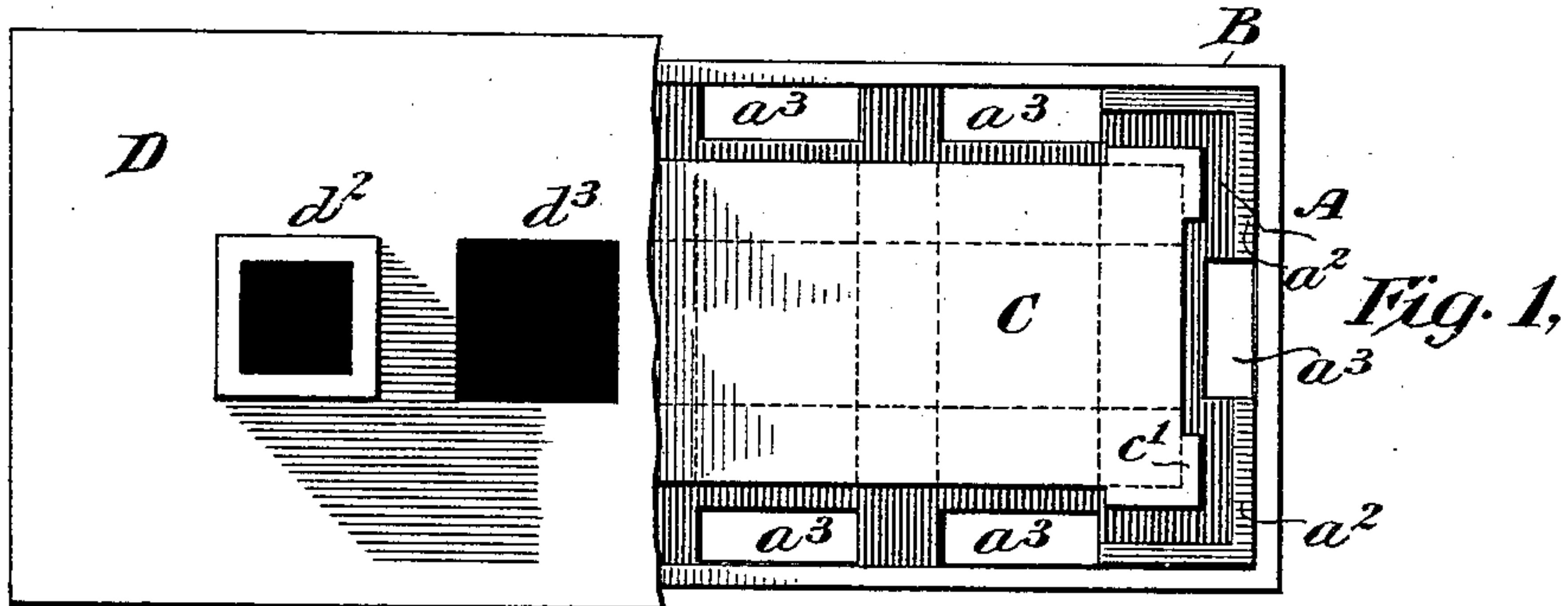
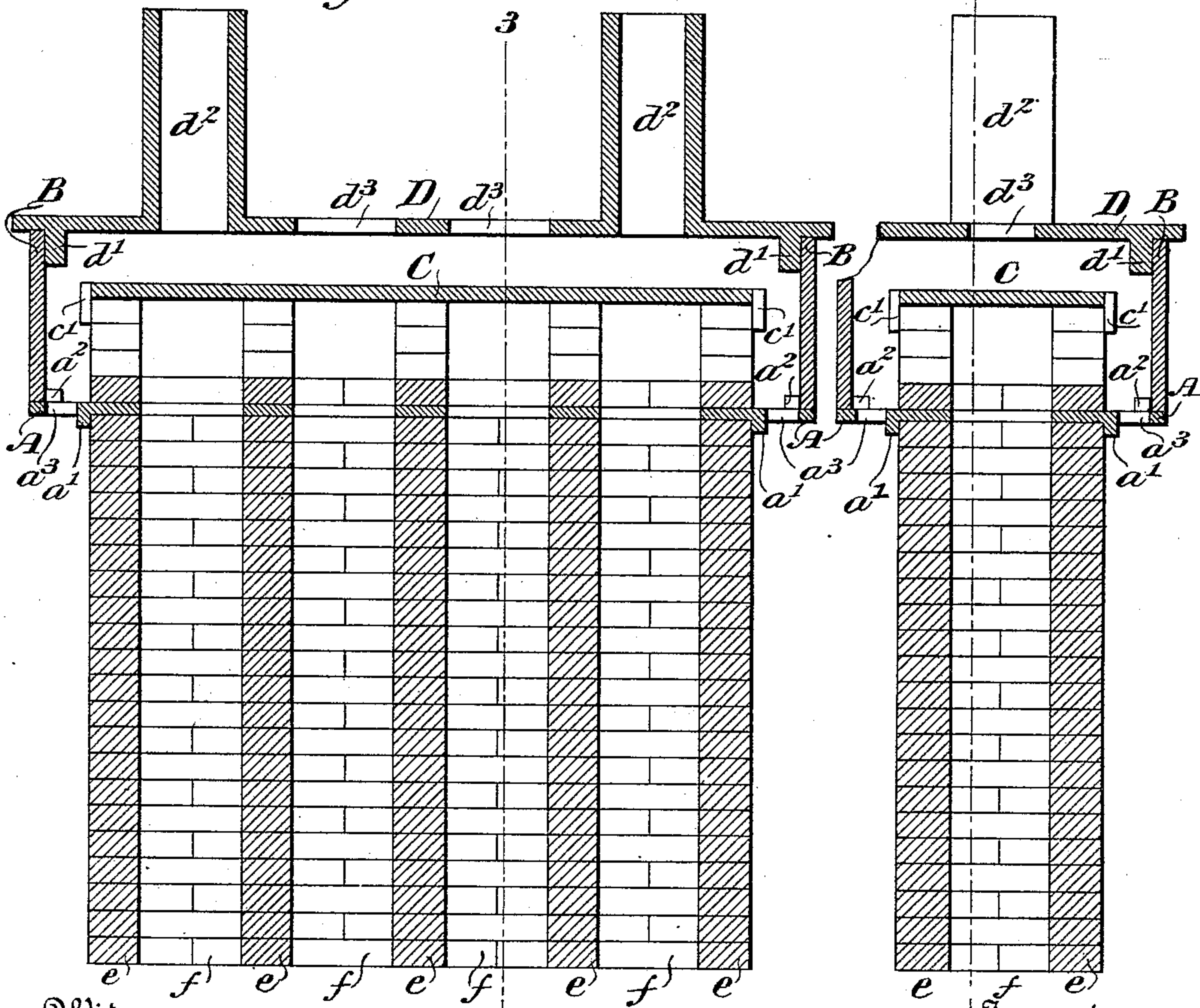


Fig. 2,

2 Fig. 3,



Witnesses

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# UNITED STATES PATENT OFFICE.

GEORGE M. McCLOSKEY, OF BROOKLYN, NEW YORK.

## CHIMNEY CAP OR VENTILATOR.

SPECIFICATION forming part of Letters Patent No. 482,905, dated September 20, 1892.

Application filed January 11, 1892. Serial No. 417,625. (No model.)

*To all whom it may concern:*

Be it known that I, GEORGE M. McCLOSKEY, a citizen of the United States, residing in the city of Brooklyn, in the county of Kings and State of New York, have invented a new and useful Improvement in Chimney Caps, Ventilators, &c., of which the following is a specification, reference being had to the accompanying drawings, forming a part thereof, wherein—

Figure 1 represents a plan view of my apparatus, having the upper plate partly broken away. Fig. 2 represents a section of the same on the line 2 2 of Fig. 3. Fig. 3 represents a section on the line 3 3 of Fig. 2.

The main objects of my invention are to obtain a draft sufficient to carry away the products of combustion or other volatile substances by means of a short chimney—an advantage which is very desirable in the construction of city houses—and the prevention of any “back-draft” which would tend to drive the products of combustion or other volatile substances back into the flues of the chimney; also, to facilitate the cleaning of the chimney and cap by the easy removal of some or all of the parts of the cap.

To the accomplishment of these ends my invention consists, primarily, of a piece of cast metal adapted to conform with the shape of the top of the chimney and having a shoulder or other suitable projection to prevent the slipping of the said plate. The said plate is so constructed as to project beyond the chimney on all sides a certain distance, forming a flange, and said flange is provided with slots or perforations outside the walls of the chimney which are opposite the flues of the chimney. At each corner of this projecting flange are suitable shoulders to hold in place a hollow-metal or terra-cotta box which rests upon the said flange. When the bed-plate is placed over the chimney, bricks are placed thereon and secured thereto by mortar or otherwise, said bricks being laid to conform to the shape of the flues of the chimney; or the bed-plate itself may bear an upwardly-projecting flange of desired height, the function of this flange being to turn the direction of the air, when blowing, into the perforations or slots and to prevent it from blowing directly into the flues of the chimney. Supports are placed at each

corner of the flues of the chimney, thus making a support for a metal or terra-cotta slab, said slab being suitably arranged to prevent its slipping. As a cap-piece to the whole, a slab of terra-cotta or metal having suitable shoulders to fit the outer inclosing box and having funnels or simply perforations directly above the flues of the chimney is employed.

Referring more particularly to the drawings, *e* represents the flues of the chimney; *f*, the flue cross-walls.

A represents the bed-plate of the chimney-cap; B, the outer box; C, the deflecting-slab; D, the cap-piece.

The bed-plate A is of metal, terra-cotta, or other suitable substance and conforms with the shape of the top of the chimney and projects beyond said chimney, forming a flange, in which are holes or perforations and beyond which on the same flange the outer box B rests. The said bed-plate A is provided with a shoulder *a'* to prevent its slipping and with a shoulder *a''* to prevent the box B from slipping. In the projecting flange of said bed-plate, outside the walls of the chimney, are perforations or holes *a'''* of convenient size for the admission of air. Upon the upper surface of the said bed-plate A a layer of bricks is placed, thus extending the chimney and flues higher than the bed-plate; or the bed-plate may bear an upward projection, preferably the width of one brick, and at each corner of the flues are placed supports, preferably three half-bricks, which form a rest for the deflecting-slab C; or the said slab may have legs suitable for the purpose attached thereto and raising the same high enough above the tops of the flues to leave a space between each support about equal to the area of each flue. Thus each flue has outlets on all sides about equal to its own area. This slab may be of metal, terra-cotta, or other suitable substance and is provided with suitable means, as shoulders *c'* to prevent its slipping.

The cap-piece D is of metal, terra-cotta, or other suitable substance and is provided with a suitable flange *d'* to hold it in place in the box B, and is also provided with funnels *d''* or outlets *d'''*, as may suit the constructor. The box B extends high enough above the



plate C to leave considerable clearance between the said slab and the cap-piece, thus permitting free circulation of air.

The operation of my improvement is as follows: If the wind be blowing downward, the draft enters the funnels or holes  $d^2$   $d^3$ , is deflected on the slab C, is again deflected by the sides of the box B, and escapes through the holes  $a^3$ , thus creating a suction around the mouth of the flues of the chimney. If the wind be blowing upward, it enters the holes  $a^3$ , strikes the layer of bricks or projections of the bed-plate on the top of the bed-plate A, and is deflected against the box B and then to the cap-piece, when it is again deflected upon the deflecting-slab C and then into the air through the funnels  $d^2$  or holes  $d^3$ . In fact, it matters not in what direction the wind may be, the draft in the flues is always upward, owing to the suction around the top of the flues.

From the construction of my improvement it is easily seen that the parts can be separated and the chimney or cap cleaned. Another advantage is that in winter, when the cap is covered with snow, it will be almost impossible to clog up the funnels or openings, as they are directly above the deflecting-slab and the said slab is always heated, being directly above the flues, so that any snow that may fall through said funnels or openings will be melted and leave a free passage for the air or products of combustion. Furthermore, my construction can be adapted to ventilators of any kind and can be made of sheet metal, if desired; but I have described the preferred construction.

Having now described my invention, what

I claim, and desire to secure by Letters Patent, is—

1. In a chimney cap or ventilator, the combination of a box the bottom of which projects beyond and overhangs the outer walls of the chimney, the said projection being provided with slots or perforations which when taken together are substantially equal in area to the area of slots or perforations in the cover portion of said box, with a deflecting-slab supported upon uprights or legs situated at each corner of each flue and high enough above the flues to raise the said deflecting-slab a sufficient distance to form on all sides of the flue an opening equal to the area of said flue, substantially as set forth.

2. In a chimney cap or ventilator, the combination of a box consisting of a bottom portion A, suitably attached to the chimney and projecting beyond and overhanging the outer walls thereof, the said projection being provided with slots or perforations  $a^3$ , the box portion B, supported on the bottom portion A, the cover portion D, having slots or perforations  $d^3$ , the said slots or perforations  $d^3$  being substantially equal in area to the area of the slots or perforations  $a^3$  when taken together, with the deflecting-slab C, supported within said box above the flues by means of legs or supports situated at each corner of each flue and of a height sufficient to raise the said deflecting-slab high enough to form an opening on all sides of the flue equal to the area of the flue, substantially as set forth.

GEORGE M. McCLOSKEY.

Witnesses:

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