

(No Model.)

J. A. HUGHES & C. S. MENGEL.

VENTILATING CAP.

No. 322,377.

Patented July 14, 1885.

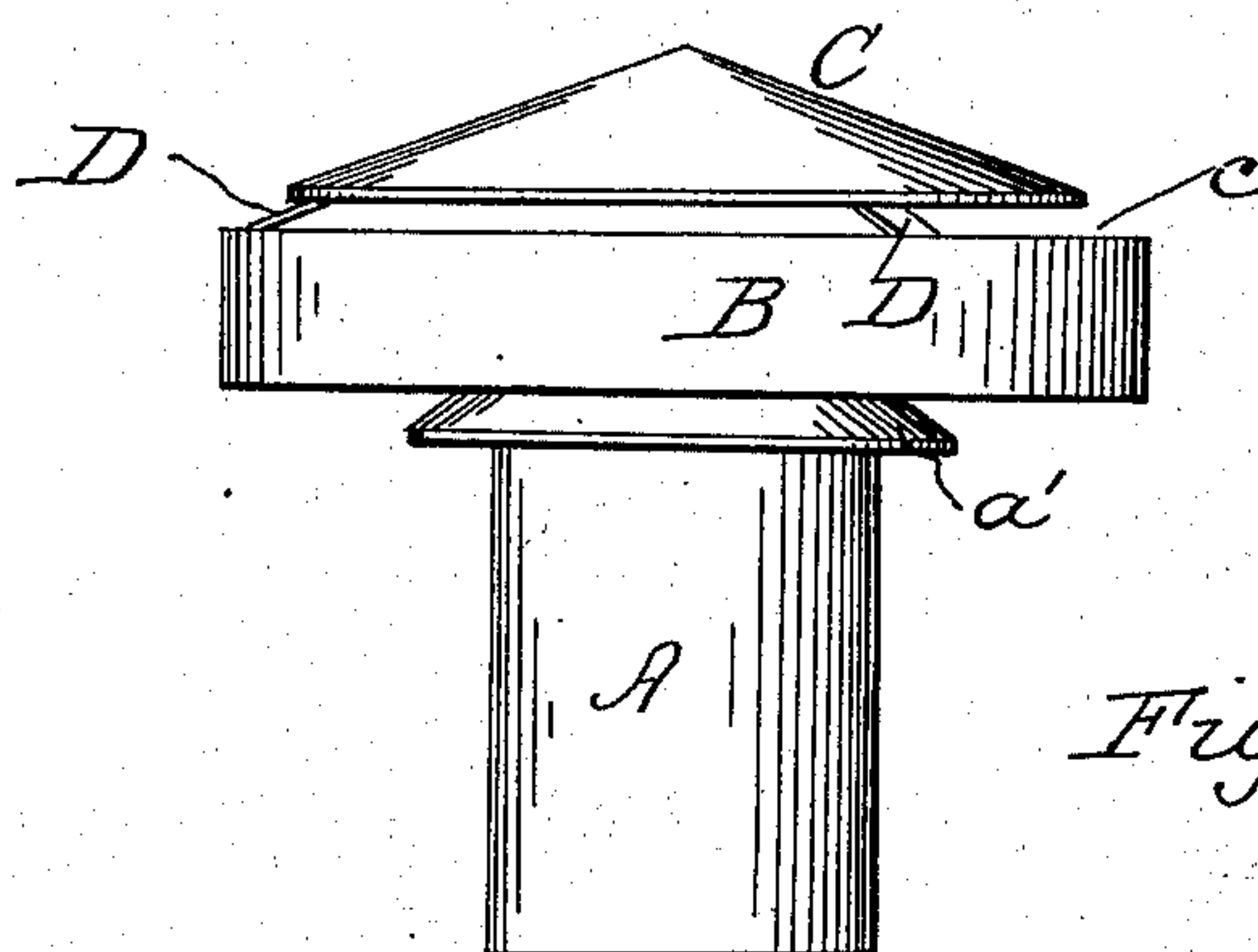


Fig. 1

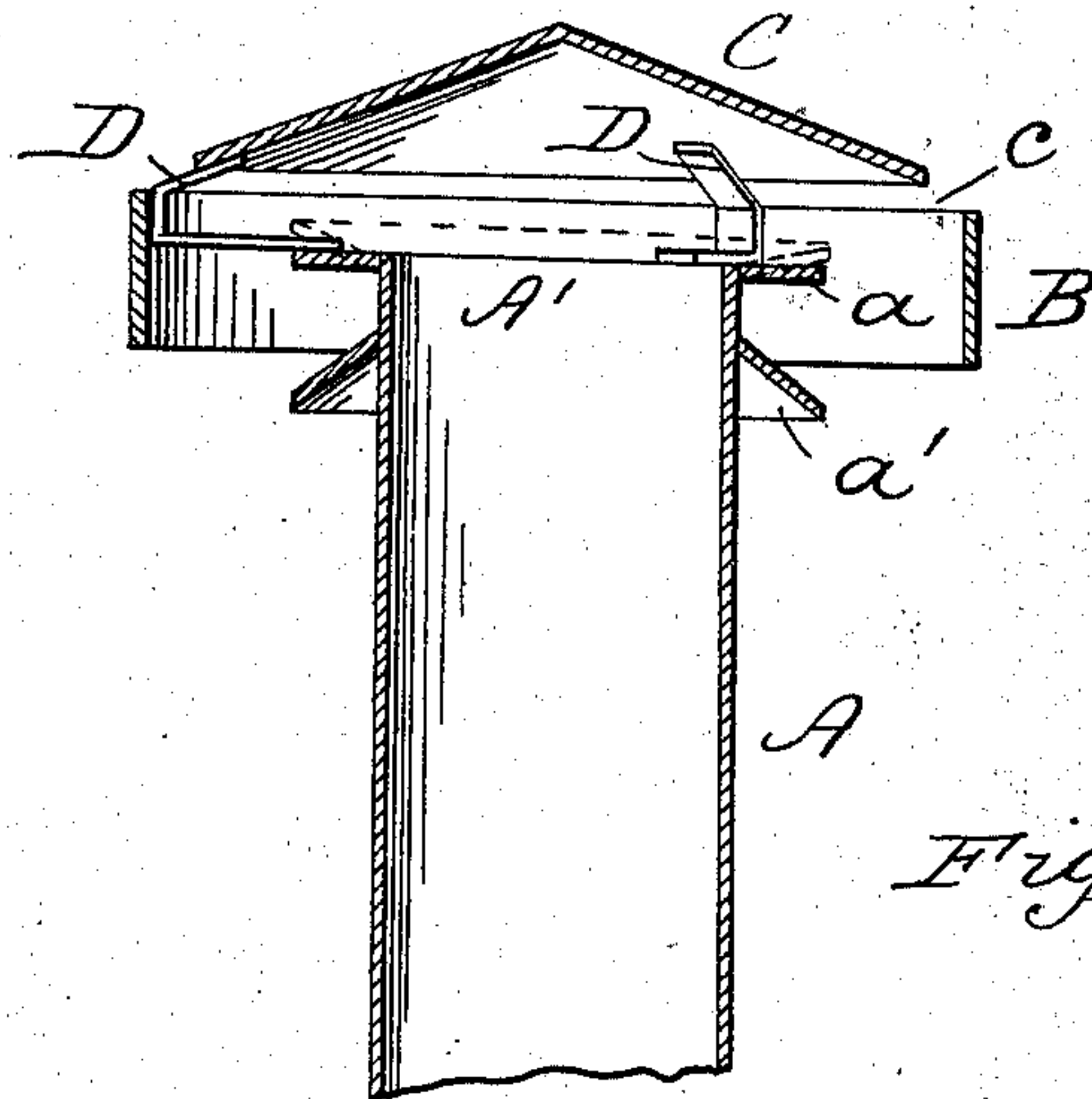


Fig. 2

WITNESSES:

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JOHN A. HUGHES AND CHARLES S. MENGEL, OF PHILADELPHIA, PA.

VENTILATING-CAP.

SPECIFICATION forming part of Letters Patent No. 322,377, dated July 14, 1885.

Application filed March 14, 1885. (No model.)

To all whom it may concern:

Be it known that we, JOHN A. HUGHES and CHARLES S. MENGEL, citizens of the United States, residing at Philadelphia, in the county of Philadelphia and State of Pennsylvania, have invented certain new and useful Improvements in Ventilating-Caps, of which the following is a specification, reference being had therein to the accompanying drawings, wherein—

Figure 1 is an elevation of a ventilator-cap embodying our improvements, and Fig. 2 is a transverse vertical section of the same.

Our invention has relation to ventilator and smoke-stack caps of the form having a band or belt surrounding the upper end of the flue, shaft, or stack, and above which band is located a cover; and it has for its object to so construct and arrange the component parts of the cap in relation to one another and to the mouth or upper end of the shaft or stack that back draft in the latter is avoided, rain or moisture prevented gaining access thereto, and ventilation of the shaft is effected by a downward, upward, horizontal, or oblique blowing of the external atmosphere or the air; or, in other words, the shaft is effectually ventilated no matter in what direction the air may be blowing.

Our invention accordingly consists in the combination, construction, and arrangement of parts comprising a ventilating-cap, as hereinafter described and claimed.

In the drawings, A represents a shaft or flue having at its upper edge preferably a straight flange, *a*, as shown in full lines Fig. 1; but, if desired, it may flare upward slightly, as indicated by the dotted lines in said figure. Below flange *a* is a conical flange, *a'*. These flanges may be integral with shaft A, or made separate from it and secured to same in any suitable manner. Surrounding flange *a*, or the mouth A' of the shaft A, is a belt or band, B,

which is of a considerably larger diameter than that of the flanges *a a'*. Band B is so located with reference to the flanges *a a'* that it projects above and below the end A' of the shaft A, or its flange *a* is on or about on the plane of the horizontal middle of the band, and the lower part of the conical flange *a'* is below the band. Above the band is a shallow conical top or cover, C, the diameter of which is smaller than that of the band, to provide a small annular space, *c*, between the adjacent edges of the band B and top C, and the latter is but slightly elevated above the plane of the upper edge of the band, to leave only a small space between said parts shown. The band B and top C are secured to one another and to the shaft A by bent supporting-rods D. Any moisture or rain falling on top C is deflected from the shaft A. The annular space *c* permits of a downward and upward blow of air adjacent to the mouth of shaft or flue A, for ventilating the flue without producing a back draft in same. The slight elevation of top C above band B is made to obtain an effectual ventilation from a horizontal or oblique blow of air, so that, no matter in what direction the air blows, a draft from or ventilation of the flue A is effected.

What we claim is—

The combination of flue A, having upper edge flange, *a*, and conical flanges *a'*, belt or band B, projecting above and below the flange *a*, and conical top C, of a less diameter than that of the band and elevated above it, substantially as shown and described.

In testimony whereof we affix our signatures in presence of two witnesses.

JOHN A. HUGHES.
CHARLES S. MENGEL.

Witnesses:

S. J. VAN STAVOREN,
CHAS. F. VAN HORN.