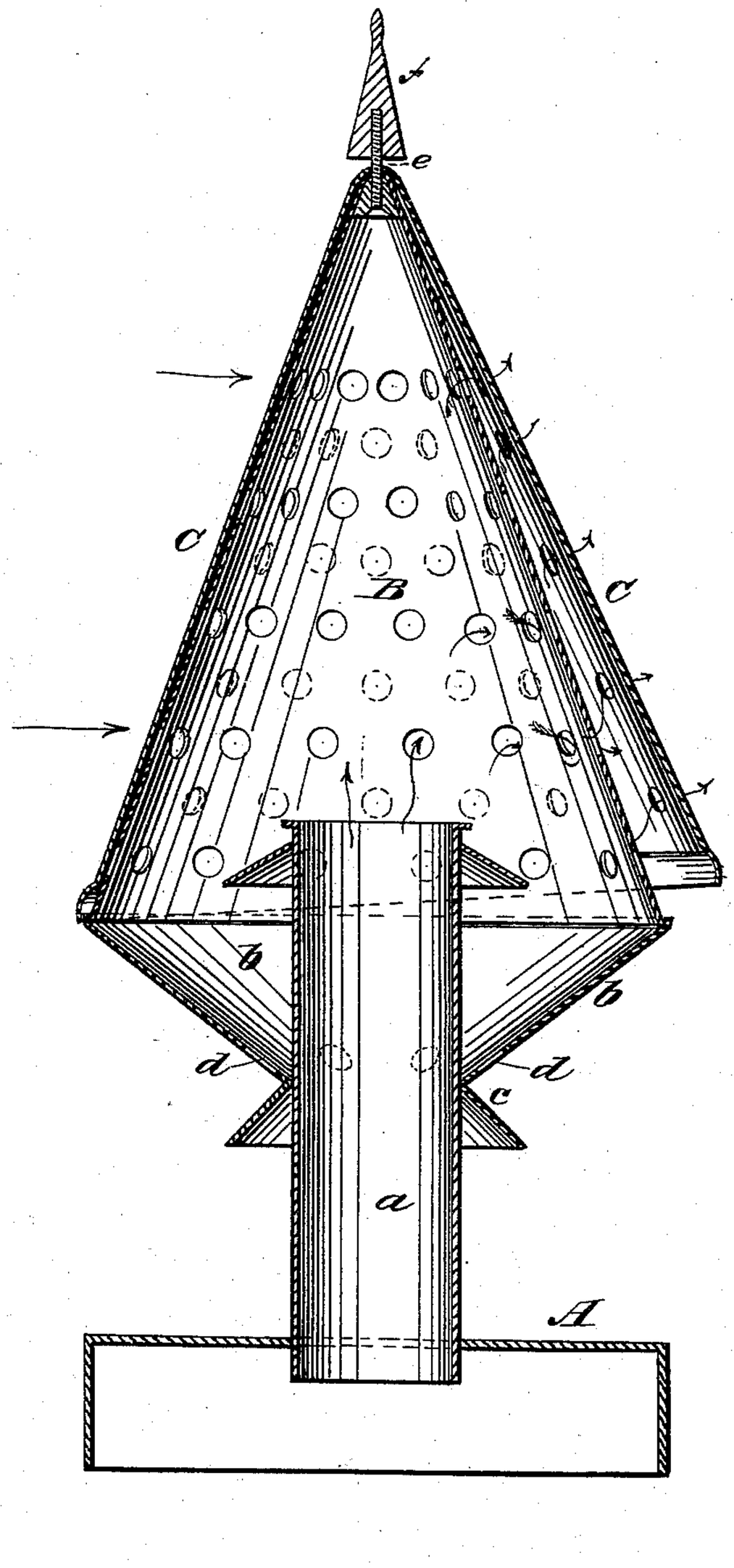
(No Model.)

W. D. BARTLETT.

Chimney Cap.

No. 232,434. Patented Sept. 21, 1880.



WITNESSES:

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UNITED STATES PATENT OFFICE.

WILLIAM D. BARTLETT, OF AMESBURY, MASSACHUSETTS.

CHIMNEY-CAP.

SPECIFICATION forming part of Letters Patent No. 232,434, dated September 21, 1880.

Application filed June 12, 1880. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM D. BARTLETT, of Amesbury, in the county of Essex and State of Massachusetts, have invented a new and useful Improvement in Chimney-Caps, of which the following is a specification.

The object of my invention is to furnish a chimney-cap which shall insure a good draft to the chimney at all times and prevent back drafts by sudden gusts or changes of wind.

As heretofore constructed chimney-caps, though they work well under ordinary circumstances, fail in high winds or in winds blowing from certain directions, according to the locality, and such failure can only be prevented by closing the windward apertures of the cap or so breaking up the gusts of wind that its force is dissipated. This I accomplish by my invention, which consists in a perforated conical cap closed at the bottom and forming a housing around the escape-flue, which cap is fitted with a perforated conical hood that is slightly larger than the fixed cap, and is hung loosely at its apex, so that it may swing freely. The holes in the hood do not register with those in the fixed cap, so that as the hood is pressed by the wind against the cap the openings are closed on the windward side, while there is free exit at the opposite side.

The construction and operation will be more particularly explained hereinafter with reference to the accompanying drawing, wherein I have shown a vertical section of a chimney-cap embodying my invention.

A is the base, of a form adapted for resting on the chimney, and fitted with the flue-pipe *a*, of suitable length.

B is the fixed cap, made in conical form, and attached by its bottom plate, *b*, to the pipe *a*, so that the upper end of the pipe is housed by the conical cap.

The bottom *b* is preferably made in the inclined or tapering form shown, and at its lower portion, around pipe *a*, there is fixed a lip or flange, *c*, that serves to direct outward from pipe *a* any water that runs down upon the under side of bottom *b*.

The conical cap B is perforated with numerous openings from its base to near the top, and in the lower portion of the bottom plate, *b*, there is a row of openings, *d*. Upon the fixed cap B is hung the conical hood *b*, which corresponds in length to the cap B, but is of greater diameter at the base—say about two inches greater.

The hood C is shown as suspended by simply resting at its apex on the apex of the cone B, a screw-pin, *e*, being fitted in cone B, and provided with a nut, *f*, for retaining the hood upon the fixed cap. The hood C may, however, be suspended in any other desired manner permitting it to swing freely. The hood C is also perforated similarly to the fixed cap B; but the perforations are over the closed portions of the cap, so that the openings may not coincide. By this construction, when there is little or no wind, the hood C hangs clear of the cap B and there is free exit at all sides.

In case of high winds or sudden gusts of wind the hood will be forced against the cap at the windward side, thereby closing the openings at that side and giving more free vent at the leeward side. Any wind that enters between these two points will be broken up and filtered through the openings, so that it will not affect the draft. This cap acts also most effectually in killing or smothering sparks as they are forced in contact with the sides of the cap and hood.

The bottom of the cap B will be washed out at every rain by the water running in at the openings of the cap and out at the openings *d*.

If desired, there may be a flange or gutter secured outside the base of cone B to turn the rain into the cap more effectually.

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

1. The chimney-cap consisting of the escape-flue *a*, perforated and fixed conical cap B, provided with bottom *b*, and perforated and suspended hood C, combined for operation as specified.

2. The combination of perforated cap B, bottom *b*, with openings *d*, perforated hood C, and pipe *a*, substantially as specified.

The above specification of my invention signed by me this 4th day of June, 1880.

WILLIAM D. BARTLETT.

Witnesses:

C. SEDGWICK,

GEO. D. WALKER.