P. MIHAN.

Chimney-Cap or Ventilator

No. 203,477. Patented May 7, 1878.

Fig. 1.

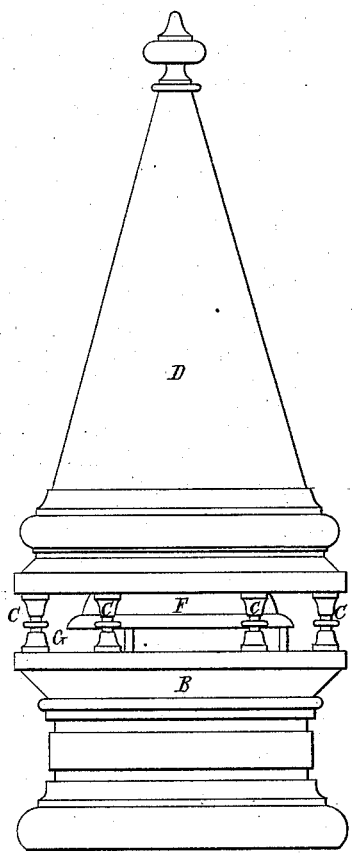
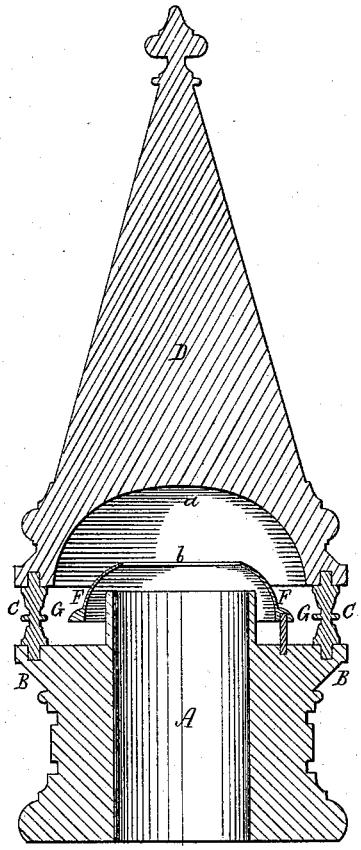


Fig. 2.



Witnesses.

S. N. Pipin

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by his attorney.

R. M. Eddy

UNITED STATES PATENT OFFICE.

PATRICK MIHAN, OF CAMBRIDGEPORT, MASSACHUSETTS.

IMPROVEMENT IN CHIMNEY-CAPS OR VENTILATORS.

Specification forming part of Letters Patent No. **203,477**, dated May 7, 1878; application filed January 2, 1878.

To all whom it may concern:

Be it known that I, PATRICK MIHAN, of Cambridgeport, of the county of Middlesex and State of Massachusetts, have invented a new and useful Improvement in Ventilators or Chimney-Caps; and do hereby declare the same to be described in the following specification and represented in the accompanying drawings, of which—

Figure 1 is a front elevation, and Fig. 2 a vertical section, of a ventilator embracing my improvement.

My present invention relates to a ventilator or chimney-cap constructed like that for which Letters Patent No. 194,781, dated September 4, 1877, have been granted to me, or, in other words, to one having a dome disposed over a discharge-pipe and a deflector encompassing the latter.

In carrying out my invention, I arrange within the dome and the open space between it and the deflector, and above the upper end of the discharge-pipe, a truncated dome, open at top as well as at bottom, and serving to separate or divide into two currents an inrushing current of air, and to subsequently cause them to unite or intermingle ere escaping with the smoke or current passing upward from the pipe.

In the drawings I have represented my ventilator in the form of a tower or the upper portion of such, as under such an architectural shape I have applied it to various buildings with a fine æsthetic effect.

The discharge-conduit A extends up through and above the base of the tower, the top or upper part of whose base constitutes the deflector B.

The conduit A at its upper end may terminate even with, or a short distance above or below, the base of the dome D, which rests on a series of columns or posts, C C C, erected on the top of the base or deflector B.

The dome is shown as conical on its exterior surface, its lower surface being arched, as represented at *a*.

The current-separator is shown at F as consisting of a truncated dome, open at top, and arranged over and at a distance above the top of the eduction-conduit A, and within the chamber of the dome D, and as extended down within the space G—that is, between the deflector and the dome—all being substantially as represented.

The opening *b* at the top of the current-separator I usually make with a diameter a little less than that of the eduction-conduit A at its upper end, such being in order that the current-separator may extend in over the upper edge of the said conduit in manner as shown in Fig. 2, an advantage being attained thereby. Such opening *b*, however, may have a diameter equal to or a little greater than that of the educt A at its top, which, there, may be flanged or slightly bell-mouthed, if desirable.

When an external current of air strikes into the ventilator, such current, by contact with the separator F, will be divided, the lower portion of it being caused to flow directly over the upper edge of the educt A, and thence up through the current-separator and into the dome. The other portion of the inrushing current of air will pass up over the separator, and, uniting with the first portion passing up through the separator, will be discharged with it out of the dome, whereby a current up the educt will, as practice has proved, be induced to better advantage than would be the case were the ventilator without the separator.

What, therefore, I claim as my invention in the described improved chimney-cap or ventilator is—

The truncated dome F, arranged and combined with the educt A, the deflector B, and the stationary dome D, substantially as set forth.

PATRICK MIHAN.

Witnesses:
R. H. EDDY,
JOHN R. SNOW.