(No Model.)

V. OSTER.

HOT AIR CHIMNEY FLUE DRAFT.

No. 454,492. Patented June 23, 1891.

Fig. 1.

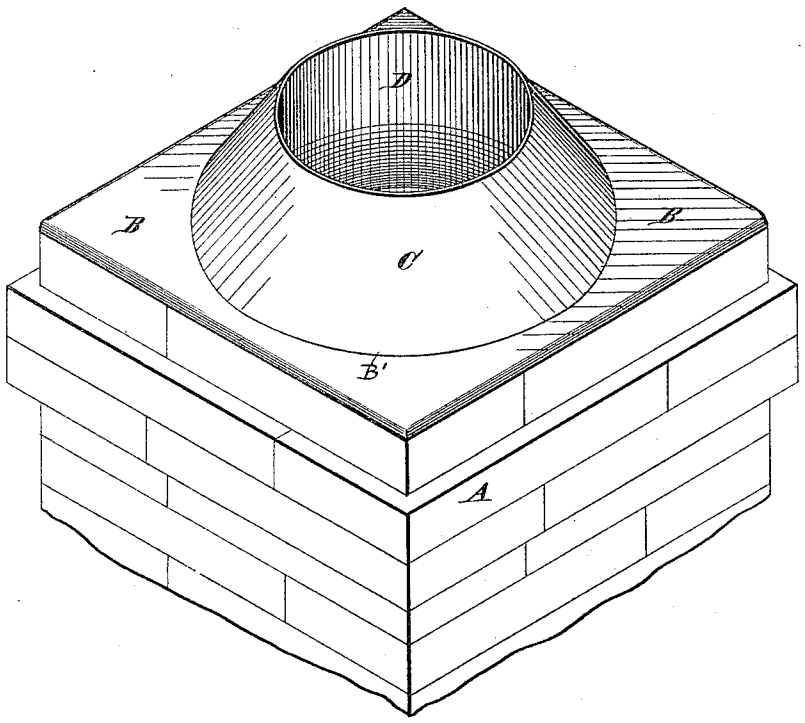
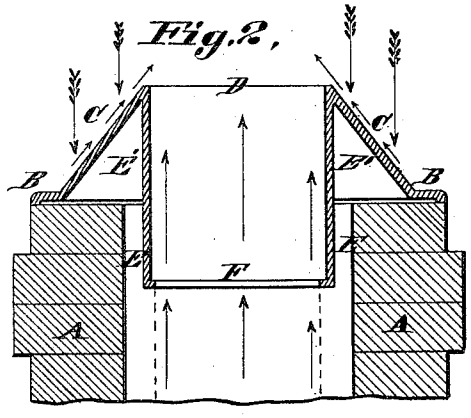


Fig. 2.



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UNITED STATES PATENT OFFICE.

VALENTINE OSTER, OF ST. LOUIS, MISSOURI.

HOT-AIR CHIMNEY-FLUE DRAFT.

SPECIFICATION forming part of Letters Patent No. 454,492, dated June 23, 1891.

Application filed January 28, 1889. Serial No. 297,811. (No model.)

To all whom it may concern:

Be it known that I, VALENTINE OSTER, a citizen of the United States, residing in the city of St. Louis, and State of Missouri, have invented certain new and useful Improvements in a Hot-Air-Chambered Chimney-Flue Draft; and I do 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, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

This invention relates to chimneys, and more particularly to means for increasing the draft of the same; and it consists in the novel combination and arrangement of parts, as will be hereinafter more fully described and claimed.

In the accompanying drawings, forming a part of this specification, and in which like letters of reference refer to corresponding parts, Figure 1 is a perspective view of my invention, showing the same applied to a chimney; and Fig. 2 is a sectional view of the upper end of a chimney with my device applied thereto, also in section.

In the said drawings, A represents the upper end of a chimney, and B the base-plate of the cap, which base-plate rests upon the upper course thereof, and is designed to be of a size corresponding to that of the chimney at that point. At the point B′ the body C rises from the plate B at an angle of about forty-five degrees, and conforms to the shape of a frustum of a cone. From the upper inner edge of this portion C depends the cylindrical portion D, constituting the smoke-flue. An inwardly-projecting annular flange F is formed on the lower end of the portion D for the purpose of holding in place a length of pipe which may be slipped through the said portion in order to increase the length thereof, an outwardly-projecting flange being formed on this additional length of pipe to impinge against the flange F. The cylindrical portion D is of such a size as to leave a hot-air space E between it and the chimney entirely around its outer surface, which space leads to the hot-air space E′ directly beneath the inclined portion C.

It will be obvious that hot air rising in the chimney will enter the passage E and pass from there to the passage E′. The object of allowing this is to heat all the parts of the upper end of the chimney, thus heating the surrounding air, which will rise and create a better draft. The air next adjacent to the portion C, becoming heated, will start a current, as indicated by the arrows in Fig. 2, toward the upper part of the cap, and the surrounding cold air will fall, as indicated by the vertical arrows, on the outside of the chimney, and be warded off from the chimney-opening, thus preventing sudden gusts of air from descending the chimney and causing it to smoke inside the house.

As before intimated, the portion D may be extended to any desired length by slipping an additional length of pipe through it until a flange formed on said pipe comes into contact with the flange F. The position of the additional pipe is shown by the dotted lines in Fig. 2. The object of making this extension is to enlarge the air-space, thereby retaining a larger quantity of heated air.

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

The combination, with a chimney, of a pipe located in the upper end thereof and forming an air-space between the outer walls and the inner walls of the chimney, a base-plate B resting upon the chimney-top, a hollow cone-shaped body having an opening in its upper end encircling the upper end of the pipe and formed integral with the base-plate B, the air-space within said cone communicating with the air-space between the pipe and the walls of the chimney, and the said last-mentioned air-space communicating with the smoke-flue of the chimney proper, whereby heated air from the chimney will enter and be retained in said air-spaces, substantially as shown and described, for the purpose specified.

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

VALENTINE OSTER.

Witnesses:
CHARLES PICKLES,
CHAS. A. NIEL.