

No. 607,264.

Patented July 12, 1898.

J. McCREERY.
FOUL AIR ESCAPE OR VENT.

(Application filed Nov. 5, 1897.)

(No Model.)

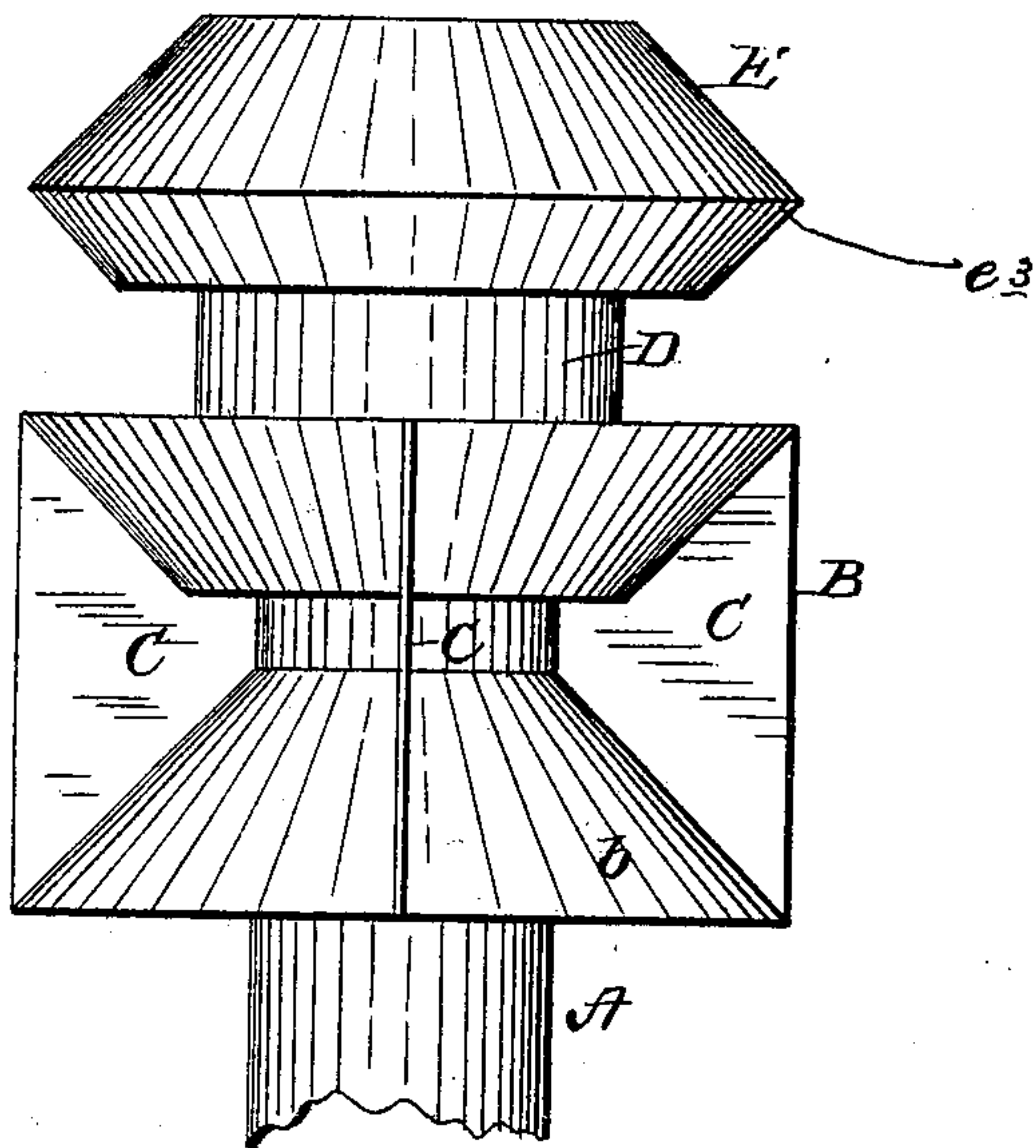


Fig. 1.

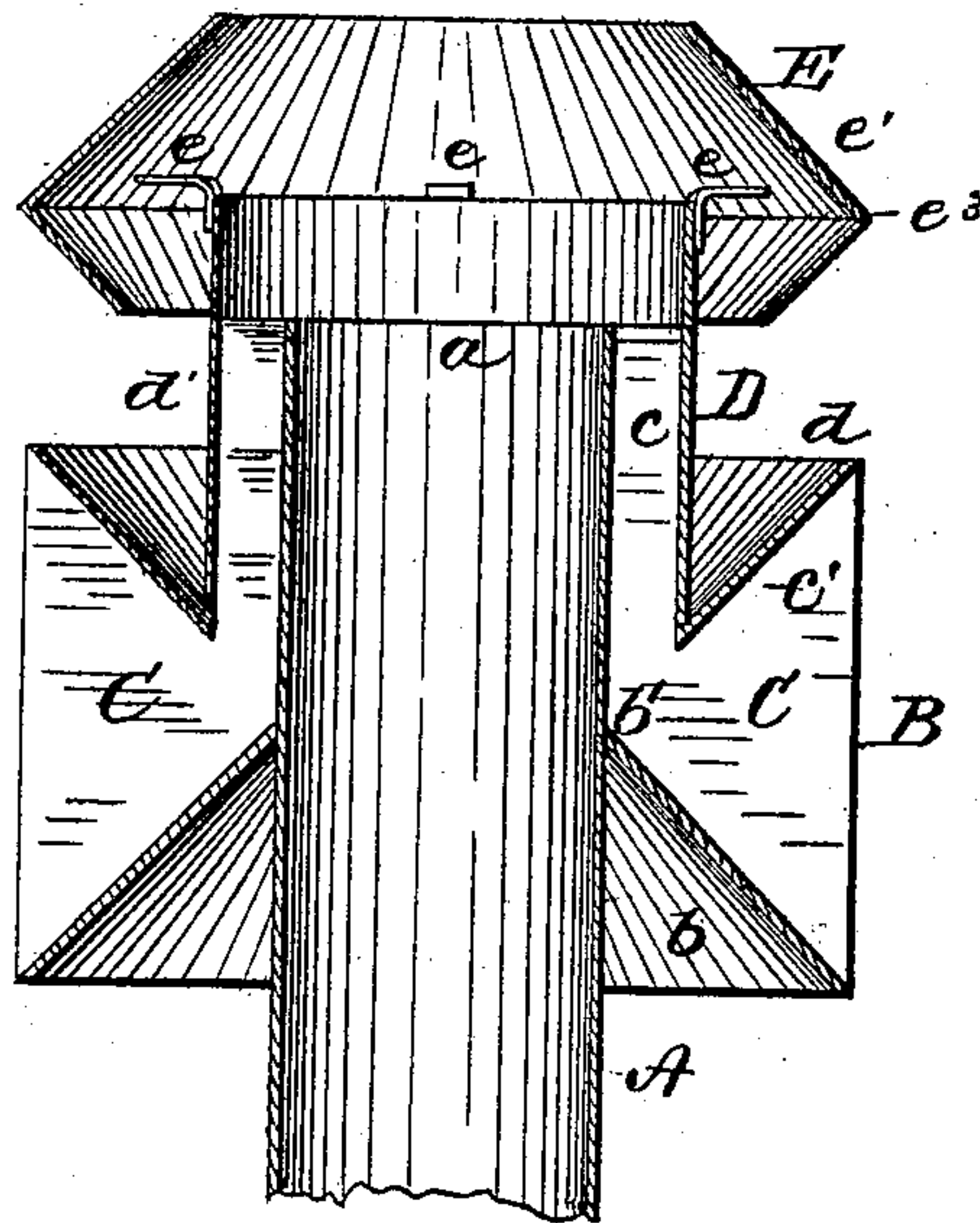
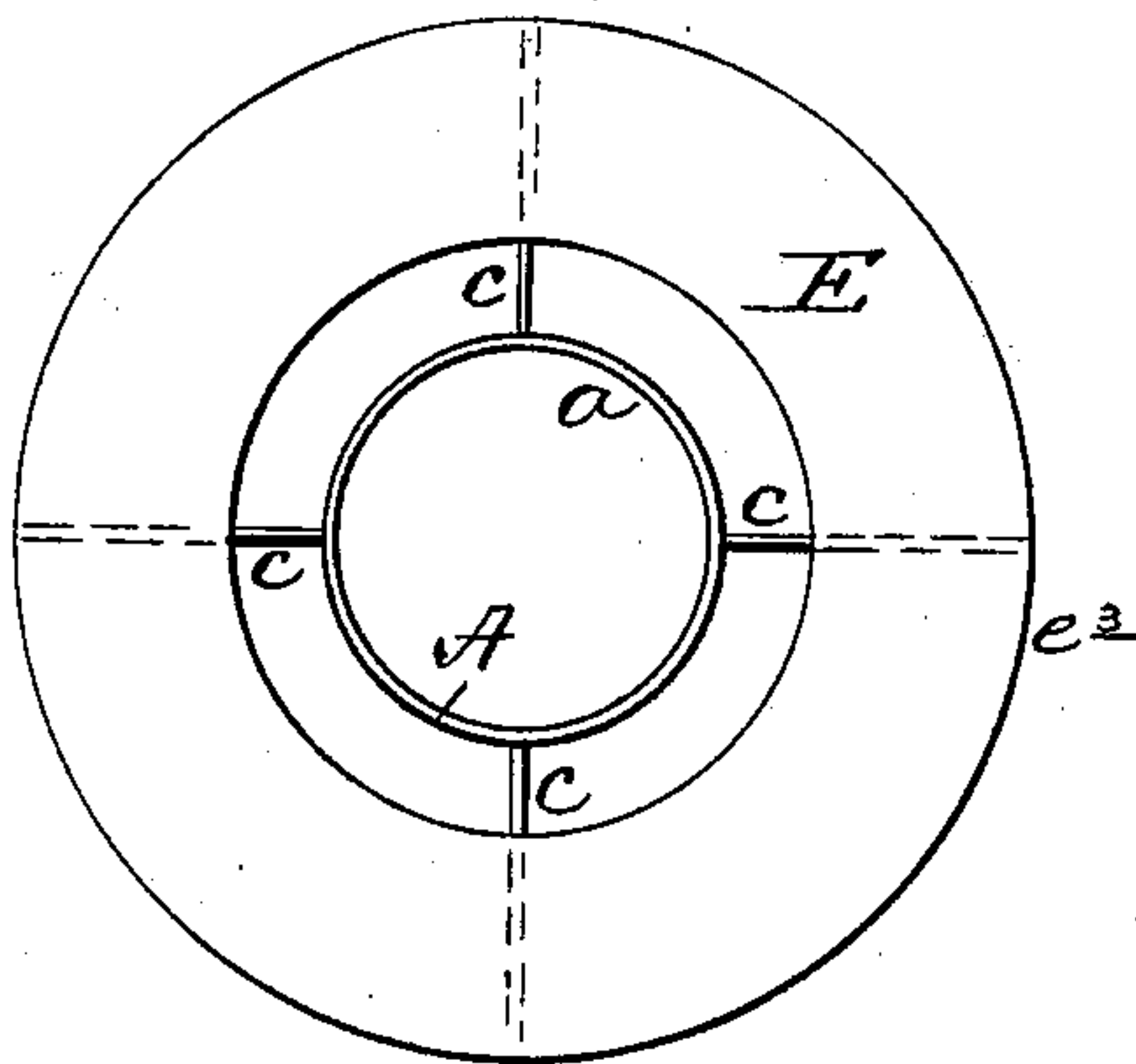


Fig. 2.

Fig. 3.



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UNITED STATES PATENT OFFICE.

JOSEPH MCCREERY, OF TOLEDO, OHIO.

FOUL-AIR ESCAPE OR VENT.

SPECIFICATION forming part of Letters Patent No. 607,264, dated July 12, 1898.

Application filed November 5, 1897. Serial No. 657,527. (No model.)

To all whom it may concern:

Be it known that I, JOSEPH MCCREERY, a citizen of the United States, residing at Toledo, in the county of Lucas and State of Ohio, have invented certain new and useful Improvements in Foul-Air Escapes or Vents; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to a new and useful improvement in foul-air escapes or vents; and it consists in the construction hereinafter pointed out.

In the annexed drawings, Figure 1 represents a side view of the device; Fig. 2, a vertical section, and Fig. 3 a top view.

In the drawings the letter A represents the top of a cylindrical hollow shaft. To the outside of this is secured the box B. This box is made with a conical-shaped bottom *b*, which converges upwardly and closely fits the shaft A at the neck *b'*. Four partitions or wings C are secured to this bottom *b* and rise vertically therefrom. These wings C have narrow extensions *c* and enlarged substantially triangular-shaped bottom portions *c'*. These partitions C are placed snugly against the shaft A, the extensions *c* terminating on a line with the top *a* of the shaft A. Secured to these partitions C is the top D of the box B. This top D has an inverted conical-shaped lower portion *d* and a vertical cylindrical neck *d'*. This top D is secured to the partition C, so that the lower portion *d* rests against the bottom portions *c'* of the partitions C, and the neck *d'* rests against the outer edges of the extensions *c*. At the top of the device a cowl E is secured to the neck *d'* by strips *e*. This cowl E has the upper and lower conically-shaped portions *e'* *e''*, meeting at *e'''*, and the top and bottom of the cowl are open.

As thus described, this device has a clear air-passage up the shaft A and out through the cowl E. There is also an air-passage or clear way from bottom to top of the cowl around the neck *d'* of the box B. There are also several clear passage-ways through the

box B from the bottom up around the shaft A and out through the cowl. As the air strikes against this device not only is the foul air drawn up the shaft A by the force of the air over the top of the cowl E, but also by air-pressure through the box B and between the box and the cowl. Divided as the box is by the partition C, from whatever direction the wind comes air is forced through the device and over the top of the shaft A. As clearly shown in Fig. 3, the opening into the box is sector-shaped. Therefore the air is crowded in toward the shaft A and driven with great pressure up the narrow passage-way between such shaft and the top D of the box B. Air also being forced between the box B and the cowl E is forced upward through the cowl E and over the top of the shaft A. These several currents of air, being forced together over the top of the shaft A, induces an upward current through such shaft and carries off the air rising into such shaft.

Having described my invention, what I claim is—

The combination of the shaft, A, the box, B, surrounding the top of the shaft, having the conical bottom, *b*, the top, B, having the inverted conical-shaped lower portion, *d*, and the vertical cylindrical neck, *d'*, and the partitions or wings, C, having narrow extensions, *c*, and enlarged substantially triangular-shaped bottom portions, *c'*, such bottom portions being between the bottom, *b*, and the portion, *d*, and the narrow extensions, *c*, being between the shaft, A, and the neck, *d'*, such extensions terminating on a line with the top of the shaft, A, and the cowl, E, secured to the top of the neck, *d'*, the cowl, E, having the upper and lower conically-shaped portions, *e'* *e''*, meeting at *e'''*, the top and bottom of the cowl being open, as set forth.

In testimony whereof I affix my signature in presence of two witnesses.

JOSEPH MCCREERY.

Witnesses:

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